

Implementing Medication for Opioid Use Disorder and the Impact of COVID-19 on Treatment Engagement and Post-Release Overdose in a Statewide Correctional System

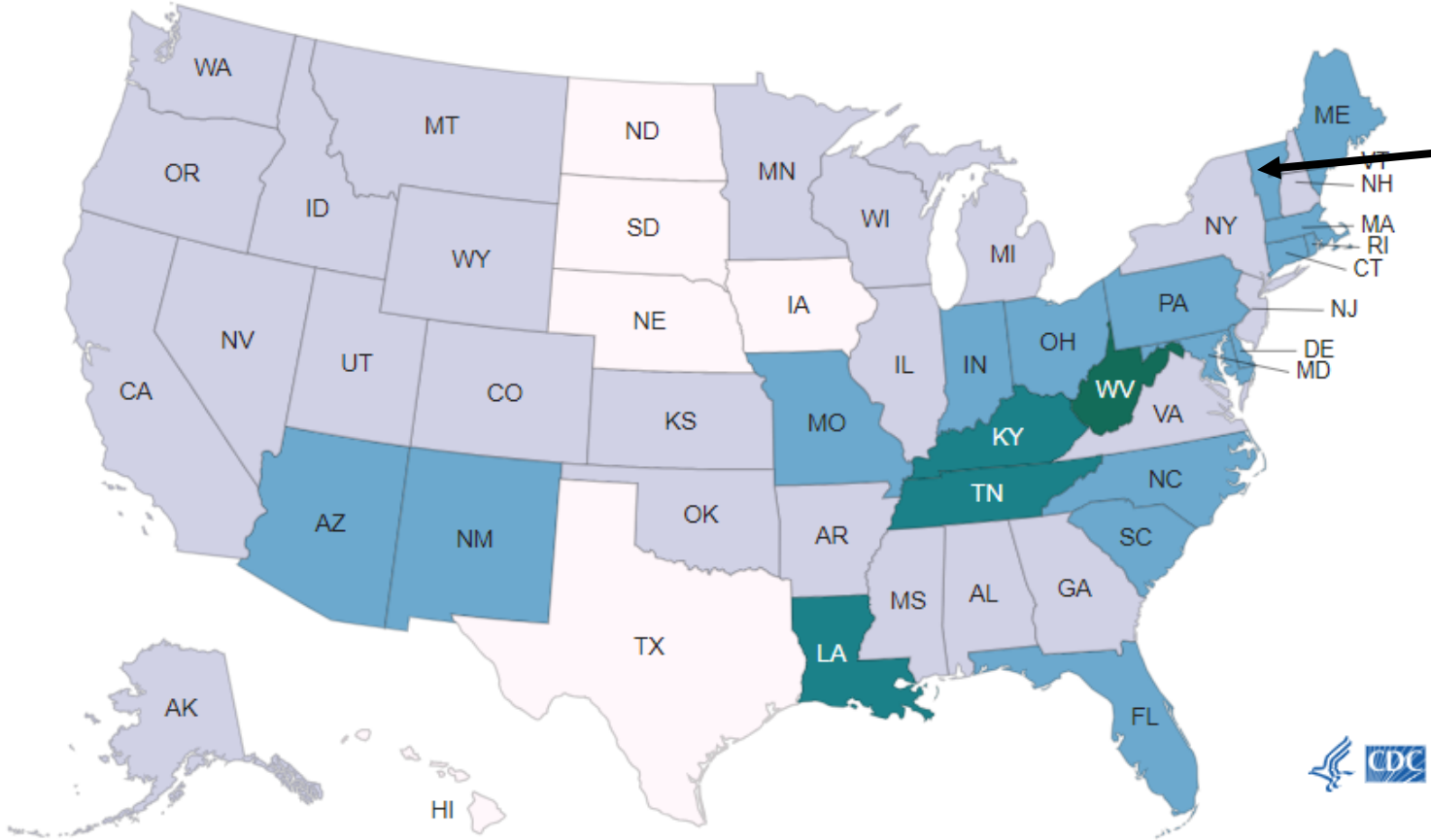
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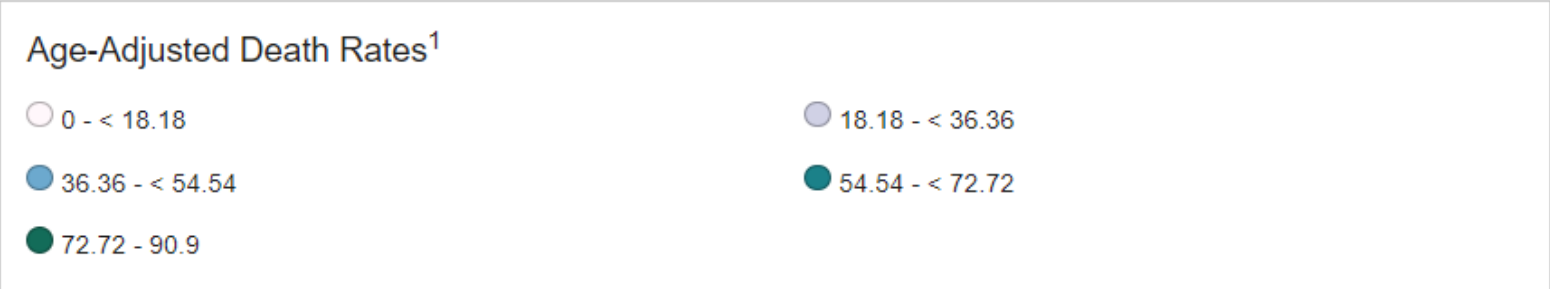
Disclosure & funding

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Past year opioid-involved overdose deaths



42.3 per 100,000 people



The Centers for Disease Control and Prevention



Opioid use and incarceration

Overdose

- A leading cause of death upon release from incarceration (Binswanger et al., 2013)
- >10 times more likely within the first two weeks of release from incarceration (Merral et al., 2010; Binswanger et al., 2007)

Treatment

- Medications for opioid use disorder (MOUD) are the only effective treatments for OUD (Schuckit, 2016)
- Most people who are incarcerated do not have access to MOUD (Moore et al., 2019; Nunn et al., 2009)

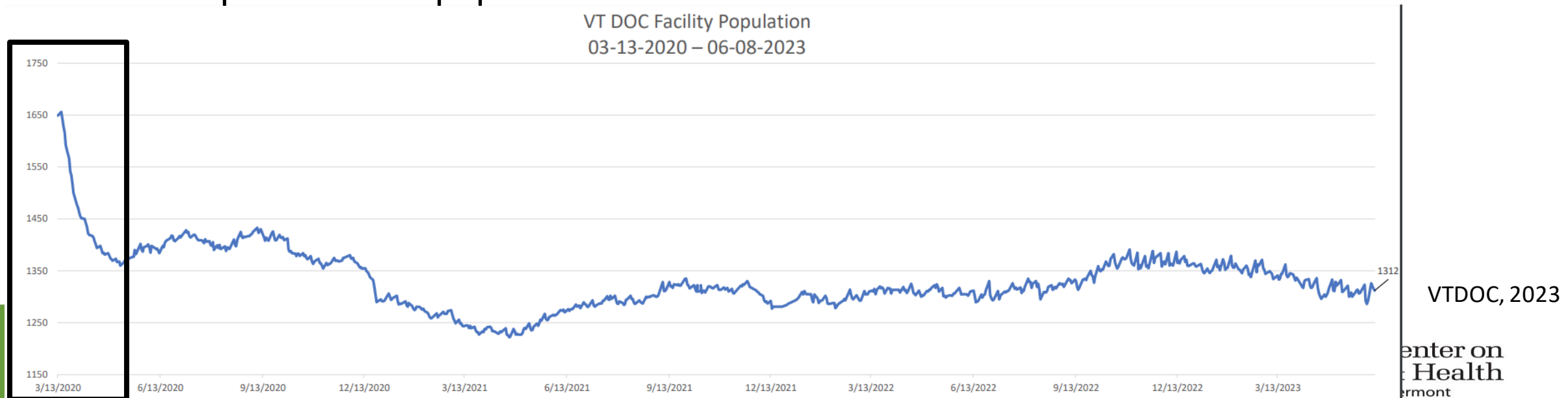
Vermont Act 176

- Directs the Vermont Department of Corrections (VT DOC) to provide all FDA approved medications for opioid use disorder (MOUD) to all people who are incarcerated who meet medical necessity and want treatment.
- Provision of MOUD as soon as possible and lasts as long as is medically necessary.
- Directs VT DOC to administer buprenorphine as a frontline treatment and offer methadone and naltrexone as medically necessary.
- Passed May 25, 2018 & MOUD implementation began July 1, 2018.
- Report submitted to Vermont legislature in January 2022.

COVID-19 in VT correctional facilities

COVID-19 operational procedures began March 2020

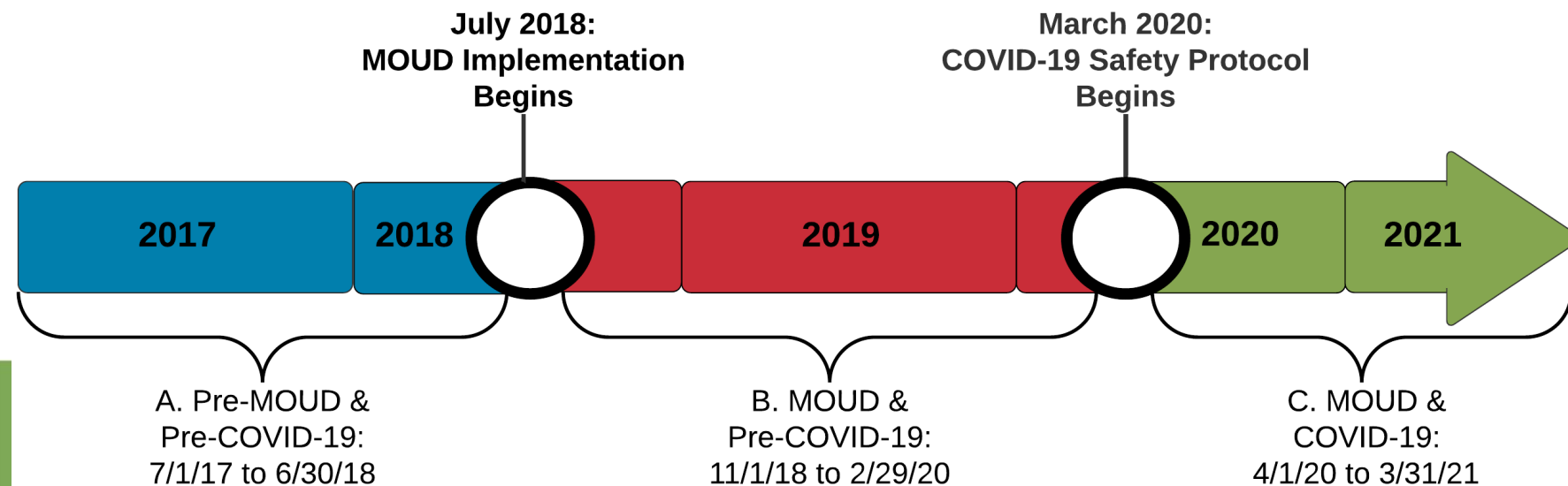
- Daily medical screenings
- Increased social distancing
- COVID-19 tests for all intakes
- Personal protective equipment



Aims

Assess change before vs after a) MOUD implementation and b) COVID-19

1. MOUD utilization while incarcerated
2. Treatment engagement following release from incarceration
3. Fatal and non-fatal overdoses following incarceration



Aim 1: MOUD utilization and characteristics of Tx engagement while incarcerated



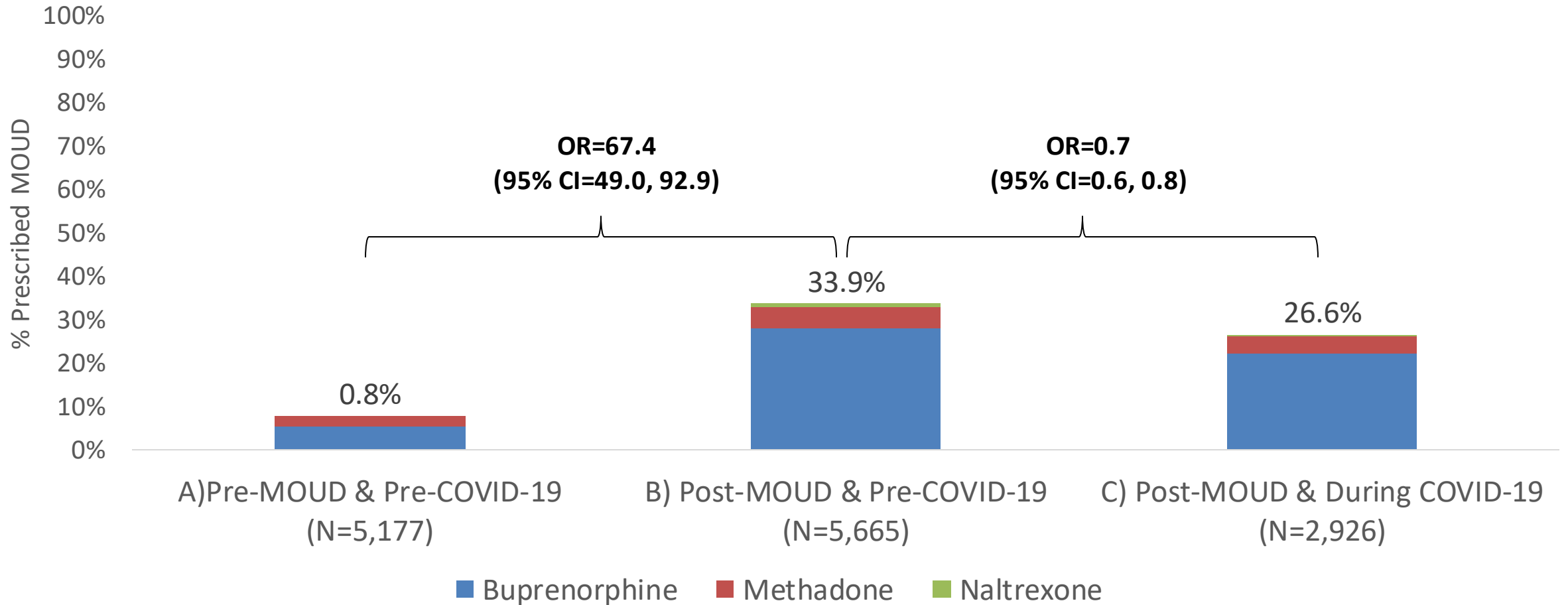


Incarcerated population characteristics

	A) Pre-MOUD & Pre-COVID-19 (n=5,177)	B) Post-MOUD & Pre-COVID-19 (n=5,665)	C) Post-MOUD & During COVID-19 (n=2,926)
Mean (SD) Age	36.3 (11.5)	36.8 (11.5)	38.0 (11.4)
Gender, n (%)			
Female	852 (16.5)	975 (17.2)	368 (12.6)
Male	4,299 (83.0)	4,651 (82.1)	2,516 (86.0)
Transgender	22 (0.4)	24 (0.4)	24 (0.8)
Missing or not reported	4 (0.1)	15 (0.3)	18 (0.6)
Race, n (%)			
Black or AA	497 (9.6)	544 (9.6)	270 (9.2)
White	4,267 (82.4)	4,623 (81.6)	2,490 (85.1)
Other	74 (1.4)	93 (1.6)	92 (3.1)
Missing or not reported	339 (6.6)	405 (7.2)	74 (2.5)
Ethnicity, n (%)			
Hispanic	441 (8.5)	553 (9.8)	270 (9.2)
Non-Hispanic	4,735 (91.5)	5,111 (90.2)	2,655 (90.7)
Missing or not reported	1 (0.02)	1 (0.02)	1 (0.03)
Marital status, n (%)			
Married/Civil Union	574 (11.1)	643 (11.4)	313 (10.7)
Divorced/Separated	682 (13.2)	753 (13.3)	378 (12.9)
Single	2,885 (55.7)	3,041 (53.7)	1,656 (56.6)
Widowed	44 (0.9)	57 (1.0)	30 (1.0)
Missing or not reported	992 (19.2)	1,171 (20.7)	549 (18.8)

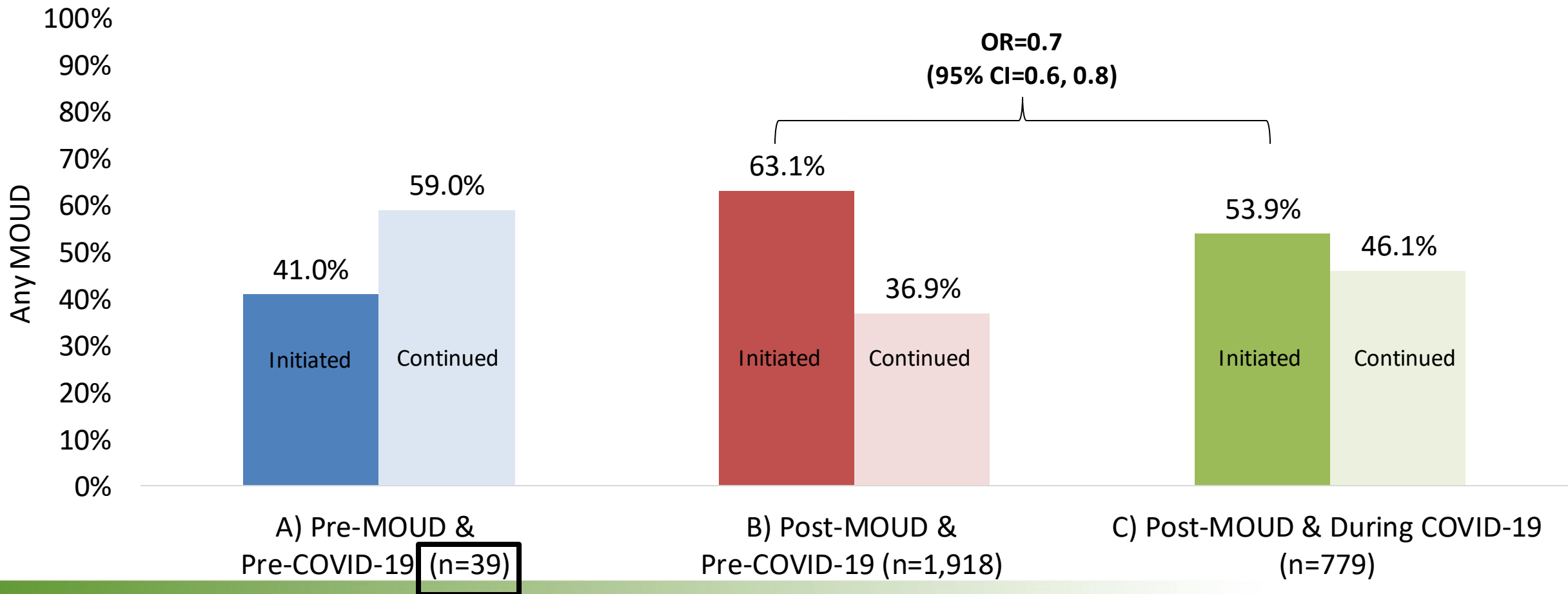


MOUD prescriptions among incarcerated individuals



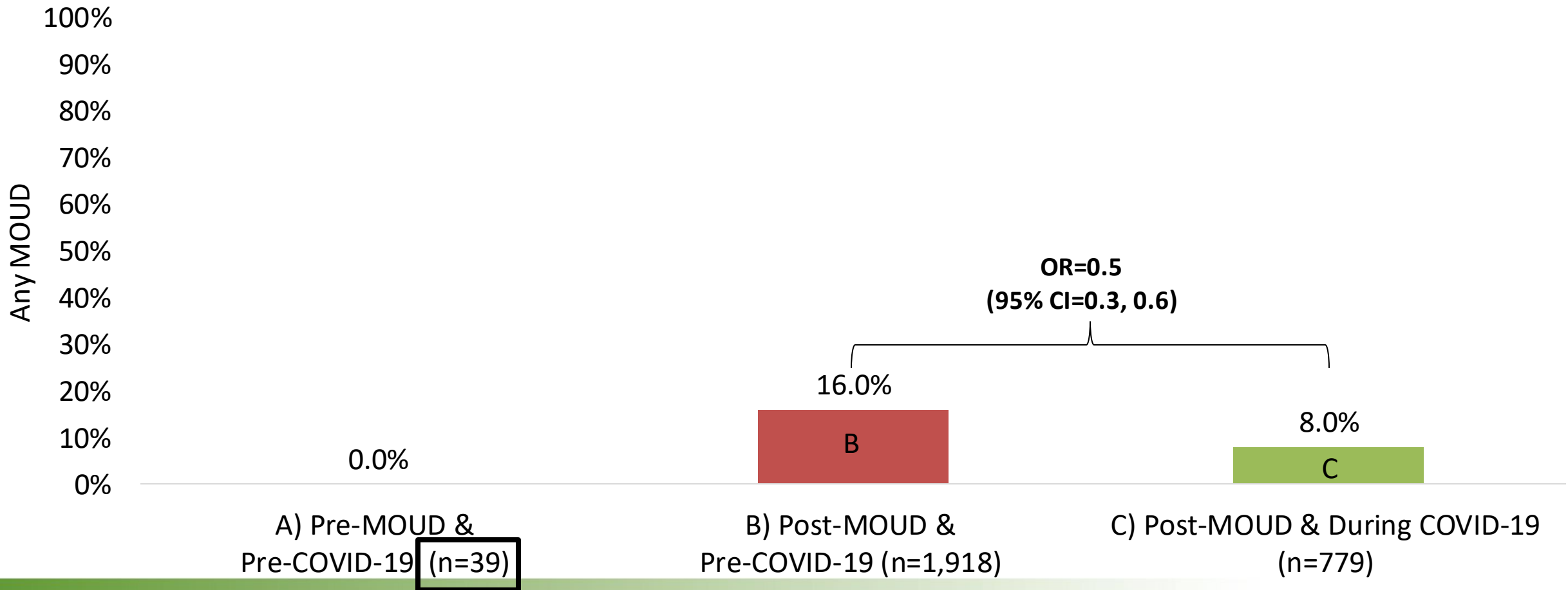


Initiated vs continued any MOUD among individuals who received MOUD while incarcerated



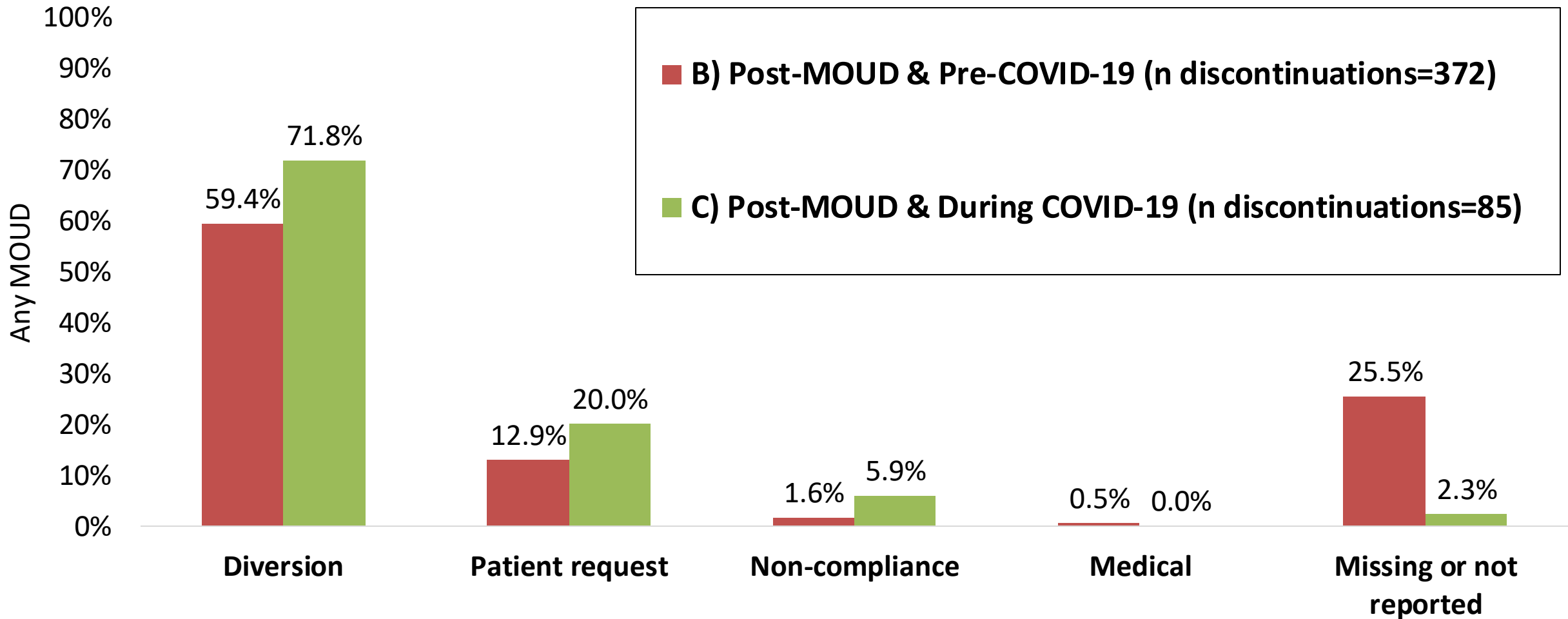


MOUD discontinuation among individuals who received MOUD while incarcerated





Reasons for discontinuing MOUD

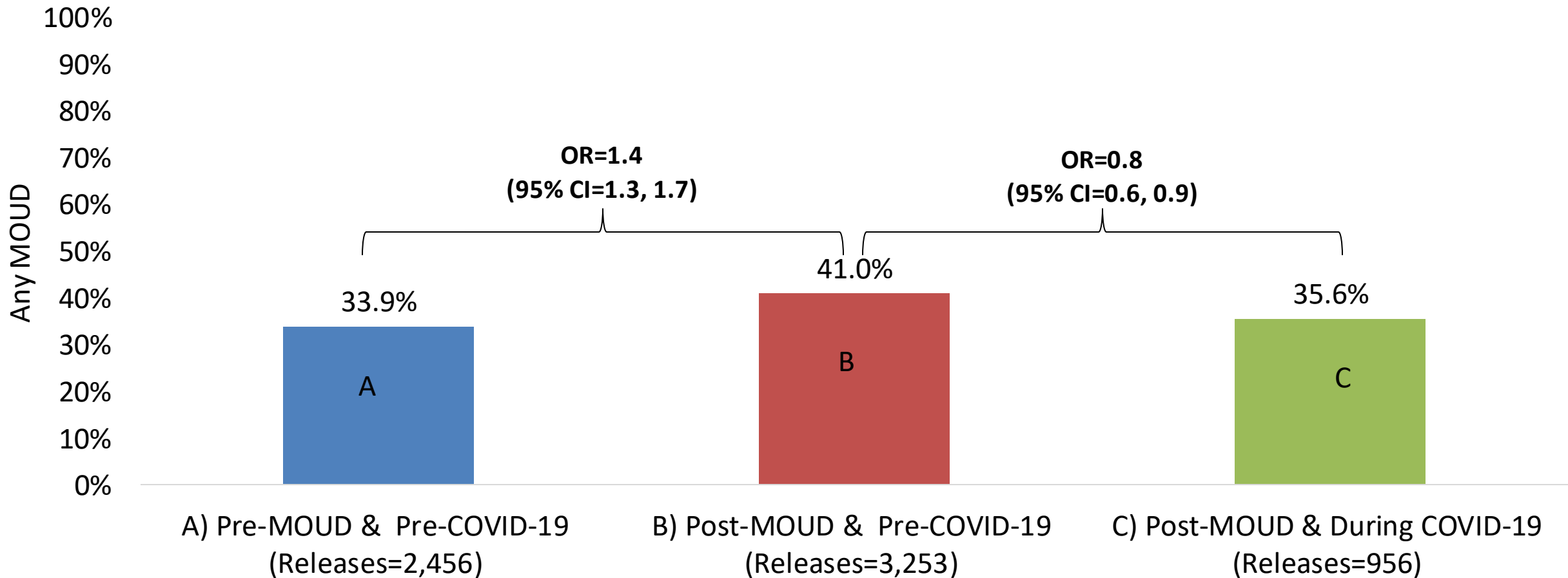


Diversion=stockpiling or concealing the medication for transfer to another; **Patient request**= personal choice to discontinue the medication; **Medical**=discontinuation due to medical necessity; **Non-compliance**=interpersonal misconduct or failure to abide by the treatment contract.

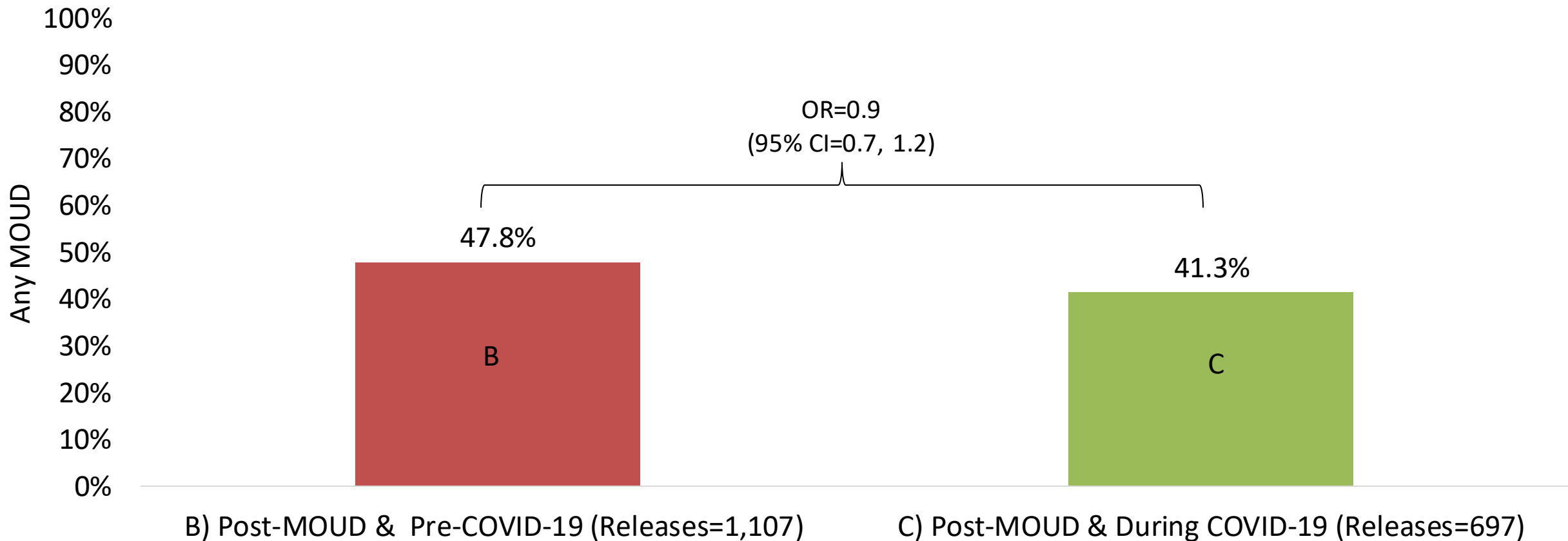
Aim 2: Treatment engagement after release from incarceration



MOUD within 30 days after release from incarceration among people with OUD



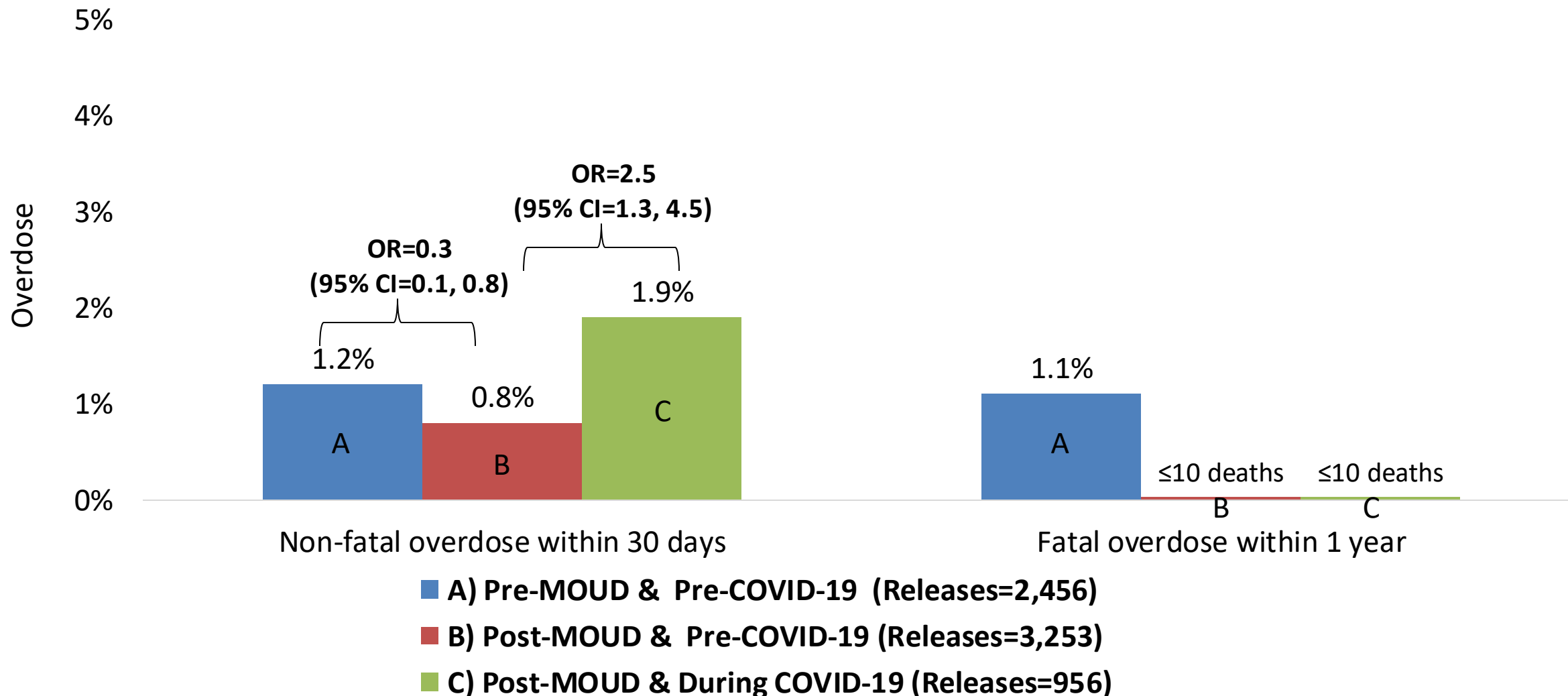
MOUD within 30 days after release from incarceration among people who received MOUD while incarcerated



Aim 3: Fatal and non-fatal overdoses following release from incarceration



Opioid-related overdose after release from incarceration among people with OUD



Summary & Conclusions

Act 176

↑ MOUD while

↑ MOUD after

↓ Non-fatal overdo

↓ Fatal overdose



The image shows the cover of a journal article. At the top left is the Elsevier logo, a tree with a figure, and the word 'ELSEVIER' below it. In the center, the journal title 'Journal of Substance Use and Addiction Treatment' is displayed. Below the title, it says 'Available online 11 June 2023, 209103' and 'In Press, Journal Pre-proof'. At the top right is the JSAT logo. The main title of the article is 'The impact of the implementation of medication for opioid use disorder and COVID-19 in a statewide correctional system on treatment engagement, postrelease continuation of care, and overdose'. Below the title, the authors are listed: Elias M. Klemperer^a, Laura Wreschnig^b, Abigail Crocker^c, Jessica King-Mohr^d, Annie Ramniceanu^d, John Brooklyn^e, Kelly R. Peck^a, Richard Rawson^a, and Elizabeth A. Evans^f.

Journal of Substance Use and Addiction Treatment

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In Press, Journal Pre-proof

JSAT

The impact of the implementation of medication for opioid use disorder and COVID-19 in a statewide correctional system on treatment engagement, postrelease continuation of care, and overdose

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Thank you

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- Stephen Higgins, PhD
- Richard Rawson, PhD
- Kelly Peck, PhD

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- Annie Ramniceanu, LCMHC, LADC
- Jessica King-Mohr, MA

Vermont Blueprint for Health

- Laura Wreschnig, MA

UMass JCOIN

- Elizabeth Evans, PhD

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Extra slides

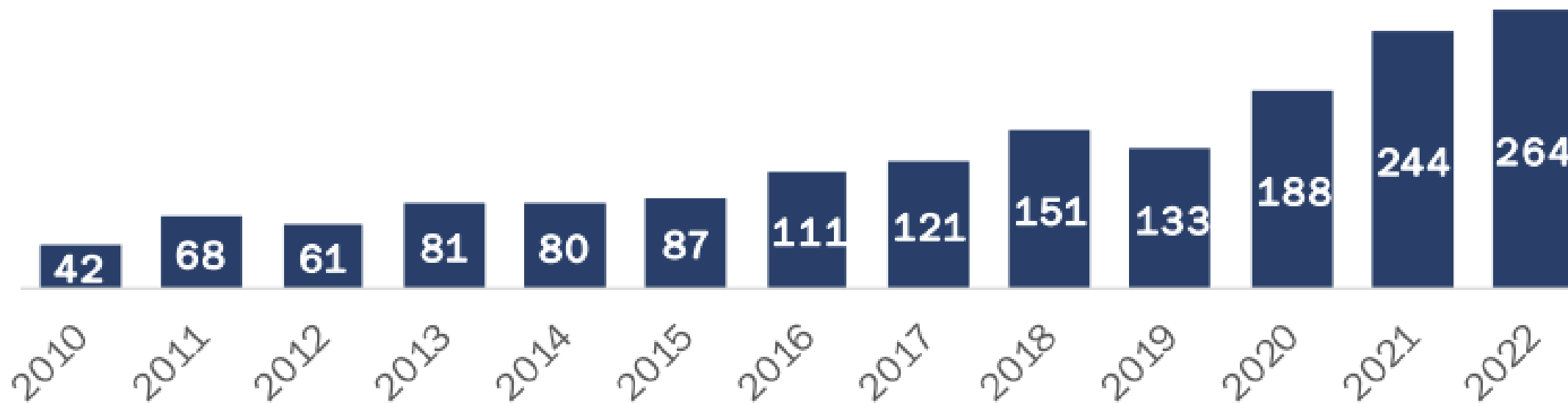


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Opioid-related fatalities in Vermont

Figure 1: The total number of accidental and undetermined fatal drug overdoses among Vermont residents has increased more than 500% between 2010 and 2022

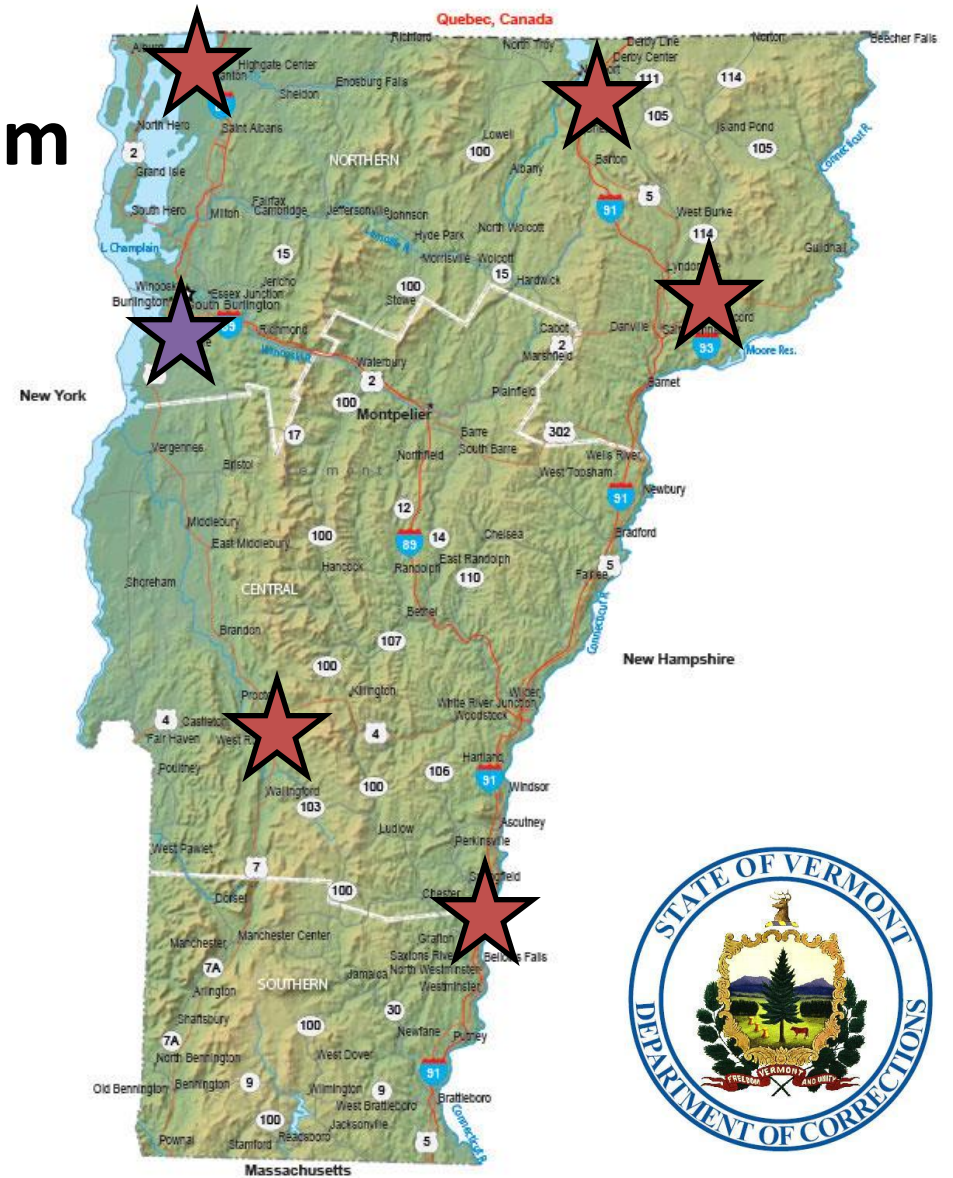
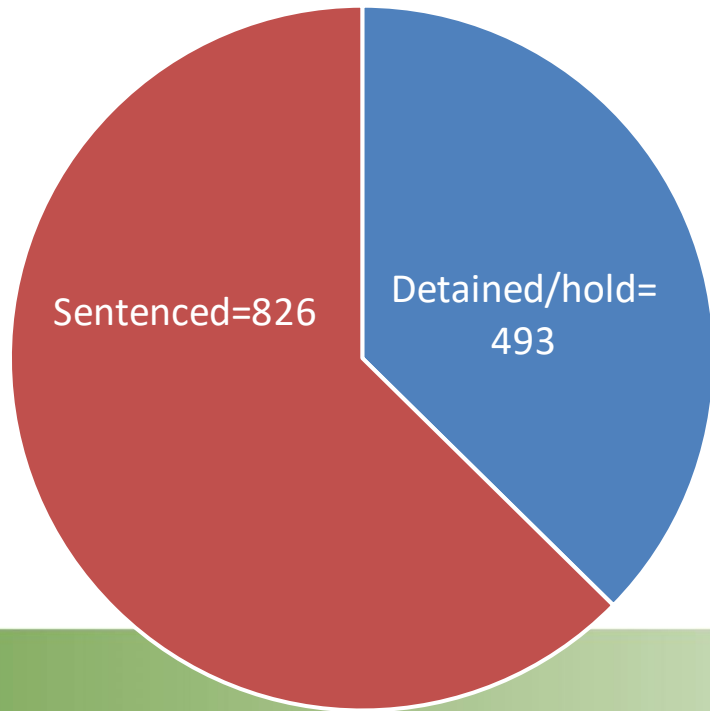


Vermont Department of Health, 2023

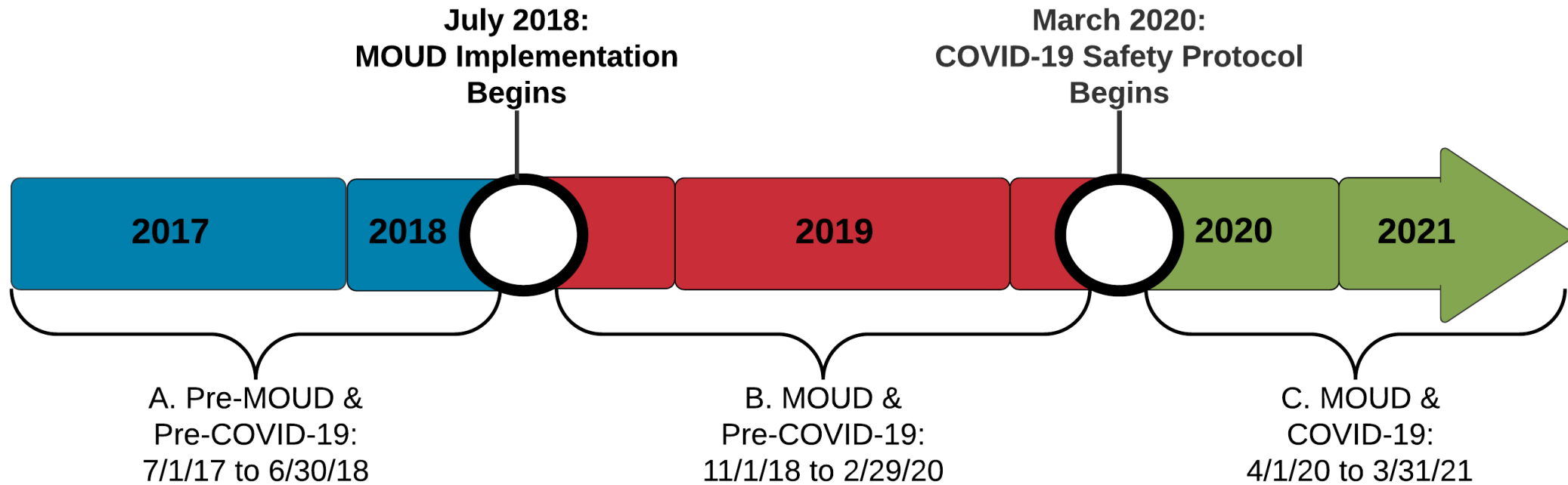
Vermont correctional facilities

- **Unified (prison & jail) state-run system with 6 facilities (5 male + 1 female)**

Booking Status (N=1,329)



Timeline



Treatment in the community: Vermont hub and spoke model

9 Regional hubs

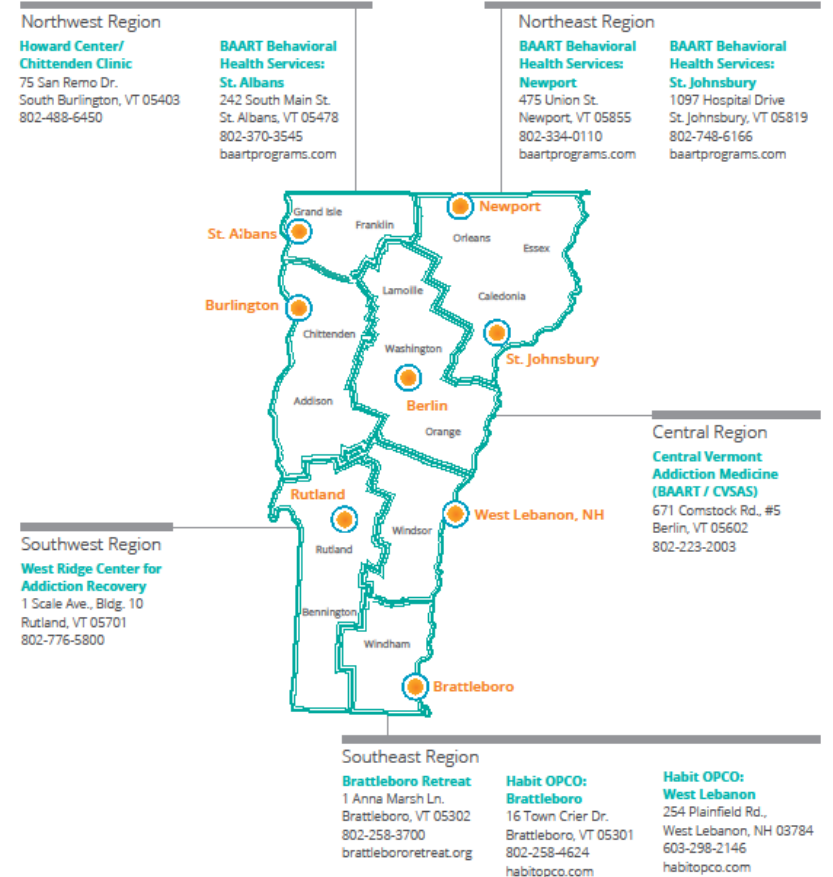
- Offer treatment for complex addiction
- Assessment, MOUD, & counseling
- Training & consultation for spokes

>75 Spokes

- Ongoing treatment in community settings
- Mostly primary care or family medicine

Care Alliance for Opioid Addiction

Service Regions



VT Blueprint for Health, 2021; Rawson et al., 2019; Rawson et al., 2019; Miele et al., 2020

Exploratory Aim 1a: VT DOC healthcare providers' and administrators' perspective on use of MOUD



The University of Vermont
LARNER COLLEGE OF MEDICINE

MOUD Diversion

MOUD: Very Helpful and Frequently Diverted

- *“I believe in MAT.... because there are people that it’s very useful for and they’re using it for what it’s designed to do but then there are people who don’t really need it, they get on it so they can sell it and buy commissary because it’s a commodity.”*
- *“There are positives around continuity of care and, you know, the folks that really can benefit from this program, that are working the program, that aren’t diverting...”*
- *“...you have this core group that really want the services. It's a tool, right? MAT's a tool that people use and it has success but there’s also so much abuse...”*

COVID-19 Increased Diversion

- **COVID Safety Protocols**
 - Changes in MOUD Distribution
 - Social Distancing & Mask Wearing
- **Increased Downtime**
 - Decreased programming/Rec Time
 - Decreased counseling
- **Increased Staff Burden**
 - Decreased number of personnel
 - Increased workload

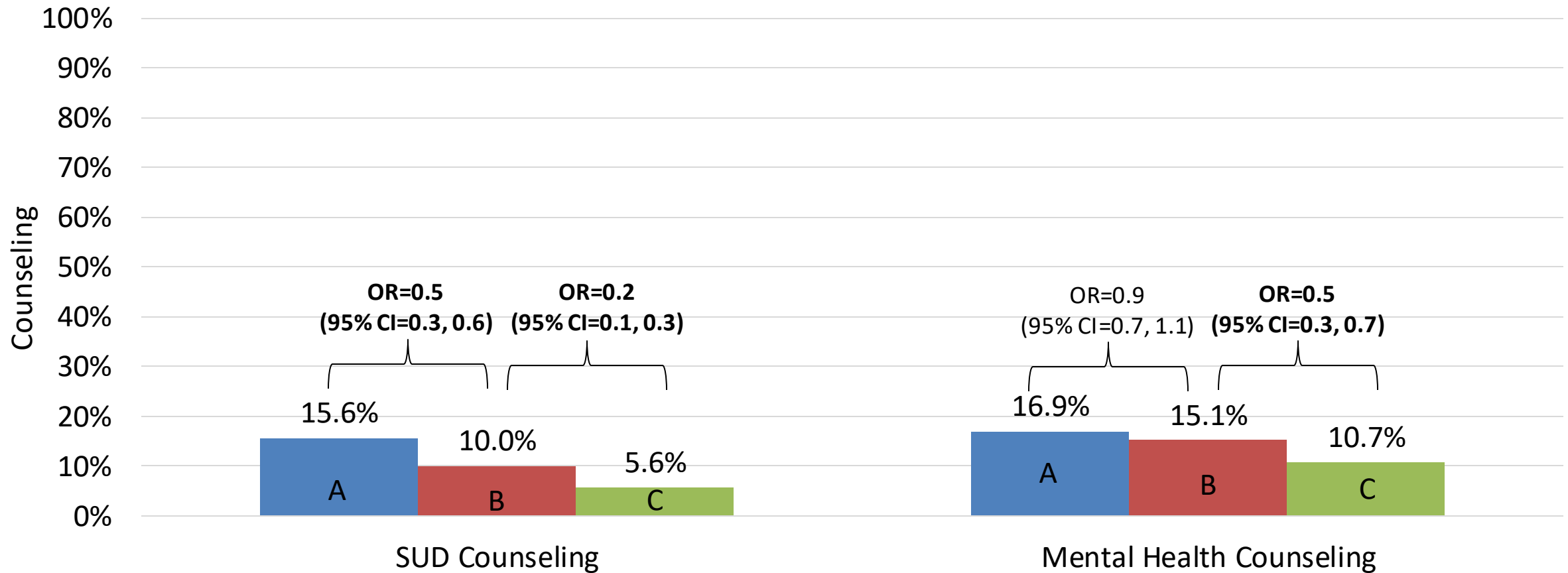
“The hard part through the whole pandemic, though, has been during lockdowns where we have to dispense medications in cells. We're not watching a person for 10 to 15 minutes, making them drink water. We're dispensing the med under the tongue, doing the mouth check that it's under the tongue, walking away, and Lord only knows what happens after that.”

Perceived Reasons for MOUD Diversion

- **Distributing MOUD**
 - To sell or trade as currency
 - In response to strong-arming or bullying
- **Obtaining MOUD illicitly**
 - “To get high” (i.e., recreational)
 - While waiting to be inducted
- **Personal use in a way not prescribed**
 - Split dosing
 - “Addictive personality”

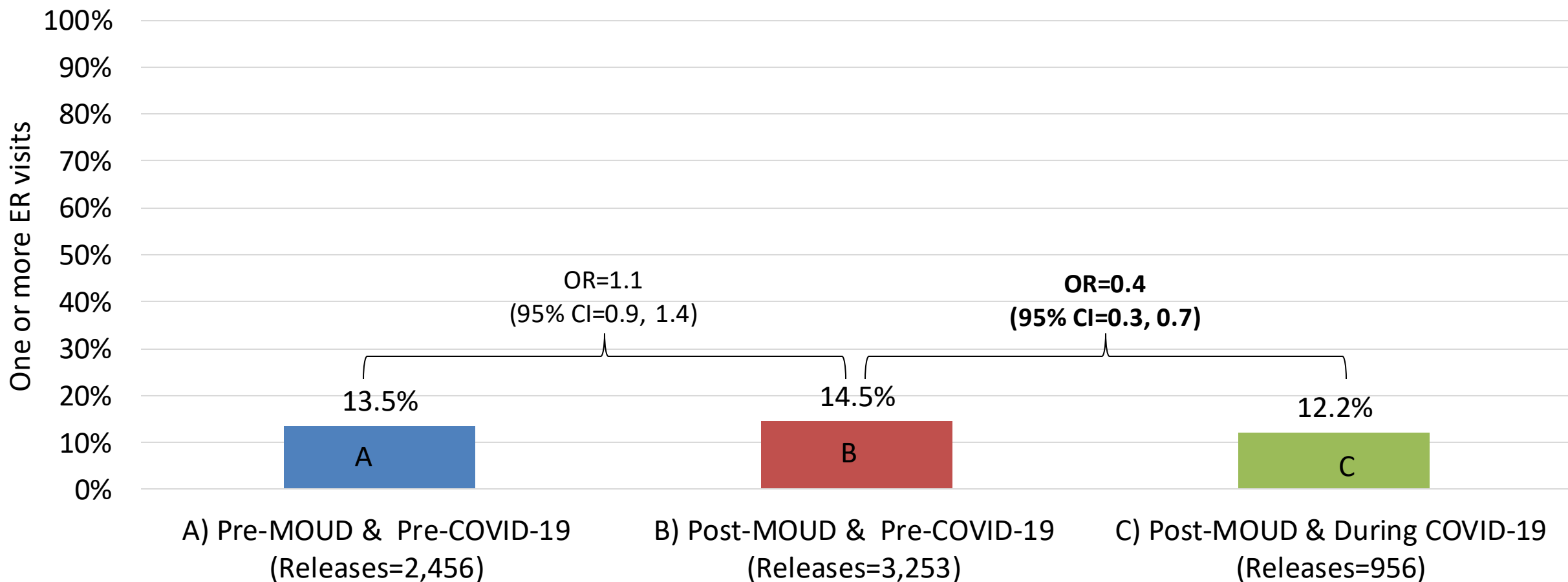
“I think some inmates see it as a business plan. It's a form of currency here, so if you can get on MAT even if you have OUD, maybe you can divert part of your dose and then, you know, use that as, you know, to trade for other things or for canteen.”

Counseling within 30 days after release from incarceration among people with OUD

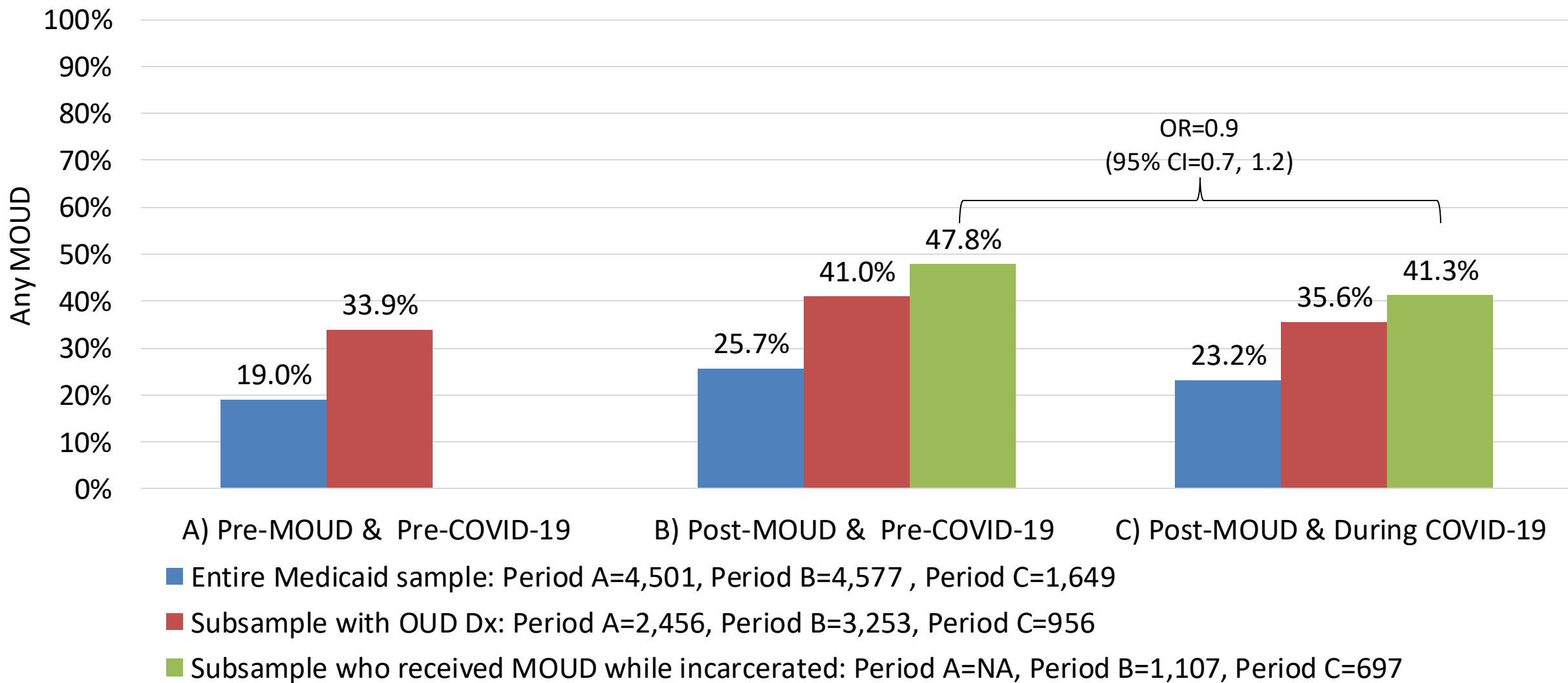


- A) Pre-MOUD & Pre-COVID-19 (Releases=2,456)
- B) Post-MOUD & Pre-COVID-19 (Releases=3,253)
- C) Post-MOUD & During COVID-19 (Releases=956)

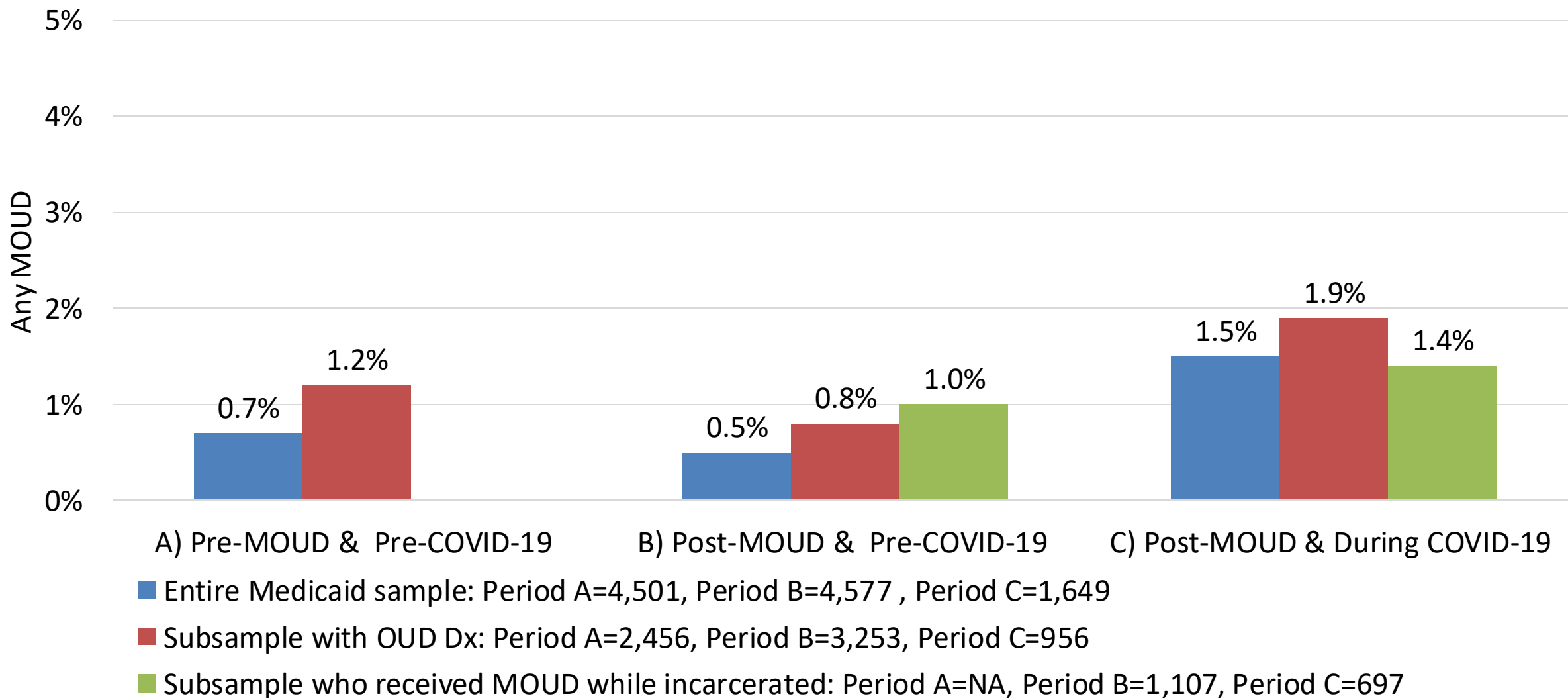
Emergency room (ER) visits within 30 days after release from incarceration among people with OUD



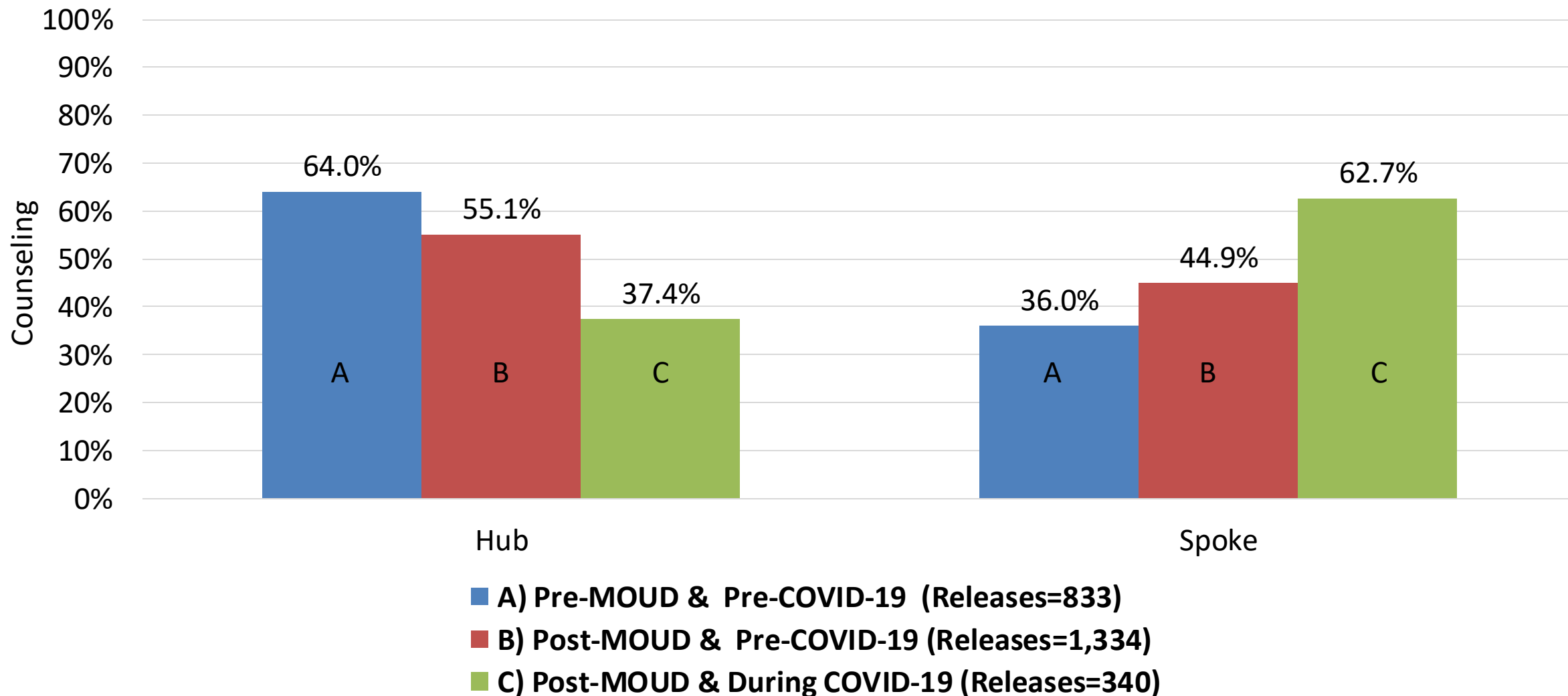
MOUD Within 30 Days After Release from Incarceration



Non-fatal Opioid-related Overdose Within 30 Days After Release from Incarceration

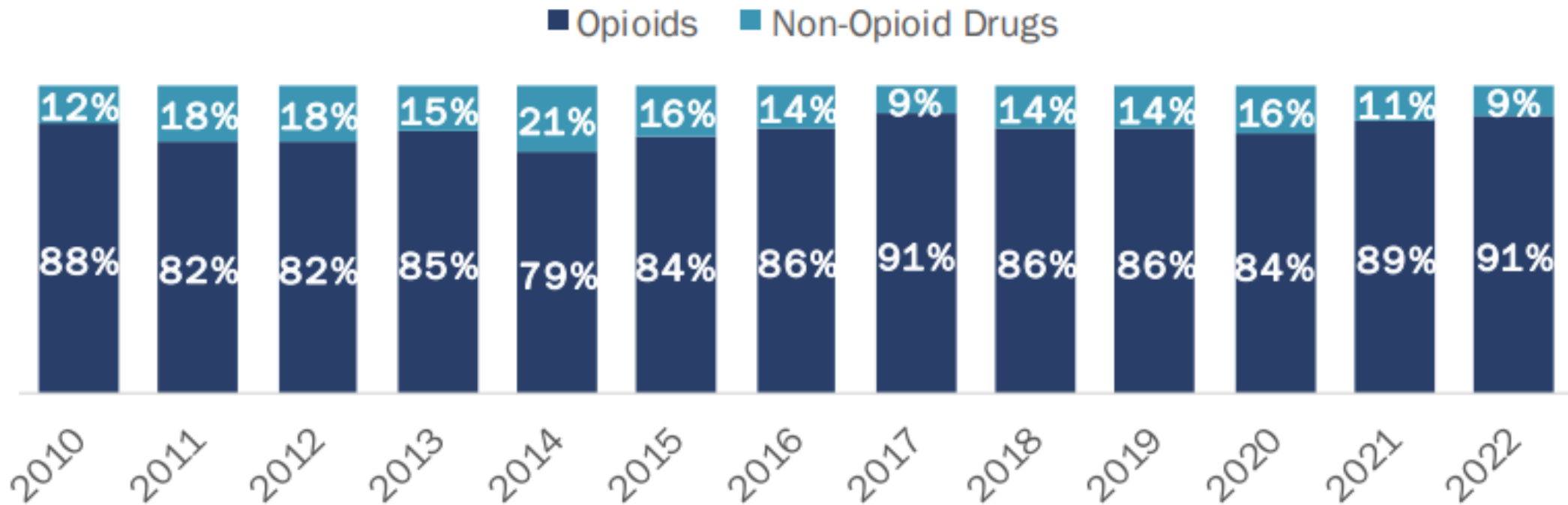


Point of First Contact for Those Who Received MOUD Within 30 Days After Release from Incarceration



Opioid-related fatalities in Vermont

Figure 2: Nearly all accidental and undetermined drug overdose deaths involve opioids



Vermont Department of Health, 2023

Data sources

Data from the VT DOC regarding incarcerated individuals

- Demographic characteristics
- Type of MOUD prescribed
- MOUD initiation, continuation, and discontinuation
- Reasons for MOUD discontinuations
- MOUD-related adverse events
 - Emergency room visits
 - Non-fatal overdoses
 - Fatal overdoses



Data after release from incarceration

Medicaid claims:

- MOUD prescriptions in the community
- Addiction counseling
- Mental health counseling
- Hub versus spoke engagement
- Emergency room visits
- Opioid-related non-fatal overdoses

VT Department of Health:

- Opioid-related overdose fatalities

VERMONT
Blueprint for Health


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DEPARTMENT OF HEALTH