COMFORT Panel Recommendations for Opioid-sparing Pain Management After Childbirth:

1. Recommendation: Patients should receive robust education about pain management, risks of opioid prescribing, and risk-reduction strategies.	Strength of Recommendation	Level of Evidence
a. Patients should be counseled about the expected recovery following vaginal/cesarean birth, including how opioid medications may influence recovery.	Good Practice Point	
b. Patients should receive information on the effects of trauma and mental health on pain.	Good practice point	
c. Patients should receive information on when and how to contact their team for pain.	Good practice point	
d. Patients receiving an opioid prescription should be told about the risks of OUD and overdose.	Good practice point	
e. Patients receiving an opioid prescription should be told about the increased risks of overdose with mixing opioid medications with Benzodiazepines, alcohol, cannabis, and other drugs.	Good practice point	
f. Patients receiving an opioid prescription should be counseled about the safety of the medication use with lactation.	Good practice point	
g. Patients receiving an opioid prescription should be provided information about Naloxone and offered a prescription for Naloxone.	Good practice point	
h. Patients receiving an opioid prescription should be provided information about safe storage and disposal of opioids.	Good practice point	
RAM Panel Discussion: ● When considering co-prescribing of Naloxone with acute opioid prescriptions, providers should consider the benefits including normalization of co-prescribing, increased access for patients and family members, and development of a universal “safety net.” ● Providers should be aware of historical biases in identifying individuals who are at higher risk of opioid misuse and overdose, and consider universal co-prescribing of Naloxone with acute opioid prescriptions.		
Considerations for health equity and patient centeredness *Pending*		

2. Recommendation: Scheduled non-opioid medications with acetaminophen and ibuprofen should be used first-line for postpartum pain.	Strength of Recommendation	Level of Evidence

a. Scheduled acetaminophen and NSAIDs should be used around the clock for patients with pain after vaginal/cesarean birth.	Strong	Moderate
b. Acetaminophen and NSAIDs can be administered together (at the same time) or staggered (alternating).	Strong	Moderate
c. Other approaches to oral acetaminophen and/or NSAIDs (e.g., PRN or scheduled single-agent) are less appropriate as first-line medications.	Good Practice Point	
RAM Panel Discussion: ● Limited evidence in non-obstetric patients supports staggering medications. ● Pragmatic considerations (e.g., sleep) and patient preference should guide schedule selection.		
Considerations for health equity and patient centeredness: *Pending*		

3. Recommendation: Nonpharmacologic strategies should be offered to augment pain management following vaginal and cesarean birth.	Strength of Recommendation	Level of Evidence
a. Nonpharmacologic strategies should be offered for patients with pain after vaginal/cesarean birth.	Strong	Low
b. Heat and ice should be offered for patients with pain after vaginal/cesarean birth.	Strong	Low
c. An abdominal binder should be offered for patients with pain after cesarean birth.	Strong	Moderate
d. Mindfulness, deep breathing and visualization may be appropriate for patients with pain after vaginal/cesarean birth.	Conditional	Low
e. Music therapy, aromatherapy and acupuncture have uncertain benefits for pain after vaginal/cesarean birth.	Conditional	Low
RAM Panel Discussion: ● Providers should consider offering non-pharmacologic strategies as a “menu” for patients to choose from. ● While evidence for many non-pharmacologic strategies is limited, these interventions are low-risk with potential for benefit.		
Considerations for health equity and patient centeredness: *Pending*		

4. Recommendation: Inpatient strategies may be considered to reduce postpartum pain, particularly for patients with more complex postpartum pain or who are unable to receive standard treatments.	Strength of Recommendation	Level of Evidence

a. Long-acting regional analgesia administered in the operating room is appropriate for pain management after cesarean birth.	Strong	High
b. Patient Controlled Analgesia with IV medications may be appropriate for patients who do not have adequate pain control with routine measures after cesarean birth or cannot receive routine pain control.	Conditional	Low
c. Transversus Abdominis Plane (TAP) Block, Ketamine infusion, surgical site infiltration with local analgesia, and perioperative gabapentin have uncertain benefit for patients who do not have adequate pain control with routine measures after cesarean birth.	Conditional	Moderate
d. Surgical site infiltration with local anesthetic in the OR has uncertain benefit for patients who do not have adequate pain control with routine measures after vaginal birth.	Conditional	Low
e. Transversus Abdominis Plane (TAP) Block and Ketamine infusion are inappropriate, and long-acting regional analgesia, Patient Controlled Analgesia with IV medications, and perioperative gabapentin are likely inappropriate for patients who do not have adequate pain control with routine measures after vaginal birth.	Strong	Very low
RAM Panel Discussion: ● Many alternative inpatient strategies have limited data in postpartum pain management. Due to their potential risk, these alternatives have a limited role in routine postpartum pain management. ● Patients who did not receive routine pain management (e.g., underwent cesarean birth under general anesthesia) or do not have adequate pain management with routine approaches may consider some alternative inpatient strategies. ● For vaginal birth, there is insufficient data to recommend for/against infiltration of local analgesia or topical analgesia for perineal pain.		
Considerations for health equity and patient centeredness: *Pending*		

5. Recommendation: After optimizing non-opioid strategies, patients and clinicians may consider tailored opioid prescriptions through a shared decision making process.	Strength of Recommendation	Level of Evidence
a. Providers should use prescribing benchmarks for individual populations and procedures to determine appropriate options for SDM with patients.	Good practice point	
b. Within an appropriate prescription range, providers should use shared decision making with patients to select the right number of opioid tablets for an individual patient.	Strong	Moderate
c. Shared decision making should take into account the day of discharge, inpatient opioid utilization, and the patient's preference. Inpatient pain scores may also be appropriate for prescription tailoring.	Strong	Moderate

d. It is uncertain if a patient's anticipated level of activity or risk of opioid abuse/misuse following discharge should influence prescription tailoring.	Conditional	Very low
e. In a postpartum person who is or is NOT breastfeeding needs an opioid prescription, oxycodone, morphine and hydromorphone may be appropriate.	Conditional	Low
f. In a postpartum person who is breastfeeding needs an opioid prescription, codeine and tramadol are inappropriate.	Strong	Moderate
g. In a postpartum person who is NOT breastfeeding needs an opioid prescription, codeine and tramadol are likely inappropriate.	Conditional	Low
h. For any postpartum patient, combined medications with both acetaminophen and an opioid are likely inappropriate.	Strong	Moderate

RAM Panel Discussion:

- Prescription tailoring should account for how well a patient's pain is controlled at the time of discharge. The main tools for assessing this in current practice are pain scores and opioid consumption, both of which may be subject to biases and inequities in assessment.
- Providers should use caution in assessing a patient's risk of abuse/misuse due to known biases in identification.
- Due to improved efficacy of PO agents, providers should consider the use of oral analgesics, even when patients are written for a NPO diet.
- Due to concerns about ultrarapid metabolizers of codeine, opioids processed by the CYP2D6 pathway (e.g., codeine, hydrocodone, oxycodone) and not preferred in lactating patients. If oxycodone is used, limiting to 30mg daily and monitoring for signs of infant sedation may be appropriate.
- Medications such as tramadol, codeine, and combined acetaminophen/opioid tablets should only be used for pain management if first-line agents do not achieve sufficient pain control.
- Due to the risk of consuming excess acetaminophen, medications that combine acetaminophen and an opioid medication should be avoided where possible.

Considerations for health equity and patient centeredness:
Pending

Principles for patients with OUD:

6. Recommendation: Maternity care professionals should use a principles based approach to postpartum pain management for patients with OUD and chronic pain, accounting for the characteristics of the birthing person.	**Strength of Recommendation**	**Level of Evidence**
General Principles		
When developing postoperative/postpartum pain management plans, providers should consider the spectrum of prescribed and unprescribed opioid use that may occur during pregnancy (e.g., chronic pain managed with opioids, OUD treated with MOUD, OUD in remission not receiving MOUD, or untreated OUD with use of unprescribed or illicit opioids).	Good Practice Point	

When developing postoperative/postpartum pain management plans, providers should consider how prenatal opioid use can affect postoperative/postpartum pain management, including opioid tolerance, hyperalgesia, medication interactions, and overdose, and adjust plans accordingly.	Good Practice Point	
Ideally, pain plans should be established prior to the hospital admission, and should include a multidisciplinary approach including anesthesia, addiction medicine, and the patient's primary opioid/MOUD prescriber.	Good Practice Point	
If a patient presents for a hospital admission without an established pain management plan, partner with providers with expertise in opioid use (e.g., providers with training in addiction medicine, chronic pain) in the healthcare system to initiate therapy, and facilitate transitions to outpatient care. Consider a multidisciplinary approach in-person or through telemedicine if in-person consultation is not readily available.	Good Practice Point	
Providers should engage patients in effective shared decision making about pain management, help patients to balance the risks of opioid medications, provide opioid alternatives when possible, and educate patients regarding optimal pain management approaches. Providers should consider the potential for stigma faced by patients with prenatal opioid use, opioid use disorder, or risk factors for poor pain management after surgical/childbirth admission in order to promote a supportive environment for pain management discussions.	Good Practice Point	
Providers should assess and address social determinants of health that affect care access and connection to resources in collaboration with multidisciplinary team members including social workers and Community Based Organizations.	Good Practice Point	
The Management of Individuals on Long-Term Opioid Therapy or on Medication of Opioid Use Disorder		
All pregnant patients with OUD should be offered MOUD (e.g., methadone, buprenorphine) during pregnancy. Hospital admissions may provide an opportunity to start MOUD for patients not yet receiving this treatment.	Good Practice Point	
The choice of MOUD agent and dosages should be made with the use of an individualized, person-centered approach.	Good Practice Point	
Due to limited evidence for Naltrexone in pregnancy, it is not a first line agent for MOUD in pregnancy. Postoperative/postpartum pain may be more difficult to manage with Naltrexone.	Strong	Low quality
For patients who take MOUD, continue their dose during the hospitalization and at discharge; consider split dosing or temporary increases in dosing frequency (e.g., every 6-8 hours) during episodes of acute pain.	Strong	Low quality

Avoid sedative/hypnotic medications (e.g., benzodiazepines) in patients on MOUD/long term opioid therapy due to the increased risk of respiratory suppression, but do not abruptly discontinue these medications in people who have established use.	Strong	Moderate quality
Providers should consider how MOUD affects medications commonly used in pain management: MOUD may reduce the efficacy of full-agonist medications. Mixed opioid agonist/antagonists such as pentazocine, butorphanol, nalbuphine may precipitate withdrawal in patients receiving MOUD and should be avoided.	Strong	Low quality
For patients maintained on buprenorphine, consider full mu agonists with a strong affinity (lower K binding coefficient) for the mu receptor (e.g., hydromorphone).	Strong	Low quality
Providers and health system leaders should work together to ensure that multiple forms of MOUD are available on hospital formularies to provide the most options for effectively managing postoperative/postpartum pain and for continuing preadmission MOUD therapy.	Good practice point	
The use of non-opioid medications for outpatient pain management		
Consider extended courses of toradol (24 to 48 hours) during the postpartum admission to reduce pain in postpartum patients when not contraindicated.	Strong	Moderate quality
Nonpharmacologic methods for pain management		
When possible, connect patients with a therapist trained in Cognitive Behavioral Therapy prior to birth to prepare for postoperative/postpartum pain management.	Strong	Low quality
Alternative inpatient strategies		
Long-acting neuraxial opioids combined with NSAIDs and Acetaminophen is typically effective for pain relief in patients with opioid-tolerance, and is considered a best-practice for cesarean birth.	Strong	Low quality
Because traditional pain management strategies are potentially less efficacious in patients with long term opioid therapy/OUD, alternative strategies may be considered on an individual basis in patients with insufficient relief. As these strategies lack evidence in pregnant/postpartum patients, patients receiving these management options should be closely monitored • IV-PCA with on-demand low-dose opioids. Basal opioid infusion should be avoided or used with continuous monitoring • Low-dose IV ketamine (potentiates the effects of opioids and reduces pain by blocking the NMDA receptor) and IV lidocaine • Transverse Abdominis Plane (TAP) Block	Strong	Low quality
Education/Risk Reduction		
Educate patients and families with prenatal opioid use on the heightened risk of overdose in the postoperative and postpartum period.	Strong	Low quality

Patients with OUD and their families should be informed that treating pain is important for healing and recovery, and reduces rates of return to nonprescribed opioid use.	Good practice point	
Educate patients and families with prenatal opioid use on the risk of Neonatal Opioid Withdrawal Syndrome and neonatal respiratory suppression if breastfeeding while using opioid medications.	Good practice point	
Educate patients on long-term opioid therapy on how to return to their routine opioid regimen and manage pain.	Strong	Low quality
Patients should be counseled about the risks of taking opioid medications and sedating medications or substances (e.g., benzodiazepines, alcohol, cannabis) concurrently.	Strong	Moderate quality
Patients should be offered Naloxone at discharge and patients and family members/caregivers should be educated on its proper use	Strong	Low quality
Opioid Prescribing Considerations at the Time of Hospital Discharge		
Confirm existing opioid prescriptions with prescribing provider, patient, and PDMP where appropriate	Strong	Low quality
Prioritize return to preprocedural regimen as soon as possible and coordination of prescribing with usual prescriber.	Good practice point	
Opioids should be prescribed on an as needed basis, rather than a continuous or set interval.	Strong	Moderate quality
Prescribe only the quantity likely to be used, not to exceed 2-3 days, unless extenuating circumstances.	Strong	Moderate quality
Discharge prescription size should be based on 24-hour prior to discharge oral opioid usage and the patient's patient control prior to discharge, recognizing daily dose will be decreasing.	Strong	Moderate quality
Clinicians should prescribe immediate-release/short-acting (ie oxycodone, hydromorphone), as opposed to extended-release/long-acting opioids	Strong	Moderate quality
Close follow up to re-evaluate pain control is preferable to automatic refills, to provide a time for reevaluation of pain management.	Good practice point	
Lactation Considerations		
Postpartum people with prenatal opioid use/OUD under treatment should be encouraged to room in and breastfeed their baby, as long as there are no other contraindications to lactation (e.g., illicit drug use, HIV).	Strong	Low quality

Postpartum people with OUD should be counseled about the need to discontinue breastfeeding in the event of return to illicit drug use or non-prescription opioid use.	Strong	Low quality
Connection to primary prescriber/follow-up		
Access to adequate postpartum psychosocial support services, including substance use disorder treatment and relapse prevention programs, should be made available, but should not be a barrier to Buprenorphine provision.	Good practice point	
Ensure patients have appropriate follow up with their substance use disorder provider for close monitoring of withdrawal symptoms, dose titration, and ongoing medical management.	Good practice point	

Considerations for health equity and patient centeredness:
Pending

*Strength of recommendation derived from the RAM Panel Recommendations; Quality of evidence based on the modified GRADE rating.