Frequently Asked Questions

Medications for Addiction Treatment: Buprenorphine

BUPRENORPHINE PHARMACOLOGY

What is buprenorphine?

Buprenorphine is a schedule III opioid medication. It is an effective medication for opioid use disorder and for pain. The most common formulations are sublingual as monoproduct (i.e. Subutex) or in combination with naloxone (ie. Suboxone). It can also be transdermal for pain (ie. Butrans), intravenous for pain (Buprenex), transmucosal (Subsys) or subcutaneous for opioid use disorder (Sublocade)[1].

OPIOID USE DISORDER			
PRODUCT NAME/ACTIVE INGREDIENT	**ROUTE OF ADMINISTRATION/FORM**	**AVAILABLE STRENGTHS**	**RECOMMENDED ONCE-DAILY MAINTENANCE DOSE**
Bunavail • Buprenorphine hydrochloride • Naloxone hydrochloride	Buccal film	2.1 mg/0.3 mg 4.2 mg/0.7 mg	**Target:** 8.4 mg/ 1.4 mg **Range:** 2.1 mg/0.3 mg to 12.6 mg/2.1 mg
Generic combination product • Buprenorphine hydrochloride • Naloxone hydrochloride	Sublingual tablet	2 mg/0.5 mg	**Target:** 16 mg/ 4 mg **Range:** 4 mg/1 mg to 24 mg/6 mg
Generic monoproduct • Buprenorphine hydrochloride	Sublingual tablet	2 mg 8 mg	**Target:** 16 mg **Range:** 4 mg to 24 mg
Suboxone • Buprenorphine hydrochloride • Naloxone hydrochloride	Sublingual film	2 mg/0.5 mg 4 mg/1 mg 8 mg/2 mg 12 mg/3 mg	**Target:** 16 mg/4 mg **Range:** 4 mg/1 mg to 24 mg/6 mg
Zubusolv • Buprenorphine hydrochloride • Naloxone hydrochloride	Sublingual tablet	0.7 mg/0.18 mg 1.4 mg/0.36 mg 2.9 mg/ 0.71 mg 5.7 mg/1.4 mg 8.6 mg/2.1 mg 11.4 mg/2.9 mg	**Target:** 11.4 mg/2.9 mg **Range:** 2.9 mg/0.71 mg to 17.2 mg/4.2 mg
Sublocade	Subcutaneous depot injection	Start with 300 mg	**Range:** 100 to 300 mg/month

CHRONIC PAIN		
PRODUCT NAME/ACTIVE INGREDIENT	**ROUTE OF ADMINISTRATION/FORM**	**AVAILABLE STRENGTHS**
Butrans	Transdermal patch	5 cmg 7 mcg 10 mcg 20 mcg
Belbuca	Buccal film	75mcg 150mcg 300mcg 450 mcg 600 mcg 750 mcg 900 mcg

What is the difference between buprenorphine and Suboxone®?

Suboxone is a brand name for a combination of buprenorphine and naloxone. The naloxone component is a deterrent that becomes inert when the tablet is taken sublingually; the naloxone is only active if the tablet is injected or snorted.[2]

I'm caring for a patient taking buprenorphine/naloxone, but we only have the buprenorphine mono product (or vice-versa) at my institution, can I substitute?

Yes. Naloxone is added to deter injection of buprenorphine. While mono products are not considered "A" rated (therapeutically bioequivalent) by the FDA and cannot be interchanged by an outpatient pharmacy without a prescriber order, they can be considered clinically similar at equivalent dosages and frequencies. Continuation of a patient's buprenorphine therapy should not be withheld due to lack of availability of a specific product as long as an equivalent dose is available.[3]

How long does buprenorphine take to act and when does it peak?

Sublingual buprenorphine takes 15 minutes to act when held under the tongue and peaks in one hour. A typical 0.3mg IV buprenorphine begins to work immediately after an IV push with peak effect in 5-10 minutes.[4]

Is buprenorphine safe?

Rates of adverse events following home or hospital emergency department initiation of buprenorphine are very low. Because buprenorphine has a "ceiling" effect at usual doses with opioid receptor agonism, it has a very low rate of respiratory depression or overdose. Case reports of overdose have occurred, usually when buprenorphine is coadministered IV with large amounts of alcohol or benzodiazepines. It is recommended to caution patients about the risks of taking both benzodiazepines or alcohol with buprenorphine, but it is not a contraindication. A more common risk is precipitated withdrawal if too large of a dose of buprenorphine is given too soon after taking a full opioid agonist – this is uncomfortable but not life threatening.[5,6 7,8]

Are there contraindications for buprenorphine?

If a patient who is physically dependent on opioids takes a high dose of buprenorphine when they have opioids in their system, the buprenorphine will rapidly block the effects of their opioid causing what is termed "precipitated withdrawal." The severity of this effect varies from mild discomfort to severe distress. This is why there is a washout period for opioid tolerant patients before starting buprenorphine unless doses are very low.[9,10,11]

How does a clinician give buprenorphine?

Buprenorphine tablets or films should be administered sublingually. IV formulations can also be used in some situations. If buprenorphine tablets or films are swallowed, very little medicine gets absorbed. No observation is required. Transdermal buprenorphine will generally be too weak to prevent withdrawal symptoms and is best used for patients with chronic pain.

A Cochrane Analysis reported no difference in adverse event rates with buprenorphine compared to non-opioid treatments for managing opioid withdrawal.[12,13]

How long do people use buprenorphine?

It depends.

Buprenorphine can be used for medically assisted withdrawal (detox) from opioids, however this is not recommended as relapse potential is very high. The goal of the medication is for long-term therapy for opioid use disorder. However, it can take multiple tries before a patient is stable on buprenorphine.

A positive experience with buprenorphine can be a motivation to come back or to pursue long-term treatment after a return to use. The evidence is clear: the more weeks of stability on buprenorphine that a person with opioid use disorder achieves, the more their mortality risk goes down. Once a patient has stabilized on buprenorphine, they should be continued on it indefinitely. When patients stop their maintenance buprenorphine or methadone, the all-cause mortality more than doubles. The neural architecture of the brain is changed by addiction and it takes years to recover. When patients are in recovery they develop whole new patterns of behavior, stress response, and reward seeking that then gets "hardwired" into the brain.[14,15]

Is there a need for an Alpha 2 agonist such as Clonidine?

Adjunct medications such as clonidine, ondansetron, and loperamide can be helpful in some cases to treat the symptoms of opioid withdrawal. It is not required. We avoid routine use of benzodiazepines.[16,17]

BUPRENORPHINE IN THE EMERGENCY DEPARTMENT

What forms of buprenorphine should we have on the formulary?

At minimum, sublingual tablet formulations of buprenorphine should be available to be administered and/or prescribed from the ED. Consider adding intravenous, and sublingual films or sublingual combination buprenorphine-naloxone.

When do you administer buprenorphine in the ED?

Starting buprenorphine when patients have moderate withdrawal symptoms (COWS >8 or at least one objective sign) provides immediate relief. Do NOT start BUP on opioid-dependent patients who are not in withdrawal. For these patients, the BUP causes withdrawal, and decreases patients' desire to stay on BUP or to try BUP again. In general, a patient will need to wait ≥12 hours after short acting opioids, ≥24 hours after a long acting opioid, and ≥48-72 hours after methadone use. In some cases, very low dose buprenorphine (generally <2 mg) can be used even when a patient has not yet entered withdrawal.[18,19,20]

These cases are complex, consider consulting an experienced provider before your first transition of this type:

In California: For immediate assistance, the **California Substance Use Line at 1-844-326-2626** is a free, confidential, 24/7 tele-consultation service for California clinicians. This line is staffed by experienced physicians, pharmacists, and nurses to provide evidence-based guidance on substance use evaluation and management for opioids, alcohol, sedatives, stimulants, and other substances and includes medications for substance use disorder treatment.

Nationally: For assistance Monday through Friday, 9 a.m. and 8 p.m ET, the Clinical Consultation Center **Substance Use Warmline at (855) 300-3595** offers free and confidential clinician-to-clinician telephone consultation focusing on substance use evaluation and management for primary care clinicians. Consultation is available from addiction medicine-certified physicians, clinical pharmacists, and nurses with special expertise in pharmacotherapy options for opioid use. Voicemail is available 24-hours a day.

How does a clinician give buprenorphine in the ED?

A streamlined approach for starting a patient on buprenorphine is available on the California Bridge Program website (see *CA Bridge Quick Start Buprenorphine Algorithm*).

How should an ED discharge a patient?

Always offer a naloxone prescription or kit in hand prior to discharge. You can sign up to receive and dispense free naloxone kits in your ED through the Department of Health Care Services Free Naloxone Distribution Program.

- **Option 1.** No DEA X waiver: It is legal in all states to offer return ED visits for bup administration for 3 days in a row if necessary until patient can follow up with an x-waivered provider. Consider providing a loading dose of bup (up to 32 mg total) prior to discharge for longer effect if patient has close follow up (ie. 1-3 days) with an x-waivered provider. Detox is not recommended. Can provide comfort meds (e.g. clonidine, loperamide, ondansetron, NSAIDS) if needed.
- **Option 2.** DEA X waiver: Give bridge script to last until outpatient visit: e.g., 8mg Suboxone, SL tabs; Take 1 tab under the tongue twice a day for withdrawal symptoms; Dispense #6-14. Usual dose Bup 16-24mg/day.

MEDICATION FOR OPIOID USE DISORDER (MOUD) AND MEDICATION FOR ADDICTION TREATMENT (MAT) IN THE HOSPITAL

What licensing do I need to prescribe buprenorphine or methadone for an inpatient, either as a new start or as an initiation?

No additional licensing is required to prescribe buprenorphine or methadone for patients in the hospital who are admitted with a primary medical problem other than opioid dependency. This is true even for patients who have not previously started to take buprenorphine or methadone. However, to write a discharge prescription for BUP, the provider will need an x-waiver a.k.a DATA 2000 waiver.

What if the patient does not have a primary medical problem separate from opioid dependency or is not admitted?

Even in cases where a patient does not have a primary medical problem, buprenorphine or methadone may be administered for up to 72 hours. Most often, this comes up when a patient presents to the ED in withdrawal but does not need admission, or when an admitted patient has been discharged and has a short wait before they can be seen in an outpatient clinic. Buprenorphine or methadone can be administered without registration as a narcotic treatment program under Title 21, Code of Federal Regulations, Part 1306.07(b)[21]

I want to continue methadone for a patient stabilized on an outpatient dose, what steps should I take?

It is recommended to continue a patient's methadone therapy during their inpatient hospitalization whenever possible. The last dose amount and date should be confirmed with the patient's opioid treatment program upon admission.[22]

What if I cannot confirm a patient's outpatient methadone dose?

If a patient has evidence of opioid use disorder, and presents with opioid withdrawal symptoms, but their outpatient methadone clinic cannot be reached to confirm a dose, they should be treated as a new methadone start. Give methadone per the guidelines, and call the methadone clinic as early as possible to confirm date and amount of their last dose.

I want to continue buprenorphine for a patient stabilized on an outpatient dose, what steps should I take?

A call to the patient's pharmacy or checking CURES can help confirm that a patient is prescribed buprenorphine and at what dose. Please also confirm with the patient directly that they have been taking it as prescribed. If they have not been consistently taking the medication and have used other opioids, treat this as a new start and follow the guidelines.

MEDICATION FOR OPIOID USE DISORDER (MOUD) AND MEDICATION FOR ADDICTION TREATMENT (MAT) IN MEDICALLY COMPLEX PATIENTS

What if the patient has pain or will have surgery?

Continue their outpatient dose! Home buprenorphine or methadone can be split TID or QID to improve pain control, and additional non-opioid and opioid analgesics should be used. See guidelines.If the patient is on buprenorphine, receiving additional opioids will not put them at risk for precipitated withdrawal.[23]

My patient has renal impairment, can I continue/start buprenorphine, buprenorphine/naloxone or methadone?

Yes, neither buprenorphine, naloxone nor methadone are renally cleared to a clinically significant degree.

My patient has hepatic impairment, can I continue/start buprenorphine, buprenorphine/naloxone or methadone?

Both buprenorphine and naloxone are hepatically metabolized. However, it has not been shown to be clinically significant, even in patients with elevated transaminitis. Consider caution in patients with acute hepatitis with severe transaminitis, however, in most cases of liver disease (including Hep C) buprenorphine can be used safely.

The manufacturer of methadone does not provide guidance on dose adjustment in liver impairment. However, because methadone is metabolized by the liver, the half-life may be prolonged in moderate to severe liver impairment and dose reductions may be required.

If my patient is on buprenorphine, will opioid analgesics cause withdrawal or be ineffective for pain?

Although this is a common concern among patients on buprenorphine therapy, if a patient is currently taking buprenorphine, addition of a full opioid agonist does not precipitate withdrawal. Once a patient has been taking buprenorphine, they may add opioid agonists while continuing buprenorphine without risking precipitated withdrawal with their next dose of buprenorphine.[24]

How long do I need to observe a patient prior to discharge after a dose of buprenorphine?

Multiple studies have confirmed the safety and efficacy of home buprenorphine starts or unobserved starts. Low doses of buprenorphine should not cause respiratory depression in patients with known opioid tolerance. Monitoring following dosing inpatient or in the emergency department is only necessary for ensuring that the dose improved withdrawal, for about one hour.[25,26,27,28]

REFERRALS TO ONGOING CARE FOLLOWING MAT STARTS FROM ACUTE CARE

What should I have in place prior to discharging a patient who has been started on buprenorphine or methadone?

Because a discharge prescription will likely be needed, it is helpful to have one or more prescribers with a DATA 2000 x-waiver available during day shifts to prescribe buprenorphine until the patient can see an outpatient x-waivered provider.

Until a routine relationship is established with a local provider or clinic, it is recommended to call a local buprenorphine prescriber (see SAMHSA Buprenorphine Practitioner Locator) before buprenorphine starts to arrange an appointment for the patient. Ideally, this appointment will be within 3 days of discharge.

Similarly, for methadone it is important to call an outpatient methadone clinic prior as soon as possible to arrange for follow up. Physicians outside of these programs cannot prescribe methadone for addiction, therefore discharge prescriptions cannot be written by hospital providers.[29,30,31]

What if there are not many outpatient buprenorphine or methadone prescribers in my community?

This is a challenge in many communities and is an incentive to have more providers be waivered. You can obtain your x-waiver for free with an online training at PCSS.

As more providers are receiving their x-waivers, there are more communities where buprenorphine is easier to access outpatient than methadone, therefore may be a better choice logistically. In California, the Hub and Spoke System will be supporting local providers ("spokes") in prescribing buprenorphine through close partnerships with expert "hubs."

You can use the SAMHSA Buprenorphine Practitioner Locator to locate providers with X waivers in your community and reach out to see if they would be able to accept your patients. If no providers are available in your community at this point, options like Groups, Project Echo, and telemedicine prescribing such as through Bright Heart Health or WorkIt Health, among others, may be good options for building local capacity.

FEDERAL REGULATIONS

What licensing do I need to prescribe buprenorphine or methadone for an inpatient, either as a new start or as an initiation?

Title 21, Code of Federal Regulations, Part 1306.07(b)[32]

72 Hour Rule[33]

(Title 21, Code of Federal Regulations, Part 1306.07(b), allows a practitioner who is not separately registered as a narcotic treatment program or certified as a "waivered DATA 2000 physician," to administer (but not prescribe) narcotic drugs to a patient for the purpose of relieving acute withdrawal symptoms while arranging for the patient's referral for treatment, under the following conditions: 1) not more than one day's medication may be administered or given to a patient at one time 2) this treatment may not be carried out for more than 72 hours and 3) this 72 hour period cannot be renewed or extended.

PART 1306 — PRESCRIPTIONS

GENERAL INFORMATION

§1306.07 Administering or dispensing of narcotic drugs.

(a) A practitioner may administer or dispense directly (but not prescribe) a narcotic drug listed in any schedule to a narcotic dependant person for the purpose of maintenance or detoxification treatment if the practitioner meets both of the following conditions:

(1) The practitioner is separately registered with DEA as a narcotic treatment program.

(2) The practitioner is in compliance with DEA regulations regarding treatment qualifications, security, records, and unsupervised use of the drugs pursuant to the Act.

(b) Nothing in this section shall prohibit a physician who is not specifically registered to conduct a narcotic treatment program from administering (but not prescribing) narcotic drugs to a person for the purpose of relieving acute withdrawal symptoms when necessary while arrangements are being made for referral for treatment. Not more than one day's medication may be administered to the person or for the person's use at one time. Such emergency treatment may be carried out for not more than three days and may not be renewed or extended.

(c) This section is not intended to impose any limitations on a physician or authorized hospital staff to administer or dispense narcotic drugs in a hospital to maintain or detoxify a person as an incidental adjunct to medical or surgical treatment of conditions other than addiction, or to administer or dispense narcotic drugs to persons with intractable pain in which no relief or cure is possible or none has been found after reasonable efforts.

(d) A practitioner may administer or dispense (including prescribe) any Schedule III, IV, or V narcotic drug approved by the Food and Drug Administration specifically for use in maintenance or detoxification treatment to a narcotic dependent person if the practitioner complies with the requirements of §1301.28 of this chapter.

RESOURCES

Clinical Consultation Center nccc.ucsf.edu/clinical-resources/substance-use-resources

California Bridge Program www.bridgetotreatment.org

California Department of Healthcare Services Free Naloxone Distribution Program
www.dhcs.ca.gov/individuals/Pages/Naloxone_Distribution_Project.aspx

SAMHSA Buprenorphine Practitioner Locator tinyurl.com/mtyjtm5

Providers Clinical Support System (PCSS) Free Online Training pcssnow.org/medication-assisted-treatment

California Hub and Spoke System www.uclaisap.org/ca-hubandspoke

Groups - Recover Together joingroups.com

Project ECHO echo.unm.edu

BrightHeart Health www.brighthearthealth.com

WorkIt Health www.workithealth.com

REFERENCES

1. Substance Abuse and Mental Health Services Administration. (2018). *Medications for opioid use disorder.* Treatment Improvement Protocol (TIP) Series 63, Full Document. HHS Publication No. (SMA) 18-5063FULLDOC. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/system/files/sma18-5063fulldoc.pdf
2. Ibid.
3. Ibid.
4. Walsh, S. L., & Eissenberg, T. (2003). The clinical pharmacology of buprenorphine: Extrapolating from the laboratory to the clinic. *Drug and Alcohol Dependence, 70*(2), S13-S27. https://doi.org/10.1016/s0376-8716(03)00056-5
5. Ibid.
6. Walsh, S. L., Preston, K. L., Stitzer, M. L., Cone, E. J., & Bigelow, G. E. (1994). Clinical pharmacology of buprenorphine: Ceiling effects at high doses. *Clinical Pharmacology and Therapeutics*, *55*(5), 569-580. https://doi.org/10.1038/clpt.1994.71
7. Substance Abuse and Mental Health Services Administration. (2018). *Medications for opioid use disorder.* Treatment Improvement Protocol (TIP) Series 63, Full Document. HHS Publication No. (SMA) 18-5063FULLDOC. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/system/files/sma18-5063fulldoc.pdf
8. Greenwald, M. K., Johanson, C. E., Moody, D. E., Woods, J. H., Kilbourn, M. R., Koeppe, R. A., ... & Zubieta, J. K. (2003). Effects of buprenorphine maintenance dose on μ-opioid receptor availability, plasma concentrations, and antagonist blockade in heroin-dependent volunteers. *Neuropsychopharmacology*, *28*(11), 2000. https://doi.org/10.1038/sj.npp.1300251
9. Ibid.
10. Englander, H., Mahoney, S., Brandt, K., Brown, J., Dorfman, C., Nydahl, A., ... & Gregg, J. (2019). Tools to support hospital-based addiction care: Core components, values, and activities of the Improving Addiction Care Team. *Journal of Addiction Medicine*, *13*(2), 85-89. https://doi.org/10.1097/ADM.0000000000000487
11. Substance Abuse and Mental Health Services Administration. (2018). *Medications for opioid use disorder.* Treatment Improvement Protocol (TIP) Series 63, Full Document. HHS Publication No. (SMA) 18-5063FULLDOC. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/system/files/sma18-5063fulldoc.pdf
12. Ibid.
13. Greenwald, M. K., Johanson, C. E., Moody, D. E., Woods, J. H., Kilbourn, M. R., Koeppe, R. A., ... & Zubieta, J. K. (2003). Effects of buprenorphine maintenance dose on μ-opioid receptor availability, plasma concentrations, and antagonist blockade in heroin-dependent volunteers. *Neuropsychopharmacology*, *28*(11), 2000. https://doi.org/10.1038/sj.npp.1300251
14. Chutuape, M. A., Jasinski, D. R., Fingerhood, M. I., & Stitzer, M. L. (2001). One-, three-, and six-month outcomes after brief inpatient opioid detoxification. *The American Journal of Drug and Alcohol Abuse*, *27*(1), 19-44. https://doi.org/10.1081/ADA-100103117
15. Jones, H. E., O'Grady, K. E., Malfi, D., & Tuten, M. (2008). Methadone maintenance vs. methadone taper during pregnancy: Maternal and neonatal outcomes. *The American Journal on Addictions*, *17*(5), 372-386. https://doi.org/10.1080/10550490802266276

16. Substance Abuse and Mental Health Services Administration. (2018). *Medications for opioid use disorder.* Treatment Improvement Protocol (TIP) Series 63, Full Document. HHS Publication No. (SMA) 18-5063FULLDOC. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/system/files/sma18-5063fulldoc.pdf
17. Englander, H., Mahoney, S., Brandt, K., Brown, J., Dorfman, C., Nydahl, A., ... & Gregg, J. (2019). Tools to support hospital-based addiction care: Core components, values, and activities of the Improving Addiction Care Team. *Journal of Addiction Medicine*, *13*(2), 85-89. https://doi.org/10.1097/ADM.0000000000000487
18. Ibid.
19. Herring, A. A., Perrone, J., & Nelson, L. S. (2019). Managing opioid withdrawal in the emergency department with buprenorphine. *Annals of Emergency Medicine*, *73*(5), 481-487. https://doi.org/10.1016/j.annemergmed.2018.11.032
20. Substance Abuse and Mental Health Services Administration. (2018). *Medications for opioid use disorder.* Treatment Improvement Protocol (TIP) Series 63, Full Document. HHS Publication No. (SMA) 18-5063FULLDOC. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/system/files/sma18-5063fulldoc.pdf
21. 21 CFR §1306.07(b).
22. Substance Abuse and Mental Health Services Administration. (2018). *Medications for opioid use disorder.* Treatment Improvement Protocol (TIP) Series 63, Full Document. HHS Publication No. (SMA) 18-5063FULLDOC. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/system/files/sma18-5063fulldoc.pdf
23. Haber, L. A., DeFries, T., & Martin, M. (2019). Things We Do for No Reason™: Discontinuing buprenorphine when treating acute pain. *Journal of Hospital Medicine*, *14*(10), 633-635. Retrieved from https://mdedge-files-live.s3.us-east-2.amazonaws.com/files/s3fs-public/issues/articles/jhm014100633.pdf
24. Ibid.
25. Herring, A. A., Perrone, J., & Nelson, L. S. (2019). Managing opioid withdrawal in the emergency department with buprenorphine. *Annals of Emergency Medicine*, *73*(5), 481-487. https://doi.org/10.1016/j.annemergmed.2018.11.032
26. Cunningham, C. O., Giovanniello, A., Li, X., Kunins, H. V., Roose, R. J., & Sohler, N. L. (2011). A comparison of buprenorphine induction strategies: Patient-centered home-based inductions versus standard-of-care office-based inductions. *Journal of Substance Abuse Treatment*, *40*(4), 349-356. https://dx.doi.org/10.1016%2Fj.jsat.2010.12.002
27. Lee, J. D., Vocci, F., & Fiellin, D. A. (2014). Unobserved "home" induction onto buprenorphine. *Journal of Addiction Medicine*, *8*(5), 299-308. https://dx.doi.org/10.1016%2Fj.jsat.2010.12.002
28. Gunderson, E. W., Wang, X. Q., Fiellin, D. A., Bryan, B., & Levin, F. R. (2010). Unobserved versus observed office buprenorphine/naloxone induction: A pilot randomized clinical trial. *Addictive Behaviors*, *35*(5), 537-540. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2830372/
29. Herring, A. A., Perrone, J., & Nelson, L. S. (2019). Managing opioid withdrawal in the emergency department with buprenorphine. *Annals of Emergency Medicine*, *73*(5), 481-487. https://doi.org/10.1016/j.annemergmed.2018.11.032
30. Englander, H., Mahoney, S., Brandt, K., Brown, J., Dorfman, C., Nydahl, A., ... & Gregg, J. (2019). Tools to support hospital-based addiction care: Core components, values, and activities of the Improving Addiction Care Team. *Journal of Addiction Medicine*, *13*(2), 85-89. https://doi.org/10.1097/ADM.0000000000000487
31. Substance Abuse and Mental Health Services Administration. (2018). *Medications for opioid use disorder.* Treatment Improvement Protocol (TIP) Series 63, Full Document. HHS Publication No. (SMA) 18-5063FULLDOC. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://store.samhsa.gov/system/files/sma18-5063fulldoc.pdf
32. 21 CFR §1306.07(b).
33. The National Alliance of Advocates for Buprenorphine Treatment. (n.d.) *Are there exceptions when Subutex and Suboxone may be administered by a practitioner without the DATA 2000 waiver?* Retrieved from https://www.naabt.org/documents/three-day-rule.pdf