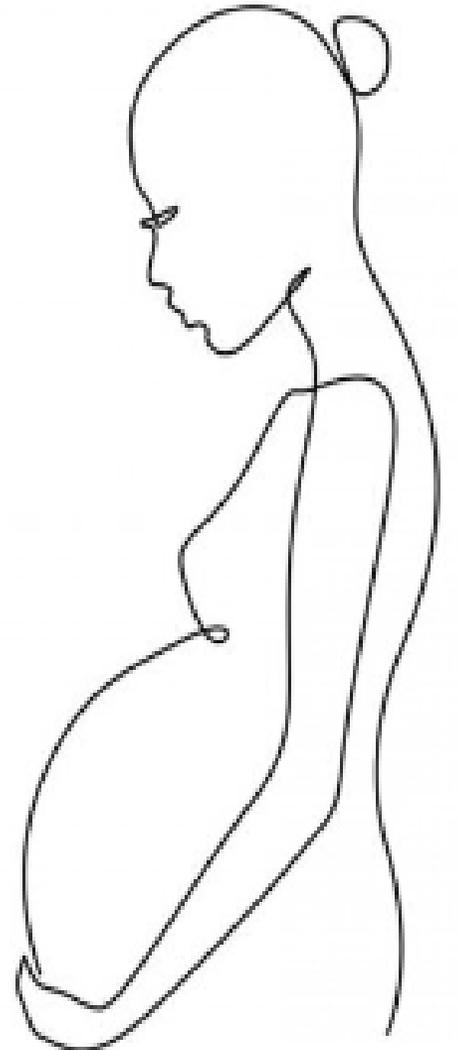


# What to Expect When You're Expecting:

## Exploring Prenatal Substance Use Policies and Navigation of MOUD During Pregnancy

Laura Curran, MA, PhD, LMHC  
Assistant Professor  
Department of Mental Health Law and Policy

**April 4<sup>th</sup>, 2025**



# Agenda

- Introduction
- Clinical experience
- Community-based research
- Navigation of treatment
- Maternal substance use policies
- Impacts of stigma
- Q and A

# About myself

- Licensed Mental Health Counselor (FL)
- Behavioral Healthcare Researcher
- Assistant Professor at USF
- Maternal substance use treatment and policy



# My Background

# Clinical Experience

Child and Family Therapist

- Foster and adoptive families

Substance Use Counselor

- Pregnant and postpartum clients

Licensed Mental Health Counselor  
(LMHC)



**Parental substance  
use and recovery**

**Domestic violence  
and trauma**

**Family  
reunification**

**Attachment and  
attachment  
disorders**

# My Research

- Community-engaged research
- Focused on between-system collaborations
- Evidence based practices for maternal substance use and mental health
- Practices and policies that support equitable and supportive access to care
- Treatment navigation
- Therapeutic alliances
- Harm reduction
- Trauma-informed
- Feminist perspective
- Mixed methods

# WHY THIS RESEARCH?

Life Saving

Listening to the  
community is  
effective

Storytelling is  
powerful

Mixed methods  
captures more

Navigating  
healthcare is hard

Improvements in  
education and  
training

- 40% of people with a lifetime substance use disorder are women (Wendell, 2013)
- 7% of women in the U.S. had used opioids during their pregnancy (CDC, 2019)
- 1 in 5 of those reported misusing opioids during their pregnancy

- 69% of women admitted to local jails met criteria for a SUD (ACOG, 2015)
- 26% experience OUD (Sufrin et al., 2020)

- preterm labor
- early onset of delivery
- withdrawal symptoms
- poor fetal growth
- NAS (neonatal abstinence syndrome) or NOWS
- miscarriage

(Johnson, 2018)

## What do we know so far?

The recommended treatment for OUD during pregnancy is MOUD combined with prenatal care

**39-50%**

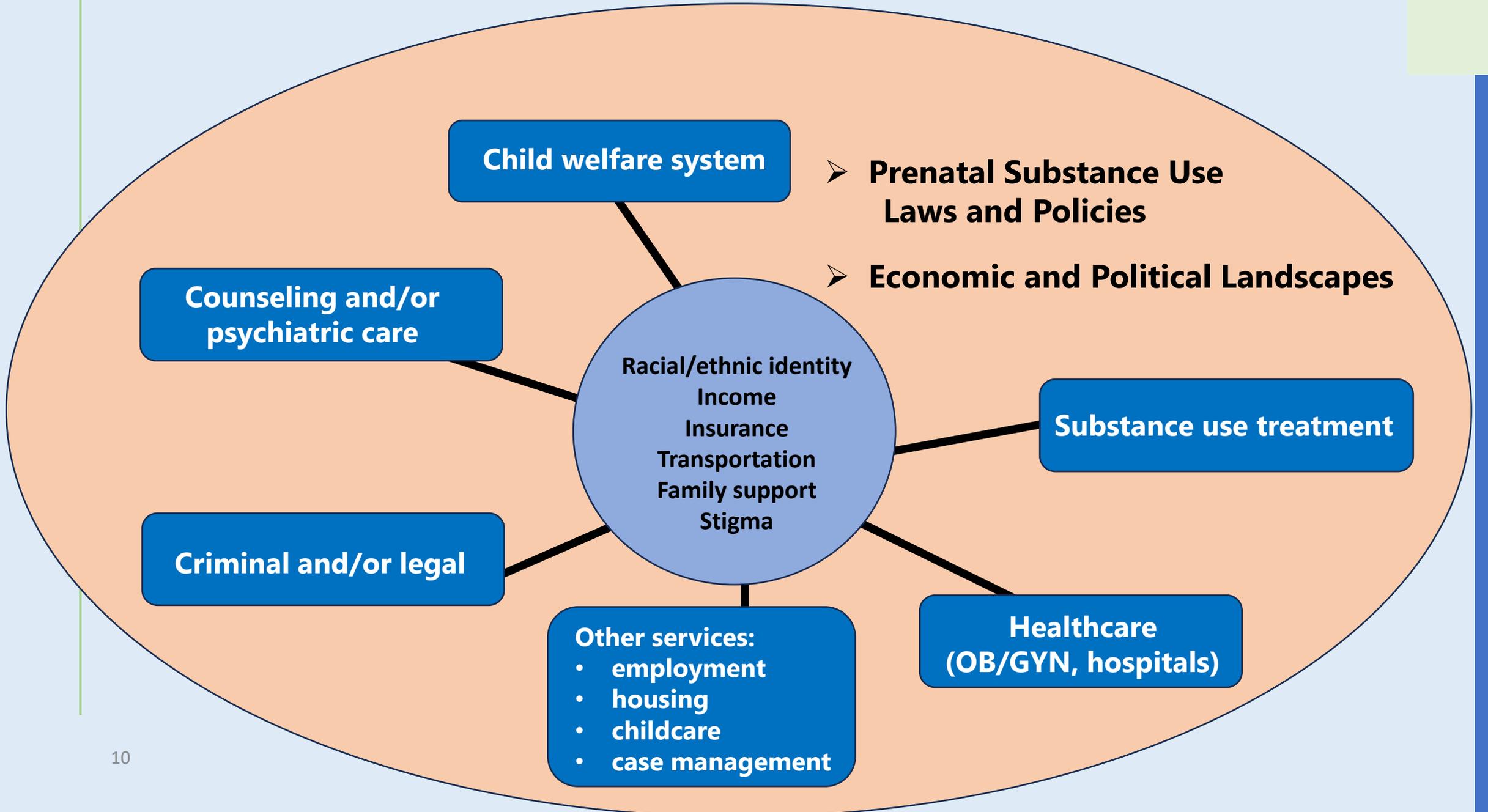
(ACOG, 2015; Jones, Finnegan, & Kaltenbach, 2012; Substance Abuse and Mental Health Services Administration, 2018; Short et al., 2018, Martin, 2015; Hand, 2017)

Treatment is complicated by stigma, fear of judgement, and competing demands of family/work

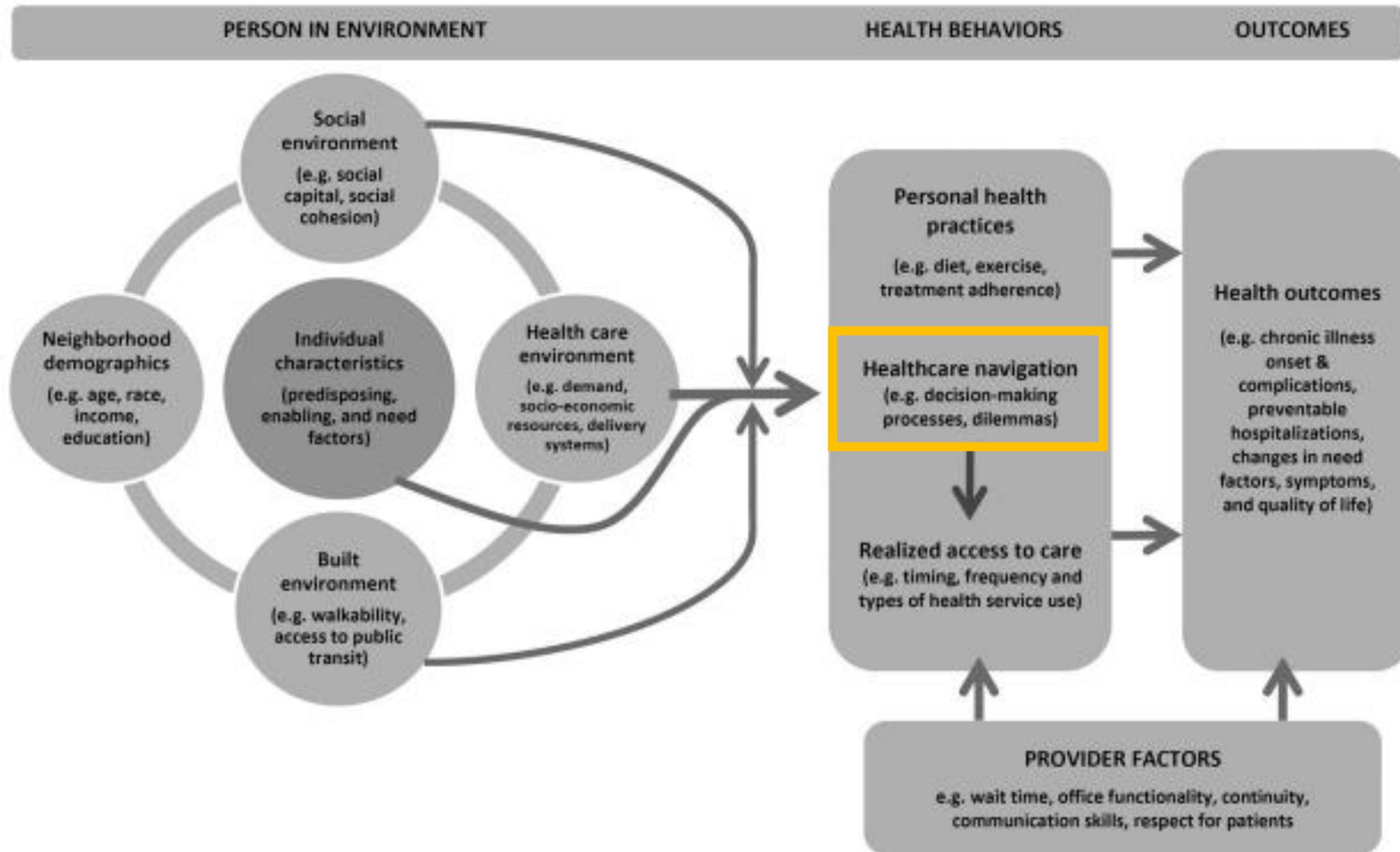
Women with SU tend to be more stigmatized than their male counterparts

Idealized depictions of motherhood

(Saunders et al., 2018; Brady & Randall, 1999; Kirtadze et al., 2013; Kulesza, Larimer, & Rao, 2013)



# BEHAVIORAL-ECOLOGICAL MODEL OF HEALTHCARE UTILIZATION AND NAVIGATION (RYVICKER, 2018)





1

Trends in Receipt of MOUD Among Pregnant Women in the U.S.

2

A Multilevel Analysis of Individual and State-level Factors Influencing MOUD Use

3

A Qualitative Exploration of the Experiences, Challenges, and Navigation of Treatment for OUD During Pregnancy

### **Research Question #1:**

What are the annual nationwide and state level estimates of MOUD utilization among pregnant women experiencing OUD who are admitted to a federally funded treatment program from 2010 to 2018, and how do these estimates change over time?

### **Research Question #2:**

Which referral sources are more likely to lead to MOUD use upon admission?

### **Research Questions #3:**

How does MOUD use among pregnant individuals differ by age, race or ethnicity, employment status, and education?

# Data and Sample

- **Treatment Episode Dataset-  
Admissions (TEDS-A)**
- **Admissions level secondary data**
- **2010 to 2018**

females

adults of reproductive age  
(18 to 49)

pregnant at  
admission

problematic use of  
heroin, methadone, or  
other synthetic opiates

# Analysis

pregnant females admitting to treatment with OUD who received MOUD as part of their initial treatment plan

- total pregnant females admitting to treatment with OUD

=

Estimate of MOUD use

## Predisposing Factors

### Other variables included:

- age
- race/ethnicity
- education
- employment

Comparison between MOUD and no MOUD

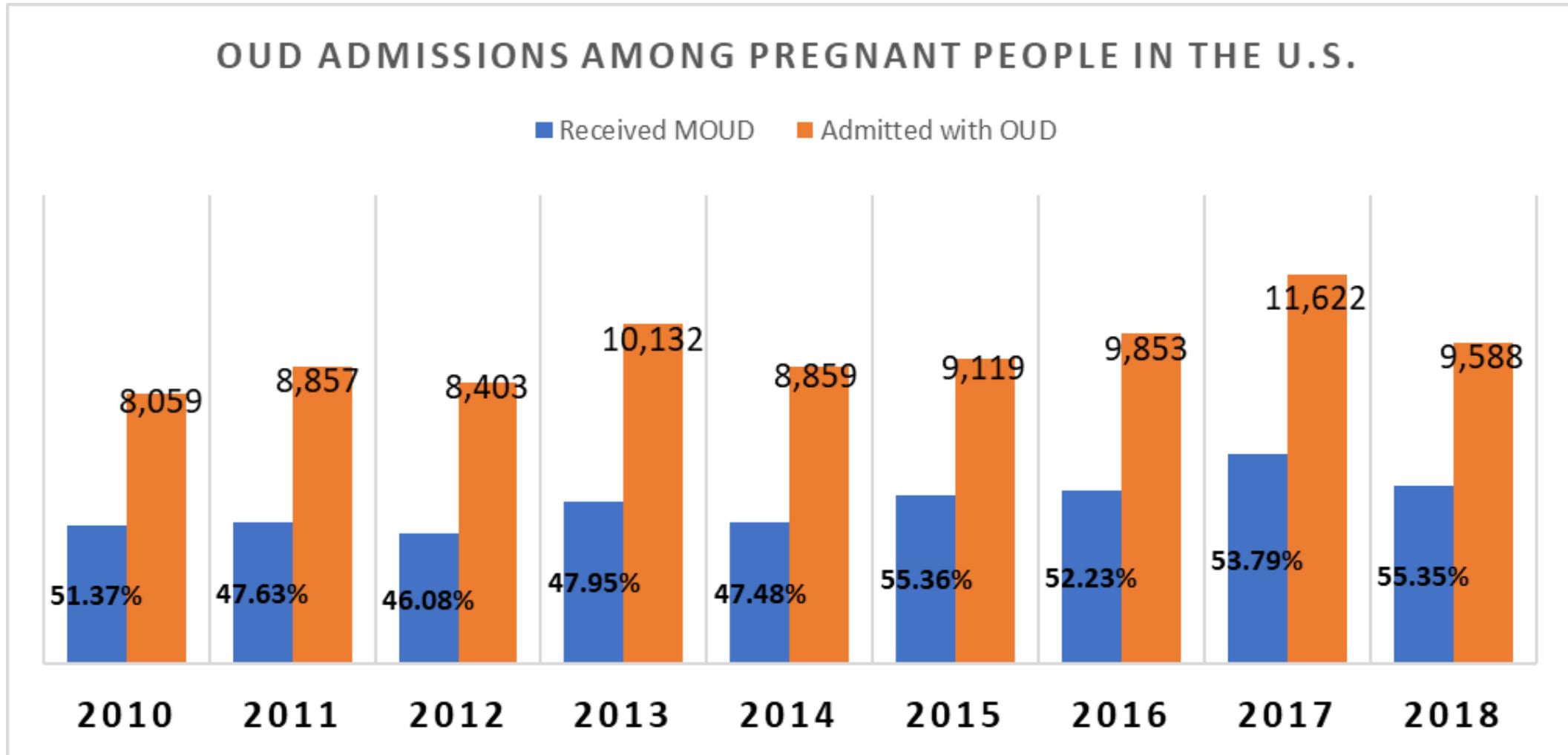
## Enabling Factor

### Referral sources:

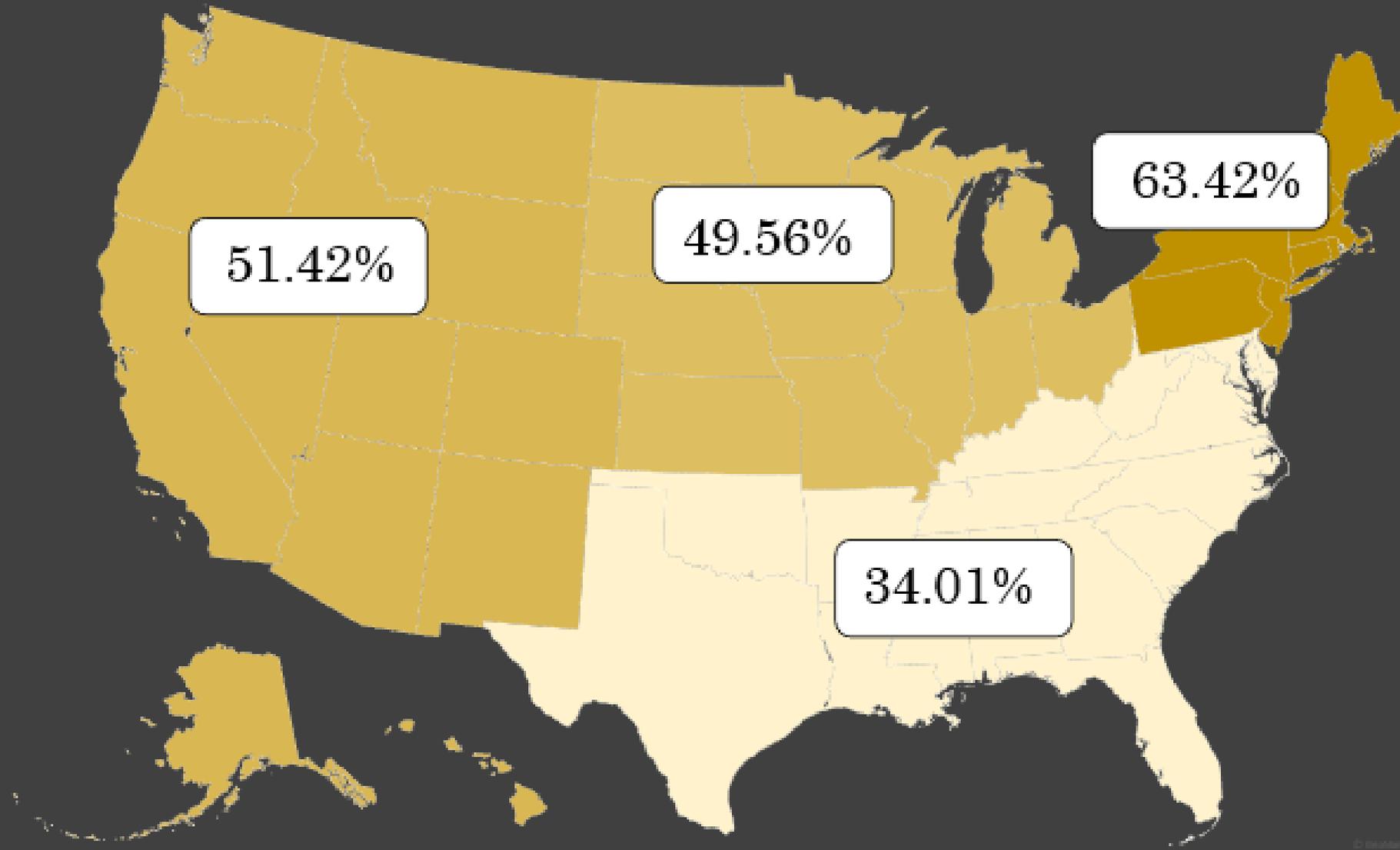
- Individual or self-referral
- Another alcohol or drug use program
- Another healthcare provider
- Employer or EAP
- Legal or criminal justice referral
- Other community referral

# Results

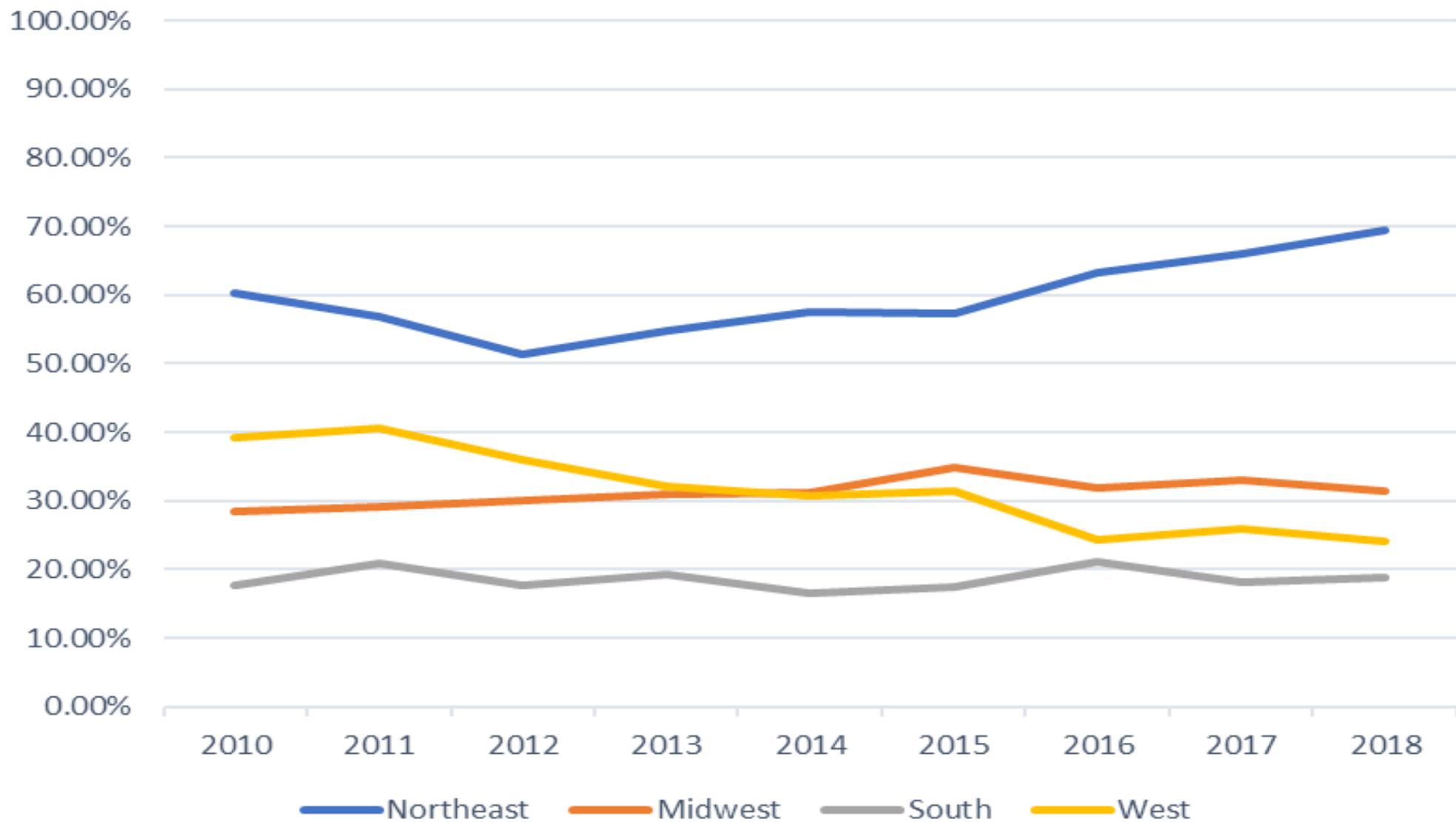
- (N= 84,492)



## Average MOUD Use Rates, 2010 to 2018



## Rates of MOUD Utilization Among Pregnant People



## THOSE WHO RECEIVED MOUD

age 25 to 29	37.3%
white	80.6%
unemployed	39.1%
HS or GED	47.2%



Maine	81.99%
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New Mexico	76.31%
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New Jersey	75.17%
------------	--------

Michigan	65.76%
----------	--------

Massachusetts	61.07%
---------------	--------

Vermont	60.79%
---------	--------

Delaware	59.81%
----------	--------

Rhode Island	59.20%
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California	58.82%
------------	--------

Connecticut	57.78%
-------------	--------

New York	56.77%
----------	--------

Minnesota	56.74%
-----------	--------

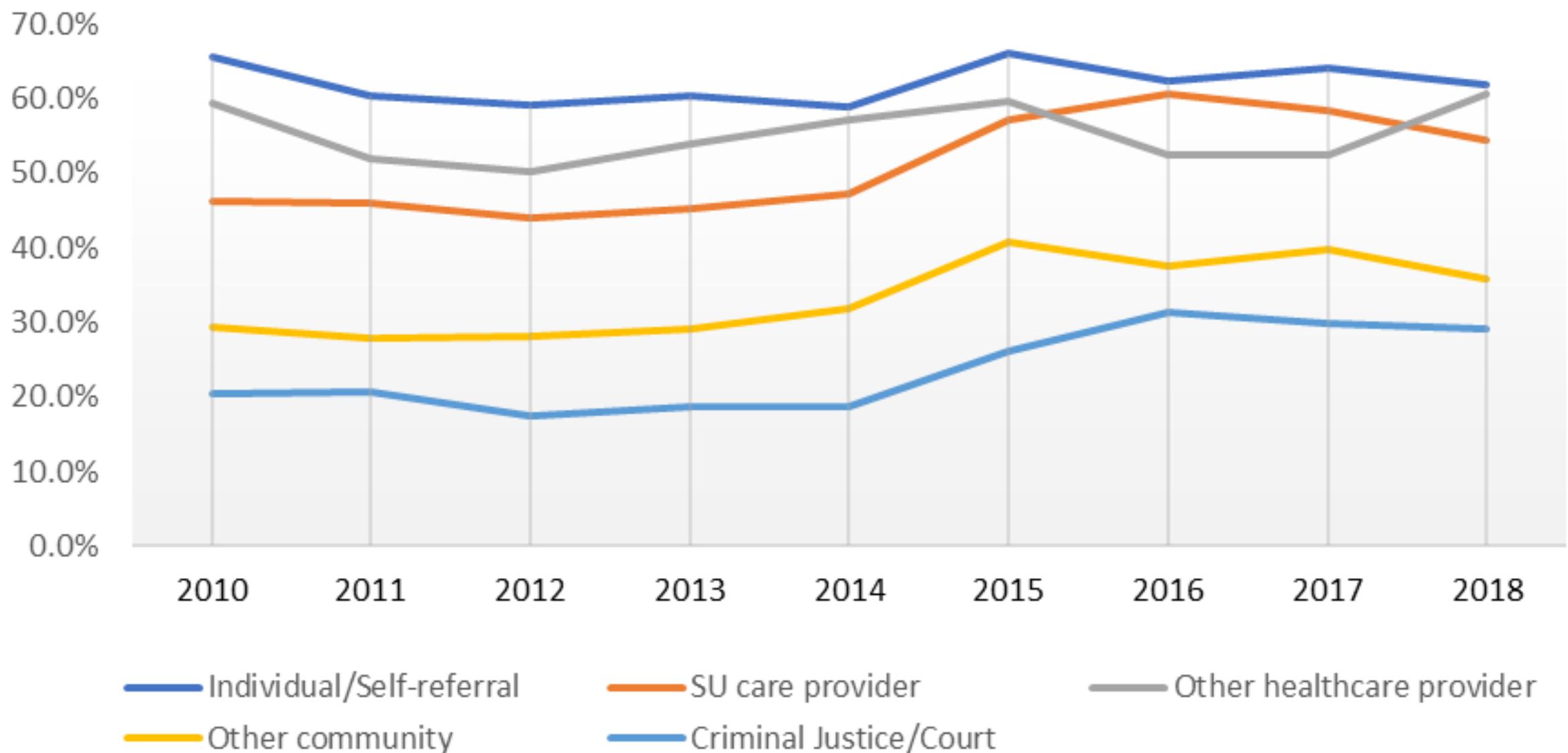
Maine	81.99%
New Mexico	76.31%
New Jersey	75.17%
Michigan	65.76%
Massachusetts	61.07%
Vermont	60.79%
Delaware	59.81%
Rhode Island	59.20%
California	58.82%
Connecticut	57.78%
New York	56.77%
Minnesota	56.74%

Mean = 50.58%

**Florida = 42.89%**

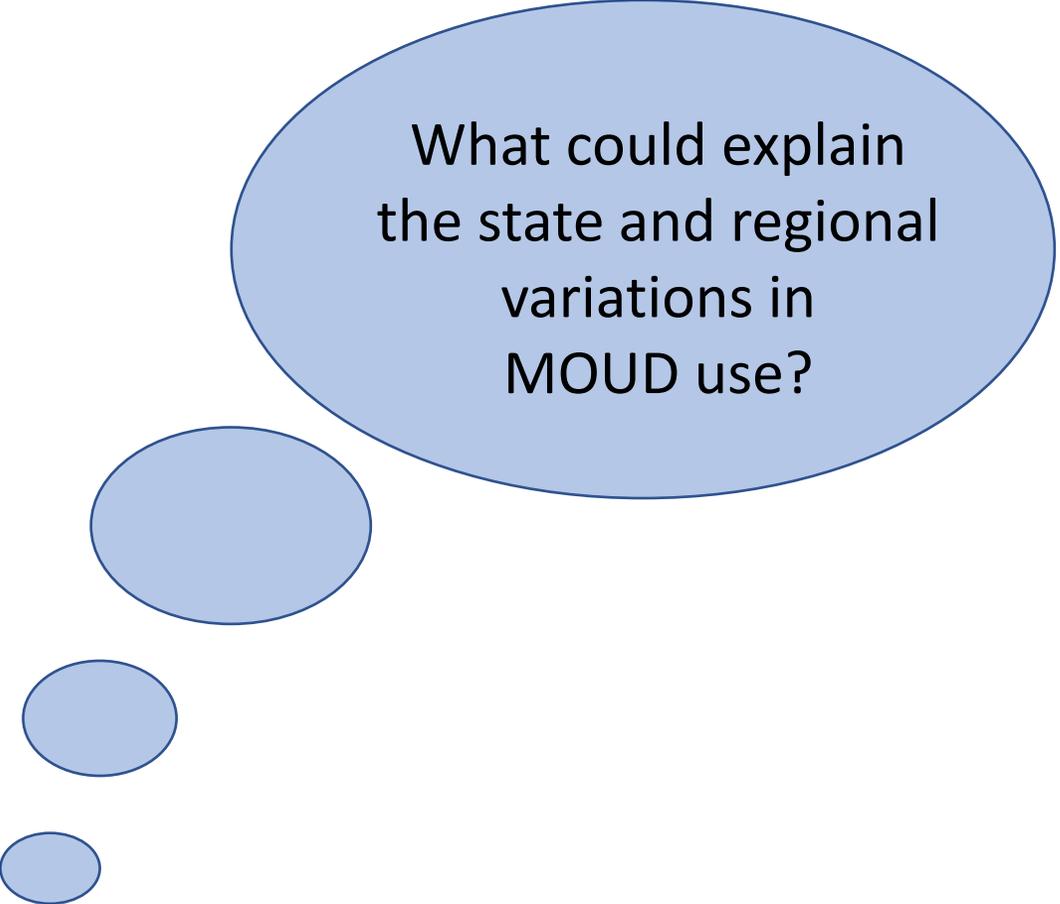
Median = 37.46%

## Referral Sources Resulting in MOUD Use

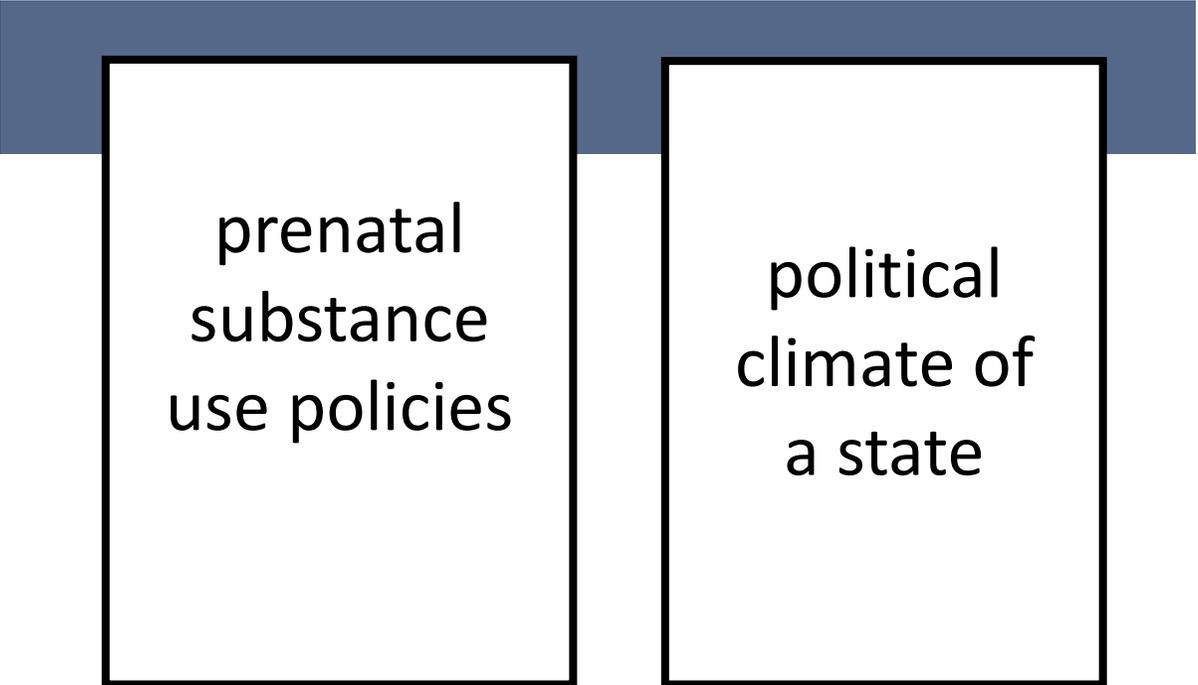


# Questions?

# Prenatal Substance Use Policies Across the U.S.



What could explain  
the state and regional  
variations in  
MOUD use?



prenatal  
substance  
use policies

political  
climate of  
a state

# Prenatal Substance Use Policies

## PUNITIVE POLICIES

24 states consider prenatal substance use to be child abuse

3 states consider it grounds for civil commitment

25 states require healthcare professionals to report suspected prenatal substance use

## FACILITATIVE POLICIES

17 states have priority access for pregnant folks

10 states prohibit treatment programs from discriminating against pregnant folks

**Women have been criminally charged in many states:**

- **criminal child endangerment**
- **delivery of controlled substance via umbilical cord**
- **manslaughter**

**Between 2000 and 2015, more states implemented these punitive policies than supportive ones**

**Punitive policy efforts do not equate to increases in MOUD receipt**

(Carroll, et al., 2021)

[Substance Use During Pregnancy | Guttmacher Institute](#)

## **Research Question #1:**

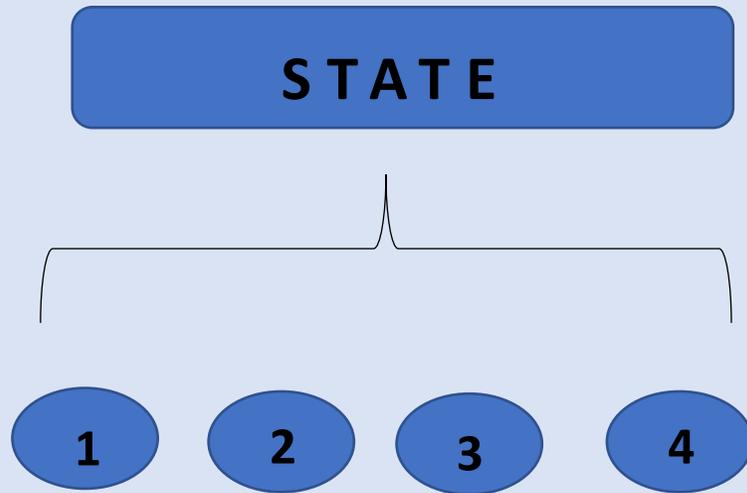
- What are the associations between MOUD receipt and the individual predisposing factors encountered by pregnant women entering substance use treatment (age, race, education, employment, referral source, and mental health)?

## **Research Question #2:**

What is the extent to which state-level policies on prenatal substance use influence MOUD use among pregnant women in treatment for OUD?

# analysis

nested  
data

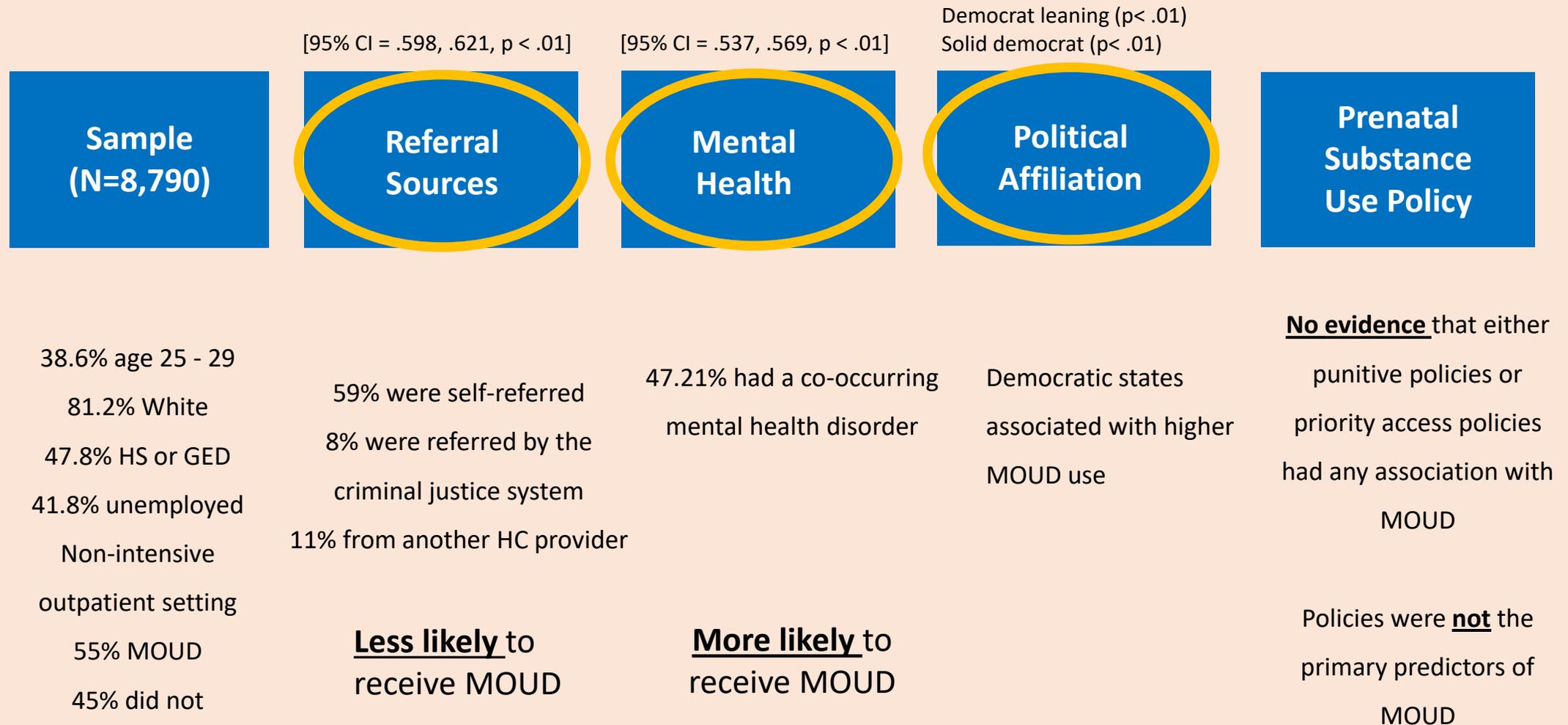


punitive policy  
priority access policy  
political climate of a state

age  
race/ethnicity  
education  
employment  
criminal justice referral  
co-occurring disorder

- **Two-sample tests (proportions)**
- **Multilevel binary logistic regression**
  - **For the year 2018**

# Multi-level model Results



# MULTILEVEL REGRESSION MODELS

	MOUD Use								
	Model 1			Model 2			Model 3		
	(N= 8,787 from 45 states)			(N= 7,539 from 39 states)			(N= 7,539 from 39 states)		
	coefficient	SE	p	coefficient	SE	p	coefficient	SE	p
<b>predictors</b>	-0.831	0.297	0.005						
<b>State level</b>									
punitive policy				-0.186	0.450	0.679	-0.397	0.249	0.111
priority access policy				-0.188	0.461	0.684	-0.240	0.265	0.365
political affiliation									
republican leaning				-0.092	0.805	0.909	0.296	0.475	0.534
competitive				1.320	0.674	0.050	1.114	0.408	0.006
democrat leaning				2.237	0.755	0.003	2.170	0.456	0.000
solid democrat				2.261	0.631	0.000	1.861	0.399	0.000
<b>Individual level</b>									
criminal justice referral				-1.410	0.081	0.000	-1.411	0.081	0.000
co-occurring mental health				-0.240	0.062	0.000	-0.231	0.062	0.000
race									
Black				0.065	0.104	0.528	0.224	0.322	0.487
Asian or Pacific Islander				0.570	0.613	0.352	1.158	0.862	0.179
other single race				0.364	0.154	0.018	0.627	0.403	0.120
two or more races				0.322	0.165	0.051	0.559	0.369	0.130
<b>chi squared</b>				357.110			372.010		
<b>ICC</b>	0.521			0.296					

# Questions?

Also let's take a break from statistics.... 😊

# Types of Stigma

1. Structural
2. Providers
3. Individual
4. Internalized
5. Criminal

<https://youtu.be/PmP990MwEz4?si=oYgDV2itXOWBm8Qw>

# Experiences of MOUD

- Challenges faced by women in accessing substance use treatment or health care in general are amplified around the time of pregnancy, and may be complicated by stigma, fear of judgment, and competing demands from their family, health, or employment

• (Saunders et al, 2018)

Pregnancy can be an emotional time, especially if pregnancies are unwanted or unexpected, and women are at risk of feeling overwhelmed with the process of obtaining care, and may avoid seeking any help for substance use problems

(Latuskie et al., 2019; Roberts & Pies, 2010)

- 1. What are the experiences of pregnant women as they seek, are referred to, and enroll in MOUD treatment during their pregnancy?**
- 2. What are the main barriers and facilitators faced by pregnant women when receiving MOUD throughout their pregnancy?**

# Study Design

- **Semi-structured interviews**
- **Formerly pregnant adults**
- **Experienced opioid misuse during pregnancy**
- **Received at least one MOUD during pregnancy**
- **Given birth in the past 2 years**

## **Interview protocol included questions about:**

- Experiences of pregnancy
- Experiences of medication
- Seeking and enrolling in MOUD
- Social support
- Decision-making
- Substance use history
- Mental health services
- Child welfare involvement
- Changes related to COVID-19

# RECRUITMENT

- From January to May 2022
- targeted at larger metropolitan areas
- Los Angeles, Tampa, New York City, Nashville
- chosen for their policy variations and varied MOUD access
- American Association for the Treatment of Opioid Dependence (Provider Locator)
- Private Facebook recovery groups for moms
- Craigslist

# Data collection

- April 2022 to June 2022
- over the phone
- 30-45 minutes each
- \$20 Amazon gift cards
- audio recorded
- sent to a third-party transcription services checked for errors

**N=24**

**12 from NY and 12 from CA**

# Qualitative analysis

- **Thematic analysis**
- a method suitable for identifying, analyzing, and reporting patterns in the data, with rich description of it
- Deductive approach
  - (Braun & Clarke, 2006)

independently reviewed all transcripts and generated memos, initial thoughts and reactions to the transcripts, and a preliminary set of codes

in-depth analysis of the transcripts

memo writing

a more defined set of codes was developed

coding and thematic analysis in Dedoose

collated the codes into themes and created a thematic “map” of the data

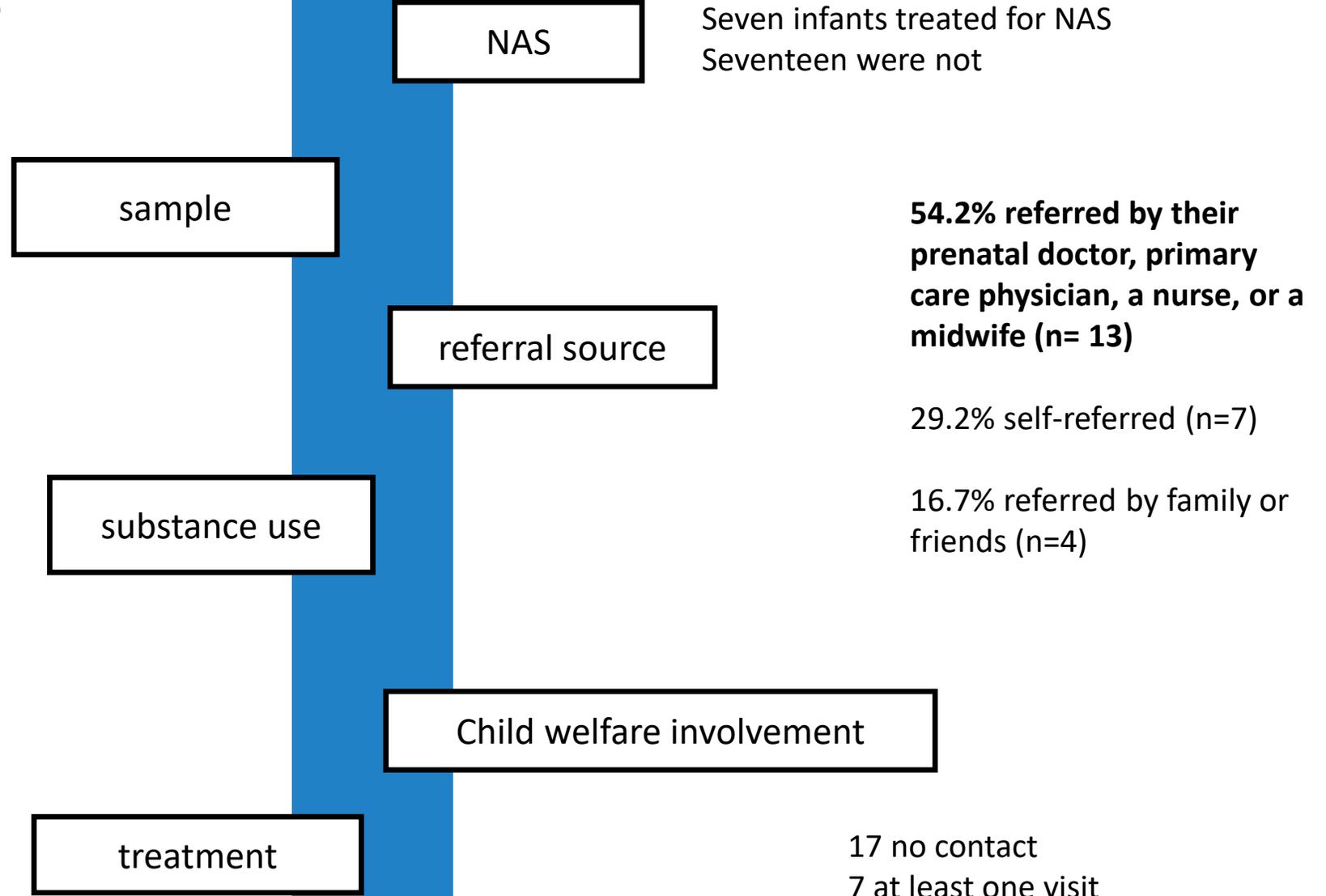
selected excerpts to illustrate these themes

# Qualitative Results

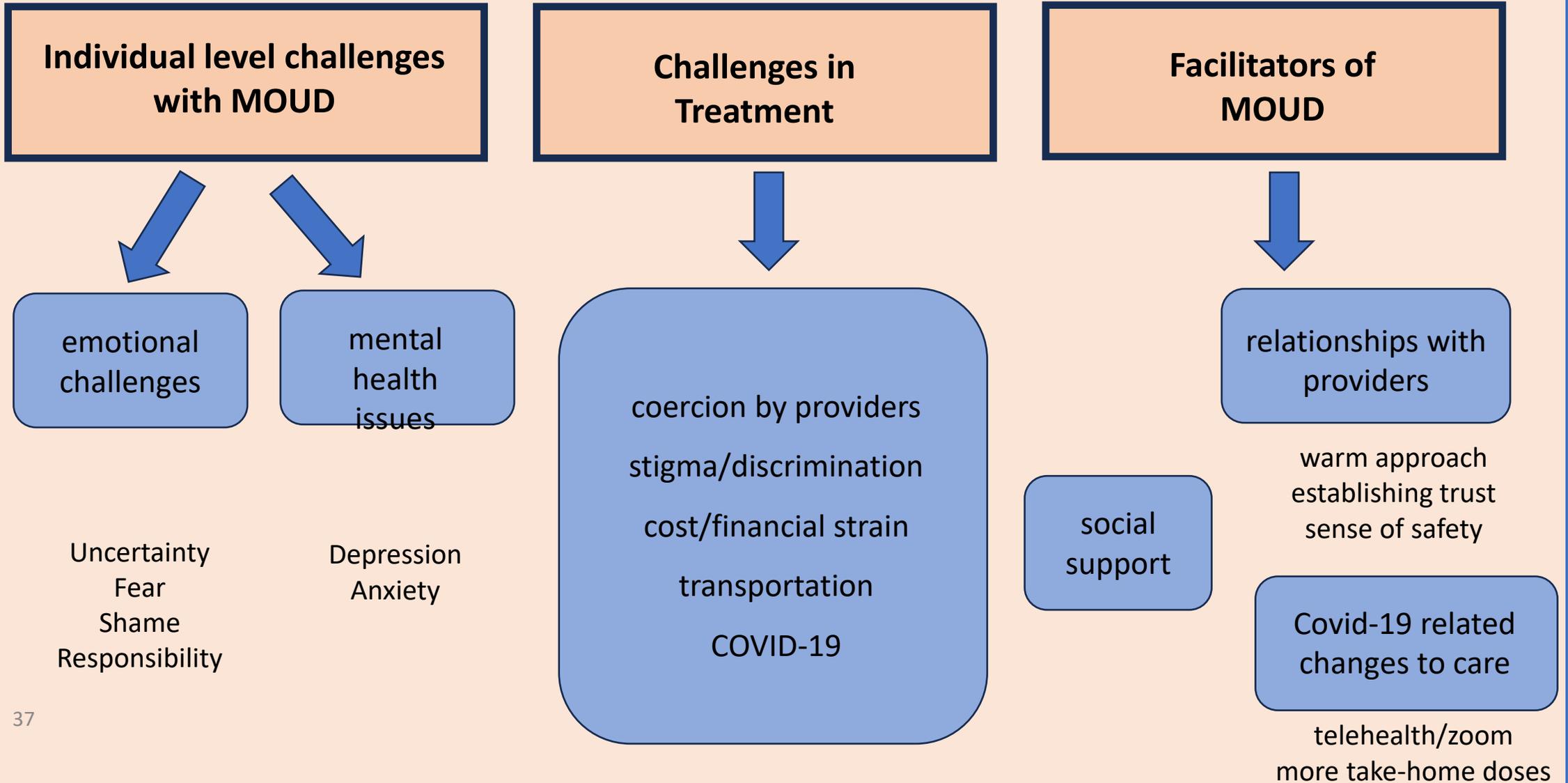
- mean age = 25.6 years old
- 91.7% Black (n= 22)
- 8.3% White (n= 2)

Misuse of non-Rx opioids (n=18)  
Misuse of Rx opioids for pain (n=6)

Methadone (n=17)  
Naltrexone (n=2)  
Subutex (n=1)



# Qualitative Themes



## Uncertainty about MOUD

*“My experience was one that – I thought I can’t really explain it because I was nervous. I was scared that I didn’t know what the outcome would be if I’m going to be [able to] hold the baby or not, because I just thought that I didn’t know what it would be like. I don’t know if my baby’s going to be OK. I was taking so many medications and listening to what doctors’ advice was like. I was nervous.” (NY\_12)*

## COVID-19 Related Challenges

*“Everyone decided to stay indoors and everything. That also affected me. Also, financially because I think COVID affected everyone financially...For someone like me I was affected financially. At the same time, emotionally because you have a situation that you’re dealing with, but when maybe you look at the news, you look all over, then you see people dying due to COVID, it affected me emotionally, I can say physically, financially, literally everything.” (NY\_05)*

## Provider Coercion

*“but once I got there [treatment], he said to me, ‘I want to treat you with methadone.’ So he told me, ‘That’s what I want.’ He wouldn’t oppose me. He led me to the program where he gave me the methadone dose.” (NY\_09)*

## Relationships with Providers

- *“I guess I was nervous, but I met a nurse who was very friendly. She walked me to the doctor's office and it reduced my anxiety and I felt just this hope.” ... “they were very welcoming and very warm.” (NY\_07)*
- *“They give you accurate information because I felt like I didn’t come out of that place with doubt. Because if you maybe go somewhere and you want to acquire information about a given product and they’re able to explain this given product properly, then you decide, OK, I like to read, first, the information and I like to try this even further. So for me the information, they were very informative and they were very gentle while explaining everything, and taking me through each step, and for me that was what also made me decide to pick that given place.” (NY\_10)*

# Conclusion

- The study found no evidence that punitive policies decrease MOUD or that supportive ones increased MOUD
- **Policies were not the primary predictors of MOUD**
- Criminal justice referrals and mental health were significant factors

**What do  
providers  
need?**



## IMPLICATIONS

### For policymakers:

- strengthen ties between legal and healthcare systems

### For treatment:

- address logistical challenges
- promote collaborative systems of care
- programs that keeps families together

### For providers:

- link clients with MOUD
- address stigma and discrimination for folks with substance use
- help pregnant clients to understand the laws and policies in their state, involvement with child welfare system

## FUTURE RESEARCH

Technology based interventions

Provider level interventions

- shared decision making
- rapport and trust building
- **expectations** of the child welfare system

Mental health during post partum

Douglas

VIDEO:

<https://youtu.be/q8Z2XO6WfyA?si=vakky9CK0C56UnJe>



**THANK YOU**

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# References

- American College of Obstetricians and Gynecologists (2015). Committee Opinion No. 633: Alcohol abuse and other substance use disorders: ethical issues in obstetric and gynecologic practice. *Obstetric Gynecology*, 125(6):1529-1537.
- Andersen, R. (1995). "Revisiting the behavioral model and access to medical care: does it matter?". *Journal of Health and Social Behavior*, 36 (1): 1–10.
- Angelotta, C., Weiss, C. J., Angelotta, J. W., & Friedman, R. A. (2016). A Moral or Medical Problem? The Relationship between Legal Penalties and Treatment Practices for Opioid Use Disorders in Pregnant Women. *Women's Health Issues*, 26(6), 595-601.
- Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3: 77-101.
- Carroll, J., El-Sabawi, T., Ostrache, B. (2021). The harms of punishing substance use during pregnancy. *International Journal of Drug Policy*.
- Center for Health Behavior Statistics and Quality (2016). Behavioral health trends in the United States: results from the 2015 national survey on drug use and health. Washington, DC: Health and Human Services.
- Faherty, L., Stein, B., & Terplan, M. (2020). Consensus guidelines and state policies: the gap between principle and practice at the intersection of substance use and pregnancy. *American Journal of Obstetrics and Gynecology*, doi: <https://doi.org/10.1016/j.ajogmf.2020.100137>
- Guttmacher Institute. (2022). Substance abuse during pregnancy. Available: <https://www.guttmacher.org/state-policy/explore/substance-use-during-pregnancy>
- Hirai, A., Ko, J., Owens, P. Stocks, C., Patrick, S. (2021). Neonatal Abstinence Syndrome and Maternal Opioid-Related Diagnoses in the US, 2010-2017. *Journal of the American Medical Association*, 325(2):146-155. doi:10.1001/jama.2020.24991
- Jones, H.E., Finnegan, L.P., Kaltenbach, K. (2012). Methadone and buprenorphine for the management of opioid dependence in pregnancy. *Drugs*, 72(6):747-757.
- Latuskie, K. A., Andrews, N. C., Motz, M., Leibson, T., Austin, Z., Ito, S., & Pepler, D. J. (2019). Reasons for substance use continuation and discontinuation during pregnancy: A qualitative study. *Women and Birth*, 32(1), e57-e64. <https://doi.org/10.1016/j.wombi.2018.04.001>
- Roberts, S., & Pies, C. (2010). Complex calculations: How drug use during pregnancy becomes a barrier to prenatal care. *Journal of Maternal Child Health*, 15, 333-341. <https://doi.org/10.1007/s10995-010-0594-7>
- Ryvicker, M. (2018). A Conceptual Framework for Examining Healthcare Access and Navigation: A Behavioral-Ecological Perspective. *Social Theory Health*, 16(3): 224–240.
- Saunders, J. B., Jarlenski, M. P., Levy, R., & Kozhimannil, K. B. (2018). Federal and State Policy Efforts to Address Maternal Opioid Misuse: Gaps and Challenges. *Women's Health Issues*, 28(2), 130-136.
- Short, V., Hand, D., MacAfee, L., Abatemarco, D., Terplan, M. (2018). Trends and disparities in receipt of pharmacotherapy among pregnant women in publicly funded treatment programs for opioid use disorder in the United States. *Journal of Substance Abuse Treatment*, 89 (67-74)
- Substance Abuse and Mental Health Services Administration (2018). *Clinical guidance for treating pregnant and parenting women with opioid use disorder and their infants (HHS Publication No. (SMA) 18-5054)*. Rockville, MD: Substance Abuse and Mental Health Services Administration: US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration1–165. Retrieved from <https://store.samhsa.gov/>.