

# Treatment of Opioid Use Disorder

Medication Assisted Treatment

It's a new day

Optum Behavioral Health Provider Network

December 2019



**OPTUM**®

# Topics

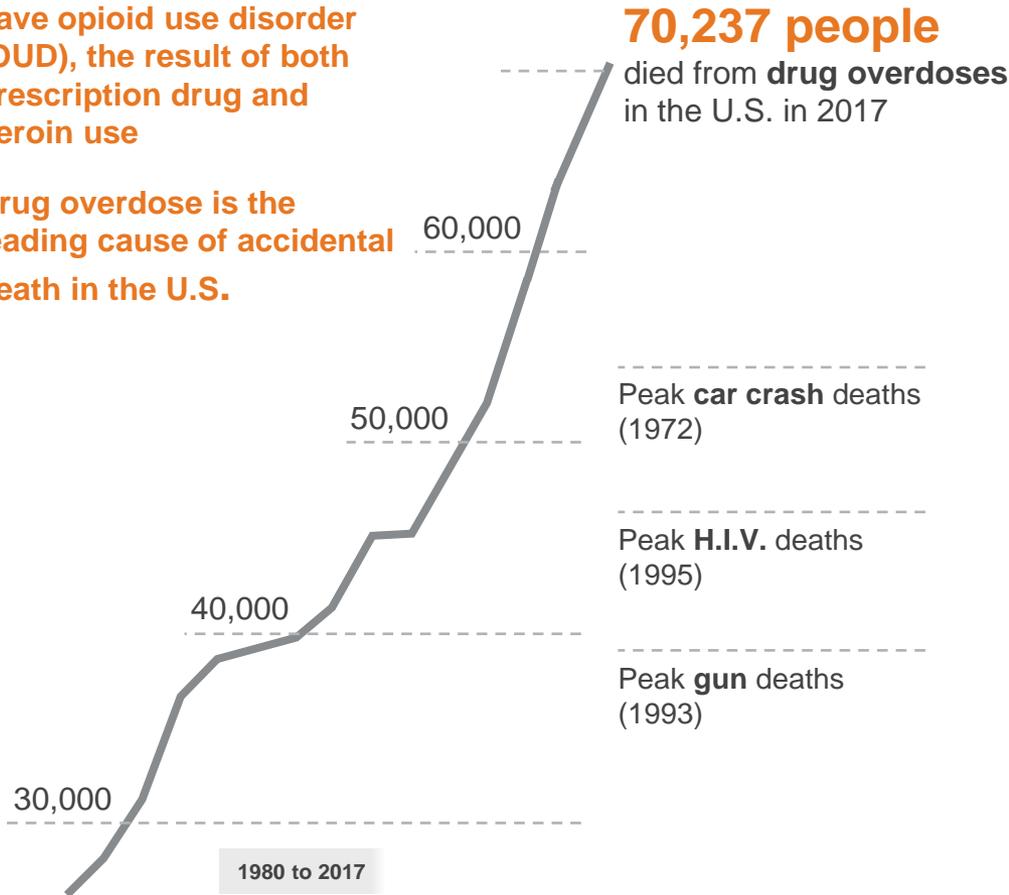
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## **MAT emerges as standard of care**

- OptumLabs/Optum Behavioral Health Comparative Effectiveness Research OUD Study
- Call to Action
- Current MAT Coverage

# The opioid epidemic is a complex, national crisis

- Nearly 3 million Americans have opioid use disorder (OUD), the result of both prescription drug and heroin use
- Drug overdose is the leading cause of accidental death in the U.S.



Adapted from The Upshot, New York Times. 'The numbers are so staggering.' Overdose deaths set a record last year. 2018 Nov 29.

... it's also expensive ...

**\$4.5B**

opioid use disorder (OUD) cost burden on UHG in 2016.

**\$12,000+**

cost of untreated OUD per UHC member per year

... and multi-faceted.

**30+**

different opioid initiatives across the enterprise.

The epidemic impacts every aspect of the health care system and millions of people nationwide — so do UHG and OptumLabs partners.

*How can we align and collaborate to make meaningful change?*

## Medications to Treat Opioid Use Disorder

### Medications to Treat Opioid Use Disorder

Research Report Series

#### Contents

[Overview](#)

[How do medications to treat  
opioid use disorder work?](#)

### How effective are medications to treat opioid use disorder?

Abundant evidence shows that methadone, buprenorphine, and naltrexone all reduce opioid use and opioid use disorder-related symptoms, and they reduce the risk of infectious disease transmission as well as criminal behavior associated with drug use.<sup>15</sup> These medications also increase the likelihood that a person will remain in treatment, which itself is associated with lower risk of overdose mortality, reduced risk of HIV and HCV transmission, reduced criminal justice involvement, and greater likelihood of employment.<sup>15</sup>

- The evidence is clear that medication assisted therapy (MAT) with buprenorphine or methadone is the best treatment available.
- Many people receive non-evidence-based treatment resulting in higher costs and unwarranted variation in patient clinical outcomes.

# Opioid Use Disorder (OUD) Pathways & Comparative Effectiveness Project

Sponsored by Optum Behavioral Health; conducted by OptumLabs & clinical co-investigators

## SCIENTIFIC LEADERSHIP/STUDY CONDUCT

### OptumLabs

Scientific leadership, methods, project management, analysis

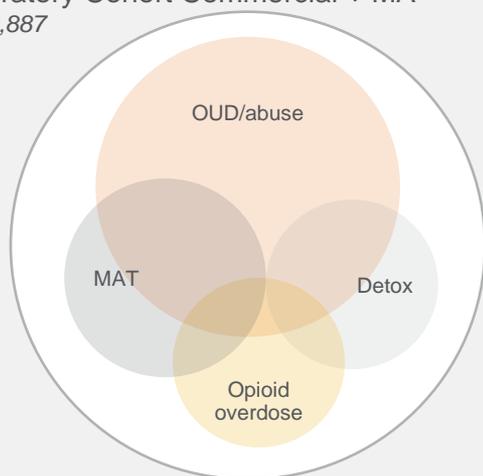
### Clinical co-investigators

Marc Larochelle, MD, MPH, Boston Medical Center and Sarah Wakeman, MD, Massachusetts General Hospital

### Phase 1

Exploratory study of treatment pathways

Exploratory Cohort Commercial + MA  
N=122,887



### Phase 2

Comparative effectiveness study

Comparative Cohort Commercial + MA  
N=40,885

*Confirmed opioid use disorder*

Comparative Cohort — Treatment Pathway	%
Total: 40,885	100.0
No treatment	5.2
Inpatient detox/RTC	15.8
BH: Intensive outpatient/partial hospitalization	4.8
MAT: Buprenorphine/methadone	12.5
MAT: Naltrexone	2.4
BH: Outpatient	59.0

# Summary: Study description

This study examined the costs and clinical outcomes associated with OUD treatment. We created one of the largest longitudinal cohorts (~41k) using UHC commercial and Medicare Advantage (MA) claims, and categorized individuals according to initial OUD treatment type.

## **We identified six separate care pathways/treatment groups:**

1. IP detox/residential treatment center (RTC)
2. Behavioral health (BH) with intensive outpatient (IOP) or partial hospitalization (PH)
3. MAT with buprenorphine or methadone
4. MAT with naltrexone
5. Behavioral health (BH) outpatient services
6. No treatment

## Primary outcomes evaluated

1. Total cost of care (TCoC): medical, behavioral, and pharmacy
2. Adverse clinical outcomes: overdose (OD), opioid-related ED visit or IP stay, and inpatient detox/ RTC — post treatment initiation at 3, 6, and 12 months

# Summary: Study results

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## Clinical outcomes at 3, 6, and 12 months of continuous enrollment

- MAT- buprenorphine or methadone initiators:
  - Fewest overdoses and fewest subsequent detox stays
  - Had similar, lower rates of opioid-related IP ED utilization as the BH outpatient group
- IP Detox/residential treatment center (RTC) initiators:
  - Were most likely to have a subsequent IP detox stay or opioid-related IP or ED visit
  - Had similar, higher rates of overdose as the no treatment group

## Costs

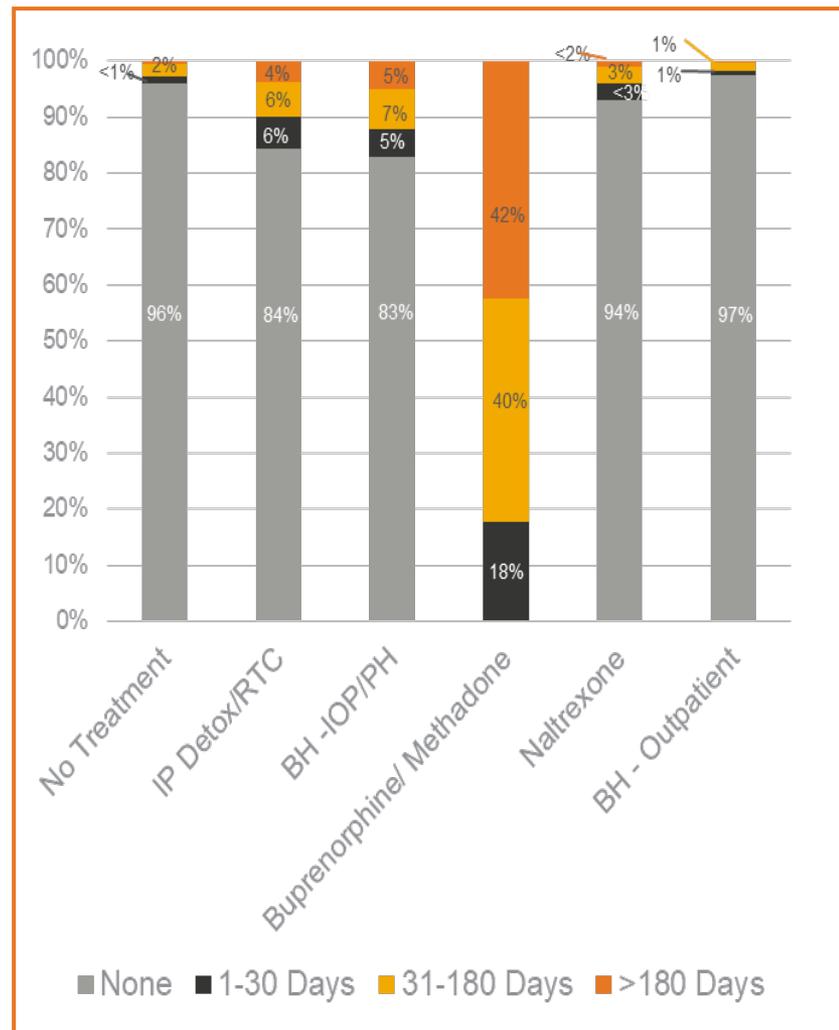
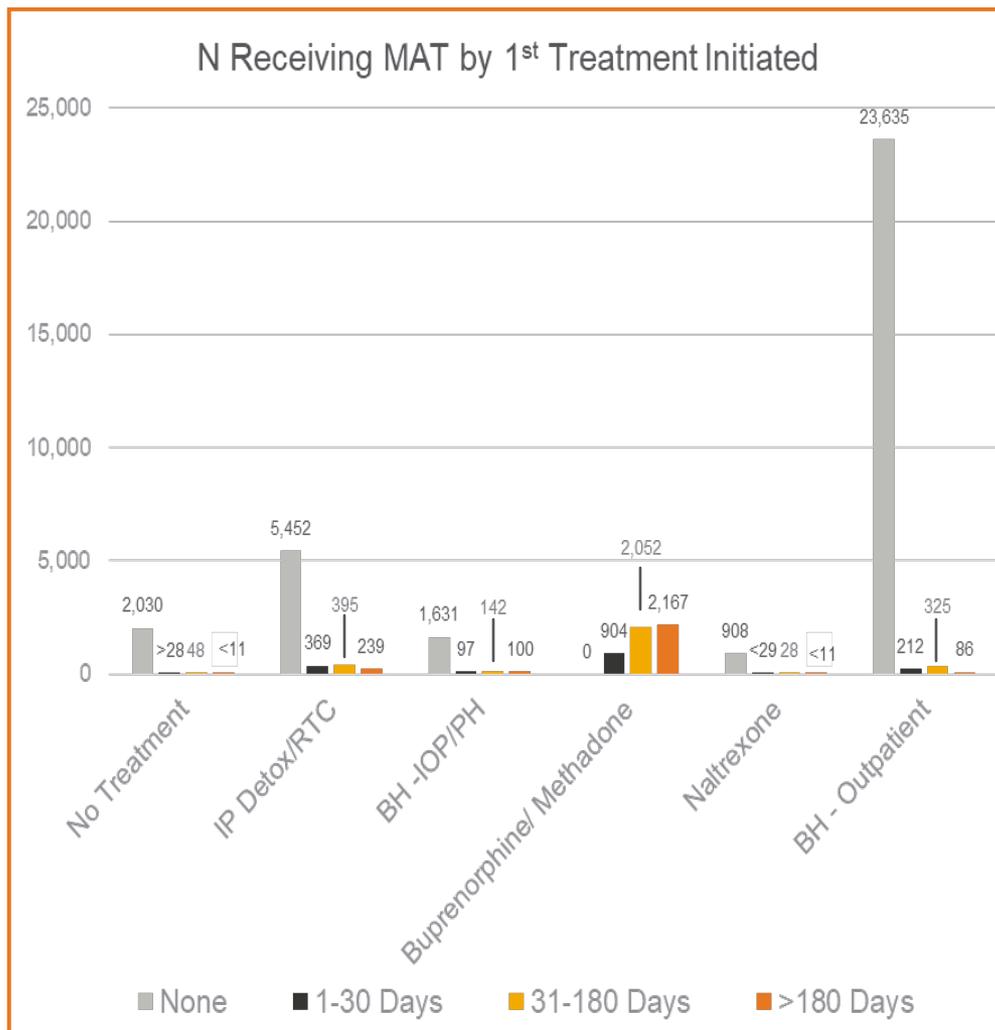
- MAT – buprenorphine or methadone initiators:
  - Had ~50% lower TCoC than the no treatment and ~75% lower TCoC than the IP Detox/RTC over 90 days post treatment initiation.
- IP Detox/RTC initiators had the highest costs at 3, 6, and 12 months of continuous enrollment

## Bottom line:

- Treatment with buprenorphine / methadone is clearly indicated and should be “the standard of care”
- Longer duration (>180 days) of buprenorphine / methadone had better clinical outcomes and TCoC
- IP Detox/RTC may be over-utilized

# Initial treatment bucket by MAT with buprenorphine or methadone duration

Duration of MAT with buprenorphine or methadone over one year of follow up

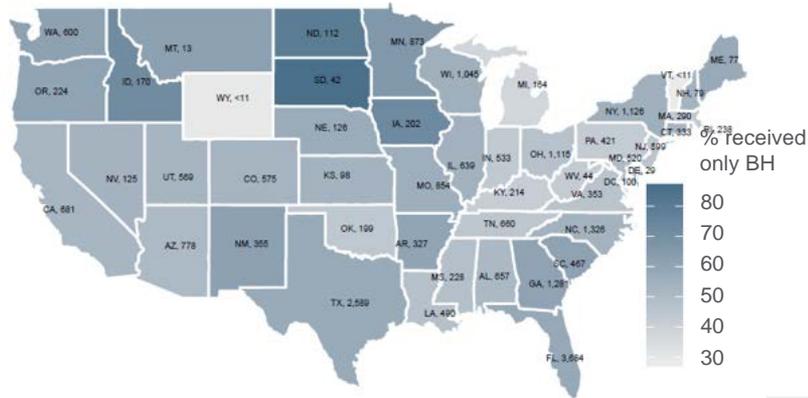


# Treatment for OUD is influenced by where you live:

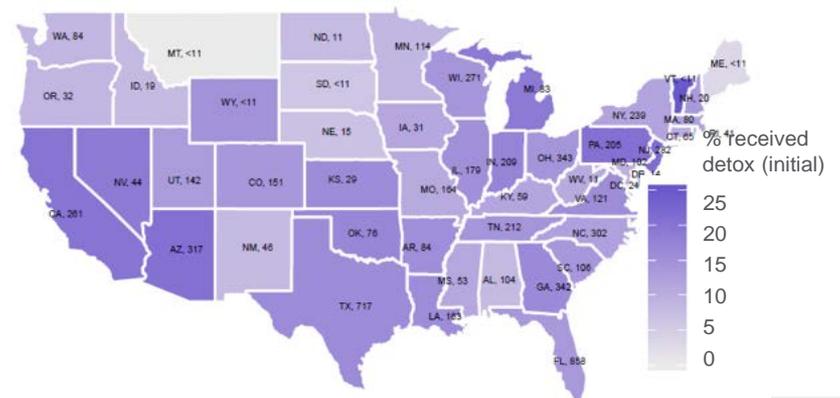
*Initial treatment: (A) behavioral health only\*, (B) inpatient detox/RTC, (C) MAT with buprenorphine/methadone, (D) No Treatment*

**Geographical distribution varies by treatment category (Note: some states have sparse numbers)**

**A Behavioral Health only** was common throughout the US; with the highest proportions in the Dakotas, Idaho and Iowa



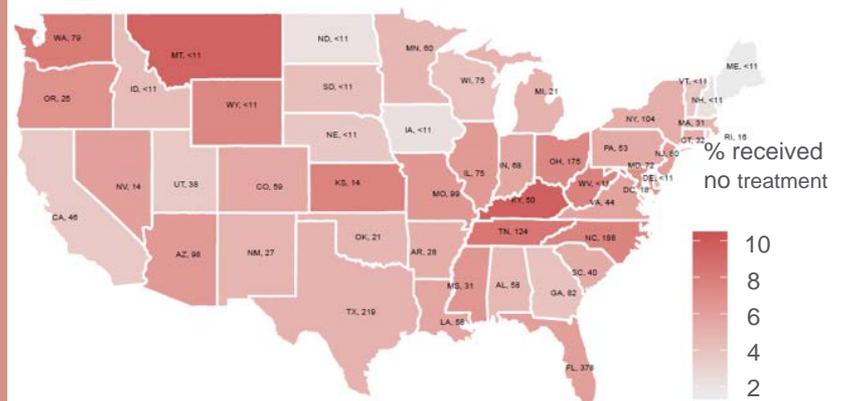
**B Inpatient detox/RTC** was most common in Vermont, Pennsylvania and the southwest



**C MAT with Buprenorphine or Methadone** higher in Midwest. Some states with highest proportion had low numbers (e.g., Montana)



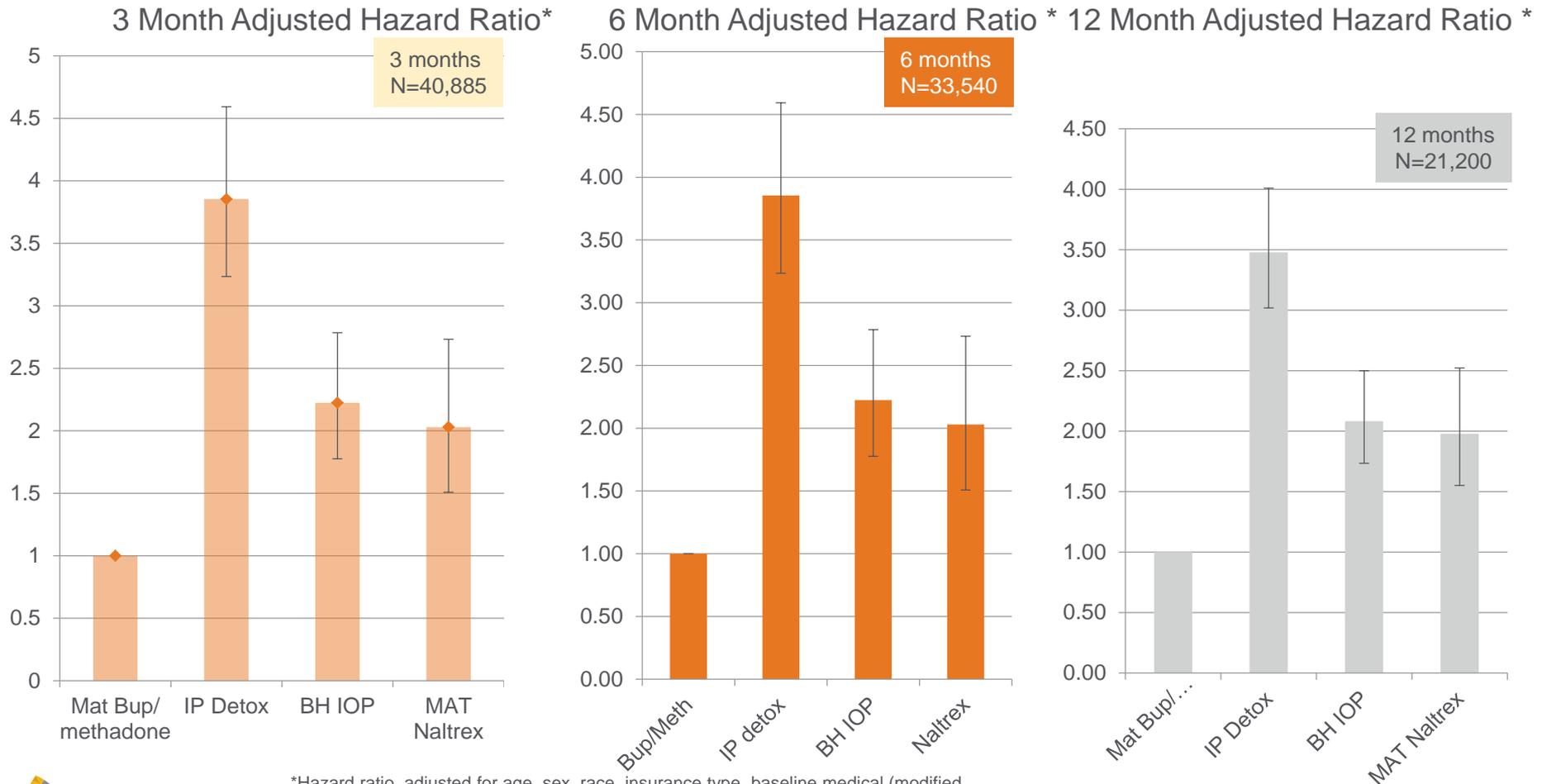
**D No treatment** with behavioral health, inpatient detox/RTC, and/or MAT



Note: the population includes Commercial and Medicare Advantage available in OptumLabs. Medicaid, PacifiCare, Oxford, and Legacy systems are not included. Maps limited to those with non-missing values and residing in continental US

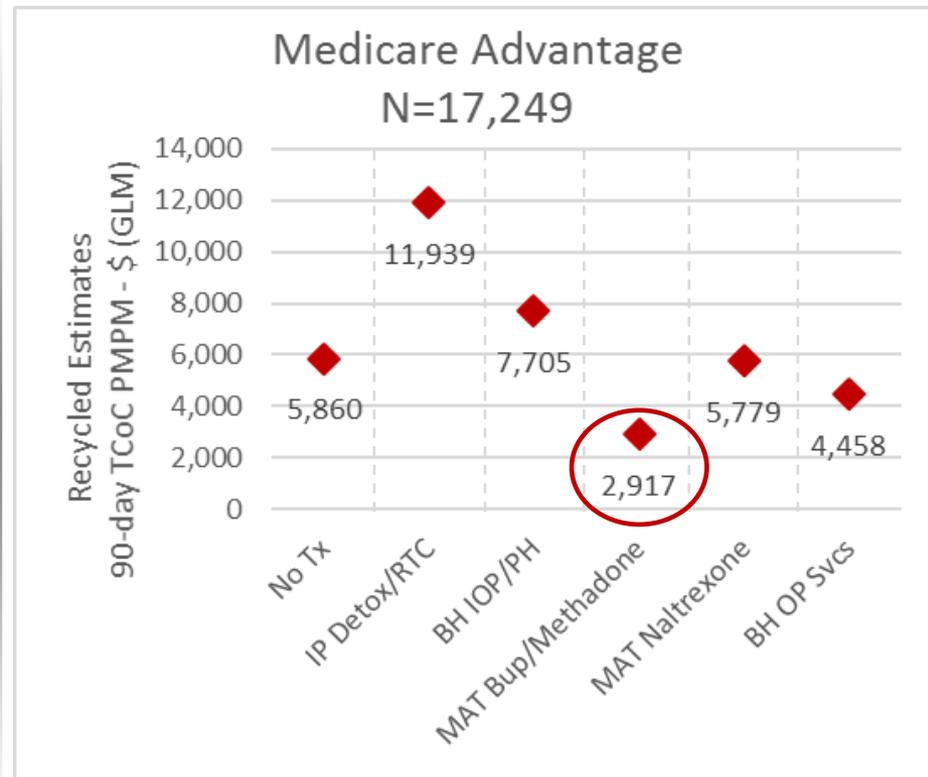
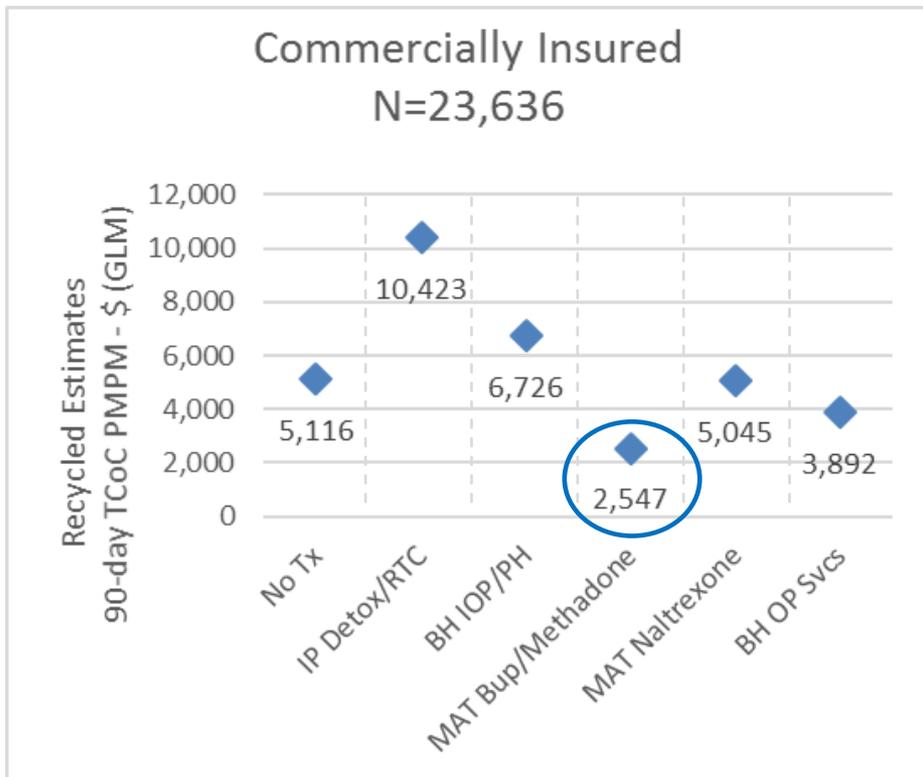
# Those who initiated with buprenorphine/methadone had the **lowest risk of subsequent IP Detox/RTC** at 3, 6, and 12 months of continuous enrollment

IP Detox/RTC initiators had strongest likelihood of subsequent detox stay and BH IOP/partial hospitalization and Naltrexone group had similarly increased hazard of subsequent IP Detox/RTC



# MAT with buprenorphine or methadone initiators had the **lowest adjusted\* mean TCoC PMPM** (medical, Rx, behavioral) in the first 3 months post-treatment initiation

Approximately 50% of the cost of the no treatment and ~25% of the cost of IP Detox/RTC groups

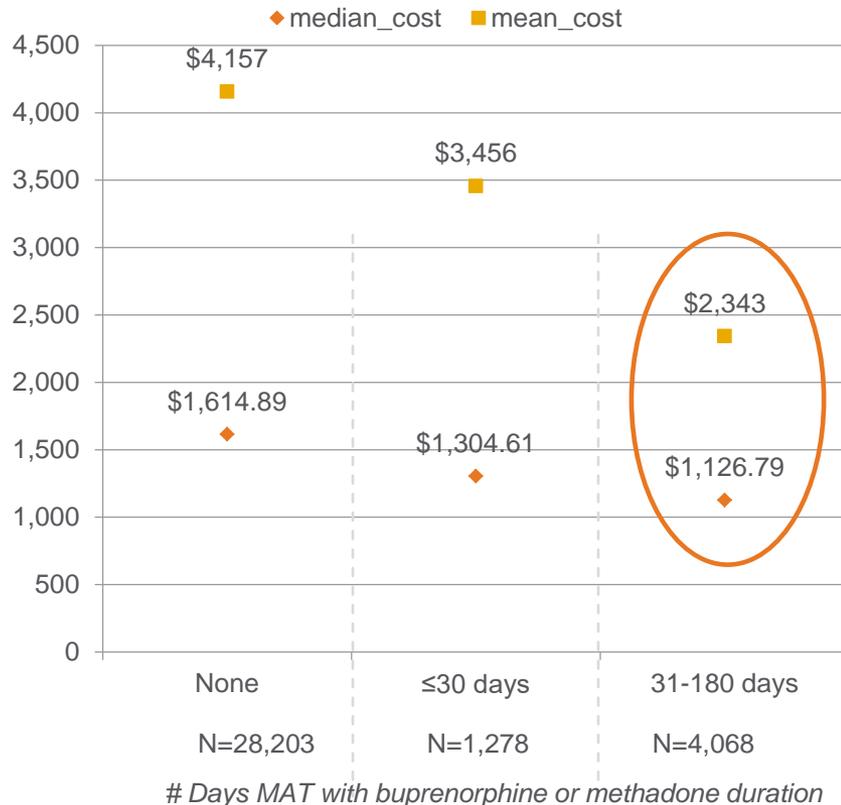


\*Adjusted for: age, sex, race, insurance type, baseline medical and mental health comorbidities and indicators of OUD severity

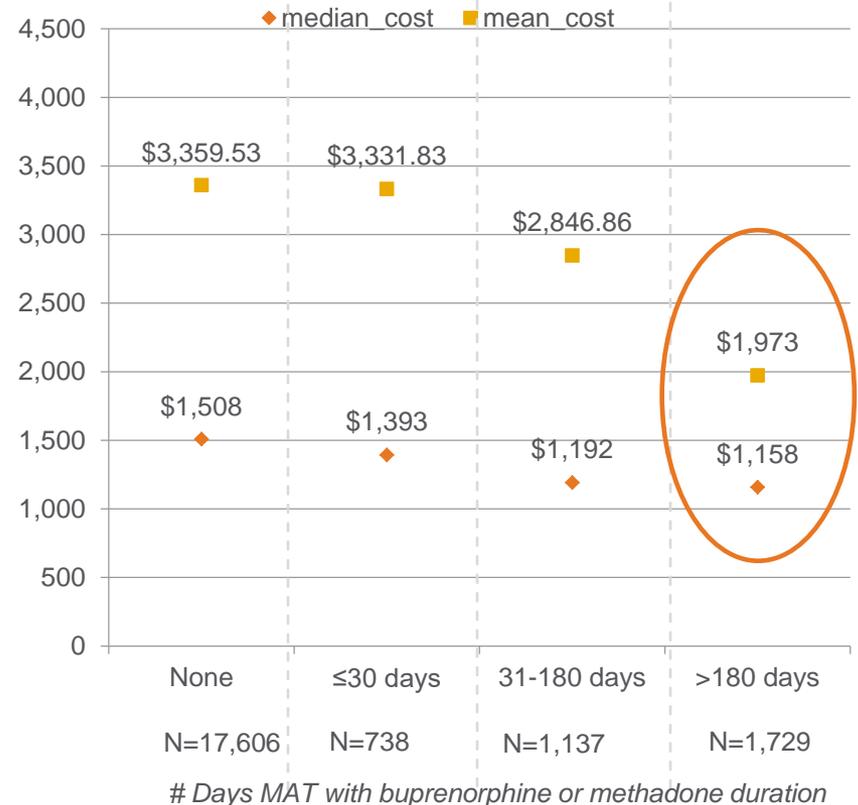
# Longer treatment with MAT with buprenorphine or methadone is associated with lower TCoC\* (medical, Rx, behavioral) regardless of initiating treatment group

\* Median and mean unadjusted TCoC PMPM for MAT with buprenorphine or methadone with 6 and 12 months of continuous enrollment)

**TCoC PMPM: Individuals with 6 Months continuous enrollment**



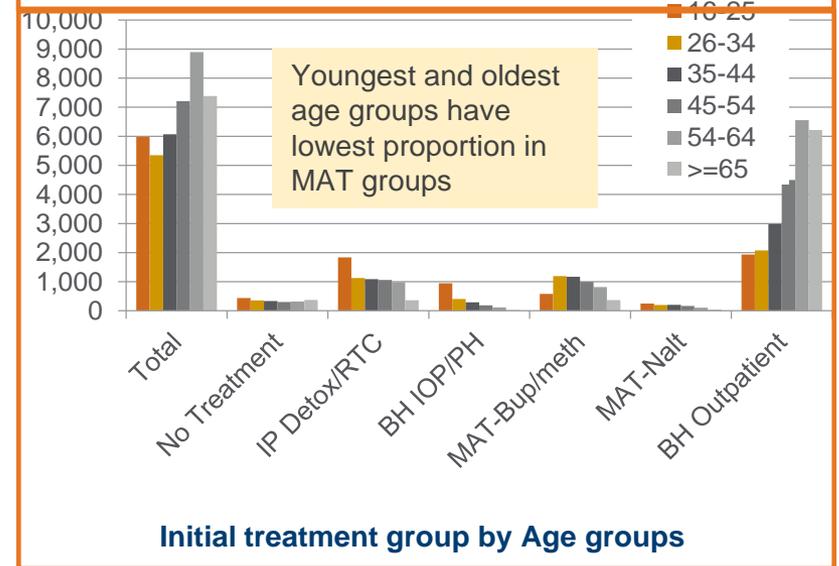
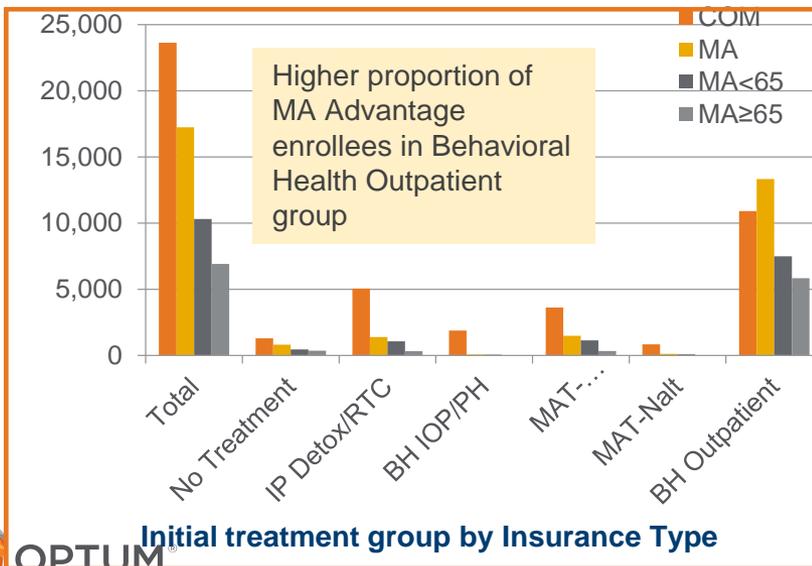
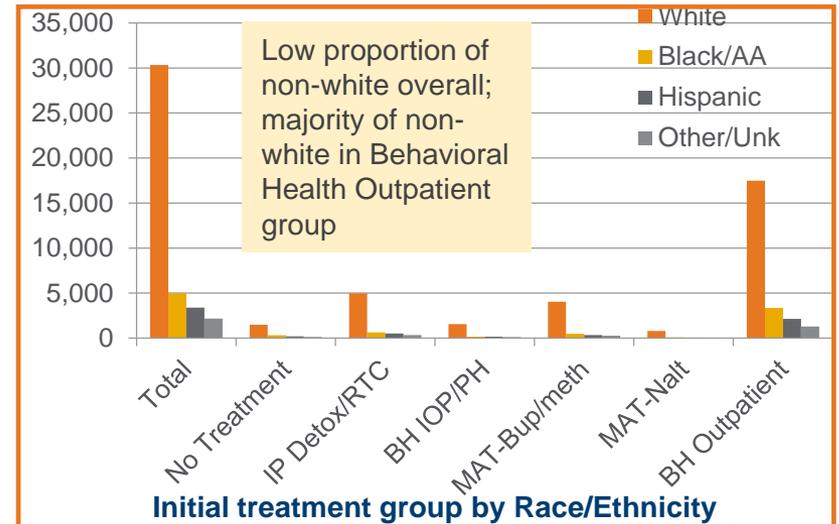
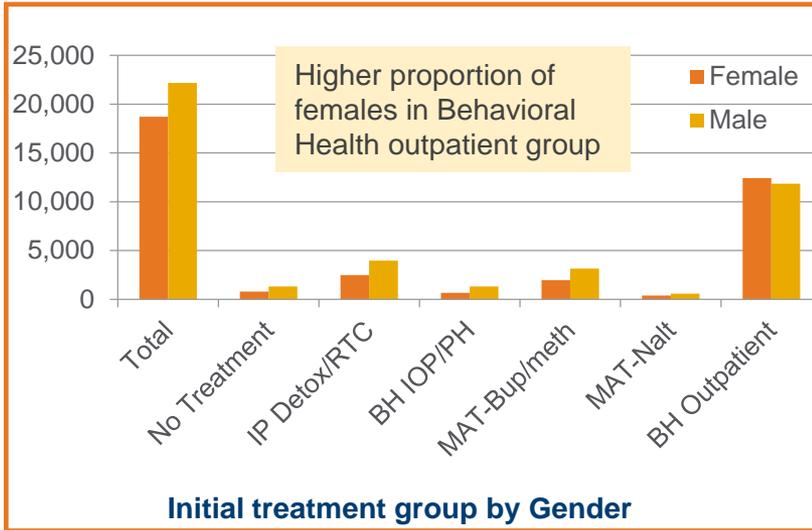
**TCoC PMPM : Individuals with 12 months continuous enrollment**



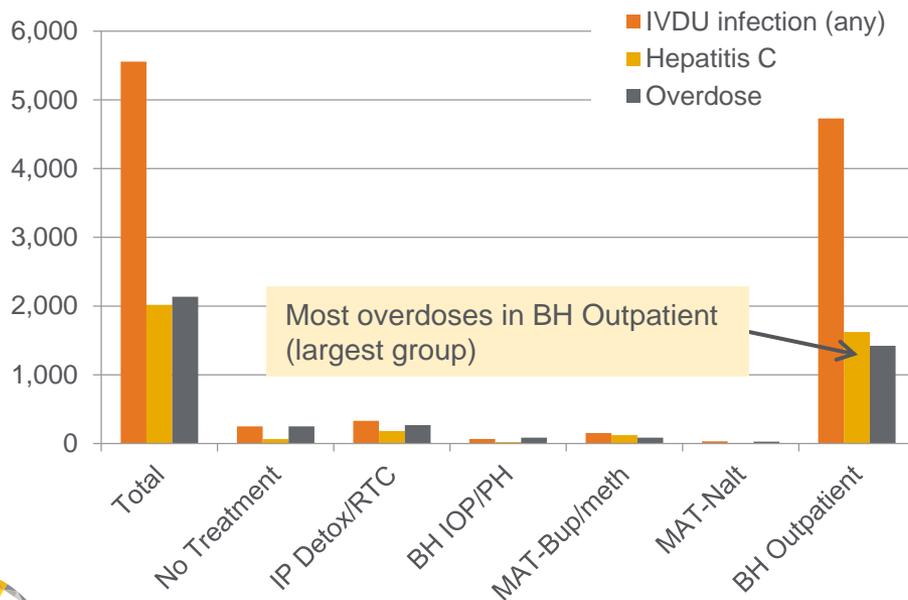
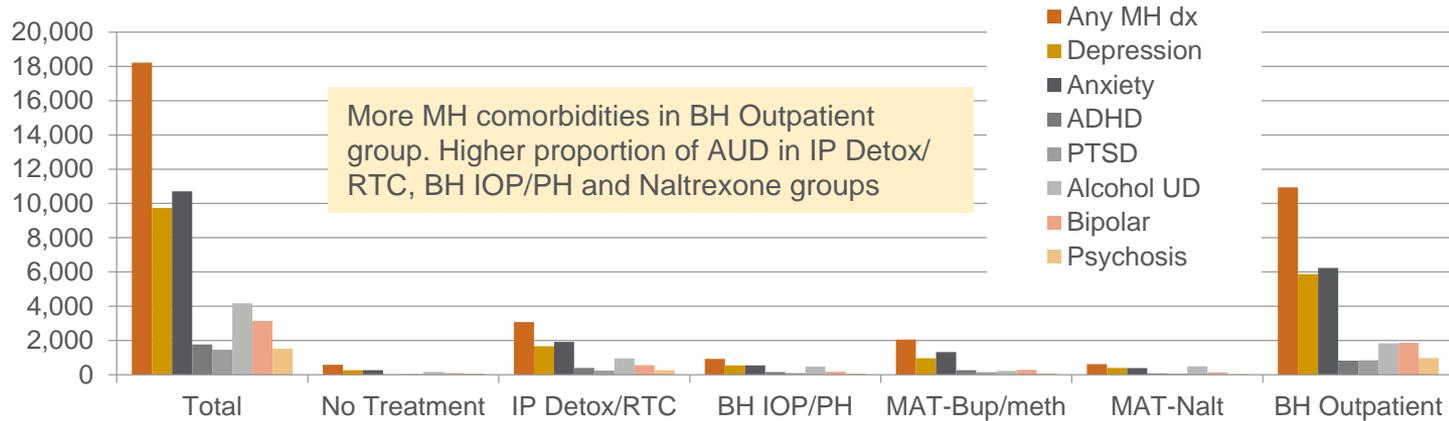
# Appendix

# Demographics and insurance type by Treatment Buckets

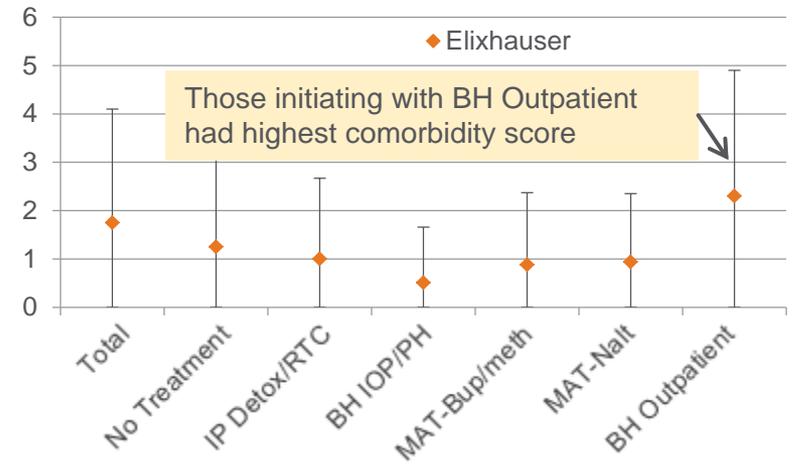
ODU affects everyone (all age groups and insurance types)



# Comorbidities and indicators of OUD Severity by initial treatment group



## Elixhauser



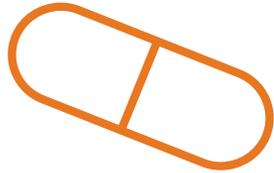
# Call to action



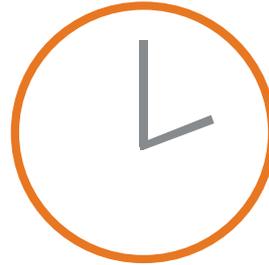
Substance use disorders are chronic and complex  
**... a chronic but treatable  
brain disease, and not a moral  
failing or character flaw**

*Office of the Surgeon General, Facing Addiction in America:  
The Surgeon General's Report on Alcohol, Drugs, and Health. 2017.*

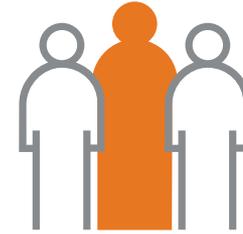
# Opioid use disorder



**32% of SUD cases** are attributed to opioid use disorder<sup>1</sup>



**Every 13 minutes,** there is a death from opioid overdose in the U.S.<sup>2</sup>



**2.1M Americans** suffer from an opioid use disorder<sup>3</sup>

## What are opiates?

An opiate is a natural compound that comes from the poppy plant. Morphine, opium itself, codeine and heroin are all opiate derivatives called opioids.<sup>4</sup>

1. Based on Optum analysis of COPM-D facility-based authorization data from the Optum commercial book of business from January 1, 2014, to September 30, 2016 (59,002 total SUD cases, including 30,057 cases of alcohol use disorder and 19,457 cases of opioid use disorder); Nussbaum, October 20, 2016. 2. Hedegaard H, Warner M, Miniño AM. Drug overdose deaths in the United States, 1999–2016. NCHS Data Brief, no 294. Hyattsville, MD: National Center for Health Statistics. 2017/ CDC. Wide-ranging online data for epidemiologic research (WONDER). Atlanta, GA: CDC, National Center for Health Statistics; 2016. (Calculation based on stat: Overdoses involving opioids killed 42,249 people in 2016, or 116 deaths a day. 40% of those deaths were from prescription opioids.). 3. Substance Abuse and Mental Health Services Administration. (2017). Key substance use and mental health indicators in the United States: Results from the 2016 National Survey on Drug Use and Health (HHS Publication No. SMA 17-5044, NSDUH Series H-52). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. 4. Based on Substance Abuse and Mental Health Services Administration (SAMSHA) definition of opioids, updated February 2016; <https://www.samhsa.gov/atod/opioids>

# Alcohol use disorder

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**50% of SUD cases**  
are attributed to  
alcohol use disorder<sup>1</sup>



**3<sup>rd</sup> leading cause**  
of preventable death in  
the U.S.<sup>2</sup>



**\$249B annually**  
approximate cost of  
alcohol misuse in the  
U.S.<sup>3</sup>

1. Based on Optum analysis of COPM-D facility-based authorization data from the Optum commercial book of business from January 1, 2014, to September 30, 2016 (59,002 total SUD cases, including 30,057 cases of alcohol use disorder and 19,457 cases of opioid use disorder); Nussbaum, October 20, 2016. 2. Centers for Disease Control and Prevention (CDC). Alcohol and Public Health: Alcohol-Related Disease Impact (ARDI). Average for United States 2006–2010 Alcohol-Attributable Deaths Due to Excessive Alcohol Use. Available at: [https://nccd.cdc.gov/DPH\\_ARDI/Default/Report.aspx?T=AAM&P=f6d7eda7-036e-4553-9968-9b17ffad620e&R=d7a9b303-48e9-4440-bf47-070a4827e1fd&M=8E1C5233-5640-4EE8-9247-1ECA7DA325B9&F=&D=](https://nccd.cdc.gov/DPH_ARDI/Default/Report.aspx?T=AAM&P=f6d7eda7-036e-4553-9968-9b17ffad620e&R=d7a9b303-48e9-4440-bf47-070a4827e1fd&M=8E1C5233-5640-4EE8-9247-1ECA7DA325B9&F=&D=). 3. Centers for Disease Control and Prevention (CDC). Excessive Drinking is Draining the U.S. Economy (2006 – 2010), July 2018; Available at: <https://www.cdc.gov/features/costsofdrinking/index.html>.

# Impact of substance use disorders in the U.S.

## Epidemic proportions



**21M Americans**

struggle with a substance use disorder.<sup>1</sup>

## Deadly



**200% increase**

in the rate of deaths from drug overdose between 2002 and 2017<sup>2</sup>



**88,000 deaths**

from alcohol-related causes annually<sup>3</sup>

## Often untreated



**Only 1 in 10**

people with substance use disorders receive treatment<sup>4</sup>

## Costly



**\$504 billion**

economic burden of the opioid crisis alone in the United States<sup>5</sup>

1. U.S. Department of Health and Human Services (HHS), Office of the Surgeon General, Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health. Washington, DC: HHS, November 2016. Available at: <https://addiction.surgeongeneral.gov/surgeon-generals-report.pdf>. 2. National Institute on Drug Abuse. Overdose Death Rates – United States. August 2018. Available at: <https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates>. 3. National Institute on Alcohol Abuse and Alcoholism (NIAAA). Alcohol facts and statistics. U.S. Department of Health and Human Services, Updated August 2018; <https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/alcohol-facts-and-statistics>. 4. U.S. Department of Health and Human Services (HHS), Office of the Surgeon General, Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health. Washington, DC: HHS, November 2016. Available at: <https://addiction.surgeongeneral.gov/surgeon-generals-report.pdf>. 5. The Council of Economic Advisors. The Underestimated Cost of the Opioid Crisis. November 2017. Available at: <https://www.whitehouse.gov/sites/whitehouse.gov/files/images/The%20Underestimated%20Cost%20of%20the%20Opioid%20Crisis.pdf>



# Medication-assisted treatment (MAT)

An effective, evidence-based treatment for substance use disorders



Combines **FDA-approved medication** with **counseling, behavioral therapy** and **recovery support**



## **Reduced cost**

for members compared to those who do not use MAT<sup>1</sup>



## **50% greater chance of remission**

(no opioid misuse) than those who receive detoxification or psychosocial treatment alone<sup>2</sup>



## **MAT medications reduce the number of drinking days**

per month, versus no medication<sup>3</sup>

1. From a February 2017 Optum analysis, savings reflect the difference in typical paid per case members who receive MAT interventions vs. those who do not receive MAT interventions for UnitedHealthcare E&I fully insured ASO members with an authorization to SUD treatment from October 1, 2015 to September 30, 2016; Source: C Mao, 2/2/17. 2. Calculated by Optum, based on relative risk ratios from the meta-analysis in: Nielsen S, Larance B, Degenhardt L, Gowing L, Kehler C, Lintzeris N. Opioid agonist treatment for pharmaceutical opioid dependent people. Cochrane Database of Systematic Reviews 2016, Issue 5. Art. No.: CD011117. DOI: 10.1002/14651858.CD011117.pub2, pages 17 and 19. 3. The American Psychiatric Association For the Pharmacological Treatment of Patients with Alcohol Use Disorder; Guideline Statements and Information; January 2018; Available at: <https://psychiatryonline.org/doi/full/10.1176/appi.books.9781615371969.alcohol04>

# MAT Medications

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FDA approval of medications used for MAT allows individuals to seek treatment without the preoccupation of physical cravings or the anxiety of impending withdrawal.

MAT can be tailored to individual needs and can be provided in multiple settings.

Medications used for MAT include:

- ✓ Methadone
- ✓ Buprenorphine / Suboxone
- ✓ Vivitrol / Naltrexone
- ✓ Sublocade (Under Medical Benefit)

# Medications used in MAT

## Appendix 1

### Full agonist (Methadone)

- An opioid that binds completely to the opioid receptor in the brain
- May only be dispensed in a federally regulated methadone clinic (Opioid Treatment Program) for the treatment of OUD
- Must be taken on a daily basis
- Eliminates withdrawal symptoms and relieves drug cravings
- Does not require increased dosing to achieve the same therapeutic effect

### Partial agonist (Buprenorphine / Suboxone/Sublocade)

- Binds partially to the opioid receptor in the brain
- May only be prescribed by a physician, nurse practitioner or physician assistant that has the appropriate FDA license/Data 2000 Waiver Certification
- Can be filled by a community pharmacy
- Must be taken as prescribed in a pill, dissolvable tablet, buccal film, 6 month implantable rods or 30-day IM injection
- Eliminates withdrawal symptoms and relieves drug cravings
- Does not require increased dosing to achieve the same therapeutic effect

### Antagonist (Naltrexone/Vivitrol)

- Inhibits opioids introduced into the system from binding to the opioid receptors in the brain that cause euphoria, dependency, respiratory depression and overdose
- Does not require appropriate FDA-licensure and may be prescribed by a physician, nurse practitioner or physician assistant acting under the scope of their licensure
- Can be filled by a community pharmacy
- Does not require increasing dosing to achieve the same therapeutic effect

# Buprenorphine / Suboxone Providers

## Buprenorphine / Suboxone medications

- May only be prescribed by a physicians, nurse practitioners or physician assistants who have the appropriate Data 2000 Waiver and have obtained a DEAX Certificate
- Providers with this waiver have undergone additional training
- Controlled Substance Registration Certificate will show a DEAX number
- Contracting:
  - Individual Addictionologists or Psychiatrists, nurse practitioners, physician assistants (with the Data 2000 Waiver) - may be individually contracted/credentialed
  - Provider groups with behavioral health services - may be contracted as a group and credentialed as an agency

**CONTROLLED SUBSTANCE REGISTRATION CERTIFICATE**  
UNITED STATES DEPARTMENT OF JUSTICE  
DRUG ENFORCEMENT ADMINISTRATION  
WASHINGTON D.C. 20537

DEA REGISTRATION NUMBER	THIS REGISTRATION EXPIRES	FEE PAID
BH9999999 XH9999999	10-31-2020	\$731

SCHEDULES	BUSINESS ACTIVITY	ISSUE DATE
2,2N,3 3N,4,5	PRACTITIONER-DW/275	10-19-2017

Form DEA-223 (9/2016)

Provider Name  
Clinic Name  
Street Address  
City, ST, Zip

Sections 304 and 1008 (21 USC 824 and 958) of the Controlled Substances Act of 1970, as amended, provide that the Attorney General may revoke or suspend a registration to manufacture, distribute, dispense, import or export a controlled substance.

THIS CERTIFICATE IS NOT TRANSFERABLE ON CHANGE OF OWNERSHIP, CONTROL, LOCATION, OR BUSINESS ACTIVITY, AND IT IS NOT VALID AFTER THE EXPIRATION DATE.

[This SAMHSA link](#) is to check for practitioners authorized to treat with buprenorphine.

# Resources

## [Optum.com](#)

The screenshot shows the top portion of the Optum.com website. At the top left is the Optum logo. To its right is a search bar with the word "SEARCH" and a magnifying glass icon. Below the logo and search bar is a navigation menu with links: "How we help", "Who we help", "Insights", "About", and "Contact us". Below the navigation menu is a breadcrumb trail: "Home > Industry topics". The main content area features a large banner image of a person's hands clasped together, with a tattoo on the left wrist. Overlaid on the left side of the banner is the text: "Working to end the opioid epidemic". Below this headline is a paragraph: "There is no escaping America's opioid problem. In small towns and big cities, someone dies of an overdose every 13 minutes. Our parents, partners, colleagues and friends — from all walks of life — struggle to get beyond the grips of addiction."

## [Provider Express](#)

The screenshot shows the Optum Provider Express website. At the top left is the Optum logo followed by "Provider Express". To the right is a search bar with "Search" and a magnifying glass icon. In the top right corner, there are links: "Log In | First-time User | Global | Site Map". Below the logo and search bar is a navigation menu: "Home", "About Us", "Clinical Resources", "Admin Resources", "Video Channel", "Training", "Our Network", and "Contact Us". Below the navigation menu is a breadcrumb trail: "Home > Clinical Resources > Medication Assisted Treatment". The main content area features a headline: "MAT can help you change lives for the better". To the left of the headline is an image of a tipped-over pill bottle with white pills spilling out. To the right of the headline is a paragraph: "Studies have shown that individuals who receive MAT are 50% more likely to remain free of opioid misuse, compared to those who receive detoxification or psychosocial treatment alone<sup>1</sup>". Below this paragraph is another paragraph: "Medication-assisted treatment is the most effective intervention to treat OUD and is more effective than either behavioral interventions or medication alone.<sup>2</sup>". To the right of the main text is a box titled "Substance Use Disorder Helpline" with the phone number "1-855-780-5955". Below this box is a sub-headline: "A 24/7 helpline for providers and patients to:" followed by a bulleted list: "• Identify local MAT and behavioral health treatment providers and provide targeted referrals for evidence-based care", "• Educate members/families about substance".



# Thank you

**Marilyn S. Gaipa, LCSW, CAC III**

Sr. Director – Behavioral Product

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