



Grayken Center
for Addiction
Boston Medical Center



The Path of the Epidemic and the Role of Drug Courts

NEADCP
November 21, 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**

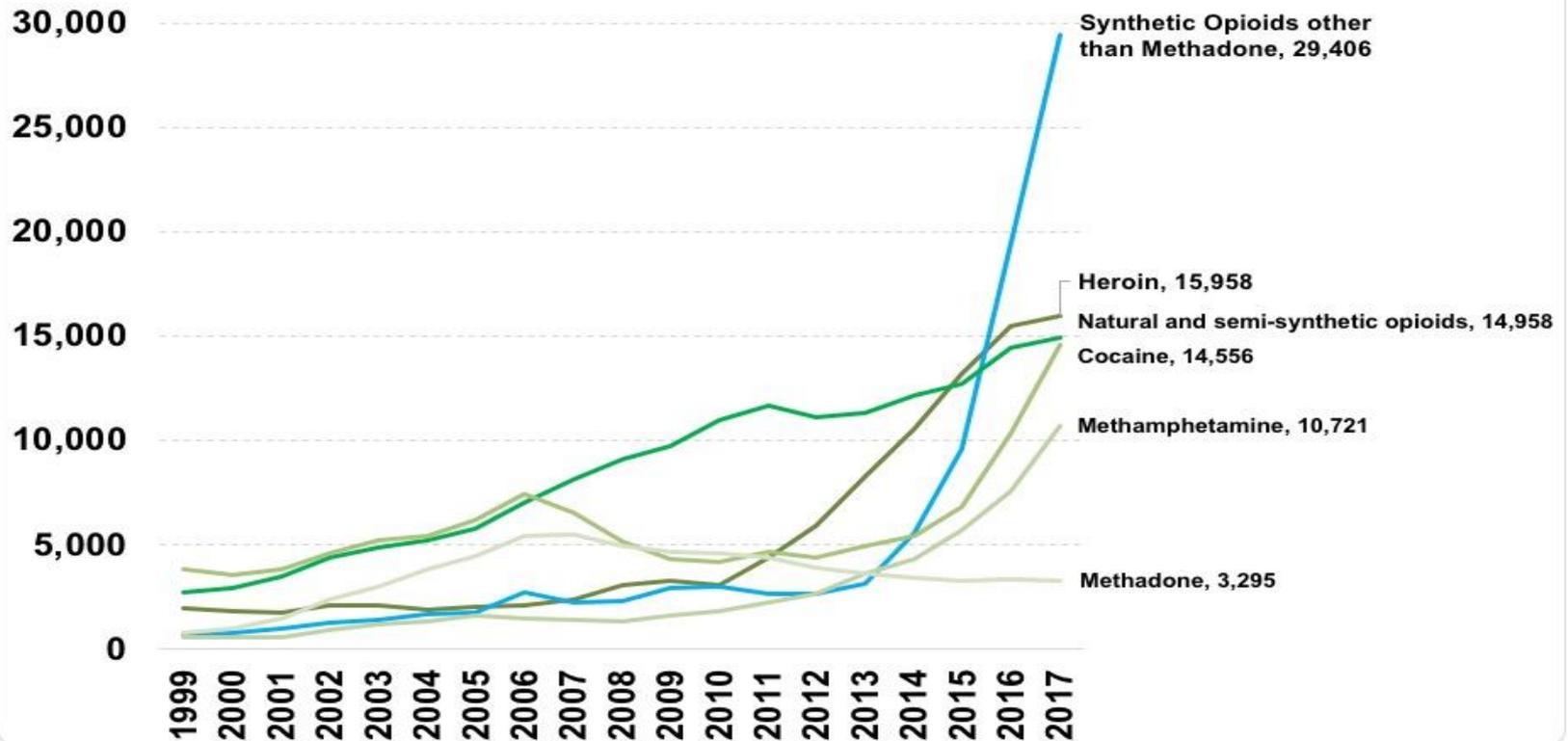
Only **very small percentage of patients diagnosed** and get care – about 17%, (Only 8% of referrals to treatment are from healthcare settings.)

Data was and is **very outdated and of very poor quality.**

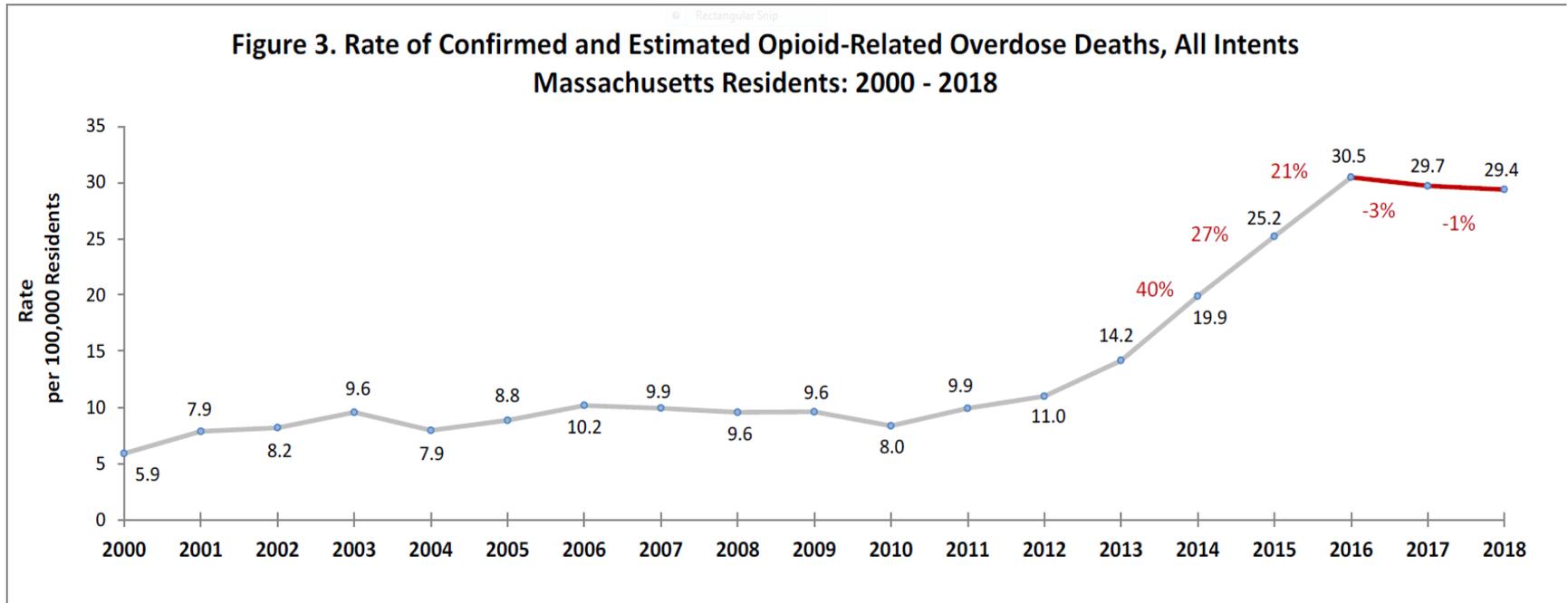
Intervention and treatment usually occur at the **most acute stage**; are largely episodic of short duration and poor quality

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

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



States are making some progress - Massachusetts

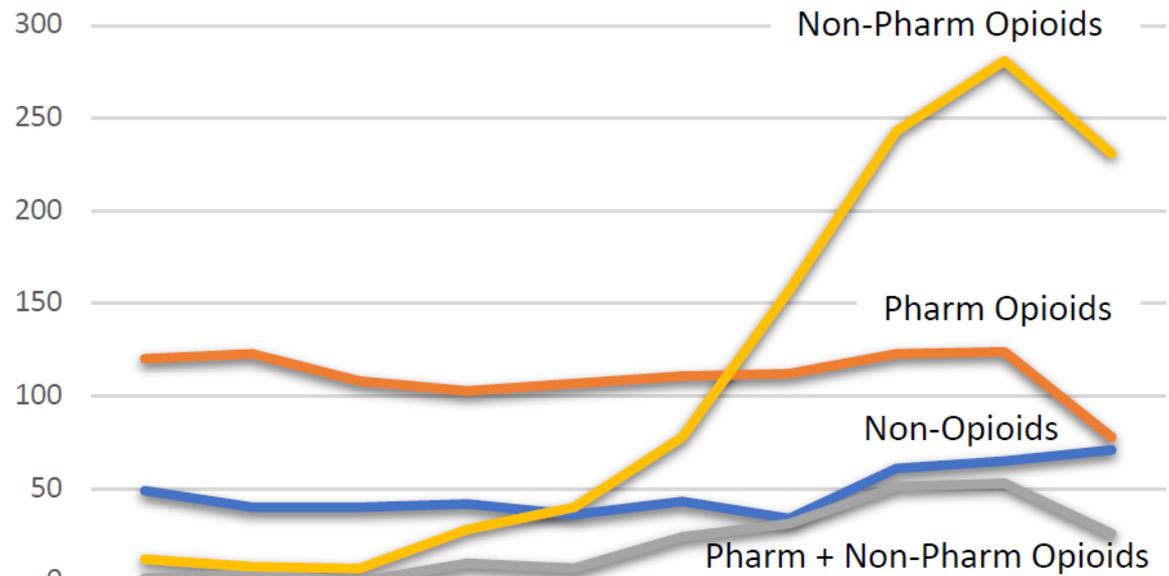


In 2018, DPH estimates a 1% decrease in the rate of opioid-related overdose deaths compared with 2017. This follows an estimated 3% decline in the rate of opioid-related overdose deaths from 2016 to 2017. The rate for 2018 represents an estimated 4% decrease from 2016.

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

States are making some progress - Maine

Number of Deaths due to Pharmaceutical vs Nonpharmaceutical Opioids



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Non-Opioid	49	40	40	42	36	43	34	61	65	71
Pharm. Opioid	120	123	108	103	107	111	112	123	124	78
Pharm + Non-Pharm Opioid	2	4	0	10	7	24	31	51	53	26
Non-Pharm. Opioid	12	8	7	28	40	78	157	243	281	231

Figure 1. Overall trends in Maine deaths due to opioids



Evolving Epidemics

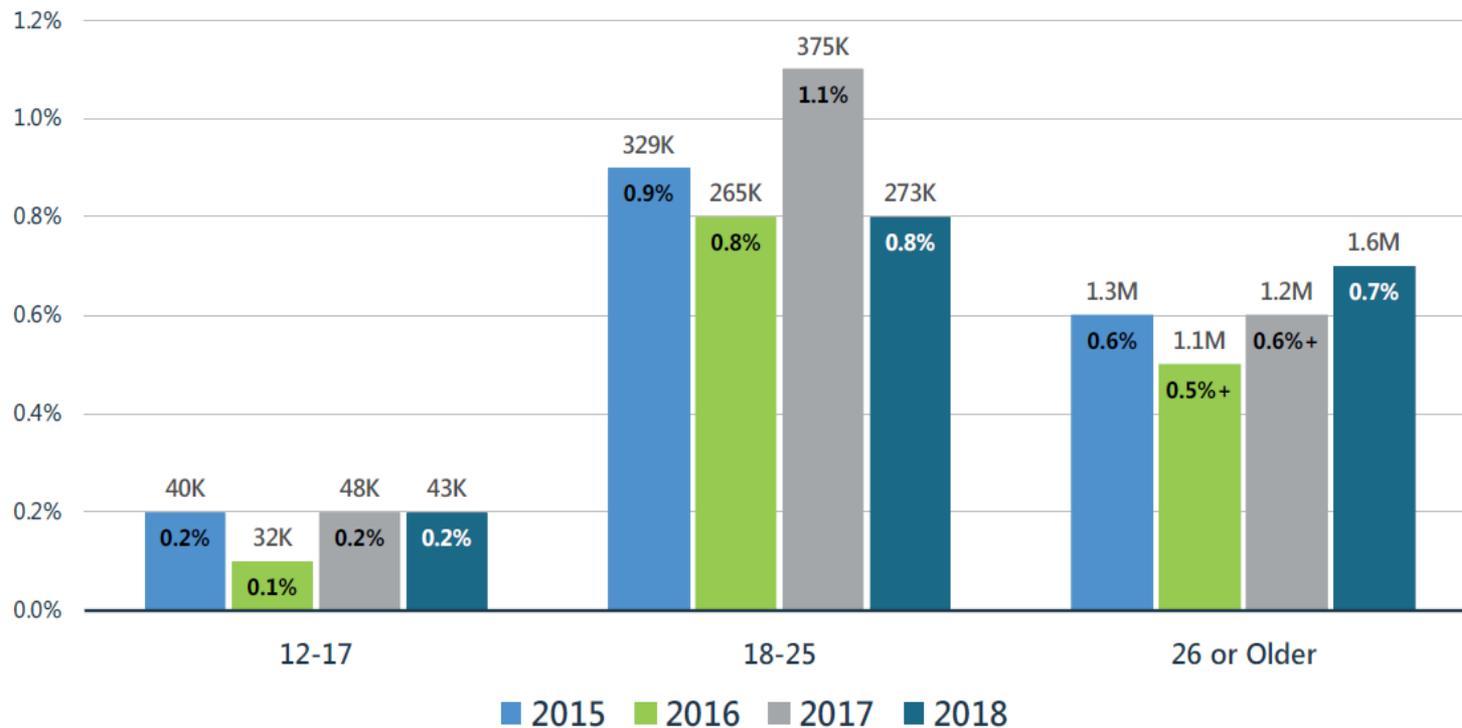
- The National Survey on Drug Use and Health (NSDUH) estimates that **80% of new heroin initiates started opioid misuse with a prescription pain medication** – seems to be driven largely by economics
- Emerging **evidence of shift** – increasing number of people reporting heroin as first opioid
- **Synthetic 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.

Meth use on the rise

Methamphetamine Use: Significant Increase in Adults ≥ 26 y.o.

PAST YEAR, 2015-2018 NSDUH, 12+

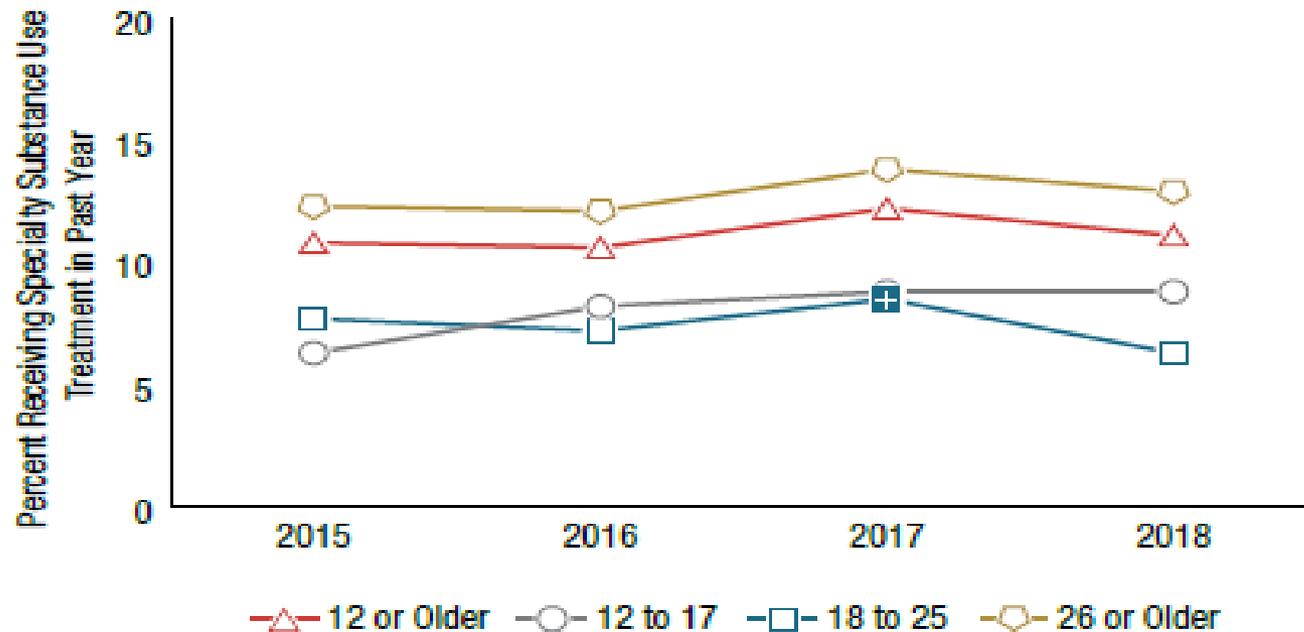


+ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

SAMHSA
Substance Abuse and Mental Health
Services Administration

Only a small percentage of people who need treatment are getting it

Figure 64. Received Specialty Substance Use Treatment in the Past Year among People Aged 12 or Older Who Needed Substance Use Treatment in the Past Year: 2015-2018



- NSDUH 2018

Significant Missed Opportunities

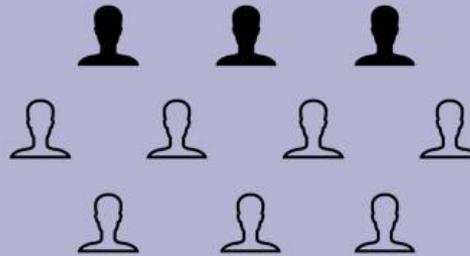
Methadone And Buprenorphine Are Associated With Reduced Mortality After Nonfatal Opioid Overdose

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-yrs

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

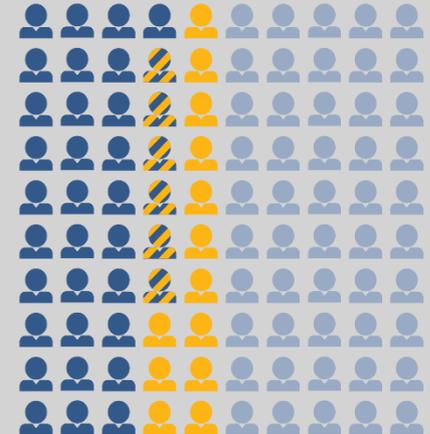
50% for any touchpoint

19% for opioid prescription touchpoints

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

37% for critical encounter touchpoints

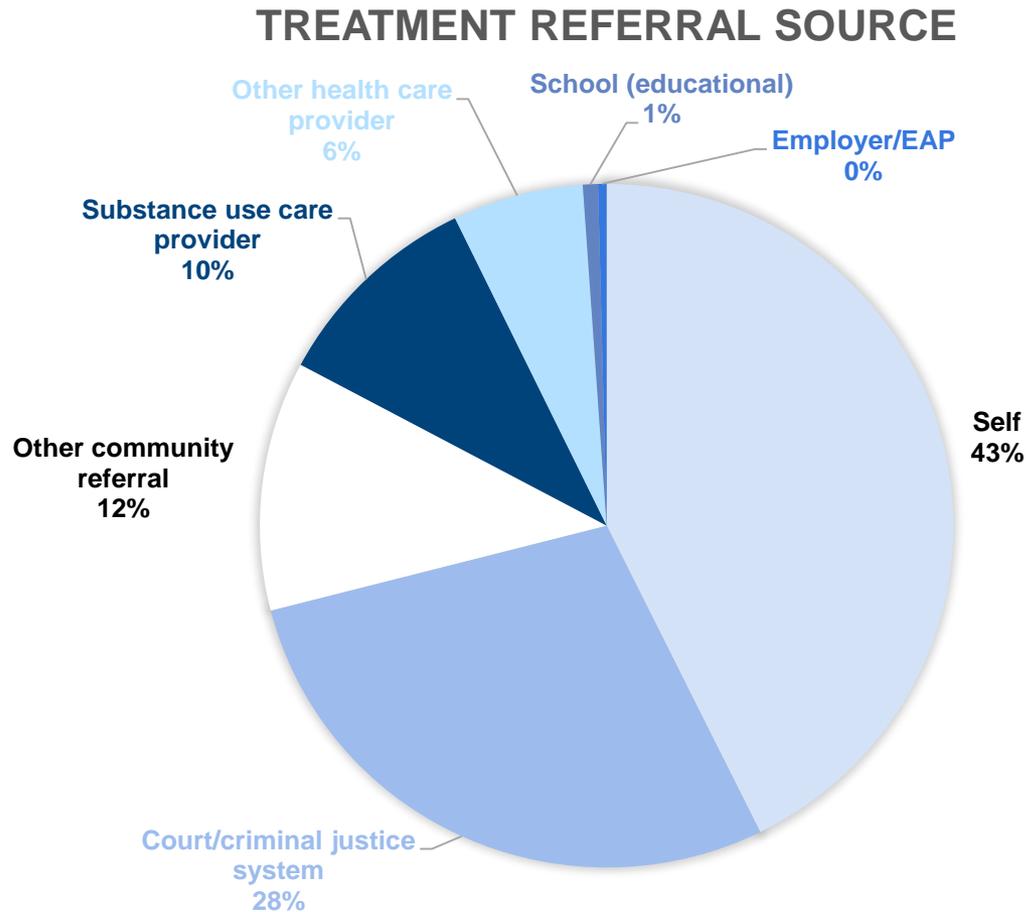
- opioid detoxification
- nonfatal opioid overdose
- injection-related infection
- release from incarceration



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.

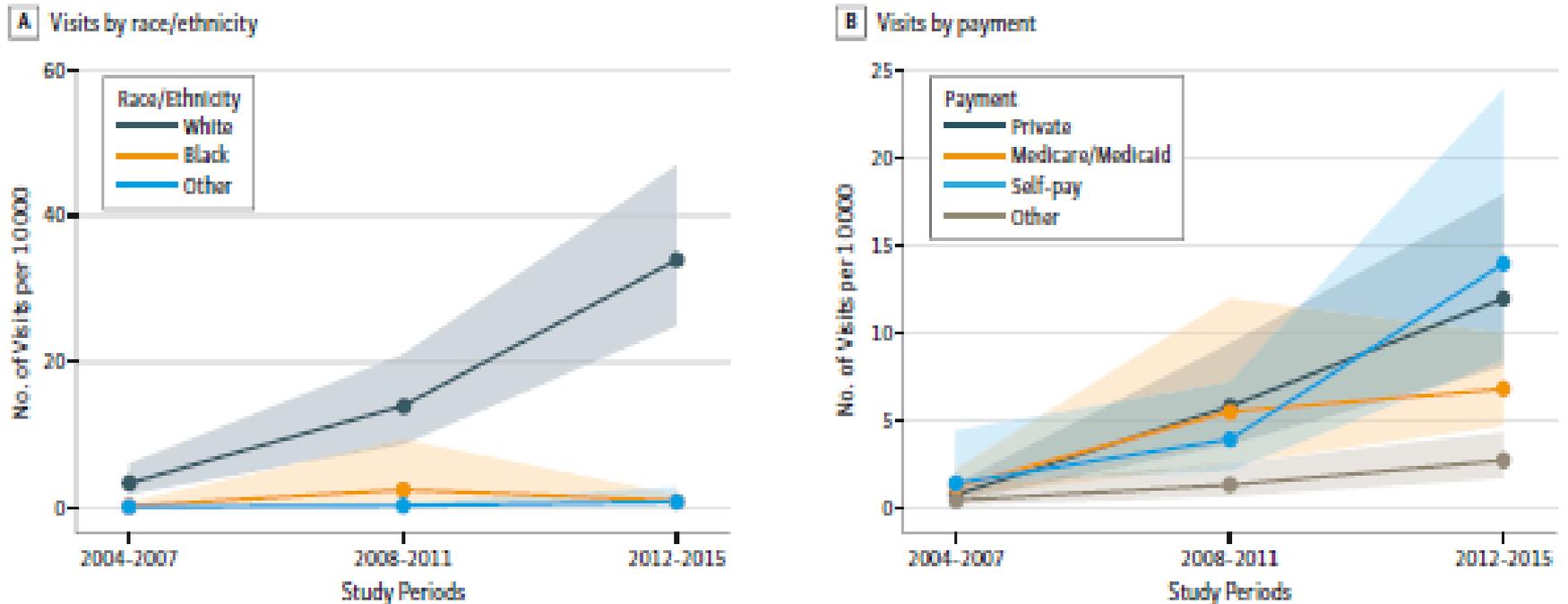
Larochelle MR et al. (2019). Touchpoints: Opportunities to Predict and Prevent Opioid Overdose. Drug and Alcohol Dependence. DOI: 10.1016/j.drugalcdep.2019.06.039

The two largest treatment referral sources are the individual themselves and the criminal justice system.



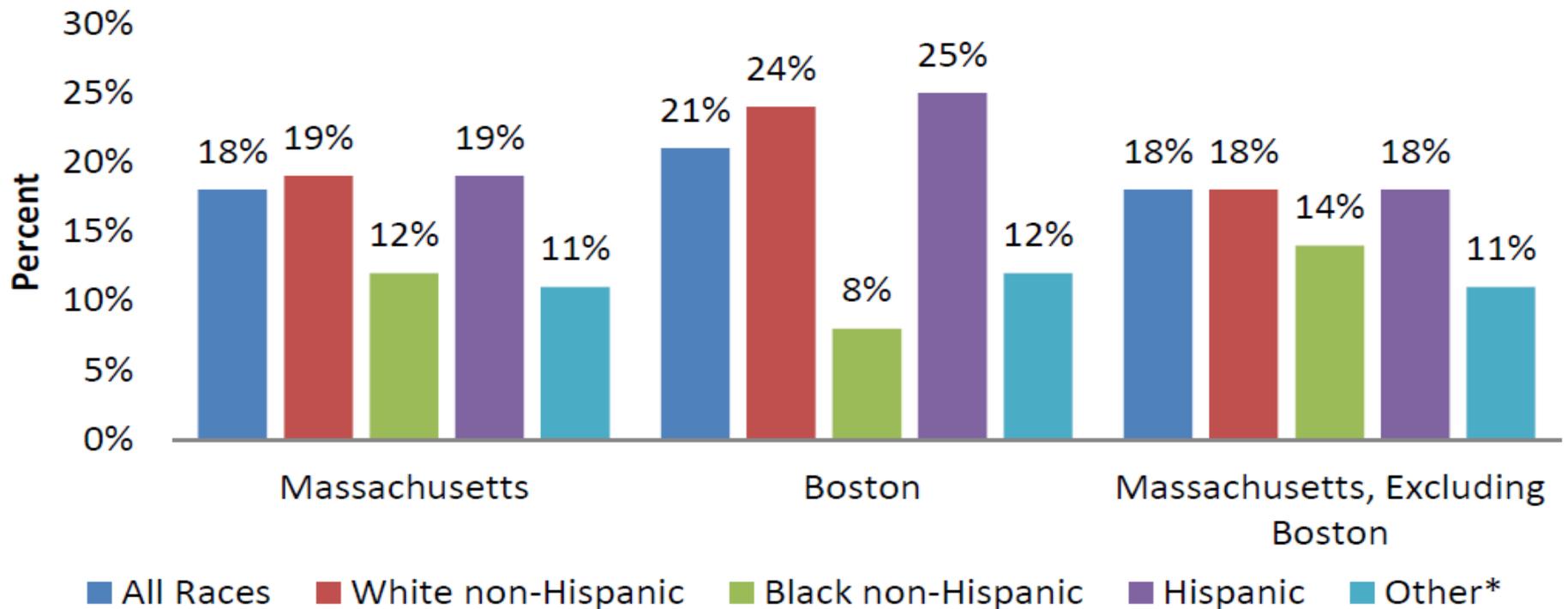
Inequitable Access

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



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.

So, what are some implications for Drug Courts

- Understanding that the CJ system is often the point of first “contact” for those with SUD
- Staying current on drug use trends and learning what the most effective treatment strategies are for those drugs
- Stimulants (meth and cocaine) are on the rise – have implications for the CJ system as well as the treatment system. No medications for stimulants.
- Support access to harm reduction services – clean needles, naloxone
- Be thought leaders, advocates and champions – focus on the evidence!