Inpatient Opioid Use Disorder Clinical Pathway Playbook

Resources for implementing evidence-based care in the hospital setting

Providence | WELL BEING TRUST

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Table of Contents

Opioid Use Disorder Clinical Pathway Vision & Recommended Approach

Vision for OUD

Opioid use disorder (OUD) is a chronic medical problem that waxes and wanes over time. Like diabetes it can lead to dangerous medical complications and can be challenging to manage during an acute hospital stay. Also, like diabetes, both pharmacologic and "lifestyle changes" are important in successfully managing this illness.

People who are physically dependent on opioids live with a fear of withdrawal symptoms. These can be dramatic with vomiting, diarrhea, jerking and writhing. But even mild withdrawal leads to anxiety, insomnia, and a dysphoria that most patients find intolerable. When patients are struggling with withdrawal, they are not able to effectively engage in care or work with staff constructively. The urgency to relieve this acute withdrawal will override almost any other priority or concern the patient may have.

Both patients and hospital staff are often focused on the desire to "detox" assuming that once withdrawal is no longer a concern the addiction problem will not return. Experience shows that even for patients who successfully stop opioids for a period - whether during a hospital, in a treatment program or when incarcerated - relapse to opioid use over the next few weeks or months is the most common result. When patients relapse after periods of abstinence there is a higher risk of a fatal overdose and many people struggling with sobriety die this way.

As with diabetes, short term management of the acute problem will ideally lead into a long-term management plan.

The Opioid Use Disorder Inpatient Clinical Pathway (OUD Pathway) aims to deliver a set of materials and tools for use in hospitals to allow patients with OUD to receive safe, effective, and compassionate care. Protocols have been designed with the goal of enabling the patient to complete treatment for medical, surgical, or psychiatric problems that brought them to the hospital. The management strategies applied in the hospital will need to be connected to long term evidence-based strategies to help patients remain successful.

The purpose of the OUD Pathway is:

- To provide guidance for clinical teams to provide care that is safe, effective & compassionate to patients with opioid use disorder who have a concurring medical, surgical or psychiatric issue.
- To increase alignment in clinical care delivery across the System by sharing best practices.
- To promote language that is dignifying and humanizing for the people we serve.
- To eliminate stigma associated opioid use disorder that impedes effective care.
- To integrate care for opioid use disorder into the broader spectrum of care we provide.
- To increase awareness of the prevalence of opioid use disorder.
- To align clinical and patient education for opioid use & withdrawal.

- To ensure tools in Epic are optimized and workflows are available to support the Pathway guidelines.
- To support Opioid related measures and initiatives throughout the system.

What is a clinical pathway?

A clinical pathway is a defined sequence of clinical interventions to guide clinicians in providing efficient, coordinated delivery of high-quality care. It is intended to be utilized by a multidisciplinary team and to focus on the quality and coordination of care. Clinical pathways aim to improve patient outcomes and experience of care through minimizing duplication of efforts, excess resource usage and differences in the interpretations of guidelines and best practices. Furthermore, this clinical pathway improves the caregiver experience through equipping them with tools to provide evidence-based care for a complex and often-stigmatized disease, and furthermore, offering a framework to impact the perception and treatment of persons with substance use disorders. The Providence Mental Health & Substance Use Clinical Performance Group (MHSU CPG) has worked with interdisciplinary subject matter experts throughout all seven regions of the organization to create, evaluate and approve the pathway content, and is eager to share this body of work with all who endeavor to transform and improve care for patients in the hospital who experience OUD.

Playbook contents & how to approach

This pathway playbook includes a variety of resources to ease the way of the leader aiming to implement this pathway, many of which will be essential to the process, and some of which will be optional based on the context of application. The high-level organization of materials follows this order:

- Central approach & guiding principles
- Project planning tools and templates
- Clinical guidelines, workflows, and training resources

The order of these materials is intentional to first provide a grounding in the purpose of this work, then offer a framework for organizing and sustainably structuring the process and, finally, to give the user the proper array of materials to implement and measure progress. Finally, this playbook is intended as a guideline and menu of resources to be selected from and applied as needed. There will be nuances to every care environment and clinical team which will inform how the work proceeds. However, the central aim and approach to care for individuals experiencing OUD will be universally applicable, connecting this work across every facility and team that endeavors to implement this Pathway.

Inpatient Opioid Use Disorder Clinical Pathway

Mental Health & Substance Use CPG
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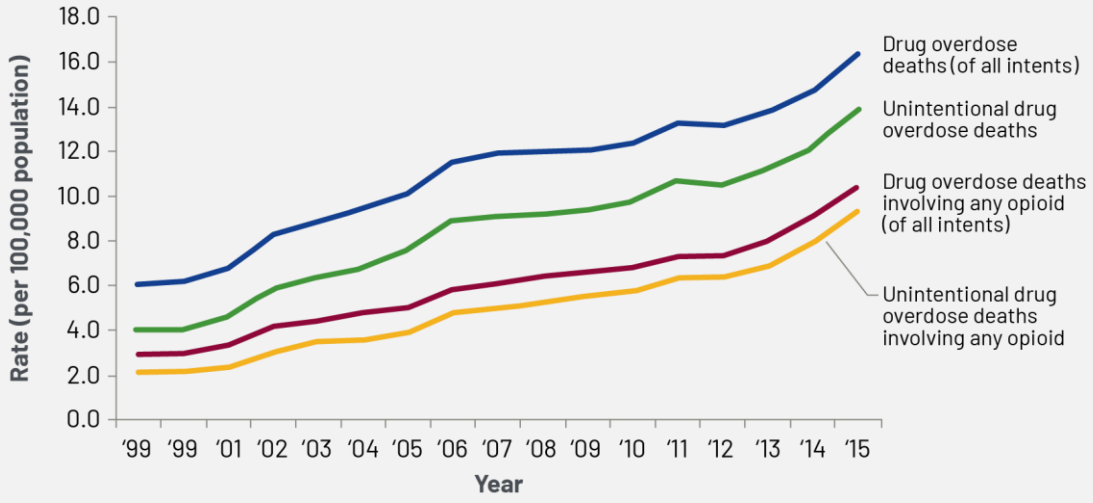
Introduction

The United States has been in the throes of an opioid epidemic for the past 3 decades, which has now been exacerbated by a rise in substance use ushered in by the 2020 COVID-19 pandemic. According to Velander (2018), "more people die of drug overdoses than any other form of accidental death, and opioid overdose rates surpass historic peak death rates from human immunodeficiency virus (HIV), gun violence, and motor vehicle accidents." Mortality is not the only societal cost related to opioid overdose. In 2014, there were approximately 53,000 hospitalizations and 92,000 ED visits for unintentional, opioid overdose across the United States (Center for Disease Control [CDC], 2017). Worldwide, the estimated financial cost of the opioid epidemic in 2015 was $504 billion (Substance Abuse and Mental Health Administration [SAMSHA], 2018). It is estimated that 4% of all hospitalized patients have OUD (Liebschutz, 2014). As hospital visits, overdoses & deaths continue to increase, the impact of this disease reaches all providers, caregivers and communities, and a need for effective care is paramount. While treating opioid use disorder is complex, the literature demonstrates that comprehensive treatment, including medication assisted treatment (MAT), can save lives. The purpose of this paper is to describe the nature of the opioid problem as a public health crisis in the United States and present evidence for the implementation of MAT as best practice and the gold standard to improve outcomes in this patient population.

Mortality trends

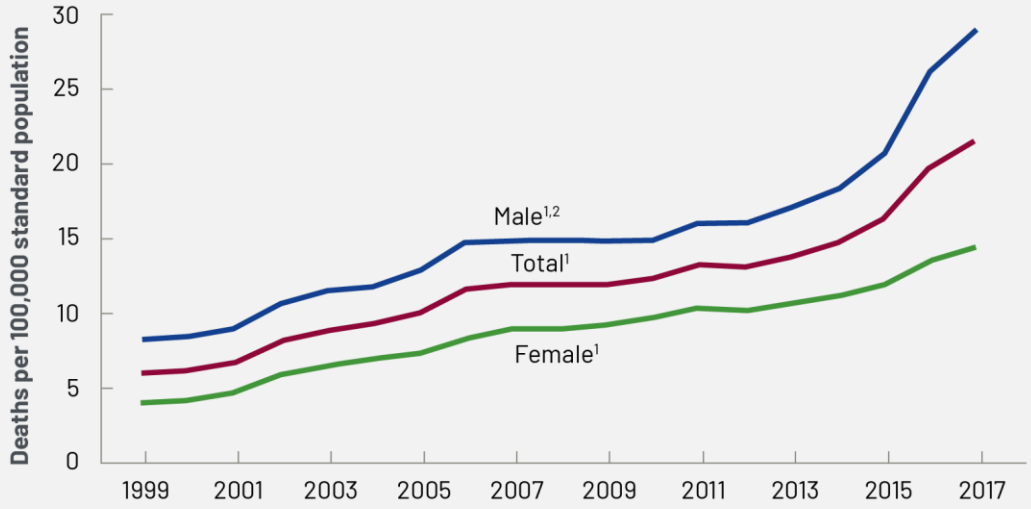
In recent decades, opioid related mortality has increased substantially, with a peak increase between the years 2013-2015 of 9% each year (CDC, 2017). Between 1999 and 2015, overall drug overdose deaths increased from 6.1 to 16.3 per 100,000 of the total population. This trend has increased through 2017. The initial increase in opioid addiction is attributed to over-prescribing practices. In response to these alarming trends, providers have demonstrated more prudence in prescribing opioids, as evidenced by recent statistics showing prescribing levels have decreased (Hedegaard, Minino, & Warner, 2018). The overall rate of opioid use continues to increase, however, with highly potent opioids entering the street market increasingly through illicit means. Drugs such as fentanyl and carfentanil are associated with an increased risk of overdose and higher rates of dependence than other opioids like morphine and heroin.

Figure 1: Age-adjusted rates of drug overdose deaths and drug overdose deaths involving any opioid, for all intents and for unintentional intent, by year – United States, 1999-2015



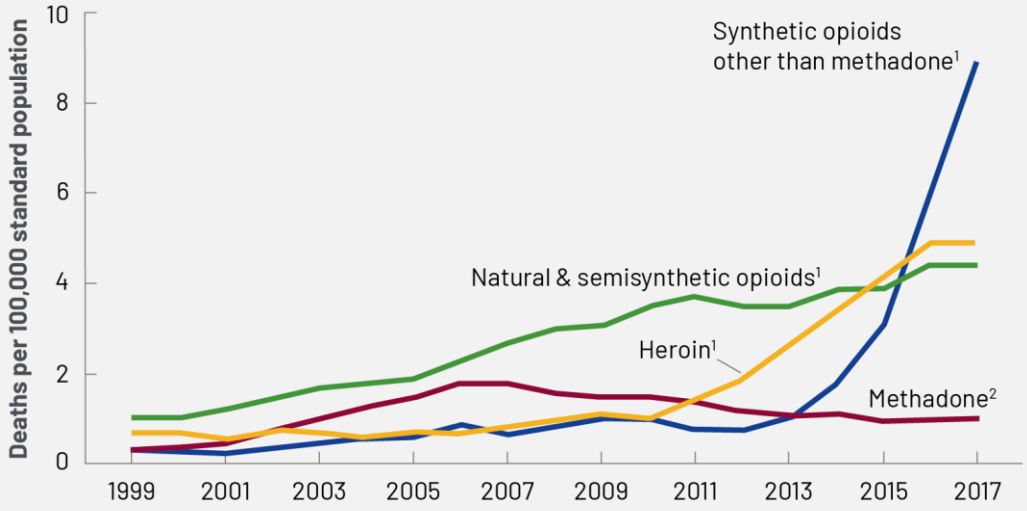
(National Vital Statistics System, 2017)

Figure 2. Age-adjusted drug overdose death rates: United States, 1999-2017



(National Center for Health Statistics, 2018)

Figure 3. Age-adjusted drug overdose death rates, by opioid category: United States, 1999-2017

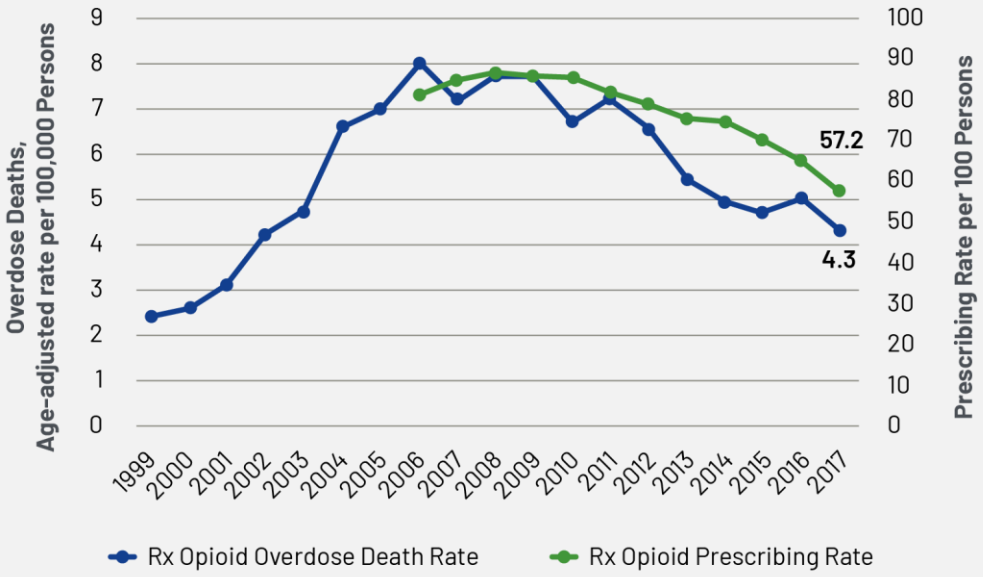


(National Center for Health Statistics, 2018)

Impact on Washington State

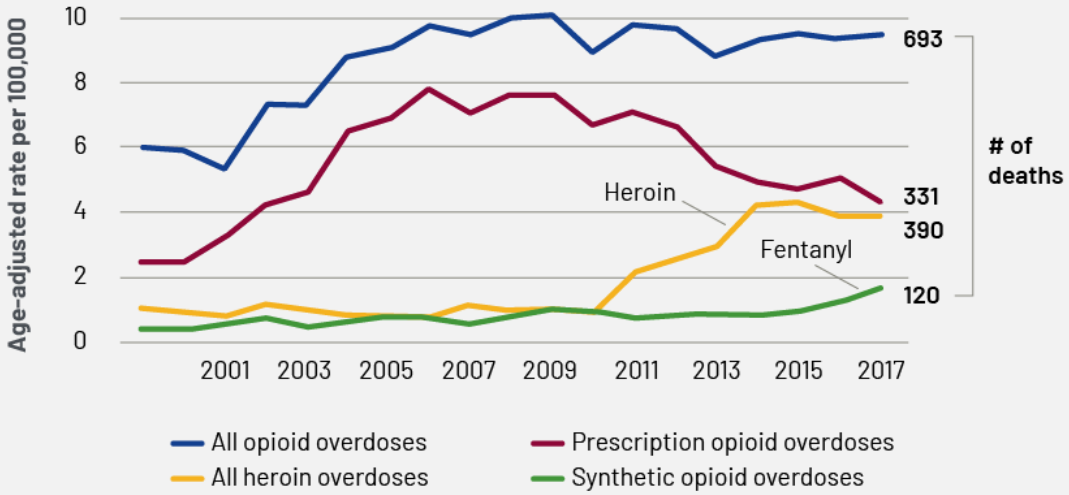
The State of Washington has experienced health impact trends parallel to the rest of the nation, including an increase in opioid overdose deaths, despite improved provider compliance with published opioid prescribing guidelines. As shown in Figure 4, opioid prescribing rates have been decreasing since 2008, and the number of overdose deaths as a result of prescription opioids has trended down with prescribing rates. However, there has been an increase in number of overdose deaths related to heroin and synthetic opioids, which has kept the overall opioid related mortality steady over the last few years, as shown in Figure 5.

Figure 4. Prescription Opioid Overdose and Prescribing Rate in Washington



National Institute on Drug Abuse (2019)

Figure 5. Number of Deaths Involving Opioids by Year and Type in Washington



(Washington Department of Health, 2018)

Opioid Use Disorder is a chronic medical condition.

The medical community's understanding of how to treat opioid use disorder continues to progress with consensus that addiction is a chronic condition requiring treatment practices similar to those of other chronic illnesses, like diabetes and cardiovascular disease. Comprehensive chronic disease management can help patients with substance use disorders (SUD's) stabilize, achieve remission of symptoms, and establish long-term recovery (SAMHSA, 2018). Chronic disease management should include referring patients to resources in their community and assisting patients in navigating the healthcare apparatus to address behavioral health and social needs. As with other chronic conditions, patients demonstrate varying degrees of adherence to the treatment program. It is not uncommon for patients with OUD to experience a relapse of symptoms requiring acute treatment, even after long periods of remission (SAMHSA, 2018). Given the risk of relapse and complex mental health and social issues often coexisting with OUD, inpatient providers may be reluctant to initiate MAT. However, the latest evidence demonstrates MAT leads to improved outcomes, including preventing risk of death due to overdose. These improved outcomes are shown to outweigh any risks associated with treatment.

Barriers to treatment

Unfortunately, most individuals with OUD are not currently receiving treatment, with only 20% having received specialty care within the previous year (Saloner & Karthikeyan, 2015). Many of those who do receive treatment are not given access to the best treatment modalities, which include buprenorphine or methadone-based MAT. Despite evidence which strongly supports addition of MAT medications to treatment plans (Velander, 2018), only a third of those who are receiving specialty care are prescribed MAT. High rates of relapse and treatment drop-out in patients with OUD lead to increased vulnerability to opioid poisoning. Due to the increased risk of unintentional overdose from opioid use following periods of abstinence, including post-discharge from treatment or prison programs (Sordo et al., 2017), MAT is a critical component of a chronic-care model of treatment. Unfortunately, less than half of those receiving specialty treatment remain in continuous care after 6 months (Timko, Schultz, Cucciare, Vittorio, & Garrison-Diehn, 2016).

Access and capacity.

An additional barrier to adequate treatment of individual with OUD is lack of broad capacity and access. Were providers to prescribe MAT at levels necessitated by the burden of OUD, resources in most states would quickly be exhausted beyond capacity. In some communities, wait lists exist for MAT at opioid treatment programs, preventing timely access to care and increasing risk of opioid-related deaths (Jones, Campopiano, Baldwin, & McCance-Katz, 2015). Other contributing factors to low access include variable and inadequate health insurance coverage, as well as knowledge deficits regarding effective treatment options. MAT still has not been fully adopted by medical providers across disciplines, and the full range of social and medical support services needed to provide adequate treatment are finite and scarce resources. Despite local and national efforts to expand OUD treatment availability, there remains a large gap between those who need treatment and those who are able to receive it (Mitchell, Gryczynski, & Schwartz, 2018).

Relationship with healthcare community.

Frequently, social stigma surrounding substance use has contributed to troubled relationships between individuals with OUD and the health care providers. When seeking treatment for addiction or other concurrent medical issues, persons with OUD often suffer from withdrawal symptoms and cooccurring mental health disorders, both of which impair the ability to collaborate with care teams to address the medical condition. When the care team fails to adequately treat underlying withdrawal symptoms or appropriately utilize MAT to treat patients, patients are less likely to comply with treatment and are at increased risk to drop out of treatment and even relapse. Previous negative experiences with healthcare providers can contribute to a reluctance to seek care in the future. Each time a patient experiences under-treatment due to judgment or stigma, trust in the healthcare system erodes, creating a significant barrier to appropriate treatment at a later date.

Treating Opioid Use disorder

Medication Assisted Treatment

In response to the enumerated challenges in treating OUD and in light of the public health crisis at hand, leading global organizations such as the World Health Organization (2009), the US Department of Health and Human Services (2016), the Substance Abuse and Misuse Organization (2018), and the American Society of Addiction Medicine (Kampman & Jarvis, 2015) have published treatment recommendations. A review of the literature supports use of opioid agonists or antagonists as part of MAT. Patients who receive treatment with methadone or buprenorphine experience lower mortality, primarily due to a reduction in drug-related overdose (Schwartz et al., 2013). In a largescale French study, after buprenorphine was made widely available to the medical community, overdose deaths were drastically reduced (Auriacombe, Fatséas, Dubernet, Daulouède, & Tignol, 2004).

Table 1. Percent Annual Change in Overdose Deaths Reported from 1993-1999

Year	Overdoses	% Change from prior year
1993	454	
1994	564	+24%
1995	465	-18%
1996	393	-16%
1997	228	-42%
1998	143	-37%
1999	120	-16%

(Auriacombe, Fatséas, Dubernet, Daulouède, & Tignol, 2004).

While initiation of MAT has typically been offered in the outpatient setting, acute care hospitals and emergency departments are increasingly impacted by the rising prevalence of OUD. ED visits where opioid misuse was a primary diagnosis nearly doubled from 2005-2014 while inpatient visits increased 64% (SAMHSA, 2018). Nearly 25% of all patients who are seen in the ED for opioid misuse require admission to the hospital (Liebschutz, 2014). The challenges of treating OUD combined with increased inpatient volume of OUD, make it imperative that hospital providers understand this condition and the current evidence-based principles for effective treatment.

MAT in the Hospital Setting

Historically, patients who are dependent on opioids admitted for other medical reasons have been expected to detox during their hospital stay. In some cases, these patients are offered medications to address withdrawal symptoms until detox is complete. However, strong evidence exists which suggests MAT should be initiated while patients are still in the hospital setting. In a randomized trial, Liebschutz et al (2014) referred patients with OUD to the hospital's primary care clinic after discharge, comparing groups that received induction and intrahospital dose stabilization of buprenorphine (linkage group) to those who were placed on a detoxification protocol. The linkage group participants were found more likely to follow-up with treatment when compared with the detoxification group (72.2% versus 11.9%). More than one third of linkage group participants reported zero illicit opioid use during the six months following the initiation of MAT, compared to only 10% of those under the detoxification protocol. Maintaining engagement in treatment remains a challenge in all groups, with only 18% of patients continuing in the treatment program after 180 days. Still, 18% compliance 180 days out is higher than the initial percentage of patients in the detoxification group that followed through with outpatient treatment from day one. Therefore, the patients who received MAT were positioned for a better long-term outcome. Though it is not required to have a DATA 2000 waiver to initiate buprenorphine in the inpatient setting, training is recommended and is necessary for discharging patients with a prescription.

In another randomized clinical trial, Dionofrio et al (2015) examined outcomes in patients with OUD seen in the emergency department. Three interventions were randomly assigned to patients: one group received only a referral to outpatient treatment; a second group was given a brief intervention (additional discussion and education on opioid use and treatment); and the third group was given a referral, brief intervention and ED-initiated buprenorphine treatment. The group that received buprenorphine treatment had increased engagement in treatment (from 45% to 78%) and decreased reported illicit drug use. In pregnant populations, referral, brief intervention, and opioid agonist treatment is recommended over supervised withdrawal (American College of Obstetricians and Gynecologists [ACOG], 2017). In agreement with the aforementioned studies, the ACOG position asserts the standard of care is to address opioid dependence and withdrawal in the pregnant patients with opioid agonists, as withdrawal without MAT support is associated with higher relapse rates and therefore worse medical outcomes and complications of opioid use.

Chronic disease model in treating OUD.

During an inpatient stay for acute medical illness, opioid dependency often comes to light during a time when patients are experiencing an increased motivation to make changes in their lives (Suzuki, 2016). Just as a diabetic patient who is admitted with DKA, the acute emergency (DKA) is treated and the chronic underlying problem is addressed, with patients receiving guidance to accept a pathway of ongoing care. This standard of care, which often includes education and referrals to outpatient providers is administered to the patient as a basic expectation during the hospital episode.

Providers are familiar with the counseling and referral process as it relates to alcohol and nicotine dependence, as these interventions have been widely utilized for many years. The MAT model is similar to the medical treatment model used in the treatment of diabetes or hypertension, where treatment is initiated, and medication is titrated during hospitalization to optimum effect. The patient is then discharged with a treatment plan that includes follow up with a primary care provider. Similarly, in the treatment of OUD, it is recommended that brief counseling and referrals should be provided. A majority of patients with OUD will be open to initiated MAT (Suzuki, 2016) and adding MAT to the interventions will increase engagement, decrease relapses, and therefore lead to improved outcomes (D'Onofrio, et al, 2015).

Overcoming barriers to hospital treatment of OUD

In the current state, patients admitted to the ED or inpatient departments are often expected to participate effectively in their care despite suffering from the effects of withdrawal. However, the evidence demonstrates that medication tapers and supervised withdrawals have poor outcomes when compared to MAT (SAMHSA, 2018). Patients who do not receive MAT during their hospital stay are much more likely to sign out against medical advice (AMA) or use illicit drugs while they are in the hospital. Figure 6 shows the rate of AMA disposition for individuals diagnosed with OUD at one Providence hospital (Providence Alaska Medical Center).

Figure 6. One year rate of AMA disposition in patients at PAMC (2017-2018)

AMA rates in patients >17yrs old, all diagnoses			
	AMA	**Total Cases**	**% AMA**
ED	130	10990	1.20%
Inpatient	43	3377	1.30%

AMA rates in patients diagnosed with opioid addiction			
	AMA	**Total Cases**	**% AMA**
ED	17	944	1.80%
Inpatient	74	937	7.9%

(Internal reporting, PAMC, 2018)

When facing withdrawal symptoms, patients who are dependent on opioids may have conflicts with hospital staff or become combative. They may find the pain of being treated under those conditions unbearable and elect to leave the facility before it is medically safe for them to do so. By contrast, patients for whom withdrawal symptoms are controlled by MAT will be far more likely to follow up with referrals they receive while in the hospital. This early engagement increases the likelihood of successful recovery.

While it is ideal to transfer patients seamlessly between inpatient and outpatient services, many communities do not have robust outpatient services that can accept a large influx of new patients with OUD. However, the relative scarcity of treatment options should not prevent providers from treating patients according to best practice. The health care community, including Providence St. Joseph Health, is actively working to prioritize the expansion of these services, but in the interim, inpatient providers should continue to follow evidence-based practice. Just as a waitlist for the community hypertension clinic does not prevent providers from treating patients medically during their hospitalization, discharge difficulties should not interfere with following MAT guidelines. It is noteworthy that while "non-compliance" is often cited as a reason that patients experiencing OUD are undertreated, there is also a high incidence of non-compliance in patients with other chronic medical diagnoses (diagnosis of asthma, diabetes, hypertension, etc.). In these cases, a patient's lack of motivation to continue care post-discharge is not considered a barrier to treatment during hospitalization.

Pharmacology

There are 3 medications that are FDA-approved for the treatment of OUD, all of which act on the mu opioid receptors: methadone (full agonist), buprenorphine (partial agonist) and extended-release naltrexone (antagonist). All three of these medications help in treatment of OUD by blunting or blocking the effects of illicit opioids and reducing cravings. Added benefits of methadone and buprenorphine are that they effectively mitigate withdrawal symptoms. These medications are the basis of MAT and are strongly supported by current evidence as the best method to treat OUD and reduce the risk of overdose death in patients (Mattick, 2013)

Methadone.

Methadone has been the most commonly used form of OUD treatment. It is considered a first-line maintenance treatment for opioid use disorder. The greatest risk in methadone treatment is the risk for respiratory depression and potential for diversion. As already described, patients receiving methadone have improved outcomes when compared to patients receiving placebo or no medications (SMHSA, 2016). However, methadone cannot be prescribed on discharge with maintenance doses. Patients receiving this modality of treatment will need to be seen by an outpatient provider before they can continue this therapy. Hospital providers should attempt to arrange a seamless transfer to a methadone clinic upon discharge. Typically, with a 7-day advanced notice of a pending discharge outpatient methadone maintenance follow up can be arranged to coordinate with day of discharge.

Buprenorphine.

Buprenorphine, another alternative for treating OUD has been shown to be safer than methadone. There is a lower "ceiling" for this medication, so there are limits to how much an increased dosage will increase any opioid effects. This reduces the risk of respiratory depression and other symptoms of overdose. However, buprenorphine does have a higher rate of treatment drop-out when compared to methadone (Mattick, 2009). Due to its reduced risk for overdose, buprenorphine is the recommended first-line maintenance treatment in patients with severe OUD (Strain, 2018). Buprenorphine can be prescribed as a single modality or in combination with naltrexone and can be prescribed (by waivered providers) on discharge as a bridge to follow-up treatment. As previously stated, this method is preferred and more effective than detox methods (Suzuki, 2016). Typically, outpatient follow up for buprenorphine (with or without naltrexone) treatment can be arranged within the community given availability of waivered providers.

Naltrexone.

As an opioid antagonist, naltrexone is effective in negating the positive effects of taking opioids. One challenge is that withdrawal must be completed prior to initiating naltrexone treatment. The patient must be opiate free for a minimum of 7-10 days before naltrexone is initiated. Naltrexone therapy could be a preferred therapy for those who are highly motivated and have mild OUD (Strain, 2018). For example, in those who must abstain from opioids entirely in order to continue their employment, naltrexone alone could be the preferred therapy. Because naltrexone is also FDA approved for alcohol relapse prevention, this could be an excellent option for those who have alcohol dependence as a co-occurring disorder. (Connery, 2015).

Conclusion

Ultimately, by providing the best treatment modalities with a patient-centered care approach, individuals with OUD will have the best chance of recovery. Furthermore, the best current evidence establishes that MAT decreases illicit opioid use and reduces risk of opioid-related overdose deaths. With decreased frequency and quantity of use, it follows that MAT contributes to a decrease in criminal activity associated with opioid use and reduces infectious disease transmission rates. Patients who have medication included in their OUD treatment are twice as likely to remain engaged in treatment (Connery, 2015). A primary goal of treatment in the patient dependent on opioids is to help them achieve improved quality of life and social functioning. It is clear MAT is an evidence-based approach to help ensure these improved outcomes.

References

American College of Obstetricians and Gynecologists. (2017). ACOG committee opinion number 711. Washington, DC: American College of Obstetricians and Gynecologists.

Auriacombe, M., Fatséas, M., Dubernet, J., Daulouède, J., & Tignol, J. (2004). French Field Experience with Buprenorphine. *American Journal on Addictions, 13(S1). doi:10.1080/10550490490440780*

Broglio, K., & Matzo, M. (2018). Acute Pain Management for people with opioid use disorder. American Journal of Nursing, 118(10), 30-38.

Centers for Disease Control and Prevention National Center for Injury Prevention and Control (U.S.) (2017). *Annual surveillance report of drug-related risks and outcomes, United States, 2017.*

Chou R et al. Medication-Assisted Treatment Models of Care for Opioid Use Disorder in Primary Care Settings. Technical Brief #28. (Prepared by the Pacific Northwest Evidence-based Practice Center under Contract No. 290-2015-00009-I.) AHRQ Publication No. 16(17)-EHC039-EF. Rockville (MD): Agency for Healthcare Research and Quality. Dec 2016.
http://www.ncbi.nlm.nih.gov/books/NBK402352/
https://www.ncbi.nlm.nih.gov/books/NBK402352/pdf/Bookshelf_NBK402352.pdf

Connery, H. S. (2015). Medication-assisted treatment of opioid use disorder: review of the evidence and future directions. Harvard Review Of Psychiatry, 23(2), 63–75. https://doi.org/10.1097/HRP.0000000000000075

D'Onofrio, G., O'Connor, P., Pantalon, M., Chawarski, M., Busch, S., Owens, P., . . . Fiellin, D. (2015). Emergency Department-Initiated Buprenorphine/Naloxone Treatment for Opioid Dependence: A Randomized Clinical Trial. *JAMA, 313(16), 1636-1644. doi:10.1001/jama.2015.3474*

Hedegaard, H., Minino, A., & Warner, M. (2018). Drug Overdose Deaths in the United States (Vol. 329)(Center for disease control and prevention, National center for health statistics).

Jones, C. M., Campopiano, M., Baldwin, G., & McCance-Katz, E. (2015). National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment. American Journal of Public Health, 105(8), e55–e63.
https://doi.org/10.2105/AJPH.2015.302664

Kampman, K., & Jarvis, M. (2015). American Society of Addiction Medicine (ASAM) National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use. *Journal of Addiction Medicine, 9(5), 358-367.*

Liebschutz, J. M., Crooks, D., Herman, D., Anderson, B., Tsui, J., Meshesha, L. Z., . . . Stein, M. (2014). Buprenorphine Treatment for Hospitalized, Opioid-Dependent Patients. JAMA Internal Medicine, 174(8), 1369. doi:10.1001/jamainternmed.2014.2556

Mattick, R. P. (2009). Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. Cochrane Database of Systematic Reviews, (3). Retrieved from
https://search.ebscohost.com/login.aspx?direct=true&db=edschh&AN=edschh.CD002209&site=eds-live&scope=site

Mattick, R. P., Breen, C., Kimber, J., & Davoli, M. (2014). Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. *The Cochrane Database Of Systematic Reviews, (2), CD002207.*
https://doi.org/10.1002/14651858.CD002207.pub4

Mitchell, S. G., Gryczynski, J., & Schwartz, R. P. (2018). Commentary on "The More Things Change: Buprenorphine/Naloxone Diversion Continues While Treatment is Inaccessible." *Journal of Addiction Medicine, 12(6), 424–425. Retrieved from*
https://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=47594512&site=pfi-live&scope=site

National Institute on Drug Abuse. (2019). *Opioid-Involved Overdose Deaths. Washington Opioid Summary.*
https://www.drugabuse.gov/drugs-abuse/opioids/opioid-summaries-by-state/washington-opioid-summary

Saloner, B., & Karthikeyan, S. (2015). Changes in Substance Abuse Treatment Use Among Individuals With Opioid Use Disorders in the United States, 2004-2013. *JAMA, 314(14), 1515–1517.* https://doi.org/10.1001/jama.2015.10345

Schwartz, R. P., Gryczynski, J., O'Grady, K. E., Sharfstein, J. M., Warren, G., Olsen, Y., ... Jaffe, J. H. (2013). Opioid agonist treatments and heroin overdose deaths in Baltimore, Maryland, 1995-2009. *The American Journal of Public Health, 103(5), 917–922.*

Sordo, L., Barrio, G., Bravo, M. J., Indave, B. I., Degenhardt, L., Wiessing, L., ... Pastor-Barriuso, R. (2017). Mortality risk during and after opioid substitution treatment: systematic review and meta-analysis of cohort studies. BMJ (Clinical Research Ed.), 357, j1550.
https://doi.org/10.1136/bmj.j1550

Strain, E. (2018) Pharmacotherapy for opioid use disorder. *UpToDate. https://www.uptodate.com/contents/pharmacotherapy-for-opioid-use-disorder*

Substance Abuse and Mental Health Services Administration (SAMSHA). (2016) *Targeted capacity expansion: Medication assisted treatment-prescription drug and opioid addiction. Washington, D.C.: U.S. Dept. of Health and Human Services.*

Substance Abuse and Mental Health Services Administration (SAMHSA). (2018). Medications for opioid use disorder: For healthcare and addiction professionals, policymakers, patients, and families--, Treatment improvement protocol 63. Washington, D.C.: U.S. Dept. of Health and Human Services.

Suzuki, J. (2016). Medication-assisted treatment for hospitalized patients with intravenous-drug-use related infective endocarditis. The American Journal on Addictions, 25(3), 191-194. doi:10.1111/ajad.12349

Timko, C., Schultz, N. R., Cucciare, M. A., Vittorio, L., & Garrison-Diehn, C. (2016). Retention in medication-assisted treatment for opiate dependence: A systematic review. Journal Of Addictive Diseases, 35(1), 22–35.
https://doi.org/10.1080/10550887.2016.1100960

Velander, J. (2018). Suboxone: Rationale, Science, Misconceptions. *Oschner Journal, 18(1).*

Washington Department of Health (2018). Washington State Opioid Response Plan. DOH 140-182, July 2018.

World health Organization. (2009). Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence. Geneva: World Health Organization.

Guiding Principles of Care for Substance Use Disorders

1. The disease of addiction is a chronic medical condition that can be managed through compassionate respectful clinical interventions.
2. Patients that have opioid use disorder (OUD) will be treated with evidence-based strategies for withdrawal prevention, management of withdrawal symptoms, and pain management.
3. Caregivers will learn about the disease of addiction and develop communication tools that will allow them to relate to patients nonjudgmentally.
4. It is possible and necessary to build a positive relationship between caregivers and patients that suffer from substance use disorders. Patients can learn to be curious about the disease and talk with their providers around their readiness for change and goals for health.
5. Caregivers recognize that moral judgments do not produce positive health outcomes.
6. Caregivers will partner with patients and visitors to discuss any safety issues that may arise.
7. Trauma informed care principles of recognizing what has happened to the patient will guide all practice.
8. All patients that are suffering from the disease of addiction deserve effective & respectful medical care. Understanding that patients use substances to manage their addiction helps prevent moral judgment.
9. Medication treatment will be the standard of care for the treatment of OUD and implemented with current evidence-based standards including multi-modal pain control.

Language Guidelines

Language matters.

Stigma is one of the biggest barriers to treatment & recovery for substance use disorders today. There are a lot of stigmatizing words common in our day-to-day language.

WHAT IS SAID	WHAT PEOPLE HEAR
Abuser	It's my fault
Drug habit	It's my choice
Addict	There's no hope
Drug user	I'm a criminal

By choosing alternate language, you can help break down the negative stereotype associated with substance use disorder.

INSTEAD OF:	TRY:
Abuser, Addict	Person with a substance use disorder
Drug habit	Regular substance use, substance use disorder
Former/Reformed Addict	Person in recovery / long-term recovery

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The National Alliance of Advocates for Buprenorphine Treatment

The Words We Use Matter. Reducing Stigma through Language.

Why does language matter?

Stigma remains the biggest barrier to addiction treatment faced by patients. The terminology used to describe addiction has contributed to the stigma. Many derogatory, stigmatizing terms were championed throughout the "War on Drugs" in an effort to dissuade people from misusing substances. Education took a backseat, mainly because little was known about the science of addiction. That has changed, and the language of addiction medicine should be changed to reflect today's greater understanding. By choosing language that is not stigmatizing, we can begin to dismantle the negative stereotype associated with addiction.

Changing the stigma will benefit everyone. It will allow patients to more easily regain their self esteem, allow lawmakers to appropriate funding, allow doctors to treat without disapproval of their peers, allow insurers to cover treatment, and help the public understand this is a medical condition as real as any other.

Choosing the words we use more carefully is one way we can all make a difference and help decrease the stigma.

"...In discussing substance use disorders, words can be powerful when used to inform, clarify, encourage, support, enlighten, and unify. On the other hand, stigmatizing words often discourage, isolate, misinform, shame, and embarrass..."

Excerpt from "Substance Use Disorders: A Guide to the Use of Language" published by CSAT and SAMHSA

Words to avoid and alternatives.

Following are stigmatizing words and phrases which could be replaced with the *suggested* "preferred terminology" as a start in reducing the stigma associated with addiction.

Addict, Abuser, Junkie

Problem with the terms: These terms are demeaning because they label a person by his/her illness. By making no distinction between the person and the disease, they deny the dignity and humanity of the individual. In addition, these labels imply a permanency to the condition, leaving no room for a change in status.

Preferred terminology: Person in active addiction, person with a substance misuse disorder, person experiencing an alcohol/drug problem, patient (if referring to an individual receiving treatment services).

Abuse

Problem with the term: Although "abuse" is a clinical diagnosis in the DSM-IV and ICD10, it is stigmatizing because: (1) it negates the fact that addictive disorders are a medical condition; (2) it blames the illness solely on the individual with the illness, ignoring environmental and genetic factors, as well as the ability of substances to alter brain chemistry; (3) it absolves those selling and promoting addictive substances of any wrong doing; and (4) it feeds into the stigma experienced not only by individuals with addictive disorders, but also family members and the addiction treatment field.

Preferred terminology: Misuse, harmful use, inappropriate use, hazardous use, problem use, risky use.

Clean, Dirty (when referring to drug test results)

Problem with the terms: Commonly used to describe drug test results, these terms are stigmatizing because they associate illness symptoms (i.e. positive drug tests) with filth.

Preferred terminology: Negative, positive, substance-free.

Habit or Drug Habit

Problem with the terms: Calling addictive disorders a habit denies the medical nature of the condition and implies that resolution of the problem is simply a matter of willpower in being able to stop the habitual behavior.

Preferred terminology: Substance misuse disorder, alcohol and drug disorder, alcohol and drug disease, active addiction.

Replacement or Substitution Therapy

Problem with the terms: This implies that treatment medications such as buprenorphine are equal to street drugs like heroin. The term suggests a lateral move from illegal addiction to legal addiction, and this does not accurately characterize the true nature of the treatment.

The essence of addiction is uncontrollable compulsive behavior. The first goal of addiction treatment is to stop this dangerous addictive behavior. With successful buprenorphine therapy, as part of a comprehensive treatment plan, the dangerous addictive behavior is stopped not replaced

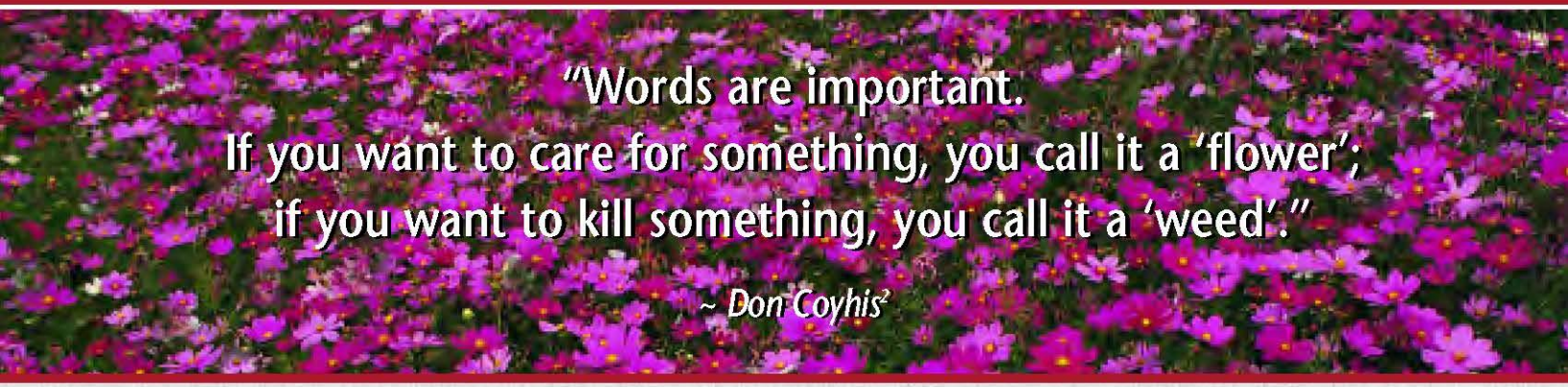
Preferred terminology: Treatment, medication-assisted treatment, medication.

User

Problem with the term: The term is stigmatizing because it labels a person by his/her behavior. It is also misleading because the term user has come to refer to one who is engaged in risky misuse of substances, but 'use' alone is not necessarily problematic.

Preferred terminology: Referring to use: person who misuses alcohol/drugs. Referring to misuse: person engaged in risky use of substances.

See this sheet's companion web page at www.naabt.org/language



Words that Work and Why.

The following terms are considered effective in furthering public understanding of addictive disorders as a medical issue, which, in turn, provides impact in reducing stigma and stereotyping.

Addiction

Why it works: This widely understood term describes "uncontrollable, compulsive drug seeking and use, even in the face of negative health and social consequences."[1] There is a distinction between addiction and physical dependence, although the words are often incorrectly used interchangeably. Addiction involves both social and health problems, whereas physical dependence only involves health.

Caveats: Clinically speaking, both the DSM-IV and the ICD10 use the phrase "substance dependence", not 'addiction' although the definitions are the same.

Addiction Free

Why it works: Indicates the patient is free from the dangerous compulsive behaviors of addiction. Less stigmatizing than "clean" or "sober" yet shows the person is no longer in active addiction.

Addiction Survivor

This terminology is in line with other life-threatening diseases. (i.e. cancer survivor) It is a positive indication of a person's disease status. It is less stigmatizing than "recovering addict", especially to people unfamiliar with recovery language. It also indicates that a person's treatment has triumphed over active addiction and shows that the person is substantially past the initial phases of recovery, unlike "in recovery" which doesn't differentiate between days or decades of addiction-free life.

Addictive Disorder, Addictive Disease

Why it works: By incorporating disorder or disease, these terms reinforce the medical nature of the condition.

Medication-Assisted Treatment

Why it works: This is a practical, accurate, and nonstigmatizing term to describe addiction treatment with medically monitored pharmacological medications such as methadone, naltrexone, buprenorphine and other medications.

Misuse

Why it works: It offers the same intended meaning as what has traditionally been termed as abuse, but without the stigma and judgmental overtones that abuse carries.

Caveat: Some say that technically speaking, one does not misuse a substance when it is used as intended. Example, marijuana is purchased with the intention of being smoked, so technically it is not misused when people smoke it. For this reason, some prefer the terms risky use or problem use.

Patient

Why it works: As with other illnesses, the word accurately refers to a person who is being medically treated for an addictive disorder. It reinforces the fact that addictive disorders are indeed health issues. It replaces stigmatizing labels like addict.

Person(s) or People With...

Why it works: Used in terms such as person(s) or people with addictive disorders, with addictions, or with addictive disease, these modifiers give identity to individuals as people, rather than labeling them by their illness.

Remission

Why it works: It is medical terminology that describes a period of time in which the signs and symptoms of the illness have disappeared. It emphasizes that addiction is indeed a medical condition.

Caveat: Prior to this, remission was seldom used in conjunction with addictive disorders.

See this sheet's companion web page at www.naabt.org/language

Adapted from: *Substance Use Disorders: A Guide to the Use of Language.*
Prepared by TASC, Inc. under contract for the Center for Substance Abuse Treatment (CSAT), Substance Abuse and Mental Health Services Administration (SAMHSA), part of the U.S. Department of Health and Human Services (DHHS), last rev. 4.12.04

Lepak, Timothy P., *The Words We Choose Matter.* NAABT, Inc., naabt.org
http://www.naabt.org/forum/topic.asp?TOPIC_ID=358

NAABT, Inc., naabt.org. *Glossary.* http://www.naabt.org/glossary.cfm

1 Leshner, Alan. 2001. The essence of drug addiction. Posted at www.jointogether.org, March 21, 2001.
2 White, William. *The Rhetoric of Recovery Advocacy: An Essay On the Power of Language*, 2001.

'The Words We Choose Matter' is dedicated in loving memory of John A. Strosnider, DO

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Ramp-Up Planning & Training Recommendations

Initial Considerations

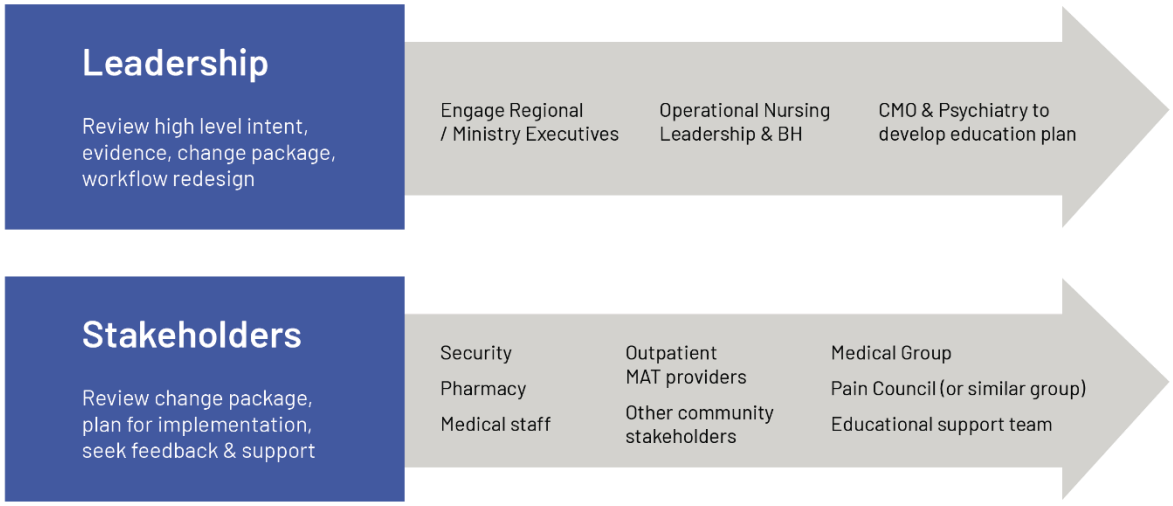
To achieve success, this body of work will require intentional planning, leader sponsorship and ongoing attention, as the nature of this Pathway encompasses changes in both clinical practice and cultural. Based on experience implementing within a handful of hospitals within Providence, the following recommendations have been compiled to guide implementation and roll out, recognizing that there may be a few stages to the work based on the size and structure of your hospital and organization:

- Establish a Substance Use Disorder (SUD) Council to provide ongoing oversight and support for this work within your care settings. This group should be chartered and should include key stakeholders and sponsors, spanning executive leadership & clinical caregivers, as relevant. An example of a charter is included later in the playbook.
- Create a support mechanism for clinicians and teams to have conversations about complex cases and to support one another – examples include huddles, rounds, complex case review, team meetings.
- Find clinical champions to advocate the work to and secure buy-in from their colleagues within the units where the Pathway is being implemented.
- Plan a phased implementation, unit by unit, beginning small and tracking what goes well and what could be improved – more on that later, with respect to the Plan-Do-Study-Act (PDSA) approach.
- Spend time training clinical staff, a portion of which should be in-person, if not possibly to do entirely – while this may be challenging given the realities of clinical schedules, up-front investment will secure sustained success.
- Short "refresher" training sessions are helpful at a regular cadence to check in and revisit the concepts introduced in the initial training sessions. These can be shorter and spaced apart 6-12 months, based on availability and preference.

On the next page are some more specific recommendations around securing leader and stakeholder support for this work, as well as some timing recommendations for training clinicians.

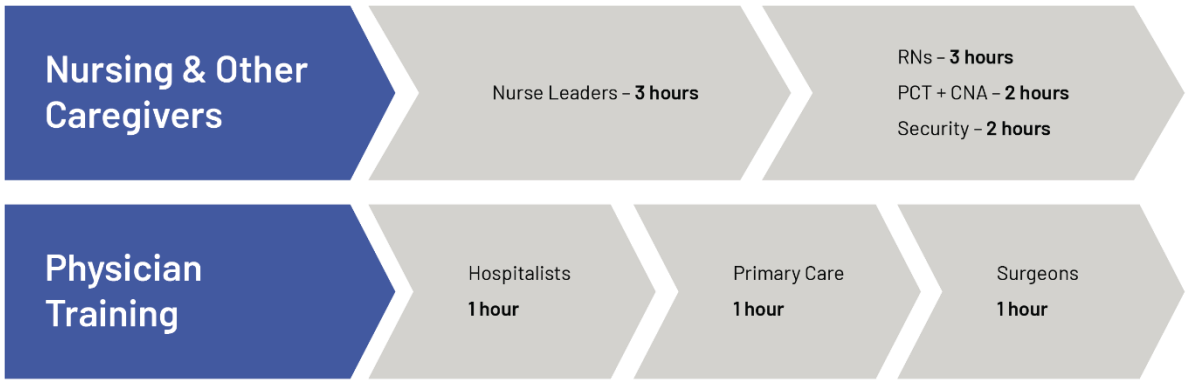
Phase 1: Stakeholder Engagement / 3-4 weeks

Convene Pathway Project Leadership Team, with regular meetings to plan implementation, address barriers and track progress. Plan stakeholder engagement in 2 phases, over 3-4 weeks, as follows:



Phase 2: Training Strategy / 3-4 weeks

Training activities may be contextualized to fit your ministry, but a recommended cadence and division of time may look as follows:



Plan-Do-Study-Act Approach to Implementation

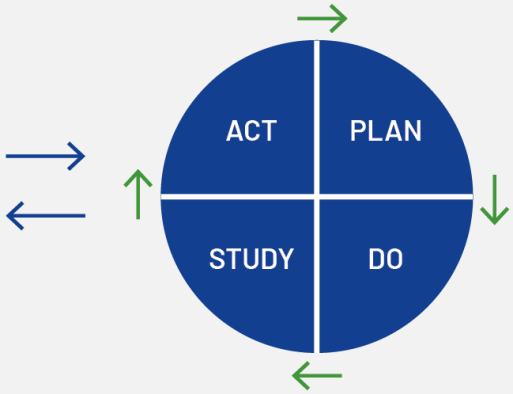
We recommend employing the Plan-Do-Study-Act (PDSA) approach to implementing this work. PDSA is a central component of the Model for Improvement framework developed by the Associates in Process Improvement, and centers on a short test of change methodology by which one may incrementally assess an intervention in a complex environment to determine how best to implement and sustain improvement. It is a simple, yet powerful tool to effect positive change. The basic premise is to start a proposed project small and generate short-term tests with clear indicators or measures of success that you plan, do (implement test), study (observe the results) and act on what is learned.

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?



This has been adapted from the Institute of Healthcare Improvement

Project & Change Management Tools

Successful OUD Pathway implementation hinges upon effective organization and efficient project management. It is recommended that one team member is resourced as the project manager and will be adequately equipped to maintain the structure of the project and keep the various elements and stakeholders engaged and on track throughout the course of the project. Organizations vary in levels of availability of dedicated project management resources, and clinical teams vary in levels of familiarity with clinical improvement projects. In addition to the resources that have been enclosed in this playbook, below is a list of essential project and change management tools for consideration during the planning and implementation phases of this effort, along with a short description of each tool and a link to either a template or a diagram to illustrate the principle or concept.

Tools	Purpose
● Project Charter	Document that formally authorizes work to start. Used to define high-level objectives and deliverables, stakeholders, risks, constraints, and assumptions.
● Project Planning Form	A document that defines how the project is executed, monitored, and controlled.
● Cascading Executive Sponsorship	Sponsorship is a key to success, as sponsors provide guidance, remove obstacles and barriers, and maintain a positive perspective to drive the project forward. The downward flow of responsibility and upward flow of accountability is called "cascading sponsorship," and takes place at the executive, director, and local levels. Use this diagram to think through your local context and who will be critical to engage along the way.
● Elevator Pitch	A technique/tool used to persuade and share project goals with sponsors and stakeholders. It's recommended to have a short and long version. The 4-P's template can assist with clarifying the message and creating a concise elevator pitch.
● Driver Diagram	A visual display of a team's theory of what "drives" or contributes to the achievement of a project aim.
● SIPOC	A process improvement tool used to summarize inputs and outputs of one or more processes. It stands for Suppliers, Inputs, Process, Outputs, and Customer.
● Customer Promise	A tool used to identify customers and to understand their pain points and problems. A "promise statement" is often used to explicitly state how customer pain points and problems can be addressed and the resulting impact.
● PDSA Cycle Tracker	PDSA = "Plan, Do, Study, Act" is an approach to testing improvements An improvement project tracking tool used to monitor the status of PDSA cycles.

● Highly Recommended Tools ● Helpful / Suggested Tools

Measurement Framework

Metric Domain	Measure Name	Measure Description
Process Metrics		
OUD Screening & Assessment	SUD Screening COWS Utilization	Rate of Completion of the NIDA Quick Screen/ TAPS1 Rate of Clinical Opiate Withdrawal Scale (COWS) Completion
Intervention	MAT Utilization	Percentage of patients identified with an Opioid Use-related Disorder who were provided MAT for OUD
Diagnostic Accuracy	Accurate OUD Diagnosis w/ MAT	Percentage of encounters where OUD is being accurately reflected in the encounter diagnoses
Outcome Metrics		
AMA	AMA Disposition	Rate of AMA disposition for OUD patients (per 1000 discharges)
Readmission	30 Day Readmissions	30 Day Readmission Rate for OUD Pathway Patients (per 1000 Admissions)
Length of Stay	Length of Stay	Average Length of Stay (days) for Discharged Patients in the OUD Pathway Median Length of Stay (Days) for Discharged Patients in the OUD Pathway
MAT Follow Up	MAT Follow Up Scheduled	% of OUD Pathway Patients Receiving MAT Who Have a Scheduled Outpatient MAT Follow Up Appointment % of Patients Who Have Been in Outpatient MAT Treatment for 90 Days Post- Hospital Discharge
Provider Perception Metrics		
Caregiver Perception	Caregiver Perception: Incorporating MAT into daily practice with OUD patients	% of Survey Respondents who "Agree" or "Strongly Agree" with the survey item: "I incorporate MAT into my daily practice when people present with Opioid Use Disorder"
	Caregiver Perception: Not having skills needed to work with patients that have SUD issues	% of Survey Respondents who "Disagree" or "Strongly Disagree" with the survey item: "I do not have the skills I need to work with patients that have substance use disorders"

Substance Use Disorder (SUD) Council Charter

A best practice to achieve strong and sustained engagement in this work from sponsors and key stakeholders throughout your facility is to convene a Council for SUD. The scope of this council can be tailored to the extent of the will in your organization but should center around improving experience of care for patients experiencing SUDs and caregivers who care for them, as well as driving better outcomes through evidence-based care delivery. Below is an example of a charter for a SUD Council at a Providence hospital in Alaska.

Mission Statement

As expressions of God's healing love, witnessed through the ministry of Jesus, we are steadfast in serving all, especially those who are poor and vulnerable.

Purpose

This council exists to support the integration of evidence-based practice of substance use and misuse disorder treatment in all care settings.

Scope/Functions/Objectives

Scope: This council will help to implement the IFSP and provide leadership for the Providence Alaska Region in guiding care and development of programs. Supervises multiple sub-committees' activity, providing direction and accountability of their efforts.

Specific Functions/Critical Objectives: Create, refine, approve, implement, and sustain the following components of the overall substance misuse and prevention pathway.

- Current treatment inconsistencies identified, and solutions implemented: treatment plan, individual location practices, team participants, clinical contexts.
- Care Conference: guidelines are aligned, clear objective provided, identified participants are well informed across all patient discharge participants.
- Provide a robust education plan supports all involved caregivers and providers to carry out action steps that follow the direction of the expertise groups. Addresses caregiver and provider self-awareness, potential bias, compassion needs, case fatigue, assessment tool use, policy revisions, implementation schedules and engages the full clinical treatment pathway components.
- Monitor pilot programs: new process development and implementation. Data collection, data reporting and associated program and task adjustments needed as iterative changes are implemented.

- Facilitate community resource involvement. Utilize communication, influence, and other modalities to give voice and power to local physician involvement, utilization of grant resources, knowledge, focus groups, ECHO and addiction fellowship participation.

Council Membership – Roles & Responsibilities

Participants/Membership – Outline who will be on the council. i.e., ratios (# of day nurses vs. night nurse) or (# of physicians vs. nurses)

Ad Hoc Members – List who will be Ad Hoc Members

Roles & Responsibilities: Outline each job function for the individuals below. Describe term limit. Define how new person is selected at end of term. Attendance rules

Council Member Accountabilities

Chairperson/Co-chairperson

- The Chairperson/Co-chairperson serves for no less than one year.
- Assures that meeting procedures occur according to policy.
- Develops agenda each month prior to the meeting.
- Attends other councils/meetings as required.

Chair/Co-chair Elect

- The chair elect serves for a term of one year and then assumes the Chair/co-chair elect position.
- Communicates with chairperson/co-chairperson and advisor.
- Observes and learns meeting flow from chairperson/co- chairperson and sponsor.
- Attends other councils/meetings as required.
- Leads meeting in absence of chairperson/co-chairperson.

Council Member

- Attendance expectations are determined within the FBC charter.
- Represents constituents at all meetings.
- Communicate activities of council. The FBC will determine a communication plan within the charter that each member will implement.
- Complete assignments according to agreed upon timelines.
- Prepared to participate in constructive discussion and decision-making process. The member will support all decisions made by the council.
- Commitment is for no less than one year.

Sponsor

- Communicates with chairperson, co-chair, and other council members.
- Mentors, guides, and supports chairperson and co-chair.
- Serves as a resource for information.

Advisor/Resource – Who would the council go to for support.

Sponsor – Who is providing leadership support

Meeting Logistics

Meeting Frequency – How often will the council meet? How long will each meeting last?

Minutes – How are minutes approved? How are minutes distributed?

Voting – Who will be allowed to vote on issues? How many members must be present to be able to vote?

Communication Plan

Committee Communications – How does the work of the council get communicated and to who? How will the facility and unit-based councils communicate?

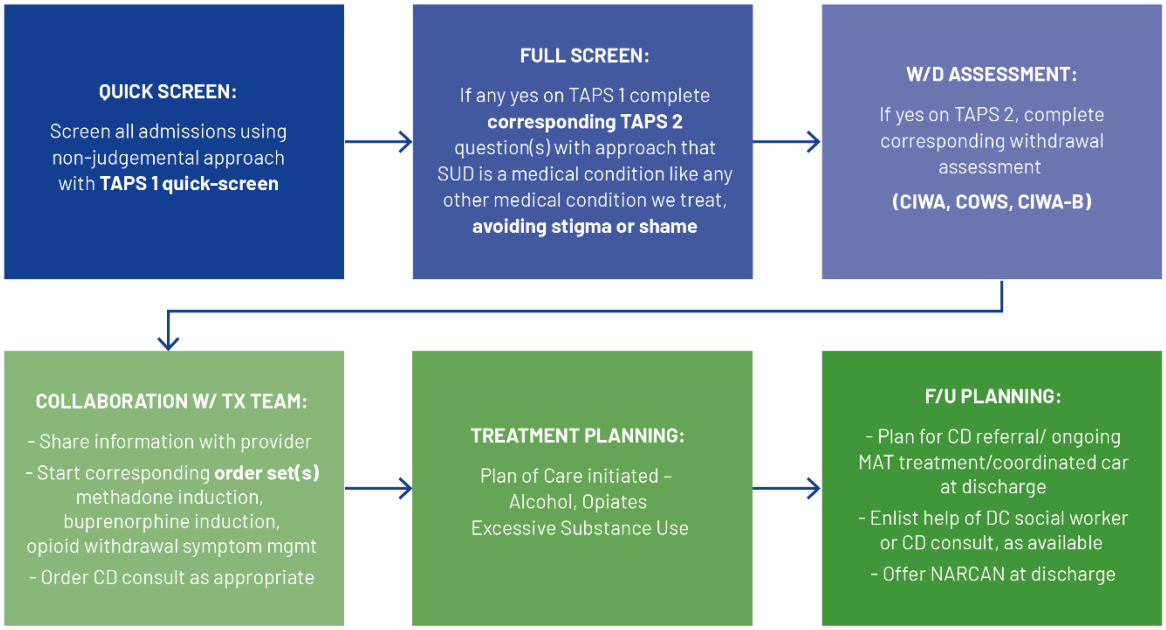
Committee Collaborations – List what other councils this council interacts with.

Amendments – Note changes to the charter here along with dates of changes.

Attachment

- Roster
- Meeting Guidelines – Add as appendix – OE guidelines

Hospital Workflow Diagram



Scripting Examples for Discussions on Substance Use Disorder

Set the scene

Ask permission to enter the room. "Can I take a seat?" Get on their level. Do not hover over them. Give choices that you are willing to abide by. Gain trust.

SCENARIO

Caring for Patients with Substance use Disorder or Suspected Substance use Disorder

POTENTIAL FOR A POSITIVE OUTCOME

Creating a safe environment to talk openly:

Start the conversation by being calm, with kind open body language, and discussing the medical issues related to substance use in an honest way with a neutral tone. Providing reassurance that we care and that we know it can be hard to discuss.

Meet the patient "where she is" and provide options.

"I would like to help you get the best care while you are here. I want to hear about your concerns and then we can try to make the best decisions for your care together."

POTENTIAL FOR A NEGATIVE OUTCOME

Creating an environment of shame and fear:

Saying nothing and pretending it's not happening.

Trying to convince someone by scaring them with potential or current medical complications.

Using words that express judgment or believing substance use is a moral failure.

SCENARIO

Talking with someone that has not disclosed that they are using a substance, but you see signs of withdrawal (unrevealed use)

POTENTIAL FOR A POSITIVE OUTCOME

Creating a safe environment to talk openly:

"You seem uncomfortable and I am noticing these symptoms.... It would help me to know if they were related to any substance use so that I could ensure your safety and/or the safety of the baby."

"Substance use disorders are medical conditions that require treatment and we screen everyone for their level of use. We don't want you to feel judged for talking about substance use, we are here to help you and want you to know we care about you."

Note: In these situations, request a social work consultation to provide increased support, psychosocial assessment and intervention related to their use. The earlier a social worker is involved, the better rapport can be obtained during a hospitalization, thus leading to increased chance of disclosure and opportunity for intervention.

POTENTIAL FOR A NEGATIVE OUTCOME

Creating an environment of shame and fear:

Avoid talking about the substance use.

"Are you high?

"Did you use while you were outside?"

"You are not going to be able to leave the floor if you are using."

SCENARIO

Seeing needles in the room or the person appears intoxicated (Partially revealed but not confirmed)

POTENTIAL FOR A POSITIVE OUTCOME

Creating a safe environment to talk openly:

Wait to discuss the persons use until they are no longer intoxicated.

"Last shift you didn't seem like yourself and I noticed that you (insert symptoms). Would it be OK if I asked about any substances you might be using?"

"I am seeing signs that your body might be experiencing withdrawal symptoms. We think about substance use like other medical issues and want you to know that you can talk with me and I will not judge you. It can be hard to talk about this, but I want you to know that we are here to help.

Note: In these situations, request a social work consultation to provide increased support, psychosocial assessment and intervention related to their use. The earlier a social worker is involved, the better rapport can be obtained during a hospitalization, thus leading to increased chance of disclosure and opportunity for intervention.

If they say they are using a substance more questions:

"We are committed making sure that you don't suffer from withdrawal while you are here at the hospital. We normally start either buprenorphine (Suboxone) or methadone do help people with opioid use disorder. Would one of those make sense to you?"

POTENTIAL FOR A NEGATIVE OUTCOME

Creating an environment of shame and fear:

Confronting the person when they are intoxicated with aggressive tone and accusing them of using.

Giving a drug screen because you want to prove they are doing something wrong and the screening will not change clinical practice and is not medically necessary.

SCENARIO

Positive drug screen for opioids (Partially revealed use by signs of use)

POTENTIAL FOR A POSITIVE OUTCOME

Creating a safe environment to talk openly:

"Would it be OK to talk about we saw in your urine test? "

"I saw a needle in the bathroom (or I saw that there were signs of intoxication). When people are using substances in the hospital it's usually to prevent withdrawing, which I know can be painful. We don't want you to withdraw while you are here either. Could we talk about some of the options that could help you?"

"I want to partner with you and help you get the best care. I am seeing signs that you might be withdrawing from opioids, or your test results were positive for opioids. We want to prevent any withdrawal and help you and your baby."

"My job is to manage your pain at the same time I manage the potential for pain medications to harm you. I don't want you to go into withdrawal, so it helps if we can keep building on this communication by talking openly."

"I understand that this is a difficult situation for you. Thanks for our courage to talk about it.
How can we help?"

"What have we done that hasn't been helpful?"
"What can we do that would help?"

POTENTIAL FOR A NEGATIVE OUTCOME

Creating an environment of shame and fear:

"Your tests reveal that you are a drug addict." "Drug use hurts your baby and you."

"Do you know the consequences of what you are doing?"

"You tested positive for drugs. We need you to be honest and come clean."

"You need to stop using drugs."

"We can't help you if you don't follow our rules."

"Do you know what damage that you have done to your body?"

"You are breaking the rules of our facility and I am going to call security."

SCENARIO

Talking with someone that is actively using substances in the facility (Fully revealed)

POTENTIAL FOR A POSITIVE OUTCOME

Creating a safe environment to talk openly:

"Thank you for telling me about your substance use. We normally start treatment with either methadone or buprenorphine (Suboxone). That makes it easier to manage things here at the hospital and can be continued after you go home."

"Thank you for talking with me about this, I know it's not easy. Our social work team can make sure you get the support you need, I can ask them to come and spend some time with you."

POTENTIAL FOR A NEGATIVE OUTCOME

Creating an environment of shame and fear:

Avoiding talking about substance use at all.

Trying to stop them from leaving the unit because you are worried about them using substances.

"You need to get 'clean' and sober."

"Do you know what damage that you have done to your body?"

"You are breaking the rules of our facility and I am going to call security."

SCENARIO

Talking with someone that is denying their use

POTENTIAL FOR A POSITIVE OUTCOME

Creating a safe environment to talk openly:

"My job is to manage your pain at the same time I manage the potential for pain medications to harm you. I am concerned about your experience and want to help you. I appreciate your willingness to come here for care."

"I can't give you the pain meds right now but I will come back and check on you frequently so that when I can we can prevent you from overdosing and manage your pain effectively."

POTENTIAL FOR A NEGATIVE OUTCOME

Creating an environment of shame and fear:

If you keep using I won't be able to give you any pain meds until you are no longer intoxicated.

SCENARIO

Talking with someone about a physician order to obtain a urine sample and/or drug screen

POTENTIAL FOR A POSITIVE OUTCOME

Creating a safe environment to talk openly:

"We are noticing your baby is experiencing some symptoms that make us concerned about their comfort and need for increased medical intervention. These symptoms can be related to different things, but your physician would like to do a test of the baby's urine to see what substances or medications are currently in the baby's systems that may be causing these symptoms."

"I noticed that you shared you are currently struggling with substance use. In an effort to ensure your baby is healthy and receiving the care they need, your physician has requested a urine sample to identify how much and which type of medications and substances may currently be in the babies systems. We obtain a urine sample by..."

POTENTIAL FOR A NEGATIVE OUTCOME

Creating an environment of shame and fear:

"We know you are using and so we have to test the baby."

"We are worried you could have harmed the baby. We want to make sure they are ok."

"We have to make sure the baby doesn't have drugs in its system."

ADDITIONAL NOTES

Harm reduction: This pathway has a foundation of trauma informed care that explores safe practices and/ways to improve safety around a generally unsafe practice.

Overall education around harm reduction for the patient that does not want to use MAT or go to treatment: If they are not willing to stop, move to harm reduction mode. Encourage safe injection practices such as a not licking needles, using only when others are around and screening for HIV/HCV. Refer to your local needle exchange program and discharge with take-home naloxone. Take a supportive stance and tell them you have an open door.

Tobacco, Alcohol, Prescription Medications, and Other Substance Tool (TAPS)

Part 1 (Modified from NIDA Quick Screen)

In the Past 12 Months, how often have you used the following?	NO	Less than Monthly	Monthly	Weekly	Daily or Almost Daily
Alcohol - For men, 5 or more drinks a day - For women, 4 or more drinks a day					
Tobacco Products					
Prescription Drugs for Non-Medical Reasons					
Recreational Drugs for non-medical Reasons					

*If all answers are **"NO"** then you are done.

*If you answer **positive** to anything then continue onto Part 2. Cascade TAPS 2 for a positive.

Part 2 (Modified from ASSIST screen)

1. In the Past 3 Months:	Yes (=1)	NO (= 0)
Did you smoke a cigarette containing tobacco?		
If "Yes"		
Did you smoke more than 10 cigarettes each day?		
Did you usually smoke within 30 minutes after waking?		

2. In the Past 3 Months:	Yes (=1)	NO (=0)
Did you have a drink containing alcohol?		
If "Yes"		
*Females Did you have 4 or more drinks containing alcohol in a day?		
*Males Did you have 5 or more drinks containing alcohol in a day?		
*One standard drink is about 1 small glass of wine (5oz), 1 beer (12oz), or 1 single shot of liquor		
Have you tried and failed to control, cut down or stop drinking?		
Has anyone expressed concern about your drinking?		

3. In the Past 3 Months	Yes (=1)	No (=0)
Did you use marijuana (hash, weed)		
If "Yes"		
Have you had a strong desire or urge to use marijuana at least once a week or more often?		
Has anyone expressed concern about your use of marijuana?		

4. In the Past 3 Months:	Yes (=1)	No (=0)
Did you use cocaine, crack, or methamphetamine (crystal meth)?		
Did you use cocaine, crack, or methamphetamine (crystal meth) at least once a week or more often?		
Has anyone expressed concern about our use of cocaine, crack, or methamphetamine (crystal meth)?		

5. In the Past 3 Months:	Yes (=1)	No (=0)
Did you use Heroin?		
Have you tried and failed to control, cut down or stop using heroin?		
Has anyone expressed concern about your use of heroin?		

6. In the Past 3 Months:	Yes (=1)	No (=0)
Did you use a prescription opiate pain reliever (for example, Percocet, Vicodin) not as prescribed or that was not prescribed for you?		
Have you tried and failed to control, cut down or stop using an opiate pain reliever?		
Has anyone expressed concern about your use of an opiate pain reliever?		

7. In the Past 3 Months:	Yes (=1)	No (=0)
Did you use a medication for anxiety or sleep (for example, Xanax, Ativan, or Klonopin) not as prescribed or that was not prescribed to you?		
Have you had a strong desire or urge to use medications for anxiety or sleep at least once a week or more often?		
Has anyone expressed concern about your use of medications for anxiety or sleep?		

8. In the Past 3 Months:	Yes (=1)	No (=0)
Did you use a medication for ADHD (for example, Adderall, Ritalin) not as prescribed or that was not prescribed for you?		
Did you use a medication for ADHD at least once a week or more often?		
Has anyone expressed concern about your use of a medication for ADHD?		

9. In the Past 3 Months:	Yes	No
Did you use any illegal or recreational drug (for example, ecstasy/molly, GHB, poppers, LSD, mushrooms, special K, bath salts, synthetic marijuana (spice'), whip-its, etc.)?		
If "yes" answering the following:		
In the past 3 months what were the other drugs you used?		

Determine if patient has substance use disorder and roles and responsibilities of caregivers.

TAPS Score	Pt. Care Needs	RN	SW
Question 1 Tobacco Score =/>1 Nicotine Replacement	Nicotine Replacement therapy Therapeutic support Ongoing Assessment and support	Make sure MD has ordered replacement therapy. Utilize replacement therapy to decrease agitation.	No actions
Question 2 Alcohol Score =/> 1 CIWA Protocol	Ativan or other medications to prevent withdrawal. Therapeutic support Ongoing Assessment and support	TAPS completed document. MD aware of patient alcohol use. CIWA scoring, ETOH withdrawal protocol if ordered, medicate as ordered.	Therapeutic support Ongoing Assessment and support Referrals if applicable
Question 3 Cannabis score =/> 1	Assess further for rationale behind why the patient may use cannabis; anxiety, appetite stimulant, or to decrease nausea/vomiting. Therapeutic support Ongoing Assessment and support	Based on rationale report to MD patient use of cannabis and potential need for other medications to treat patient as needed.	No actions
Question 4 Cocaine, crack, methamphetamine Score =/> 2 Screen into Pathway.	Request symptoms management medications. Ongoing assessment and support Document and notify MD of findings	Substance Use Disorder, document and report to MD usage. Request symptoms management medications. Use COWS tool to assess and manage withdrawal.	Therapeutic support Ongoing Assessment and support Referrals if applicable
Question 5 & 6 Heroin score =/> 2 Screen into Pathway	Screened into Opioid Use Disorder Pathway. Ongoing assessment and support Document and notify MD of findings	OUD Pathway Medications Assisted Treatment COWS and use of medications to minimize withdrawal discomfort.	Therapeutic support Ongoing Assessment and support Referrals if applicable
Question 7 Benzodiazepines score =/> 2	CIWA and talk to the patient. Ongoing assessment and support Document and notify MD of findings	Ativan or other medications as ordered to prevent withdrawal. Therapeutic support Ongoing Assessment and support	Therapeutic support Ongoing Assessment and support Referrals if applicable
Question 8 & 9 Any yes	Document and inform Doctor	TAPS completed, assess further if need arises.	SW not involved related to substance use/no use disorder identified.

Epic Flowsheet Workflow

Substance Use Disorder (SUD) Pathway & Use of Medication Assisted Treatment

INTENDED AUDIENCE:

All caregivers who care for adult or pediatric patients (includes ED, Obstetrics, Peri-Op, PEDS > 12 years old)

Why is this change occurring?

- Our community is showing epidemic rates for use of opioids, amphetamines and alcohol that have resulted in increasing overdoses, illnesses, and death.
- Use of an evidence-based drug and alcohol screener is the best way to identify patients who might need help.
- There is a need to align care and improve outcomes for patients with a SUD using a non-judgmental, non-shame-based collaborative approach maintaining dignity and respect.
- Best practice indicates medication assisted treatment is the standard of care for patients with an OUD.

What is the change?

1. Using gentle conversation in a non-judgmental and caring manner, ask all patients upon admission:
    - "If it's okay with you, I'd like to ask a few questions about substance use that will help us give you better care and medical treatment. We ask these of everyone, so we don't miss anything."
2. During the admit/arrival assessment, open the flowsheet template "TAPS/SUD pathway" and ask the 4 initial questions for all alert patients age 12 and older.
3. Partner with the patient upon admission to perform a belongings search, or if declined then offer to have the items bagged, zip tied and stored on the unit or sent home. Avoid using security staff unless there is an imminent safety risk
4. Only do a room search if there is an objective suspicion to justify a reasonable suspicion search.

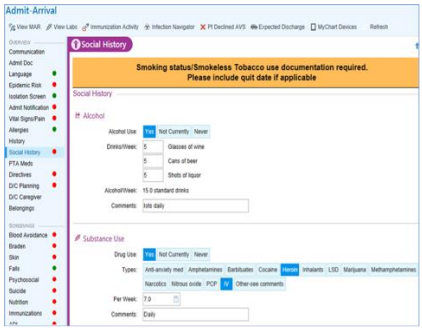
When will this change occur?

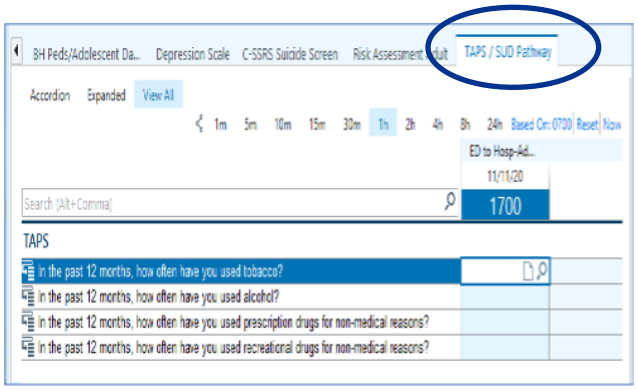
- Epic TAPS/SUD pathway flowsheet template became available November 17, 2020

New process

Complete the TAPS/SUD Pathway flowsheet template (4 questions "Quick Screen")

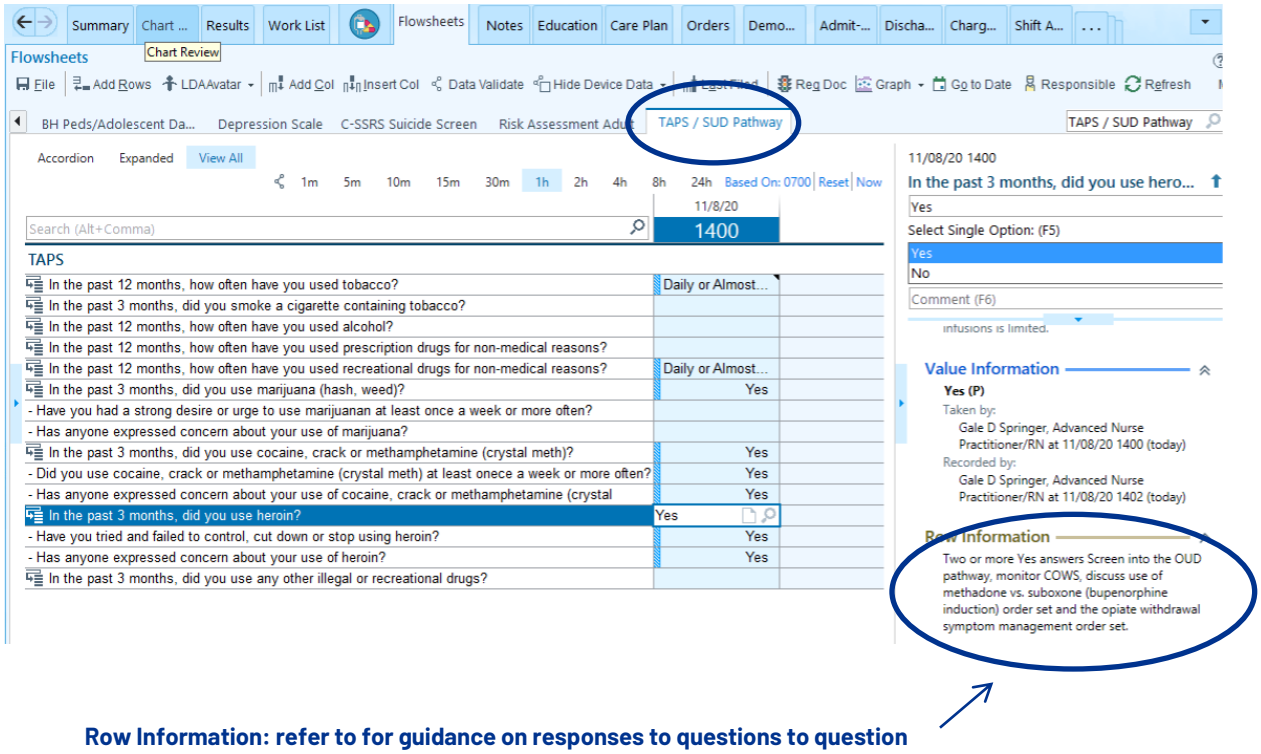
- During the admit/arrival intake, at the social history questions > open the flowsheet templates > select facility pref list > search, select and COMPLETE the "TAPS/SUD pathway" > finish social hx questions





Complete additional "Full Screen" TAPS questions only when "Yes" answers on the quick screen

- Scripting: "We have started using a clinical pathway to improve the way we treat people who experience the medical disease of a substance use disorder. We don't want you to feel judged for talking about substance use, we are here to help support you and want you to know we care about you. We use medications and medical treatments to help minimize withdrawal symptoms and discomfort."



Row Information: refer to for guidance on responses to questions to question

Complete Withdrawal Assessment as indicated: CIWA, COWS or CIWA-B

Collaborate with the treatment team: Inform LIP of TAPS and withdrawal assessment. Obtain orders for buprenorphine induction, methadone induction or opiate withdrawal symptoms management, & CD consult as indicated

Treatment Planning: Add plan of care (alcohol, opiates, excessive substance use). Crush all short acting opiates & give in food, use Curos Caps and tamper resistant tape on all IV lives for pt with hx of IV use, avoid leaving syringes in room, remove unsecured sharps container, remove non-locking carts

Language matters: When using words like abuser, addict, drug user patients often hear "it's my fault, I made poor choices, there's no hope, I'm a criminal" Try using the following terms: Person with a substance use disorder, substance use disorder, person in recovery

Use Trauma Informed Care practices: Ensure a sense of safety and trust for the patient, utilize collaboration and patient centered care, enhance a patient's sense of empowerment and avoid control issues

Additional references and resource:

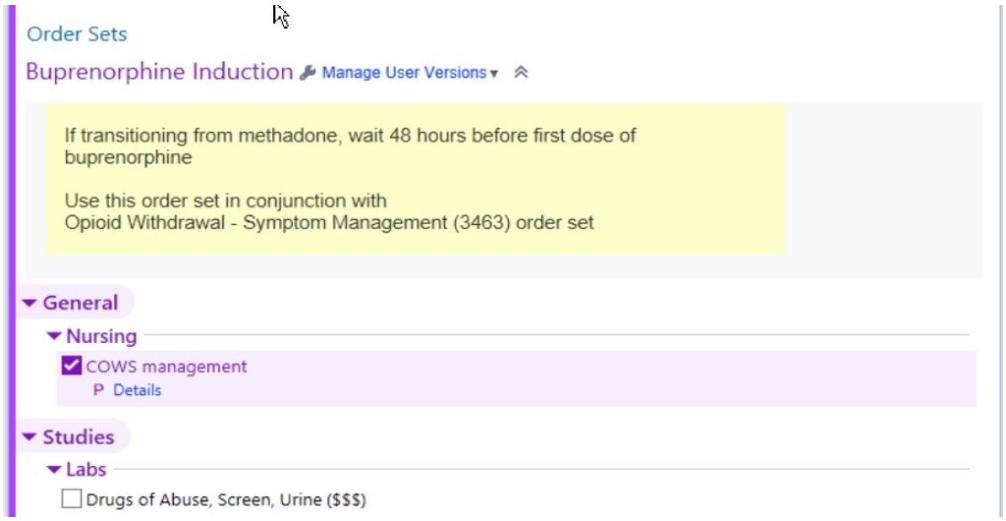
- On-site Resource Staff: _____
- Complete HealthStream Module "PSJH: Substance Use Disorder (SUD) and Medication Assisted Treatment (MAT) – A New Inpatient Pathway" within 90 days

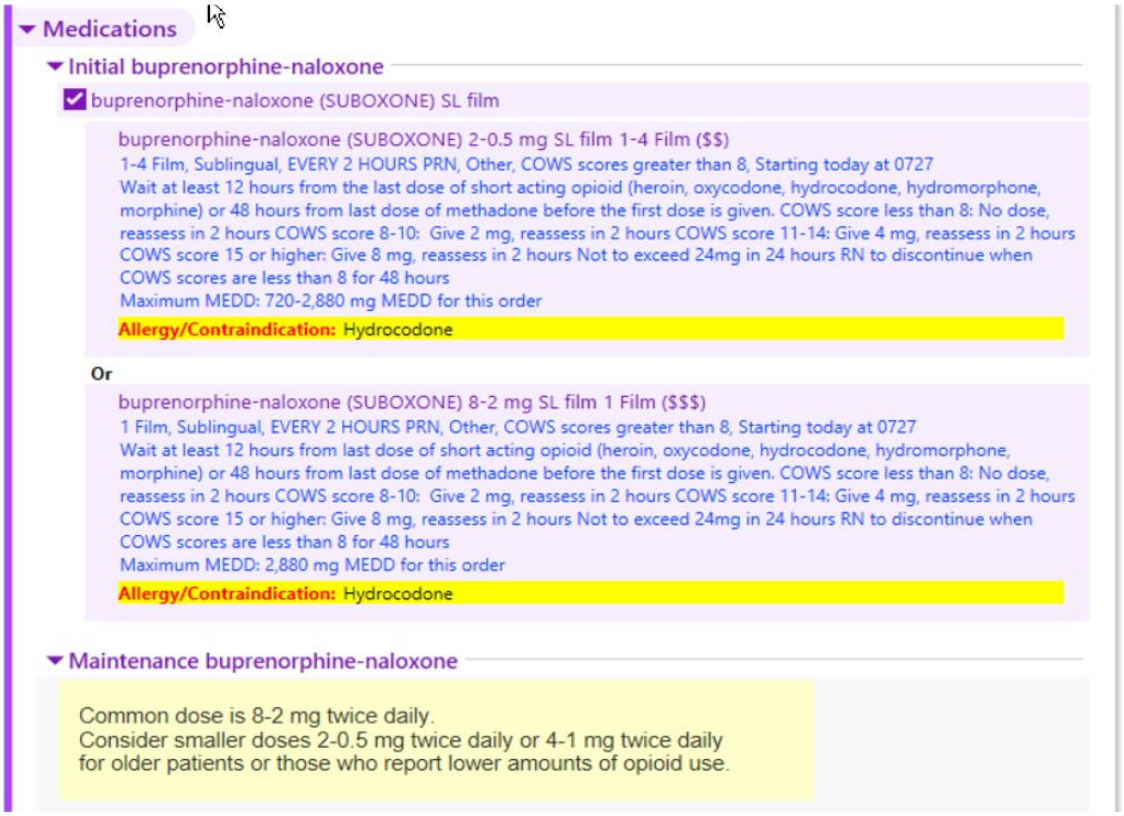
Partnering with Security: Strategies to Mitigate Substance Use & Provide a Safe Environment

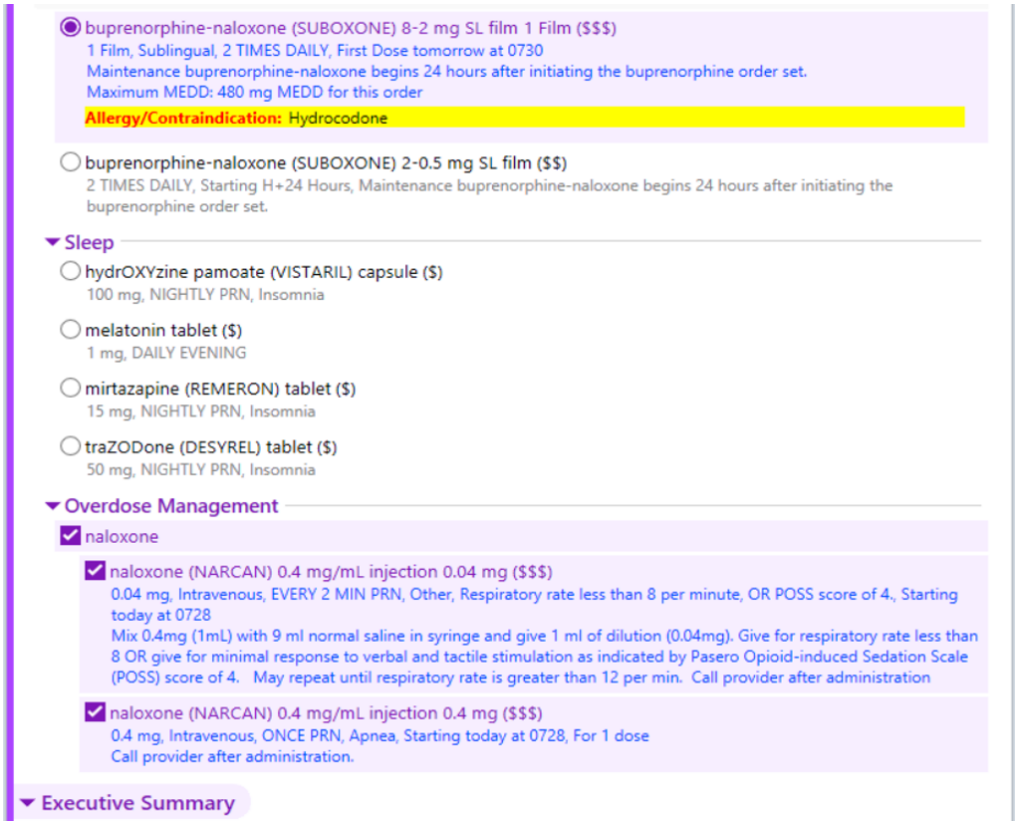
- The focus of care is on reducing the negative consequences and high-risk behaviors of substance use (harm reduction); it neither condones nor condemns any behavior
- Providence does not criminalize the use of substances while patients are in medical care, understanding that substance use is a part of the disease and will occur until the patient is more stable and able to engage in recovery
- We will talk openly with a patient about substance use once we observe or suspect misuse
- We will ask the patient to talk about their use with us and work with us to remove substances from the room, we will call security to help with disposal if drugs are present
- When we search the room we will partner with the patient and let them know we are searching to help them to be medically safe, while ensuring that we will treat their withdrawal
- Security will be called when there is imminent risk associated with physical aggression or criminal behavior
- We will not restrict visiting to manage substance misuse but can use visitation restrictions as means of safety for the staff and patient
- We will not order TSAs and/or e-sitters to prevent substance misuse
- Urine drug screens will be used when clinically indicated but not to control use
- Any decisions to discharge a patient for substance misuse or lack of engagement in care will be given after MAT has been offered and in conjunction with a care team conference
- Boundaries that are set for patients around substance use will be set with trauma informed clinical evidence-based practice

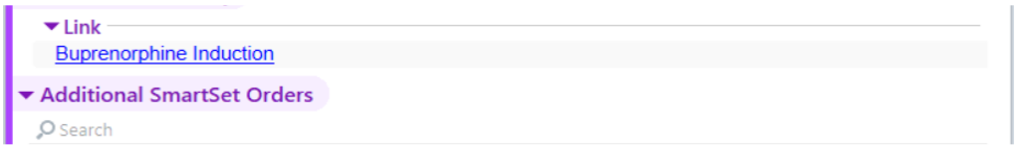
Epic Physician Order Sets

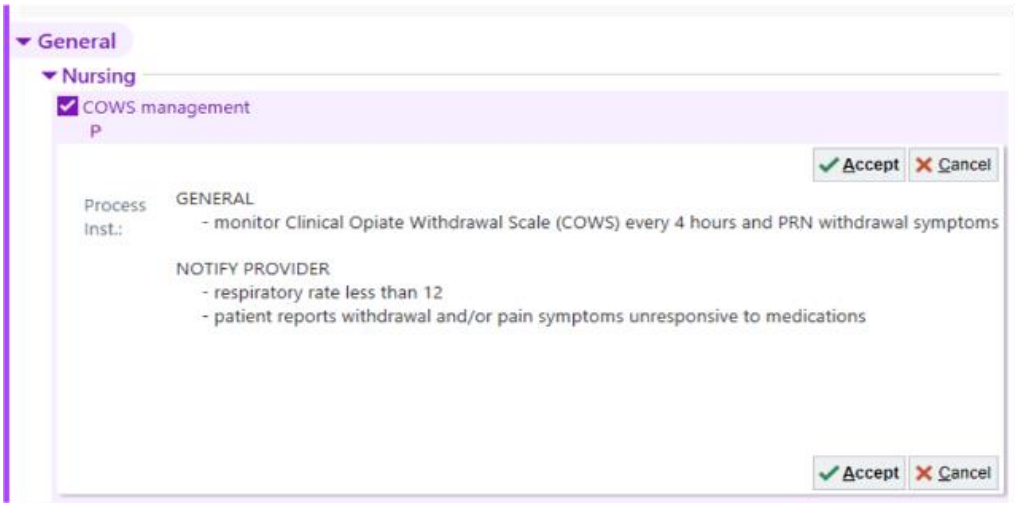
Buprenorphine Induction



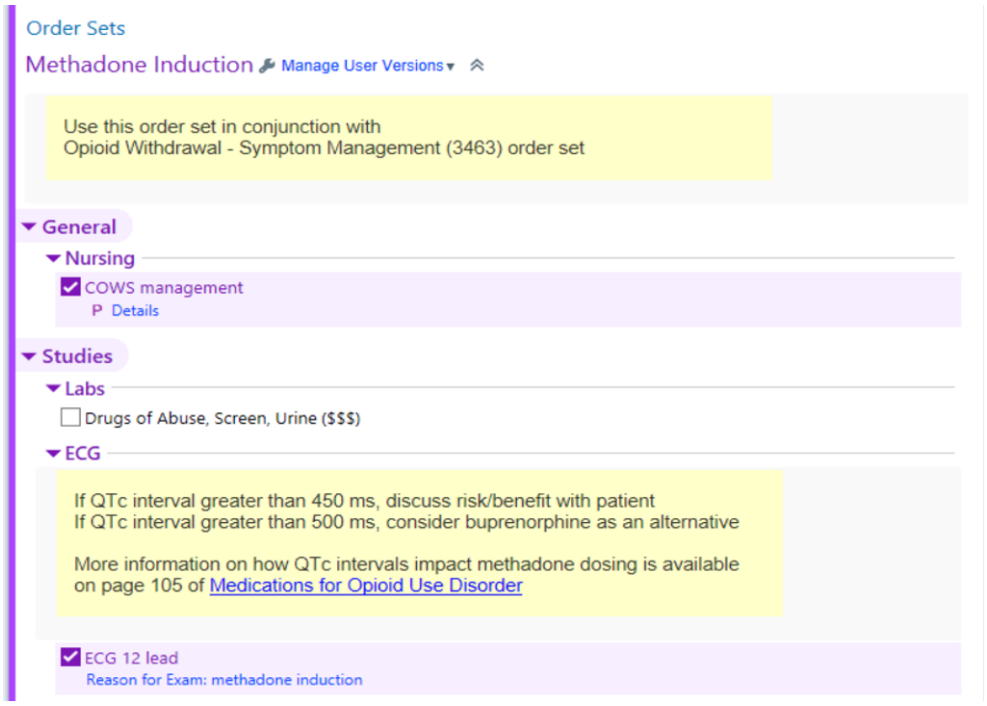



buprenorphine-naloxone (SUBOXONE) 8-2 mg SL film 1 Film ($$$)
1 Film, Sublingual, 2 TIMES DAILY, First Dose tomorrow at 0730
Maintenance buprenorphine-naloxone begins 24 hours after initiating the buprenorphine order set.
Maximum MEDD: 480 mg MEDD for this order
Allergy/Contraindication: Hydrocodone
buprenorphine-naloxone (SUBOXONE) 2-0.5 mg SL film ($$)
2 TIMES DAILY, Starting H+24 Hours, Maintenance buprenorphine-naloxone begins 24 hours after initiating the buprenorphine order set.
Sleep
hydrOXYzine pamoate (VISTARIL) capsule ($)
100 mg, NIGHTLY PRN, Insomnia
melatonin tablet ($)
1 mg, DAILY EVENING
mirtazapine (REMERON) tablet ($)
15 mg, NIGHTLY PRN, Insomnia
traZODone (DESYREL) tablet ($)
50 mg, NIGHTLY PRN, Insomnia
Overdose Management
naloxone
naloxone (NARCAN) 0.4 mg/mL injection 0.04 mg ($$$)
0.04 mg, Intravenous, EVERY 2 MIN PRN, Other, Respiratory rate less than 8 per minute, OR POSS score of 4., Starting today at 0728
Mix 0.4mg (1mL) with 9 ml normal saline in syringe and give 1 ml of dilution (0.04mg). Give for respiratory rate less than 8 OR give for minimal response to verbal and tactile stimulation as indicated by Pasero Opioid-induced Sedation Scale (POSS) score of 4. May repeat until respiratory rate is greater than 12 per min. Call provider after administration
naloxone (NARCAN) 0.4 mg/mL injection 0.4 mg ($$$)
0.4 mg, Intravenous, ONCE PRN, Apnea, Starting today at 0728, For 1 dose
Call provider after administration.
Executive Summary


Link
Buprenorphine Induction
Additional SmartSet Orders
Search

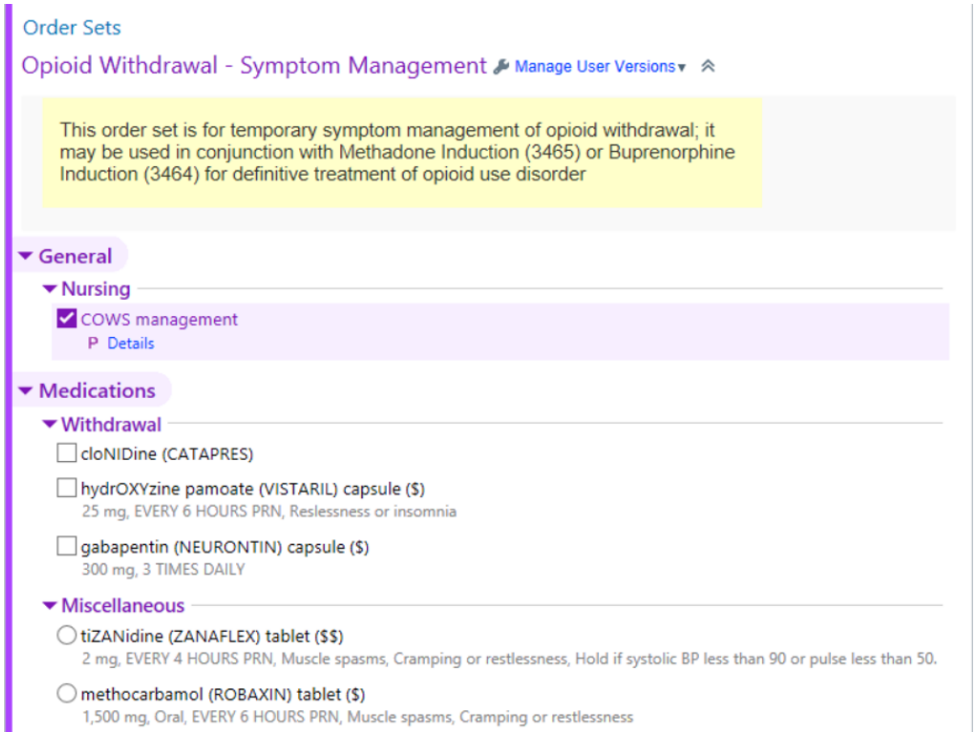

General
Nursing
COWS management
P
Accept
Cancel
Process Inst.:
GENERAL
- monitor Clinical Opiate Withdrawal Scale (COWS) every 4 hours and PRN withdrawal symptoms
NOTIFY PROVIDER
- respiratory rate less than 12
- patient reports withdrawal and/or pain symptoms unresponsive to medications
Accept
Cancel

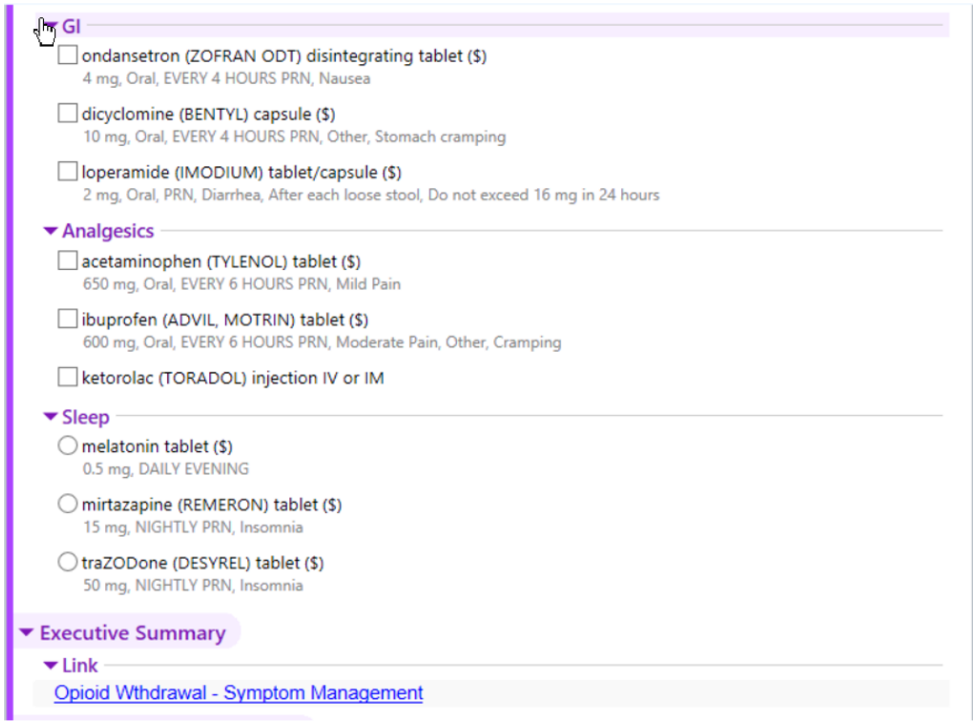
Methadone Induction




Sleep
hydrOXYzine pamoate (VISTARIL) capsule ($)
100 mg, NIGHTLY PRN, Insomnia
melatonin tablet ($)
1 mg, DAILY EVENING
mirtazapine (REMERON) tablet ($)
15 mg, NIGHTLY PRN, Insomnia
traZODone (DESYREL) tablet ($)
50 mg, NIGHTLY PRN, Insomnia
Overdose Management
naloxone
naloxone (NARCAN) 0.4 mg/mL injection 0.04 mg ($$$)
0.04 mg, Intravenous, EVERY 2 MIN PRN, Other, Respiratory rate less than 8 per minute, OR POSS score of 4., Starting today at 0733
Mix 0.4mg (1mL) with 9 ml normal saline in syringe and give 1 ml of dilution (0.04mg). Give for respiratory rate less than 8 OR give for minimal response to verbal and tactile stimulation as indicated by Pasero Opioid-induced Sedation Scale (POSS) score of 4. May repeat until respiratory rate is greater than 12 per min. Call provider after administration
naloxone (NARCAN) 0.4 mg/mL injection 0.4 mg ($$$)
0.4 mg, Intravenous, ONCE PRN, Apnea, Starting today at 0733, For 1 dose
Call provider after administration.
Executive Summary
Link
Methadone Induction

Opiate Withdrawal Symptom Management





Physician MAT Quick Guide Cards

Opioid Withdrawal Symptom Management

Use in combination with Medication Assisted Treatment

Scheduled	As Needed	
Clonidine 0.1 mg poq6h • Hold if SBP < 90, HR < 50 Hydroxyzine 50 mg poq4h • If ≥60 yo, â to 25 mg Gabapentin 300 mg poq8h **For sleep, pick one:** Hydroxyzine 50 –100 mg poqhs Mirtazapine 15 mg poqhs Melatonin 0.5 mg poq1700	Pain	Acetaminophen 650 mg poq6h prn Ibuprofen 600 mg poq8h prn Toradol 15 –30 mg IM/IV q6h prn Tizanidine2 mg poq4h prn muscle cramps
	Nausea/Vomiting	Zofran 4 mg po/IV q4h prn Dicyclomine10 mg poq4h prn stomach cramps
	Diarrhea	Loperimide4 mg once followed by 2 mg prn loose stool; not to exceed 16 mg daily

Medication Assisted Treatment – Opioid Use Disorder

If using fentanyl or methadone, use methadone pathway or liaise w/psych C/L service

Buprenorphine

- Discontinue all opioid medications
- Monitor with COWS q4h; d/c 24h after last buprenorphine increase
- Suboxone= Buprenorphine/Naloxone tablet 8 mg/2 mg
- Day 1: Half tablet of Suboxone8/2 for dose of 4mg/1 mg SL prn COWS ≥8
  - NTE 24 mg TDD buprenorphine
- Day 2+: calculate daily dose by totaling previous day's administration
  - Suboxone4 mg/1mg COWS ≥ 8 (NTE 24mg TDD buprenorphine)

Methadone

Continuation	Initiation

Confirm dose at clinic
If last dose:
• <48h: continue home dose
• 48-72h: reduce by 25%
• >72h: follow initiation pathway
	• Monitor with COWS q4h
	• Hold for RR <12
	• Starting dose: Methadone 10 mg potid
	• Titration: increase q3days in 15 mg increments ÷tid
	  ○ With clinical judgment, can increase q2days
	  ○ mg tid à 15 tid à 20 tid
	  ○ Goal 80 –120 mg, targeting w/d sx& cravings
	  ○ Liaise w/psych CL for TDD >80 mg
	• Oxycodone 5–20 mg poq3h prn COWS ≥ 8
	• Transition to daily dosing prior to discharge

Acute Pain Management & Medication Assisted Treatment

Pts w/OUD usually have higher opioid tolerance & may require higher doses than opioid-naïve pts. They may have lower threshold for pain, experiencing hyperalgesia and allodynia.

For all patients:

1. Multimodal Pain Management Postop order set (some Rx auto d/c after 3 days)
2. Consider IV Lidocaine or IV Ketamine (per PAMC policy)
3. Neuraxial/Regional anesthesia if appropriate

Methadone

Home dose methadone alone cannot be relied upon for acute pain management

1. Divide methadone to q8h dosing
   - Return to home dosing regimen when acute pain resolved
2. Utilize prn medic

Oral (preferred)

- Oxycodone 5 – 20 mg po q3h prn
- Hydromorphone 4 – 8 mg po q3h prn
- Morphine 15 – 45 mg q3h prn

Intravenous

- If oral ineffective or unavailable
- Hydromorphone 1 – 2 mg IV q2h prn
- Morphine 5 – 10 mg IV q2h prn

Buprenorphine (Suboxone, Subutex, Zubsolv, Sublocade, Bunavail)

Due to buprenorphine's high affinity for mu receptor, low dose/affinity opioids are ineffective for pain

1. Continue home dose buprenorphine & divide to q8h dosing
   - Add buprenorphine 2 -6 mg q6h prn for TDD 32 mg; determine requirement & schedule
   - Return to home dosing regimen when acute pain resolved
2. If increased buprenorphine & multimodals are ineffective **OR** expected moderate/severe pain

Oral (preferred)

- Hydromorphone 4 – 8 mg po q3h prn

Intravenous

If oral ineffective or unavailable

- Hydromorphone 1 – 2 mg IV q2h prn

Naltrexone (Vivitrol, Revia, Contrave)

1. Discontinue naltrexone (oral blockade ~48 hours; IM ~14 – 28 days)
2. Naltrexone blockade can be overcome by 6-20x usual analgesic dose
3. When naltrexone blockade wears off, may be extremely sensitive to opioids à **monitor**

Overdose Management & Narcan Kit

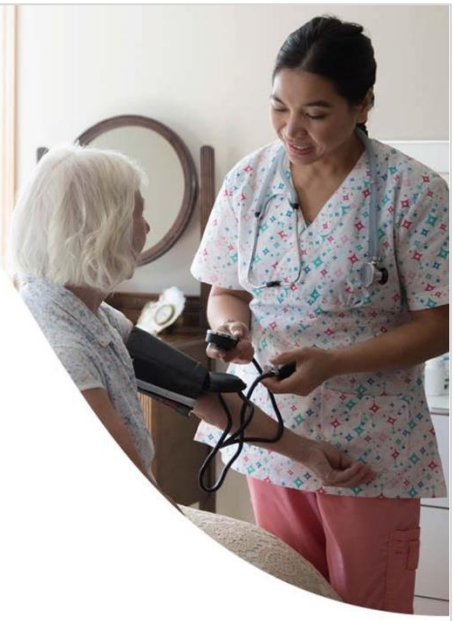
- **Respiratory depression:** Naloxone 0.04 mg IV prn RR <8; give q2 minutes until RR >12
- **Respiratory arrest:** Naloxone 0.4 mg IV prn RR <4 or hypoxia
- Prescribed a Narcan Kit at discharge to all OUD patients
  - Available for free, without Rx at Medical Arts pharmacy through Project HOPE.
  - Available on standing prescription at Fred Meyer pharmacies (using insurance).

Appendix

Table of Contents

A. Inpatient OUD Pathway Presentations

Providence



Opioid Use Disorder: Inpatient Pathway

Alaska MHWI Strategic Plan

Addressing the Opioid Crisis in Alaska – Reducing Opioid Overdose Deaths

Situation

- December 2017 - Alaska Governor declared state's opioid crisis a public health disaster
- Opioid Use Disorder (OUD) incidence increasing in all medical settings, resulting in:
  - Poorer patient outcomes
  - Escalations and leaving against medical advice
- Insufficient number of physicians x-waivered and able to provide Medicine Assisted Treatment (MAT)

Aspiration

To end the cycle of OUD by ensuring access to effective evidence-based treatment and trauma informed care

- Reduce opioid overdose death rate 50% in the communities we serve by 2022

Action

1. Increase Suboxone waivered providers providing MAT
2. Establish Substance Misuse and Prevention Council and community partnerships addressing OUD
3. Implement clinical pathways for OUD

Collaboration

Building partnerships with:

- State of Alaska
- University of Alaska
- Tribal health system and
- Internal and external primary care clinics

Providence

PAMC Ops Council 2

Current State: Outcomes

- Fear experienced by patients & the care team
- Marginalization of patients
- Poor management of medical comorbidities
- Increased risk of readmission with resource-intensive, prolonged hospital stays
- Less likely to complete medical treatment
- Security is contacted to manage misuse vs. clinical treatment
- More likely to leave AMA (12% of pt w/OUD)
- High risk of return to (drug) use after discharge
- Higher risk of death by overdose after discharge (10x)

Providence PAMC Ops Council 3

Evidence Based Practice

- Addiction is a neurobiological disease
- Appropriate identification & diagnosis
- Hospitalization is an ideal time to start treatment & connect to outpatient services
  - Should be initiated in ED, medical, surgical & OB pts
- Medication Assisted Treatment (MAT) is first line treatment
- If pt declines MAT
  - Educating on harm reduction strategies
  - Provide appropriate symptom management Rx
- Punitive behavioral contracts, room & visitor searches
- Narcan kits to patient, friends, and family at discharge
  - They are available for free to anyone at the Med Arts pharmacy

Providence PAMC Ops Council 4

Predicted Outcomes

- MAT reduces overdose death by 67%, decreases HIV & other infections
  - 75% less likely to die from addiction-related disease
- Decreased re-admission rates
- Reduced AMA discharges
- Reduction in ED visits
- Increased pt engagement in care
- Reduction in patient-care team conflict
- Decreased patient aggression/violence
  - Reduction in caregiver injuries
  - Decreased code grays
  - Reduction in criminal activity, in & out of hospital

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PAMC Ops Council 5

Harm Reduction Model

- Accepts drug use is part of our world, and chooses to work to minimize its harmful effects
- Understands drug use as a complex, multifaceted phenomenon encompassing a continuum of behaviors
- Acknowledges that some ways of using drugs are safer than others
- Non-judgmental, non-coercive provision of services and resources to assist them in reducing harm
- Does not attempt to minimize or ignore real and tragic harm and danger associated with licit and illicit drug use

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PAMC Ops Council 6

Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA

Providence

Mental Health & Substance Use CPG
Clinical Program Services

Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA

July 1, 2019

Goals

PROVIDE CONTEXT

- Context of MHSU CPG & Addiction Focus Group
- Update on IP OUD Pathway work in AK

ALIGN

- Discuss need & opportunity to launch in Everett
- Facilitating Factors & Barriers

PLAN

- Identify next steps & timeline
- Resources needed

Agenda

TIMING	TOPIC	PRESENTER
9:00 am	Introductions & Reflection	Renee Rafferty, MS, LPC
9:10 am	MHSU CPG Overview & Context	Jordan Johnson
9:20 am	SUD Vision	Jim Walsh, MD
9:25 am	Inpatient OUD Pathway Summary	Kelly Ogden, RN
9:40 am	Update on AK Pilot	Phil Capp, MD
10:10 am	Launching a Pilot in Everett	Laura Knapp, LICSW
10:40 am	Discussion, Q&A, Next Steps	Gale Springer, ARNP

Providence

At Providence, of the patients age 12+ who we see…

1.4 M / 36%	200k / 3%	60k / 1.5%
have a diagnosis of mental illness	have a diagnosis of SUD	have co-morbid SUD & Mental Illness

In November 2017…

- 140 folks gathered for the first time
- 2-day CPG kickoff with speakers + work sessions

Goals:

- Connect
- Learn from each other
- Clarify shared needs
- Identify priorities
- Plan clinical transformational work

Since Then…

- Relationships formed and a network emerged
- Inventory of PSJH MH & SUD services
- Convened a Leadership Council & 4 Focus Groups – over 200 caregivers engaged
- Work featured at internal & external events
- Launched 4 digital pilots for depression treatment
- 3 Executive Metrics on 2019 CCPH Dashboard

Providence

Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 6

CPG Overview

The Mental Health and Substance Use Clinical Performance Group (MHSU CPG) convenes the full spectrum of behavioral health services across PSJH

Our regions offer a wide variety of acute, ambulatory, specialty and primary care behavioral health services

Combined with our own health plan, we have the opportunity to transform how behavioral health services are supported, provided and paid for through leveraging the collective knowledge within PSJH

In alignment with the foundational purpose of Clinical Program Services (CPS), the MHSU CPG will:

- Optimize expert-to-expert collaboration,
- Design, develop and deploy clinical standardization
- And scale innovation across the organization

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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 7

MHSU CPG Aspirational Vision:

Transforming our Health System to Prevent Deaths of Despair

Aligned with Health 2.0:

We will be our communities' health partner, aiming for physical, spiritual and emotional well-being. We seek to ease the way of our neighbors in their journey to good life.

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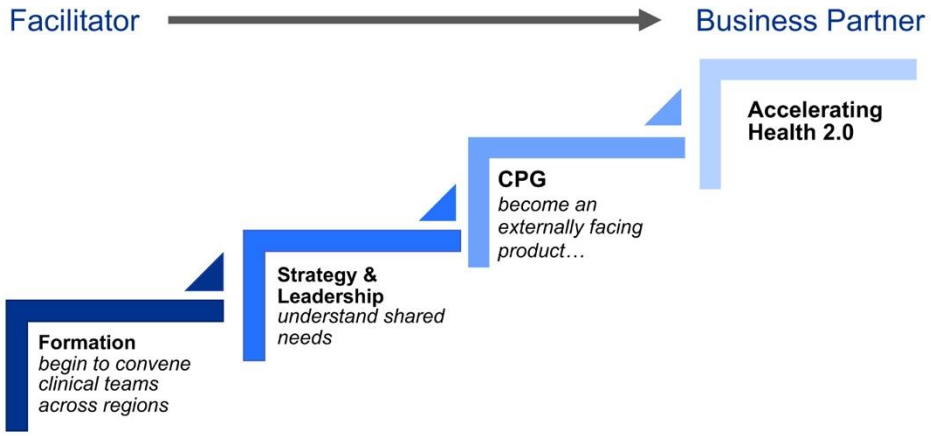
Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 8

Clinical Performance Group Maturity Path



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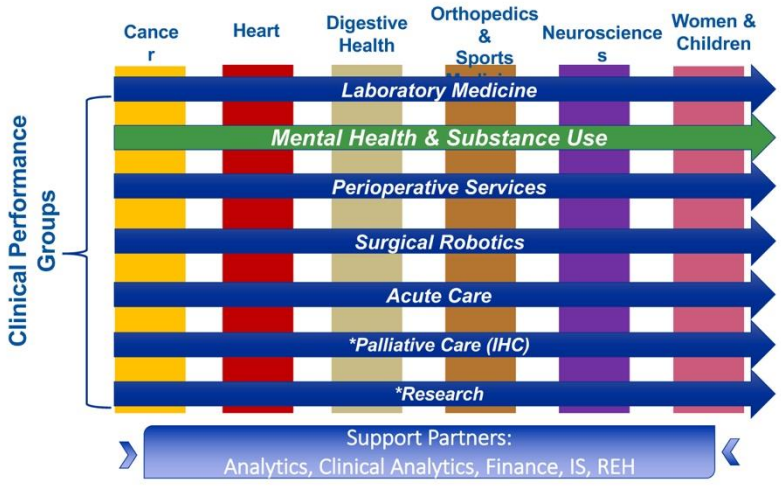
Clinical Program Services Structure



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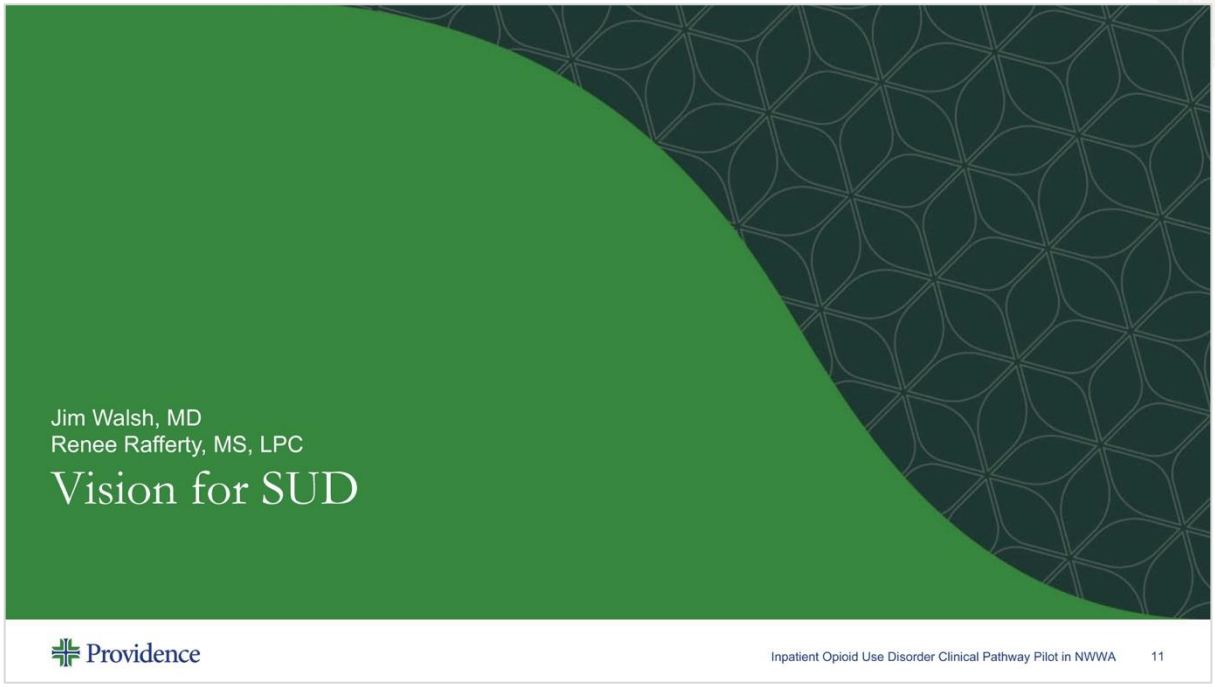

MHSU CPG 5 Year Vision on Substance Use Disorders

We Respond

One of our CHNA most critical needs in every community we serve is substance use disorders (SUDs)

We Elevate Value

- Deliver better outcomes & experience of care for our most vulnerable patients
- Improve the safety and experience of our caregivers
- Realize significant cost savings in acute care from better management of SUD

We Create No Wrong Door

Our strategy is built on the success of the Mass General SUD Initiative, which asserts patients must have access to evidence-based treatment that is readily available and in alignment across the system

MHSU CPG 5-Year Vision on Substance Use Disorders

In every community we serve, we will create access by offering or partnering with organizations providing the following elements:

- Education & Culture Change
- Enhanced Hospital Treatment
- Inpatient Addiction Consult Team
- Bridge Clinic for MAT
- Recovery Coaches
- Prevention & Patient Support
- Evaluation & Measurement

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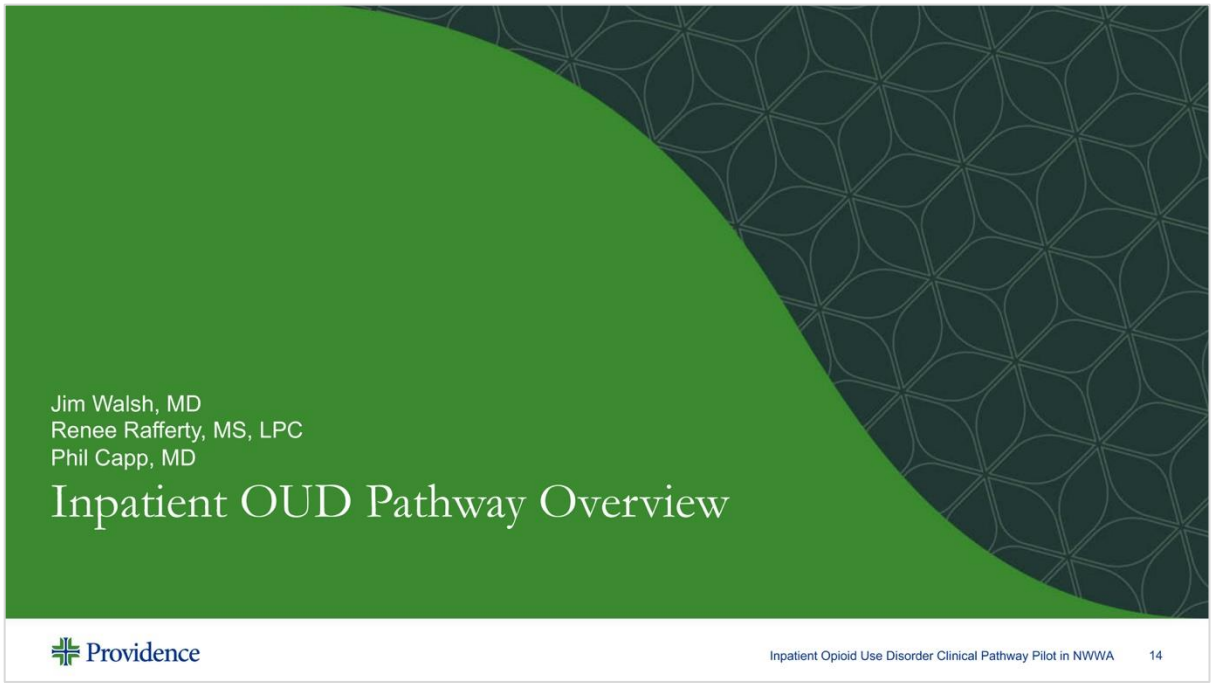

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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 14

Vision for Pathway

Opioid use disorder (OUD) is a chronic medical problem that waxes and wanes over time. Like diabetes it can lead to dangerous medical complications and can be challenging to manage during an acute hospital stay. Also like diabetes, both pharmacologic and "life style changes" are important in successfully managing this illness.

People who are physically dependent on opioids live with a fear of withdrawal symptoms. These can be dramatic with vomiting, diarrhea, jerking and writhing. But even mild withdrawal leads to anxiety, insomnia and a dysphoria that most patients find intolerable. When patients are struggling with withdrawal they are not able to effectively engage in care or work with staff constructively. The urgency to relieve this acute withdrawal will override almost any other priority or concern the patient may have.

There are several strategies to relieve withdrawal. Opioids such as methadone, buprenorphine or familiar medications used for pain can be effective. There are non-opioid medications that can help although the efficacy is somewhat limited and side effects can be significant.

Both patients and hospital staff are often focused on the desire to "detox" assuming that once withdrawal is no longer a concern the addiction problem will not return. Experience shows that even for patients who successfully stop opioids for a period - whether during a hospital, in a treatment program or when incarcerated - relapse to opioid use over the next few weeks or months is the most common result. When patients relapse after periods of abstinence there is a higher risk of a fatal overdose and many people struggling with sobriety die this way.

As with diabetes, short term management of the acute problem will ideally lead into a long term management plan.

The Addiction Focus Group, of the MHSU CPG, will strive to develop care pathways that can work in each of our hospitals to allow patients with opioid use disorder to receive safe, effective and compassionate care. Protocols will be designed to allow the patient to complete treatment for medical, surgical or psychiatric problems that brought them to the hospital. The management strategies applied in the hospital will need to be connected to long term evidenced based strategies to help patients remain successful.

We look forward to collaborating with all Focus Group members to understand the issues that come up in our ministries and to gather and share the successful treatments we have found. We will explore the treatment resources available in various regions and look for ways to build up supports where they are needed.

Harm Reduction Model

- Accepts drug use is part of our world, and chooses to work to minimize its harmful effects
- Understands drug use as a complex, multifaceted phenomenon encompassing a continuum of behaviors
- Acknowledges that some ways of using drugs are safer than others
- Non-judgmental, non-coercive provision of services and resources to assist them in reducing harm
- Does not attempt to minimize or ignore real and tragic harm and danger associated with licit and illicit drug use

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Why?

- Fear experienced by patients & the care team
- Marginalization of patients
- Poor management of medical comorbidities
- Increased risk of readmission with resource-intensive, prolonged hospital stays
- Less likely to complete medical treatment
- Security is contacted to manage misuse vs. clinical treatment
- More likely to leave AMA (12% of pt w/ OUD)
- High risk of return to substance use after discharge
- Higher risk of death by overdose after discharge (10x)

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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 18

Evidence Based Practice

- Addiction is a neurobiological disease
- Appropriate identification & diagnosis
- Hospitalization is an ideal time to start treatment & connect to outpatient services
  - Should be initiated in ED, medical, surgical & OB pts
- Medication Assisted Treatment (MAT) is first line treatment
- If pt declines MATa…
  - Educating on harm reduction strategies
  - Provide appropriate symptom management Rx
- Punitive behavioral contracts, room & visitor searches
- Narcan kits to patient, friends, and family at discharge
  - They are available for free to anyone at the Med Arts pharmacy

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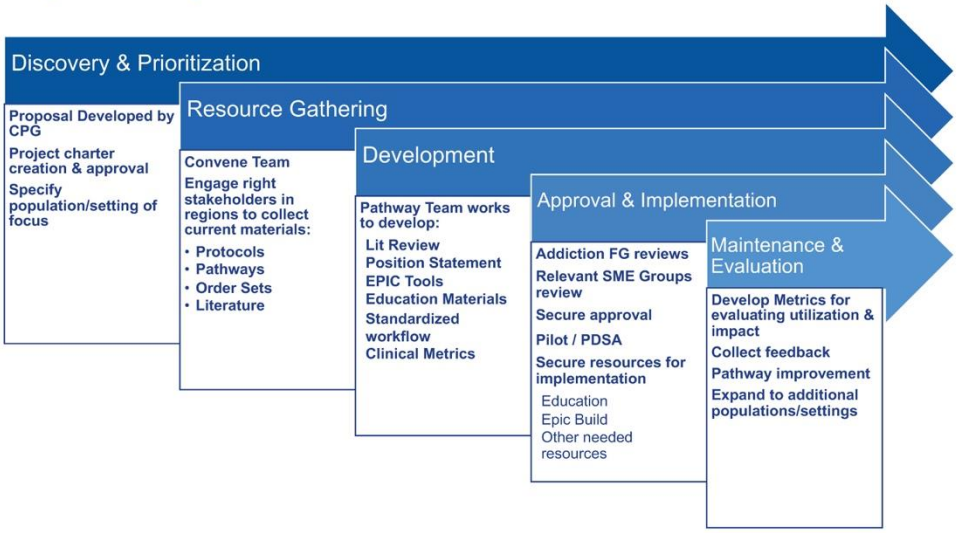
Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 19

Pathway Development Timeline



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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 20

Change Package Deliverables

Category	Deliverables
Best Clinical Practices	• Literature Review • White Paper
Workflow & Process Map	• Hospital Protocol • NIDA Screening Tool • Security Recommendations
Epic Tools	• Physician Order Sets ▪ Opioid Withdrawal ▪ Initiation of MAT (Bup & Methadone) ▪ Including Pain Management Guidelines
Clinical & Patient Education	• NAABT Language Guidelines • Scripting for caregivers – working document • ECHO Learning Communities Recommendation • Pocket Guide for Meds
Measurement & Evaluation Framework	• List of metrics
Training Materials	• Slide Decks for discipline-specific training sessions (Nursing, Social Work, Providers, Security Officers)

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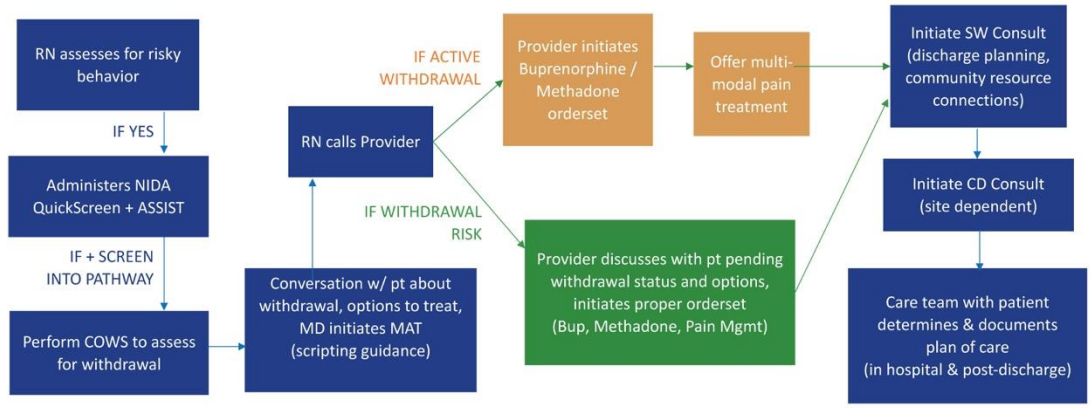
Hospital Workflow



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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 22

Measurement & Evaluation

Metric Domain	Measure Name	Measure Description
Process Metrics		
OUD Screening & Assessment	SUD Screening	Rate of Completion of the NIDA Quick Screen
	SUD Assessment	Rate of Completion of the ASSIST SUD Assessment Tool
	COWS Utilization	Rate of Clinical Opiate Withdrawal Scale (COWS) Completion
Intervention	MAT Induction	Percentage of patients identified with Opioid Use-related Disorder who were provided MAT for OUD
Diagnostic Accuracy	Accurate OUD Diagnosis w/ MAT	Percentage of encounters where OUD is being accurately reflected in the encounter diagnoses
	Accurate Diagnosis with Positive COWS	% of Patients Screening Positive on the COWS who have a OUD (F11) diagnosis in encounter diagnoses
Outcome Metrics		
AMA	AMA Disposition	Rate of AMA disposition for OUD patients (per 1000 admissions)
Length of Stay	Length of Stay	Average Length of Stay (days) for patients with OUD
		Median Length of Stay (Days) for patients with OUD
Readmission	30 & 90 Day Readmissions	30 Day Readmission Rate for Patients Receiving MAT (per 1000 Admissions)
		90 Day Readmission Rate for Patients Receiving MAT (per 1000 Admissions)
MAT Treatment Retention	Connection & Retention in Outpatient MAT Services	% of Patients Referred & Connected with Outpatient MAT Services
		% of Patients Who Have Been in Outpatient MAT Treatment for 90 Days Post- Hospital Discharge
Provider Perception Metrics		
Provider Perception	Caregiver Perception	Specific Survey Items TBD
	Physician Perception	Specific Survey Items TBD

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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 23

Renee Rafferty, MS, LPC
Kelly Ogden, RN
Phil Capp, MD

Alaska pilot update

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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 24

Approach to Roll Out

Connected work to local MH Strategic Plan

Socialized with Executive Team, Clinical Leaders

Met with internal & external stakeholders

- Security
- Law Enforcement
- Others

Began with 1 unit, expanded to 2nd, additional units scheduled

Inpatient Psychiatric Liaison service available for support

Bridge Clinic development & ramp up for OP follow up

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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 25

Training – Ongoing Adaptive Learning Process

Nursing

- Med-Surg leader 1 hour Focus Group
- Leader OUD training 2 hour
- OUD 3 hour class for RN
- OUD 2 hour class for PCT

Physicians – MAT Overview for Physicians (Overview, Slides)

Social Work – OUD 2 hour Class for Social Work

Security – OUD Pathway 2 Hour Overview For Security Officers

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Predicted Outcomes

- MAT reduces overdose death by 67%, decreases HIV & other infections
  - **75% less likely to die from addiction-related disease**
- Decreased re-admission rates
- Reduced AMA discharges
- Reduction in ED visits
- Increased pt engagement in care
- Reduction in patient-care team conflict
  - **Decreased patient aggression/violence**
  - **Reduction in caregiver injuries**
  - **Decreased code grays**
- Reduction in criminal activity, in & out of hospital

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AK Pathway Early Results

In 6 weeks live at PAMC on 2 med-surg units:

- **14 patients have been identified with COWS scores of 5 or greater, compared to 28 in 12 months prior** (4x monthly rate increase)
- **9 patients have been prescribed MAT, compared to 30 in 12 months prior** (2.5x monthly rate increase)
- **50% reduction in rate of patients with elevated COWS leaving AMA** (7% vs 14.3% in 12 months prior - baseline underreported due to low levels of COWS screening)
- Prior to implementation, providers & caregivers responded to a survey showing…
  - **1/4 caregivers felt they had the skills** to work with pts with SUDs
  - **1/5 caregivers were familiar with MAT** and how to use in hospital setting

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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 28


Laura Knapp, LICSW
Katie Gilligan, MD
Gale Springer, ARNP
Launching a pilot in Everett
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Everett Current State:
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CD Consult Process

CD consult placed by MHT

Prov Drug and Alcohol counselor

- 2hrs Tues and Thurs. Todd Carran MD on Tuesday afternoons
- Recently started doing NIDA
- When asked, the right person can do an ASAM assessment required for inpt CD treatment (hive knowledge)
- Communication problems

Those in the know place a Provider to Provider consult to Gale Springer or just call her.

Psych often evaluates and if appropriate for suboxone, consults with Gale/Todd Carran

Patient Stories

22 yr woman admitted for DKA on 9/14/2018

- Using heroin, meth, marijuana
- Admitted to critical care

Nausea noted. gastroparesis dyspepsia [no mention of withdrawal]

Polysubstance abuse. Prn oxycodone, vistaril, ativan. "Importance of stop using drugs d/w patient"

9/16: SW consult

- "consistently using drugs"
- 6 admits and 2 ED visits this year for DKA
- "anticipated services: CD treatment"

Patient Stories

22 yr woman admitted for DKA on 9/14/2018

9/17

Refusing medication, refusing to talk with any staff

"self destructive behavior"

Psych consult

Nutrition consult b/c pt wt is 85 lbs

Severe malnutrition, has lost ~35% of body wt over 5 months

9/18

Psych consult – refused to talk

9/19

Pt's mom called asking nurse to call Evergreen Drug Rehab.

Nurse called and left message w/ hospital call back number, no pt information.

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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 33

Patient Stories

22 yr woman admitted for DKA on 9/14/2018

9/20 transfer to 3A

CD consult (placed 9/15)

"pt willing to go to treatment and states someone from Evergreen Manor will be coming out to complete assessment as soon as nurse has phone consult with treatment program"

[had been scheduled for 9/20 prior to admit]

9/21 stable to discharge

SW consult

- Home with family with f/u CD services
- Mom want pt to go directly to inpt CD treatment

Psych consult

- "appears miserable
- Agreed to suboxone
- Call DCR for Ricky's Law if tries to leave AMA

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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 34

Patient Stories

22 yr woman admitted for DKA on 9/14/2018

9/22 Last opiate was 11am 9/21

MHT note

- "tearful…but encouraged when I commended her for making a decision to transition from her past way of life"
- COWS scores remained 6-7 and not given suboxone
- Tachycardia, anxious, crying, c/o "all over pain"

Later that evening attempted to leave AMA

- DCR called, detained late in the night

Transferred to inpt CD treatment ITA Ricky's Law

- Left 11am 9/23, last opiate 11 am 9/21

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Patient Stories

22 yr woman admitted for DKA on 9/14/2018

11/30 F/U PMG PCP Marysville clinic

Wanted to get back on suboxone which was tapered and d/c during early treatment

Referral for PMG SW

- SW spoke with pt via phone and set up an appt to see PMG doc in Monroe who prescribes suboxone

12/6 Visit with PMG doc, starts suboxone

Working with care management team

- Has not been in ED in over 9 months
- Seeing endocrine
- Has visits with 5yr son

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Problems with this system

Late identification of withdrawal

Worsening medical problems

- Not eating, vomiting up pills, refusing lactulose because already having diarrhea

Late decisions about treatment

Withdrawal treated with oxycodone

- Never enough
- Pt has to withdrawal from it to transition to suboxone

Confusion about the plan

Lack of empathy from treatment team

- "self destructive behavior" on problem list
- "consistently using drugs"
- Increase length of stay
- AMA discharges = readmission

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Statistics and Need

Snohomish County:

"The county accounts for about 11 percent of Washington's population, but during the past five years has experienced 14 percent of all opioid-related deaths and nearly 16 percent of all heroin-related deaths in the state. Over the last two years, Snohomish County has seen 100+ opioid-related deaths (103 in 2017 and 117 in 2018). This community on average loses two people every week to opioids." –Sheriff Ty Tyrany

PRMCE Emergency Department

Often the community safety net for addressing mental health and substance misuse crisis

In 2018, there were 14,552 patients with a mental health diagnosis, of which 1,569 also had an opioid diagnosis, which came into or through the Emergency Department

In the last 12 months 6,692 patients had a discharge diagnosis related to addiction

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Breakdown of Need

Category	Month of adt_a..	
Behavioral Health (Alcohol Abuse)	May 2018	86
	June 2018	70
	July 2018	91
	August 2018	67
	September 2018	73
	October 2018	73
	November 2018	72
	December 2018	101
	January 2019	63
	February 2019	57
	March 2019	93
	April 2019	76
Grand Total		922

Category	Month of adt_a..	
Behavioral Health (Alcohol Dependence)	May 2018	264
	June 2018	255
	July 2018	317
	August 2018	265
	September 2018	258
	October 2018	249
	November 2018	275
	December 2018	276
	January 2019	215
	February 2019	250
	March 2019	292
	April 2019	269
Grand Total		3,185

Category	Month of adt_a..	
Behavioral Health (Drug Dependence)	May 2018	249
	June 2018	293
	July 2018	313
	August 2018	273
	September 2018	268
	October 2018	252
	November 2018	271
	December 2018	282
	January 2019	284
	February 2019	226
	March 2019	249
	April 2019	241
Grand Total		3,201

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Strengths

- Motivated Caregivers who want to help patients
- Providence Drug and Alcohol Unit partners
- CDP assessment built in epic
- SUD screening trials underway
- Strong community SUD partners
- Mental Health/ CD CNS highly utilized by staff
- Providers requesting CD consults regularly

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Strengths

Medication Assisted Treatment Inductions currently occurring on IP side	Medication Assisted Treatment induction occurring in the Emergency Department	Buprenorphine waiver course coming to Everett in July and August
Active engagement from Everett in Addiction CPG	Increasing MAT prescribers in community and PMG	Safe Program has demonstrated many successes

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Example of potential results when we try doing things differently:

SAFE Program (2012 to 2018)

64 patients

Average days in the hospital: 14.94

Average hospital days saved 20.36

Total days of hospitalization saved: 1303

Money saved ($500-$1500 per day)

0.65-1.95 million saved

Data from Dr Hunt

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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 42

Results for 2019 YTD

11 patients (plus an additional 2 in progress)

Age = average 41, range 23-67

Gender = 64% male, 36% female

Antibiotic completed = 66% (1 opted to not do any further treatment, 1 incarcerated, 1 death)

Known drug relapse = 11 % (1/9)

Diagnosis = osteomyelitis, septic arthritis, pneumonia, endocarditis

Deaths = 1 patient at home, f/u with coroner indicated death related to cardiac issues, no opioids in the system

Label tampering = 0%

PICC line use = 0%

Medication – 3 on Dalbavancin (weekly med) 2 did well, 1 was incarcerated

Hospital days prevented = 228

Estimated cost saving = $456,000 ($2000/day)

Medication Assisted Treatment (5 out of 11) (2 suboxone and 3 methadone)

Average days to set up outpatient plan = 12 days (range 3-40 days)

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Barriers and Challenges

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All
Discussion, Q&A, Next Steps
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Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 45


Adjourn
Providence
Inpatient Opioid Use Disorder Clinical Pathway Pilot in NWWA 46

B. Caregiver Training Pre & Post-Survey

Pre-Survey	
Question	**Responses**
1. How confident are you that your facility has the right policies, protocols and procedures in place to treat OUD effectively?	Not confident at all | Not too confident | Somewhat confident | Very confident
2. How comfortable are you talking to patients about the issue of substance use disorder?	Not comfortable at all | Not too comfortable | Somewhat comfortable | Very comfortable
3. How prepared do you feel to identify patients who are experiencing opioid use disorder (OUD) and/or opioid withdrawal (including due to prescription opiates)?	Not prepared at all | Not too prepared | Somewhat prepared | Very Prepared
4. In your opinion, how effective are available medical tx for treating OUD?	Not effective at all | Not too effective | Somewhat effective | Very effective
5. I am familiar with Medication Assisted treatment (MAT) and how to use it in a hospital setting	Strongly disagree | Disagree | Neutral | Agree | Strongly agree
6. I incorporate MAT into my daily practice when patients present with Opioid Use disorder	Strongly disagree | Disagree | Neutral | Agree | Strongly agree
7. I have the skills I need to work with patients who have SUD	Strongly disagree | Disagree | Neutral | Agree | Strongly Agree
8. Failing to treat withdrawal of substances is harmful to patients.	Strongly disagree | Disagree | Neutral | Agree | Strongly Agree

Post-Survey	
Question	**Responses**
1. How confident are you that your facility has the right policies, protocols and procedures in place to treat OUD effectively?	Not confident at all | Not too confident | Somewhat confident | Very confident
2. How comfortable are you talking to patients about the issue of substance use disorder?	Not comfortable at all | Not too comfortable | Somewhat comfortable | Very comfortable
3. How prepared do you feel to identify patients who are experiencing opioid use disorder (OUD) and/or opioid withdrawal (including due to prescription opiates)?	Not prepared at all | Not too prepared | Somewhat prepared | Very Prepared
4. In your opinion, how effective are available medical tx for treating OUD?	Not effective at all | Not too effective | Somewhat effective | Very effective
5. I am familiar with Medication Assisted treatment (MAT) and how to use it in a hospital setting	Strongly disagree | Disagree | Neutral | Agree | Strongly agree
6. I intend to incorporate MAT into my daily practice when patients present with Opioid Use disorder	Strongly disagree | Disagree | Neutral | Agree | Strongly agree
7. I have the skills I need to work with patients who have SUD	Strongly disagree | Disagree | Neutral | Agree | Strongly Agree
8. Failing to treat withdrawal of substances is harmful to patients.	Strongly disagree | Disagree | Neutral | Agree | Strongly Agree

C. Training Materials

Substance Use Disorders (SUDs) & Medication Assisted Treatment (MAT): A New Inpatient Pathway for Providing Evidence Based Treatment

Addiction Focus Group | Mental Health & Substance Use Clinical Performance Group (CPG)
Clinical Program Services | Providence St. Joseph Health

Contributors

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Gale Springer, RN, MSN, ARNP, PMHCNS-BC – Mental Health Clinical Nurse Specialist/ Psychiatric ARNP; Providence Regional Medical Center Everett

Jim Walsh, MD – Addiction Medicine Physician, Swedish Medical Group

Learning Objectives

- Explain history of the opioid epidemic
- Describe Substance Use Disorder (SUD) diagnostic criteria
- Distinguish changes in our culture, practice and guiding principles to improve outcomes for patients with SUD using a non-judgmental, non-shame-based collaborative approach maintaining dignity and respect
- Describe an improved evidence-based care pathway for Substance Use Disorders
- List key points for nurses starting patients on medication assisted treatment (MAT) and opioid withdrawal symptom management

We can make a difference and be a powerful influence for healing change

Patient feedback after pathway launch at Providence Alaska Medical Center (Anchorage, AK):

"Mattie specifically cared about me. She went above and beyond for me. She is the reason I am going to try and get clean. She cared about me, and talked to me about going to live with my mom and she helped make it happen. She took the time out of her busy day and sat down and asked me questions about myself. She was my friend. She did not judge me or look down upon me for my bad decisions. All she wanted to do is help me and do what is best for me. I want to make Mattie proud of me. I am going to try and get clean because someone cared. I just want her to know that I will always be thankful for her. She is a great nurse.

She showed all the traits of a great nurse. Not just medical information about disease and medications, she went above and beyond this. She is smart and efficient. She didn't just use sentences she was taught to talk to people with addictions, she was compassionate about me. I was a human being to her, not just one of her patients. I hope there is a way for her to be recognized for what she did for me. I have not always been an addict, I used to be a regular person, just like you. I have had a lot of nurses and doctors take care of me and many of them act the same way and treat me the same way. Mattie treated me as an equal and took the time for me."

CURRENT SUD PRACTICES

- Under treatment or no treatment of withdrawal symptoms
- Punitive withdrawal management – coercing or manipulating the patient
  - e.g. "if you do this, we'll do that"
- Room & visitor searches which demoralize the patient
- Use of ineffective & punitive behavior contracts/agreements
- Sporadic utilization of Medication Assisted Treatment (MAT) by providers
- Failure to diagnose Opioid Use Disorder (OUD) and Substance Use Disorder (SUD)
- Order/document "counseling/abstinence for OUD" (this is NOT the standard of care)
- Methadone started, but patient prefers Suboxone

…you can't see what you don't know

CURRENT OUTCOMES LESS THAN DESIRABLE

- **FEAR**: experienced by caregivers and patients
- Caregiver frustration & pejorative attitude towards patients
- Poor management of medical comorbidities
- Increased risk of readmission with resource-intensive, prolonged hospital stays
- Patients less likely to complete medical treatment
- Increased aggression and workplace violence, with higher security presence required, resulting in increased caregiver safety concerns
- Higher AMA rate (8 - 25% of patient's with SUD)
- Use of high dose opiates for longer than needed
- Higher risk of return to use, and death by overdose after discharge (10x)
- Increased use of restraints

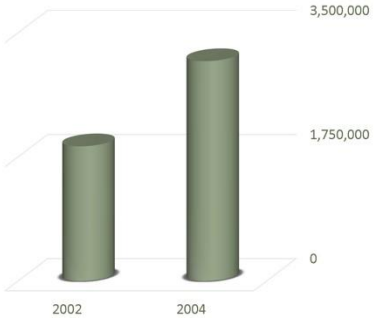
History of the Opioid Epidemic

1996
- Purdue Pharma releases Oxycontin & encourages use for chronic non-cancer pain
- "Safe and effective" - risk of addiction reported as <1%; other studies show 18-45%
- Dispense >34,000 free coupons

Late 1990s
- Purdue Pharma receives widespread support from American Pain Society, American Academy of Pain Management, JCAHO, FSMB
- Similar efforts by Endo Pharmaceuticals, Teva, Abbot Labs, Johnson & Johnson

2001
- JCAHO issues new standard telling hospitals to regularly ask about pain & treat as a priority

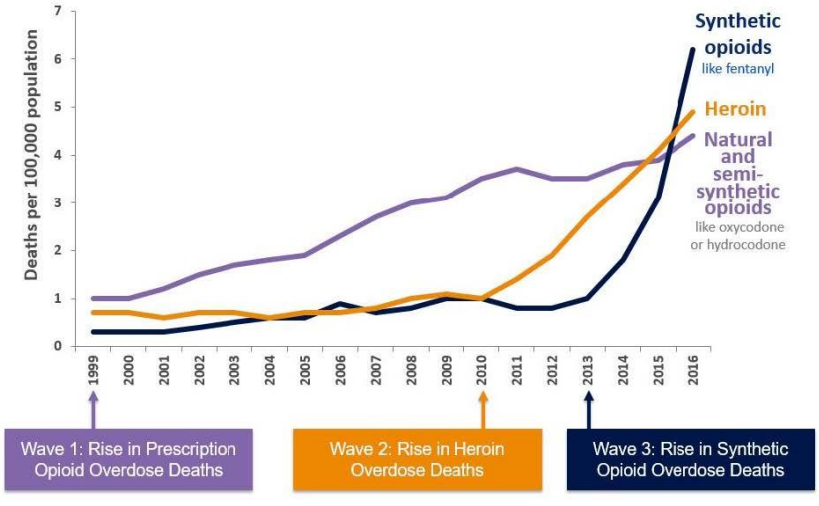
2004
- FSMB calls on state medical boards to make under treatment of pain punishable
- Oxycontin leading drug of abuse in USA



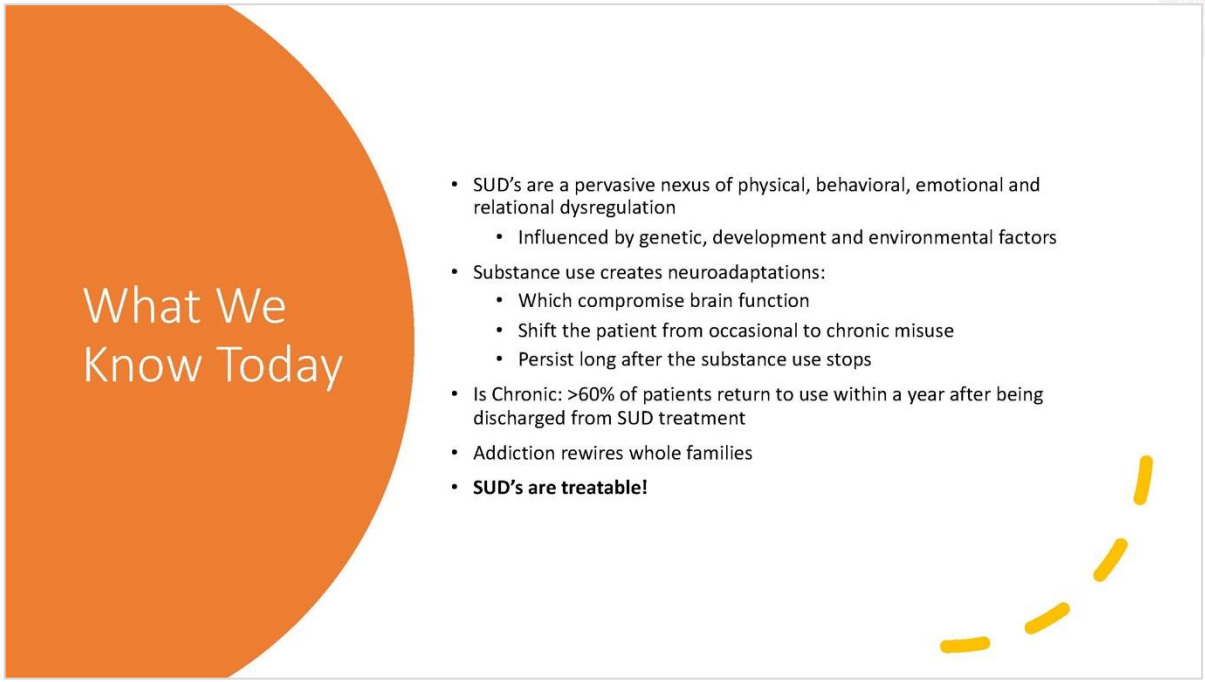
Lifetime Non-Medical Oxycontin Use

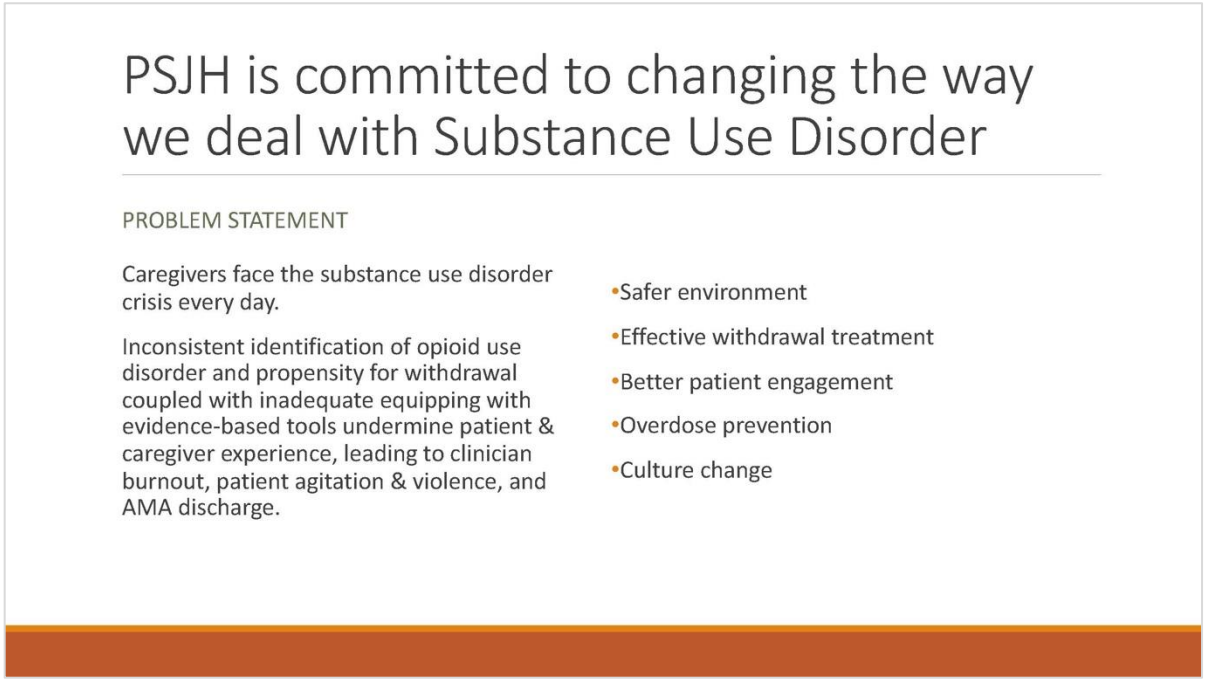
- Total number of analgesic prescriptions in the US increased 104% from 2000 – 2010
- Good intentions, but bad outcomes occurred

3 Waves of the Rise in Opioid Overdose Deaths



SOURCE: National Vital Statistics System Mortality File.


What We Know Today
• SUD's are a pervasive nexus of physical, behavioral, emotional and relational dysregulation
• Influenced by genetic, development and environmental factors
• Substance use creates neuroadaptations:
• Which compromise brain function
• Shift the patient from occasional to chronic misuse
• Persist long after the substance use stops
• Is Chronic: >60% of patients return to use within a year after being discharged from SUD treatment
• Addiction rewires whole families
• SUD's are treatable!


PSJH is committed to changing the way we deal with Substance Use Disorder
PROBLEM STATEMENT
Caregivers face the substance use disorder crisis every day.
Inconsistent identification of opioid use disorder and propensity for withdrawal coupled with inadequate equipping with evidence-based tools undermine patient & caregiver experience, leading to clinician burnout, patient agitation & violence, and AMA discharge.
•Safer environment
•Effective withdrawal treatment
•Better patient engagement
•Overdose prevention
•Culture change

Substance Use Disorder Diagnostic Criteria

- Problematic pattern of substance use leading to clinically significant impairment or distress; as manifested by at least 2 of the following: (2-3 mild, 4-5 moderate, 6 or more severe)
  - Escalating use
  - Desire or efforts to cut down or control use
  - Spending time to obtain, use or recover from substance effects
  - Cravings
  - Continued use despite social or interpersonal problems
  - Social, occupational, recreational activities given up/reduced due to substance use
  - Recurrent substance use in situations where it is physically hazardous
  - Continued use despite knowledge of physical or psychological problem that is likely to have been caused or exacerbated by the substance
  - Tolerance: increased amounts to achieve desired effect or diminished effect with continued use of the same amount
  - Substance Withdrawal Syndrome: substance taken to relieve or avoid withdrawal symptoms

TERMINOLOGY CHANGES

INSTEAD OF THIS:	USE THIS:
Addict, abuser, junkie	Person with an opioid use disorder
Abuse	Misuse, harmful use
Clean/Dirty UDS	Negative/Positive for (substance)
Drug habit	Substance use disorder
Replacement/substitution therapy	Medication Assisted Treatment
Clean	Abstinent
Relapse	Return to use

A PARADIGM SHIFT:

ADDICT	→	PERSON WITH SUD
What's wrong with you?	→	What has happened to you?
	→	

GUIDING PRINCIPLES –building an allied relationship with the patient

ADDICTION
=
DISEASE

MAT +
Trauma Informed Care +
Harm Reduction
=
STANDARD OF CARE

CAREGIVERS
+
PATIENTS
=
POSITIVE
PARTNERSHIP

CURIOSITY
+
SAFETY

IMPROVING CARE BY…

- Changing terminology when talking about the patient and addiction
- Using a harm reduction model of care
- Understanding and using a trauma informed approach
- Understanding addiction as a disease process
- Engaging patients in a person-first conversation about their disease and treatment
- Building awareness of and intentionality around our internal biases with addiction
- Utilizing medications for Substance Use Disorder, called medication assisted treatment (MAT), as a primary treatment intervention
- Providing tools for overdose prevention – Narcan kit

Harm Reduction Model

- Guiding Concepts:
  - We accept that drug use is a part of our world; we choose to work to minimize its harmful effects
  - We understand drug use as a complex, multifaceted phenomenon encompassing a continuum of behaviors
  - We acknowledge that some ways of using drugs are safer than others
  - We provide nonjudgmental, non-coercive services and resources to assist our patients in reducing harm
  - We do not attempt to minimize or ignore real and tragic harm and danger associated with licit and illicit drug use

16

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Harm Reduction Model (continued)

- **FOCUS OF CARE**: reducing the negative consequences and high-risk behaviors of substance use; neither condones or condemns any behavior
- Our faculty DOES NOT criminalize the use of substances while patients are in medical care, understanding that substance use is a part of the disease process and will likely occur until the patient is more stable and able to engage in recovery.
  - No remote visual monitoring, aka "tele-sitters", to prevent misuse
  - Urine drug screens will be used when clinically indicated, not solely to control use
  - Caregiver safety is a key concern; always call security when there is imminent risk associated with physical aggression or criminal behavior

17

Providence St Joseph Health

TRAUMA + ADDICTION

"When you're traumatized, you feel these awful sensations of dread, helplessness, disgust and horror in your body. In response to that, you try to numb out your body. The most common way of doing that is drugs and alcohol. The comorbidity between trauma, drugs and alcohol is gigantic. Research shows that it's almost impossible to become a **drug addict** without having a prior history of childhood trauma. It's important to understand these ways…as ways in which people desperately try to manage these unbearable sensations." - Bessel Van der Kolk, MD

Remember "Little t's"

"Then, after the physical pain of withdrawal wore off, I would be left with the memories of being beaten…living with Post Traumatic Stress Disorder is like being stuck in time. On heroin, time moved forward. Off heroin, I was seventeen and being beaten endlessly. It seemed to me then, as the agony of recovery grew nearer, that I was better off strung out." – Elizabeth Brico, VICE News

TRAUMA-INFORMED CARE

"Trauma informed care is a strengths-based framework that is grounded in an understanding of and responsiveness to the impact of trauma, that emphasizes physical, psychological, and emotional safety for both providers and survivors, and that creates opportunities for survivors to rebuild a sense of control and empowerment."

Hopper, Bassuk & Olivet, 2009

TRAUMA INFORMED CARE IS:

INSIDE OUT & BOTTOM UP

LOW AND SLOW

ABOUT CONNECTION

VIEWED FROM 10,000'

Patient Trauma & Addiction

LITTLE T TRAUMAS IN THE HOSPITAL

- People ignoring you or not talking to you directly
- Delays in care, waiting to see right provider
- Isolation
- Not being trusted
- Untreated withdrawal

BIG T TRAUMAS IN THE HOSPITAL

- Getting reported to child protective services
- Police involvement
- Heart problems
- Abscesses
- Rooms searched and security called

Caregiver Trauma & Addiction

LITTLE T TRAUMAS IN THE HOSPITAL

- Frequent visits by the same person
- Patients Lying
- Verbal violence from patients
- Managing challenging behaviors

BIG T TRAUMAS IN THE HOSPITAL

- Violence
- Illegal behaviors
- People dying from overdose
- Personal history of addiction in ourselves or in our family

PATIENT-CAREGIVER PARTNERSHIP

"Building awareness of intentionality around our internal bias with addictions"

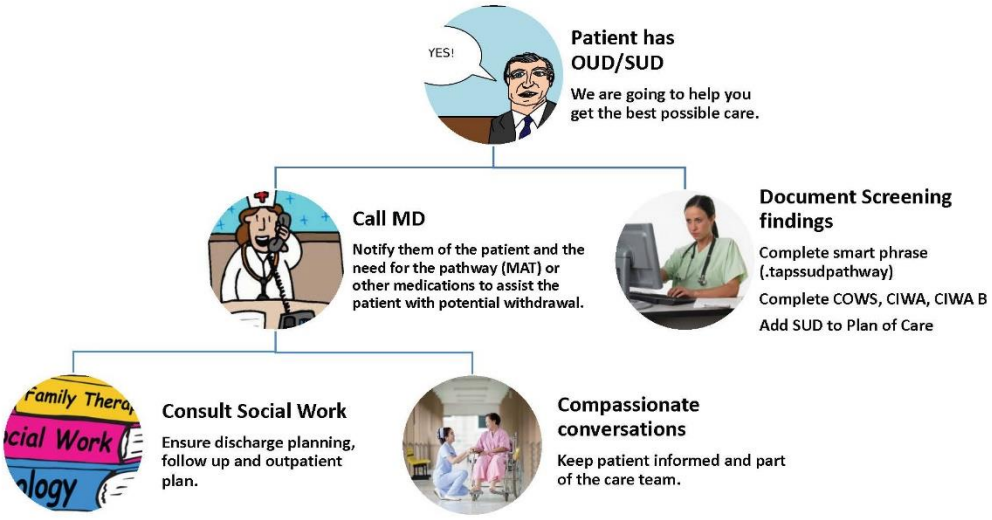
Communication Strategies

- Acknowledge and address your internal biases
- Ask permission to discuss substance use
- Validate the patient's emotions – frustration, fear, pain
- Set reasonable limits and avoid arguing
- Respond compassionately to requests to leave AMA
- Do not make promises you cannot keep
- MAT is a means to an end, not the end itself
- Treat with dignity and respect even in the face of a debilitating illness

Predicted Outcomes when Following the OUD Pathway

- MAT reduces overdose death by 67%, decreases HIV and other infections,
  - 75% less likely to die from addiction-related disease
- Reduction in ED visits
- Reduction in patient-care team conflict
  - Decreased patient aggression, violence, code grays
  - Reduction in caregiver injuries and workplace violence
  - Decrease need for security intervention
- Increased patient engagement in care
- Reduced AMA discharges
- Decreased readmission rates
- Reduction in criminal activity, in & out of the hospital

New Nursing Workflow



What is the TAPS "Tobacco, Alcohol, Prescription Drugs, Substances" screen?

- It is a 2-part evidence-based substance use disorder screening tool
- **Part 1 / TAPS 1 "Quick Screen"** – asks about use within the **past 12 months**
  - 4 question screen asking about frequency of use
  - If all answers are "no", then you are done with the screen
- **Part 2 / TAPS 2 "Full Screen"** – asks about use within the **past 3 months**
  - Any positive on TAPS 1, ask **only** corresponding questions on the TAPS 2
    - Alcohol → Alcohol questions
    - Tobacco products → Cigarette, Tobacco questions
    - Prescription Drugs nonmedical reasons → Opiate pain relivers, Xanax/Ativan/Klonopin, Adderall/Ritalin questions
    - Recreational Drugs nonmedical reasons → Marijuana, Amphetamine, Heroin, Hallucinogen (Ecstasy, LSD, Mushrooms, Spice, etc.) questions

Hospital SUD Pathway Workflow

QUICK SCREEN:
Screen all admissions using non-judgmental approach with **TAPS 1 quick-screen**

→

FULL SCREEN:
If any yes on TAPS 1 complete **corresponding TAPS 2 question(s)** with approach that SUD is a medical condition like any other medical condition we treat, **avoiding stigma or shame**

→

W/D ASSESSMENT:
If yes on TAPS 2, complete corresponding withdrawal assessment
(CIWA, COWS, CIWA-B)

↓

COLLABORATION W/ TX TEAM:
- Share information with provider
- Start corresponding **order set(s)**
  methadone induction, buprenorphine induction, opioid withdrawal symptom mgmt
- Order CD consult as appropriate

→

TREATMENT PLANNING:
Plan of Care initiated – Alcohol, Opiates, Excessive Substance Use

→

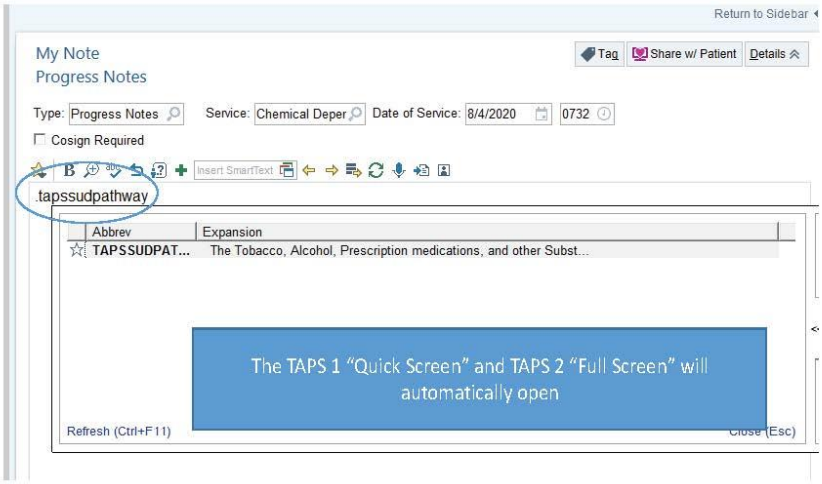
F/U PLANNING:
- Plan for CD referral/ ongoing MAT treatment/coordinated care at discharge
- Enlist help of DC social worker or CD consult, as available
- Offer NARCAN at discharge

Providence St. Joseph Health

Nursing Documentation for Substance Use Disorder (SUD) assessment: "Quick Screen" and "Full Screen"

- During the admit arrival assessment at the social history questions on alcohol and substance use, allow these questions remind you to... complete the Quick Screen
- Slide to the left and click on the notes section

In notes section, enter .tapssudpathway



Quick Screen: *Scripting* for TAPS 1 Questions

- "I have a few questions to ask about substance use. We ask these questions of all people because we know it's an issue for some and we don't want to miss anything. We have treatments for substance use that can be very helpful."

Quick Screen: TAPS 1 – Everyone gets screened for past questions about the *past 12 months*

Part 1 (Modified from NIDA Quick Screen)

In the Past 12 Months, how often have you used the following?	NO	Less than Monthly	Monthly	Weekly	Daily or Almost Daily
Alcohol -For men, 5 or more drinks a day -For women, 4 or more drinks a day					
Tobacco Products					
Prescription Drugs for Non-Medical Reasons					
Recreational Drugs for non-medical Reasons					

***If all answers are "NO" then you are done.**

***If you answer positive to anything then continue onto Part 2.**

Full Screen: *Scripting* for TAPS 2 Questions

Only need to ask corresponding questions to the yes on TAPS 1 ie, for nicotine, alcohol, prescription medications, other substances

Scripting:

- "I have a few more questions regarding substance use in the **past 3 months**."
- "We treat substance use as a medical condition and would like to make sure we provide the best care for you to prevent suffering and minimize any withdrawal you might experience in the hospital. We don't want you to feel judged for talking about substance use, we are here to help support you and want you to know we care about you. We have helpful interventions that can minimize withdrawal symptoms"

Full Screen: TAPS 2 (only done if part one had any YES as answers)

Part 2 (Modified from ASSIST screen)

1. In the Past 3 Months:	Yes (=1)	NO (= 0)
Did you smoke a cigarette containing tobacco?		
If "Yes"		
Did you smoke more than 10 cigarettes each day?		
Did you usually smoke within 30 minutes after waking?		

2. In the Past 3 Months:	Yes (=1)	NO (=0)
Did you have a drink containing alcohol?		
If "Yes"		
*Females Did you have 4 or more drinks containing alcohol in a day?		
*Males Did you have 5 or more drinks containing alcohol in a day?		
*One standard drink is about 1 small glass of wine (5oz), 1 beer (12oz), or 1 single shot of liquor		
Have you tried and failed to control, cut down or stop drinking?		
Has anyone expressed concern about your drinking?		

3. In the Past 3 Months	Yes (=1)	No (=0)
Did you use marijuana (hash, weed)		
If "Yes" Have you had a strong desire or urge to use marijuana at least once a week or more often?		
Has anyone expressed concern about your use of marijuana?		

4. In the Past 3 Months:	Yes (=1)	No (=0)
Did you use cocaine, crack, or methamphetamine (crystal meth)?		
Did you use cocaine, crack, or methamphetamine (crystal meth) at least once a week or more often?		
Has anyone expressed concern about our use of cocaine, crack, or methamphetamine (crystal meth)?		

5. In the Past 3 Months:	Yes (=1)	No (=0)
Did you use Heroin?		
Have you tried and failed to control, cut down or stop using heroin?		
Has anyone expressed concern about your use of heroin?		

6. In the Past 3 Months:	Yes (=1)	No (=0)
Did you use a prescription opiate pain reliever (for example, Percocet, Vicodin) not as prescribed or that was not prescribed for you? Have you tried and failed to control, cut down or stop using an opiate pain reliever? Has anyone expressed concern about your use of an opiate pain reliever?		

7. In the Past 3 Months:	Yes (=1)	No (=0)
Did you use a medication for anxiety or sleep (for example, Xanax, Ativan, or Klonopin) not as prescribed or that was not prescribed to you?		
Have you had a strong desire or urge to use medications for anxiety or sleep at least once a week or more often?		
Has anyone expressed concern about your use of medications for anxiety or sleep?		

8. In the Past 3 Months:	Yes (=1)	No (=0)
Did you use a medication for ADHD (for example, Adderall, Ritalin) not as prescribed or that was not prescribed for you?		
Did you use a medication for ADHD at least once a week or more often?		
Has anyone expressed concern about your use of a medication for ADHD?		

9. In the Past 3 Months:	Yes	No
Did you use any illegal or recreational drug (for example, ectasy/molly, GHB, poppers, LSD, mushrooms, special K, bath salts, synthetic marijuana (spice'), whip-its, etc.)?		
If "yes" answering the following:		
In the past 3 months what were the other drugs you used?		

Scripting for any "Yes" from TAPS 2

"Thank you for answering the questions, I am going to reach out to the doctor with this information. We have started using a clinical pathway to improve the way we treat people who suffer from substance use disorders. We want to make sure we minimize your withdrawal symptoms and make you as comfortable as possible while you are hospitalized so you can have a good medical outcome."

Scripting for specific "Yes" responses on TAPS 2

Tobacco

"We utilize nicotine replacement patches routinely, Nicotrol inhalers and nicotine gum as needed to help you while hospitalized. I will reach out to the MD and ask for these medications."

Alcohol Withdrawal

"We will be monitoring you for signs of withdrawal, if you start to feel agitated or anxious, start having light sensitivity, nausea, tremors or anything unusual for you please let me know. We want to make sure to keep you safe and comfortable as possible while you are here."

Cannabis Use

"I am going to ask you a few questions regarding your cannabis usage as we may need to get you some alternative medications while you are here. Is your smoking or ingestion related to either nausea or vomiting? Do you use cannabis to improve your appetite? Do you use it to help with anxiety or a sleep aid? Or, is it more recreational?"

Scripting for "Yes" responses on TAPS 2

Opiates (prescription drugs or heroin)

"We have available methadone or suboxone as standard medications to help care for you to minimize or alleviate your withdrawal symptoms and cravings. Do you have a preference or is there anything I can answer about these medications?"

And then,

"Please let me know if you have symptoms of withdrawal, we have medications that can help alleviate or ease your discomfort. "

Amphetamines

"I'm interested in what withdrawal symptoms you might have experienced after using amphetamines so we can help manage your discomfort. Sometimes people experience a 'crash' and we would like to make sure you feel supported."

TAPS Scoring + Actions

Question & Score	Score	Action
Q1 / Tobacco	**1 or higher**	Discuss Nicotine replacement (gum, patch, lozenge) with patient and inform provider of preference
Q2 / Alcohol	**1 or higher**	Talk with Physician re: Alcohol Withdrawal Orders, monitor CIWA-AR and notify provider of potential for alcohol withdrawal
Q3 / Cannabis	**1 or higher**	Talk about use with patient, ask: what does cannabis do for them? Work toward a path of addressing these needs in the hospital without cannabis.
Q4 / Cocaine, crack, methamphetamine	**2 or higher**	Talk about use with patient, what does the stimulant do for them? Partner with patient to address these needs in the hospital without the stimulant. If use was recent, discuss patients previous experience with withdrawal (crash) and how to support them with their withdrawal symptoms.
Q5-6 / Heroin/ Percocet	**2 or higher**	Screen into the OUD pathway, monitor COWS, Discuss use of methadone vs. suboxone (buprenorphine induction) order set and the opiate withdrawal symptom management order set
Q7 / Benzodiazepines	**2 or higher**	Monitor CIWA-B and notify provider of potential for benzodiazepine withdrawal.
Q 8 & 9	**Any yes**	Talk about use with patient, what does their use do for them? Partner with patient to address these needs in the hospital without the drug.

In the future …

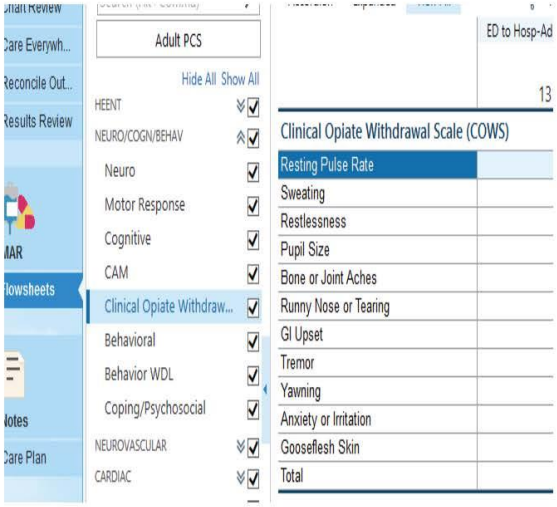
- The Mental Health & Substance Use CPG is working on building the TAPS "Quick Screening" tool into EPIC in the nursing admission navigator
- It will cascade to additional TAPS "Full Screen" questions if needed
- Then, it will cascade open to the symptomology tool (CIWA, COWS or CIWA-B) as needed
- It will be efficient and flow smoothly

Role Play – Let's practice using the TAPS 1 and TAPS 2 screening tool

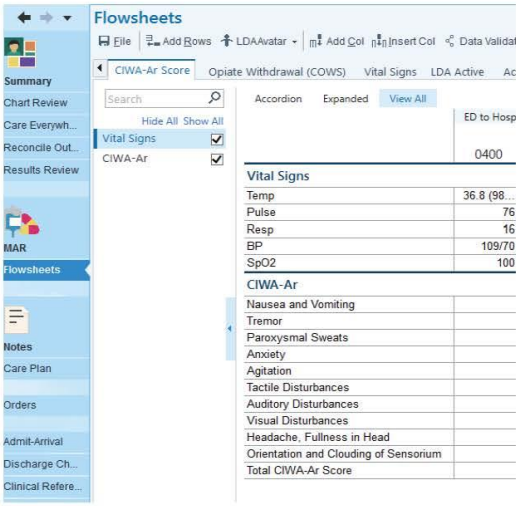
- Meet Katie Anderson, Family Therapist and Adrienne Loetscher, Nurse Manager, Sacred Heart, Spokane, WA.
  - They will discuss how to respond to a patient who is struggling. They'll provide education, reassurance and validation – this process can be helpful
  - They'll show how to have a caring conversation
  - How to use the TAPS 1 and TAPS 2 screening tools
  - How to discuss withdrawal management i.e.. "this is how we can help you"

Assess for Withdrawal Symptoms Q2-4h and prn using:

COWS – assesses for opiates withdrawal

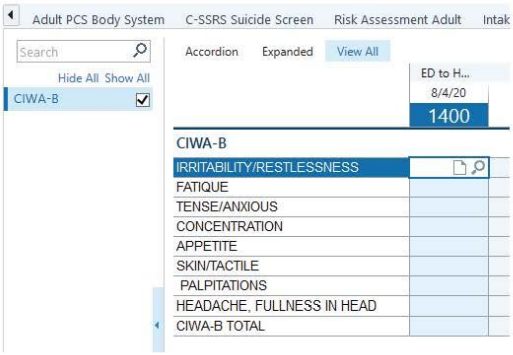


CIWA – assesses for alcohol withdrawal



Assess for withdrawal symptoms Q2-4h and prn using:

CIWA B – assesses for Benzodiazepines



Document in Care Plan note

- Withdrawal symptoms for:
  - Nicotine
  - Marijuana
  - Amphetamines
  - Benzodiazepines
  - Hallucinogen effects

Collaboration with the Treatment Team

- Contact Provider to inform of substance use history and whether the patient has any withdrawal symptoms
- Discuss which order set is needed, if any, to support the patient to minimize or alleviate withdrawal symptoms
- Order Sets:
  - Alcohol Withdrawal
  - Buprenorphine Induction
  - Methadone Induction
  - Opiate Withdrawal Symptom Management
- Discuss need for a CD (Chemical Dependency) Consult

A pharmacological problem, not a behavioral one

Abstinence-based interventions have an 80-97% return-to-use rate within 3 months

Medication treatment demonstrates up to 50-80% retention at 3 months and 40% at 5 years

Reduces transmission of infectious diseases

Reduces risk of death by 70%

Those who receive counseling only treatment (versus medication) are twice as likely to die in 4 years

Medications (suboxone or methadone) are the evidence-based standard of care treatment

Key Points: Nicotine Replacement

Step 1: Calculate daily dose (1 pack cig = 40 mg nicotine)

Step 2: Provide ~ ½ of daily nicotine in patch/24 hr

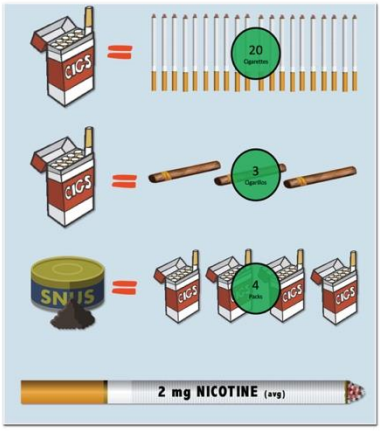
- 40 mg divide by 2 = 20 mg → 21 mg patch
- Can provide more than 1 patch

Step 3: Provide ~ ½ of daily nicotine in PRN med

Gum: Use 4 mg (~ 3mg absorbed) if patient smokes within 30 min. of awakening

- Otherwise use 2 mg (~ 1 mg. absorbed)
- Teach patients how to use: chew – park – chew – park

Nicotrol Inhaler 10 mg but 2 mg absorbed (similar to cigarettes)

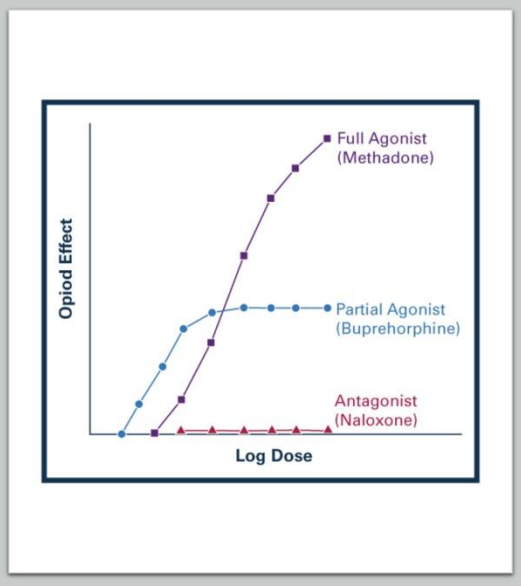


44

Key Points: Methadone vs Suboxone

- Conceptual Representation of Opioid Effect Versus Log Dose for Opioid Full Agonists, Partial Agonists, and Antagonists

- Center for Substance Abuse Treatment. Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction.
- Treatment Improvement Protocol (TIP) Series 40. DHHS Publication no. (SMA) 04-3939. Rockville, MD: US Substance Abuse and Mental Health Services Administration, 2004.
- http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.chapter.72248



Key Points: Methadone

- Requires daily attendance at a Methadone Maintenance Opiate Treatment Facility

Hospital Dosing

- Methadone 10 mg TID/QID starting dose; may need an initial one time "loading dose" up to 20 mg
- Start methadone cautiously - covering with short acting opioids while titrating methadone up. Additional short acting medications will help manage the withdrawal symptoms. May be PRN or PCA or scheduled
- Increase methadone doses every 2-3 days
- Hold if respiratory rate less than 12
- As methadone increases, and/or surgical pain improves, short acting opioids are tapered off
- Generally an ECG is ordered prior to starting medication to evaluate for QTc prolongation
- Half life is ~ 24 hours (18-36 hours)
- 3-5 half lives for serum levels to equilibrate
- Time to peak effect is 4 - 6 hours
- One time "Safe Dose" 30 mg for almost all patients
- TID dosing may also help manage pain symptoms
- Target dose is 80-120 mg a day

Key Points: Suboxone

- Is a combination drug of buprenorphine and naloxone (the naloxone has no effect if taken sublingually)
- May be obtained from an Opiate Treatment Facility or a Primary Care Clinic if they have buprenorphine waivered providers

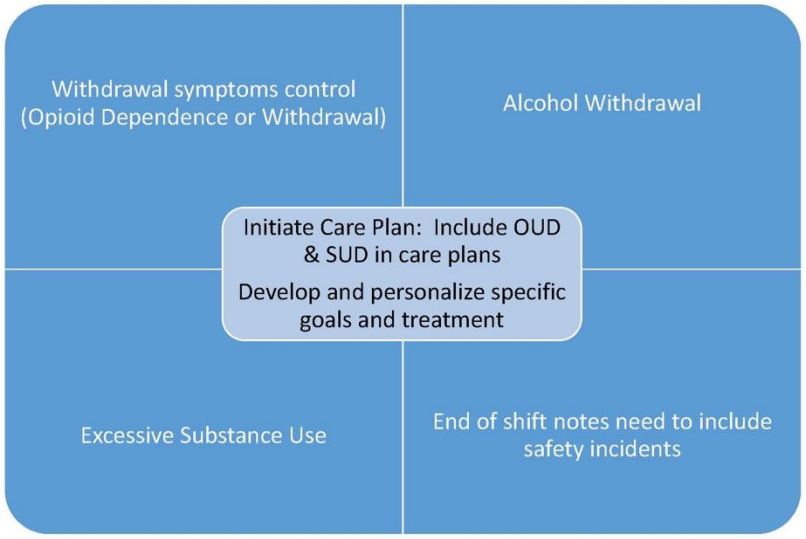
Hospital

- Use the prn dosing schedule based on the COWS score in the buprenorphine induction order set
- Patients should be in mild withdrawal (i.e. COWS score of 8), typically 12-24 hr after last opioid or 48 hr after methadone
- Use lower doses in the elderly
- Suboxone is given sublingually and generally no food or drink for 20 min after dosing
- **Maximum dose**: not to exceed 24 mg per day
- If suboxone is given too early and patient is not in mild withdrawal, there is a risk for precipitated withdrawal
- **Precipitated withdrawal**: can occur when an antagonist (or partial antagonist, such as buprenorphine) is administered to a patient dependent on full agonist opioids. Due to Buprenorphine's high affinity but low intrinsic activity at the mu receptor, the partial antagonist displaces agonist opioids from the mu receptors, without activating the receptor to an equivalent degree, resulting in a net decrease in agonist effect, thus precipitating a withdrawal syndrome. Can cause very severe withdrawal symptoms of nausea, vomiting, diarrhea, & intense sweating.

Be careful of the suboxone linked orders

- The linked orders are set up so you may give suboxone based on COWS score
  - 1 (**2/0.5 film**) for 8-10,
  - 2 (**2/0.5 film**) for 11-14, OR
  - 1 (**8/2 film**) for ≥ 15
- On occasion, nurses have accidently given 1 (8/2 film) instead of 1 (2/0.5 film) for a COWS score of 10 = monitor carefully for this in the Pxyis

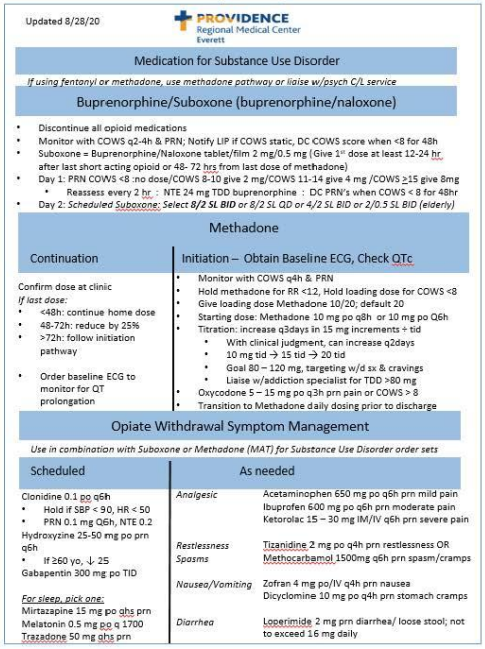
Care Plan Initiation



Discharge Planning

- Ensure the patient has a follow up substance use disorder counseling plan and an intake appointment if patient is open to additional treatment
- Ensure patient has a follow up medication appointment for suboxone or methadone as needed

Withdrawal Symptom Management/MAT/Pain Mgmt



Updated 8/28/20

PROVIDENCE Regional Medical Center Everett

Medication for Substance Use Disorder

If using fentanyl or methadone, use methadone pathway or liaise w/psych C/L service

Buprenorphine/Suboxone (buprenorphine/naloxone)

- Discontinue all opioid medications
- Monitor with COWS q2-4h & PRN; Notify LIP if COWS static, DC COWS score when <8 for 48h
- Suboxone = Buprenorphine/Naloxone tablet/film 2 mg/0.5 mg (Give 1st dose at least 12-24 hr after last short acting opioid or 48- 72 hrs from last dose of methadone)
- Day 1: PRN COWS <8 : no dose/COWS 8-10 give 2 mg/COWS 11-14 give 4 mg /COWS ≥15 give 8mg
  - Reassess every 2 hr. : NTE 24 mg TDD buprenorphine : DC PRN's when COWS < 8 for 48hr
- Day 2: *Scheduled Suboxone: Select **8/2 SL BID** or 8/2 SL QD or 4/2 SL BID or 2/0.5 SL BID (elderly)*

Methadone

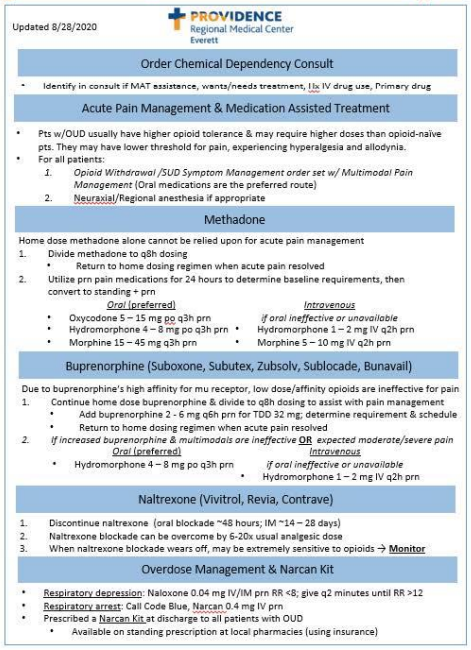
Continuation	Initiation – Obtain Baseline ECG, Check QTc

Confirm dose at clinic
If last dose:
• <48h: continue home dose
• 48-72h: reduce by 25%
• >72h: follow initiation pathway
• Order baseline ECG to monitor for QT prolongation
	• Monitor with COWS q4h & PRN
	• Hold methadone for RR <12, Hold loading dose for COWS <8
	• Give loading dose Methadone 10/20; default 20
	• Starting dose: Methadone 10 mg po q8h or 10 mg po Q6h
	• Titration: increase q3days in 15 mg increments ÷ tid
	  • With clinical judgment, can increase q2days
	  • 10 mg tid → 15 tid → 20 tid
	  • Goal 80 – 120 mg, targeting w/d sx & cravings
	  • Liaise w/addiction specialist for TDD >80 mg
	• Oxycodone 5 – 15 mg po q3h prn pain or COWS > 8
	• Transition to Methadone daily dosing prior to discharge

Opiate Withdrawal Symptom Management

Use in combination with Suboxone or Methadone (MAT) for Substance Use Disorder order sets

Scheduled	As needed	
Clonidine 0.1 po q6h • Hold if SBP < 90, HR < 50 • PRN 0.1 mg Q6h, NTE 0.2 Hydroxyzine 25-50 mg po prn q6h • If ≥60 yo, ↓ 25 Gabapentin 300 mg po TID *For sleep, pick one:* Mirtazapine 15 mg po qhs prn Melatonin 0.5 mg po q 1700 Trazadone 50 mg qhs prn	*Analgesic*	Acetaminophen 650 mg po q6h prn mild pain Ibuprofen 600 mg po q6h prn moderate pain Ketorolac 15 – 30 mg IM/IV q6h prn severe pain
	Restlessness	Tizanidine 2 mg po q4h prn restlessness OR
	Spasms	Methocarbamol 1500mg q6h prn spasm/cramps
	Nausea/Vomiting	Zofran 4 mg po/IV q4h prn nausea Dicyclomine 10 mg po q4h prn stomach cramps
	Diarrhea	Loperimide 2 mg prn diarrhea/ loose stool; not to exceed 16 mg daily



Updated 8/28/2020

PROVIDENCE Regional Medical Center Everett

Order Chemical Dependency Consult

- Identify in consult if MAT assistance, wants/needs treatment, Hx IV drug use, Primary drug

Acute Pain Management & Medication Assisted Treatment

- Pts w/OUD usually have higher opioid tolerance & may require higher doses than opioid-naïve pts. They may have lower threshold for pain, experiencing hyperalgesia and allodynia.
- For all patients:
  1. *Opioid Withdrawal /SUD Symptom Management order set w/ Multimodal Pain Management* (Oral medications are the preferred route)
  2. Neuraxial/Regional anesthesia if appropriate

Methadone

Home dose methadone alone cannot be relied upon for acute pain management

1. Divide methadone to q8h dosing
   - Return to home dosing regimen when acute pain resolved
2. Utilize prn pain medications for 24 hours to determine baseline requirements, then convert to standing + prn

Oral (preferred)	*Intravenous*
• Oxycodone 5 – 15 mg po q3h prn	*if oral ineffective or unavailable*
• Hydromorphone 4 – 8 mg po q3h prn	• Hydromorphone 1 – 2 mg IV q2h prn
• Morphine 15 – 45 mg q3h prn	• Morphine 5 – 10 mg IV q2h prn

Buprenorphine (Suboxone, Subutex, Zubsolv, Sublocade, Bunavail)

Due to buprenorphine's high affinity for mu receptor, low dose/affinity opioids are ineffective for pain

1. Continue home dose buprenorphine & divide to q8h dosing to assist with pain management
   - Add buprenorphine 2 - 6 mg q6h prn for TDD 32 mg; determine requirement & schedule
   - Return to home dosing regimen when acute pain resolved
2. *If increased buprenorphine & multimodals are ineffective **OR** expected moderate/severe pain*

Oral (preferred)	*Intravenous*
• Hydromorphone 4 – 8 mg po q3h prn	*if oral ineffective or unavailable*
	• Hydromorphone 1 – 2 mg IV q2h prn

Naltrexone (Vivitrol, Revia, Contrave)

1. Discontinue naltrexone (oral blockade ~48 hours; IM ~14 – 28 days)
2. Naltrexone blockade can be overcome by 6-20x usual analgesic dose
3. When naltrexone blockade wears off, may be extremely sensitive to opioids → **Monitor**

Overdose Management & Narcan Kit

- Respiratory depression: Naloxone 0.04 mg IV/IM prn RR <8; give q2 minutes until RR >12
- Respiratory arrest: Call Code Blue, Narcan 0.4 mg IV prn
- Prescribed a Narcan Kit at discharge to all patients with OUD
  - Available on standing prescription at local pharmacies (using insurance)

Resources

- Addiction Focus Group of MHSU CPG
- SAMHSA Publications
- American Society of Addiction Medicine
- ASAM National Practice Guidelines for the Use of Medications in the Treatment of Addiction Involving Opioid Use
- Reach out to your local nurse educator

D. Literature Review – MAT in OUD

Content

Medication-Assisted Treatment (MAT)

- Benefits of MAT
- Effective Medications
- Most of the people with OUD are not receiving treatment
- Gap between need & treatment capacity

Clinical Evidence on Mortality

- Long-term agonist treatment
  - DIVERSION of buprenorphine/naloxone

Treatment Algorithms

Medication-Assisted Treatment (MAT)

The World Health Organization, UNAIDS (Joint United Nations Program on HIV and AIDS), the United Nations Office on Drug Policy, the Canadian Guidelines, the Department of Health & Human Services (HHS), the National Institute on Drug Abuse (NIDA), CDC, the American Society of Addiction Medicine (ASAM) and the Substance Abuse and Mental Health Services Administration (SAMHSA) all agree that people dependent on heroin and other opioids should have access to treatment with medication, known as Medication Assisted Treatment (MAT).[1-8]

MAT has emerged as a first-line treatment for opioid misuse and opioid use disorder (OUD).

MAT is an evidence-based, "whole-patient" approach that combines medical therapy with an opioid agonist or antagonist, with behavioral counseling and recovery support.[5,9]

MAT is to be provided in a clinically driven, person-centered, and individualized setting.[6]

Challenges in the treatment of OUD include the relapsing nature of this condition, the frequent presence of psychiatric and medical comorbidities, and the disproportionate impact on those in socioeconomically disadvantaged settings with limited access to care.[10]

Patients with OUD who achieve abstinence through medically supervised withdrawal or other means often require long-term treatment (medication maintenance with an opioid agonist or antagonist) to prevent relapse.[11]

Medically supervised treatment should be offered to patients, a strong recommendation - supported by high-quality evidence from several guidelines, including the 2 recently published evidence-based Canadian Guidelines on the management of OUD.[2,3,7-9]

The message of the *National Canadian Guideline* (developed by the Canadian Research Initiative in Substance Misuse, CRISM)[3] and the Vancouver OUD guideline (developed by Vancouver Coastal Health, Providence Health Care and Ministry of Health, British Columbia, Canada) 2 is that pharmacotherapy is unequivocally the evidence-based first-line treatment for OUD. They both strongly recommend opioid agonist treatment with buprenorphine/naloxone as the preferred first-line treatment when possible (novel recommendation), because of buprenorphine's multiple advantages, which include a superior safety profile in terms of overdose risk.[2,3]

The Vancouver opioid use disorder guideline - a useful resource for clinicians who treat patients who have OUD - was summarized by Dunlap & Cifu in a JAMA Clinical Guideline Synopsis.[9]

JAMA has assembled a collection of articles and podcasts on opioids, which also reviews all the treatment options and the barriers that exist to providing care for patients with opioid-related substance use disorder.[12]

Benefits of MAT

MAT decreases:

- frequency and quantity of opioid use
- opioid-related overdose deaths
- criminal activity
- infectious disease transmission rates.

MAT increases:

- social functioning
- quality of life
- retention in treatment.

Patients treated with medication were more likely to remain in therapy compared to patients receiving treatment that did not include medication.[5,10,13-15]

MAT superior to withdrawal alone: it has been shown to be more effective than treatments that do not use medication.[5,10,13-18]

MAT at least doubles the rates that an individual will achieve opioid abstinence during active treatment, compared to 'no medication-treatment' or placebo.[13-15,19-22]

Abstinence-based residential treatment without MAT shows limited effectiveness and poses an increased risk of fatal overdose if one relapses to opioid use upon discharge to home.[15]

Treatment of opioid-dependent pregnant women with methadone or buprenorphine improves outcomes for their babies; MAT reduces symptoms of neonatal abstinence syndrome and length of hospital stay.[5,23]

Effective Medications

FDA approved 3 medications for preventing opioid relapse and for stabilization/maintenance treatment of OUD.

All 3 are ligands that bind to central mu (m) -opioid receptors:

- full agonist, methadone
- partial agonist, buprenorphine
- antagonist, extended-release naltrexone (XR-NTX).

They are effective for the treatment of OUD and showed to reduce overdose deaths among patients with OUD.[5,10,13,14,17,19,24-28]

All 3 medications show improved retention in treatment compared to placebo or no medication.[13,15,20-22] Methadone demonstrated the highest rates of treatment retention in all studies,[14,29] including the treatment of pregnant women[30] and those with HIV.[31] Medically supervised agents with partial- or full-agonist properties, buprenorphine or methadone are recommended as first-line maintenance treatment for opioid dependence, supported by high-quality evidence.[1,9,15,32,33]

MAT using agonist therapy with methadone or buprenorphine has been shown to be superior to withdrawal ("detox") for important patient-centered outcomes such as drug use, overdose death, rates of infectious disease, retention in treatment, and relapse; and is also less costly.[9,13-18,34-36] The majority of patients relapse with withdrawal management alone.[37] Evidence is not robust in support of only psychosocial treatment of OUD provided after detoxification from opioids. [21,33,38]

Methadone has been the most commonly used type of opioid replacement therapy.[39]

However, methadone, a full opioid agonist, has significantly higher risks of abuse and lethal overdose compared with buprenorphine. It can cause potentially hazardous respiratory depression and might pose an excess risk of death from overdose during treatment induction if initial doses are too high or coexist with illicit opioid use.[39-44] Relapse remains a huge problem for patients in methadone maintenance therapy, with rates ranging from 20% to 70%.[39]

Buprenorphine has rapidly expanded the treatment of opioid use disorder in the US.[43,45-47]

Buprenorphine is argued to have a superior safety profile to methadone (patients are less likely to overdose and experience respiratory depression), but also has a higher dropout rate (retention in buprenorphine treatment is poor, almost two-thirds of patients discontinue buprenorphine treatment within 6 months, and patients are also more likely to switch medications during treatment). Relapse rates among individuals in buprenorphine treatment range from 50% to 90%.[14,29,43,48-51]

A meta-analysis of 11 randomized trials comparing methadone to buprenorphine in maintenance treatment for opioid dependence concluded that buprenorphine was effective in OUD but slightly less effective than methadone in its capacity to retain patients in treatment.[14]

Combined buprenorphine/naloxone demonstrated significant efficacy and favorable safety and tolerability in multiple populations, including youth and prescription opioid-dependent individuals.[15]

The opioid antagonist, Naltrexone decreases or prevents the positive effects of opioids and is available in pill, implant, and injectable forms. Completed withdrawal is needed prior to naltrexone.

Despite trials showing some promise for naltrexone, it is still underused in treatment settings due to lack of patient acceptance. Naltrexone was shown to be superior to treatment-as-usual (without medication) in reducing illicit opioid use among adults with criminal justice involvement, in a US open-label trial.[25]

Two recent clinical trials[26,52] comparing extended-release naltrexone (XR-NTX) with buprenorphine found little evidence of a difference in abstinence rates, although it appears that initial stabilization on buprenorphine may be easier to accomplish.

An open-label clinical trial from Norway found that XR-NTX was as effective as buprenorphine-naloxone in maintaining short-term abstinence from heroin and other illicit substances in opioid-dependent individuals.[52]

An US open-label RCT (NCT02032433) found that it is more difficult to initiate patients to XR-NTX than sublingual buprenorphine-naloxone (due to the fact that naltrexone requires full detoxification), and this negatively affected overall relapse. However, once initiated, both medications were equally safe and effective.[26,53]

Relapse rates remain high (over 80% for oral naltrexone, over 45% for the naltrexone implant, and over 40% for injectable naltrexone). Naltrexone therapy has higher discontinuation rates than buprenorphine. The risk of overdose is high for people during the course of and subsequent to naltrexone treatment.[19,25,26,54-56]

Antagonist therapy may be preferred for a motivated, treatment-seeking individual who desires to continue their employment (pilots, physicians, professional athletes, or those carrying firearms).

Similarly, an individual with co-occurring OUD and alcohol use disorder might benefit most from antagonist therapy, given that the FDA has approved extended-release naltrexone as effective in preventing relapse to alcohol use.

In all such situations, these matters should be covered in a collaborative informed consent process, and clinicians should carefully document the discussion.[15]

NON-OPIOID DRUG

In May 2018, FDA approved the first non-opioid drug, lofexidine hydrochloride, for the mitigation of withdrawal symptoms to facilitate abrupt discontinuation of opioids in adults.[57]

Lofexidine may lessen the severity of withdrawal symptoms but may not completely prevent them and is approved for treatment for only up to 14 days.

Lofexidine is not a treatment for OUD but can be used as part of a broader, long-term treatment plan for managing OUD, the FDA said in their news release.[57,58]

Clinical studies are needed to evaluate the safety of lofexidine in clinical situations where use of the drug might exceed the maximum 14-day treatment period for which it is currently approved.[57]

Most of the people with OUD are not receiving treatment

Overdoses frequently occur among people with OUD, who were recently discharged from detoxification programs, treatment, or criminal justice settings.[27,44,59-61]

Unintentional overdose death is often a consequence of untreated or improperly treated OUD, reflecting a long-standing addiction treatment gap in the US and the difficulties patients face in accessing evidence-based care.[27,36,62]

Despite the fact that pharmacotherapies are superior to placebo treatment and counseling-only treatment for OUD,[13,14,19,24-27] there are still low rates of initiation and retention on these medications.[27,51,63,64]

An alarmingly low percentage (~1/5 of the 2.4 million individuals estimated to have OUD)65 receive any specialty care in a given year.[66-68]

With only 1/3 of those in specialty care estimated to receive one of the 3 FDA-approved MTA during a care episode, and a 6-month retention rate under 30–50% in most settings[51,56,69,70] only a fraction of individuals with OUD achieve long-term remission in the US.[27,71]

Gap between need & treatment capacity

Medications are underutilized. Access to effective pharmacotherapy for OUD should be increased.[28]

However, nearly all US states do not have sufficient treatment capacity to provide MAT to all patients with OUD.

There are waiting lists for methadone and buprenorphine treatment at some opioid treatment programs (OTPs), despite the fact that not everyone with OUD will seek treatment, and despite local and national efforts to expand treatment availability.[72-75]

The paper by Jones et al. noted that most of the nation's OTPs are at or exceed 80% of their capacity and if all of the physicians, waivered to prescribe buprenorphine treatment, were at full capacity, there would still remain a gap of nearly 1 million adults in need of treatment for OUD.[73]

The benefits of extended methadone or buprenorphine/naloxone maintenance delivered within an OTP (requiring daily medication monitoring during early recovery, and providing structured psychosocial interventions and integrated care options) are especially pronounced for populations with significant drug-related legal charges and drug-using social networks, for patients with co-occurring medical illness

related to injection drug use, and for socially disadvantaged patients, who may receive, through the integrated structure of the program, the intensive social and medical services needed to support sustained recovery.[15]

Policy and regulatory barriers play an important role in this gap. These obstacles may hinder access and appropriate care.[36,75]

HHS agencies are actively collaborating with public and private stakeholders in efforts to expand access to and improve utilization of MATs to reduce opioid overdoses.[36,76]

Other barriers include lack of health insurance coverage (including Medicaid), stigma against pharmacotherapy among individuals with opioid addiction and health care providers, inadequate training, and lack of penetration of pharmacotherapy in community corrections, jails, and prisons.[75,77]

Integration of MAT in US primary care settings would expand access to OUD treatment.[78]

The majority of medication treatment for OUD is provided in primary care settings. Effective and innovative models of care for MAT in primary care settings (including rural or other underserved settings) could facilitate implementation and enhance provision and uptake of agonist and antagonist pharmacotherapy in conjunction with psychosocial services for more effective treatment of OUDs.

A recent Technical Brief from AHRQ summarized 12 representative MAT models of care in primary care settings, which may help inform the individualized implementation of these models.[10,78]

Practice-based models: Office-based opioid treatment (OBOT), Buprenorphine HIV Evaluation and Support Collaborative model, One-stop shop model, Integrated prenatal care and MAT.

System-based models: Hub-and-spoke model (Vermont), Medicaid health home model, Project Extension for Community Healthcare Outcomes (ECHO, New Mexico), Collaborative opioid prescribing model (Maryland), Massachusetts nurse care manager model, Emergency Department initiation of OBOT, Inpatient initiation of MAT, Southern Oregon model.

All models contained some degree of 4 key components: (1) pharmacological therapy; (2) psychosocial services; (3) integration of care; and (4) education and outreach.[10]

Models varied in relative emphasis of these components, though common themes included the importance of a non-physician coordinator and use of tiered approaches. The ideal model of care for a particular setting likely depends on local factors such as available expertise, the population being served, proximity to an addiction center of excellence, reimbursement policies, and geography. Decisions about MAT models of care should therefore be individualized.

Regarding the pharmacological therapy component, most MAT models of care in primary care settings to date have focused on provision of sublingual buprenorphine/naltrexone.[10]

Although implantable buprenorphine was approved by the FDA in 2016, research on its use in primary care settings is lacking. Similarly, although extended-release naltrexone has been shown to be effective in addiction treatment settings, research on its use in primary care settings is extremely sparse.

Provision of additional pharmacological therapy choices for MAT has potential advantages in terms of expanding patient choices, reducing risk of diversion, and decreasing need for frequent follow-up in appropriate patients.[10]

The findings of a recent systematic review79 suggest that multidisciplinary and coordinated care delivery models are an effective strategy to implement OUD treatment and increase MAT access in primary care, but research directly comparing specific structures and processes of care models is still needed.[79]

Clinical Evidence on Mortality

Increased exposure to opioid maintenance treatment reduces the risk of death in opioid-dependent people. Being out of treatment is associated with a markedly increased risk of death. Substitution therapy with methadone or buprenorphine reduces mortality risk, especially for drug-related overdose.[17,18,24,43,44,59,80-87]

The induction phase onto treatment and the time immediately after leaving treatment are periods of particularly increased mortality risk.[43,44,59]

Patients' risk of all-cause mortality increases following treatment cessation and is highest in the initial 4-week period.[43,59] Some precautions that should be taken to increase safety: 1) establishing a safe induction dose; 2) monitoring during the induction period, especially for methadone (considering adjusting opioid doses, monitoring mental and somatic problems, and preventing the use of opioids obtained on the illicit drug market).

Buprenorphine induction followed by transition to methadone might be an option. Education of patients about the risk of overdose risk and establishing mechanisms for information and coordination between healthcare, social and legal services, and patient counselling should also be considered.[44]

A systematic review & meta-analysis of cohort studies concluded that retention in methadone and buprenorphine treatment reduces overall mortality and overdose death in people dependent on opioids.[44] Time spent in opioid substitution treatment with methadone is associated with an average reduction of 25 deaths/1000 person years (from 36.1 deaths out of treatment to 11.3 deaths/1000 person years, in-treatment).

Pooled all-cause mortality rates were also reduced with buprenorphine treatment, from 9.5 out of treatment to 4.3 in-treatment.[44] 19 cohorts, following 122 885 people treated with methadone over 1.3 - 13.9 years and 15 831 people treated with buprenorphine over 1.1 - 4.5 years.[44]

A recent meta-analysis from China[88] showed that compared with patients receiving MAT, untreated participants had higher risk of all-cause mortality (2.56 times) and overdose mortality (8.10 times). Discharged participants had also higher risk of all-cause death (2.33 times) and overdose death (3.09 times).[88]

Longer retention in MAT was associated with a reduction in mortality rate (retention in MAT of >1-year was associated with a lower mortality rate than with retention ≤1 year) and discontinuation of MAT increased the risk of death, especially in the first 2 weeks after medication treatment discharge.

Improved coverage and adherence to MAT and post-treatment follow-up are crucial to reduce the mortality. Long-acting naltrexone showed positive advantage on prevention of premature death among persons with OUD.

Naltrexone (in the form of implants or extended-release) represents an alternative option to deliver medication treatment for OUD, given that it was associated with a lower mortality rate than methadone and buprenorphine treatment.

However, more research is still needed.[88]

In addition, meta-analyses of randomized controlled trials (RCTs) show that agonist medications are effective at retaining patients in treatment and reducing heroin use.[13,14,18,89]

A retrospective cohort study from Massachusetts[90] (>17 000 people with nonfatal opioid overdose between 2012 and 2014) found that buprenorphine and methadone maintenance treatments were associated with reduced all-cause and opioid-related mortality. Less than a third of participants received medications in the 12 months after a nonfatal opioid overdose.[90]

A study from England91 observed an elevated drug-related poisoning (DRP) risk during periods out of any treatment for opioid dependence and a lower risk during treatment. During treatment there was a greater reduction in this risk for men, for illicit drug injectors and those who reported problematic alcohol use. And, consistent with meta-analysis,[13,14,89] opioid agonist pharmacotherapy (OAP) was associated with a strong reduction in DRP risk.[91]

Using oral methadone or buprenorphine, well-delivered OAP manages the patient's physiological dependence, attenuates drug use cravings and facilitates access to healthcare and recovery supports.[91] Psychological support was associated with twice the DRP risk observed for OAP and was comparable to the risk when not in treatment.[91]

DRP risk increased during the month following discharge from OAP or residential treatment and elevated risk persisted beyond the month following discharge. Successfully completing treatment is not associated with a reduction in DRP risk.[91]

Observational studies of addiction treatment systems have reported that the risk of fatal DRP is at least halved when patients are enrolled in treatment for opioid dependence,[24,92] with this risk increasing immediately following the start of treatment and after it ends.[84,91,93]

A 10-year follow up study[85] of 405 patients randomly assigned to receive either methadone or buprenorphine found an association between the duration of treatment with either medication and lower rates of mortality. There was no difference in mortality between buprenorphine and methadone.[85]

Long-term agonist treatment

The nation's methadone maintenance treatment (MMT) programs play a central role in addressing the current opioid epidemic in US.[94] Considerable evidence documents the treatment effectiveness of MMT and, in turn, the importance of adequate dosing to MMT's effectiveness.[94]

Studies have demonstrated the effectiveness of MMT for reducing illicit opioid use, morbidity and mortality, risk of HIV infection, illegal activities, and improving overall functioning.[95-99]

Patients in MMT had a 1-year mortality rate of 1% compared with 8% among patients who discontinued treatment.[95]

A study from Taiwan100 highlighted the impact of methadone dosage on the mortality of opioid-dependent patients in MMT. A dose-response relationship of higher- vs. lower-dosage groups on the risk of mortality risk was observed.[100]

A recent analysis[94] of data from the National Drug Abuse Treatment Systems Survey (NDATSS) done by D'Aunno et al. indicates that private for-profit and public organizations significantly under-dosed patients compared to private nonprofit providers.[94] Under-dosing also was more common in programs that serve high proportions of African American patients. These results are concerning because MMT remains the medication of choice for vulnerable patients with the most severe OUDs, and for-profit providers treat a growing proportion of MMT patients.[94]

A study from Sweden[101] evaluating MMT-programs in Sweden and the effect of treatment status on death, found that mortality was significantly increased during periods off treatment. In particular, the hazard of dying from a drug-related cause was increased 4-fold when not in treatment.[101]

A retrospective cohort study from Canada.[102] Adherence to methadone was associated with significantly lower rates of death in a population-level cohort of Canadian convicted offenders. Achieving higher rates of adherence may reduce overdose deaths and other causes of mortality among offenders and similarly marginalized populations.[102]

Continuing in methadone treatment was associated with a reduced risk of death also among primary care patients in Ireland.[59] Two years of MMT appears to be the minimum duration before attempting withdrawal.[103]

Even patients receiving maintenance for long periods with substantial lifestyle changes often relapse after leaving treatment, and death rates are much higher than for individuals who remain in treatment. For many patients, therefore, years or even lifetime maintenance may be needed, but there is often patient and family opposition.[99]

Buprenorphine has been shown to reduce heroin overdose deaths in US, Australia, and France.[17,81,104]

According to a recent French study[87] by Dupoy et al investigating mortality among patients treated with buprenorphine in ambulatory (office-based general medical) practice, buprenorphine appears to be a strong protective factor against mortality.[87]

This study showed that during buprenorphine maintenance treatment, being out of treatment was associated with sharply elevated (at least 10-fold) mortality risk.[87]

A retrospective cohort study[43] from Australia suggested that induction of patients to buprenorphine is beneficial in settings in which risk of death is increased in the first 4 weeks of treatment.

They compared mortality risk between methadone and buprenorphine and found that in a setting with high risk of death in the first 4 weeks of opioid substitution therapy, buprenorphine reduced mortality in this period.

The risk of drug-related overdose during the first 4 weeks of treatment induction and stabilization is almost 5 times higher, and all-cause mortality double, for patients inducted on to methadone than for those inducted on to buprenorphine.

However, little difference between buprenorphine and methadone was noted thereafter or for in-treatment switching of medications.[43]

These findings support a stepped treatment approach: patients are first induced on to buprenorphine and subsequently transferred to methadone (due to concerns about low treatment retention for patients on buprenorphine).[43]

A study from Finland indicated that buprenorphine maintenance treatment is an effective treatment for opioid dependents who are mainly misusing buprenorphine intravenously.[105]

A review of the evidence by Thomas et al. found that MAT with buprenorphine is associated with improved outcomes compared with placebo for individuals and pregnant women with OUD.[106]

DIVERSION OF BUPRENORPHINE/NALOXONE

The challenge is bringing treatment for opioid addiction to scale while simultaneously monitoring and limiting the diversion of buprenorphine/naloxone.[9,75]

Although diverted buprenorphine appears to be most frequently used by people with opioid addiction to manage withdrawal and treat their disease, it is an opioid partial agonist with reinforcing properties that can be self-administered to achieve euphoria.[74,75] Diversion can result in further opioid misuse and overdoses, accidental pediatric exposures, and accidental or intentional adolescent exposures.[15,107,108]

The balance between the extent to which diverted buprenorphine is used for "self-treatment" compared with "getting high" depends on the availability and cost of other illicit opioids (including heroin and other prescription opioids) that are more reinforcing than buprenorphine.

In US heroin, and more recently fentanyl, has been available at low prices and high potency. However, efforts to restrict their availability could make these opioids difficult to find and expensive to obtain. In this scenario, it is possible that non-therapeutic use of diverted medications may increase. Thus, continued vigilance of the extent and reasons for use of diverted buprenorphine must go hand in glove with expanded access to treatment.[75] According to NIHDA,109 however, diversion of buprenorphine is uncommon; when it does occur, it is primarily used for managing withdrawal.[110,111]

Diversion of prescription pain relievers, including oxycodone and hydrocodone, is far more common; in 2014, buprenorphine made up less than 1% of all reported drugs diverted in the US.[5,109] Novel delivery systems (long-acting preparations) for buprenorphine in injectable and implantable forms (such as monthly injection and the 6-month implant) seem to add significant advantages, and will play an important role over the next several years in increasing treatment access while minimizing diversion.[33,75]

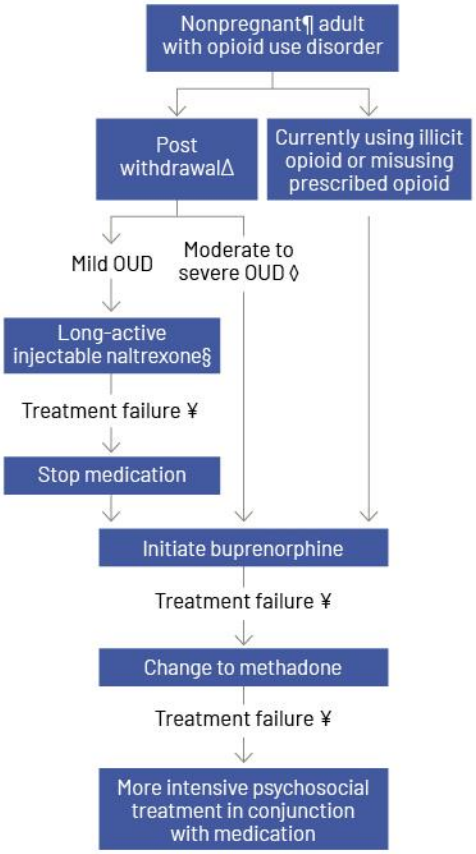
A number of other approaches can also be used to reduce the likelihood of diversion, including the use of computerized medication dispensing devices designed to increase adherence[112] and creating collaborative care between prescribing physicians and Opioid Treatment Programs[113] or pharmacists.[114]

Physicians who prescribe buprenorphine should utilize their States Prescription Monitoring Drug Program to ensure their patients are not obtaining other opioid prescriptions and should adopt the effective clinical practices detailed in ASAM's National Practice Guidelines.[115]

Treatment Algorithm – MAT of OUD

A Treatment Algorithm was recently described by Dr Eric Strain (Johns Hopkins University School of Medicine) on UpToDate.[11]

Editors were Dr Andrew J Saxon (University of Washington) & Dr Richard Hermann (Tufts University School of Medicine).



The algorithm 116 (shown on the right) describes an approach to medication-assisted treatment of OUD, based on the limited data available and their clinical experience. [11]

For most patients with OUD following the completion of medically supervised withdrawal, as first line, they suggest MAT augmented by psychosocial treatment, rather than MAT alone or psychosocial treatment alone.[11]

They suggest beginning with addiction counseling and participation in
a mutual help group.[11]

¶ Opioid withdrawal and treatment with an opioid antagonist should be avoided in pregnant women with OUD. The selection of medication to treat opioid use disorder during pregnancy is discussed in the topic on methadone substitution therapy for OUD during pregnancy.

Δ Completed withdrawal is needed prior to naltrexone, but not prior to buprenorphine or methadone. For some patients, however, the choice of medications is not made until after withdrawal. Initial agonist dosing after withdrawal should be adjusted accordingly, given the lower level of physical dependence in such cases.

◊ Naltrexone is generally suggested for highly motivated patients with mild OUD; however, for some patients with more severe OUD, naltrexone may be preferred by the patient or buprenorphine and methadone may be unavailable.

§ Supervised daily oral naltrexone is a reasonable alternative to long-acting injectable naltrexone in highly motivated patients who refuse injections or have good external support.

¥ Treatment failure as indicated by poor attendance and/or continual, ongoing illicit opioid use.[11,116]

Moderate to severe OUD

They suggest first-line treatment with an opioid agonist: methadone or buprenorphine, rather than opioid-antagonist medication, for patients with moderate to severe OUD.[11]

Numerous clinical trials have shown treatment with buprenorphine or methadone to reduce opioid use compared with placebo or other treatments.

Fewer clinical trials have found long-acting injectable (LAI) naltrexone to reduce opioid use compared with placebo; daily oral naltrexone has shown efficacy only in more mild illness and in patients who are highly motivated or under supervised medication administration.[26,52]

They suggest buprenorphine rather than methadone as first-line maintenance treatment in patients with OUD.[11]

Both medications are effective. Although available data suggest that methadone is on average more efficacious than buprenorphine in most clinical circumstance, buprenorphine is safer than methadone, which has a greater potential for lethal overdose. Unlike buprenorphine, methadone requires clinic-based treatment (and essentially daily in-clinic observed ingestion during the initial treatment period).[11]

Methadone is a reasonable choice for patients with continued opioid use despite buprenorphine treatment, a history of a poor response to buprenorphine, or previous misuse or diversion of buprenorphine.[11]

Treatment with oral or LAI naltrexone is a reasonable first-line alternative to methadone or buprenorphine in:[11]

- Highly motivated patients with a mild OUD
- Situations in which medication use can be supervised
- Patients in occupations that do not permit opioid agonist treatment. In areas such as public safety, transport of hazardous materials, licensed drivers, and healthcare, some employees are not allowed to use methadone and, in some cases, buprenorphine.

Patients who relapse to opioid use while on oral naltrexone, particularly those who are known or suspected to be non-adherent to daily use, should be treated with LAI naltrexone. Initiating naltrexone treatment with the LAI formulation is a reasonable alternative to first using the oral formulation.[11] For patients who continue to use opioids despite treatment with methadone and buprenorphine, they suggest switching to treatment with LAI naltrexone.[11]

National Canadian Guideline – Treatment Algorithm

The Canadian guideline[3] supports using a stepped and integrated care approach, in which treatment intensity is continually adjusted to accommodate individual patient needs and circumstances over time, and recognizes that many individuals may benefit from the ability to move between treatments (Figure 1 shows the Treatment Algorithm for OUD).[3]

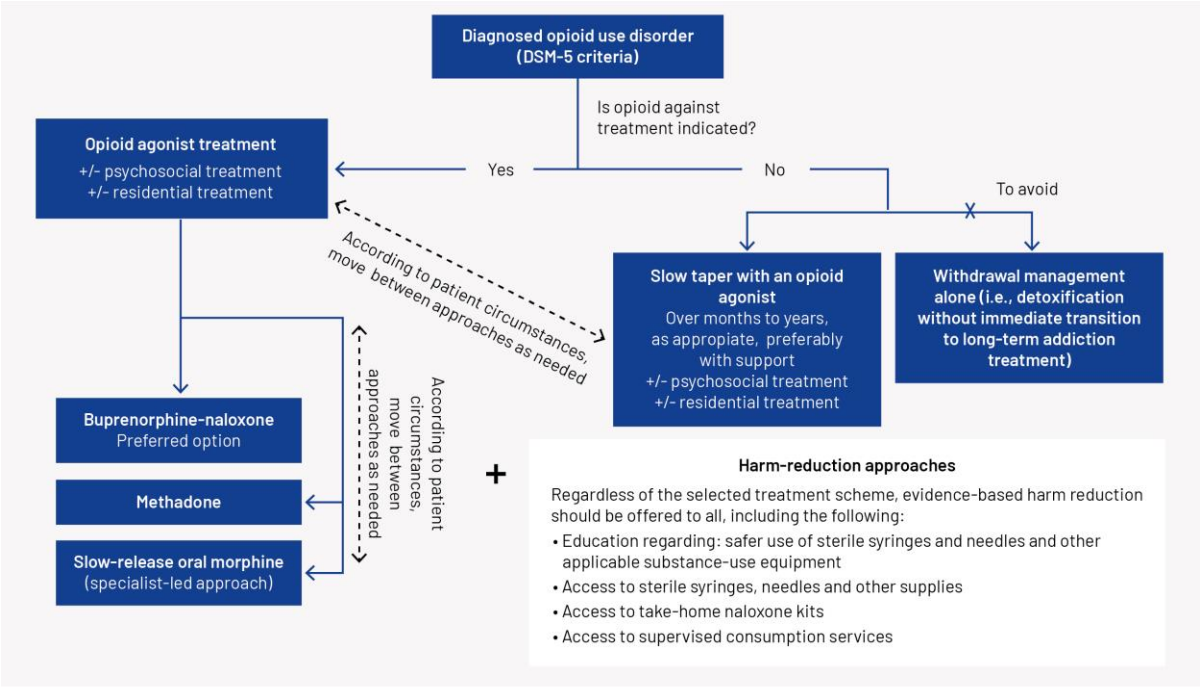


FIGURE 1
Treatment algorithm for opioid use disorder. Note: A particular medication may not be indicated for a variety of reasons, including ineffectiveness or medical contraindiction, comorbidities, drug-drug interactions, patient preference and specific circumstances, and prescriber's experience. Any treatment for opioid use disorder, but particularly slow agonist tapers, should incorporate evidence-based psychosocial interventions with qualified professionals, motivational interviewing, long-term monitoring of substance use, provision of comprehensive primary care, and referrals to psychosocial treatment interventions and psychosocial supports as appropiate, with specialist care as required, to optimize physical and mental wellness as the patient progresses in recovery. Withdrawal management (formerly "detoxification") without linkage to long-term addiction treatment is to be avoided, and patients desiring such approach should be informed of risks and encouraged toward other treatment optoins that would suit their circumstances.
DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, fifth edition.[74]

RECOMMENDATIONS:[3]

- Initiate opioid agonist treatment with buprenorphine/naloxone whenever feasible
- For individuals responding poorly to buprenorphine/naloxone, consider transition to methadone treatment
- Initiate treatment with methadone when treatment with buprenorphine/naloxone is not the preferred option
- For individuals with a successful and sustained response to methadone who express a desire for treatment simplification, consider transition to buprenorphine/naloxone
- Withdrawal management alone is not recommended, because this approach has been associated with elevated risks and death from overdose.[3]

MAT Selection Algorithm

In her 2015 Harvard review, Dr Hilary Connery gives an example of a simple, evidence-based algorithm for MAT selection—one designed to be flexible in relation to regional MAT availability (Text Box 2).[15]

Availability of a regularly updated, evidence-based algorithm to assist in decision making would contribute to the adoption of MAT in practice.[15]

Text Box 2: Evidence-Based Medication-Assisted Treatment Selection Algorithm for Treating Opioid Use Disorder in Adults[a]

A. Threshold questions

(1) Is the patient actively seeking abstinence from all illicit opioid use?

YES: consider antagonist or agonist medication-assisted treatment (MAT)

NO: consider agonist MAT to reduce risk of accidental opioid overdose death by maintaining opioid tolerance

(2) Does the patient have significant co-occurring chronic pain?

YES: consider agonist MAT to reduce pain-related opioid relapse

NO: consider antagonist or agonist MAT

B. Exclusions to extended-release antagonist maintenance

- pregnant or planning pregnancy
- foreseeable need for opioid analgesia during treatment
- recent opioid overdose or high risk for opioid overdose behavior

C. MAT treatment setting

(1) office-based outpatient care

- patients committed to abstaining from all substance use
- no recent history of accidental or intentional substance overdose
- no recent history of opioid diversion

(2) structured care setting (e.g., opioid treatment program, integrated mental health care clinic)

- recently stabilized sedative/hypnotic or alcohol use disorders
- recent history of accidental or intentional substance overdose
- patient is receiving agonistMAT and has recent history of opioid diversion

[a] This algorithm is flexible in that it includes local care options and is designed to reduce opioid overdose deaths and opioid diversion. Failure of one MAT trial would prompt reconsideration of other available MAT options or the relocation of treatment from an office-based practice setting to a structured clinical setting with closer patient monitoring.

The use and implementation of a MAT algorithm would reduce discrepancies in treatment based on regional variations, prescriber expertise, or access to specialty clinics.[15] The main weakness of this approach, however, is that it could reduce the role of patient preferences in selecting MAT.[15]

OUD Treatment Cascade

Despite considerable progress, gaps exist in quality measures for OUD treatment.

Developing and organizing quality measures under a unified framework such as a Cascade of Care could improve system level practice and treatment outcomes.[27] Williams et collaborators proposed to repurpose the HIV/AIDS "Cascade of Care Framework" in a framework suitable for OUD.[71]

They proposed an OUD Treatment Cascade model, which includes 4 key stages for patients identified with OUD:[27]

1. Treatment engagement
2. MAT initiation
3. Retention
4. Remission

This model could also build on existing measures to enhance patient outcomes.[27,71]

Figure 2 (on the right, taken from Williams et al, 2018. Ref #27) models candidate measure concepts for each of the 4 proposed stages of an OUD Treatment Cascade at the structural, process, and outcome levels for patients with OUD.[27]

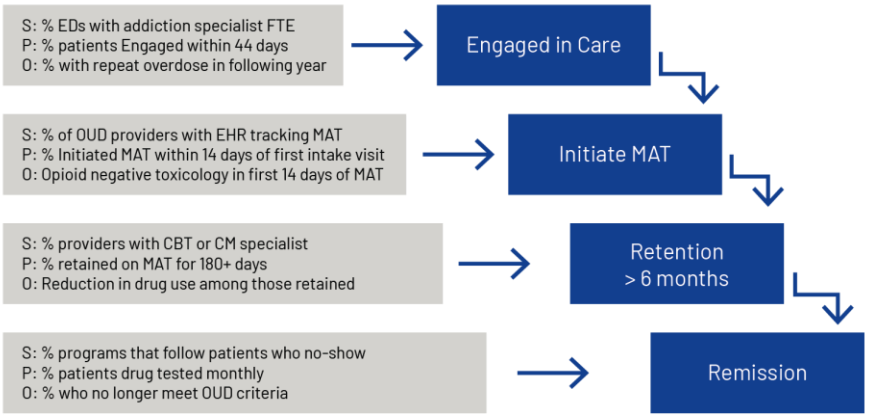


FIGURE 2
Candidate quality measure concepts for an OUD treatment cascade at structural, process, and outcome levels for patients treated for overdose.

The model is premised on the concept that patients who achieve long-term recovery from opioids are likely to do so through a stepwise process with each step dependent on success with the prior step. It posits that patients must first engage in care in order to initiate MAT. Among those who initiate MAT successfully, efforts are then needed to retain patients in care.[27]

As an example, Belenko et al. have demonstrated the utility of applying the cascade framework to juvenile justice populations with substance use to detect gaps in care and opportunities for improvement.[117]

Development of a unified quality measurement framework such as an OUD Treatment Cascade will require further elaboration and refinement of existing measures across populations and settings.[27]

An OUD Treatment Cascade framework could improve treatment program accreditation standards, data collection and reporting, monitoring of key targets, and enhance outcomes.

Developing quality measures to identify which patients struggle at which stages of the Cascade could also target clinical and policy interventions to help federal and state efforts improve patient outcomes.[27]

Such a framework could form the basis for applying strategies at clinical, organizational, and policy levels to expand access to quality care and reduce opioid-related mortality.[27]

References

1. World Health Organization. Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence. Geneva: WHO, 2009. *http://www.who.int/substance_abuse/publications/opioid_dependence_guidelines.pdf*
2. Canada, 2017. British Columbia Centre on Substance Use. A Guideline for the Clinical Management of Opioid Use Disorder. *http://www.bccsu.ca/wp-content/uploads/2017/06/BC-OUD-Guidelines_June2017.pdf* *http://www.vch.ca/Documents/Opioid-Use-Disorder-Guideline.pdf*
3. Bruneau J et al. Management of opioid use disorders: a national clinical practice guideline. CMAJ 2018; 190:E247-57. *S:\CSesti\Mental Health\MAT Dec'18\2018 CMAJ_Management of OUD-Canadian clinical practice guideline.pdf*
4. Macrae, J., Hyde, P. HHS Launches Multi-pronged Effort to Combat Opioid Abuse. 2015. US Department of Health & Human Services. *https://blog.samhsa.gov/2015/07/27/hhs-launches-multi-pronged-effort-to-combat-opioid-abuse*
5. National Institute on Drug Abuse (NIDA). Effective Treatments for Opioid Addiction. 2016. *https://www.drugabuse.gov/publications/effective-treatments-opioid-addiction/effective-treatments-opioid-addiction* *https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/policybrief-effectivetreatments.pdf*
6. Department of Health and Human Services Substance Abuse and Mental Health Services Administration. Targeted Capacity Expansion: Medication Assisted Treatment - Prescription Drug and Opioid Addiction (Short Title - MAT-PDOA) Initial Announcement. 2016. *http://www.samhsa.gov/sites/default/files/grants/pdf/ti-16-014.pdf*
7. Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain--United States, 2016. JAMA. 2016 Apr 19; 315(15):1624-45. Review. *https://jamanetwork.com/journals/jama/fullarticle/2503508*
8. Kampman K, Jarvis M. American Society of Addiction Medicine (ASAM) National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use. J Addict Med. 2015; 9(5):358-67. *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4605275/pdf/adm-9-358.pdf*
9. Dunlap B, Cifu AS. Clinical management of opioid use disorder. JAMA. 2016; 316(3):338–339. *https://jamanetwork.com/journals/jama/fullarticle/2533488*
10. Chou R et al. Medication-Assisted Treatment Models of Care for Opioid Use Disorder in Primary Care Settings. Technical Brief #28. (Prepared by the Pacific Northwest Evidence-based Practice Center under Contract No. 290-2015-00009-I.) AHRQ Publication No. 16(17)-EHC039-EF. Rockville (MD): Agency for Healthcare Research and Quality. Dec 2016. *http://www.ncbi.nlm.nih.gov/books/NBK402352/* *https://www.ncbi.nlm.nih.gov/books/NBK402352/pdf/Bookshelf_NBK402352.pdf*
11. Pharmacotherapy for opioid use disorder. 2018. *https://www.uptodate.com/contents/pharmacotherapy-for-opioid-use-disorder*
12. JAMA Network Collection of Articles about Opioids. Treatment of Opioid Addiction. *https://sites.jamanetwork.com/opioids/*
13. Mattick RP et al. Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. Cochrane Database Syst Rev 2009; 3: CD002209. *https://www.ncbi.nlm.nih.gov/pubmed/19588333*
14. Mattick RP et al. Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. Cochrane Database Syst Rev 2014; 2: CD002207. *https://www.ncbi.nlm.nih.gov/pubmed/24500948*
15. Connery HS. Medication-assisted treatment of opioid use disorder: review of the evidence and future directions. Harv Rev Psychiatry. 2015 Mar-Apr; 23(2):63-75.Review. *S:\CSesti\Mental Health\MAT Dec'18\2015 Harv Rev Psychiatry_MAT of OUD-review of evidence et future directions.pdf*
16. Kakko J et al. 1-year retention and social function after buprenorphine-assisted relapse prevention treatment for heroin dependence in Sweden: a randomised, placebo-controlled trial. Lancet. 2003; 361(9358):662-8.
17. Schwartz RP et al. Opioid agonist treatments and heroin overdose deaths in Baltimore, Maryland, 1995–2009. Am J Public Health. 2013; 103(5):917–22.
18. Fullerton CA et al. Medication-assisted treatment with methadone: assessing the evidence. Psychiatr Serv. 2014 Feb 1; 65(2):146-57. *https://www.thenationalcouncil.org/wp-content/uploads/2018/01/Methadone-final.pdf*
19. Krupitsky E et al. Injectable extended-release naltrexone for opioid dependence: a double-blind, placebo-controlled, multicentre randomised trial. Lancet 2011; 377: pp. 1506-1513. *Cross Ref*
20. Fudala PJ et al. Office-based treatment of opiate addiction with a sublingual-tablet formulation of buprenorphine and naloxone. N Engl JMed 2003; 349:949–58.
21. Weiss RD et al. Adjunctive counseling during brief and extended buprenorphine-naloxone treatment for prescription opioid dependence: a 2-phase randomized controlled trial. Arch Gen Psychiatry 2011; 68:1238–46.
22. Woody GE et al. Extended vs short-term buprenorphine-naloxone for treatment of opioid-addicted youth: a randomized trial. JAMA 2008; 300:2003–11.
23. ACOG & ASAM. 2017. *https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Opioid-Use-and-Opioid-Use-Disorder-in-Pregnancy*
24. Degenhardt L et al. Mortality among regular or dependent users of heroin and other opioids: a systematic review and meta-analysis of cohort studies. Addiction 2011; 106: 32–51.
25. Lee JD et al. Extended-release naltrexone to prevent opioid relapse in criminal justice offenders. NEJM. 2016; 374:1232–1242. *Cross Ref*
26. Lee JD et al. Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention (X:BOT): A multicenter, open-label, randomize controlled trial. Lancet. 2018; 391(10118):309–318. *https://doi.org/10.1016/S0140-6736(17)32812-X*
27. Williams AR et al. Developing an opioid use disorder treatment cascade: A review of quality measures. J Subst Abuse Treat. 2018 Aug; 91:57-68. *https://www.ncbi.nlm.nih.gov/pubmed/29910015* *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6039975/pdf/nihms975411.pdf*

28. Sharma A et al. Update on Barriers to Pharmacotherapy for Opioid Use Disorders. Curr Psychiatry Rep. 2017 Jun; 19(6):35. Review. *S:\CSesti\Mental Health\MAT Dec'18\2017 Curr Psychiatry Rep_Update on Barriers to Pharmacotherapy for Opioid Use Disorders.pdf*
29. *Hser YI et al. Treatment retention among patients randomized to buprenorphine/naloxone compared to methadone in a multi-site trial. Addiction 2014; 109:79–87.*
30. *Minozzi S et al. Maintenance agonist treatments for opiate-dependent pregnant women. Cochrane Database Syst Rev 2013; 12:CD006318.*
31. *Woody G et al. HIV risk reduction with buprenorphine-naloxone or methadone: findings from a randomized trial. J Acquir Immune Defic Syndr 2014; 66:288–93.*
32. *National Institute for Health and Clinical Excellence (NICE). Methadone and buprenorphine for the management of opioid dependence. NICE Technology Appraisal Guide 114. 2007. Reviewed Feb 2016. http://www.nice.org.uk/guidance/ta114*
33. *Rosenthal RN, Goradia VV. Advances in the delivery of buprenorphine for opioid dependence. Drug Des Devel Ther. 2017 Aug 28; 11:2493-2505. Review. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5584886/pdf/dddt-11-2493.pdf*
34. *MacArthur GJ et al. Opiate substitution treatment and HIV transmission in people who inject drugs. BMJ. 2012; 345(3):e5945-e5945.*
35. *Clark RE et al. Risk factors for relapse and higher costs among medicaid members with opioid dependence or abuse: opioid agonists, comorbidities, and treatment history. J Subst Abuse Treat. 2015; 57:75–80.*
36. *Volkow ND et al. Medication-assisted therapies--tackling the opioid overdose epidemic. New England Journal of Medicine. 2014; 370:2063–2066. https://www.nejm.org/doi/pdf/10.1056/NEJMp1402780*
37. *Smyth BP, Barry J, Keenan E, Ducray K. Lapse and relapse following inpatient treatment of opiate dependence. Ir Med J. 2010; 103(6):176-179.*
38. *Dugosh K et al. A systematic review on the use of psychosocial interventions in conjunction with medications for the treatment of opioid addiction. J Addict Med. 2016; 10(2):93–103.*
39. *Brady KT, McCauley JL, Back SE. Prescription opioid misuse, abuse, and treatment in the United States: an update. Am J Psychiatry. 2016; 173:18–26. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4782928/pdf/nihms753305.pdf*
40. *Buster MC, van Brussel GH, van den Brink W. An increase in overdose mortality during the first 2 weeks after entering or re-entering methadone treatment in Amsterdam. Addiction 2002; 97:993-1001. doi:10.1046/j.1360-0443.2002.00179.x pmid:12144602*
41. *Luty J, O'Gara C, Sessay M. Is methadone too dangerous for opiate addiction? BMJ. 2005 Dec 10; 331(7529):1352-3.*
42. *Bell JR et al. Comparing overdose mortality associated with methadone and buprenorphine treatment. Drug Alcohol Depend. 2009 Sep 1; 104(1-2):73-7.*
43. *Kimber J et al. Mortality risk of opioid substitution therapy with methadone versus buprenorphine: a retrospective cohort study. Lancet Psychiatry. 2015 Oct; 2(10):901-8. https://www.clinicalkey.com/service/content/pdf/watermarked/1-s2.0-S2215036615003661.pdf?locale=en_US*
44. *Sordo L et al. Mortality risk during and after opioid substitution treatment: systematic review and meta-analysis of cohort studies. BMJ. 2017 Apr 26; 357:j1550. Review. https://www.ncbi.nlm.nih.gov/pubmed/28446428 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5421454/?report=printable*
45. *Stein BD, Gordon AJ, Dick AW, et al. Supply of buprenorphine waivered physicians: the influence of state policies. J Subst Abuse Treat. 2015; 48:104–111.*
46. *Hser YI et al. Long-term outcomes after randomization to buprenorphine/naloxone versus methadone in a multi-site trial. Addiction. 2016; 111:695–705.*
47. *Lo Ciganic WH et al. Association between trajectories of buprenorphine treatment and emergency department and in-patient utilization. Addiction. 2016; 111:892–902.*
48. *Garcia-Portilla MP et al. Long term outcomes of pharmacological treatments for opioid dependence: does methadone still lead the pack? Br J Clin Pharmacol. 2012; 77:272–284.*
49. *Burns L et al. Opioid agonist pharmacotherapy in New South Wales from 1985 to 2006: patient characteristics and patterns and predictors of treatment retention. Addiction 2009; 104: 1363–72.*
50. *Burns L et al. A longitudinal comparison of retention in buprenorphine and methadone treatment for opioid dependence in New South Wales, Australia. Addiction 2015; 110: 646–55.*
51. *Timko C et al. Retention in medication-assisted treatment for opiate dependence: A systematic review. Journal of Addictive Diseases. 2016; 35(1):22–35.*
52. *Tanum L et al. Effectiveness of Injectable Extended-Release Naltrexone vs Daily Buprenorphine-Naloxone for Opioid Dependence: A Randomized Clinical Noninferiority Trial. JAMA Psychiatry. 2017 Dec 1; 74(12):1197-1205. doi: 10.1001/jamapsychiatry.2017.3206*
53. *https://clinicaltrials.gov/ct2/show/NCT02032433*
54. *Krupitsky E et al. Randomized trial of long-acting sustained-release naltrexone implant vs oral naltrexone or placebo for preventing relapse to opioid dependence. Arch Gen Psychiatry. 2012; 69:973–981.*
55. *Wolfe D et al. Concerns about injectable naltrexone for opioid dependence. Lancet. 2011; 377: 1468–1470.*
56. *Morgan JR et al. Injectable naltrexone, oral naltrexone, and buprenorphine/naloxone utilization and discontinuation among individuals treated for opioid use disorder in a United States commercially insured population. Journal of Substance Abuse Treatment. 2018 Jul 3.85:90–96. https://doi.org/10.1016/j.jsat.2017.07.001*
57. *FDA Approves First Nonopioid Drug for Opioid Withdrawal - Medscape - May 16, 2018. https://www.medscape.com/viewarticle/896736*
58. *https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm607884.htm*
59. *Cousins G et al. Risk of mortality on and off methadone substitution treatment in primary care: A national cohort study. Addiction. 2016; 111:73–82. https://www.ncbi.nlm.nih.gov/pubmed/26234389*
60. *Ravndal E, Amundsen EJ. Mortality among drug users after discharge from inpatient treatment: An 8-year prospective study. Drug and Alcohol Dependence. 2010; 108(1-2):65–69.*

61. *Strang J et al. Loss of tolerance and overdose mortality after inpatient opiate detoxification: follow up study. BMJ. 2003; 326:959–960.*
62. *Ghitza UE, Tai B. Challenges and opportunities for integrating preventive substance-use-care services in primary care through the affordable care act. Journal of Health Care for the Poor and Underserved. 2014; 25(10):36–45.*
63. *Aletraris L, Bond EM, Roman PM. Adoption of injectable naltrexone in US substance use disorder treatment programs. Journal of Studies on Alcohol and Drugs. 2015; 1:143–151.*
64. *Turner L, Kruszewski SP, Alexander GC. Trends in the use of buprenorphine by office-based physicians in the United States, 2003–2013. The American Journal on Addictions. 2015; 24:24–29.*
65. *Substance Abuse and Mental Health Services Administration, National Survey of Substance Abuse Treatment Services (N-SSATS): 2015. Data on Substance Abuse Treatment Facilities. BHSIS Series S-88, HHS Publication No. (SMA) 17-5031. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2017.*
66. *Use of opioid recovery medications. Sept 2016. https://www.iqvia.com/-/media/iqvia/pdfs/institute-reports/use-of-opioid-recovery-medications.pdf*
67. *Saloner B. Changes in substance abuse treatment use among individuals with opioid use disorders in the United States, 2004–2013 during the last decade, non-medical use. JAMA. 2015; 314(14):1515–1517. https://jamanetwork.com/journals/jama/fullarticle/2456156*
68. *Wu L, Zhu H, Swartz MS. Treatment utilization among persons with opioid use disorder in the United States. Drug and Alcohol Dependence. 2016; 169:117–127.*
69. *Tkacz J, Severt J, Cacciola J, Ruetsch C. Compliance with buprenorphine medication-assisted treatment and relapse to opioid use. The American Journal on Addictions. 2011; 21:55–62.*
70. *Knudsen HK, Abraham AJ, Roman PM. Adoption and implementation of medications in addiction treatment programs. J Addict Med. 2011; 5(1):21-7. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3045214/?report=reader*
71. *Williams AR, Nunes EV, Olfson M. To battle the opioid overdose epidemic, deploy the "Cascade of Care" model. Health affairs blog. 2017 Mar 13. https://www.healthaffairs.org/do/10.1377/hblog20170313.059163/full/*
72. *Sigmon SC et al. Bridging waitlist delays with interim buprenorphine treatment: initial feasibility. Addict Behav. 2015; 51:136–42.*
73. *Jones CM et al. National and state treatment need and capacity for opioid agonist medication-assisted treatment. Am J Public Health. 2015; 105(8): e55–63. https://ajph.aphapublications.org/doi/10.2105/AJPH.2015.302664*
74. *Carroll JJ, Rich JD, Green TC. The more things change: Buprenorphine/naloxone diversion continues while treatment remains inaccessible. J Addict Med 2018; 12:459–465. https://www.ncbi.nlm.nih.gov/pubmed/30095563*
75. *Mitchell SG, Gryczynski J, Schwartz RP. Commentary on "The More Things Change: Buprenorphine/Naloxone Diversion Continues While Treatment is Inaccessible". J Addict Med. 2018 Nov/Dec; 12(6):424-425. S:\CSesti\Mental Health\MAT Dec'18\2018 J Addict Med_Commentary on The More Things Change-Buprenorphine_Naloxone Diversion Continues While Treatment is Inaccessible.pdf*
76. *https://www.cdc.gov/drugoverdose/index.html*
77. *DeFlavio JR et al. Analysis of barriers to adoption of buprenorphine maintenance therapy by family physicians. Rural Remote Health. 2015; 15:3019. Review.*
78. *Korthuis PT et al. Primary Care-Based Models for the Treatment of Opioid Use Disorder: A Scoping Review. Ann Intern Med. 2017 Feb 21; 166(4):268-278. Review. Free PMC Article*
79. *Lagisetty P et al. Primary care models for treating opioid use disorders: What actually works? A systematic review. PLoS One. 2017 Oct 17; 12(10):e0186315. Review. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5645096/*
80. *Risser D et al. Mortality of opiate users in Vienna, Austria. Drug Alcohol Depend 2001; 64: 251–56.*
81. *Auriacombe M, Franques P, Tignol J. Deaths attributable to methadone vs buprenorphine in France. JAMA. 2001; 285(1):45.*
82. *Soyka M et al. One-year mortality rates of patients receiving methadone and buprenorphine maintenance therapy: a nationally representative cohort study in 2694 patients. J Clin Psychopharmacol 2006; 26: 657–60.*
83. *Clausen T et al. Mortality among opiate users: opioid maintenance therapy, age and causes of death. Addiction 2009; 104: 1356–62.*
84. *Degenhardt L et al. Mortality among clients of a state-wide opioid pharmacotherapy program over 20 years: risk factors and lives saved. Drug Alcohol Depend 2009; 105: 9–15.*
85. *Gibson A et al. Exposure to opioid maintenance treatment reduces long-term mortality. Addiction. 2008 Mar; 103(3):462-8. doi: 10.1111/j.1360-0443.2007.02090.x*
86. *Evans E et al. Mortality among individuals accessing pharmacological treatment for opioid dependence in California, 2006-10. Addiction. 2015; 110:996–1005.*
87. *Dupouy J et al. Mortality Associated With Time in and Out of Buprenorphine Treatment in French Office-Based General Practice: A 7-Year Cohort Study. Ann Fam Med. 2017 Jul; 15(4):355-358. https://www.ncbi.nlm.nih.gov/pubmed/28694272*
88. *Ma J et al. Effects of medication-assisted treatment on mortality among opioids users: systematic review and meta-analysis. Mol Psychiatry. 2018 Jun 22. doi: 10.1038/s41380-018-0094-5*
89. *Amato L et al. Methadone at tapered doses for the management of opioid withdrawal. Cochrane Database Syst Rev 2013; 2: CD003409. https://www.ncbi.nlm.nih.gov/pubmed/23450540*
90. *Larochelle MR et al. Medication for Opioid Use Disorder after Nonfatal Opioid Overdose and Association with Mortality: A Cohort Study. Ann Intern Med. 2018 Aug 7; 169(3):137-145. https://www.ncbi.nlm.nih.gov/pubmed/29913516 https://medicine.yale.edu/edbup/LaRochelle%202018_341141_174718_5_v2.pdf*
91. *Pierce M et al. Impact of treatment for opioid dependence on fatal drug-related poisoning: a national cohort study in England. Addiction. 2016 Feb; 111(2):298-308. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4950033/pdf/ADD-111-298.pdf*
92. *White M et al. Fatal opioid poisoning: a counterfactual model to estimate the preventive effect of treatment for opioid use disorder in England. Addiction 2015 Aug; 110(8):1321-9. https://onlinelibrary.wiley.com/doi/pdf/10.1111/add.12971*
93. *Cornish R et al. Risk of death during and after opiate substitution treatment in primary care: prospective observational study in UK General Practice Research Database. BMJ 2010; 341: c5475.*

94. *D'Aunno T, Park SE, Pollack HA. Evidence-based treatment for opioid use disorders: A national study of methadone dose levels, 2011-2017. J Subst Abuse Treat. 2019 Jan; 96:18-22. S:\CSesti\Mental Health\MAT Dec'18\2019 J Subst Abuse Treat_Evidence-based treatment for opioid use disorders-national study of methadone dose levels 2011-2017.pdf*
95. *Zanis DA, Woody GE. One year mortality rates following methadone treatment discharge. Drug Alcohol Depend. 1998; 52(3):257-260.*
96. *Metzger DS et al. Human immunodeficiency virus seroconversion among intravenous drug users in and out of treatment: an 18 month prospective follow-up. J Acquir Immune Defic Syndr. 1993; 6(9):1049-1056.*
97. *Ball JC, Ross A. The Effectiveness of Methadone Maintenance Treatment. New York, NY: Springer Verlag; 1991.*
98. *McLellan AT et al. The effects of psychosocial services in substance abuse treatment. JAMA. 1993; 269(15):1953-1960.*
99. *Kleber HD. Methadone maintenance 4 decades later: thousands of lives saved but still controversial. JAMA. 2008 Nov 19; 300(19):2303-5. https://jamanetwork.com/journals/jama/fullarticle/182898*
100. *Liao DL et al. Higher methadone doses are associated with lower mortality in patients of opioid dependence in Taiwan. J Psychiatr Res. 2013 Oct; 47(10):1530-4.*
101. *Ledberg A. Mortality related to methadone maintenance treatment in Stockholm, Sweden, during 2006-2013. J Subst Abuse Treat. 2017 Mar; 74:35-41. https://www.clinicalkey.com/service/content/pdf/watermarked/1-s2.0-S0740547216304123.pdf?locale=en_US*
102. *Russolillo A, Moniruzzaman A, Somers JM. Methadone maintenance treatment and mortality in people with criminal convictions: A population-based retrospective cohort study from Canada. PLoS Med. 2018 Jul 31; 15(7):e1002625. https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002625 https://journals.plos.org/plosmedicine/article/file?id=10.1371/journal.pmed.1002625&type=printable*
103. *Jaffe JH, O'Keeffe C. From morphine clinics to buprenorphine: regulating opioid agonist treatment of addiction in the United States. Drug Alcohol Depend. 2003; 70(2 suppl):S3-S11.*
104. *Bell J, Trinh L, Butler B, Randall D, Rubin G. Comparing retention in treatment and mortality in people after initial entry to methadone and buprenorphine treatment. Addiction. 2009; 104(7):1193-1200.*
105. *Aalto M et al. Effectiveness of buprenorphine maintenance treatment as compared to a syringe exchange program among buprenorphine misusing opioid-dependent patients. Nord J Psychiatry. 2011 Sep; 65(4):238-43.*
106. *Thomas CP et al. Medication-assisted treatment with buprenorphine: assessing the evidence. Psychiatr Serv. 2014 Feb 1; 65(2):158-70. Review. https://ps.psychiatryonline.org/doi/pdf/10.1176/appi.ps.201300256*
107. *Larance B et al. The diversion and injection of a buprenorphine-naloxone soluble film formulation. Drug Alcohol Depend 2014; 136:21–7.*
108. *Schuman-Olivier Z et al. Clinician beliefs and attitudes about buprenorphine/naloxone diversion. Am J Addict 2013; 22:574–80.*
109. *Drug Enforcement Agency Office of Diversion Control. National Forensic Laboratory Information System (NFLIS) 2014 Annual Report*
110. *AR Bazazi, et al. J Addict Med. (2011)*
111. *Schuman-Olivier Z. et al. J. Subst. Abuse Treat. (2010)External link, please review our disclaimer.*
112. *Sigmon SC et al. Interim buprenorphine vs. waiting list for opioid dependence. N Engl J Med 2016; 375:2504–2505.*
113. *Stoller KB. A collaborative opioid prescribing (CoOP) model linking opioid treatment programs with office-based buprenorphine providers. Addict Sci Clin Pract 2015; 10(suppl 1):A63.*
114. *DiPaula BA, Menachery E. Physician-pharmacist collaborative care model for buprenorphine-maintained opioid-dependent patients. J Am Pharm Assoc (2003) 2015; 55:187–192.*
115. *ASAM National Practice Guideline. For the use of Medications for the Treatment of Addiction involving Opioid Use. 2015. https://www.asam.org/docs/default-source/practice-support/guidelinesand-consensus-docs/asam-national-practice-guideline-supplement.pdf?sfvrsn=24*
116. *Algorithm. https://www.uptodate.com/contents/image?imageKey=PSYCH%2F115474&topicKey=DRUG_GEN%2F8484&source=see_link*
117. *Belenko S et al. The Juvenile Justice Behavioral Health Services Cascade: A new framework for measuring unmet substance use treatment services needs among adolescent offenders. Journal of Substance Abuse Treatment. 2017; 74:80–91.*

E. Example: Charter

[Project Name] Charter

Problem Statement:

*Suggested format: **What** (what is the problem), **Who** (who is involved), **When** (frequency of problem occurrence), **Where** (Location of the Problem), **How/How Much** (how bad is the problem)*

Aim Statement:

Measures you ultimately want to move. All projects must have a SMART (Specific, Measurable, Agreed Upon, Realistic, Time Bound) outcome goal. (i.e. I will arrive to meetings on time 100% of the time within 3 months.)

Outcome Measurement:

Measures you ultimately want to move. They tell you how the system is performing, i.e., what is the ultimate result? (i.e. percent of the time you arrive punctually to meetings)

Balancing Measures:

Measures to track that you do not unintentionally decrease a different component of the quadruple aim (outcomes, cost, patient experience and caregiver satisfaction)

Project Scope:

Words –what is included and excluded

Forecasted Financial Benefit:

$000,000

Strategic Alignment:

Words

Project Sponsor:

Name

Project Scope:

Names

Project Scope:

Names

Process Owners:

Name(s)

E. Template: Charter

_____ Charter

Project Title

Problem Statement:

Aim Statement:

Outcome Measurement:

Balancing Measures:

Project Scope:

Project Sponsor:

Process Owners:

Forecasted Financial Benefit:

Project Team Members:

Strategic Alignment:

Quad Members:

F. Example: Project Planning Form

Team: John, Sally, Mark, Dave, Laura, and Beth **Project**: Lowering Depression Scores: Achieve a 15-point decrease in PHQ-9 scores for 50% of depressed patients by May 1.

Driver – list the drivers you'll be working on	Process Measure	Goal
1. Patient education	% of patients in depressed population receiving education materials before leaving office will have documented use of education materials	90% of patients in depressed population will have documented use of educational materials before leaving office
2. Follow-up assessment	% of patients in depressed population that have a follow-up assessment within the first eight weeks of their initial diagnosis	75% of patients in depressed population have a follow-up assessment within the first eight weeks of their initial diagnosis
3.		
4.		
5.		
6.		

Driver Number (from above)	Change Idea	Tasks to Prepare for Tests	PDSA	Person Responsible	Timeline (T = Test; I = Implement; S = Spread)												
					Week												
					1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Provide pamphlet and link to short video at time of patient discharge	Need to make sure we have enough pamphlets on site; need to ensure link to video works	Nurse will hand materials to patient before leaving the exam room with all patients scoring high on the PHQ-9	Beth and Mark	T	T											
2	Patients will come back to the office for a follow-up assessment within eight weeks of depression diagnosis	Need to schedule appointments within timeframe and get patients to attend follow-up appointment; need to make sure secretaries are aware of this test	Have secretaries write down the date and time of the follow-up appointment on the back of the clinic's business card	Laura	T	T											

This form has been adapted from the Institute of Healthcare Improvement

F. Template: Project Planning Form

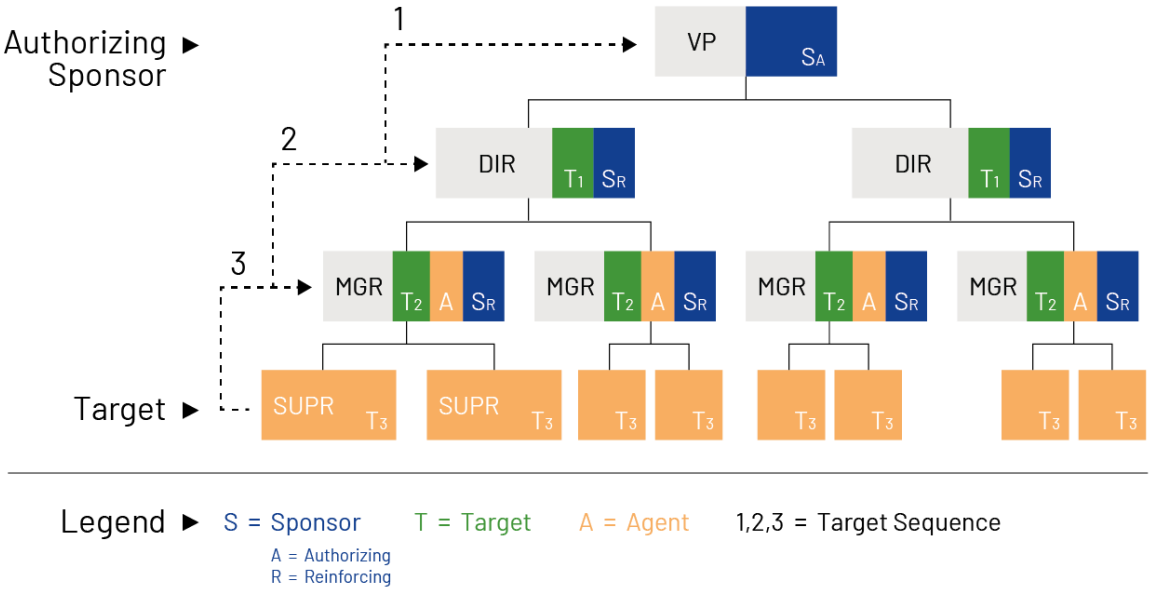
Team:	Project:

Driver – list the drivers you'll be working on	Process Measure	Goal
1.		
2.		
3.		
4.		
5.		
6.		

Driver Number (from above)	Change Idea	Tasks to Prepare for Tests	PDSA	Person Responsible	Timeline (T = Test; I = Implement; S = Spread)													
					Week													
					1	2	3	4	5	6	7	8	9	10	11	12	13	14

This form has been adapted from the Institute of Healthcare Improvement

G. Cascading Executive Sponsorship



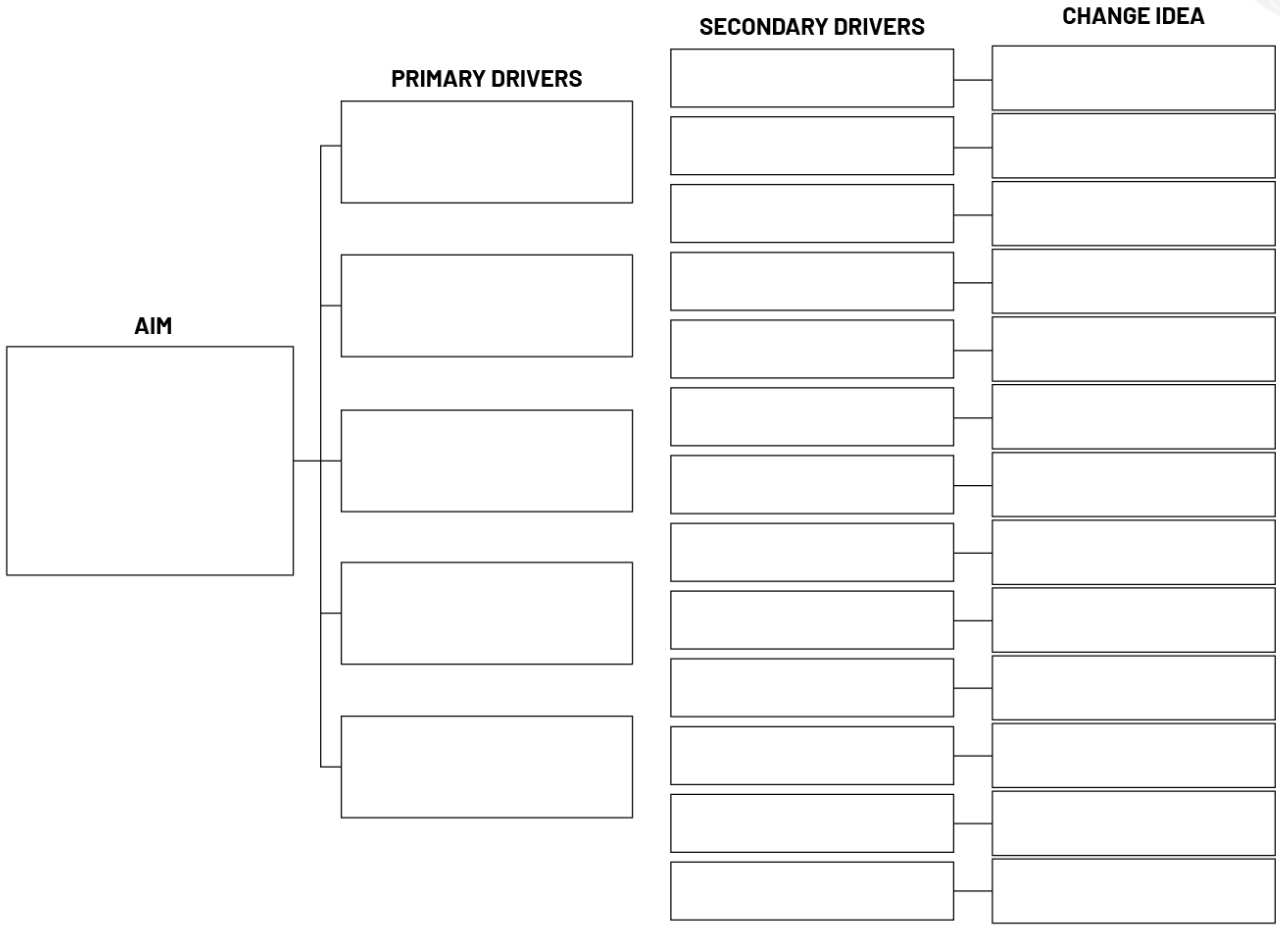
H. Elevator Pitch

Clarify Your Message with the 4-Ps

INSTRUCTIONS: Fill in each box to help clarify your message.

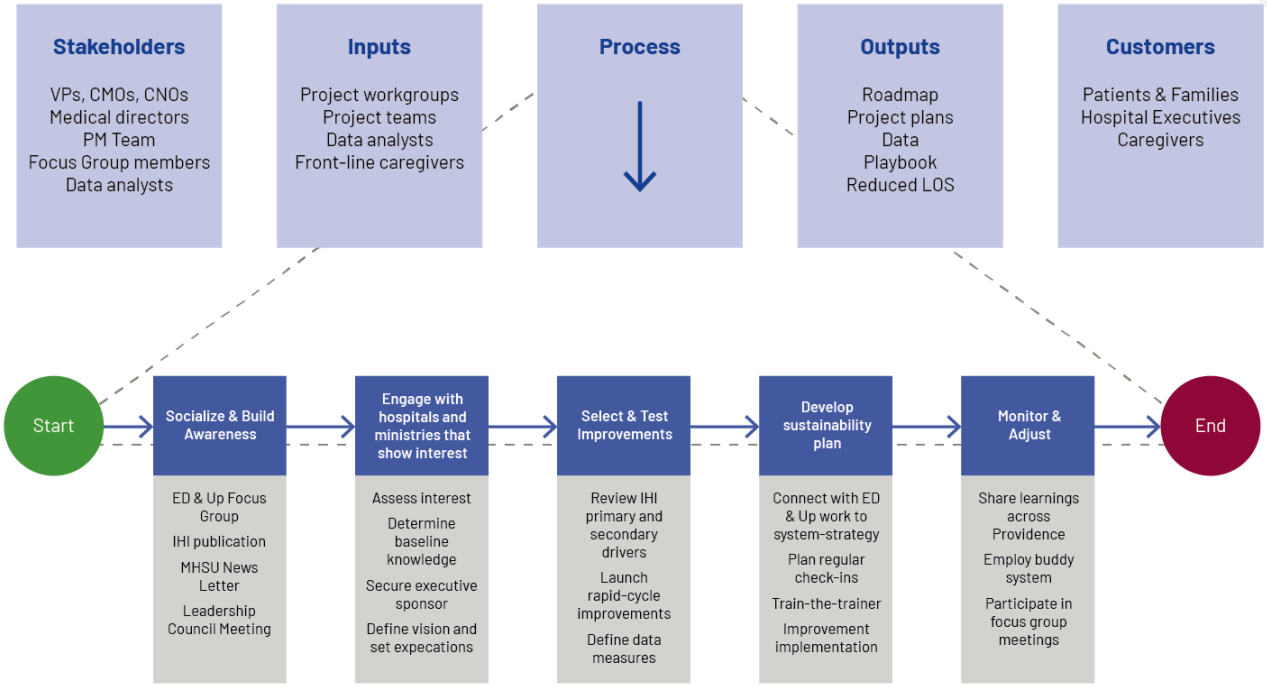
Purpose The logic behind the change	**Picture** Show/co-create the picture
Plan Lay out the plan	**Part** Allocate the parts

I. Driver Diagram Template

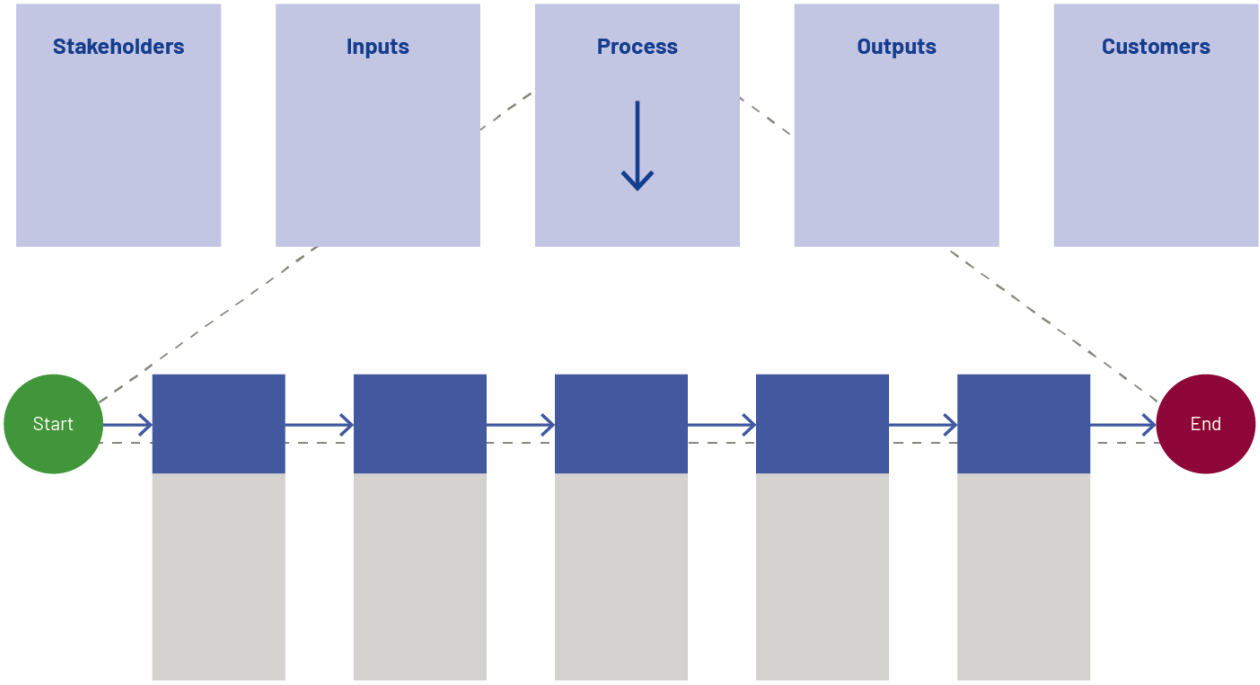


Adapted from the Institute of Healthcare Improvement

J. Example: SIPOC Diagram

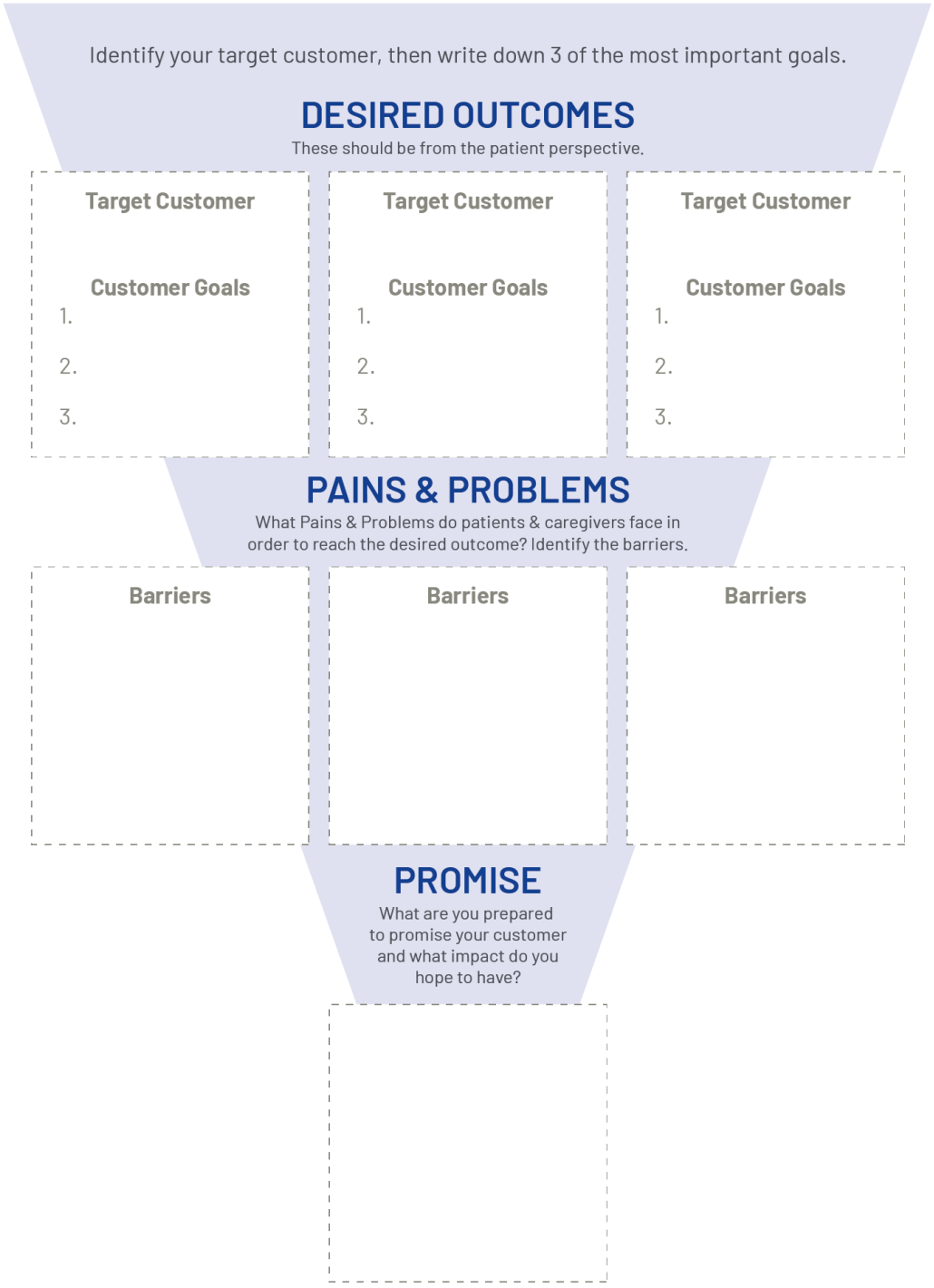


J. Template: SIPOC Diagram



K. Example: Customer Promise Tool

K. Template: Customer Promise Tool



L. PDSA Cycle Tracker (IHI)

PDSA	Person Responsible	Timeline (T = Test; I = Implement; S = Spread)													
		Week													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Nurse will hand materials to patient before leaving the exam room with all patients scoring high on the PHQ-9	Beth and Mark	T	T												
Have secretaries write down the date and time of the follow-up appointment on the back of the clinic's business card	Laura	T	T												

PDSA	Person Responsible	Timeline (T = Test; I = Implement; S = Spread)													
		Week													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14

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