### General

<table>
<thead>
<tr>
<th>Q.</th>
<th>What is the denominator?</th>
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<tbody>
<tr>
<td>A.</td>
<td>All deliveries during the month of collection. The data form requests this via total number of vaginal and C-section deliveries. Do not include prenatal/antepartum admissions, unless the patient delivered during the admission.</td>
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<tr>
<th>Q.</th>
<th>To calculate the percentage of women that received pharmacologic prophylaxis, is the correct denominator the number of cesarean deliveries or all deliveries?</th>
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<tbody>
<tr>
<td>A.</td>
<td>The number of cesarean deliveries is the correct denominator.</td>
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<tr>
<th>Q.</th>
<th>Upon suspecting a DVT, Hospital X immediately transferred a patient to Hospital Y. No diagnostic procedures were performed at Hospital X. Which hospital reports this data?</th>
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<tbody>
<tr>
<td>A.</td>
<td>Hospital X should report this data even if the diagnosis was confirmed at Hospital Y.</td>
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<tr>
<th>Q.</th>
<th>A patient with postpartum hemorrhage was transfused at Hospital X then transferred to the ICU at Hospital Y. How is this data reported?</th>
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<tbody>
<tr>
<td>A.</td>
<td>Hospital X should report this event so we are able to assess how they managed the postpartum hemorrhage. Hospital Y should report the number of days in the ICU and indicate that the patient came from another hospital</td>
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<th>Q.</th>
<th>Under which service should a postpartum patient with anemia be admitted if she does not present with bleeding, abdominal pain, or fever?</th>
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</table>
| A. | This will vary depending on what other conditions the patient presents with. Anemia on its own does not constitute a diagnoses; it is only a sign or symptom. Since many etiologies cause anemia, the admission decision should be individualized based on diagnosis.  
If a complete workup for anemia is needed, the patient may be placed with Obstetrics and consults called in as needed. Generally speaking, any postpartum patient in need of inpatient services should be admitted to Obstetrics, unless she requires care that unit cannot provide (intubation/ventilation, ICU, etc.) |
Q. How does one capture the SMI data for a postpartum patient with preeclampsia that went straight from the emergency room to ICU, completely bypassing Labor & Delivery?

A. If this is a readmission, all hospitals should be reviewing their readmission process since there will be significant financial penalties related to these rates.

For retrospective reporting, hospitals should already be collecting and reviewing any readmissions within 30 days of delivery, and Admitting must be capable of generating this list through OB codes. These charts would then need to be reviewed manually. The Emergency and Obstetrics Departments should be enforcing this protocol so that prospective data collection is also possible.

However, for the few potential patients that exhibit signs or symptoms within the full six-week postpartum period, hospitals would require additional resources to capture this data.

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**Obstetric Hemorrhage**

Q. Prenatally, a BMI >50 is a risk factor. For labor & delivery, a BMI >40 is a medium risk factor. Why isn’t the BMI the same for both situations?

A. This discrepancy is intentional as the two risk assessment time points have different goals. The prenatal risk assessment is designed to identify patients at very high risk. These patients may warrant consideration for transfer to a higher-level of care for safe delivery (BMI>50). For this, a BMI cut-off of 40 may lead to the unnecessary antenatal transfer of a large number of patients who would be better served at their own hospital.

The admission risk assessment is meant to highlight risk factors for the care team, and facilitate communication/preparation between the care team and blood bank. In this situation, it is reasonable to be more conservative given there is no risk to the patient due to heightened surveillance.

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Q. Should hospitals carry 10 units of every blood type (type-specific, O negative)?

A. A total of 6 units is acceptable: 4 units of Type O negative in addition to type-specific.

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Q. Our hospital does not routinely carry Type B negative blood. However, we are able to acquire it from nearby institutions within one hour. Is it reasonable to continue with this plan despite it not meeting SMI recommendations?

A. Yes, it is acceptable to not stock Type B negative blood. However smaller hospitals and centers with limited blood supplies should have a procedure in place to procure the needed amount of blood type in a timely manner if/when necessary. Institutions that regularly provide these services include the Red Cross and larger medical centers.
Q. SMI recommends a 6:4:1 ratio of various blood products in their Massive Transfusion Protocol (MTP). Can you provide references for this?

A. Though ACOG does not have specific MTP guidelines, it is important for each center to have a protocol in place that includes predetermined ratios, including a high ratio of fresh frozen plasma and platelets. Supplies should be easily released and replenished in postpartum hemorrhage situations. Please see pages 60-69 of the California Maternal Quality Care Collaborative Toolkit (available at https://www.cmqcc.org/ob_hemorrhage) for a summary of the available literature.

Q. Is ACLS monitoring standard practice for obstetric patients receiving IV-administered Hydralazine and Labetalol? Can a nurse administer these? We are a small hospital without a medical or obstetric intensive care unit.

A. Continuous monitoring for these patients varies by institution and hospitals should follow their specific protocols. Because the use of IV medications is not novel, every OB unit should have established guidelines as to what maternal monitoring is recommended and required at their institution. It is acceptable for different hospitals to have varying procedures as long as maternal treatment is not delayed due to the necessity of monitoring. If a hospital mandates monitoring, staff should have procedures in place to respond in a timely manner so that treatment is not compromised.

Q. Can you explain the ICD coding process regarding number of patients with severe HTN, and how to determine the total?

A. The ICD codes are used as a first-pass to identify severe HTN cases. Thereafter, a complete chart audit should be used to confirm the diagnosis. ICD codes are to be used only when hospitals cannot undertake a chart audit due to the sheer volume of severe HTN cases. If this is the issue, a sampling can be taken (see Tip Sheet for the chart audit table). Please provide complete data on the cases sampled, in addition to reporting numbers for the total amount of cases that will be based on the ICD codes.

Q. Is the SMI form requesting diagnoses only via ICD-9 codes, or through the criteria of BP ≥160 or ≥ 110? We have patients that were diagnosed yet did not meet the BP criteria. As a result, Question 3 on the data form may be higher than Question 2. (i.e. we have 4 patients diagnosed with severe HTN, but 5 were treated for the abovementioned BP criteria).

A. For defining hypertension, use the BP criteria as the first option and ICD criteria thereafter. In the above example, one should report 5 cases of severe hypertension.
Q. In addition to Labetalol and Hydralazine, the February 2015 ACOG Committee Opinion includes Nifedipine as a first line agent. Does the SMI bundle include guidance for Nifedipine? How should we proceed?

A. The difference between the February 2015 ACOG bulletin and current SMI protocol is not substantive. The use of Nifedipine in the SMI Severe Hypertension in Pregnancy bundle is recommended when no IV access is available, and to be administered as follows:

- 200 mg of labetalol orally or 10 mg of Nifedipine orally (not for sublingual use)
- Repeat in 30 minutes if systolic blood pressure remains ≥ 160 or diastolic blood pressure ≥ 110 and IV access still unavailable

ACOG’s February 2015 guidelines may be used as a resource and is outlined below:

- Start with 10 mg of Nifedipine when systolic blood pressure ≥ 160 or diastolic blood pressure ≥ 110
- For persistent BP elevation longer than 15 minutes, administer 20 mg.
- If BP continues to be elevated at 20 minutes, administer another 20 mg.
- Switch to Labetolol after prolonged BP elevation

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**Venous Thromboembolism**

1. **Q. What is “routine” administration of prophylaxis?**
   
   A. Administering prophylaxis to 100% of deliveries.

2. **Q. What form of Heparin should be used in VTE prophylaxis?**
   
   A. UFH Heparin is used for the vast majority of inpatient indications. There are no specific guidelines related to preservatives.

3. **Q. 5,000 units of subcutaneous Heparin every 12 hours is a fairly standard order for prophylaxis postpartum. What is the indication for 10,000 units?**
   
   A. When considering obese to morbidly obese patients, it would be reasonable to use 10,000 units.

4. **Q. Our anesthesiologists administer 4 doses of Toradol post-operatively. Is this contraindicated with the use of Lovenox for VTE prophylaxis?**
   
   A. No, Toradol is not a contraindication to administration of Lovenox.
Q. Should we include air, fluid, and septic data on the VTE data page, or blood clot embolisms only?

A. Blood clot embolisms only.

Q. How should the number of patients who received prophylaxis be counted?

A. A suggested approach is to contact and work in conjunction with hospital billing to identify how drugs and devices are coded in the chargemaster. Based on the hospital’s protocol, data should be able to be obtained in this manner.

Q. What literature is available regarding the safety of patients receiving an epidural/regionanesthesia after a prophylactic, subcutaneous dose of Heparin?

A. Expert guidelines and observational evidence support the safety of neuraxial anesthesia. Concerns about patients receiving subcutaneous heparin in prophylactic doses (usually 5000 q 12 hours) center on the possibility of heparin-induced thrombocytopenia or the "unusual responder" who develops an elevated aPTT. Based on the clinical experience reported, these patients are quite rare.

However, after a few doses of therapy, Heparin-induced thrombocytopenia should be screened for, and it is not unreasonable to check an aPTT to monitor for adverse effects.

A summary of relevant information is provided below:

- Recent evidence confirms a long-standing clinical impression that obstetric patients are significantly less likely to develop neuraxial bleeding than other patients, so any risk that is suspected in non-obstetric patients is almost certainly less in pregnancy (1). Horlocker (1,2) also states that there are no known cases of epidural hematoma in obstetric patients associated with antithrombotic/antiplatelet therapy.

- American Society of Regional Anesthesia (2) states "The widespread use of subcutaneous heparin and paucity of complications suggests that there is little risk of spinal hematoma associated with this therapy. There are 9 published series totaling more than 9000 patients who have received this therapy without complications...”

- "In patients receiving prophylaxis with subcutaneous UFH with dosing regimens of 5000 U twice daily, there is no contraindication to the use of neuraxial techniques. The risk of neuraxial bleeding may be reduced by delay of the heparin injection until after the block and may be increased in debilitated patients after prolonged therapy (Grade 1C).” (ASRA 2010 guidelines)

- Butwick (3) summarized national/international regarding UFH and neuraxial procedures suggesting that anesthesia soon after SQ Heparin is performed in many countries

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