Summary of Testimony to the House Health Committee

of the Pennsylvania House of Representatives
April 12, 2022
Hearing on "Opioids in the Commonwealth: Lessons learned and next steps"

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Charleston, West Virginia.

West Virginia has some of the highest rates of substance use and overdose deaths in the country. This epidemic has not spared our pregnant women and their babies. A 2009 umbilical cord tissue study found that 19% of babies born in WV were exposed to one or more substances in utero. Rates of neonatal abstinence syndrome (NAS) are the highest in the US.

Substance use in pregnancy and its effects on the fetus and newborn is an area of major concern for the West Virginia Perinatal Partnership (WVPP). Established in 2006, the Partnership coordinates programs and develops policies to improve health outcomes among mothers and their babies.

WVPP in collaboration with health care providers and policymakers has made significant progress in improving processes to better identify babies born to mothers who used substances during pregnancy and track prevalence of NAS. These include the development of a standardized definition for diagnosing NAS and outreach to pediatric providers on the identification, diagnosis, and documentation of intrauterine substance exposure and NAS. West Virginia has established a system to track incidences of intrauterine substance exposure and NAS using the Birth Score assessment tool.

WVPP has developed a model of care that better serves pregnant and postpartum women with substance use disorder and their families. In 2011, WVPP developed the Drug Free Moms and Babies project to provide comprehensive and integrated medical and behavioral health services to this population. A qualitative and quantitative evaluation of the project demonstrated a significant reduction in illicit substance use of participants, as well as improved birth outcomes for their children. Using a variety of state, federal and foundation funds, the DFMB project expanded and now serves women and their infants in 17 sites across the state.

West Virginia is seeing an increase in the use of methamphetamines. WVPP along with others in WV continue to work on addressing barriers to care, including transportation, childcare, judgmental attitudes, and stigma, as well as exploring effective treatments for addressing stimulant use disorder.

behavioral health providers, substance use treatment providers, and community resources in a seamless partnership to provide the best care for mothers and babies.

The key components of the project include screening, integration of maternity and behavioral healthcare services, comprehensive needs assessment, coordination of care, long-term follow-up, provider outreach, and program evaluation. The DFMB Project works in communities, integrating medical and behavioral healthcare through a strong care coordination model that incorporates wrap around recovery support services and social services. While all sites provide required service components, they have the flexibility to provide services in a way that meets local needs and demands and is responsive to available resources.

We believe this flexibility has been integral to the success of the program. Evaluation of the DFMB Project consistently shows positive results. These include:

- Provision of essential treatment and referral services to a high-risk, impoverished, medically-underserved population.
- Significant decrease in illicit substance use during pregnancy (nearly 80% in first trimester reduced to 30% at delivery).
- Lower rates of preterm delivery when compared to comparable group of pregnant patients (13% vs. 19.4%)
- High rate of newborns discharged to mother's care (87%)

This model of care improves health outcomes for mothers and their babies, and positively impacts families affected by substance use disorder. Despite these successes, we continue to face challenges around transportation, childcare, stigma, judgmental attitudes, provider shortages, and an everchanging landscape of drug use. West Virginia is seeing an increase in the use of methamphetamines and more severe polysubstance use. Unfortunately, there are few evidence-based treatments to address stimulant use disorder. We continue to work with our state partners to address these and other challenges as we strive to improve the care of the mother-baby dyad affected by substance use disorder and their families.

Thank you for inviting me to address you on this important topic. I am happy to try to answer any questions you may have.

The Birth Score data has been invaluable to the state. We are able to track where the highest rates of NAS are occurring and allocate resources accordingly. New data being collected on specific substances that babies are exposed to will provide important information to providers and researchers.

Drug Free Moms and Babies Project

In response to West Virginia's high rates of intrauterine substance exposure and NAS, the WVPP developed the Drug Free Moms and Babies (DFMB) Project in 2011, with financial support and guidance from the Bureau for Behavioral Health, Bureau for Public Health, and the Claude Worthington Benedum Foundation. The goal of the DFMB Project is to support healthy pregnancy outcomes by providing prevention, early intervention, substance use treatment, and recovery support services for pregnant and postpartum women with SUD/OUD.

The DFMB Project first enrolled participants in 2012 at four pilot sites. Since that time the project has expanded to 17 sites across the state of West Virginia. This project is a critical component of helping us improve health outcomes for pregnant women and their babies.

Pregnancy is a unique time. For women with substance use disorders, pregnancy is perhaps one of the only times she can gain access to health insurance. She has frequent and ongoing contact with health care providers. The increased motivation for improved health that often comes with pregnancy makes the prenatal and postpartum periods ideal for addressing substance use. We also know that women may not seek prenatal care because of fear, guilt, shame, as well as concerns about legal consequences. The removal of these barriers is a key part of our efforts. Research repeatedly demonstrates that women using substances who receive prenatal care experience more positive birth outcomes and have greater opportunities for other health promoting interventions than women who do not receive care.[2] Further, research also demonstrates that maternal, fetal, and child outcomes are improved when pregnant and parenting women receive care that addresses physical, mental, and care coordination needs.[3] That is why the DFMB Project was structured using an integrated approach that combines the medical team,

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[2] Stone R. Pregnant women and substance use: fear, stigma, and barriers to care. Health Justice. 2015;3:2. Published 2015 Feb 12. doi:10.1186/s40352-015-0015-5.

[3] Substance Abuse and Mental Health Services Administration. A Collaborative Approach to the Treatment of Pregnant Women with Opioid Use Disorders. HHS Publication No. (SMA) 16- 4978. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2016. Available at: http://store.samhsa.gov/.

the delivery hospitals in WV and trained hospital staff on identifying, assessing, diagnosing, and documenting intrauterine substance exposure and NAS based upon the standardized definition. The training included guidance on which diagnostic codes to use. While this initiative addresses the problem of inconsistency in NAS diagnosis among providers, it does not address another significant problem with claims data that we've discovered. When billing systems pull medical claims, only the first 5-10 diagnoses (typically those resulting in the highest billing) are included. So, even if the NAS diagnosis is made, it may not show up when data is pulled. As a result, we believe NAS continues to be underreported when relying on claims data.

Soon after the development of the standardized definition for diagnosing NAS, we began meeting with state officials on developing a system to track the prevalence of maternal substance use and NAS. Even though we hoped that the state's administrative data would improve as a result of the education we provided, we knew that it would take time. There can be a 2-3 year delay in analyzing claims data, and given the severity of the problem and the vulnerability of the population, we knew the state needed a system that would allow for a quick assessment of need so that resources could be allocated in a timely manner. In October 2016, the state began collecting data on intrauterine substance exposure and NAS in Project WATCH using the Birth Score tool. The Birth Score is a risk assessment completed on every baby born in the state of West Virginia with the goal of identifying those who are at risk for health and developmental problems. Utilizing the Birth Score offered several advantages, including:

- it was an existing tool that has been in place since 1998;
- it is completed by nursing staff prior to the baby's discharge;
- it is entered electronically or uploaded directly from the hospital's electronic medical record, and
- it provides real time data.

In February 2020, questions to assess the type of substances the infant had been exposed to were added to the Birth Score.

Birth Score data shows that 14% of babies born in WV have intrauterine substance exposure; 5.6% are diagnosed with NAS. It's worth noting that in 2020 we saw the highest rates of NAS since we began collecting the data at 6.5%. We believe this may be related to the COVID-19 pandemic.

Substance Use During Pregnancy Committee.

WVPP established a statewide committee in 2007. The Committee, facilitated by the Partnership and chaired by a neonatologist, identifies educational and training needs, facilitates and promotes research, develops programs, and makes policy recommendations. The Committee has been instrumental in the development of model screening policies and informed consents, prevalence studies, education and trainings, and new models of care. Several of these initiatives will be the focus of my testimony.

Tracking the Prevalence of Substance Use During Pregnancy.

In 2006, neonatologists were reporting that they were being forced to send newborns in need of neonatal intensive care out of state because of lack of beds. At the time, they were experiencing an influx of newborns transferred to their NICUs needing treatment for neonatal abstinence syndrome (NAS). In an effort to assess the extent of the problem, we examined claims data to see how many babies were diagnosed with NAS. We quickly discovered that this data underreported the problem and was inaccurate. In 2009, WVPP in collaboration with two medical schools and physician leaders, designed and implemented a research study in an effort to gain a better understanding of the extent of maternal substance use in the state. De-identified cord tissue specimens from 8 hospitals throughout WV were collected over a one-month period in 2009. This study confirmed what the neonatologists and other health care providers already knew. The problem of substance use during pregnancy was widespread and extensive. The study found that 19% of the babies born in WV were positive for a significant substance, such as marijuana, opioids, or alcohol. Most were positive for more than one substance.[1] Since that time we have continued to explore how to better document and track the prevalence of intrauterine substance exposure and NAS in WV.

In 2014, the Partnership brought together physician leaders in pediatric care to develop a standardized definition for NAS diagnosis. One problem with relying on claims data for assessing NAS prevalence was the fact that providers used inconsistent criteria when diagnosing NAS. Creating a standardized definition was an important strategy to ensure better documentation and diagnosis of the problem. During 2015-2016, we conducted outreach to all

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[1] *West Virginia Medical Journal*, Stitley, et al
http://www.wvsma.com/Portals/0/SubstanceAbuse10.pdf pp. 48-52

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West Virginia Perinatal Partnership
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Honorable Members of the Committee:

Thank you for the opportunity to provide testimony to this committee. It is an honor and a privilege to be asked to testify here today, and I hope my testimony will be of some assistance to you as you continue to address the devastating impact of the opioid crisis in Pennsylvania, especially its effect on mothers and babies.

West Virginia has been profoundly affected by the substance use epidemic. We continue to lead the nation in rates of overdose deaths. The epidemic has not spared our state's expectant mothers. Substance use in pregnancy (including the use of tobacco, alcohol, prescription, and illicit drugs) has long been identified by West Virginia healthcare professionals as a major factor contributing to poor health outcomes for mothers and babies.

In 2006, the West Virginia Perinatal Partnership (WVPP) was established to improve the health of mothers and babies in West Virginia, as well as have a positive impact on their environments, their family situations, and their futures. Our mission is to engage and unite health care professionals and stakeholders in improving maternal and infant health outcomes. We are a nonprofit organization that works through a variety of committees to develop new programs, improve existing programs and policies, and implement best practices to reduce maternal and infant mortality and morbidity and improve the delivery of care.

WVPP is recognized throughout the state for its effectiveness in bringing together individuals and organizations involved in all aspects of perinatal care. Over the past 15 years we have collaborated on a number of initiatives to address the issue of substance use in pregnancy.

West Virginia's Efforts to Address Substance Use During Pregnancy

Testimony provided to the House Committee of the Pennsylvania House of Representatives

"Opioids in the Commonwealth: Lessons learned and next steps" Hearing

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West Virginia Perinatal Partnership

A statewide partnership of healthcare professionals and public and private organizations committed to improving perinatal health in West Virginia.

Our Vision

Healthy mothers and healthy babies in a supportive community

Our Mission

To engage and unite healthcare providers and stakeholders in improving maternal and infant health outcomes

Improving Perinatal Outcomes Through Partnership

The WVPP was strategically structured as an independent entity (501c3, non-profit) to bring all the key players to together in a neutral space to work collaboratively on a set of shared goals.

West Virginia Perinatal Partnership

Working together for healthier mothers and babies

Substance Use During Pregnancy Committee

- Statewide
- Identify educational and training needs
- Facilitate and promote research
- Develop programs
- Make policy recommendations

What is the extent of the problem?

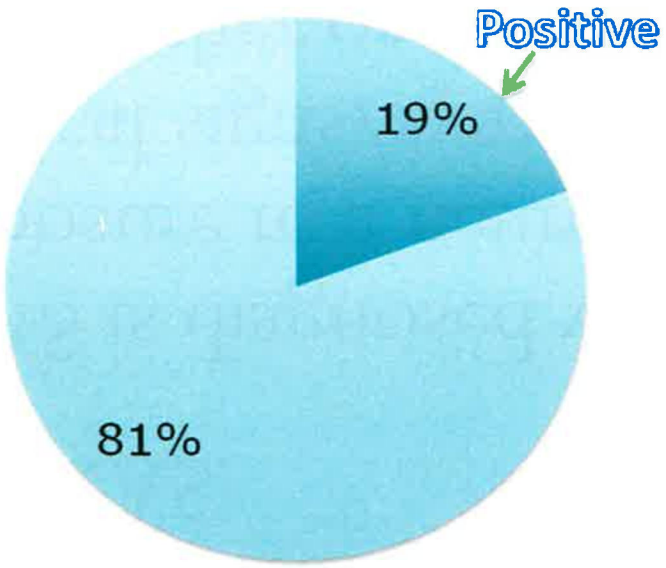
- NICUs at capacity because of NAS
- Claims data
  - Inaccurate/underreporting
  - Providers not uniformly diagnosing NAS
  - Systems only recognize top 5-10 diagnostic codes
  - Substantial delay

Improvements to Data Collection

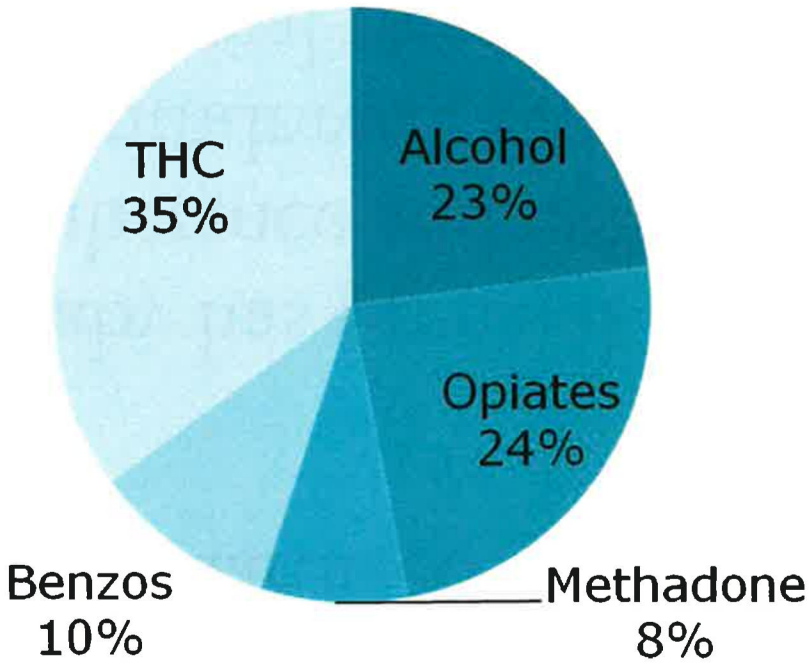
- 2009 umbilical cord tissue study
- 2014 development of standardized definition of NAS
- 2016 began tracking incidence of intrauterine substance exposure and NAS using Birth Score tool
- 2020 began tracking substances that infant was exposed to in utero

WV Umbilical Cord Study, 2009

759 Total Cords



Drugs



Source: Stitley, Michael, MD, et.al. "Prevalence of Drug Use in Pregnant West Virginia Patients," West Virginia Medical Journal, Vol. 106, No. 4, 2010. (Study funded by WV Office of Maternal, Child and Family Health, Bureau for Public Health, DHHR)

NAS definition in 2014

Pediatric leaders develop a standardized definition for NAS:

NAS is diagnosed when a baby has prenatal exposure to a neuroactive substance and exhibits clinical signs/symptoms of withdrawal, regardless of whether or not pharmacological treatment is required.

Project WATCH: Working in Appalachia to identify At-risk Infants

Components:

- Birth Score
- Newborn Hearing
- Newborn Critical Congenital Heart Disease (CCHD)
- Intrauterine substance exposure (IUSE) and neonatal abstinence syndrome (NAS) Surveillance (added October 2016)
  - Questions about substances added in 2020

Primary Objective:

- Identify newborns who are at a higher risk for poor health outcomes and infant mortality in the first year of life
- Link these infants with pediatric services and case management to initiate close follow-up

Birth Score: Logic-based questions about substance exposure

Intrauterine Substance Exposure

If yes, check all that apply:

- Self-reported
- Documented in prenatal record (past medical records)
- Positive maternal drug test (during their labor and delivery hospital admission)
- Unknown
- Other

If yes, check all that apply:

- Opioids
- Stimulants
- Sedatives-Hypnotics
- Phencyclidine (PCP)
- Cannabinoids
- Gabapentin
- Alcohol
- Antidepressants

Birth Score

Infant with clinical signs consistent with NAS diagnosis*?

Yes/No

**NAS is diagnosed when a baby has intrauterine exposure to a neuroactive substance and exhibits clinical signs/symptoms of withdrawal, regardless of whether or not pharmacological treatment is required*

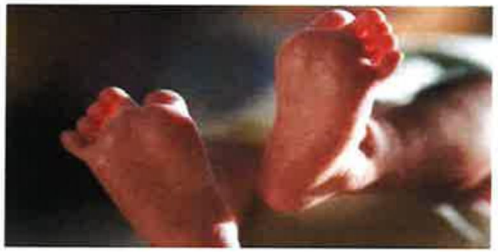
Project WATCH- Yearly Data

Year	All Births	IUSE (%)	NAS (%)	NAS/1000
2017	18,797	13.99	5.12	51.2
2018	18,177	14.07	4.96	49.6
2019	18,526	13.19	5.55	55.5
2020	18,093	13.86	6.54	65.4
2021	17,965	13.53	5.41	54.1

Problem is BIG!

- What can we do about it?
  - Providers reluctant to screen
  - Treatment programs not equipped to serve pregnant women

Healthy Moms Make Healthy Babies



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Drug Free Moms and Babies Project (DFMB)

Goal

To develop, evaluate, document, and replicate programs that support healthy baby outcomes by providing prevention, early intervention, treatment, and recovery services for pregnant and postpartum women with substance use disorders.

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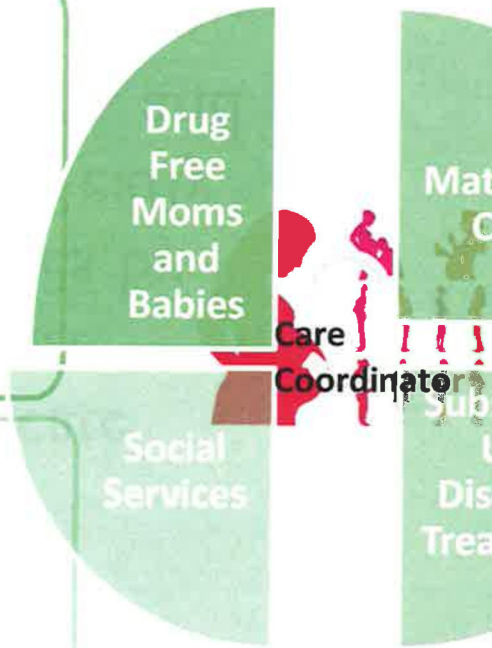
Drug Free Moms and Babies Model Services

- Outreach
- Needs Assessment
- Referrals/ Linkages
- Follow up
- Peer Recovery Coach

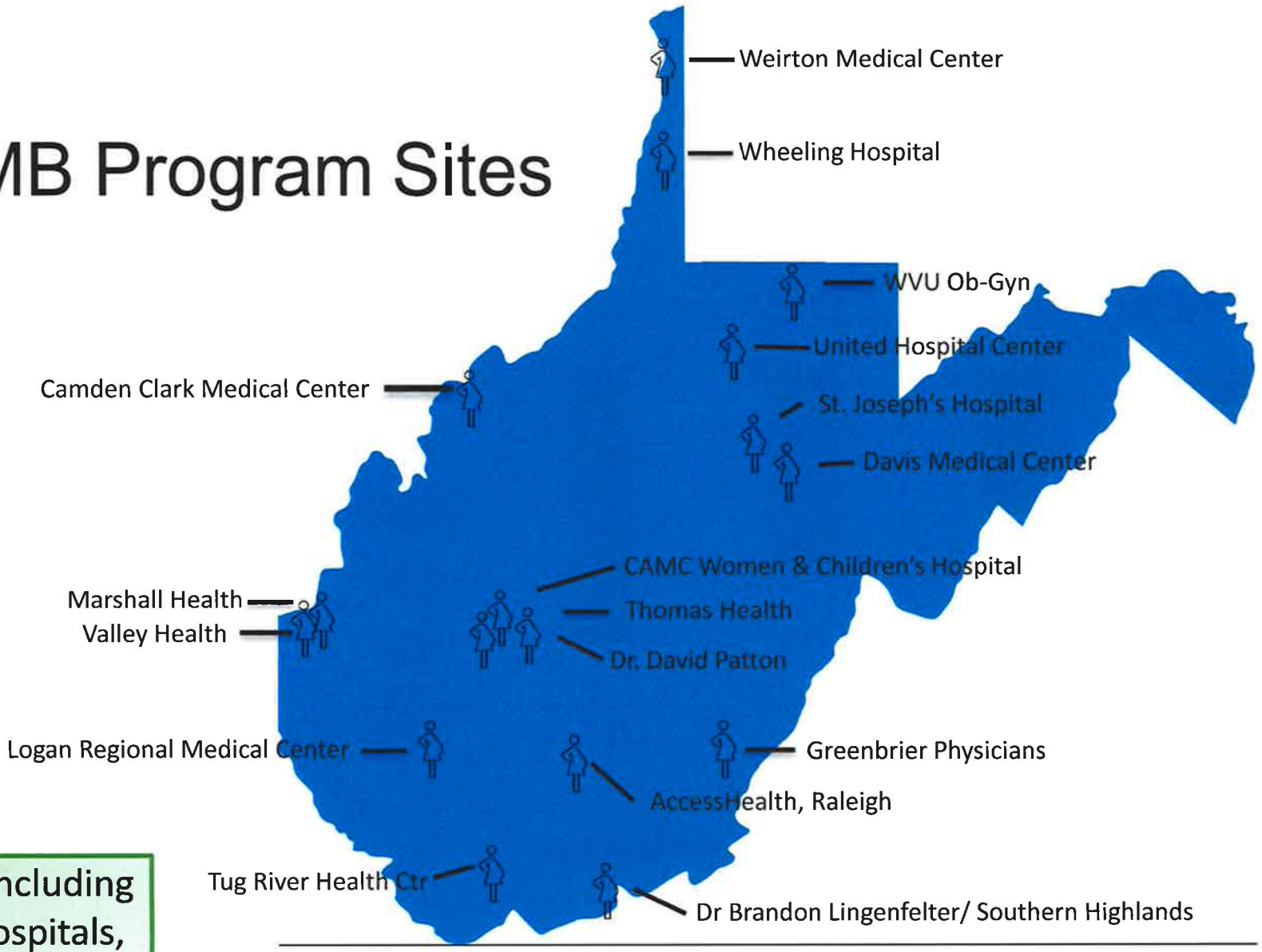


- Prenatal Care
- Labor and Delivery
- Postpartum

- Home visitation
- WIC/nutrition
- Housing
- Child Care
- Transportation

- Medication Assisted Treatment
- Individual and Group Counseling

DFMB Program Sites



17 sites, including clinics, hospitals, FQHCs, and BHCs.

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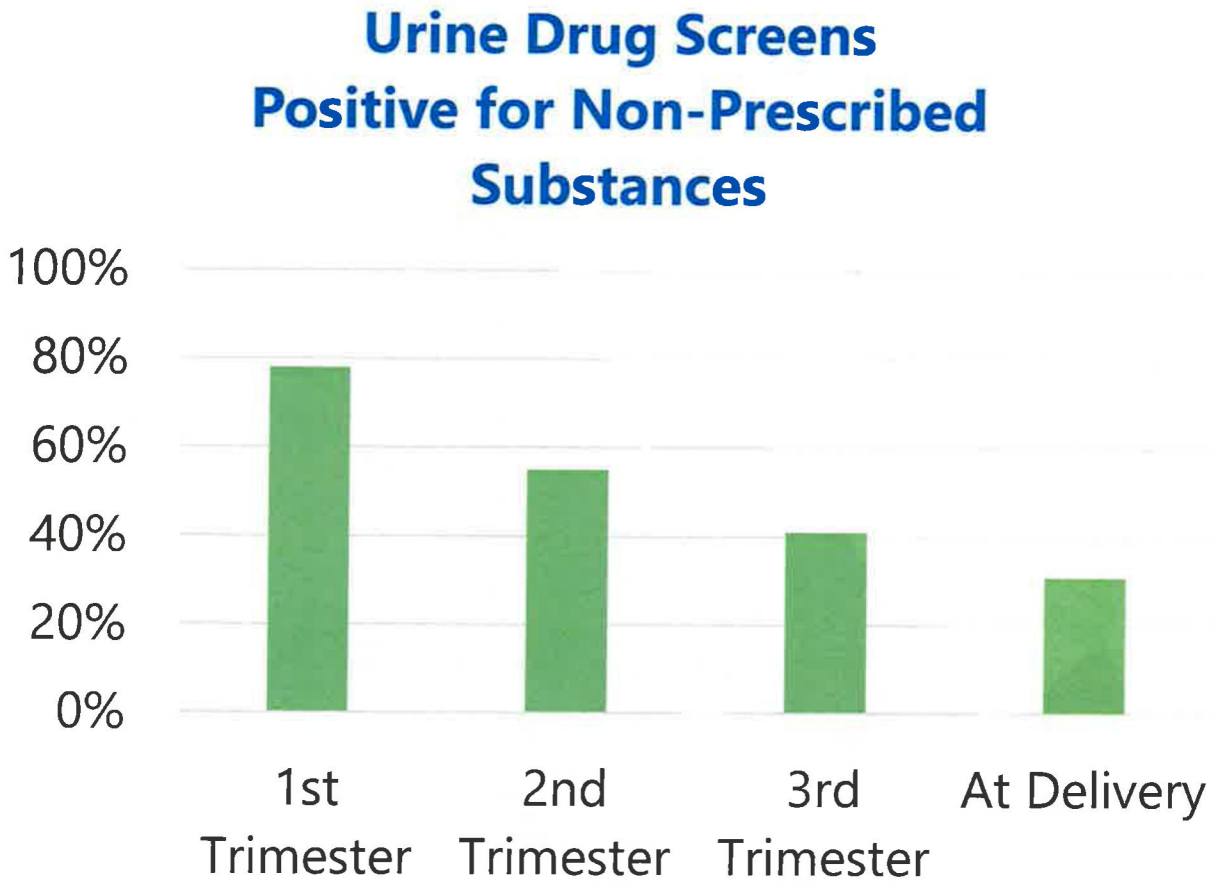
Decreased Substance Use During Pregnancy, DFMB Participants



DFMB Outcomes 2018-21

- Births
  - 84% term births
  - 13% preterm
- NAS
  - 28%
- Breastfed after birth
  - 45%
- Baby discharged to mother
  - 87%

Project WATCH comparisons 2021: 13.7% IUSE

- Birth outcomes
  - Preterm, 19.4%
- NAS
  - 40%
- Breastfed after birth
  - 15%

New and Continuing Challenges

- Increase in methamphetamine use
- Transportation
- Childcare
- Stigma
- Provider shortages (maternity, behavorial health, mental health)

Thank you!

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