Birth is Not the Endpoint

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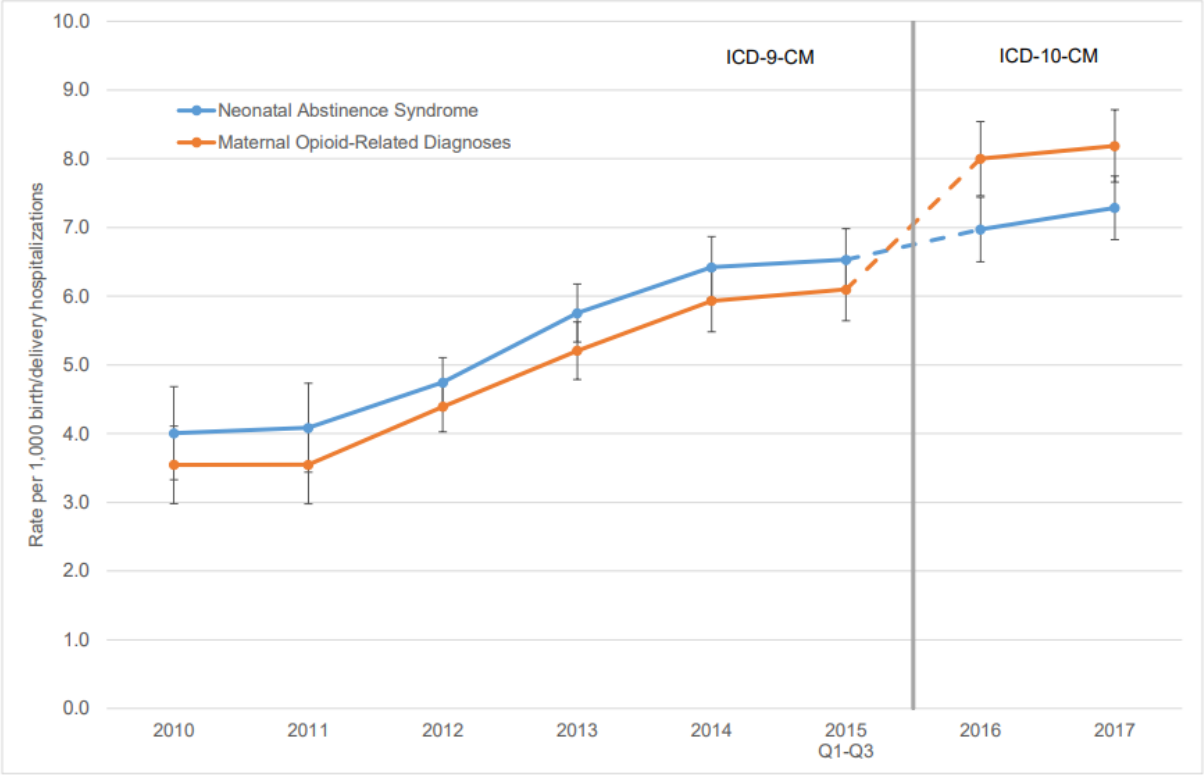
Objectives

- Review the impact of substance use disorder on maternal health throughout the first year postpartum
- Outline best practices for supporting birthing people with substance use disorder after delivery
- Identify areas for systematic improvement to prevent maternal mortality related to substance use disorder

Scope of the Problem

eFigure 1. Neonatal Abstinence Syndrome and Maternal Opioid-Related Diagnoses Rates per 1,000, 2010-2017



Source: Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project, National Inpatient Sample, 2010-2017

Legend: Rates of Neonatal Abstinence Syndrome per 1,000 birth hospitalizations (blue) and Maternal Opioid-Related Diagnoses per 1,000 delivery hospitalizations (orange) are shown from 2010-2017 with a discontinuity for *ICD-10-CM* coding implemented in the fourth quarter of 2015, which expands maternal opioid-related diagnoses to include new codes for long-term use of opioid medications and unspecified opioid use in addition to opioid dependence and abuse.

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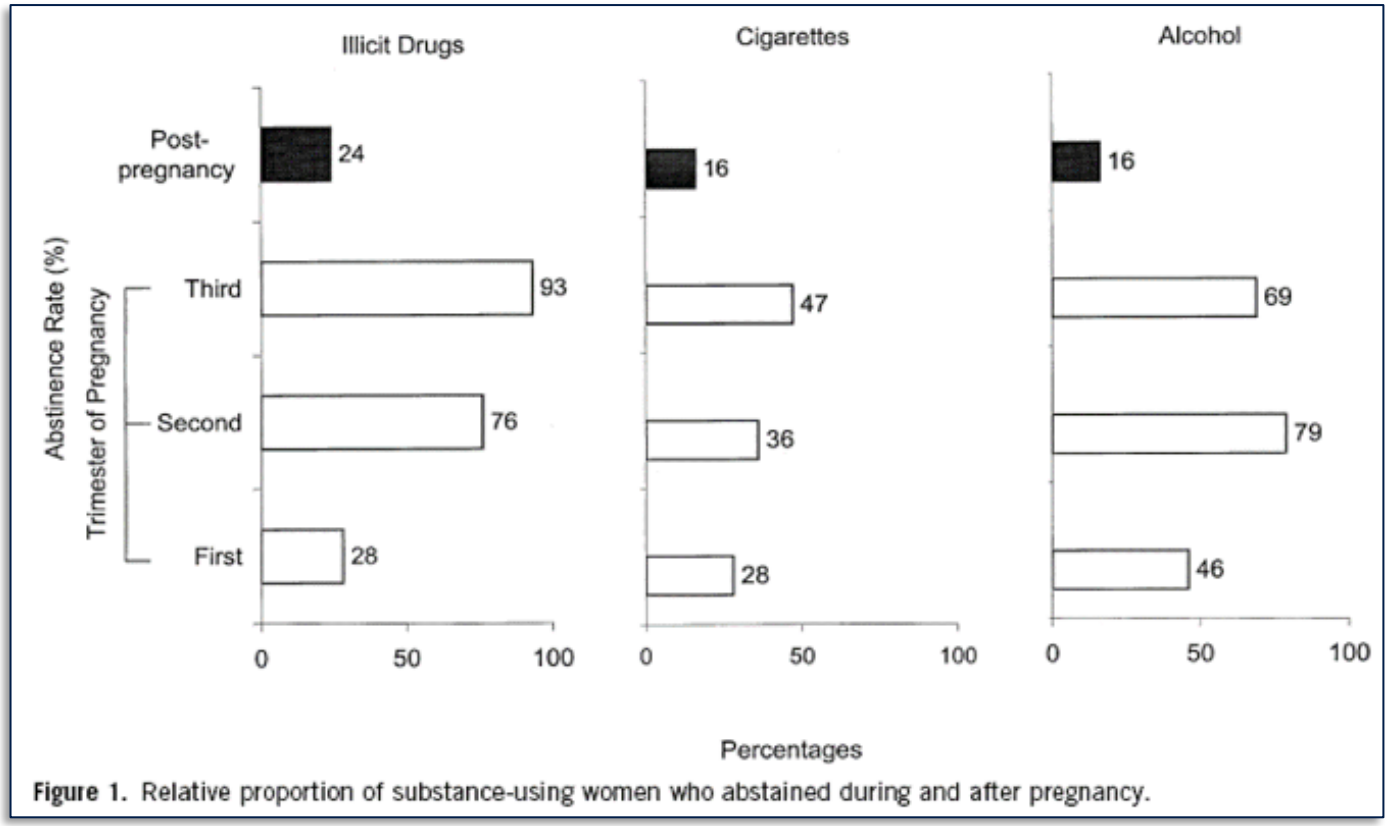
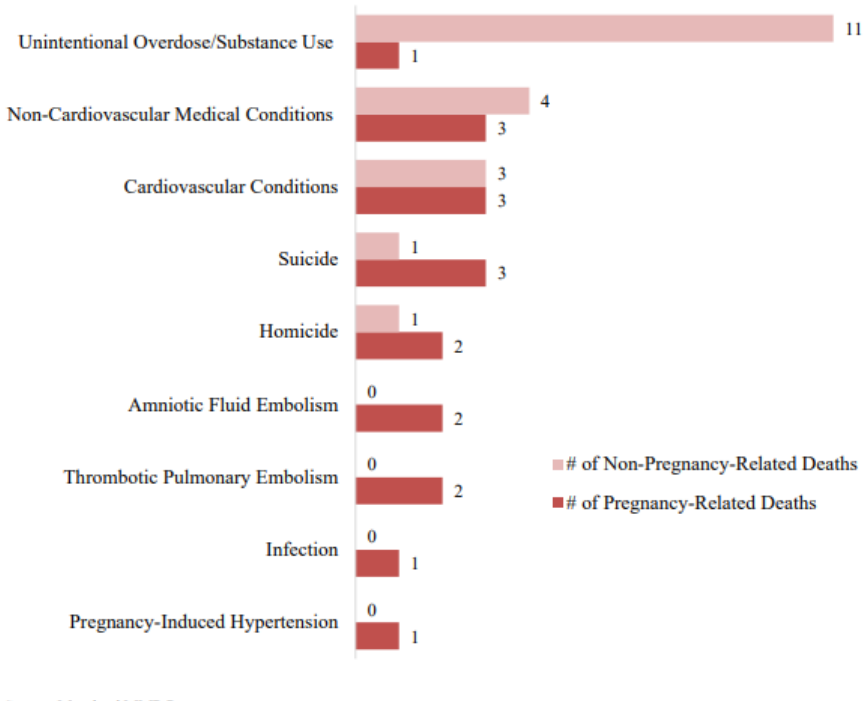


Figure 1. Relative proportion of substance-using women who abstained during and after pregnancy.

Figure 4. Number of Pregnancy-Related and Non-Pregnancy-Related Deaths by Category of Cause of Death, Maryland, 2018 (Total Deaths = 38)



Data Source: Maryland MMR Program.

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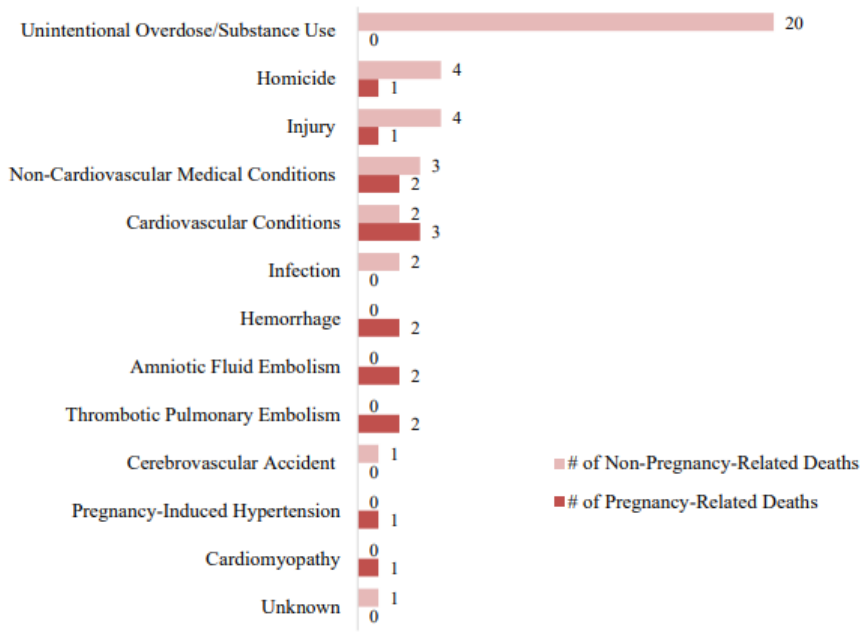
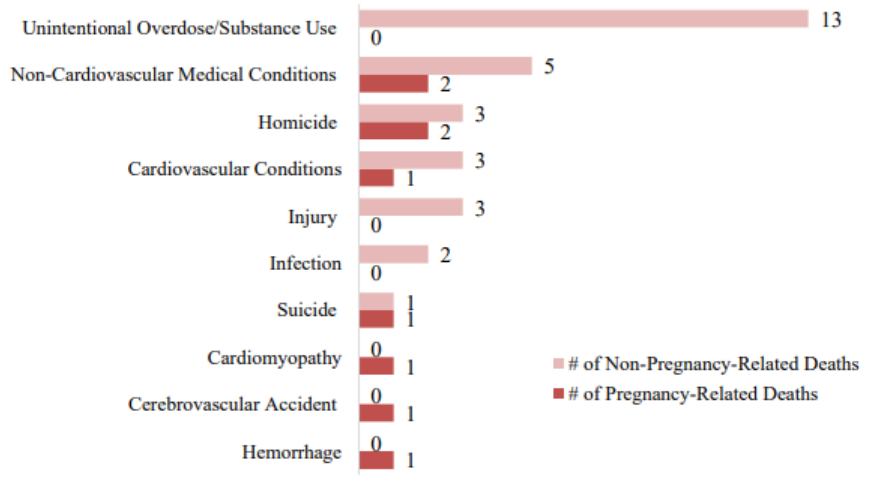
MMR, Health.Maryland.gov

Figure 4. Number of Pregnancy-Related* and Non-Pregnancy-Related Deaths by Category of Cause of Death, Maryland, 2017 (Total Deaths = 52)**



* Deaths of women while pregnant or within 365 days of pregnancy from a cause related to or aggravated by pregnancy or its management.
** Deaths of women while pregnant or within 365 days of pregnancy from any cause not related to or aggravated by pregnancy or its management.
Data Source: MDH, VSA, and Maryland Maternal Mortality Review Program.

Figure 4. Number of Pregnancy-Related* and Non-Pregnancy-Related Deaths by Category of Cause of Death, Maryland, 2016 (Total Deaths = 39)**



*Deaths of women while pregnant or within 365 days of pregnancy from a cause related to or aggravated by pregnancy or its management.
** Deaths of women while pregnant or within 365 days of pregnancy from any cause not related to or aggravated by pregnancy or its management.
Data Source: MDH, VSA, and Maryland Maternal Mortality Review Program.

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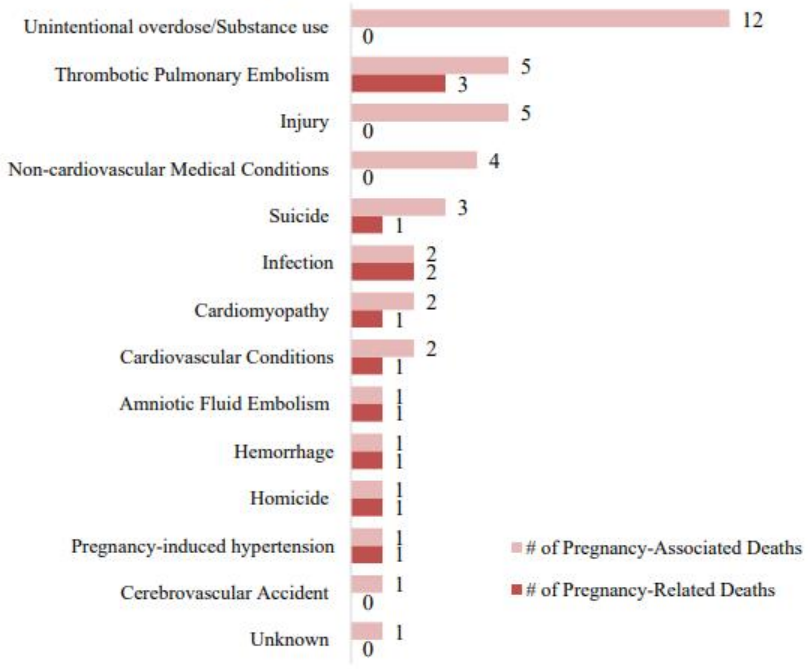
MMR, Health.Maryland.gov

Figure 3. Number of Pregnancy-Associated* and Pregnancy-Related Deaths by Category of Cause of Death***, Maryland, 2015**



* Number of deaths of women from any cause while pregnant or within 365 days of pregnancy
** Number of deaths of women while pregnant or within 365 days of pregnancy from any cause related to or aggravated by pregnancy
***Category as determined by Maternal Mortality Review Committee
Data Source: Maryland Department of Health, Vital Statistics Administration

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MMR, Health.Maryland.gov

Cause of death	All pregnant individuals (n=4,972,061)	All pregnant individuals with OUD (n=48,902)
All deaths	51.1 (48.3, 54.1)	316 (258, 385)
Opioid overdose	5.4 (4.5, 6.4)	118 (84, 163)
Other drug and alcohol related	3.1 (2.5, 4.0)	47 (27, 79)
Other injuries	8.9 (7.8, 10.3)	33 (18, 60)
Suicide	2.4 (1.8, 3.1)	26 (12, 52)
Pregnancy and delivery	9.6 (8.6, 10.8)	24 (12, 46)
Other diseases	6.3 (5.3, 7.4)	24 (11, 47)
Circulatory	4.6 (3.8, 5.6)	23 (10, 47)
Unknown cause	4.1 (3.4, 5.0)	12 (4, 32)
Homicide	3.6 (2.9, 4.5)	9 (3, 24)
Cancer	3.0 (2.3, 3.8)	0

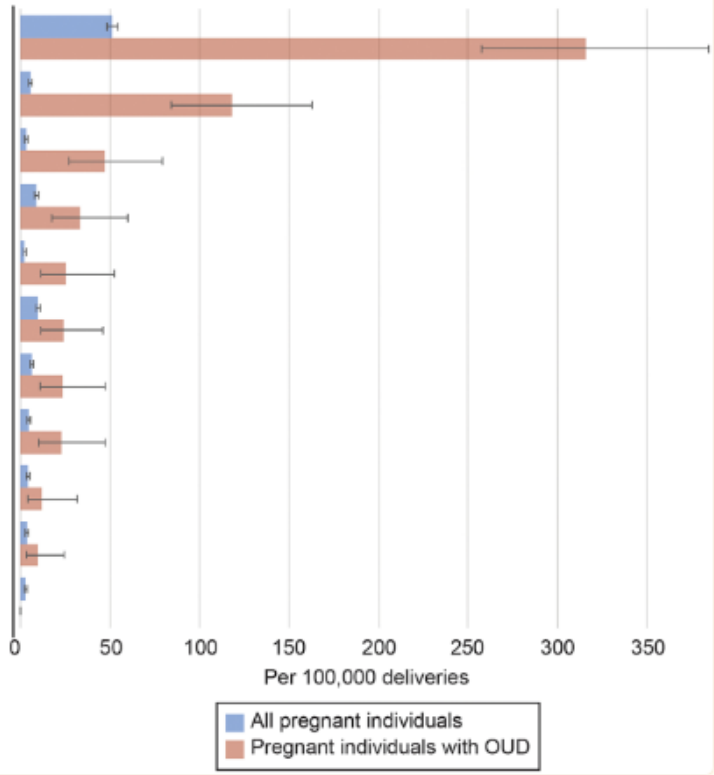
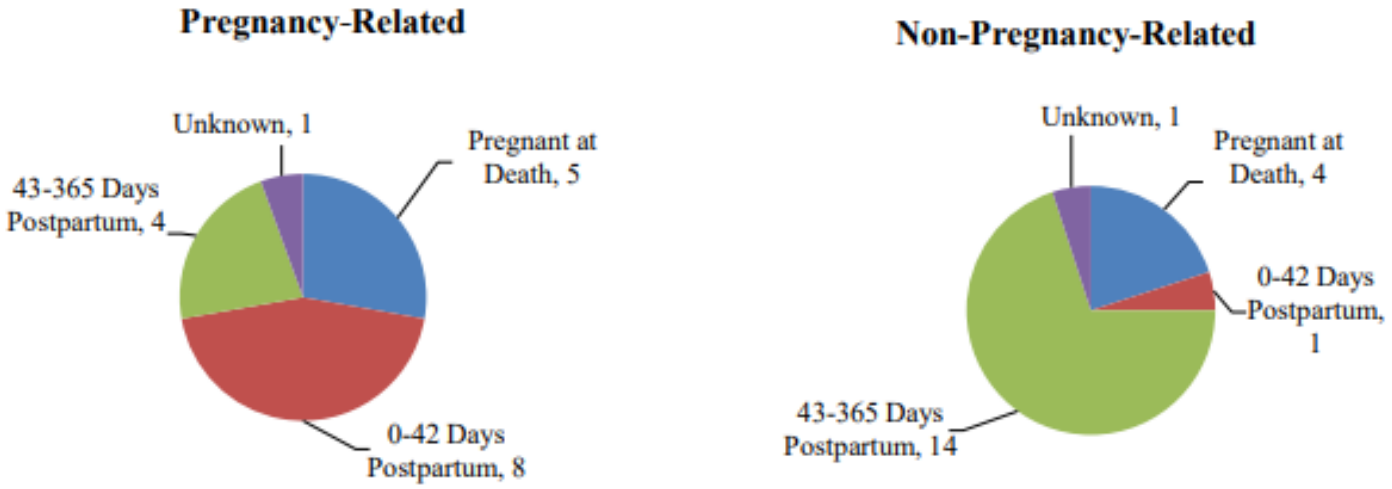


Figure 2.

Distribution of causes of death and cumulative incidence per 100,000 deliveries of specific causes of death by 1 year postpartum.

Suarez, Obstet Gynecol 2023

Figure 5. Number of Pregnancy-Related and Non-Pregnancy-Related Deaths by Timing of Death, Maryland, 2018



Data Source: Maryland MMR Program.

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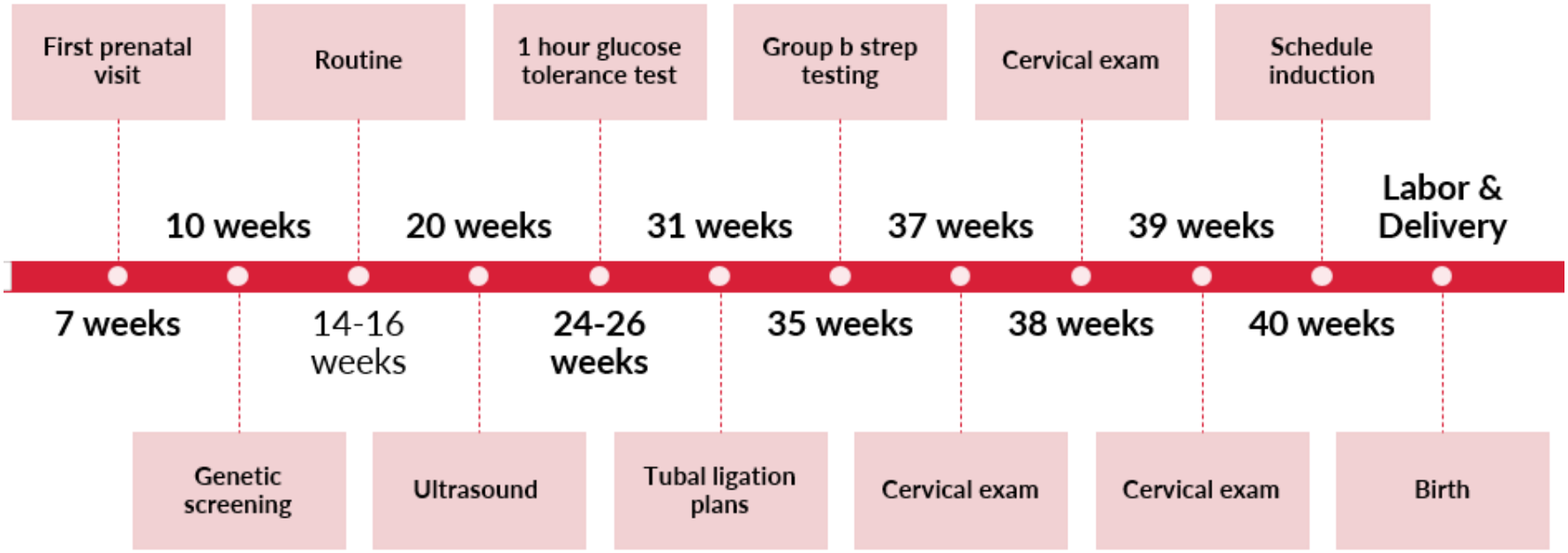
Healthcare During Pregnancy



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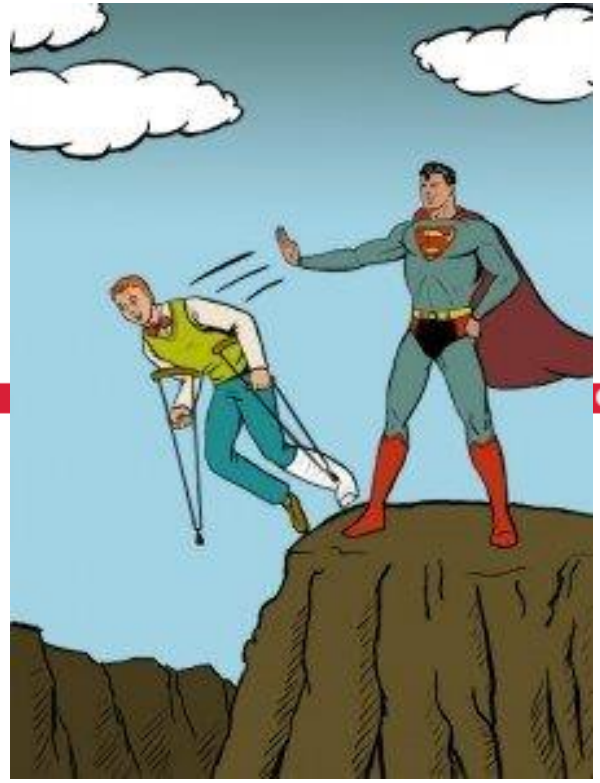
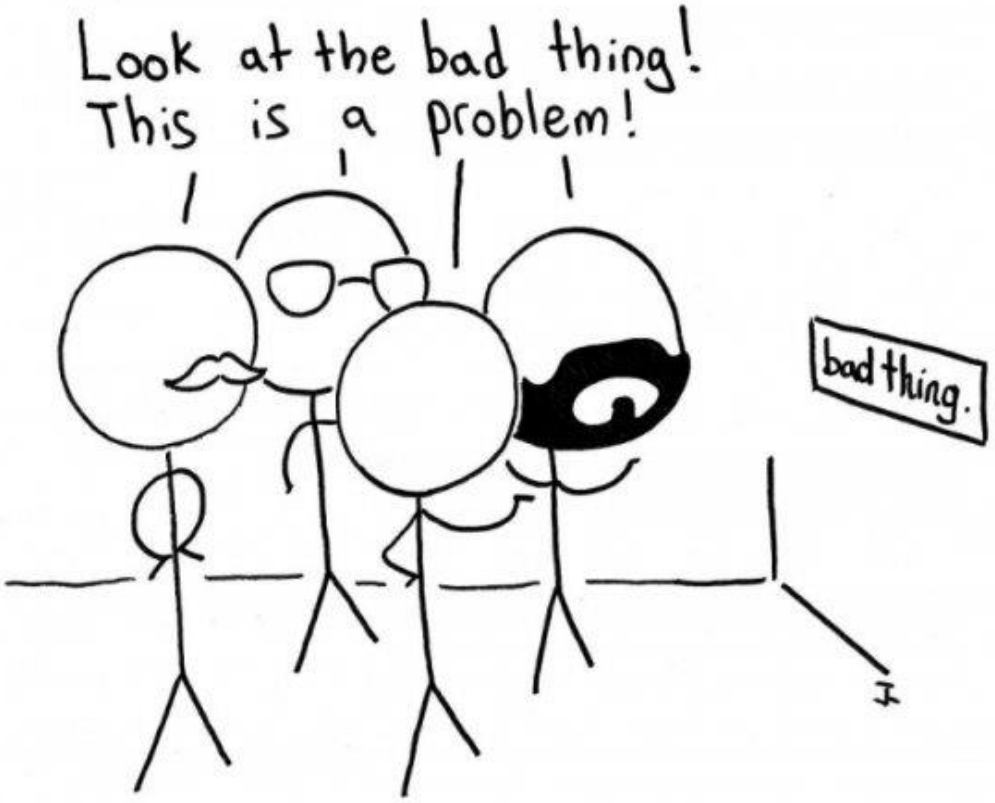
Healthcare Postpartum

6 week postpartum visit





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Medication for Opioid Use Disorder

University of Maryland
School of Medicine

Prevention of Postpartum Overdose

- People with OUD are 6x more likely to die in year postpartum
- Reasons include drug/alcohol related (47/100,000)
  - Suicide (26/100,000)
  - Accidents/falls (33/100,000)
  - People on MOUD had 60% lower rate of overdose

- MOUD was the only factor that mediated risk of overdose

Frankeberger, Mat Child Health J 2023
Suarez, Obstet Gynecol 2023

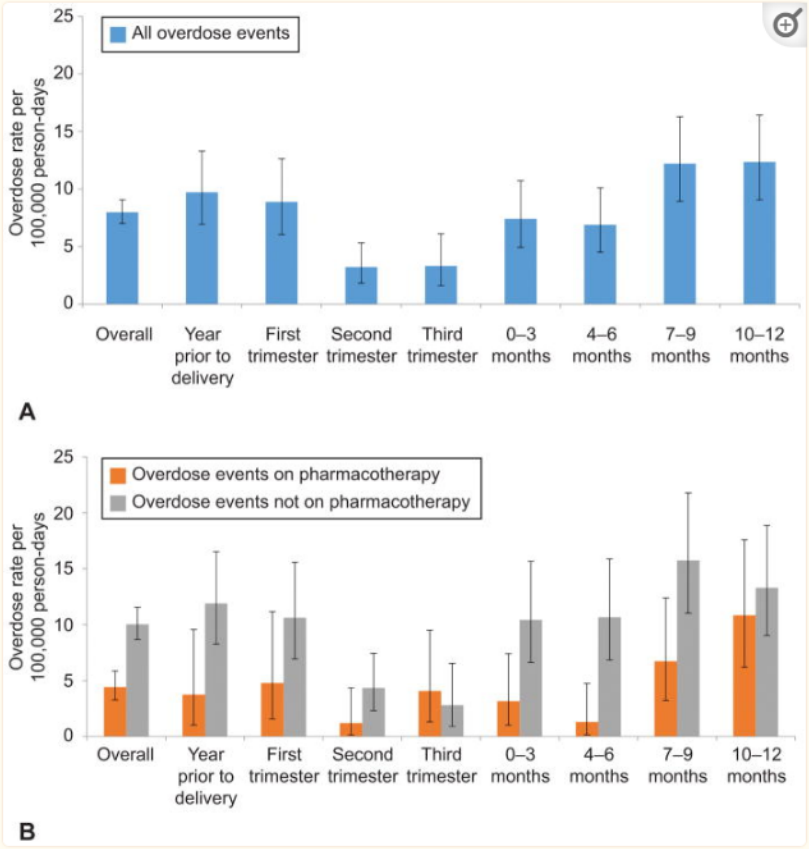

Figure 2

Opioid overdose rates among pregnant and parenting women with evidence of opioid use disorder in year prior to delivery (n=4,154). All overdose events (**A**), stratified by receipt of pharmacotherapy during month of overdose event (**B**). Error bars represents 95% CIs. First trimester defined at 0–12 weeks of gestation, second trimester defined as 13–28 weeks of gestation, and third trimester defined as ≥29 weeks of gestation.

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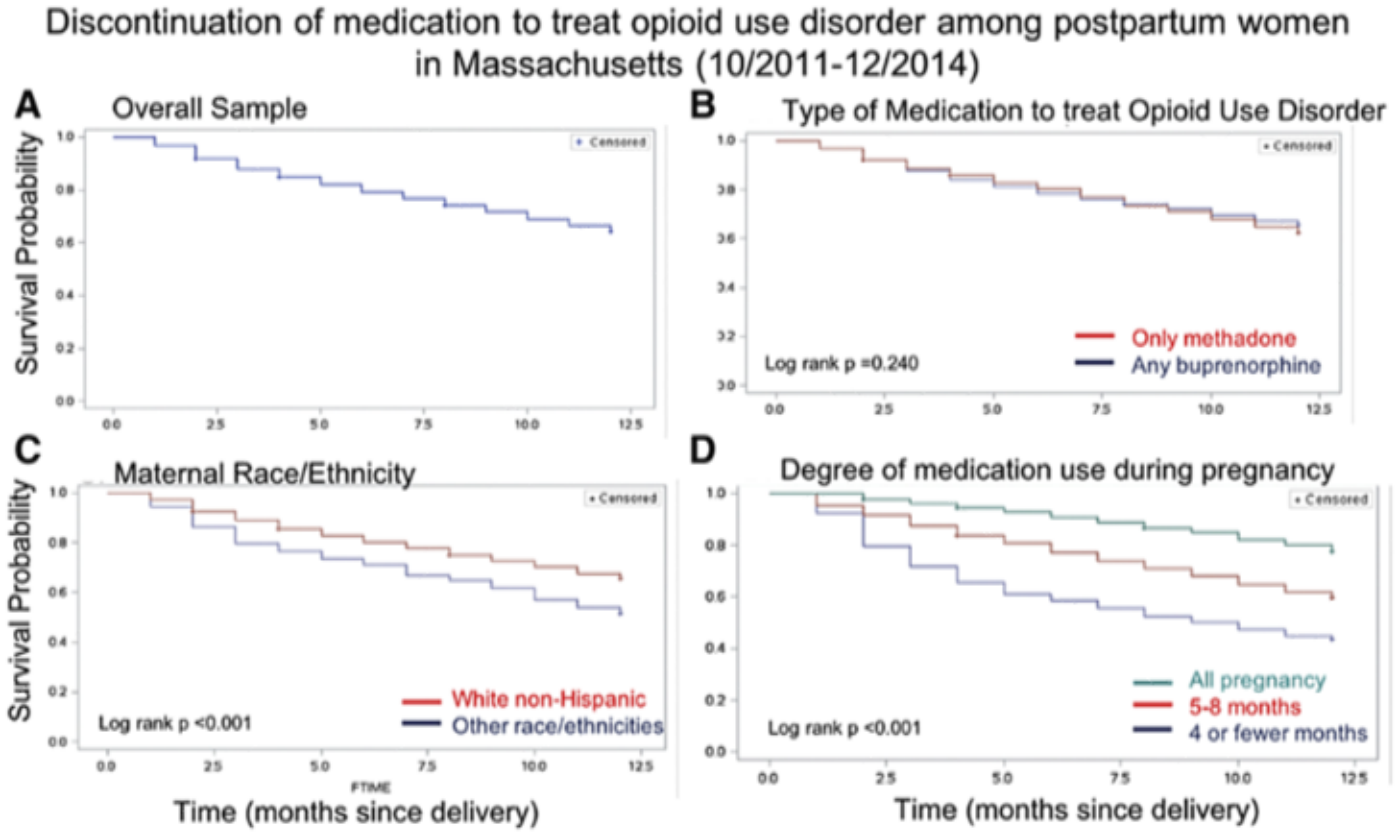
Schiff, Obstet Gynecol 2018

FIGURE 2
Kaplan-Meier survival analysis curves



Schiff et al. Postpartum methadone or buprenorphine adherence. Am J Obstet Gynecol 2021.

"You have to take this medication, but then you get punished for taking it:" Lack of agency, choice, and fear of medications to treat opioid use disorder across the perinatal period

Davida M. Schiff, MD, MSc,[1] Erin C. Work,[1] Serra Muftu,[1] Shayla Partridge,[1] Kathryn De L. MacMillan,[2] Jessica R. Gray,[3] Bettina B. Hoeppner, PhD,[4] John F. Kelly, PhD,[4] Shelly F. Greenfield, MD, MPH,[5,6] Hendrée E. Jones, PhD,[7] Timothy E. Wilens, MD,[8] Mishka Terplan, MDH, MPH,[9] and Judith Bernstein, RN, PhD[10]

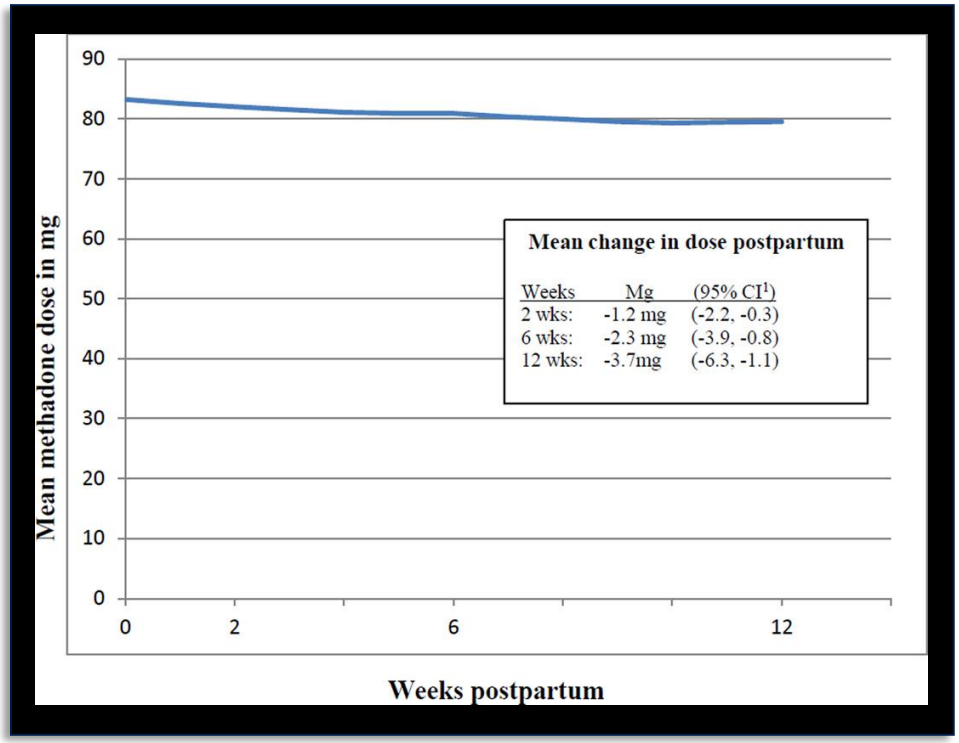
Either way, with DCF, it was, basically, a no-win. I was [in recovery]. I was on Subutex while I was pregnant. Then they asked me, "Oh, why are you on Subutex?" I said, "I have to be on Subutex 'cause it's keeping me [in recovery]." If I was using, they would be upset, or if they thought I was using. If I'm [in recovery] on Subutex, they 're still upset. (27-year-old Latina, mixed race mother, Subtheme 8)

But not one time did they tell me that DCF would be involved after my pregnancy. If I would have known that I was gonna get in trouble for takin' a medication that's supposed to help me, I would have never did it. I would have never did it. (28-year-old Latina mother, Subtheme 6)

It's a flaw that the system just automatically assume[s] that because somebody is on Suboxone or methadone, that they're doing the wrong thing. It really creates an awful stigma having the time that after you have your kid be interrupted by DCF. I got home from the hospital to a DCF worker. That's horrifying. It's not appropriate. They don't do that to moms that are on any type of medication. (31-year-old White mother, Subtheme 7)

Postpartum Methadone Dosing

- Dose decreases were rare in first 12 weeks postpartum.
- Oversedation events were rare.



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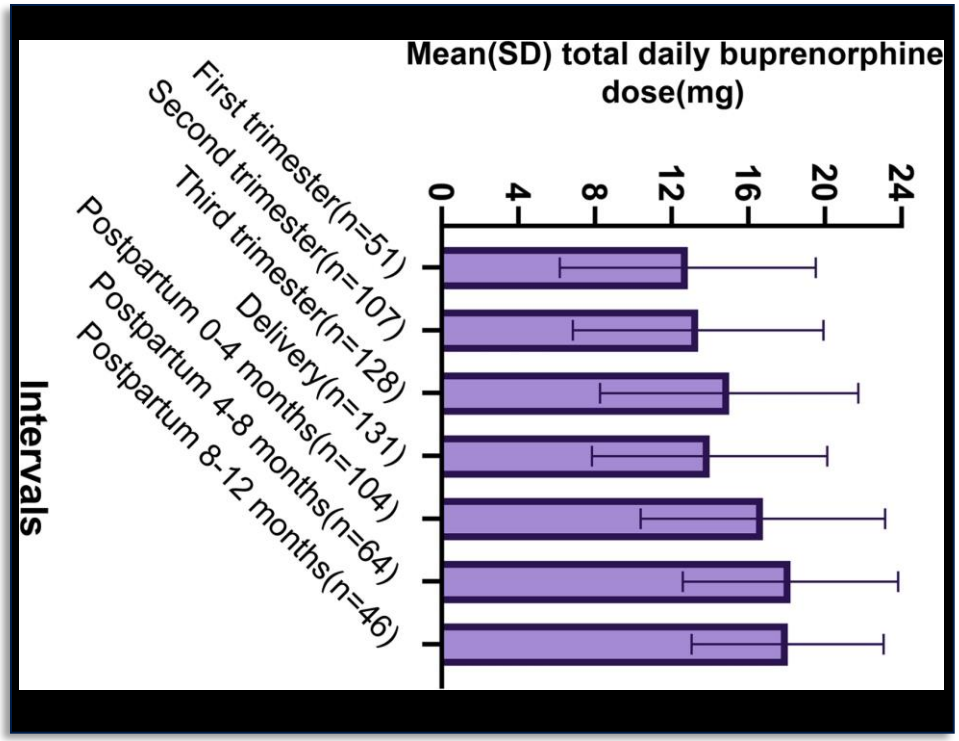
Pace, J Subst Abuse Treat, 2014

Postpartum Buprenorphine Dosing

- Other factor: Transition monoproduct to dual product



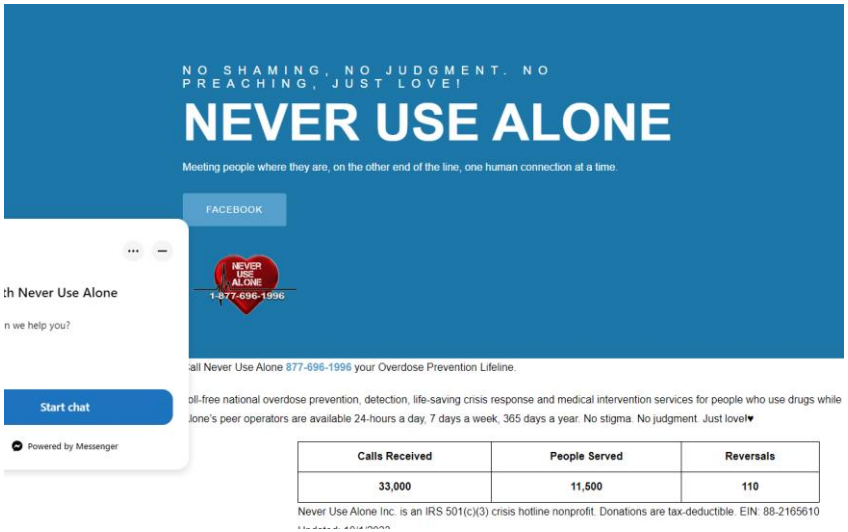
Martin, Curr Treat Options Psych 2020

Provider's Role

- Assess the patient's goals
- Recommend continuation of MOUD in postpartum period
- When discontinuation is requested, inquire about the reason
  - Familial pressure
  - Legal concerns
  - Access issues
  - Stigma
  - Traumatization
  - Misconceptions

Provider's Role

- Shared decision making
- Motivational interviewing
- Harm reduction



Syringe Services Program (SSP)

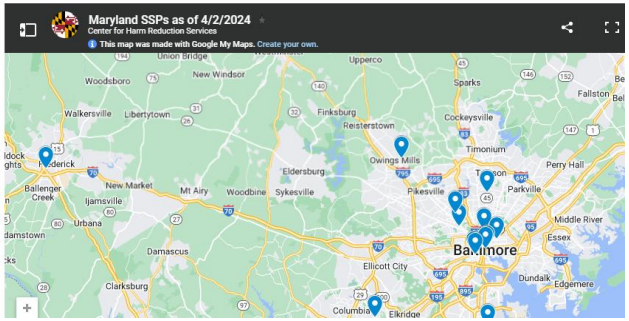
The Center for Harm Reduction Services administers the Maryland Syringe Services Program, reviewing new applications, managing program reporting, issuing program guidance, and providing TA and suppor to approved programs.

Find a SSP Near You

As of November 2023, there are 23 active SSPs throughout the state of Maryland.

SSP Guide: Hours & Locations (updated November 2023)

Click on the icon in the top left of the map to view details.



THE NALOXONE PROJECT

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Stigma

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Types of Stigma

- Public stigma: driven by stereotypes about people with OUD which translate to negative attitudes
- Anticipated stigma: stigmatized individuals are subjectively aware of negative attitudes and develop expectations of being rejected
- Internalized (self) stigma: people with a stigmatized identity accept their devalued status as valid, thereby adopting for themselves the prevailing negative attitudes embedded in public stigma

Tsai CA, et al. PloS Med. 2019; 16(11): 1-18

Types of Stigma (cont)

- Courtesy stigma: family members and friends experience as a result of their affiliation with people with OUD

- Enacted stigma: behavioral manifestations of public stigma, including discrimination and social distancing
  - Leads to suboptimal care and affects access to treatment/harm reduction services

Tsai CA, et al. PloS Med. 2019; 16(11): 1-18

Types of Stigma (cont)

- Structural stigma: totality of ways in which societies constrain those with stigmatized identities through mutually reinforcing institutions, normal, policies and resources.
  - Become encoded in cultural norms, laws and institutional policies.

- **The types of stigma are interrelated/reinforcing and result in poorer health outcomes for patients with OUD**

Tsai CA, et al. PloS Med. 2019; 16(11): 1-18

Common stigma towards patients with SUD

- Dangerous
- Unpredictable
- Incapable of managing treatment
- Caused their condition
- Can stop at will
- Are difficult to work with
- Do not care about their babies

Stigma as a barrier to care

- 73.3% reported being afraid of being identified as a substance user
  - Afraid of loss of custody
  - Afraid of criminal justice consequences
- **Most common strategy was avoidance of medical care 54.5%**
- Some pregnant people reported switching to drugs that are detected for a shorter period of time (marijuana to alcohol)
- Report hiding use, social isolation and using alone, all things that increase a person's risk of fatal overdose

Stone, Health & Justice 2021

In their own words….

“My third child, I had no prenatal care. Because I was taking drugs, well not drugs-drugs, I was down there smoking marijuana and drinking liquor. And they told me that if they see THC or something in my system, then protective services would get involved. So I didn’t go to no care. None.”

Stone, Health & Justice 2023

Postpartum and NICU Care

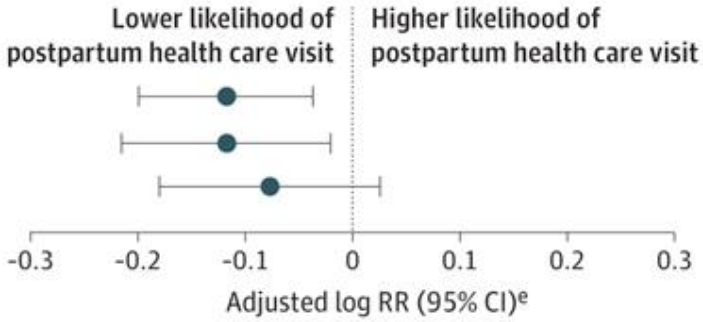
- Mothers report negative experiences in the NICU
  - Feeling judged
  - Being discouraged from participating in care
  - “Scoring” of baby was upsetting and felt bias
  - Caused self-doubt, shame and avoidance

Cleveland, Am J MCN 2013

Mandated Reporting: Postpartum care

Figure 3. Risk Ratios (RRs) Comparing Receipt of a Postpartum Health Care Visit by State Prenatal Substance Use Policies

State policy category (vs neither category)[a]	Log RR (95% CI)
Child abuse policy only[b]	-0.12 (-0.20 to -0.14)
Mandated reporting policy only[c]	-0.12 (-0.22 to -0.02)
Both policies[d]	-0.08 (-0.18 to 0.02)



[a]Among 4155 births to women who reported substance use during pregnancy.

Austin, JAMA Ped 2022

Assumption that people with SUD do not want to access care is a self-fulfilling prophecy

Stigma

- Increased surveillance by healthcare workers that doubted their parenting ability
  - Fear of making a “mistake” and being judged as unfit
- Desire for a “normal” early parenting experience
- Importance of support from clinicians and peers to develop maternal confidence and connection

. "I didn't want them to think I couldn't handle her… They were like, "Are you okay?" And I was like, "…I'm fine." But, you know, obviously, I was nodding off. [My nurse explained] 'when you are tired, you have to go to sleep. You cannot hold her. She's a newborn.' … I explained 'Oh, I didn't want you to think—cause CPS… I don't want you to say I don't know what I'm doing.'" (Participant 25, 31-year-old Black mixed-race mother)

Schiff, JAM 2024

Sleep Deprivation

- Nearly universal among new parents
  - Secondary to physiological changes postpartum and need to care for newborn baby
- Most important modifiable risk factor for postpartum psychiatric disorders
- Consequents for parents with SUD:
  - Trigger to use substances or misuse of buprenorphine
  - Increased risk for postpartum depression and anxiety disorders
  - Emotional dysregulation

Schmid, Obstet Gynecol 2022

Sleep Deprivation: Provider's Role

- Educate about the safety of sleep medications.
- Educate about non-pharmacological treatment options
- Discuss self-care with patients.
  - "Putting your own oxygen mask on first."
- Discuss safe sleep
- Engage social support to assist with postpartum sleep plan.
  - Best if done prior to delivery
  - Consider role of breastfeeding

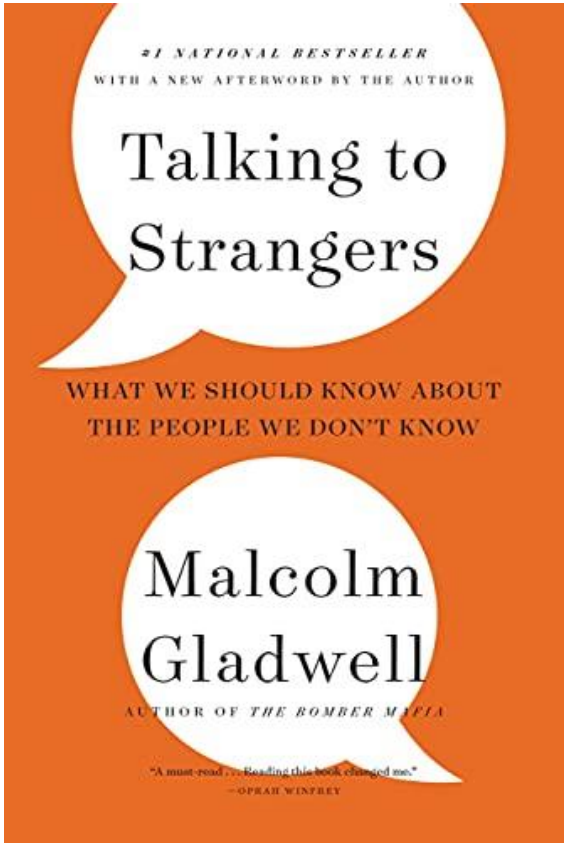
Schmid, Obstet Gynecol 2022

Psychosocial Support

Illusion of Similarity

"Do not look at a stranger and jump to conclusions. Look at the stranger's world"

- Malcolm Gladwell



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Psychology of Addiction

- Addiction is a brain disease whose visible symptoms are behaviors
- Lack of engagement in care is not synonymous with laziness or lack of interest
  - Stigma and fear of judgement or repercussions
  - Hopelessness
  - Disorganization
  - Difficulty with long-term planning
  - Binary thinking

Women's Voices

"[Interviewer: What would help?] I suppose a bit more support, like support me. Don't just take my kids away and then kind of leave me on my own. I suppose peer support group and more support services with no judgement will help" (Milly, aged 39)

"Overwhelming, just overwhelming, like set you up with DCS and stuff like that. The first few weeks of postpartum is so detrimental for postpartum depression and bonding and stuff like that – when you feel overwhelmed with all that kind of stuff it can really put a [pause] a damper on that – it could come between that. And it can completely throw you off mentally." – Mother, Participant 7

Allen, Drug Alch Dep 2023

Patient Navigation

- Behavioral health approach that helps patients navigate complex health systems and stay engaged in care
- OPTI-Mom 2.0 – multi-center pilot study providing 10 sessions during pregnancy and 4 postpartum
- Showed improvement in engagement in care

Cochran, Addiction 2024

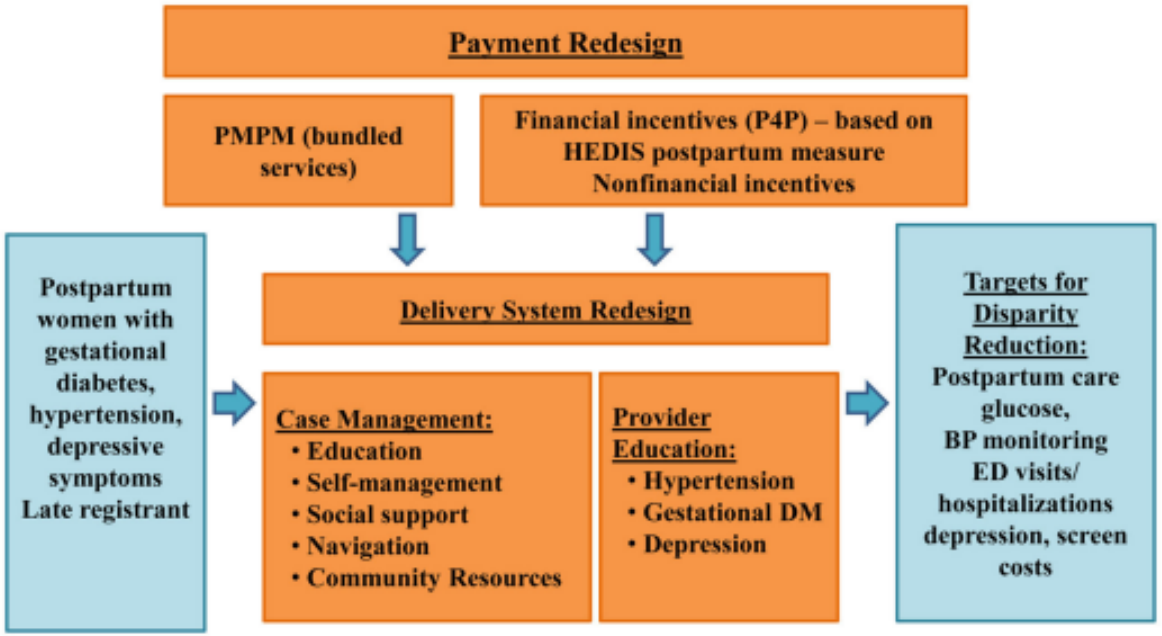

Fig. 1.
Delivery and payment redesign: elements

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Howell, Mat Child Health J 2018
Howel, Am J Pub Health 2020

Doula Care

- Improved perception of health literacy
- Increased self-advocacy
- Increased perception of recovery support
- Decreased feelings of stigmatization

Gannon, Midwifery 2023

Peer Support Specialists

- A person with lived experience whose role is to support the birthing person
- Can help to serve as a bridge with the medical team
- Improve feelings of support
- Can help navigate the healthcare system

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Fallin-Bennet, Addict Beh 2020

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Maryland
DEPARTMENT OF HEALTH

Maryland MOM (Maternal Opioid Misuse) Case Management Services

Consent and Permission

☐ I give my consent to be contacted about the Maryland Maternal Opioid Misuse model.

I prefer to receive information via (check all that apply): *

☐ Voicemail

☐ Text Message

☐ Email

☐ I understand that if there is an issue with my submission, someone from Maryland MOM may need to contact me using the email address I provide.

Contact Information

Name *

First | Last

Date of Birth *

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MARYLAND DEPARTMENT OF HEALTH

Maryland Medicaid Maternal and Child Health Programs

Home | Medicaid Maternal and Child Health Programs | Contact Us

Program Information - for Medicaid Members and their Families

- Medicaid Home Visiting Services
- Maryland Medicaid Doula Program
- Medicaid HealthySteps
- Medicaid CenteringPregnancy Services

Maryland Medicaid Doula Program

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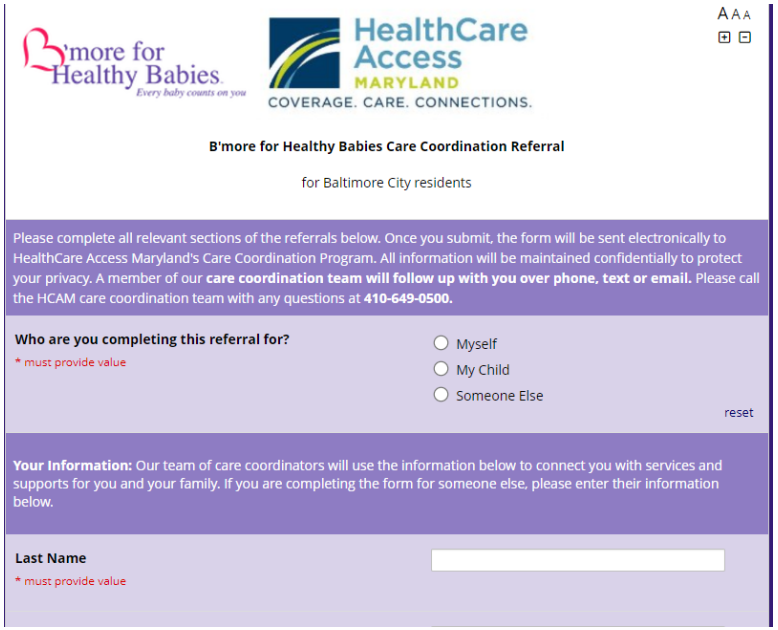

B'more for Healthy Babies
Every baby counts on you

HealthCare Access MARYLAND
COVERAGE. CARE. CONNECTIONS.

A A A

B'more for Healthy Babies Care Coordination Referral

for Baltimore City residents

Please complete all relevant sections of the referrals below. Once you submit, the form will be sent electronically to HealthCare Access Maryland's Care Coordination Program. All information will be maintained confidentially to protect your privacy. A member of our **care coordination team will follow up with you over phone, text or email.** Please call the HCAM care coordination team with any questions at **410-649-0500.**

Who are you completing this referral for?

* must provide value

- ○ Myself
- ○ My Child
- ○ Someone Else

reset

Your Information: Our team of care coordinators will use the information below to connect you with services and supports for you and your family. If you are completing the form for someone else, please enter their information below.

Last Name

* must provide value

Maryland
DEPARTMENT OF HEALTH

Maryland Prenatal Risk Assessment- MDH 4850

(Refer to the Instructions at the bottom of this document before completing this form)

Provider Demographic Information:
Date of Initial Prenatal Visit/ Form Completed: ____/____/____
Provider NPI#: _____ Site NPI#_____
Provider Name: _____Provider Phone Number: ____-____-____

Patient Demographic Information:
Patient Last Name:_____First Name:_____ Middle I:____
DOB: ____/____/____ Preferred Pronouns: _____
Social Security Number: ____-____-____ Medical Assistance Number (MA): _____
Current Address: Street _____City_____County _____State____Zip Code _____
Best Contact Phone Number: ____-____-____ Email: _____
Emergency Contact Name: _____ Contact Phone Number:____-____-____
Communication Barrier: Yes ____(Requires an Interpreter Y/N) No _____ Primary Language _____

Insurance Status (at time of prenatal visit):

Uninsured: Y____N____	FFS: Y____N____	Applied for Maryland MA: Y____N____ Date: ____/____/____
Maryland Medicaid: Y____N____		MCO: _____

Demographics:

Biologic Sex:	Male ____Female____	Other: _____	
Gender Identity:	Cisgender: Male ____Female____	Other: (Patient's own definition) _____	
Race (check all that apply)	Black or African American ____	Asian ____	American Native ____
	Hispanic ____	Native Hawaiian/Pacific Islander ____	Alaska Native ____
	Non Hispanic White____	Multiracial____	Unknown____
Educational Level:	Highest Grade Completed _____	Currently in School: Yes ____ No____	GED: Yes ____No____
Marital Status:	Married ____	Unmarried____	Unknown ____
	Separated ____	Divorced ____	

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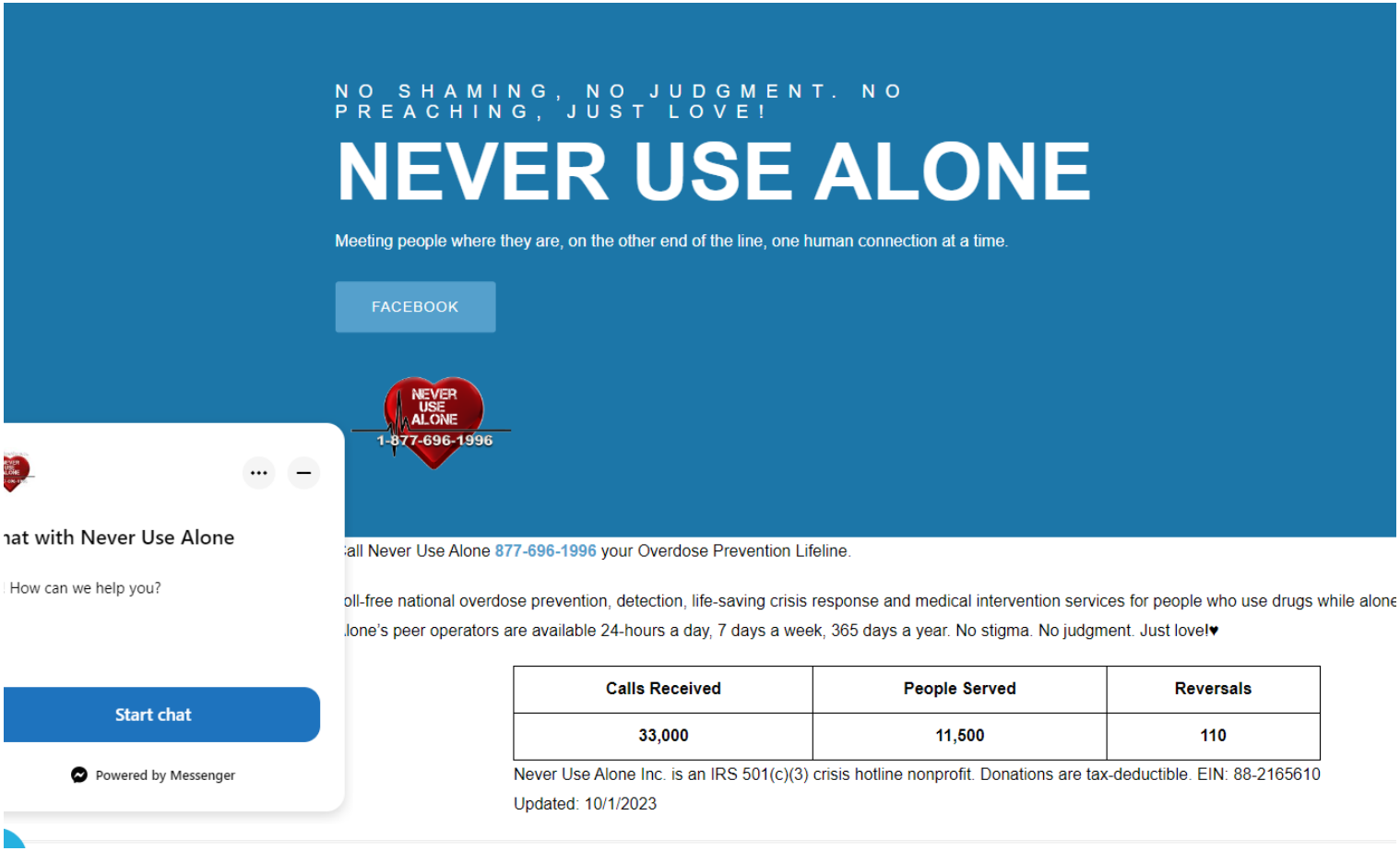

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MACS
Maryland Addiction Consultation Service for MOMS

Maryland Addiction Consultation Service for Maternal Opioid Misuse (MACS for MOMs)

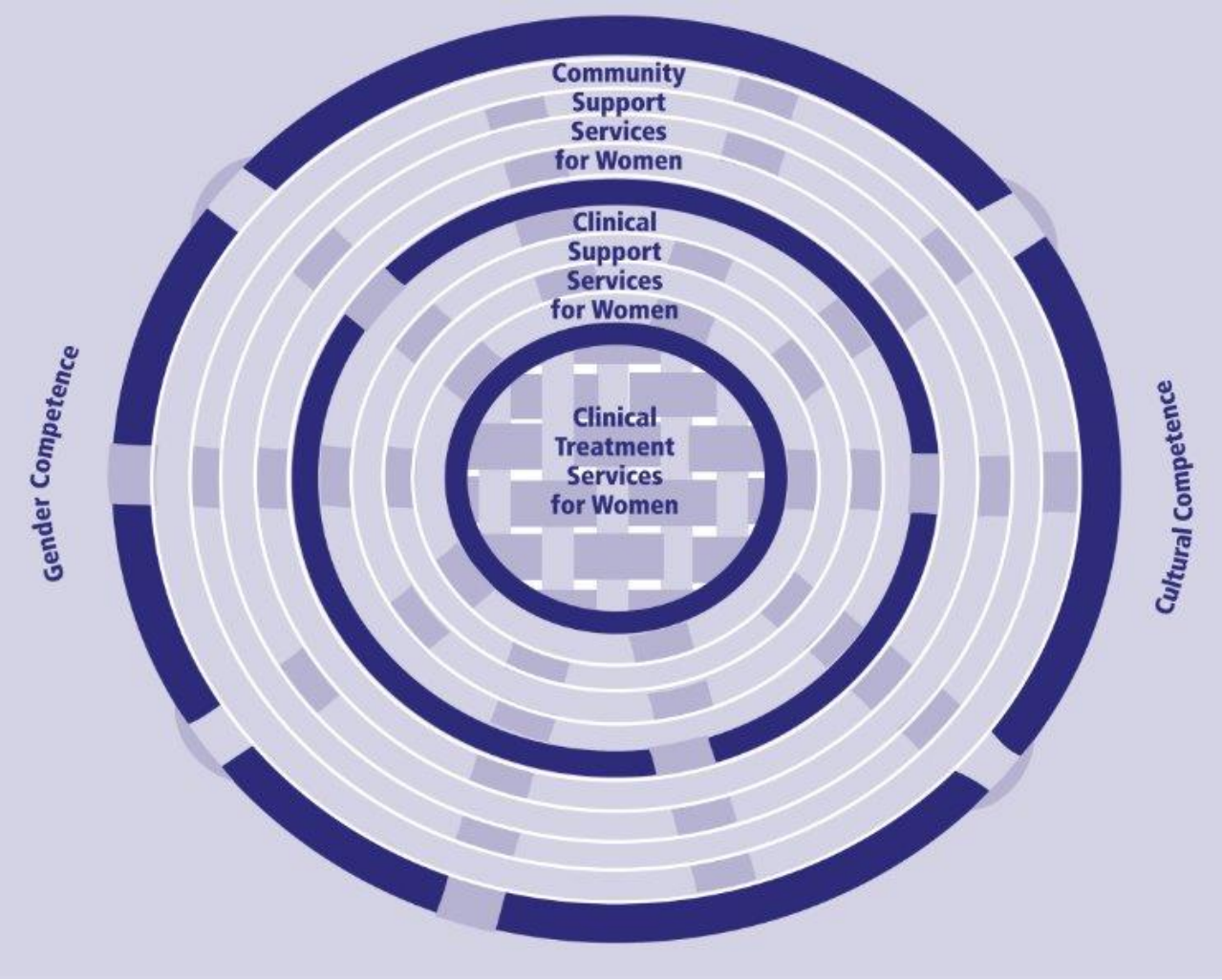
Provides support to maternal health providers and their practices in addressing the needs of their pregnant and postpartum patients with substance use disorders (SUD), particularly opioid use disorder (OUD).

All Services are FREE

- Phone consultation for clinical questions
- Education and training opportunities related to substance use disorders and pregnancy
- Assistance with addiction and behavioral health resources and referrals
- MACS for MOMs TeleECHO Clinics: collaborative medical education through didactic presentations and case-based learning

1-855-337-MACS (6227) • www.MACSforMOMs.org

University of Maryland School of Medicine



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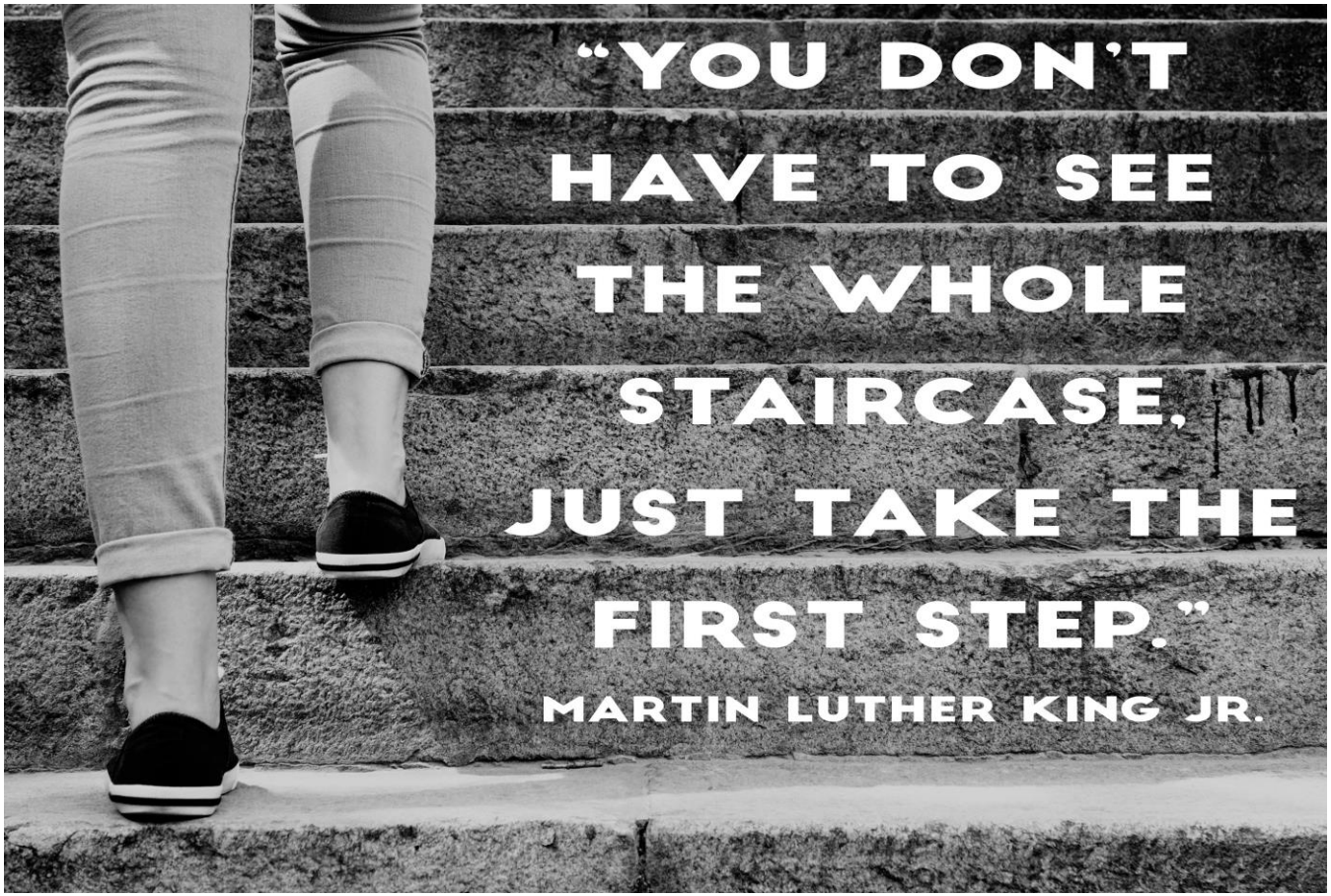
Key Takeaways

- People with OUD are 6x more likely to die in the year postpartum
- Care should be low-barrier, non-judgemental and accessible
- Continuation of MOUD postpartum is recommended
- Visits should be more frequent and recurring throughout the year postpartum

Key Takeaways

- All birthing people should have an evaluation of Social Determinants of Health
- Stigma and parent/child separation, or even the threat of this separation, can lead to avoidance of care
- Discuss the plans for the postpartum course during pregnancy and make appropriate referrals to strengthen support system



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