Deciding How and When to Taper or Discontinue Medications in Patients with Opioid Use Disorder

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Contents

- When or if one should taper
- Deciding how to taper
- Tapering MOUDs and other opioids

References

- Zweben JE, Sorensen JL, Shingle M, Blazes CK. Discontinuing Methadone and Buprenorphine: A Review and Clinical Challenges. J Addict Med. 2021 Nov-Dec 01;15(6):454-460. doi: 10.1097/ADM.0000000000000789. PMID: 33323695; PMCID: PMC10082633.
- American Society of Addiction Medicine. (2020). National practice guideline for the treatment of opioid use disorder: 2020 focused update. Journal of Addiction Medicine, 14(4), 1-73. DOI: 10.1097/ADM.0000000000000675.
- Centers for Disease Control and Prevention. (2022). Recommendation 5: Opioid Selection, Dosage, Duration, Follow-Up, and Discontinuation. In CDC Guideline for Prescribing Opioids for Pain — United States, 2022. MMWR Recomm Rep, 71(3), 33-42.

When or if one should taper

Treatment Controversial from the beginning

- Methadone was the first widely used opioid medication in outpatient addiction treatment
- In the 60s and 70s, it was believed that methadone could stabilize patients, with up to 2 years to steady their lives before tapering off
- Most patients are unable to discontinue methadone and maintain the progress they made during treatment

National Institute on Drug Abuse. (2021). Medications to treat opioid use disorder. Retrieved from https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-addiction/overview.

Buprenorphine/Naloxone for Opioid Use Disorder

- Buprenorphine/naloxone offers advantages over methadone:
  - Partial opioid agonist with less toxicity
  - More convenient and less stigmatizing
  - Limited availability compared to methadone
- Discontinuing the medication leads to discouraging results, while continuing it has shown high levels of success

Reference: Substance Abuse and Mental Health Services Administration. (2016). Buprenorphine waiver management: Frequently asked questions. https://www.samhsa.gov/sites/default/files/programs_campaigns/medication_assisted/Buprenorphine-Waiver-Management-FAQs.pdf

Tapering a medication for opioid use disorder (OUD) can carry various risks

- Relapse: A study published in the Journal of Substance Abuse Treatment
  - Among the patients who tapered off buprenorphine, 64% relapsed within six months, compared to 26% of those who continued taking the medication.
- Withdrawal symptoms: Tapering off opioid medications can also cause withdrawal symptoms, which can be uncomfortable and even dangerous in some cases.
  - The severity can vary depending on the individual and the medication
- Overdose: Another risk of tapering medication for OUD is an increased risk of overdose.
  - According to a study published in the Journal of Substance Abuse Treatment, patients who tapered off buprenorphine were more likely to experience a non-fatal overdose than those who continued taking the medication. Among the patients who tapered off buprenorphine, 12% experienced a non-fatal overdose within six months, compared to 2% of those who continued taking the medication.

•Substance Abuse and Mental Health Services Administration. (2015). TIP 45: Detoxification and substance abuse treatment. https://store.samhsa.gov/product/TIP-45-Detoxification-and-Substance-Abuse-Treatment/SMA15-4131

A personal decision

- Tapering medication for opioid use disorder (MOUD) is a personal decision for a patient because it involves their own goals, preferences, and values.
- The decision to taper MOUD should be made collaboratively between the patient and their healthcare provider, taking into account the patient's individual circumstances and goals.

National Institute on Drug Abuse. (2021). Medications to treat opioid use disorder: Frequently asked questions. Retrieved from https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-use-disorder/frequently-asked-questions.

Discontinuing Buprenorphine/Naloxone

- Majority of patients who attempt to withdraw from buprenorphine/naloxone do not succeed
- Review articles summarize the literature exploring and comparing methods for discontinuing buprenorphine/naloxone
  - Dunn et al. (2018) compared 27 studies
    - Median of 23% of participants provided opioid-negative samples at the first post-taper follow-up visit
- Treatment barriers for patients at high risk for discontinuation should be addressed

Reference: Dunn, K. E., Bergeria, C. L., Harris, A. H. S., & Nuzzo, P. A. (2018). Buprenorphine/naloxone for opioid dependence: Clinical practice and barriers to uptake. Journal of Addiction Medicine, 12(6), 441-452. https://doi.org/10.1097/ADM.0000000000000433

Discontinuing Buprenorphine/Naloxone Maintenance for Compliance Reasons

- Bentzley et al. (2015) conducted a systematic review on discontinuing buprenorphine/naloxone maintenance
  - Most patients discontinued involuntarily due to failing to meet program requirements
  - Rates of relapse to illicit opioid use 1 month after discontinuation were over 50% in every study
  - Across all studies, 18% of patients were abstinent from opioids in the first month following discontinuance of buprenorphine/naloxone

Reference: Bentzley, B. S., Barth, K. S., & Back, S. E. (2015). Discontinuation of buprenorphine maintenance therapy: Perspectives and outcomes. Journal of Substance Abuse Treatment, 52, 48-57. https://doi.org/10.1016/j.jsat.2014.12.008

Injury Rates in OUD Patient Relapse

- A study by Bohnert et al. (2017) found that OUD patients who relapsed had a significantly higher risk of injury compared to those who did not relapse
  - Among patients who relapsed, the injury rate was 13.7 per 100 person-years
  - Among patients who did not relapse, the injury rate was 2.9 per 100 person-years
  - Injuries included overdose, suicide attempt, and non-fatal unintentional injuries
- The World Health Organization (WHO) estimates the global injury rate for unintentional injuries at an injury rate of approximately 0.02 per 100 person-years.

Reference: Bohnert, A. S. B., Bonar, E. E., Cunningham, R., Chermack, S., Ilgen, M., & Blow, F. C. (2017). A pilot randomized clinical trial of an intervention to reduce overdose risk behaviors among emergency department patients at risk for prescription opioid overdose. Drug and Alcohol Dependence, 174, 79-87. https://doi.org/10.1016/j.drugalcdep.2017.01.003

Transitioning from Methadone to Buprenorphine/Naloxone to Nothing

- Breen et al. (2017) explored transferring patients from methadone to buprenorphine/naloxone and tapering off
- 75% of patients reached zero dosage, but only 31% were not using heroin or methadone at 1-month follow-up
- 13% switched to buprenorphine/naloxone and one tapered off, while 67% stopped tapers due to various reasons
  - Feeling unstable/withdrawal symptoms
  - Positive drug tests
  - Pain management issues

Reference: Breen, C., Degenhardt, L., Bruno, R., et. al (2017). Does swapping from methadone to sublingual buprenorphine stabilize patients on long-term methadone maintenance treatment? Journal of Substance Abuse Treatment, 81, 81-86.

Opioid Agonist Treatment and Mortality Risk

- Williams et al. (2019) found that patients with Medicaid who discontinued opioid agonist treatment had high risks of acute care service use and opioid overdose, but adverse events decreased with longer time in treatment
- Almost half the patients were seen in emergency departments at least once, although adverse events diminished with longer time in treatment.

Williams, A. R., Nunes, E. V., Bisaga, A., Levin, F. R., & Olfson, M. (2019). Development of a Medicaid episode-of-care treatment measure for opioid use disorder. Journal of Substance Abuse Treatment, 96, 19-27. https://doi.org/10.1016/j.jsat.2018.10.003

Discontinuing Opioid Agonist Treatment Not Recommended

- Weinstein et al. (2016) found many patients want to discontinue opioid agonist treatment, few are successful, and efforts should be focused on overcoming barriers to long-term maintenance
- Discontinuing opioid agonist treatment is not recommended for most patients and that long-term maintenance should be the primary goal of treatment

Weinstein, Z. M., Gryczynski, J., Cheng, D. M., Quinn, E., Hui, D., Kim, H. W., . . . Samet, J. H. (2016). Tapering off and returning to buprenorphine maintenance in a primary care Office-Based Addiction Treatment (OBAT) program. Drug and Alcohol Dependence, 168, 66-72. https://doi.org/10.1016/j.drugalcdep.2016.08.640

Misconception: Discontinuing Medications is Necessary

- Stigma is a powerful force perpetuating negative attitudes toward opioid medications
  - Many view discontinuation as a desirable or a primary goal
- Methadone and buprenorphine/naloxone are dependence-producing medications
  - Many medications are dependence producing but less influenced by stigma
    - Synthetic thyroid, antidepressants, antipsychotics, antihistamines, blood pressure medications, and antiepileptic drugs

Weiss, R. D. (2016). Commentary on the SAMHSA opioid treatment guidelines: Clinical implications. Journal of Addiction Medicine, 10(2), 80-81. https://doi.org/10.1097/ADM.0000000000000204

Misconception: Treatment as a Moral Weakness

- The belief that receiving maintenance opioids reflects an illness, a defect, or moral weakness
- Family members and peers may devalue a patient's accomplishments if they remain on medication
- Patients may fear losing their jobs due to detection

Weiss, R. D. (2016). Commentary on the SAMHSA opioid treatment guidelines: Clinical implications. Journal of Addiction Medicine, 10(2), 80-81. https://doi.org/10.1097/ADM.0000000000000204

Misconception: If I just try harder

- The belief that the ability to discontinue opioid medications is solely a matter of willpower and effort

Weiss, R. D. (2016). Commentary on the SAMHSA opioid treatment guidelines: Clinical implications. Journal of Addiction Medicine, 10(2), 80-81. https://doi.org/10.1097/ADM.0000000000000204

Addressing Guilt-based Misconceptions

- Research suggests genetic factors play a role in vulnerability to opioid addiction
- Long-term opioid use can also alter neurobiological factors and make it difficult discontinuation difficult
- Opioid agonist treatment is a safe and effective long-term option

Weiss, R. D. (2016). Commentary on the SAMHSA opioid treatment guidelines: Clinical implications. Journal of Addiction Medicine, 10(2), 80-81. https://doi.org/10.1097/ADM.0000000000000204

Medication-based Misconceptions

- The “treating an opioid use disorder with an opioid” misunderstanding.
- The idea medications that are easier to taper are better for treating opioid use disorder
  - Is buprenorphine/naloxone really preferable?
  - No consistent relationship between ease of discontinuation and long-term abstinence
- Work collaboratively with patients to determine the best medication and treatment plan for their individual needs and circumstances

Weiss, R. D. (2016). Commentary on the SAMHSA opioid treatment guidelines: Clinical implications. Journal of Addiction Medicine, 10(2), 80-81. https://doi.org/10.1097/ADM.0000000000000204

Promote an “Abstinence” that works

“A patient is abstinent if he/she is not drinking alcohol or using illicit drugs and using medication as prescribed.”

National Institute on Drug Abuse. (2012). Principles of drug addiction treatment: A research-based guide (third edition). Retrieved from https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/frequently-asked-questions/what-drug-addiction-treatment.

The Recovery Capital Checklist

- A tool based on the Tapering Readiness Inventory providers can use when considering tapering.
- Guide patients to make their own assessment of readiness.
- Considers factors that contribute to recovery.
  - Physical health, psychological well-being, social support, etc
- Identify areas that may require additional attention and support.
- Helps patients build a foundation for long-term success.

Laudet, A., & White, W. (2010). What are your priorities right now? Identifying service needs across recovery stages to inform service development. Journal of Substance Abuse Treatment, 38(1), 51-59.

TABLE 1. The Recovery Capital Checklist (Patients and Counselors Section)

1.	Have you been abstaining from illegal drugs, such as heroin, cocaine, and speed?
2.	Do you think you are able to cope with difficult situations without using drugs?
3.	Are you employed or in school?
4.	Are you staying away from contact with users and illegal activities?
5.	Have you gotten rid of your drug paraphernalia?
6.	Are you living in a neighborhood that doesn't have a lot of drug use?
7.	And are you comfortable there?
8.	Do you have nonuser friends that you spend time with?
9.	Are you living in a stable household or family?
10.	Do you have friends or family who would be helpful to you during a taper?
11.	Do you have a spiritual practice?
12.	Have you been participating in counseling that has been helpful?
13.	Does your counselor think you are ready to taper?
14.	Do you think you would ask for help when you are feeling bad during a taper?
15.	Are you in good mental and physical health?
16.	Do you want to get off methadone or buprenorphine?

TABLE 2. Physician Risk Factor Checklist (Medical Providers Section)

1.	Any unexpected findings on PDMP*
2.	Frequent emergency department visits/minor injuries/MVCs†
3.	Recently appeared intoxicated/impaired
4.	Increased dose without authorization
5.	Needed to take medications belonging to someone else
6.	Patient or others worried about how patient is handling medications
7.	Had to make an emergency phone call or go to the clinic without an appointment
8.	Used pain medication for symptoms other than pain—sleep, mood, stress relief
9.	Changed route of administration
10.	Serious co-morbid mental illness
11.	Recent requests for early refills
12.	Recent reports of lost or stolen prescriptions
13.	Hoarding or stockpiling of medications
14.	Increasingly unkempt
15.	Attempted to obtain prescriptions from other doctors
16.	Concurrent benzodiazepine prescriptions
17.	Concurrent stimulant prescription
18.	Maintenance dose greater than 8 mg or buprenorphine or 80 mg methadone
19.	Current reports of disturbances in sleep
20.	Current reports of problems or lability in mood or energy

Interpreting the Recovery Capital Checklist

- It is not scored like a screening tool.
- The Physician section indicates warning signs that the patient is likely not stable enough to consider a taper.
- The patients and counselors section reviews factors associated with a readiness to discontinue methadone or buprenorphine/naloxone.
- More factors suggest a better chance.
- Fewer factors indicate greater chance of relapse.

Kreek, M. J., & Schluger, J. H. (2020). Informed Consent on Tapering of Methadone or Buprenorphine/Naloxone Maintenance Medication: New Tools Based on Updated Literature. Journal of Addiction Medicine, 14(5), 365-372.

A Patient-centered Clinical Stance

- Maintain a balance between respect for a patient's choice and realistic outcomes
- Provide honest feedback on what it will take to succeed
- If the patient chooses to remain on medication, plan for peer and family pressure
  - Education for both
- If the patient chooses to discontinue medication, monitor
  - If the patient is struggling recommend resuming medication
- Focus on achievements and recovery goals.

Don’t Forget Injectable Naltrexone XR

- Long-acting injectable naltrexone is an effective treatment
- When patients decide to discontinue buprenorphine/naloxone or methadone, long-acting naltrexone is a viable alternative
- Help patients make an informed decision about their treatment options

Lee, J. D., Nunes, E. V., Jr, Novo, P., et al. (2018). Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention (X:BOT): a multicentre, open-label, randomised controlled trial. The Lancet, 391(10118), 309-318. https://doi.org/10.1016/S0140-6736(17)32812-X

Deciding how to taper

The ASAM

NATIONAL PRACTICE GUIDELINE

For the Treatment of Opioid Use Disorder

2020 Focused Update

Withdrawal Management vs Maintenance

- Long-term
  - Medication assisted treatment
  - Methadone maintenance therapy
- Short-term
  - Buprenorphine taper
  - Methadone taper (OTP only)
- Symptom management
  - Alpha-2 blockers, etc

American Society of Addiction Medicine. (2020). National practice guideline for the treatment of opioid use disorder: 2020 focused update. Journal of Addiction Medicine, 14(4), 1-73. DOI: 10.1097/ADM.0000000000000675.

Tapering Buprenorphine: Balancing Benefits and Risks

- Before considering buprenorphine tapering, patients should be informed of the potential risks, including relapse and increased risk of overdose and overdose death.
- The evidence on the most effective rate of tapering buprenorphine is limited, and there is no one-size-fits-all approach.
- One trial found that longer courses of buprenorphine with gradual tapering were more effective than rapid tapering for withdrawal.
- Close monitoring and ongoing support is crucial for patients during the tapering process and beyond.

Lee, J. D., Nunes, E. V., Jr, Novo, P., Bachrach, K., Bailey, G. L., Bhatt, S., … Rotrosen, J. (2018). Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention (X:BOT): a multicentre, open-label, randomised controlled trial. Lancet (London, England), 391(10118), 309–318. https://doi.org/10.1016/S0140-6736(17)32812-X

Assessment of Opioid Withdrawal

- Encounters should focus on signs and symptoms associated with opioid withdrawal
- Validated scales can be helpful
  - Clinical Opioid Withdrawal Scale (COWS)
  - Subjective Opioid Withdrawal Scale (SOWS)
  - Objective Opioid Withdrawal Scale (OOWS)

Gowing L, Ali R, White JM. Opioid antagonists under heavy sedation or anaesthesia for opioid withdrawal. Cochrane Database Syst Rev. 2017;(11):CD00295. doi: 10.1002/14651858.CD00295.pub5. PMID: 29130474.

Treating Opioid Withdrawal

- Opioid withdrawal syndrome is a range of symptoms that occur after stopping or reducing opioid drug use
- Short-acting opioids withdrawal symptoms peak within 24-48 hours, and last 3-5 days
- Long-acting opioids withdrawal symptoms may last up to 10 days
- Abrupt discontinuation may lead to withdrawal, cravings, and relapse
- Opioid withdrawal syndrome is serious but rarely life-threatening
- Treatment may include medications such as methadone or buprenorphine
- A medical provider should supervise opioid withdrawal treatment

Sullivan MA, Bisaga A, Kleber HD. The diagnosis and management of opioid dependence: A national clinical practice guideline. New York: Substance Abuse and Mental Health Services Administration; 201

Withdrawal Management with Opioid Agonists

- Methadone and buprenorphine are both recommended for management of opioid withdrawal.
- Both medications have comparable results in reducing withdrawal severity and improving treatment retention and opioid abstinence.
- Withdrawal management with methadone must be done in an OTP or inpatient setting.
- Ongoing maintenance medication, in combination with psychosocial treatment appropriate for the patient's needs, is the standard of care for treating opioid use disorder.
- If the decision is made to taper, patients should be advised about the risk of relapse and other safety concerns, including increased risk of overdose and overdose death.

Reference: Voon P, Karamouzian M, Kerr T. Chronic Pain and Opioid Misuse: A Review of Reviews. Subst Abuse. 2017;11:1–16.

Withdrawal Management with Methadone

- For patients withdrawing from short-acting opioids
- The initial methadone dose is typically 20-30 mg per day
- The patient may be tapered off in 6-10 days.
- Proper administration and monitoring of methadone withdrawal management are critical
- By regulation, it must be administered in an OTP or acute care setting

Center for Substance Abuse Treatment. (2006). Methadone maintenance treatment. In Treatment Improvement Protocol (TIP) Series, No. 45. Substance Abuse and Mental Health Services Administration (US).

Buprenorphine Tapering and Discontinuation

- Buprenorphine taper is a gradual process
- Usually takes several months to complete the tapering process
- Close monitoring is recommended
- Patients should be encouraged to remain in treatment after discontinuation

Sullivan, M. A., & Bisaga, A. (2011). Buprenorphine tapering schedule and illicit opioid use. Addiction, 106(12), 2335-2342. doi: 10.1111/j.1360-0443.2011.03579.x

Buprenorphine Withdrawal Management

- Initial dose of 2-4 mg, titrated as needed to suppress withdrawal
  - 4-16 mg per day
- Risks of relapse and overdose death should be discussed if patient decides to taper
- Tapering can last 3-5 days or over 30 days
- Studies on long vs short-duration tapers are inconclusive
- Insufficient evidence on the effectiveness of different tapering rates

Reference: American Society of Addiction Medicine. (2021). The ASAM Clinical Practice Guideline on Alcohol and Opioid Use Disorders: Supplemental materials. Retrieved from https://www.asam.org/docs/default-source/quality-science/asam-alcohol-and-opioid-use-disorder-supplemental-materials.pdf

Tapering Buprenorphine: Considerations and Risks

- Tapering buprenorphine is a slow process and requires close monitoring.
- Patients should be advised of the risks associated with tapering, including relapse and increased risk of overdose.
- The evidence on the effectiveness of different tapering rates is insufficient.
  - A trial found that longer courses of buprenorphine with gradual tapering were superior to rapid tapering for withdrawal.

Lee JD, Nunes EV Jr, Novo P, et al. Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention (X:BOT): a multicentre, open-label, randomised controlled trial. Lancet. 2018;391(10118):309-318. doi:10.1016/S0140-6736(17)32812-X

Initiating Buprenorphine for Opioid Withdrawal Management

- Buprenorphine for opioid withdrawal management should only be initiated when there are objective signs of opioid withdrawal.
- Objective signs of withdrawal should be confirmed before administering an initial dose of buprenorphine.
- The initial dose of buprenorphine should be 2-4 mg and titrated up as needed to suppress withdrawal symptoms.

Reference: American Society of Addiction Medicine. (2015). The ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use. https://www.asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/npg-2.1_final.pdf

Alpha-2 Adrenergic Agonists and Opioid Agonists for Opioid Withdrawal Management

- Alpha-2 adrenergic agonists, such as lofexidine and clonidine, are safe and effective options for managing opioid withdrawal symptoms
- Methadone and buprenorphine are more effective in reducing withdrawal symptoms, retaining patients in treatment, and supporting successful completion of withdrawal management
- Work collaboratively…

Gowing, L., Ali, R., & White, J. M. (2017). Opioid antagonists with minimal sedation for opioid withdrawal. Cochrane Database of Systematic Reviews, (6), CD002021. https://doi.org/10.1002/14651858.CD002021.pub4

Opioid Withdrawal Management: Best Practices

- Abrupt cessation of opioids may lead to strong cravings and acute withdrawal syndrome, putting the patient at risk for relapse, overdose, and overdose death.
- Opioid withdrawal management without ongoing pharmacotherapy is not a treatment method for opioid use disorder.
- Medication-assisted treatment with methadone or buprenorphine is the recommended standard of care for treating opioid use disorder.

Reference: Substance Abuse and Mental Health Services Administration. (2015). Treatment Improvement Protocol 45: Detoxification and Substance Abuse Treatment.

Areas for Further Research: Improving Withdrawal Management Methods

- Accelerated introduction of extended-release injectable naltrexone
- Determining if opioid antagonists combined with alpha-2 adrenergic agonists reduce withdrawal duration or increase retention rates
- Need to determine optimal duration for buprenorphine tapering and safety of inpatient vs. outpatient withdrawal management
- Modification of buprenorphine and methadone initiation protocol for patients using high potency opioids

Reference: Strain, E. C., & Panchal, S. J. (2021). Management of opioid withdrawal in the outpatient setting: a clinical practice guideline. Mayo Clinic Proceedings, 96(5), 1265-1281.

Tapering other opioids

Centers for Disease Control and Prevention
MMWR
Morbidity and Mortality Weekly Report
Recommendations and Reports / Vol. 71 / No. 3
November 4, 2022

CDC Clinical Practice Guideline for Prescribing Opioids for Pain — United States, 2022

A different tone in 2022

- More focus on shared decision making.
- Expanded settings.
- More clarity on continuing treatment.
- Recommendation categories & Evidence types.
- Morphine equivalency language softened.

CDC 2022 **Recommendation 5**

- **For patients already receiving opioid therapy, clinicians should carefully weigh benefits and risks and exercise care when changing opioid dosage. If benefits outweigh risks of continued opioid therapy, clinicians should work closely with patients to optimize nonopioid therapies while continuing opioid therapy. If benefits do not outweigh risks of continued opioid therapy, clinicians should optimize other therapies and work closely with patients to gradually taper to lower dosages or, if warranted based on the individual circumstances of the patient, appropriately taper and discontinue opioids. Unless there are indications of a life-threatening issue such as warning signs of impending overdose (e.g., confusion, sedation, or slurred speech), opioid therapy should not be discontinued abruptly, and clinicians should not rapidly reduce opioid dosages from higher dosages (recommendation category: B; evidence type: 4)**

Thank you