Buprenorphine—Taper or Continue for Life?

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Disclosure Information

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No disclosures

To Taper or not to Taper—THAT is the Question

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Learning objectives

- Discuss the duration of buprenorphine treatment for OUD—when and under what circumstances can discontinuation be considered?
- How can we make long-term OAT more acceptable to those who struggle with the idea of prolonged treatment?
- How do we approach patients wanting to taper?
- How do we go about tapering?
- What happens after discontinuation?

Length of OAT for average patient in your program

a) < 1 year
b) 1-3 years
c) 3-5 years
d) >5years

When do you address duration of treatment/tapering?

a) At intake into your program

b) Every 3-6 months

c) Yearly

d) Less often than yearly

e) Only when the patient brings it up

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Yes or no

1. Most patients who do well in treatment should at some point be able to taper off buprenorphine.
2. Some patients will need it for life
3. Most patients should remain on it for life.
4. All other things being equal patients on buprenorphine are better candidates for discontinuation than those on methadone.
5. Most of my stable patients who have continued on buprenorphine for >3 years are tapering, have tapered, or are off buprenorphine, or are candidates for tapering.
6. Patients with no history of heroin use or IV drug use are better tapering candidates.

Discontinuing Methadone and Buprenorphine: A Review and Clinical Challenges

Joan E Zweben[1], James L Sorensen, Mallory Shingle, Christopher K Blazes

J Addiction Med 2020 Dec. 15, Published ahead of print

Abstract

This paper offers a review and recommendations for clinicians working with patients interested in discontinuing opioid agonist treatment. As buprenorphine/naloxone has gained widespread acceptance for opioid addiction, many treatment providers and patients have a range of hopes and expectations about its optimal use. A surprising number assume buprenorphine/naloxone is primarily useful as a medication to transition off illicit opioid use, and success is partially defined by discontinuing the medication. Despite accumulating evidence that a majority of patients will need to remain on medication to preserve their gains, clinicians often have to address a patient's fervent desire to taper. Using the concept of "recovery capital," our review addresses (1) the appropriate duration of opioid agonist treatment, (2) risks associated with discontinuing, (3) a checklist that guides the patient through self-assessment of the wisdom of discontinuing opioid agonist treatment, and (4) shared decision making about how to proceed.

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History of tapering in Maine

- 2003 DATA 2000 into effect, with no indication of how long patients would remain on buprenorphine. The 30-patient limit and expectations of abstinence and other requirements, as well as patient expectations, limited expected length of treatment.
- Idea that treatment not complete until patient off buprenorphine, or leaves program to make room for other patients, becomes prevalent.
- 2010-2018 Maine Medicaid payment for buprenorphine treatment limited to 2 year duration with expectation of tapering.
- 2010- OAT provided through state-approved programs (such as "the Opioid Health Home") emphasizing ancillary services unintentionally leading to a short-term treatment orientation.
- 2016- Increase in opioid overdoses, deaths, morbidity and research about effectiveness of leads a rethinking of tapering and a loosening of expectations for continuing OAT. Increased treatment availability and decreased cost reduces pressure to cycle patients off treatment.
- 2018 Change in state administration led to dropping the Medicaid "two-year limit" though restrictions in treatment availability persist.
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From page 2 of the Maine Medicaid PA form for buprenorphine 2010-2019

Has the patient previously tried to titrate down the dose of buprenorphine?

☐ Yes
☒ No

Was the attempt successful?

☐ Yes
☐ No

Do you and the patient plan to taper the dose in the next 3, 6, 12 months?

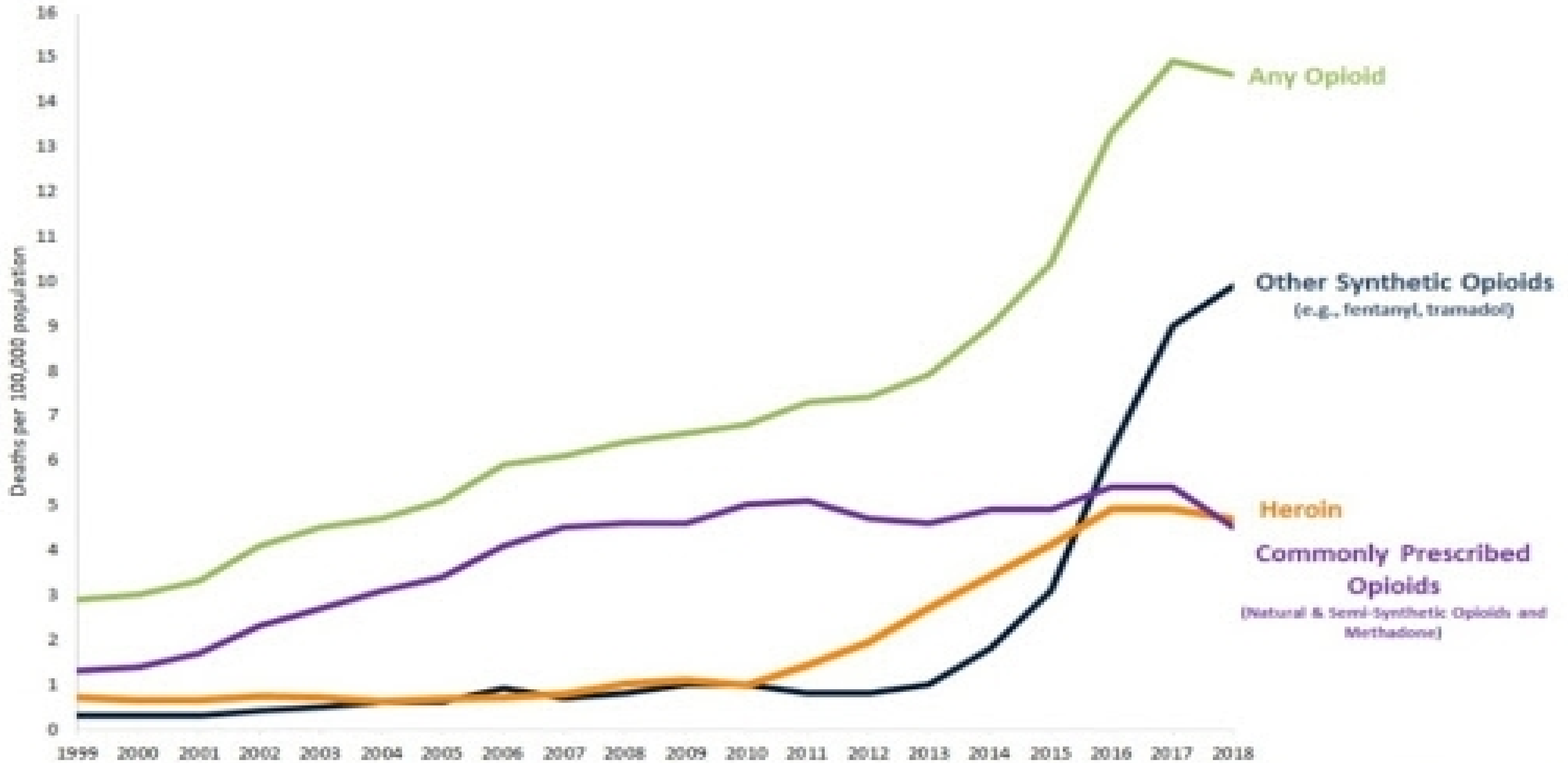
☐ Yes
☐ No

Do you anticipate being able to discontinue Suboxone (sic) treatment for this patient in the next 12 months?

☐ Yes
☐ No

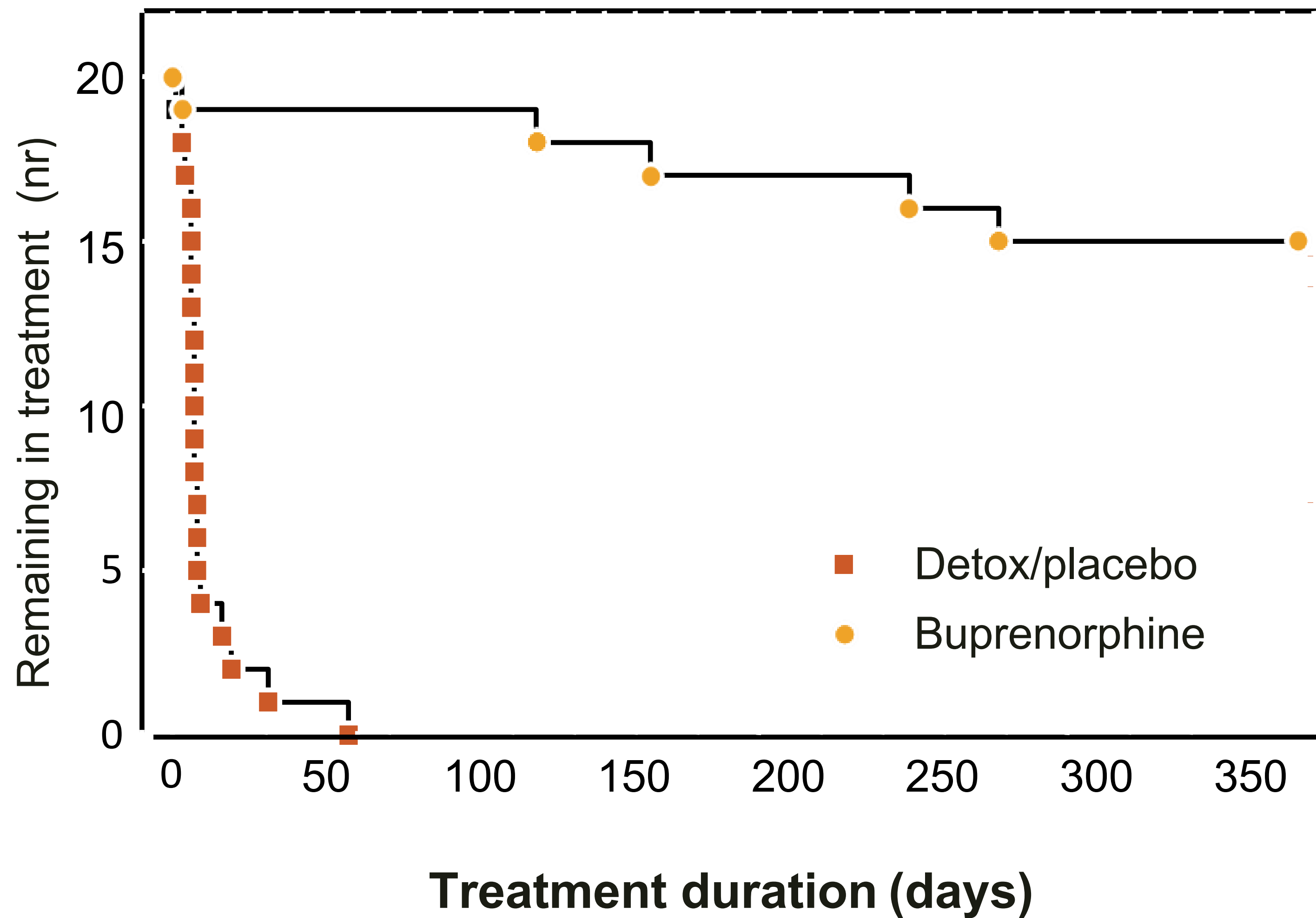
If you answered no to any of the questions above, please provide an explanation:

Exceptions to tapering requirement: serious and persistent mental illness, child under age 3 in home, pregnancy.



Overdose Death Rates Involving Opioids, by Type, United States, 1999-2018
Deaths per 100,000 population
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Any Opioid
Other Synthetic Opioids
(e.g., fentanyl, tramadol)
Heroin
Commonly Prescribed Opioids
(Natural & Semi-Synthetic Opioids and Methadone)
SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC; 2020. https://wonder.cdc.gov/.
www.cdc.gov
Your Source for Credible Health Information

Buprenorphine detoxification vs maintenance: retention



(Kakko et al., 2003)

Blog posts….attitudes toward long-term OAT

- Buprenorphine was intended as a bridge from rampant addiction to medication assisted therapy for a period of time to sobriety. But the multi billion dollar buprenorphine industry now wants addicted patients to stay on this drug the rest of their lives.
- I've met enough folks who have put enough time and distance between themselves and their addiction, that they describe themselves as a different person than who they were before. Some of these folks deserve a chance to see if they can continue to succeed without bupe. Is it really so much different from the patient who wants to get off their statin by changing their lifestyle so that their cholesterol is no longer elevated? I can cheer them on, celebrating their determination to live really healthfully. Or I can be the voice of doom …..

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Case report: it's not the same as stopping atorvastatin

35 year-old employed single mother of 3 on buprenorphine for 3 years, no relapses, occasional alcohol use that might be considered high-risk. Encouraged to taper by a relative who had done so successfully. Decided to go ahead with it after a promotion at work led to loss of Medicaid. Tapered smoothly over 9 months, then lost to follow-up.

I heard from her 18 months later calling from intake office of a residential program trying to get in. She had relapsed to heroin/fentanyl, had been hospitalized with endocarditis followed by an embolic CVA, with suspected continuing cognitive deficits, had lost job, child custody, housing.

Prolonged withdrawal

“…..After I hit zero, I began counting again, this time up instead of down….one week off. Two. Ten. Twelve.

Every night I awoke, overcome with fear, disoriented and confused. Sleep deprivation devastated my health.

Eventually I developed a drinking problem. My marriage fell apart.

Ironically, my body never felt better. For the first time, I was able to travel. I swam miles in the ocean. I went back to work. Yet all these sweet firsts were ruined by the black hole opiates left in my brain.”

Madora Pennington, LA Times/Portland Press Herald, Oct 30 2019

Studies of buprenorphine tapers

- Nearly all are look at patients on buprenorphine from 2-12 weeks.
- Studies of methadone tapers show they don't work.
- One observational study looked at stable patients maintained on buprenorphine in a large clinic in Boston who completed a taper

1308 patients, 48 tapered, about half resumed buprenorphine at same clinic

Return was 2-3 years after taper complete for most

Those who had medically supervised tapers retuned less often, 3/22

Weinstein Tapering Off and returning to Buprenorphine…..Drug Alcohol Dependence Aug 2018

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Issues that make tapering problematic

- There is always risk of relapse, overdose, and death—difficult to assess and sometimes manifesting after years of apparent success.
- For many, brain changes in OUD-"resetting of the hedonic set point" may be irreversible.
- In patients with SUD tapering to discontinuation is rarely an effective treatment strategy: consider alcohol, tobacco, opioids, methadone.
- As dose decreases reinforcement increases.
- A problematic period of the taper occurs AFTER the taper is completed—yet it is difficult to engage post-taper patients in treatment.

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Multiple choice: which of the following is the best predictor of a successful taper?

a) Lower total length of SUD

b) Absence of co-occurring disorders

c) Five or more years of successful treatment with abstinence from former drug(s) of choice

d) Stable buprenorphine dose of 8 mg or less

e) Drug of use/choice oxycodone rather than heroin/fentanyl

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The Journey is not the same as the destination…

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Myths regarding tapering -- I

- Recovery is not complete until you are not dependent on OAT opioids
- The milder the opioid (buprenorphine as compared to methadone) the lower the risk.
- Discontinuation risk is lower in recovery from pharmaceutical opioids than from IV heroin/fentanyl. From non-IVDU than from IVDU.
- Once you are stable after a year of treatment you can consider discontinuation, if you wait too long it's harder to change course
- A long taper is okay but too long a taper leads to discouragement.
- Relapse risk can be minimized by staying just above the withdrawal threshold.
- Once you get the dose down to 2 mg you are home free.

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More myths -- II

- A taper in a residential treatment setting is easier and therefore more likely to be successful.
- Most people who have completed successful tapers have benefited from staying in treatment after completion of the taper.
- If you give me a month's script I can manage my own taper.
- If I don't have too hard a struggle during the taper I should do okay after.
- A little THC will help.

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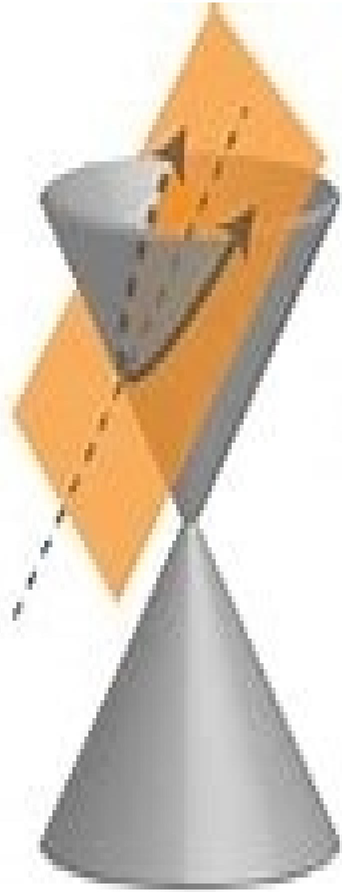
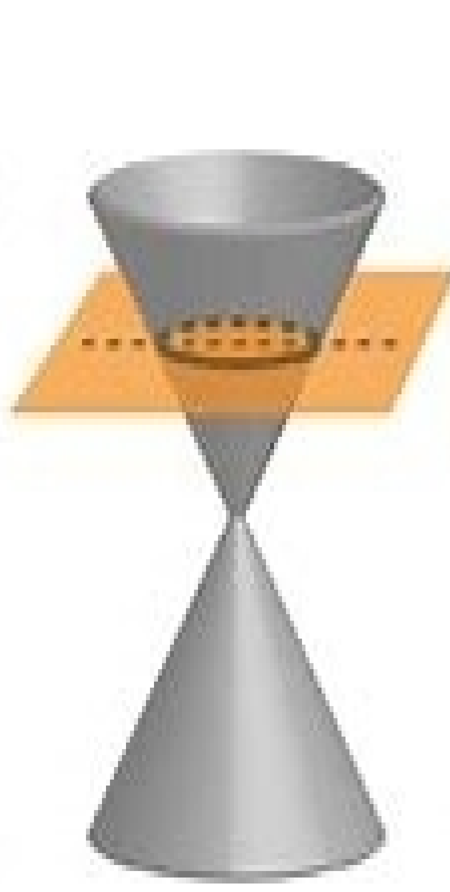
Conic sections



Parabola

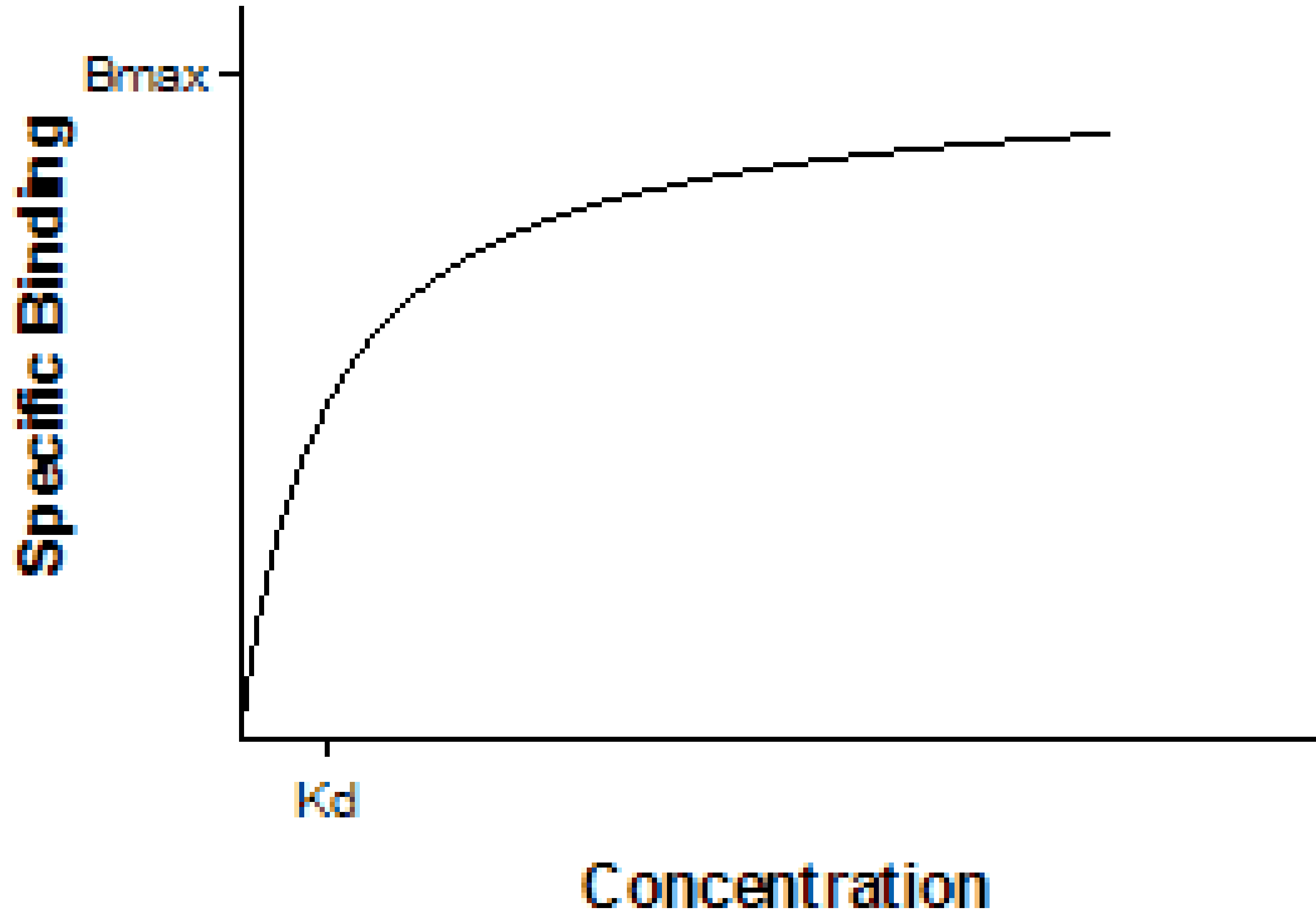


Circle

Ellipse

Hyperbola

Hyperbolic curve relating dose to activity



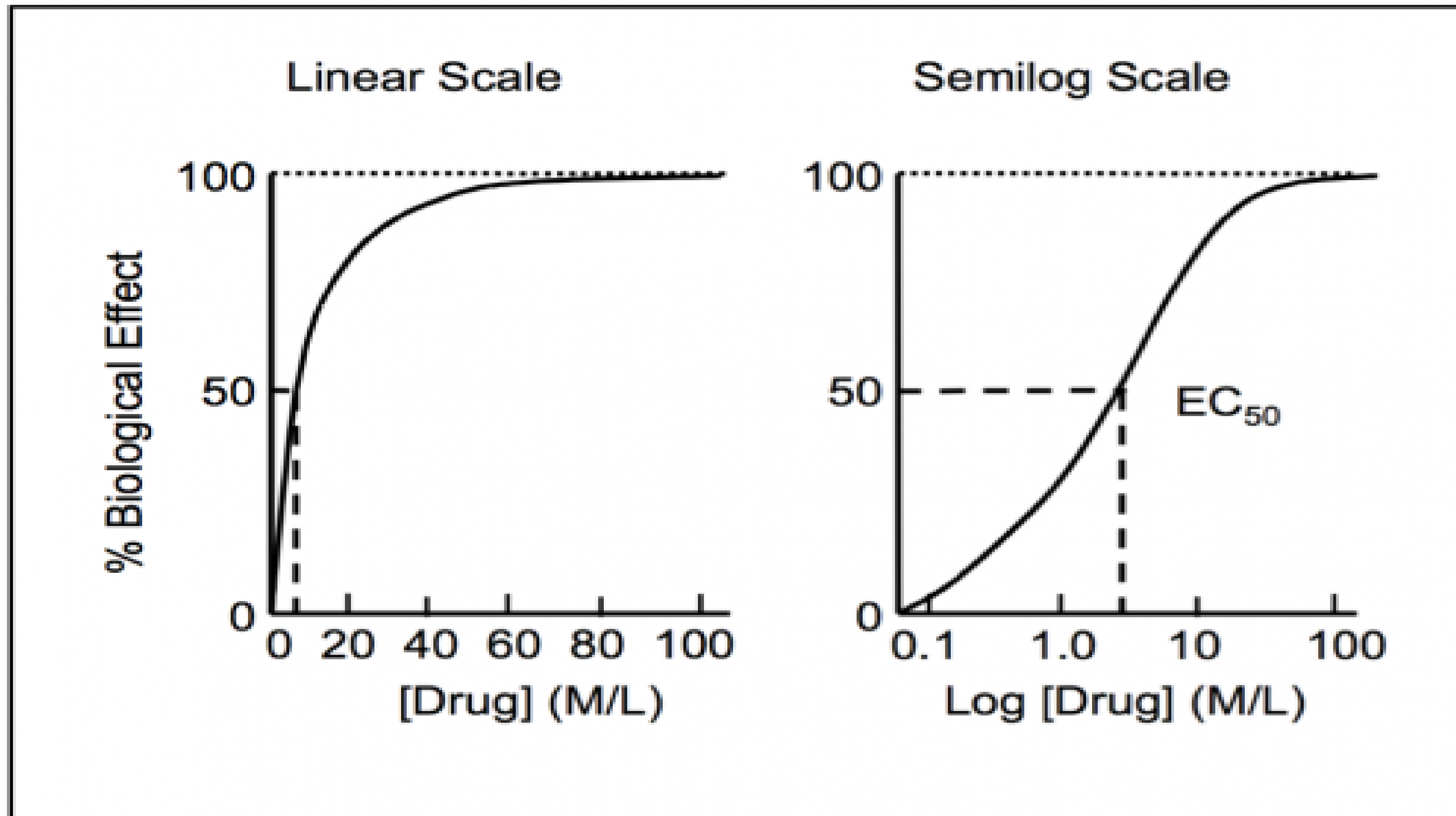


Figure 2. *The dose-response relationship. When plotted on a linear scale (left panel), a dose-response relationship is hyperbolic, and can typically be well described by a Langmuir binding isotherm. At high concentrations the response reaches a maximum due to saturation of available receptors by drug. When plotted on a semi-log scale (logarithm of drug concentration vs. effect), the relationship becomes sigmoidal (S-shaped). The semi-log plot is the preferred method for plotting dose-response relationships because it becomes easier to accurately determine the* ***EC50*** *value (the concentration which produces 50% of the response) by placing it on a linear portion of the curve.*

From tmedweb.tulane.edu/pharmwiki

Mu-receptor occupancy vs daily buprenorphine dose

% mu receptor occupancy

80

60

40

20

mg dose 2 4 8 16

Tapering strategy from Horowitz 2021

Data from Greenwald 2014

% mu-receptor saturation

Saturation 50%-60%
Blocks withdrawal symptoms

Saturation >80%
Blocks craving and exogenous opioid effect

80
70
60
50
40
30
20
10
0

buprenorphine 2 mg | 4 mg | 8 mg | 16 mg | 32 mg

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Data from Greenwald 2014

Items from the Recovery Capital Checklist

First 9 items on patient list, 14 of 15 on provider list, relate to solidity of recovery

Positives

- Spiritual practice
- Counseling participation

Negatives

- Current BZD or stimulant prescription
- Psychotropic polypharmacy
- Current regular or risky alcohol use
- Serious mental illness
- Buprenorphine dose > 8 mg
- Disturbed sleep
- Problems with mood/energy

Zweben J addict med 2020

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Reasons for wanting to taper

- **Forced**
  - loss of insurance, provider
  - failure to meet or agree to program requirements
    - return to use or failure to keep appointments
  - provider or program or insurance limits on duration of treatment
  - living situation not allowing buprenorphine

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Reasons for wanting to taper -- II

- **Patient-driven—often stigma-related**

  Idea that recovery not complete if taking an opioid

  Not wanting to be "chained to a bottle of pills."

  Pressure from family/social circle/sponsor

  Life-style issues: job, change in location, cost, inconvenience

  Medical: pregnancy, end-of-life care

  Poor commitment to recovery in the first place

  Side effects

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HOW should you address tapering? Words matter!

- What do you think about weaning off buprenorphine?
- If you're going to stay on buprenorphine we have to get a Prior Authorization.
- We have to fill out the Treatment Plan for next year—do you want to remain on buprenorphine during that time?
- You mentioned tapering last (visit, year) where are you with that?
- Are you comfortable staying with buprenorphine for now/ for the foreseeable future?

Once you know the patient's "tapering titer" there is no need to continue asking about it.

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Role-play: interview assessing interest in tapering

See handout.

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Making long-term OAT more acceptable -- I

- Reduce stigma. Confront secrets. Work with pharmacy, insurance.
- If you work in a medical practice, your rules for monitoring and visit frequency should conform to those for other DEA-scheduled drugs prescribed in the practice—3-6 month visit intervals, UDSs, pill counts, medication contracts, PMP, etc.
- Collaborate with treatment team: PCP, counselor, psychiatrist, probation officer.
- Visits are purposeful and collaborative, not confrontational or stigmatizing. Use visit time to address issues that matter: tobacco, cannabis, parenting, codependency, polypharmacy, coping skills.

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Making long-term OAT more acceptable -- II

- Avoid counseling requirements, refer to counseling when indicated.
- Consider folding buprenorphine into primary care.
- Minimize cost, inconvenience, side effects.
- Use patient’s preferred dose formulation—tablets, film, mono-product, injection.
- If you are older than your patients, have a plan of succession for your practice.
- Be aware of your patient’s “tapering titer”--- approach interest in tapering collaboratively.

Tapering Plan

Undertaken jointly with the patient.

Think of taper in 2 distinct, but overlapping stages: craving/triggering, and withdrawal.

Dose should be scheduled—taper is provider-directed.

Duration is year-long at least, more often two years

Counseling is desirable.

Address tobacco/cannabis

Continued participation in treatment after taper completed

Agree to resume buprenorphine in event of difficulties

Dose reduction, rather than cessation, is acceptable outcome

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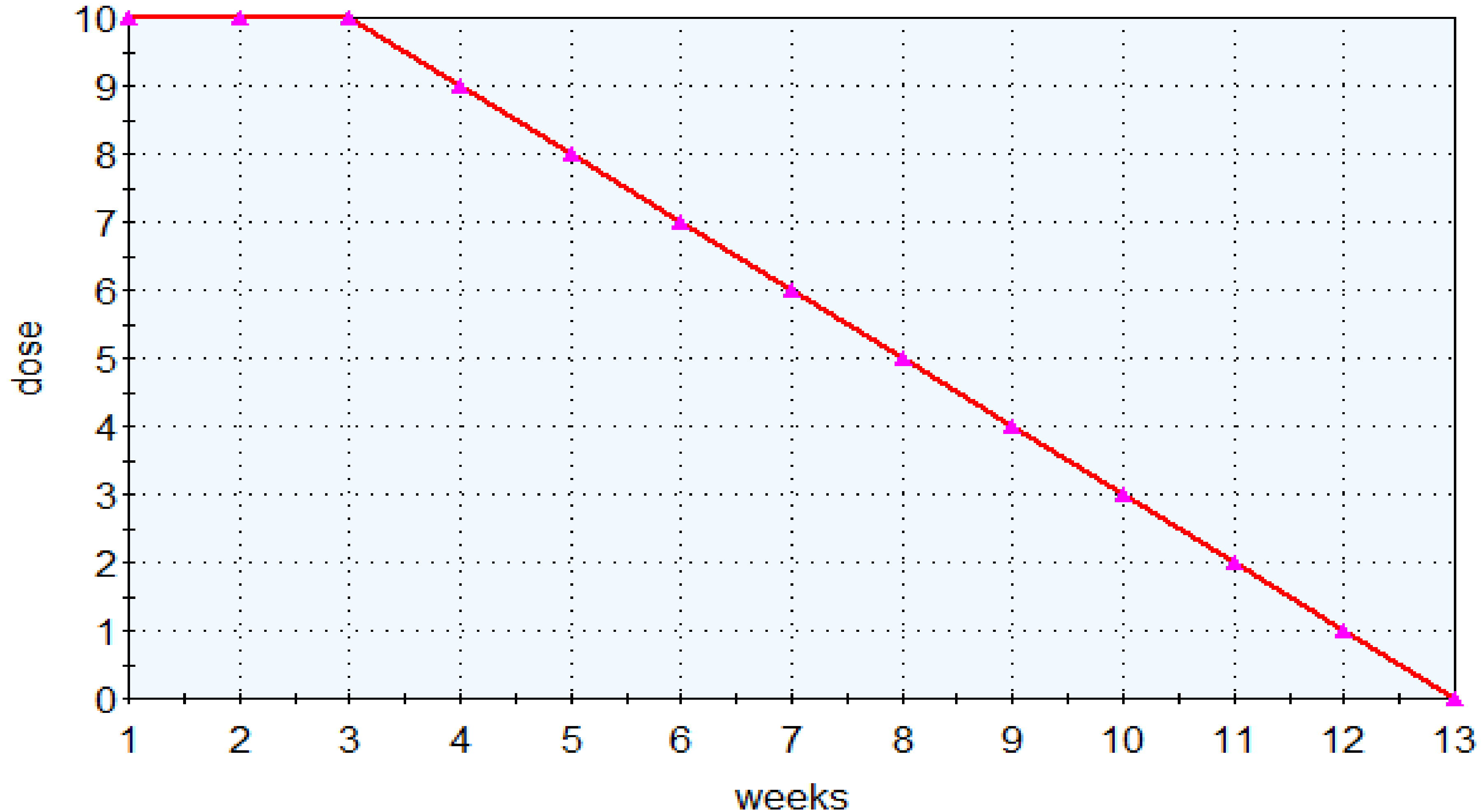
Not recommended



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Preferred

stepwise taper

dose

25
22.5
20
17.5
15
12.5
10
7.5
5
2.5
0

20 20 20
15 15 15 15
10 10 10 10
5 5 5 5 5
1 1 1 1

weeks

How to do it

- Convert to single daily dosing, avoid as-needed use
- On average, dose reduction at 2-month intervals. May do 1 month initially; 2 month intervals and lower mg reductions when you reach the steep portion of the hyperbolic curve
- At 2 mg you still have a ways to go.
- Dose on prescription should agree with agreed-upon plan.
- Okay to pause taper at times.
- Continue urine monitoring---buprenorphine levels, ETG.
- Participation in treatment continues after completion of taper.

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Medications and tapering

- Pharmacologic supports: alpha-2 agonists, mirtazapine, gabapentin, quetiapine, mirtazapine, naltrexone, cannabis, tramadol, kratom. Keep to one or 2 at most—coping skills have priority over medication.
- Alpha-2 agonists: clonidine, tizanidine, lofexidine
- Beware of alcohol, polypharmacy.
- Consider injectable naltrexone after taper completed.
- Don’t forget rescue naloxone!

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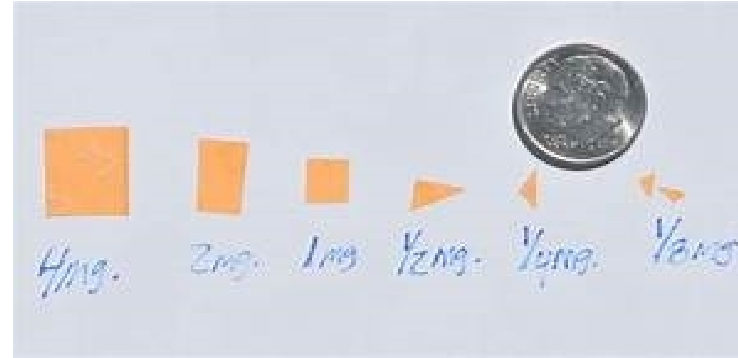
What if there is difficulty getting below 2 mg?

- Cutting film into little pieces?



- Long-acting topical or injected preparations:

ER buprenorphine injection

Transdermal patch

Ritvo 2020

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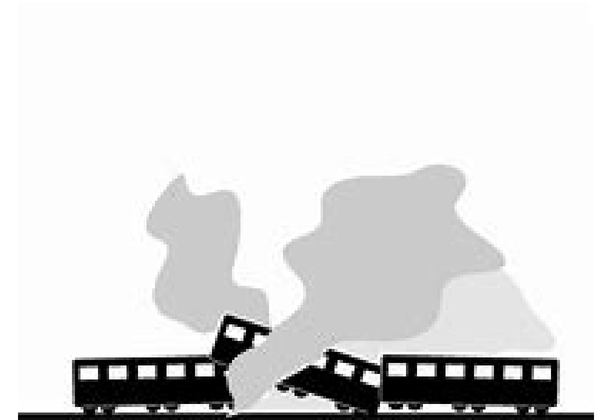
What can derail a taper?

- Secrets
- Deadlines
- Lack of commitment to recovery
- Substitution of other substances, including alcohol and prescription medications
- Lack of coping skills



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Final takeaways/summary

- Buprenorphine for life? YES! Patients on MUOD should remain with it indefinitely.
- How do we engage patients in long-term treatment? By making OAT convenient and acceptable.
- Tapering/discontinuing OAT should be an informed decision by the patient with guidance from the treatment team.
- As part of this decision, a risk assessment such as the Recovery Capital Checklist should be reviewed.
- Patient contact should be maintained after the taper is completed.
- The taper should be structured to optimize safety and effectiveness.

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