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Editor's Choice

Implementation of State Laws Giving Pregnant People Priority Access to Drug Treatment Programs in the Context of Coexisting Punitive Laws

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A B S T R A C T

Background: In response to increased prenatal drug use since the 2000s, states have adopted treatment-oriented laws giving pregnant and postpartum people priority access to public drug treatment programs as well as multiple punitive policy responses. No prior studies have systematically characterized these state statutes or examined implementation of state priority access laws in the context of co-existing punitive laws.
Methods: We conducted legal mapping to examine state priority access laws and their overlap with state laws deeming prenatal drug use to be child maltreatment, mandating reporting of prenatal drug use to child protective services, or criminalizing prenatal drug use. We also conducted interviews with 51 state leaders with expertise on their states' prenatal drug use laws to understand how priority access laws were implemented.
Results: Thirty-three states and the District of Columbia have a priority access law, and more than 80% of these jurisdictions also have one of the punitive prenatal drug use laws described. Leaders reported major barriers to implementing state priority access laws, including the lack of drug treatment programs, stigma, and conflicts with punitive prenatal drug use laws.
Conclusions: Our results suggest that state laws granting pregnant and postpartum people priority access to drug treatment programs are likely insufficient to significantly increase access to evidence-based drug treatment. Punitive state prenatal drug use laws may counteract priority access laws by impeding treatment seeking. Findings highlight the need to allocate additional resources to drug treatment for pregnant and postpartum people.
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Drug use during pregnancy has increased sharply since the early 2000s, with estimates of nonmedical prenatal drug use increasing from 4.3% in 2002 to 8.3% in 2020 (Center for Behavioral Health Statistics and Quality, 2021; Substance Abuse Mental Health Services Administration, 2004). Specifically, there have been documented increases in cannabis, methamphetamine, opioid, and polysubstance use among pregnant people (Bakhireva et al., 2018; Kozhimannil et al., 2017; Maeda, Bateman, Clancy, Creanga, & Leffert, 2014; Petrangelo, Czuzoj-Shulman, Balayla, & Abenhaim, 2019; Terplan, Smith, Kozloski, & Pollack, 2009; Volkow, Han, Compton, & McCance-Katz, 2019). In turn, there has been a corresponding increase in substance use disorder (SUD) diagnoses for drugs other than alcohol and increased SUD treatment seeking among pregnant and postpartum people (Martin, Longinaker, & Terplan, 2015; Petrangelo et al., 2019; Shi & Zhong, 2018). Additionally, the number of infants displaying effects of drug exposure—for example, low birth weight, prematurity, and neonatal

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withdrawal syndrome—has increased in recent years (Haight, Ko, Tong, Bohm, & Callaghan, 2018; Howard, Dhanraj, Devaiah, & Lambers, 2019; Patrick, Davis, Lehmann, & Cooper, 2015; Petrangelo et al., 2019; Tolia et al., 2015; Winkelman, Villapiano, Kozhimannil, Davis, & Patrick, 2018).

Importantly, SUDs can be safely and effectively treated during pregnancy (National Institute on Drug Abuse, 2021; Substance Abuse and Mental Health Services Administration, 2020) using approaches such as cognitive behavioral therapy or contingency management (Haug, Duffy, & McCaul, 2014; Yonkers et al., 2009). For pregnant people with opioid use disorder (OUD), the standard of care is pharmacologic therapy with methadone or buprenorphine, often in combination with counseling (Jones et al., 2012; Mattick, Breen, Kimber, & Davoli, 2009; Minozzi et al., 2020). People who use drugs report increased motivation to seek drug treatment during pregnancy (Barnett, Knight, Herman, Amarakaran, & Jankowski, 2021; Goodman, Saunders, & Wolff, 2020; Jessup, Humphreys, Brindis, & Lee., 2003; O'Rourke-Suchoff et al., 2020; Ostrach & Leiner, 2019; Wolfson, Schmidt, Stinson, & Poole, 2021). However, nearly one-half of pregnant people with SUDs do not receive treatment (Clemans-Cope, Lynch, Epstein, & Kenney, 2019; Faherty et al., 2021; The Medicaid Outcomes Distributed Research Network, 2021), and only between one-third and one-half of pregnant patients with OUD in public drug treatment programs are treated with clinical guideline-concordant medication (Martin et al., 2015; Short, Hand, MacAfee, Abatemarco, & Terplan, 2018). Additionally, many specialty drug treatment providers do not treat pregnant patients, impeding care access for this group (Patrick et al., 2019; Patrick et al., 2020).

In an attempt to improve drug treatment access for pregnant people, some states have passed laws giving pregnant and postpartum people priority access to public drug treatment facilities, or "priority access laws" (Guttmacher Institute, 2021). These laws prioritize pregnant people over others for available residential or outpatient drug treatment slots. Access to drug treatment during pregnancy improves outcomes for infants and birthing people (Armstrong et al., 2003; Crane et al., 2019; Goler, Armstrong, Taillac, & Osejo, 2008; Gregoire & Schultz, 2001; Lieberman, Taillac, & Goler, 2005; Nishimoto & Roberts, 2001), and research shows that shorter wait times for treatment are associated with a higher likelihood of treatment completion (Albrecht, Lindsay, & Terplan, 2011). However, no studies to date have characterized the implementation of state laws granting pregnant people priority access to drug treatment services. Examining whether and how these laws are implemented is critical to understanding how priority access laws may achieve their intended outcome of enhanced drug treatment access during pregnancy. In addition, studying implementation can identify barriers that states should address to achieve their goals and best practices that could be scaled up in other states.

In addition to priority access laws, some states have enacted punitive laws that deem prenatal drug use to be child maltreatment, require health care providers to report prenatal drug use to child protective services (CPS), and/or criminalize prenatal drug use. Limited available research suggests these laws are associated with decreased drug treatment use among pregnant people (Angelotta, Weiss, Angelotta, & Friedman, 2016; Atkins & Durrance, 2020; Gressler, Shah, & Shaya, 2019; Kozhimannil, Dowd, Ali, Novak, & Chen, 2019). Medical professional organizations including the American Congress of Obstetricians and Gynecologists and the American Medical Association have asserted that these policies deter prenatal care and drug treatment and have the potential to increase neonatal harms (American Academy of Family Physicians, 2019; American College of Obstetricians and Gynecologists, 2011; 2020; American Medical Association, 1990; American Nurses Association, 2017; American Psychiatric Association, 1992; Patrick, Schiff, & Committee On Substance Use and Prevention 2017). In contrast, multiple medical professional and advocacy organizations have endorsed priority access laws (American Academy of Family Physicians, 2019; American College of Obstetricians and Gynecologists, 2011; American Medical Association, 1990; American Nurses Association, 2017; American Psychiatric Association, 1992; March of Dimes, 2014; Patrick et al., 2017). No studies have characterized the interplay of priority access and punitive laws targeting prenatal drug use or created a comprehensive, longitudinal database of these policies among U.S. states.

This study has two objectives. First, we used legal mapping to delineate U.S. state laws giving pregnant people priority access to drug treatment and their coexistence with laws deeming prenatal drug use to be child maltreatment, mandating reporting of prenatal drug use to CPS, and/or criminalizing prenatal drug use. Second, we characterized the implementation of priority access laws through qualitative research with state leaders.

Methods

We conducted comprehensive legal mapping across all 50 U S. states and the District of Columbia to characterize the effective dates and provisions of four key types of state laws related to prenatal drug use: 1) priority access laws, which give pregnant and postpartum people priority access to public drug treatment programs and/or prioritize access for this group by waiving state-specific, general population eligibility requirements (e.g., waiving a state's requirement that individuals have a 1-year history of OUD to be eligible for treatment); 2) child maltreatment laws, which deem prenatal drug use to be child maltreatment; 3) mandatory reporting laws, which require health care providers to report diagnosed or suspected prenatal drug use to CPS; and 4) criminalization laws, which make prenatal drug use a crime. We focused on state laws pertaining to the use of drugs other than alcohol, because state laws related to prenatal alcohol use have been characterized previously (Drabble, Thomas, O'Connor, & Roberts, 2014). Although some state statutes pertain to both alcohol and other drugs, many are specific to one versus the other.

Legal mapping covered the years 1974 (the first year a statute of interest was enacted) to 2019 and was conducted using standard legal research and legislative history techniques (Wagenaar & Scott, 2013) by a single public health lawyer with extensive experience mapping similar types of policy landscapes. This process included full-text searches of the Westlaw legal database and identification of state session laws and regulatory materials using HeinOnline, LexisNexis, and individual state legislature and agency websites. Standard search terms, reported in Appendix A, were developed through an iterative process that incorporated the research team's existing knowledge of state policies and related policy analyses (Guttmacher Institute, 2021; Jarlenski et al., 2017; Thomas et al., 2018). To ensure that these standardized, state-specific searches of state statutes and regulatory material captured all relevant policies, we performed an additional review of each relevant state's code chapters that govern child welfare, substance use treatment, and pregnancy treatment. The documents in those chapters were reviewed to ensure that we captured any documents that our search missed. Implementation

dates were recorded as the date a law went into effect, as described in legislation or elsewhere in state session laws.

As additional checks on validity, we compared our law data with the limited available data published in prior work (Guttmacher Institute, 2021; Jarlenski et al., 2017; Thomas et al., 2018) and verified law information with state leader interviewees. In general, conflicts between our coding and existing sources were rare, but any that arose were resolved through reexamination of policy text, research team discussion, and clarification with qualitative interviewees. As an example, the Guttmacher Institute does not classify Colorado as having a priority access law, but our legal research revealed a regulation that specifically granted pregnant women priority admission to treatment for SUDs (2 CCR 502-1:21.220.4) and qualitative interviewees from Colorado confirmed their awareness of this regulation. Although prior work has described the U.S. state prenatal drug use law landscape at given points in time or provided longitudinal data on a single type of prenatal drug use law (Guttmacher Institute, 2021; Jarlenski et al., 2017; Thomas et al., 2018), our team's data are unique; no other comprehensive, longitudinal databases including policy enactment dates exist for the prenatal drug use policies included in this study.

In the subset of 12 states that passed one or more of the four primary types of state prenatal drug use laws between 2009 and 2019—Alabama, Colorado, Kentucky, Mississippi, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Tennessee, and West Virginia—we conducted interviews with state leaders to characterize law implementation and enforcement. We focused on laws implemented in this period to support our ability to recruit leaders familiar with the initial implementation of their state law. Interviewees were purposively recruited from state agencies legislatively tasked with implementing or enforcing the law of interest. We then asked interviewees to identify additional state leaders with professional expertise related to implementation of the law of interest (snowball sampling). Participants were selected for recruitment if they had a professional role involving the implementation and/or enforcement of the state law of interest.

Semistructured interviews were conducted by a single study team member from November 2019 to November 2020. The interview guide, included in Appendix B, was drafted based on a review of the literature, study team members' expertise on the topic, and specific research questions. The domains of the guide were 1) perceptions of the problem of prenatal drug use in the state; 2) the goals of the state law(s) related to prenatal drug use; 3) implementation of the law(s) of interest; and 4) enforcement of the law(s) of interest. Participants were recruited via email. Interviews were conducted in each state until data saturation was reached, defined as the point when no new themes emerged from interviews and no additional interviewees were recommended for snowball sampling.

Interviews were conducted over the phone and lasted 30–45 minutes. Oral consent was obtained at the beginning of each interview. All interviews were audio-recorded and transcribed for analysis. All transcripts were reviewed and validated using the audio recording and personally identifying information was removed from the transcript. No incentives or rewards were offered to study participants. Transcripts of interviews were analyzed using a hybrid inductive and deductive approach. The development of an initial codebook was informed by the previous literature, the study team's a priori knowledge, and summary memos created by the interviewer after the completion of each interview. The codebook was developed iteratively and piloted by two study team members through blind and independent double coding until the development and organization of themes was consistent across reviewers. The coding and identification of themes and subthemes was completed using NVivo 11. This research was reviewed and approved by the Johns Hopkins Bloomberg School of Public Health Institutional Review Board.

Results

The first state priority access law was implemented in 1990. A total of 33 states and the District of Columbia passed a priority access law designed to facilitate drug treatment access for pregnant and postpartum people by the end of the study period in 2019 (Table 1). Additionally, 40 states and the District of Columbia had enacted at least one of the punitive laws of interest: a child maltreatment law, a mandatory reporting law, or a criminalization law. Among the 34 jurisdictions with a priority access law, 28 (82.3%) also had at least one punitive law in place and six states (17.7%) had a priority access law with no punitive laws in place. See Appendix A for complete legal mapping.

Among the jurisdictions with a priority access law, 12 enacted their law in 2009 or later and were included in the qualitative study sample. A total of 51 leaders were interviewed across these 12 states. Participants represented a broad group of stakeholders knowledgeable on the implementation and enforcement of their state laws, including leaders representing state health departments, CPS, and law enforcement, as well as medical providers and advocates who identified as professional leaders in the prenatal drug use space (Table 2). Most interviewees represented state health departments (41%), the agency that was universally tasked with implementing state priority access laws. Seventy percent of the interview participants were women.

A qualitative analysis yielded four key themes: availability and accessibility of drug treatment services for pregnant people (with three subthemes), stigma toward drug use and OUD medication for pregnant people, lack of state funding for priority access law implementation, and punitive state laws as a barrier to priority access law implementation. These themes are

Table 1
Matrix of Priority Access State Laws and Punitive State Laws Related to Drug Use in Pregnancy as of 2019

State Laws Related to Drug Use in Pregnancy	Punitive State Laws	
	Has at Least 1 Punitive Law in Place	No Punitive Laws
Priority access laws		
Does have a priority access law in place	AL, AZ, AR, CO, DE, DC, FL, GA, IL, IA, KS, KY, ME, MA, MO, NH, NJ, NM, ND, OH, OK, PA, RI, SC, TN, TX, UT, WI ($n = 28$)	MS, NY, OR, VT, WA, WV ($n = 6$)
Does not have a priority access law in place	AK, CA, CT, ID, IN, LA, MD, MI, MN, MT, NV, SD, VA ($n = 13$)	HI, NE, NC, WY ($n = 4$)

Notes: Punitive state laws related to drug use in pregnancy are defined as child maltreatment laws that deem prenatal drug use to be child maltreatment, mandatory reporting laws that require health care providers to report diagnosed or suspected prenatal drug use to child protective services, and laws that make prenatal drug use a crime.

Table 2
Employment Characteristics of Study Participants*

Employment Characteristic	51 Interviewees from 12 States
State Agency Representative	
Health (e.g., Department of Health, Division of Mental Health)	21
Law Enforcement (e.g., District Attorney, Drug Enforcement Commander)	3
Child Protective Services (e.g., Department of Child Safety, Division of Family Services)	8
Office of Drug Control Policy	1
Other Representatives	
Medical Provider	9
Interest Groups (e.g., Perinatal Quality Collaboratives, state March of Dimes chapters)	9

* Study participants were key leaders with professional roles overseeing implementation and enforcement of the law of interest. Job titles cannot be listed owing to confidentiality protections, but examples of the general types of titles held by interviewees include Deputy Commissioner, Program Director, and Medical Director for Substance Use Services.

described in greater detail elsewhere in this article, with illustrative quotes in Table 3.

Availability and Accessibility of Addiction Treatment Services

Lack of treatment availability

State leaders reported that the implementation of state priority access laws was hindered by the lack of drug treatment availability. This factor included treatment services that were technically available but in practice inaccessible owing to geographic distance, failure to accept pregnant patients, unaffordability, or other barriers. Forty-four interviewees from 11 of the 12 total states included in the interview sample reported this theme. An apt summary of this concern was:

> People understand pregnant women should be a priority, and pregnant women are prioritized for treatment. I don't think it solves the problem, in that there still isn't enough substance use treatment, depending on— most probably everywhere in Oregon, but it's worse in different communities. And it might not be the kind of treatment that people want, or it might not be a good fit for the situation. (OR-1)

Family-centered treatment services

Twenty-six interviewees from 9 of the 12 states in the study sample pointed out that their state had increased the volume of family-centered drug treatment services over the past decade, and that these increases—although not a direct result of a priority access law—facilitated priority access law implementation. This included co-locating prenatal care and drug treatment facilities, creating or expanding residential facilities that included childcare and/or allowed patients to bring their children with them, and expanding the wraparound services that address social determinants of health for pregnant people experiencing addiction, such as transportation services and connections to food assistance programs. However, all interviewees who discussed this theme also noted that the demand for family-centered drug treatment services still significantly outpaced supply.

Residential treatment

Interviewees pointed out that concerns around the availability of treatment were compounded by the fact that state institutions, such as CPS or criminal courts, relied heavily (if not solely) on residential treatment to satisfy treatment requirements. Interviewees noted that these requirements existed despite outpatient treatment, not residential treatment, often being the clinically appropriate standard of care for pregnant people with a SUD. Eleven interviewees from six states reported that residential treatment beds are an even scarcer resource than outpatient treatment slots, and often require that a pregnant person leave home for an extended period to receive treatment, generally without bringing their children, which adds additional barriers to the accessibility of those services.

Stigma toward Drug Use and Drug Treatment for Pregnant People

Interviewees noted that stigma toward prenatal drug use and medication for OUD during pregnancy were barriers to the implementation of priority access laws. This theme was noted by 16 interviewees across 7 states, who described stigma as a barrier that exists broadly for pregnant people seeking drug treatment and is exacerbated for those seeking treatment with medication for OUD. Buprenorphine and methadone, both opioid agonists approved by the U.S. Food and Drug Administration, are the standard of care for pregnant people with OUD (American College of Obstetricians and Gynecologists Committee on Obstetric Practice, 2017; Jones et al., 2012; Mattick et al., 2009; Minozzi et al., 2020), but interviewees noted that medication is often stigmatized owing to the incorrect but pervasive idea that these medications replace one addiction with another. Interviewees reported that it was difficult to find providers comfortable working with pregnant patients with OUD. One interviewee noted this challenge at the provider level, stating:

> I feel people are still super nervous about treating pregnant women with SUDs. They literally will kick them out of their buprenorphine clinic when they become pregnant. (WV-3)

Lack of State Funding for Priority Access Law Implementation

Fourteen interviewees across nine states noted that the implementation of their state priority access law was hindered by the fact that the state legislature gave no additional funding for drug treatment programs when enacting the law. One interviewee noted:

> Well, the barrier that always exists is there's never any funding attached to implementation of new laws. And often existing staff is at full capacity, and there's no person or persons charged with actually going out and doing that education and program awareness. (KY-2)

Table 3
Key Themes and Illustrative Study Participant Quotes Regarding State Priority Access Laws ($N = 51$ Interviewees Across 12 States)

Key Theme or Subtheme	Quote
Key Theme: Availability and Accessibility of Addiction Treatment Services	
Subtheme: Lack of Treatment Availability (mentioned by 44 interviewees across 11 states): Interviewees consistently noted the availability of drug treatment services in their state was insufficient to meet demand, which made implementing the priority access law challenging. Limited treatment availability was not specific to pregnant people but hindered their priority access into programs.	"I think for me the priority access, and again, I'm talking more in the postpartum area for women, but my biggest struggle with the priority access is I agree with the priority access, but we still experience limitation of availability of the treatment when needed. And so I have had more challenges along that line and helping women get the treatment that they need. And especially challenging has been the woman who has made progress, but wants treatment to sustain that progress, but some of the limitations on treatment programs— they have to be actively using or things like that, so there's still limitations on the availability for treatment for women who want it. And I've seen the negative consequences of that. So that's been the hardest." – CO-7
Subtheme: Geographic Variation in Implementation owing to Treatment Deserts (mentioned by 43 interviewees across 11 states): Interviewees commonly noted that treatment availability barriers were particularly problematic for pregnant people who need to travel significant distances for daily methadone or be taken out of their community (possibly away from their children) for residential treatment.	"I think in the places where you've got more providers, such as in urban areas versus rural areas, you're going to have more capacity. And I think you just have more people who have a willingness to kind of, maybe try this. Where you've got rural areas, you have very limited providers, and what I've seen is like, they're kind of just— they don't want to go outside of their lane, right? Because they were doing it this way for however long, or where their provider is uncomfortable, and it's the provider they've had for the last 25 years and the one they'll have for the next 20. So, I think that also impacts it as well. Because finding providers is really, really difficult, particularly for rural areas." – NY-4
Subtheme: Increased Access to Family-Centered Treatment Services (mentioned by 26 interviewees across 9 states): Multiple interviewees noted that their state had increased access to family-centered treatment services in recent years, which facilitated implementation of the priority access law. Examples of expanded access included co-locating prenatal care providers with substance use disorder treatment facilities and increasing residential treatment beds that allow pregnant people to bring their children with them. While interviewees perceived this as an important facilitator, they also noted that demand still regularly outpaces supply for these services.	"Up until a year ago we only had two facilities in the state that offered beds for pregnant and parenting women. One of those agencies is up from 14 beds or 16 beds, to 26 beds. Which is huge. And then we have another facility that has opened a pregnant and parenting facility that also contracts an additional 6 or 10 beds, I'm not totally sure. But expanding our beds for pregnant parenting women has helped a great deal. And the fact that they have that priority has helped as well." – MS-6
Subtheme: Organizational Demands for Residential Treatment (mentioned by 11 interviewees across 6 states): Interviewees noted that pregnant people were often required to participate in residential drug treatment to satisfy child welfare or criminal legal system requirements, even in cases when outpatient treatment was clinically recommended. Residential treatment beds are a more limited resource, which increases the likelihood of experiencing wait times or needing to travel outside the community for care.	"I actually think until maybe the last couple of years, we all forgot that it was required as an out-patient provider. I think maybe part of the problem is that it's the influence of the child welfare system, and it is what I think is an antiquated belief why people who don't provide treatment, that residential treatment is the only kind of treatment. So you see this a lot when treatments influenced by external providers like child welfare and criminal justice. The only route to meeting their expectations most often is that person has to go to residential treatment, and so they're making treatment recommendations [that] have nothing to do with need or feasibility. They're saying if you want to meet our expectations and let's say stay out of jail or reunify with their children, you have to go to residential treatment. So if, because residential treatment's a finite resource you only have so many beds, and they only open so often, there is a lot of energy around clamoring for those beds and pointing to those block grants requirements to get people into treatment... It's technically in the rules for our out-patient providers. I see way less emphasis on— or way less energy both in the provider community and the child welfare community that is saying make those priority decisions." – OR-2
Key Theme: Stigma Toward Drug Use and Drug Treatment for Pregnant People (mentioned by 16 interviewees across 7 states): Interviewees noted that stigma against medications for opioid use disorder for pregnant people added another barrier to treatment access. Examples of stigma provided by interviewees included pre-/post-natal care providers being uncomfortable with providing medication for opioid use disorder; providers being uncomfortable serving pregnant patients; and the criminal legal/child welfare system heavily favoring detoxification alone.	"There are some things that are much more subtle than laws that heavily influence access. And so, women can be given access to treatment and for opioid use, the treatment of choice is either methadone or buprenorphine. But many of our pregnant women are involved or become involved with Child Protective Services during the course of their treatment. And in some counties — it varies very widely county by county — there is clear influence. Not, people don't come out and say, 'You need to come off your medicine to get your baby.' But that is the message that women get. And so, that's very confusing for women who desperately, if they've lost custody of their children or if they're at risk for losing custody, they will do whatever it takes even if that means putting their own health at risk. And obviously, that puts their children's health at risk, too. That's like this subtle behind-the-scenes, again, stigma, that influences access and uptake of evidence-based treatment." – WV-3
Key Theme: Lack of State Funding for Priority Access Law Implementation (mentioned by 14 interviewees across 9 states): Interviewees noted that their state's priority access law did not include additional dollars from the state to add treatment capacity, enhance family-centered services, or improve the state's addiction treatment infrastructure.	"I have found, in my career, working as a bureaucrat, that laws get passed but a lot of times, unless it's certain laws like our— well, I'll say even for health licensure laws, they don't get opened up and really detailed out when we find out it's not working, right? So, it's great that we have this law about prioritizing, but can you not take it a step further? And dedicate money to helping that population or, better yet, hold the providers more accountable in the state to give treatment? I just feel like once we get data that shows this is not working how we thought it would, they have to be willing to revisit it and correct it." – WV-4 "I would love to say, 'Yes, they've given us extra money to be able to add beds on,' which we really, really need and want to do — to be able to expand our pregnant population that we're able to treat. But, the federal grants allow us to do everything that we do so the grants definitely help us to pay for treatment for these women and these babies once they're born. And sometimes they choose to stay longer than those six weeks, so the federal grants definitely help with that because we treat such an indigent population in the state." – MS-3

(*continued on next page*)

Table 3 (*continued*)

Key Theme or Subtheme	Quote
Key Theme: Punitive State Laws as a Barrier to Priority Access Law Implementation (mentioned by 13 interviewees across 7 states): Interviewees viewed co-existing punitive state laws as hindering priority access laws by making pregnant people fearful of disclosing their substance use disorder. Additionally, interviewees believed punitive laws made providers reluctant to screen pregnant people for drug use and hindered the patient-provider relationship.	"I wish I could say that it has proactively brought women into recovery. Meaning, 'Oh my gosh, I'm dependent. I'm going to enter recovery before I get pregnant.' No. I think it has not changed anything. But if anything — it has simply driven women who are substance dependent further into the shadows. Additionally, it has, if anything, increased diversion. What do I mean? Women who are opioid or heroin dependent and pregnant, due to primarily fear of criminalization, are finding other people — it may even be someone in their own household — for whom buprenorphine, known as Subutex, is provided and they're using that. They're trying to get themselves into a place of better health, of recovery, and especially of gradually being able to not come to the attention of law enforcement because if, when I'm delivering, my drug test shows buprenorphine only, I'm more likely to not have DHR take my baby away. They also know that the outcome for infants are better with buprenorphine alone, but there's the fear of if I enter recovery of my own accord, they might lock me up or turn me in." – AL-3 "I think that the implementation was kind of like a de facto fear inducement, and people went underground as much as they possibly could, which is sort of what we had predicted might happen. It was the opposite of what we were hoping—what anybody would hope for is that more people would go into treatment. And I think the goal of the legislation in addition to 'being able to help the poor children who are wandering the streets' was to induce more people to seek treatment so that they could rebut the presumption of harm. But it kind of had the opposite effect of making people afraid to disclose that they needed treatment." – NH-1

Punitive State Laws as a Barrier to Priority Access Law Implementation

The final key theme noted by interviewees was the challenge of implementing priority access laws when the state had coexisting punitive prenatal drug use laws. Thirteen interviewees from seven states noted that state laws deeming prenatal drug use to be child maltreatment, mandating reporting of prenatal drug use to CPS, or criminalizing prenatal drug use impeded treatment seeking and hindered the therapeutic relationship between pregnant people and their providers. Interviewees also perceived that these punitive laws increased the likelihood that a pregnant person would be legally required to go to residential treatment to avoid civil or criminal punishment, regardless of the availability or clinical appropriateness of such treatment. Interviewees also noted that the presence of punitive laws might influence providers' screening behaviors:

> We have a lot of providers that do not want to get engaged even though they are mandatory reporters. They will not test unless the baby is showing active signs of NAS because of the fact that, then they would have to report [to CPS] and they know the laws exist in this case. (AL-1)

Discussion

In 2019, two-thirds of U.S. states had a law granting pregnant and postpartum people priority access to drug treatment services. Most states with a priority access law also had a law deeming prenatal drug use to be child maltreatment, a law requiring health care providers to report prenatal drug use to CPS, and/or a law criminalizing prenatal drug use. Consistent with prior work, our legal mapping shows that state prenatal drug use laws have become increasingly punitive over the past two decades (Faherty, Heins, S., Kranz, Patrick, & Stein, 2021; Guttmacher Institute, 2021; Roberts, Thomas, Treffers, & Drabble, 2017; Roberts, Thompson, & Taylor, 2021; Thomas et al., 2018). State leaders responsible for priority access law implementation perceived limited treatment availability, stigma, and lack of funding as key implementation barriers. Overall, our results suggest that state laws granting pregnant and postpartum people priority access to drug treatment may have limited reach, given the substantial implementation challenges.

The most frequently reported barrier to implementing state priority access laws was the lack of accessible and appropriate drug treatment services. Only 15% of publicly funded drug treatment facilities in the United States offer services tailored to pregnant people, and the proportion of drug treatment admissions attributable to pregnant people has remained nearly unchanged at 4% for the past 25 years (Kozhimannil et al., 2019; Martin et al., 2015; Terplan, Longinaker, & Appel, 2015). Despite clinical guidelines recommending methadone or buprenorphine to treat OUD during pregnancy (American College of Obstetricians and Gynecologists Committee on Obstetric Practice, 2017; Jones et al., 2012; Mattick et al., 2009; Minozzi et al., 2020), most publicly funded drug treatment programs do not offer these medications for pregnant people with OUD (Abraham, Andrews, Harris, & Friedmann, 2020; Angelotta et al., 2016; Krans, Kim, James, Kelley, & Jarlenski, 2019; Mojtabai, Mauro, Wall, Barry, & Olfson, 2019). There is pervasive interventional stigma against these OUD medications, which are inaccurately viewed by many as "trading one drug for another" (Barry et al., 2016; Barry, McGinty, Pescosolido, & Goldman, 2014; Kennedy-Hendricks et al., 2017; Madden, 2019; National Academies of Sciences Engineering Medicine, 2019; Olsen & Sharfstein, 2014; Volkow, Frieden, Hyde, & Cha, 2014). Our findings are consistent with other studies showing that stigmatizing attitudes are amplified toward pregnant people with SUDs, and toward pregnant people using medication to treat OUD (Atwood et al., 2016; Gartner et al., 2018; Whittaker et al., 2019). Given the degree to which stigma impedes evidence-based drug treatment, dissemination of evidence-based stigma reduction interventions should be a priority

(McGinty & Barry, 2020; Weber, Miskle, Lynch, Arndt, & Acion, 2021).

We found that, of the 34 states with priority access laws adopted between 2009 and 2019, 28 also had 1 or more coexisting punitive law regarding prenatal drug use. Only one quantitative study has examined the relationship between priority access laws and drug treatment access, finding no correlation between the presence of these laws in 16 states and drug treatment admissions among pregnant people (Kozhimannil et al., 2019). A small body of quantitative research suggests that laws designed to deter prenatal drug use, including the punitive state laws of interest in the present study, may lead pregnant people with SUDs to avoid prenatal care or drug treatment, decrease the likelihood that a pregnant person with OUD will receive medication treatment, and have limited to no effect on neonatal withdrawal syndrome or maternal narcotic exposure (Angelotta et al., 2016; Atkins & Durrance, 2020; Faherty et al., 2021; Faherty et al., 2019; Kozhimannil et al., 2019; Roberts & Pies, 2011). Rigorous quantitative research using quasiexperimental designs is needed to better understand the effects of state prenatal drug use laws on drug use, drug screening and treatment, and maternal and child health outcomes. The longitudinal state law database developed in this study could support this type of research.

Limitations

This study should be considered in the context of several limitations. First, although we sought to be comprehensive in our legal mapping, it is possible that a state policy was unintentionally omitted. We minimized this risk by comparing our results to other data sources and discussing our coding with state interviewees. Second, interviews may have been subject to response bias owing to self-selection of individuals willing to participate, or social desirability bias stemming from interviewees' desire to present their state in a positive light. To minimize these concerns, the informed consent process included confidentiality assurances and interviews were conducted with multiple leaders, representing diverse organizations, within each state. Last, qualitative research may also be subject to researchers' biases. To mitigate this concern, we used a common interview guide and structured coding process.

Implications for Practice and/or Policy

Study findings highlight the importance of allocating additional resources to drug treatment programs tailored to the needs of pregnant and postpartum people. In addition, results suggest that state prenatal drug use laws may counteract priority access laws by impeding treatment seeking.

Conclusions

Our study identified multiple barriers to the implementation of state laws granting pregnant and postpartum people priority access to drug treatment programs, including a lack of available and accessible treatment, stigma, and the presence of conflicting state laws imposing punitive responses to prenatal drug use. These findings suggest that state priority access laws are likely insufficient to significantly increase access to evidence-based drug treatment for pregnant and postpartum people. Our results point to a need for significant allocation of financial resources to increase access to evidence-based drug treatment tailored to pregnant and postpartum people and reform of punitive prenatal drug use laws, which may impede treatment seeking.

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Supplementary Data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.whi.2022.09.001.

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