
SUBSTANCE USE TREATMENT AND MATERNITY CARE: INTEGRATING CARE TO IMPROVE ACCESS AND OUTCOMES

DAISY GOODMAN, DNP, CNM, MPH CARN-AP
8/26/21

DISCLOSURES

- No financial conflicts to disclose
- Many acknowledgements
- Funding:
 - Patient Centered Outcomes Research Institute (PCORI): Moms in REcovery (MORE): Defining Optimal Care for Pregnant Women and Infants.
 - U.S. Health Resources and Services Administration (HRSA) Rural Opioid Response Program: G26RH40088-01-01, GAIRH42907-01-00

OBJECTIVES

- Discuss lessons learned from Substance-Related Pregnancy Associated Deaths
 - Access to treatment
 - Naloxone
 - Impact of social determinants of health
- Describe integrated care models to improve care for pregnant people with opioid use disorder in New Hampshire
 - Access to medication for opioid use disorder
 - Naloxone initiative
- Explore postpartum challenges

FACTORS CONTRIBUTING TO PERINATAL OVERDOSE IN MASSACHUSETTS

Fatal and Nonfatal Overdose Among Pregnant and Postpartum Women in Massachusetts

David M. Schiff, MD, MSc, Timothy Nielsen, MPH, Mishka Terplan, MD, MPH, Malena Hood, MPH, Dana Bernson, MPH, Hafsatou Diop, MD, MPH, Monica Bharel, MD, MPH, Timothy E. Wilens, MD, Marc LaRochelle, MD, MPH, Alexander Y. Walley, MD, MSc, and Thomas Land, PhD

Schiff, et al. *Obstet Gynecol* 2018; 132: 466-74

- Fatal and nonfatal overdose risk was lowest during pregnancy, highest at 7-12 months postpartum
- **Pharmacotherapy reduced overdose risk > 50%**
 - Only 64% received pharmacotherapy for OUD during the prenatal year
- Other factors associated with overdose: anxiety, depression, homelessness

CONSEQUENCES OF UNTREATED SUBSTANCE USE

Mother

- Limited prenatal care
- Tobacco, alcohol, other substance use
- Infectious disease
- Pregnancy complications
- Untreated psychiatric needs

Baby

- Poor fetal growth/LBW
- Neonatal abstinence
- Developmental delays
- Adverse childhood events

Prenatal care and substance use treatment transform outcomes

BENEFITS OF MEDICATION FOR OUD DURING PREGNANCY

Benefits of MOUD over medically managed withdrawal

- Reduced mortality and morbidity
- Lower relapse rates
- Higher rates of engagement in care

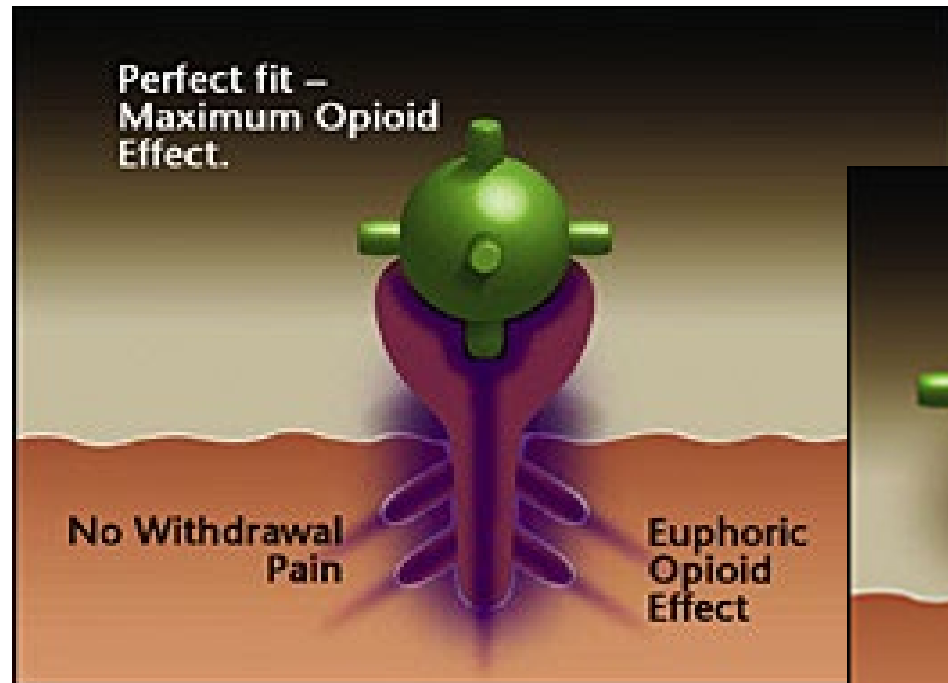
Neonatal abstinence less severe for newborns exposed to MOUD

- 40+ year experience with Methadone
- Buprenorphine equivalent in effectiveness, with decreased duration and severity of NAS

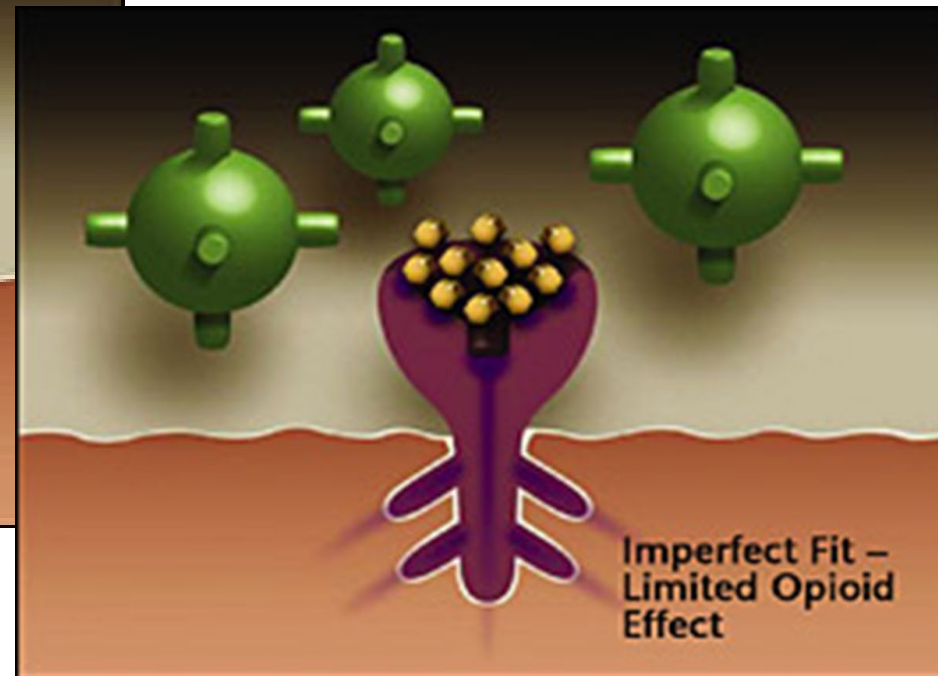
(Terplan et al. *Obstet Gynecol* 2018;131:803–14; Jones, et al. *N Engl J Med* 2010;363:2320-31)

MEDICATIONS FOR OPIOID USE DISORDER (MOUD) DURING PREGNANCY

Methadone



Buprenorphine



(Images: National Institute on Drug Abuse)

BARRIERS TO TREATMENT DURING PREGNANCY AND POSTPARTUM

- Stigma
- Lack of public knowledge about safety and efficacy of MOUD during pregnancy and lactation
- Provider reluctance to treat pregnant people
- Patient reluctance to disclose
- Fear of child protection involvement
- Barriers to accessing or continuing treatment (childcare, transportation, employment)

SPECIAL CONSIDERATIONS FOR INITIATION OF MOUD DURING PREGNANCY

- Buprenorphine monotherapy vs buprenorphine-naloxone?
- Outpatient vs Inpatient?
- Use of adjunctive medications?
- Polysubstance use, benzodiazepines, alcohol
- Tobacco use disorder

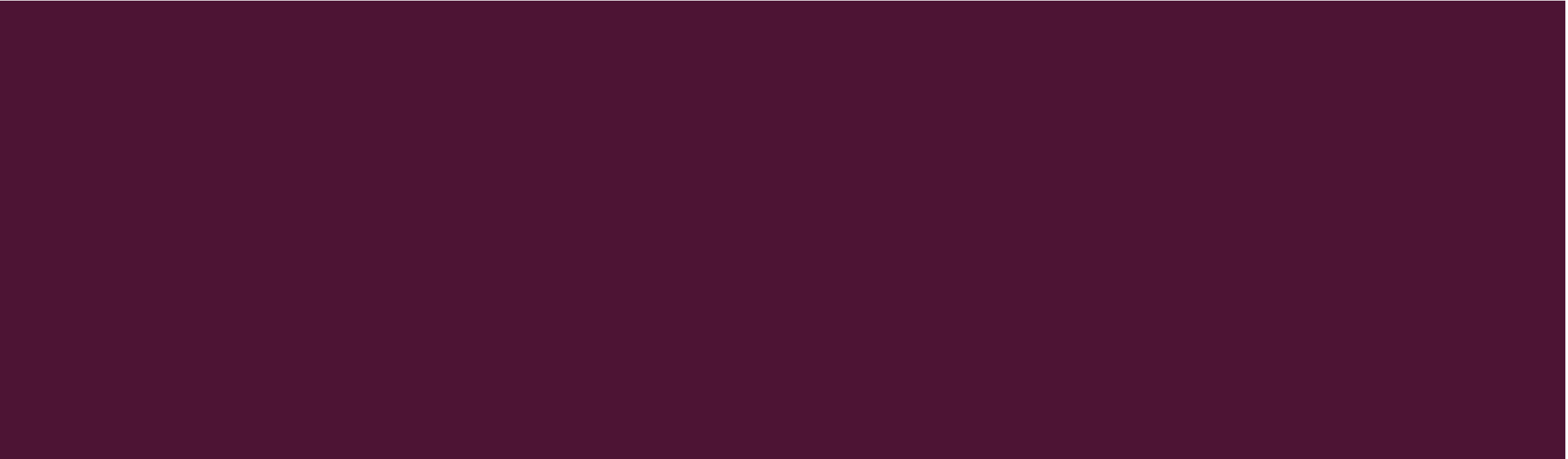
(Higgins, T, et al. *J Preventive Medicine* 2019; 128; Saiai et al. *Curr Obstet Gynecol Rep* 2016; 5; Krans et al. *Obstet Gynecol.* 2019; 00: 1-11)

CONTINUING MOUD DURING PREGNANCY

- Common side effects should be managed during pregnancy
- Dose adjustment is typical
- Anticipatory guidance
 - Hospital drug testing policies
 - NAS surveillance
 - No correlation between buprenorphine dose and NAS severity
 - Pain management
- What about naltrexone?
- Naloxone



FACILITATING ACCESS TO NALOXONE



WHY NALOXONE?

- Community-administered naloxone saves lives
 - Naloxone “kits” typically include two intranasal applicators
 - Standard education about opioid overdose and naloxone administration is required when dispensing

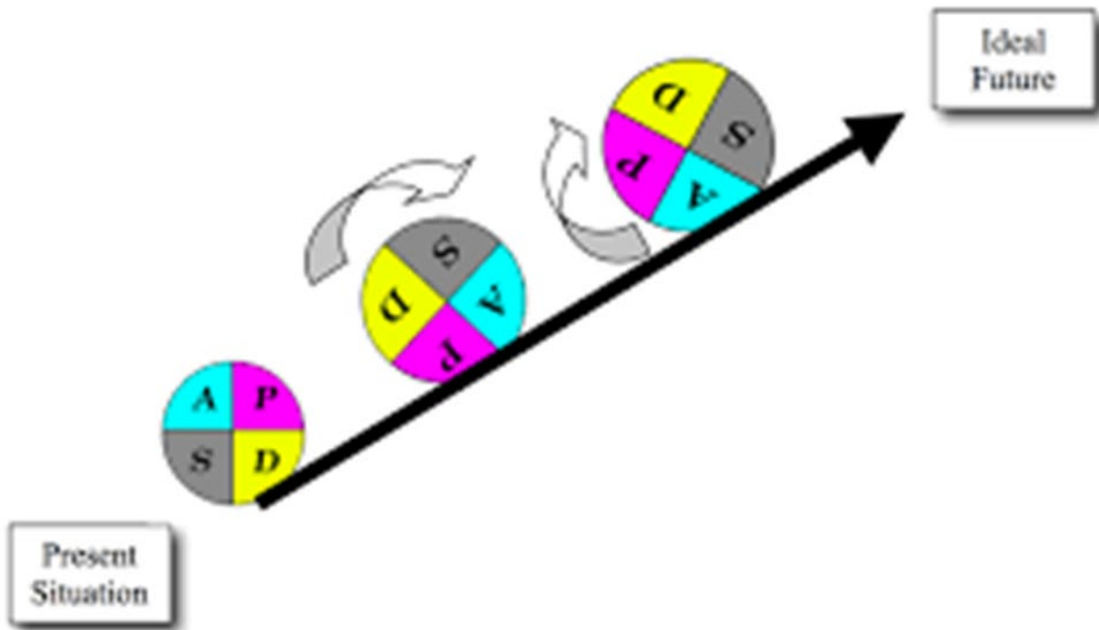
- Safety during pregnancy and lactation

“Although induced withdrawal may possibly contribute to fetal stress, naloxone should be used in pregnant women in the case of maternal overdose in order to save the woman’s life.”

-ACOG Committee Opinion #711 (2017)



DEVELOPING A NALOXONE DISTRIBUTION PROGRAM



- ✓ **Identify source for naloxone:**
 - ❑ Establish relationship with state distribution network
 - ❑ Develop collaborative procedures for ordering, delivery, and data collection

- ✓ **Develop policies and procedures:**
 - ❑ Write clinic/inpatient policy
 - ❑ Pharmacy and Therapeutics Committee approval

- ✓ **Training and education:**
 - ❑ Train providers to dispense naloxone
 - ❑ Train nursing staff to provide harm reduction education
 - ❑ Develop annual competencies for sustainability

- ✓ **Implementation**
 - ❑ Launch Screening/identification of patients
 - ❑ Integrate naloxone distribution into clinic or inpatient flow

- ✓ **Data collection:**
 - ❑ Electronic medical record documentation
 - ❑ Inventory, ordering, reporting, data collection

ASKING ABOUT NALOXONE

NH-AIM recommendation:

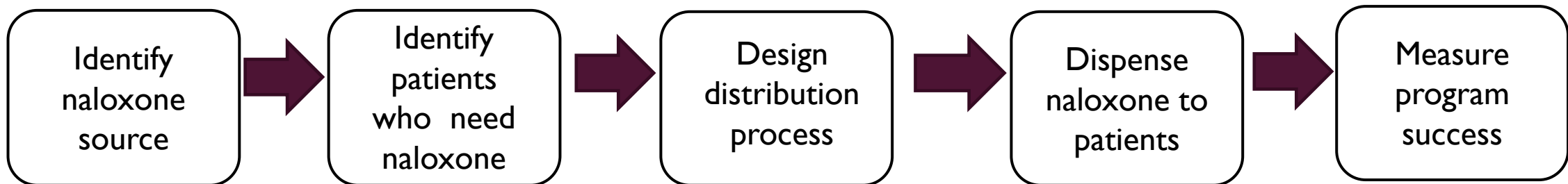
Universal screening for access to naloxone

- *“Opioid overdose is a serious problem in our community. Naloxone can save someone’s life if they overdose. Would you like to talk to someone about getting a naloxone kit?”*



IMPLEMENTING A NALOXONE PROGRAM IN NEW HAMPSHIRE'S BIRTH HOSPITALS

Specific Aim: By December 31st, 2021, 75% of postpartum people with an identified substance use condition will receive or be prescribed naloxone by the time of hospital discharge.



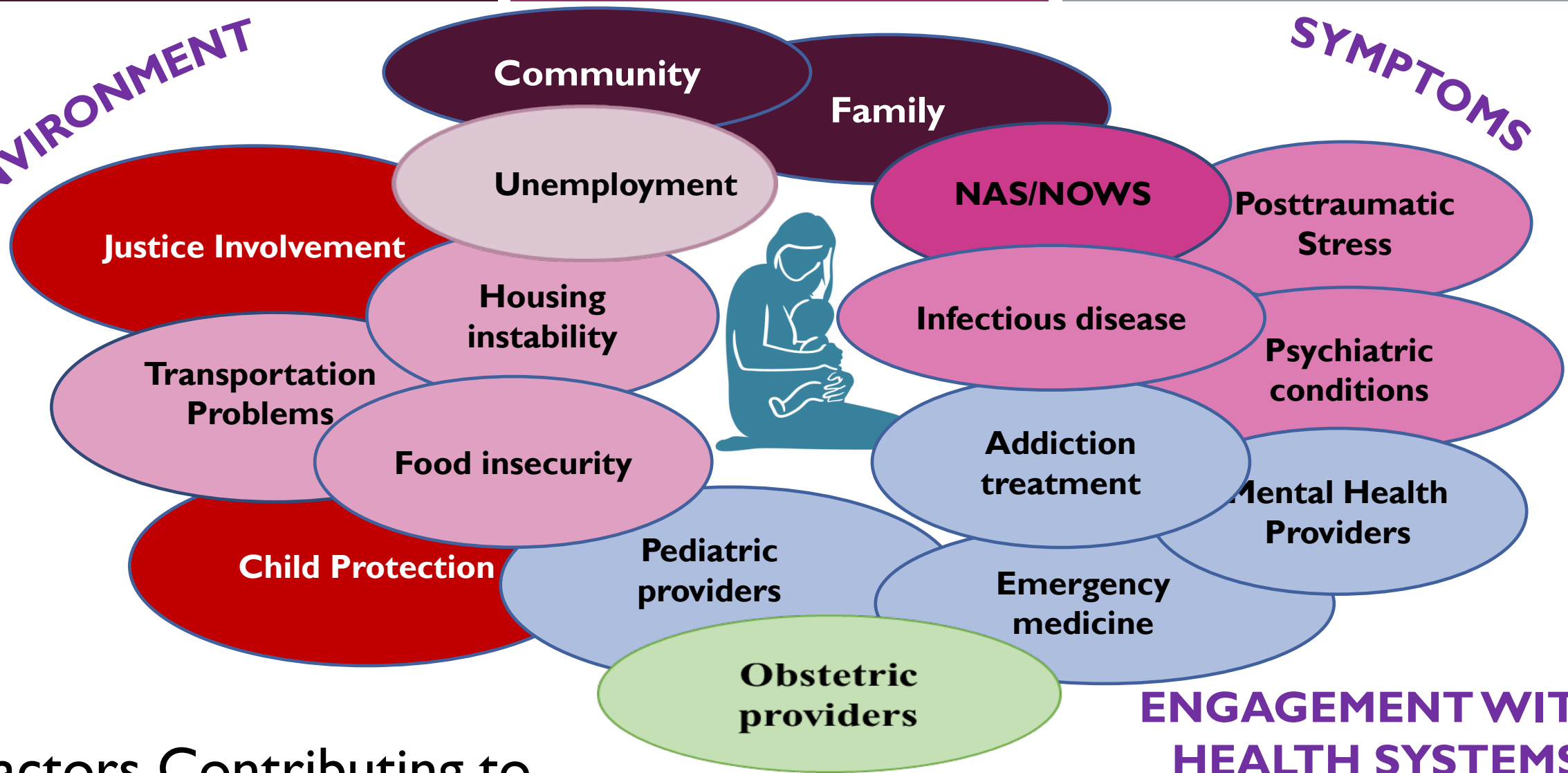


DEFINING COMPREHENSIVE CARE



ENVIRONMENT

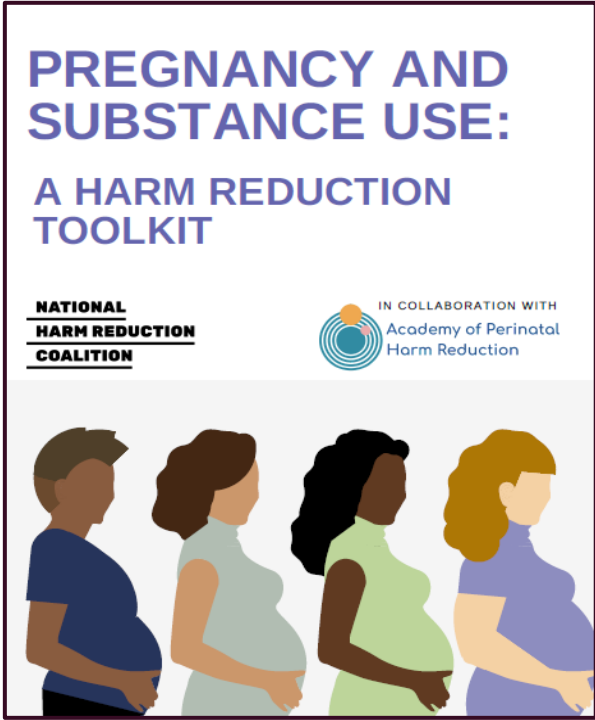
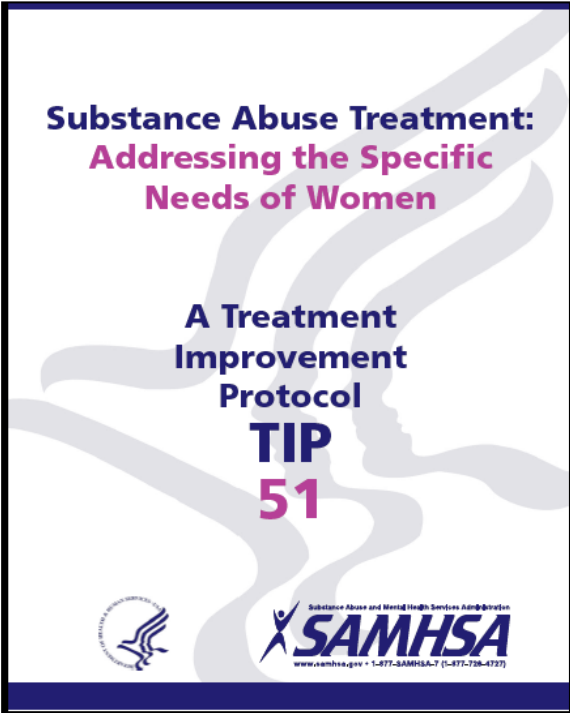
SYMPTOMS



Factors Contributing to Maternal and Infant Outcomes

“Services for pregnant and breastfeeding women with substance use disorders should have a level of comprehensiveness that matches the complexity and multifaceted nature of substance use disorders and their antecedents.”

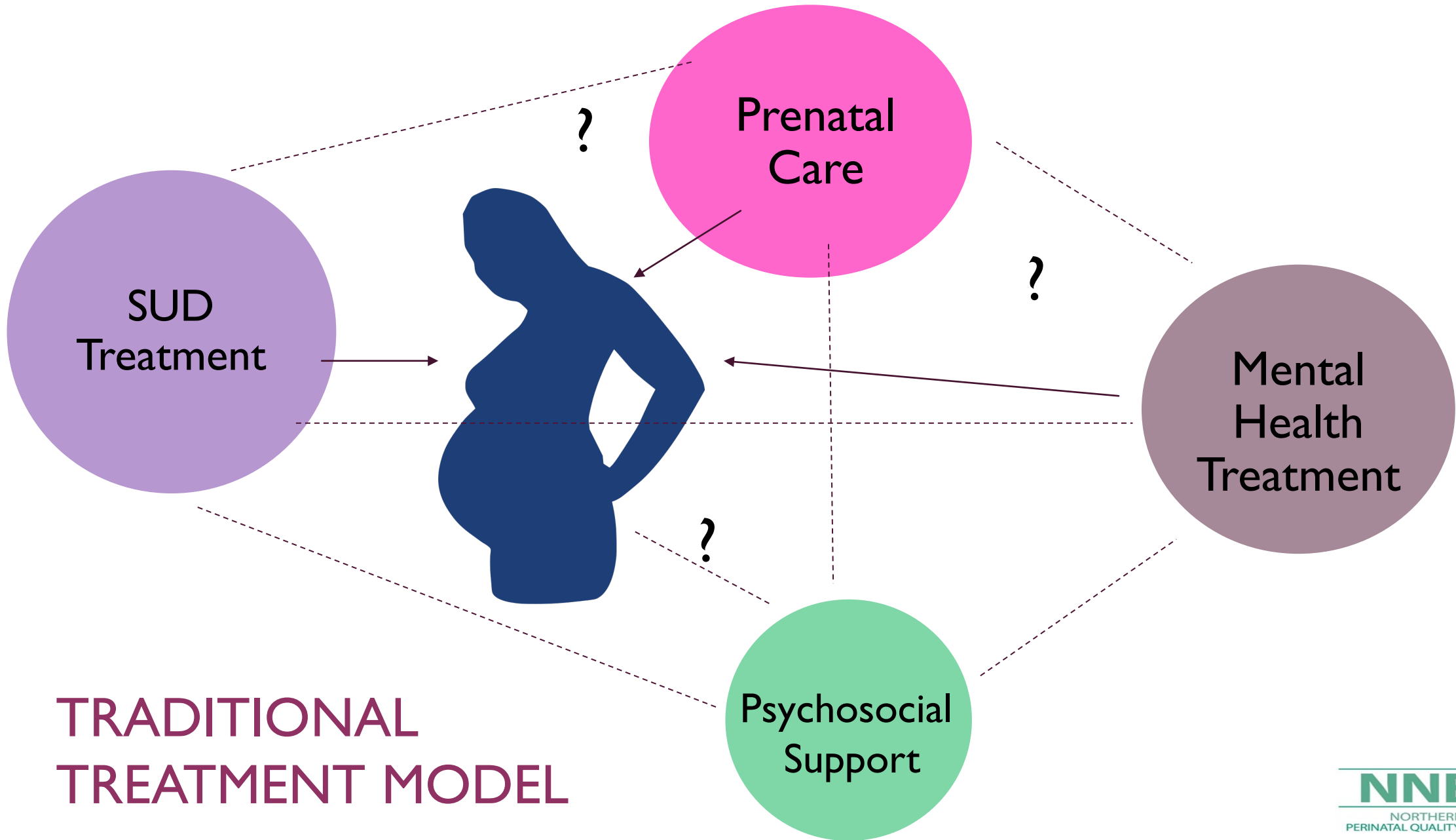
(World Health Organization. *Guidelines for the identification and management of substance use and substance use disorders in pregnancy* 2014)



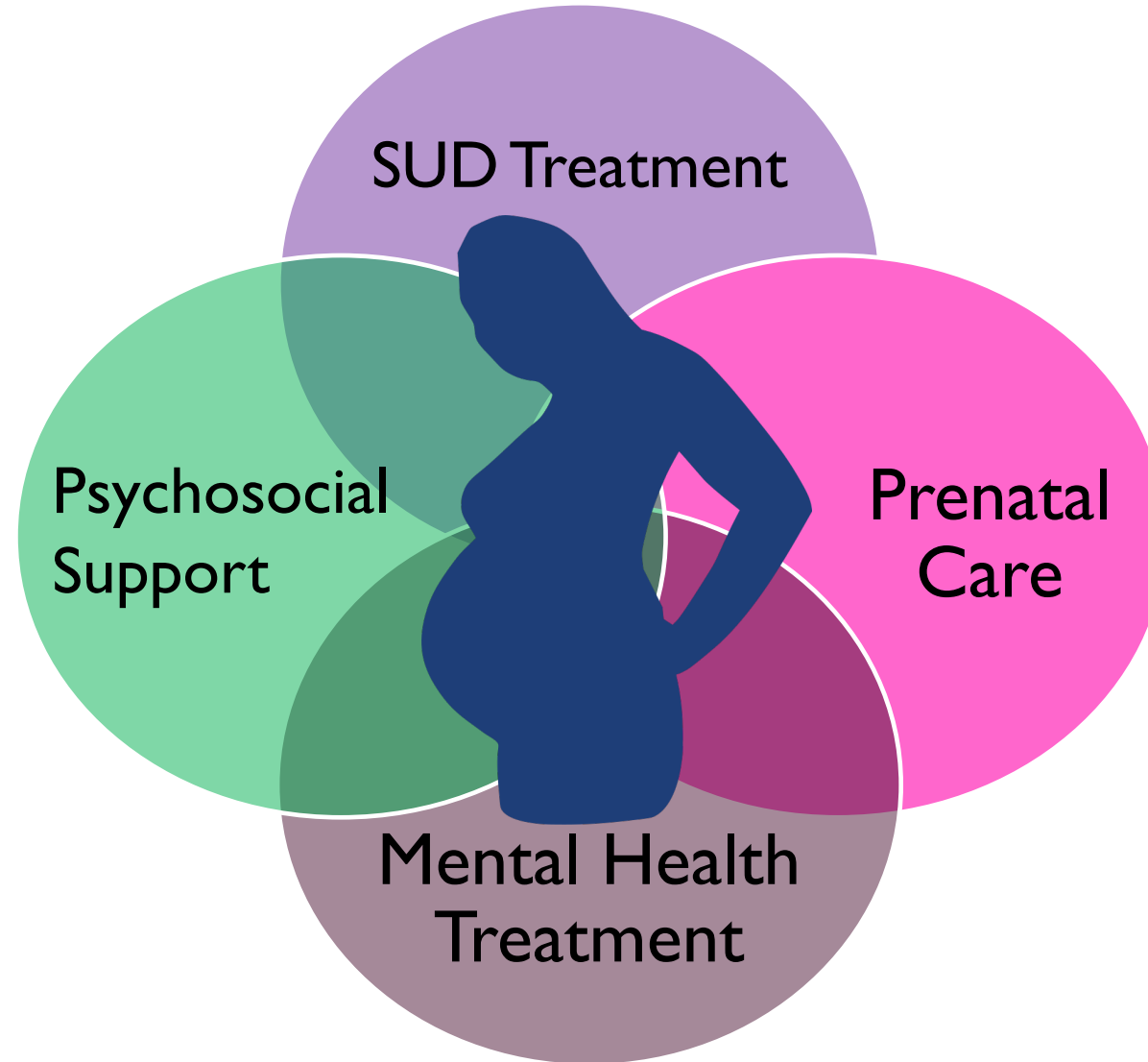
A CLINICAL PATHWAY FOR PERINATAL OUD

- ✓ Linkage to care
 - Behavioral Health care
 - Substance use treatment
 - Naloxone
- ✓ Screening and follow up for infectious disease
 - HIV
 - Hepatitis
 - Sexually transmitted infection
- ✓ Screen for/address material needs
 - Housing
 - Food insecurity
 - Safety
- ✓ Anticipatory guidance
 - Infant care/NOWS
 - Hospital policies
 - Plan of Safe Care mandate
- ✓ Education
 - Breastfeeding benefits
 - Pain management
 - Birth spacing/options
- ✓ Provide Respectful Care
 - Anti-stigma training for staff

(Krans, et al. *Obstet Gynecol* 2019;00:1–11)



INTEGRATED CARE

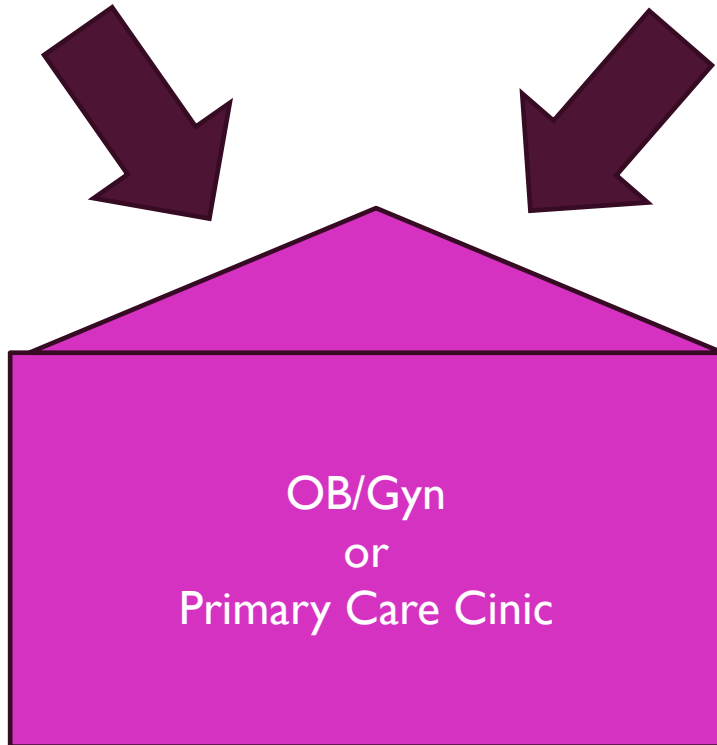


TWO INTEGRATED CARE MODELS

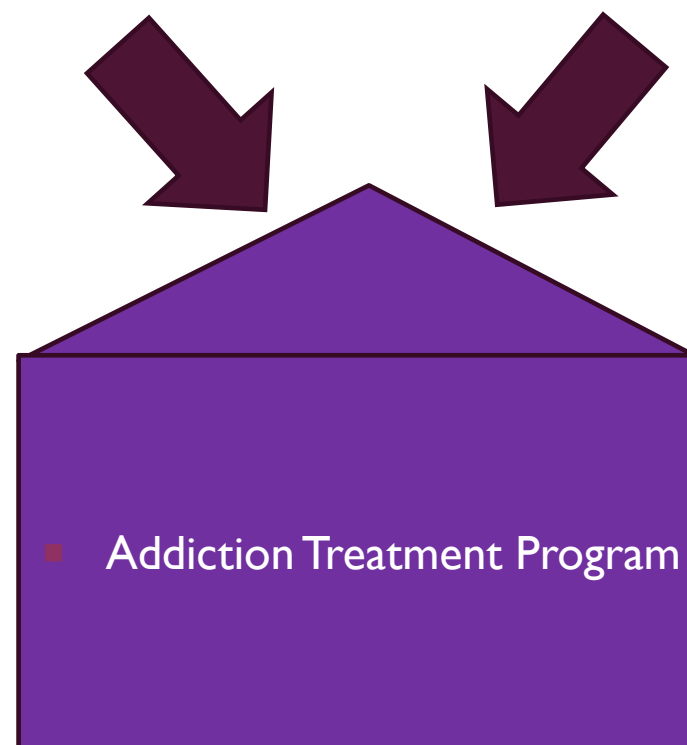
Addiction Treatment

Behavioral Health

Perinatal/Women's Healthcare



“Traditional” Integrated Care



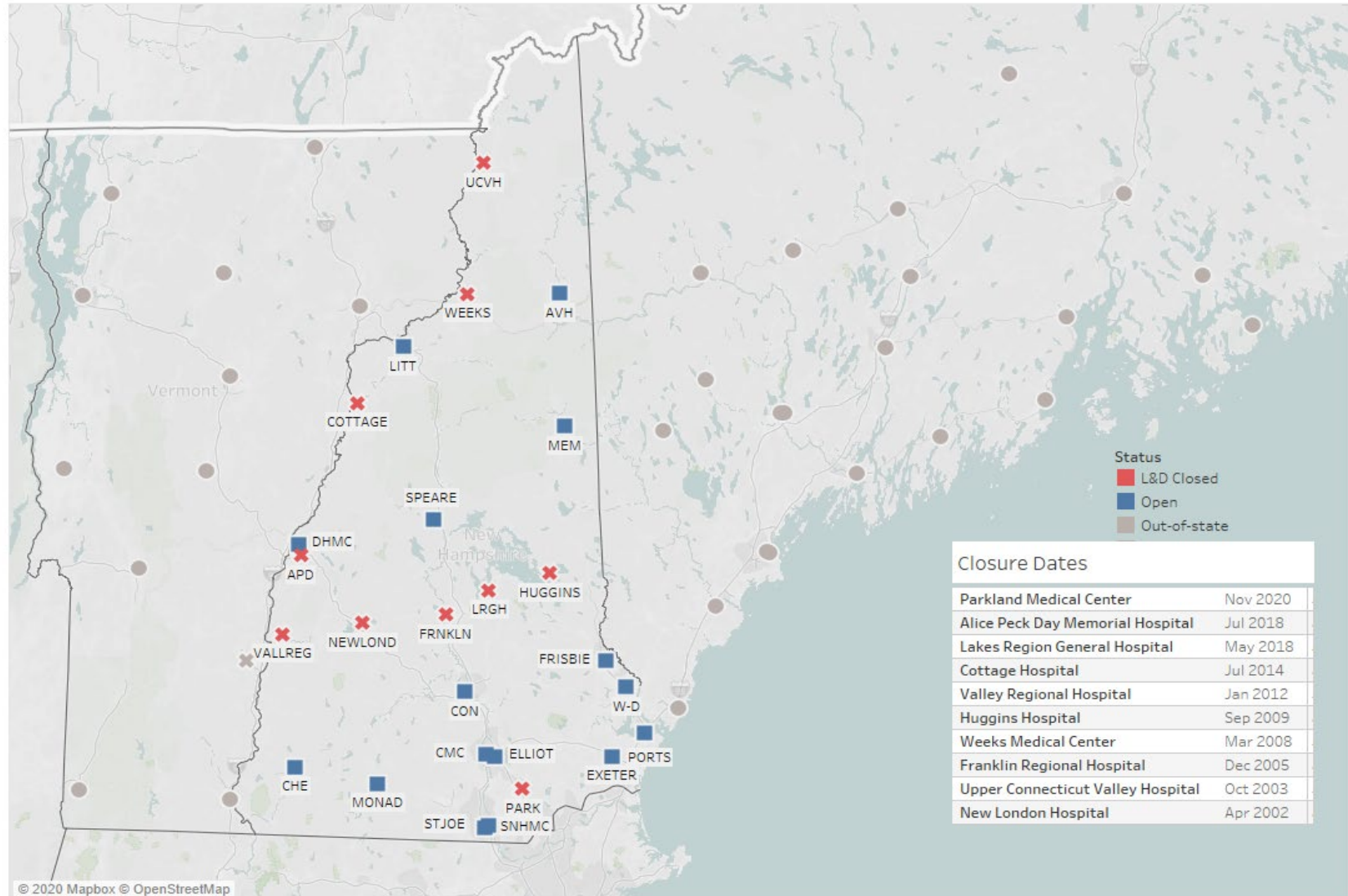
“Reverse” Integration

Key elements

- Behavioral Health
- Medications for OUD/SUD
- Women's Health
- Case Manager
- Recovery Support Worker
- Psychiatry

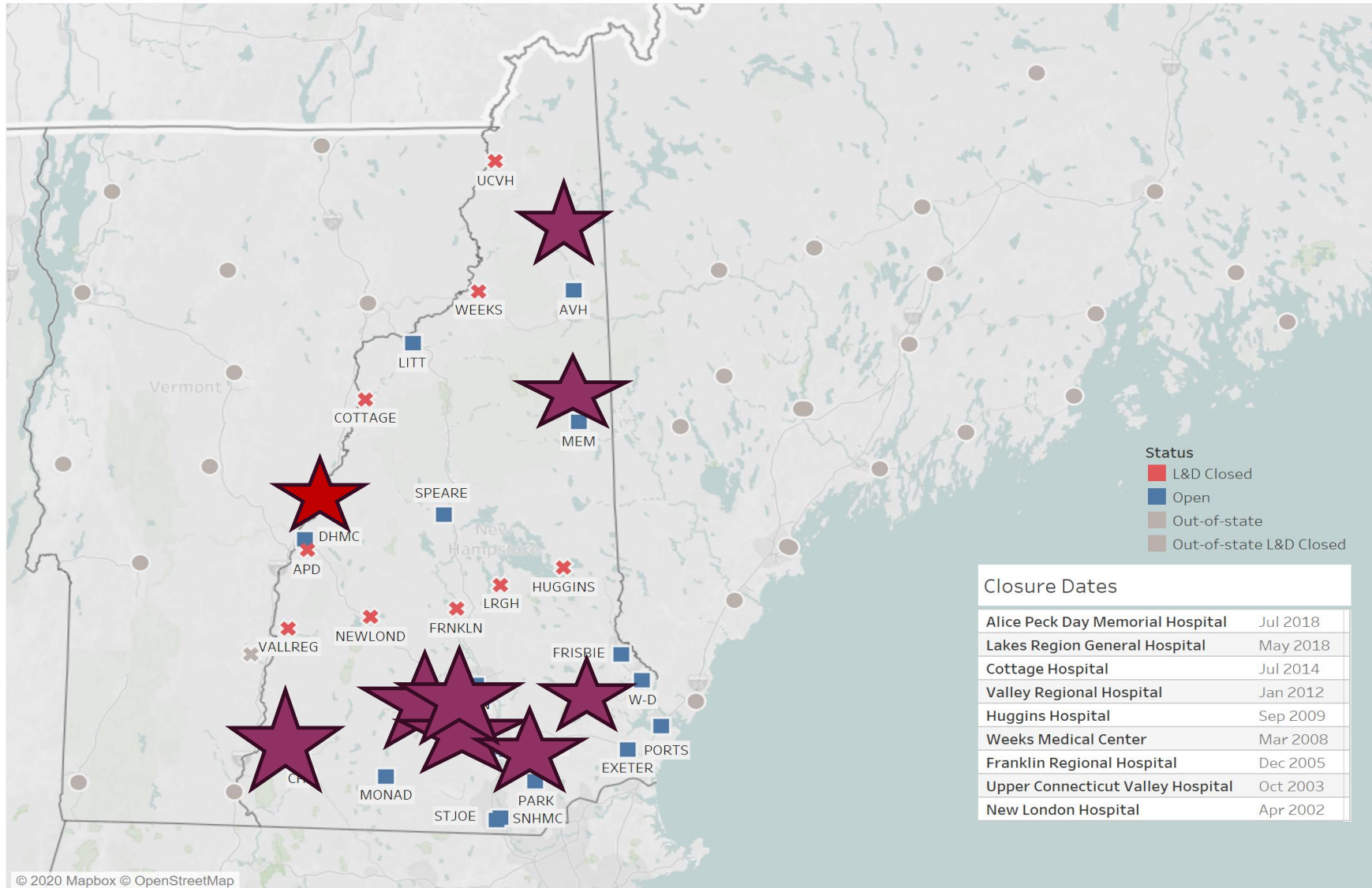
NEW HAMPSHIRE MATERNITY UNIT CLOSURES

New Hampshire Labor & Delivery Closures



Data source: David.Laflamme@unh.edu

New Hampshire Labor & Delivery Closures



Integrated Perinatal Treatment Programs in New Hampshire

PERINATAL OUTCOMES OF INTEGRATED VS NON-INTEGRATED PROGRAM PARTICIPANTS (2014-2017)

Perinatal Outcomes	Integrated (n=92)	Non-Integrated (n=132)	p
Preterm birth, n (%)	10 (11.8%)	33 (26.6%)	<0.01
Infant days in hospital, m (sd)	6.5 (4.8)	10.7 (16.2)	<0.03
Admission to the neonatal intensive care (NICU), n (%)	56 (60.9%)	85 (63.9%)	0.64
Positive meconium/umbilical toxicology, n (%)	27 (29.4%)	46 (34.6%)	0.41
Positive urine toxicology at delivery, n (%)	33 (35.9%)	99 (74.4%)	<0.0001
Pharmacological treatment for neonatal opioid withdrawal (NOWS), n (%)	12 (14.3%)	17 (13.4%)	0.85
Infant in state custody at discharge, n (%)	9 (10.6%)	15 (12.0%)	0.92
Tobacco use during pregnancy, n (%)	85 (92.4%)	124 (96.9%)	0.13

POSTPARTUM CHALLENGES

“I looked into it [treatment], but it was all nothing that I could afford. So I just kept doing what I was doing and getting by, and I got pregnant and I got my insurance and that’s really helped out.”

(Goodman et al. *BMC Pregnancy and Childbirth* 2020;20:178)

FACTORS PREDICTING POSTPARTUM RETENTION IN TREATMENT

Factors associated with retention in methadone treatment

- Intensive case management
- Methadone dose (≥ 60 mg/d)

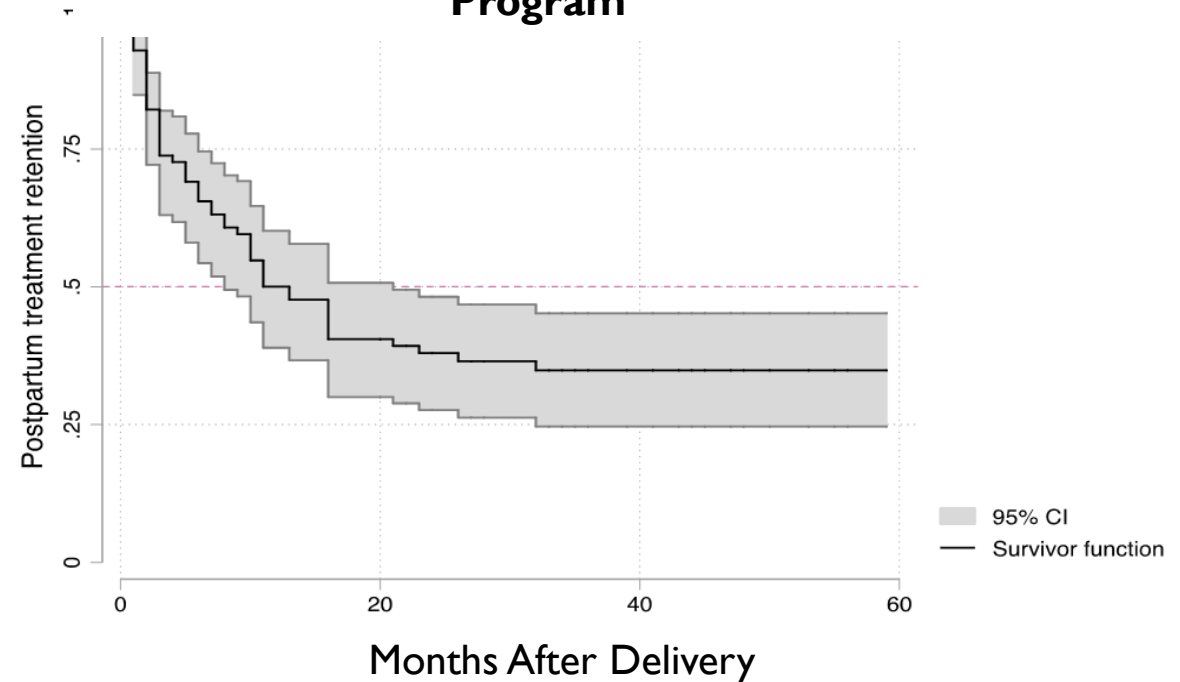
6-month retention rate: 44%

Factors associated with retention in an integrated Family Medicine clinic

- Entry in treatment early during pregnancy
- Pharmacotherapy for depression
- Negative urine toxicology

6 month retention rate: 79.5%

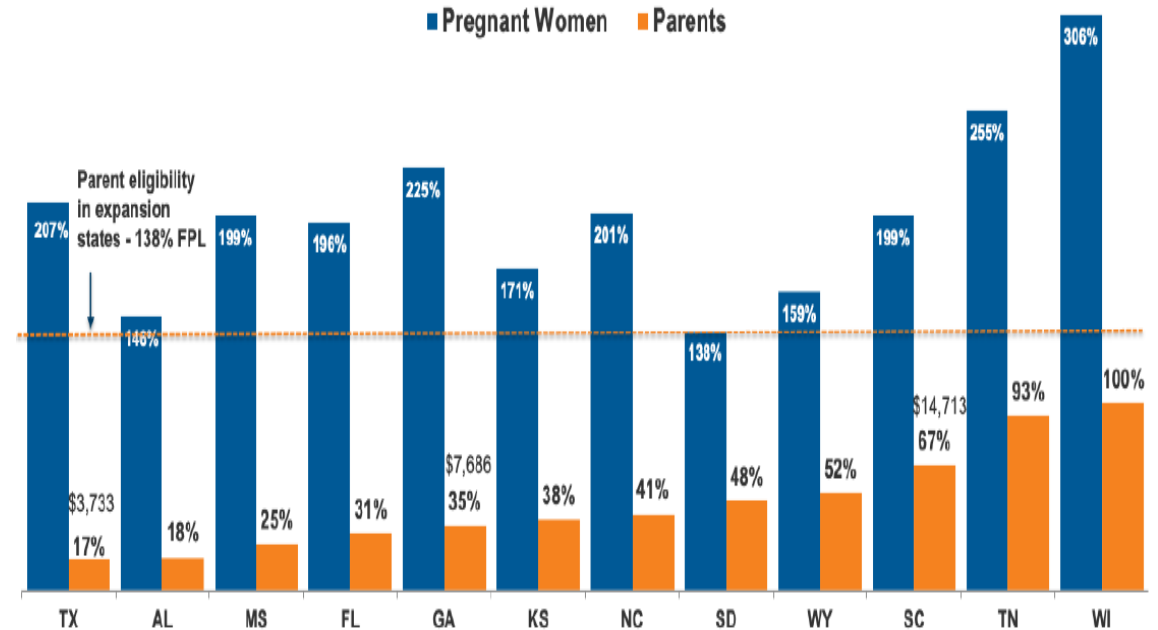
Postpartum Participants Continuing in Dartmouth-Hitchcock Moms in Recovery Program



BARRIERS TO ACHIEVING A TRUE POSTPARTUM “PLAN OF SAFE CARE”

- Reduced Medicaid eligibility for mothers at 60 days post delivery
- Lack of reimbursement for critical services
 - Case management
 - Peer recovery support
 - Community health workers/navigators
- Persistent gaps in continuum of care
 - Access to treatment at level of need
 - Programs accommodating children
 - Woman-centered residential programs
 - Recovery housing options

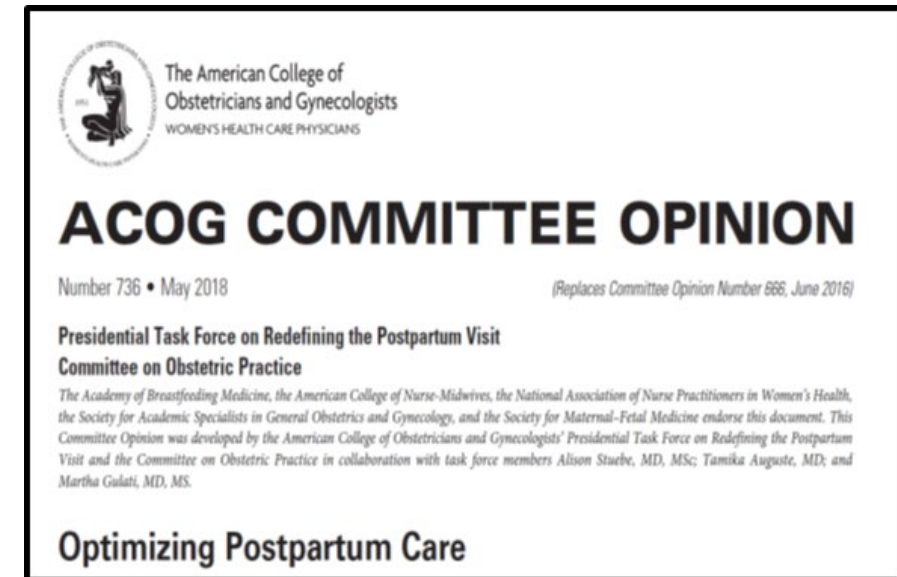
Medicaid eligibility thresholds for pregnant women compared to parents, 2021



<https://www.kff.org/womens-health-policy/issue-brief/expanding-postpartum-medicaid-coverage/>

RETHINKING POSTPARTUM CARE

- ✓ Engagement throughout the fourth trimester
 - Short interval follow up (1-2 weeks)
 - Pregnancy spacing/reproductive life plan
 - Emphasis on screening for SDOH needs and linkage to services
- ✓ Multidisciplinary approach
 - Lactation support
 - Mental health evaluation/treatment
 - Substance use screening/treatment
- ✓ Affirming cultural knowledge and diverse family structures
- ✓ Personalized transition to medical home



SUPPORTING RESILIENCE

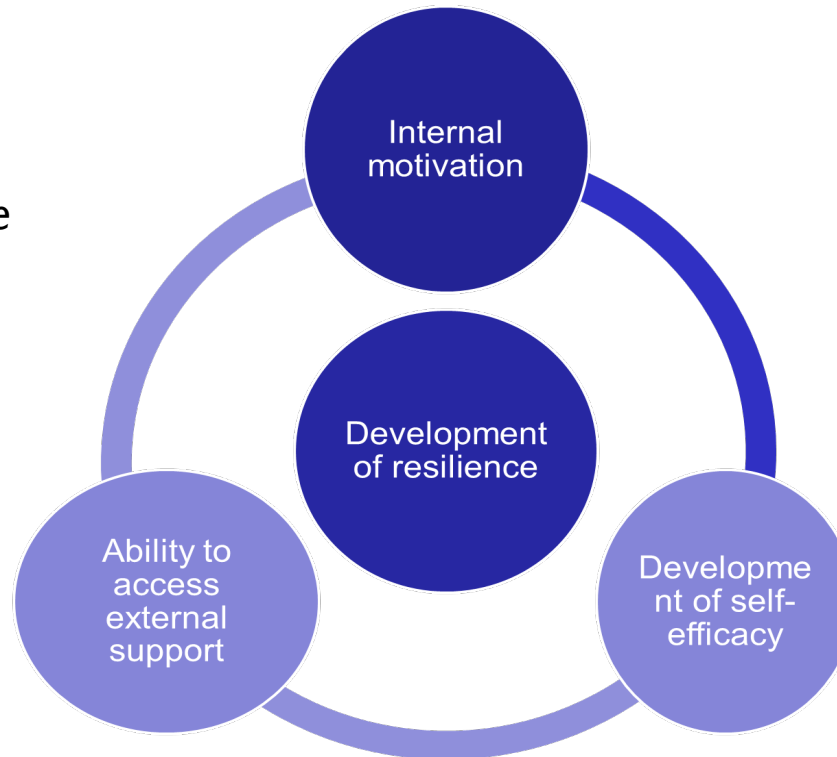
• Pregnancy is a strong
motivator...but it has an end point

Internal motivation

“Just finding out that I was pregnant did give me hope. It made me feel like, wow, I really have – not just for myself- but I have a reason to stop

Overcoming Barriers

“I looked into it [treatment], but it was all nothing that I could afford. So I just kept doing what I was doing and getting by and I got pregnant and I got my insurance and that’s really helped out.”

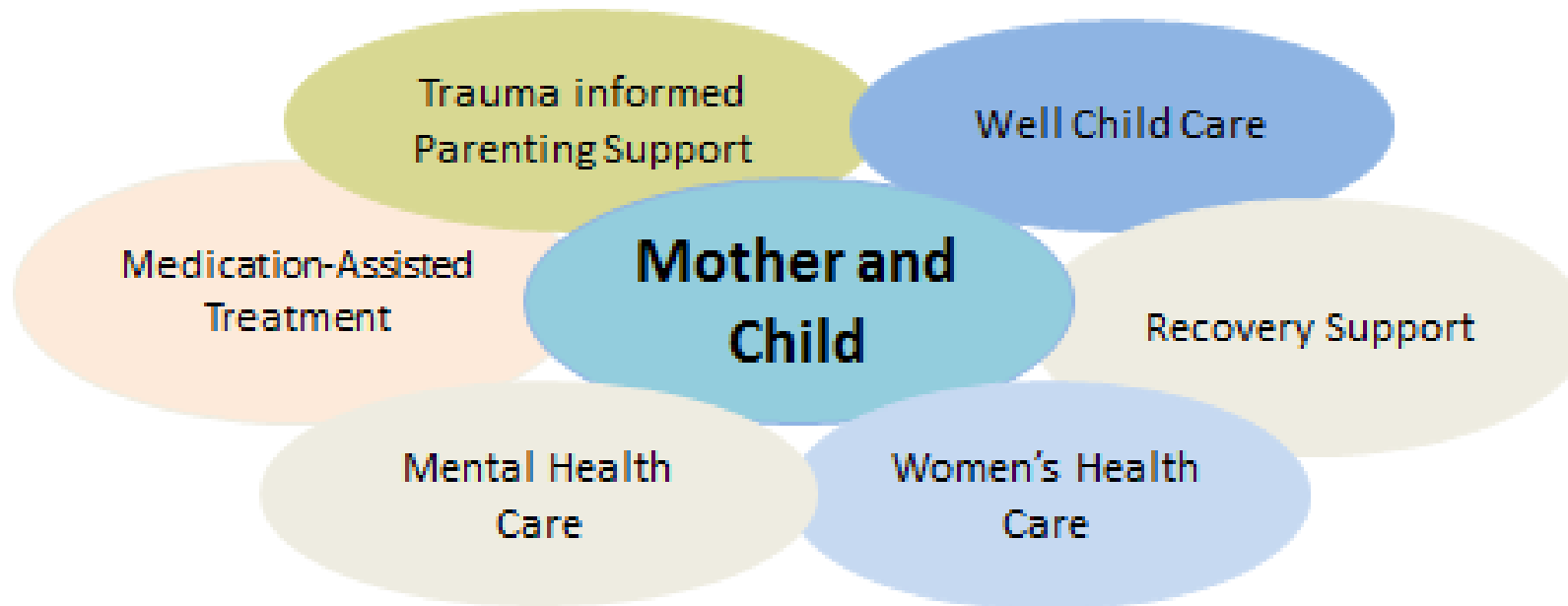


”Self-Efficacy

“I actually turned it around...I’m not ready to see my parents now that I’m clean...‘Cause I don’t want them to jeopardize this!”

“You know, people fall and make mistakes. But you can bounce back. it’s not the end of the world to make a mistake, but how you react afterwards and pick yourself up is the important part”

TREATMENT IS MUCH MORE THAN MEDICATION



DISCUSSION

daisy.j.goodman@hitchcock.org

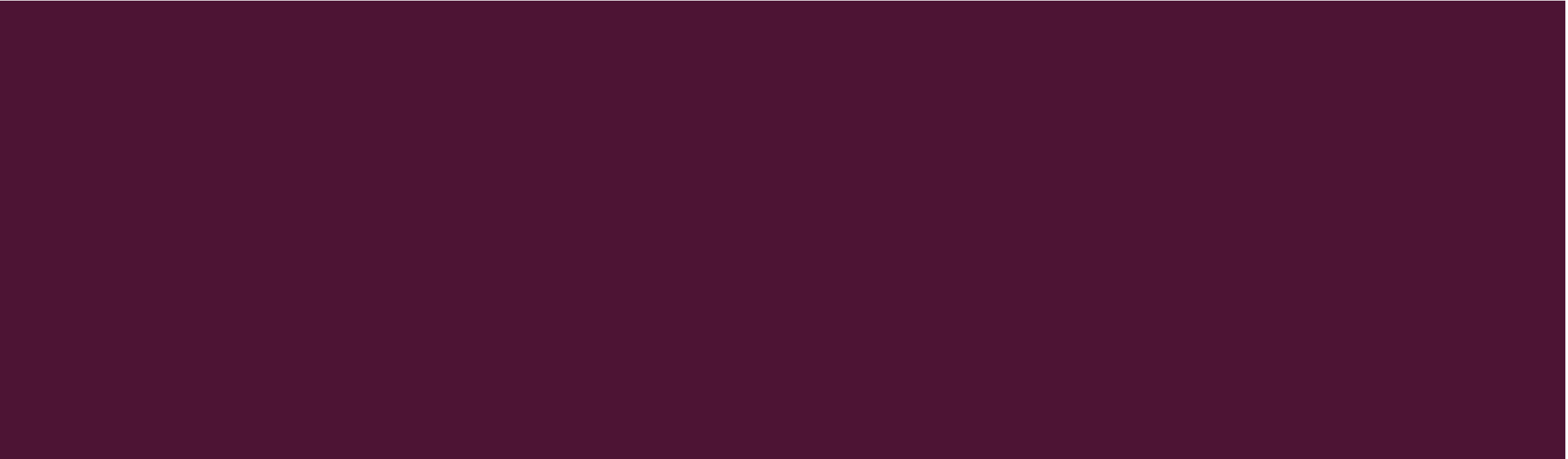


CITATIONS

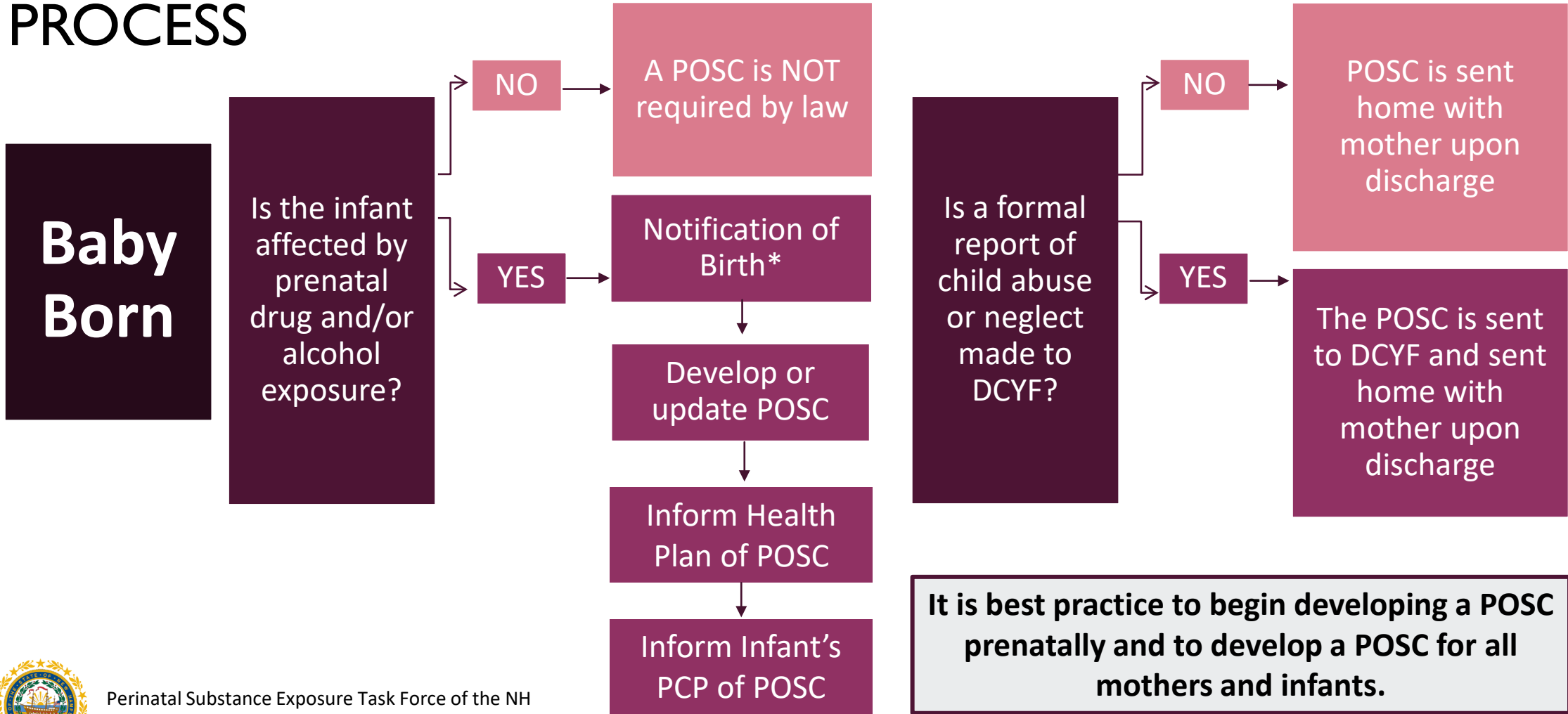
- Alliance for Innovation in Maternal Health. <https://safehealthcareforeverywoman.org/aim-program>
- American College of Obstetricians and Gynecologists, Presidential Task Force on Redefining the Postpartum Visit. Optimizing Postpartum Care. *Committee Opinion 736* 2018.
- Forray, A, Merry, B, Lin, H et al. Perinatal substance use: A prospective evaluation of abstinence and relapse. *Drug and Alcohol Dependence* 2015; 150: 147-155
- Goodman, D, Saunders, E, Wolff, K. In their own words. *BMC Pregnancy and Childbirth* 2020; 20:178.
- Higgins, T, Goodman, D, Meyer, M. Treating perinatal opioid use disorder in rural settings: challenges and opportunities. *J Preventive Medicine* 2019;
- Jones, et al. Neonatal abstinence syndrome after methadone or buprenorphine exposure. *N Engl J Med* 2010;363:2320-31
- Krans et al. Consensus bundle for the care of pregnant and postpartum women with opioid use disorder. *Obstet Gynecol.* 2019; 00: 1-11
- O'Connor, A, Uhler, B, O'Brian, L. et al. Predictors of treatment retention in postpartum women prescribed buprenorphine during pregnancy *J Substance Abuse Treatment* 2018; 86: 26-29
- 128;
- Saiai et al. Caring for pregnant women with opioid use disorder in the USA: expanding and improving treatment. *Curr Obstet Gynecol Rep* 2016; 5;
- Schiff, D, Nielsen, T, Terplan, M et al. Fatal and nonfatal overdose among pregnant and postpartum women in Massachusetts. *Obstetrics and Gynecology* 2018; 132: 466-74
- Substance Abuse Mental Health Administration. Clinical guidance for treating pregnant and parenting women with opioid use disorder and their infants. 2018. <https://store.samhsa.gov/system/files/sma18-5054.pdf>
- Terplan et al. Opioid detoxification in pregnancy. *J Obstet Gynecol* 2018; 131:803–14.
- Wilder, C, Lewis, D, Winhusen, T. Medication assisted treatment discontinuation in pregnant and postpartum women with opioid use disorder. *Drug and Alcohol Dependence* 2015 149: 225-231
- Wilder, C, Hosta, D, Winhusen, T. Association of methadone dose with substance use and treatment retention in pregnant and postpartum women with opioid use disorder. *J Substance Abuse Treatment* 2017; 80: 33-36



NEW HAMPSHIRE'S PLAN OF SAFE CARE STRATEGY



NEW HAMPSHIRE'S PLAN OF SAFE/SUPPORTIVE CARE (POSC) PROCESS



Perinatal Substance Exposure Task Force of the NH
Governor's Commission on Alcohol and Other Drugs

***Notification is captured through answering "Prenatal Substance Exposure" questions on the birth worksheet.**

NH POSC TEMPLATE



Supported Care for Mothers and Infants

July 2019

<https://nhcenterforexcellence.org/governors-commission/perinatal-substance-exposure-task-force/plans-of-safe-care-posc/>



I. PLAN OF SAFE CARE (POSC)					
This POSC, developed collaboratively with the mother and other involved caregivers, reinforces existing supports and coordinates referrals to new services to help infants and families stay safe and connected when they leave the hospital. The POSC must be given to the mother upon discharge and should go to the infant's primary care provider along with the infant's other medical records. Providers should encourage the mother to share the POSC with those who do and will provide her services and supports. The POSC includes private health information. For an electronic version of this form, visit: https://nhcenterforexcellence.org/governors-commission/perinatal-substance-exposure-task-force/plans-of-safe-care-posc/ .					
II. DEMOGRAPHIC INFORMATION					
Name of Mother:		Mother's Medical Provider:			
Name of Father:		Infant's Medical Provider:			
Name of Infant:		Mother's Admission Date:			
Name of Other Caregiver (if relevant):		Mother's Discharge Date:			
Infant's DOB:		Infant's Discharge Date:			
Mother's Phone Number:		Father's Phone Number:			
Mother's Health Insurance:		Other Caregiver's Phone Number:			
Current Address:					
III. CURRENT SUPPORTS (e.g. partner/spouse, family/friends, counselor, spiritual faith/community, recovery community, etc.)					
IV. STRENGTHS AND GOALS (e.g. breastfeeding, parenting, housing, smoking cessation, in recovery)					
V. HOUSEHOLD MEMBERS					
Name	Relationship to Infant	Age	Name	Relationship to Infant	Age
VI. EMERGENCY CHILDCARE CONTACT/OTHER PRIMARY SUPPORTS					
Name	Relationship to Infant	Phone Number			
VII. NOTES/HELP NEEDED (please time/date entries)					

POSC Template (p2)

<https://nhcenterforexcellence.org/governors-commission/perinatal-substance-exposure-task-force/plans-of-safe-care-posc/>



VIII. SERVICES, SUPPORTS and NEW REFERRALS					
	Discussed	Active	Referred	Contact Name	Organization/Phone Number
Visiting Nurse Association (VNA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Women, Infants, and Children Program (WIC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
health insurance enrollment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Family Resource Center (FRC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
parenting classes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
safe sleep education/plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
childcare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
other home visiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Early Supports and Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
voluntary child welfare services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
family planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
mental health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
smoking cessation/no smoke exposure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
housing assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Temporary Assistance for Needy Families (TANF)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
financial assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
legal assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
personal security/Domestic Violence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
substance use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Medication Assisted Treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
recovery support services (e.g. recovery coaching, meetings)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Drug Court participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Other ()	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Other ()	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

IX. PRENATAL EXPOSURE		
	Y/N	Notes
Does the infant have prenatal substance exposure?		
Is the prenatal substance exposure a result of prescribed medication?		
Is there prenatal substance exposure in addition to prescribed medication?		

X. IS THE INFANT DISCHARGED IN THE CARE OF SOMEONE OTHER THAN THE MOTHER?		
Name:	Relationship to Infant:	Court Involvement (Y/N):
Phone Number/Address:		

XI. PARENT/CAREGIVER SIGNATURE	
I acknowledge I have participated in the development of this Plan of Safe Care, I have a copy of the Plan of Safe Care, I will share the Plan of Safe Care with my baby's primary care provider, and I will make reasonable efforts to follow-up with the services and supports listed above.	
Signature: _____	Date: _____

XII. STAFF SIGNATURE	
I, _____ provided _____ with the Plan of Safe Care upon discharge.	
Signature: _____	Date: _____