Substance Use Disorder in Pregnancy

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Background & Epidemiology ***2***

Terminology and Pharmacology of Illicit Substances ***3***

Acronym and Terminology dictionary ***3***

Table 1. Appropriate Terminology of Substance Use and Addiction **5**

Table 2. Stigmatizing and Preferred Language[6] **6**

Screening for Substance Use ***6***

Universal verbal screening **6**

Urine toxicology screening: NOT recommended. **6**

Individuals who screen positive for SUD **7**

Treatment of co-occurring mental health conditions ***7***

Ben Taub Perinatal Substance Use Program Contact Information ***7***

Opioid Use Disorder (OUD)[8] ***8***

Table 3. Admission Evaluation for Patients Presenting with Opioid Withdrawal 9

Figure 1. Clinical Opioid Withdrawal Scale (COWS)[10] 10

Medications for Opioid Use Disorder **11**

Table 4. Comparison of MOUD agents 11

Methadone 11

Methadone Induction 11

Table 5. Protocol for Methadone Induction 12

Buprenorphine (Suboxone, Subutex) 12

Buprenorphine Induction 12

Table 6. Protocol for Buprenorphine Induction 12

Recommendations for discharge and follow up following MOUD induction **13**

Table 7. Checklist for discharge following MOUD induction 13

Substance Use-Focused Prenatal Care ***14***

Prenatal Visits **14**

Family CARE Portfolio (FCP) **14**

Anesthesia Consultation **14**

Neonatology Consultation **14**

Social Work Consultation **15**

Table 8. Prenatal Visit Checklist in MPAT Clinic 15

Intrapartum Management ***16***

Pain management **16**

Table 9. Anesthesia considerations during labor for patients with SUD 16

Postpartum Care *17*
Post-Vaginal Delivery pain control **17**
Post-Cesarean delivery pain control **17**
Inpatient considerations **17**
Preparing for discharge **17**
Postpartum Follow Up **18**
CPS referral requirements: **18**
Neonatal Management of Substance-Exposed Infants *20*
Table 10. Substances associated with withdrawal symptoms 20
Drug Screening **20**
Withdrawal symptoms **21**
Table 11. Symptoms of neonatal abstinence syndrome (NAS) 21
Table 12. Timing of withdrawal symptoms based on primary substance use 21
Length of Stay **21**
Treatment of NAS **22**
Figure 2. Ben Taub Eat Sleep Console program 23
Infant discharge criteria 23
Breastfeeding recommendations **23**
Figure 3. Breastfeeding recommendations based on substance use history 24
References *25*
Appendix *26*
Appendix A. Characteristics of common substances involved in SUD **26**
Appendix B. Pharmacokinetics of common illicit substances **27**
Appendix C. DSM-5 Criteria for Opioid Use Disorder **28**
Appendix D. Family CARE Portfolio **29**

This update includes edits to the MPAT team contact information as well as the Opioid Use Disorder management, breastfeeding recommendations for patients with a valid amphetamine prescription.

Background & Epidemiology

Several state Maternal Morbidity and Mortality Review Committees (MMMRC) have found that mental health, inclusive of substance use and drug overdose, is the leading cause of maternal death.[2] A recent summary review of these state committee findings found 4 common patterns[3]:

1. Obstetric providers are not screening systematically for substance use, misuse, and addiction.
2. Obstetric providers are not well prepared to treat patients with substance use disorder (SUD).
3. Primary attention to patient level factors may place blame on patients for their own deaths.
4. The postpartum period is a critical time for drug-related deaths and health care systems may be missing the warning signs.

Vital statistics data from Texas maternal deaths mirror the findings of other states. In Texas, mental health, inclusive of substance use and drug overdose, is tied with cardiovascular disorders as the leading cause of maternal death. Most of the drug overdose-related deaths occur between 45 and 365 days after delivery. The

postpartum period is recognized as a high-risk period due to returning to pre-pregnancy physiology, mental health changes, child welfare involvement and stressors, relationship and financial stressors that occur during this time.

Studies indicate that pregnant patients with SUD have an increased risk of severe maternal morbidity (SMM) during pregnancy.[4] The etiologies are not specifically known but have been hypothesized to include biologic factors (such as the cardiovascular risks with opioid use disorder [OUD] and stimulant use disorder), infectious diseases, poor nutrition, stigma and socioeconomic factors (i.e., housing instability). Conversely, people who have had a delivery complicated by SMM have an increased risk of developing a SUD in the first year postpartum.[5]

A common bias is that SUD is a choice and not a medical condition. Trauma-informed care has become a hallmark of pregnancy-related care as well as SUD treatment and is critical in understanding the challenges the patients we care for face and how to optimize outcomes during pregnancy. The stigma and bias involved with SUD are important contributors to these patients' outcomes.

This guideline includes recommendations for screening for substance use disorders as well as care of patients with SUD during pregnancy, intrapartum, and postpartum. Additionally, this document discusses neonatal care of babies born to parents with SUD. This is not an exhaustive guideline, but it endeavors to introduce considerations for substance use comprehensive care.

Terminology and Pharmacology of Illicit Substances

In the United States, 25% of pregnant patients have used substances (inclusive of nicotine, alcohol, or illicit drugs) in the previous month and 15% meet criteria for SUD. **Appendix A** displays the intoxication symptoms, withdrawal symptoms, and medications to avoid in hospital (or outpatient) settings based on the substance involved. **Appendix B** displays the pharmacokinetics of commonly encountered substances.

Use of modern terminology is important, as many of these changes were made to reduce the stigma and bias associated with older labels. **Table 1** describes current DSM-5 terminology for substance use, misuse, SUD, and recovery. For a full table of current terminology, please see: https://nida.nih.gov/. Table 2 describes stigmatizing language and appropriate alternatives.

Acronym and Terminology dictionary

We recognize that this perinatal guideline includes specific acronyms and terms that can become confusing. Please refer to this section or contact the MPAT team if there are any questions.

Abbreviation/Acronym	Definition
42 CFR Part 2	Federal regulations that serve to protect patient records created by federally assisted programs for the treatment of substance use disorders.
BUP	Buprenorphine
COWS	Clinical Opiate Withdrawal Scale
DAST	Drug Abuse Screening Test Verbal screening tool used to identify patients at high risk of SUD
FCP	Family CARE Portfolio, previously called Plan of Safe Care. CARE stands for *Coordinate. Advocate. Record. Empower.*
MAT	Medication Assisted Therapy

MOM	Maternal Opioid Misuse (MOM) Model Grant funded by Center for Medicare and Medicaid Innovation
MOUD	Medication for Opioid Use Disorder
MPAT	Maternal Perinatal Addiction Treatment
OTP	Opioid Treatment Provider
OUD	Opioid Use Disorder
SDoH	Social Determinants of Health
SMH	Santa Maria Hostel Substance use treatment program in Houston that is described in detail on Page 13
SUD	Substance Use Disorder
UDS	Urine Drug Screen
WHO	Women Helping Ourselves 180-day residential substance use treatment program at SMH that is an alternative to incarceration for patients with a history of SUD
WWC	Women With Children Specialized female and single women intensive and supportive residential treatment program at SMH

Table 1. Appropriate Terminology of Substance Use and Addiction

Term	Definition
Substance Use	Sporadic use of psychoactive substances
Substance Misuse	Excessive use of psychoactive substances, which may lead to physical, social, or emotional harm
Addiction	A treatable, chronic medical disease involving complex interactions among brain circuits, genetics, the environment, and an individual's life experiences. People with addiction use substances or engage in behaviors that become compulsive and often continue despite harmful consequences. Prevention efforts and treatment approaches for addiction are generally as successful as those for other chronic diseases
Substance Use Disorder	DSM-5 uses the same overarching criteria for all substances to diagnose mild (2-3 symptoms), moderate (4-5 symptoms), and severe (6 or more) Impaired control • Use in larger amounts or longer periods than intended • Persistent desire or unsuccessful efforts to decrease or stop use • Craving or strong desire to use • Excessive time spent obtaining or using substances or recovering from the effect Social impairment • Failure to fulfill major role obligations at work, school, home • Persistent or recurrent social or interpersonal problems exacerbated by use • Reduction or cessation of important social, occupational or recreational activities because of use Risky Use • Use in psychically hazardous situations • Continued use despite knowledge of persistent physical or psychological problems arising from use Pharmacologic properties • Tolerance • Withdrawal symptoms • Note: solely pharmacologic symptoms are not sufficient to meet criteria for SUD
Recovery	A process of changing through which individuals improve their health and wellness, live a self-directed life and strive to reach their full potential
Trauma-informed care	Practices that promote a culture of safety, empowerment, and healing by recognizing how common trauma is, and understanding that every patient may have experienced serious trauma.

Table 2. Stigmatizing and Preferred Language[6]

Stigmatizing Language	Preferred Language
Substance abuse	Substance use or misuse, substance use disorder
Abuser, addict, alcoholic	Person with a substance use disorder
Smoker	Person with cannabis or tobacco or nicotine use disorder
Addicted baby	Neonate with neonatal abstinence syndrome or with in utero exposure to [named substance]
Clean or sober	Abstinent, in remission, toxicology "negative" for [substance]
Dirty	Using [substance], toxicology "positive" for [substance]
Drug of choice, habit	Substance of use
Getting or being high	Intoxicated, under the influence of [substance]
Shooting up	Intravenous drug use, injection drug use
Replacement or substitution treatment for opioid use disorder, opioid replacement, medication-assisted treatment	Medications for opioid use disorder, medications for addiction treatment
Relapse	Return to use, symptom recurrence

Screening for Substance Use

Universal verbal screening

ACOG, SMFM and AAP recommend utilizing a validated screening tool for universal substance use screening, performing a brief intervention, and sending a referral to treatment for all patients at risk for complications related to substance use. This process is known as Screening, Brief Intervention, and Referral to Treatment or "SBIRT".

The screening tool utilized at Harris Health for all pregnant and postpartum women is the Drug Addiction Screening Tool (DAST). DAST should be performed at obstetric intake for all patients. If a patient has a score >6, they are at risk for complications for substance use and the provider should do a brief intervention inclusive of motivational interviewing and assessment of the patient's readiness for change. These tools are built into the Harris Health Epic as a best practice alert "BPA" whenever a patient scores >6 on the DAST.

Urine toxicology screening: NOT recommended.

Risk-based screening is highly subject to bias and often predominantly tests Black or Hispanic patients and those with reduced access to prenatal care. Universal screening with urine drug screen (UDS) has the risk of false positives, which occur in 5-10% of samples, and can result in Child Protective Services referrals based on hospital, state or federal requirements. Finally, many hospital urine drug screens do not test for methadone, buprenorphine, or fentanyl so may miss a subset of patients with SUD if used as a primary screening tool. **These tests must be ordered separately.**

Because of the high risk of false positives, patients who test positive and do not report a history of substance use should have "confirmatory testing" via mass spectrometry. Examples of medications that cause false positive results on UDS include:

1. Benzodiazepines: efavirenz, sertraline
2. THC: dronabinol, efavirenz, PPI, NSAIDs, hemp seed oil
3. Amphetamines: cold medications, Wellbutrin, TCA antidepressants
4. Opioids: quinolone antibiotics

Of note, while not appropriate for screening, UDS can and should be used in the routine management of patients with known SUDs.

Individuals who screen positive for SUD

Patients at Harris Health, Pavilion for Women (PFW) and community sites can all be offered referral to treatment in the MPAT clinic at Ben Taub. The patient should be given an appointment and a "warm handoff" provided to the place of referral.

For patients who report active treatment for OUD, such as currently taking suboxone or methadone, they should continue this medication and be referred for MPAT. If there is any evidence of withdrawal or desire to initiate MOUD, the patient should be sent to the ER or OB Intake (triage) at Ben Taub.

Treatment of co-occurring mental health conditions

There is significant burden of mental health conditions in patients with SUDs, and treatment of mental health conditions is associated with improved SUD outcomes for these patients.[7] Screening for mental health conditions should be performed at obstetric intake, in the third trimester and after delivery. Patients should be offered medical management and referral to therapy, psychology and psychiatry services. PeriPAN is an excellent resource that can help with triage and initial treatment while awaiting specialty services. For urgent questions, please **call PeriPAN directly at 1-888-901-2726,** Monday through Friday from 0800-1700.

Ben Taub Perinatal Substance Use Program Contact Information

For patients in the outpatient setting or at PFW, please email maternalSUD@harrishealth.org for patient referrals. For patients in the inpatient setting at Ben Taub, please use the BT Epic Chat group "BT MOM". This chat message will be sent to the MPAT program manager, nurse navigator, and community health worker.

You can also give patients the Ben Taub MPAT Program Cell Phone: 281-224-7926 so they can call or text the MPAT team. Staff will respond during business hours.

MPAT Clinic occurs on Wednesday Mornings

Primary MPAT Providers:

Dr. Carey Eppes
Dr. Sarah Detlefs

Opioid Use Disorder (OUD)[8]

Opioids are natural or synthetic substances that act on one of three main opioid receptors (mu, kappa, delta). Opioids have analgesic and CNS depressant effects, and can be used intranasal, intravenous, subcutaneous, intramuscular. Opioid Use Disorder (DSM-5) is a problematic pattern of opioid use leading to clinically significant impairment or distress, as manifested by at least two criteria seen in **Appendix C** in a 12-month period. Recently, there has been an increase in the use of synthetic opioids, including fentanyl, which have quick onset to action and high potential for overdose. Medications for opioid use disorder (MOUD) include methadone, buprenorphine, and naltrexone.

Patients with OUD are at risk for several complications including:

1. Localized infections at injection sites
2. Systemic infections including hepatitis C virus (HCV).
3. Bowel changes
4. Hyperalgesia
5. Liver fibrosis
6. Leukoencephalopathy
7. Amnestic syndrome

Opioid Withdrawal and Treatment[9]

Patients with opioid withdrawal typically present with symptoms such as agitation, rhinorrhea, muscle aches, sweating, yawning, abdominal cramping, diarrhea, nausea, vomiting and dilated pupils. Treatment options include supported withdrawal with either detoxification or transition to medication-assisted therapy (MAT). Obstetric and non-obstetric literature supports transitioning to MAT as a harm reduction approach with a lower chance of relapse.[8] **Figure 1** shows the recommended protocol for supportive withdrawal from opioids, especially while awaiting induction with suboxone. Please note, when searching the Texas PMP, methadone will not show up in the registry because it is prescribed only by licensed treatment facilities.

Initial Evaluation

The recommended evaluation for all pregnant and postpartum patients presenting with opioid withdrawal upon admission is listed in **Table 3**.

Table 13. *Admission Evaluation for Patients Presenting with Opioid Withdrawal*

- ☐ Perform DAST or other clinical screening if not done previously, utilizing a motivational interviewing approach to offering treatment.
  - Assess the patient's readiness for change
- ☐ Labs
  - If not done previously, order prenatal labs including HCV, HIV, GC/CT, HbsAg, and syphilis testing.
  - CBC, CMP[1], UDS[2] with consent.
- ☐ Additional Tests
  - EKG[3]
  - Daily NST during withdrawal for viable pregnancies
- ☐ Treat any identified sexually transmitted infections
- ☐ Evaluate the Texas PMP for last prescriptions for opioids and any previous MAT use
- ☐ If they were previously on methadone, call the methadone clinic and verify the last dose time and amount
- ☐ Order Clinical Opiate Withdrawal Scale (COWS) assessment q4-6 hours[4]
- ☐ Treat symptoms of opioid withdrawal with the medications in Clinical Treatment of Opioid Withdrawal Symptoms.

[1]CMP to evaluate for renal or hepatic disease, in which the dosing should be adjusted.
[2]UDS to determine timing of last use and concurrent substance use that may change induction timing (example: Benzo)
[3]EKG to evaluate for prolonged QT prior to methadone initiation.
[4] The COWS score is an 11-item clinician administered scale assessing opioid withdrawal and can be found in appendix F.[2]

Clinical treatment of Opioid Withdrawal symptoms

Mainstay of Therapy
Administer Clonidine 0.1-0.3 q 4-6 hours for any withdrawal symptoms (Give only 0.05 – 0.025 mg *if* BP < 100/60 and/or HR < 60)

Adjunctive Therapies (Administer Based on Symptoms)

Anxiety	Diphenhydramine 50mg PO q4-6h PRN Hydroxyzine 20-100mg PO q6-8h PRN
Abdominal Cramping	Dicyclomine 10-20mg q6-8H PRN
Diarrhea	Loperamide 4mg x1 then 2mg after each loose stool (max 16 mg daily)
Nausea and Vomiting	Ondansetron ODT or IV q6-8h PRN Promethazine 25mg PO or IM (only use as a second line due to addiction properties)
Insomnia	Trazodone 50mg qHS PRN (may repeat once after 2 hours if persistent insomnia)
Muscle Aches/Joint Pain	Rehydration Warm shower Stretching Acetaminophen 650mg q4-6h PRN

Smart phrase for Ben Taub Epic: .OUDwithdrawal

Figure 1. *Clinical Opioid Withdrawal Scale (COWS)*[10]

Wesson & Ling, J Psychoactive Drugs. 2003 Apr-Jun;35(2):253-9.

COWS Clinical Opiate Withdrawal Scale

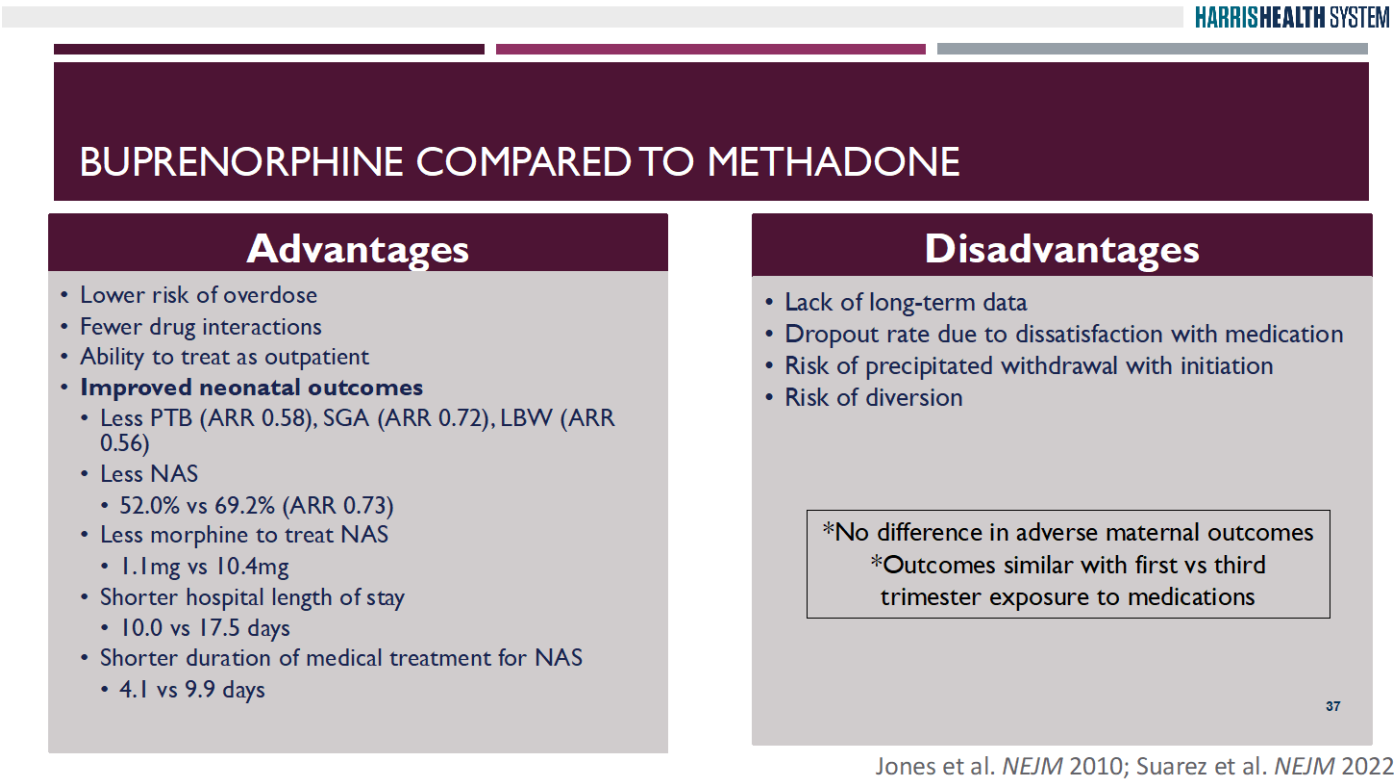
Resting Pulse Rate: _____beats/minute *Measured after patient is sitting or lying for one minute* 0 Pulse rate 80 or below 1 Pulse rate 81-100 2 Pulse rate 101-120 4 Pulse rate greater than 120	GI Upset: *over last 1/2 hour* 0 No GI symptoms 1 Stomach cramps 2 Nausea or loose stool 3 Vomiting or diarrhea 5 Multiple episodes of diarrhea or vomiting
Sweating: *over past 1/2 hour not accounted for by room temperature or patient activity.* 0 No report of chills or flushing 1 Subjective report of chills or flushing 2 Flushed or observable moistness on face 3 Beads of sweat on brow or face 4 Sweat streaming off face	Tremor *observation of outstretched hands* 0 No tremor 1 Tremor can be felt, but not observed 2 Slight tremor observable 4 Gross tremor or muscle twitching
Restlessness *Observation during assessment* 0 Able to sit still 1 Reports difficulty sifting still, but is able to do so 3 Frequent shifting or extraneous movements of legs/arms 5 Unable to sit still for more than a few seconds	Yawning *Observation during assessment* 0 No yawning 1 Yawning once or twice during assessment 2 Yawning three or more times during assessment 4 Yawning several times/minute
Pupil size 0 Pupils pinned or normal size for room light 1 Pupils possibly larger than normal for room light 2 Pupils moderately dilated 5 Pupils so dilated that only the rim of the iris is visible	Anxiety or irritability 0 None 1 Patient reports increasing irritability or anxiousness 2 Patient obviously irritable anxious 4 Patient so irritable or anxious that participation in the assessment is difficult
Bone or Joint aches *If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored* 0 Not present 1 Mild diffuse discomfort 2 Patient reports severe diffuse aching of joints/ muscles 4 Patient is rubbing joints or muscles and is unable to sit still because of discomfort	Gooseflesh skin 0 Skin is smooth 3 Piloerrection of skin can be felt or hairs standing up on arms 5 Prominent piloerrection
Runny nose or tearing *Not accounted for by cold symptoms or allergies* 0 Not present 1 Nasal stuffiness or unusually moist eyes 2 Nose running or tearing 4 Nose constantly running or tears streaming down cheeks	Total Score _____ The total score is the sum of all 11 items Initials of person completing Assessment:_____

Score: 5-12 mild; 13-24 moderate; 25-36 moderately severe; more than 36 = severe withdrawal

Medications for Opioid Use Disorder

There are two primary agents used as MOUD, which are described in detail below. The agent chosen for MOUD should be individualized (**Table 4**).

***Table 4**. Comparison of MOUD agents*



Jones et al. *NEJM* 2010; Suarez et al. *NEJM* 2022

Methadone

Methadone is a full mu opioid receptor agonist used to treat OUD. Methadone is a unique opioid receptor agonist as it dulls the euphoria from illicit opiate use and reduces or eliminates craving for opiates. Methadone treatment is strictly regulated and can only be administered by licensed treatment facilities. These facilities typically have strict criteria for entry into a methadone treatment program and require daily (early morning) visits to outpatient treatment centers. **Methadone treatment can be started immediately (regardless of recent opioid use).** For patients already taking methadone, all providers can continue the medication during admission and verification of the patient's dose should be performed by calling the treatment facility. **This can be challenging as they often close before noon**.

The typical effective dose is 60-80 mg per day. However, pregnancy-related increases in circulating blood volume and glomerular filtration rate (GFR) often mean that increased dose and/or or split (BID) dosing are needed, particularly in the third trimester.

It is important to note that for patients in the Harris County Jail system**, methadone is the only available MOUD.** Patients transitioning to this form of MOUD will need to initiate methadone therapy inpatient and then connect with the Texas Clinic for ongoing dosing. An intake should be scheduled for ongoing dosing *PRIOR* to returning to jail.

Methadone Induction

Methadone induction should be done in conjunction with a substance use specialist. The Ben Taub Protocol for methadone induction is explained in **Table 5**.

Table 5. Protocol for Methadone Induction

- ☐ Ensure QTc is < 450 prior to starting methadone[1]
- ☐ Check UDS and Fentanyl urine screen[2]
- ☐ Induction:
  - Start with 30-40mg methadone as a single dose.[3]
  - Repeat vital signs in 1-2 hours after first dose.
  - Repeat COWS scoring q4 hours. If the score is consistently >5, add an additional 10mg methadone on day 2.
  - If the patient has emesis:
    - <15 min from methadone dose: replace with 50% dose.
    - 15-30 min from methadone dose: replace 25% dose.
    - >30 min from methadone dose: do not replace dose.

[1]Caution with QTc 450-500
[2]Do not initiate methadone while a patient's UDS remains positive for benzodiazepines due to the risk of overdose.
[3]For patients already receiving methadone but with unknown dosing, please initiate 30mg daily and follow this same protocol (EKG, UDS, etc). Add 10mg if COWS > 10 on the same day.

Buprenorphine (Suboxone, Subutex)

Buprenorphine (BUP) is a partial agonist at mu receptor. Formulations include Suboxone (buprenorphine + naloxone) and Subutex (buprenorphine). It is available as an outpatient prescription (no daily clinic visits needed) and comes in sublingual films, tablets, patches or SQ injection (Sublocade). There are a few instances where buprenorphine may not be as effective as methadone: for patients requiring treatment of acute or chronic pain and for patients with very high opiate tolerance (due to ceiling effect of partial agonist pharmacology).

Administration of buprenorphine to patients with recent opioid use can precipitate withdrawal. **Patients must be in mild/moderate withdrawal prior to initiation. This correlates with COWS scores ≥12, which is typically 6-12 hours after heroin use and 24-48 hours after methadone use. It is important to treat withdrawal symptoms using adjunctive non-opioid therapies while waiting for COWS score to rise and appropriate BUP initiation.**

Buprenorphine Induction

The Ben Taub protocol for Buprenorphine induction is described in **Table 6.** This should be performed in conjunction with a provider who is certified to prescribe buprenorphine agents.

Table 6. Protocol for Buprenorphine Induction

1. Initial dose: 2-4mg BUP films
2. Repeat vital signs q60-90 min and COWS q4 hours
3. Give an additional 2-4mg if needed (maximum daily dose is 24 mg) if the next COWS score is elevated

Recommendations for discharge and follow up following MOUD induction

After admission and induction of MOUD, all patients should be offered ongoing substance use treatment. Outcomes are improved for patients that engage in treatment activities in addition to MOUD therapy. Resources such as Santa Maria Hostel provide inpatient and outpatient programs. The Ben Taub MPAT program has a relationship with Santa Maria, and patients should be directly transferred to Santa Maria whenever possible. The MPAT nursing team or the inpatient social work team can coordinate referrals. A discharge checklist is described in **Table 7**.

***Table 7**. Checklist for discharge following MOUD induction*

- ☐ Prescribe Narcan regardless of substance used[1]
  - ☐ Perform education on Narcan use
- ☐ Ensure they have pharmacy or methadone clinic access (**do not** discharge those on methadone on a weekend without ensuring the clinic will see them the next day)
  - ☐ Nursing staff will need to provide patient with printed documentation of their inpatient administration of methadone doses because this will be requested when they present to their methadone clinic following discharge
- ☐ Schedule follow up in MPAT within 1 week of discharge
- ☐ If on buprenorphine: follow up with Dr. Ojeda in 1 week
- ☐ Offer Santa Maria Hostel services (and give warm handoff via social work or a direct call)
- ☐ Ensure the patient has transportation to clinic visits prior to discharge

[1]An increasing number of substances are "laced" or cut with Fentanyl resulting in overdose from opioids.

Substance Use-Focused Prenatal Care

Pregnancy is an opportune time to address SUD and provide adequate therapy. This requires a multidisciplinary approach that includes utilizing trauma informed care methodology and providing addiction medicine, psychiatry, psychology, obstetric, care coordination, and social work support. Prenatal care for this patient population should include enhancements to prenatal visits, initiation of the Family CARE Portfolio, and consultations with anesthesiology and neonatology.

Prenatal Visits

The MPAT clinic is a specialized, grant-funded clinic that treats patients with a history of current or prior SUD. **Table** 8 describes the prenatal visit checklist to specifically address substance use.

Family CARE Portfolio (FCP)

The FCP, previously termed The Plan of Safe Care (POSC), is a federally required document for all states. This should include information regarding the pregnant patient's recovery journey, support system, and mental health and substance use treatment plan to facilitate hand-off between social work and CPS teams. As there is no federal generic tool used as the FCP, each state is expected to create their own. Beginning in late 2019, a multidisciplinary team in Houston including Santa Maria Hostel, the Harris County drug and family court, Department of Family and Protective Services (DFPS, CPS) and MPAT team at Ben Taub collaborated to develop the current FCP.

The FCP used at Ben Taub can be found in **Appendix D**. The document includes instructions on which individual should fill out each section (patient vs OB/GYN vs Addiction medicine, etc).

Anesthesia Consultation

All patients with SUD should be offered a pre-delivery anesthesia consult. The goal of this consult is primarily creating a pain management plan that includes safe and effective analgesia (and anesthesia if needed) and minimizing opioid use.

The following should be reviewed, using a trauma-informed care methodology:

- Planning for admission early anesthesia consultation and documentation.
- Non-judgmental review and assessment of the patient's concerns, previous history and goals.
- Develop of individualized peri-delivery analgesia and anesthesia plans.
- Create contingency planning.
- Coordinate expectations of the patient, family and the care teams.

Anesthesia labor considerations are discussed below.

Neonatology Consultation

Neonatology consultation is recommended in the third trimester to discuss expectations for newborn care after delivery. This includes discussing neonatal withdrawal symptoms and treatment. The model recommended for neonatal support is the Eat Sleep Console program and is detailed in the neonatal section below.

In the event that the parent is discharged prior to the infant, they are potentially eligible to stay in the "Care-by Parent" suite. This is a location where parents can stay in the NICU in an apartment-like setting after discharge and continue to care for their infant while the infant is admitted for observation for Neonatal Abstinence Syndrome (NAS), sometimes called Neonatal Opioid Withdrawal Syndrome (NOWS).

It is important to determine whether the patient is a candidate for the Care-by Parent suite in the third trimester. Candidacy is based on engagement in care, incidence of relapses during pregnancy, and UDS screens, as well as baby medical needs. This should be documented in the care coordination note.

Social Work Consultation

Social work should be involved in care of patients with SUD throughout their prenatal care. This includes evaluating specific social determinants of health, provide psychosocial support, and assisting with access to care.

Table 8. *Prenatal Visit Checklist in MPAT Clinic*

First Visit:

- ☐ Introduce the multidisciplinary care team and treatment model
- ☐ Offer peer support via Santa Maria Peer and Parenting coaches
- ☐ Prescribe Narcan
- ☐ Introduce the Family CARE Portfolio (see below)
- ☐ Social work assessment
    - Screen for social determinants of health (SDoH) needs (utilizing the accountable care communities tool, found in epic flowsheets under ACH SDOH)
    - Assess for intimate partner violence or history of trafficking
- ☐ Head to toe skin exam (evaluation for skin infections, especially at injection sites)
- ☐ Screen for STIs
- ☐ Evaluate for history of IV or subcutaneous use and perform full skin examination
- ☐ Patient Activation Measure Screening (PAM) if in MOM model
- ☐ CFR 42 consent form completion (this allows release of information between everyone involved in the patient's care)
- ☐ DAST screening if not done previously
- ☐ EDPS screening
- ☐ Create care coordination note

Every visit:

- ☐ UDS is recommended to document the recovery journey
- ☐ Update care coordination note
- ☐ Update Family CARE Portfolio/POSC
- ☐ Provide coordinated care with social work and SMH as needed to address individual patient concerns and/or needs

Third trimester:

- ☐ Scan Family CARE Portfolio/POSC into epic chart at 36 weeks
- ☐ Confirm methadone dose from treatment facility and put in Epic problem list
- ☐ Anesthesia consultation
- ☐ Neonatology consultation
- ☐ For patients who qualify for the "Care-by Parent" suite (see below)
    - Document in care coordination note that patient is cleared / permitted to stay in suite (consider how recent last substance use, if there are stipulations for those justice-involved / WHO clients, etc.)
    - Request "take home doses" for patients who will be discharged to the Care-by Parent Suite
    - Ensure adequate Buprenorphine doses with Dr. Ojeda for Care by Parent Suite

Intrapartum Management

There are several recommendations for management of patients with SUD on labor and delivery:

1. **UDS/Fentanyl screen** with every admission: a negative UDS will help with their recovery documentation.
2. Patients on **MOUD** (Buprenorphine or Methadone) should continue the same doses while admitted. All providers can continue these medications.
3. Patients with SUD may have **pain management** challenges during labor, which is discussed in detail below.

Pain management

During labor, the agonist-antagonist drugs such as nalbuphine (Nubain), butorphanol (Stadol), pentazocine and naloxone (except when used to treat opioid overdose) should be avoided for patients on MOUD because they precipitate withdrawal. Higher than usual opioid doses may be needed as μ receptors are blocked and patients often have opioid-induced hyperalgesia. Other considerations are listed in **Table** 9. As described above, all patients with SUD should be offered a pre-delivery anesthesia consultation.

During labor, epidural and spinal anesthesia can be safely performed. For intraoperative anesthesia, neuraxial analgesia is the preferred method, particularly with use of preservative free Morphine (duramorph).

Table 9. *Anesthesia considerations during labor for patients with SUD*

Challenge	Recommendation
Acute opioid use/ overdose	Reduced requirements of analgesics/sedatives Watch for impaired airway protection and respiratory depression
Long term opioid use	Increased requirements of anesthetic agents due to tolerance and hyperalgesia
Medication interactions	Avoid synergistic drugs
Difficult IV access	Central/midline access may be needed
Cellulitis/abscess on back	Contraindication to neuraxial anesthesia
MOUD	**Continue MOUD at prior prescribed doses**, avoid opioid antagonists
Co-occurring conditions	Ensure all other medical conditions are optimized (pre-delivery consultation is helpful)

Postpartum Care

Post-Vaginal Delivery pain control

Post- SVD considerations to optimize pain control and minimize opioid use include:

1. Use a multi-modal approach including Acetaminophen and non-steroidal anti-inflammatory agents (ibuprofen).
2. Routine perineal care including ice packs, cooling spray, and tucks pads.
3. Do not order routine opioids, but these may be necessary. The patient should be evaluated if pain is not managed by the above therapies.
    a. If opioids are required, order single agents (i.e., oxycodone versus narcotic/acetaminophen combinations) at the lowest effective dose for the shortest duration of time.

Post-Cesarean delivery pain control

Postoperative considerations to optimize pain control and minimize opioid use include:

1. Use of a multi-modal approach including alternating Acetaminophen with non-steroidal anti-inflammatory agents (primarily Ketorolac followed by ibuprofen); then adding opioids if necessary.
2. Utilization of a PCEA for at least 24 hours after delivery.
3. Local anesthetic infiltration or patches.
4. Continuous wound infiltration of local anesthetics.
5. Truncal blocks.
6. If opioids are required, order single agents (i.e., oxycodone versus narcotic/acetaminophen combinations) at the lowest effective dose for the shortest duration of time.
    a. **Importantly, the MOUD alone should not be considered treatment for labor or acute post-operative pain**.
    b. Evidence has **not** shown that short-term peri-operative use of opioids will lead to relapse of opioid use disorder.

Inpatient considerations

Patients on MOUD or with active substance use should be managed on the antepartum service postpartum for care coordination. Postpartum management for other patients with SUD or history of SUD should be individualized based on clinical situation. The infants will room-in with mom unless otherwise indicated by MPAT care coordination or NICU team. If the parent is ready for discharge prior to infant's discharge related to MOUD or opioid exposure, they are potentially eligible for the "Care-by Parent Suite" as described above.

Preparing for discharge

1. Discharge home: routine medication and discharge orders, ensure has prescription for BUP (usually 1 week until next appt with Addiction Medicine), ideally delivered via meds to beds before discharge.
2. Discharge to SMH: coordinate with SMH
3. Discharge to care by parent suite: ensure they have enough BUP or methadone on hand for the care by parent suite, as they typically do not leave for medications once discharged to the suite. Patients seen in the MPAT clinic and determined to be a good candidate for the suite will have this note in their care coordination section of the EMR. Patients who are members of the Santa Maria WHO program (jail diversion) will need approval for the suite, which is established ahead of delivery.
    a. If the parent does not have enough take home doses and needs to return to the methadone clinic, the neonatology team should be alerted and the nurses will care for baby in the Level 2 nursery until the parent returns.

4. Discharge to jail: For patients on methadone, do not discharge on a Saturday (they cannot get their methadone dose on a Sunday typically). Please ensure they are established with the Texas clinic (methadone facility) prior to transition to jail.
5. For patients on methadone, it is critical to ensure continuity of their dosing upon discharge to avoid withdrawal and readmission. These patients should not be discharged over a weekend without confirming the methadone clinic is open. Nursing staff will need to provide patient with printed documentation of their inpatient administration of methadone doses because this will be requested when they present to their OTP for dosing after discharge. Patients on Buprenorphine should have meds to beds delivery medications before discharge.

Postpartum Follow Up

Patients should have scheduled follow up prior to discharge. This includes routine postpartum obstetric care as well as substance use care. Through the MPAT grant, patients qualify for substance use care for up to 1 year postpartum.

All MPAT patients should have the following appointments:

- ☐ 2 week follow up in MPAT with OB and Dr. Ojeda.
- ☐ 4-6 week follow up in MPAT with OB and Dr. Ojeda.
- ☐ Coordination with Santa Maria for discharge for those leaving directly to their residential treatment program.
- ☐ Continue with Dr. Ojeda through 12 months postpartum (or longer).

If the discharge team has difficulty scheduling these follow-up appointments, they should contact the MPAT team via Epic Chat at BT MOM.

CPS referral requirements:

Many patients are fearful of CPS referrals which can affect their engagement in prenatal care. Caution should be used in CPS referrals. The literature supports the ongoing perpetuation of racial inequalities, with black and American Native children removed at 2-10 times the rate of white children in the setting of substance use. The literature also indicates that maternal mortality is highest in those who have had their parental rights removed in this setting.

A recent ACOG Expert publication states that the role of ob-gyns in the child welfare system process should be twofold: To provide support for pregnant and postpartum individuals with child welfare system involvement, and to advocate for public policy reforms that **eliminate punitive approaches to substance use in pregnancy and improve access to resources individuals need to meet their parenting and life goals.**[11]

The Pavilion for Women and Harris Health System do not have a set policy regarding reporting to CPS for maternal SUD. There are several federal and state requirements with which treatment teams should be familiar:

1. Child Abuse Protection and Treatment Act (CAPTA): Sets forth a federal definition of child abuse and neglect

   https://www.congress.gov/bill/93rd-congress/senate-bill/1191
   https://www.acf.hhs.gov/sites/default/files/documents/cb/capta.pdf

2. Comprehensive Addiction and Recovery Act (CARA): Requires facilities to produce information concerning best practices on developing plans for the safe care of infants born with substance use disorders or showing withdrawal symptoms. This section also requires that a State plan addresses the health and SUD treatment needs of the infant, among others.

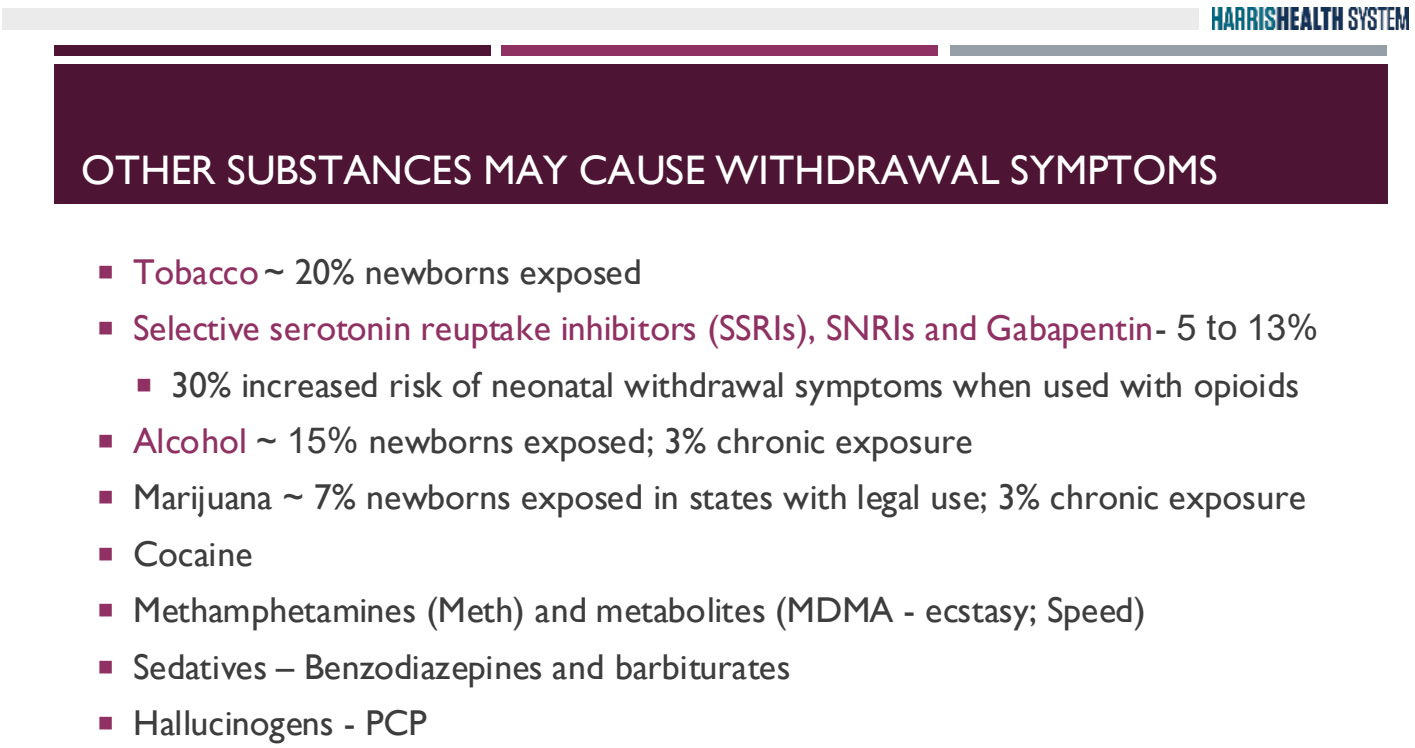
3. Texas Requirements as specific in the following link:

http://benchbook.texaschildrenscommission.gov/pdf/Bench%20Book%202021%20Substance%20Use%20Disorders.pdf

Neonatal Management of Substance-Exposed Infants

It is important to recognize that newborns are not born “addicted”. However, withdrawal symptoms are anticipated after prolonged exposure to certain medications or illicit substances. **Table 10** lists the agents associated with withdrawal symptoms.

***Table 10**. Substances associated with withdrawal symptoms*



A few factors increase the risk of withdrawal, including co-exposure to psychotropic medication(s) close to delivery such as benzodiazepines, SSRI/SNRIs and gabapentin. Use of a single psychotropic medication increases the risk of significant neonatal withdrawal symptoms by 30%, whereas two or more psychotropic co-agents doubles this risk.

For MOUD, the incidence and duration of NAS does NOT differ based on the maternal methadone dose. Lower doses are not associated with milder or shorter neonatal symptoms although some data support lower rates of NAS with split dosing regimens.

Drug Screening

Infant urine drug screening results reflects drug exposure within a few days prior to delivery, whereas meconium drug screens reflect exposure after 20 weeks of gestation. False negative results can occur with delayed sampling, urine or stool mixed with meconium. Notably, similar to adult UDS screening, most of these screening tests will not pick up fentanyl, other synthetic opioids, tobacco, alcohol, or SSRI/SNRIs.

Recent studies indicate that even intrathecal narcotics administered during labor with regional anesthesia lead to positive maternal and infant drug screens, therefore the hospital administered medications need to be taken into account when positive drug screen results occur. Specifically, 29% of mothers who received fentanyl in regional anesthesia had infants that testing positive on UDS.[10]

Withdrawal symptoms

Infants born to parents with SUD will be monitored for withdrawal symptoms (Table 11). The time to onset of withdrawal symptoms will depend on the primary substance used (Table 12).

***Table 11**. Symptoms of neonatal abstinence syndrome (NAS)*

Central Nervous System	Gastrointestinal	Autonomic Nervous System
Tremors	Loose stools	Sweating
Irritability	Poor feeding	Fever
High-pitched continuous cry	Emesis	Frequent sneezing
Decreased sleep	Poor weight gain	Frequent yawning
Increased muscle tone		Increased respiratory rate
Hyperactive Moro reflex		Nasal stuffiness, flaring
Myoclonic jerks +/- seizures		Mottling

***Table 12**. Timing of withdrawal symptoms based on primary substance use*

Substance	Onset	Duration
Tobacco	Within 24 hours	5 – 10 days
Heroin	24 – 48 hours	8 – 10 days
Alcohol	24 – 48 hours	
SSRIs	24 – 36 hours	2 – 6 days
Prescription opioids	36 – 72 hours	10 – 30 days
Buprenorphine	36 – 60 hours	Up to 28 days
Methadone	48 – 72 hours	Up to 30 days

Length of Stay

The minimum recommended observation for development of withdrawal symptoms for MOUD is 72 hours but is longer for patients on buprenorphine (4 days) and methadone (5 days). Most parents will be ready for discharge prior to this time, so the Ben Taub MPAT program uses a “Care-by Parent” suite for eligible newborns and parents. This apartment-like suite is located near the NICU, so that parents can continue to care for their infant while the infant is admitted for observation for neonatal abstinence syndrome (NAS) or neonatal opioid withdrawal syndrome (NOWS).

Treatment of NAS

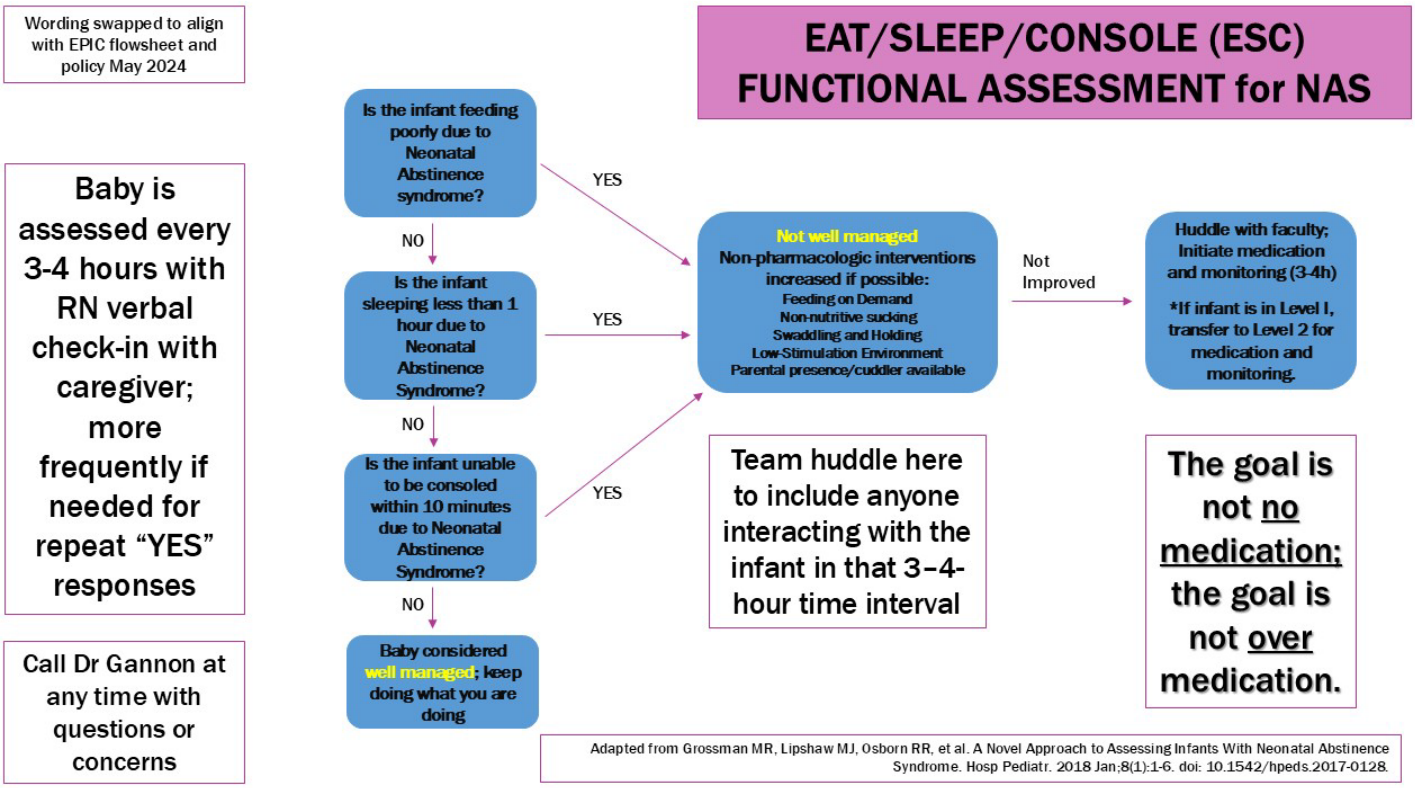
There are two methodologies for monitoring and treating NOWS. The primary method used by the MPAT program is **Eat Sleep Console (ESC)**. Ben Taub's ESC program is illustrated in **Figure 2**. Pharmacologic treatment is a secondary method and may still be needed after non-pharmacologic care has been optimized. The neonatal morphine solution used to treat NOWS should be given as PRN doses initially (up to 3 doses) before scheduled doses are ordered. For polysubstance use that does not include opioids **or** when the maximum dose of neonatal morphine has been reached and the infant is not well managed, Phenobarbital is the first line treatment. Clonidine may be preferred with SSRI exposure.

Data Supporting Eat Sleep Console Program

This method is based on a quality improvement study by Grossman et al. (2018) from Yale New Haven Hospital.[1] This study implemented a program to treat NOWS and evaluated outcomes pre-implementation and post-implementation. The primary outcome evaluated was neonatal length of stay (LOS); secondary outcomes evaluated neonatal narcotic requirements, hospital costs, and breastfeeding rate. Care in this program included a private room and low stimulation environment with dim lights, muted TV, and reduced noise right after delivery. The model also included clustered care, containment or swaddling, and non-nutritive sucking as comfort. Staff engaged parents in continuous care of their infant and encouraged rooming-in on the postpartum unit (MBU). The baby was then transferred to an inpatient room for continued neonatal observation after the parent was cleared for discharge. The parents were told they would be the primary treatment for their infant and needed to be present as much as possible with staff support, and coaching provided to implement the program.

The researchers found a decreased length of stay with the program from 22 days to 6 days. This program was also associated with a decreased use of morphine from 98% to 14%, decreased hospital costs by $34,535 per patient, increased majority breast milk feeding from 20% to 45%, and decreased direct admissions to NICU from 100% to 20%.

Figure 2. *Ben Taub Eat Sleep Console program*



Infant discharge criteria

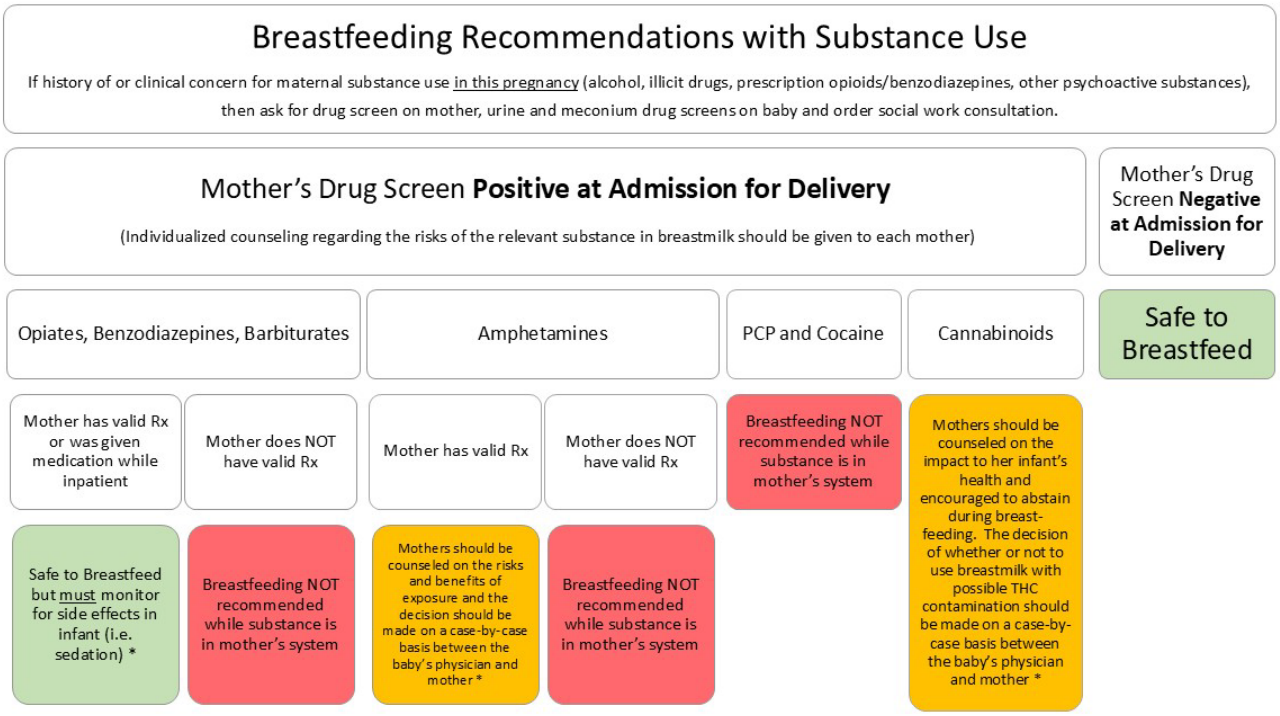
Ben Taub uses the following criteria to determine readiness for discharge:

- ☐ Minimum observation time has passed (3-5 days) without concerns for increasing acute withdrawal or dehydration.
- ☐ No significant clinical signs of withdrawal for 24-48 hours after any medication treatment.
- ☐ Parent education about subacute symptoms that may last weeks to months, safe sleeping, shaken baby syndrome, and who to call for concerns.
- ☐ Warm handoff to primary care provider with visit in 48 hours. Include Hepatitis C and HIV testing/referrals when appropriate.
- ☐ Early Childhood Intervention referral; neurodevelopmental referral for severe cases.
- ☐ Family CARE Portfolio (AKA Plan of Safe Care) is in place, coordination with CPS when involved.

Breastfeeding recommendations

Counseling and recommendations for breastfeeding will depend on substance used as well as use of recent illicit substances. Patients with uncontrolled substance use and no valid prescription for the medications they are taking should be encouraged to formula feed. **Figure 3** illustrates recommendations for breastfeeding based on substance.

Figure 3. *Breastfeeding recommendations based on substance use history*



* Type of medication as well as timing of breastfeeding compared to medication administration should be evaluated to minimize substance exposure if possible

Deal, Gannon, Hair, Tucker 3/2025

References

References

1. Grossman MR, Lipshaw MJ, Osborn RR, Berkwitt AK. A Novel Approach to Assessing Infants With Neonatal Abstinence Syndrome. *Hosp Pediatr*. Jan 2018;8(1):1-6. doi:10.1542/hpeds.2017-0128
2. Trost SL BJ, Nijie F, et al. Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 36 US States, 2017-2019. Centers for Disease Control and Prevention, US Department of Health and Human Services. Accessed 1/18/2023, 2022.
3. Smid MC, Schauberger CW, Terplan M, Wright TE. Early lessons from maternal mortality review committees on drug-related deaths-time for obstetrical providers to take the lead in addressing addiction. *Am J Obstet Gynecol MFM*. Nov 2020;2(4):100177. doi:10.1016/j.ajogmf.2020.100177
4. Jarlenski M, Krans EE, Chen Q, et al. Substance use disorders and risk of severe maternal morbidity in the United States. *Drug Alcohol Depend*. Nov 1 2020;216:108236. doi:10.1016/j.drugalcdep.2020.108236
5. Lewkowitz AK, Rosenbloom JI, Keller M, et al. Association Between Severe Maternal Morbidity and Psychiatric Illness Within 1 Year of Hospital Discharge After Delivery. *Obstet Gynecol*. Oct 2019;134(4):695-707. doi:10.1097/aog.0000000000003434
6. Smid MC, Terplan M. What Obstetrician-Gynecologists Should Know About Substance Use Disorders in the Perinatal Period. *Obstet Gynecol*. Feb 1 2022;139(2):317-337. doi:10.1097/AOG.0000000000004657
7. Kelly TM, Daley DC. Integrated treatment of substance use and psychiatric disorders. *Soc Work Public Health*. 2013;28(3-4):388-406. doi:10.1080/19371918.2013.774673
8. Committee Opinion No. 711: Opioid Use and Opioid Use Disorder in Pregnancy. *Obstet Gynecol*. Aug 2017;130(2):e81-e94. doi:10.1097/aog.0000000000002235
9. Shah M, Huecker MR. Opioid Withdrawal. *StatPearls*. StatPearls Publishing

10. Tompkins DA, Bigelow GE, Harrison JA, Johnson RE, Fudala PJ, Strain EC. Concurrent validation of the Clinical Opiate Withdrawal Scale (COWS) and single-item indices against the Clinical Institute Narcotic Assessment (CINA) opioid withdrawal instrument. *Drug Alcohol Depend*. Nov 1 2009;105(1-2):154-9. doi:10.1016/j.drugalcdep.2009.07.001
11. Gynecologists ACoOa. Opposition to Criminalization of Individuals During Pregnancy and the Postpartum Period. Accessed 10/17, 2025. https://www.acog.org/clinical-information/policy-and-position-statements/statements-of-policy/2020/opposition-criminalization-of-individuals-pregnancy-and-postpartum-period

Appendix

Appendix A. Characteristics of common substances involved in SUD

Substance and Derivatives	Intoxication Signs/Symptoms	Withdrawal Signs/Symptoms	Medications to Avoid
Cocaine Intranasal Nasal Smoking Gastrointestinal	Increased HR, BP, and myocardial oxygen demand Increased arousal, alertness, self-confidence, and euphoria	Fatigue, lack of pleasure, anxiety, irritability, sleepiness, and sometimes agitation, extreme suspicion, or paranoia	Beta-blockers (unopposed alpha)
Opioids[1] Heroin Fentanyl Synthetic (ex: oxycodone)	Slurred speech, sedation, pinpoint pupils, relaxation, and euphoria	Autonomic hyperactivity (tachypnea, hyperreflexia, tachycardia, sweating, hypertension, hyperthermia) Lacrimation or rhinorrhea, piloerection ("goose flesh"), myalgia, diarrhea, nausea/vomiting, pupillary dilatation, photophobia, insomnia and yawning.	Nubain, Stadol (precipitates acute withdrawal) Concurrent sedatives (overdose risk)
Benzodiazepines Short acting <12h Intermediate acting (12-24h) Long acting >24h	Sedation, ataxia, respiratory depression[1]	Autonomic instability Tremors, anxiety, perceptual disturbances, dysphoria, psychosis, seizures,	PPIs, sedatives, fluroquinolone antibiotics
Marijuana	Increased HR, BP and RR; conjunctival injection, and nystagmus Dry mouth, increased appetite, ataxia, and slurred speech	Sleeplessness, irritability, anxiety, and depressed mood	
Methamphetamines	Increased HR and BP; metabolic acidosis Diaphoresis, severe agitation, psychosis, delirium, and seizures	Dysphoria, anhedonia, fatigue, increased sleep or insomnia, vivid dreams, agitation, anxiety, drug craving, and increased appetite	Caution with calcium channel blockers in patients with tachycardia

[1]Treat benzodiazepine overdose with **naloxone**

Appendix B. Pharmacokinetics of common illicit substances

	Half-life	Onset	Peak Action	Duration of Action
Cocaine				
Intranasal		<1min	3-5 min	30-60 min
Nasal		1-5min	20-30 min	60-120 min
Smoking		<1min	3-5 min	30-60 min
Gastrointestinal		30-60 min	60-90 min	Unknown
Benzodiazepines				
Short acting <12	1.5-3 hr		0.7-2.5 hr	
Intermediate acting (12-24)	3-24 hr		0.5-6 hr	
Long acting >24	5-50 hr		0.5-4 hr	
Marijuana				
Inhaled		15-30 min		4 hours
Ingested		30 – 180 min		12 hours
Methamphetamines				
Smoking or injection		<1 min		20 hours
Intranasal		5min		
Oral		20 min		

Appendix C. DSM-5 Criteria for Opioid Use Disorder

1. Opioids are often taken in larger amounts or over a longer period than was intended
2. There is a persistent desire or unsuccessful efforts to cut down or control opioid use
3. A great deal of time is spent in activities necessary to obtain opioids, use the opioid or recover from its effects
4. Craving, or a strong desire or urge to use opioids
5. Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home
6. Continued opioid use despite having persistent or recurrent social or interpersonal problems cause or exacerbated by the effects of opioids
7. Important social, occupations, or recreational activities are given up or reduced because of opioid use
8. Recurrent opioid use in situations in which it is physically hazardous
9. Continued opioid use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance
10. Tolerance, as defined by either of the following:
    a. A need for markedly increase amounts of opioids to achieve intoxication or desired effect
    b. A marked diminished effect with continued use of the same amount of an opioid
11. Withdrawal, as manifested by either of the following:
    a. The characteristic opioid withdrawal syndrome
    b. Opioids are taken to relieve or avoid withdrawal symptoms

↑

Appendix D. Family CARE Portfolio

https://www.txsafebabies.org/posc/assets/docs/posc_portfolio_nfd.pdf