The 2022 Application for the Society of Obstetric Anesthesia and Perinatology (SOAP) Center of Excellence (COE) for Anesthesia Care of Obstetric Patients Designation

Please describe your institution's current practice in response to the expected COE criteria outlined below. For all free text questions provide detailed responses and mention specifics (such as personnel, equipment, location, etc.) as they relate to each stipulated criterion. **Do not simply respond yes or no, outline your answers in detail and attach supporting documents as appropriate.**

SOAP COE applications are institution-specific. Do not apply for a healthcare system or anesthesia group that provides services to various hospitals. **Each hospital requires a separate application, even if the same pool of providers cover them.**

Institutional and Application Details:

1. **Please mark the application designation that is applicable to you:**
   - ☐ First time applying for COE designation
   - ☐ Recertification (i.e. previously received COE certification)
   - ☐ Previously applied without success (but with fee waiver for reapplication)
   - ☐ Previously applied without success

2. Describe the institution where you provide obstetric anesthesia services
   - ☐ Academic/university affiliated
   - ☐ Private/county/community
   - ☐ Military/VA
   - ☐ Other (please specify) _____

3. What is the country of the applying institution? _____

If USA application, what is the institution's zip code? _____

4. Mark all that apply to your institution:

- ☐ Train/teach residents
- ☐ Train/teach obstetric anesthesia fellows
- ☐ Has an ACGME-accredited OB Anesthesia fellowship program

5. How many deliveries are there at your institution?

_____ per year

6. What is the current cesarean delivery rate at your institution?

_____%

7. General anesthesia rates:

What is your institution's overall general anesthesia rate for cesarean delivery? #

_____%

What is your general anesthesia rate for planned/scheduled/elective cesarean delivery?

_____%

What is your general anesthesia rate for unplanned/intrapartum/urgent cesarean delivery? _____%

- ☐ *Do you conduct a quality assurance review of all cases requiring general anesthesia (irrespective of your institution's general anesthesia rate)? Please provide evidence of your quality assurance review process.

_____

A quality assurance review must be established, with the aim of reducing avoidable general anesthesia. #Overall (for all indications i.e. planned/scheduled/elective and unplanned/intrapartum/urgent combined, including abnormal placentation/cesarean hysterectomy cases), general anesthesia rate for cesarean delivery should ideally be ≤5%. If >5%, the COE criteria can be met if the application review determines that all general anesthesia cases are being actively reviewed and there is clear evidence of efforts made to reduce avoidable general anesthesia.

8. What percentage of laboring patients at your institution receive neuraxial analgesia? _____%

9. What is your labor epidural block replacement rate? _____ %
The labor epidural replacement rate should ideally be 3-6%.

10. What is your institution's "wet-tap" _____*%* and *"epidural blood patch (EBP)"* _____% rate in the obstetric setting?
The unintentional dural puncture rate should ideally be ≤2%. A quality assurance review of all unintentional dural punctures and post-dural puncture headaches (PDPH) should be in place.

11. How many labor and delivery rooms are in your obstetric unit?
_____

12. How many operating rooms are in/dedicated to your obstetric unit?
_____

13. What American College of Obstetricians and Gynecologists (ACOG) level of maternal care (Level 1, 2, 3 or 4) is your institution? _____
https://www.acog.org/clinical/clinical-guidance/obstetric-care-consensus/articles/2019/08/levels-of-maternal-care

Personnel and Staffing:

1. Obstetric anesthesia staffing for your obstetric anesthesia service:
   - How many faculty in total cover the obstetric anesthesia service (day, night, weekends and holidays)? _____
   - How many of the total faculty that cover the obstetric anesthesia service have completed an ACGME-accredited obstetric anesthesia fellowship, and/or have

equivalent expertise and experience in obstetric anesthesia (e.g. specific training in obstetric anesthesia, several years of practice with a focus on obstetric anesthesia, and/or evidence of expertise based on academic contributions)? _____/_____% (actual number and percent of total faculty)

- On a daily basis, how many staff are assigned to provide dedicated coverage for the obstetric anesthesia service?

Daytime:

*Attending physician: _____

Estimated proportion of shifts covered by specialists vs. generalists _____%

Fellow: _____

Resident: _____

Certified Registered Nurse Anesthetists (CRNA) / Certified Anesthesiologist Assistants (CAA): _____

Other (specify): _____

Night-time:

*Attending physician: _____

Estimated proportion of shifts covered by specialists vs. generalists _____%

Fellow: _____

Resident: _____

CRNA/CAA: _____

Other (specify): _____

Weekends:

*Attending physician: _____

Estimated proportion of shifts covered by specialists vs. generalists _____%

Fellow: _____

Resident: _____

CRNA/CAA: _____

Other (specify): _____

Are all neuraxial procedures (spinal/epidural/combined spinal epidural (CSE)/dural puncture epidural(DPE)) in labor and operating rooms performed under direct supervision of the attending physician when performed by Fellow, Resident, Student Registered Nurse Anesthetists (SRNA) and/or CRNA? Yes/No
If no, please outline supervision expectations

_____

2. Obstetric anesthesiologist leadership

- *Outline the expertise and experience of the obstetric anesthesia lead. *The obstetric anesthesia lead must be a board-certified physician anesthesiologist who has completed an ACGME-accredited obstetric anesthesia fellowship, and/or has equivalent expertise in obstetric anesthesia. If equivalent expertise, the basis for this must be clearly delineated (e.g. specific training in obstetric anesthesia, several years of practice with a focus on obstetric anesthesia, and/or evidence of expertise based on academic contributions). Please provide the curriculum vitae of the lead obstetric physician anesthesiologist with your application.*

3. Staffing education

- *Provide evidence of ongoing participation in continuing medical education and professional practice improvement. *The obstetric anesthesia lead and the majority of core faculty members need to show evidence of ongoing participation in continuing medical education relevant to the practice of obstetric anesthesia (e.g. SOAP membership, attendance at a SOAP conference or equivalent obstetric anesthesia-focused meeting at least every other year, and can provide examples of professional practice improvement or evidence-based updates to clinical practice).*
- If applicable, please also outline efforts made to ensure continuing medical education for all non-core faculty that cover the obstetric service.

- Outline obstetric anesthesia-related staff meetings. *Regular (e.g. every 1-2 months) staff meetings for obstetric anesthesia providers to provide clinical service updates and ongoing education is recommended.*

4. Dedicated coverage
   - *Outline your coverage model. *In-house (24/7) coverage of obstetric patients, by at least one board-certified (or equivalent) physician anesthesiologist who is dedicated to cover the obstetric service without additional responsibilities for non-obstetric patients is emphasized. If a low volume center (<1500 deliveries per year), non-dedicated coverage with minimal additional responsibilities may be acceptable. If a very high volume center (>5000 deliveries per year), solo dedicated coverage may not be adequate unless there is a readily available physician anesthesiologist backup with adequate numbers of trainees/CRNAs to support the clinical load. If applicable, provide the full list of out-of-unit responsibilities, and the frequency at which faculty are called to complete these duties outside the obstetric unit.*

5. Supervision
   - Outline your supervision policy. *In academic centers that train residents or fellows, institutional policy should dictate that the physician anesthesiologist dedicated to the obstetric floor is present (regardless of the level of experience of the trainee) for placement and induction of neuraxial labor analgesia procedures with rare exceptions (e.g. simultaneous emergency), and should be present (regardless of the level of experience of the trainee) at induction and emergence from general anesthesia. For team-based (physician plus CRNA) care models, physician leadership and active medical management involvement is necessary. Evidence of physician contribution to education and training of fellow, resident, CRNA and Student Registered Nurse Anesthetist (SRNA) should be provided.*

6. Backup system

- *Outline your backup system. *Ability to mobilize (within 30-minute timeframe) additional anesthesia personnel in case of obstetric emergencies or high clinical volume beyond the capacity of in-house staff assigned to the obstetric service is required.*

7. Anesthesia techs and other support staff

- Outline if anesthesia techs or equivalent are staffed on the obstetric unit. Describe their availability (24/7 or only daytime) and if anesthesia techs are dedicated to the obstetric service.

Equipment, Protocols and Policies:

1. Obstetric hemorrhage management
   - Outline your hemorrhage risk stratification algorithm and management protocol. Protocols should consider core elements of the National Partnership Obstetric Hemorrhage Bundle (1), California Maternal Quality Care Collaborative Obstetric Hemorrhage Toolkit (2), or comparable recommendations to manage obstetric hemorrhage.
   - *Describe your massive transfusion protocol. Availability of a massive transfusion protocol with O-negative blood and other blood products, and an emergency release system for available blood is essential. Blood bank protocol needs to have been tested and be functional on the obstetric unit.
   - *Describe your rapid-infuser devices. Rapid-infuser device to assist with massive resuscitation (e.g. Belmont® Rapid Infuser, Level 1® Fast Flow Fluid Warmer) should be stored on the obstetric unit.
   - Outline how obstetric blood loss is recorded (quantitative versus estimated blood loss) and how the incidence of postpartum hemorrhage is tracked.
   - *Outline plans for difficult peripheral and/or central intravascular access, e.g. ultrasound and intraosseous kits available.
   - Describe your point-of-care equipment to assess hematocrit and/or coagulation. Outline if thromboelastography (TEG®), thromboelastometry (ROTEM®),

sonorheometry (Quantra™) or other viscoelastic monitoring technology are available to guide management.

- Outline availability of intraoperative cell salvage for patients who refuse banked blood, and/or during high-risk cesarean deliveries. How are patients who refuse blood transfusion identified prior to presenting for delivery, counselled regarding blood product options, and prepared or optimized for delivery?
- Describe your hemorrhage quality assurance review process. Quality assurance review of all “severe” hemorrhage cases (defined at an institutional level, e.g. >4 unit blood transfusion) and all unplanned intrapartum hysterectomies should be in place so that opportunities for improvement can be identified and initiated.
- *Briefly describe and provide your institution’s obstetric hemorrhage toolkit (including protocols, checklists and/or algorithms).
- Outline your policies/procedures for suspected abnormal placentation (e.g. placenta accreta/percreta) cases. Describe the location (obstetric or main operating suite), staffing (e.g. obstetric anesthesia specialists), planning process (e.g. multidisciplinary meeting) and other considerations (e.g. blood management) for these cases.

2. Airway management
   - *Outline your difficult airway cart and supplies (laryngoscopes, endotracheal tubes, rescue airway devices (e.g. supraglottic airway device such as a laryngeal mask airway), video-laryngoscope and surgical airway equipment) that are stored on the obstetric unit.
   - Describe if you have an obstetric-specific difficult airway protocol on the difficult airway cart and in obstetric operating rooms.
   - *Describe the availability of suction devices. *Suction and a means to deliver positive pressure ventilation (e.g. bag-valve mask device) is required to be immediately available in readily accessible locations where neuraxial analgesia/anesthesia and/or general anesthesia are administered.*
   - Describe your in-house backup plan to provide personnel with surgical airway access skills if needed 24/7.

3. Other emergency resources
    - *Outline your lipid emulsion availability, appropriate supplies, and protocols that allow a timely response to local anesthetic systemic toxicity.
    - Outline your malignant hyperthermia protocol. *Dantrolene formulations and sterile water vials, along with other supplies must be available to allow a timely response to malignant hyperthermia.*
    - Outline cognitive aids and training resources. *Provide evidence for cognitive aids and clinician awareness of resources to manage emergencies, and training to facilitate team member awareness of the location and means to retrieve resources to better manage emergencies.*

4. Ultrasound and echocardiography

    *Outline availability and usage by obstetric anesthesia providers of ultrasound devices for peripheral and central intravenous access, neuraxial blocks, regional blocks (e.g. transversus abdominis/quadratus lumborum/erector spinae), and point-of-care evaluations (gastric, airway, lung, and cardiac).

5. Multidisciplinary team-based approach
    - *Describe systems in place to ensure inter-professional communication and situational awareness on your obstetric unit such as: board sign-out at each shift change of anesthesiology staff; pre-procedural timeouts; post-procedural briefings, as indicated; daily multidisciplinary rounds or huddles to discuss management plans for patients on labor and delivery, antepartum and postpartum.
    - Outline how timeouts are performed prior to all anesthetic interventions.
    - Outline evaluations by the anesthesiology service of: 1) all patients undergoing scheduled cesarean delivery and other obstetric-related surgeries, and 2) the vast majority of patients presenting to labor and delivery. *Patients presenting to labor and delivery should be triaged, and/or evaluated by the anesthesiology service soon after admission.*

- Outline the system in place to screen and identify all high-risk patients. Discuss early anesthesia evaluation of high-risk antenatal patients prior to admission for scheduled surgery or labor and delivery (e.g. high-risk anesthesia clinic).
- Describe your multidisciplinary evaluation of cardiac and other high-risk obstetric patients.
- *Describe the availability of surgical backup. *Surgical backup (e.g. trauma and/or gyn-onc surgeons) must be available, ideally 24/7 and in-house.*
- Outline your protocol or pathway to activate interventional radiology.
- Describe the intensive care unit available to receive obstetric patients (e.g. expertise, proximity to the obstetric unit and capacity).
- Outline the qualifications of nursing staff who provide post-anesthesia care in the obstetric unit and describe their competencies to recover surgical patients from both neuraxial and general anesthesia.
- *Describe your obstetric emergency response team and policy. Outline obstetric conditions and/or vital sign parameters that warrant activation, the means of notifying all members of the response team, and the approach for including anesthesiologists in the response to obstetrical emergencies such as hemorrhage, severe hypertension and non-reassuring fetal heart rate.
- *Outline your simulation drills and training.

  Outline the percentage of anesthesiology faculty (who cover obstetric anesthesia call), obstetricians, nurses, and other personnel who have participated in obstetric simulation (or inter-professional team training) in the last five years.

  _____%

  Describe simulation training scenarios practices and compliance with The Joint Commission (JACHO) requirements for obstetric hemorrhage and preeclampsia simulations. (*https://www.jointcommission.org/standards/r3-report/r3-report-issue-24-pc-standards-for-maternal-safety/#.YofbDHbML-g)*

  Physicians providing obstetric anesthesia should participate in at least one simulation drill every five years. An active multidisciplinary program with obstetric and anesthetic emergency simulation drills (e.g. emergent cesarean delivery, maternal cardiac arrest, difficult/failed intubation, obstetric hemorrhage, and

eclampsia) is preferable. Simulation drills for anesthesiology providers only may be acceptable, if no formal multidisciplinary program exists, or to supplement pre-existing drills.

6. Institutional resources
   - Describe your ability to provide anesthesia care for postpartum tubal ligation procedures within 24 hours of delivery, and urgent cerclage placement within 12 hours of surgical request. Outline policies/procedures to ensure postpartum tubal ligation are prioritized and performed in a timely manner as per ACOG recommendations. *https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2021/06/access-to-postpartum-sterilization*

   - *Outline options for an additional operating room (with nursing/tech/obstetric and anesthesiology personnel) that is available at all times for emergency obstetric procedures (if all obstetric unit operating rooms are occupied).
   - Describe your ability to provide invasive monitoring and other advanced management techniques for high-risk patients on the obstetric unit, including arterial lines, central lines, cardiac output monitoring, and transthoracic/transesophageal echocardiography.
   - Outline your management of patients who need vasoactive drug infusions, intensive care or cardiac care, and/or additional monitoring requirements (e.g. monitored bed, telemetry).

7. *Community and/or interprofessional education

Outline your approach to educating:

   - Expectant people, patients and families
   - Nurses, obstetricians and other healthcare providers
   - If applicable, obstetric anesthesia training for residents, fellows, CAAs, and/or SRNAs.

8. *Outline the initiatives that you have done at your institution to better meet the needs of patients from the most prevalent racial and ethnic minority group(s) that

your facility serves (e.g. implicit bias training of healthcare providers; provision of health educational resources for non-English speakers). Describe efforts to promote diversity, equity and inclusion of your workforce (e.g. support pipeline programs for groups underrepresented in medicine; diversity, equity and inclusion hiring/promotion practices; microaggression and bystander response training; mentorship/sponsorship of individuals from groups underrepresented in medicine and female trainees and faculty).

Cesarean Delivery Management:

1. *Outline, describe, and provide your enhanced recovery protocol as defined by the SOAP Enhanced Recovery After Cesarean (ERAC) Consensus Statement (3). *A standardized enhanced recovery protocol or clinical care pathway that is utilized by the institution and all obstetric anesthesia providers is an essential element.*

2. *Outline your routine utilization of a pencil-point needle, 25-gauge (or smaller) for the provision of spinal and CSE anesthesia for cesarean delivery.

3. *Describe your approach and outline policies and/or protocols to prevent and/or treat insufficient anesthesia or intraoperative pain during cesarean delivery. Outline how neuraxial block are tested *prior* to incision and strategies/protocols used to ensure blocks are adequate for surgery. Outline strategies/protocols to *treat* intraoperative pain, and describe the follow-up for patients that experience intraoperative pain.

4. Multimodal analgesia protocols
   - *Outline your post-cesarean delivery analgesic protocol. *Analgesic protocols should include low dose long-acting neuraxial opioid (such as 100-150 mcg intrathecal morphine or equivalent long-acting opioid, or 2-3 mg epidural morphine or equivalent long-acting opioid), and supplemental multimodal analgesics (ideally scheduled non-steroidal anti-inflammatory drugs and acetaminophen).*

- Describe your ability to provide local anesthetic wound infusions or regional nerve/fascial plane blocks when appropriate. Are regional blocks performed by obstetric anesthesia providers or the acute pain/regional anesthesia service?
- *Outline institutional efforts to minimize opioid usage, such as limiting rescue opioid doses (e.g. <30 mg oxycodone/24 hours), non-opioid rescue analgesic options (e.g. transversus abdominis plane blocks, gabapentin), and efforts to limit the number of opioid tablets (e.g. 10-20 tablets) prescribed on discharge.
- Describe your standardized protocol or plan of action to manage patients with opioid use disorders, and/or chronic pain.

5. Temperature management
   - *Outline strategies to prevent maternal and fetal intraoperative hypothermia, e.g. active warming, warm intravenous fluids, appropriate ambient delivery/operating room temperature. *Active warming and a standardized minimum operating room temperature of at least ≥73^{o}F (22.8^{o}C), and/or operating room temperature based on gestational age for cesarean delivery is recommended.*
   - Describe your approach to the measurement of maternal temperature during general and neuraxial anesthesia.

6. Appropriate antibiotic prophylaxis to prevent surgical site infection
   - *Describe your antibiotic prophylaxis protocols, specifically how the following are ensured: timely administration (prior to skin incision) of appropriate antibiotic(s); implementation of a weight-based dosing approach; implementation of an appropriate re-dosing strategy; identification of alternatives if allergies known/detected; and consideration of additional antibiotics for high-risk patients.
   - Outline which antibiotics are stored in the operating room for emergency cesarean deliveries, and describe how additional antibiotics are acquired urgently from pharmacy.

7. Spinal hypotension prevention and treatment

- *Outline your standardized approach to prevent and treat hypotension after spinal anesthesia. *Ideally, prophylactic infusion of phenylephrine to maintain blood pressure within 10% of baseline, with boluses of phenylephrine and ephedrine as appropriate to treat hypotension, as well as intravenous fluid pre-load or co-load during spinal or CSE anesthesia should be utilized.*

8. Neuraxial opioid-induced side effects prophylaxis and treatment
   Perioperative nausea and vomiting (PONV)
   - Describe your approach to risk stratify patients at risk for perioperative nausea and vomiting.
   - *Outline your perioperative nausea and vomiting antiemetic prophylaxis and treatment protocol. *A standardized approach ideally involving at least one prophylactic antiemetic agent routinely administered, with an alternative class of antiemetic agent available for additional prophylaxis (in patients at higher risk for PONV) and for treatment of nausea and vomiting.*
   - Outline which medications are immediately available for treatment of intraoperative shivering and pruritus in the operating room and recovery unit.

9. Postpartum monitoring
   - Describe your approach to risk stratification to identify patients at increased risk for respiratory depression, and screening for obstructive sleep apnea.
   - *Describe your monitoring and treatment for respiratory depression after cesarean delivery. *Your protocol should be consistent with the SOAP Consensus Recommendations for the Prevention and Detection of Respiratory Depression Associated with Neuraxial Morphine Administration for Cesarean Delivery Analgesia for the Prevention, Detection and Management of Respiratory Depression Associated with Neuraxial Opioids (4, 5).*
   - Outline your nursing care and monitoring. *Your nursing care should be consistent with the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) and ASA recommendations.*

10. Neonatal care
    - Describe how your anesthesiology service is supportive of baby-friendly breastfeeding practices (e.g. ability to safely facilitate skin-to-skin in the operating room or recovery unit, when possible).
    - Outline how an in-house (24/7) clinician (separate from the anesthesiology service) with appropriate training to provide neonatal resuscitation is available.

Labor Analgesia:

1. *Outline your routine utilization of a pencil-point needle, 25-gauge (or smaller) for the provision of CSE or DPE labor analgesia.

2. Low concentration local anesthetic solutions for administering neuraxial labor analgesia
    - *Describe your use of low concentration local anesthetic solutions (ideally ≤0.1% bupivacaine or ≤0.15% ropivacaine).
    - *Outline your use of neuraxial opioids (e.g. fentanyl or sufentanil) and/or other adjuvants (e.g. clonidine) added to epidural local anesthetic solutions.
    - Describe how standardized epidural solutions are provided and used by all providers. *Ideally, pharmacy-provided pre-mixed epidural solutions.*

3. Neuraxial techniques
    - *Outline if and which alternative neuraxial techniques are offered in addition to standard labor epidural analgesia (e.g., CSE, DPE, single-shot spinal). Please provide an estimated percentage breakdown of the utilization of these techniques.

      Standard epidural _____
      CSE _____
      DPE _____
      Other _____ (Describe:_____)
      Total 100%

- *Outline your labor epidural maintenance techniques. *Patient-controlled epidural analgesia (PCEA) and ideally background programmed intermittent epidural boluses (PIEB) should be utilized for provision of neuraxial labor analgesia.*
- *Describe your routine utilization of flexible (flex-tipped/wire-reinforced) epidural catheters for labor epidural analgesia.

4. Regular assessment of labor analgesia effectiveness
   - *Outline how you provide regular assessment of neuraxial labor analgesia effectiveness. *Ideally, pain scores documented by nursing staff (e.g. every 1-2 hours) supplemented with regular anesthesia provider rounds or evaluations (e.g. every 2-4 hours).*
   - Describe your protocol for managing epidural breakthrough pain. Describe your system used to track labor epidural replacement rates.
   - Describe your ongoing monitoring (e.g. blood pressure, assessment of motor/sensory levels) and protocols to manage potential side effects or complications associated with neuraxial analgesia.
   - Outline your nursing postpartum monitoring protocol that is consistent with AWHONN recommendations.

5. *Non-neuraxial labor analgesia options
   Describe intravenous patient-controlled opioid analgesia options offered, and outline protocol specifics including opioids available, administration settings and monitoring requirements. Outline the availability of nitrous oxide for labor analgesia, and if available provide protocol specifics.

Recommendations and Guidelines Implementation:

- *At a minimum, provide evidence of implementation of the Practice Guidelines for Obstetric Anesthesia by the ASA Task Force on Obstetric Anesthesia and SOAP (6). Select key recommendations not otherwise addressed in other areas of this application:

- Platelet count prior to neuraxial block placement: No requirement for routine testing in healthy patients
- Appropriate liquid and diet restrictions: Intrapartum (allow clear liquids in uncomplicated patients); cesarean delivery (clear liquids up to 2 hours prior)
- Timing of neuraxial analgesia: Allow neuraxial analgesia in early labor (no specific cervical dilation required)

- Outline evidence of implementation of the SOAP Consensus Statement on the Management of Cardiac Arrest in Pregnancy (7).
- National Partnership Maternal Safety Bundles (8): Confirm that aspects of the following Maternal Safety Bundles have been implemented:

  Obstetric Hemorrhage Yes/No
  Severe Hypertension in Pregnancy Yes/No
  Maternal Venous Thromboembolism Yes/No
  Cardiac Conditions in Obstetrical Care Yes/No
  Care for Pregnant and Postpartum People with Substance Use Disorder Yes/No

  Provide examples of implementation of key aspects of National Partnership Maternal Safety Bundles; outline at least one example of an item that has been implemented to address each domain (Readiness, Recognition and Prevention, Response, and Reporting and System Learning) for the following:

  Obstetric Hemorrhage _____
  Severe Hypertension in Pregnancy _____

  Ideally, institutions should consider implementation of all available safety bundles.
- Outline your approach to coordinate care for patients receiving ante- and postpartum thromboprophylaxis as outlined by the SOAP Consensus Statement on Neuraxial Anesthesia in Obstetric Patients Receiving Thromboprophylaxis (9). Describe a process by which obstetric anesthesia providers are informed about patients receiving thromboprophylaxis.

- Outline your implementation of recommendations from SOAP Interdisciplinary Consensus Statement on Neuraxial Procedures in Obstetric Patients with Thrombocytopenia.

Quality Assurance and Patient Follow-up:

- *Describe how an anesthesiologist serves as a member of the team that develops and implements multidisciplinary clinical policies, e.g. quality improvement committee, patient safety committee. Outline current quality assurance and other patient care initiatives that the obstetric anesthesia division is leading, and/or involved in.
- Outline involvement of obstetric anesthesia staff in hospital committees. Describe committees (e.g. peer review, blood management) that the obstetric anesthesia staff are involved in, and their role in these committees.
- *Describe how patients receive follow-up with structured interview/consultation who received either labor neuraxial analgesia, cesarean anesthesia, or anesthesia for other procedures (e.g. postpartum tubal ligation, cerclage). *Patients should be reviewed, or protocol criteria fulfilled prior to discharge or transfer from labor and delivery. All patients who received an anesthetic procedure should be reviewed by the anesthesia service on the postpartum floor prior to hospital discharge.*
- Outline your system to follow-up on all patients with anesthesia-related complications.
- *Describe your system to evaluate and treat (with an EBP, if necessary) a PDPH in a timely fashion. Are EBPs generally performed early (within 12-48 hours) or delayed? Who performs the EBP and which location(s) are EBPs performed in prior to and after discharge? *Optimally, outpatient PDPH should be evaluated and treated on the obstetric unit and not in the emergency department.*
- Describe your approach to routinely collecting patient feedback on maternal experience of care, with a specific focus on anesthetic and analgesic care.

- Outline if the anesthesiologist is an active participant in multidisciplinary root cause analysis, maternal case conferences, or equivalent program to evaluate maternal and/or fetal adverse events. Provide examples of effective implementation of identified system solutions.

References:

1. Council on Patient Safety in Women's Health Care. Obstetric Hemorrhage. http://safehealthcareforeverywoman.org/patient-safety-bundles/obstetric-hemorrhage/ (accessed May 2022)
2. California Maternal Quality Care Collaborative. OB Hemorrhage Toolkit V 2.0. https://www.cmqcc.org/resources-tool-kits/toolkits/ob-hemorrhage-toolkit (accessed June 2019)
3. Bollag L, Lim G, Sultan P et al. Society for Obstetric Anesthesia and Perinatology: Consensus Statement and Recommendations for Enhanced Recovery After Cesarean Anesth Analg 2021;132(5):1362-1377.
4. Bauchat J, Weiniger CF, Sultan P, et al. Society for Obstetric Anesthesia and Perinatology Consensus Statement: Monitoring Recommendations for Prevention and Detection of Respiratory Depression Associated with Administration of Neuraxial Morphine for Cesarean Delivery Analgesia. Anesth Analg. 2019;129(2):458-474.
5. Practice Guidelines for the Prevention, Detection, and Management of Respiratory Depression Associated with Neuraxial Opioid Administration: An Updated Report by the American Society of Anesthesiologists Task Force on Neuraxial Opioids and the American Society of Regional Anesthesia and Pain Medicine. Anesthesiology. 2016;124(3):535-52.
6. Practice Guidelines for Obstetric Anesthesia: An Updated Report by the American Society of Anesthesiologists Task Force on Obstetric Anesthesia and the Society for Obstetric Anesthesia and Perinatology. Anesthesiology. 2016;124(2):270-300
7. Lipman S, Cohen S, Einav S et al. The Society for Obstetric Anesthesia and Perinatology Consensus Statement on the Management of Cardiac Arrest in Pregnancy. Anesth Analg. 2014;118(5):1003-16.
8. Council on Patient Safety in Women's Health Care. Patient Safety Bundles. https://safehealthcareforeverywoman.org/aim/patient-safety-bundles/ (accessed May 2022)
9. Leffert L, Butwick A, Carvalho B et al. The Society for Obstetric Anesthesia and Perinatology Consensus Statement on the Anesthetic Management of Pregnant and

Postpartum Women Receiving Thromboprophylaxis or Higher Dose Anticoagulants. Anesth Analg. 2018;126(3):928-944.
10. Bauer ME, Arendt K, Beilin Y et al. The Society for Obstetric Anesthesia and Perinatology Interdisciplinary Consensus Statement on Neuraxial Procedures in Obstetric Patients With Thrombocytopenia. Anesth Analg 2021;132(6):1531-1544.