# CAPSTONE Interprofessional Curriculum 2011

## Obstetrical Scenarios

Precipitous Delivery
Mild Post Partum Hemorrhage
Mild Post Partum Hemorrhage + error

# 2011 CAPSTONE – UWMC OBSTETRICS

**Development Team:** Leslie Carranza MD, Dilys Walker MD

**Intended Audience:** 4th Year Medical Students, 4th Year Nursing Students, 4th Year Pharmacy Students,

**Participants:** Each Module requires:

- a medical student playing role of intern
- a medical student playing role of senior resident
- a nursing student playing the role of a bedside nurse
- a nursing student playing the role of a floor nurse available to give assistance
- a pharmacy student playing the role of an in-hospital pharmacist

# 2011 Capstone DRAFT Agenda (UWMC – PM Session)

| Time | Activity | Facilitated by: | Materials Needed: |
|---|---|---|---|
| 12:30-1:00 PM | **Students arrive and sign in** | WISH Staff Member | 1. Student packets and nametags |
| 1:00-1:20 PM (20 MINUTES) | **Icebreaker: Paper chain**<br>**(21 students)**<br>1. As a team your goal is to create the longest chain made out of paper links in 2 minutes, go!<br>a. Quick debrief: What worked? Who emerged as leaders?<br>2. Now, same goal but you can't use your dominant hand<br>a. How did you work together?<br>3. Now, you can use any resources in the room, but you can't talk<br>a. Communication and situational awareness? | Leslie Carranza | 1. Paper<br>2. Tape dispensers<br>3. Scissors |
| 1:20–2:00PM (40 MINUTES) | **TeamSTEPPS Didactic Presentation**<br>Introduce check back, call out, SBAR<br>**Explanation of Observational Tool and Consents** | Leslie Carranza<br>Assessment Team Member /WISH Staff | 1. TeamSTEPPS Powerpoint<br>2. PPT slides for observational tool |
| 2:00-2:20 PM (20 minutes) | **Introduction to Simulation and Parto Pants** | Leslie Carranza<br>Dilys Walker | 1. Parto Pants |
| 2:20–2:30 PM | *Break and Students meet in their Groups. Faculty Brief* | | |
| 2:30–2:40 PM (10 min) | **Basics of PPH** | Leslie Carranza | 1. PPT slides |
| 2:40–3:10 PM (30 min) | **Run Scenario: Vaginal Delivery**<br>- No intro needed<br>- Run scenario (10min)<br>○ Group A does scenario<br>○ Group B/C observe & checklist<br>- Debrief (20 min) | All Faculty | 2. Simulator and Equipment for Video Playback |
| 3:10–3:15 PM | *Break and Students meet in their groups* | | |
| 3:15–3:50 PM (35 min) | **Run Scenario: Mild Post Partum Hemorrhage**<br>- Content didactic review (5 minutes)<br>- Run scenario (10min)<br>○ Group B does scenario<br>○ Group A/C observe and & checklist<br>- Debrief (20min) | All Faculty | SAME AS ABOVE |
| 3:50–3:55PM | *Break and Students meet in their groups* | | |
| 3:55–4:25 PM (30 min) | **Run Scenario: Post Partum Hemorrhage with error**<br>- Run scenario (10 min)<br>○ Group C does scenario<br>○ Group A/B students observe & checklist<br>- Debrief (20min) | All Faculty | SAME AS ABOVE |
| 4:25- 4:30PM | *Transition back to Conference Room* | | |
| 4:30 AM–5:00PM | **Wrap up**<br>Goals:<br>1. Reflections of students<br>2. Descriptions of roles<br>3. Debrief as large group | Leslie Carranza | Whiteboard |

# UWMC CAPSTONE: OBSTETRICS
# Clinical Overview

## Fetal Presentation

At the onset of labor, the position of the fetus with respect to the birth canal is critical to the route of delivery. Thus, fetal position within the uterine cavity should be determined at the onset of labor. With the onset of labor and after cervical dilatation, vertex presentations and their positions are recognized by palpation of the various fetal sutures and fontanels. Face and breech presentations are identified by palpation of the facial features and the fetal sacrum, respectively

## Mechanisms of Labor

In most cases, the fetus enters the pelvis in the vertex presentation. The positional changes in the presenting part required to navigate the pelvic canal constitute the mechanisms of labor. The cardinal movements of labor are engagement, descent, flexion, internal rotation, extension, external rotation, and expulsion.

# POSTPARTUM HEMORRHAGE[2]

## Background

Postpartum hemorrhage (PPH) is an obstetrical emergency that can follow vaginal or cesarean delivery. It is a major cause of maternal morbidity, and one of the top three causes of maternal mortality in both high and low per capita income countries, although the absolute risk of death is much lower in high income countries (1 in 100,000 versus 1 in 1000 births in low income countries). Furthermore, hemorrhage is the leading cause of admission to the intensive care unit and the most preventable cause of maternal mortality.

## Definition

PPH is best defined and diagnosed clinically as excessive bleeding that makes the patient symptomatic (lightheadedness, weakness, palpitations, diaphoresis, restlessness, confusion, air hunger, syncope) and results in signs of hypovolemia (hypotension, tachycardia, oliguria, low oxygen saturation (<95 percent). Another common definition of PPH is estimated blood loss ≥500 mL after vaginal birth or ≥1000 mL after cesarean delivery. Vaginal bleeding is usually noted, but may not be present in cases where hemorrhage is related to abdominal bleeding from a cesarean delivery or a broad ligament hematoma after a sulcus laceration.

A timely, accurate diagnosis of PPH is important in order to initiate intervention (eg, drugs, surgery, referral) and improve outcome. The incidence of PPH is estimated is 1 to 5 percent of deliveries. Uterine atony is the most common cause of PPH and accounted for most of the increase.

PPH is also defined as primary or secondary: primary PPH occurs within 24 hours after delivery (also called early PPH) and secondary PPH occurs 24 hours to 12 weeks after delivery (also called late PPH).

## Etiology and Risks Factors

The etiology of PPH can be classified into for categories (also designated the four "T"s)

1. Atony ("**T**one"): The most common cause of PPH is uterine atony (ie, lack of effective contraction of the uterus after delivery), which complicates 1 in 20 births and is responsible for at least 80 percent of cases of PPH. Risks factors for uterine atony include:
    a. Overdistension (multiple gestation, polyhydramnios, macrosomia)
    b. Uterine infection
    c. "Uterine fatigue" after a prolonged or induced labor
    d. Uterine inversion
    e. Retained placenta or placental fragment (either a normally attached placenta or placenta accreta).

2. **T**rauma: Trauma-related bleeding can be due to lacerations (perineal, vaginal, cervical, uterine), incisions (hysterotomy, episiotomy), or uterine rupture. Lacerations are more common after instrumental delivery.

3. **T**issue: retained placenta and abnormal placentation (accreta, increta, and percreta)

4. Coagulation defects (**T**hrombin): Can be either be acquired or from congenital bleeding. Acquired causes include severe preeclampsia, HELLP syndrome, abruptio placentae, fetal demise, amniotic fluid embolism, and sepsis. Consumptive coagulopathy may develop in women with severe hemorrhage.

**The key to the management of PPH is quick identification of the emergency and a systematic approach through the differential diagnosis and treatment**

| Drug | Dose/Route | Frequency | Onset of Action | Half Life | Comments |
|---|---|---|---|---|---|
| | | | | | |
| **Oxytocin** | **IV: 10-40 units in 1 liter NS or LR IM: 10 units** | **Continuous** | **IV: Immediate IM: 3 minutes** | **5-12 minutes** | **Avoid undiluted rapid IV infusion, which causes hypotension** |
| **Methergine** | **IM: 0.2mg** | **Every 2-4 hours. Max 5 doses** | **IM: 2-5 minutes (also PO)** | **3.3 hours** | **Avoid in hypertensive patients** |
| **Hemabate** | **IM: 0.25mg** | **Every 15 minutes. Max 8 doses** | **IM: 15-60 minutes (can give IM in uterus)** | **1.5 hours** | **Avoid in asthma. Diarrhea, fever, tachycardia, pulmonary edema can occur** |
| **Misoprostol** | **Rectal: 800-1,000 mcg** | **Once** | **Vaginal: 5-10 minutes** | **1.5 hours** | **Causes shivering and pyrexia** |

2. Modified from Up to Date

# Overview of Simulation at UWMC site

The simulations at UWMC will be exclusively focused on Obstetrics. One unique aspect of the simulations at UWMC is that an Obstetrics faculty member will be present in the virtual OR with a white board and marker guiding the simulation (writing vital signs and physical findings) and making sure team members are moving in the right direction. We will using a patient actor and no mannequins will be used.

Students will be assigned into three groups at the start of the day. Group 1 will manage the precipitous vaginal delivery, although they will not know the exact content of the scenario. Group 2 will manage mild post partum hemorrhage, and Group 3 will manage mild postpartum hemorrhage with error. Please note that the students will not know there is an error in the case. Students will receive a basic overview on management of normal vaginal deliveries and post partum hemorrhage during the didactic portion of the day.

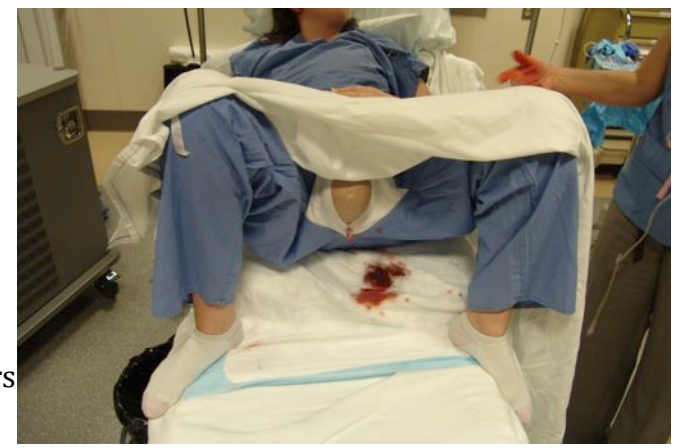
A live actor will play the role of the laboring patient. She will be wearing surgical scrubs called Parto Pants™ (birthing pants in Spanish), which have been modified to allow the simulation of a vaginal delivery and post partum hemorrhage.

Parto Pants™ were developed by PRONTO International, which is an obstetric and neonatal emergency training program that was designed in Mexico by a group obstetricians, nurses, and pediatricians. PRONTO International leads multidisciplinary medical care teams through a series of skills stations, team-building activities, and low-tech, high-fidelity simulations throughout Central America. For more information on PRONTO please visit: http://www.pronto2international.com/

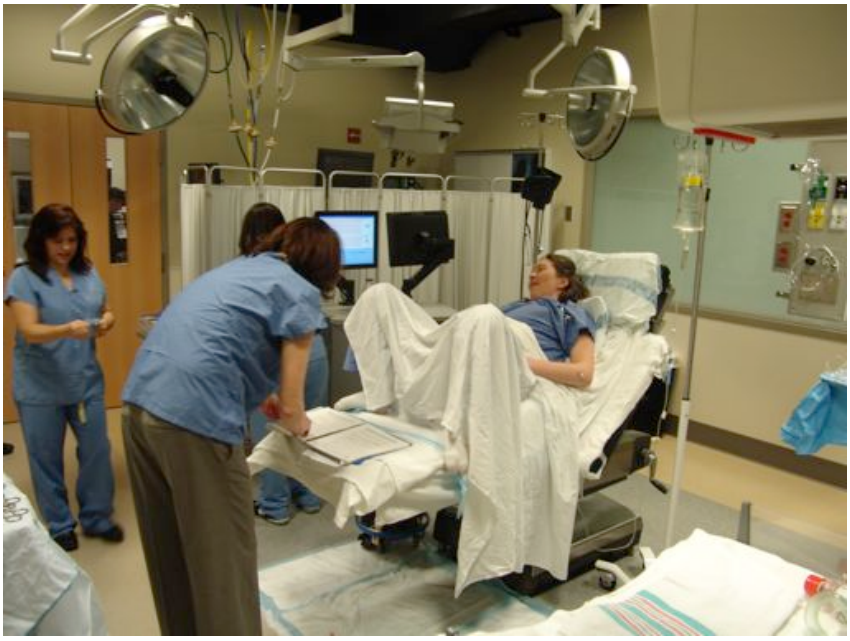
We are honored and very lucky to have one of the founders and Executive Director of PRONTO International participate in CAPSTONE and help lead our simulations.

The Parto Pants™ include a stretchy vagina for the birth of a baby/placenta, rectum for administration of hemorrhage medications, urethra for catheterization, suprapubic bag for blood, leg pad for IM injection. We use a plastic doll and attached placenta. All other materials included in the simulations are based on the actual materials (medications, instruments, equipment) found on Labor and Delivery.

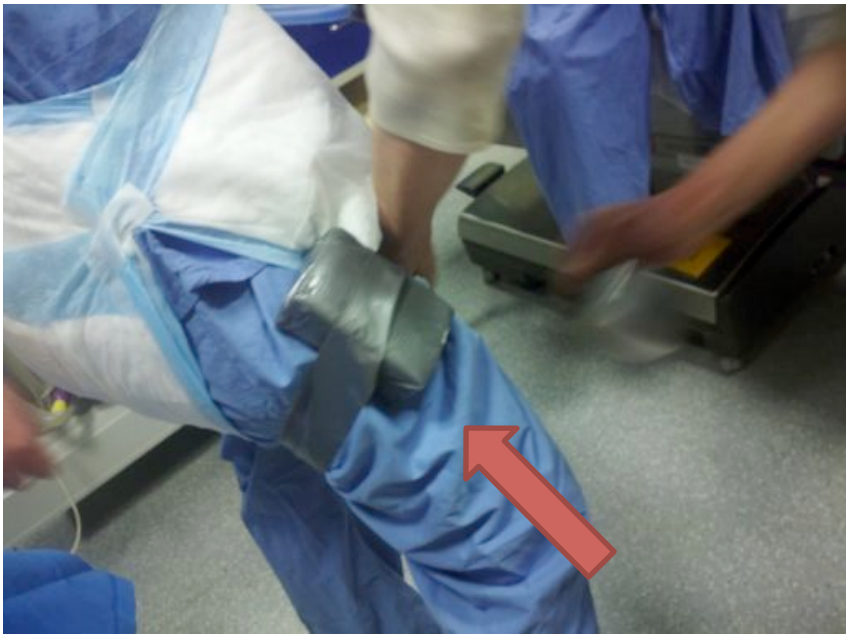
C ivers

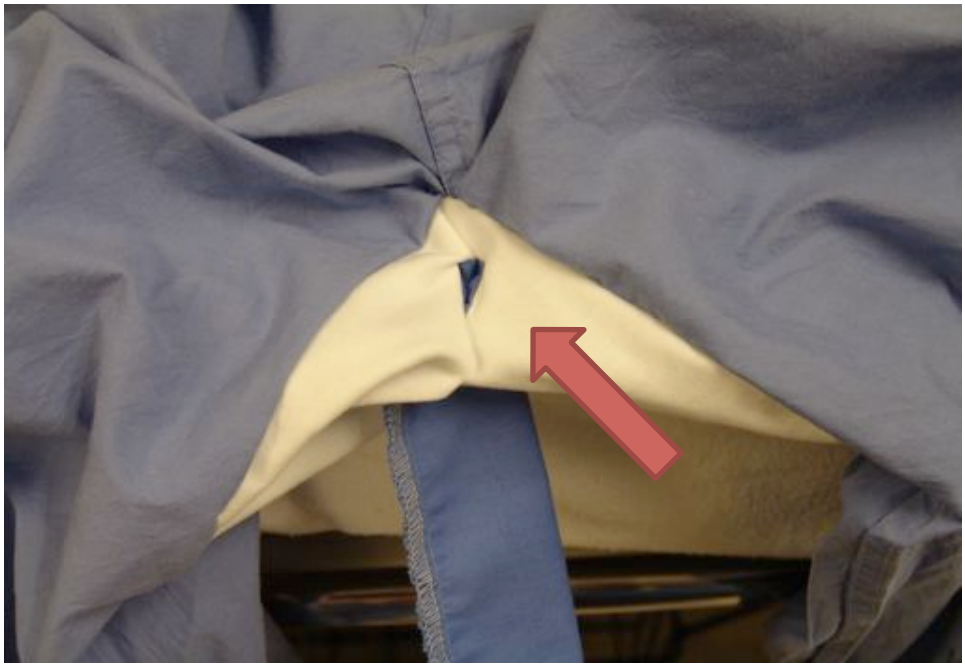


**Virtual OR at WISH**

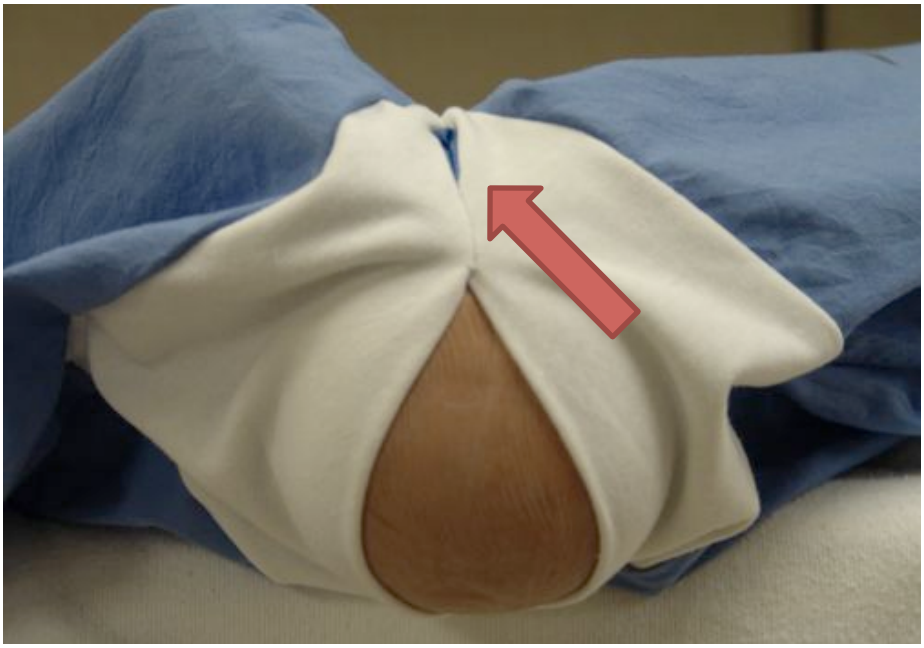


**Site for injection of IM medications**

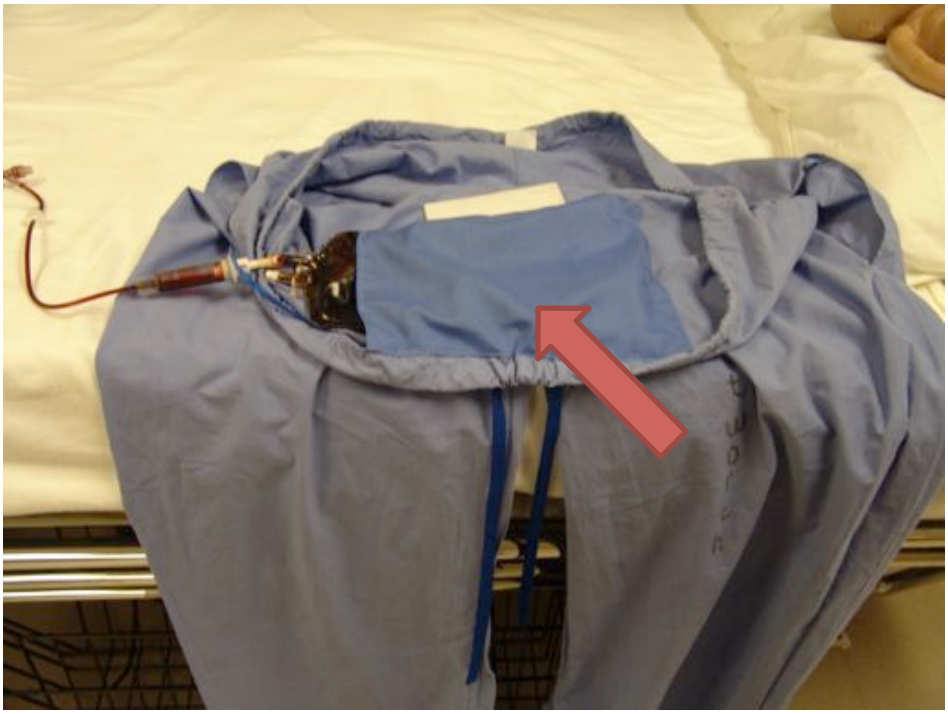




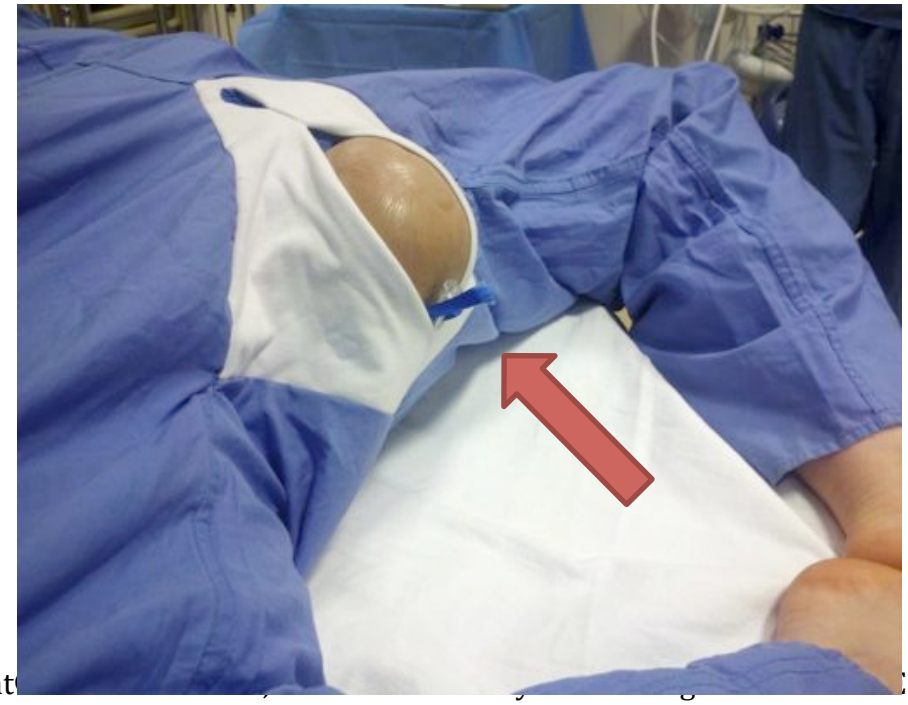
**Urethra (with capability to place foley)**



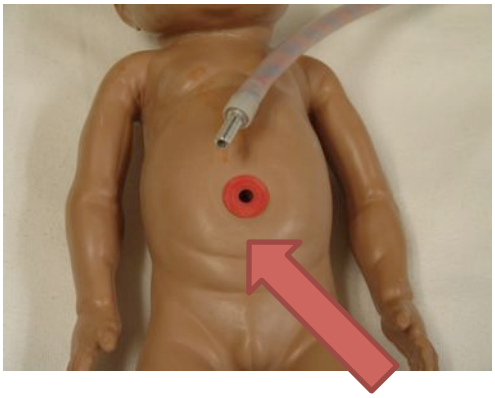
**Suprapubic saline bag with "blood"**

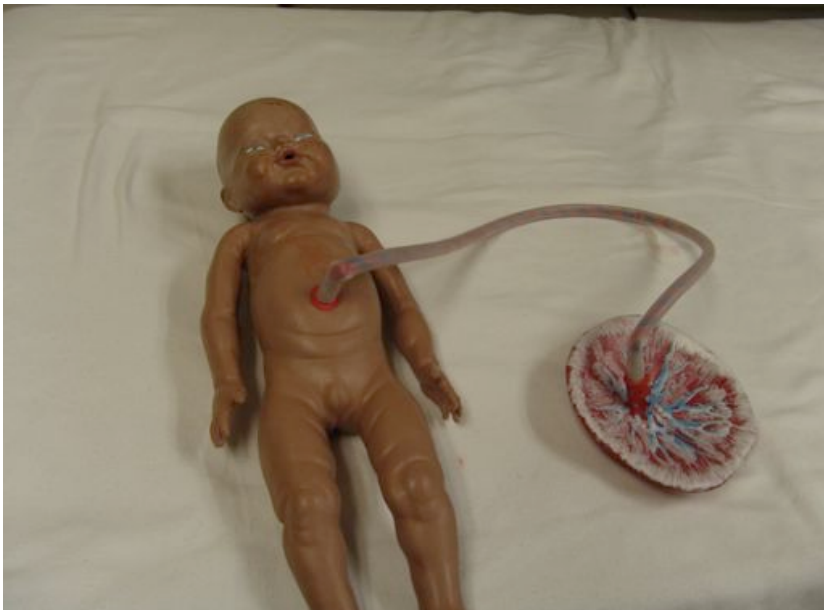


**Parto Pants and Vagina with tubing for bleeding**



**Baby and Placenta**





# UWMC CAPSTONE: OBSTETRICS
## Objectives

**Scenario #1**

- ☐ Quickly organize and assign roles & responsibilities
- ☐ Perform the minimal tasks that allow for a safe precipitous delivery
- ☐ Provide patient centered care
- ☐ Obtain a concise and effective HPI and OB history

**Scenario #2**

- ☐ Obtain thorough HPI and OB history from patient
- ☐ Appropriately recognizes PPH atony
- ☐ Inform team dealing with PPH
- ☐ Works effectively and efficiently with all staff – coordinated teamwork
- ☐ Perform correct use of medications: including dose and route
- ☐ Recognizes the **contraindications and side effects** to uterotonics
- ☐ Call for additional help
- ☐ Anticipate possible next steps and plans accordingly

**Scenario #3**

Same goals noted above, in addition

- ☐ Recognizes contraindication to the uterotonic Hemabate
- ☐ Recognizes wrong route is ordered for Methergine
- ☐ Utlizes TeamSTEPPS concepts to challenge orders: 2 challenge rule or CUS

**Team Process Objectives**

- ☐ Clear leadership- can we tell who is in charge
- ☐ Team leader or "event manager" responds to requests and questions from assistants promptly and professionally (exhibit followership)
- ☐ Closed loop communication: call outs, cross-checks, check backs
- ☐ Team leader or "event manager" strategically uses assistants and provides specific instructions
- ☐ Team exhibits situational awareness – recognizes errors from other team members
- ☐ Shared mental model - plan is verbalized

# SCENARIO #1

# Precipitous Vaginal Delivery

# Clinical Scenario #1: Precipitous Vaginal Delivery
# Timeline

**Students will have received an overview of the Virtual OR and the Parto Pants™**

**10 minutes** Run scenario

**20 minutes** Debrief clinical management, team communication and function

## Scenario Participants

2 Medical students
- **A.** Intern #1
- **B.** Intern #2

2 Nursing students
- **A.** Primary night nurse
- **B.** A second floor nurse

1-2 Pharmacy students
- **A.** Medical floor pharmacist

# Clinical Scenario #1: Precipitous Vaginal Delivery
# Timeline

The purpose of this initial exercise is to "warm up" the students to the urgency and quickness under which emergency situations occur on the labor and delivery floor, and in the care of Obstetrics patients in general.

A staff member will portray the patient. The students will not know they are a part of t he simulation. She will NOT be introduced as part of the teaching staff. Instead, students will assume that she is a pregnant staff member not directly involved in the training. This is intentional because we want to add an element of surprise and realism to the simulation.

The patient will be a healthy 22 yo female with history of two prior deliveries, both of which were very quick labors. She will interrupt the lecture in the conference room where staff will be reviewing the basic management of post partum hemorrhage (PPH).

**a. Overview of scenario**

As previously mentioned the students will not have an introduction to the scenario prior to starting. The lecture that they will be listening to will be interrupted by the pregnant staff member. Students assigned to group #1 will be identified as the team members that will be in charge of taking care of the patient.

**b. Overview of equipment and setting**

Students will be informed prior to starting all simulations that they will be working with a patient-actor. The scenario will take place in the "virtual OR" at the UWMC ISIS, which will be set-up as a standard Labor and Delivery room. Students will have the opportunity to tour the room and see the equipment and medications available prior to starting the simulations. A list of equipment and room set-up is described in the Equipment section.

Students will be informed that the faculty present in the room with a whiteboard will provide vital signs and physical exam findings to them. There is a telephone that works. It can be used to call for help. Respiratory equipment, including nasal cannula and a non-rebreather mask will be available.

**c. Available data (including fetal monitoring)**

All data that will be available will need to be obtained from the patient directly or will be provided by the faculty present in the room. No medical chart will be available. If fetal monitoring is requested it will be reactive and reassuring.

**d. Lab results**

No lab results will be available due to the emergent nature of the case.

**e. Medications and administration**

Medications that will be immediately available will be a vial of Pitocin, Cytotec, Methergine, Hemabate, Hydralazine, Labetalol (see pictures and dosage of

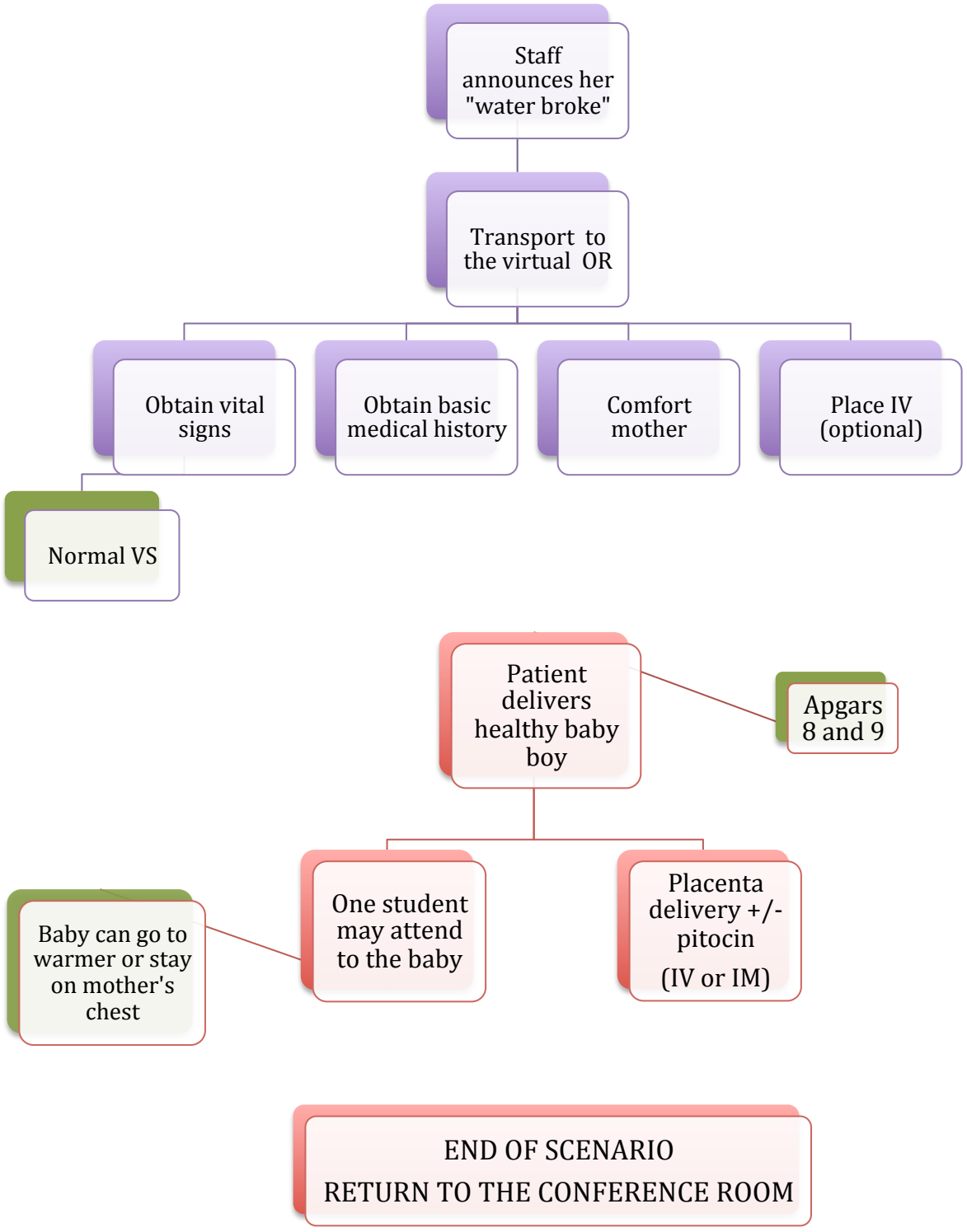
medications). Students will need to call the pharmacy to request any other STAT medications, but they will not be made available during the scenario. If they need to administer a medication IV, they will need to place an IV, which will be simulated with IV tubing and tape.

**f. Questions?**
Make sure to allow participants opportunity to ask questions.

***g.*** **Introduce the participants**
No introductions will be made prior to this scenario. Participants will introduce themselves at the beginning of the day.

***h.*** **Starting the scenario:**
Scenario starts when staff member announces her water broke and she is having contractions

# Clinical Scenario #1: Precipitous Vaginal Delivery
# Storyboard



# Clinical Scenario #1: Precipitous Vaginal Delivery
# Debriefing Tips

(see TeamSTEPPS debrief for team communication objectives)

Please refer to the section titled "basics of debriefing" to help guide conversation with participants. Additional questions that can be addressed with them are:

**CLINICAL QUESTIONS**

- ✓ Did you feel you obtained all the relevant medical information in the amount of time given?
- ✓ What other information should you have asked the patient (or when in the same situation in a couple of months)?
- ✓ Was it vital to have an IV in place? What factors may change your decision to obtain intravenous access? (you can refer to risk factors for post partum hemorrhage described in the debriefing section in scenario #2) What if she was hypertensive?
- ✓ How did comforting patient and supporting her through labor go for the team?

**TEAM MANAGEMENT**

- ✓ "Did the element of surprise affect:
  - Team dynamics (clear leadership established?)
  - Communication (was closed loop communication used?)
  - Shared mental model
  - Task prioritization
- ✓ Would knowing your team members ahead of time make an emergency situation easier to manage?
- ✓ Would practice drills with established protocols make an emergency situation easier to manage?

# Clinical Scenario: Precipitous Vaginal Delivery
# Information for Actor Portraying Stephanie

**Personal History**
You are 25 years old and were born and raised in Seattle, and graduated from the UW. You've been married for 5 years, and have 2 small children, one is 4 and the other is 2 years old. You work at the University of Washington at ISIS. Your husband works for Microsoft.

**Current Obstetrical History**
You have been receiving your prenatal care with a midwife at University of Washington. Your pregnancy so far has been uncomplicated. Your due date is in one week (making you 39 weeks pregnant). All of your prenatal labs have been normal. At your last appointment you were 3 cm dilated and the baby's head was low in the pelvis. You are hoping to not need pain medications during labor.

**Past Obstetrical history**
This is your third pregnancy. Your two prior pregnancies were uneventful. You had two vaginal deliveries at full term. Your second labor was extremely fast, your midwife had barely time to put her gloves on before baby delivered. Your children are healthy and growing well.

**Past Medical History**
None

**Past Surgical History**
None

**Medications**
Prenatal vitamins

**Allergies**
None

**Habits**
You walk for an hour 3-4 times a week

**Family History**
Everybody in your family is healthy

**Scenario development**
You were siting at your desk and having mild contractions when suddenly you felt a popping sensation, and immediately you realized that your water broke. You will enter into the lecture room when staff signals you. You will interrupt the lecture and say: "my water broke and the contractions are very strong, I think the baby is coming fast!" A group of students will be in charge of moving you to the virtual OR on a wheelchair. You will have contractions every minute. During contractions you will not be able to answer any questions. You will ask for your husband to be called at work.

The students may ask questions related to the medical history provided above. **A general Rule of Thumb is that if something is not mentioned above, it's negative. For example, if prior history of high blood pressure or diabetes is not mentioned, you can safely assume that you have <u>never had these conditions</u>.**

Overall, follow the instructions of the faculty member that will be in the room with you. They will instruct you when to start delivering the baby. Delivery will be uneventful and without complications. You will ask for the baby to be placed on your abdomen. Delivery of the placenta will be uncomplicated.

Most importantly have fun and be as creative as you would like to be! We appreciate your help in educating our students on how to take care of women in interprofessional teams.

# SCENARIO #2

# Mild Post Partum Hemorrhage

# Clinical Scenario #2: Mild Post Partum Hemorrhage
# Timeline

**5 minutes** Brief review of the differential diagnosis and initial workup of post partum hemorrhage. This clinical review should allay student anxiety about clinical management, and allow them to focus more on team communication. Explain to students that handoffs will be in a separate location for physicians and that they will enter the virtual OR only when called by the nursing staff.

**10 minutes** Run scenario

Act 1, Scene 1: Handoff from night nurse to day shift nurse + nursing student (at bedside)

Handoff from L&D night intern to day intern (outside virtual OR)

Act 1, Scene 2: Initial assessment by day shift nurse + nursing student

Act 1, Scene 3: Call from day shift nurse to resident to come to room for delivery

Act 2: Team evaluates and manages patient's bleeding

**20 minutes** Debrief clinical management, team communication and function

# Scenario Participants

**4 Medical students (2 active roles, 2 reserve)**

- **A.** Intern
- **B.** Senior resident (will enter when help is requested)

**3 Nursing students (2 active roles, 1 reserve)**

- **C.** Primary day shift nurse
- **D.** Nursing student

**1 Pharmacy student**

- **E.** Medical floor pharmacist

**1 Nursing faculty** – provides handoff to the primary day shift nurse (C) to start the scenario. If things are not flowing smoothly, could also "come back to help out".

**1 Medicine faculty** – acts as the L&D night intern, who gives sign-out to the day intern

# Clinical Scenario #2: Mild Post Partum Hemorrhage
# Simulation Overview

Group 2 will manage the mild post partum hemorrhage. Students will be informed they will manage post partum hemorrhage and receive a basic overview of its management prior to starting the simulation. As already mentioned, one faculty member will be in the virtual OR providing additional information team members are requesting and helping the scenario move along.

## a. Overview of scenario

**ACT I**

Scenario will start in the virtual OR with a woman in active labor. She will have a history of having three prior vaginal deliveries, no past medical history, no medications, no allergies, overall a very healthy patient. There will be no mistakes in hand offs.

Scene 1: There will be two hand-offs at change of shift: one between the nurses and one between physicians. Handoffs will be initiated in two separate locations: RN handoff will take place at the bedside and MD handoff will be outside the virtual OR. Handoffs will take place between two faculty members and two students.

- ✓ Physician faculty (acting as night time intern) -> Day time intern
- ✓ Nursing faculty (acting as night time nurse) -> 1$^{ary}$ day time nurse + nursing student

Scene 2: RN team interviews patient. Patient reports that "she wants to push"

Scene 3: RN team call intern for delivery. Patient will have a normal delivery.

**ACT II**

Patient will proceed to have brisk bleeding from uterine atony. Team members should be informed of the emergency. Pharmacy students will be important in this scenario and will assist medical students with the correct dosage and route of our routine atony medications. Medications that will need to be drawn up by nursing students are: methergine IM, hemabate IM, add pitocin to a bag of saline (20 units), and cytotec (administered rectally by medical student). We will be reviewing these medications with the students (but only the pharmacy students will have a copy of all the medications, dosage and contraindications). The patient will loose 1-1.5 liter of blood by the end of the scenario.

## b. Overview of equipment and setting

Patient actor will be in the OR with Parto Pants set-up for post-partum hemorrhage. She will have one IV taped to her arm. The rest of the room set-up is unchanged from prior scenario.

Students will be informed prior to starting that all simulations will involve a patient-actor. T he scenario will take place in the "virtual OR" at the UWMC WISH, which will be set-up as a standard Labor and Delivery room. Students will have the opportunity to tour the room

and see the equipment and medications available prior to starting the simulations. A list of equipment and room set-up is described in the Equipment section.

Students will be informed that the faculty present in the room with a whiteboard will provide vital signs and physical exam findings to them. Respiratory equipment, including nasal cannula and a non-rebreather mask will be available.

**c. Available data (including fetal monitoring)**
Data can be obtained from the patient, from the two handoffs, or will be provided by the faculty present in the room. A medical chart called the "Blue Boarder" will be available in the virtual OR. If fetal monitoring is requested it will be reactive and reassuring.

**d. Lab results**
No lab results will be available.

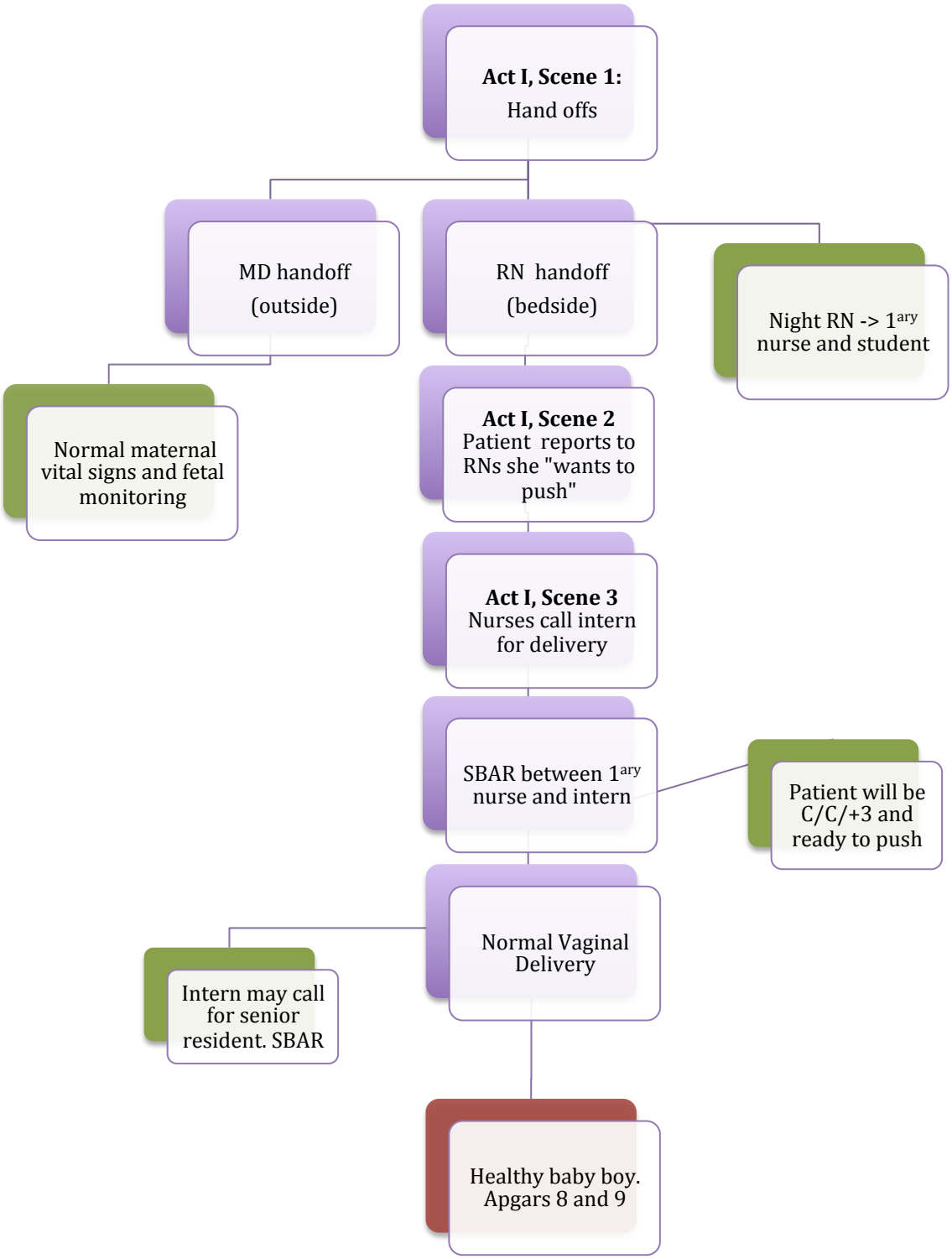
**e. Medications and administration**
Medications that will be immediately available will be a vial of Pitocin, Cytotec, Methergine, Hemabate, Hydralazine, Labetalol, and Fentanyl (see pictures and dosage of medications). Students will need to call the pharmacy to request any other STAT medications, but they will not be made available during the scenario. If they need to administer a medication IV, they will need to place an IV, which will be simulated with IV tubing and tape.

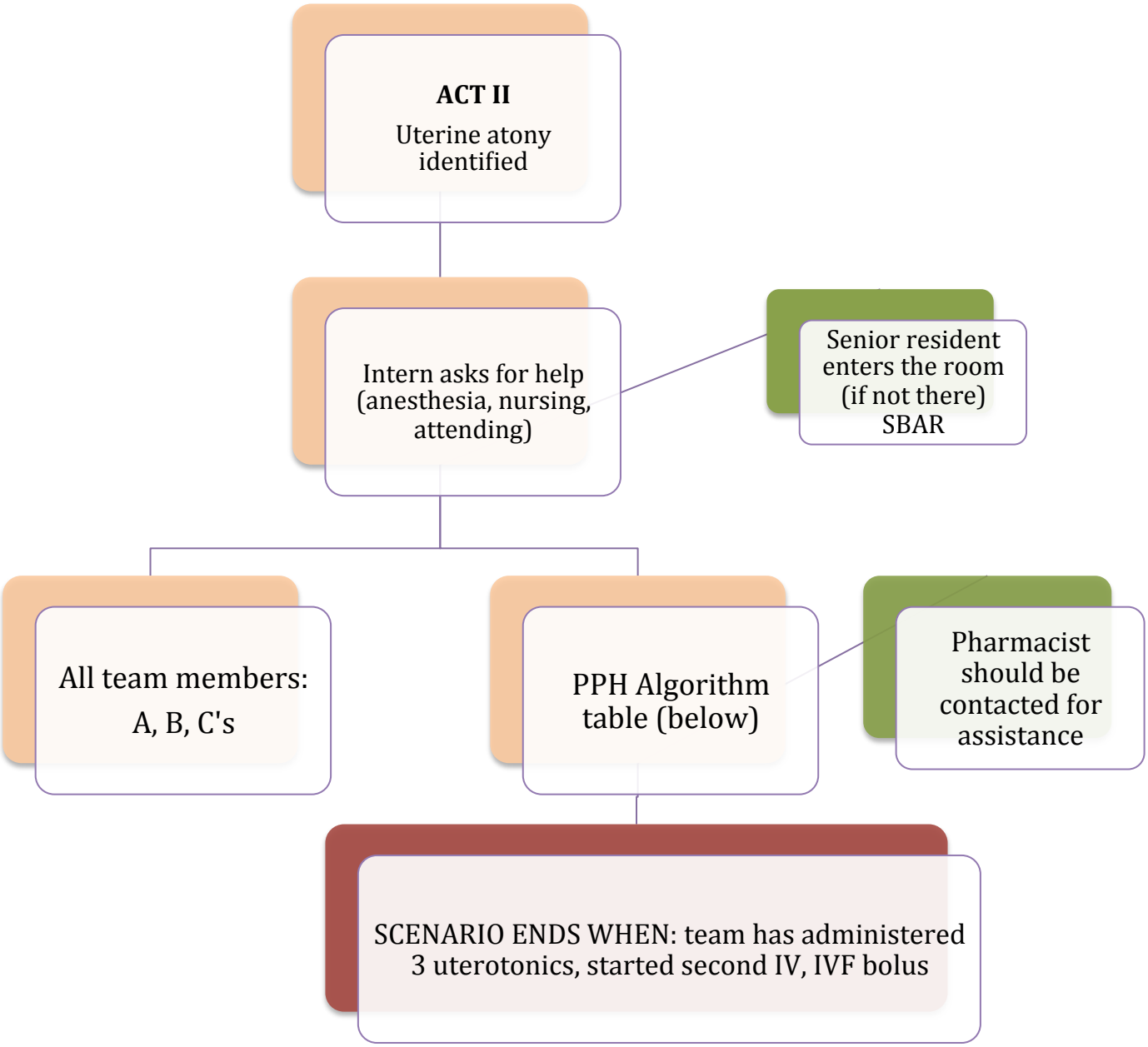
**f. Questions?**
Make sure to allow participants opportunity to ask questions.

***g.* Introduce the participants**
Participants will introduce themselves prior to starting the scenario.

***h.* Starting the scenario:**
Scenario starts when handoff has been completed with both the primary nurse and intern.

# Clinical Scenario #2: Mild Post Partum Hemorrhage Storyboard





# Clinical Scenario #2: Mild Post Partum Hemorrhage
# Debriefing Tips

(see TeamSTEPPS debrief for team communication objectives)

Please refer to the section titled "basics of debriefing" to help guide conversation with participants. Additional questions that can be addressed with them are:

**CLINICAL QUESTIONS**

✓ Discuss the algorithm described below

| Potential Team Action | Debrief Point |
|---|---|
| | |
| **Called for appropriate help or crisis response team** | Optimal care requires multiple individuals to implement required interventions. |
| **Team member consistently assessed and communicated quantity of blood lost with updates during the scenario** | This contributes to the interpretation of hemodynamic status. Communication with the team helps with planning and implementation of interventions. |
| **Differential diagnosis generated** | The treatment leader should consider possible causes. Identification and treatment of the cause is critical for resolution of the problem. |
| **Evaluated whether fragment of placenta is missing** | This is an important cause of hemorrhage that will guide interventions if found. |
| **Inspected for internal lacerations** | This is an important cause of hemorrhage that will guide interventions if found. |
| **Evaluated for atony** | This is an important cause of hemorrhage that will guide interventions if found. |
| **Emptied bladder** | Helps improve uterine tone |
| **Uterine Massage** | Helps improve uterine tone |
| **Multiple large bore venous access obtained** | Fluid and blood product resuscitation requires adequate large bore venous access. |
| **Fluid resuscitation performed** | This is key for hemodynamic resuscitation during acute blood loss. |
| **Hematologic/coagulation lab assessment requested (will not be available during scenario)** | This data will help intepret hematologic status and plan interventions. |
| **Orders blood crossmatch** | This allows bloodbank to start its process to have crossmatched blood and products available as soon as possible. |
| **Blood product resuscitation ordered** | This patient will likely require blood and blood products as soon as possible. This requires the use of un-crossmatched blood. |
| **Uterotonic medications administered** | Atony is the cause of this patient's hemorrhage. Uterotonic medications are the first-line medical |

| | |
|---|---|
| | treatment for this problem. |
| **Prior to administration of utertonic medications, treatment leader ascertained patient's hypertension and asthma history.** | Hemabate is contraindicated if patient has asthma. Methergine is relatively contraindicated if patient has HTN. However, if patient is severely hypotensive, this medication may be given. |
| **Team provided analgesia** | High dose morphine is likely to exacerbate this patient's hypotension. The team should pick shorter acting opiates (e.g., fentanyl) and/or delay analgesics until surgical anesthesia is obtained. |

**TEAM MANAGEMENT**

- ✓ Discuss
  - Team dynamics (clear leadership established?)
  - Communication (was closed loop communication used?)
  - Shared mental model
  - Task prioritization

- ✓ Would knowing your team members ahead of time make an emergency situation easier to manage?

- ✓ Would practice drills with established protocols make an emergency situation easier to manage?

# Clinical Scenario #2: Mild Post Partum Hemorrhage
# Information for Actor Portraying Stephanie Johnson

**Personal History**
You are 30 years old and were born and raised in Seattle, and graduated from the UW. You've been married for 7 years, and have 3 children. This is your fourth pregnancy. You work at the University of Washington. Your husband works for Microsoft.

**Current Obstetrical History**
You have been receiving your prenatal care with a midwife at University of Washington. Your pregnancy so far has been uncomplicated. Your due date is in one week (making you 39 weeks pregnant). All of your prenatal labs have been normal.

**Past Obstetrical history**
This is your fourth pregnancy. Your three prior pregnancies were uneventful. You had three vaginal deliveries at full term. Your children are healthy and growing well.

**Past Medical History**
None

**Past Surgical History**
None

**Medications**
Prenatal vitamins

**Allergies**
None

**Habits**
You walk for an hour 3-4 times a week

**Family History**
Everybody in your family is healthy

**Scenario development**
You were admitted to Labor and Delivery this morning at around 10:00 am when your water broke. You have been in labor for 4 hours, you opted not to have an epidural. You will have contractions every minute. During contractions you will not be able to answer any questions. Last cervical exam 1 hour ago you were 8/C/-1. Your husband will be at the bedside providing support. Follow the instructions of the faculty member that will be in the room with you. They will instruct you when to start delivering the baby.

Delivery will be uneventful and without complications. You will ask for the baby to be placed on your abdomen. Delivery of the placenta will also be uncomplicated. The team will then inform you that you are having more bleeding than expected. They will likely perform an exam, uterine massage, empty your bladder, start a second IV, give IVF bolus, and administer intravenous and/or intramuscular medications. You will progressively get concerned, report pain with exams,

and ask for additional information. Again, follow the instructions of the faculty member that will be in the room with you, they will indicate when to increase/decrease bleeding, act faint, etc.

The students may ask questions related to the medical history provided above. **A general Rule of Thumb is that if something is not mentioned above, it's negative. For example, if prior history of high blood pressure or diabetes is not mentioned, you can safely assume that you have <u>never had these conditions</u>.**

Most importantly have fun and be as creative as you would like to be! We appreciate your help in educating our students on how to take care of women in interprofessional teams.

# Clinical Scenario #2: Mild Post Partum Hemorrhage
# Handoff for Nursing Faculty

**Situation:**
Mrs. Stephanie Johnson is a healthy 30 year old G4P3 at 39 weeks pregnancy admitted 4 hours ago in active labor.

**Background:**
Mrs. Johnson is a healthy woman, no medical problems, no allergies. This is her fourth pregnancy. All three prior pregnancies were vaginal deliveries. Last cervical exam was one hour ago and she was 8 cm dilated, completely effaced, and -1 station. She does not have an epidural. She has been coping well throughout the labor. She has one IV placed with no fluids running. She is not receiving any other medications or antibiotics since she is GBS negative. She has no known drug allergies. She wants the baby placed on her abdomen after delivery.

**Assessment:**
Patient will likely deliver at soon.

**Recommendation:**
Be prepared to call the intern early, she is moving quickly through labor. She is at risk of post partum hemorrhage. The bag of post partum Pitocin is in the room and ready, along with other uterotonics.

**IF STUDENTS ASK FOR INFORMATION THAT IS NOT LISTED ABOVE DIRECT THEM TO THE BLUE BOARDER LOCATED IN THE PATIENT'S ROOM**

# Clinical Scenario #2: Mild Post Partum Hemorrhage
# Handoff for Physician Faculty

**Situation:**
Mrs. Stephanie Johnson is a healthy 30 year old G4P3 at 39 weeks admitted 4 hours ago in active labor.

**Background:**
Mrs. Johnson is a healthy woman, no medical problems and no prior surgeries. This is her fourth pregnancy. All three prior pregnancies were vaginal deliveries. Last cervical exam was one hour ago and she was 8 cm dilated, completely effaced, and -1 station. She does not have an epidural. She has been coping well throughout labor. She is GBS negative. She wants the baby placed on her abdomen after delivery.

**Assessment:**
Patient will likely deliver at soon.

**Recommendation:**
Keep a close eye on her, she is moving fast through labor. She is also at risk of post partum hemorrhage, low threshold to have the senior resident available or present during delivery. All uterotonics are in the room available

**IF STUDENTS ASK FOR INFORMATION THAT IS NOT LISTED ABOVE DIRECT THEM TO THE BLUE BOARDER LOCATED IN THE PATIENT'S ROOM**

# SCENARIO #3

# Mild Post Partum Hemorrhage + Error

## Clinical Scenario #3: Mild Post Partum Hemorrhage + Error Timeline

**5 minutes** Address any questions participants may have. This simulation is the same format as Scenario #2.

**10 minutes** Run scenario

Act 1, Scene 1: Handoff from night nurse to day shift nurse + nursing student (at bedside)

Handoff from L&D night intern to day intern (outside virtual OR), with missing key medical information

Act 1, Scene 2: Initial assessment by day shift nurse + nursing student

Act 1, Scene 3: Call from day shift nurse to resident to come to room for delivery

Act 2: Team evaluates and manages patient's bleeding

**20 minutes** Debrief clinical management, team communication and function

## Scenario Participants

**4 Medical students (2 active roles, 2 reserve)**

- **A.** Intern
- **B.** Senior resident (will enter when help is requested)

**3 Nursing students (2 active roles, 1 reserve)**

- **C.** Primary day shift nurse
- **D.** Nursing student

**1 Pharmacy student**

- **E.** Medical floor pharmacist

**1 Nursing faculty** – provides handoff to the primary day shift nurse (C) to start the scenario. If things are not flowing smoothly, could also "come back to help out".

**1 Medicine faculty** – acts as the L&D night intern, who gives sign-out to the day intern (sign out will exclude important medical history)

# Clinical Scenario #3: Mild Post Partum Hemorrhage + Error Simulation Overview

Students will be assigned into three groups at the start of the day. Group 3 will manage the mild post partum hemorrhage + error. Students will be informed they will manage post partum hemorrhage again, and would have already received a basic overview of its management prior to starting the simulation. As already mentioned, one faculty member will be in the virtual OR providing additional information team members are requesting and helping the scenario move along.

**i. Overview of scenario**

Same story line as scenario #2 except patient has history of asthma with hospitalizations, and "senior resident" will be intentionally ask to make a medication error.

**ACT I**

Scene 1: There will be two hand-offs at change of shift: one between the nurses and one between physicians. Handoffs will be initiated in two separate locations: RN handoff will take place at the bedside and MD handoff will be outside the virtual OR. Handoffs will take place between two faculty members and two students. There will be an intentional omission of information in the physician hand offs: the history of asthma with multiple hospitalizations will not be included in the handoff.

- ✓ Physician faculty (acting as night time intern) -> Day time intern (missing information)
- ✓ Nursing faculty (acting as night time nurse) -> 1$^{ary}$ day time nurse + nursing student

Scene 2: RN team interviews patient. Patient reports that "she wants to push"

Scene 3: RN team call intern for delivery. Patient will have a normal delivery.

**ACT II**

Scene 1: Patient will proceed to have brisk bleeding from uterine atony. Team members should be informed of the emergency. Nursing students will help the team go through their ABCs, make sure patient has oxygen, second IV, call for help (senior resident, anesthesia, additional nursing, pharmacy, blood bank), and administer medications.

Scene 2: A medication error will be planted. The "senior resident" will be instructed to order the wrong route for Methergine and will request it IV instead of IM. The OB intern, nurses or pharmacist in the group should pick up on the error and challenge the order. The "senior resident" will be instructed to initially refuse their recommendation until they consult the pharmacist (the nurse and OB intern will need to request pharmacist's opinion, senior resident will NOT request it). If the mistake is not challenged, the patient will have a hypertensive crisis and the training ends. If students avoid the medication being given IV they will proceed to Scene #3

Scene 3: Patient will have a h/o asthma that will be listed in her blue boarder (medical record) but will not be included at the time of handoff to the intern. This information will be given to the 1$^{ary}$ nurse at sign out. Intern is likely to ask for Hemabate (where asthma is

a contraindication), and hopefully the nurse will speak up. Otherwise patient will have bronchospasm and this will end the training.

**j. Overview of equipment and setting**

Patient actor will be in the OR with Parto Pants set-up for post-partum hemorrhage. She will have one IV taped to her arm. The rest of the room set-up is unchanged from prior scenario.

Students will be informed prior to starting that all simulations will involve a patient-actor. T he scenario will take place in the "virtual OR" at the UWMC WISH, which will be set-up as a standard Labor and Delivery room. Students will have the opportunity to tour the room and see the equipment and medications available prior to starting t he simulations. A list of equipment and room set-up is described in the Equipment section.

Students will be informed that the faculty present in the room with a whiteboard will provide vital signs and physical exam findings to them. Respiratory equipment, including nasal cannula and a non-rebreather mask will be available.

**k. Available data (including fetal monitoring)**

Data can be obtained from the patient, from the two handoffs, or will be provided by the faculty present in the room. A medical chart called the "Blue Boarder" will be available in the virtual OR. If fetal monitoring is requested it will be reactive and reassuring.

**l. Lab results**

No lab results will be available.

**m. Medications and administration**

Medications that will be immediately available will be a vial of Pitocin, Cytotec, Methergine, Hemabate, Hydralazine, Labetalol, and Fentanyl (see pictures and dosage of medications). Students will need to call the pharmacy to request any other STAT medications, but they will not be made available during the scenario. If they need to administer a medication IV, they will need to place an IV, which will be simulated with IV tubing and tape.

**n. Questions?**

Make sure to allow participants opportunity to ask questions.

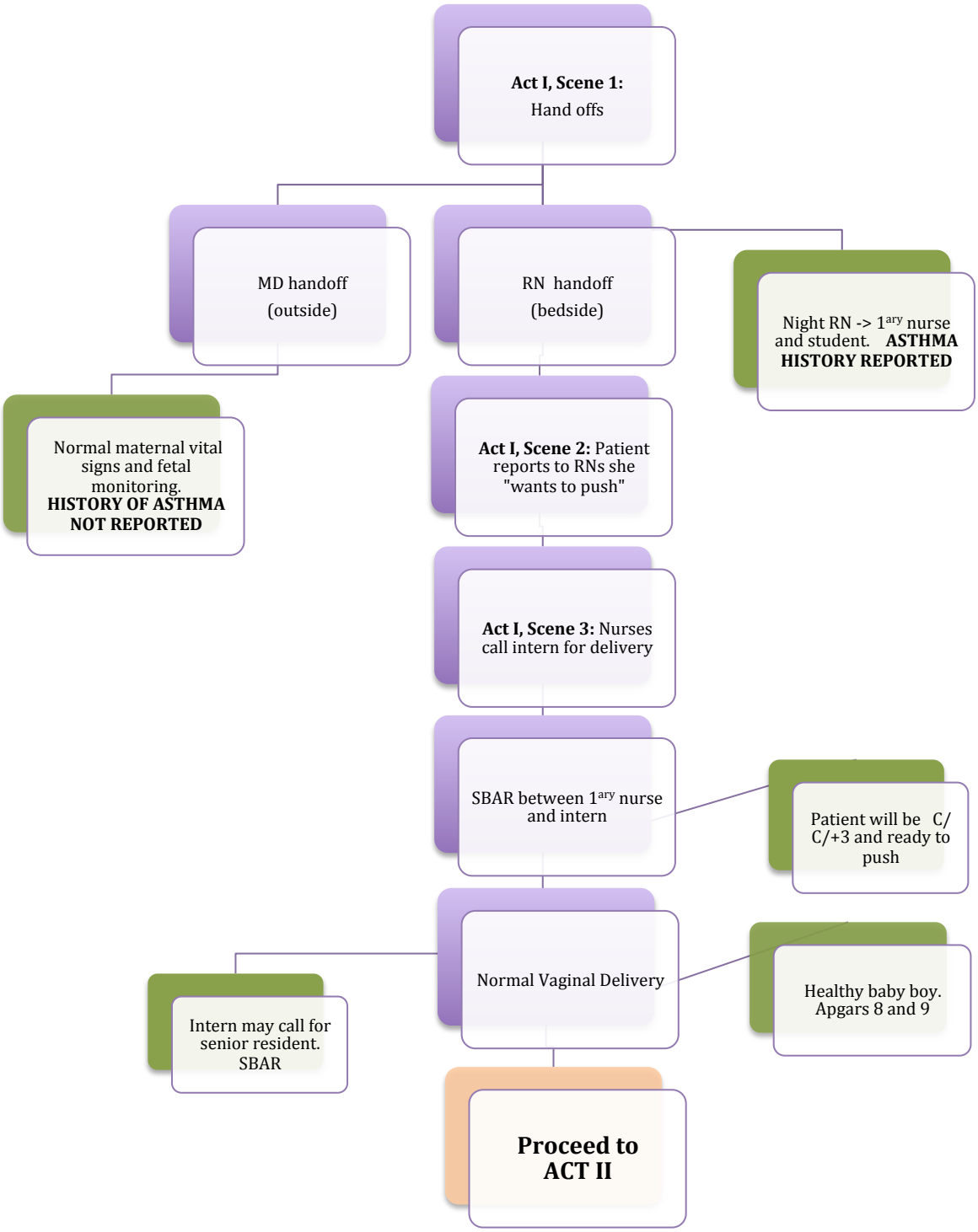
***o.* Introduce the participants**

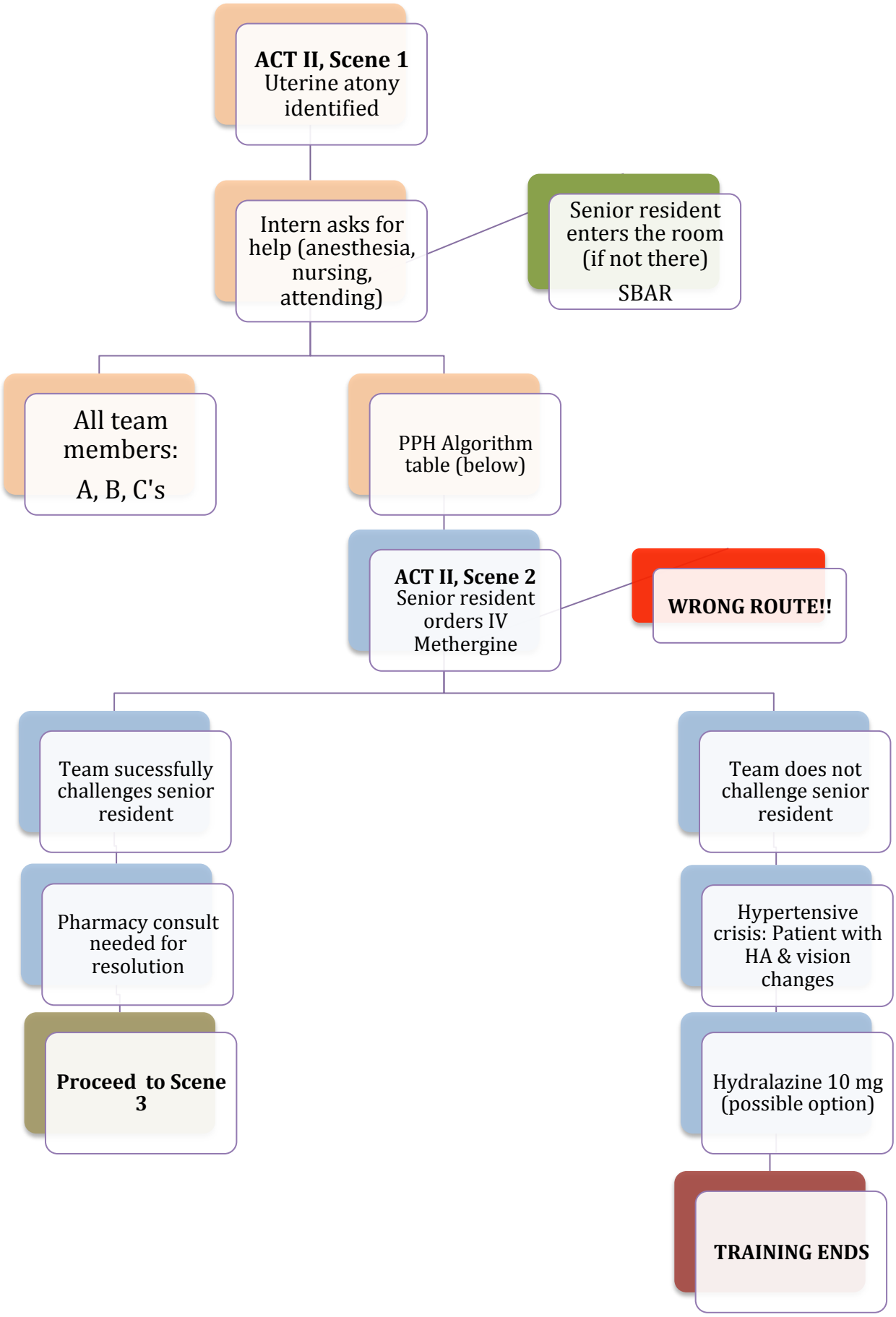
Participants will introduce themselves prior to starting the scenario.

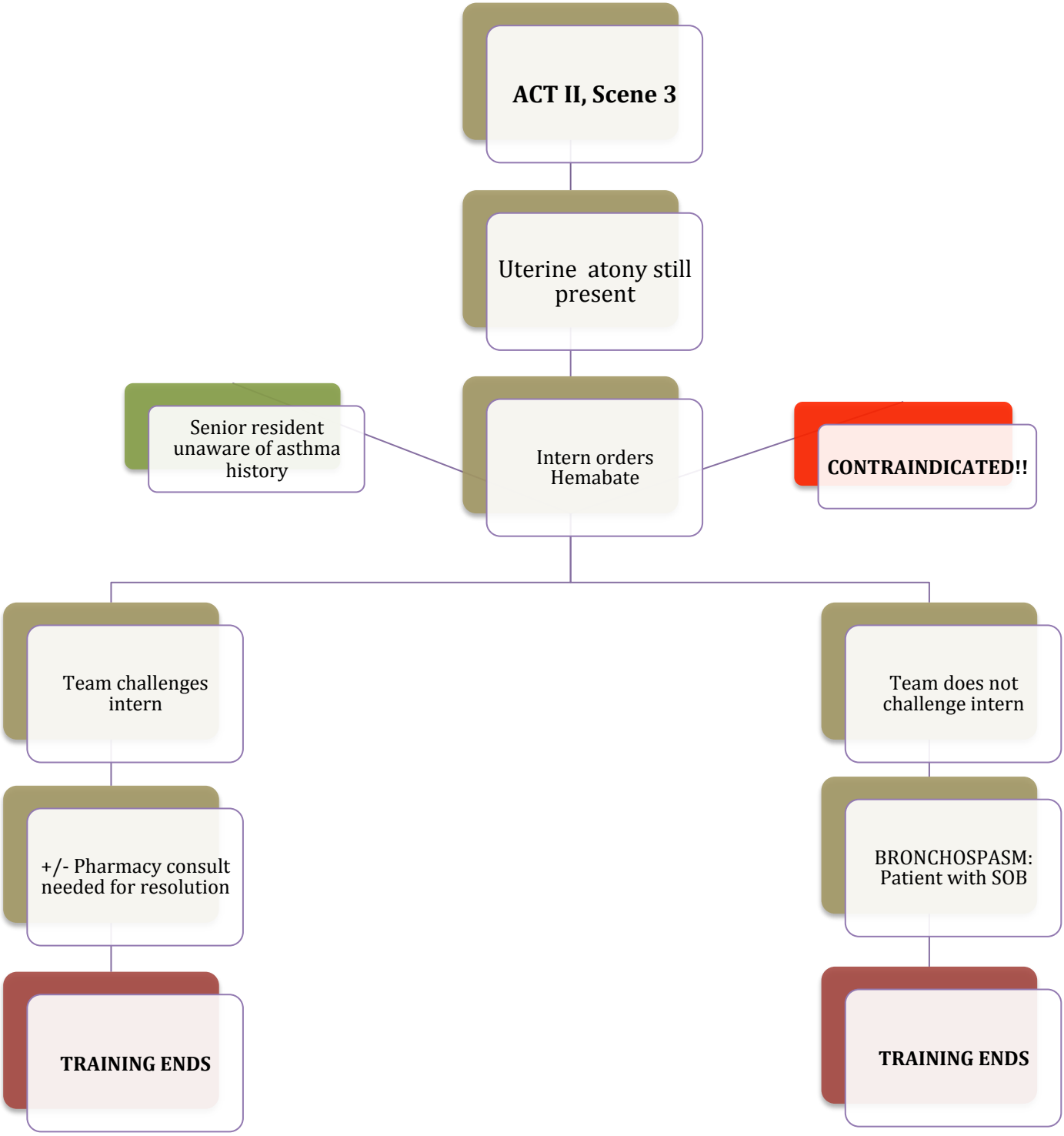
***p.* Starting the scenario:**

Scenario starts when handoff has been completed by both the primary nurse and primary physician.

# Clinical Scenario #3: Mild Post Partum Hemorrhage + Error Storyboard







# Clinical Scenario #3 Mild Post Partum Hemorrhage + Error Debriefing Tips

(see TeamSTEPPS debrief for team communication objectives)

Please refer to the section titled "basics of debriefing" to help guide conversation with participants. Additional questions that can be addressed with them are:

**CLINICAL QUESTIONS**

✓ Discuss the post partum hemorrhage algorithm

| Potential Team Action | Debrief Point |
|---|---|
| | |
| **Called for appropriate help or crisis response team** | Optimal care requires multiple individuals to implement required interventions. |
| **Team member consistently assessed and communicated quantity of blood lost with updates during the scenario** | This contributes to the interpretation of hemodynamic status. Communication with the team helps with planning and implementation of interventions. |
| **Differential diagnosis generated** | The treatment leader should consider possible causes. Identification and treatment of the cause is critical for resolution of the problem. |
| **Evaluated whether fragment of placenta is missing** | This is an important cause of hemorrhage that will guide interventions if found. |
| **Inspected for internal lacerations** | This is an important cause of hemorrhage that will guide interventions if found. |
| **Evaluated for atony** | This is an important cause of hemorrhage that will guide interventions if found. |
| **Emptied bladder** | Helps improve uterine tone |
| **Uterine Massage** | Helps improve uterine tone |
| **Multiple large bore venous access obtained** | Fluid and blood product resuscitation requires adequate large bore venous access. |
| **Fluid resuscitation performed** | This is key for hemodynamic resuscitation during acute blood loss. |
| **Hematologic/coagulation lab assessment requested (will not be available during scenario)** | This data will help intepret hematologic status and plan interventions. |
| **Orders blood crossmatch** | This allows bloodbank to start its process to have crossmatched blood and products available as soon as possible. |
| **Blood product resuscitation ordered** | This patient will likely require blood and blood products as soon as possible. This requires the use of un-crossmatched blood. |
| **Uterotonic medications administered** | Atony is the cause of this patient's hemorrhage. Uterotonic medications are the first-line medical |

| | |
|---|---|
| | treatment for this problem. |
| **Prior to administration of utertonic medications, treatment leader ascertained patient's hypertension and asthma history.** | Hemabate is contraindicated if patient has asthma. Methergine is relatively contraindicated if patient has HTN. However, if patient is severely hypotensive, this medication may be given. |
| **Team provided analgesia** | High dose morphine is likely to exacerbate this patient's hypotension. The team should pick shorter acting opiates (e.g., fentanyl) and/or delay analgesics until surgical anesthesia is obtained. |

**TEAM MANAGEMENT**

- ✓ Discuss
  - Team dynamics (clear leadership established?)
  - Communication (was closed loop communication used?)
  - Shared mental model
  - Task prioritization

- ✓ Would knowing your team members ahead of time make an emergency situation easier to manage?

- ✓ Would practice drills with established protocols make an emergency situation easier to manage?

# Clinical Scenario #3: Mild Post Partum Hemorrhage + Error
# Information for Actor Portraying Stephanie Johnson

**Personal History**
You are 30 years old and were born and raised in Seattle, and graduated from the UW. You've been married for 7 years, and have 3 children. This is your fourth pregnancy. You work at the University of Washington. Your husband works for Microsoft.

**Current Obstetrical History**
You have been receiving your prenatal care with a midwife at University of Washington. Your pregnancy so far has been uncomplicated. Your due date is in one week (making you 39 weeks pregnant). All of your prenatal labs have been normal.

**Past Obstetrical history**
This is your fourth pregnancy. Your three prior pregnancies were uneventful. You had three vaginal deliveries at full term. Your children are healthy and growing well.

**Past Medical History**
Depression – well controlled on Zoloft
Migraines with aura – no medications
Asthma with h/o of three hospitalizations (two as a child and one in your early 20's). No inhalers were needed during this pregnancy.

**Past Surgical History**
None

**Medications**
Prenatal vitamins
Zoloft

**Allergies**
None

**Habits**
You walk for an hour 3-4 times a week

**Family History**
Hypertension and diabetes

**Scenario development**
You were admitted to Labor and Delivery this morning at around 10:00 am when your water broke. You have been in labor for 4 hours, you opted not to have an epidural. You will have contractions every minute. During contractions you will not be able to answer any questions. Your husband will be at the bedside providing support. Follow the instructions of the faculty member that will be in the room with you. They will instruct you when to start delivering the baby.

Delivery will be uneventful and without complications. You will ask for the baby to be placed on your abdomen. Delivery of the placenta will also be uncomplicated. The team will then inform you

that you are having more bleeding than expected. They will likely perform an exam, uterine massage, empty your bladder, start a second IV, give IVF bolus, and administer intravenous and/or intramuscular medications. You will progressively get concerned, report pain with exams, and ask for additional information. Again, follow the instructions of the faculty member that will be in the room with you, they will indicate when to increase/decrease bleeding, act faint, etc.

In this scenario there will be two potential errors the team can make. These are implanted errors in the scenario. One includes an omission of h/o asthma. If you are given a medication called Hemabate the faculty in the room will instruct you to start having shortness of breath. The other implanted mistake is the potential administration of a medication called Methergine through the IV instead of an intramuscular injection. If the medication is given through your IV the faculty in the room will instruct you to have a severe headache and blurry vision.

The students may ask questions related to the medical history provided above. **A general Rule of Thumb is that if something is not mentioned above, it's negative. For example, if prior history of high blood pressure or diabetes is not mentioned, you can safely assume that you have <u>never had these conditions</u>.**

Most importantly have fun and be as creative as you would like to be! We appreciate your help in educating our students on how to take care of women in interprofessional teams.

# Clinical Scenario #3: Mild Post Partum Hemorrhage + Error Handoff for Nursing Faculty

**Situation:**
Mrs. Stephanie Johnson is a 30 year old G4P3 at 39 weeks pregnancy admitted 4 hours ago in active labor.

**Background:**
This Mrs. Johnson's fourth pregnancy, all three prior pregnancies were uncomplicated vaginal deliveries. Her past medical history is significant for depression that is well controlled on Zoloft, asthma, and migraines with aura. She has no known drug allergies. Last cervical exam was one hour ago and she was 8 cm dilated, completely effaced, and -1 station. She does not have an epidural. She has been coping well throughout the labor. She has one IV placed with no fluids running. She is not receiving any other medications or antibiotics since she is GBS negative. She wants the baby placed on her abdomen after delivery.

**Assessment:**
Patient will likely deliver at soon.

**Recommendation:**
Be prepared to call the intern early, she is moving quickly through labor. She is at risk of post partum hemorrhage and medications are in the room available. The bag of post partum Pitocin is in the room and ready.

**IF STUDENTS ASK FOR INFORMATION THAT IS NOT LISTED ABOVE DIRECT THEM TO THE BLUE BOARDER LOCATED IN THE PATIENT'S ROOM. IF THEY ASK FOR MORE INFORMATION ON THE ASTHMA HISTORY REPLY THAT SHE HAS NOT NEEDED INHALERS DURING PREGNANCY**

# Clinical Scenario #3: Mild Post Partum Hemorrhage + Error Handoff for Physician Faculty

**Situation:**
Mrs. Stephanie Johnson is a healthy 30 year old G4P3 at 39 weeks admitted 4 hours ago in active labor.

**Background:**
This Mrs. Johnson's fourth pregnancy, all three prior pregnancies were uncomplicated vaginal deliveries. Her past medical history is significant for depression that is well controlled on Zoloft, and migraines with aura. She has no known drug allergies. Last cervical exam was one hour ago and she was 8 cm dilated, completely effaced, and -1 station. She does not have an epidural. She has been coping well throughout labor. She is GBS negative. She wants the baby placed on her abdomen after delivery.

**Assessment:**
Patient will likely deliver at soon.

**Recommendation:**
Keep a close eye on her, she is moving fast through labor. She is also at risk of post partum hemorrhage, low threshold to have the senior resident available or present during delivery. Post partum hemorrhage medications are in the room available.

**IF STUDENTS ASK FOR INFORMATION THAT IS NOT LISTED ABOVE DIRECT THEM TO THE BLUE BOARDER LOCATED IN THE PATIENT'S ROOM**

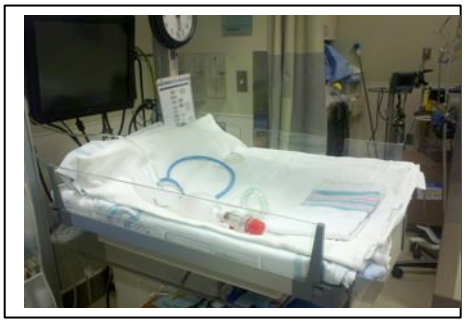
# Simulation Equipment and Medications
# Applies to all scenarios

**Simulator:**
Patient-actor dressed in a hospital top and Parto Pants™

**Setting:**
OR bed with pillow, sheets, and blanket at center. Chucks should be taped to the floor below the table.

Baby warmer on far corner of room ready for possible neonatal resuscitation (with baby blanket)

Special note: Place wheelchair at entrance of ISIS, hide anesthesia equipment behind curtains in the OR, and designate one area outside of the conference room with video recording capabilities called "MD handoff station"



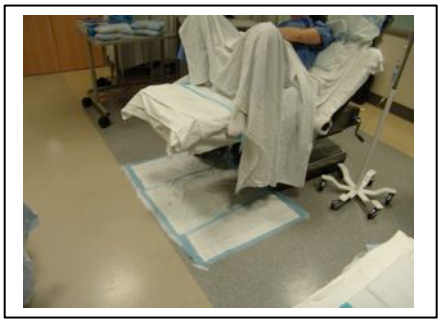


**Table setup (3 in total):**
Table at the entrance of the room: six hospital gowns, six sets of long shoe covers, 4 medium top/bottom scrubs, 4 large medium top/bottom, one box of small/medium/large gloves

Second table: labor and delivery set and speculum kit (will obtain from L&D)

Third table/mayo stand: medications (including post partum hemorrhage kit), needles, syringes, surgical tape, extra IV tubing, two 1 liter bags of LR, post-partum pitocin

Other equipment available: Blood pressure cuff and stethoscope.

**Respiratory equipment**

Nasal cannula
Non-rebreather mask
Oxygen Flow meter

**Urinary catheter equipment**

In-out catheter (placed in the second table)

**IV equipment**

IV pole x2
IV bag with pitocin label (on third table)
IV bag 1 LR X 2 (on third table)

**Medications and equipment:**

| | |
|---|---|
| Methergine | Two 1 ml ampules (0.2mg/mL) |
| Hemabate | Two 1 ml ampules (0.25mg/mL) |
| Pitocin | Two 10 ml vials (10 USP units/mL) |
| Fentanyl | 2 vials |
| Cytotec | 800mcg x 3 (16 tablets in total) |
| Labetalol | One 20 ml vial (5mg/mL) |
| Hydralazine | Two vials (20mg/mL) |
| Syringes | 3 ml X 3; 5 ml X 3; 10 ml X 3 |

**Paperwork:**

None in Scenario #1
Blue Boarder A in scenario #2
Blue Boarder B in scenario #3

**Parto Pants Set-up (for patient actor)**

Mesh underwear
2 adult diapers
One scrub pant for first layer (medium to large)
Two top scrub (medium to large)
Two kitchen sponges duct taped to leg on top of first scrub pant
1 liter bag (only filled to 500 cc) filled with fake blood, this gets placed in the front of parto pants
Enteric bag (1,200 cc) with tubing, clamp with a hemostat to the patient's shirt
Note: One scrub pant, then diapers, then parto pants. Add one more scrub top.

**Miscellaneous**

Baby + placenta

# APPENDIX

# Instructions to Team #1

**I. Your team members are:**

| First Name | Last Name | Program | Group |
|---|---|---|---|
| Amanda | Beery | Med | 1 |
| Benjamin | Eastham | Med | 1 |
| Lee | Hammons | Med | 1 |
| Samantha | Michelena | Med | 1 |
| Rachel | So | Nurse | 1 |
| Donna | Steinman | Nurse | 1 |

II. **Roles to assign:** all of you will participate in this training scenario. Assume that you have graduated already and this is your first year as a floor nurse(s), OB/GYN resident(s), and medical floor pharmacist(s)

III. **What:** You will manage together a normal vaginal delivery

## Have fun and do not worry about what you do not know

## Use each other as resources

Hint: Do a small brief before starting.

# Instructions to Team #2

## I. Your team members are:

| First Name | Last Name | Program | Group |
|---|---|---|---|
| Amy | Bellante | Nurse | 2 |
| Victoria | Berger | Med | 2 |
| Sean | Edmunds | Med | 2 |
| Joshua | Greenwood | Pharm | 2 |
| Heidi | Michael | Med | 3 |
| Katy | Southerland | Nurse | 2 |
| Katherine | Titiali | Nurse | 2 |
| Ana | Torvie | Med | 2 |

## III. Types of Roles:

There are two roles: active and reserve.

Active roles will start with the simulation training and will have designated roles.

Reserve positions are more fluid, they can act as additional help, or a second opinion if your team is "stuck." They may not know what has happened in the simulation, so you will need to update them and assign specific tasks. They do not have to play the role of their area of study. Be creative!

## IV. Roles to assign:

Assume that you have graduated already and this is your first year as a floor nurse(s), OB/GYN resident(s), and medical floor pharmacist(s)

Medical students (2 active, 2 reserve)

1. Intern (enters when called by nurses)
2. Senior resident (enters when called by the intern)
3. Reserve
4. Reserve

Nursing students (2 active, 1 reserve)

1. Primary day shift nurse
1. Nursing student
2. Reserve

Pharmacy student (1 active)

1. Medical floor pharmacist

**V. What:**

You will manage a post partum hemorrhage

**VI. How to start:**

Simulation training starts with handoffs:

a. Primary day shift nurse, nursing student, and pharmacist will obtain sign-out at the patient's bedside from the night time nurse (in the Virtual OR).

b. Intern will obtain sign-out from night time intern (area designated in WISH)
c. Reserve team members will be sitting outside the Virtual OR

**VII. Ground Rules**

a. Intern can only enter Virtual OR when called by nursing staff.

b. Senior resident can only enter Virtual OR when called by intern.

c. If your team is in a situation that is uncomfortable or beyond your team's level of knowledge you can STOP the training. This is your safe "way out."

# Use each other as resources

# Instructions to Team #3

## I. Your team members are:

| First Name | Last Name | Program | Group |
|---|---|---|---|
| Sarah | Chisholm | Med | 3 |
| Tania | Hall | Med | 3 |
| Joel | Henckel | Pharm | 3 |
| Lia | LaBrant | Med | 2 |
| Jennifer | Spencer | Nurse | 3 |
| Kayleigh | Stromgren | Nurse | 3 |
| Claire | Welly | Nurse | 3 |

## II. Types of Roles:

There are two roles: active and reserve.
Active roles will start with the simulation training and will have designated roles.

Reserve positions are more fluid, they can act as additional help, or a second opinion if your team is "stuck." They may not know what has happened in the simulation, so you will need to update them and assign specific tasks. They do not have to play the role of their area of study. Be creative!

**VIII. Roles to assign:** Assume that you have graduated already and this is your first year as a floor nurse(s), OB/GYN resident (s), and medical floor pharmacist(s)

Medical students (2 active, 2 reserve)

5. Intern (enters when called by nurses)
6. Senior resident (enters when called by the intern)
7. Reserve
8. Reserve

Nursing students (2 active, 1 reserve)

2. Primary day shift nurse
3. Nursing student

4. Reserve

Pharmacy student (1 active)

2. Medical floor pharmacist

**III. What:**

You will manage a post partum hemorrhage

**IV. How to start:**

Simulation training starts with handoffs:

a. Primary day shift nurse, nursing student, and pharmacist will obtain sign-out at the patient's bedside from the night time nurse (in the Virtual OR).

b. Intern will obtain sign-out from night time intern (area designated in ISIS)

c. Reserve team members will be sitting outside the Virtual OR

**V. Ground Rules**

a. Intern can only enter Virtual OR when called by nursing staff.

b. Senior resident can only enter Virtual OR when called by intern.

c. If your team is in a situation that is uncomfortable or beyond your team's level of knowledge you can STOP the training. This is your safe "way out."

# Use each other as resources

# Instructions to Team #3
# Senior Resident

You have been designated a co-conspirator. You are not to inform your team members that you have been given additional instructions.

When you are called to the Virtual OR you will order Methergine 0.2 mg IV x1 instead of an IM injection.

- ✓ If the intern or nurses challenge you, tell them "you know what you are doing". Do not change your order until they consult the pharmacist. Once the pharmacist is consulted then you should agree to change your order.

- ✓ If the pharmacist challenges you first, then force the pharmacist to use one of the two teamSTEPPS concepts, either CUS or two challenge rule, before you agree to change your order.

Feel free to be creative in your performance!