HEALTHTRUST®

Education

Supporting Documents/Resources | Maternal Mortality & Morbidity Series

The following materials were provided for educational purposes by **Frank R. Kolucki**, Jr. M.D., FACOG, Chairman of the Department, Obstetrics & Gynecology, Moses Taylor Hospital, in support of the Maternal Mortality and Morbidity two-part series offered via live webinar for HealthTrust members.

PART 1 | "Code Crimson: Massive Transfusion Protocol" | Aug. 20, 2020

PART 2| "Four Types of Hypertension in Obstetrics" | Sept. 17, 2020

Vaginal Delivery Procedure Checklist
(Multiple gestations: complete 1 form for each infant delivered)

☐ Vacuum-assisted ☐ Forceps-assisted

Pre-Procedure Evaluation for Vacuum or Forceps

Preoperative diagnosis (indication for use)
- ☐ Prolonged second stage
- ☐ Suspected fetal compromise
- ☐ Diminished maternal pushing effects
- ☐ Shortening 2nd stage for maternal benefit
- ☐ Other: _____

Fetal heart interpretation: Check all that apply
- ☐ Normal (Category 1)
- ☐ Indeterminate (Category 2)
- ☐ Abnormal (Category 3)
- ☐ Decelerations

Examination findings
Presentation _____
Fetal Station _____
Fetal Position _____
EFW _____
- ☐ Cervix completely dilated & effaced
- ☐ Maternal-fetal size appropriate for application
- ☐ Gestational age > 34 weeks
- ☐ Fetal head engaged

Patient counseling
- ☐ Indications discussed
- ☐ Questions answered
- ☐ Patient consented to operative delivery

Cup placement (vacuum only)
- ☐ Flexion point identified
- ☐ Maternal tissue excluded from vacuum cup

Details of Procedure

Station at Application
- ☐ Zero ☐ +4
- ☐ +1 ☐ +5
- ☐ +2
- ☐ +3

Anesthesia
- ☐ Local/Pudendal
- ☐ Epidural
- ☐ Spinal
- ☐ Other _____

Episiotomy/Laceration
Episiotomy: Yes No
- ☐ Median
- ☐ Mediolateral

Laceration
- ☐ No
- ☐ Yes

Degree: 1 2 3 4
Repair: Suture _____

Forceps Assisted

Forceps Used
- ☐ Simpson Forceps ☐ Low/Small Simpsons
- ☐ Tucker-Mclean Forceps ☐ Piper
- ☐ Other (Describe) _____

Complete and check all categories
- ☐ Bladder catheterized prior to application of forceps
- ☐ Hinge/lock approximated without difficulty
- ☐ Advanced in station with each pull

Time applied _____ Time removed _____

Type of forcep delivery
- ☐ Outlet ☐ Low ☐ Mid

Rotation of fetal head: Forceps rotation
- ☐ None ☐ 0 - 45° ☐ > 45°

Vacuum Assisted

Vacuum used
- ☐ Kiwi Omnicup

Complete and check all categories
- ☐ Bladder catheterized prior to application of vacuum
- ☐ Total time of vacuum application _____ (minutes) (1st application to delivery)
- ☐ Maximum vacuum achieved _____mmHg
- ☐ Number of pulls (contractions) _____
- ☐ Number of involuntary releases (pop-offs)
- ☐ Advancement in station with each pull

Rotation of fetal head: Vacuum autorotation
- ☐ None ☐ 0 - 45° ☐ > 45°

Post Procedure Evaluation
(Labor & Birth and Newborn Admission/Discharge Summaries)

Infant
- ☐ Male
- ☐ Female

Weight _____
Date of delivery: _____
Time of delivery: _____

Apgar Scores
- ☐ 1 min
- ☐ 5 min
- ☐ 10 min

Extraction Successful
- ☐ Yes
- ☐ No (indicate reason below

_____

Newborn evaluation
- ☐ NRP certified personnel in attendance at delivery
- ☐ Neonatologist present

- ☐ Live birth
- ☐ Stillborn

Additional notes dictated ☐ Yes ☐ No

_____
Signature

_____ _____
Date Time

Time head delivered _____ Time body delivered _____

Initial Traction:

☐ Gentle attempt at traction, assisted by maternal expulsive forces

Explain if above box not checked _____

Any/all maneuvers that apply and the order in which they were utilized. The order is not specified by the standard of care.

Maneuvers utilized	**In which order *(check)***	**By whom**
☐ McRoberts	☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7	_____
Hyperflexion of the mother's hip against her abdomen		
☐ Suprapubic Pressure	☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7	_____
Posterolateral suprapubic pressure		
☐ Episiotomy	☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7	_____
☐ Episiotomy Extension	☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7	_____
☐ Posterior arm release	☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7	_____
☐ Rubin's Maneuver	☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7	_____
Manual rotation of the posterior aspect of the anterior shoulder rotating it toward the fetal chest		
☐ Wood's Maneuver	☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7	_____
Manual progressive rotation of the posterior shoulder to release the opposite impacted anterior shoulder		
Other *(list)*	☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7	_____

Verify that fundal pressure was not applied after the head delivered:

☐ Not Applied ☐ Applied

If applied, by whom _____ If applied, reason: _____

The arm under the symphysis at the point the head was delivered was: ☐ **Right** ☐ **Left**

List other items of note _____

_____

Primary Care Provider	Date	Time	Registered Nurse	Date	Time
Other Care Provider in Attendance	**Date**	**Time**	**Other Care Provider in Attendance**	**Date**	**Time**

Patient Label

Perinatal Safety Initiative
Pre-Oxytocin Checklist for Women with Term-Singleton Babies

Date, Time, Signature: _____

"This Pre-Oxytocin checklist represents a guideline for care; however, individualized medical care is directed by the physician"

If the following checklist cannot be completed, Oxytocin should not be initiated.

1. □ Physician order on chart
2. □ Current history and physical on chart*
3. □ Prenatal record on chart*
4. □ Indication for induction/augmentation is documented
5. □ Pelvis is documented by physician to be clinically adequate (should be on prenatal record)*
6. □ Estimated fetal weight within past week (clinical or ultrasound) less than 5000 grams in a non-diabetic woman or less than 4250 grams in a diabetic woman*
7. □ Gestational age documented
8. □ Consent signed (consent for vaginal/surgical birth)
9. □ Physician with C/Section privileges is aware of the induction/augmentation and readily available and this is documented in the medical record.
10. □

SIGN	POINTS				SCORE
	0	1	2	3	
POSITION	POSTERIOR	INTERMEDIATE	ANTERIOR		
CONSISTENCY	FIRM	INTERMEDIATE	SOFT		
EFFACEMENT	0-30%	31-50%	51-80%	>80%	
DILATION	0 cm	1-2 cm	3-4 cm	>5 cm	
STATION	-3	-2	-1, 0	+1, +2	
TOTAL BISHOP SCORE					

11. □ Presentation is assessed documented (physician required to come in if nurse unable to determine)
12. □ Fetal assessment completed and indicates: (complete below)
    - □ A minimum of 30 minutes of fetal monitoring is required prior to starting Oxytocin
    - □ At least 2 accelerations (15bpm x 15bpm) in 30 minutes are present or a biophysical profile of 8 of 10 is present within the past 4 hours or adequate or adequate variability**
    - □ No late decelerations in the last 30 minutes
    - □ No more than 2 decelerations exceeding 60 seconds and decreasing greater than 60 bpm from baseline within the previous 30 minutes prior to starting Oxytocin infusion

*May be delayed for non-elective admissions

** This document does not apply to a formal Oxytocin challenge test without the intent to induce or augment labor

**There will be some situations in which alternations in management from that described in the protocol are clinically appropriate. If, after reviewing the fetal heart rate strip and course of labor the responsible physician should feels that in his or her judgment, continued use of Oxytocin is in the best interest of the mother and baby, the physician should write or dictate a note to the effect and order the Oxytocin to continue. The RN will continue to provide safe, high quality nursing care

Suspected Chorioamnionitis Order Sheet

Generic - Chemical - Therapeutic Automatic Interchange and Protocols for specific drugs as approved by the Medical Staff are permitted for implementation for all applicable orders below

PROHIBITED ABBREVIATIONS	IU, qd, qod, MS, MgSO4, MSO4, A/A, Nitro, U, X ___ D (define doses or days), zero after decimal (X.0), lack of zero before decimal (.X)

ALLERGIES: Refer Allergy Verification Record **WEIGHT: _____ kg; HEIGHT: ___inches**

Clinical Suspicions:

- Maternal Temperature > 38°C (100.4°F) **Most sensitive indicator**
- Maternal leukocytosis
- Maternal tachycardia
- Uterine tenderness
- Foul Smelling amniotic fluid
- Preterm Labor Prolonged Rupture of Membranes

Nursing

- Consult Neonatology for Suspected Chorioamnionitis

Laboratory Orders

- CBC with diff
- Blood Culture
- Placenta to pathology Reason: Chrioamnionitis
- Aerobic Placenta Culture

Medications Regimens

- ☐ Ampicillin 2 grams IV q6 hours
  Gentamicin 1.5 mg/kg IV q8 hours
  - Bun
  - Creatinine
  - ☐ Check Gentamicin peak and through level after 3 rd dose
- ☐ Unasyn 3 grams IV q 6 hours
- ☐ Timentin 3.1 grams IV q 4 hours
- ☐ Ancef 2 grams IV q 6 hours

If C-Section And Patient Utilizing Ampicillin and Gentamycin Regimen Please Add Either

- ☐ Clindamycin 900 mg IV q 8 hours
- ☐ Flagyl 500mg IV q 8 hours

If Patient Is Penicillin Allergic

- ☐ Vancomycin 1 gram IV q 12 hour

PHYSICIAN SIGNATURE:	**DATE:**	**TIME**
NURSE NOTING ORDERS:	**DATE:**	**TIME:**

Form: 0213

VTE Prophylaxis Assessment

To be completed by Nurse

This is to be completed on admission, upon transfer to Postpartum, and as needed based on patient course of care.

Please check the boxes as they are applicable to the patient and sum total Risk Factor Points based on patient history.

Patient Label

Antepartum Admission Assessment

Risk Factors	Points
☐ Immobility (bed rest greater than 3 days antepartum)**	4
☐ High risk Thrombophilia* (antithrombin deficiency; double heterozygous for prothrombin G20210A mutation and factor V Leiden; factor V Leiden homozygous or prothrombin G20210A mutation homozygous)	4
☐ Previous VTE	4
☐ Active cancer	4
☐ Medical condition (SLE, Sickle cell disease, heart disease)	2
☐ Active infection (e.g. chorio, endometritis, pyelo, etc.)	2
☐ BMI greater than or equal to 35 kg/m²	2
☐ History of cancer (treated in past year)	2
☐ Low risk Thrombophilia* (factor V Leiden heterozygous; prothrombin G20210A heterozygous; protein C or protein S deficiency)	2
☐ Age greater than 40 years and above	2
☐ Multiple pregnancy	2
☐ Smoker (greater than 10 cigarettes/day)	2

Total Points:

IF Total Points are greater than or equal to 4, and/or the patient has Thrombophilia notify provider immediately for prophylaxis!
***Refer to ACOG Bulletin Inherited Thrombophilias in Pregnancy #138**
****Hold for those at risk for immediate hemorrhage risk, such as placenta previa**

Provider notified:

Date/Time notified:

Assessment completed by:

Date/Time completed:

Post-Delivery Transfer Assessment

Risk Factors	Points
☐ Immobility (bed rest greater than 3 days antepartum)**	4
☐ High risk Thrombophilia* (antithrombin deficiency; double heterozygous for prothrombin G20210A mutation and factor V Leiden; factor V Leiden homozygous or prothrombin G20210A mutation homozygous)	4
☐ Previous VTE	4
☐ Active cancer	4
☐ Medical condition (SLE, Sickle cell disease, heart disease)	2
☐ Active infection (e.g. chorio, endometritis, pyelo, etc.)	2
☐ BMI greater than or equal to 35 kg/m²	2
☐ History of cancer (treated in past year)	2
☐ Low risk Thrombophilia* (factor V Leiden heterozygous; prothrombin G20210A heterozygous; protein C or protein S deficiency)	2
☐ Age greater than 40 years and above	2
☐ Multiple pregnancy	2
☐ Smoker (greater than 10 cigarettes/day)	2
☐ Cesarean Section	2

Total Points: _____

IF Total Points are greater than or equal to 4, and/or the patient has Thrombophilia notify provider immediately for prophylaxis!
***Refer to ACOG Bulletin Inherited Thrombophilias in Pregnancy #138**
****Hold for those at risk for immediate hemorrhage risk, such as placenta previa**

Provider notified:

Date/Time notified:

Assessment completed by:

Date/Time completed:

For Provider Use **Patient is _____ weeks pregnant / Patient is in the __ trimester / The patient's VTE Prophylaxis Assessment score is __**

VTE Prophylaxis Exclusion Criteria *(if no prophylaxis is ordered, reason must be specified)*

- Therapeutic on Home Anticoagulation Therapy: Continue therapeutic therapy and send order to pharmacy
- Patient needs TREATMENT dosing:
  - Consult Hematology
  - Consult and send order to Pharmacy
- Low Risk for VTE: Pharmacologic Prophylaxis not indicated
- Contraindications to Pharmacologic Prophylaxis:
  - Allergy to Heparin products
  - Active Bleed
  - Active Stroke in previous 4 weeks
  - Thrombocytopenia
  - Increased risk of major hemorrhage
  - Other: _____
- Contraindications to Mechanical Prophylaxis
  - Injury to Lower Extremities
  - Other _____ ___

Recommended ANTEPARTUM Prophylaxis Dosing *(switch to Heparin Sodium if gestation greater than or equal to 35 weeks)*

Enoxaparin (Lovenox®)

- BMI less than 40 kg/m2: Enoxaparin 40mg subcutaneous every 24 hours
- BMI greater than 40 kg/m2: Enoxaparin 40mg subcutaneous every 12 hours

Patient Label

Unfractionated Heparin (Heparin Sodium®)

- 1st Trimester: Heparin 5.000 units subcutaneous every 12 hours
- 2nd Trimester: Heparin 7,500 units subcutaneous every 12 hours
- 3rd Trimester: Heparin 10,000 units subcutaneous every 12 hours

Holding of Pharmacologic Therapy *BEFORE* Neuroaxial Anesthesia

Medication	Wait time post last dose prior to neuraxial blockade
Unfractionated Heparin Prophylaxis	**8 hours**
Unfractionated Heparin Therapeutic	**8 hours**
Enoxaparin Prophylaxis	**12 hours**
Enoxaparin Therapeutic	**24 hours**

Recommended POSTPARTUM Prophylaxis Dosing *(Starting at: Date: _____ Time: _____)*

Enoxaparin (Lovenox®)

- BMI less than 40 kg/m2: Enoxaparin 40mg subcutaneous every 24 hours
- BMI greater than 40 kg/m2: Enoxaparin 40mg subcutaneous every 12 hours

Unfractionated Heparin (Heparin Sodium®)

Heparin 5,000 units subcutaneous every 12 hours

Mechanical Prophylaxis

- Apply sequential compression device: Routine, UNTIL DISCONTINUED

Laboratory Orders

- CBC and SCr at baseline and routinely

Re-Starting Pharmacologic Therapy *AFTER* Neuroaxial Anesthesia

Medication	Wait time after epidural catheter removal or spinal needle placement
Unfractionated Heparin Prophylaxis (less than 10,000IU/day)	**Greater than 2 hours**
Unfractionated Heparin Therapeutic	**Greater than 2 hours**
Enoxaparin Prophylaxis	**Greater than 4 hours**
Enoxaparin Therapeutic	**Greater than 24 hours**

Patient Label

Table 4. Recommended Thromboprophylaxis for Pregnancies Complicated by Inherited Thrombophilias*
SOURCE: ACOG Practice Bulletin Inherited Thrombophilias in Pregnancy #138, September 2013(Reaffirmed 2017).

Clinical Scenario	Antepartum Management	Postpartum Management
Low-risk thrombophilia† without previous VTE	Surveillance without anticoagulation therapy	Surveillance without anticoagulation therapy or postpartum anticoagulation therapy if the patient has additional risks factors‡
Low-risk thrombophilia with a family history (first-degree relative) of VTE	Surveillance without anticoagulation therapy	Postpartum anticoagulation therapy or intermediate-dose LMWH/UFH
Low-risk thrombophilia† with a single previous episode of VTE—Not receiving long-term anticoagulation therapy	Prophylactic or intermediate-dose LMWH/UFH or surveillance without anticoagulation therapy	Postpartum anticoagulation therapy or intermediate-dose LMWH/UFH
High-risk thrombophilia§ without previous VTE	Surveillance without anticoagulation therapy, or prophylactic LMWH or UFH	Postpartum anticoagulation therapy
High-risk thrombophilia§ with a single previous episode of VTE or an affected first-degree relative—Not receiving long-term anticoagulation therapy	Prophylactic, intermediate-dose, or adjusted-dose LMWH/UFH regimen	Postpartum anticoagulation therapy, or intermediate or adjusted-dose LMWH/UFH for 6 weeks (therapy level should be at least as high as antepartum treatment)
No thrombophilia with previous single episode of VTE associated with transient risk factor that is no longer present—Excludes pregnancy- or estrogen-related risk factor	Surveillance without anticoagulation therapy	Postpartum anticoagulation therapy‖
No thrombophilia with previous single episode of VTE associated with transient risk factor that was pregnancy- or estrogen-related	Prophylactic-dose LMWH or UFH‖	Postpartum anticoagulation therapy
No thrombophilia with previous single episode of VTE without an associated risk factor (idiopathic)—Not receiving long-term anticoagulation therapy	Prophylactic-dose LMWH or UFH‖	Postpartum anticoagulation therapy
Thrombophilia or no thrombophilia with two or more episodes of VTE—Not receiving long-term anticoagulation therapy	Prophylactic or therapeutic-dose LMWH or Prophylactic or therapeutic-dose UFH	Postpartum anticoagulation therapy or Therapeutic-dose LMWH/UFH for 6 weeks
Thrombophilia or no thrombophilia with two or more episodes of VTE—Receiving long-term anticoagulation therapy	Therapeutic-dose LMWH or UFH	Resumption of long-term anticoagulation therapy

Abbreviations: LMWH, low molecular weight heparin; UFH, unfractionated heparin; VTE, venous thromboembolism.
*Postpartum treatment levels should be greater or equal to antepartum treatment. Treatment of acute VTE and management of antiphospholipid syndrome are addressed in other Practice Bulletins.
†Low-risk thrombophilia: factor V Leiden heterozygous; prothrombin *G20210A* heterozygous; protein C or protein S deficiency.
‡First-degree relative with a history of a thrombotic episode before age 50 years, or other major thrombotic risk factors (eg, obesity or prolonged immobility).
§High-risk thrombophilia: antithrombin deficiency; double heterozygous for prothrombin *G20210A* mutation and factor V Leiden; factor V Leiden homozygous or prothrombin *G20210A* mutation homozygous.
‖Surveillance without anticoagulation therapy is supported as an alternative approach by some experts.

ONLY CHECKED ITEMS WILL BE ORDERED

☐ Another brand of drug identical in form and content may be dispensed unless marked with an X

VTE Prophylaxis, OB (High Risk)

VTE Prophylaxis

- ☐ Communication order if NO neuraxial anesthesia used, restart pharmacological therapy 6 hours post vaginal delivery
- ☐ Communication order if NO neuraxial anesthesia used, restart pharmacological therapy 12 hours post cesarean delivery

ANTEPARTUM PROPHYLAXIS

- ● Consider switching to unfractionated heparin if gestation greater than or equal to 35 weeks
  - ☐ enoxaparin (e.g. Lovenox) 40 milligram subcutaneously every 24 hours (BMI less than 40)
  - ☐ enoxaparin (e.g. Lovenox) 40 milligram subcutaneously every 12 hours (BMI greater than 40)
  - ☐ heparin 5,000 unit subcutaneously every 12 hours (1st trimester)
  - ☐ heparin 7,500 unit subcutaneously every 12 hours (2nd trimester)
  - ☐ heparin 10,000 unit subcutaneously every 12 hours (3rd trimester)

POSTPARTUM PROPHYLAXIS

- ☐ Administer first dose of anticoagulation : _____(date) _____(time)
- ☐ enoxaparin (e.g. Lovenox) 40 milligram subcutaneously every 24 hours (BMI less than 40)
- ☐ enoxaparin (e.g. Lovenox) 40 milligram subcutaneously every 12 hours (BMI greater than 40)
- ☐ heparin 5,000 unit subcutaneously every 12 hours

Mechanical options

- ☐ Intermittent pneumatic compression

Laboratory

- ☐ Complete blood cell count without white blood cell differential now
- ☐ Complete blood cell count without white blood cell differential every 3 days (while on anticoagulation therapy)
- ☐ Creatinine (Cr), serum now

No VTE Prophylaxis Reasons

- ☐ VTE Prophylaxis Exclusionary Criteria therapeutic on home anticoagulation therapy: continuing home therapy
- ☐ VTE Prophylaxis Exclusionary Criteria patient at low risk for VTE
- ☐ VTE Prophylaxis Exclusionary Criteria patient needs treatment dosing-consult hematology
- ☐ No pharmacological prophylaxis ordered due to reasons identified below allergy to heparin products
- ☐ No pharmacological prophylaxis ordered due to reasons identified below ambulating
- ☐ No pharmacological prophylaxis ordered due to reasons identified below active bleed
- ☐ No pharmacological prophylaxis ordered due to reasons identified below thrombocytopenia
- ☐ No pharmacological prophylaxis ordered due to reasons identified below increased risk of major hemorrhage

Physician Initials

Patient Label

+

ONLY CHECKED ITEMS WILL BE ORDERED

☐ Another brand of drug identical in form and content may be dispensed unless marked with an X

☐ No pharmacological prophylaxis ordered due to reasons identified below active stroke in previous 4 weeks

☐ No pharmacological prophylaxis ordered due to reasons identified below other:

_____

☐ No mechanical prophylaxis ordered due to reasons identified below injury to lower extremities

☐ No mechanical prophylaxis ordered due to reasons identified below other: _____

Consults

- Patients with high risk factor related to active cancer or known thrombophilic condition should automatically receive treatment (not prophylaxis), consider consult to hematology for dosing recommendations

☐ Consult to hematology; Reason/Provider consulted: Active cancer or thrombophilic condition

_____ _____ _____

Physician Signature Date Time

Patient Label

+

ONLY CHECKED ITEMS WILL BE ORDERED

☐ Another brand of drug identical in form and content may be dispensed unless marked with an X

VTE Prophylaxis, OB

VTE Prophylaxis

- ☐ enoxaparin (e.g. Lovenox) 40 milligram subcutaneously every 24 hours (for creatinine clearance greater than or equal to 30 milliliters per minute)
- ☐ enoxaparin (e.g. Lovenox) 30 milligram subcutaneously every 24 hours (for creatinine clearance less than 30 milliliters per minute)
- ☐ heparin 5,000 unit subcutaneously every 8 hours

Laboratory

- ☐ Basic metabolic panel now (prior to initiation of prophylaxis treatment)
- ☐ Complete blood cell count without white blood cell differential now
- ☐ Complete blood cell count without white blood cell differential every other day (while on anticoagulation therapy)
- ☐ Creatinine (Cr), serum now
- ☐ Creatinine (Cr), serum every 3 days
- ☐ Notify provider if platelets less than 100,000 or decreased more than 50%

Mechanical options

- ☐ Intermittent pneumatic compression

Physician Signature _____ Date _____ Time _____

Patient Label

Hypertensive emergencies in OB – Severe Pre-eclampsia

Systolic BP ≥ 160 mmHg and/or Diastolic BP ≥110 mmHg

START

1. Inform OB team / Call for Help
2. Establish IV access if not present (at least 18 gauge) and monitor FHTs
   - Send Labs CBC, PT/aPTT, Fibrinogen, CMP, Uric Acid, LDH, Type and Screen, Urinalysis for protein/creatinine
   - Nifedipine PO can be used in absence or inability to get IV access
     - Labetalol PO Second line drug if Nifedipine not avail (and No IV access)
3. Start anti-hypertensive Meds → Start Seizure prophylaxis

- Labetalol 20 mg IV over 2 min
- Check BP in 10 min if still ↑ Labetalol 40 mg IV over 2 min
- Check BP in 10 min if still ↑ Labetalol 80 mg IV over 2 min
- Check BP in 10 min if still ↑ Hydralazine 10 mg IV over 2 min

OR

- Hydralazine 5 – 10 mg IV over 2 min
- Check BP in 20 min if still ↑ Hydralazine 10 mg IV over 2 min
- Check BP in 20 min if still ↑ Labetalol 20 mg over 2 min
- Check BP in 20 min if still ↑ Labetalol 20 mg over 2 min

AND

- 10% Magnesium Sulfate in 100 mL solution IV – bolus load dose 4-6 gm IV over 20 min
- Magnesium Sulfate – maintenance dose 1-2 gm IV per hour continuous infusion

Contraindications –

- *Myasthenia gravis(bolus and maintenance)*
- *Significant pulmonary edema (bolus and maintenance)*
- *Renal Failure (maintenance only)*

4. IF BP still increased obtain emergency Critical Care Medicine, MFM, anesthesia, and/or internal medicine consult.

If seizures present or begin, go to next page "Hypertensive Emergencies – Seizures"

DRUG DOSES and treatments

Nifedipine PO	• 10 mg every 20 – 30 minutes X 5 doses
Labetalol PO	• 100mg one time dose PO
Labetalol IV	• Max dose – 220mg IV

Labetalol

- Avoid in asthma or heart failure
- Can cause Neonatal Bradycardia

EXAMPLE

Eclampsia Checklist

- ☐ Call for Assistance
- ☐ Designate
  - ◯ Team leader
  - ◯ Checklist reader/recorder
  - ◯ Primary RN
- ☐ Ensure side rails up
- ☐ Protect airway and improve oxygenation:
  - ◯ Maternal pulse oximetry
  - ◯ Supplemental oxygen (100% non-rebreather)
    - ☐ Lateral decubitis position
    - ☐ Bag-mask ventilation available
    - ☐ Suction available
- ☐ Continuous fetal monitoring
- ☐ Place IV; Draw preeclampsia labs
- ☐ Ensure medications appropriate given patient history
- ☐ Administer magnesium sulfate
- ☐ Administer antihypertensive therapy if appropriate
- ☐ Develop delivery plan, if appropriate
- ☐ Debrief patient, family, and obstetric team

† "Active asthma" is defined as:
Ⓐ symptoms at least once a week, or
Ⓑ use of an inhaler, corticosteroids for asthma during the pregnancy, or
Ⓒ any history of intubation or hospitalization for asthma.

Magnesium Sulfate

Contraindications: Myasthenia gravis; avoid with pulmonary edema, use caution with renal failure

IV access:

- ☐ Load 4-6 grams 10% magnesium sulfate in 100 mL solution over 20 min
- ☐ Label magnesium sulfate; Connect to labeled infusion pump
- ☐ Magnesium sulfate maintenance 1-2 grams/hour

No IV access:

- ☐ 10 grams of 50% solution IM (5 g in each buttock)

Antihypertensive Medications

For SBP ≥ 160 or DBP ≥ 110
(See SMI algorithms for complete management when necessary to move to another agent after 2 doses.)

- ☐ **Labetalol** (initial dose: 20mg); **Avoid parenteral labetalol with active asthma, heart disease, or congestive heart failure; use with caution with history of asthma**
- ☐ **Hydralazine** (5-10 mg IV* over 2 min); **May increase risk of maternal hypotension**
- ☐ **Oral Nifedipine** (10 mg capsules); Capsules should be administered orally, not punctured or otherwise administered sublingually

** Maximum cumulative IV-administered doses should not exceed 220 mg labetalol or 25 mg hydralazine in 24 hours*

Note: *If persistent seizures, consider anticonvulsant medications and additional workup*

Anticonvulsant Medications

For recurrent seizures or when magnesium sulfate contraindicated

- ☐ **Lorazepam (Ativan)**: 2-4 mg IV x 1, may repeat once after 10-15 min
- ☐ **Diazepam (Valium)**: 5-10 mg IV q 5-10 min to maximum dose 30 mg

For Persistent Seizures

- ☐ Neuromuscular block and intubate
- ☐ Obtain radiographic imaging
- ☐ ICU admission
- ☐ Consider anticonvulsant medications

Safe Motherhood Initiative

ACOG The American College of Obstetricians and Gynecologists District II

Revised January 2019

Maternal Early Warning Signs (MEWS)

Maternal Early Warning Criteria (2014)

– Systolic BP (mm Hg)	< 90 or > 160
– Diastolic BP (mm Hg)	> 100
– Heart Rate (beats per min)	< 50 or > 120
– Respiratory Rate (breaths per min)	< 10 or > 30
– Oxygen saturation on room air, %	95
– Oliguria, mL/hr for 4 hours	< 120

- Maternal agitation, confusion, or unresponsiveness
- Patient with hypertension/preeclampsia reporting a non-remitting headache or shortness of breath

Mhyre J et al. Obstet Gynecol 2014

Protocol for Addressing High Blood Pressures in Pregnant or Postpartum Patients

(This protocol will be posted in the Labor Unit and Mom-Baby Unit)

1. Only measure initial blood-pressures after the patient has been sitting or resting for at least 5 minutes. Blood pressures should be taken with a correctly-fitted cuff placed at the level of the patient's heart.

2. For any measurement of severe hypertension* (systolic ≥ 160 and/or diastolic ≥ 110), the RN will:
   a. Notify the physician
   b. Perform a repeat blood pressure check 15 minutes after the initial reading.

   *If the RN feels that the blood pressure was not accurate (for example: the patient was pushing or vomiting) this should be documented in the EMR and a repeat blood pressure check should be performed 15 minutes after the initial reading.

3. If the repeat blood pressure is again severe (systolic ≥ 160 and/or diastolic ≥ 110) nursing staff will immediately notify the physician. The following standard script should be used:

   "Your patient, Mrs. _____, in room _____ has had two severe blood pressures of _____ and _____. Our unit protocol requests that you consider administering IV Labetalol, IV Hydralazine, or oral nifedipine. Would you like to order one of these?

   Standard doses of first-line medications include the following:

   a. Labetalol, 20mg, IV infused over 2 minutes
   b. Hydralazine, 5mg or 10mg, IV infused over 2 minutes
   c. Nifedipine, immediate release, 10mg, orally (appropriate if patient has no IV access)

4. All antihypertensive medications should be ordered as STAT and given as soon possible, preferably within 15 minutes of the second elevated BP.

5. If the physician chooses not to treat the patient, the RN should document this in the EMR and the blood pressure should be repeated in 15 minutes. If the blood pressure is again in the severe range, repeat Step 3 (above).

6. Continue to record blood-pressures every 10-20 minutes. Notify the physician for any measurement of severe hypertension* (systolic ≥ 160 and/or diastolic ≥ 110). Protocols for continued treatment are attached.

Management of Severe Hypertension with Labetalol:

1. Initial dose: **Labetalol**, 20mg IV, infused over >2 minutes.
    a. Repeat BP in 10 minutes
2. If still elevated, administer **Labetalol**, 40mg, IV, infused over >2 minutes
    a. Repeat BP in 10 minutes
3. If still elevated, administer **Labetalol**, 80mg, IV, infused over >2 minutes
    a. Repeat BP in 10 minutes
4. If still elevated, administer **Hydralazine**, 10mg, IV, infused over >2 minutes
    a. Repeat BP in 20 minutes
5. If still elevated, consider emergency consultation with MFM, internal medicine, anesthesia, or critical-care medicine

Management of Severe Hypertension with Hydralazine:

1. Initial dose: **Hydralazine**, 5 or 10mg IV, infused over >2 minutes.
    a. Repeat BP in 20 minutes
2. If still elevated, administer **Hydralazine**, 10mg, IV, infused over >2 minutes
    a. Repeat BP in 20 minutes
3. If still elevated, administer **Labetalol**, 20mg, IV, infused over >2 minutes
    a. Repeat BP in 10 minutes
4. If still elevated, administer **Labetalol**, 40mg, IV, infused over >2 minutes
    a. Repeat BP in 10 minutes
5. If still elevated, consider emergency consultation with MFM, internal medicine, anesthesia, or critical-care medicine

Management of Severe Hypertension with Nifedipine:

1. Initial Dose: **Nifedipine**, immediate-release, 10mg, orally
    a. Repeat BP in 20 minutes
2. If still elevated, administer **Nifedipine**, immediate release, 20mg, orally
    a. Repeat BP in 20 minutes
3. If still elevated, administer **Nifedipine**, immediate release, 20mg, orally
    a. Repeat BP in 20 minutes
4. If still elevated, administer **Labetalol**, 40mg, IV, infused over >2 minutes
    a. Repeat BP in 10 minutes
5. If still elevated, consider emergency consultation with MFM, internal medicine, anesthesia, or critical-care medicine

Blood Pressure in Pregnant or Postpartum Patient Competency

Name_____ **Date**_____

Measurable Behavior	Validator's Initials
Prepare equipment: a. Obtains blood pressure with either automated blood pressure machine or manual blood pressure sphygmomanometer and stethoscope. b. Checks blood pressure cuff for any defaults. c. Obtains correct size cuff: width of bladder 40% of circumference and encircles 80% of are.	
Prepare the patient: a. Uses a sitting or semi-reclining position with back supported and arm at heart level. b. Instructs patient to sit quietly for 5 minutes prior to measurement. c. Bares arm of any restrictive clothing. d. Instructs patient feet should be flat, not dangling from examination table or bed, and legs uncrossed. e. Assesses for any recent (within previous 30 minutes) consumption of caffeine or nicotine. *If blood pressure is at the level requiring treatment, do not delay treatment based on consumption if blood pressures are at the level that requires treatment.*	
Take Measurement : a. Supports patient's arm at heart level in a seated semi-fowlers position. b. Instructs patient not to talk during blood pressure measurement. c. Obtains blood pressure with either automated blood pressure machine or manual blood pressure cuff. d. Repeats blood pressure again in 15 minutes and reports the higher reading. e. If greater that 140/90 further evaluation for preeclampsia is warranted.	

Records Measurement: Documents BP, patient position, and arm in which blood pressure was taken.	
Severe Blood Pressure measurement (systolic ≥ 160 and or diastolic ≥ 110, : a. Obtains the Hypertensive Crisis Critical Event Checklist b. Notifies the physician of elevated BP. c. Performs a repeat blood pressure check 15 minutes after the initial reading. d. If repeat BP is again severe, will immediately notify the MD and will anticipate antihypertensive treatment. e. Administers antihypertensive medication ASAP preferably within 15 minutes of the second elevated BP and will administer medication as ordered per algorithm. f. If the physician chooses not to treat the patient, the RN documents in the EMR and repeats BP in 15 minutes. If BP remains in severe range, RN will notify MD again. If BP not treated considers utilization of chain of command. g. Continues to record blood pressures every 10-20 minutes. Notify MD for any measurement of severe hypertension.	

The undersigned has reviewed all policies and procedures included in this competency packet and is knowledgeable about the contents of this packet.

SIGNATURE NURSE_____

SIGNATURE INSTRUCTOR_____

Formulated 9/2017.

MASSIVE TRANSFUSION PROTOCOL
CODE CRIMSON (OB)

Generic – Chemical – Therapeutic Automatic Interchange and Protocols for specific drugs as approved by the Medical Staff are permitted for implementation for all applicable orders below

Diagnosis: Post Partum HEMORRHAGE; ACTIVATE CODE CRIMSON

❑ **LEVEL 1:**

LABS: Draw STAT **Code Crimson Lab and Massive Transfusion Package 1 [MTP1]** .Notify LAB of inbound blood work

- CBC
- PT/INR
- PTT
- Fibrinogen
- CMBP
- D-dimer
- Type and Screen
- Type & Cross 3 Units Packed Red Blood Cells, 3 Units Fresh Frozen Plasma, 1 Unit Aphoresed Platelets

❑ If ongoing bleeding, order and Prepare **Massive Transfusion Package [MTP2]** and **10 Units Cryoprecipitate**

- 6 Units Packed Red Blood Cells (RBC)
- 6 Units Fresh Frozen Plasma (FFP)
- 1 Unit Aphoresed Platelets (PLT)
- 10Units Cryoprecipitate (CR10)

❑ **LEVEL 2:**

LABS: Draw STAT **Code Crimson Lab and Massive Transfusion Package 2 [MTP2]**. Notify LAB of inbound blood work

- CBC
- PT/INR
- PTT
- Fibrinogen
- D-dimer
- CMBP
- Type & Cross 6 Units Packed Red Blood Cells, 6 Units Fresh Frozen Plasma, 1 Unit Aphoresed Platelets, and 10 Units Cryoprecipitate

■ Insure two (2) large bore (#18) IV access

❑ If ongoing bleeding, order additional **MTP2**
(6 Units Packed Red Blood Cells, 6 Units Fresh Frozen Plasma, 1 Units Aphoresed Platelets)and **20** units Cryoprecipitate CR10, CR10. Further MTP2 packs will be dictated by clinical presentation and lab work.

Medication:

❑ Tranexamic Acid 1 gram/ 100 ml in 0.9% NaCl; Infuse, Infuse 100 ml bag over 20 minutes (ie. 300 ml/hr) for 2 doses
❑ Vitamin K 10mg in 50 mL of NSS IV once over 30 minutes
❑ Calcium Gluconate 2 grams STAT after every MTP2 ; Administer IV Push over 10 minutes (max rate: 200mg/min)

Factors (SELECT ONE ONLY)

- RiaSTAP (fibrinogen concentrate) 2 grams for 1 dose **STAT** for fibrinogen level <200mg/dl. IV infusion over 20 minutes in separate line. Rate not to exceed 5ml/min. Pharmacy to Round dose to the nearest vial size. **Document lot # in Electronic Health Record (Cerner)**

❑ KCentra **50 units/kg** based upon total body weight for 1 dose **STAT**, when the bleeding has not abated after administration of tranexamic acid , or Immediately in a Factor Deficiency Patient or a low Fibrinogen result with cryopercipate or FFP administered.

- **Maximum Dose** to be administered is 5000 units Factor IX
- **Doses** will be rounded to the nearest 500 units Factor IX
- **Infuse at a rate of 0.12 mL/kg/minute (~3 units/kg/minute) in a separate line and do not mix with any other medications or blood products. Do not allow blood to enter syringe (to reduce risk of fibrin clot formation).**
- **Do not exceed a rate of 8.4mL/minute (~210 units/minute)**
- **Administered within 4 hours of reconstitution.**
- **Document lot # in Electronic Health Record (Cerner)**

❑ (NovoSeven® RT) Coagulation Factor VIIa Room Temperature Stable IV Bolus over 2-5 minutes (stored in pharmacy in refrigerator or room temperature). **Dose** Coagulation Factor VIIa (NovoSeven® RT) based on weight below. (Dosing equals 60 mcg/kg rounded up to the nearest 1000 mcg, 2000 mcg, or 5000 mcg vial)

For patient's weight of:

❒ 50 kilograms or less, administer 3000 mcg
❒ 51-66 kilograms, administer 4000 mcg
❒ 67-83 kilograms, administer 5000 mcg
❒ 84-100 kilograms, administer 6000 mcg
❒ 101-116 kilograms, administer 7000 mcg
❒ 117-133 kilograms, administer 8000 mcg
❒134-150 kilograms, administer 9000 mcg
❒151-165 kilograms, administer 10,000 mcg
❒166-180 kilograms, administer 11,000 mc

Physicians signature:	**Date:**	**Time:**
Nurse Noting signature:	**Date:**	**Time:**

NovoSeven

Used for uncontrolled postpartum hemorrhage (Code Crimson).

Nursing and Pharmacy: treat all orders as STAT.

- NovoSeven activates coagulation factors to convert prothrombin to thrombin and fibrinogen to fibrin to induce hemostasis.
- Contraindicated in patients with known hypersensitivity to mouse, hamster, or bovine proteins.
- Prior to reconstitution, NovoSeven is stored in the refrigerator.

DOSE for Code Crimson is 60 mcg/kg; rounded up to the nearest 1200 mcg vial.

- ❑ 40 kilograms or less administer 2400 mcg
- ❑ 41-60 kilograms administer 3600 mcg
- ❑ 61-80 kilograms administer 4800 mcg
- ❑ 81-100 kilograms administer 6000 mcg
- ❑ 101-120 kilograms administer 7200 mcg
- ❑ 121-140 kilograms administer 8400 mcg

Pharmacy:

- Orders will be entered into the pharmacy computer STAT
- Do NOT tube. Pharmacy supply is limited to one dose and the situation does not allow for tube failure.
- If more medication is needed other than what is in stock, Pharmacy will contact New Life Homecare Inc. at 570 602-3093 or Mike Pajka at 570 696-8408 (cell). If NewLife has in stock, allow for ½ to 1 hour delivery during the day and 2 hours during the night. If not it stock, delivery can be expected to be 3-4 hours.
- Dispense Instructions for mixing with NovoSeven

LBR staff:

- **Must pick up pick up NovoSeven from the pharmacy**

LBR Nursing

Reconstitution: To be done in patient care area immediately prior to use

1. Use sterile water as diluent.
2. Bring NovoSeven and sterile water to room temperature.
3. Draw up 2.2 ml of sterile water for each 1200mcg vial of NovoSeven
4. Insert needle into NovoSeven vial. **Do NOT inject diluent directly into NovoSeven powder. Inject sterile water into the side of the vial.**
5. Gently swirl, (do not shake) until dissolved. Solution should be clear and colorless.
6. **Reconstituted vials contain approximately 0.6mg/mL (600mcg/mL) of NovoSeven.**
7. Keep reconstituted NovoSeven in vial until administration. Do not store in syringe.

Administration Guidelines:

- Administer as an intravenous bolus injection over 2-5 minutes.
- Do not mix with other infusion solutions.
- Dose could be given as often as every 2 hours.
- If not administered within 3 hours of reconstitution, discard.
- Do not waste! NovoSeven is expensive and supply is limited.

Code Crimson v19

Code Crimson – Level 1

For patients with potential / actual hemorrhage

FBS Staff- Notify Switchboard of Code Crimson for overhead page
Switchboard will alert Laboratory, Anesthesia, Ultrasound, Interventional Radiology, Nursing Supervisor, and Pharmacy to await further instructions
Draw the following STAT Labs and tube specimens to Laboratory for:
Code Crimson- CBC; PT / PTT; Fibrinogen; CMBP;
Type and Screen; and Type and Cross **Three (3) Units Packed Red Blood Cells, Three (3)Units Fresh Frozen Plasma, and One (1) Unit Aphoresed Platelets**
Notify Lab ( ) of inbound STAT Blood Work
Repeat Labwork every 60 minutes or after every completed MTP.
Ensure IV access & Patency
Confirm treatment with Tranexamic Acid 1 gm IV repeat in 30 minutes if bleeding continues
Obtain Uterine Tamponade Balloon
Prepare OR Hysterectomy pan
Notify CRNA to prepare Rapid Infuser/ Blood Warmer

Code Crimson – Level 2

For patients with a **life threatening** potential/actual hemorrhage

Notify Switchboard of Code Crimson (; for overhead page and alerts
Confirm treatment with Tranexamic Acid 1 gm IV repeat in 30 minutes if bleeding continues
FBS Staff – Draw the following **STAT** Labs and tube specimens to Laboratory for:
CBC; PT / PTT; Fibrinogen; Type and Screen; CMBP, and Type and Cross
Six (6) Units Packed Red Blood Cells, Six (6) Units Fresh Frozen Plasma, One (1) Unit Aphoresed Platelets, and Ten (10) Unit Cryoprecipitate (only 1 unit plts in hospital; additional units will be procured by lab)
Notify Lab (and Blood Bank ( ) of inbound STAT Blood Work
T/L will designate one person to be in contact with lab for blood products and to obtain when ready (blood runner).
Repeat Labwork work every 60 minutes or after every completed MTP.
- **Ensure two (2) large bore (#18) IV access**
- **Prepare OR Hyster pan/Prepare Uterine Tamponade Balloon**
  Ready Second MTP2 PACKAGE
  - **6 Units RBCs**
  - **6 Units FFP**
  - **1 Unit Aphoresed Platelets**
  - **10 Units Cryoprecipitate**
  - **Administer 10 mg Vitamin K IV for 1 dose**
  - **Calcium Gluconate 2 gm (4.65meq/ 1gm) IV**

  (lab will procure any additional blood products as needed)

Laboratory may contact the **FBS-Charge Nurse/**

Nursing Supervisor (
Anesthesiologist
Anesthesia CRNA (
*** Prepare Rapid Infuser/ Blood Warmer**
If necessary, Anesthesia will notify Cell Saver perfusionist -

If AB plasma for AB patient is not available A plasma may be used

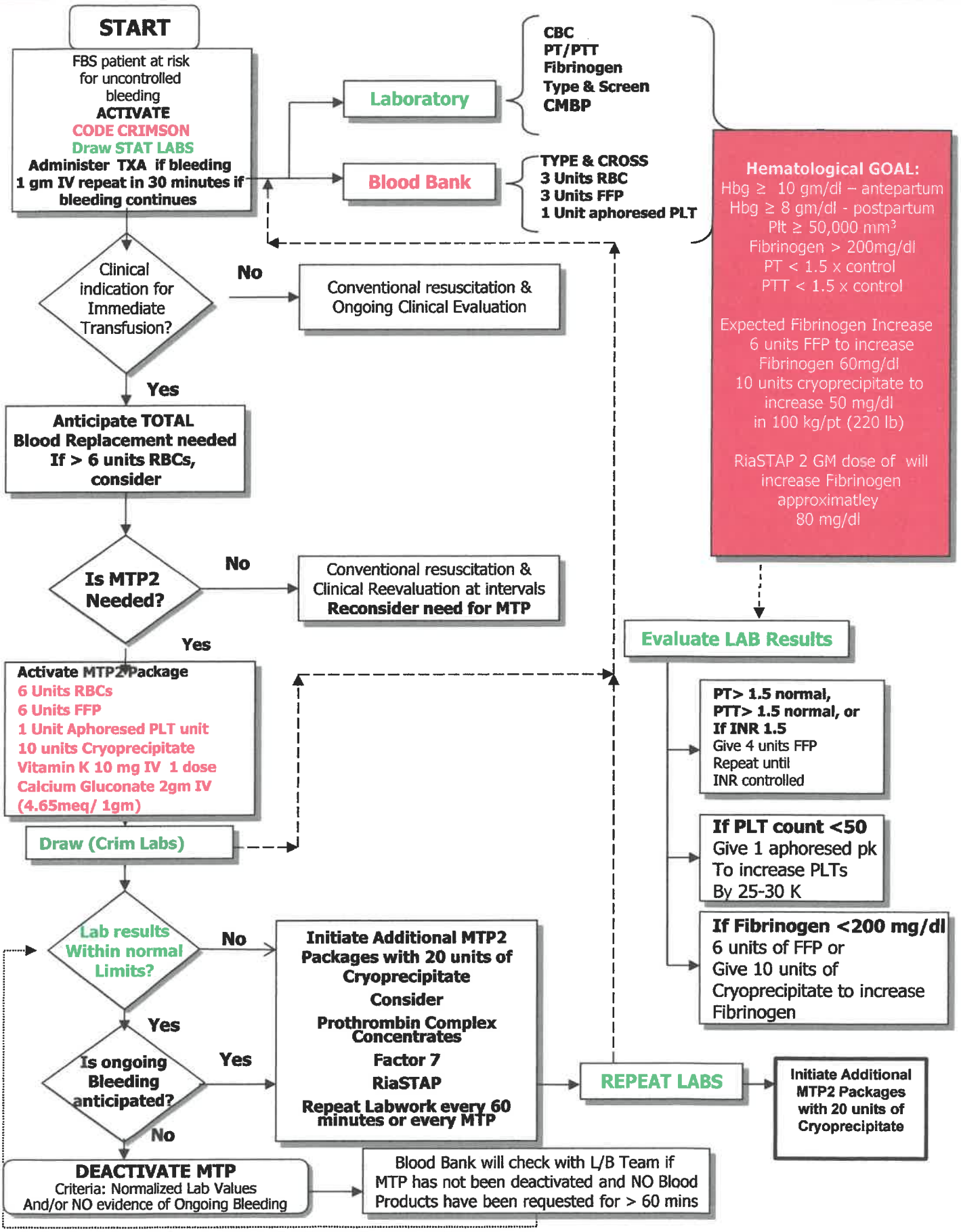
Operating Room (
Interventional Radiology ((OB/GYN Physician or designee must speak directly with Radiologist)
If necessary, **Notify Rapid Response Team (RRT)**
Dial # provide Switchboard Operator with Room Number / location for RRT response
Notify ICU of possible transfer (
Notify second in-house OB physician of situation
IF ANTICIPATING ONGOING BLEEDING:
- **Repeat STAT LABS- CBC; PT / PTT; Fibrinogen;**
- **CMBP**
- **INITIATE ADDITIONAL MTP2 PACKAGES with 20 Units of Cryoprecipitate**
- **Consider For Continued Life Threating Hemorrhage**
  Prothrombin Complex Concentrate (Kcentra)
  Factor 7 (NovoSeven)
  RiaSTAP *for consumptive coagulopathy/DIC; severe hypofibrinogenemia or volume overload*

Calculating Corrected Calcium Equation
4- [(0.8 X Albumin] + serum Ca = corrected Ca

Developed 2/06 FBS_ rev10_09072010ds, 1/10/2011me, 2/14/11ej, 5/9/11me, 4/9/2014dg, 6/24/2014dg, 12/18/2017 dg, 01/04/2018 dg

MASSIVE TRANSFUSION PROTOCOL [MTP]

Updated 01./2018



Massive Transfusion/Code Crimson Worksheet
Level 1

PPID Label

Notify Switchboard ext

Time: _____

(Switchboard will alert Laboratory, Anesthesia, Ultrasound, IR, Nursing Supervisor and Pharmacy to await further instructions)

Second In-House OB Physician

Type and Cross Total of three units packed RBCs, three units FFP, one unit of platelets

Lab Results (Repeat 60 min or every MTP)

Draw STAT Labs _____
(CBC, PT/PTT, INR, Fibrinogen, Type and Cross, CMBP)
Result Time_____

Draw STAT Labs _____
(CBC, PT/PTT, INR, Fibrinogen, Type and Cross, CMBP)
Result Time_____

Draw STAT Labs _____
(CBC, PT/PTT, INR, Fibrinogen, Type and Cross, CMBP)
Result Time_____

Ensure IV Access
Site 1_____

Site 2_____

Foley Catheter Insertion_____

Administer O2 to keep sats greater than 95%

Keep Patient warm

Apply SCDs

Continuous vigorous fundal massage

Prepare
Uterine Tamponade Balloon Cart _____
OR Hysterectomy Pan_____
Prepare Rapid Infuser/Blood Warmer_____

Blood Products Intake *(Indicate in mLs)*

RBCs: Unit 1_____ Unit 2_____ Unit 3_____

FFP: Unit 1_____ Unit 2_____ Unit 3_____

Platelets: _____ **Cryoprecipitate:** _____

Total Blood Product Intake: _____

Medications

Oxytocin 30 units/500mL at 500 mL/hr _____

Methergine 0.2 mg IM Q 2-4hrs_____

Hemabate 250mcg IM or intramyometrial (can be given every 15-90 minutes; do not exceed 8 doses in 24 hrs)
Dose 1_____ Dose 2_____
Dose 3_____ Dose 4_____

Misoprostol 600mcg- 1000mcg PR time 1 does_____
Or 400mcg- 900mcg SL times 1 dose _____

Tranexamic Acid 1 gm/100ml NSS IV over 20 min
Repeat in 30 min if bleeding not controlled.
Dose 1_____ Dose 2_____

Additional IV Intake

IV Fluids: _____

_____

Output/ EBL *(Record blood loss volume Q 15min)*
(Weigh EBL 1gm= 1cc)
Delivery EBL: _____ Delivery Urine Output:_____
Additional blood loss: _____
Additional Hourly Output: _____

Vital Signs Q 5 Min including O2 sat _____

_____

Signature:
_____

Massive Transfusion/Code Crimson Worksheet
Level 2

PPID Label

Type and Cross Total of six units packed RBCs, six units FFP, one unit of platelets, ten units' cryoprecipitate, and additional MTP2 packages with 20 units of cryoprecipitate

Lab Results (Repeat every 60 min or every MTP)

Draw STAT Labs _____
(CBC, PT/PTT, INR, Fibrinogen, Type and Cross, CMBP)
Result Time_____

Draw STAT Labs _____
(CBC, PT/PTT, INR, Fibrinogen, Type and Cross, CMBP)
Result Time_____

Draw STAT Labs _____
(CBC, PT/PTT, INR, Fibrinogen, Type and Cross, CMBP)
Result Time_____

Output/ EBL *(Record blood loss volume Q 15min) (Weigh EBL 1gm= 1cc)*

Delivery EBL: _____ Delivery Urine Output:_____

Additional blood loss: _____

_____

Additional Hourly Output: _____

Blood Products Intake *(Indicate in mLs)*

RBCs: Unit 1_____ Unit 2_____ Unit 3_____ Unit 4_____ Unit 5_____ Unit 6_____

FFP: Unit 1_____ Unit 2_____ Unit 3_____ Unit 4_____ Unit 5_____ Unit 6_____

Platelets: _____ **Cryoprecipitate:** _____

Total Blood Product Intake: _____

Blood Products Intake *(Indicate in mLs)*

RBCs: Unit 1_____ Unit 2_____ Unit 3_____ Unit 4_____ Unit 5_____ Unit 6_____

FFP: Unit 1_____ Unit 2_____ Unit 3_____ Unit 4_____ Unit 5_____ Unit 6_____

Platelets: _____ **Cryoprecipitate:** _____

Total Blood Product Intake: _____

Medications *(Refer to page 1)*

Vitamin K 10 mg IV 1 dose_____

Prothrombin Complex Concentrates_____

Factor 7 _____

Additional IV Intake

IV Fluids: _____

_____

Notes:

Signature:

_____

Preterm Premature Rupture of Membranes Protocol-Physician Order Sheet

Generic – Chemical – Therapeutic Automatic Interchange and Protocols for specific drugs as approved by the Medical Staff are permitted for implementation for all applicable orders below

PROHIBITED ABBREVIATIONS	IU, qd, qod, MS, MgSO4, MSO4, A/A, Nitro, U, x___ D(define doses or days),zero after decimal (X.0), lack of zero before decimal (.X)

WEIGHT: _____ kg; HEIGHT: _____ inches (required only on initial set of orders)

ALLERGIES:

Diagnosis: Preterm Premature Rupture of Membranes at _____weeks; EDC:_____	Noted

- ■ No digital exams unless requested by physician
- ■ Vital signs per routine; Call physician for temperature greater than 100.4°F, MHR greater than 100, FHR greater than 160
- ■ Continuous Fetal Monitoring
- ■ NST and BPP every day if not reactive
- ■ Sono EFW
- ■ If less than 34 weeks: pooled amniotic fluid for amnistat if available,
- ■ Consider induction/delivery at 34 weeks EGA

Activity: ❑ Strict bedrest with bedpan ❑ Bedrest with BRP ❑ Bedrest with bedside commode

Nutrition: ❑ NPO ❑ Clear liquids ❑ Regular

LABS: ■ GBS Cultures ■ Gen Probe ■ Type and Screen ■ CBC Diff

Consults: ❑ Anesthesia; re: _____ ❑ Neonatology; re: _____
❑ Social Work; re: _____ ❑ Maternal/Fetal medicine; re: _____ ❑ Other: _____

DVT Prophylaxis: Apply Sequential compression devices

MEDICATIONS:

❑ IV 18 guage line minimum with Lactated Ringers 1000ml at ___ milliliters/hour 12116

❑ IV lock flushed with saline every 8 hours

❑ IF EGA<34 weeks BETAMETHASONE SUSPENSION 12mg IM, NOW and repeat in 24 hours for a total of 2 doses 12500

NOTE FOR PHYSICIAN Magnesium Sulfate: *Complete separate Magnesium Sulfate Neuroprotection order sheet ;* ***consider for potential delivery less than 32 weeks for neuroprotection***

Antibiotics: Choose one

❑ NON ALLERGIC PENICILLIN OR MACROLIDE PATIENTS : *(Ampicillin + Erythromycin)*

- ■ *11480* Ampicillin 2 gram in 100ml 0.9%NaCl IV every 6 hours for 48 hours(START TIME_____) then BEGIN *18111* AMOXicillin 250mg orally every 8 hours for 5 days ***TIME ALL DOSES FROM 1st DOSE***
- ■ *95116 Erythromycin 250mg* IV piggyback over 60 minutes (**Pharmacy must prepare**) every 6 hours for 48 hours (START TIME_____) then BEGIN *13395* Ery-tab (erythromycin enteric coated delayed release) 333 mg orally for 5 days ***TIME ALL DOSES FROM 1st DOSE***

❑ Penicillin ALLERGIC PATIENTS *(Vancomycin and Erythromycin)*

- ■ 681 Vancomycin 1 gram over 90 minutes IV every 12 hours for 7 days (Pharmacy prepares; no load dose) (START TIME_____) ***TIME ALL DOSES FROM 1st DOSE***
- ■ *95116 Erythromycin 250mg* IV piggyback over 60 minutes (**Pharmacy must prepare**) every 6 hours for 48 hours (START TIME_____) then BEGIN *13395* Ery-tab (erythromycin enteric coated delayed release) 333 mg orally every 8 hours for 5 days ***TIME ALL DOSES FROM 1st DOSE***

❑ Macrolide (Erythromycin) ALLERGIC PATIENTS: *(Ampicillin and Clindamycin and Amoxicillin)*

- ■ *1148* Ampicillin 2 gram in 100ml 0.9%NaCl IV over 20 minutes (In Pyxis)every 6 hours for 48 hours (START TIME_____) then BEGIN *18111*AMOXicillin 250mg orally every 8 hours for 5 days ***TIME ALL DOSES FROM 1st DOSE***
- ■ *#11501* Clindamycin 900 mg in 50ml D5%W IV over 20 minutes (In Pyxis) every 8 hours for 48 hrs (START TIME_____) then #15865 Clindamycin 150mg Take 2 caps po every 6hours for 5 days ***TIME ALL DOSES FROM 1st DOSE***

Physicians signature:	Date:	Time:
Nurse Noting signature:	Date:	Time:

Rev 011414

IF Erythromycin not available. may substitute with Azithromycin 1gm PO x 1 dose

PREVIA ALGORITHM

Evaluate all patients for placental location—
2nd trimester ultrasound

☐ Neither "Previa" nor "Low Lying"—
Routine Care

☐ "No Previa" on subsequent scan ***and***
☐ No prior cesarean
--Routine Care

☐ Either "Previa" or "Low Lying"
Continue surveillance for location

☐ Persistent Previa ***or***
Resolved Previa and a prior cesarean section

☐ Repeat evaluation at 24-28 wks
☐ Repeat evaluation at 30-34 wks
Other ultrasounds as clinically indicated

Does the patient have one or more of the following?
☐ One or more prior c-sections
☐ Age > 40
☐ Prior abdominal, pelvic, or uterine surgery, including prior c-section
☐ Known history of Asherman's Syndrome, postpartum D&C, accreta or retained placenta
☐ Signs of accrete/increta/percreta on imaging

☐ All answers "NO"

☐ Any answer is "YES"

☐ Discuss hemorrhage & hysterectomy with patient
☐ Review any prior operative notes
☐ Antepartum anesthesia consult
☐ CBC and Type & Screen sent 24-72 hrs pre-op
☐ Attending for delivery can complete a gravid hysterectomy and manage PPH

☐ Discuss hemorrhage, hysterectomy with patient
☐ Review any prior operative notes
☐ Antepartum anesthesia consult
☐ CBC and Type & Screen sent 24-72 hrs pre-op
☐ Deliver with an attending experienced at managing accrete who can complete hysterectomy
☐ Review operative planning with OR team
☐ Discuss likely accrete cases with MFM service

GRAVID HYSTERECTOMY PLANNING RELATED TO PREVIA

Anesthesia Staff

- Longer duration of surgery
- IV access
- Warming equipment
- Availability of blood

Surgical Staff

- Laparotomy kit, retractors, sutures

Nursing

- DVT prophylaxis
- Foley catheter
- Extra antibiotics, if needed
- Uterotonic agents

Blood Bank

- Blood and plasma available prior to incision
- Alert to possible need for ongoing transfusion

Physician

- Counseling and consent with placenta previa—risk of hemorrhage, transfusion, hysterectomy
- Discuss vertical incision
- Have a surgical plan prior to the day of delivery even if the goal is vaginal delivery

EXAMPLE

EMERGENCY DEPARTMENT

Postpartum Preeclampsia Checklist

IF PATIENT < 6 WEEKS POSTPARTUM WITH:

- BP ≥ 160/110 or
- BP ≥ 140/90 with unremitting headache, visual disturbances, epigastric pain

- ☐ Call for Assistance
- ☐ Designate:
  - ○ Team leader
  - ○ Checklist reader/recorder
  - ○ Primary RN
- ☐ Ensure side rails up
- ☐ Call obstetric consult; Document call
- ☐ Place IV; Draw preeclampsia labs
  - ○ CBC
  - ○ PT
  - ○ PTT
  - ○ Fibrinogen
  - ○ Chemistry Panel
  - ○ Uric Acid
  - ○ Hepatic Function
  - ○ Type and Screen
- ☐ Ensure medications appropriate given patient history
- ☐ Administer seizure prophylaxis
- ☐ Administer antihypertensive therapy
  - ○ Contact MFM or Critical Care for refractory blood pressure
- ☐ Consider indwelling urinary catheter
  - ○ Maintain strict I&O — patient at risk for pulmonary edema
- ☐ Brain imaging if unremitting headache or neurological symptoms

† "Active asthma" is defined as:
Ⓐ symptoms at least once a week, or
Ⓑ use of an inhaler, corticosteroids for asthma during the pregnancy, or
Ⓒ any history of intubation or hospitalization for asthma.

Magnesium Sulfate

Contraindications: Myasthenia gravis; avoid with pulmonary edema, use caution with renal failure

IV access:

- ☐ Load 4-6 grams 10% magnesium sulfate in 100 mL solution over 20 min
- ☐ Label magnesium sulfate; Connect to labeled infusion pump
- ☐ Magnesium sulfate maintenance 1-2 grams/hour

No IV access:

- ☐ 10 grams of 50% solution IM (5 g in each buttock)

Antihypertensive Medications

For SBP ≥ 160 or DBP ≥ 110
(See SMI algorithms for complete management when necessary to move to another agent after 2 doses.)

- ☐ **Labetalol** (initial dose: 20mg); **Avoid parenteral labetalol with active asthma, heart disease, or congestive heart failure; use with caution with history of asthma**
- ☐ **Hydralazine** (5-10 mg IV* over 2 min); **May increase risk of maternal hypotension**
- ☐ **Oral Nifedipine** (10 mg capsules); Capsules should be administered orally, not punctured or otherwise administered sublingually

** Maximum cumulative IV-administered doses should not exceed 220 mg labetalol or 25 mg hydralazine in 24 hours*

***Note:** If first line agents unsuccessful, emergency consult with specialist (MFM, internal medicine, OB anesthesiology, critical care) is recommended*

Anticonvulsant Medications

For recurrent seizures or when magnesium sulfate contraindicated

- ☐ **Lorazepam (Ativan)**: 2-4 mg IV x 1, may repeat once after 10-15 min
- ☐ **Diazepam (Valium)**: 5-10 mg IV q 5-10 min

The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

Patient Safety Checklist

Number 6 • August 2012

DOCUMENTING SHOULDER DYSTOCIA

Date_____ Patient _____ Date of birth _____ MR # _____

Physician or certified nurse–midwife _____ Gravidity/Parity_____

Timing:

Onset of active labor_____ Start of second stage_____

Delivery of head _____ Time shoulder dystocia recognized and help called_____

Delivery of posterior shoulder _____ Delivery of infant _____

Antepartum documentation:

- ❑ Assessment of pelvis
- ❑ History of prior cesarean delivery: Indication for cesarean delivery: _____
- ❑ History of prior shoulder dystocia ❑ History of gestational diabetes
- ❑ Largest prior newborn birth weight _____ ❑ Estimated fetal weight _____
- ❑ Cesarean delivery offered if estimated fetal weight greater than 4,500 g (if the patient has diabetes mellitus) or greater than 5,000 g (if patient does not have diabetes mellitus)

Intrapartum documentation:

- ❑ Mode of delivery of vertex:
  - ❑ Spontaneous ❑ Operative delivery: Indication:_____
    - ❑ Vacuum ❑ Forceps
- ❑ Anterior shoulder:
  - ❑ Right ❑ Left
- ❑ Traction on vertex:
  - ❑ None ❑ Standard
- ❑ No fundal pressure applied
- ❑ Maneuvers utilized (1):
  - ❑ Hip flexion (McRoberts maneuver)
  - ❑ Delivery of posterior arm
  - ❑ Posterior scapula (Woods maneuver)
  - ❑ Abdominal delivery
  - ❑ Suprapubic pressure (stand on the side of the occiput)
  - ❑ All fours (Gaskin maneuver)
  - ❑ Anterior scapula (Rubin maneuver)
  - ❑ Zavanelli maneuver
- ❑ Episiotomy:
  - ❑ None ❑ Median ❑ Mediolateral ❑ Proctoepisiotomy
- ❑ Extension of episiotomy:
  - ❑ None ❑ Third degree ❑ Fourth degree
- ❑ Laceration:
  - ❑ Third degree ❑ Fourth degree
- ❑ Cord blood gases sent to the laboratory:
  - ❑ Yes: Results:_____
  - ❑ No

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- ❑ Status of neonate prior to leaving delivery room or operating room:
  - Apgar scores _____
  - Evidence of injury_____
  - Birth weight (if available)_____
- ❑ Staff present _____
- ❑ Family members present_____
- ❑ Patient and family counseled ❑ Debriefing with appropriate personnel

Postpartum/neonatal documentation:

- ❑ Delivery discussed with family ❑ Perineal assessment if third or fourth degree laceration
- ❑ Monitored for postpartum hemorrhage:
  - ❑ Yes: Results: _____
  - ❑ No
- ❑ Communication with pediatrics department if there is evidence of injury or asphyxia
- ❑ Coordination of follow-up care for mother and baby
- ❑ Monitored for postpartum depression:
  - ❑ Yes: Results: _____
  - ❑ No

Procedural Elements for Shoulder Dystocia

The following steps should be taken when managing shoulder dystocia:

1. Call for help from pediatrics, anesthesia, and neonatal intensive care unit staff, and assign a timekeeper
2. Initiate maneuver (eg, McRoberts maneuver)
3. Re-evaluate course of actions, including using other maneuvers or repeating maneuvers if unsuccessful
4. Consider abdominal delivery
5. Document event—move to documentation checklist

Reference

1. Shoulder dystocia. ACOG Practice Bulletin No. 40. American College of Obstetricians and Gynecologists. Obstet Gynecol 2002;100:1045–50. [PubMed] [*Obstetrics & Gynecology*] ⇦

Standardization of health care processes and reduced variation has been shown to improve outcomes and quality of care. The American College of Obstetricians and Gynecologists has developed a series of Patient Safety Checklists to help facilitate the standardization process. This checklist reflects emerging clinical, scientific and patient safety advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed. Although the components of a particular checklist may be adapted to local resources, standardization of checklists within an institution is strongly encouraged.

How to Use This Checklist

The Patient Safety Checklist on Documenting Shoulder Dystocia should be used to guide the documentation process if a patient has experienced shoulder dystocia.

Documenting shoulder dystocia. Patient Safety Checklist No. 6. American College of Obstetricians and Gynecologists. Obstet Gynecol 2012;120:430–1.

The American College of Obstetricians and Gynecologists
Women's Health Care Physicians

Patient Safety Checklist

Number 5 • December 2011
(Replaces Patient Safety Checklist No. 1, November 2011)

SCHEDULING INDUCTION OF LABOR

Date_____ Patient _____ Date of birth_____ MR # _____

Physician or certified nurse–midwife _____ Last menstrual period _____

Gravidity/Parity_____

Estimated date of delivery_____ Best estimated gestational age at delivery _____

Proposed induction date _____ Proposed admission time _____

❑ Gestational age of 39 0/7 weeks or older confirmed by either of the following criteria (1):

- ❑ Ultrasound measurement at less than 20 weeks of gestation supports gestational age of 39 weeks or greater
- ❑ Fetal heart tones have been documented as present for 30 weeks of gestation by Doppler ultrasonography

Indication for induction: (choose one)

- ❑ Medical complication or condition (1): Diagnosis: _____
- ❑ Nonmedically indicated (1–3): Circumstances: _____

Patient counseled about risks, benefits, and alternatives to induction of labor (1)

- ❑ Consent form signed as required by institution

Bishop Score (see below) (1): _____

Bishop Scoring System

	Factor				
Score	**Dilation (cm)**	**Position of Cervix**	**Effacement (%)**	**Station***	**Cervical Consistency**
0	Closed	Posterior	0–30	-3	Firm
1	1–2	Midposition	40–50	-2	Medium
2	3–4	Anterior	60–70	-1, 0	Soft
3	5–6	—	80	+1, +2	—

*Station reflects a –3 to +3 scale.
Modified from Bishop EH. Pelvic scoring for elective induction. Obstet Gynecol 1964;24:266–8.

❑ Pertinent prenatal laboratory test results (eg, group B streptococci or hematocrit) available (4, 5)

❑ Special concerns (eg, allergies, medical problems, and special needs): _____

To be completed by reviewer:

❑ Approved induction after 39 0/7 weeks of gestation by aforementioned dating criteria

❑ Approved induction before 39 0/7 weeks of gestation (medical indication)

❑ **HARD STOP** – gestational age, indication, consent, or other issues prevent initiating induction without further information or consultation with department chair

References

1. Induction of Labor. ACOG Practice Bulletin No. 107. American College of Obstetricians and Gynecologists. Obstet Gynecol 2009;114:386–97.
2. Caughey AB, Sundaram V, Kaimal AJ, Cheng YW, Gienger A, Little SE, et al. Maternal and neonatal outcomes of elective induction of labor. Evidence Report/Technology Assessment No. 176. (Prepared by the Stanford University-UCSF Evidence-based Practice Center under contract No. 290-02-0017.) AHRQ Publication No. 09-E—5. Rockville (MD): Agency for Healthcare Research and Quality; 2009.
3. Clark SL, Frye DR, Meyers JA, Belfort MA, Dildy GA, Kofford S, et al. Reduction in elective delivery <39 weeks of gestation: comparative effectiveness of 3 approaches to change and the impact on neonatal intensive care admission and stillbirth. Am J Obstet Gynecol 2010;203:449.e1–449.e6.
4. American Academy of Pediatrics, American College of Obstetricians and Gynecologists. Antepartum care. In: Guidelines for perinatal care. 6th ed. Elk Grove Village (IL): AAP; Washington, DC: ACOG; 2007. p. 83–137.
5. American Academy of Pediatrics, American College of Obstetricians and Gynecologists. Perinatal infections. In: Guidelines for perinatal care. 6th ed. Elk Grove Village (IL): AAP; Washington, DC: ACOG; 2007. p. 303–48.

Standardization of health care processes and reduced variation has been shown to improve outcomes and quality of care. The American College of Obstetricians and Gynecologists has developed a series of patient safety checklists to help facilitate the standardization process. This checklist reflects emerging clinical, scientific, and patient safety advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed. Although the components of a particular checklist may be adapted to local resources, standardization of checklists within an institution is strongly encouraged.

How to Use This Checklist

The Patient Safety Checklist on Scheduling Induction of Labor should be completed by the health care provider and submitted to the respective hospital to schedule an induction of labor. The hospital should establish procedures to review the appropriateness of the scheduling based on the information contained in the checklist. A hard stop should be called if there are questions that arise that require further information or consultation with the department chair.

Scheduling induction of labor. Patient Safety Checklist No. 5. American College of Obstetricians and Gynecologists. Obstet Gynecol 2011;118:1473–4.

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Obstetricians and Gynecologists
Women's Health Care Physicians

Patient Safety Checklist

Number 4 • December 2011

Reaffirmed 2014

PREOPERATIVE PLANNED CESAREAN DELIVERY

Date_____ Patient _____ Date of birth _____ MR # _____

Physician _____ Gravidity/Parity _____

Best estimated gestational age _____ Indication _____

- ❑ Patient has a complete medical history and physical examination
  - ❑ Known allergies identified
  - ❑ Medical factors that could affect anesthetic choices identified
- ❑ Patient counseled about risks and benefits of cesarean delivery versus trial of labor and vaginal delivery (1, 2)
  - ❑ Consent form signed as required by institution
- ❑ Appropriate preoperative and pertinent prenatal laboratory test results (eg, group B streptococci or hematocrit) available (3)
- ❑ Antibiotic prophylaxis administered within 60 minutes before incision (4)
- ❑ Appropriate deep vein thrombosis prophylaxis administered (3, 5)
  - ❑ Yes
  - ❑ No: Reason:_____
- ❑ Presence of fetal heart tones documented before incision (6)
  - ❑ Yes
  - ❑ No: Reason:_____
- ❑ Risk factors identified:
  - ❑ If at risk of bleeding more than 1,000 mL, adequate intravenous access and fluids planned and packed cells and blood products available
  - ❑ Airway
  - ❑ Allergies
  - ❑ Notification of neonatal or pediatric departments if necessary
- ❑ A "time out" is conducted before the start of surgery to confirm the patient's name, allergies, and consent; to confirm the surgery to be performed; and to identify team member names and roles (7)
- ❑ Surgical counts performed before incision (surgical counts are reconfirmed postoperatively)

References

1. Vaginal birth after cesarean delivery. Practice Bulletin No. 115. American College of Obstetricians and Gynecologists. Obstet Gynecol 2010;116:786–90.
2. Surgery and patient choice. ACOG Committee Opinion No. 395. American College of Obstetricians and Gynecologists. Obstet Gynecol 2008;111:243–7.
3. American Academy of Pediatrics, American College of Obstetricians and Gynecologists. Intrapartum and postpartum care. In: Guidelines for perinatal care. 6th ed. Elk Grove Village (IL): AAP; Washington, DC: ACOG; 2007. p. 139–74.
4. Antimicrobial prophylaxis for cesarean delivery: timing of administration. Committee Opinion No. 465. American College of Obstetricians and Gynecologists. Obstet Gynecol 2010;116:791–2.

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References *(continued)*

5. Obesity in pregnancy. ACOG Committee Opinion No. 315. American College of Obstetricians and Gynecologists. Obstet Gynecol 2005;106:671–5.
6. Fetal monitoring prior to scheduled cesarean delivery. ACOG Committee Opinion No. 382. American College of Obstetricians and Gynecologists. Obstet Gynecol 2007;110:961–2.
7. Patient safety in the surgical environment. Committee Opinion No. 464. American College of Obstetricians and Gynecologists. Obstet Gynecol 2010;116:786–90.

Standardization of health care processes and reduced variation has been shown to improve outcomes and quality of care. The American College of Obstetricians and Gynecologists has developed a series of patient safety checklists to help facilitate the standardization process. This checklist reflects emerging clinical, scientific, and patient safety advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed. Although the components of a particular checklist may be adapted to local resources, standardization of checklists within an institution is strongly encouraged.

How to Use This Checklist

The Patient Safety Checklist on Preoperative Planned Cesarean Delivery should be completed by the health care provider during the patient's admission.

Preoperative planned cesarean delivery. Patient Safety Checklist No. 4. American College of Obstetricians and Gynecologists. Obstet Gynecol 2011;118:1471–2.

The American College of Obstetricians and Gynecologists
Women's Health Care Physicians

Patient Safety Checklist ✓

Number 3 • December 2011

SCHEDULING PLANNED CESAREAN DELIVERY

Date_____ Patient _____ Date of birth_____ MR # _____

Physician or certified nurse–midwife _____ Last menstrual period _____

Gravidity/Parity_____

Estimated date of delivery_____ Best estimated gestational age (at admission)_____

Proposed cesarean delivery date _____

Indication (choose one):

- ❑ Medically indicated: Diagnosis:_____
- ❑ Repeat cesarean delivery (choose one) (1, 2):
  - ❑ Trial of labor not appropriate: Reason:_____
  - ❑ Trial of labor offered
    - ❑ Yes
    - ❑ No: Reason:_____
  - ❑ Patient counseled about risks and benefits of cesarean delivery versus trial of labor and vaginal delivery (1, 3)
    - ❑ Consent form signed as required by the institution
  - ❑ Repeat cesarean delivery for logistical reasons: Circumstances:_____
- ❑ Elective primary cesarean delivery at maternal request (4):
  - ❑ Patient counseled about risks and benefits of cesarean delivery versus vaginal delivery (1, 3)
    - ❑ Consent form signed as requested by institution
- ❑ Gestational age of 39 0/7 weeks or greater confirmed by either of the following criteria (5):
  - ❑ Ultrasound measurement at less than 20 weeks of gestation supports gestational age of 39 weeks or greater
  - ❑ Fetal heart tones have been documented as present for 30 weeks of gestation by Doppler ultrasonography

If this is an elective cesarean delivery and gestational age is 39 0/7 weeks or less, reason for variance:

_____

Results of amniocentesis (if performed): _____

- ❑ Preoperative and pertinent prenatal laboratory test results (eg, group B streptococci or hematocrit) available (2)
- ❑ Special concerns (eg, allergies, medical problems, and special needs)_____
- ❑ Pertinent comorbid risk factors (maternal and fetal) _____

To be completed by reviewer:

- ❑ Approved cesarean delivery for gestational age equal to or greater than 39 0/7 weeks by the aforementioned dating criteria
- ❑ Approved cesarean delivery before 39 0/7 weeks of gestation (medical indication)
- ❑ **HARD STOP** – gestational age, indication, consent, or other issues prevent initiating planned cesarean delivery without further information or consultation with department chair

References

1. Vaginal birth after cesarean delivery. Practice Bulletin No. 115. American College of Obstetricians and Gynecologists. Obstet Gynecol 2010;116:786–90.
2. American Academy of Pediatrics, American College of Obstetricians and Gynecologists. Intrapartum and postpartum care. In: Guidelines for perinatal care. 6th ed. Elk Grove Village (IL): AAP; Washington, DC: ACOG; 2007. p. 139–74.
3. Surgery and patient choice. ACOG Committee Opinion No. 395. American College of Obstetricians and Gynecologists. Obstet Gynecol 2008;111:243–7.
4. Cesarean delivery on maternal request. ACOG Committee Opinion No. 394. American College of Obstetricians and Gynecologists. Obstet Gynecol 2007;110:1501.
5. Fetal lung maturity. ACOG Practice Bulletin No. 97. American College of Obstetricians and Gynecologists. Obstet Gynecol 2008;112:717–26.

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How to Use This Checklist

The Patient Safety Checklist on Scheduling Planned Cesarean Delivery should be completed by the health care provider and submitted to the respective hospital to schedule a planned cesarean delivery. The hospital should establish procedures to review the appropriateness of the scheduling based on the information contained in the checklist. A hard stop should be called if there are questions that arise that require further information or consultation with the department chair.

Scheduling planned cesarean delivery. Patient Safety Checklist No. 3. American College of Obstetricians and Gynecologists. Obstet Gynecol 2011;118:1469–70.