Postpartum Hemorrhage

OVERVIEW
The care team will:

*1) Listen to the initial **scenario** presented by the group facilitator*
*2) Hold a **briefing** session to discuss risk factors and roles after the facilitator presents the initial case (limit to five minutes)*
*3) Simulate patient care management (**teamwork in action**). The facilitator intervenes as little as possible. (limit to 30 minutes)*
*4) Participate in a structured **debriefing** lead by the facilitator. (approximately one hour)*

Videotape to playback sections during debriefing if possible.

INITIAL SCENARIO
"You are caring for a G1P0 at 41 weeks by 14 week ultrasound with an uncomplicated pregnancy who presented to your labor unit with spontaneous rupture of membranes at 2 cm. She was augmented with oxytocin and progressed steadily during active labor. She has been pushing for two and a half hours and is getting close to delivery."

BRIEF
"Does this patient have any risk factors for a postpartum hemorrhage?"

Rating Levels:
1 – Team meets all criteria
2 – Team meets criteria with minimal prompting
3 – Team requires retraining to meet criteria

Rating Team Competency Criteria:

_____ **Briefing: Identifies risk factors**

- ☐ Antepartum
  - Preeclampsia
  - Nulliparity
  - Multiple gestation
  - Previous postpartum hemorrhage
  - Previous cesarean delivery
  - Thrombolytic disorders
  - Chorioamnionitis
  - Placenta previa
  - Suspected placenta accrete or percreta

- Platelets < 100,000 Coagulpopathy/thrpmbocytopenia
- Estimated fetal weight > 4000 grams Macrosomia

☐ Intrapartum
- Prolonged labor
- Prolonged third stage (greater than 30 min)
- Lacerations (cervical/vaginal/perineal)
- Episiotomy
- Assisted delivery (forceps/vacuum)
- Augmented labor

"Name some ways you can help prevent or reduce the patient's risk for a postpartum hemorrhage?"

_____ **Brief: Verbalizes four ways to prevent or reduce postpartum hemorrhage**

☐ Check hemoglobin and correct anemia before delivery
☐ Perform episiotomy only if a non-reassuring FHR tracing occurs, or the perineum excessively delays birth
☐ Practice active management of third stage labor (oxytocin with anterior shoulder, early cord clamping, and controlled cord traction)
☐ Have primary care provider re-examine the patient's vitals and vaginal flow after completing documentation of the delivery (in order to pick up slow, steady bleeding that can be missed at completion of the third stage)
☐ Avoid underestimating significant bleeding (do not underestimate estimated blood loss (EBL); do not disregard a slow but unrelenting trickle; if signs of shock are present without increased EBL, hidden bleeding must be considered, such as a hematoma)
☐ Weighing of saturated pads, drapes, etc.

"What are the four causes you will look for during a postpartum hemorrhage?"

_____ **Brief: Verbalizes specific causes of postpartum Hemorrhage (fourT's)**

☐ Tone (uterine atony) *Occurs in 70 percent of cases*
☐ Trauma (tears,abrasions) *Occurs in 20 percent of cases*
☐ Tissue (retained products) *Occurs in 10 percent of cases*
☐ Thrombin (clotting disruption) *Occurs in one percent of cases*

"What measures can you take to prepare for a postpartum hemorrhage?"

_____ **Brief: Prepares for postpartum hemorrhage based on risk factors**

☐ Considers additional staff present for patients with risk factors
☐ Ensures patent IV access throughout second stage
☐ Considers additional IV access sites for patients at risk
☐ Ensures rapid access of medications for patients at risk
☐ Quantative analysis of blood loss (i.e. scale available, etc.)

"Is there any other team preparation you want to discuss in your briefing session?"

_____ **Briefing checklist: Team preparation (list below for discussion during debriefing)**

- ☐ Who is on core team? Ensures adequate staffing for delivery (whenever feasible, have two nurses present for delivery)
- ☐ All members understand and agree upon goals?
- ☐ Roles and responsibilities understood?
- ☐ Plan of care?
- ☐ Staff availability?
- ☐ Workload?
- ☐ Available resources?

TEAMWORK IN ACTION

Facilitator now observes the team in action to evaluate their performance with as little interaction as possible.

Facilitator throws in challenges: significant other passes out or objects to needed intervention, magnesium not available, bed unplugged, language barrier …

"Your patient pushed for a total of three hours, then required a vacuum-assisted delivery due to fetal bradycardia. Her placenta delivered at 20 minutes, and frank bleeding followed. As a team, provide care for this patient."

_____ **Teamwork in action: Organizes the team**

- ☐ Person at the perineum calls for help, provides massage, empties bladder, applies bimanual compression if needed, reviews causes, orders labs as indicated, and gives directions to the team
- ☐ Team members have assigned roles
- ☐ Team initiates emergency notifications per unit policy (insert your facility's emergency notification process here):

  _____
  _____
  _____

- ☐ Alert blood bank: Order 2 units PRBC's to be at bedside – transfuse based upon clinical signs. Do not wait for lab results.
  Determine availability of fresh frozen plasma and platelets.
- ☐ Alert anesthesia
- ☐ Person at the head checks airway, breathing, administers oxygen, puts head of bed flat, and records interventions
- ☐ Person at the arms checks pulse, B/P, establishes two large-bore IV's, and gives medications

Teamwork in action: Initiates appropriate management of postpartum hemorrhage

_____ **Tone**

- ☐ Assess bladder – consider foley placement
- ☐ Fundal massage
- ☐ Bimanual massage
- ☐ Lowers head of bed
- ☐ Considers a second IV line
- ☐ Medications
  - ____Pitocin 20 to 40 units/1000mL IV or Pitocin 10 units IM
  - ____Methergine 0.2 mg IM (***Contraindicated with hypertension***. Give x1 if no response, move to next drug. May repeat every 2 hours.
  - ____Misoprostol 600mcg sublingual or 800 mcg rectal
  - ____Hemabate 250 mcg IM **(*Use with caution in asthmatics)***
- ☐ Assesses vital signs
- ☐ Applies supplemental oxygen

_____ **Trauma**

- ☐ Assess for perineal, vaginal, or cervical lacerations
- ☐ Apply direct pressure or use a hemostat to control bleeding until repair
- ☐ Assess for hidden bleeding, such as hematomas

_____ **Tissue**

- ☐ Inspect placenta for its integrity
- ☐ Perform manual exploration for retained placental fragments or membranes
- ☐ Obtain additional assistance for this procedure
- ☐ Ensure adequate analgesia/anesthesia for the patient
- ☐ Places a second IV line if not already established
- ☐ Blood type and crossmatch

_____ **Thrombin**

- ☐ Awareness of pre-existing conditions
- ☐ Obtain labwork (CBC, PT, PTT, fibrinogen, split products {FSP})

_____ **Teamwork in action teamwork – core tools:**

- ☐ **Huddle** (for critical issues and emerging events)
- ☐ **Situation Monitoring**: STEP (Status of patient; Team members; Environment; Progress towards goal)
- ☐ **Shared Mental Model**
- ☐ **SBAR** (Situation; Background; Assessment; Recommendation)
- ☐ **Check back** (closed loop communication)

_____ **Teamwork in action teamwork – other appropriate tools:**

- ☐ Cross monitoring (monitoring actions of other team members)
- ☐ Feedback (Timely; Respectful; Specific; Directed toward improvement; Considerate)
- ☐ Advocacy and assertion (Advocate for patient; Assert corrective action in firm and respectful manner)
- ☐ Two-challenge rule for informational conflict; Anyone can "stop the line" after concern voiced twice
- ☐ CUS (I'm Concerned; I'm Uncomfortable; This is a Safety issue)
- ☐ DESC script for personal conflict (Describe; Express; Suggest; Consequences)
- ☐ I'M SAFE checklist (Illness; Medication; Stress; Alcohol and Drugs; Fatigue; Eating and elimination)
- ☐ Collaboration (Win/win; commitment to common mission)
- ☐ Call out (for critical information)

"What complications will you assess for in the mother and infant?"

_____ **Teamwork in action content – assesses possible maternal complications**

- ☐ Anemia
- ☐ Hypotension
- ☐ Perineal trauma
- ☐ Fistula

_____ **Teamwork in action content -- assesses possible neonatal complications**

- ☐ Baby already born
- ☐ Routine assessment

"When and how will you discuss the emergency with the family?"

_____ **Discusses effective communication with patient and family members**

"Tell me about what you will document and what forms are needed in your facility for adequate documentation (including applicable policies)."

_____ **Discusses adequate documentation**

DEBRIEFING

Debriefing session should now be led by facilitator. Television and monitor should be available for review of briefing and teamwork in action as indicated. Debriefing should be videotaped for viewing by those who could not attend.

Facilitator should categorize responses on three flip chart papers taped to wall labeled "medical management", "teamwork" and "performance improvement (systems issues)". If discussion of one area is lacking, the facilitator should guide discussion to that area.

Briefing and team management should be discussed.

Plans should be made for addressing key problems identified.

_____ **Debriefing**

- ☐ What went well and why?
- ☐ What could have gone better and why?
- ☐ What would you do differently?

Follow Up:

- ☐ Communication clear?
- ☐ Roles and responsibilities understood?
- ☐ Situation awareness maintained?
- ☐ Workload distribution?
- ☐ Did we ask for or offer assistance?
- ☐ Were errors made or avoided?
- ☐ Did our team have a shared and understood plan of care?

FINAL REVIEW

Facilitator now discusses team performance during the drill, reviewing points of success and recommendations for improvement.

Date: _____

Observer: _____ Title:_____

Participants:

_____ _____
_____ _____
_____ _____

Summary of Training:

Competency Validated (circle one) YES NO
If no, discuss the areas of concern and repeat the scenario and document below

Competency Validated following remediation YES NO
If no, unit leaders must be informed so re-education and training can be addressed