St. John Health System	OWNING DEPARTMENT Labor and Delivery 6 WEST Postpartum 6 EAST
ST. JOHN MEDICAL CENTER	
Postpartum Hemorrhage	PAGE 1 OF 5 DATE APPROVED:

I. Department Applies To- Labor and Delivery, 6 East Postpartum

II. Overview

Postpartum Hemorrhage: An estimated blood loss in excess of 500 mL following a vaginal birth or a loss of greater than 1,000 mL following cesarean birth

III. Policy

A. Indications- Postpartum with cumulative blood loss >500 mL after vaginal birth or >1000 mL after cesarean birth

B. Contraindications - Hysterectomy after delivery

IV. Procedure

A. Upon admission to L&D or PP/AP unit, every patient will be screened and OB Hemorrhage Risk Level will be documented on the patient's record.

1. Evaluate for risks developed during the Labor/Delivery/Recovery process and re-assess OB Hemorrhage Risk Level as needed
2. Patients with 2 or more medium risk factors are considered High Risk.

B. Group, Type & Screen (GTS) will be obtained for every patient

C. Identify patients who may decline blood products and document

1. Notify delivering physician, OB hospitalist and anesthesiologist
2. Review consent form and ensure declination of blood form is signed if applicable

D. Notify physician that patient meets High Risk criteria.

E. Place ORDER SET in every patient chart

F. At delivery, both vaginal and Cesarean Section (C/S), blood loss will be measured quantitatively using formal methods, such as graduated containers and/or weight of blood soaked materials (1 gm = 1 mL).

G. Following delivery, blood loss will continue to be measured, every 15 minutes, until the patient status changes to routine PP care.

1. During this time, an appropriate Stage of OB hemorrhage will be documented in the delivery record

2. Notify Physician if patient status is Stage 1 or higher and initiate the POSTPARTUM HEMORRHAGE PROTOCOL AND ORDER SET

REPLACES PREVIOUS DOCUMENT TITLE/NUMBER N/A - New	PREPARED BY Sherry Batterson RN Ellen Mayberry BSN, RNC-OB Carissa Shaw, BSN, RNC-OB Regina Wilcox, BSN, RN
REPLACES DOCUMENT DATED N/A - New	APPROVER

OB Hemorrhage STAGE	PROCEDURE PER PROTOCOL
STAGE 0 **ALL BIRTHS**	• Infuse increased rate of oxytocin after delivery per physician order • Obtain quantitative measurements of blood loss • Ongoing evaluation of Vital Signs and fundal properties
If <u>Cumulative Blood Loss</u> >500 mL for vaginal birth or >1000 mL for cesarean birth <u>OR</u> <u>vital signs</u> > 15% change <u>OR Increased bleeding</u> during recovery or postpartum <u>THEN</u> PROCEED TO STAGE 1	
STAGE 1	• Ensure OBGYN physician is present • Maintain patent IV access • Increase IV oxytocin rate and titrate infusion rate per uterine tone • Continue vigorous fundal massage every 15 minutes • Empty bladder: straight catheter or place indwelling catheter with urometer per order • Administer medications per ORDER SET • Vital signs every 15 minutes, continuous pulse ox • Obtain and record Quantitative measurement of blood loss q 10-15 min • Administer O_2 to maintain saturation at >95% • Maintain I&O's • Keep patient warm • Type and Crossmatch 2 units PRBCs (if not already done) as ordered by physician, notify Blood Bank for potential preparation of OB Pack • Obtain CBC, if platelets < 100,000 draw DIC profile
If continued bleeding with blood loss up to 1500 ml cumulative blood loss <u>OR</u> continued vital sign instability, PROCEED TO STAGE 2	
STAGE 2	• Notify anesthesia potential for: o D&C o Bakri Balloon placement o Packing or repair as required o Uterine Artery Ligation o Hypogastric ligation o Selective embolization (IR) o B-Lynch or Hysterectomy • Establish 2nd large bore IV • Assess and announce VS and cumulative blood loss q 5-10 min • Administer meds, blood products and draw labs per ORDER SET, as requested by physican • Keep patient warm • Place indwelling catheter with urometer (if not already done) • Upon physician order, Transfuse 2 units PRBCs per protocol

	If cumulative blood loss >1500 mL, VS unstable <u>OR</u> Suspicion for DIC PROCEED TO STAGE 3
STAGE 3	• Move patient to OR (if not already there) • Upon physician order, TRANSFUSE AGGRESSIVELY. Order OB Pack (4:4:1) from Blood Bank. • Notify House Supervisor about possible transfer to ICU • Announce VS and cumulative blood loss q 5-10 min • Apply upper body warming blanket if feasible • Use fluid warmer and/or rapid infuser for fluid/blood products • Apply SCDs

(California Maternal Quality Care Collaborative [CMQCC], 2009)

V. Definitions

A. ***Admission OB Hemorrhage Risk Levels***

1. Low:
   a) No previous uterine incision
   b) Singleton Pregnancy
   c) <4 previous vaginal births
   d) No known bleeding disorders
   e) No history of PPH
   f) BMI < 30
2. Medium:
   a) Prior cesarean birth(s) or uterine surgery
   b) Multiple gestation
   c) History of PPH
   d) 4 or more previous vaginal births
   e) Chorioamnionitis
   f) Large uterine fibroids
   g) Polyhydramnios
   h) History of previous PPH
   i) Estimated fetal weight 4000 gm or greater
   j) BMI > 30

3. High:
    a) Placenta previa, low lying placenta
    b. Suspected placenta accreta or percreta
    c) Hematocrit <30% AND any additional medium risk factors
    d) Platelets <100,000
    e) Active bleeding (greater than show) on admission
    f) Known coagulopathy
    g) Anticoagulant therapy

B. ***Initial Post Delivery Hemorrhage Risk Levels***

1. Low:
    a) Singleton pregnancy
    b) Less than 5 total vaginal births
    c) No known bleeding disorder
    d) No history of PPH
    e) Uncomplicated vaginal delivery
    f) No genital tract trauma
2. Medium:
    a) Cesarean birth or uterine surgery
    b) Multiple gestation
    c) Polyhydramnios
    d) Greater than or equal to 5 total vaginal deliveries
    e) Chorioamnionitis
    f) History of previous PPH
    g) Large uterine fibroids or uterine anomaly
    h) Prolonged active labor > 12 hr.
    i) Prolonged Oxytocin use
    j) Rapid labor
    k) Application of forceps or vacuum
    l) Genital tract trauma
    m) Shoulder dystocia
    n) Magnesium Sulfate treatment
3. High:
    a) Hematocrit less than 30% AND other medium or high risk factors present
    b) Platelets less than 100,000
    c) Anticoagulant therapy

d) Known coagulopathy
e) Active bleeding

(CMQCC, 2009)

VI. References

The American College of Obstetricians and Gynecologists (ACOG). (2006). *ACOG Practice Bulletin Number 76. Postpartum Hemorrhage.*

California Maternal Quality Care Collaboration (CMQCC). (2009). *OB Hemorrhage Toolkit*. Retrieved from http://www.cmqcc.org/ob_hemorrhage

VII. Keywords

Postpartum Hemorrhage, Obstetric Hemorrhage, Obstetric Emergencies