

Opioids & Opioid Use Disorder Treatment

SANDI MELLOR, DNP, APRN, FNP-BC

Relevant Financial Disclosure

Sandi Mellor, DNP, APRN, FNP-BC

- I have nothing to disclose

Objectives

- Identify pharmacology of Opioids and how they act in the body and mind
- Discuss State of Oklahoma guidelines for APRNs scope of practice and opioid prescribing
- Define Addiction and associated terms according to American Society of Addiction Medicine
- Define Opioid Use Disorder (OUD) using criteria for diagnosis
- Discuss State of Oklahoma guidelines for APRNs scope of practice and Opioid Use Disorder treatment
- Compare and contrast treatment guidelines and evidence-based recommendations
- Evaluate outcomes goals and completion or discontinuation of treatment
- Discuss challenges and recommendations to refer for increased assistance for management of OUD

APRN scope of practice prescribing Opioids: Nurse Practice Act

- § 567.4a. Prescriptive authority recognition—Rules
- 3. Define minimal requirements for application for renewal of prescriptive authority which shall include, but not be limited to, documentation of a minimum of: a. fifteen (15) contact hours or one (1) academic credit hour of education in pharmacotherapeutics, clinical application, and use of pharmacological agents in the prevention of illness, and in the restoration and maintenance of health in a program beyond basic registered nurse preparation, and b. two (2) hours of education in pain management or two (2) hours of education in opioid use or addiction, unless the Advanced Practice Registered Nurse has demonstrated to the satisfaction of the Board that the Advanced Practice Registered Nurse does not currently hold a valid federal Drug Enforcement Administration registration number, approved by the Board, within the two-year period immediately preceding the effective date of application for renewal of prescriptive authority;

- Oklahoma Board of Nursing. (2020). Nurse Practice Act. <https://oklahoma.gov/content/dam/ok/en/nursing/documents/actwp20.pdf>

APRN scope of practice prescribing Opioids

- Oklahoma APRN with DEA for Schedule III-V and RX authority can prescribe some opioids: codeine, Talwin (pentazocine and naloxone) and tramadol
- Indications for short-term use for antitussive activity or acute pain management – 1 prescription for prn medication to not exceed 7 days
- A repeat face-to-face visit and an additional prn prescription to not exceed 7 days
- Chronic pain management requires referral to a physician certified in pain and addiction treatment
- APRNs cannot contribute to the Opioid Use epidemic- Must continue to prescribe within our scope and with caution * includes checking PMP to see if your pt getting other opioids and if RX of benzodiazepines is given to a patient NOT on opioids (increased risk of OD/death)

APRN scope of practice prescribing Opioids

- Discussion Guidelines for Advanced Practice Registered Nurses When Prescribing Opioids:
- D. In accordance with the Oklahoma Uniform Controlled Dangerous Substances Act, specifically 63 O.S. § 2-309I, a practitioner, which includes APRNs, shall not issue an initial prescription for an opioid drug in a quantity exceeding a seven-day supply for treatment of acute pain for an adult patient, or a seven-day supply for treatment of acute pain for a patient under the age of eighteen years old. Any prescription for acute pain shall be for the lowest effective dose of immediate-release opioid.
- III. Exceptions: The Uniform Controlled and Dangerous Substance Act does contain exception language for patients in active treatment for cancer, receiving hospice care or palliative care, or who are residents of a long-term care facility, or receiving medications for treatment of substance abuse or opioid dependence.
- Oklahoma Board of Nursing. (2023). <https://oklahoma.gov/content/dam/ok/en/nursing/documents/opioiddiscgl.pdf>

Scheduled drugs

* APRN RX

- I: heroin, LSD, cannabis, ecstasy, methaqualone, peyote
- II: hydrocodone, cocaine, methamphetamine, methadone, hydromorphone, meperidine, oxycodone, fentanyl, Dexedrine, Ritalin, Adderall
- III: Codeine (< 90mg/unit dose- Tylenol #3 & #4), ketamine- short-acting anesthetic- use for sedation and resistant depression in certified clinic only, anabolic steroids, testosterone, buprenorphine or buprenorphine-naloxone
- IV: benzodiazepines (Xanax- acute treatment of panic d/o but XR recommended for GAD/PD, clonazepam-longer acting for panic d/o or epilepsy, valium), Soma-carisoprodol (FDA only use 3 weeks), Talwin (pentazocine and naloxone- moderate to severe pain & preop), Ambien, Tramadol – mod/severe chronic pain * sz precaution {Darvon/Darvocet taken off market 2010}
- V: Cough meds. w/ codeine < 200mg/100mL, Lomotil, Motofen (Difenoxin & atropine- antidiarrheal), Lyrica, Parepectolin (contains opium)

Opioid List

<https://www.drugs.com/drug-class/narcotic-analgesics.html>

Name	Route	Onset of effect	Duration of effect
<u>alfentanil</u>	Intravenous (IV)	90 seconds	45-60 mins
Buprenorphine (opioid partial agonist)	Oral	Very slow onset- peak 3-4 hr	Ave. Half-life 38hr
<u>codeine</u>	Oral	15-60 mins	3-4 hours
<u>fentanyl</u>	IV	Immediate	0.5-1h
	Intramuscular (IM)	7-8 mins	1-2 hours
	Buccal (through the gums) or Sublingual (SL)	5-15mins	4-6 hours
	Transdermal patch (via the skin)	6h	72-96 hours
<u>hydrocodone</u>	Oral	10-20 minutes	4-8 hours
<u>hydromorphone</u>	Oral	15-30 mins	3-4 hours
	IV	5 mins	3-4 hours
<u>methadone</u>	Subcutaneous (SC) (under the skin)	15 mins	3-4 hours
<u>morphine</u>	Oral	30-60 mins	3-6 hours (immediate-release) 8-24 hours (extended-release)
	IV/SC	5-10 mins	4 hours
<u>oxycodone</u>	Oral	10-15 mins	3-6 hours
<u>oxymorphone</u>	Oral	30-60 mins (immediate-release) 1-2 hours (extended-release)	4-6 hours (immediate-release) 12 hours (extended-release)
	IM/IV/SC	5-10 mins	3-6 hours
Pentazocine/naloxone	Oral	15-30 mins	3-4 hours
<u>tramadol</u>	Oral	30-60 mins (immediate-	4-6 hours (immediate-release)

Classification of Opioids/Antidotes for opioid overdose or OUD treatment: Mechanism of Action

- **Agonists** : Morphine, codeine, oxycodone, pethidine, diamorphine, hydromorphone, levorphanol, methadone, fentanyl, sufentanyl, remifentanyl, tramadol, tapentadol
- **Antagonists**: Naloxone, Naltrexone, Nalmefene, Diprenorphine
- **Agonist/Antagonists**: nalorphine, pentazocine, nalbuphine, butorphanol, dezocine
- **Partial Agonists** (both agonist and antagonist): meptazinol, buprenorphine

Opioid Receptors

- Your body can produce multiple kinds of endorphins.
- It also has three types of opioid receptors. All three types play a role in pain relief, but they also have other unique functions in your body:
- **Mu opioid receptors (MORs)** produce feelings of euphoria and reinforcement for rewards. They're also responsible for side effects like physical dependence, constipation, and respiratory depression.
- **Kappa opioid receptors (KORs)** produce a sedative effect. They're also responsible for the feelings of depression or stress that often accompany long-term opioid use.
- **Delta opioid receptors (DORs)** help reduce anxiety.
- Heroin and prescription opioids tend to bond primarily with MORs, so using these types of opioids may increase your risk of dependence or addiction.

Agonists and Antagonists

Agonists - Drugs that occupy receptors and activate them.

Antagonists - Drugs that occupy receptors but do not activate them
Antagonists block receptor activation by agonists.



Codeine

- **Indications:** Codeine Sulfate Tablets are an opioid agonist, indicated for the management of mild to moderate pain, where treatment with an opioid is appropriate and for which alternative treatments are inadequate. (1)
Limitations of Use (1) Because of the risks of addiction, abuse, and misuse with opioids, even at recommended doses, reserve Codeine Sulfate Tablets for use in patients for whom alternative treatment options [e.g., non-opioid analgesics or opioid combination products]:
 - Have not been tolerated, or are not expected to be tolerated.
 - Have not provided adequate analgesia, or are not expected to provide adequate analgesia.
- **Dosage:** Use the lowest effective dosage for the shortest duration consistent with individual patient treatment goals. (2.1)
 - Individualize dosing based on the severity of pain, patient response, prior analgesic experience, and risk factors for addiction, abuse, and misuse. (2.1)

Codeine

- **Contraindications:** Children younger than 12 years of age.
- • Postoperative management in children younger than 18 years of age following tonsillectomy and/or adenoidectomy. (4)
- • Significant respiratory depression. (4)
- • Acute or severe bronchial asthma in an unmonitored setting or in absence of resuscitative equipment. (4)
- • Concurrent use of monoamine oxidase inhibitors (MAOIs) or use of MAOIs within the last 14 days. (4)
- • Known or suspected gastrointestinal obstruction, including paralytic ileus. (4)
- • Hypersensitivity to codeine. (4)

Codeine

- **Warnings and Precautions:**
- Life-Threatening Respiratory Depression in Patients with Chronic Pulmonary Disease or in Elderly, Cachectic, or Debilitated Patients: Monitor closely, particularly during initiation and titration. (5.8)
- • Adrenal Insufficiency: If diagnosed, treat with physiologic replacement of corticosteroids, and wean patient off of the opioid. (5.10)
- • Severe Hypotension: Monitor during dosage initiation and titration. Avoid use of Codeine Sulfate Tablets in patients with circulatory shock. (5.11)
- • Risks of Use in Patients with Increased Intracranial Pressure, Brain Tumors, Head Injury, or Impaired Consciousness: Monitor for sedation and respiratory depression. Avoid use of Codeine Sulfate Tablets in patients with impaired consciousness or coma

Codeine

- **Drug interactions:**
 - Serotonergic Drugs: Concomitant use may result in serotonin syndrome. Discontinue codeine sulfate if serotonin syndrome is suspected. (7)
 - Mixed Agonist/Antagonist and Partial Agonist Opioid Analgesics: Avoid use with Codeine Sulfate Tablets because they may reduce analgesic effect of Codeine Sulfate Tablets or precipitate withdrawal symptoms. (7)
- **Use in Specific Populations:**
 - Pregnancy: May cause fetal harm. (8.1)
 - Lactation: Breastfeeding not recommended. (8.2)
- The most common adverse reactions include: drowsiness, lightheadedness, dizziness, sedation, shortness of breath, nausea, vomiting, and sweating. (6) To report SUSPECTED ADVERSE REACTIONS, contact West-Ward Pharmaceuticals Corp. at 1-800-962-8364 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

Talwin - mixed agonist/antagonist

- Talwin 50 -Pentazocine tablets originally did not contain naloxone
 - they were crushed and dissolved with tripeleennamine (antihistamine) and injected IV - “T’s and blues” cheaper alternative than heroin
 - a new formulation was made to add naloxone 0.5mg to the 50 mg tablet in 1983 to give abusers a withdrawal instead of a high
- Talwin (pentazocine) 30mg/mL injection discontinued April 16, 2018 due to abuse

(Carlson, 1983; Optum RX, 2018)

Talwin - mixed agonist/antagonist

- **Indications:** • the management of pain severe enough to require an opioid analgesic and for which alternative treatments are inadequate. • for use as a preoperative or preanesthetic medication and as a supplement to surgical anesthesia. (1) **Limitations of Use (1)** Because of the risks of addiction, abuse, and misuse with opioids, even at recommended doses, reserve TALWIN for use in patients for whom alternative treatment options [e.g., non-opioid analgesics or opioid combination products]: • Have not been tolerated, or are not expected to be tolerated, • Have not provided adequate analgesia, or are not expected to provide adequate analgesia
- **Dosage:** Use the lowest effective dosage for the shortest duration consistent with individual patient treatment goals. (2.1) • Individualize dosing based on the severity of pain, patient response, prior analgesic experience, and risk factors for addiction, abuse, and misuse. (2.1)

Talwin - mixed agonist/antagonist

- **Contraindications:**
- Significant respiratory depression. (4)
- • Acute or severe bronchial asthma in an unmonitored setting or in absence of resuscitative equipment. (4)
- • Known or suspected gastrointestinal obstruction, including paralytic ileus. (4)
- • Hypersensitivity to pentazocine. (4)

Talwin - mixed agonist/antagonist

- **Warnings and Precautions:** Life-Threatening Respiratory Depression in Patients with Chronic Pulmonary Disease or in Elderly, Cachectic, or Debilitated Patients: Monitor closely, particularly during initiation and titration. (5.5)
- **Adrenal Insufficiency:** If diagnosed, treat with physiologic replacement of corticosteroids, and wean patient off of the opioid. (5.6)
- **Severe Hypotension:** Monitor during dosage initiation and titration. Avoid use of TALWIN in patients with circulatory shock. (5.7)
- **Risks of Use in Patients with Increased Intracranial Pressure, Brain Tumors, Head Injury, or Impaired Consciousness:** Monitor for sedation and respiratory depression. Avoid use of TALWIN in patients with impaired consciousness or coma. (5.8)

Talwin - mixed agonist/antagonist

- **Drug interactions:** Serotonergic Drugs: Concomitant use may result in serotonin syndrome. Discontinue TALWIN if serotonin syndrome is suspected. (7) • Mixed Agonist/Antagonist and Partial Agonist Opioid Analgesics: Avoid use with TALWIN because they may reduce analgesic effect of TALWIN or precipitate withdrawal symptoms. (7)
- **Use is Specific Populations:** Pregnancy: May cause fetal harm. (8.1) Lactation: TALWIN has been detected in human milk. Closely monitor infants of nursing women receiving TALWIN. (8.2)
- Most common adverse reactions were nausea, dizziness or lightheadedness, vomiting, and euphoria. (6) To report SUSPECTED ADVERSE REACTIONS, contact Hospira, Inc. at 1-800-441-4100, or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

Tramadol- opioid agonist & monoamine reuptake inhibitor

- **Indications:** • the management of pain severe enough to require an opioid analgesic and for which alternative treatments are inadequate (1)
Limitations of Use (1) Because of the risks of addiction, abuse, and misuse with opioids, even at recommended doses, reserve Ultram for use in patients for whom alternative treatment options [e.g., non-opioid analgesics or opioid combination products]: • Have not been tolerated, or are not expected to be tolerated, • Have not provided adequate analgesia, or are not expected to provide adequate analgesia
- **Dosage:** Use the lowest effective dosage for the shortest duration consistent with individual patient treatment goals. (2.1) • Individualize dosing based on the severity of pain, patient response, prior analgesic experience, and risk factors for addiction, abuse, and misuse. (2.1) **Severe Renal Impairment:** increase the ULTRAM dosing interval to 12 hours, and limit maximum daily dose to 200 mg (2.3). • **Severe hepatic impairment:** Recommended dose is 50 mg every 12 hours.

Tramadol

- **Contraindications:** Children younger than 12 years of age (4).
- • Postoperative management in children younger than 18 years of age following tonsillectomy and/or adenoidectomy (4).
- • Significant respiratory depression (4).
- • Acute or severe bronchial asthma in an unmonitored setting or in the absence of resuscitative equipment (4).
- • Known or suspected gastrointestinal obstruction, including paralytic ileus (4).
- • Hypersensitivity to tramadol, any other component of this product or opioids (4).
- • Concurrent use of monoamine oxidase inhibitors (MAOIs) or use of MAOIs within the last 14 days (4).

Tramadol

- **Warnings and Precautions: Serotonin Syndrome:** May be life-threatening. Can occur with use of tramadol alone, with concomitant use of serotonergic drugs, with drugs that impair metabolism of serotonin or tramadol (5.8).
- **Risk of Seizure:** Can occur at the recommended dose of tramadol. Concomitant use with other drugs may increase seizure risk. Risk may increase in patients with epilepsy, a history of seizures, and in patients with a recognized risk for seizures (5.9).
- **Risk of Suicide:** Do not prescribe for suicidal or addiction-prone patients (5.10).
- **Adrenal Insufficiency:** If diagnosed, treat with physiologic replacement of corticosteroids, and wean patient off the opioid (5.11).
- **Life-Threatening Respiratory Depression in Patients with Chronic Pulmonary Disease or in Elderly, Cachectic, or Debilitated Patients:** Monitor closely, particularly during initiation and titration (5.12).
- **Severe Hypotension:** Monitor during dosage initiation and titration. Avoid use of ULTRAM in patients with circulatory shock (5.13).
- **Risks of Use in Patients with Increased Intracranial Pressure, Brain Tumors, Head Injury, or Impaired Consciousness:** Monitor for sedation and respiratory depression. Avoid use of ULTRAM in patients with impaired consciousness or coma (5.14).

Tramadol

- **Drug interactions:** Mixed Agonist/Antagonist and Partial Agonist Opioid Analgesics: Avoid use with ULTRAM because they may reduce analgesic effect of ULTRAM or precipitate withdrawal symptoms (7)
- **Use is Specific Populations:** Pregnancy: May cause fetal harm (8.1). Lactation: Breastfeeding not recommended (8.2).
- Most common incidence of treatment-emergent adverse events ($\geq 15.0\%$) in patients from clinical trials were dizziness/vertigo, nausea, constipation, headache, somnolence, vomiting and pruritus (6). To report SUSPECTED ADVERSE REACTIONS, contact Janssen Pharmaceuticals, Inc at 1-800-JANSSEN (1-800-526-7736) or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

Quiz Questions

- This is an opioid agonist

Quiz Questions

- This is an opioid agonist and antagonist

Quiz Questions

These drugs occupy receptors and activate them

Quiz Questions

- These drugs occupy receptors but do NOT activate them

Quiz Questions

This opioid is NOT recommended in children

Quiz Questions

- This opioid increases seizure risk

Quiz Questions

- This opioid carry risk for addiction

Quiz Questions

- This opioid receptor increases your risk of dependence and addiction

Quiz Questions

- This is how long can an APRN RX opioids for acute pain

Quiz Questions

- This is when should you check the PMP aware when RX scheduled medications

Terms concerning Addiction

- **Tolerance:** means you become used to the medication and need to take more for the same benefit (HTN treatment- need to increase dose)
- **Physical dependence:** means you have symptoms of withdrawal when the medication is stopped (given Narcan for opioid OD –have diaphoresis, anxiety, GI distress, tachycardia, restlessness)
- **Pseudo-addiction:** means taking a medication for the intended use but the condition is undertreated or not effectively managed (acute surgical pain in addition to chronic pain treatment- takes more pain medication)
- **Addiction:** means taking the medication for and unintended benefit (taking opioid for chronic back pain to ease your emotional distress or “zone out” from life)

Definition of Addiction from ASAM

- Addiction is 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.

OUD treatment Medications

- Medications for OUD can help reduce withdrawal symptoms, like cravings. The FDA has approved three medications for OUD:
- Buprenorphine helps reduce cravings and withdrawal symptoms. It may blunt the euphoric effects of opioids.
- Methadone has the same effects as buprenorphine- APRNs cannot RX sch. II
- Naltrexone blocks the euphoric and sedative effects of opioids.
- Buprenorphine and methadone are both opioids themselves. But because of how they bind to opioid receptors, they offer some protection against overdose from other opioids while also minimizing withdrawal symptoms.

APRN scope of practice: Treating Opioid Use Disorder

- Oklahoma APRN with RX authority can prescribe Buprenorphine and Naloxone and combinations for treatment of Opioid Use Disorder
- III. Exceptions (to 7-day RX) : The Uniform Controlled and Dangerous Substance Act does contain exception language for patients in active treatment for cancer, receiving hospice care or palliative care, or who are residents of a long-term care facility, or receiving medications for treatment of substance abuse or opioid dependence.
- Oklahoma Board of Nursing. (2023). <https://oklahoma.gov/content/dam/ok/en/nursing/documents/opioiddiscgl.pdf>

Opioid Use Disorder: Diagnostic Criteria

- Taking opioids in larger amounts or over a longer period of time than intended
- Having a persistent desire or unsuccessful attempts to reduce or control opioid use
- Spending excess time obtaining, using, or recovering from opioids
- Craving opioids
- Continued opioid use causing inability to fulfill work, home, or school responsibilities
- Continuing opioid use despite having persistent social or interpersonal problems
- Lack of involvement in social, occupational, or recreational activities
- Using opioids in physically hazardous situations
- Continuing opioid use in spite of awareness of persistent physical or psychological problems
- Exhibiting tolerance symptoms, as defined by either of the following:*
- a. A need for markedly increased amounts of opioids to achieve intoxication or desired effect, or
- b. Markedly diminished effect with continued use of the same amount of an opioid.
- Exhibiting withdrawal symptoms, as manifested by either of the following:*
- a. The characteristic opioid withdrawal syndrome, or
- b. Opioids (or a closely related substance) are taken to relieve or avoid withdrawal symptoms.

Severity Scale (OUD = 2/ 11 defined criteria occurring within 1 year)

Mild: 2-3 criteria

Moderate: 4-5 criteria

Severe: greater than or equal 6 criteria

<https://www.cdc.gov/opioids/healthcare-professionals/prescribing/pdf/Opioid-Use-Disorder-Checklist.pdf>

Specify if:

In early remission: After full criteria for opioid use disorder were previously met, none of the criteria for opioid use disorder have been met for at least 3 months but for less than 12 months (with the exception that Criterion 4, “Craving, or a strong desire or urge to use opioids,” may be met).

In sustained remission: After full criteria for opioid use disorder were previously met, none of the criteria for opioid use disorder have been met at any time during a period of 12 months or longer (with the exception that Criterion 4, “Craving, or a strong desire or urge to use opioids,” may be met).

On maintenance therapy: This additional specifier is used if the individual is taking a prescribed agonist medication, such as methadone or buprenorphine, and none of the criteria for opioid use disorder have been met for that class of medication (except tolerance to, or withdrawal from, the agonist). This category also applies to those individuals being maintained on a partial agonist, an agonist/antagonist, or a full antagonist such as oral naltrexone or depot naltrexone. In a controlled environment: This additional specifier is used if the individual is in an environment where access to opioids is restricted.

Current severity: **Mild:** Presence of 2–3 symptoms. Code as: F11.10 (ICD-10)

Moderate: Presence of 4–5 symptoms. Code as: F11.20 (ICD-10)

Severe: Presence of 6 or more symptoms. Code as: F11.20 (ICD-10)

Buprenorphine (Suboxone) Treatment Agreement

1. To keep all my scheduled appointments or change the appointment in advance, except in case of emergency. _
2. I agree not to sell, share, or give any of my medication to another person. _____
3. I agree not to deal or buy drugs at the clinic, or in its parking lots or property. _____
4. I agree that my medication/prescription will only be given to me at my regular office visits. A missed visit may result in my not being able to get my medication/prescription until the next scheduled visit. _____
5. I agree that the medication I receive is my responsibility and I agree to keep it safe and secure. I agree that lost/ stolen medication will not be replaced regardless of why it was lost/ stolen. _____
6. I agree not to obtain buprenorphine (Suboxone), other opioids, or benzodiazepines (for example, lorazepam, diazepam/Valium, clonazepam, alprazolam/Xanax, etc.) from any other healthcare providers, pharmacies, or other sources without telling my treating physician. _____
7. I understand that mixing buprenorphine with other medications, especially benzodiazepines (as in #6) can be dangerous. I understand that several deaths have occurred among persons mixing buprenorphine (Suboxone) and benzodiazepines. There is also a risk of overdose death from mixing buprenorphine (Suboxone) with large amounts of alcohol or other types of sedatives, such as barbiturates. _____
8. I understand that buprenorphine (Suboxone) by itself is not enough treatment for my addiction, and I agree to participate in counseling/support groups as discussed and agreed upon with my healthcare provider. I understand that if my attendance at these groups is not confirmed then I will not be able to continue to receive buprenorphine (Suboxone). _____

Buprenorphine (Suboxone) Treatment Agreement

9. I agree to provide random urine samples for drug testing and have my healthcare provider test my blood alcohol level whenever I am asked to do so. _____

10. I agree that my goal is to stop using addictive drugs, and that I will work to stop using all addictive and illegal drugs during my treatment with buprenorphine (Suboxone). _____

11. I agree that violating this agreement may result in my no longer receiving treatment with buprenorphine (Suboxone). _____

12. I understand that if I decrease my use of opioids (stop using heroin, pain pills) or substitute buprenorphine for these drugs, I have a higher risk of dying from an overdose if I relapse. I understand that if I relapse, I need to use small doses of opioids until I learn what my body can tolerate. _____

13. I understand that if I relapse when I have been taking buprenorphine, at first I may not get high from the other opioids because buprenorphine blocks their effect. I understand that if I keep using larger and larger amounts to try to get high, I could stop breathing and die. _____

14. I understand that buprenorphine (Suboxone) is extremely dangerous for infants and children. They can stop breathing and die after taking in tiny amounts of this medication. I agree to keep my supply of this medication locked securely away from others, especially infants and children. _____

Name: _____ DOB: _____

I consent to the above terms and to begin treatment with buprenorphine (Suboxone).

Patient signature _____ Date _____

Provider name & signature _____ Date _____

Buprenorphine sublingual tablets (Subutex)

- **Indications:** SUBUTEX, contains buprenorphine, a partial opioid agonist, and is indicated for the treatment of opioid dependence and is preferred for induction. (1) SUBUTEX should be used as part of a complete treatment plan that includes counseling and psychosocial support. (1) SUBOXONE[®] (buprenorphine and naloxone) sublingual film or SUBOXONE[®] (buprenorphine and naloxone) sublingual tablet is generally initiated after two days of SUBUTEX titration.
- **Dosage:** Sublingual tablet: buprenorphine 2 mg and buprenorphine 8 mg.
- SUBUTEX must be administered whole. Do not cut, chew, or swallow SUBUTEX

Buprenorphine sublingual tablets (Subutex)

- **Contraindications:** Hypersensitivity to buprenorphine
- **Warnings and Precautions:**
 - **Addiction, Abuse, and Misuse:** Buprenorphine can be abused in a similar manner to other opioids. Monitor patients for conditions indicative of diversion or progression of opioid dependence and addictive behaviors. Multiple refills should not be prescribed early in treatment or without appropriate patient follow-up visits. (5.1)
 - **Respiratory Depression:** Life-threatening respiratory depression and death have occurred in association with buprenorphine use. Warn patients of the potential danger of self-administration of benzodiazepines or other CNS depressants while under treatment with SUBUTEX. (5.2, 5.3)
 - **Unintentional Pediatric Exposure:** Store SUBUTEX safely out of the sight and reach of children. Buprenorphine can cause severe, possibly fatal, respiratory depression in children. (5.4)
 - **Neonatal Opioid Withdrawal Syndrome:** Neonatal opioid withdrawal syndrome (NOWS) is an expected and treatable outcome of prolonged use of opioids during pregnancy. (5.5)

Buprenorphine sublingual tablets (Subutex)

- **Warnings and Precautions:** • Adrenal Insufficiency: If diagnosed, treat with physiologic replacement of corticosteroids, and wean patient off of the opioid. (5.6)
- • Risk of Opioid Withdrawal with Abrupt Discontinuation: If treatment is temporarily interrupted or discontinued, monitor patients for withdrawal and treat appropriately. (5.7)
- • Risk of Hepatitis, Hepatic Events: Monitor liver function tests prior to initiation and during treatment and evaluate suspected hepatic events. (5.8)
- • Precipitation of Opioid Withdrawal Signs and Symptoms: An opioid withdrawal syndrome is likely to occur with parenteral misuse of SUBUTEX by individuals physically dependent on full opioid agonists, or by sublingual administration before the agonist effects of other opioids have subsided. (5.10)
- • Risk of Overdose in Opioid-Naïve Patients: SUBUTEX is NOT appropriate as an analgesic. There have been reported deaths of opioid naïve individuals who received a 2 mg sublingual dose of buprenorphine. (5.11)

Buprenorphine sublingual tablets (Subutex)

- **Drug interactions:**
 - **Benzodiazepines:** Use caution in prescribing SUBUTEX for patients receiving benzodiazepines or other CNS depressants and warn patients against concomitant self-administration/misuse. (7)
 - **CYP_{3A4} Inhibitors and Inducers:** Monitor patients starting or ending CYP_{3A4} inhibitors or inducers for potential over- or under- dosing. (7)
 - **Antiretrovirals:** Patients who are on chronic buprenorphine treatment should have their dose monitored if NNRTIs are added to their treatment regimen. Monitor patients taking buprenorphine and atazanavir with and without ritonavir, and reduce dose of buprenorphine if warranted. (7)
 - **Serotonergic Drugs:** Concomitant use may result in serotonin syndrome. Discontinue SUBUTEX if serotonin syndrome is suspected. (7)
- **Use in Specific Populations:**
 - **Lactation:** Buprenorphine passes into mother's milk. (8.2)
 - **Geriatric Patients:** Monitor for sedation or respiratory depression. (8.5)
 - **Severe Hepatic Impairment:** Consider reducing the starting and titration incremental dose by half and monitor for signs and symptoms of toxicity or overdose. (8.6)

Buprenorphine/naloxone sublingual tablet *same for film

- **Indications:** SUBOXONE sublingual tablet contains buprenorphine, a partial opioid agonist, and naloxone, an opioid antagonist, and is indicated for the maintenance treatment of opioid dependence. (1) SUBOXONE sublingual tablet should be used as part of a complete treatment plan that includes counseling and psychosocial support. (1)
- **Dosage:** Sublingual tablet: • buprenorphine 2 mg/ naloxone 0.5 mg and
- buprenorphine 8 mg/ naloxone 2 mg. (3)

Buprenorphine/naloxone sublingual tablet *same for film

- **Contraindications:** Hypersensitivity to buprenorphine or naloxone.
- **Warnings and Precautions:** Addiction, Abuse, and Misuse: Buprenorphine can be abused in a similar manner to other opioids. Clinical monitoring appropriate to the patient's level of stability is essential. Monitor patients for conditions indicative of diversion or progression of opioid dependence and addictive behaviors. Multiple refills should not be prescribed early in treatment or without appropriate patient follow-up visits. (5.1)
- **Respiratory Depression:** Life-threatening respiratory depression and death have occurred in association with buprenorphine use. Warn patients of the potential danger of self-administration of benzodiazepine or other CNS depressants while under treatment with SUBOXONE sublingual tablets. (5.2, 5.3)
- **Unintentional Pediatric Exposure:** Store SUBOXONE sublingual tablet safely out of the sight and reach of children. Buprenorphine can cause severe, possibly fatal, respiratory depression in children. (5.4)
- **Neonatal Opioid Withdrawal Syndrome:** Neonatal opioid withdrawal syndrome (NOWS) is an expected and treatable outcome of prolonged use of opioids during pregnancy. (5.5)

Buprenorphine/naloxone sublingual tablet *same for film

- Warnings and Precautions:**
- **Adrenal Insufficiency:** If diagnosed, treat with physiologic replacement of corticosteroids, and wean patient off of the opioid. (5.6)
 - **Risk of Opioid Withdrawal with Abrupt Discontinuation:** If treatment is temporarily interrupted or discontinued, monitor patients for withdrawal and treat appropriately. (5.7)
 - **Risk of Hepatitis, Hepatic Events:** Monitor liver function tests prior to initiation and during treatment and evaluate suspected hepatic events. (5.8)
 - **Precipitation of Opioid Withdrawal Signs and Symptoms:** An opioid withdrawal syndrome is likely to occur with parenteral misuse of SUBOXONE sublingual tablet by individuals physically dependent on full opioid agonists, or by sublingual administration before the agonist effects of other opioids have subsided. (5.10)
 - **Risk of Overdose in Opioid-Naïve Patients:** SUBOXONE sublingual tablet is not appropriate as an analgesic. There have been reported deaths of opioid naïve individuals who received a 2 mg sublingual dose. (5.11)

Buprenorphine/naloxone sublingual tablet *same for film

- **Drug interactions:** Benzodiazepines: Use caution in prescribing SUBOXONE sublingual tablet for patients receiving benzodiazepines or other CNS depressants and warn patients against concomitant self-administration/misuse. (7)
- • CYP_{3A4} Inhibitors and Inducers: Monitor patients starting or ending CYP_{3A4} inhibitors or inducers for potential over- or under- dosing. (7)
- • Antiretrovirals: Patients who are on chronic buprenorphine treatment should have their dose monitored if NNRTIs are added to their treatment regimen. Monitor patients taking buprenorphine and atazanavir with and without ritonavir, and reduce dose of buprenorphine if warranted (7)
- • Serotonergic Drugs: Concomitant use may result in serotonin syndrome. Discontinue SUBOXONE sublingual tablet if serotonin syndrome is suspected. (7)
- **Use in Specific Populations:** Lactation: Buprenorphine passes into mother's milk. (8.2)
- • Geriatric Patients: Monitor for sedation and respiratory depression. (8.5)
- • Moderate and Severe Hepatic Impairment: Buprenorphine/naloxone products are not recommended in patients with severe hepatic impairment and may not be appropriate for patients with moderate hepatic impairment. (8.6)

Another option: Severe OUD- Brixadi (buprenorphine) extended-release

- injection 50mg/mL weekly
- monthly 356mg/mL
- Severe Opioid Use Disorder and only certified providers to administer through Brixadi REMS requirements
- <https://www.brixadihcp.com/about-brixadi/>

ASAM: Treatment Guidelines for Opioid Use Disorder

- Part 5: Buprenorphine 1. Buprenorphine is a recommended treatment for patients with opioid use disorder, who are able to give informed consent and have no specific contraindication for this treatment.
- 2. For patients who are currently opioid dependent, buprenorphine should not be initiated until there are objective signs of opioid withdrawal to reduce the risk of precipitated withdrawal.
- 3. Once objective signs of withdrawal are observed, initiation of buprenorphine should start with a dose of 2–4 mg. Dosages may be increased in increments of 2–8 mg

ASAM: Treatment Guidelines for Opioid Use Disorder

- 4. The setting for initiation of buprenorphine should be carefully considered. Both office-based and home-based initiation are considered safe and effective when starting buprenorphine treatment. Clinical judgement should be used to determine the most appropriate setting for a given patient and may include consideration of the patient's past experience with buprenorphine and assessment of their ability to manage initiation at home.
- 5. Following initiation, buprenorphine dose should be titrated to alleviate symptoms. To be effective, buprenorphine dose should be sufficient to enable patients to discontinue illicit opioid use. Evidence suggests that 16 mg per day or more may be more effective than lower doses. There is limited evidence regarding the relative efficacy of doses higher than 24 mg per day, and the use of higher doses may increase the risk of diversion.¹⁶

ASAM: Treatment Guidelines for Opioid Use Disorder

- **Part 7: Psychosocial Treatment in Conjunction with Medications for the Treatment of Opioid Use Disorder** 1. Patients' psychosocial needs should be assessed, and patients should be offered or referred to psychosocial treatment, based on their individual needs, in conjunction with any pharmacotherapy for the treatment of, or prevention of relapse to, opioid use disorder. However, a patient's decision to decline psychosocial treatment or the absence of available psychosocial treatment should not preclude or delay pharmacological treatment of opioid use disorder, with appropriate medication management. Motivational interviewing or enhancement can be used to encourage patients to engage in psychosocial treatment services appropriate for addressing their individual needs.

ASAM: Treatment Guidelines for Opioid Use Disorder

- Part 7 cont: 2. Treatment planning should include collaboration with qualified behavioral healthcare providers to determine the optimal type and intensity of psychosocial treatment and for renegotiation of the treatment plan for circumstances in which patients do not adhere to recommended plans for, or referrals to, psychosocial treatment.

ASAM: Treatment Guidelines for Opioid Use Disorder

- 8. Clinicians should take steps to reduce the chance of buprenorphine diversion. Recommended strategies may include frequent office visits (e.g., weekly in early treatment); drug testing, including testing for buprenorphine and metabolites; and recall visits for medication counts. Refer to ASAM's Sample Diversion Control Policy for additional strategies to reduce the risk for diversion. 16
- 9. Drug testing should be used to monitor patients for adherence to buprenorphine and use of illicit and controlled substances. For additional guidance see The ASAM Appropriate Use of Drug Testing in Clinical Addiction Medicine. 14

Labs: Urinalysis confirmation for prescribed drug(s) & metabolite(s) and illegal substances

Tested Drugs and Metabolites

<u>Drug/Metabolite</u>	<u>Cutoff (ng/mL)</u>	<u>Drug/Metabolite</u>	<u>Cutoff (ng/mL)</u>	<u>Drug/Metabolite</u>	<u>Cutoff (ng/mL)</u>
Amphetamine	250	7-Aminoclonazepam	50	Alpha-Hydroxyalprazolam	50
Alprazolam	50	Diazepam	50	Lorazepam	50
Midazolam	50	Nordiazepam	50	Oxazepam	50
Temazepam	50	Carisoprodol	100	Meprobamate	100
EDDP	100	Methadone	100	6-Acetylmorphine	10
Benzoyllecgonine	100	Methamphetamine	250	Phencyclidine	25
Methylphenidate	100	Ritalinic Acid	100	Buprenorphine	40
Codeine	75	Fentanyl	2	Hydrocodone	75
Hydromorphone	75	Meperidine	100	Morphine	75
Norbuprenorphine	50	Norfentanyl	10	Normeperidine	100
Oxycodone	75	Oxymorphone	75	Tapentadol	75
Tramadol	100	Amitriptyline	100	Desipramine	100

PRE-SCREENING RESULTS

<u>Prescreen Assay</u>	<u>Cutoff(ng/mL)</u>	<u>Result</u>	<u>Prescreen Assay</u>	<u>Cutoff(ng/mL)</u>	<u>Result</u>	<u>Prescreen Assay</u>	<u>Cutoff(ng/mL)</u>	<u>Result</u>
(Screen) Amphetamine	1000	NEGATIVE	(Screen) Barbiturates	300	NEGATIVE	(Screen) Benzodiazepines	300	NEGATIVE
(Screen) Buprenorphine	10	NEGATIVE	(Screen) Cocaine	300	NEGATIVE	(Screen) Methadone	300	NEGATIVE
(Screen) Methamphetamine	1000	NEGATIVE	(Screen) Opiates	2000	POSITIVE	(Screen) Oxycodone	100	NEGATIVE

Labs: Urinalysis confirmation for prescribed drug(s) & metabolite(s) and illegal substances

Drug/Metabolite	Interp/Remark	Concentration(ng/mL)
Benzoyllecgonine	POSITIVE	112.6
Hydrocodone	POSITIVE - Consistent with meds	3206.0
Hydromorphone	POSITIVE - MB: Hydrocodone	2338.5
Amitriptyline	NEGATIVE - Not consistent with meds	<100

All drugs in the toxicology panel, other than results indicated above, are negative.

Tested Drugs and Metabolites

<u>Drug/Metabolite</u>	<u>Cutoff (ng/mL)</u>	<u>Drug/Metabolite</u>	<u>Cutoff (ng/mL)</u>	<u>Drug/Metabolite</u>	<u>Cutoff (ng/mL)</u>
Amphetamine	250	7-Aminoclonazepam	50	Alpha-Hydroxyalprazolam	50
Alprazolam	50	Diazepam	50	Lorazepam	50
Midazolam	50	Nordiazepam	50	Oxazepam	50
Temazepam	50	Carisoprodol	100	Meprobamate	100
EDDP	100	Methadone	100	6-Acetylmorphine	10
Benzoyllecgonine	100	Methamphetamine	250	Phencyclidine	25
Methylphenidate	100	Ritalinic Acid	100	Buprenorphine	40
Codeine	75	Fentanyl	2	Hydrocodone	75
Hydromorphone	75	Meperidine	100	Morphine	75
Norbuprenorphine	50	Norfentanyl	10	Normeperidine	100
Oxycodone	75	Oxymorphone	75	Tapentadol	75
Tramadol	100	Amitriptyline	100	Desipramine	100

PRE-SCREENING RESULTS

<u>Prescreen Assay</u>	<u>Cutoff(ng/mL)</u>	<u>Result</u>	<u>Prescreen Assay</u>	<u>Cutoff(ng/mL)</u>	<u>Result</u>	<u>Prescreen Assay</u>	<u>Cutoff(ng/mL)</u>	<u>Result</u>
(Screen) Amphetamine	1000	NEGATIVE	(Screen) Barbiturates	300	NEGATIVE	(Screen) Benzodiazepines	300	NEGATIVE
(Screen) Buprenorphine	10	NEGATIVE	(Screen) Cocaine	300	NEGATIVE	(Screen) Methadone	300	NEGATIVE
(Screen) Methamphetamine	1000	NEGATIVE	(Screen) Opiates	2000	POSITIVE	(Screen) Oxycodone	100	NEGATIVE

Labs: Urinalysis confirmation RX drug(s)/illegal sub. & metabolite(s)

Tests: (5) Illegal Narcotics (ILLEGAL)

Benzoylcegonine	[H] 112.6 ng/mL	0.0-100.0	*15
6-Acetylmorphine	NEGATIVE	10	*16
Phencyclidine	NEGATIVE	25	*17
Methamphetamine	NEGATIVE	100	*18

Tests: (6) Methylphenidate (METHYL)

Methylphenidate	NEGATIVE	100	*19
Ritalinic Acid	NEGATIVE	100	*20

Tests: (7) Opiates/Opioids & Synthetics (OPIOIDS)

Codeine	NEGATIVE	75	*21
Hydrocodone	[H] 3206.0 ng/mL	0.0-75.0	*22
Hydromorphone	[H] 2338.5 ng/mL	0.0-75.0	*23
Morphine	NEGATIVE	75	*24
Oxycodone	NEGATIVE	75	*25
Oxymorphone	NEGATIVE	75	*26
Tapentadol	NEGATIVE	75	*27
Buprenorphine	NEGATIVE	40	*28
Fentanyl	NEGATIVE	2	*29
Norbuprenorphine	NEGATIVE	50	*30
Norfentanyl	NEGATIVE	10	*31
Normeperidine	NEGATIVE	100	*32
Tramadol	NEGATIVE	100	*33

Tests: (1) Amphetamines (AMPH)

Order Note: I WOULD LIKE TO CONFIRM POSITIVE OR INCONSIS INITIAL SCREEN.

Amphetamine	NEGATIVE	250	*1
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Tests: (2) Benzodiazepines (BENZO)

Alpha-Hydroxyalprazolam	NEGATIVE	50	*2
Alprazolam	NEGATIVE	50	*3
7-Aminoclonazepam	NEGATIVE	50	*4
Diazepam	NEGATIVE	50	*5
Lorazepam	NEGATIVE	50	*6
Midazolam	NEGATIVE	50	*7
Nordiazepam	NEGATIVE	50	*8
Oxazepam	NEGATIVE	50	*9
Temazepam	NEGATIVE	50	*10

Tests: (3) Carisoprodol (Soma) (CCARIS)

Carisoprodol	NEGATIVE	100	*11
Meprobamate	NEGATIVE	100	*12

Tests: (4) Methadone (CMETD)

Methadone	NEGATIVE	100	*13
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ASAM: Treatment Guidelines for Opioid Use Disorder

- 11. When considering a transition from buprenorphine to naltrexone, providers should note that 7–14 days should typically elapse between the last dose of buprenorphine and the start of naltrexone to ensure that the patient is not physically dependent on opioids before starting naltrexone.
- 13. There is no recommended time limit for pharmacological treatment with buprenorphine. Patients who **discontinue** buprenorphine treatment should be made aware of the risks associated with opioid overdose, and especially the increased risk of death if they return to illicit opioid use. Treatment alternatives including methadone (see Part 4) and naltrexone (see Part 6), as well as opioid overdose prevention with naloxone (see part 13) should be discussed with any patient choosing to discontinue treatment.
- 14. Buprenorphine taper and discontinuation is a slow process and close monitoring is recommended. Buprenorphine tapering is generally accomplished over several months. Patients should be encouraged to remain in treatment for ongoing monitoring past the point of discontinuation.

(American Society of Addiction Medicine, 2020, p. 13)

ASAM: Treatment Guidelines for Opioid Use Disorder

- Part 8: Special Populations: Pregnant Women
- 1. The first priority in evaluating pregnant women for opioid use disorder should be to identify emergent or urgent medical conditions that require immediate referral for clinical evaluation.
- 2. Treatment with methadone or buprenorphine is recommended and should be initiated as early as possible during pregnancy.
- 3. Pregnant women who are physically dependent on opioids should receive treatment using methadone or buprenorphine rather than withdrawal management or psychosocial treatment alone.
- 9. Care for pregnant women with opioid use disorder should be comanaged by a clinician experienced in obstetrical care and a clinician experienced in the treatment of opioid use disorder.

ASAM: Treatment Guidelines for Opioid Use Disorder

- Part 9: Special Populations: Individuals with Pain 1. For all patients with pain, it is important that the correct diagnosis is made and that pain is addressed. Alternative treatments including nonopioid medications with pain modulating properties, behavioral approaches, physical therapy, and procedural approaches (e.g., regional anesthesia) should be considered before prescribing opioid medications for pain.
- Narcan or Nalmefene injection reverses opioid overdose and should be prescribed at the time of chronic opioid prescription

Questions?

- Contact Information:
- **Sandi Mellor, DNP, APRN, FNP-BC**
- Clinical Assistant Professor
- Fran and Earl Ziegler College of Nursing
- The University of Oklahoma Health Sciences
- 4502 East 41st Street, #1F07, Tulsa, OK 74135
- (918)660-3966 Sandi-Mellor@ouhsc.edu

References

- American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders (DSM-5), Washington, D.C., October 1, 2020. https://www.rand.org/content/dam/rand/pubs/tools/TLA900/TLA928-1/resources/step-2/ODU/RAND_TLA928-1.diagnostic-checklist_OUD.pdf
- American Society of Addiction Medicine. Definition of Addiction. <https://www.asam.org/quality-care/definition-of-addiction>
- American Society of Addiction Medicine. National Practice Guideline for the Treatment of Opioid Use Disorder 2020 Focused Update. (2020). <https://www.asam.org/quality-care/clinical-guidelines/national-practice-guideline>
- Braeburn Inc. Brixadi (buprenorphine extended-release injection for subcutaneous use). (2023). <https://www.brixadihcp.com/about-brixadi/>
- Carlson, C. (1983). JAMA. 249 (13). <https://jamanetwork.com/journals/jama/article>
- Centers for Disease Control and Prevention. DSMV Diagnostic Criteria of Opioid Use disorder. (2022) <https://www.cdc.gov/opioids/healthcare-professionals/prescribing/pdf/Opioid-Use-Disorder-Checklist.pdf>
- Federal Drug Administration. Drug label: Codeine. (2018). http://www.accessdata.fda.gov/drugsatfda_docs/label/2018
- Federal Drug Administration. Drug label: Talwin. (2018). http://www.accessdata.fda.gov/drugsatfda_docs/label/2018
- Federal Drug Administration. Drug label: Tramadol. (2018). http://www.accessdata.fda.gov/drugsatfda_docs/label/2018
- Federal Drug Administration. Drug label: Suboxone. (2019). https://www.accessdata.fda.gov/drugsatfda_docs/label/2019/020733s024lbl.pdf
- Federal Drug Administration. Drug label: Subutex. (2018). http://www.accessdata.fda.gov/drugsatfda_docs/label/2018
- Healthline.com (n.d.). FDA approved medications to treat Opioid Use Disorder. <https://www.healthline.com/health/substance-use/what-are-opioids#opioid-use-disorder>
- Indian Health Services.gov. https://www.ihs.gov/sites/opioids/themes/responsive2017/display_objects/documents/buprenorphinetreatmentagreement.pdf
- Oklahoma Board of Nursing. (2020). Nursing Practice Act. <https://oklahoma.gov/content/dam/ok/en/nursing/documents/actwp20.pdf>
- Optum RX. Talwin (pentazocine)- Product discontinuation. April 16, 2018. https://professionals.optumrx.com/publications/library/drugwithdrawal_talwin_2018-0417.html

History of treating Opioid and OUD treatment

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- **Oct 2014**- hydrocodone changed to Schedule 2 from 3
- **2020** Oklahoma APRNs could take 24 hr of training to earn X waiver and RX for OUD- but only 30 suboxone pts in 1st yr- then petition to take 100 pts (Tennessee, Wyoming and Oklahoma most restrictive) – had American Psychiatric Nurses Association- free 24 training – collaborating physician also needed to have an X waiver (8hr training for physicians)
- **Dec 2022**, X waiver eliminated for any provider with DEA
- **Fall 2023** all providers renewing DEA must take 8 hr CEU about addiction and opioid RXing