MAT: Pharmacology, Misconceptions, and Myths

Kelly S. Ramsey, MD, MPH, MA, FACP

Medical Director of Substance Use Disorders

HRHCare

Community Level Strategies:

Confronting the Opioid Epidemic, 4/16/19

DISCLOSURES

Dr. Ramsey has no relevant disclosures

LEARNING OBJECTIVES

1. Discuss the opioid epidemic and opioid use disorder (OUD)
2. Discuss medication assisted treatment (MAT) for OUD, including the pharmacology of MAT
3. Discuss the misconceptions and myths surrounding MAT

Vulnerability Factors for OUD

- Genetic predisposition
- Concomitant mental health diagnoses: bipolar disorder, anxiety, depression, ADHD, personality disorders (borderline, antisocial), antisocial conduct disorder (especially in adolescence); undiagnosed or undertreated or untreated or treated inappropriately
- History of trauma and/or abuse
- Poor coping mechanisms; escapism
- Impulsivity
- Sensation/novelty seeking
- Environmental triggers
- Lack of homeostatic reward regulation; reward "deficiency": orientation towards pleasurable rewards

Why Are We Here? Let's Discuss Opioids…

Opiate v. Opioid

- ***Opiate*:** a term that refers to drugs or medications that are derived from the opium poppy, such as heroin, morphine, and codeine
- ***Opioid*:** a more general term that includes opiates, as well as the semi-synthetic or synthetic drugs or medications, such as buprenorphine, methadone, meperidine, fentanyl, that produce analgesia and other effects similar to morphine

Examples of Opioids

Most commonly used opioids

- Heroin
- Codeine
- Demerol
- Morphine
- Darvocet
- Fentanyl
- Dilaudid
- Methadone
- Opium
- Hydrocodone
- Oxycodone
- Levorphanol
- Vicodin
- OxyContin
- Tylenol 3
- Tylox
- Percocet
- Percodan

Illicit Fentanyl: Potency of Analogs

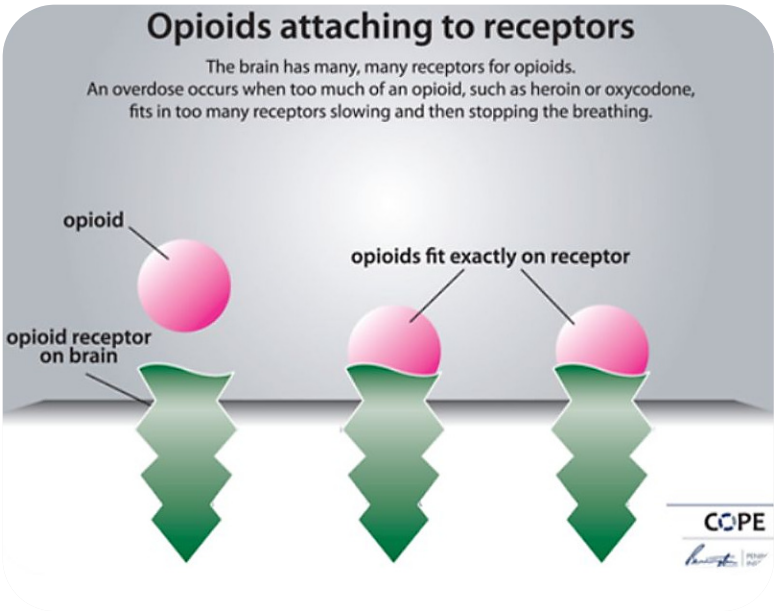
Why Is Heroin So Pleasurable?

- Heroin is highly lipid soluble
- Heroin crosses the blood brain barrier within 15 seconds, the heroin "rush"
- After IV administration, 68% of heroin is in the brain, as compared to <5% of morphine
- Within 30 minutes, heroin is metabolized into morphine

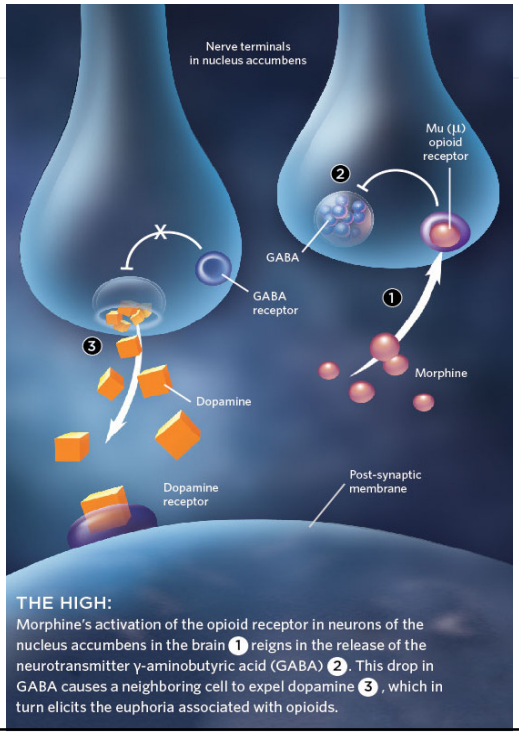
Opioid Receptors: Full Agonists

- Full agonists activate the mu receptor
- This is highly reinforcing
- This is the most misused opioid type
- Full agonists include: heroin, methadone, and oxycodone
- What determines opioid effects?
  - Receptor affinity
  - Dissociation
  - Intrinsic activity

Opioids in the Brain

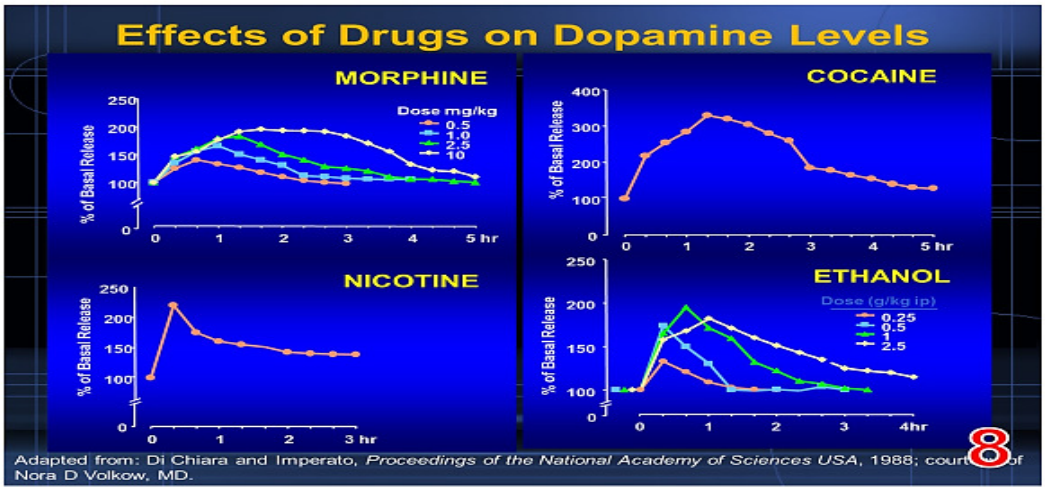


Opioids in the Brain



Similar Effects of Pleasurable Substances in the Brain…

Substance Use Disorder is a Brain Disease



Adapted from: Di Chiara and Imperato, *Proceedings of the National Academy of Sciences USA*, 1988; courtesy of Nora D Volkow, MD.

The Current Opioid Epidemic

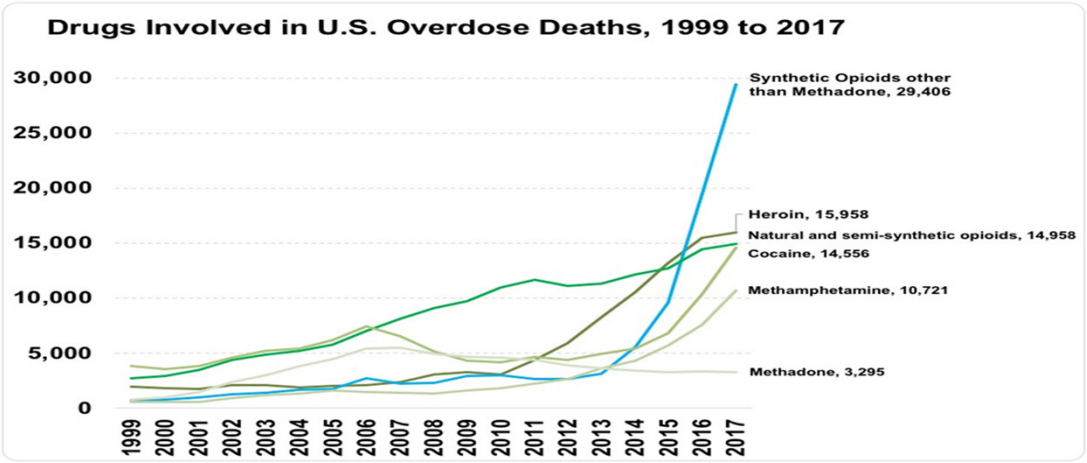
Heroin Use Has INCREASED Among Most Demographic Groups

	2002-2004*	2011-2013*	% CHANGE
SEX			
Male	2.4	3.6	50%
Female	0.8	1.6	100%
AGE, YEARS			
12-17	1.8	1.6	--
18-25	3.5	7.3	109%
26 or older	1.2	1.9	58%
RACE/ETHNICITY			
Non-Hispanic white	1.4	3	114%
Other	2	1.7	--
ANNUAL HOUSEHOLD INCOME			
Less than $20,000	3.4	5.5	62%
$20,000–$49,999	1.3	2.3	77%
$50,000 or more	1	1.6	60%
HEALTH INSURANCE COVERAGE			
None	4.2	6.7	60%
Medicaid	4.3	4.7	--
Private or other	0.8	1.3	63%

The Current Opioid Epidemic

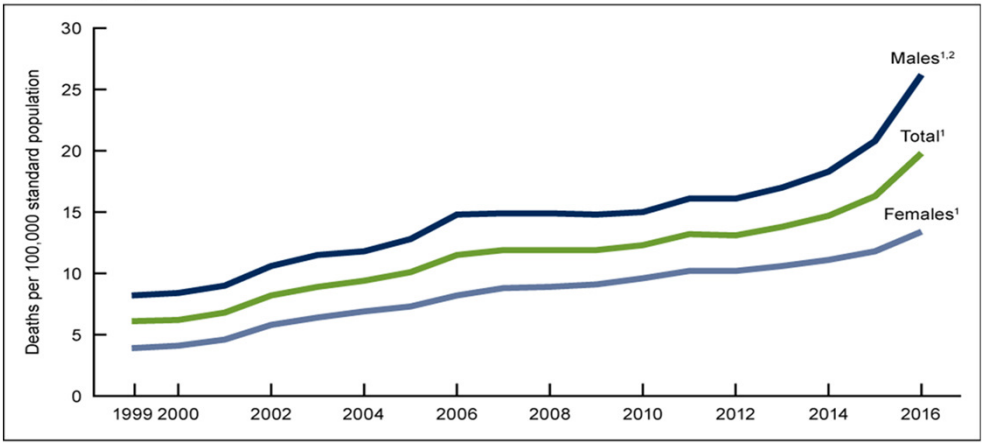
- Drug overdose is the leading cause of accidental death in the US; in 2017: 70,237 drug overdose deaths occurred
- Opioid use disorder is driving this epidemic; the rate of drug overdose deaths due to synthetic opioids, other than methadone (fentanyl, fentanyl analogs), increased by 45% from 2016 to 2017. 49,068 persons died due to opioid overdose in 2017.
- Source: CDC

The Current Opioid Epidemic



The Current Opioid Epidemic

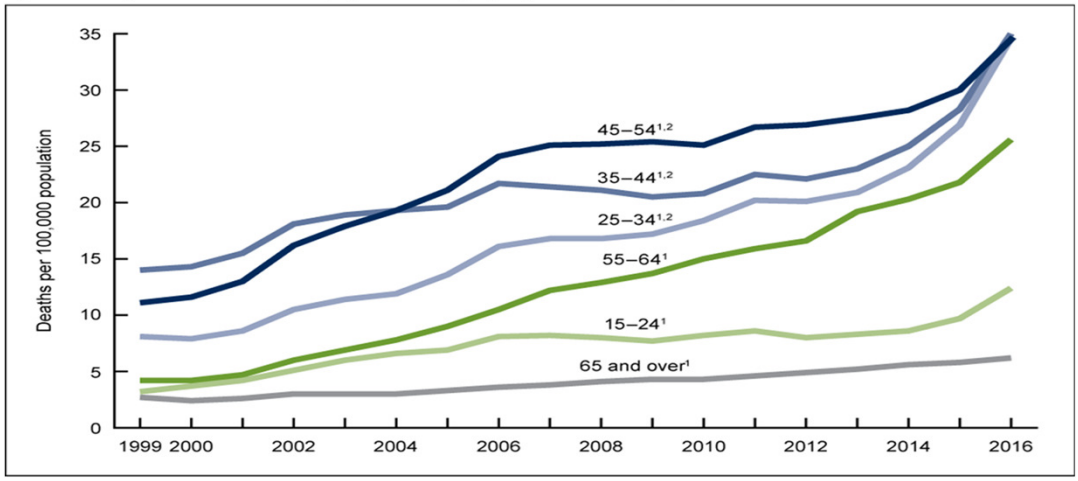
Figure 1. Age-adjusted drug overdose death rates: United States, 1999–2016



[1]Significant increasing trend from 1999 to 2016 with different rates of change over time, $p < 0.001$.
[2]2016 rate for males was significantly higher than for females, $p < 0.001$.
NOTES: Deaths are classified using the *International Classification of Diseases, Tenth Revision*. Drug-poisoning (overdose) deaths are identified using underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. The number of drug overdose deaths in 2016 was 63,632. Access data table for Figure 1 at: https://www.cdc.gov/nchs/data/databriefs/db294_table.pdf#1.
SOURCE: NCHS, National Vital Statistics System, Mortality.

The Current Opioid Epidemic

Figure 2. Drug overdose death rates, by selected age group: United States, 1999–2016



[1]Significant increasing trend from 1999 to 2016 with different rates of change over time, $p < 0.005$.
[2]2016 rate was significantly higher than for the rate for age groups 15–24, 55–64, and 65 and over, $p < 0.05$.
NOTES: Deaths are classified using the *International Classification of Diseases*, Tenth Revision. Drug-poisoning (overdose) deaths are identified using underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. Access data table for Figure 2 at: https://www.cdc.gov/nchs/data/databriefs/db294_table.pdf#2.
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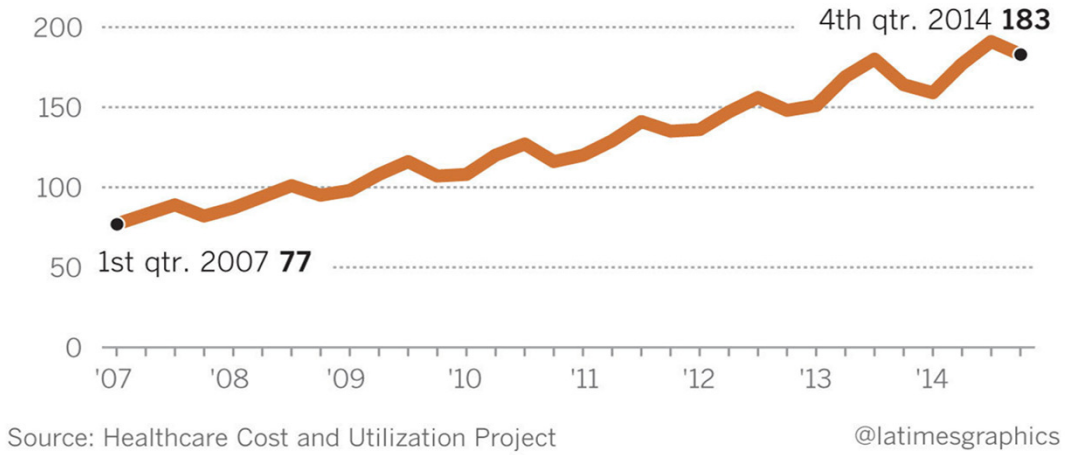
The Current Opioid Epidemic



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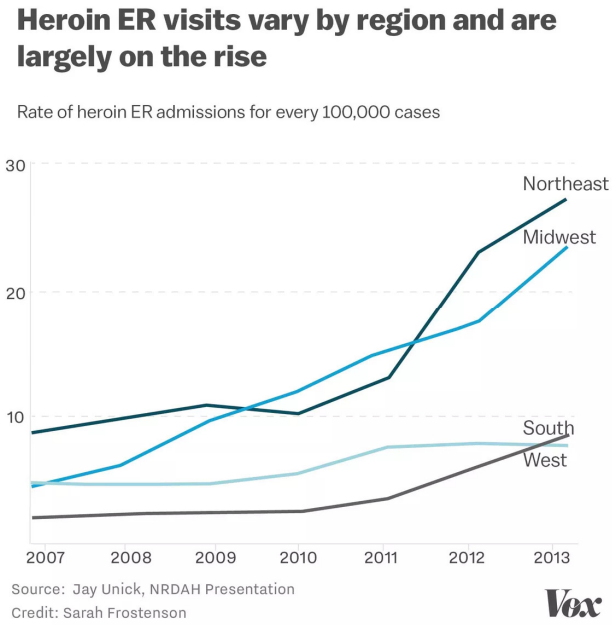

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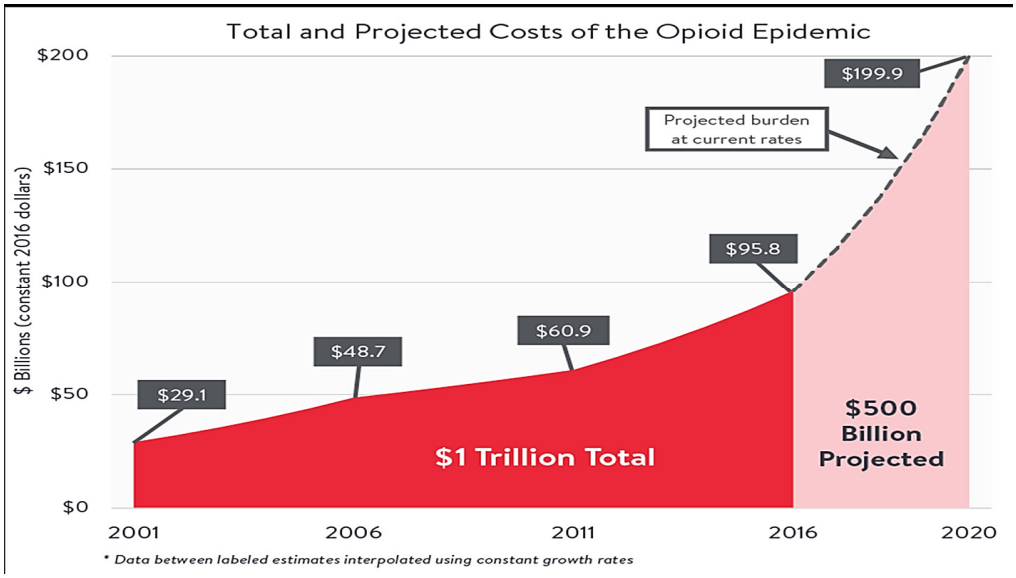

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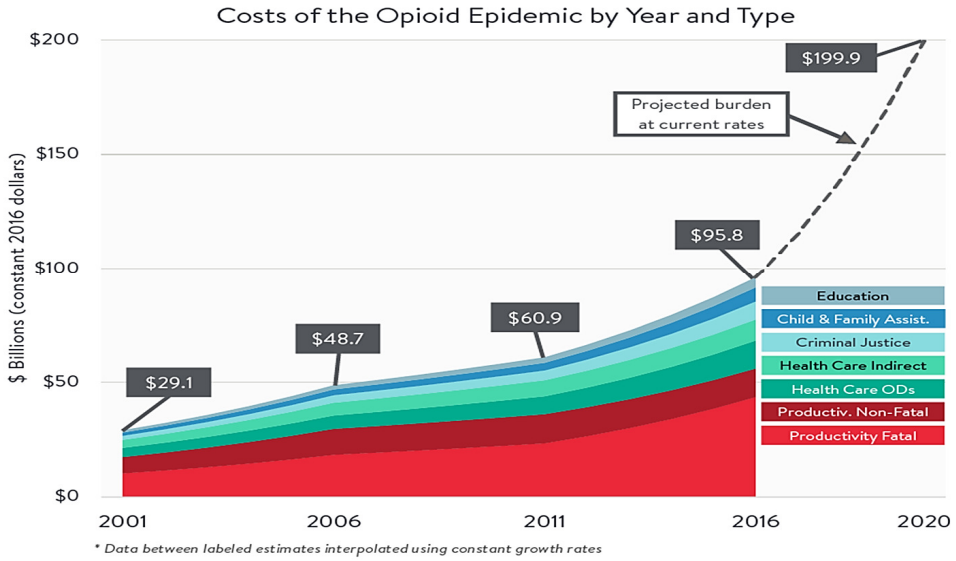

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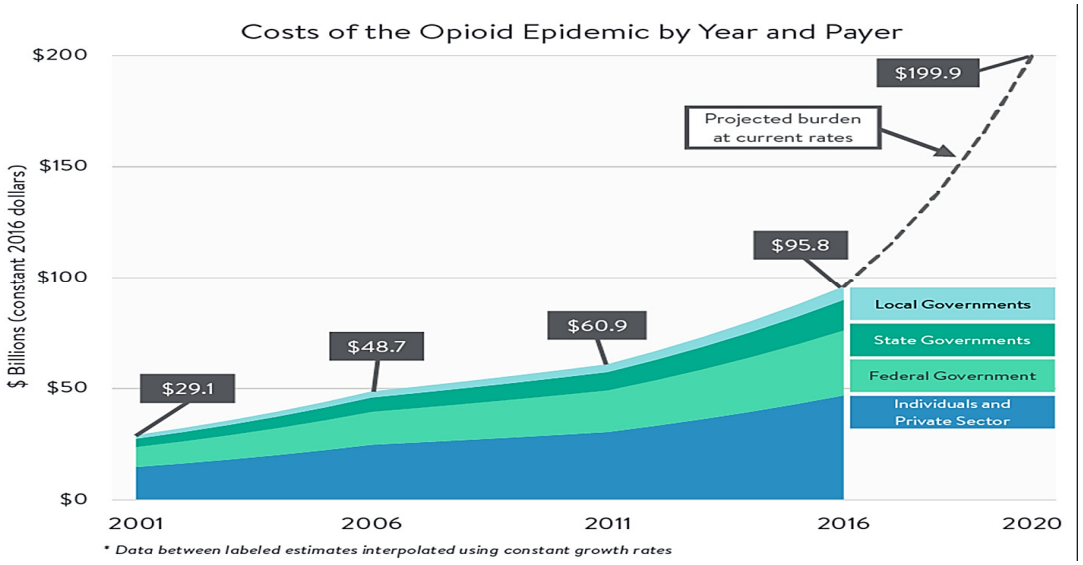
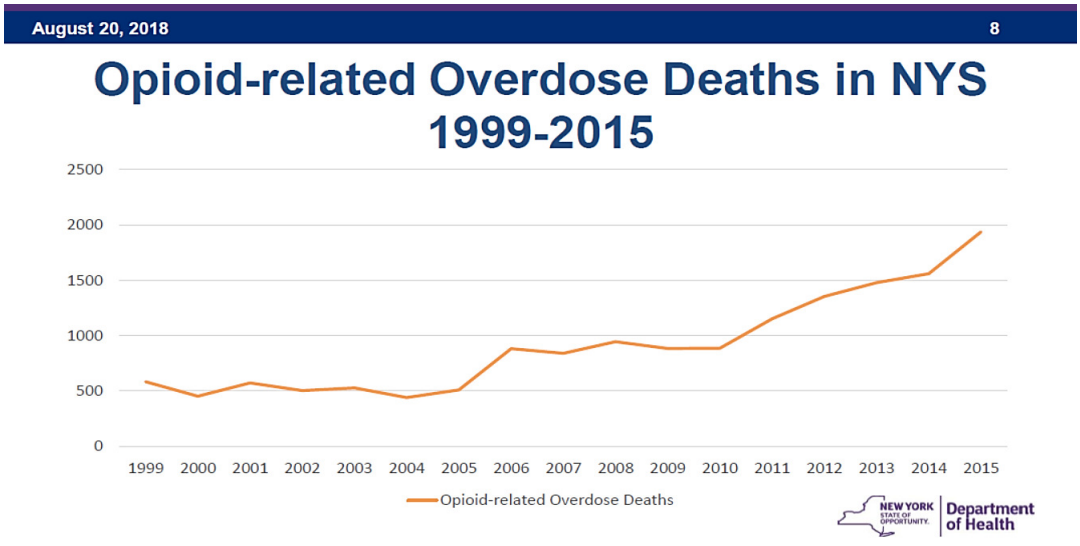
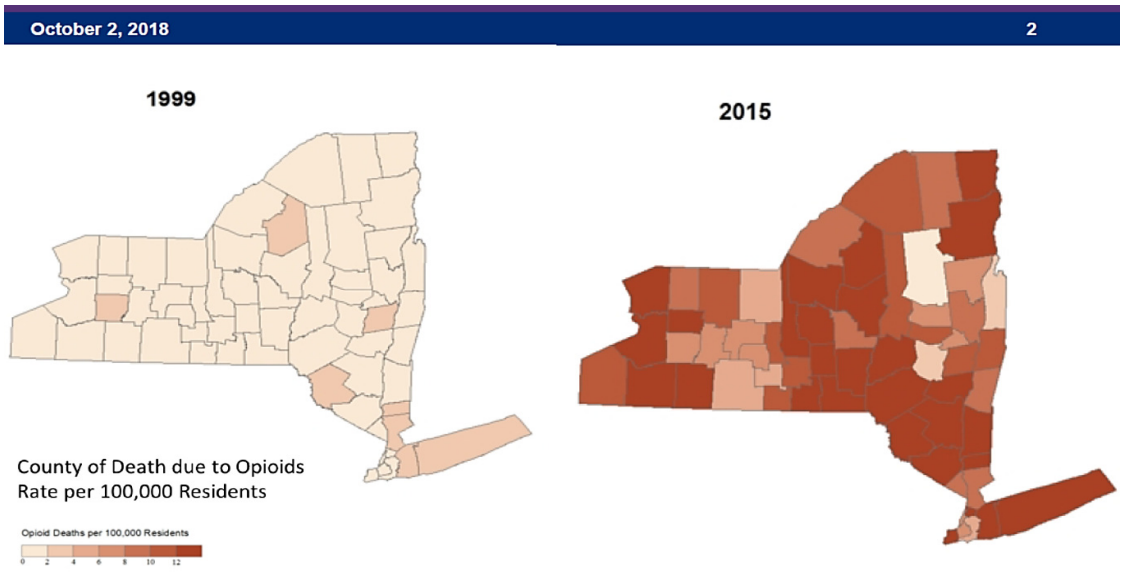


The Current Opioid Epidemic in NYS



The Current Opioid Epidemic in NYS



Treatment Goals for OUD

Treatment Goals

- Range of treatment goals

Minimization of harms from ongoing use ⟷ Sustained recovery with abstinence from all substances

- Treatment Options; Federations of State Medical Boards 2013
  - Partial Agonist (Buprenorphine) at the mu-receptor – OBOT/OTP
  - Agonist (Methadone) at the mu-receptor - OTP
  - Antagonists (Naltrexone) at the mu-receptor
  - Simple detoxification and no other treatment
  - Counseling and/or peer support without MAT
  - Referral to short or long term residential treatment

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Recovery is Individualized

A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential.

- ***Health***: **overcoming or managing one's disease(s) or symptoms;**
- ***Home:*** **a stable and safe place to live;**
- ***Purpose:*** **meaningful daily activities and the independence, income, and resources to participate in society; and**
- ***Community***: **relationships and social networks that provide support, friendship, love, and hope.**

- **Source: Abridged from SAMHSA**

What is Harm Reduction?

Harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use. Harm reduction is also a movement for social justice built on a belief in, and respect for, the rights of people who use drugs. It is based on a strong commitment to public health and human rights.

Harm Reduction: Principles

- A set of practical strategies by which harm related to illicit drug use is reduced:

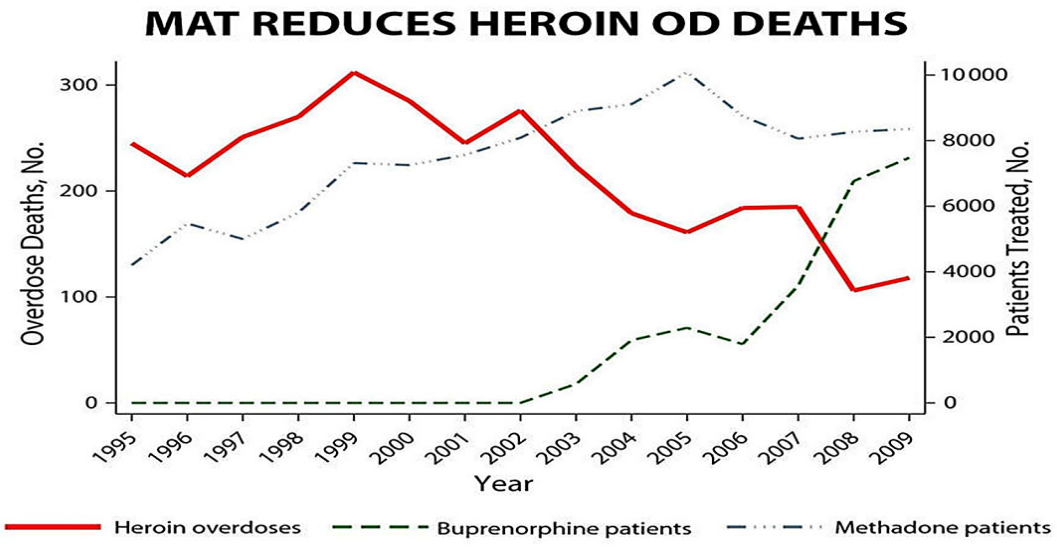
- Recognizes that drug use is common
- Includes a "spectrum" of strategies from safer use to abstinence
- Is low threshold: entry requirements appropriate to the targeted group
- Ensures that PWUD have a real voice in the creation of programs and policies

- Source: www.harmreduction.org

Drug Treatment Isn't for Everyone

- Some occasional alcohol and/or other drug use may not present a health risk; though any use is worthy of discussion
- Not all people who use want to stop
- Not all have time for treatment due to work and other obligations
- Fear of stigma

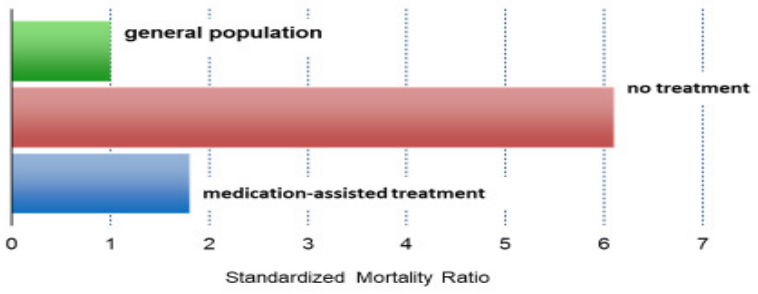
Why MAT?



Why MAT?

Benefits of MAT: Decreased Mortality

Death rates:



Dupouy et al., 2017
Evans et al., 2015
Sordo et al., 2017

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Historical Context of MAT

- Early 1900s: morphine clinics for persons with OUD
- 1914: Congress adopts Harrison Narcotic Act: taxed and regulated the production, importation, and distribution of opiate and coca products
- 1920: AMA condemns prescribing opioids to persons with OUD
- 1923: last morphine clinic closed
- 1935: civil commitment to USPHS Narcotic Hospitals, located in Lexington, KY and Fort Worth, TX; >90% relapse rates with detoxification only
- 1960s: methadone maintenance treatment research occurs
- 1970s: methadone maintenance treatment programs (MMTPs) open; methadone for the treatment of OUD may be dispensed in state and federally regulated MMTPs ONLY (not by private medical providers)

Pivotal Milestones for MAT

Year	Milestone
1970 1973	Methadone is approved by the FDA for *detoxification* Methadone is approved by the FDA for *maintenance*
1974	Opioid Treatment Programs (OTP's) able to dispense Methadone for maintenance treatment
1984	Oral Naltrexone is approved by the FDA
2000	Drug Addiction Treatment Act of 2000 (DATA 2000) allowed qualified physicians to offer Office Based Opioid Treatment (OBOT)
2002	Buprenorphine is approved by the FDA
2010	Extended-release injectable naltrexone is approved by the FDA
2016	Comprehensive Addiction and Recovery Act (CARA) - Allows Nurse Practitioners and Physician Assistants to become eligible to prescribe buprenorphine for treatment of opioid use disorder

Goals for MAT

- Alleviate physical withdrawal symptoms
- Create a "narcotic blockade" (saturate the opioid mu receptors)
- Alleviate drug cravings
- Decrease risk for overdose (methadone and buprenorphine)
- Normalize brain changes: anatomy
- Normalize brain physiology: neurotransmitters
- Increase functionality for the patient: goals are individualized

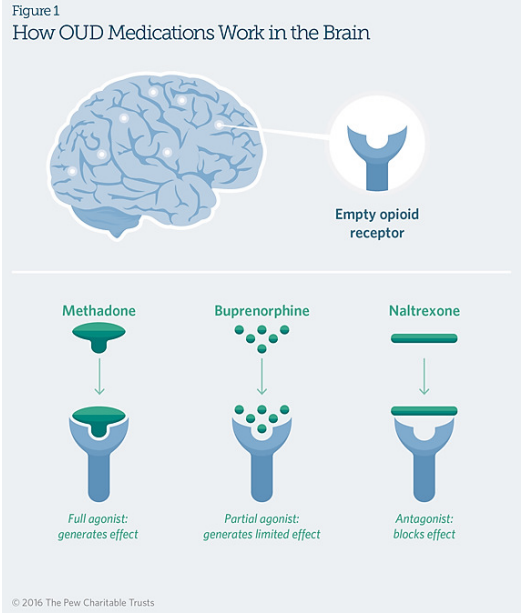
Options for MAT

FDA approved medications

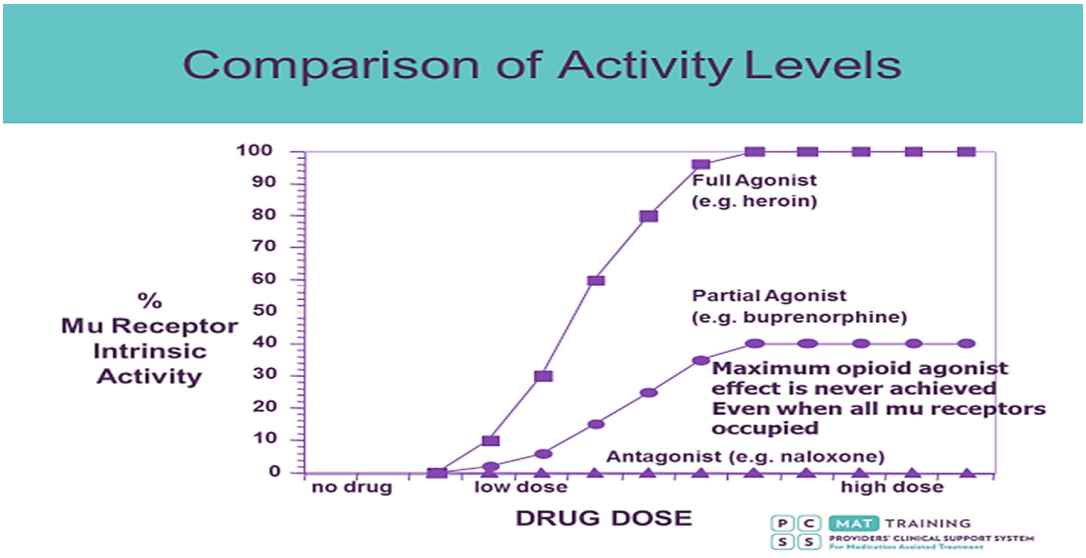
Medication	Euphoria	Overdose Risk	Effectiveness	Other
Methadone	Some	Low	↓ mortality ↓ illicit opioids ↓ criminality	Good data Structured Inexpensive
Buprenorphine	Minimal	Minimal	↓ mortality ↓ illicit opioids ↓ HIV risk	Good data Convenient Feasible
Long-acting naltrexone	None	None	↓ illicit opioids	Minimal data Expensive

Sharma *Substance Abuse & Rehabilitation* 2016

How MAT Works in the Brain



% Mu Receptor Intrinsic Activity



Options for MAT: Methadone

- **METHADONE:** full opioid agonist; in tablet or liquid form; must be prescribed and dispensed from a methadone maintenance treatment program (MMTP)
- **PROS:** best for patients who need a lot of oversight and the structure provided by a MMTP; can be used for concomitant pain management needs, with or without other opioids
- **CONS:** restrictive for the patient; can have CNS altering effects (euphoria), multiple potential drug-drug interactions; complex metabolism/half-life: not well understood by patients or most medical providers; congregates an entire population of PWUD in one location and at potentially different stages of change (SOC); could be stigmatizing for the patient (public setting)

Options for MAT: Methadone

Major Features of Methadone

***Full Agonist* at mu receptor**

Long acting

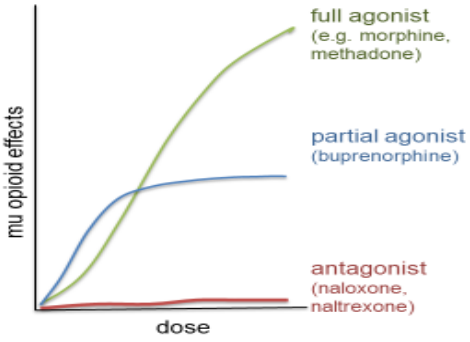
- Half-life ~ 15-60 Hours

Weak affinity for mu receptor

- *Can be displaced by partial agonists (e,g. burprenorphine) and antagonists (e.g.naloxone, naltrexone),* which can both precipitate withdrawal

Monitoring

- Significant respiratory suppression and potential respiratory arrest in overdose
- QT prolongation



CSAT, 2005

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Options for MAT: Naltrexone

- **NALTREXONE:** opioid antagonist at the mu opioid receptor; treats both OUD and alcohol use disorder (AUD); tablet or depot injection (Vivitrol) (monthly); can be given in an office setting; patient must be **abstinent** x 7-10 days (minimally) from opioids when initiated on naltrexone; providers do not require special training/certification to prescribe naltrexone
- **PROS:** a monthly injection removes daily responsibility of taking a medication from the patient; if a patient relapses, he/she will not feel the effects of either opioids/alcohol; good option if patient is abstinent, but at risk for relapse (s/p incarceration/rehab/detox); similar outcomes to buprenorphine if patient is able to be maintained on treatment with naltrexone
- **CONS:** requires an injection: possible injection site reactions; patient MUST have opioids/alcohol out of their system x 7-10 days before starting; potential hepatotoxicity; increased risk for opioid overdose if patient tries to override the opioid antagonist blockade; Vivitrol is expensive and requires a PA; data is lacking on its long term efficacy compared with good data for methadone and buprenorphine: initial uptake and retention in care are worse with naltrexone; decreases dopamine levels in patients on naltrexone leading to heightened dysphoria: may explain poor retention in care with naltrexone

Options for MAT: Naltrexone

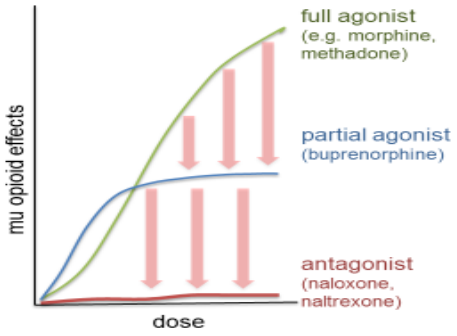
Major Features of Naltrexone

Full Antagonist at mu receptor
- Competitive binding at mu receptor

Long acting
- Half-life:
  - Oral ~ 4 Hours
  - IM ~ 5-10 days

High affinity for mu receptor
- *Blocks* other opioids
- *Displaces* other opioids
  - Can precipitate withdrawal

Formulations
- *Tablets: Revia®: FDA approved in 1984*
- *Extended-Release intramuscular injection: Vivitrol®: FDA approved in 2010*



SAMHSA, 2018

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Options for MAT: Buprenorphine

- **BUPRENORPHINE:** partial agonist at the mu opioid receptor; may be prescribed by a provider with a DATA waiver; multiple formulations (sublingual films/tablets, buccal films, implant, monthly depot injection)
- **PROS:** allows more anonymity in the treatment of OUD; gives the patient responsibility/an active role in her/his recovery; does not cause CNS effects in opioid experienced persons; misuse-deterrent formulation; allows engagement for the patient in primary care; if the patient relapses with opioids and is taking buprenorphine as directed, she/he will not feel the effects of the opioid used; has a ceiling effect; allows for a more flexible and individualized treatment plan
- **CONS:** requires the patient to take a daily medication; is expensive; some insurances require a PA; it doesn't work if the patient doesn't take it…; in and of itself, may not be adequate treatment for many patients with OUD: patient may also require psychosocial counseling, mental health engagement, or IOP engagement; commonly diverted (though typically to treat OWS and to persons not able to access or not ready to access OUD tx)

Options for MAT: Buprenorphine

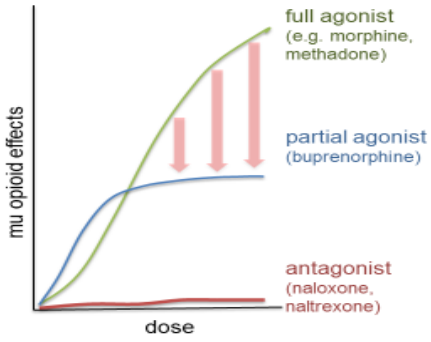
Major Features of Buprenorphine

Partial agonist at mu receptor
- Comparatively minimal respiratory suppression and no respiratory arrest when used as prescribed

Long acting
- Half-life ~ 24-36 Hours

High affinity for mu receptor
- *Blocks* other opioids
- *Displaces* other opioids
  - Can precipitate withdrawal

Slow dissociation from mu receptor
- *Stays on receptor for a long time*



SAMHSA, 2018
Orman & Keating, 2009

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Duration of MAT

- **LONG ENOUGH…!!!**
- **It is different for every patient, but…recidivism rates and mortality are higher for shorter courses of treatment and for no treatment**
- **At a minimum, patients should remain on MAT for six months-1 year; but, in reality, MAT is often much longer, and, often chronic**
- **Average duration on buprenorphine treatment: 8-9 years**
- **OUD is a CHRONIC disease, and, like other chronic diseases, may require medication CHRONICALLY (think long term versus lifetime)**

Buprenorphine Treatment: Crux of the Problem

- Less than 10% of persons with SUD successfully access treatment
- Only 25% of providers with a buprenorphine waiver actually have ever written a prescription for buprenorphine
- Of those that have written prescriptions, they often have less than 10 buprenorphine patients on their panel
- Buprenorphine providers are often not located in communities where persons with OUD can access them
- Many buprenorphine providers do not prescribe buprenorphine in a harm reduction context, but rather use an abstinence based recovery model and punitive measures with patients with OUD who "fail"
- Many buprenorphine prescribers have a high threshold for entry, meaning no polysubstance use, no comorbid mental health conditions, etc.
- Some buprenorphine providers do not accept insurance* and accept cash payments only, preying on desperate patients and families, and discharging patients when they cannot pay

*this is partially due to low insurance reimbursement rates for visits

Buprenorphine Treatment: Misconceptions or Perceived Challenges

- "I don't want *those patients* in my waiting room"
- "The floodgates will open"
- "I don't want to be a social worker (and don't we need to provide psychosocial counseling in our office setting?)"
- "Buprenorphine induction is too challenging"
- "I don't know what to do with polysubstance use"
- "I don't know how to order and interpret urine drug screens"
- "What about buprenorphine diversion? Are people on the street going to get high from my buprenorphine prescriptions?"
- "There are too many insurance and prior authorization issues"
- "I need support; *those patients* are too needy and too difficult"
- "*Those patients* will disrupt the clinic and patient flow"
- "I am not confident in treating OUD and I don't feel that I received adequate training"

Buprenorphine Treatment: Addressing STIGMA

How can we reduce stigma?

Changing the Language of Addiction

ASAM
American Society of Addiction Medicine

Terms that stigmatize addiction can affect the perspective and behavior of patients, clients, scientists, and clinicians. Clinicians especially need to be aware of person-first language and avoid more stigmatizing terms.

Terms Not to Use	Terms to Use
• addict, abuser, user, junkie, druggie	• person with a substance use disorder
• alcoholic, drunk	• person with an alcohol use disorder
• oxy-addict, meth-head	• person with an opioid use disorder
• ex-addict, former alcoholic	• person in recovery
• clean/dirty (drug test)	• negative/positive result(s)
• addictions, addictive disorders	• addiction, substance use disorder

Buprenorphine Treatment: Addressing STIGMA

NYS DOH AIDS Institute Recommendations for Improving Language and Establishing Stigma-Free, Supportive, Service Delivery Environments

- Use person-first language: examples: "person who uses drugs", "woman who uses drugs"; NOT "drug addict" or "drug abuser" or "dope fiend"
- Use Identity-affirming language: encourage positive talk instead of negative talk
- Establish a welcoming environment: create a "safe space"
- Recognize the value of staff being representative of the communities served
- Build staff skills to dialogue with clients/patients about language
- Be on the alert for judgmental language: examples: "clean", "dirty", "infectious"
- Use quality improvement to dismantle stigma
- Promote ongoing discussions regarding stigma
- Document agency policies, practices, and progress toward eliminating stigma

Buprenorphine Treatment: Psychosocial Counseling

Lack of effect of additional psychosocial treatment with buprenorphine treatment

- 4 negative RCTs
  - RCT of telephonic support vs standard of care
    - "Care coach" called participants, provided OUD education, assistance with treatment challenges, encouragement
    - No change in retention
  - 3 RCTs of standard vs. enhanced medical management
    - MDs & RNs; HIV+/- patients; primary care setting
    - Standard (15-20 min): counseling about drug use, drug abstinence/reduction, self-help groups, utox results
    - Enhanced (45 min): similar content
    - No change in abstinence, retention, adherence

Fiellin 2006; Weiss 2011; Tetrault 2012; Brigham 2014; Ruetsch 2012;

Buprenorphine Treatment: Psychosocial Counseling

Intensive counseling does NOT improve buprenorphine treatment outcomes

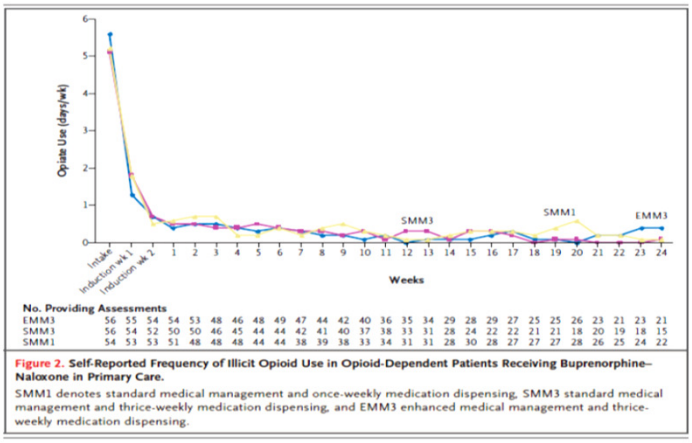


Figure 2. Self-Reported Frequency of Illicit Opioid Use in Opioid-Dependent Patients Receiving Buprenorphine–Naloxone in Primary Care.

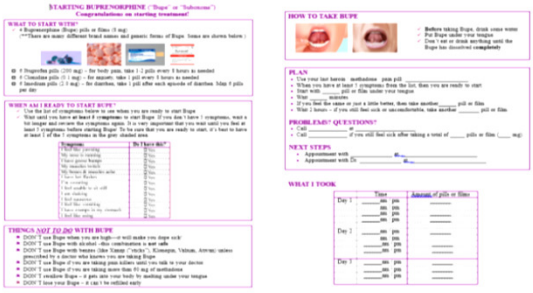
SMM1 denotes standard medical management and once-weekly medication dispensing, SMM3 standard medical management and thrice-weekly medication dispensing, and EMM3 enhanced medical management and thrice-weekly medication dispensing.

Fiellin NEJM 2006

Buprenorphine Treatment: Induction

Buprenorphine induction strategies

- National guidelines provide induction options
  - Home- and office-based inductions
- In 2005, nearly half of MA providers used home-based inductions
- Induction "tool kit"
  - Buprenorphine
  - Ancillary medications
  - Instruction sheet
  - Teach self-management of chronic disease



ASAM National Practice Guideline 2015; Walley 2008; Sohler 2009; Cunningham 2011

Buprenorphine Treatment: Induction

Home- vs. office-based buprenorphine inductions

- Observational cohort study with 6-month follow up of 79 patients initiating buprenorphine treatment
- Choice of home- vs. office-based induction
- Findings: Similar reduction in opioid use, greater reduction in any drug use among home vs. office-based inductions

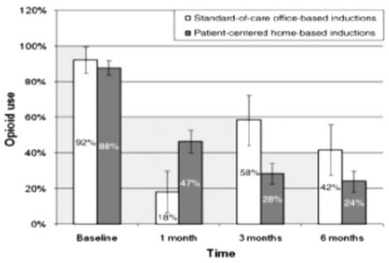


Fig. 1. Opioid use over time by induction strategy.

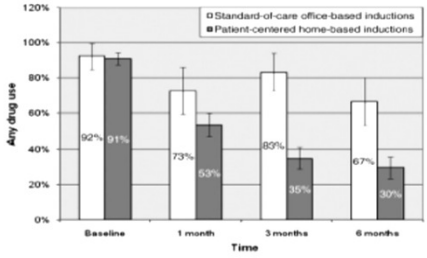
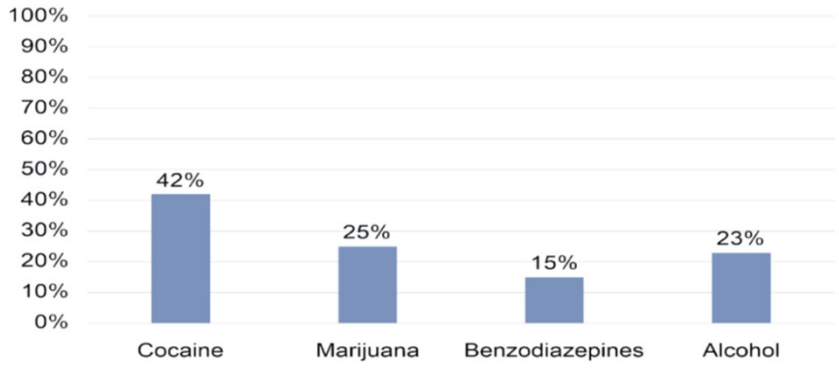


Fig. 2. Any drug use over time by induction strategy.

Cunningham 2011

Buprenorphine Treatment: Polysubstance Use

Polysubstance use among patients initiating buprenorphine treatment in the Bronx



Cunningham 2008, 2013; Lu 2017

Buprenorphine Treatment: Polysubstance Use

Buprenorphine Treatment Outcomes among Opioid-Dependent Cocaine Users and Non-Users

Chinazo O. Cunningham, MD, MS,[1] Angela Giovanniello, PharmD,[1]
Hillary V. Kunins, MD, MPH, MS,[1] Robert J. Roose, MD, MPH,[1]
Aaron D. Fox, MD,[1] Nancy L. Sohler, PhD, MPH[2]

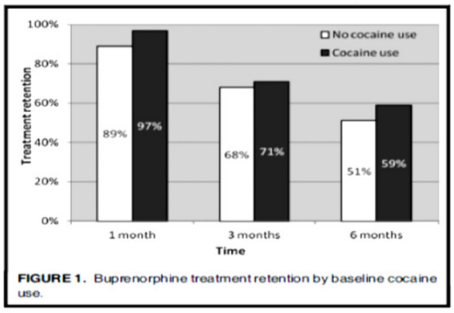


FIGURE 1. Buprenorphine treatment retention by baseline cocaine use.

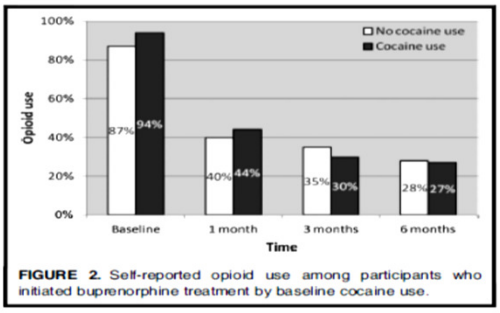


FIGURE 2. Self-reported opioid use among participants who initiated buprenorphine treatment by baseline cocaine use.

Cunningham 2013

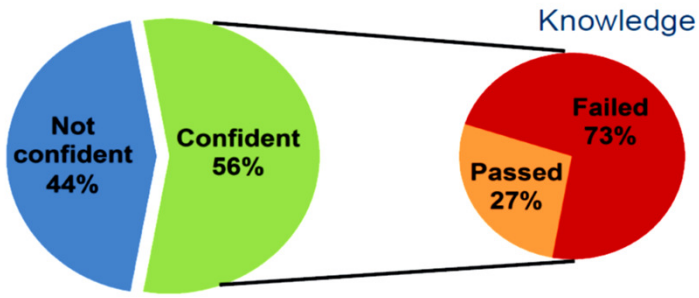
Buprenorphine Treatment: Polysubstance Use

Buprenorphine Treatment Retention by Baseline Marijuana Use

Lu T, AMERSA, 2017

Buprenorphine Treatment: UDS Interpretation

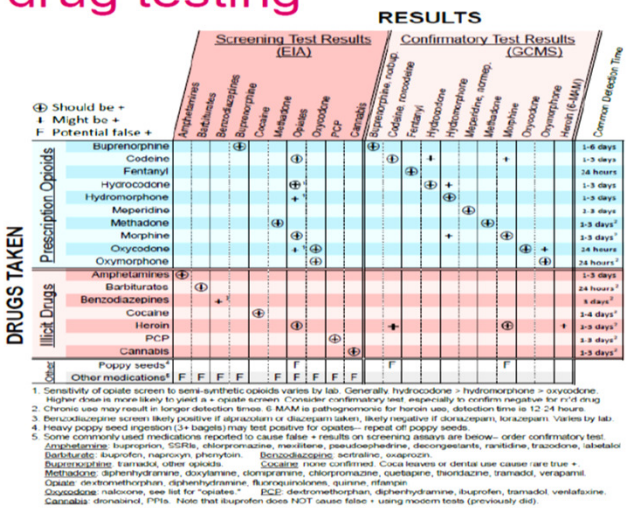
Urine drug test interpretation



Starrels JL et al. JGIM 2012

Buprenorphine Treatment: UDS Interpretation

Urine drug testing



Created by J. Starrels, MD jostarre@Montefiore.org
Available at: http://mytopcare.org & http://cahpp.org/bupmanual

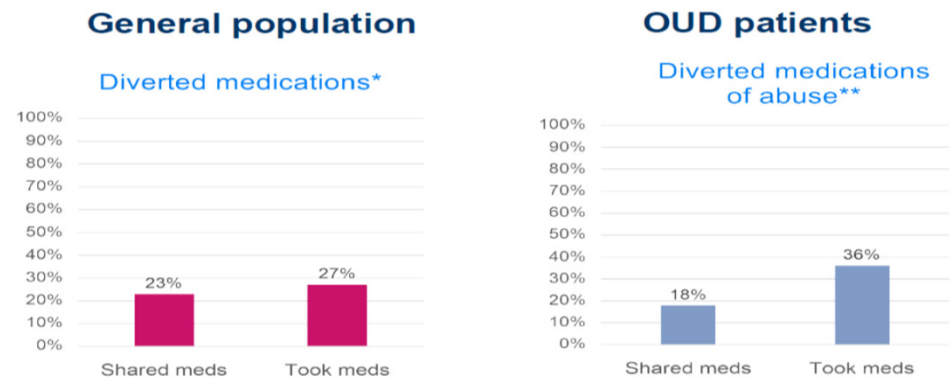
Buprenorphine Treatment: Diversion

Diversion

- It happens
- With many meds
- Buprenorphine <<< other opioids

Buprenorphine Treatment: Diversion

Diversion in general and OUD populations



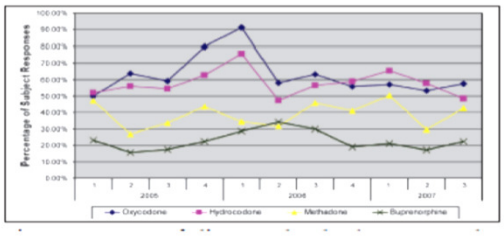
*Medications = antibiotics; birth control pills; meds for allergies, pain, mood, acne
**Medications of abuse = sedatives; buprenorphine; meds for ADHD, sleep, pain

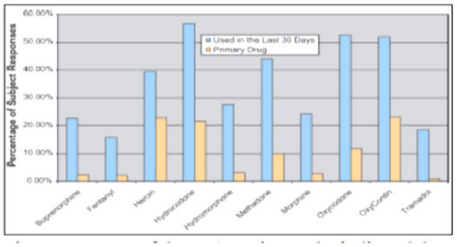
Caviness 2013; Lowfall 2013; Goldsworthy 2008

Buprenorphine Treatment: Diversion

Diversion: Buprenorphine vs. other opioids

- 2005-2007
- 100 drug treatment programs in the US
- 1741 patients with Rx OUD
- Asked about illicit medication use, prior 30 days
- Bupe <<< other opioids





Cicero 2007

Challenging the Myths About MAT for OUD

- ***Myth:*** *"MAT just trades one addiction for another"*
- ***Fact:*** Both buprenorphine and methadone do cause physical dependence to an opioid; however, physical dependence does not equal addiction or a use disorder; OUD is characterized by a compulsion to use opioids with associated behaviors which lead to dysfunction in the PWUD's life; buprenorphine and methadone allow people to stabilize, by occupying the mu opioid recptors to keep opioid withdrawal symptoms at bay and control opioid cravings, allowing a person to regain functionality in his/her life

- ***Myth:*** *"MAT is only for the short term"*
- ***Fact:*** Research has consistently shown that people maintained on MAT for longer durations have better long term outcomes than those who are taken off MAT; there is no evidence to support benefits from stopping MAT

Challenging the Myths About MAT for OUD

- ***Myth:*** *"My patent's condition is not severe enough to require MAT"*
- ***Fact:*** Given the lethality of the current opioid epidemic, preventing unintentional opioid overdose among opioid users is a key goal of MAT; MAT is now recommended for all opioid users, including adolescents, and all pregnant women, even if they do not meet DSM-5 criteria for OUD; the three MAT options allow tailoring of treatment to meet each person's needs

- ***Myth:*** *"MAT increases the risk for overdose in patients"*
- ***Fact:*** Research has shown clearly that both methadone and buprenorphine use are associated with decreased risk for mortality due to opioid overdose; occupancy of the mu opioid receptors by either methadone or buprenorphine protects a PWUD from an unintentional overdose if he/she relapses with opioids

Challenging the Myths About MAT for OUD

- ***Myth:*** *"Providing MAT will only disrupt and hinder a patient's recovery process"*
- ***Fact:*** MAT has been shown to assist PWUD in recovery by improving quality of life, level of functioning, and the ability to handle stress; most importantly, MAT reduces mortality while PWUD begin their recovery process; PWUD are often more open to other supports for their recovery once stable on MAT

- ***Myth:*** *"There isn't any proof that MAT is better than abstinence"*
- ***Fact:*** MAT is evidence-based and is the recommended course of treatment for OUD; AAAP, AMA, NIDA, SAMHSA, NIAAA, CDC, WHO, and many other professional organizations emphasize MAT as **first-line treatment for OUD**

- ***Myth:*** *"Most insurance plans don't cover MAT"*
- ***Fact:*** This is no longer true; most Medicaid, Medicare, and private insurance plans cover MAT; a prior authorization (PA) may be required

Best Practices for Engaging PWUD

1. *Engaging* with PWUD is the most important activity: *demonstrate empathy*
2. *Utilizing* harm reduction principles in counseling and employing harm reduction interventions with PWUD is vital (make referrals as needed: MAT, MH; link with local services: SEP, MMTP)
3. *Utilizing* motivational interviewing to engage PWUD *in whatever stage of change they are currently in*
4. *Giving* a naloxone kit to anyone at risk of opioid overdose (either experiencing it or witnessing it)
5. *True integration* (not just coordination of care or co-location) of behavioral health, primary care, and SUD services is *key* to *effecting* change
6. *Think outside the box!*
7. *Support one another*

OUD and MAT Conclusions

- OUD is prevalent; OUD is a chronic disease/medical condition
- MAT is efficacious for OUD; chronic medication is often needed
- MAT is only effective if the person with OUD is READY for treatment
- Do harm reduction education and give naloxone kits
- Be non-judgmental with persons with OUD; it is not a moral issue or a character defect, it is a medical condition
- Incorporating MAT into general medical practice is the ideal forum in which to deliver care; it is a rewarding part of practice
- Dispel myths and misconceptions about MAT; address stigma

Resources

- www.harmreduction.org
- www.samhsa.gov
- https://www.confidentialrecovery.com/services/mat-medication-assisted-treatment/
- https://www2.palomar.edu/users/warmstrong/wwstaff.htm
- http://www.penington.org.au/community-overdose-prevention-and-education-cope/
- Special thanks to: Petros Levounis, MD, Chinazo Cunningham, MD, Ross Sullivan, MD, and Crystal Marr, LCSW for use of their slides
- www.cdc.gov
- www.nytimes.com
- https://www.cdc.gov/nchs/about/index.htm
- https://www.ahrq.gov/data/hcup/index.html
- https://www.vox.com/
- https://www.drugabuse.gov/drugs-abuse/opioids/opioid-overdose-crisis
- https://www.hhs.gov/opioids/about-the-epidemic/index.html
- https://www.health.ny.gov/
- https://pcssnow.org/
- https://www.naabt.org/
- https://www.ncbi.nlm.nih.gov/pubmed/12606177
- https://www.asam.org/
- https://www.health.ny.gov/diseases/aids/consumers/prevention/

Resources

1) http://www.shatterproof.org/blog/entry/medication-assisted-treatment-for-addiction
2) https://www.whitehouse.gov/sites/default/files/ondcp/recovery/medication assisted treatment 9-21-20121.pdf
3) http://www.overdosefreepa.pitt.edu/education-toolbox/medication-assisted-treatment-mat-2/#clarifying
4) http://www.asam.org/docs/default-source/advocacy/aaam implications-for-opioid-addiction-treatment final
5) http://store.samhsa.gov/shin/content/SMA14-4854/SMA14-4854.pdf
6) http://www.samhsa.gov/medication-assisted-treatment/legislation-regulations-guidelines#DATA-2000
7) http://www.samhsa.gov/medication-assisted-treatment/treatment/naltrexone
8) http://www.samhsa.gov/medication-assisted-treatment/training-resources/support-organizations
9) https://www.federalregister.gov/articles/2016/03/30/2016-07128/medication-assisted-treatment-for-opioid-use-disorders
10) http://www.integration.samhsa.gov/clinical-practice/mat/mat-overview
11) https://www.congress.gov/bill/114th-congress/senate-bill/524/text
12) http://pcssmat.org/waiver-eligibility-training/
13) "MAT Maintenance Treatment and Superior Outcomes" PowerPoint, Dr. Arthur Williams
14) https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition/frequently-asked-questions/how-long-does-drug-addiction-treatment
15) Challenging the Myths About Medication Assisted Treatment (MAT) for Opioid Use Disorder (OUD) information sheet by Nick Szubiak, Director, Clinical Excellence in Addictions, at NICKS@thenationalcouncil.org

QUESTIONS?

kramsey@hrhcare.org