Autonomous Well-Being

Increasing Access to Contraception Among People Who Use Drugs

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Disclaimer

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

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Honor Code Statement

On my honor as a student, I have neither given nor received unauthorized aid on this assignment.

Key Terms

People who use drugs (PWUD): People who use substances of any kind. This analysis focuses on people at risk for stigma and criminalization for their substance use, including those who use illicit substances, people of color or low-income people who use substances, people who use substances who are experiencing homelessness, or others.

Contraception: The use of tools or methods to prevent pregnancy (*Eunice Kennedy Shriver National Institute of Child Health and Human Development - NICHD*, n.d.).

Contraceptives: Tools through which one can prevent pregnancy (*Birth Control*, n.d.).

Assigned female at birth (AFAB): Individuals assigned female sex at birth, typically based on an infant's external anatomy. AFAB individuals may have a uterus and be capable of pregnancy, though this is not always the case (*LGBTQ+ Inclusion*, n.d.).

Long-acting reversible contraception (LARC): Highly effective contraceptive methods that act for long periods of time. LARCs include intrauterine devices, implants, and shots (Itriyeva, 2018; *LARC (Long-Acting Reversible Contraceptive)*, 2022).

Intrauterine device (IUD): A contraceptive device that remains in the uterus for up to several years (*IUD Birth Control | Info About Mirena & Paragard IUDs*, n.d.).

Substance use disorder (SUD): A mental health disorder that leads to a person's inability to control their use of substances. This diagnosis is made by a medical professional. This label may not reflect the experiences of PWUD, and stigmatizing medical personnel may apply this diagnosis without regard to the impact of substance use on a person's life (*Substance Use and Co-Occurring Mental Disorders - National Institute of Mental Health (NIMH)*, n.d.).

Clinic: In this context, any organization that may implement solutions, including reproductive health offices, substance use resource centers, treatment clinics, or local health departments.

Guiding Values

Harm reduction: Practices that aim to minimize negative effects associated with drug use and drug-related policies. Harm reduction programs work without judgement, discrimination, or requiring that people stop using drugs (*What Is Harm Reduction? - Harm Reduction International*, n.d.).

Person-centered care: Health care that is responsive to individuals and their goals, values, and preferences. Patients and providers work to make effective care plans and patient-provider communication is prioritized (*Person-Centered Care | CMS*, 2023).

Reproductive autonomy: The power to make and act on decisions about reproduction (*The Constitutional Right to Reproductive Autonomy*, 2022).

Gender inclusivity: Advocacy and language that is inclusive of all gender identities. This analysis uses gender neutral language to reflect a range of bodies and gender identities.

00 Executive Summary

People who use drugs (PWUD) face compounded barriers to accessing contraception, leading to 48.93 percent unmet need in this population (Appendix B). PWUD often hold multiple marginalized identities and have been adversely impacted by punitive state and federal policy seeking to punish drug use and restrict access to contraception.

Access to contraception promotes reproductive autonomy. PWUD, like the general population, deserve the right to decide if, when, and how to have children, without barriers to healthcare or coercion to make a particular decision. When attempting to increase access to contraception among PWUD, implementers should avoid coercing PWUD to take up a particular method of contraception or to initiate contraception at all. PWUD have many legitimate reasons for refusing contraception, and initiatives should focus on making a range of methods available and helping individuals give informed consent when they desire contraception.

This report explores barriers to accessing contraception faced by PWUD and offers recommendations to ameliorate these challenges. It overviews the problem, applicability, and limitations of the project, and describes prior research in the field. It considers three alternatives: co-locating contraceptive services with substance use resources, offering patient navigation in contraceptive clinics, and establishing contraceptive-providing mobile medical units. Each alternative is evaluated for its ability to reduce unmet need for contraception, feasibility, flat cost to implementers, and cost-effectiveness.

Mobile medical units (MMUs) emerge as a national recommendation after rigorous evaluation. MMUs are projected to reduce unmet need among PWUD by 24.27 percentage points (Appendix B), by far the most effective alternative by this metric. This alternative is feasible in the current federal policy climate compared to other prominent alternatives. Implementers should work with local PWUD, community members, and substance use resource centers to develop a mobile route to bring contraception to local PWUD. The unit should offer contraceptive counseling, a wide range of contraceptive methods, and provide services at minimal cost to patients. Contraceptive-providing mobile medical units will break down barriers and bring care directly to those who need it.

Implementers may wish to conduct independent analysis of alternatives. Clinics should consider whether local drug policy favors punitive or harm reductionist methods, and the availability of funding for contraception in their area. Most importantly, clinics should consider the preferences of local PWUD.

01 Introduction

Introduction

Nearly half of people who use drugs (PWUD) have an unmet need for contraception (Appendix B). PWUD face criminalization and stigma, leading to compounded barriers preventing this unique population from accessing desired care. Too often, PWUD also face coercion and stigma from providers who pressure them to take up long-term or permanent contraception, rather than providing opportunities for informed, autonomous decision-making. This atmosphere of criminalization, stigma, and coercion reduces the ability of PWUD to make autonomous decisions about their reproduction.

PWUD come from all walks of life and use drugs across a range of substances, methods, and habits, but share key barriers to access with other marginalized groups, including racial and ethnic minorities, LGBTQ+ individuals, and youth. By increasing access to contraception among PWUD, advocates can reduce barriers and increase access among other key populations.

Problem Statement

While up to eighty-five percent of people who use drugs and have the capacity to become pregnant want to avoid pregnancy (Stancil et al., 2021), only fifty percent of sexually active individuals in this population used a contraceptive method at last vaginal sex (Shelton et al., 2022). People who use drugs face compounded barriers to accessing contraception, including cost, transportation, criminalization, and stigma. Too few people who use drugs and have the capacity for pregnancy are able to access needed contraception to exercise reproductive autonomy.

Background

Accessing Contraception

Discussion of contraception must include all four categories: hormonal, barrier, behavioral, and surgical (Appendix A). Individuals have a wide range of preferences, budgets, and concerns. Autonomous reproductive healthcare requires free access to and knowledge of all methods of contraception, and patients must have the ability to choose their preferred method, regardless of what healthcare providers consider optimal.

Private insurance provides access to contraception, though choice may be limited. The Health Resources and Services Administration's (HRSA) 2019 guidelines require private insurers to cover at least one contraceptive in each of their 18 categories (Robertson & Braman, 2023; *Women's Preventive Services Guidelines | HRSA*, n.d.). The Title X family planning program subsidizes reproductive and family planning services including contraception through participating clinics (*Title X Service Grants | HHS Office of Population Affairs*, n.d.). Title X service grants are funded by the Department of Health and Human Services' Office of Population Affairs. Under the first Trump administration, the Title X Final

Rule, otherwise known as the domestic gag rule, prohibited Title X recipients from receiving federal funds if they spoke about, provided, or gave referrals for abortion care (Dawson, 2020). A quarter of providers left the network in response (Dawson, 2020).

Medicaid is the nation's largest public provider of family planning services (Ranji et al., 2019), and states are required to fund family planning under Medicaid (*Medicaid Covers Family Planning Services | Medicaid*, n.d.). However, coverage varies by state (*Contraception in Medicaid: Improving Maternal and Infant Health | Medicaid*, n.d.). For example, Iowa stopped participating in Medicaid family planning services in 2017, leaving 15,000 patients without a provider (Frohwirth et al., 2022). Beyond financial assistance, Medicaid provides limited transportation assistance for healthcare visits (*Transportation Services*, n.d.). Recipients can call ahead to schedule pickup and drop-off from a medical appointment, and those with children must provide their own car seats.

Barriers

PWUD and other minoritized groups face barriers to accessing contraception. Solutions should eliminate cost burdens, eliminate transportation barriers, reduce stigma, protect PWUD from criminalization, and educate patients about contraceptive methods.

> "For people in substance use, the problem of equity in contraceptive access can't be disentangled from the problem of equity in literally everything else in their life."
>
> - Joelle Puccio, Director of Education, Academy of Perinatal Harm Reduction

Cost is a major barrier to contraceptive access among PWUD (Frohwirth et al., 2022). Drug use is more common among low-income communities and is linked to inconsistent employment (Albright et al., 2022). Unstable employment leads to insurance plan churn and lower continuous use of contraception, as different plans may cover different brands of contraception, creating opportunities for gaps in coverage (Frohwirth et al., 2022). Some insurers restrict the number of provider visits or prescription refills that patients can receive, which may conflict with provider requirements and cause patients to discontinue care. For those without private insurance, cost barriers may be even higher and may vary by location. People without Medicaid or Title X-subsidized funds are less likely to receive cost assistance for contraception.

Without consistent access to transportation, individuals may struggle to attend contraceptive visits. People researchers identified as women using opioids cited difficulty gaining access to transportation, particularly stemming from high costs (Stancil et al., 2021). Providers that require in-person visits for pelvic exams or blood pressure checks for contraception may be out of reach for low-income patients (Hurtado et al., 2022). Patients may also struggle to travel to pharmacies to fill their prescriptions (Hurtado et al., 2022).

Drug use is heavily stigmatized. Both direct stigma (actively perpetuated by providers) and perceived stigma (fears and expectations of stigmatizing behaviors) create barriers to access (McCartin et al., 2022). A study of people assigned female at birth (AFAB) in drug use treatment asked individuals to self-assess direct stigma on a scale between 0 and 2. For a 1 unit increase in direct stigma, patients faced a fourfold decrease in their ability to access contraception (McCartin et al., 2022). Higher perceived stigma was also associated with a

decreased likelihood of being able to access contraception (McCartin et al., 2022). A culture of direct and perceived stigma around substance use prevents PWUD from seeking and receiving care.

In the United States, drug use has been treated as a criminal justice problem and PWUD often fear punitive law enforcement, deterring interactions with healthcare rather than deterring illicit substance use. Parents who use drugs may face jail time and loss of child custody (Hurley et al., 2023; Shelton et al., 2022), and studies indicate that parents who use drugs may avoid seeking prenatal care because they fear criminalization (McCartin et al., 2022). Twenty-five percent of AFAB people in prison for substance use in Tennessee had a child born in custody, and 21 percent had a child who was born drug-dependent (McNeely et al., 2019). These outcomes have negative psychosocial ramifications for parents, and PWUD may avoid seeking contraception to avoid revealing their drug use to providers who may report them to authorities.

> "I often think about stigma, and I think that we cannot overlook that in people who use drugs, especially for people who have the capacity to get pregnant. This is becoming more and more true as state policy is working to both criminalize people who use drugs and peoples' reproductive outcomes, and in this group they are being targeted for criminalization in multiple ways."
>
> - Anna Brown, Deputy Director of Programs, Nurses for Sexual and Reproductive Health

PWUD often lack necessary information to make autonomous choices about contraception (Charron et al., 2021). People in outpatient recovery facilities scored lower on contraceptive knowledge than the general population. The greatest disparities in knowledge had to do with IUDs, emergency contraception, and awareness of fertility (Melbostad et al., 2020). PWUD often inaccurately believe that their drug use has compromised their fertility, or that they cannot get pregnant if their period has stopped (Olsen et al., 2014). Accurate, comprehensive information about contraception allows individuals to make informed and autonomous decisions about their reproduction. Education must be incorporated into any potential solution.

Client Overview

The Guttmacher Institute's work spans research and policy, aiming to advance sexual and reproductive health and rights (SRHR) domestically and worldwide. They conduct original research and participate in evidence-grounded advocacy and communications efforts (*About | Guttmacher Institute*, 2015). Their work is often referenced in advocacy by other organizations.

The Guttmacher Institute views SRHR as a holistic concern, encompassing a person's right to make decisions about their body in an environment free of discrimination, stigma, and coercion (Starrs et al., 2018). They highly value person-centered care, reproductive autonomy, and equitable reproductive health outcomes. They prioritize policy recommendations that center the needs of those most impacted by systems of oppression and health inequities, respect individual preferences, and work to break down systemic barriers to care (Starrs et al., 2018). They view reproductive health choices as belonging to

the individual, with providers and advocates positioned to provide tools for autonomous decision-making (Starrs et al., 2018).

A core part of Guttmacher's mission is ensuring equitable access to reproductive healthcare, including abortion and contraception, across marginalized populations. They are particularly interested in inequities faced by people of color, LGBTQ+ people, those with low incomes, adolescents, immigrants, and people with disabilities (Fuentes, 2023). They are interested in expanding their work to PWUD, and PWUD commonly share one or more of the aforementioned identities. Guttmacher's work around contraception generally focuses on the right to contraception, evaluating effects of restrictive policies, and advocating for proactive policies to expand access.

Applicability

All populations face some barriers to accessing contraception, particularly in light of restrictive laws. However, marginalized populations face compounded barriers to access. Solutions that aid an extremely marginalized group such as PWUD are likely also effective in increasing access to contraception among the less marginalized. PWUD are systematically stigmatized and often hold other marginalized identities, and marginalized groups tend to face similar barriers.

LGBTQ+ individuals, racial and ethnic minorities, and low-income individuals are more likely to use drugs, and this effect is compounded for those with intersectional identities (Freitag et al., 2021). Sexual orientation minorities are more likely than heterosexuals to use drugs and have their drug use be classified as disordered. These associations are stronger for racial and ethnic minorities. For example, Black bisexuals are over three times as likely as heterosexuals to meet the criteria for tobacco use disorder, compared to non-Hispanic white bisexuals who are nearly twice as likely as heterosexuals to meet these criteria (Freitag et al., 2021). Socioeconomic challenges, such as experiencing homelessness, food insecurity, poverty, lower rates of high school graduation, and lower income are all associated with higher rates of drug use (Albright et al., 2022).

Diverse marginalized groups also often share barriers to contraceptive access with PWUD. Cost is a major barrier to reproductive healthcare for people of color, as is stigma and bias (Sutton et al., 2021). Stigma and a lack of social support also presents barriers to healthcare access for LGBTQ+ individuals (Newcomb et al., 2020). Alternatives that address barriers faced by PWUD are likely to address barriers for many marginalized groups.

This project provides evidence-based recommendations to help PWUD access contraception. These recommendations are implementable anywhere across the U.S. at the local or clinic level. While the Guttmacher Institute will not directly implement these recommendations, this project may form the basis for future research, advocacy, and communication with state and local governments. Finally, this project expands the scope of Guttmacher's work on contraception by going beyond restrictive policy to investigate specific barriers and evaluate policy solutions.

Limitations

This project is limited in several key ways. First, by focusing on AFAB people, this analysis places the onus for reproductive decision-making on people with the capacity for pregnancy. While people without capacity for pregnancy should be involved and educated about reproductive decision-making, most modern contraceptive methods are used by people with uteri. Alternatives that increase access to contraception will therefore mainly address those with the capacity for pregnancy.

Second, PWUD are an under-studied group, particularly regarding reproductive healthcare. Research tends to focus on those diagnosed with substance use disorders rather than PWUD as a whole. Recommendations may change with more robust data.

Finally, the scope of analysis presents both opportunities and limitations. The national view allows for recommendations that can be applied anywhere in the country. However, different states and localities approach contraceptive care and drug use differently, meaning that what is best for one locality may not be best for another. To address this variation, evaluation tools are provided for clinics to conduct their own assessment of alternatives.

02 Literature Review

Introduction

Approaches to increasing access to contraception among PWUD have changed over time. While harm reduction and personal autonomy are widely practiced in the field today, solutions in the past have focused on reducing the birthrate among PWUD or using access to contraception as a tool to reduce drug use. These motivations deprioritize the desires of PWUD, stigmatize reproduction among those who use drugs, and incentivize coercive practices. The following review overviews solutions that have been studied and practiced over time, though not all align with the values of this project.

Providing Monetary Incentives for Attendance at Reproductive Healthcare Visits

Drug use treatment facilities have traditionally used monetary incentives, such as cash payments or vouchers for essential goods, to promote desired outcomes. Such outcomes include abstinence from drug use, treatment attendance, and medication compliance (Lussier et al., 2006). A meta-analysis of 63 studies between 1991 and 2004 found strong effects across randomized controlled trial (RCT) studies of vouchers and other monetary incentives on abstinence from drug use, and small to medium effect sizes on other outcomes including treatment attendance and compliance (Lussier et al., 2006). Bigger incentives and immediate delivery of a voucher upon completing a goal were associated with larger effect sizes, as was a greater monetary value of the incentive (Lussier et al., 2006). This study is nearly 20 years old, and the field has since largely moved away from potentially coercive practices such as these.

A 2016 RCT found that offering vouchers for attending contraceptive counseling visits reduced pregnancies by 20 percentage points, and those who received vouchers attended 95% of appointments (Heil et al., 2016). Patients at a Vermont opioid use treatment program were randomly assigned to receive contraceptive counseling and prescriptions. Those in the usual care condition received information about contraceptives, condoms, and emergency contraception. Patients in the experimental condition were offered increasingly valuable vouchers for attendance at each follow-up visit after being prescribed contraception.

There is strong evidence to suggest that monetary incentives would be effective in increasing uptake of contraception through encouraging patients to attend reproductive health appointments. Though the main body of evidence is older, barriers that PWUD face have not changed much over time, so results are likely still applicable today. However, offering monetary incentives for takeup of contraception is in direct opposition to person-centered, noncoercive care. Particularly for those facing financial pressures, offering

> "People who use drugs are just like the rest of us, and that means a lot of them want to have children. It's important not to assume everybody who is using substances, or even who is in chaotic use doesn't want to get pregnant."
>
> - Joelle Puccio, Director of Education, Academy of Perinatal Harm Reduction

money might coerce an individual to make a reproductive choice that they would not make under ideal circumstances. Monetary incentives are a poor alternative to increase autonomy and access to contraception.

Integrating Contraceptive Services with Criminal Justice Procedures

Drug use is increasingly criminalized in the United States, and the AFAB prison population is growing. The number of people incarcerated in assigned-female facilities tripled between 2005 and 2015 (Schonberg et al., 2015). Some advocates have suggested that criminal justice procedures may present a way to reach those who are most stigmatized by the legal system.

Between 2014 and 2017, the East Region Tennessee Department of Health (TDH) partnered with county jails in Appalachian Tennessee to provide LARCs to AFAB people, many of whom were incarcerated on drug-related charges. TDH representatives offered contraceptive education, counseling sessions, and voluntary LARC placement (McNeely et al., 2019). Post-program interviews through convenience sampling indicated that recipients viewed the program as voluntary and acceptable, and that participants retained contraceptive knowledge (McNeely et al., 2019). These results may not be generalizable. Only 18 participants were interviewed, so evidence for patient centering is not strong.

A 2015 survey of prisoners at Rikers Island in New York found that 60-78% of incarcerated AFAB people expressed interest in starting birth control while incarcerated or soon after their release, and that many viewed prescription of birth control in jail as an opportunity to get a head start on life after incarceration (Schonberg et al., 2015). However, this survey was conducted through a convenience sample, and may not be generalizable to the broader population of incarcerated PWUD.

Integrating contraceptive services with criminal justice procedures has been critiqued for coercive practices. Sufrin et al. argue that providing a limited selection of contraceptive methods (such as only offering LARCs) and withholding substance use treatment (common practice in carceral settings) fails to center patients. The power dynamic between free and incarcerated people might create pressure for incarcerated people to take up contraception (Sufrin et al., 2019). Additionally, the generalization of these data to all PWUD assumes that PWUD are broadly similar to the general incarcerated population. Finally, advocates express concern that cooperating with law enforcement legitimizes and enables the criminalization of PWUD (M. Francis, personal communication, October 17, 2024).

Educating Clinicians to Reduce Stigmatizing Behavior

Stigma is a primary barrier to contraceptive access among PWUD, disincentivizing individuals from seeking healthcare (McCartin et al., 2022). PWUD report that providers question their healthcare choices because of their drug use, use offensive language, or even take action to criminalize them. Providers may assume that PWUD are unfit to become

parents and pressure patients to take up contraception (Olsen et al., 2014). Providers may also pressure patients to use a particular kind of contraception, such as LARCs, because of preconceived notions about what is best for a patient. These negative experiences dissuade PWUD from seeking care. Advocates frequently call for educating clinicians to reduce stigmatizing behavior, but evidence is limited (Horvath & Kottke, 2023).

A 2023 paper examined a half-day workshop aiming to reduce stigmatizing attitudes about PWUD among contraceptive providers. The workshop was designed by workshop facilitators and community members who use drugs (Wingo et al., 2023). Programming included personal storytelling and interactive anti-bias training (Wingo et al., 2023). Researchers used purposive sampling to invite providers to participate, but participation was voluntary. Self-assessment questionnaires given immediately and one month after the workshop showed that sixty-six percent of providers reported an increased awareness of personal bias (Wingo et al., 2023). Additionally, interviews revealed anecdotal evidence of providers incorporating knowledge of bias in their approaches to care.

> "There's a lot of stigma around being pregnant and using. I've not ever met a woman who woke up one day and said 'I'm going to be pregnant and I'm going to be using heroin today.' It just doesn't happen that way. That aspect makes it a lot more difficult for them to seek care, because they are shamed enough in the community, but the thought of walking into our building and admitting 'I'm pregnant and I'm using,' that aspect has a huge impact on their mental health."
>
> - Jody Hoard, Project Link Program Manager, Region Ten

While this study provides encouraging evidence for clinician education, little additional evidence is available about the impact of anti-bias training on actual bias. Further, the changes in attitude and behavior were self-assessed by providers and subject to personal bias. Attitudes were only assessed in the short term, so these effects may not hold in the long term. Studies have found that racial bias training increases providers' awareness of bias, but does not actually change provider behavior unless the training teaches providers concrete skills (Fung et al., 2012). Clinician education may be a strong alternative in the future, but further study is needed.

Co-Locating Contraceptive Services and Substance Use Resources

Advocates for contraceptive access for PWUD frequently call for co-locating contraceptive services with existing substance use treatment programs (Melbostad et al., 2020; Stone et al., 2020). Patients also indicate that they desire co-located services. A cross-sectional survey of four treatment sites in Baltimore found that eighty-three percent of AFAB respondents said they would use family planning services if available on-site (Terplan et al., 2016).

While desired by both patients and providers, evidence for co-location is mixed. A 2018 retrospective cohort study found that enrollment in a recovery program that offered contraception on-site was associated with higher rates of postpartum visit attendance and

postpartum LARC takeup compared to a program that did not offer contraception on-site (Krans et al., 2018). There were no significant demographic differences between comparison groups. Offering contraception via a location that is already frequented by PWUD may create more opportunities for those who wish to access contraception.

In contrast, a 2019 retrospective cohort study found no significant difference in contraceptive takeup or access to a preferred method of contraception between those who received treatment at a co-located versus standard facility (Collier et al., 2019). This discrepancy in findings could reflect pressure by providers in the 2018 study to take up LARCs, or could reflect that co-located services are most effective when they prioritize patient centered-care. Any co-located services should be free from coercion or judgement by providers and center patient preferences and goals.

Employing Patient Navigators

Patient navigation originated in cancer treatment centers in the 1990s to reduce health disparities faced by low-income Black women (Schechter et al., 2024). Navigation has since been applied across medical fields with similar goals, including in reproductive healthcare.

A large volume of literature shows patient navigation's ability to improve access to reproductive healthcare across marginalized groups, including PWUD. A quasi-experimental study of a patient navigation program in a health clinic serving AFAB patients found that those who received navigation had greater uptake of contraception and attended visits more frequently (Yee et al., 2017). Patients were compared in the year before and the year after the program was implemented. No other intentional changes occurred at the clinic during this period. While this study lacks the rigor of an RCT, selection bias is unlikely as patients did not self-select into treatment groups. No significant differences were found between the groups on any demographic measure.

A 2015 literature review of patient navigation for PWUD in HIV treatment found that peer-led patient navigation was associated with an increase in the proportion of people tested for HIV and linked to care (Risher et al., 2015). Survey data from people who inject drugs (PWID) receiving HIV medication described a successful navigation program. Navigation for PWUD tends to be the most effective when the navigator is viewed as a peer. Recipients shared that in-person education from a fellow PWUD or a trusted navigator made them more likely to trust the information (Bazzi et al., 2022). The clinic navigator was able to meet people in-person and offer reminders about upcoming appointments and doses of medication, improving adherence to treatment (Bazzi et al., 2022).

Establishing Contraceptive-Providing Mobile Medical Units

Mobile medical units (MMUs) serve populations that have difficulty accessing traditional healthcare due to transportation, cost, stigma, or other barriers. MMUs have been used in syringe exchanges and other interventions for PWUD.

A scoping literature review of mobile needle and syringe programs found that MMUs reduce the fear of stigma for PWUD (Strike & Miskovic, 2018). Generally, MMUs for PWUD are recognizable to potential patients, but were found to be anonymous to neighbors, businesses, and law enforcement (Strike & Miskovic, 2018). Due to their mobile nature, MMUs may also decrease fears of criminalization as they are not a fixed location that can easily be targeted by law enforcement. Additionally, literature concurred that people with the highest risk injection drug use behaviors used the mobile programs at the highest rates, indicating that MMUs may be able to reach people with the highest need (Strike & Miskovic, 2018).

A quasi-experimental study of an MMU offered education and contraception to people in recovery centers using an interrupted time series design (Hurley et al., 2023). Before the intervention, usual care was enhanced with education about contraceptive options but contraception was not provided. After intervention, patients had the option to see a reproductive health provider and obtain contraception through the MMU . To avoid withholding needed healthcare, both the intervention and control condition were offered to the same set of participants at different times. Patients were ten times as likely to be using contraception after the intervention and self-identified as more confident in their ability to prevent pregnancy (Hurley et al., 2023).

A 2012 quasi-experimental study of reproductive health services in needle exchange vans for exotic dancers in Baltimore found that sixty-five percent of the van visits after the intervention provided contraception (Moore et al., 2012). Potential AFAB clients were purposively recruited from exotic dancing clubs, from the existing needle exchange program, or from the street (Moore et al., 2012). This strategy may have led to bias. Those who chose to seek care from the MMU may have already been inclined to seek contraception through a mobile program, while those who did not participate may have found the program unacceptable. Overall, evidence for MMUs is abundant, and literature agrees on the effects of MMUs. Study design tends to be less rigorous than an RCT, but consistent findings make evidence for MMUs strong.

03 Alternatives and Criteria

Alternatives

Co-location, patient navigation, and mobile medical units are evaluated for implementation. These alternatives minimize risks of provider coercion compared to other interventions, have a relatively strong evidence base, and address multiple barriers identified in the introduction. Contraceptive education and cost barrier elimination are integrated into each alternative to promote reproductive autonomy.

Co-Locate Contraceptive Services and Substance Use Resources

Providers at existing substance use resource centers may expand their practice to provide contraceptive services, known as "co-location (Stone et al., 2020)." Resource centers may be treatment centers, recovery centers, supervised injection sites, or other sites that provide resources specifically tailored to PWUD. Such sites may be medical or non-medical in nature and are hereafter referred to as "clinics."

Patients are introduced to clinics through self-referrals, referrals through social networks, other medical services, government operations, or the legal system (J. Hoard, personal communication, October 9, 2024). During a patient's initial visit, clinic staff should offer the opportunity to receive contraceptive counseling and provision. If a patient consents to counseling, a trained educator should teach the patient about hormonal, barrier, surgical, and behavioral methods of contraception. Staff should take care to present each option as equally valid and emphasize the patient's choice in selecting a method, while providing factual information about the relative efficacy and potential side effects of each method.

After counseling, patients should have the opportunity to request contraception. Clinics should provide contraception at low or no cost, while providing as many methods as possible to promote autonomy (Horvath & Kottke, 2023). If this is infeasible, clinics should prioritize offering oral hormonal contraceptives, LARCS such as IUDs and arm implants, and external condoms. After permanent sterilization, these are the three most commonly used methods of contraception in the United States (Daniels & Abma, 2020). It is unlikely that substance use clinics will have the resources necessary to provide sterilization, so clinics should provide referrals when patients prefer that method (Owens et al., 2020). Providing this range of methods will promote access to a patient's preferred method, thereby respecting autonomous decision-making.

Medical professionals employed by the clinic, such as physicians and nurse practitioners, should be responsible for prescribing contraception (Gupta, 2024). If necessary, a clinician with a background in reproductive health should be hired for this purpose. Non-clinical staff members should be trained to provide contraceptive counseling (Stone et al., 2020). Clinics may choose to allocate space in the existing center to provide contraceptive services. If space is limited, clinics may choose to provide contraceptive services on a rotating basis, providing counseling every day but designating specific rooms to be used for prescription and provision during certain times (Owens et al., 2020).

To fund services, clinics may apply to become Title X recipients. Clinics can also provide Medicaid-funded services to low-income patients. Medicaid eligibility varies by state, and states have discretion over quantity limits, age restrictions, generic medication requirements, and preferred drug lists (Ranji et al., 2019). However, states generally have

few restrictions on IUDs and implants (Ranji et al., 2019). Patients must meet Medicaid's income threshold, residency, immigration status, and citizenship requirements (*Provider Requirements | CMS*, 2016).

Several distributors offer free bulk contraception to nonprofit organizations. SIRUM and Julie offer donation programs to provide emergency contraception to nonprofit partners (*Special Initiative: Emergency Contraceptive Access*, n.d.; *Julie for All*, n.d.). State health departments such as the Virginia Department of Health offer free bulk condom distribution ("Family Planning," 2025), and private companies such as Trojan offer low-cost wholesale condoms (*Trojan Professional Wholesale Condoms*, n.d.). Perrigo Company, the manufacturer of the hormonal over-the-counter contraceptive Opill, provides bulk donations of Opill to nonprofit and Title X organizations (*Opill Product Donation Program Application*, n.d.). The IUD Access Partnership offers a monthly supply of IUDs at no cost to partnered clinics (*Medicines360*, 2019). Additionally, clinics can seek private donations to cover the cost of services.

Employ Patient Navigators

Organizations that provide contraceptive services who wish to make services more accessible to PWUD should employ a patient navigator. Navigators work directly with patients to overcome barriers to care. Navigators may help a patient arrange low-cost transportation, enroll in health insurance, apply for grants to fund care, provide contraceptive counseling, answer questions about appointments and prescriptions, and advocate on behalf of the patient (Natale-Pereira et al., 2011). Additional services may be provided at the discretion of the clinic. Navigators have a medical or non-medical background (Kennedy et al., 2024). Patient navigators are more trusted when they are seen as peers to patients (Risher et al., 2015), so when possible navigators should be familiar with drug use.

Patients should have the opportunity to request navigation at initial contact with the clinic. Patients who are concerned about cost, transportation, understanding treatment options or the healthcare system, or stigma from providers should be prioritized for navigation (Domingo et al., 2011). Navigators should reach out to requesting patients to discuss their concerns, taking time to respond empathetically and establishing social bonds to promote trust (Bazzi et al., 2022).

Grant programs for patient navigation may be available from public and private sources. The Secretary of Health and Human Services has discretion to make navigation grants available through HRSA (*42 USC 256a: Patient Navigator Grants*, n.d.). HRSA, the Centers for Medicare & Medicaid Services (CMS), and the Substance Abuse and Mental Health Services Administration (SAMHSA) have given navigation grants in the past (Domingo et al., 2011).. Additionally, Bristol Myers Squibb, a private pharmaceutical company, offers grants supporting patient navigation for programs focused on health equity (*Health Equity Grants to Train and Support Community Health Workers and Patient Navigators in the U.S.*, n.d.).

Establish Contraceptive-Providing Mobile Medical Units

> "Just give it to people. Go to where they are and hand it to them."
>
> - Joelle Puccio, Director of Education, Academy of Perinatal Harm Reduction

Clinics of any type can use mobile medical units (MMUs) to bring contraceptive services directly to PWUD. MMUs are specialized healthcare vehicles that provide a mobile clinic space, often focused on a specific service (Hurley et al., 2023). Contraception should be provided at low or no cost to patients across as many methods as possible. If this is infeasible, clinics should prioritize providing oral contraception, external condoms, LARCs, and referrals for sterilization.

Clinics should work with PWUD, local resource centers for PWUD, and community members to determine optimal routes, locations, and times for the MMU to visit. The MMU should visit each location at least twice a week for at least two hours at a time (Robinowitz et al., 2014). The MMU will be open to anyone seeking contraceptive services, but will be present where PWUD are and address barriers that PWUD often face. The MMU's design should indicate the availability of contraceptive services, but the vehicle should not advertise that it caters to PWUD. PWUD may fear social stigma when accessing substance use resources, and eliminating references to substance use can help to maintain anonymity (Strike & Miskovic, 2018).

The MMU should have at least two staff members on each shift. One staff member should be a nurse practitioner, physician's assistant, or physician who is able to prescribe contraception. This clinician will write prescriptions, perform examinations, and insert LARCs. The other staff member should be responsible for administration, including intake, counseling, and coordinating the MMU's movement.

MMUs can be funded through Title X, Medicaid, private donations, and contraceptive donation programs. MMU-specific grant opportunities are also available. The Chapman Trust funds nonprofit capital needs of healthcare access projects, and the Hearst Foundation provides grants to regional organizations whose expenses are over $2 million ("Additional Grant Opportunities," n.d.). There are also local grants available, such as the Dogwood Health Trust in North Carolina and the SBB Research Group Foundation in Massachusetts ("Additional Grant Opportunities," n.d.). Finally, the Google Ad Grant gives nonprofits annual funding towards Google search advertising ("Additional Grant Opportunities," n.d.).

Criteria

Alternatives are evaluated on four criteria: a reduction in unmet need for contraception, feasibility, flat cost, and cost-effectiveness. To empirically compare alternatives, each alternative is scored a (1), (2), or (3) on each criterion, with (3) being allocated to the best-performing alternative by that criterion. The score for unmet need will be weighted the most heavily, followed by feasibility and cost-effectiveness, then flat cost. The alternative with the highest weighted score is recommended as a final solution.

Figure 1: Weighted Score Formula

Weighted Score = 2(Unmet Need score) + 1(Feasibility score) + 1(Cost-Effectiveness score) + 0.5(Flat Cost score)

Unmet Need for Contraception

Access to contraception is proxied by a reduction in unmet need among PWUD who can become pregnant. Unmet need considers AFAB people of reproductive age (ages 15-49) (Senderowicz et al., 2023).

Figure 2: Unmet Need Formula

$$\text{Unmet Need} = \frac{\text{People AFAB of reproductive age who do not want to have children for 2+ years AND are not currently using contraception}}{\text{Fecund and sexually active people AFAB of reproductive age}}$$

This metric has been criticized, as some individuals who do not desire children may not wish to use contraception (Senderowicz & Maloney, 2022). However, this metric is widely used among those studying access to contraception (Karra, 2022), and the inputs of unmet need are more easily measured than metrics that capture more nuance in contraceptive intention, particularly among PWUD who are an under-studied group with respect to reproductive health.

Since unmet need does not directly measure autonomy, programs must be robustly designed to protect autonomy. If a program protects and promotes autonomy, a decrease in unmet need will indicate greater access to the tools of reproductive autonomy.
Unmet need projections reflect the anticipated national average percentage point reduction in unmet need if a given intervention was implemented across the country. Currently, unmet need among AFAB PWUD is 48.93 percent (Appendix B).

Feasibility

Feasibility is constructed on two dimensions: political feasibility and acceptability to patients. Each dimension is scored on a scale from 0-1, with quarter points possible, and the final feasibility rating is the sum of the two scores, ranging from 0-2. A score of 0 means that an alternative is totally infeasible, while a score of 2 indicates no feasibility barriers. Political feasibility is established through an analysis of current federal political trends that relate to each alternative. Acceptability to patients is evaluated based on evidence from literature regarding similar programs.

Cost

Flat cost to implementers is calculated as the total cost over a five-year period, discounted as appropriate. Total costs for both cost-effectiveness and flat cost are calculated over a five-year time horizon, assuming that each intervention would serve a baseline of 500 patients per year. It is likely that based on state and local factors, the actual number of patients served per year will vary widely. However, a baseline of 500 is used to compare each alternative nationally.

Cost should not be interpreted as a valuation of access to contraception for PWUD, but rather an extension of feasibility analysis for implementing clinics. Ideally, cost will not be prohibitive to effective policy, but cost will be important to consider for local clinics that may have limited resources.

Cost-Effectiveness

Cost is further evaluated through cost-effectiveness analysis. The unit of effectiveness is a one percentage point reduction in unmet need.

Figure 3: Cost-Effectiveness Formula

$$\text{Cost-Effectiveness} = \frac{\text{Total cost (\$)}}{\text{Units of effectiveness (percentage point reduction in unmet need)}}$$

Cost-effectiveness should be approached as a tool for implementing clinics to use to seek funding for programs and to evaluate their preferred alternative. However, cost-effectiveness is deprioritized in the weighted score compared to unmet need. Relying on cost-effectiveness alone can incentivize increased provision of contraception without regard to individual preference, leading to harmful and coercive practices.

04 Evaluation

Co-locate Contraceptive Services and Substance Use Resources

Co-located contraceptive services should meet PWUD where they are, offering contraceptive counseling and provision at low or no cost.

Figure 4: Co-Location Outcomes

	Reduction in Unmet Need (percentage points)	Feasibility	Cost-Effectiveness	Flat Cost, 5 years
Co-Location	16.76	1	43,932.42	$736,525.94

Reduction in Unmet need

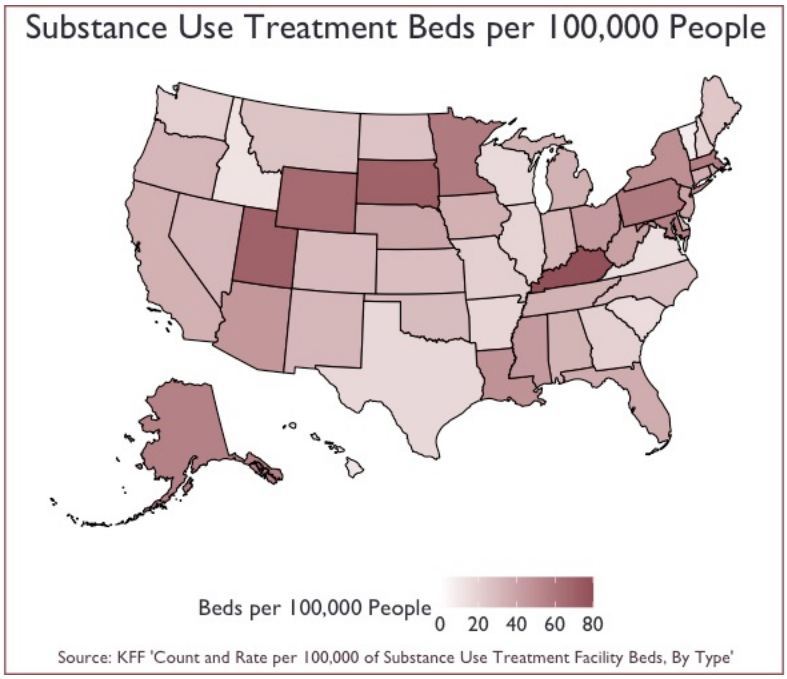
Co-locating services is expected to reduce unmet need by 16.76 percentage points, from 48.93 percent at baseline to 32.17 percent after intervention. The potential reduction in unmet need is estimated using figures from a study of the Pregnancy Recovery Center (Krans et al., 2018). This retrospective cohort study examined pregnant people diagnosed with opioid use disorder and compared contraceptive uptake among those who received co-located services versus those who did not receive co-located services. Co-location was associated with a 10.9 percentage point increase in contraceptive use between those who did and did not receive services, from 13 percent to 23.9 percent take up (Krans et al., 2018). This translates to a 45.6 percent increase in contraceptive use, and 32.17 percent unmet need if co-located services are widely available. For detailed calculations of unmet need, see Appendix B.

Figure 5: Unmet Need Following Co-Location

$$\text{Unmet Need} = \frac{\text{4,274,309.443 AFAB PWUD of reproductive age who do not want to have children AND are not using contraception}}{\text{13,286,746.1 fecund and sexually active AFAB PWUD of reproductive age}} = 32.17\%$$

Co-location has a greater potential to reduce unmet need in areas with more resources for PWUD, and more opportunities to co-locate services. The availability of substance use treatment varies widely between states (Figure 6), ranging from eight to 79 beds per 100,000 people (Saunders & Euhus, 2024). Facilities with greater capacity may see a greater reduction in unmet need. Conversely, facilities with low capacity may see a lower reduction in unmet need. Additionally, this alternative does not address transportation barriers. Co-located services near robust public transportation systems will likely see a greater reduction in unmet need, while those in rural areas with low car ownership rates will likely see a lower reduction.

Figure 6: Substance Use Treatment Beds per 100,000 People



Feasibility

Co-location receives a feasibility score of 1 out of 2 points, with 0.25 points for political feasibility and 0.75 points for patient acceptability.

Co-location is likely to be politically infeasible. This alternative is heavily reliant on Title X and Medicaid funding for clinician salaries, medical equipment, and contraceptives. Both Title X and Medicaid are endangered under the Trump administration and a Republican-controlled Congress. Title X is chronically underfunded. Funding has stagnated at $286.5 million per year since 2014, but the Office of Population Affairs estimates that the program requires $1.38 billion per year to adequately meet patient needs (Gorzig et al., 2024). In Congress, the House has proposed eliminating Title X six times between 2011 and 2018 (*Title X*, n.d.), and the House Labor-Health and Human Services committee proposed its elimination again in 2024 (*Committee Approves FY25 Labor, Health and Human*

Services, Education, and Related Agencies Appropriations Act, 2024). Further, the Trump administration's push against diversity, equity, and inclusion (DEI)-related federal programs halted National Institutes of Health grant funding (Kaiser, 2025), indicating hostility to programs that might serve particular populations such as PWUD.

The Title X Final Rule under the first Trump administration prompted a quarter of providers to leave the network, reducing Title X service capacity by 46 percent (Dawson, 2021). The Final Rule also encouraged providers to reach out to patients' partners and family members for family planning discussions, even for patients who were not minors (Dawson, 2021). Inter-partner violence (IPV) and reproductive coercion is a frequently cited concern for PWUD seeking contraception (Stone et al., 2020), and policies that threaten patient confidentiality may worsen these barriers. Though the Final Rule was repealed under the Biden administration, advocates expect it to be reinstated during the second Trump term (*Potential Trump Funding Cuts to Reproductive Care Providers Threaten Access in Maine*, 2024).

Medicaid also faces funding threats. Republican members of Congress have proposed cuts of up to $2.3 trillion over the next decade and eliminating federal funds for people enrolled under the Affordable Care Act Medicaid expansion (Barlow, 2025). If these cuts pass, it is likely that some states will opt out of the Medicaid expansion, meaning fewer patients served by Medicaid (Barlow, 2025). In his first term, President Trump allowed Texas to block Medicaid funds from clinics that prescribe emergency contraception, and additional states have applied for similar waivers (Felix et al., 2024). Such restrictions would prevent co-located programs from offering a full range of care to patients.

The current administration is also unlikely to support free services for PWUD. Republican drug policy tends to emphasize law and order rather than treatment and prevention (LaBelle, 2024). Funding for SAMHSA was frozen in January 2025 due to DEI concerns (*ACTION ALERT*, n.d.). While there is bipartisan support for battling the overdose crisis, new funding is unlikely to be appropriated for harm reduction efforts like co-location. This alternative scores 0.25 out of 1 point for political feasibility due to potential political opposition.

President Trump has stated that he will not approve a national contraceptive ban (Ollstein & Messerly, 2024). However, individual states may be hostile to contraception. The landmark Supreme Court case *Eisenstadt v. Baird* protects an individual's right to contraception (Felix et al., 2024), but relies on the privacy penumbra challenged by *Dobbs v. Jackson* in 2022 (Niehoff, 2023). The *Dobbs* decision, overturning the federal right to abortion, may support future challenges to the federal right to contraception. Justice Clarence Thomas wrote in his *Dobbs* concurring opinion that the court should reconsider *Griswold v. Connecticut*, which protects the right to contraception for married couples (Forgey & Gerstein, 2022). As of 2024, 10 states and Washington, D.C., protected the right to contraception, but a similar bill was blocked at the federal level (Felix et al., 2024).

Potential patients generally have a positive outlook on co-location. A survey of drug use treatment clients in Baltimore, Maryland, found that 83 percent of people with uteri said they were likely to use family planning services if available at their treatment center (Terplan et al., 2016). A survey of participants in a program providing reproductive health services for PWID found that most participants had positive experiences (Owens et al., 2020). Another study of people with uteri in a drug treatment program found that 73 percent of respondents

would be open to using contraceptive services provided by their program (Elko & Jansson, 2011). For many PWUD, substance use resources might be their only contact with healthcare (Stancil et al., 2021), and co-locating contraceptive services can build on a pre-existing foundation of trust. However, co-located services remain inaccessible to those unable or unwilling to access substance use resources. This alternative scores 0.75 out of 1 point on patient acceptability.

Cost

Co-location is projected to incur a flat cost of $736,525.94 per implementing clinic over a five-year period, and a cost effectiveness ratio of 42,932.42 over the same period (Table 1). To view calculations and rationale for each cost, see Appendix C.

Table 1: Co-Location Costs

Cost	Yearly Cost	Total
Cost of contraceptive methods (at minimum, oral pills, IUDs, and condoms)	$ -	$ -
Cost of creating new space for contraceptive provision OR opportunity cost of using space for substance use treatment	$ 2,069.60	$ 9,587.39
Salary of an additional clinician to prescribe contraception or to fulfill an employed clinician's previous duties	$ 139,860.00	$ 647,899.33
Training for clinic staff to provide contraceptive counseling	$ 120.00	$ 120.00
Opportunity cost of a patient receiving additional substance use treatment instead of contraceptive services	$ 9,950.00	$ 46,093.22
Educational materials to distribute to patients	$ 202.80	$ 939.47
Additional time cost of charting contraceptive treatment	$ 105.43	$ 488.42
Time and salary cost of grant seeking	$ 2,000.00	$ 9,264.97
Cost of Title X and Medicaid compliance (startup costs)	$ 1,920.00	$ 1,920.00
Cost of Title X and Medicaid compliance (recurring costs)	$ 2,640.00	$ 12,229.76
Time and salary cost of seeking donations	$ 1,000.00	$ 4,632.48
Cost of medical equipment for exams and insertion of LARCs (one time costs)	$ 1,829.95	$ 1,829.95
Cost of medical equipment for exams and insertion of LARCs (repeating yearly)	$ 328.32	$ 1,520.94
	Total cost, 5 years	$ 736,525.94

Figure 7: Cost-Effectiveness of Co-Location

$$\text{Cost-Effectiveness} = \frac{\$736{,}525.94}{16.76} = 43{,}932.42$$

Employ Patient Navigators

Clinics may choose to employ a patient navigator responsible for helping patients overcome common barriers to care. Navigation should be offered to patients alongside contraceptive counseling at low or no cost.

Figure 8: Patient Navigation Outcomes

	Reduction in Unmet Need (percentage points)	Feasibility	Cost-Effectiveness	Flat Cost, 5 years
Patient Navigation	11.11	1.25	49,163.92	$546,053.71

Reduction in Unmet Need

Patient navigation is expected to reduce unmet need by 11.11 percentage points, from 48.93 percent at baseline to 37.83 percent after intervention. This reduction is estimated using figures from a study of patient navigation in a reproductive health clinic. Patients enrolled in navigation services showed 73.85 percent uptake of contraceptives versus 51.54 percent among those not enrolled in the program (Yee et al., 2017), a 30.21 percent increase in contraceptive use. This translates to 37.83 percent unmet need if patient navigation is implemented widely (Appendix B).

Figure 9: Unmet Need Following Patient Navigation

$$\text{Unmet Need} = \frac{\text{5,026,097.41 AFAB PWUD of reproductive age who do not want to have children AND are not using contraception}}{\text{13,286,746.1 fecund and sexually active AFAB PWUD of reproductive age}} = 37.83\%$$

Patient navigation benefits all racial and ethnic groups, but people of color see the greatest benefits from navigation (Ko et al., 2016). This alternative may be the most effective in reducing unmet need among the most marginalized populations. Clinics that serve majority-minority populations may therefore see greater reductions in unmet need, while those that serve majority-White populations may see a lower reduction. Additionally, navigators located in clinics with higher capacity may reach more patients than clinics with lower capacity, leading to a greater reduction in unmet need.

Feasibility

Patient navigation receives a feasibility score of 1.25 out of 2 points, with 0.75 points for political feasibility and 0.5 points for patient acceptability.

Navigation is moderately politically feasible. This alternative is not dependent on Title X or Medicaid funding, so threats to those programs are unlikely to impact navigation itself. However, cuts to Title X or Medicaid are likely to impact patients' ability to access existing contraceptive services. Navigators may be able to help patients find alternate sources of funding, but some patients will likely still be prevented from accessing care.

Funding for navigation is likely to be restricted under current conditions, but some key sources of funding will remain. Federal funds from SAMHSA, HHS, and CMS are unlikely to be available under the Trump administration due to DEI concerns, since navigation is meant to uplift specific marginalized communities and is unlikely to serve all populations equally. Private funding for patient navigation is unlikely to be impacted by political opposition to providing contraception.

State-level policy may restrict access to contraception, but restrictions would not directly impact navigation programs. Navigators connect patients with existing resources rather than creating new ones. Anti-drug use policy is likely to impact patient navigation, but to a lesser extent than co-location or MMUs, since services are provided rather than free items. This alternative scores 0.75 out of 1 point on political feasibility.

Patient navigation is most effective when patients trust navigators and navigators interact with patients in a non-stigmatizing manner (Bazzi et al., 2022). Navigators may perform intensive outreach to build relationships with patients and support community-based education about treatment to familiarize patients with their options (Bazzi et al., 2022). When these components are present, patients find navigators to be acceptable and helpful. However, the presence of these traits may vary by navigation program. Navigator staff may bring personal prejudices to the role, making them less effective. Navigation staff

may be a person who has used drugs, or they may be an individual unfamiliar with the lived experience of drug use. This potential variability in performance and efficacy leads to a score of 0.5 out of 1 point on patient acceptability.

Cost

Patient navigation is expected to carry a flat cost of $546,054 per implementing clinic over five years, and a cost-effectiveness ratio of 49,163.92 over the same period (Table 2).

Table 2: Patient Navigation Costs

Cost	Yearly Cost	Total
Salary of a patient navigator	$ 44,034.00	$ 203,986.84
Navigation training for existing staff member	$ 2,670.00	$ 2,670.00
Salary of additional staff member to fulfill navigator's previous duties, if navigator is current staff member	$ 46,930.00	$ 217,402.51
Advertisement of navigation services	$ 2,379.50	$ 11,023.00
Computer and office equipment	$ 1,200.00	$ 1,200.00
New space for navigator to work OR opportunity cost of using the space for other services	$ 20,696.00	$ 95,873.91
Time and salary cost of grant seeking	$ 2,000.00	$ 9,264.97
Time and salary cost of seeking donations	$ 1,000.00	$ 4,632.48
	Total cost, 5 years	$ 546,054

Figure 10: Cost-Effectiveness of Patient Navigation

$$\text{Cost-Effectiveness} = \frac{\$546{,}054}{11.12} = 49{,}163.92$$

Establish Contraceptive-Providing Mobile Medical Units

Clinics may choose to establish mobile medical units, mobile outpatient treatment facilities that serve hard-to-reach patients. MMUs should offer contraceptive counseling and provision for low or no cost.

Figure 11: Mobile Medical Units Outcomes

	Reduction in Unmet Need (percentage points)	Feasibility	Cost-Effectiveness	Flat Cost, 5 years
Mobile Medical Units	24.27	1.25	46,678.84	$1,132,838.33

Reduction in Unmet Need

Contraceptive-providing MMUs are projected to reduce unmet need by 24.27 percentage points, from 48.93 percent at baseline to 24.67 percent after intervention. A quasi-experimental interrupted time series study of an MMU at three recovery centers found that three months after the intervention, 40.9 percent of intervention participants were using contraception compared to 13.9 percent of non-participants (Hurley et al., 2023). This is a 66.01 percent increase in contraceptive use, which translates to 24.67 percent unmet need with MMUs (Appendix B)

Figure 12: Unmet Need Following Mobile Medical Units

$$\text{Unmet Need} = \frac{\text{3,277,298.89 AFAB PWUD of reproductive age who do not want to have children AND are not using contraception}}{\text{13,286,746.1 fecund and sexually active AFAB PWUD of reproductive age}} = 24.67\%$$

Feasibility

MMUs receive a feasibility score of 1.25 out of 2 points, with 0.5 points for political feasibility and 0.75 for patient acceptability.

MMUs are moderately politically feasible. MMUs will face many of the same challenges as co-location regarding funding through Title X and Medicaid. However, a variety of local and national grants are available to offset the equipment and medical costs of running an MMU ("Additional Grant Opportunities," n.d.), which are unlikely to be impacted by federal opposition.

State restrictions on contraception would impact the efficacy of an MMU, restricting the number of patients that can access services. If contraception is banned or heavily restricted in a given state, MMUs will not be able to provide service. However, contraceptive provision remains nationally politically feasible.

MMUs may be able to avoid controversy around providing free services for PWUD. An ideal MMU will indirectly target PWUD through its route, timing, and outreach to local substance use treatment centers. However, the MMU itself will utilize a discreet design and providers will not explicitly discuss drug use unless medically necessary or when initiated by patients. Due to this indirect targeting of a population of interest, MMUs may be able to avoid anti-DEI concerns and pushback around providing free items to PWUD. This alternative scores 0.5 out of 1 point on political feasibility.

MMUs are generally acceptable to potential patients and provide destigmatizing anonymity. A pilot program offering contraception in needle exchange vans in Baltimore showed that 65 percent of medical visits to the van provided contraception (Moore et al., 2012), indicating a willingness among participants to utilize MMU services. A pilot study of an MMU in Chicago found that most participants expressed interest in receiving education and counseling about contraception via the MMU, and 54.4 percent said they were likely to seek contraception through the MMU (Stefansson et al., 2018). The relative anonymity of MMUs make interactions with an MMU less stigmatizing and intimidating (Strike & Miskovic, 2018). This alternative scores 0.75 out of 1 point on patient acceptability.

Cost

Implementing contraceptive services through mobile medical units is projected to have a flat cost of $1,132,838.33 per implementing clinic over five years and a cost-effectiveness ratio of 46,678.84 over the same period (Table 3).

Table 3: Mobile Medical Units Costs

Cost	Yearly Cost	Total
Cost of vehicle (pre-built or custom for the clinic's purposes)	$ 80,000.00	$ 80,000.00
Cost of redesigning exterior	$ 10,000.00	$ 10,000.00
Cost of medical equipment for exams and insertion of LARCs (one time costs)	$ 1,829.95	$ 1,829.95
Cost of medical equipment for exams and insertion of LARCs (repeating yearly)	$ 328.32	$ 1,520.94
Cost of contraceptive methods (at minimum, oral pills, IUDs, and condoms)	$ -	$ -
Salary for clinician	$ 139,860.00	$ 647,899.33
Salary for support staff member	$ 46,930.00	$ 217,402.51
Contraceptive counseling education for support staff member	$ 40.00	$ 40.00
Time cost of outreach to substance use treatment facilities	$ 200.00	$ 926.50
Time cost of advertising MMU services	$ 400.00	$ 1,852.99
Cost of advertising materials	$ 146.00	$ 676.34
Educational materials to distribute to patients	$ 302.80	$ 1,402.72
Gas and maintenance costs for vehicle	$ 30,489.00	$ 141,239.83
Time and salary cost of grant seeking	$ 2,000.00	$ 9,264.97
Cost of Title X and Medicaid compliance (startup costs)	$ 1,920.00	$ 1,920.00
Cost of Title X and Medicaid compliance (recurring costs)	$ 2,640.00	$ 12,229.76
Time and salary cost of seeking donations	$ 1,000.00	$ 4,632.48
	Total cost, 5 years	$ 1,132,838.33

Figure 13: Cost-Effectiveness of Mobile Medical Units

$$\text{Cost-Effectiveness} = \frac{\$1,132,838.33}{24.37} = 46,678.84$$

05 Recommendation and Implementation

Recommendation

Contraceptive-providing mobile medical units received the highest weighted score of 11.5, followed by co-location and patient navigation.

Figure 14: Outcomes Matrix

	Reduction in Unmet Need (percentage points)	Feasibility	Cost-Effectiveness	Flat Cost, 5 years	Weighted Score
Co-Location	16.76	1	43,932.42	$736,525.94	10
Patient Navigation	11.11	1.25	49,163.92	$546,053.71	7.5
Mobile Medical Units	24.27	1.25	46,678.84	$1,132,838.33	11.5

Figure 15: Mobile Medical Units Weighted Score

Weighted Score, Mobile Medical Units = 2(3, Unmet Need score) + 1(3, Feasibility score) + 1(2, Cost-Effectiveness score) + 0.5(1, Flat Cost score) = 11.5

Compared to other alternatives, MMUs are highly effective at reducing unmet need. Under circumstances where patient navigation or co-location are more effective, these alternatives might score higher than MMUs. Co-location and MMUs both provide direct access to contraception, but MMUs are more politically feasible due to diverse funding sources and fewer advertised connections with PWUD.

MMUs are very costly and have high startup costs, which may be prohibitive for certain clinics. MMUs are nearly twice as expensive over a 5-year period as patient navigation. While co-located services and patient navigation can be operated in-house by already-employed staff, MMUs require new employees and new space.

Co-location and patient navigation directly target PWUD. The MMU will indirectly target PWUD by reducing barriers that PWUD often face, service routes where PWUD tend to be located, and partnering with local substance use resource centers. This indirect targeting means that not all PWUD in an area will find the MMU, and the MMU will serve some people

who do not use drugs. However, MMUs are able to serve a broader population of PWUD than co-location or patient navigation.

Mobile medical units are recommended as a national, best practices alternative. However, individual clinics or state or local policymakers may wish to evaluate their financial resources and policy environment to assess which alternative is best for their locality. Figures 16 and 17 provide tools for this analysis. Ultimately, the alternative implemented should be the one that local PWUD are willing to use and centers patient autonomy and access to care.

Figure 16: Decision Tree

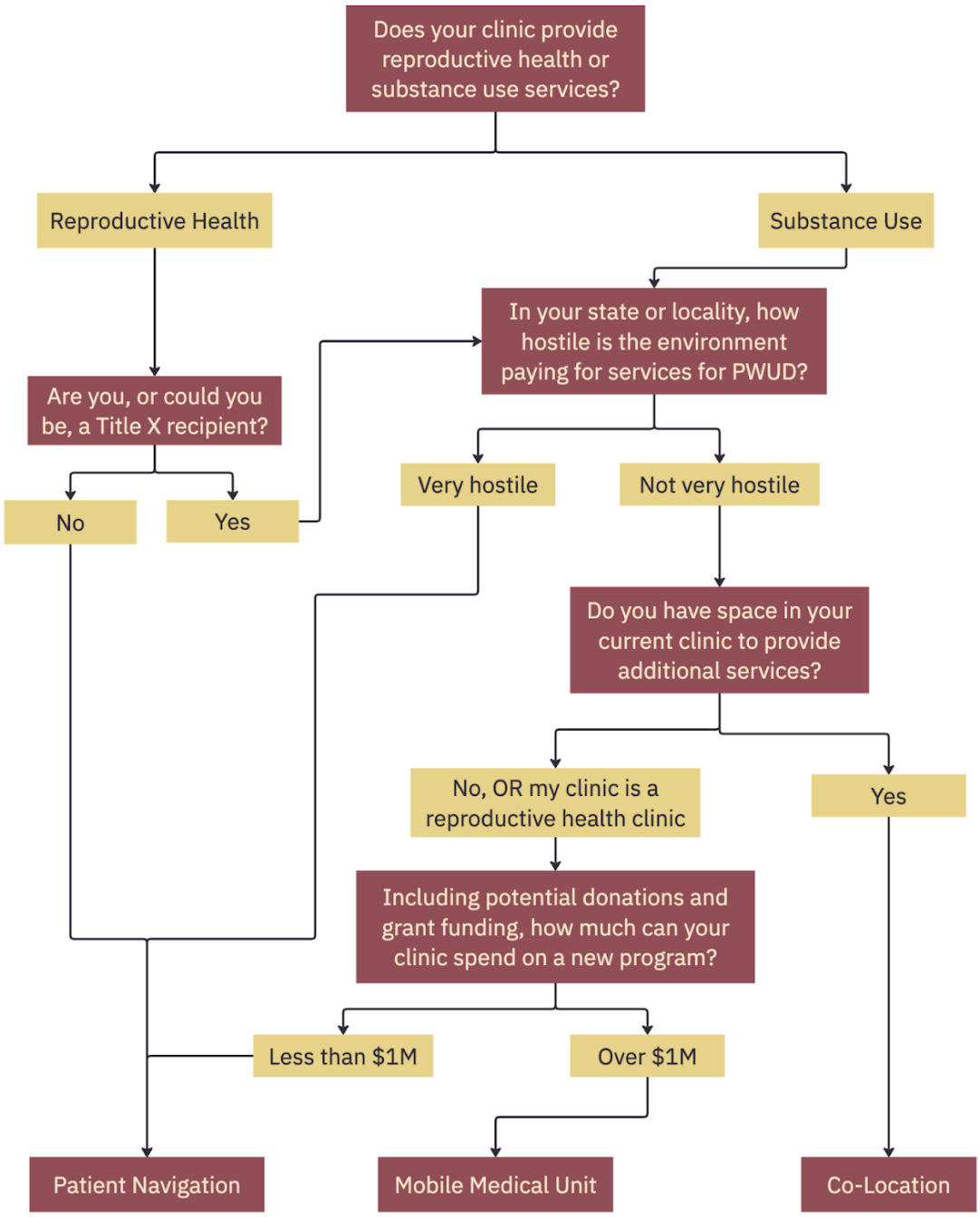


Figure 17: Alternatives Quiz

Which alternative is best for my clinic?

Total the number of (a), (b), and (c) you select

What kind of services does your clinic provide?

a) Reproductive health
b) Substance use-related
c) Both (a) and (b)

Are you, or could you be, a Title X recipient?

a) No
b) Yes
c) Maybe

In your state or locality, how hostile is the environment to paying for services for PWUD?

a) Very hostile
b) Moderately hostile
c) Not very hostile

How much space do you have available to provide additional services?

a) A small amount
b) A large amount
c) None

Including potential donations and grant funding, how much can your clinic spend on a new program?

a) $500,000
b) $750,000
c) $1M or more

In your community, how willing are PWUD to interact with substance use-related resources?

a) Not very willing
b) Very willing
c) Moderately willing

In your community, how willing are PWUD to interact with reproductive health resources?

a) Very willing
b) Not very willing
c) Moderately willing

What demographics does your clinic tend to serve?

a) Majority-minority
b) and c) Majority White

What does access to transportation look like in your community?

a) Some people have easy access to transportation
b) Many people have easy access to transportation
c) Very few people have easy access to transportation

Mostly (a): Patient Navigation

Mostly (b): Co-Location

Mostly (c): Mobile Medical Unit

Different alternatives may lead to different reductions in unmet need in different locations. Clinics should consider their service capacity and the demographics of their patients to anticipate changes in unmet need resulting from co-location and patient navigation. Additionally, local infrastructure and access to transportation will impact to what extent PWUD are able to interface with alternatives.

Clinics should consider political feasibility, including the availability of family planning and substance use treatment funds, the legality of contraception, and the presence or absence of carceral policies regarding PWUD in a particular state or locality. Clinics should also consider existing relationships with their communities and the level of trust present between PWUD and providers. Local patient acceptability can be established through surveys, one-on-one interviews, or focus groups.

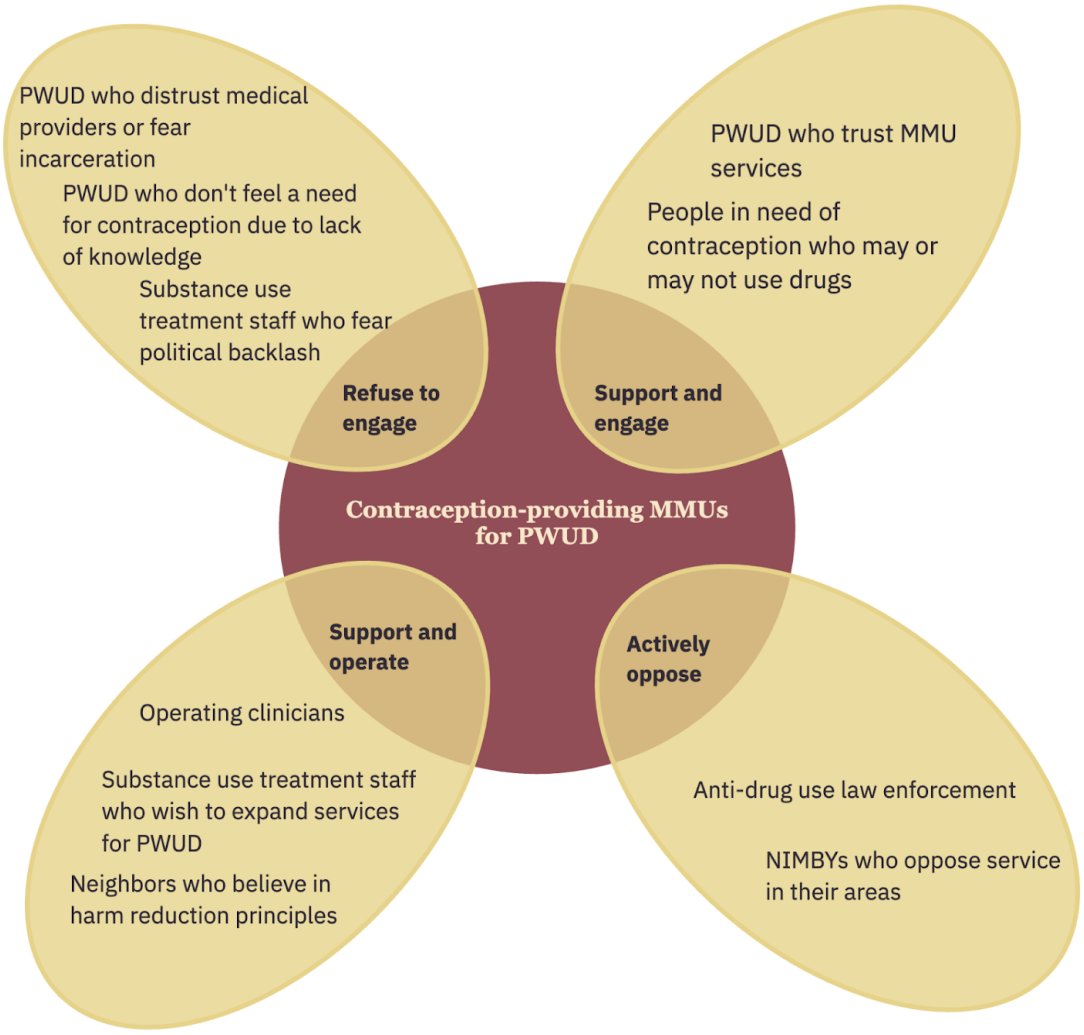
Implementation

Mobile medical units will be implemented locally or regionally by local clinics, treatment centers, or health departments. Clinic leadership will be responsible for coordinating the implementation, including hiring necessary staff and delegating decision-making authority. To address challenges, on-the-ground staff should coordinate with clinic leadership to come to resolutions that protect the program while aligning with the clinic's priorities.

Stakeholders

Stakeholders will likely align with one of four factions visualized in Figure 18.

Figure 18: Faction Map



Challenges will stem from the stakeholders who either refuse to engage with or actively oppose the MMU. If too many PWUD refuse to engage due to distrust or lack of knowledge or awareness, the MMU will be ineffective. Staff should work to establish trust and educate stakeholders by making themselves accessible to answer questions, proactively distributing information about the MMU, and being transparent about their motivations (Bazzi et al., 2022).

Opponents may pursue legal challenges against MMU operators or target patients for arrest and harassment (Nguyen et al., 2025). Staff should be careful to comply with state and local laws and establish procedures to protect patient security and confidentiality. Engaging NIMBYs (not in my backyard) in education and outreach will allow staff to mitigate and anticipate opposition (Dedmon et al., 2024).

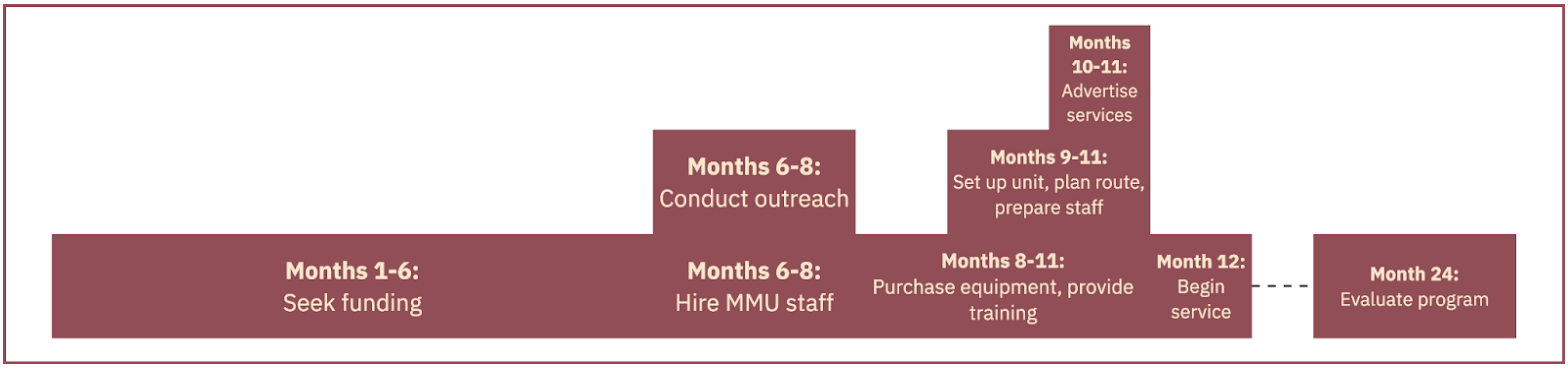
Staff should aim to maximize the population that supports and engages with the MMU. Robust advertisement and outreach before and during service provision will bolster

trust and awareness of available services (Dedmon et al., 2024). Clinic staff establishing the MMU should recruit and engage additional operators, including staff at local treatment centers and residents in areas that the MMU will visit. Forming operating coalitions across these constituencies will help strengthen the response to any challenges.

Timeline

Implementing a mobile medical unit should be completed in steps, seeking input from relevant stakeholders along the way. The initial preparation period will take roughly one year to begin providing services.

Figure 19: Timeline



Step 1, months 1-6: Seek funding.

Clinic staff should determine what existing clinic funds can be allocated to the MMU. This review will inform the amount of additional funding needed. Staff should seek funding through Title X, Medicaid, private grant programs, and donations.

Step 2, months 6-8: Hire MMU staff.

One clinician and one administrator should be hired to staff the MMU. The clinician should have prescribing authority, and ideally be experienced in contraceptive provision. The administrator should have experience working with PWUD and familiarity with contraception.

Step 3, months 6-8: Conduct outreach.

To build trust between MMU staff and stakeholders, clinic and MMU staff should conduct outreach to local substance use resource centers, target populations, and community members. Staff can work with treatment centers to connect with PWUD and seek input on ideal routes for the MMU. Treatment centers may also know where PWUD tend to live, and staff should ensure to engage PWUD who are not currently accessing substance use resources.

Staff can also hold mobile “town halls,” where stakeholders are invited to discuss concerns and provide input. During these events, stakeholders who do not use drugs should be invited to participate. This will allow staff to reduce stigma around the MMU and anticipate and prevent pushback from local residents.

Step 4, months 8-11: Purchase equipment and provide training.

Staff should purchase a vehicle and needed gynecological equipment. The unit should be stocked with contraceptives donated by free programs or purchased with raised funds. MMU staff should receive contraceptive counseling training, if they do not already have applicable experience. If applicable, staff should also be trained on confidential data collection to collect data for program evaluation.

Step 5, months 9-11: Set up unit, plan route, and prepare staff.

The outside of the vehicle should be redesigned to clearly advertise the availability of contraceptives and the affiliated clinic, but should not discuss drug use. Based on stakeholder input from Step 2, staff should designate an optimal route and service schedule. Additionally, MMU staff should establish and practice procedures to provide care, protect security and confidentiality, and collect data for evaluation.

Step 6, months 10-11: Advertise services.

MMU staff should develop flyers and outreach scripts to distribute to local treatment centers, neighborhoods and locations where they plan to service, and those who identified themselves as potential patients in Step 2. Outreach materials should include the MMU's route, schedule, services provided, and contact information for the clinic.

Step 7, month 12: Begin providing services.

At the end of this process, contraceptive provision through the MMU should begin. The MMU should visit the predetermined locations on the established schedule. Staff should collect anonymized data about visits for later evaluation.

Step 8, month 24: Evaluate program.

Staff should take inventory of what contraceptives have been used and which remain, determine which are the most popular, reach out to stakeholders and patients to seek further feedback, and adjust the schedule if necessary. At this time, the clinic should explore hiring additional staff and expanding the MMU's hours if demand is high enough.

Measuring Success

During visits, staff should collect anonymized data about patients and visits. Staff should note the demographics and drug use statuses of patients served to determine whether the MMU is reaching the intended population. Staff should also track what kinds of contraceptives are provided, what questions patients ask during counseling, which times and locations are most often accessed by patients, and any concerns that patients express. Names should not be collected to preserve anonymity.

A successful program will serve a population of patients of whom the majority are PWUD, ideally over 80% of the population. It will provide the desired contraceptive method for all patients served and answer all patient questions to ensure informed consent. The route will also be convenient and accessible for PWUD.

06 Conclusion

People who use drugs face barriers to accessing contraception, preventing individuals in this population from exercising reproductive autonomy. This group faces compounded barriers to access, including cost barriers, lack of transportation, lack of knowledge about contraception, criminalization for drug use, and stigmatizing behavior from medical professionals. In addition, this group tends to hold multiple marginalized identities, and face barriers that overlap with barriers faced by many marginalized groups. Policy solutions that improve access to contraception among people who use drugs will promote autonomy among this population and provide potential alternatives to improve access to contraception and reproductive autonomy across marginalized groups.

> "When you're working with individuals, we have to be able to give that person... unconditional positive regard. We have to be able to not just pretend but actually believe that this is a human adult with rights and with preferences and with the ability to make choices that work for them."
>
> - Joelle Puccio, Director of Education, Academy of Perinatal Harm Reduction

Solutions must center reproductive autonomy and patients' preferences and needs. Opportunities should be created for PWUD to seek and receive contraception without barriers on their own terms. PWUD should be treated as experts in their own care. Physicians should not privilege one contraceptive method over another or put economic or social pressure on PWUD to take up a particular method or take up contraception at all. To promote autonomy, implemented solutions should prioritize education as a central component of the program. Providing robust contraceptive counseling will allow patients to understand the benefits, risks, and side effects of different methods, and make informed choices. Cost barriers should be minimized or eliminated, and a full range of methods should be provided to give patients the opportunity to choose their preferred method.

Following rigorous analysis, this project recommends that local clinics, health departments, and policymakers advocate for and implement contraceptive-providing mobile medical units to serve PWUD. Mobile medical units providing a range of free contraceptives and rigorous education can address cost barriers and lack of knowledge. MMUs can also overcome transportation barriers by bringing healthcare directly to PWUD, and avoid stigmatizing and criminalizing targeting of PWUD by providing relative anonymity and keeping drug use confidential.

Clinics, localities, and policymakers should conduct independent analysis to implement solutions that are best aligned with the needs of their locality. Ultimately, the implemented solution should be the one that local PWUD desire.

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08 Appendices

Appendix A: Contraception

Contraception can generally be categorized as hormonal, barrier, surgical, or behavioral. Hormonal methods of contraception prevent pregnancy by ceasing ovulation or by thickening cervical mucus to prevent fertilization. Commonly used hormonal contraceptives include oral pills, patches, shots, rings, arm implants, and hormone-based intrauterine devices (IUDs). Barrier methods prevent pregnancy by physically separating sperm from ova, and include internal condoms, external condoms, and diaphragms. Surgical methods alter a person's body to impair their fertility, including vasectomies for people with penises and tubal ligations for people with uteri. Behavioral methods adapt a person's behavior to reduce the risk of pregnancy, including withdrawal, fertility tracking, and lactational amenorrhea.

Hormonal contraception, surgical methods, and diaphragms generally require a physician to initiate. Copper IUDs also require a physician to initiate. One brand of oral contraception, Opill, is available over-the-counter and does not require a prescription. Emergency contraception (EC) is an additional category of contraception intended to prevent pregnancy when no contraceptive method was used during intercourse, or when a method has failed. Oral EC pills present a concentrated dose of hormones to delay ovulation. Copper IUDs may also be used as emergency contraception if initiated within five days of unprotected intercourse. Recent research indicates that hormonal IUDs may be effective for use as emergency contraception if inserted within five days of intercourse, but this use has not yet been approved by the FDA.

Appendix B: Unmet Need Calculations

Baseline			Co-Location	
Denominator: Number of AFAB people of reproductive age who use drugs	**Source**		**Numerator: Number of AFAB people of reproductive age who use drugs who do not want to have children and are not using contraception**	**Source**
78157330 females of reproductive age in the U.S.	https://plat		Co-location demonstrated increase in contraception use from 13% to 23.9%	https://ww
17% of females used drugs in the past year	https://druga		0.456066946	
13286746.1			= 45.60% increase in contraception use	
			5700014.077 people currently using contraception	
			8299220.496	
Numerator: Number of AFAB people of reproductive age who use drugs who do not want to have children and are not using contraception			8299220.496 people expected to be using contraception after intervention	
85.7% of PWUD trying to avoid pregnancy	https://pmc		4987525.604	
57.1% did not use any method to prevent pregnancy at last vaginal sex	https://pmc		4987525.604 people NOT using contraception after intervention	
6501829.344			85.7% of PWUD trying to avoid pregnancy	
			4274309.443	
Unmet need: Numerator / Denominator, expressed as percentage			**Unmet need: Numerator / Denominator, expressed as percentage**	
48.9347			32.1697232	
Other calulations				
Number of PWUD currently using contraception				
57.1% did not use any method to prevent pregnancy at last vaginal sex	https://pmc			
42.9				
42.9% of AFAB PWUD currently using contraception				
5700014.077				
Number of people NOT currently using contraception				
7586732.023				

Patient Navigators	
Numerator: Number of AFAB people of reproductive age who use drugs who do not want to have children and are not using contraception	**Source**
Patient navigation demonstrated increase in contraception use from 51.54% to 73.85%	https://pmc
0.302098849	
= 30.21% increase in contraception use	
5700014.077 people currently using contraception	
7421988.33	
7421988.33 people expected to be using contraception after intervention	
5864757.77	
5864757.77 people NOT using contraception after intervention	
85.7% of PWUD trying to avoid pregnancy	
5026097.409	
Unmet need: Numerator / Denominator, expressed as percentage	
37.82790287	

Mobile Medical Units	
Numerator: Number of AFAB people of reproductive age who use drugs who do not want to have children and are not using contraception	**Source**
Mobile medical units demonstrated increase in contraception use from 13.9% to 40.9%	https://pmc
0.660146699	
= 66.01% increase in contraception use	
5700014.077 people currently using contraception	
9462593.369	
9462593.369 people expected to be using contraception after intervention	
3824152.731	
3824152.731 people NOT using contraception after intervention	
85.7% of PWUD trying to avoid pregnancy	
3277298.89	
Unmet need: Numerator / Denominator, expressed as percentage	
24.66592547	

Appendix C: Costing

Assumptions

- $20 per person-hour
- Assume 2.6% inflation/year (average over 25 years)
- At least 500 patients served by each intervention per clinic per year
- Five-year time horizon
- Use present value of annuity formula for repeating yearly costs
- Changes in unmet need are estimated using point estimates from the strongest available literature. Observation-level data sets were too old to use and subsetted the population.
- Double click on tables to open Excel workbook

Co-Location Costs

Total cost over 5 years:	$ 736,525.94
% point reduction in unmet need	16.7649768
Cost-Effectiveness	43932.41607

Cost	Rationale	Sources	Term	Yearly Cost	Total
Cost of contraceptive methods (at minimum, oral pills, IUDs, and condoms)	If donated, $0 for condoms, EC, and IUDs	https://sirum.org/special-initia	Repeating yearly for 5 years	$ -	$ -
Cost of creating new space for contraceptive provision OR opportunity cost of using space for substance use treatment	What is the value of 1 hour of substance use treatment? The average intensive outpatient episode cost is $3582 with average treatment duration of 12 weeks. Avg 6 hours per day in outpatient rehab for five days a week Use the space for 4 hours a week, 52 weeks a year	https://drugabusestatistics.org	Repeating yearly for 5 years	$ 2,069.60	$9,587.39
Salary of an additional clinician to prescribe contraception or to fulfill an employed clinician's previous duties	The average Nurse Practictioner salary in oupatient care centers is $139,860	https://www.bls.gov/oes/current/o	Repeating yearly for 5 years	$ 139,860.00	$ 647,899.33
Training for clinic staff to provide contraceptive counseling	Free e-learning course taking 2 hours, assume $20/hr and 3 people training	https://www.fsrh.org/Public/Pu	One time cost	$ 120.00	$ 120.00
Opportunity cost of a patient receiving additional substance use treatment instead of contraceptive services	What is the value of 1 hour of substance use treatment? The average intensive outpatient episode cost is $3582 with average treatment duration of 12 weeks. Avg 6 hours per day in outpatient rehab for five days a week For one patient, 2 hours of services per year and 500 patients/year	https://drugabusestatistics.org	Repeating yearly for 5 years	$ 9,950.00	$ 46,093.22
Educational materials to distribute to patients	Time cost of developing materials - 5 hours @ $20/hr Minimum 500 patients/year: 1000 pages for 2 pamphlets A quote for the above specifications is $202.80	https://www.uprinting.com/bu	Repeating yearly for 5 years	$ 202.80	$ 939.47
Additional time cost of charting contraceptive treatment	On average, nurses spent 31.63 minutes charting per 4 hour observation. 40 hour work week for 1 clinician, $20 per person/hour	https://pmc.ncbi.nlm.nih.gov/	Repeating yearly for 5 years	$ 105.43	$ 488.42
Time and salary cost of grant seeking	Assume 100 person-hours of work at $20/hour		Repeating yearly for 5 years	$ 2,000.00	$ 9,264.97

	Document nondiscrimination policy (5 hours) Provider nondiscrimination and noncoercion training (5 hours) Document noncoercion procedures (5 hours) Development of consent forms (1 hour, adapted from current consent forms) Write informing procedures that sites may be subject to prosecution for coercion (5 hours) Written confidentiality policy and inform staff (5 hours)				
Cost of Title X and Medicaid compliance (startup costs)	Develop provision plans and take minutes (20	https://opa.hhs.gov/sites/defa	One time cost	$ 1,920.00	$ 1,920.00
Cost of Title X and Medicaid compliance (recurring costs)	Intake time documentation (.25 hour per patient -> minimum 500 patients = 125 hours) Document provision of HIPAA privacy forms (2 hours) Interview time with compliance officer (x5 interviews) (5 hours)	https://opa.hhs.gov/sites/defa	Repeating yearly for 5 years	$ 2,640.00	$ 12,229.76
Time and salary cost of seeking donations	Assume 50 person-hours of work at $20/hr		Repeating yearly for 5 years	$ 1,000.00	$ 4,632.48
Cost of medical equipment for exams and insertion of LARCs (one time costs)	Speculums different sizes One of each size (linked) = $335 Forceps of different sizes Two large = $130 Two small = $76 Two tenaculums = $130 Two uterine sounds Two of these = $90 Cervical dilators = $315 Two scissors = $116 Sterilization solution for body 1 case of 1000 = $26.95 Numbing injection	https://www.youtube.com/watch?v=aVZoH0Pda-4 https://www.youtube.com/watch?v=wppNPneHL6g https://www.youtube.com/watch?v=SAVS-CTj6uM https://www.mpmmedicalsupply.com/collections/ob-gyn-equipment-instruments/products/pederson-vaginal-speculum?variant=14538322804794 https://www.mpmmedicalsupply.com/collections/ob-gyn-equipment-instruments/products/foerster-sponge-forceps?variant=14537892560954 https://www.mpmmedicalsupply.com/collections/ob-gyn-equipment-instruments/products/kelly-hemostatic-forceps https://www.mpmmedicalsupply.	One time cost	$ 1,829.95	$ 1,829.95

Cost of medical equipment for exams and insertion of LARCs (repeating yearly)	Gloves (assume 1000 gloves per year), $130 Sanitizing equipment (2 per year) $110 Paper for exam table Two of these, which serves 450 each = $88.32	https://www.uline.com/Product/Detail/S-14179S/Nitrile-Gloves/Uline-Industrial-Nitrile-Gloves-Powder-Free-4-Mil-Small?pricode=WB0799&gadtype=pla&id=S-14179S&gad_source=1&gclid=CjwKCAiA5Ka9BhB5EiwA1ZVtvBXyGjsiGH8ocjEDIWhO5evjh-TdcAimbzP-lp5hONnRfSjtdkZdZBoCt5oQAvD_BwE https://www.wpiinc.com/504611-rapicide-opa-28-high-level-disinfectant.html https://www.walmart.com/ip/McKesson-Exam-Table-Paper-Smooth-White-18-in-x-225-ft-12-Count/200439566?classType=VARIANT&athbdg=L1600	Repeating yearly for 5 years	$ 328.32	$ 1,520.94

Patient Navigation Costs

Total cost over 5 years:	$546,054
% point reduction in unmet need	11.1067971
Cost-Effectiveness	49163.9224

Cost	Rationale	Sources	Term	Yearly Cost	Total
Salary of a patient navigator	Median patient navigator salary is $44,034/year, using data from Lightcast which is a labor market analysis firm. Some of the data come from BLS	https://www.franklin.edu/care	Repeating yearly for 5 years	$ 44,034.00	$ 203,986.84
Navigation training for existing staff member	Do the following 4 together: 3 day level 1 training, $800 registration fee, 8.5 hours x 3 days, 4 hours pre-work Level 2 courses, $300 registration fee Care coordination for patient navigators, 2 days in person x 8.5 hours/day Advanced motivational interviewing, 1 day x 8.5 hours 1 misc course, 1 day x 8.5 hours Administration program, self paced and online, free	https://patientnavigatortraining.or	One-time cost	$ 2,670.00	$ 2,670.00
Salary of additional staff member to fulfill navigator's previous duties, if navigator is current staff member	Medical secretaries and administrative assistants make an average of $46,930 mean for outpatient care centers	https://www.bls.gov/oes/2023/may	Repeating yearly for 5 years	$ 46,930.00	$ 217,402.51
Advertisement of navigation services	Have admin assistant discuss navigation program with patient at intake: .2 hours/patient, 500 patients, $20/person-hour Flyers available in exam rooms and waiting room advertising services: 3 flyers a day x 4 rooms x 365 days/year = 4380 flyers $379.50 for 5000 8.5 x 11 70 lb paper uncoated front only flyers	https://www.uprinting.com/b	Repeating yearly for 5 years	$ 2,379.50	$ 11,023.00

Computer and office equipment	Additional computer: ~$500 for PC ~$100 for monitor Additional desk: $300 for desk Additional chair: $150 for chair Office software subscription: $12.50/user/month for standard plan	https://www.officedepot.com/a/pr	One-time cost	$ 1,200.00	$ 1,200.00
New space for navigator to work OR opportunity cost of using the space for other services	What is the value of 1 hour of substance use treatment? The average intensive outpatient episode cost is $3582 with average treatment duration of 12 weeks. Avg 6 hours per day in outpatient rehab for five days a week Use the space 40 hours a week, 52 weeks per year	https://drugabusestatistics.org	Repeating yearly for 5 years	$ 20,696.00	$ 95,873.91
Time and salary cost of grant seeking	Assume 100 person-hours of work at $20/hour		Repeating yearly for 5 years	$ 2,000.00	$ 9,264.97
Time and salary cost of seeking donations	Assume 50 person-hours of work at $20/hr		Repeating yearly for 5 years	$ 1,000.00	$ 4,632.48

Mobile Medical Unit Costs

Total cost over 5 years:	$ 1,132,838.33
% point reduction in unmet need	24.26877453
Cost-Effectiveness	46678.84359

Cost	Rationale	Sources	Term	Yearly Cost	Total
Cost of vehicle (pre-built or custom for the clinic's purposes)	$80,000 for a used vehicle	https://www.specialtyvehiclee	One time cost	$ 80,000.00	$ 80,000.00
Cost of re-designing exterior	RV wrap can cost between	https://www.vinylfrog.com/blo	One time cost	$ 10,000.00	$ 10,000.00
Cost of medical equipment for exams and insertion of LARCs (one time costs)	Speculums different sizes One of each size (linked) = $335 Forceps of different sizes Two large = $130 Two small = $76 Two tenaculums = $130 Two uterine sounds Two of these = $90 Cervical dilators = $315 Two scissors = $116 Sterilization solution for body 1 case of 1000 = $26.95 Numbing injection	https://www.youtube.com/wa	One time cost	$ 1,829.95	$ 1,829.95
Cost of medical equipment for exams and insertion of LARCs (repeating yearly)	Gloves (assume 1000 gloves per year), $130 Sanitizing equipment (2 per year) $110 Paper for exam table Two of these, which serves 450 each = $88.32	https://www.uline.com/Produ	Repeating yearly for 5 years	$ 328.32	$ 1,520.94
Cost of contraceptive methods (at minimum, oral pills, IUDs, and condoms)	If donated, $0 for condoms, EC, and IUDs	https://sirum.org/special-initia	Repeating yearly for 5 years	$ -	$ -
Salary for clinician	The average Nurse Practictioner salary in oupatient care centers is $139,860	https://www.bls.gov/oes/curre	Repeating yearly for 5 years	$ 139,860.00	$ 647,899.33
Salary for support staff member	Medical secretaries and administrative assistants make an average of $46,930 mean for outpatient care centers	https://www.bls.gov/oes/2023	Repeating yearly for 5 years	$ 46,930.00	$ 217,402.51
Contraceptive counseling education for support staff member	Free e-learning course taking 2 hours, assume $20/hr and 1 person training	https://www.fsrh.org/Public/Pu	One time cost	$ 40.00	$ 40.00

Time cost of outreach to substance use treatment facilities	Assume 10 hours x $20/hr		Repeating yearly for 5 years	$ 200.00	$ 926.50
Time cost of advertising MMU services	Assume 20 hours x $20/hr		Repeating yearly for 5 years	$ 400.00	$ 1,852.99
Cost of advertising materials	1000 flyers quoted at $146	https://www.uprinting.com/bu	Repeating yearly for 5 years	$ 146.00	$ 676.34
Educational materials to distribute to patients	Time cost of developing materials - 5 hours @ $20/hr Minimum 500 patients/year: 1000 pages for 2 pamphlets quote of $202.80/year	https://www.uprinting.com/bu	Repeating yearly for 5 years	$ 302.80	$ 1,402.72
Gas and maintenance costs for vehicle	For primary care/mammography MMUs, average maintenance costs $30,489/year	https://pmc.ncbi.nlm.nih.gov/	Repeating yearly for 5 years	$ 30,489.00	$ 141,239.83
Time and salary cost of grant seeking	Assume 100 person-hours of work at $20/hour		Repeating yearly for 5 years	$ 2,000.00	$ 9,264.97
Cost of Title X and Medicaid compliance (startup costs)	Document nondiscrimination policy (5 hours) Provider nondiscrimination and noncoercion training (5 hours) Document noncoercion procedures (5 hours) Development of consent forms (1 hour, adapted from current consent forms) Write informing procedures that sites may be subject to prosecution for coercion (5 hours) Written confidentiality policy and inform staff (5 hours) Develop provision plans and take minutes (20	https://opa.hhs.gov/sites/defa	One time cost	$ 1,920.00	$ 1,920.00

Cost of Title X and Medicaid compliance (recurring costs)	Intake time documentation (.25 hour per patient -> minimum 500 patients = 125 hours) Document provision of HIPAA privacy forms (2 hours) Interview time with compliance officer (x5 interviews) (5 hours)	https://opa.hhs.gov/sites/defa	Repeating yearly for 5 years	$ 2,640.00	$ 12,229.76
Time and salary cost of seeking donations	Assume 50 person-hours of work at $20/hr		Repeating yearly for 5 years	$ 1,000.00	$ 4,632.48

Appendix D: Weighted Scores

	Reduction in Unmet Need	Feasibility	Cost-Effectiveness	Flat Cost		Final Weighted Score
Co-Location	2	2	3	2		10
Patient Navigation	1	3	1	3		7.5
Mobile Medical Units	3	3	2	1		11.5