The Conundrum: Pain and Substance Use Disorder

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Objectives

1. Review substance use disorder (SUD)
2. List principles of managing pain in patients with SUD
3. Discuss strategies for preventing relapse and managing diversion

Words Matter: Preferred Language for Talking About Addiction National Institute on Drug Abuse (NIDA) (nih.gov)

Talking About Yourself or Others with Substance Use Disorder

Use...	Instead of...	Because...
•**Person with a substance use disorder**[10] •**Person with an opioid use disorder (OUD) or person with opioid addiction**	•Addict •User •Substance or drug abuser •Junkie	•Using person-first language shows that SUD is an illness. •Using these words shows that a person with a SUD "has" a problem/illness, rather than "is" the problem.[6] •The terms avoid elicit negative associations, punitive attitudes, and individual blame.[6]
•**Person with alcohol use disorder** •**Person who misuses alcohol/engages in unhealthy/hazardous alcohol use**	•Alcoholic •Drunk	
•**Person in recovery or long-term recovery/person who previously used drugs**	•Former addict •Reformed addict	
•**Testing positive (on a drug screen)**	•Dirty •Failing a drug test	•Use medically accurate terminology the same way it would be used for other medical conditions.[8] •These terms may decrease a person's sense of hope and self-efficacy for change.[6]

Words Matter: Preferred Language for Talking About Addiction

National Institute on Drug Abuse (NIDA) (nih.gov)

Talking about Using Substances		
Use...	**Instead of...**	**Because...**
•**Substance use disorder** •**Drug addiction**	•Habit	•"Habit" implies that a person is *choosing* to use substances or can *choose* to stop. This implication is inaccurate.[5] •Describing SUD as a habit makes the illness seem less serious than it is.
•**Use** (for illicit drugs) •**Misuse** (for prescription medications used other than prescribed)	•Abuse	•The term "abuse" was found to have a high association with negative judgments and punishment.[7] •Use outside of the parameters of how medications were prescribed is misuse.

Words Matter: Preferred Language for Talking About Addiction

National Institute on Drug Abuse (NIDA) (nih.gov)

Talking about Recovery and Treatment

Use...	Instead of...	Because...
•Medication treatment for OUD •Medications for OUD •Opioid agonist therapy •Pharmacotherapy •Medication for a substance use disorder	•Opioid substitution •Replacement therapy •Medication-assisted treatment (MAT)	•It is a misconception that medications merely "substitute" one drug or "one addiction" for another.[5] •The term MAT implies that medication should have a supplemental or temporary role in treatment. Using "MOUD" aligns with the way other psychiatric medications are understood (e.g., antidepressants, antipsychotics), as critical tools that are central to a patient's treatment plan.
•Being in remission or recovery •Abstinent from drugs •Not drinking or taking drugs •Testing negative (on a drug screen)	•Clean	•Use of medical terminology (the same way you would for other illnesses) can help reduce stigma.[8]

Substance Use Terminology

Misuse	Use of prescribed medication for purposes other than those intended by the prescriber Chemical coping “copioiding”?
Abuse	Use of medication/drug for non-medical purposes
Aberrant behavior	Medication related behavior that is not adherent to the prescribed plan
Physical Dependence	Pharmacological adaptation to a medication/drug associated with class-specific withdrawal syndrome
Tolerance	Exposure to medication/drug results in diminished effects over time

DSM V Substance Use Disorder (SUD) Criteria

(Adapted)

Criteria	Severity
Pitts S, Shrier LA. Substance abuse screening and brief intervention for adolescents in primary care. Pediatr Ann. 2014;43(10):412	**Designated by the number of symptoms**
Use for a longer period of times then intended	0-1 No diagnosis 2-3 Mild SUD 4-5 Moderate SUD ≥6 Severe SUD
Unsuccessful efforts to cut down or quit	
Extensive time using the drug	
Intensive desire/urge for drug (craving)	
Failure to fulfill major obligations	
Continued use despite social /interpersonal problems	
Activities/hobbies reduced	
Recurrent use in hazardous situations	
Recurrent use despite physical or psychological caused by or worsened by use	
Tolerance	
Withdrawal ·	

Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)

Definition of Addiction

Adopted by the ASAM Board of Directors September 15, 2019

- 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.

Definition of WHO risk drinking levels in the United States

	Average ethanol consumed per day in the past year			
	Men		Women	
	In grams	In U.S. standard drinks	In grams	In U.S. standard drinks
Very high risk	>100	>7.1	>60	>4.3
High risk	>60 to 100	>4.3 to 7.1	>40 to 60	>2.9 to 4.3
Moderate risk	>40 to 60	>2.9 to 4.3	>20 to 40	>1.4 to 2.9
Low risk	1 to 40	1 to 2.9	1 to 20	1 to 1.4

The World Health Organization Risk Drinking Levels
Measure of Alcohol Consumption: Prevalence and Health Correlates in Nationally Representative Surveys of U.S. Adults, 2001–2002 and 2012–2013. Am J Psychiatry (doi: 10.1176/appi.ajp.2020.20050610

AUDIT

Alcohol Use Disorder Identification Test

The Alcohol Use Disorders Identification Test: Self-Report Version

PATIENT: Because alcohol use can affect your health and can interfere with certain medications and treatments, it is important that we ask some questions about your use of alcohol. Your answers will remain confidential so please be honest. Place an X in one box that best describes your answer to each question.

Questions	0	1	2	3	4	
1. How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week	
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more	
3. How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year	
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year	
					Total	

CAGE Questions Adapted to Include both Alcohol and Drug Use (CAGE-AID)

1. Have you ever felt you ought to cut down on your drinking or drug use?
2. Have people annoyed you by criticizing your drinking or drug use?
3. Have you felt bad or guilty about your drinking or drug use?
4. Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover (eye-opener)?

Opioid Risk Tool – OUD (ORT-OUD)

This tool should be administered to patients upon an initial visit prior to beginning or continuing opioid therapy for pain management. A score of 2 or lower indicates low risk for future opioid use disorder; a score of >/= 3 indicates high risk for opioid use disorder.

Mark Each Box That Applies	Yes	No
Family history of substance abuse		
Alcohol	1	0
Illegal drugs	1	0
Rx drugs	1	0
Personal history of substance abuse		
Alcohol	1	0
Illegal drugs	1	0
Rx drugs	1	0
Age between 16-45 years	1	0
Psychological disease		
ADD, OCD, bipolar, schizophrenia	1	0
Depression	1	0
Scoring total		

https://nida.nih.gov/nidamed-medical-health-professionals/screening-tools-resources/opioid-risk-tool-oud-ort-oud

The Drug Abuse Screen Test (DAST-10)

https://cde.drugabuse.gov/sites/nida_cde/files/DrugAbuseScreeningTest_2014Mar24.pdf

These questions refer to the past 12 months		No	Yes
1	Have you used drugs other than those required for medical reasons?	0	1
2	Do you abuse more than one drug at a time?	0	1
3	Are you always able to stop using drugs when you want to? (If never use drugs, answer "Yes".	0	1
4	Have you had "blackouts" or "flashbacks" as a result of drug use?	0	1
5	Do you ever feel bad or guilty about your drug use? If never use drugs, choose "No".	0	1
6	Does your spouse (or parents) ever complain about your involvement with drugs?	0	1
7	Have you neglected your family because of your use of drugs?	0	1
8	Have you engaged in illegal activities in order to obtain drugs?	0	1
9	Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?	0	1
10	Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)?	0	1

0: No problems reported

1-2: Low level Monitor, reassess at a later date

3-5: Moderate level Further investigation

6-8: Substantial level Intensive assessment

9-10: Severe level Intensive assessment

Medications for Alcohol Use Disorder (MAUD)

	Disulfiram	Naltrexone oral and extended release injectable formulations	Acamprosate delayed-release tablets
Frequency of Administration	Daily	Daily (oral) or monthly (extended-release injectable)	Three times per day
Principal Action	**When** taken in combination with alcohol, causes a significant physical reaction, involving nausea/vomiting, flushing, and heart palpitations. The knowledge that such reactions are likely if alcohol is consumed acts as a deterrent to drinking. **Given** sufficient amounts of alcohol in the patient's system, more severe reactions may occur, such as respiratory depression, cardiovascular collapse, arrhythmias, myocardial infarction, acute congestive heart failure, unconsciousness, convulsions, and death.	**Blocks** opiate receptors that are involved in the rewarding effects of drinking and craving for alcohol. **Extended-release** injectable naltrexone is administered every 4 weeks, thereby minimizing opportunities for nonadherence, as compared with daily oral ingestion. The monthly injection also produces a more consistent and predictable blood level of the drug, because the depot injection bypasses first-pass metabolism.	**Is** thought to reduce symptoms of protracted abstinence by counteracting the imbalance between the glutamatergic and GABAergic systems associated with chronic alcohol exposure and alcohol withdrawal.
Clinical Uses/Ideal Candidates	**Candidates** include patients dependent on alcohol who have completed alcohol withdrawal. Ideally, candidates are committed to abstinence and willing to take disulfiram under the supervision of a family member or treatment program.	**Oral** naltrexone and extended-release injectable naltrexone are indicated for the treatment of alcohol dependence in patients who can abstain from alcohol in an outpatient setting before the initiation of treatment. Naltrexone has not been shown to be effective in patients who are drinking at treatment initiation. **Both** formulations may have the greatest benefit in patients who can discontinue drinking on their own for several days before treatment initiation. **Extended-release** injectable naltrexone is also indicated for the prevention of relapse to opioid dependence following detoxification.	**Acamprosate** is indicated for the maintenance of abstinence in patients who are dependent on alcohol and are abstinent at treatment initiation. **The** efficacy of acamprosate in promoting abstinence has not been demonstrated in subjects who have not completed detoxification or who have not achieved alcohol abstinence before beginning treatment.

Medications for Alcohol Use Disorder (MAUD)

	Disulfiram	Naltrexone oral and extended release injectable formulations	Acamprosate delayed-release tablets
Contraindications	**Contraindicated** in the presence of severe myocardial disease or coronary occlusion, psychoses, pregnancy, and in those with high levels of impulsivity, suicidality, and hypersensitivity to disulfiram or to other thiuram derivatives used in pesticides and rubber vulcanization. **Patients** who are taking or have recently taken metronidazole, paraldehyde, alcohol, or alcohol-containing preparations (e.g., cough syrups, tonics) should not be given disulfiram. **Disulfiram** labeling also includes several important precautions regarding drug–drug interactions. See the package insert for specific contraindications.	**Contraindicated** in patients receiving opioid analgesics and those receiving long-term opioid therapy or anticipating a need for opioids (e.g., surgery), because it could precipitate a severe opioid withdrawal or block opioid analgesia; patients currently dependent on opioids, including those being maintained on opioid agonists such as methadone or partial agonists such as buprenorphine; patients in acute opioid withdrawal; patients who have failed the naloxone challenge test or whose urine tests positive for opioids. **Contraindicated** in patients with a history of sensitivity to polylactide-co-glycolide, carboxymethyl cellulose, or any components of the diluent used for the injectable medication. **It** should not be given to patients whose body mass precludes intramuscular (IM) injection with the 2-inch needle provided. Inadvertent subcutaneous injection may cause a severe injection-site reaction. **Although** not in current labeling, the consensus of the panel is that use should be avoided in patients with serum aminotransferase levels greater than five times the upper limit of normal, except where the benefits outweigh the risks.	**Contraindicated** in patients with severe renal impairment and in those who have a known hypersensitivity to the drug or its components.

Medications for Alcohol Use Disorder (MAUD)

	Disulfiram	Naltrexone oral and extended release injectable formulations	Acamprosate delayed-release tablets
Warnings	**Use** with caution in patients with heart disease, diabetes, hypothyroidism, epilepsy, cerebral damage, chronic or acute nephritis, acute hepatitis or other hepatic diseases, and in patients older than 60. **Hepatic** toxicity (including hepatic failure resulting in liver transplantation or death) has been infrequently reported. Severe and sometimes fatal hepatitis associated with disulfiram may develop after many months of therapy. Hepatic toxicity has occurred in patients with or without a history of abnormal liver function. **Patients** should be advised to immediately notify their physician of any early symptoms of hepatitis, including fatigue, weakness, malaise, anorexia, nausea, vomiting, jaundice, or dark urine. **Liver** function tests (taken at baseline and 10–14 days later) are suggested to detect any hepatic dysfunction that may result from disulfiram therapy. In addition, complete blood counts and serum chemistries, including liver function tests, should be monitored. **Psychotic** reactions have been noted, attributable to the unmasking of underlying psychoses in patients.	**Cases** of hepatitis and clinically significant liver dysfunction were observed in association with extended-release injectable naltrexone treatment. Discontinue use of naltrexone in the event of symptoms or signs of acute hepatitis. **Use** with caution in patients with moderate to severe renal impairment. **Patients** should take no opioids, including opioid-containing medications, for a minimum of 7 days before starting naltrexone to avoid precipitating opioid withdrawal. **Patients** needing opioid analgesia or patients with a history of opioid use disorder may respond to lower doses of opioids after treatment with extended-release injectable naltrexone. Failure to carefully titrate opioid dose could result in potentially life-threatening opioid intoxication and overdose. **Patients** should be told of the serious consequences of trying to overcome the opioid blockade.	**Before** initiating treatment with acamprosate, evaluate the patient's renal function through a standard panel for urea, electrolytes, and serum creatinine to rule out severe renal impairment. **For** patients with moderate renal impairment (creatinine clearance of 30–50 mL/min), a reduced dose of acamprosate (one 333 mg tablet 3 times a day) is recommended. **Because** of elevated risk of diminished renal function in people ages 65 or older, baseline and frequent renal function tests are important in this population.

Medications for the Treatment of OUD

Agent	Dose	Dosing
Buprenorphine sublingual film, tablets (generic)	PO: 2 mg, 8 mg film and tablets	**Initial:** 2–4 mg (Increase by 2–4 mg) **Daily:** ≥8 mg **Max:** 24 mg/day
Methadone tablets/liquid (generic)	PO: 5 mg, 10 mg, tablets; 10 mg/mL liquid	**Initial:** 10-30 mg (Reassess in 3–4 hours; add ≤10 mg PRN) **Daily:** 60-120 mg[a]
Naltrexone XR injection *(Vivitrol®)*	IV/IM: 380 mg in 4 cc	Every 4 weeks
Naltrexone tablets (generic)	PO: 50 mg	**Daily:** 50 mg (May give 2–3 daily doses at once on M–W–F.)
Buprenorphine Combination Product (See Table 5)		

[a] The dose should be individualized and may be higher or lower than this usual dosage.

The ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use https://www.samhsa.gov/sites/default/files/sites/default/files/opioid-addiction-asam-use-of-medications-in-treatment.pdf

Medication Comparison

The ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use
https://www.samhsa.gov/sites/default/files/sites/default/files/opioid-addiction-asam-use-of-medications-in-treatment.pdf

	Methadone	Buprenorphine	Extended Release Naltrexone
Pharmacology	Full agonist	Partial agonist	Full antagonist
Dosing	Daily (but duration often longer)	Daily	*q4wks*
Setting	Specialty licensed OTP	Office-based or OTP,	Any medical setting, requires injection
Induction	No time restriction; start low, go slow	Mild-mod withdrawal: >8-12 hrs after last opioid	>7 days after last opioid
Adherence	Intrinsically reinforcing	Intrinsically reinforcing	Long acting
Side Effect/ Safety	Sedation esp early in treatment, constipation. Caution re: concurrent benzos/alcohol overdosing, drug-drug interactions	Lower extremity swelling, urinary hesitancy, constipation. Caution re: concurrent benzos/alcohol	Injection site rxns, nausea, malaise. Caution re: precipitated withdrawal if given before opioid free washout period
Other advantages	Co-morbid pain, high potency, high structure of delivery setting.	Safety compared to methadone, co-morbid pain, dosing flexibility, lower burden of OBOT delivery, simple pharmacy availability	Low diversion, no dependence, verifiable dosing. lower stigma in some settings compared to agonists
Craving reduction	+++	++	+

Oral Medications Used to Treat Mild to Moderate Alcohol Withdrawal Symptoms

Medications	Typical dosing	Comments
Nonbenzodiazepine anticonvulsants		Appropriate monotherapy in mild AWS
Carbamazepine (Tegretol)	600 mg to 800 mg	600 mg to 800 mg per day tapered to 200 mg to 400 mg per day over 4 to 9 days
Gabapentin (Neurontin)	Loading dose: 1,200 mg Days 1 through 3: 600 mg to 1,200 mg per day Days 4 through 7: taper to 300 mg to 600 mg per day	Adjunctive therapy dosing: 300 mg to 500 mg every 6 to 8 hours Consider in those with continuing treatment for AUD (1,200 mg per day)
Benzodiazepines		First-line treatment for moderate AWS. Longer-acting types are preferred; if concern for liver disease, use benzodiazepines with less hepatic metabolism
Chlordiazepoxide (Librium)	50 mg to 100 mg	Single dose of 50 mg to 100 mg or symptom-triggered dose every 4 to 6 hours
Diazepam (Valium)	10 mg to 20 mg	10 mg to 20 mg every 6 to 12 hours for the first 24 hours, then reduce to 5 mg to 10 mg every 6 to 12 hours for the next 3 to 5 days Alternative front-loading regimen of 20 mg every 1 to 2 hours for 3 doses, then proceed to symptom-triggered regimen
Lorazepam (Ativan)	0.5 mg to 2 mg	0.5 mg to 1 mg every 6 to 8 hours on a scheduled basis, plus 1 mg every 4 hours if needed for mild symptoms or plus 2 mg every 2 hours if needed for moderate symptoms
Oxazepam (Serax)	15 mg to 30 mg	15 mg to 30 mg every 6 to 8 hours
Phenobarbital	60 mg to 260 mg*	Narrow therapeutic window, should be used by physicians with extensive experience or in Level 2 Withdrawal Management facility
Adjunctive therapy with benzodiazepines		Used if symptoms persist despite adequate benzodiazepine use
Beta blockers	Atenolol: 25 mg to 50 mg daily Metoprolol: 25 mg to 50 mg every 12 hours	For persistent hypertension and tachycardia
Carbamazepine	200 mg every 8 hours or 400 mg every 12 hours	For additional control; reduces craving
Clonidine	0.2 mg	For autonomic hyperactivity or anxiety
Gabapentin	400 mg every 6 to 8 hours	For additional control; reduces craving
Valproate (Depacon)	300 mg to 500 mg every 6 hours	Contraindicated in pregnancy and in patients with liver disease; should not be used as monotherapy for withdrawal

AUD = alcohol use disorder; AWS = alcohol withdrawal syndrome.

*—Can also be given intramuscularly.

Information from references 8 and 14.

AUD = alcohol use disorder; AWS = alcohol withdrawal syndrome.

Relapse Prevention
MEDICATION FOR OPIOID USE DISORDER (MOUD) and ALCOHOL USE DISORDER (MAOD)

- **All are safe and effective for OUD/AUD *in combination <u>WITH</u> counseling and psychosocial support.***
- There is no maximum recommended duration of maintenance treatment

https://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm600092.htm

The Challenge

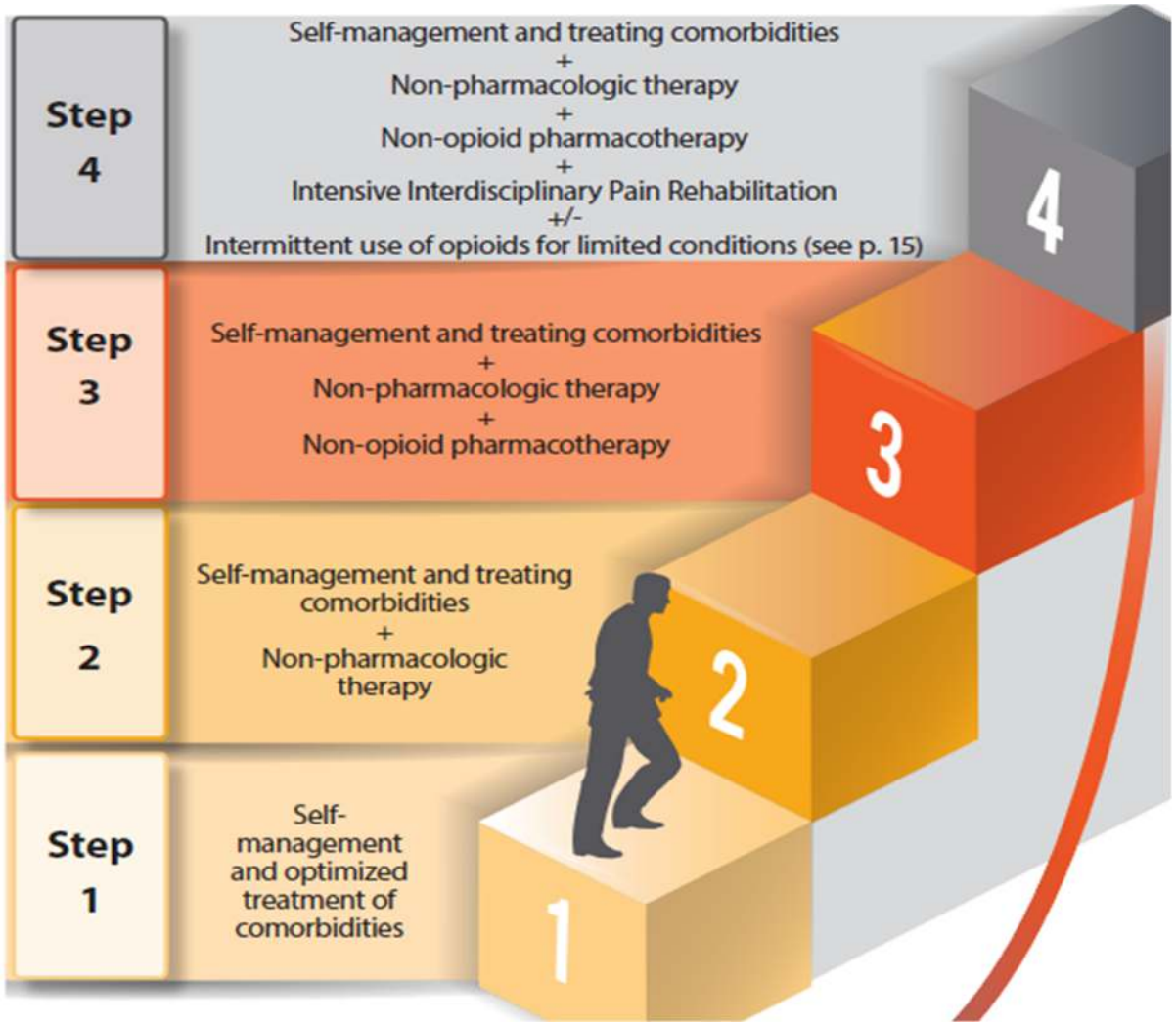
Provide
Appropriate Pain
Management

Reduce
Prescription &
Illegal Drug Abuse,
Substance Use
Disorder, and
Diversion

Substance Use Disorder Risk Stratification

Low	Moderate	High
• No personal or family history of substance use disorder • No history of major psychiatric disorder • Older age • Non-smoker • Stable social support	• Remote history of substance-use disorder • History of addiction with sustained periods of recovery • Questionable family history of substance-use disorder • Effectively managed major psychiatric disorder (past or present) • Younger age • Active smoker • History of physical or sexual abuse • Poor social support • Involvement with others using drugs or alcohol	• Recent history or multiple episodes of substance abuse • Substance use history with limited or no system to sustain recovery • Past or current history of major psychiatric disorder

Stepwise Approach to Pain Management in Substance Use Disorder



American Society of Addiction Medicine Guidelines

Pain Management Strategies in Persons with an Opioid Use Disorder (OUD)

- It is important that the correct diagnosis be madefor all patients with pain and the suitable treatment is identified.
- If pharmacological treatment is considered, nonnarcotic medications such as acetaminophen and NSAIDs should always be tried first.
- Opioid agonists (methadone or buprenorphine) should be considered for patients with active OUD who are not in treatment.
- Pharmacotherapy in conjunction with psychosocial treatment should be considered for patients with pain who have OUD.

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American Society of Addiction Medicine Guidelines
Pain Management Strategies in Persons with an Opioid Use Disorder (OUD)

- Patients on methadone for the treatment of OUD will require doses of opioids in addition to their regular daily dose of methadone to manage acute pain
- Patients on methadone for the treatment of OUD and who are admitted for surgery may require additional short-acting opioid pain relievers.
- The dose of pain relievers prescribed may be higher due to tolerance.
- Temporarily increasing buprenorphine dosing may be effective for mild acute pain.

The ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Usehttps://www.samhsa.gov/sites/default/files/sites/default/files/opioid-addiction-asam-use-of-medications-in-treatment.pdf

American Society of Addiction Medicine Guidelines

Pain Management Strategies in Persons with an Opioid Use Disorder (OUD)

- Patients on naltrexone will not respond to opioid analgesics in the usual manner. Treat mild pain with NSAIDs & moderate to severe pain with ketorolac on a short-term basis.
- For severe acute pain, a high potency opioid may be used (e.g. hydromorphone) with or without discontinuing buprenorphine.
- Consider additional interventions such as regional anesthesia.

The ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Usehttps://www.samhsa.gov/sites/default/files/sites/default/files/opioid-addiction-asam-use-of-medications-in-treatment.pdf

American Society of Addiction Medicine Guidelines

Pain Management Strategies in Persons with an Opioid Use Disorder (OUD)

- The decision to discontinue buprenorphine prior to an elective surgery should be made in consultation with the attending surgeon and anesthesiologist.
- If it is decided that buprenorphine should be discontinued prior to surgery, discontinue 24–36 hours in advance of surgery and restarted post-operatively when the need for full opioid agonist analgesia has passed.
- Oral naltrexone should be discontinued 72 hours prior to surgery and extended-release injectable naltrexone should be discontinued 30 days prior to an anticipated surgery.

The ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Usehttps://www.samhsa.gov/sites/default/files/sites/default/files/opioid-addiction-asam-use-of-medications-in-treatment.pdf

Pain Management Strategies in Persons with an Opioid Use Disorder (OUD)

- Avoid opioid agonist-antagonists in persons with known or suspected active addictions
- Avoid opioid of choice
- Maintain structured control access
- Focus endpoint of treatment on functioning pain relief
- Put less emphasis on achieving maximum level of function

Opioid Addiction and Surgery: Pain Management for Recovering Addicts https://www.zwivel.com/blog/opioid-addiction-and-surgery

Pain Management Strategies in Persons with an Opioid Use Disorder (OUD)

- Prescribe sufficient dosages, dosing intervals and quantities
- Switch to non-opioid analgesia as soon as possible
- Use long-acting opioids if longer duration of therapy is needed (*Conflicts with CDC guidelines*)
- Inpatient management when necessary
- Always utilize nonpharmacological interventions

Opioid Addiction and Surgery: Pain Management for Recovering Addicts https://www.zwivel.com/blog/opioid-addiction-and-surgery

Pain Management Strategies in Persons with an Opioid Use Disorder (OUD)

- Encourage recovering individuals to enhance their recovery program
- Educate the patient & family on pain management program and goals
- **Ensure comorbid medical and psychiatric conditions are being effectively managed.**

Opioid Addiction and Surgery: Pain Management for Recovering Addicts https://www.zwivel.com/blog/opioid-addiction-and-surgery

Pain Management Strategies in Persons with an Opioid Use Disorder (OUD)

- Provide psycho-social/ spiritual support to address underlying coping deficits and triggers.
- Develop an honest, trusting & supportive relationship between patient and health care providers.
- Utilize a pain management agreement, check prescription drug monitoring programs (PDMPs) , and obtain urine drug screens as needed.

Opioid Addiction and Surgery: Pain Management for Recovering Addicts https://www.zwivel.com/blog/opioid-addiction-and-surgery

Buprenorphine for Pain

Good Candidates

- Moderate-severe nociceptive pain
- Low OME requirements
- Intolerable side effects to other opioids
- Neuropathic pain?
- History of opioid dependence
- Potential for abuse/diversion
- Abuse deterrent formulations?

Poor Candidates

- Severe nociceptive pain
- High opioid requirements
- Recent use of full agonist opioids
- Severe hepatic dysfunction
- Prolonged QTc interval/cardiac disease?

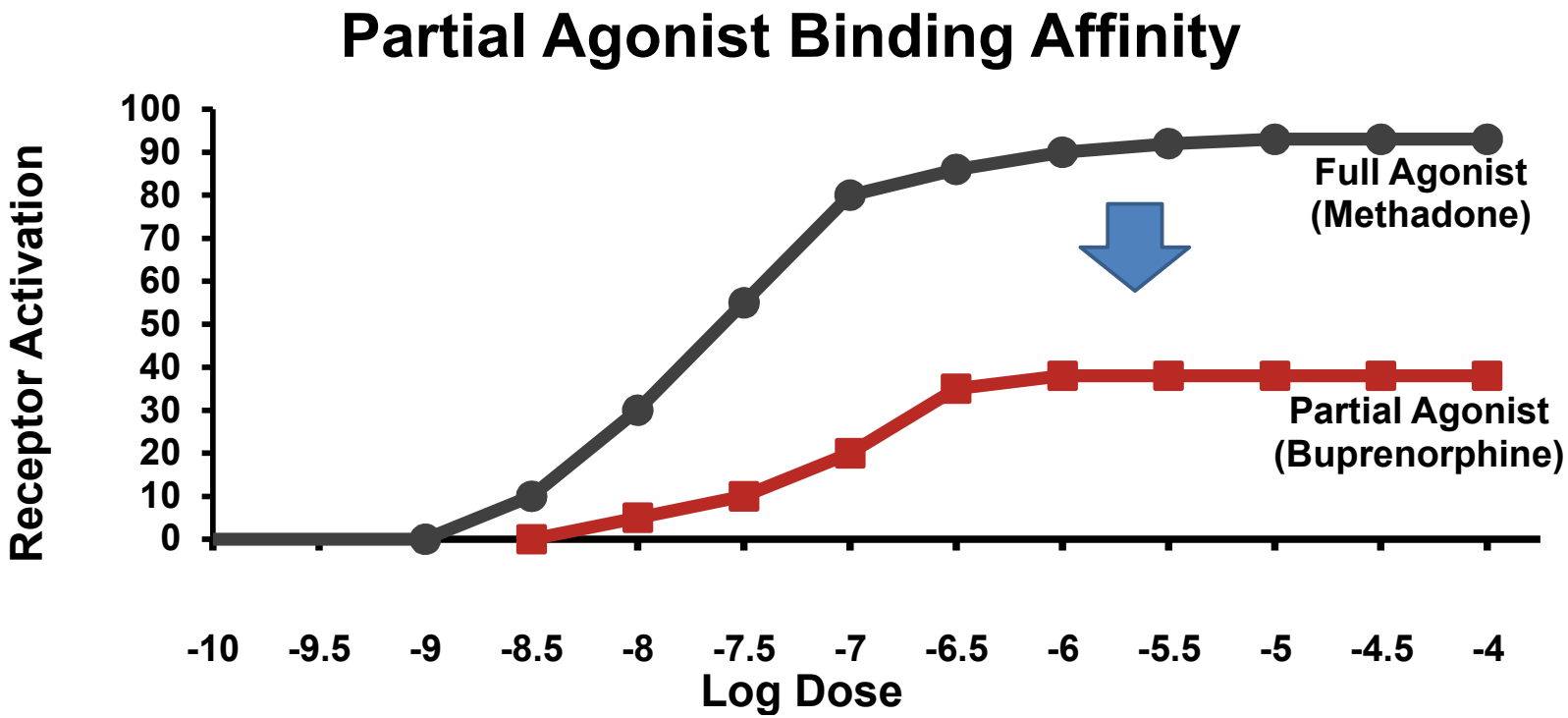
Buprenorphine Advantages for Pain

- ↓ Addiction potential
  - Lower peak effect
- ↓ Adverse effects
  - Partial agonist
- ↑ Safety
  - Respiratory depression ceiling
- Reduced incidence of hyperalgesia
- Schedule III controlled substance
  - Fewer prescribing restrictions
- Safety in renal failure/dialysis?
  - Renal elimination of active metabolites

Buprenorphine Disadvantages for Pain

- Strong binding affinity
  - Precipitate withdrawal
  - Not for acute pain treatment
- Limited analgesic efficacy
  - Partial agonist
- Dosing:
  - 1:75 - 1:100 IV buprenorphine to PO morphine
- Patient issues:
  - Treatment of addiction
- "Copioiding"
- Reversal can be challenging
- Higher naloxone doses or infusion may be required
- Hepatic dysfunction
- Drug interactions
  - CYP3A4
- QT interval prolongation
- $$$$$

Withdrawal Precipitation with Buprenorphine



Buprenorphine Transdermal Dosing for Pain

- Wean to < 30 OME prior to initiation
- Titrate every 3-4 days as tolerated

Belbuca©		Butrans©	
OME/Day	**Initial Dose**	**OME/Day**	**Initial Dose**
< 30 mg	75 mcg Q12h	< 30 mg	5 mcg/hr
30-89 mg	150 mcg Q12h	30-80 mg	10 mcg/hr
90-160 mg	300 mcg Q12h	>80 mg	Not recommended
> 160 mg	Not recommended		

Acute Pain Requiring Opioids – Buprenorphine MOUD

Continue Buprenorphine + short-acting opioids

Divide Buprenorphine

Q6 – 8H

Discontinue Buprenorphine + opioids

Switch Buprenorphine to methadone + short-acting opioids

Ann Intern Med. 2006;144:127-134.

Four As of Pain Assessment

- **A**nalgesia
- **A**ctivity
- **A**dverse reactions
- **A**berrant behavior

Inappropriate (Aberrant) Behaviors

Probably more predictive

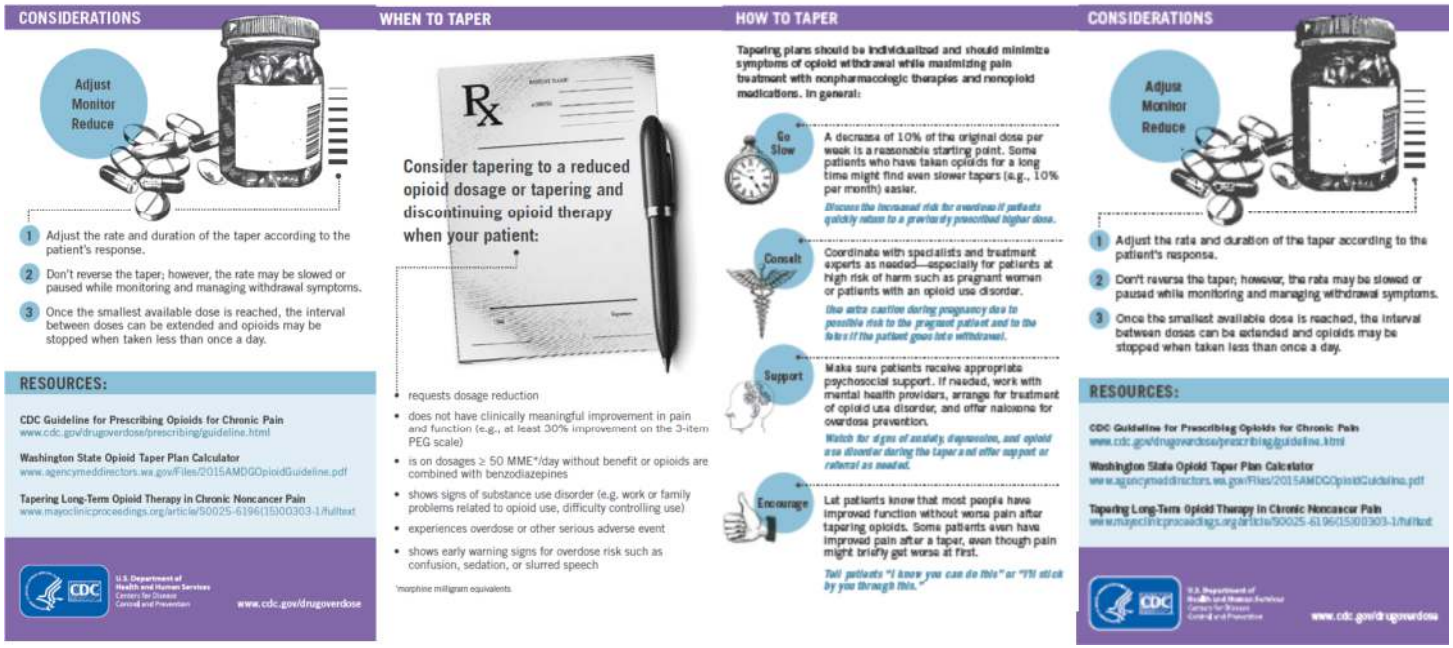
- Selling prescription drugs
- Prescription forgery
- Stealing or borrowing another patient's drugs
- Injecting oral formulation
- Obtaining prescription drugs from non-medical sources
- Concurrent abuse of related illicit drugs
- Multiple unsanctioned dose escalations
- Recurrent prescription losses

Probably less predictive

- Aggressive complaining about need for higher doses
- Drug hoarding during periods of reduced symptoms
- Requesting specific drugs
- Acquisition of similar drugs from other medical sources
- Unsanctioned dose escalation 1 – 2 times
- Unapproved use of the drug to treat another symptom

Manchikanti L. Pain Physician 2008; Opioids Special Issue: 11:S155-180

Opioid Tapering Protocol



https://www.cdc.gov/drugoverdose/pdf/clinical_pocket_guide_tapering-a.pdf

Common Misconceptions

- The MOUD opioid provides adequate analgesia
- Use of opioids for analgesia may result in addiction relapse
- Reporting pain may be a manipulation to obtain opioids, drug-seeking, or manifestation of worsening addiction
- Full agonists opioids will be ineffective when treating acute pain with patients taking buprenorphine

Managing Pain in Patients with Substance Use Disorder

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