



Grayken Center  
for Addiction  
Boston Medical Center



# The Opioid Epidemic: How We Got Here, How We End It

**MHOA**  
**November 6, 2019**

# What were/are the major drivers of the opioid epidemic?

**Pre-existing conditions**

Pharmaceutical industry **marketing tactics**

**Untreated/Undertreated** Addiction

**Overprescribing** and diversion of pain medication

Emergence of **synthetic opioids** (fentanyl)

Ready supply of **cheap, pure heroin**

**Social determinants of health:** poverty, racism, violence/trauma, lack of educational and vocational opportunities.

# Epidemics don't happen in a vacuum: there were pre-existing conditions

Substance use has always been **highly stigmatized** – reflected in public attitude, clinical care, media coverage, language and policy

Policy and funding were **focused largely on criminal justice** and **supply reduction** policies and practices, not on health/public health approaches

**Separate care and payment structure** – carve outs; lack of integration with larger health system

**Little to no training** on substance use in educational curricula in all health fields

Long history of **inadequate healthcare coverage, underfunding as well insurance discrimination in both public and commercial plans**

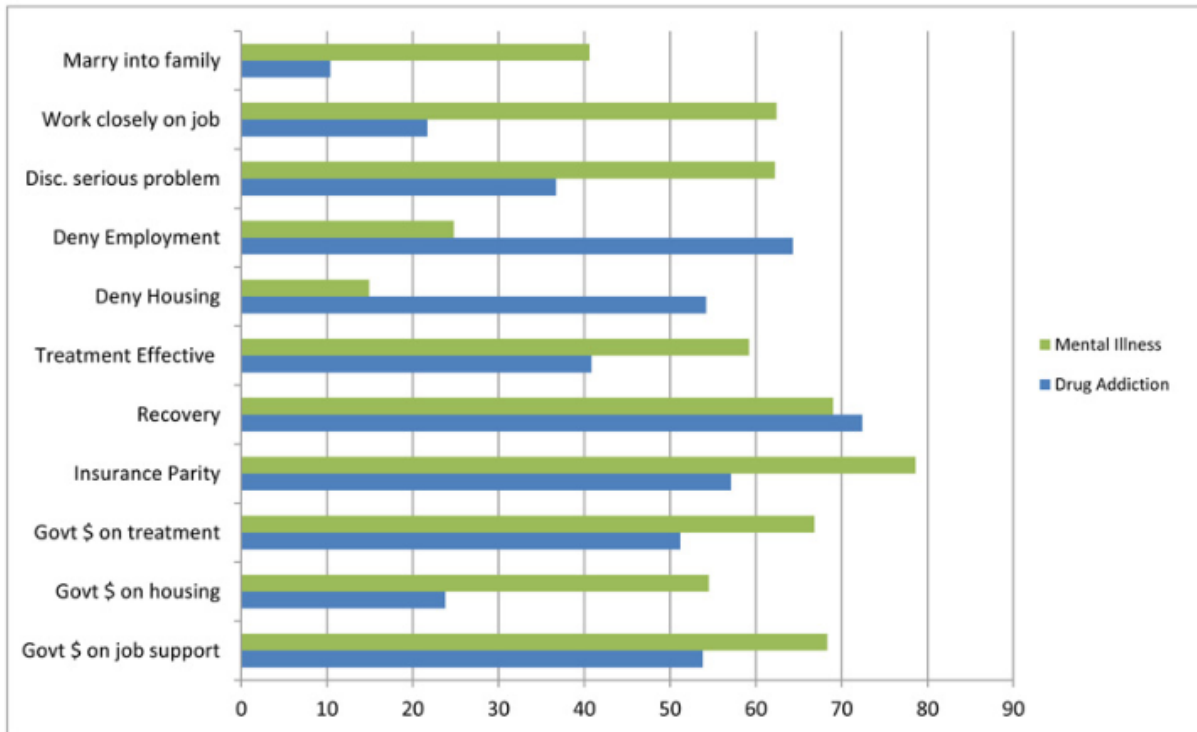
Only **very small percentage of patients diagnosed** and get care – about 17%, (Only 8% of referrals to treatment are from healthcare settings.)

Data was and is **very outdated and of very poor quality.**

Intervention and treatment usually occur at the **most acute stage**; are largely episodic of short duration and poor quality

# Public Attitudes Drive Public Policy

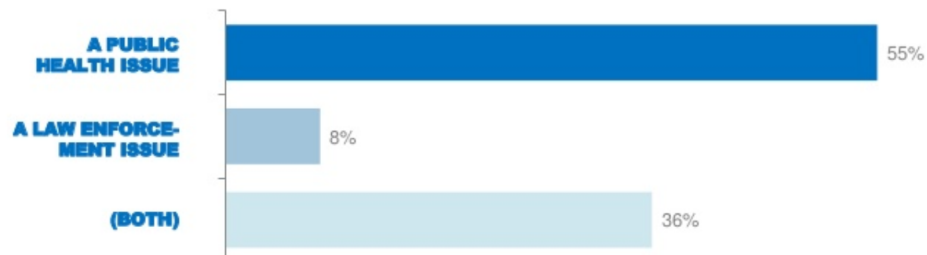
*Stigma, Discrimination, Treatment Effectiveness: Comparing Public Views About Drug Addiction with Mental Illness* – Barry, et al. October 2014, Psychiatric Services



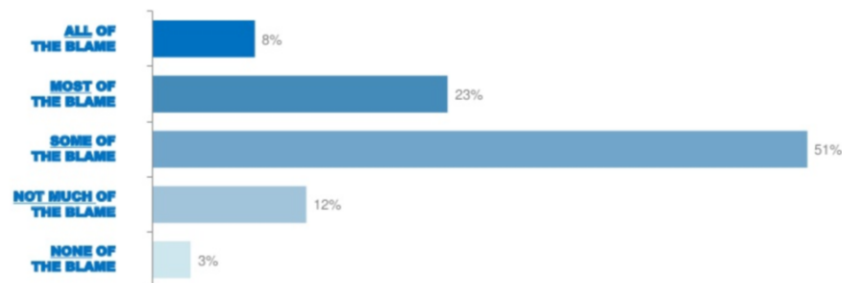
- 43% **oppose giving health benefits** for people with a drug addiction v. 21% for mental illness
- 64% said employers should **deny employment** for people with drug addiction v. 25% for mental illness
- 54% said **landlords should deny housing** for people with a drug addiction v. 15% for mental illness

# BC/BS MA Survey Findings (March 2018)

More than half believe **the opioid epidemic is a public health issue** rather than a matter for law enforcement



82% believe people who are addicted to opioids **bear all, most or some of the blame for their addiction**



Almost 4 in 10 **believe addiction is a disease**; 3 in 10 **believe it is a choice**

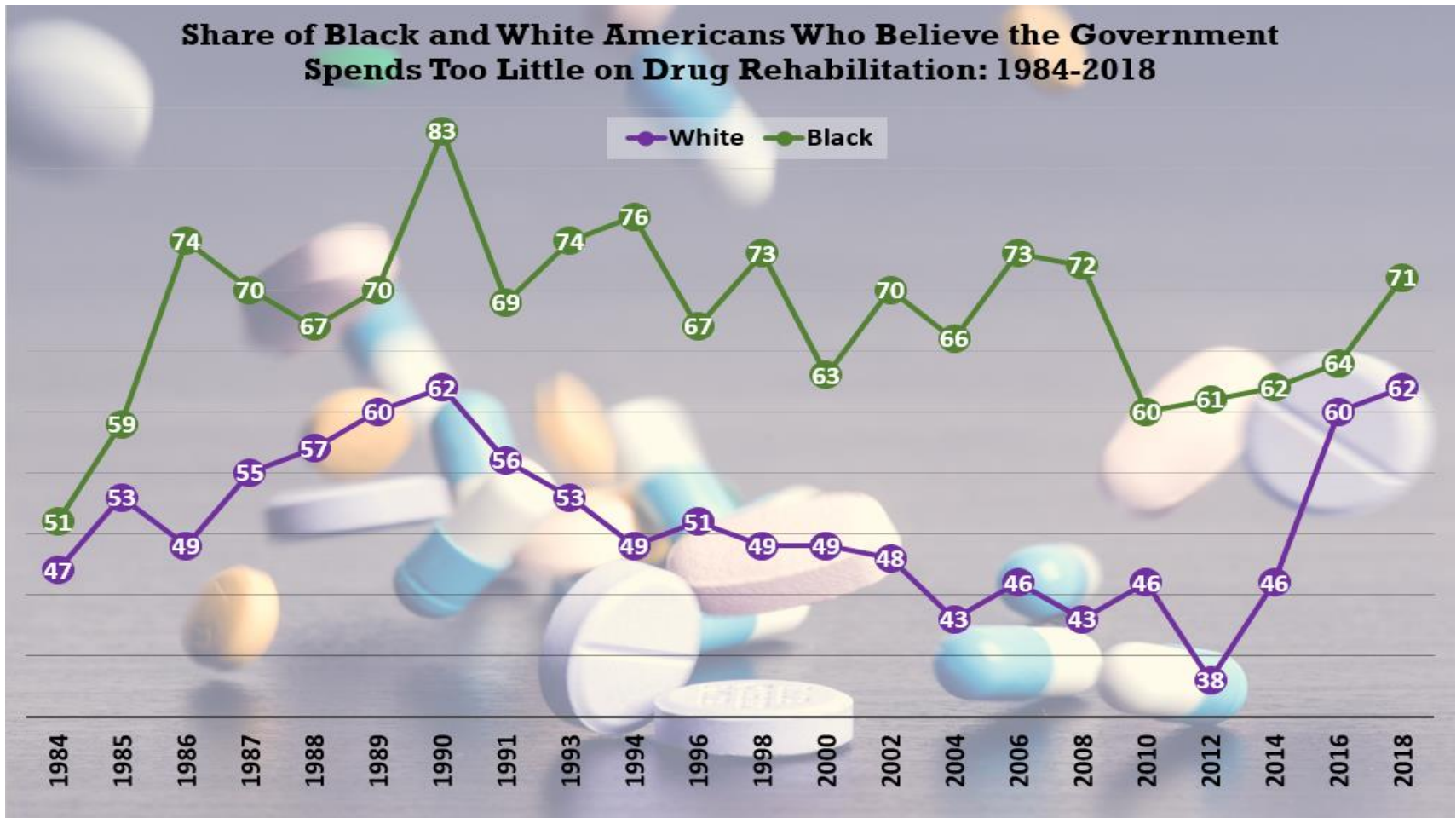


# Attitudes on Spending on Drug Rehabilitation

Share of All Americans Who Believe the Government Spends Too Little on Drug Rehabilitation: 1984-2018



# Attitudes on Spending on Drug Rehabilitation By Race



# A Massachusetts Medical Society/Shatterproof/RIZE survey on provider attitudes on addiction training and treatment

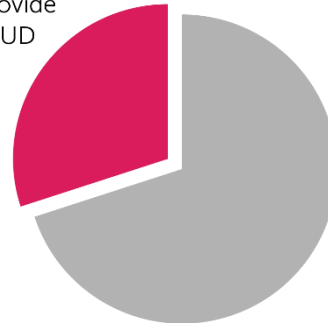
## Only 1 in 4

providers had received training on addiction during medical education



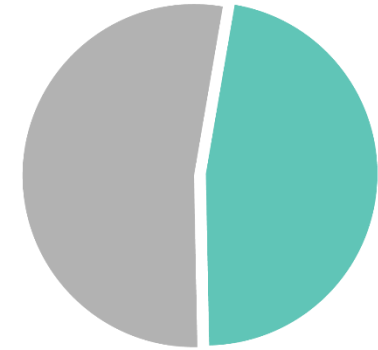
## Less than 1/3

of EM, FM/IM, OBGYN/Women's Health, or pediatric providers feel very prepared to screen, diagnose, provide brief intervention for, or discuss or provide treatment for OUD



## Less than 50%

of EM and FM/IM providers believed that OUD is treatable



## Other findings:

- 40% of EM or FM/IM providers feel that treating patients with OUD **takes away time and resources from other patients**
- **2x as many EM providers** than any other specialty believe methadone treatment for OUD is **substituting one addiction for another**



# Opioid Prescribing Patterns

- In 2012, **there were 255 million prescriptions written in the US** – enough for every adult American to have their own prescription, quadrupling since 1999 with a quadrupling in prescription drug overdose deaths
  - From 2007 – 2012, the rate of opioid prescribing steadily increased among specialists more likely to manage acute and chronic pain.
- Prescribing rates are highest among pain medicine (49%), surgery (37%), and physical medicine/rehabilitation (36%).
  - However, **primary care providers** account for about half of opioid pain relievers dispensed.
- Since the peak in 2012, **the number of opioid prescriptions has fallen from 81.8/100 persons to 58.7/100 in 2017**. Still 3x the number in 1999.
- Wide variation by county with some counties prescribing 6x the rate of other counties

# **Painful Words: How a 1980 Letter Fueled the Opioid Epidemic – *New York Times*, May 31, 2017**

- The letter was written by Dr. Hershel Jick, a drug specialist at Boston University Medical Center, and a graduate student. Cited over 600 times, most of them inaccurate.
- "I'm essentially mortified that that letter to the editor was used as an excuse to do what these drug companies did," Jick told The Associated Press in an interview on Wednesday. "They used this letter to spread the word that these drugs were not very addictive."

## ***States Sue Pharmacy Company Behind OxyContin Amid Opioid Crisis***

California, [Maine](#), Hawaii and the District of Columbia are accusing Purdue Pharma of helping fuel the rise in drug overdoses linked to opioids.

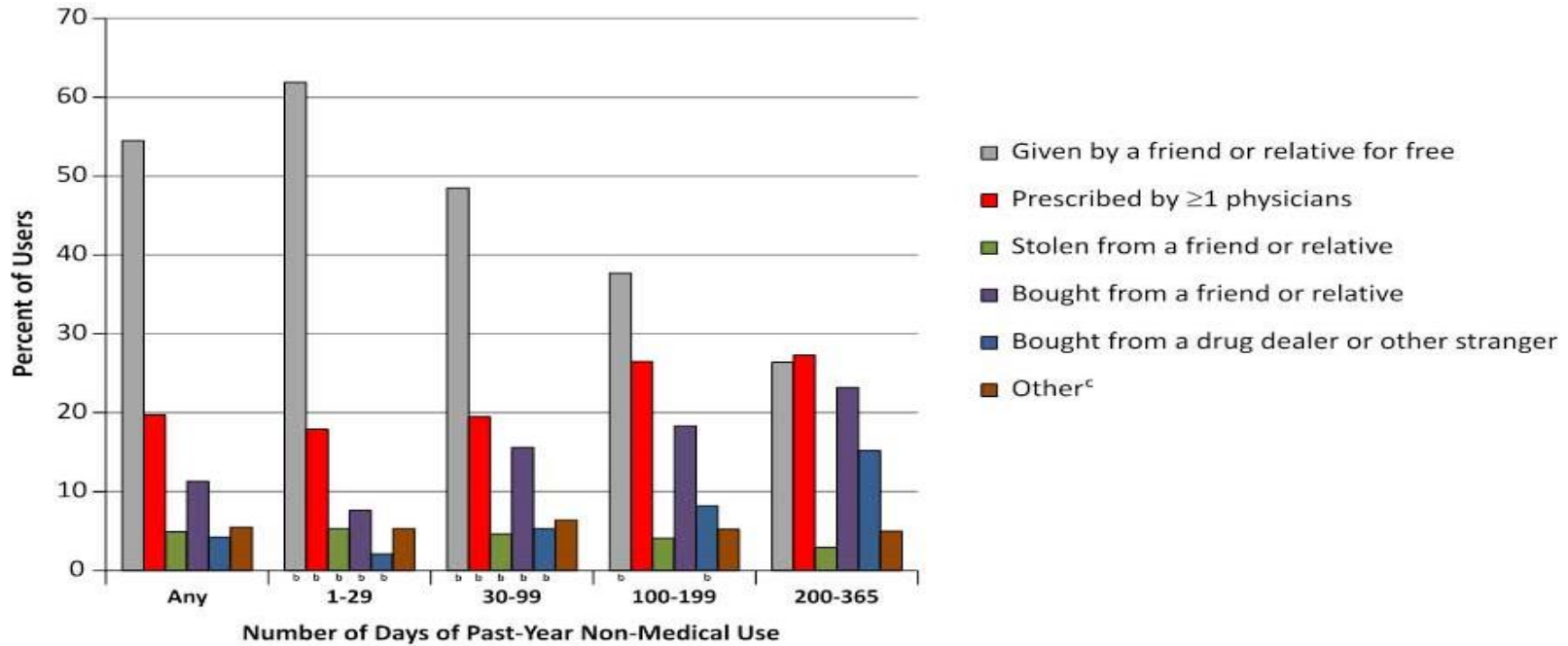
## ***McKesson, Drug Distribution Giant, Settles Lawsuit Over Opioids in West Virginia***

## ***First Opioid Trial Takes Aim at Johnson & Johnson***

Having settled with Purdue Pharma and Teva, Oklahoma will now try to blame Johnson & Johnson for its opioid disaster. Nearly 1,900 lawsuits remain nationwide.

## ***New York Sues Sackler Family Members and Drug Distributors***

# Sources of Prescription Opioids Among Past-Year Non-Medical Users



<sup>a</sup> Obtained from the US National Survey on Drug Use and Health, 2008 through 2011.<sup>5</sup>

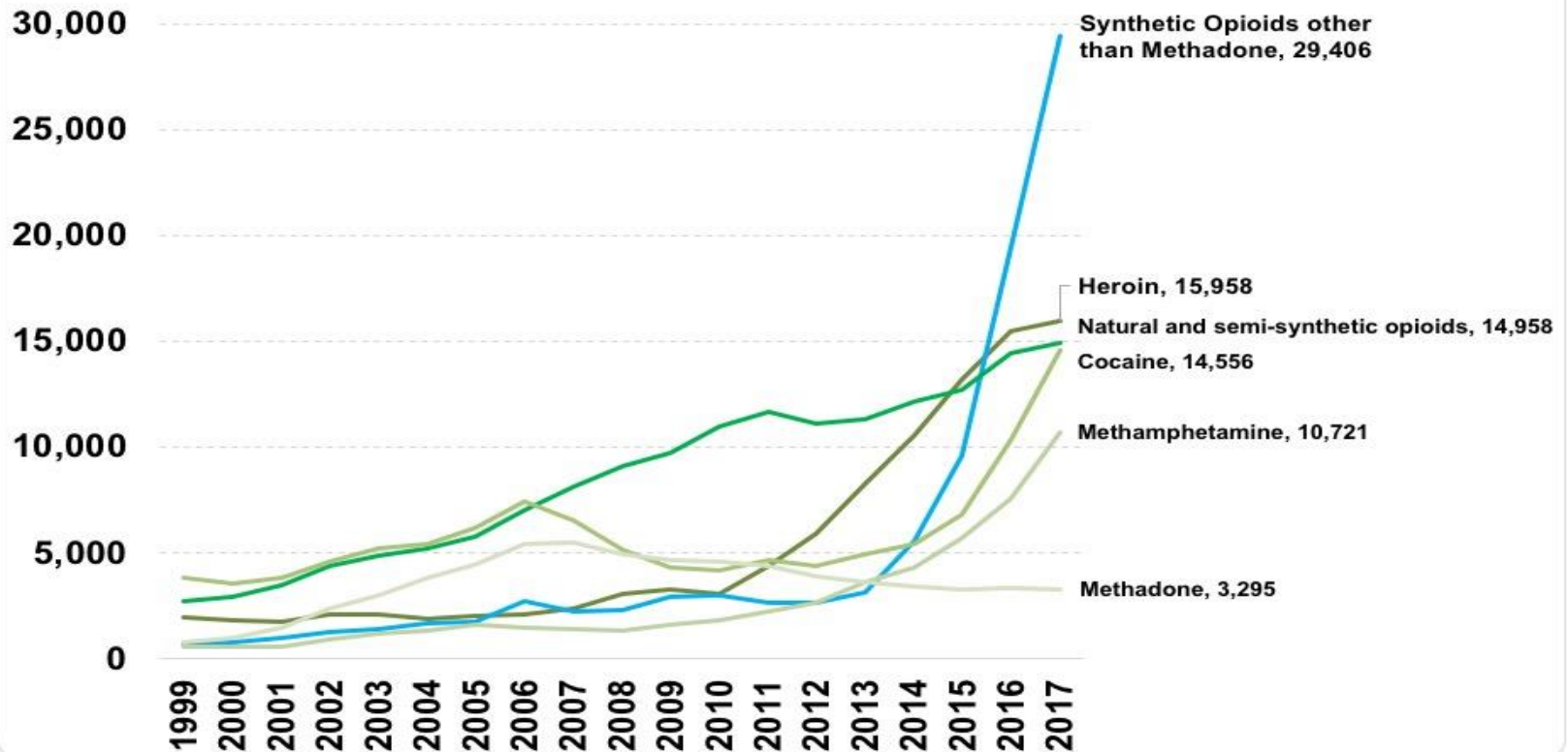
<sup>b</sup> Estimate is statistically significantly different from that for highest-frequency users (200-365 days) ( $P < .05$ ).

<sup>c</sup> Includes written fake prescriptions and those opioids stolen from a physician's office, clinic, hospital, or pharmacy; purchases on the Internet; and obtained some other way.

SOURCE: Jones C, Paulozzi L, Mack K. Sources of prescription opioid pain relievers by frequency of past-year nonmedical use: United States, 2008–2011. JAMA Int Med 2014; 174(5):802-803.

# More than 72,000 people died of a drug overdose in 2017

## Drugs Involved in U.S. Overdose Deaths, 1999 to 2017

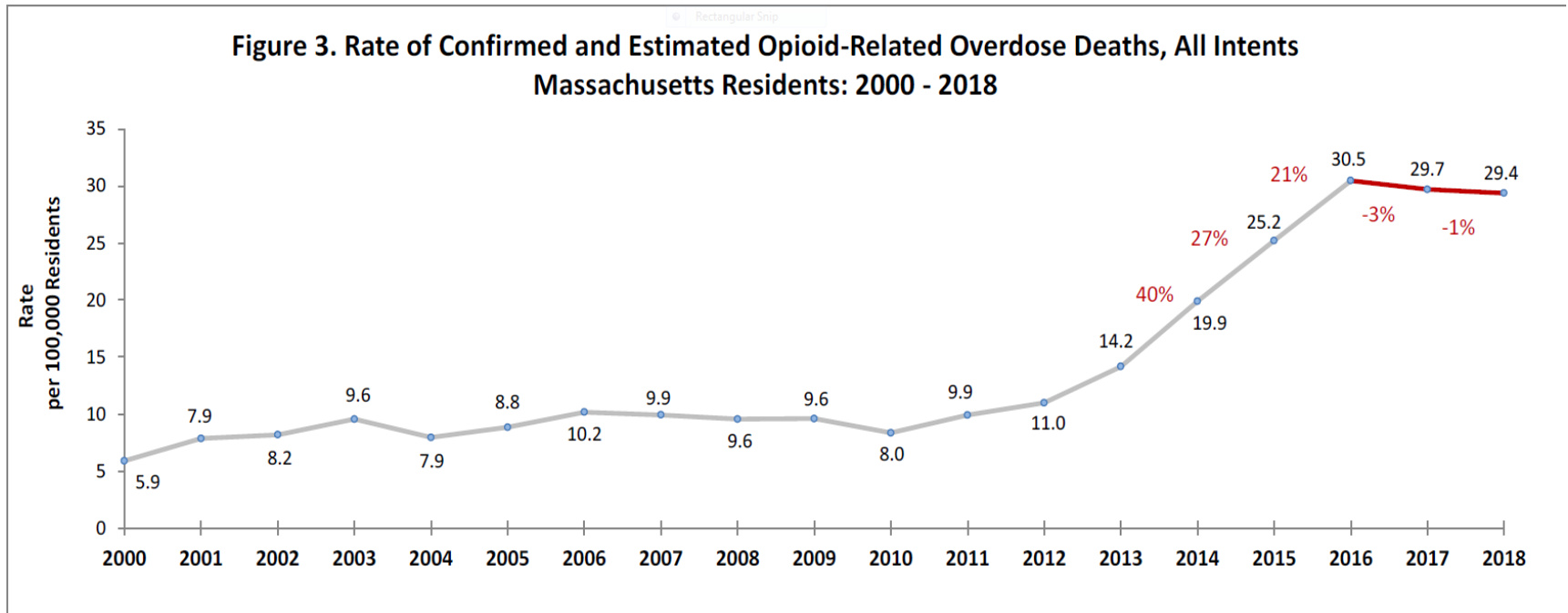


# Evolving Epidemics

- The National Survey on Drug Use and Health (NSDUH) estimates that **80% of new heroin initiates started opioid misuse with a prescription pain medication** – seems to be driven largely by economics
- Emerging **evidence of shift** – increasing number of people reporting heroin as first opioid
- **Synthetic opioids** other than methadone linked to increases in overdose death in MA and in many other states.
- Recent analysis of OD deaths in MA showed **an increase in fentanyl involved deaths from 32% in 2013-14 to 90%** through first half of 2018.
  - In MA in 2014-15, **83% of overdoses involved an opioid and another substance**
- Significant increases in deaths attributable to cocaine and methamphetamine
- Polysubstance use constitutes the majority of deaths – a fourth wave?

**This is more than just an opioid epidemic.**

## States are making some progress - Massachusetts

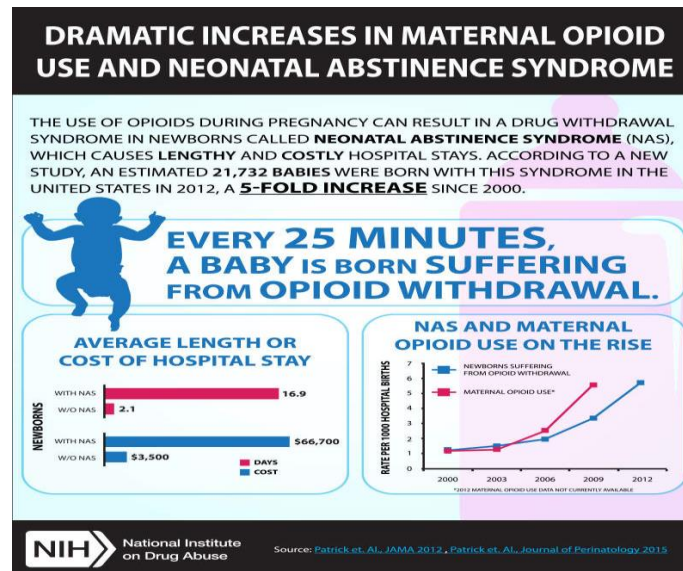


In 2018, DPH estimates a 1% decrease in the rate of opioid-related overdose deaths compared with 2017. This follows an estimated 3% decline in the rate of opioid-related overdose deaths from 2016 to 2017. The rate for 2018 represents an estimated 4% decrease from 2016.

Data Brief, August 2019. MA Department of Public Health.

# Other Health Consequences

- NSDUH estimates approximately **2m adults with an opioid use disorder – LIKELY underestimated!**
- Significant **increase in Hepatitis C infections** associated with injection Drug Use. During 2010–2015, HCV incidence increased by 294% with the highest rates among young persons who inject drugs (PWID).<sup>†</sup>
- Local **outbreaks of HIV** among PWID: Scott Co. Indiana, Lawrence and Lowell, MA; Boston, MA
- Significant **increases in Neonatal Abstinence Syndrome**. 3-fold increase from 1999-2013
- Increase in infective endocarditis associated with drug use



# Significant Missed Opportunities

## Methadone And Buprenorphine Are Associated With Reduced Mortality After Nonfatal Opioid Overdose

RETROSPECTIVE COHORT, MASSACHUSETTS PUBLIC HEALTH DATASET, 2012-2014

**17,568 opioid overdose survivors**  
with ambulance or hospital encounter



**Only 3 in 10 receive MOUD\***  
over 12 months of follow-up



\*Medication for Opioid Use Disorder

Mortality at 12 months:  
**4.7 deaths / 100 person-ys**

Association of MOUD\* with mortality:

Methadone ↓ 53%

Buprenorphine ↓ 37%

Naltrexone\*\* ↔

\*\* limited by small sample

Larochelle et al. *Annals of Internal Medicine*. 2018.



# Touchpoints for Intervention



## TOUCHPOINTS: OPPORTUNITIES TO PREDICT AND PREVENT OPIOID OVERDOSE

RETROSPECTIVE COHORT, MASSACHUSETTS PUBLIC HEALTH DATA WAREHOUSE 1,351 OPIOID OVERDOSE DEATHS AMONG 6,717,390 RESIDENTS, 2014

### WHAT WE KNOW:

Risk factors for future opioid overdose death are well-established and can be identified through medical care, public health, or criminal justice system encounters. These encounters could serve as “touchpoints” – opportunities to identify and intervene with individuals at high risk of opioid overdose death.

### STUDY OBJECTIVE

Determine the relative risk for opioid overdose death and proportion of those deaths that could be prevented at 8 candidate touchpoints.

#### RELATIVE RISK OF OPIOID OVERDOSE DEATH FOLLOWING TOUCHPOINTS

##### OPIOID PRESCRIPTION TOUCHPOINTS

- high dosage
- benzodiazepine co-prescribing
- multiple prescribers
- multiple pharmacies

13x

##### CRITICAL ENCOUNTER TOUCHPOINTS

- opioid detoxification
- nonfatal opioid overdose
- injection-related infection
- release from incarceration

68x

#### PROPORTION OF OPIOID OVERDOSE DEATHS THAT COULD BE AVERTED FOLLOWING TOUCHPOINTS

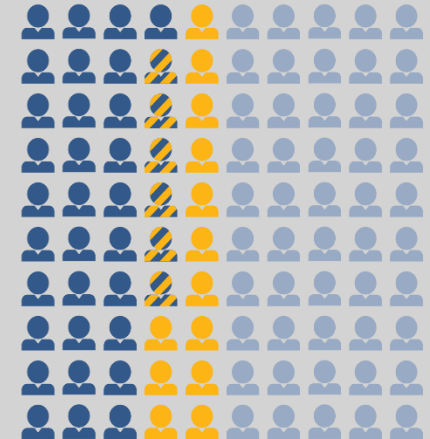
50% for any touchpoint

19% for opioid prescription touchpoints

- high dosage
- benzodiazepine co-prescribing
- multiple prescribers
- multiple pharmacies

37% for critical encounter touchpoints

- opioid detoxification
- nonfatal opioid overdose
- injection-related infection
- release from incarceration



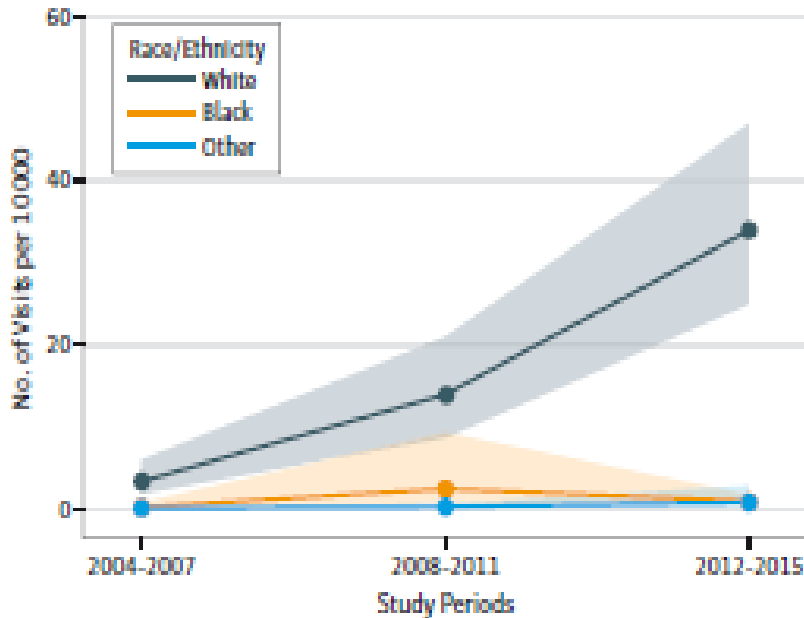
**BOTTOM LINE:** These data provide a roadmap of high-yield opportunities to deliver harm-reduction services and initiate treatment with medications for opioid use disorder.

Larochelle MR et al. (2019). Touchpoints: Opportunities to Predict and Prevent Opioid Overdose. Drug and Alcohol Dependence. DOI: 10.1016/j.drugalcdep.2019.06.039

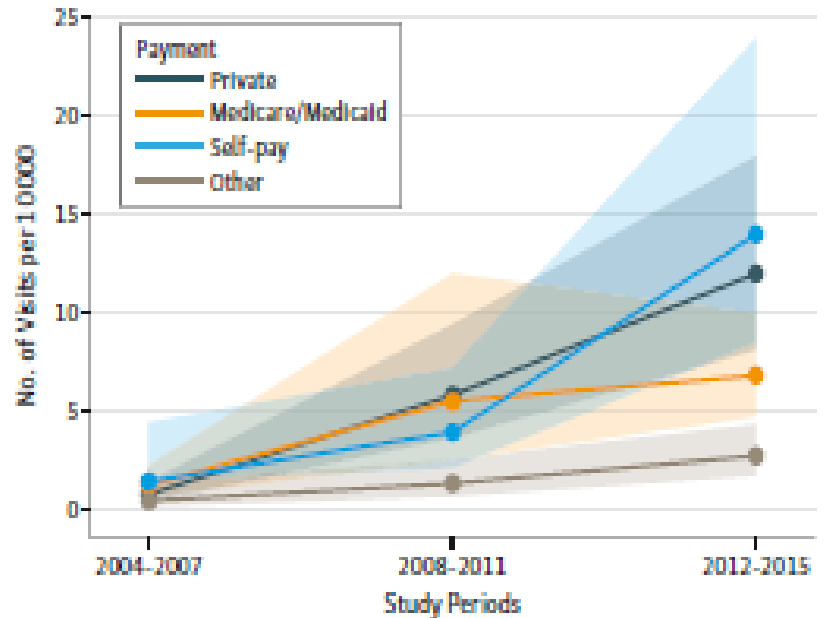
# Inequitable Access

Figure. Buprenorphine Visits by Race/Ethnicity and Payment Type, 2004-2015

A Visits by race/ethnicity

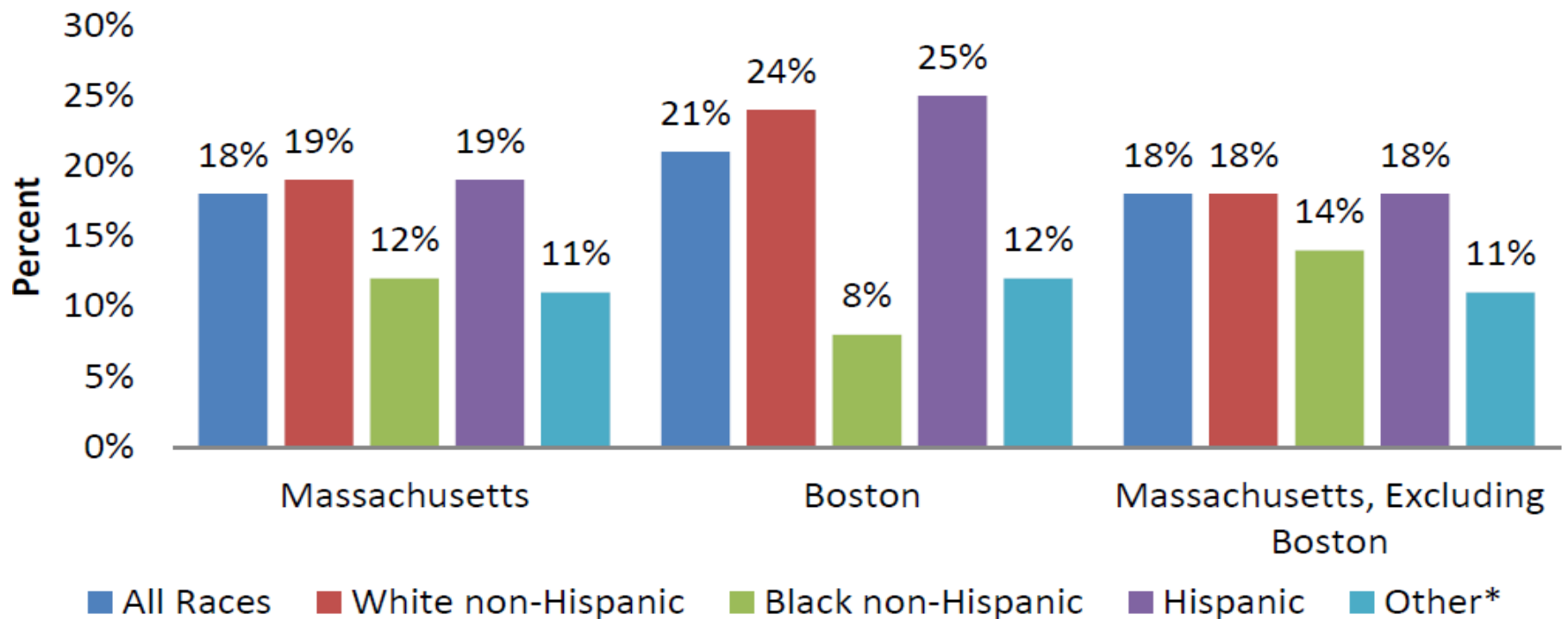


B Visits by payment



Buprenorphine visits (n = 1369) and 95% CIs per 10 000 visits (shaded areas), grouped by year and stratified by race/ethnicity and payment type. Estimates account for complex survey design elements and are nationally representative.

**Figure 1: Percent of Hospital Patient Encounters for Opioid-related Overdose Resulting in Substance Misuse Treatment in 30 Days, by Race/Ethnicity and Location**



\*Other includes Asian/Pacific Islander non-Hispanic, American Indian non-Hispanic and other. Groups were combined due to small counts.

# What is our response? Where is the evidence taking us?

Safer Opioid Prescribing, Alternative Pain Management Strategies - CDC Guideline, State limits

Prescription Drug Monitoring (PDMPs)

Safe Storage and Medication Disposal

Better Diagnoses and linkage to care (ED interventions, Addiction Consultation Services)

Expanded/equitable access to treatment; particularly MOUD

- Increase healthcare coverage with a robust treatment benefit
- Capacity building in primary care settings
- Increasing the number of waived health professionals – “x” the DEA X waiver?
- Expanded health professionals who can prescribe treatments (NPs, PAs)
- Increased patient cap + Increase federal safety net dollars
- Build capacity in “treatment deserts”

# What is our response? Where is the evidence taking us?

Enhanced enforcement of Federal parity law

Expand Naloxone Availability/Co-prescribing

Increase access to Syringe Service Programs; ‘Overdose Prevention Sites’

Decrease Stigma

- Personal Narratives

Enhanced Training/Treating people with SUD with dignity and respect

Changing the Language we Use – SIGN THE PLEDGE

- <https://www.bmc.org/addiction/reducing-stigma>

Public Health and Public Safety Partnerships



GOAL: Decrease  
Overdose deaths by 40%  
in 2 Years



2  
2

HEALing  
Communities  
STRONG

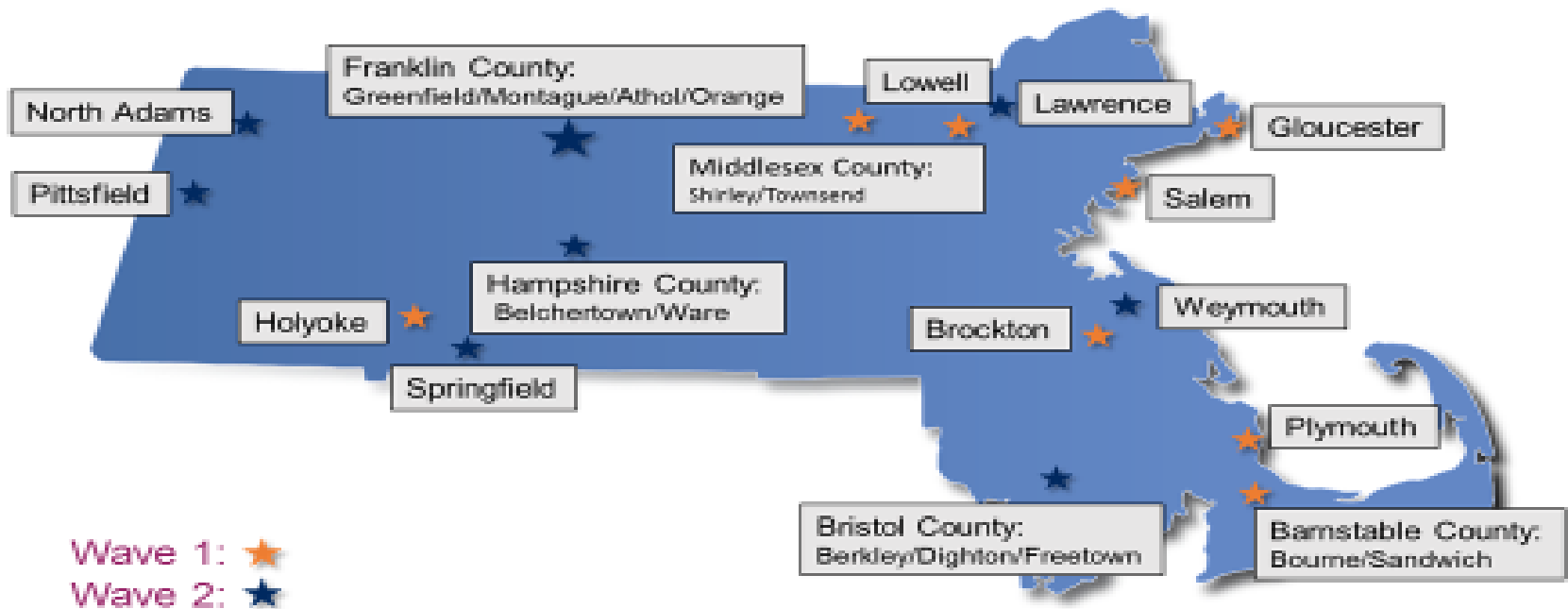
# How we're going to achieve our goal

- 1) Increase opioid overdose prevention education and naloxone distribution (OEND)
- 2) Enhance delivery of medication for opioid use disorder (MOUD) maintenance treatment, including agonist/ partial agonist medication
- 3) Improve prescription opioid safety

To effectively act on the three objectives, it is necessary to guide evidence-based practices towards:

- Populations at substantially heightened risk for opioid overdose death
- Venues with populations at heightened risk for opioid overdose death

# Massachusetts' Communities





## How you Can Participate and help reach our goal

- Participate in community coalitions
- Support uptake of interventions
- Assist with dissemination of communications campaigns
- Be a community champion for evidence-based approaches