

# Mother & Baby Substance Exposure Toolkit

## Best Practice No. 12

A part of the California Medication Assisted Treatment Expansion Project

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# Implement evidence-based anesthesia practices in the peripartum period for opioid use disorder in pregnancy

Best Practice No. 12

Labor and Delivery and Treatment

## Overview

Implement evidence-based best practices for anesthesia care and pain relief for pregnant women with opioid use disorder (OUD).

## Why we are recommending this best practice

Pregnant women with OUD have pain relief and anesthetic needs that vary from women without OUD in the peripartum period. Early consultation and use of best practices for management of intrapartum and postpartum pain relief will optimize maternal and newborn outcomes. Individual hospitals/settings will have different availability of anesthetic/analgesic options.

## Strategies for Implementation

### Pre-delivery

- Consult with an anesthesiologist at the delivering facility who will be able to review and develop an anesthetic plan that addresses the patient's needs and accounts for the options available at the local institution.
- Utilize shared decision making for the degree of pain relief desired during intrapartum and postpartum recovery.
- Provide resources for anesthesia providers about OUD and anesthetic consideration/needs.

### Intrapartum

- Neuraxial anesthesia provides the best quality of pain relief, especially in opioid tolerant individuals. Patients will need adjustment of medication types and concentrations for optimal pain relief that do not interfere with and will not be affected by OUD or OUD medications. Increased strength or concentration of a medication (e.g., local anesthetic or the total dose or frequency of a dose of a medication that has a uniform concentration) will likely be needed. Neuraxial adjuncts may be helpful.

Patients with a prior history of OUD who fear relapse may desire a method of analgesia/anesthesia that omits opioids entirely.

- Avoid nitrous oxide in combination with high dose opioids. Nitrous oxide is not recommended in this setting as nitrous combined with opioids may produce excessive sedation or respiratory depression, causing the patient deep sedation or general anesthesia. When the preferred method, epidural analgesia, is contraindicated, nitrous oxide may be considered under close supervision as an adjunct with other systemic therapies.

### **Cesarean Delivery**

- Adjust use of neuraxial anesthesia according to the individual patient's OUD or OUD medications and tolerances. Adjunct neuraxial medications may be considered.
- Use general anesthesia only as otherwise indicated. This is not the preferred method for routine cesarean in pregnant women with OUD.

### **Post-delivery pain relief**

- Create a multimodal analgesia and multidisciplinary care plan.
- Understand that multiple non-narcotic adjuncts are available. Choices may be affected by local resources and availability.
- Emphasize local anesthetics used in neuraxial infusion and/or peripheral nerve blocks (e.g, Transverse Abdominis Plan (TAP), Quadratus Lumborum Block (QL2), epidural infusion, and wound liposomal bupivacaine). Consider use of a catheter for continued infusion of local anesthetics and adjuvants, as well as scheduled acetaminophen and NSAIDs.
- IV patient-controlled analgesia (PCA) opioids may be used as a supplement to other multimodal treatment, but the requirements may be higher.
- Post-delivery monitoring requirements should be considered.

### **Additional Considerations**

- Develop an informational packet for anesthesia providers.
- If the patient was previously on buprenorphine, continue buprenorphine, although the dose may need to be split (e.g., TID), and total dose may need to be increased.
- Use of multiple opioids, analgesics, adjuncts, and/or sedatives may result in pharmacologic/pharmacogenetic additive or synergistic effects and result in shifting from minimal sedation to moderate sedation/analgesia to deep sedation/analgesia or even general anesthesia. Caution is urged, and proper monitoring for respiratory depression and oxygenation may be warranted. Underlying medical conditions will amplify the effect of sedatives, analgesics and other medications (e.g., obstructive sleep apnea, chorioamnionitis with fever). Rescue capacity is required under the Patients' Rights standard at §482.13(c)(2), guaranteeing patients care in a safe setting (CMS Interpretive guidelines).



## Kayla

Kayla's physician referred her for a consultation at 36 weeks of pregnancy with the anesthesiologist at her delivering facility. They reviewed together her current medications, any non-prescription medication usage including herbals and marijuana derivatives, medical issues, as well as her personal concerns about pain, pain medications, and her overall pain tolerance. Kayla expressed great concern about getting her regular pain medications and additional oxycodone for pain. The anesthesiologist reassured her that epidural analgesia for labor or post-cesarean does not aggravate her increasing back pain with the pregnancy and provides the highest quality pain relief for labor and post-partum. The use of non-narcotic neuraxial adjuvants is very important, as Kayla's current total opioid and non-opioid pharmaceutical consumption may produce opioid induced hyperalgesia—suggesting use of another type of medication could be very helpful. If Kayla undergoes a cesarean delivery, increased doses of neuraxial narcotic will be needed as well as additional non-narcotic analgesic regimens (e.g., TAP Quadratus Lumborum type 2 local anesthetic block, or wound infusion). Even a complicated vaginal delivery (for example, a third- or fourth-degree laceration) may benefit from neuraxial morphine and adjuvants for post-delivery analgesia. The anesthesiologist will need to notify the hospital pharmacy if adjuvants will be used, as they may not be standard stock (e.g., clonidine for epidural administration), and if the hospital can accommodate post-delivery epidural infusions for analgesia, particularly adjuvants like clonidine.

Failure to secure a pre-delivery consultation may adversely affect intrapartum or postpartum care. Not all anesthesia providers are familiar with OUD in pregnancy, and a consultation allows discussion and implementation of a multimodal analgesia plan, combining patient preferences and shared decision making with what is available at her particular delivery location. Care coordination becomes even more important if a consultation is not an option.

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Dr. Pamela Flood is Professor of Anesthesiology, Perioperative, and Pain Medicine at Stanford University. Her research interests include prevention and reduction of pain and opioid use in women after delivery. She divides her clinical time between labor and delivery and her outpatient pain management clinic. She clinical work is directed toward compassionate weaning of high dose opioids and management of pelvic pain syndromes.