



Addressing Opioid Overdose and Opioid Use Disorder: Medication-Based Treatment Approaches

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Section 35 Commission
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A photograph of the Boston Medical Center Emergency Department entrance at night. A large, illuminated sign above the entrance reads "BOSTON MEDICAL" in blue and "EMERGENCY" in red. A red traffic light is visible on the right side of the entrance. Several people, including medical staff in white coats and blue scrubs, are standing near the entrance. A white ambulance is parked on the left side of the entrance.

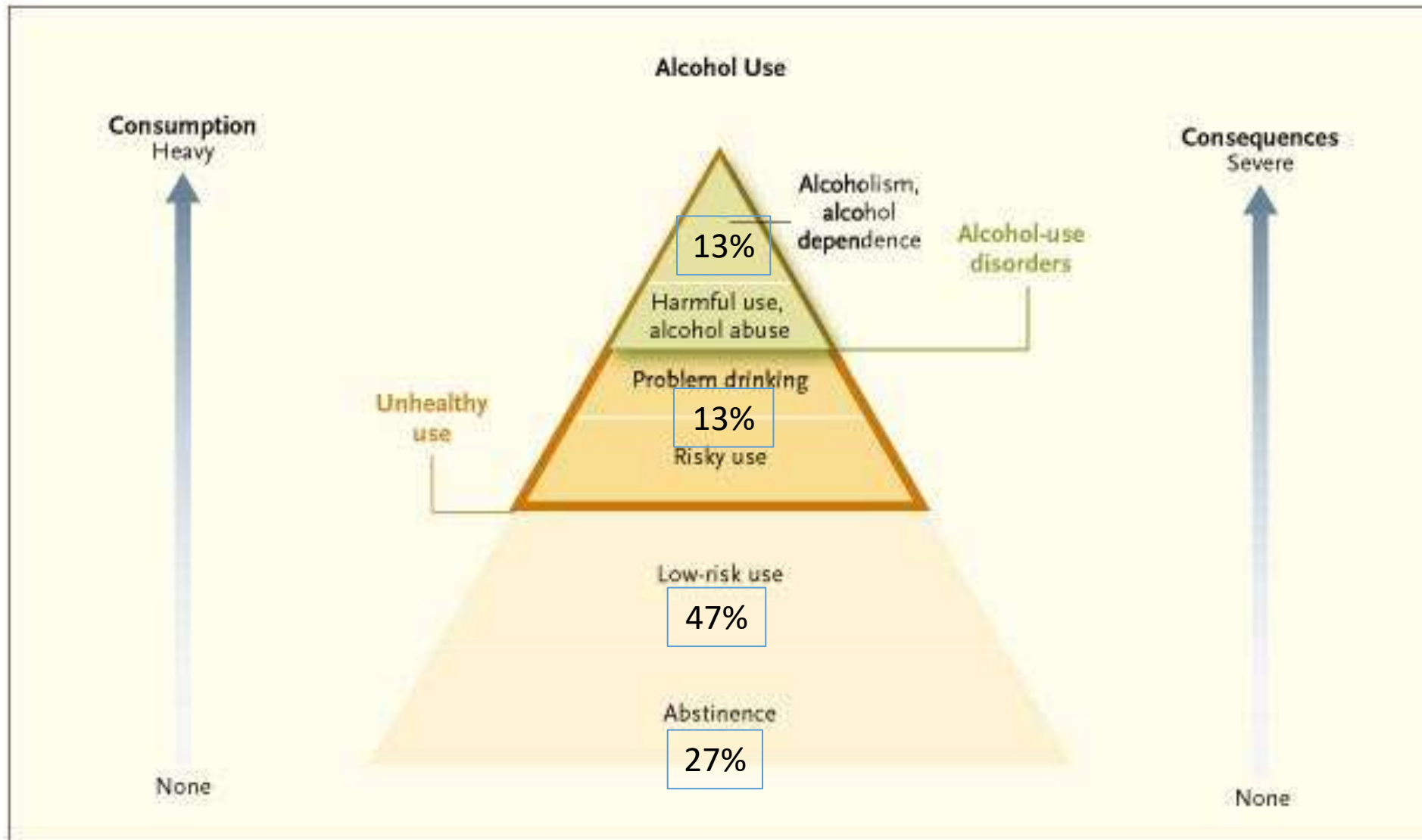
BOSTON
MEDICAL

EMERGENCY

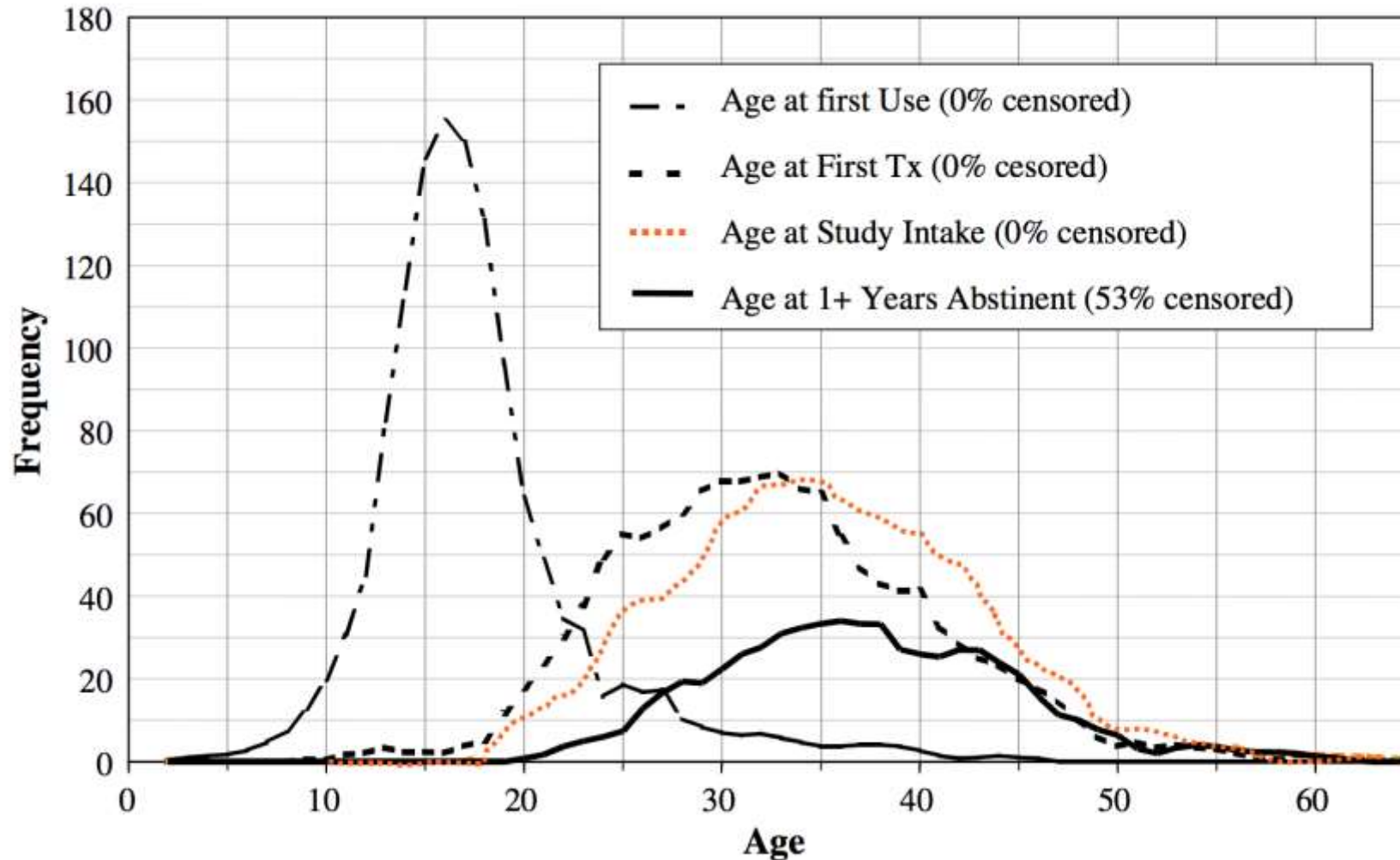
Objectives

Review the natural history of substance use disorders

Review outcomes and discuss opportunities for delivering medications for opioid use disorder to high risk patient populations

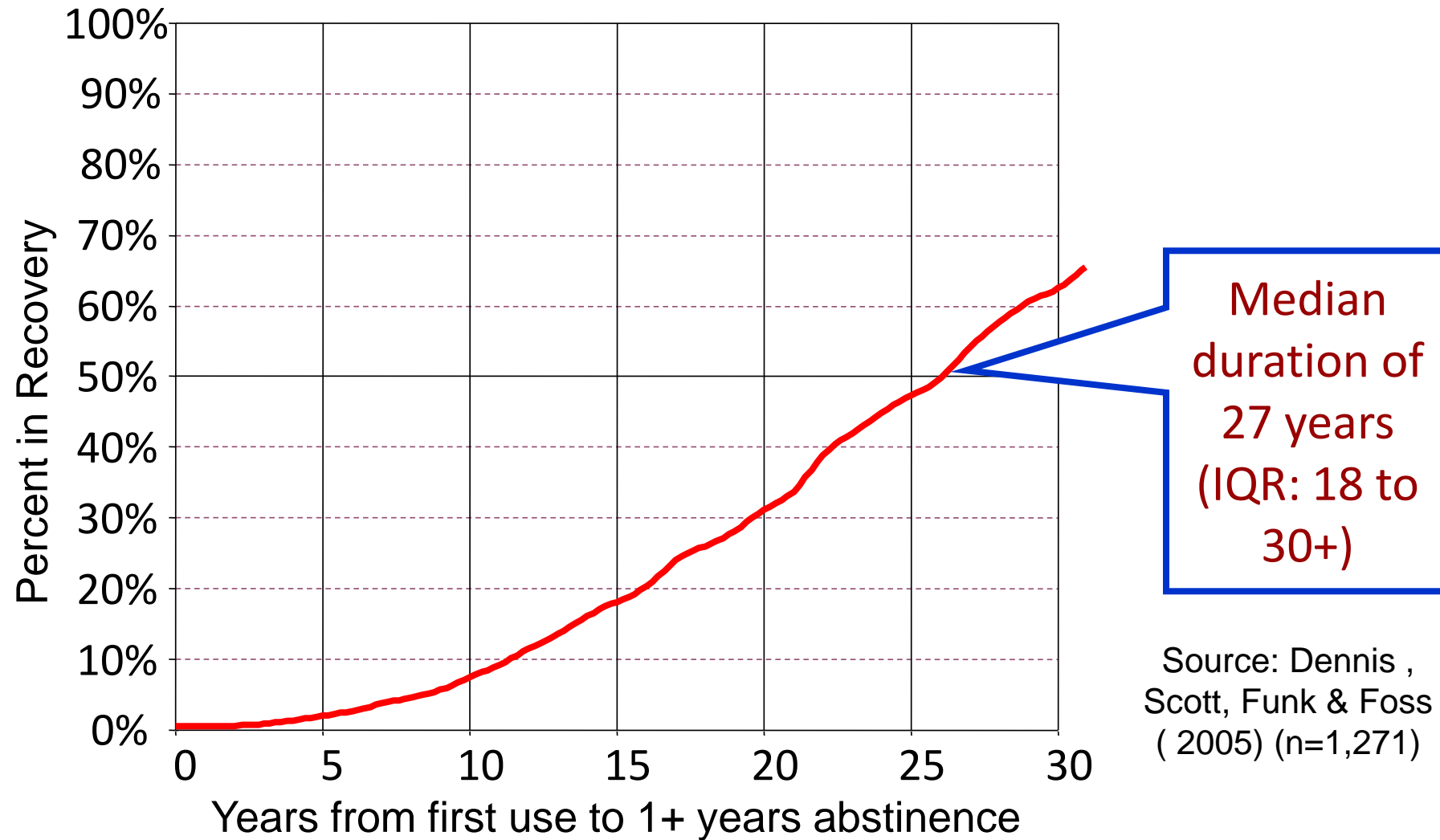


Substance Use Careers Last for Decades



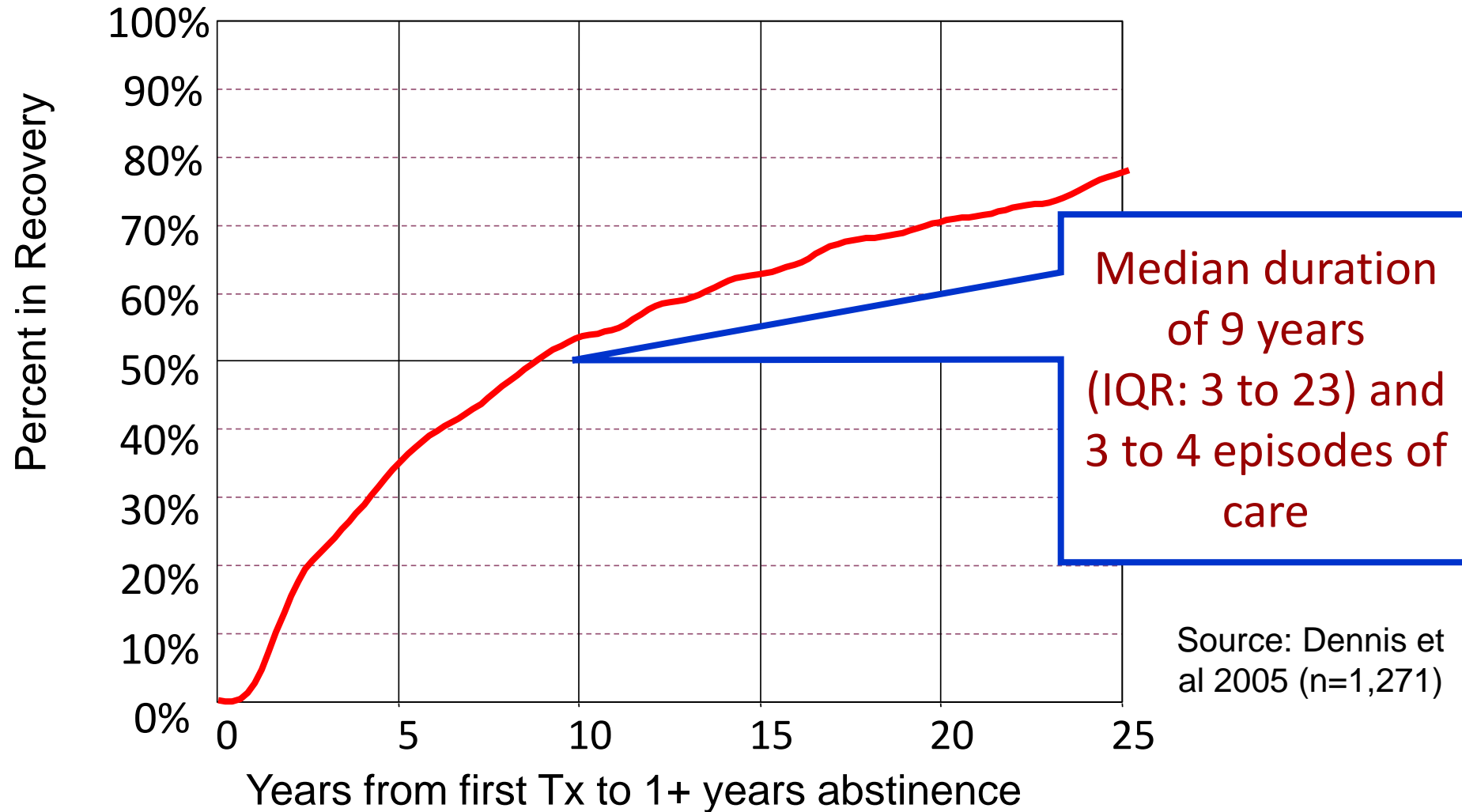
N=1271 admissions
to publicly funded
treatment
64% CUD
44% AUD
41% OUD
14% MUD

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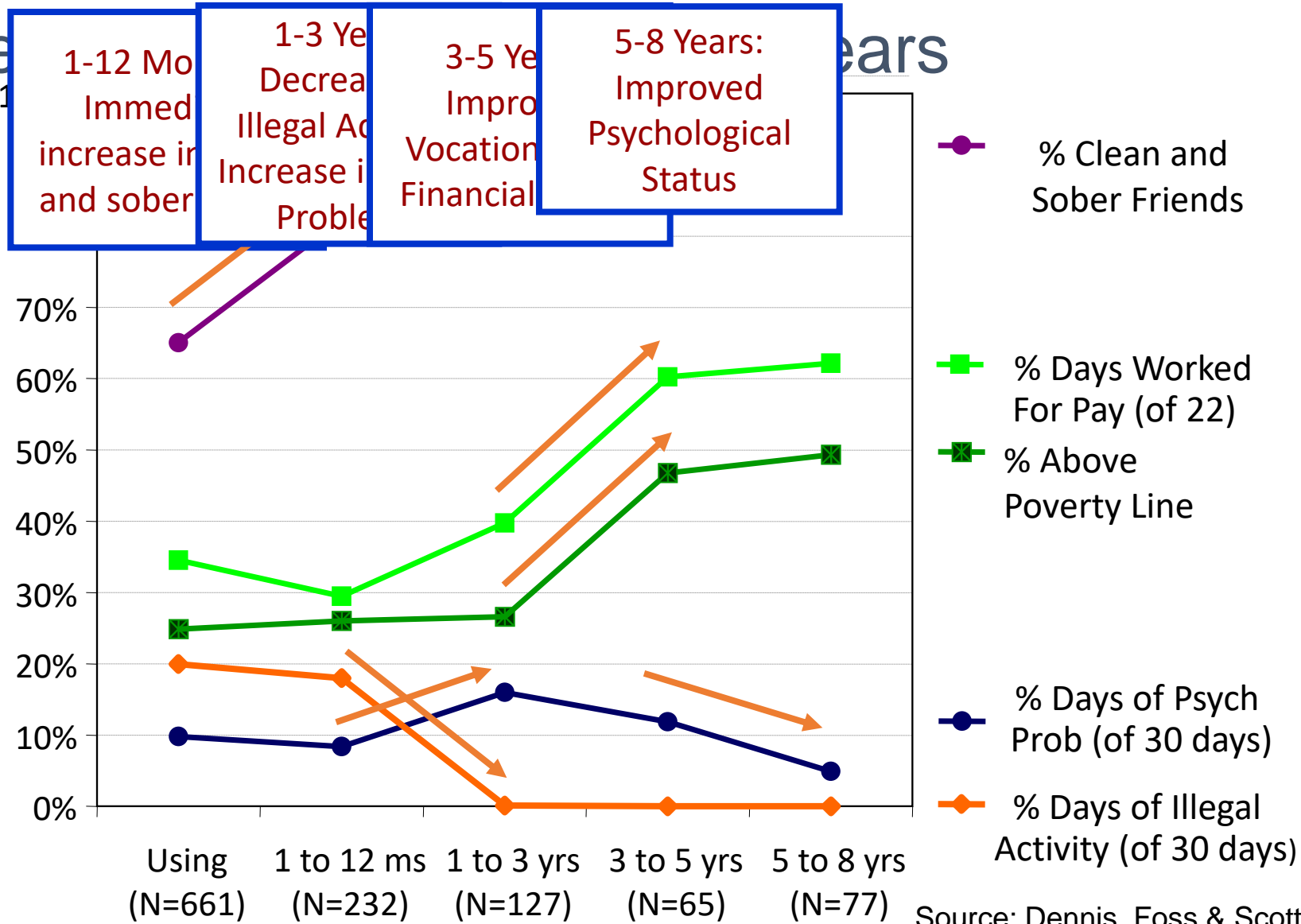


Source: Dennis ,
Scott, Funk & Foss
(2005) (n=1,271)

Most people do achieve abstinence



Recovery Timeline



Source: Dennis, Foss & Scott (2007)

Goals of medication treatment for opioid use disorder

Relief of withdrawal symptoms

- Low dose methadone (30-40mg), buprenorphine

Opioid blockade

- High dose methadone (>60mg), buprenorphine, naltrexone

Reduce opioid craving

- High dose methadone (>60mg), buprenorphine, naltrexone

Restoration of reward pathway

- Long term (>6 months)
- methadone, buprenorphine, naltrexone

Matching Patients to Medications for Opioid Use Disorder

- The choice of methadone, buprenorphine, or naltrexone depends upon:
 - Patient preference
 - Past experience
 - Likelihood of continuing the treatment
 - Access to treatment setting
 - Ability to manage withdrawal (esp for naltrexone)

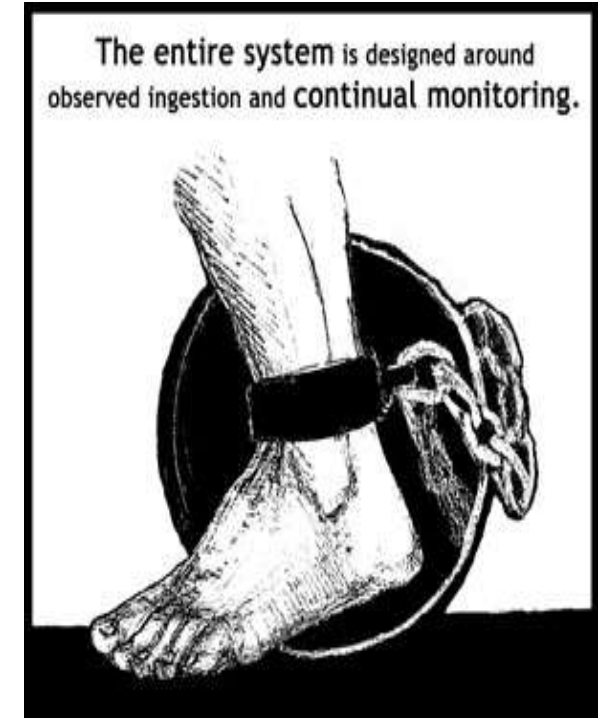
Matching Patients to Medications for OUD

	Abstinence required?	Dosing schedule	Required Training -Regulation	Retention
Injectable IM Naltrexone	7-10 days	Q28 day provider injection	None	Good - trial populations Poor - real-world
Oral Naltrexone	7-10 days	Daily pharmacy prescription	None	No better than placebo
Buprenorphine	12 hours ¹	Daily pharmacy prescription	8 hr MD/DO 24 hr NP/PA	Not as good as methadone
Methadone	No, BUT start low go slow	Daily clinic administered ²	Licensed clinic only	Best
¹ 24-72 hours of abstinence needed when switching from methadone to buprenorphine				
² Take homes can be earned after 60 days				

Methadone Maintenance Treatment

Highly Structured

- Daily nursing assessment
 - Weekly individual and/or group counseling
 - Random supervised toxicology screens
 - Medical director oversight
 - Methadone dosing
 - Observed daily ⇒ “Take homes”
- Separate system not involving primary care
 - Limited access
 - 5 states: 0 clinics
 - 4 states: < 3 clinics
 - Inconvenient and highly punitive
 - Mixes stable and unstable patients
 - Lack of privacy
 - No ability to “graduate”
 - Stigma



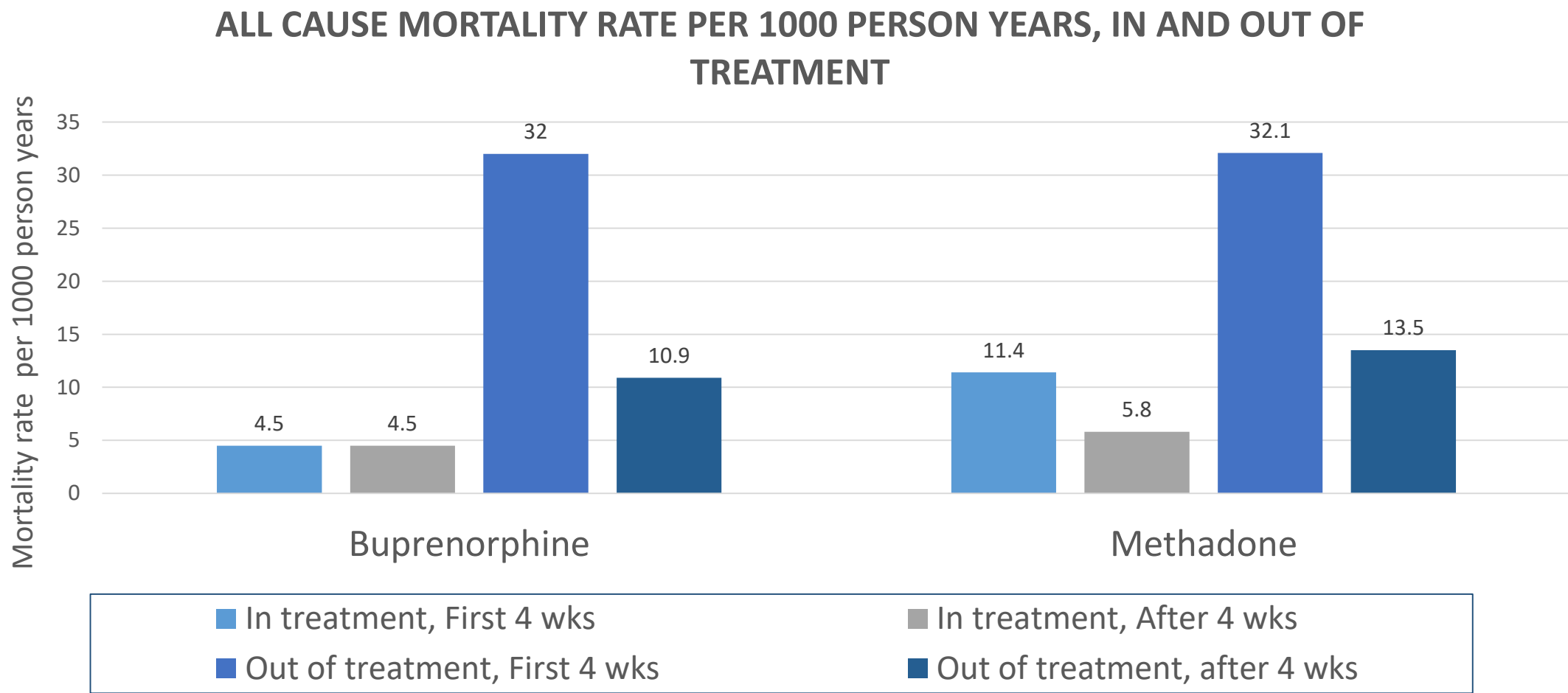
Opioid Detox Outcomes

- Low rate of retention in treatment
- High rates of relapse post treatment
 - < 50% abstinent at 6 months
 - < 15% abstinent at 12 months
 - Increased rates of overdose due to decreased tolerance

So, how long should maintenance treatment last?

Long enough

Medication saves lives. People die when medication stops.



Touchpoint:

A health care, public health, or criminal justice encounter where we can:

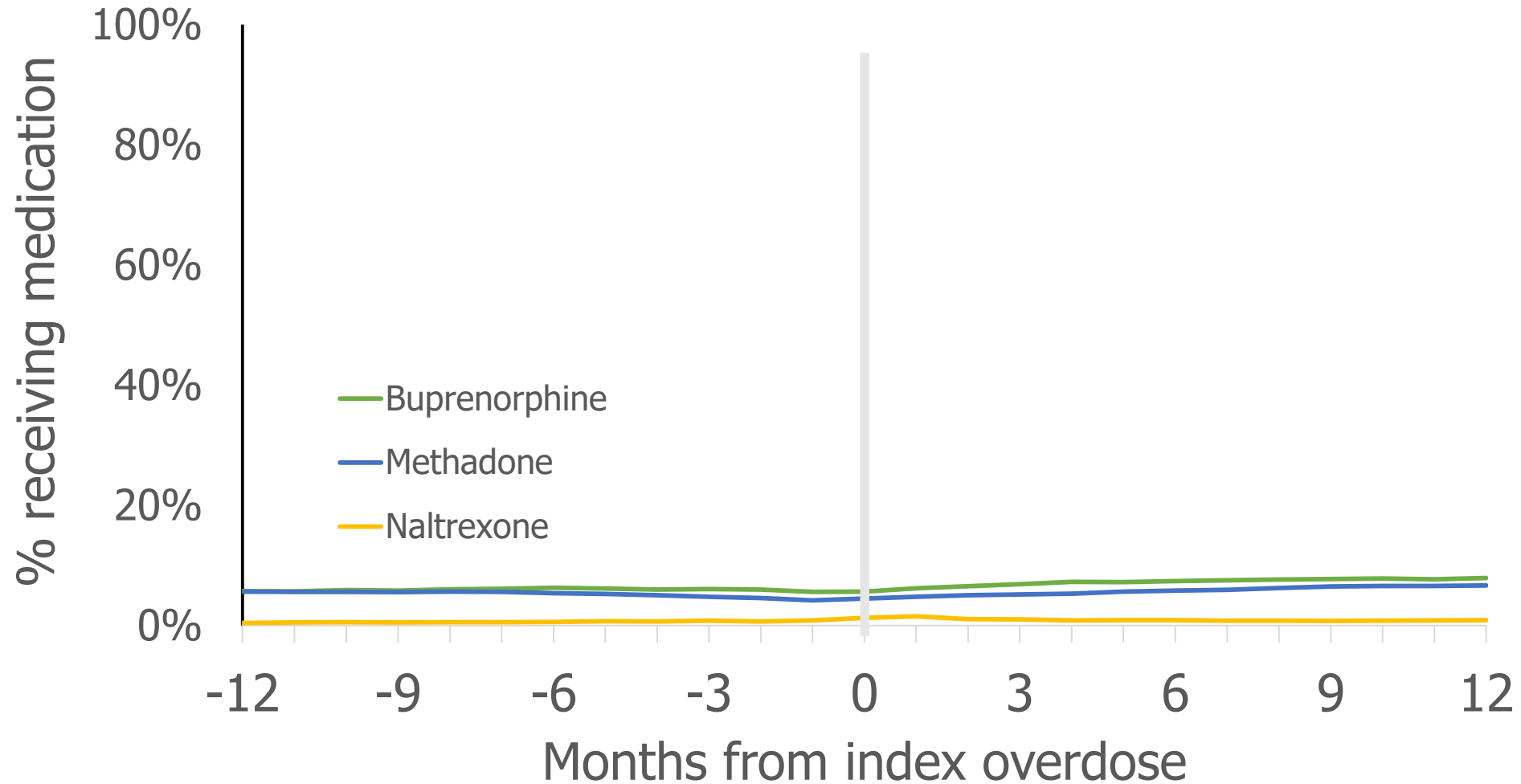
- identify individuals at high-risk for opioid overdose death
- deliver overdose risk reduction services, and/or
- link and engage in treatment

Examples: **Post-overdose, while incarcerated, when hospitalized, residential treatment, if civilly committed**

- *We are missing opportunities to engage people*
- *When people are treated with MOUD, their mortality is cut in half or more*
- *When people discontinue treatment, they die*
 - > *We need to make the treatment work for the patient*
 -not make the patient work for the treatment*

After overdose, few survivors receive medications for OUD

Cohort of 17,755 overdose survivors in MA, 2012-2014



Larochelle MR, Bernson D, Land T, Stopka TJ, Wang N, Xuan Z, Bagley SM, Liebschutz JM, Walley AY. Medication for Opioid Use Disorder After Nonfatal Opioid Overdose and Association With Mortality: A Cohort Study. *Annals of Internal Medicine*. 2018 Aug 7;169(3):137-145.

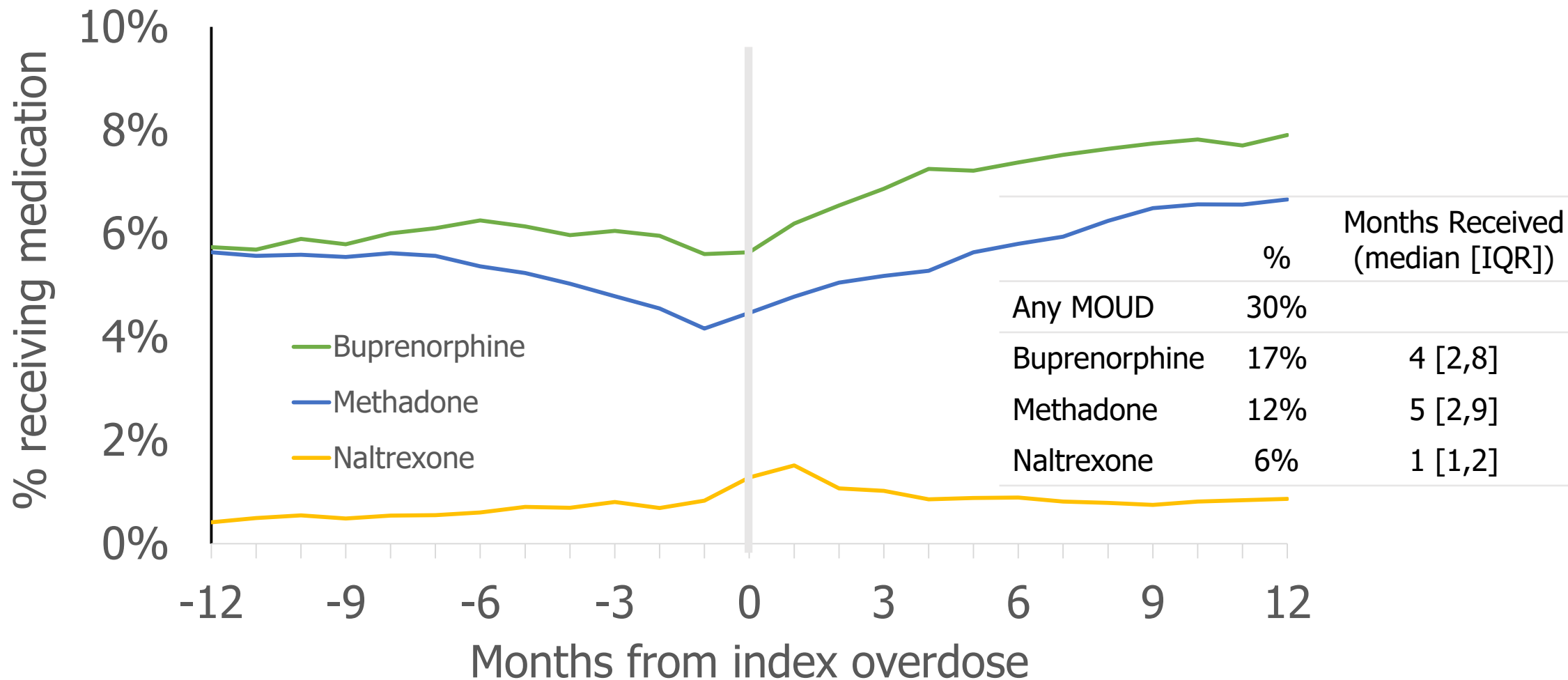


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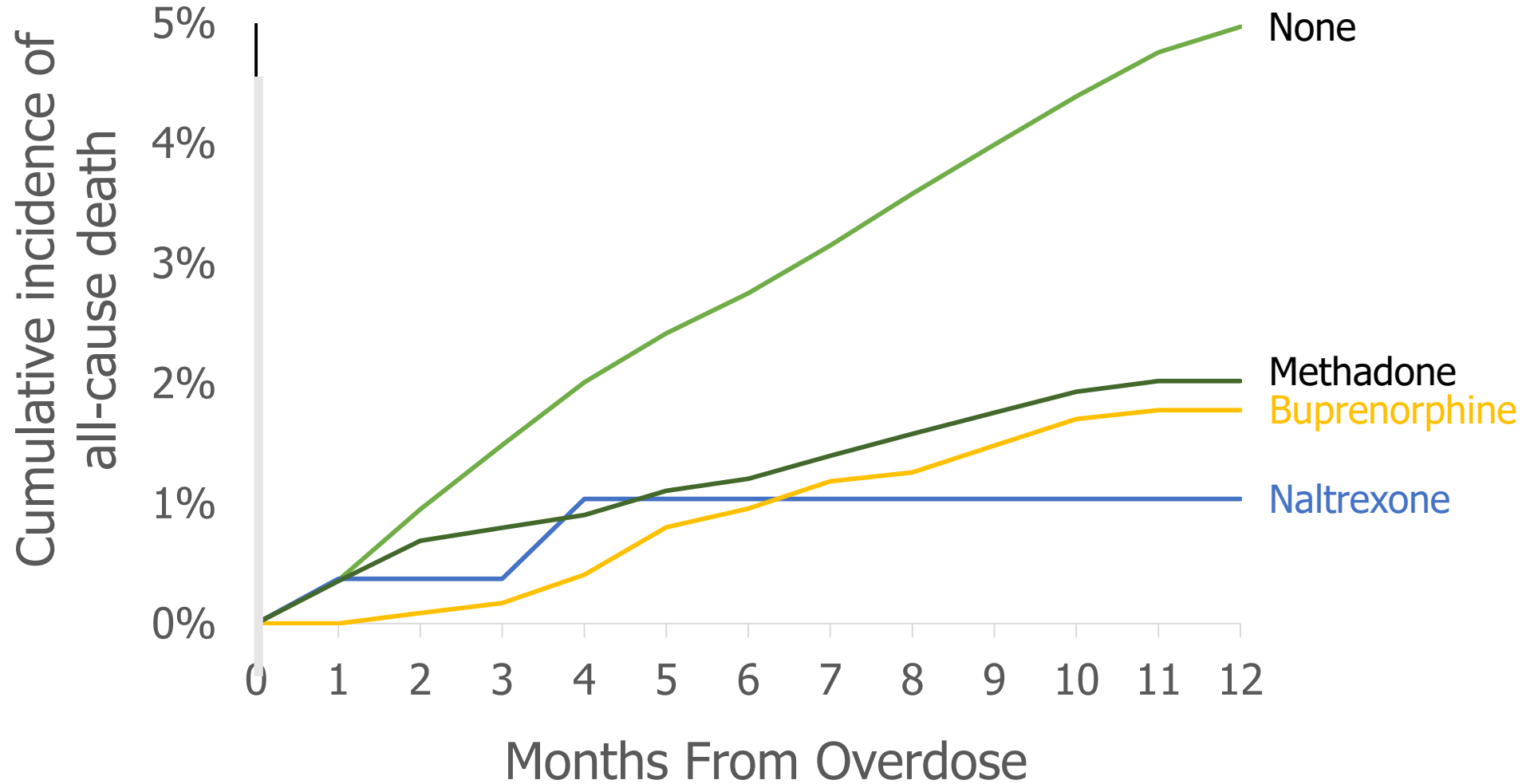


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Overdose survivors who receive medications have better survival

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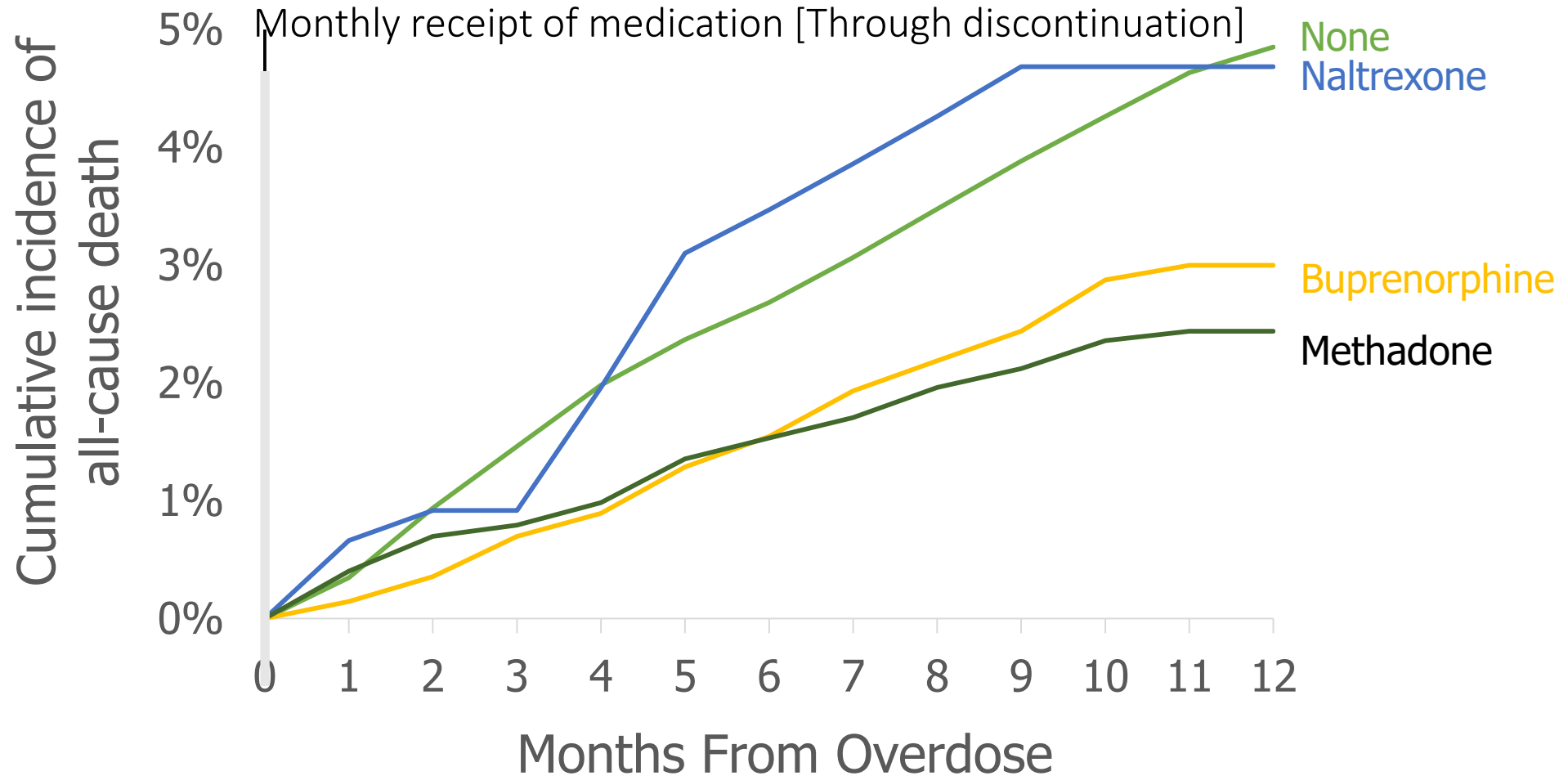


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The role of medication for opioid use disorder

- Make medication opt out, instead of opt in
 - Residential programs should offer MOUD induction
 - MOUD for hospitalized/ED patients, especially post-overdose
 - Initiate and continue MOUD for incarcerated/ civilly committed
- Overdose prevention for all
 - People who are prescribed opioids and benzos
 - Overdose prevention as part of addiction treatment
 - Medical and mental health patients who use opioids
 - Incarcerated, civilly committed

**I am living proof
that methadone
treatment works.**

I started using heroin when I was 20. I went from once in awhile to every day. When you wake up sick from withdrawal, all other needs and responsibilities are subordinate. It's only through methadone treatment that I was able to stop. Today, life is centered on my kids, my family, and my music. Methadone made it possible.

— Erik

Opioid addiction treatment with methadone and buprenorphine is available in New York City.



RECOVERY

Expectations



Reality



Realistic Expectations!

Addiction is a chronic
relapsing condition

Over time treatment works
People get better

Thank you!
awalley@bu.edu

