

Section 1.

Opioid Use Disorder Clinical Pathway

Antepartum Care (Outpatient)	
Upon entry into care and identification of substance use in pregnancy (Snuggle ME Checklists)	
<input type="checkbox"/>	Assess for signs and symptoms of acute withdrawal (Ohio MOMS F.1-F.9) <ul style="list-style-type: none">• Early: agitation, anxiety, muscle aches, increased tearing, insomnia, runny nose, sweating, yawning• Late: abdominal cramping, diarrhea, dilated pupils, goose flesh, nausea, vomiting
<input type="checkbox"/>	Refer immediately to one of the following for treatment and/or stabilization depending on acuity: <ul style="list-style-type: none">• Emergency Room• Obstetric ER/Triage• Inpatient treatment center
<input type="checkbox"/>	Screen for co-morbid psychiatric conditions <ul style="list-style-type: none">• If positive refer to Behavioral Health, unless this will be provided by treatment program
<input type="checkbox"/>	Screen for co-morbid domestic violence <ul style="list-style-type: none">• If positive refer to domestic violence advocacy service
<input type="checkbox"/>	Complete a detailed medical, surgical, obstetric, and prenatal history
<input type="checkbox"/>	Provide a thorough physical examination
<input type="checkbox"/>	Assess for other immediate psychosocial needs
<input type="checkbox"/>	Obtain recommended lab testing in addition to routine prenatal labs (NNEPQIN checklist) <ul style="list-style-type: none">• HIV• HepBsAg, anti-HBcore, HBsAb<ul style="list-style-type: none">○ Consider immunization as indicated• HCV antibody<ul style="list-style-type: none">○ If positive draw HCV PCR, LFTs• Serum creatinine• Consider gamma-glutamyl transferase (GGT) if active alcohol use suspected• Assess risk factors for tuberculosis and screen if indicated• Urine toxicology with woman’s consent.<ul style="list-style-type: none">○ Synthetic opioids (e.g., buprenorphine, fentanyl, oxycodone) may not be detected with standard drug test and may require more specific testing. Consult with individual lab• Baseline EKG before starting methadone
<input type="checkbox"/>	Perform dating ultrasound upon entry to care

<input type="checkbox"/> Determine appropriate level of care and arrange referrals to treatment when indicated and accepted by woman (Wright et al, Figure 1) <ul style="list-style-type: none"> • Assess Risk (Ohio MOMS F.1-F.9) • Refer for medically supervised inpatient detox if alcohol or benzo dependent • If psychiatric or medical instability, refer for appropriate emergency psychiatric or medical care services.
<input type="checkbox"/> Give the woman information re. treatment provider/center contact (SAMHSA treatment directory)
<input type="checkbox"/> If woman is currently in a treatment program: <ul style="list-style-type: none"> • Obtain appropriate CFR42 Part 2 consent to communicate with treatment provider (Legal Action Center sample consents) • Coordinate care with mental health/treatment provider or center • Women receiving treatment for chronic pain should have drug agreement in place with treatment provider
<input type="checkbox"/> Provide a “warm” handoff to treatment provider whenever possible
<input type="checkbox"/> Counsel woman on recommended substance use management, risks to pregnancy, fetus, infant and explore treatment options (NNEPQIN toolkit) <ul style="list-style-type: none"> • Recommended treatment for OUD during pregnancy is MAT with buprenorphine or methadone; explore options and arrange appropriate referrals. • Recommended management of alcohol use during pregnancy is complete abstinence; explore options and arrange appropriate referrals as needed. • Recommended management of marijuana use during pregnancy is abstinence; explore options.
<input type="checkbox"/> Counsel woman regarding risks of tobacco use and offer smoking cessation strategies
<input type="checkbox"/> Counsel woman on maternal/fetal/neonatal risks of polysubstance use (SAMHSA Factsheet #6)
<input type="checkbox"/> Check the woman's record in state Prescription Monitoring Program
<input type="checkbox"/> Be aware of pharmacologic interactions with Buprenorphine/Methadone (McCance-Katz et al, Table 2)
<input type="checkbox"/> Discuss Narcan rescue and offer prescription (Narcan toolkit)
<input type="checkbox"/> Assess need for bowel regimen for constipation
<input type="checkbox"/> Assess need for anti-emetics and antacids for hyperemesis/reflux <ul style="list-style-type: none"> • Note: avoid Zofran for women on methadone to avoid prolonged QTc interval
<input type="checkbox"/> Consultation and Referral considerations may include, but are not limited to: <ul style="list-style-type: none"> • Social Work • Case Management • Maternal Fetal Medicine if medically complex

<ul style="list-style-type: none"> • Cardiology with prior history of pericarditis • Infectious Disease if HIV positive • Infectious Disease or Gastroenterology if HCV/HVB • Dental • Dietary
<input type="checkbox"/> Schedule short interval follow up for prenatal care
Follow-Up Care
<input type="checkbox"/> Reassess and treat for opioid side effects
<input type="checkbox"/> Assess for changes in psychosocial and medical needs
<input type="checkbox"/> Ask about cravings, on-prescribed drug and alcohol use at every visit
<input type="checkbox"/> Provide continued tobacco cessation counseling and treatment for patient who smokes
<input type="checkbox"/> Periodically review PDMP for patient prescription history
<input type="checkbox"/> Repeat urine toxicology with consent when indicated
<input type="checkbox"/> More specific tests may need to be ordered to identify methadone, buprenorphine, fentanyl, other synthetics or alcohol metabolites. Consult individual lab for guidance.
<input type="checkbox"/> Document treatment coordination
Second and Third Trimester Care
<input type="checkbox"/> Schedule and/or provide second trimester anatomy scan
<input type="checkbox"/> Schedule and/or provide third trimester growth scan <ul style="list-style-type: none"> • Monitor growth with serial assessments as indicated
<input type="checkbox"/> Antenatal testing only if clinically indicated; e.g., IUGR. (Reddy et al, Box 1) <ul style="list-style-type: none"> • If antenatal testing performed, reduce false positive NST and/or BPP by performing at least 4-6 hours after last treatment dose
<input type="checkbox"/> Repeat HIV, HCV, RPR, GC/CT in third trimester <ul style="list-style-type: none"> • Repeat HBsAg if initial testing negative
<input type="checkbox"/> Verify and update MAT medication/dose/status with treatment provider/center prior to birth <ul style="list-style-type: none"> • Advise woman to bring buprenorphine to hospital admission for safe storage and dose verification
<input type="checkbox"/> Discuss pain management options for labor and birth and assist woman in development of plan <ul style="list-style-type: none"> • Consider Anesthesiology consult for the woman with high anxiety, difficult IV access, or other co-existing medical issues pertinent to anesthesia

<input type="checkbox"/> Educate woman and support persons importance maternal participation in newborn care/safety, NAS/NOWS, breastfeeding <ul style="list-style-type: none"> • Maternal participation in newborn care (Mommies Toolkit) <ul style="list-style-type: none"> ○ Options for Rooming in ○ Maternal participation in Eat, Sleep, Console (ESC tool) ○ Encourage skin to skin and breastfeeding (SAMHSA factsheet #11)
<input type="checkbox"/> Provide Patient/family education to include: <ul style="list-style-type: none"> • Hospital policies (SAMHSA Factsheet #7) <ul style="list-style-type: none"> ○ NAS/NOWS assessment/management/length of stay ○ Breastfeeding ○ Maternal/newborn toxicology and reporting requirements • Signs and symptoms of potential pregnancy complications <ul style="list-style-type: none"> ○ Preterm labor ○ Preterm premature rupture of membranes • Importance of prenatal care • Plan for fetal surveillance • NAS/NOWS assessment/management/length of stay • Maternal/newborn toxicology and reporting • Parenting classes
<input type="checkbox"/> Consider prenatal consult appointment with pediatrician/neonatologist at delivering institution
<input type="checkbox"/> If delivering hospital is unable to care for infant with NAS/NOWS, discuss antenatal transfer of care versus neonatal transfer after delivery if treatment necessary
<input type="checkbox"/> Provide contraceptive counseling (SAMHSA Factsheet #7) <ul style="list-style-type: none"> • If tubal ligation desired, sign federally required consent for Medicaid patients • Offer post-placental IUD insertion or implant prior to discharge, if available at institution.
General Considerations of Methadone MAT in Pregnancy
<input type="checkbox"/> For women on methadone MAT prior to pregnancy, continue current dosing. <ul style="list-style-type: none"> • May need increased dose in 3rd trimester to increase plasma volume.
<input type="checkbox"/> Patient/family education (MAT in pregnancy patient education) <ul style="list-style-type: none"> • Risk and benefits of methadone treatment in pregnancy • Daily visit requirement at treatment center • Insurance coverage and/or cost • Incidence of NAS 50-66% • Possible effects of newborn head circumference and white matter tracts • Conflicting long-term studies on outcomes in children exposed in utero
<input type="checkbox"/> Initiation of methadone:

- Start at 10-20 mg and titrate to eliminate withdrawal symptoms without producing intoxication.

General Considerations of Buprenorphine MAT in Pregnancy

If on suboxone prior to pregnancy, can consider continuing suboxone during pregnancy

- In order to maintain plasma concentrations above 1ng/mL to prevent withdrawal symptoms, consider frequent dosing (3-4 times per day) (Caritis, S.N. et al)

- Patient/family education

- Risk and benefits of buprenorphine treatment in pregnancy
- Insurance coverage and/or cost
- Higher dropout rate than methadone (33% v. 18%) (MOTHER trial)
- Higher relapse rate
- Limited providers with prescription training and authority
- Use with caution with antiretrovirals, antiseizure, dexamethasone, and SSRI medications

- Initiation of buprenorphine:

- Note: Little data on appropriate way to initiate dosing during pregnancy
- Must be in moderate withdrawal
- Must be at least 12 hours since last dose of short-acting opioid
- Start with 2-4 mg and titrate for relief of withdrawal symptoms

- Consider possible “graduation” to monthly prescription as indicated

Inpatient Obstetric Care

If Initial Contact is in Obstetric ED/Triage or L&D

- Refer to above “Upon entry into care and identification of substance use in pregnancy”

- [Ohio Moms OB.5-OB.8](#)

- [NNEPQIN checklist](#)

- Initiate clinical pathway for acute opiate withdrawal or elective induction to MAT

- ASAM buprenorphine course
 - [ASAM Induction Protocol](#)
 - [ASAM Sample Inpatient Nursing Protocol](#)
- [Miami Valley Protocol example](#)

- Consider acute withdrawal in DDX of woman with intractable, nausea, vomiting, or abdominal pain

- Assess for signs and symptoms of placental abruption

Admission for Labor and Birth

- When possible, confirm MAT medication and dose with addiction provider

- Note: Inpatient provider may legally prescribe buprenorphine and methadone to maintain the woman’s treatment dose during hospitalization

<input type="checkbox"/> Continue buprenorphine/methadone at usual dosing (SAMHSA Factsheet #8) <ul style="list-style-type: none"> • Consider dividing total daily dose into every 6-8 hour dosing for maximal analgesic effects (ACOG Committee Opinion 711)
<input type="checkbox"/> Prescribe nicotine replacement as indicated
<input type="checkbox"/> Labs <ul style="list-style-type: none"> • Routine labs for labor and birth • Repeat HIV/Hepatitis screening if not repeated in third trimester • Urine drug test with consent
<input type="checkbox"/> Notify pediatric provider of admission for delivery and determine need for neonatal team at birth
<input type="checkbox"/> Consults <ul style="list-style-type: none"> • Neonatology consult if not previously done • Social work/Care management • Anesthesiology • Lactation • If illicit substance use first disclosed at time of birth, consider consultation with addiction specialist or phone consultation with addiction specialist/center, or MFM.
<input type="checkbox"/> Offer immediate postpartum long-acting contraception as provided by facility (ACOG Committee Opinion #670)
<input type="checkbox"/> Involve the woman, social work, and pediatrics/neonatology to establish a Plan of Safe Care. (ACOG District II Slides 31-32)
Peripartum Pain Management (Ohio MOMS Pain Management Protocol)
<input type="checkbox"/> General Considerations: (Zhou Pain Management Presentation) <ul style="list-style-type: none"> • Maintenance medication does not treat pain • Women using MAT or with history of long term opioid exposure may require higher and more frequent dosing of narcotic medications for intrapartum and postpartum pain <ul style="list-style-type: none"> ○ Opioid dependent women have increased sensitivity to painful stimuli (hyperalgesia) ○ Opioids dependent women experience tolerance to opioid treatment for analgesia ○ Higher doses of full opioid agonists will be required to displace buprenorphine and provide analgesia
<input type="checkbox"/> Pharmacologic interactions <ul style="list-style-type: none"> • Avoid partial agonist/antagonists in treating pain (i.e., nalbuphine or butorphanol)
<input type="checkbox"/> Neuraxial analgesia is preferred for cesarean birth or other procedures <ul style="list-style-type: none"> • If general anesthesia is necessary, be aware of increased risk of airway compromise or drug interactions with concomitant use of stimulants

Intrapartum (Executive Summary on Opioid Use in Pregnancy Box 2)

- Educate L&D and postpartum staff on opioid pharmacology and appropriate pain control
- Provide continuous labor support during active labor
 - 1:1 staffing
 - Consider Doula services if available
- Avoid fetal scalp electrodes in women with HIV or HCV
- Recommend early labor neuraxial anesthesia with continuous dosing to provide pain relief for labor and birth
 - Epidural analgesia using opioids (e.g. fentanyl) in usual labor doses may not be effective in opioid dependent patients.
 - May be necessary to use higher doses of local anesthetics or nonopioid adjuvants such as clonidine
 - If neuraxial anesthesia is not feasible or available, consider the following:
 - Nitrous oxide
 - Short acting opioids
 - **Do not use nalbuphine or butorphanol for analgesia or pruritis as these can precipitate withdrawal**
 - **If withdrawal inadvertently precipitated, withdrawal symptoms can be reversed with full agonists or for those in treatment with buprenorphine a 2-4 mg dose (confirm with current ASAM buprenorphine recommendations/ course slides)**

Postpartum Care (Reddy et al)

- Vaginal birth pain management
 - Consider scheduled doses of NSAIDs and acetaminophen rather than prn dosing
 - Avoid acetaminophen with evidence of liver impairment
- Cesarean birth pain management may include the following:
 - Intrathecal or epidural opioids for postpartum pain control
 - May not be fully effective requiring other options
 - Higher concentrations of local anesthetics or non-opioid adjuvants (e.g., clonidine) in epidural solutions
 - Consider PCA for additional coverage if needed but use PCA by demand only and patient monitored carefully for respiratory depression
 - Intraoperative ketorolac when appropriate
 - Scheduled Nonsteroidal anti-inflammatory drugs and acetaminophen
 - Avoid acetaminophen with evidence of liver impairment
 - Alternative pain management includes gabapentin, transversus abdominis plane (TAP) blocks, and IV Tylenol but further data needed
- When opioids used for complicated vaginal or cesarean birth:
 - Monitor closely for over sedation.

- If somnolent, decrease pain medication dose or consult the addiction treatment provider to adjust dose of MAT
- Provide close follow-up
- Prescribe limited quantities
- Taper rapidly transitioning for non-opioid options
- Consider avoiding triggering opioids with “high likeability” (e.g., oxycodone) and instead use oral morphine or hydrocodone.

Postpartum Support

If the woman desires to breast feed, provide lactation consultation and breast feeding support ([SAMHSA Factsheet #11](#))

- Provide patient and family education to include:
- Caring for NAS babies ([Stronger Together video](#))
 - Signs and symptoms of newborn withdrawal
 - Comfort care measures
 - Maternal care needs
 - Signs and symptoms of postpartum depression
 - When to notify a provider (obstetric and newborn)

If on methadone, monitor for increased somnolence and contact treatment provider if dose decrease appears necessary.

Discharge Planning ([SAMHSA factsheet #15](#))

Avoid postpartum discontinuation of treatment due to increased relapse rates for SUD after delivery

Coordinate hospital discharge with addiction treatment provider/center and release planned so treatment can continue after discharge without interruption

Provide contraception counseling and determine contraception plan

- Offer option to receive postpartum LARC if not already provided

Develop Plan of Safe Care

- Engage woman, care coordination, and pediatric/neonatal team to define plan of safe care.

Determine discharge pain management plan

- Maximize NSAIDs and nonpharmacologic measures
- If opioids are required at discharge, prescribe only the quantity likely to be used

Ensure that plan for postpartum MAT is in place

Schedule for more frequent postpartum visits with first postpartum visit within 1-2 weeks.

Safe storage of medications

Postpartum care (Outpatient)

Close postpartum follow-up with frequent visits

- Rescreen and brief intervention for return to substance use ([SAMHSA Factsheet #16](#))
- Provide postpartum depression screening
- Monitor for relapse
- Screen for intimate partner violence at 6 weeks and whenever indicated
- Provide smoking cessation reinforcement or continued cessation counseling as indicated.
- Consider providing support services for longer than the traditional 6-week postpartum period
- Assess resource needs at each visit and coordinate with case worker/social service providers
- Assist the woman in scheduling appointments for infectious disease management as indicated
- Facilitate transition for recovery-friendly primary care provider if not previously established
- If breast feeding, provide support
- Provide contraception and counsel on birth spacing if immediate postpartum LARC not used

References

- ACOG District II. Opioid Use Disorder in Pregnancy Bundle. Available at <https://www.acog.org/-/media/Districts/District-II/Public/PDFs/ACOGopioidUseReadinessRecognitionPreventionFINAL.pdf?dmc=1&ts=20180412T2013551033>. Accessed April 29, 2018.
- American College of Obstetricians and Gynecologists. Immediate postpartum long-acting reversible contraception. Committee Opinion no. 670. *Obstet Gynecol* 2016;128:e32-7.
- American College of Obstetricians and Gynecologists. Opioid use and opioid use disorder in pregnancy. Committee Opinion no. 711. *Obstet Gynecol* 2017;130:e81-94.
- American Society of Addiction Medicine. The ASAM Buprenorphine Course Slides. Accessed October 20, 2017.
- Caritis, SN, Bastian, JR, Hongfei, Z et al. An evidence-based recommendation to increase the dosing frequency of buprenorphine during pregnancy. *Am J Obstet Gynecol*. 2017; 217: 459e1-6.
- Klamon SL, Isaacs K, et al. Treating women who are pregnant and parenting for opioid use disorder and the concurrent care of their infants and children: Literature review to support national guidance. *J Addict Med* 2017;11(3);178-190. doi: 10.1097/ADM.0000000000000308
- Krans EE, Patrick SW. Opioid use disorder in pregnancy. *Obstet Gynecol* 2016;128:4-10d
- NNEPQIN. Toolkit for the perinatal care of women with opioid use disorders. Available at: http://www.nnepqin.org/wp-content/uploads/2017/08/ToolkitOUD_Complete_Toolkit.pdf. Accessed January 13, 2018.
- Jones EJ, Deppen K, Leopold A, et al. Clinical care for opioid-using pregnant and postpartum women: the role of obstetric providers. *Am J Obstet Gynecol* 2014;301-310.
- McCance-Katz E, Sullivan L. Drug interactions of clinical importance among the opioids, methadone and buprenorphine, and other frequently prescribe medication: A review. *Am J Addict*.2010;19(1):4-16. Doi: 10.1111/j.1521-0391.2009.00005.x
- Maternal Opiate Medical Support. Decision trees for care of opiate dependent-women. Available at: http://momsOhio.org/healthcare-providers/decision-trees/decisiontree-attributes/MOMS%20Decision%20Tree_F4_6-27-16.pdf. Accessed April 8, 2018.
- Reddy UM, Davis JM, Ren Z, et al. Opioid use in pregnancy, neonatal abstinence syndrome, and Childhood Outcomes. *Obstet Gynecol* 2017;130:10-28. doi: 10.1097/AOG.0000000000002054
- Substance Abuse and Mental Health Services Administration. Clinical Guidance for Treating Pregnant and Parenting Women With Opioid Use Disorder and Their Infants. HHS Publication No. (SMA) 18-5054. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2018. Available at: <https://store.samhsa.gov/shin/content/SMA18-5054/SMA18-5054.pdf>. Accessed February 7, 2018

- Substance Abuse and Mental Health Services Administration. Opioid overdose toolkit. Available at: [https://store.samhsa.gov/shin/content/SMA13-4742/Overdose Toolkit 2014 Jan.pdf](https://store.samhsa.gov/shin/content/SMA13-4742/Overdose_Toolkit_2014_Jan.pdf). Accessed April 29, 2018.
- The Snuggle ME Guidelines: Tools for caring for women with addiction and their babies, Embracing drug affected babies and their families in the first year of life to improve medical care and outcomes Maine. Maine for Disease Control, Department of Health and Human Services. Available at: <http://www.maine.gov/dhhs/SnuggleME/documents/SnuggleME-2018-GuidelinesFINAL.pdf>. Accessed April 6, 2018.
- The Texas Department of State Health Services. The mummies toolkit: Improving outcomes for families impacted by neonatal abstinence syndrome. Available at: [www.dshs.texas.gov/sa/NAS/Mommies Toolkit.pdf](http://www.dshs.texas.gov/sa/NAS/Mommies_Toolkit.pdf). Accessed April 29, 2018.
- Washington State Department of Health. Substance use disorders during pregnancy: Guidelines for screening & management rev 2016. Available at: <https://here.doh.wa.gov/portals/14/materials/950-135-PregSubs-en-L.pdf>. Accessed April 18, 2017.
- Wright TE, Terplan M, Ondersma SJ, et al. The role of screening, brief intervention, and referral to treatment in the perinatal period. *Am J Obstet Gynecol* 2016;215:539-47.
- Zhou L. Postpartum Pain Management. Lecture presented: Ohio Opiate Project Echo; April 13, 2018.

Checklist Chart Template

Element	Date	Comments
Federal consent to share information with treatment provider		
HIV status		
HBsAg, HBCAb, HBsAb		
Hepatitis C antibody		
HCV viral load and genotype <i>(if indicated)</i>		
Hepatic Function Panel		
Serum Creatinine		
Institutional drug testing policy reviewed		
Plan of Safe Care introduced		
Behavioral Health		
Needs assessment / Care Management referral		
Risks of non-prescribed drugs and alcohol discussed		
Marijuana counseling		
Tobacco counseling/treatment		
Narcan discussed /offered		
Offer Hepatitis A or A/B vaccine		
Third Trimester		
Repeat HIV, HBsAg, HCVAb, GC/CT		
Ultrasound (growth/fluid)		
Urine toxicology with confirmation, (consent required)		
Ethyl glucuronide/ethyl sulfate (alcohol metabolites)		
Third trimester education		
Review Plan of Safe Care		
Review institutional drug testing policy		
NAS/newborn care		
Breastfeeding		
Pain management		
Family Planning		
Pediatrician identified		
Repeat Hepatitis A or A/B vaccine		
OTHER		