

Substance Use Disorder Care Amidst a Converging Drug Epidemic and COVID Pandemic: Challenges and Opportunities

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MASSACHUSETTS
GENERAL HOSPITAL



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

Disclosures

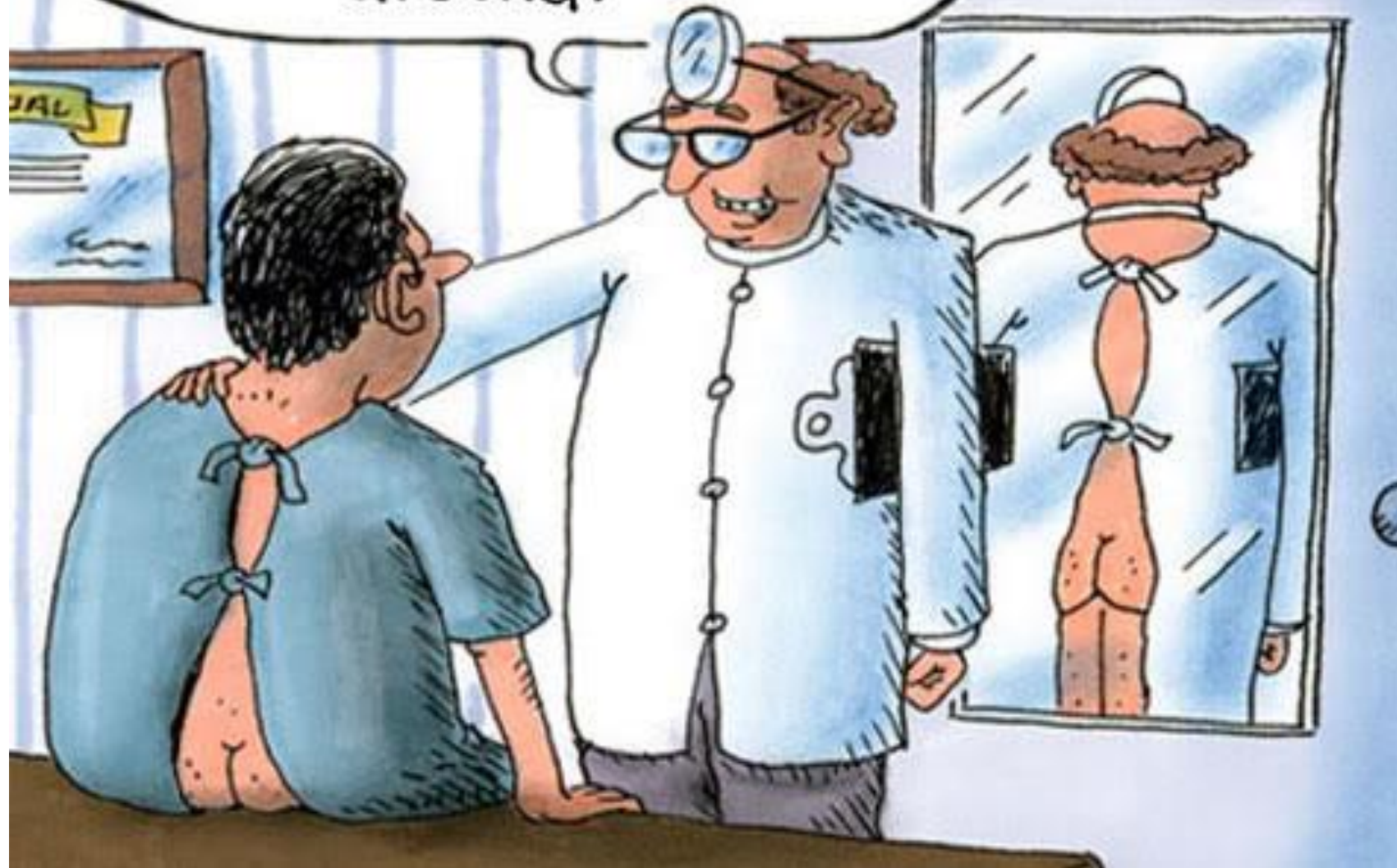
Consultant:

- MCSTAP Massachusetts Consultation Service for the Treatment of Addiction and Pain
- Baycove and Gavin Foundations for Acute Treatment Services
- MAP Health Peer Recovery Support Services
- PATH CCM
- Indivior: non-branded speaker's panel and advisory board
- Column Health Opioid Treatment Program: medical director

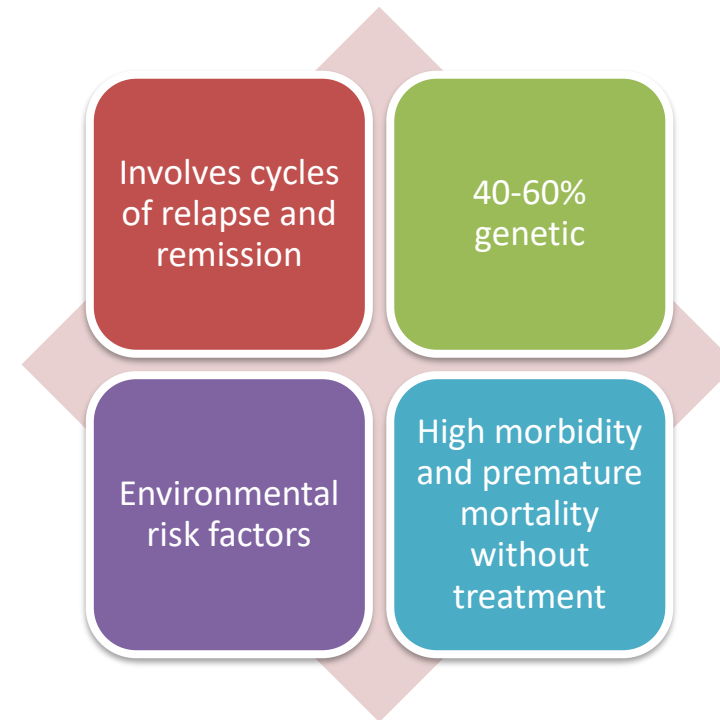
Objectives

- Overview of evolving US drug crisis
- Overview of how the COVID19 pandemic has affected the US drug epidemic
- Overview of need for immediate access to medication for opioid use disorder
- Challenges and opportunities
- Buprenorphine basics

I think you'll find
I'm one of the most
empathetic doctors
around.



Opioid Use Disorder



The myth of “flu like” opioid withdrawal

Health Health Care Medical Mysteries Science Wellness

HEALTH

As an ex-heroin addict, I know getting off opioids is near impossible

Withdrawal is the most important aspect, and it's barely given lip service in the response to the opioid epidemic

Perspective by Elizabeth Grey

May 27, 2022 at 7:25 a.m. EDT

“There is no consequence worse than being dopesick.”

More than once, I've read this phrase describing opioid withdrawal: The patient will experience flu-like symptoms.

That must be the most inaccurate statement in medicine. . . .

There is no flu that feels like being trapped in a burning room with no way to get out. The flu doesn't leave you with psychic death. It's the most brutal experience I've survived. I have post traumatic stress disorder from withdrawing, not using.”

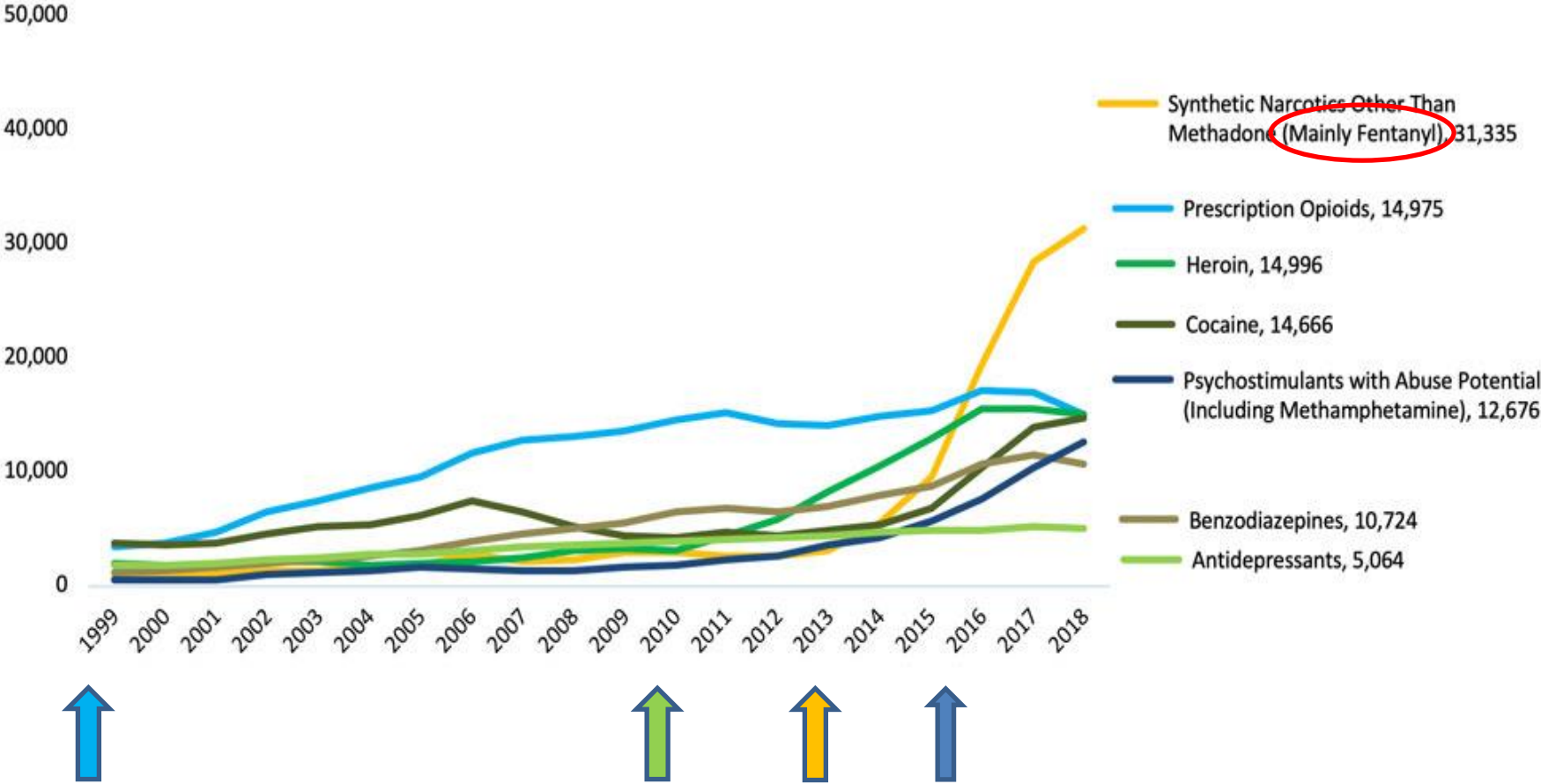
<https://www.washingtonpost.com/health/2022/05/27>

OD deaths continue to increase



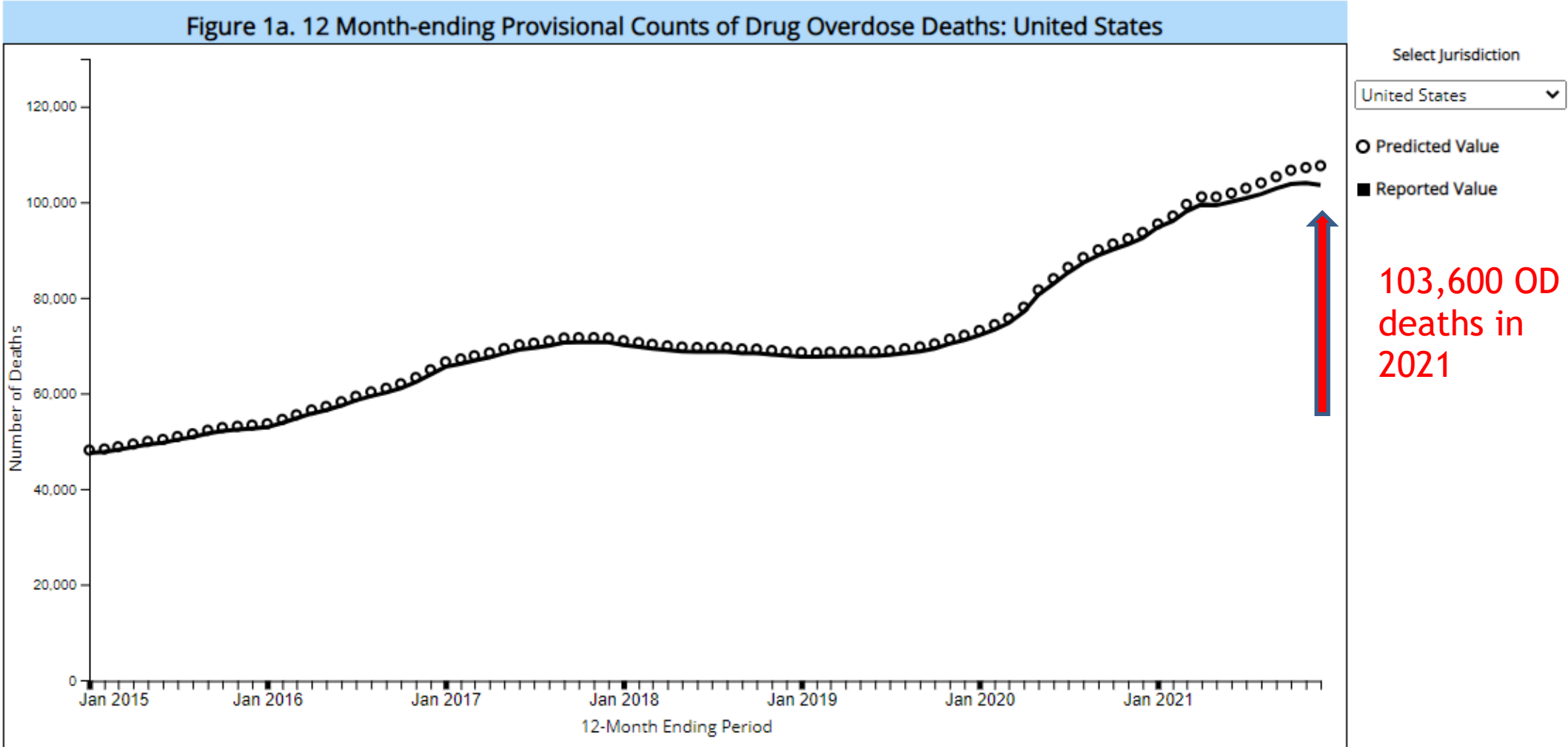
Source: DEA

National Drug Overdose Deaths Involving Select Prescription and Illicit Drugs



12 Month-ending Provisional Number and Percent Change of Drug Overdose Deaths

Based on data available for analysis on: May 01, 2022

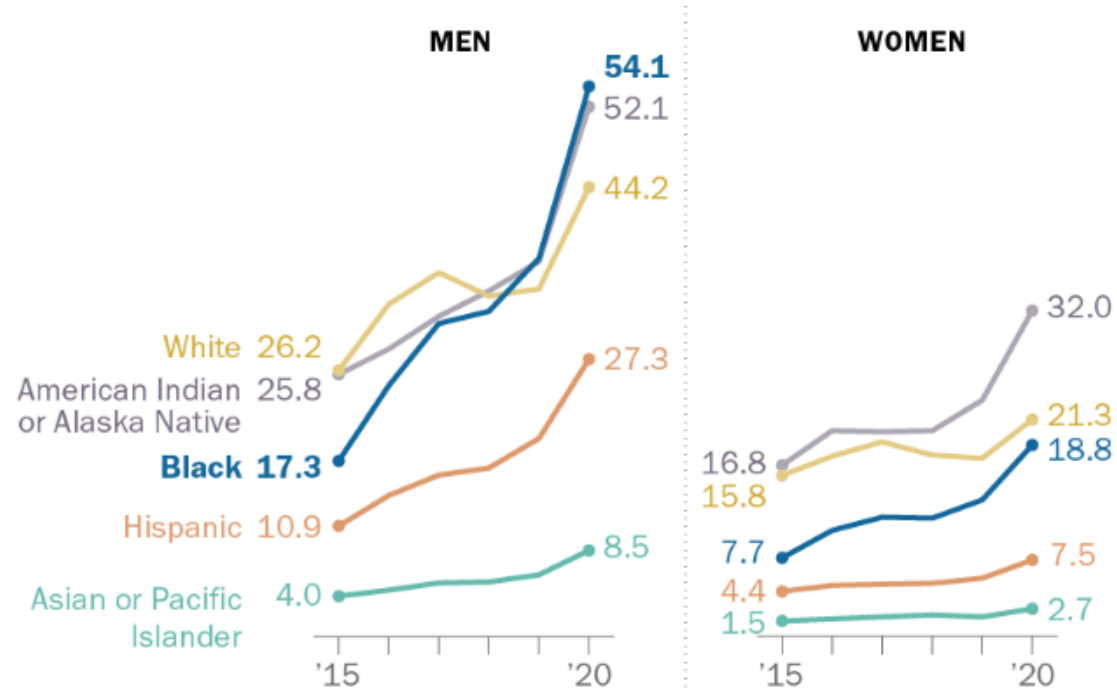


68,000 71,000 92,500

Ahmad FB, Rossen LM, Sutton P. Provisional drug overdose death counts. National Center for Health Statistics. 2021.

Drug overdose death rate among Black men in the U.S. more than tripled between 2015 and 2020

U.S. drug overdose death rate per 100,000 people, by race and ethnicity (age-adjusted)



Note: All racial categories include people of one race, as well as those who are multiracial. For those who are multiracial, the CDC selects a single race to allow for consistent comparisons. All racial groups refer to non-Hispanic members of those groups, while Hispanics are of any race.

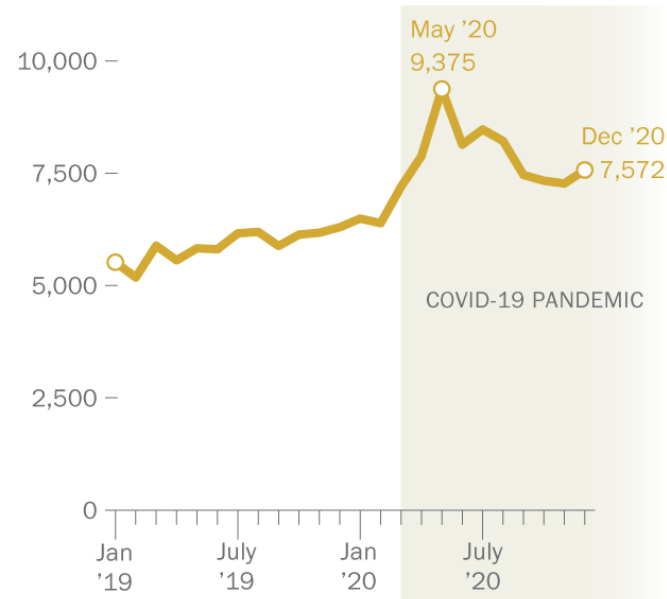
Source: Centers for Disease Control and Prevention.

COVID impact on fatal OD

Monthly overdose deaths have trended higher during the pandemic

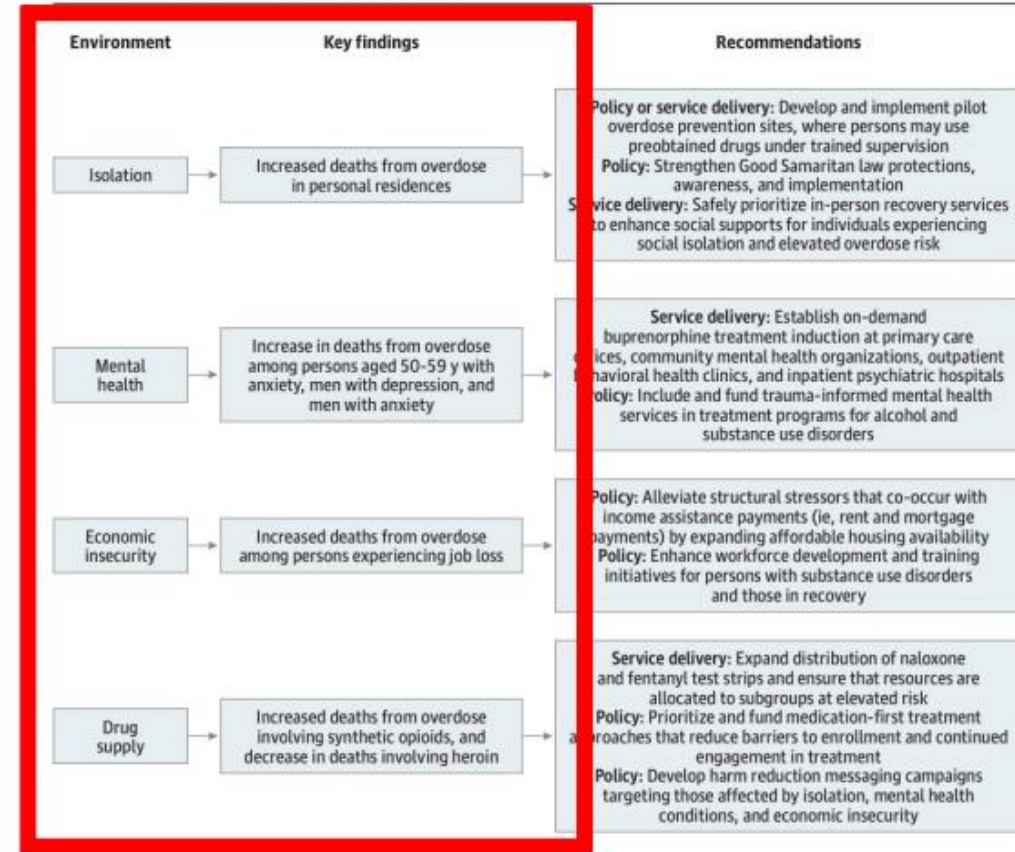
Monthly drug overdose deaths have trended higher during the pandemic

Monthly drug overdose deaths in the U.S.



Source: Centers for Disease Control and Prevention.

Figure. Summary of Key Findings and Recommendations Corresponding to Macroeconomic Changes That Occurred During the COVID-19 Pandemic



A poisoned drug supply


 September 14, 2018 For Immediate Release
Contact: Kameron Korte
Phone Number: (571) 324-6204

Drug Enforcement Administration

Cocaine laced with fentanyl leads to multiple deaths, overdoses

Authorities issue warning to the public after beach community fatalities

Shelly S. Howe
Special Agent in Charge
San Diego

 **ELSEVIER** 

Drug and Alcohol Dependence

Volume 233, 1 April 2022, 109380

Xylazine spreads across the US: A growing component of the increasingly synthetic and polysubstance overdose crisis

Joseph Friedman ^{a, b}, Fernando Montero ^c, Phillippe Bourgois ^a, Rafik Wahbi ^d, Daniel Dye ^e, David Goodman-Meza ^f, Chelsea Shover ^e

WHICH XANAX PILLS ARE FAKE?



GROUP A **GROUP B**

DEA Issues Warning After Counterfeit Adderall Made With Methamphetamine Seized

August 22, 2019



Side A **Side B**

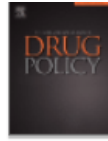
Source: DEA

Fentanyl and analogues



International Journal of Drug Policy

Volume 74, December 2019, Pages 299-304

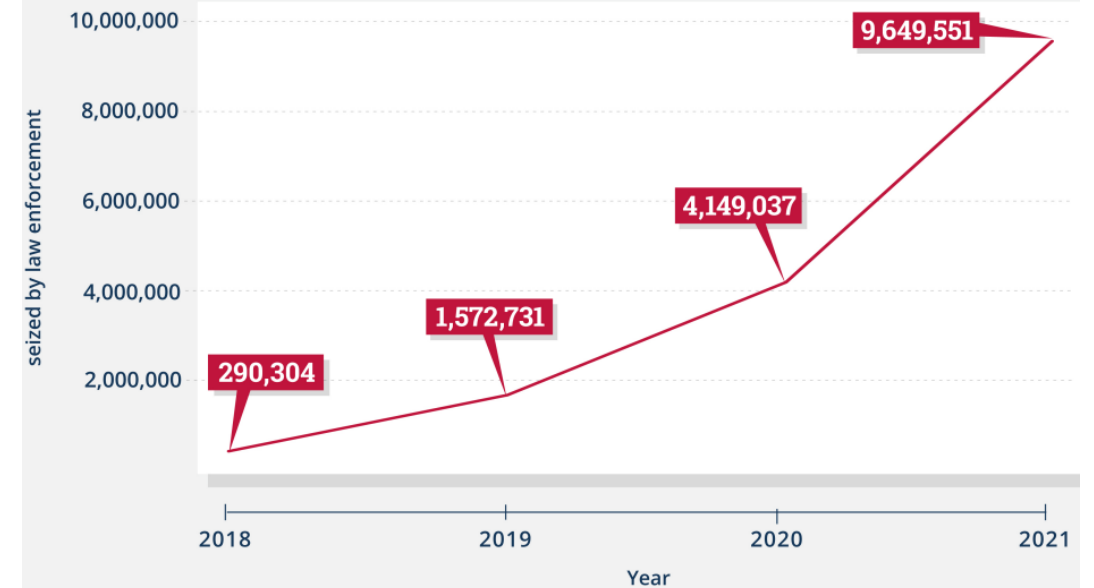


Research Paper

Associations between perceived illicit fentanyl use and infectious disease risks among people who inject drugs

Barrot H. Lambdin ^{a, b, c, *}, Ricky N. Bluthenthal ^d, Jon E. Zibbell ^a, Lynn Wenger ^a, Kelsey Simpson ^d, Alex H. Kral ^a

Number of Pills Containing Fentanyl Seized by Law Enforcement in the United States, 2018 – 2021

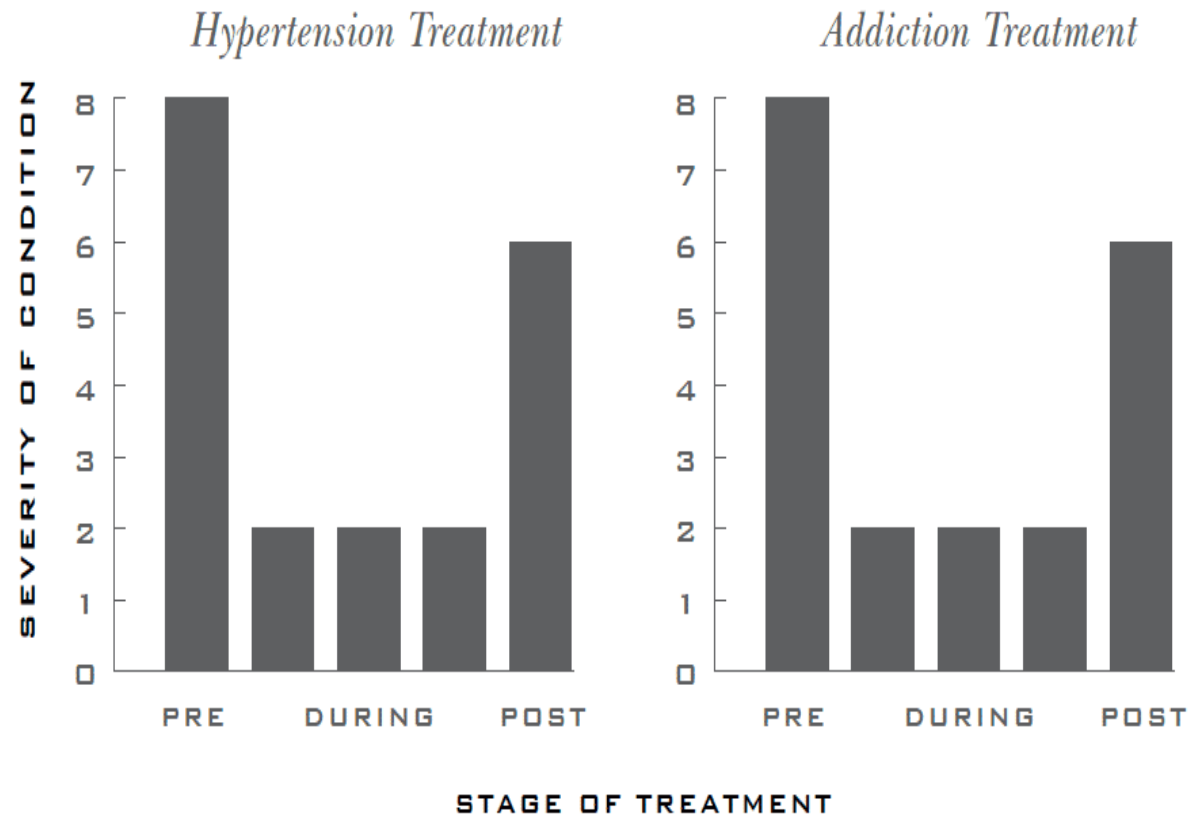


Estimates based on data reported by the Office of National Drug Control Policy's High Intensity Drug Trafficking Areas program

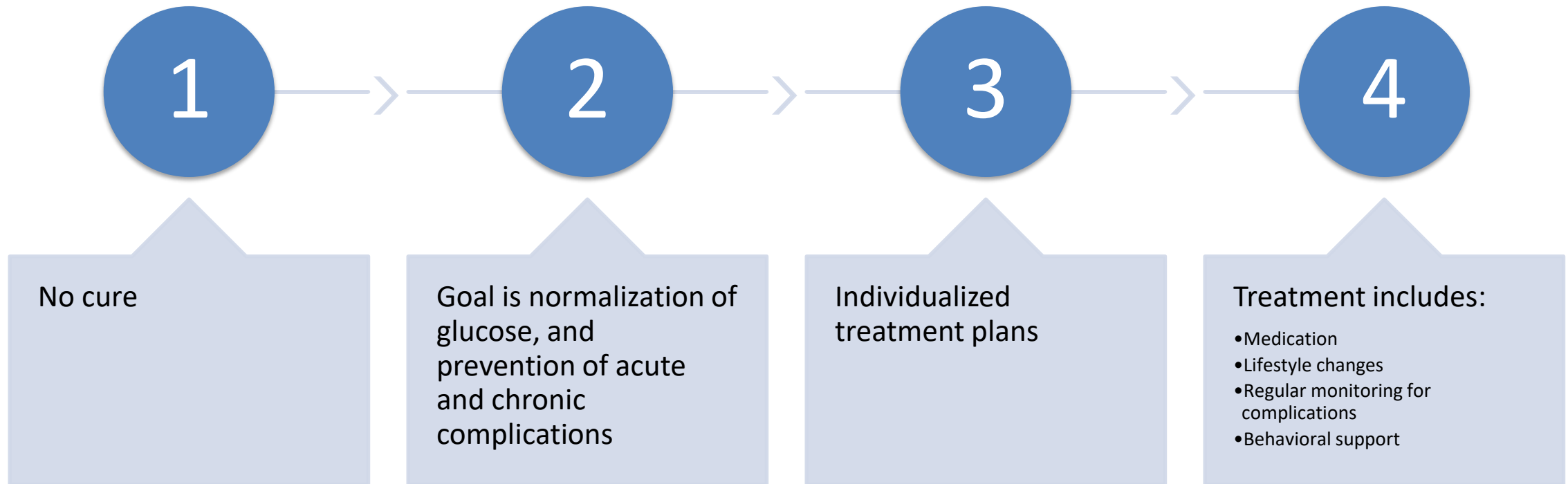
Reference: JJ Palamar, et al. *Drug and Alcohol Dependence*. DOI: 10.1016/j.drugalcdep.2022.109398 (2022)

Treatment outcomes as good as for other chronic diseases

WHY IS ADDICTION TREATMENT EVALUATED DIFFERENTLY?
BOTH REQUIRE ONGOING CARE



Similar to management of diabetes



Goal of Medications for Addiction Treatment

Relieve withdrawal symptoms

Block effects of other opioids

Reduce cravings

Restore normal reward pathway

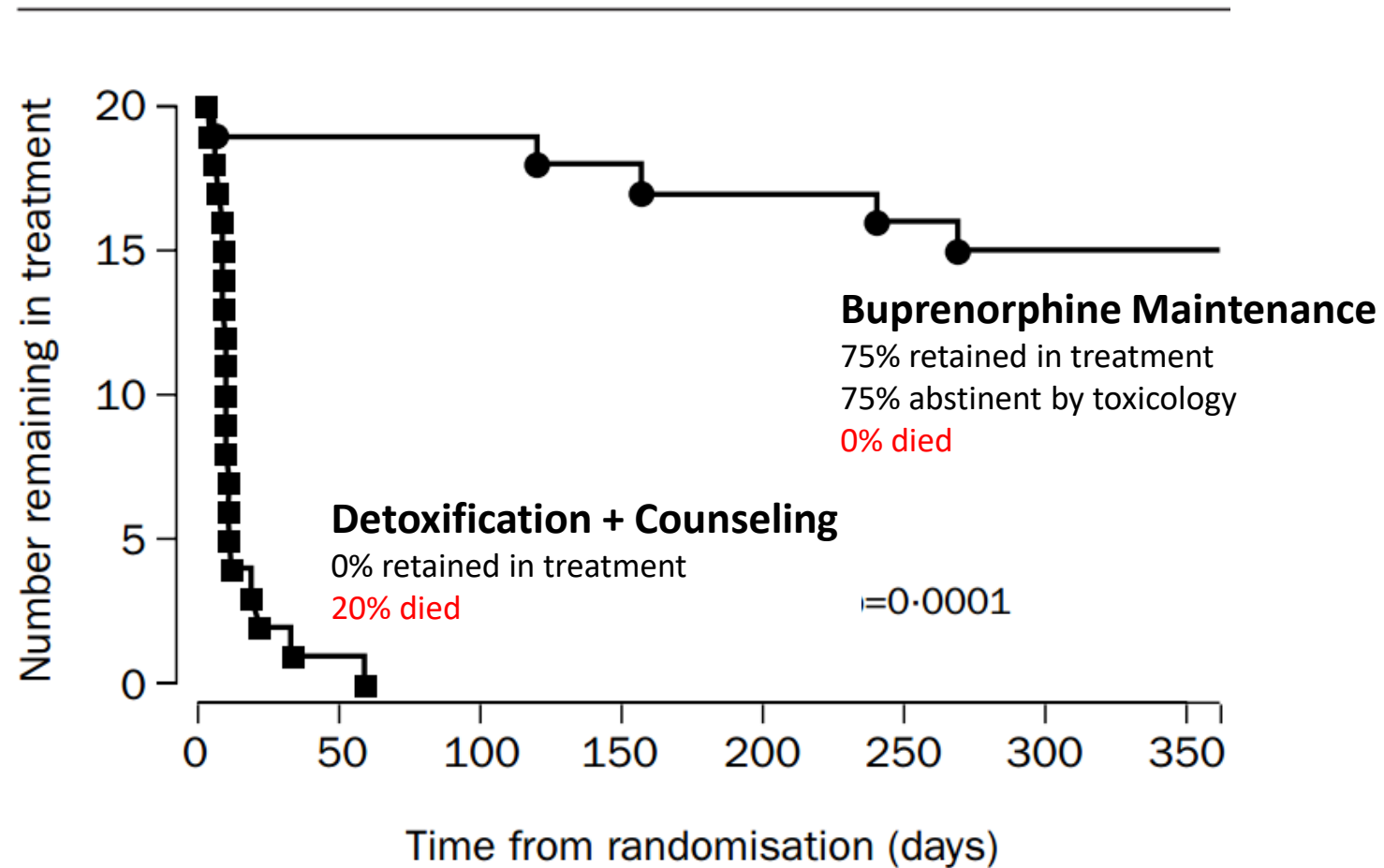
Life saving medication: comparable effectiveness

Intervention	Outcome	NNT
Anticoagulation for LE DVT	Prevent recurrent VTE	17
ASA after prior MI/CVA	Prevent: <ul style="list-style-type: none">• subsequent MI• subsequent CVA• mortality	77 200 333
Buprenorphine (16mg+) ¹	Retention in treatment	2
Buprenorphine ²	Prevent 1 yr mortality	5

Mattick RP, Breen C, Kimber J, Davoli M. Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. Cochrane Database Syst Rev 2014 Feb 6; (2)

Kakko J, Svanborg KD, Kreek MJ, Heilig M. 1 year retention and social function after buprenorphine-assisted relapse prevention treatment for heroin dependence in Sweden: a randomized, placebo-controlled trial, Lancet 2003 Feb 22.

“Detox” is ineffective and dangerous



Opioid agonist treatment saves lives

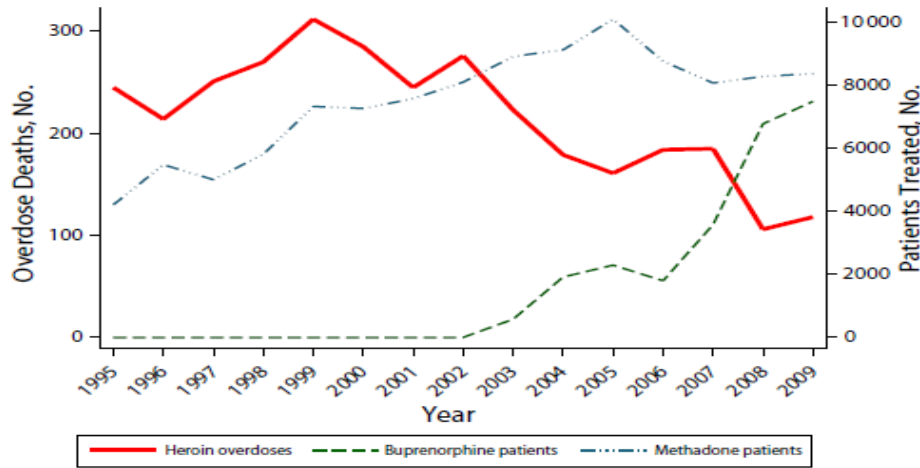
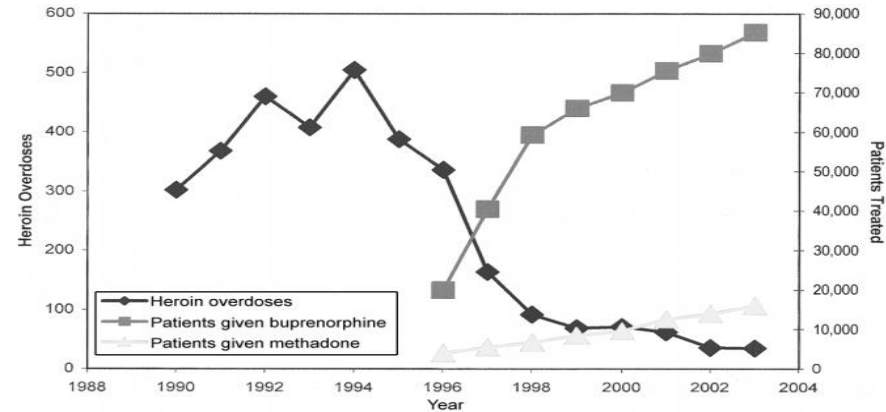


FIGURE 1—Heroin overdose deaths and opioid agonist treatment: Baltimore, MD, 1995–2009.

Maryland: 50% reduction in overdose death with opioid agonist treatment

Schwartz RP et al. Am J Public Health. 2013 May;103(5):917-22

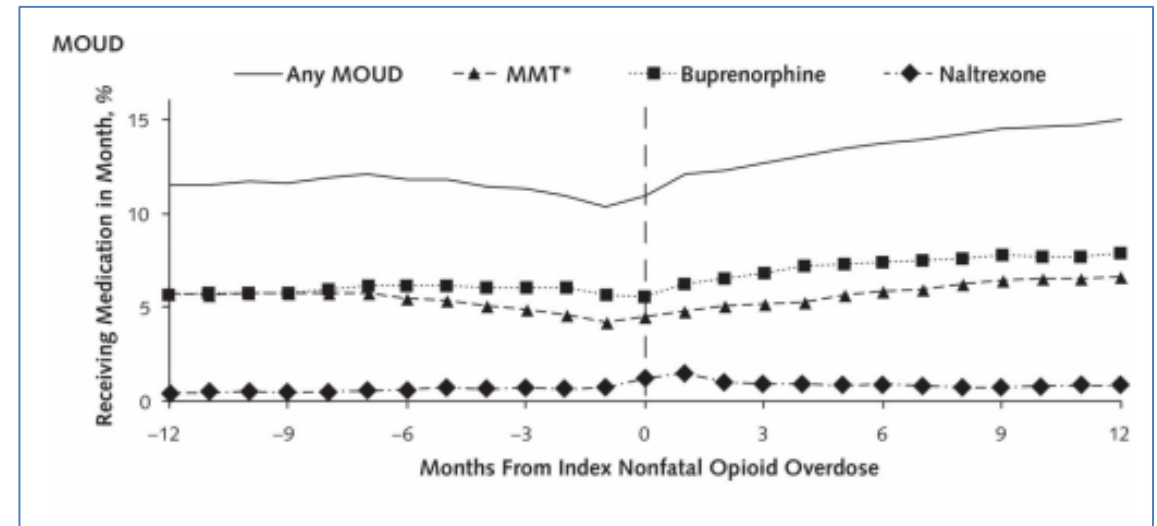


France: 79% reduction in overdose death opioid agonist treatment

Carrieri MP et al. Clin Infect Dis. 2006 Dec 15;43 Suppl 4:S197-215

Post Overdose, Few Receive Medication for OUD

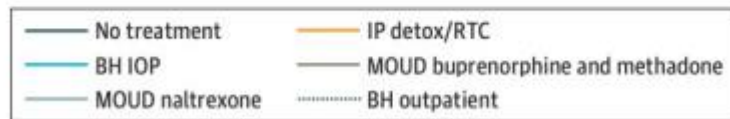
- In 12 months after nonfatal overdose:
 - 11% of participants received MMT for median of 5 months
 - 17% bupe for median of 4 months
 - 6% NTX for median of 1 month
- Despite short duration of treatment:
 - reduction in all-cause mortality with MMT (AHR 0.47) and bupe (AHR 0.63)
 - For NTX, there was no mortality benefit (AHR 1.44)



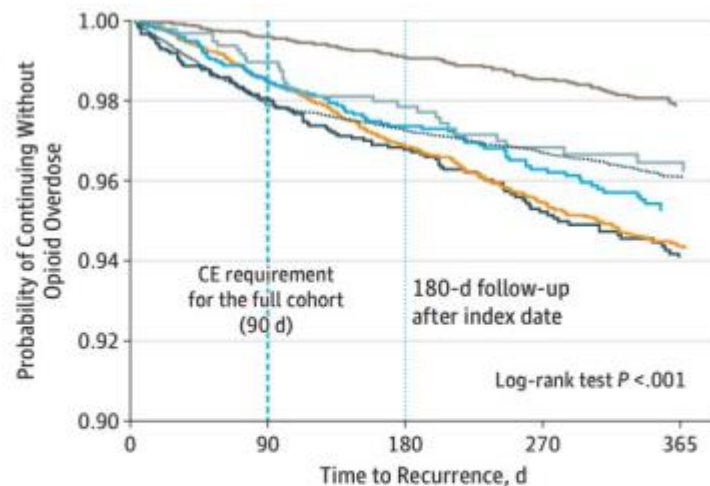
Real-world Effectiveness of Different Treatment Pathways for OUD

Probability of Opioid Overdose and Acute Care Use

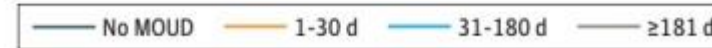
During the 3-Month Follow-up



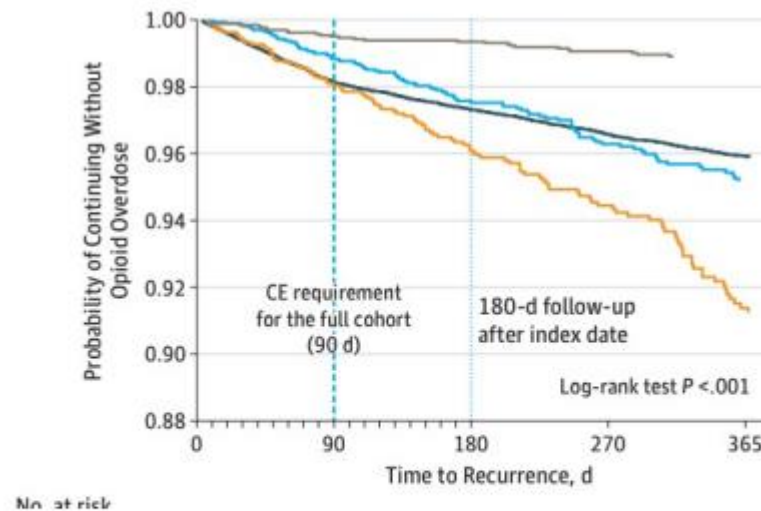
A Opioid overdose at 3 mo



During the 12-Month Follow-up



A Opioid overdose at 12 mo



Only bup, methadone associated with reduced risk of overdose and serious opioid-related acute care use compared with no treatment during 3, 12 months of follow-up

Need for more flexible on demand care

- People who use drugs face numerous barriers to engage in services:
 - Stigma
 - Where? How? Balancing competing priorities
 - Complicated registration and multi-step intake process
 - Difficulty articulating needs
 - *Legacy of past negative experiences with treatment providers* →
Conditioned not to trust us

“I’m all over the place... Appointments are really hard for me. And I didn’t want to not take the medicine, so I’ve taken it every day up until now... It’s just really hard setting up appointments and then trying to go about things the way that other people would want me to do at the hospital.”

Fox et al. *Subst Abus.* 2015; 36(2): 155–160. Fox et al. *J Subst Abuse Treat.* 2015 Jan;48(1):112-6.

Edland-Gryt M. *Int J Drug Policy.* 2013 May;24(3):257-64.; Mofizul Islam

Wakeman, Kehoe, Snow et al. *J Subst Abuse Treat.* 2019 Dec

A Growing Awareness of the Need For “Bridge” Clinics



HOW-TO GUIDE FAQ OPPORTUNITIES
STORIES RESOURCES REFERENCES CONNECT

The ED-BRIDGE Buprenorphine Guide provides a practical framework for the use of buprenorphine as an effective short-term treatment for pain and opioid withdrawal, and a bridge to long-term treatment of opioid use disorder.

Now Mandated To Offer Meds For Opioid Addiction In The ER, Mass. Hospitals Get 'How-To' Guidelines

January 07, 2019

By [Martha Bebinger](#)



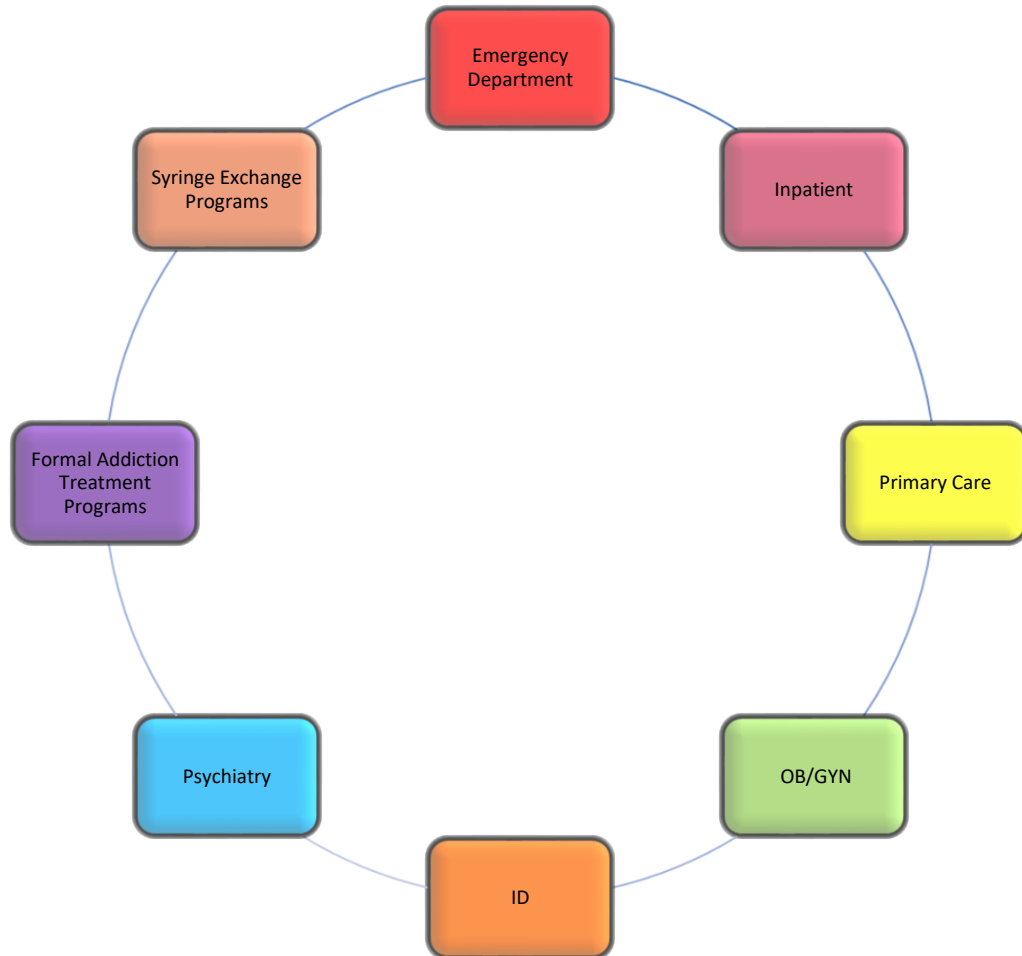
Age Sex Indi Are Whi Whi
Despite an opioid crisis, most ERs don't offer addiction treatment. California is changing that.

This is what it looks like when we stop treating addiction as a moral failure.

By German Lopez | [@germanlopez](#) | german.lopez@vox.com | Updated Jan 8, 2019, 11:25am EST

Slide courtesy of Sarah Wakeman, MD

Meeting people “where they are” can and should happen anywhere



- Initiating methadone in hospital:
 - 82% present for follow-up addiction care
- Initiating buprenorphine in hospital vs withdrawal management alone:
 - Buprenorphine: 72.2% enter treatment after discharge
 - Withdrawal management: 11.9% enter treatment after discharge
- Initiating buprenorphine in ED vs referral to treatment
 - 78% vs 37% engaged in buprenorphine treatment at 30 days
 - Fewer days of opioid use w/ buprenorphine tx

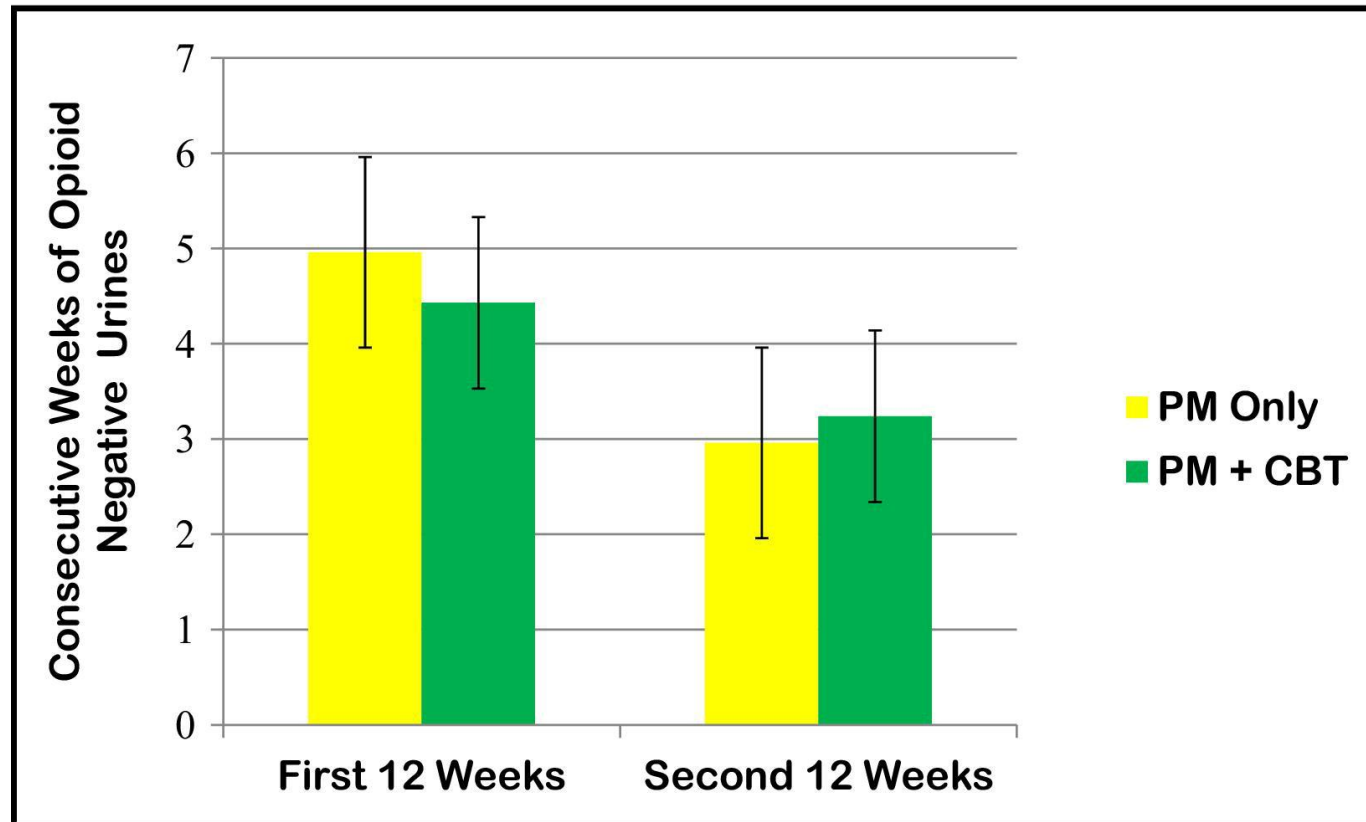
J Gen Intern Med. Aug 2010; 25(8): 803–808;
JAMA Intern Med 2014 Aug;174(8):1369-76.);
D'Onofrio et al. JAMA 2015 Apr 28;313(16):1636-44

In Hospital Use



- Among PWUD, 43.9% report using in the hospital
- Bathroom most common (20.8%)
- Abstinence-based approaches don't prevent drug use in hospital, may increase high risk use

Treatment Effective in Primary Care

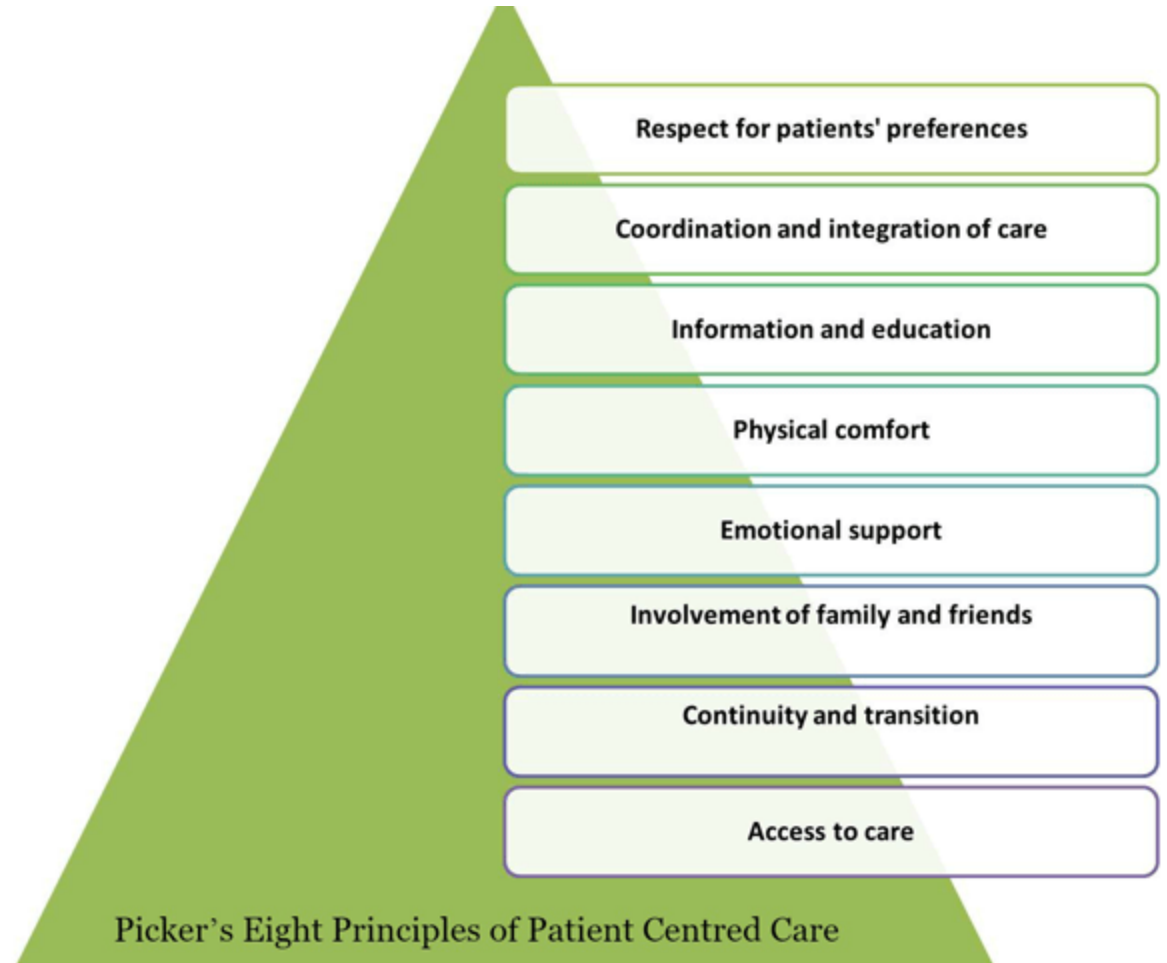


No difference in self reported opioid use, opioid abstinence, study completion, or cocaine abstinence between the 2 groups

Patient centered care

“Providing care that is respectful of, and responsive to, individual patient preferences, needs and values, and ensuring that patient values guide all clinical decisions.”

-Institute of Medicine



Reducing negative consequences

- Engagement is primary goal
- Building a trusting and welcoming environment crucial
- Balances risks and benefits
- Practical



Primary Prevention

- Aims to prevent disease or injury before it occurs.
- Goal: prevent exposures to hazards that cause disease or injury, alter unhealthy or unsafe behaviors that can lead to disease or injury

Secondary Prevention

- Aims to intervene after an illness or serious risk factors have been diagnosed
- Goal: halt or slow the progression of disease (if possible) in its earliest stages and limit long-term disability and prevent recurrence.

Tertiary Prevention

- Aims to help people manage complicated, long-term health problems
- Goal: to improve function, quality of life and life expectancy

Celebrating Progress

“I walk out of here and I feel good about myself... Instead of getting chastised for relapsing, and feeling bad about it, we actually talked about it... I take something away from it positive instead of just feeling bad about it. Like how I screwed up again...then I just feel bad and then how do I deal with feeling bad? I end up using drugs.”

RELAPSE



FAILURE

Naloxone



NARCAN (naloxone HCl)
NASAL SPRAY 4mg

available at
your pharmacy

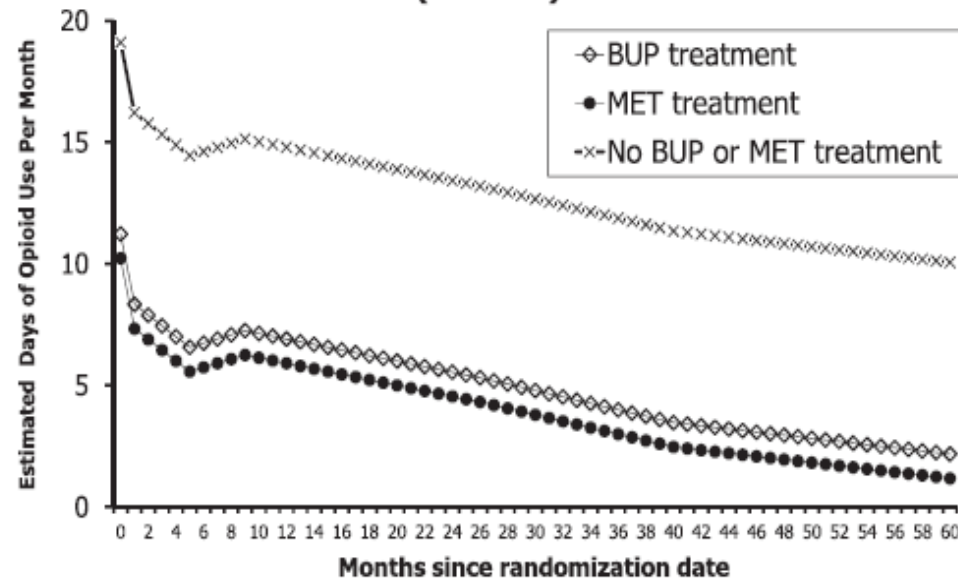
TAP TO CONTINUE

4/17/16
HAD my first overdose AFTER
20 years of iv DRUG USE.
I CAN DESCRIBE my THOUGHTS
AND FEELINGS, AFTER BEING SAVED
BY NARCAN, IN ONE WORD
ALONE... GRATEFUL!! THIS
MEDICATION/DRUG is SAVING
LIVES. THANK GOD, GOD BLESS.
KEEP THE FAITH
→ NICK

6/17/16
TODAY is my Birthday AND
I have received THE BEST
PRESENT EVER... ANOTHER
CHANCE AT LIFE. SO GRATEFUL
FOR MY FAMILY, SO GRATEFUL
FOR MY HEALTH, SO GRATEFUL FOR
THIS PROGRAM. AND A GRATEFUL
HEART WILL NEVER RELAPSE.
NICK
↙

Early Use
During
Treatment
Expected

Estimated Days of Opioid Use by the Types of Treatment Based on Model 4 (N = 795)^{††}



^{††}The number of participants in each type of treatment varied in each month and is therefore not indicated in the figure; on average over the follow-up period, each month there were about 14.2% of the participants in BUP treatment, 38.5% in MET treatment, and 46.9% in neither BUP nor MET treatment.

Figure 4 Estimated days of opioid use by the types of treatment based on model 4 ($n = 795$)^{††}. BUP:buprenorphine; MET:methadone.

Reducing negative consequences

- Congruent with other chronic condition management
- Critical to management of other chronic condition management
- Safer substance use
- Safer injection or use practices
- Intranasal Naloxone for overdose prevention
- PrEP and PEP
- **Immediate access to pharmacotherapy**

“Harm reduction can be thought of as a universal precaution and applied to all individuals regardless of their disclosure of negative health behaviors, given that health behaviors operate along a continuum and are not binary.”

Hawk, M, Coulter R, Egan, J et al. Harm Reduction Principles for Healthcare settings. Harm Reduct J 14, 70 (2017)

Keeping people safe while illness is active



- Opioid use disorder is a relapsing condition
- People often use together
- Lowers risk of infection to person and public – blood borne illnesses
- Cost effective
- Reduces overdose death
- Congruent with other education and tools we share to reduce harm
- Engagement and trust

Wilson et al, The CoEffectiveness of Harm Reduction, International Journal of Drug Policy
Volume 26, Supplement 1, 1 February 2015,

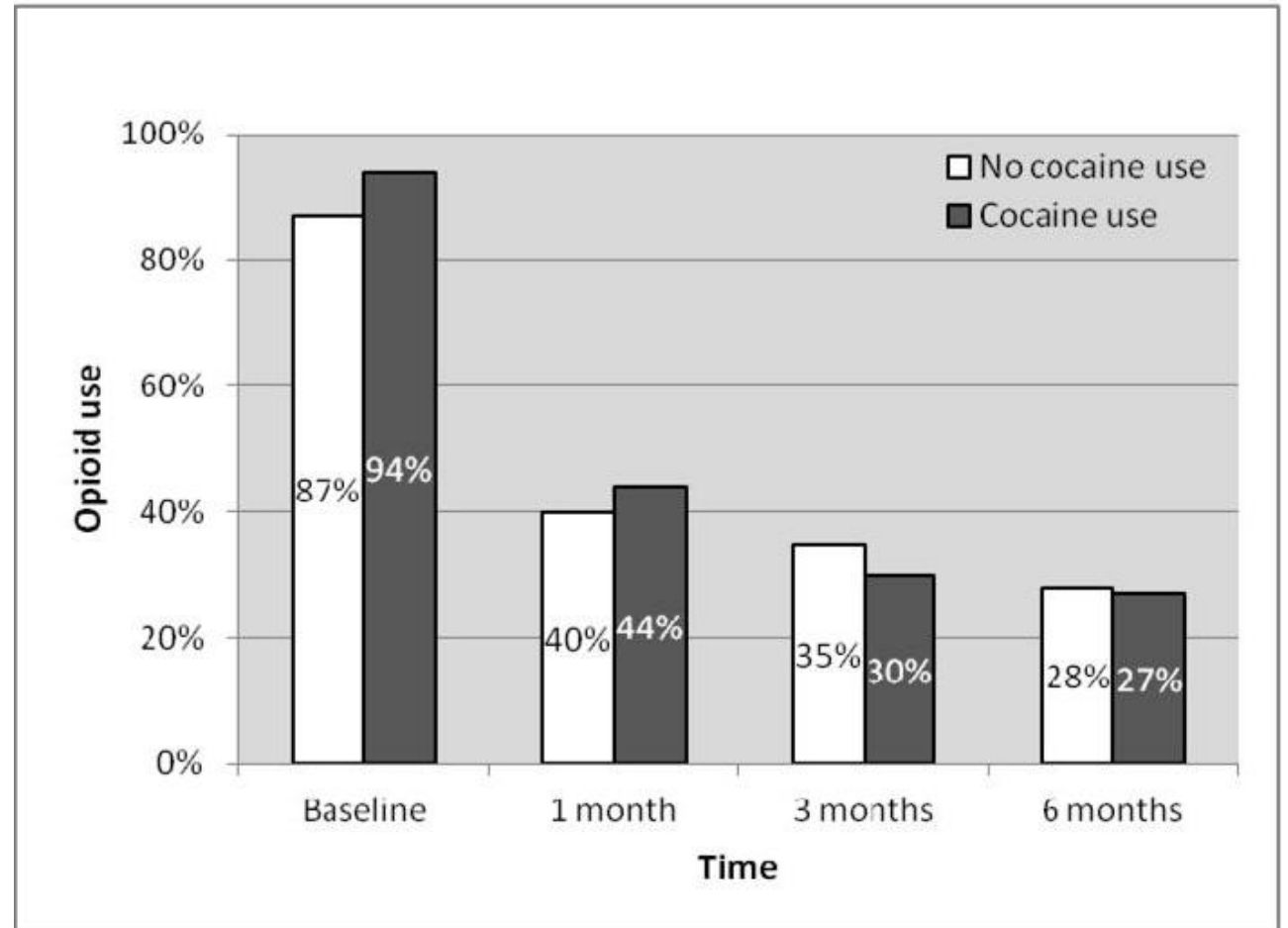
Trust is critical for retention

“I guess it's like that there's no judgement... I'm not trying to abuse anything, I just need someone to work with me. And I think that's the biggest difference. Here it's like they work with you. As opposed to just throwing you on medication and throwing you out the door.”

What about polysubstance use?

Opioid use by baseline cocaine use , treated with buprenorphine

- Buprenorphine Rx for pts using cocaine vs. no cocaine
- Followed for 1,3,6 months
- Same treatment retention rate
- Same reduction/improvement in opioid use
- Overall cocaine use improved



Cunningham, C. O., et al. (2013), Buprenorphine Treatment Outcomes among Opioid-Dependent Cocaine Users and Non-Users. *Am J Addict*, 22: 352–357

VE ADVENTUREVEN SNUCKA PUFF.
CIGARETTES 6/192 - 3/18
SMOKING POT Complete Abstinence,
BENZOS = VALIUMS, PINS, XNAX,
POTEM POLES ETC
SNORTING COKE
DRINKING 1-2 pints Southern
P.C. ANKLDUST PER DAY
OPIATES = DILAUDIO, PLYCOBONE, OXY-
CONTIN etc. METHADONE.
Aderoll, RUTILIN, ADAVAN,
SEX 20 ~~\$\$\$~~ street dates +
250.00 AN HOUR MASSAGES / CA
really want to quit but right now im
not totally ready 2s i want to be or
should be, im proud of my above 2c-
complishments and look forward to
Finally getting this, not monkey, but
200 of my back.

Understanding ambivalence

really want to quit but right now im
not totally ready 2s i want to be or
should be, im proud of my above 2c-
complishments and look forward to
Finally getting this, not monkey, but
200 of my back.

Policy changes for prescribing MOUD during COVID-19 pandemic

Prior to COVID

- Buprenorphine:
 - Prescribed through pharmacies in outpatient settings
 - DATA 2000, limited clinicians with buprenorphine waivers that required additional training and federal registration
 - Limited number of patients to treat
 - In person evaluation for initial dose

- Methadone:
 - Dispensed only federally approved opioid treatment programs
 - In person for daily dosing

Under COVID emergency measures

- DEA allowed:
 - 3/17/20: Buprenorphine initiation via telehealth without in person visit
 - Follow up can be via phone
- Effective April 28, 2021, **any provider** can prescribe buprenorphine to up to 30 patients at a time **without needing additional training**

- SAMHSA allowed
 - 3/16/20: 28 day take home
 - 3/30/20: for those in quarantine – surrogate take home or door step delivery
 - Still requires in person visit for first dose

Art, science, reason, humanity

- Untreated substance use disorders exist in all medical settings
- We must reduce barriers to initiate and continue treatment
- Fundamental practice of medicine trains us best
- Harm Reduction is the scaffolding of medical care
- Extensive evidence base for medication for opioid use disorder
- A treatable illness



My name is. , I came into the Bridge Clinic back in spring 2018 (I believe May) and you saved my life. This is an email I've been meaning to write for years and for whatever reason I've always put it off...

When I came to MGH that day I had been stuck in serious addiction for 4-5 years, and actively wanting to stop for a year and a half. I had been going to AA meetings for over a year, working with a sponsor, and went to an outpatient program while using the entire time. I had never considered MAT [medication for addiction treatment] mostly due to ignorance and the general consensus in the 12 step community that it wasn't a legitimate way to stop using. I just could not stop no matter the consequences. I was renting an apartment because my wife had kicked me out of our house, and rightfully so. I had been fired from a great job back in Dec 2017 because of the things I would do during addiction.... In the weeks before meeting you my use had picked up and I started mixing in other drugs, which I knew from past experience was adding gasoline to the fire. I knew I was going to be homeless, dead, or in jail soon enough. From all that, I was at the end of my rope when I met you and I probably would have done anything to stop.

What I remember most from the visit was the kindness of you and your staff. I had interacted with doctors in the past due to my addiction and I was treated poorly by the doctor and staff. Nothing malicious, but just the general aspect of being looked at as "less than". The Bridge Clinic staff treated me with compassion and that meant so much to me.

My 2nd biggest takeaway is that you treated me like someone who had a medical problem, and no one else had ever done that. 12 step and the general recovery community calls it a disease but they don't treat it like a disease, they treat it as a moral failing. In some ways for me it was a moral failing, but the days of morality were years behind me by the time I came in. I was living like an injured animal who was cornered, and that's how I felt at that time.

For you and your staff to treat me with respect and for you to have genuine empathy for me and to treat me like a doctor treats a patient saved my life.

I didn't stop the day I met you, but I did fill my prescription and I knew I was going to give it a try. Within a month or so I took my medicine every day and I never looked back. It'll be 3 years soon since I stopped. I haven't been to a meeting since, I enjoy a beer every now and then, and I'm still a regular THC user. But I haven't thought about wanting an opiate or hard drug in well over a year and I know I'll never go back, because it would mean the end of my life.

Within the past year I've gotten an amazing job that I've had some great success in and my wife and I are expecting our 1st child in June. I'm going back to school to work towards my Masters degree. I've had the respect and trust back of my family and friends for a long time now. I'm free to live the beautiful life I have without the lying, stress, and poor health I had before.

I want to thank you from the bottom of my heart.

Patient reflection

Initial thoughts/reactions?

Have you cared for a patient with SUD?

Do you think a patient who was cared for with asthma would feel compelled to write such a letter?

What are your thoughts about the support and care he received and how this may have affected his trajectory?

What are your thoughts about his alcohol and THC use?

What are your thoughts about his ongoing care now that he has achieved health and personal and professional success?

Hope



Picture shared with permission

Thank you!

lgkehoe@mgh.harvard.edu

<https://www.massgeneral.org/substance-use-disorders-initiative>



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