Map MAPPING THE OPIOID USE DISORDER CRISIS IN PHILADELPHIA, PA



Erin L. Kelly, Megan K. Reed, Lara C. Weinstein, Robert Sterling, Tracy Esteves Camacho, Diane Abetamarco, Jeffrey Gillingham, Shané Gill, Shimrit Kedeem, John Cashy, Meghan Gannon, Simran Rahi, Melissa Denish

Table of Contents

1.	Executive Summary	4
2.	Background	10
З.	OUD Patient Journey Map Philadelphia	12
4.	Methods & Results	15
	A. Quantitative Methods	15
	B. Quantitative Results	18
	i. Overview of GIS maps and program director survey results	18
	ii. Locations of services for opioid use	18
	iii. Estimate of available treatment slots	20
	iv. Methadone Sites	20
	v. COVID-19 Impacts on services	21
	C. Qualitative Methods	24
	i. Recommendations and Dissemination	25
	D. Qualitative Results	26
	i. Assessment	29
	ii. Reflections on Facilitators and Barriers by Treatment Type	30
	iii. Urine Drug Screens	33
	iv. Programmatic Barriers	33
	v. Staffing	36
	vi. Wounds	38
	vii. Patient Conflict	38
	viii. Housing	39
	ix. Parenting	39
	x. Incarceration	40
	xi. Sexuality and Gender	40
	xii. Race and OUD Treatment	40
	E. GIS Maps of Treatment Services within Philadelphia	42
	i. Population	42
	ii. Treatment by ASAM Levels of Care	47
	iii. Public Insurance	52
	iv. Travel	53
	v. Census tracts and race/ethnicity	56
5.	Limitations	61
6.	Policy Recommendations & Conclusions	62
	A. Policy Recommendations for DBHIDS	63
	B. Opportunities for DBHIDS to Support Federal and Commonwealth Policy Change	69
7.	Funding	70
8.	Meet the Team	70
9.	References	71



GLOSSARY

IMPORTANT ACRONYMS

- ASAM—American Society of Addiction Medicine
- BAC-Behavioral Assessments Centers
- **CAB**—Community Advisory Board
- **CDC**—Centers for Disease Control and Prevention
- **CRC**—Crisis Response Center
- **CRS**—Certified Recovery Specialist
- DBHIDS—Department of Behavioral Health and Intellectual Disability Services
- DDAP-Pennsylvania Department of Drug and Alcohol Programs
- **DEA**—Drug Enforcement Agency
- **EBT**—Evidence-Based Treatment
- GIS—Geographical Information System
- MOUD—Medications for Opioid Use Disorder
- OUD-Opioid Use Disorder
- **PDPH**—Philadelphia Department of Public Health

SAMHSA-Substance Abuse and Mental Health Services Administration



The Village Oracle-Installation on commercial building in North Philadelphia.

1. EXECUTIVE SUMMARY

The escalating opioid epidemic continues to adversely affect Philadelphia on individual, family, community, and socioeconomic levels. The fragmented opioid use disorder (OUD) treatment system is not reaching or retaining many individuals who need and want to engage in treatment, particularly those using fentanyl and xylazine.

This multimethod project intended to produce foundational research about the status and capacity of the current treatment system to provide equitable access and to retain people who use drugs within services. Therefore, we conducted geographic information systems (GIS) mapping, directly engaged individuals with lived experience of OUD in focus groups and stakeholder advisory group meetings, and surveyed providers of methadone services.

The goal of this research was to provide insights into the factors that contribute to engagement, early exit, and retention: (e.g., treatment facilities/ locations, patient needs and preferences, etc.).



Reasons and timing of early treatment exit

Data were collected between November 2022 to August 2023 and used to develop practical policy and practice recommendations to inform efforts to address the opioid crisis and reduce overdose deaths in Philadelphia.



Develop practical policy & practice recommendations



Accessibility of services

Illustrated by GIS maps, Philadelphia has a multifaceted treatment system that allows people with public insurance (e.g., Medicaid, Medicare, county insurance) to access services through many different types of organizations.

This complexity means that there are providers that can meet the needs of different subpopulations but maintaining current records of available services is challenging and urgently needs better reconciliation about availability of treatment programs. There are distinct patterns of accessibility related to race/ethnicity as most inpatient and outpatient facilities are in census tracts with high proportions of people who are non-Hispanic Black. Overall, services are available in most parts of the city center and accessible by different modes of transportation (walking, SEPTA, and driving) for people with public insurance. However, there is poorer access in the Northern, Southwestern, Western peripheries of the city and many inpatient facilities are well outside the city limits.

COVID-19 markedly changed services provision within substance use services and continues to impact care. Methadone program leadership reported occupancy rates that ranged from 62.5% to 91% and noted serious challenges including staff difficulties, lower patient demand, less patient retention, and changes in the drug supply. Lower patient demand and retention were attributed to a preference for other medications for opioid use disorder (MOUD) such as buprenorphine and to challenges related to withdrawal from fentanyl and xylazine.

Through qualitative focus groups with people with lived experience of substance use, our participants described having a complex set of needs that can create barriers to accessing substance use services, such as:





Transportation

Childcare

Participants also described how inadequate support, bureaucratic processes, or delays in the availability of services during moments of crisis contribute to failures to access services. Retention in services was adversely affected by: issues of cost, lack of sufficient time within inpatient care, stigma, and discrimination due to patient substance use or race/ethnicity, staff that were perceived as unengaged, overly laborious programmatic requirements, limited hours, transportation issues, and difficulties meeting basic needs for food and housing during and after treatment.

However, there were also resources identified as supportive of their retention in services including assistance from Certified Recovery Specialists (CRS) and other treatment staff with lived experience. This workforce helped to create a more welcoming environment. Tailoring services to specific populations who require specialized services and support beyond treatment access is a notable area of strength in programs. Examples include programs tailored to pregnant and parenting people that offer childcare, comprehensive resources, and social support for needs related to parenting as well as a program for participants experiencing chronic homelessness that offers housing services, case management, and resources to address safety and poverty. A graphic depiction of common experiences of individuals during their recovery journeys is presented to capture individual flows in and out of treatment.

"Like, the community don't wan't deugs, right? But then they don't want halfway houses or houses to help people... damned if you do, clamned if you don't -Black men focus group



Village of Arts and Humanities, Hartranft section of Philadelphia.

In partnership with people with lived experience of OUD, our team synthesized the information gathered in this multimethod study to develop critical policy and practice recommendations around treatment access and retention with the goals of reducing overdose deaths in Philadelphia while supporting the development of a more just and equitable system of care.



Sendero Verde (Green Trail) Mural, in Callowhill section of Philadelphia

RECOMMENDATIONS

Recommendations focused on treatment access are grouped by those that can be addressed through local policy and those that require state or federal intervention.Recommendations that can be addressed, at least in part, at the local level through coordination by the Department of Behavioral Health and Intellectual disAbility Services (DBHIDS) with other city and state agencies (e.g., Philadelphia Department of Public Health (PDPH), the Pennsylvania Department of Drug and Alcohol Programs (DDAP).

Understanding the scope of OUD and the treatment system locally

Build a current and user friendly, public-facing website that identifies locations and types of services available.

Improve service planning and evaluation through a comprehensive survey to assess the scale of OUD within Philadelphia.

Assessment

Improve consumer experiences during the assessment process.

Inpatient

Address withdrawal from xylazine and opioids.

Improve treatment access by increasing the number of available treatment programs and continue current efforts to create more inpatient beds that can support those who have complex comorbid conditions and wounds to ensure that individuals do not experience critical delays in access.

Provide support for longer inpatient stays.





Outpatient

Increase financial, housing, and transportation resources available to support people when initiating treatment.

Explore alternative treatment locations and expand efforts to provide expanded hours, mobile, wound, and outreach services.

Enhance harm reduction services.

Encourage participation in treatment despite ongoing substance use or programmatic compliance issues rather than restricting or denying access to medication.

Encourage less punitive approaches to address ongoing substance use during treatment through restricting or denying access to medication.

Increase housing for all stages of recovery, during transitions between levels of care, and allow for family unification and preservation

Improve linkage to treatment for incarcerated people upon release.



Workforce Development

Expand and support the OUD service workforce with staff members that are skilled and reflect the demographics and language preferences of those participating in services (in collaboration with DDAP) Train more staff who speak Spanish and other languages. Increase the number of Certified Recovery Specialists (CRS) and other peer support workers.

Recommendations requiring coordination with Federal & Commonwealth partners include:

Support use of treatment entry using telehealth. Advocate to change insurance requirements for the presence of opioids to initiate MOUD.

Philadelphia has a robust network of services to address the needs of people seeking treatment for OUD, but expansion and adaptation are urgently needed. With programmatic and policy changes within organizations, hospitals, the city, the state, and the federal government that are attuned to improving the treatment access and retention of this highly vulnerable population will lead to improved quality of life of the community.



Jefferson Tower, Center City section of Philadelphia.

"There's just not enough. There's not enough detox beds. There's not enough rehab beds. Especially with the 'opiates' that are out there now. We're seeing flesh wounds where there's tendons, there's bone, there's major muscle damage, right? There's two 4.0 facilities with BCH, right? Or Philadelphia, whatever, that will contract, right? There's only 70 beds. So a lot of these people wind up discharging to, say, a skilled nursing facility. If they're even willing to accept them. Because if you have substance use disorder stamped on your chart, nobody wants to deal with you. And a lot of these patients wind up being discharged back to shelters, back to the flop house, back to the streets." –Community CRS focus group

2. BACKGROUND

The overdose crisis in the United States has been categorized as occurring in waves. The first wave is attributed to overdose deaths driven in large part by prescription opioids. The second wave, starting in 2010, was marked by an increase in heroin overdoses. The supplanting of heroin with fentanyl marked the third wave, beginning in 2014. Currently, we are in the fourth wave of the crisis, with overdose deaths driven largely by stimulant and opioid polysubstance use.¹ In tandem with the fourth wave, the unregulated drug supply in Philadelphia and elsewhere continues to shift with the addition of new adulterants and novel psychoactive substances.

Situated in the Southeastern portion of Pennsylvania with a population of 1,567,258,² Philadelphia has one of the highest metropolitan overdose death rates in the country. The number of unintentional opioid overdose deaths in Philadelphia was 1,171 people in 2022, the highest number ever recorded.³ Demographically, 43% of residents are Black, followed by 41.5% White, then 8.8% Asian. Nearly 16% of residents are Latino/a/x.⁴ In a demographic shift, fatal overdoses were highest for Black Philadelphians starting in late 2020 and comprised 46% of unintentional fatal overdoses in 2022. This is compared to 38% of overdoses among White residents and 15% among Hispanic residents during that year.³ This means it is particularly important to reconsider the accessibility and cultural responsiveness of substance use services for the changing demographics of those affected. Most relevant to the current opioid composition in Philadelphia is the intrusion of xylazine into the fentanyl supply. In 2021, xylazine was detected in over 90% of fentanyl ("dope") samples collected in the community and subsequently analyzed.⁵

This crisis has ripple effects at the local level; a 2019 Pew poll found that nearly

Philadelphians knew someone who had died of an opioid overdose

Described the impact of opioids in their neighborhoods as "major"⁶

In a follow-up poll, more than half of Philadelphians (53%) reported that opioid use negatively impacted their neighborhood's quality of life, a 12 percentage point increase since 2019.⁷

Estimating the need for treatment for OUD is imprecise as no comprehensive data exists to document the scope of opioid use and OUD in Philadelphia. However, some approximations can be extrapolated from survey data. From 2016-2018, about 8.2% of Philadelphians met the criteria for substance use disorder, and 3.6% needed but did not receive treatment for illicit substance use.⁸

A small survey of Philadelphians in 2017 found that nearly 1 in 3 reported prescription opioid use in the past year; of these, 19% acquired them from friends, family, or the illicit market.⁹ Misuse of prescription opioids was not measured in this survey, nor was other opioid use.

The system of treatment

Substance use and rates of overdose overall increased since the start of the COVID-19 pandemic, making treatment access and retention vitally important to reduce mortality and morbidity. To mitigate disruptions to services, federal, state, and local policy changes were rapidly enacted. For example, in March 2020, the US Drug Enforcement Administration and the Substance Abuse and Mental Health Services Administration (SAMHSA) temporarily allowed for the prescription of buprenorphine via telemedicine, without requiring an in-person evaluation. Methadone induction still required in-person intake appointments, but methadone could be prescribed in 14- and 28-day take-home options.¹⁰ There is clear evidence that these measures were critical to preserving access to services during the pandemic's early phases and did not lead to a significant upswing in diversion, but there are also notable ongoing challenges, such as significant disruptions to staffing and loss of group therapy.^{11–15}

MOUD are underutilized by individuals who use opioids. In 2020, of 2.5 million people surveyed with a history of opioid use, only 11.2% received MOUD treatment.¹⁶ Previously, estimates of access to buprenorphine providers using data from the Substance Abuse and Mental Health Services (SAMHSA) Administration found that only 1% of households in Philadelphia did not have access to a buprenorphine provider within 30 minutes on public transit.¹⁷ This study also found that services were highly accessible by car. However, there are low rates of car ownership in Philadelphia, with 28.6% of Philadelphians not having access to a car18 and therefore conceptualizing service access may be better captured via walking and public transit rather than driving. Additionally, the study by Drake and colleagues did not account for whether all these providers were accessible by those with public insurance; many individuals who seek substance use treatment are covered by publicly sponsored health insurance and from 2010-2017 between 81-88% of those hospitalized in Philadelphia for opioid poisoning were insured through public insurance. In 2009, of the \$24 billion that health insurance payers spent on substance use disorders⁷. Medicaid accounted for 21% of the spending and is the largest single payer for SUD services.¹⁹ In 2016, approximately 21% of adults in Philadelphia were enrolled in Medicaid.²⁰ A focus on individuals with public insurance is critical to understanding the unique facilitators and barriers to care that those with this type of insurance may face.

Substance use services are classified according to the American Society of Addiction Medicine (ASAM) levels of care and facilities can provide one or more levels of care in each location. The ASAM criteria are a widely used set of comprehensive guidelines to classify the treatment needs of individuals who use substances. These criteria can help to match a person to a level of care that is commensurate with their needs and help to guide practitioners on when a person may be appropriate to step up or step down their level of care. It is important to identify how accessible each level of care is for those who are covered by public insurance, which was also not addressed in prior studies.^{17,21} The levels of care will be outlined below. Results from this research address critical knowledge gaps about the OUD treatment system in Philadelphia. This was accomplished through mapping various levels of treatment in Philadelphia (and beyond when services were covered by Philadelphia's public insurance program). Treatment locations are visually represented and overlaid with race, ethnicity, population density, and transportation times to identify trends and note gaps. Results were combined with qualitative findings from consumers of services, CRS, and a community advisory board to develop recommendations to improve OUD treatment in Philadelphia.

3. OUD PATIENT JOURNEY MAP PHILADELPHIA.

Participants had many years of experience accessing multiple forms of OUD treatment in Philadelphia. Participants who had only one treatment type or attempt were in the minority. During focus groups, participants were asked what other types of treatment they had accessed and most indicated most or all treatment types. Participants tended to describe treatment experiences as isolated events rather than as journeys into and out of care and transition across different types of care. CRS more frequently discussed these transitions, especially in terms of how treatment could be disrupted during transitions between levels of care. The "OUD Patient Journey Map Philadelphia" follows three hypothetical Philadelphians with OUD through the treatment system, describing facilitators and barriers to entry and retention from the treatment system specifically, along with elements of their lives (e.g., personal relationships, employment, physical health) that impact decisions to enter and leave treatment.







Thomas Jefferson University - Communicating Health Data



Intersection in the Harrowgate section of Philadelphia

4. METHODS & RESULTS *A. QUANTITATIVE METHODS*

Datasets for maps

Data were drawn from five primary sources. To develop descriptive GIS maps of treatment locations, a list of programs that provide services to individuals with public insurance was requested from DBHIDS and received on June 30th, 2023, under a data sharing agreement. A total of 96 programs were identified across 88 locations of services and the ASAM levels of care provided by these programs were also included. Maps of each location across each ASAM level of care were created with the locations provided by DBHIDS and overlaid by population density maps at the census tract level according to data compiled by the Centers for Disease Control and Prevention (CDC). Locations of inpatient services that were located outside the city limits are only displayed on one map as it would be visually prohibitive to view these maps overlaid with other data about neighborhood characteristics (all outpatient services are within city limits).

As information about the medications offered at these sites was not included, the DDAP website was reviewed on July 5th, 2023, to identify which sites provide methadone services using the Drug and Alcohol Facility Locator Page. All sites noted within Philadelphia County as providing 'outpatient maintenance' were included and coding of these sites were manually entered into the analytic dataset. There were 14 sites identified on the state's website as being authorized to provide methadone services. Twelve programs were identified as providing methadone services by the state's website and by DBHIDS and included in these analyses.

DDAP also provides a crosswalk of how the different types of inpatient licenses map onto the ASAM levels of care. Data about the number of treatment beds for inpatient services was accessed on the DDAP website on August 14th, 2023. Confirmation of each level of care and the number of licensed treatment beds were manually entered into the Excel file with the raw data on treatment locations provided by DBHIDS and notes were made about any discrepancies between the two sources. Assessment centers were also not included in the list of providers from DBHIDS, but their website identified eight locations. These sites are included in the GIS maps of outpatient treatment centers. Three sites are Behavioral Assessment Centers (BAC) that provide assessments for substance use services only but do not operate 24/7. Two sites are Crisis Response Centers (CRC), which operate 24/7 for mental health crisis-related emergencies. Three sites have both BAC and CRC services.²²

To explore where locations of mobile MOUD and wound care services exist, we compiled a list of mobile services maintained by the Health Federation in October and November 2022 and through personal communication with local providers. Due to the ephemeral nature of the locations of mobile services, only one map will illustrate where some mobile services are provided.

Data about the insurance status by census tract were obtained from the CDC website.²³ Demographic data on the race/ethnicity and population density by census tract were obtained from the 2020 US Census.

> "Every day you get home, you go to the frigging clinic & deal with people you didn't want to have to deal with, you know what I mean? It was like an everyday all day thing. It's Job, that's what it is. going to the methadione clinic is a job.

Buppenorphile Focus group

Descriptive Mapping

The list of treatment centers was imported into R and geocoded (i.e., converted them into longitude-latitude coordinates) using ESRI's geocoding service to determine geographic

coordinates for place names, street addresses, and zip codes. These coordinates were then overlaid onto a base map of Philadelphia that was acquired from the US Census TIGER/LINE databank²⁴ Maps were created using the NAD State Plane Pennsylvania South FIPS 3702 Coordinate System.

Transportation Outcome Analyses

We created isochrones (also called service areas) to show the region that a person could travel within 20 minutes of a treatment center by walking, driving, or public transportation. The isochrones were created by first downloading the underlying street network data (OpenStreetMap) of the whole US Northeast.²⁵ This was trimmed to just the Southeast PA region using the Osmium Tool²⁶ Next, using the OpenTripPlanner library in R program (version 0.5.1), an OpenTripPlanner (OTP) map server was created that connected to the OpenStreetMap data and created the isochrones. The isochrone layers were created in QGIS (version 3.26.3 - Buenos Aires) by connecting QGIS to the OTP map server with the OpenTripPlanner plugin for QGIS.²⁷ For walking, we used the default assumption of walking 3 mph. For public transit, we used only SEPTA routes from the General Transit Feed Specification (GTFS), available at https://www3.septa.org/developer/gtfs_public. zip. We used the feed version of April 07, 2023, which had route timetables from 04/16/2023 to 08/19/2023. Transit isochrones were based on a non-holiday weekday at 2:00 pm, traveling FROM the treatment sites. Isochrones created with QGIS/ OpenTripPlanner were saved as shapefiles and imported into R. The isochrones are depicted by pink shading around each treatment center (centroids) in six unique maps.

Survey of Methadone/Outpatient Treatment Programs.

An online survey was distributed to 10 program directors that represent 12 sites that were identified as providing methadone services. From April 26th, 2023, to June 14th, 2023, nine respondents filled out the survey representing 11 locations





Market-Frankford El SEPTA Station and Broad Street line map.

of care representing a 92% response rate. One program director was identified for 3 programs (though only 2 of those programs are accessible to those with public insurance).

The survey items were developed for this study. Each program director was asked to report about how their services had been affected by COVID-19 within a specified time frame or currently (defined as in the prior month). Program directors were asked to estimate their current approved capacity and current census (in the prior month). Program directors were provided with checklists of possible system-level and patient-level explanations for why there were differences between their capacity and current census since the beginning of the pandemic. Program directors could also write in additional reasons. Open-ended questions about how COVID-19 had affected operations were asked about their hours of operation, closures, if they had difficulties with patient retention and why, adaptations to services, staffing challenges, and the impact of federal emergency policy measures on patients. Program directors were asked to provide information in open-ended questions about factors that could help to prevent premature treatment termination in the future. factors leading to administrative termination, and the support needed by patients to better engage in recovery.

Demographic, insurance, and medication information about the number of participants in the programs from July 2021 to June 2022 were asked regarding gender, race/ethnicity, insurance status, and type of MOUD prescribed. Data were aggregated into percentages across all sites to provide a descriptive profile of individuals enrolled in methadone services.

Respondents were asked to estimate what number of their patients met the criteria for treatment adherence. Treatment adherence was defined for participants by medication type. For buprenorphine patients, it was defined as the number of patients who screened positive for buprenorphine for three consecutive months in urine drug screens. Retention was defined by an expert in the field of MOUD. For patients maintained on methadone, adherence was operationalized as missing no more than two doses per month in the prior three months.

So, il was on the waiting list f [housing prega n] ecause il call them and they're like, well, what drugs are you rently on?... A Said I have nost a year lom. Well, we can't help you, or have to be rey would ate me 1 Was Moequarta,

B. QUANTITATIVE RESULTS

i. Overview of GIS maps and program director survey results

Using descriptive maps of locations of care along the ASAM levels of care, we found that inpatient and outpatient services were highly accessible for individuals who live within the center of the city through walking, SEPTA, or driving, but that access was more variable in its peripheries in the Southwest, West, Northwest, North, and Northeast. However, a notable limitation of these data is that there is some discordance between data on locations of care provided by DBHIDS in June 2023 and those recorded as licensed by DDAP in August 2023, which suggests a need for better data management online by DDAP or improved data sharing between the city and the state.

About a third of inpatient beds are outside the city limits, which may pose as a barrier if individuals lack transportation assistance (DBHIDS provides transportation to those who are connected through an assessment center). The facilities that beds are available at are also potentially contracted to work with multiple Counties and therefore are not exclusive to Philadelphia residents. This could limit how often these beds are available.

For outpatient services, locations of care are more heavily located in places with higher population density and with higher proportions of people who have public insurance but with noticeable gaps in the areas in the Northeast, Northwest, and Southwest parts of the city. No outpatient sites are outside the city limits. Locations of care were often within Black predominant neighborhoods, which may make services more accessible to those in need within these communities, but they were often along the periphery of white predominant neighborhoods.

Methadone sites are primarily concentrated near the center of Philadelphia and near the SEPTA Market-Frankford train line.

A survey of the program directors of methadone programs identified many ongoing barriers to services but a lack of staff and lower patient demand (attributed to patient preferences for other MOUD and difficulties with withdrawal from fentanyl and xylazine) were the most common reasons selected.

Policy Recommendation: Expand alternative treatment locations, wound care, mobile, and outreach services.

ii. Locations of services for opioid use

From 2021-2022, the City of Philadelphia identified 96 programs as providing OUD services to individuals with public insurance in the greater Philadelphia area across 88 locations. As outlined above, in previous research using all treatment centers identified by the Substance Abuse and Mental Health Services Administration (SAMHSA) in 2017, there are sites within 30 minutes driving distance for all but 1% of Philadelphia. However, a smaller subset of providers is accessible to those with public insurance.¹⁷ which means that the prior research does not estimate service accessibility for those who are limited to facilities that accept public insurance and who are seeking services.¹⁷ As noted above, the vast majority of those who are admitted for opioid poisoning to the hospital have public insurance, which means that access for this particular population is important to estimate. Services are classified according to the ASAM levels of care and facilities can provide one or more levels of care in each location, though only 4 sites provide both inpatient and outpatient care at the same location. The number of programs that provide each level of care are presented in Table 1 using data provided from DBHIDS.

MOUD can be a vital part of evidence-based treatment (EBT) for OUD. The types of MOUD that each facility provides can include methadone, oral and injectable buprenorphine, and naltrexone. Due to federal regulations, methadone is distributed through a smaller number of providers who are specially licensed to dispense it in outpatient settings.

Table 1. ASAM Levels of Care of Treatment Programs in Philadelphia, PA $^{\scriptscriptstyle 30}$

ASAM Level of Care	Definition of ASAM Level of Care	Number of programs	DDAP Analogue
1.0	Outpatient treatment: Outpatient treatment services that are for less than 9 hours per week. This level of care is designed for those who have less severe disorders or those who have stepped down from a more intensive service level.	60	Not applicable
2.1	Intensive outpatient treatment Intensive outpatient treatment programs provide substance use services that are between 9 to 20 hours per week. These programs are designed to offer medical care by telephone and in person.	6	
2.5	Partial hospitalization: Providing partial hospitalization for at least 20 hours a week. This does not include 24-hour care but allows for daily monitoring.	1	
3.1	Clinically managed low-intensity residential: Clinically managed low-intensity residential treatment services provide housing 24 hours but only require 5 hours of treatment per week, such as a group home format.	7	On-hospital residential facility
3.5	Clinically managed, high intensity residential: Clinically managed residential services are for people with serious psychological or substance use issues that require 24-hour care and are at risk of imminent harm.	35	Clinically managed, high intensity residential
3.7	Medically monitored intensive inpatient: Medically managed high intensity inpatient treatment is designed for people who require 24-hour monitoring and care but do not require daily visits from a physician. Residential treatment is provided to assist individuals with co-occurring mental health symptoms and can be hospitals or freestanding residential facilities that are dual licensed for psychiatric care and substance use care.	3	Residential treatment provided in a healthcare facility, or hospital capable of medical monitoring, or psychiatric hospital with D&A license, or free-standing psychiatric hospital, or freestanding residential facility
3.7WM	Medically monitored inpatient withdrawal management: Traditional detoxification and intended for a shorter stay. Medically managed high intensity inpatient treatment is designed for people who require 24-hour monitoring and care but do not require daily visits from a physician.	13	Non-hospital residential detoxification
4.0	Medically managed intensive inpatient: Medically managed 24-hour acute nursing care under the daily supervision of a physician. This is for people who are experiencing serious medical issues. IV antibiotics and wound care services can be provided.	3	Hospital-based residential inpatient
4.0WM	Medically managed intensive inpatient withdrawal manage- ment: Medically managed 24-hour care under the daily supervi- sion of a physician for people who are experiencing withdrawal. This is acute care or a psychiatric hospital unit that provides specialized medical care for people who are experiencing serious medical issues, such as those at risk for seizures. Individuals may be transferred from acute care hospital settings into this setting.	5	Hospital-based detoxification

iii. Estimate of available treatment slots

Data were requested from DBHIDS and are pending delivery due to the time required to clean and compile the data on the use of treatment slots across the ASAM levels of care, and these data will be part of a future publication. Notably, until January 2023, physicians who completed eight hours of training and received a Drug Enforcement Administration (DEA) waiver, also known as an X waiver, could prescribe buprenorphine in primary care for OUD. Due to the changes in federal regulations, it is no longer possible to estimate the number of patients that might be seen for buprenorphine services with the available data. However, in 2020, only 6% of Philadelphia providers had completed the X-waiver training to prescribe MOUD, and only 24% of those providers prescribed MOUD (The Pew Charitable Trusts, 2021). Primary care providers often report a lack of training, experience, resources, and institutional support as factors preventing them from delivering MOUD.²⁷ According to the DDAP website, there are 110 partial hospital beds (level 2.5) licensed at facilities identified by DBHIDS as available to individuals with public insurance, as well as 70 inpatient transitional living facility beds (level 3.1), 1829 inpatient non-hospital beds (level 3.5), 177 inpatient non-hospital detoxification beds (level 3.7WM), 103 inpatient hospital beds (level 4.0), and 53 inpatient hospital detoxification beds (level 4.0WM). There was no clear category of licenses issued for level 3.7 services on the DDAP website that corresponded to any of the identified sites.

iv. Methadone Sites.

Excluding the Veterans Affairs (VA) system, as of December 2022, the state of Pennsylvania on the DDAP website identified 14 locations as providing methadone services with a total of 6067 treatment slots citywide. This reflects a recent reduction in available beds as one location failed its licensure inspection on 12/08/2022 and was closed. Of the 14 sites, there are 12 sites that provide methadone within the network of care for those who are publicly insured, with a total of 5527 treatment slots (according to the state's DDAP website). According to the program director's survey, none of the programs were at full capacity with censuses observed to range from 170 to 1200. In terms of the percentages of occupied slots relative to the approved capacity, the percentages ranged from 62.5% - 91%. The average occupancy was 76.8% (SD = 8.9%). According to the 7 completed responses, 98.5% of individuals treated in these facilities were dispensed methadone and 99% were reported to be methadone adherent. Insurance coverage was high in these programs as 93% of individuals had public insurance, 2% were uninsured, and 5% had other insurance.

The director's survey indicated the overall gender identity of persons served within these facilities were 57% male 42.7% female, and 0.3% transgender (completed by 7 of 9 respondents). The race of persons served included 58% White, 27% Black, .2% Asian, .06% American Indian or Alaska Native, and 15% other (completed by 5 of 9 respondents). The ethnicity of persons served was 13% Hispanic/Latinx. These demographics would reflect an over-representation of White individuals receiving treatment relative to their representation in the city, which is 40% White and an under-representation of Black individuals (who comprise 40% of the city's population) and Asian individuals (who comprise 8.2% of the city's population).

The nine programs reported that their weekday hours of operation ranged from opening times of 5:15 AM – 7:30 AM and end times between 1:00 PM and 7:00 PM and 6 facilities reported truncated hours of operation on the weekends/holidays. Seven of the nine respondents reported that there were no changes to their hours of operation during the COVID-19 pandemic. The two facilities that reported changes had to close early or reduce their hours due to staffing shortages.

> Policy Recommendation: Boost treatment on demand by increasing hours of operationfor assessment and outpatient services.

v. COVID-19 Impacts on services.

Programs were asked to identify system-level factors that may have limited access to services during COVID-19, as seen below in Figure 1. The most common issue that facilities reported was staffing issues, with 88% of facilities having staffing difficulties. When asked about issues related to recruiting suitable therapist candidates, clinics cited a lack of qualified applicants, applicants wanting higher starting salaries than the clinics can provide, that some hires did not pass the 90-day probation period, and that some hires want the opportunity to work from home which is inconsistent with the delivery of highest quality care.

Figure 1. Methadone Program Directors' perceptions of the system-level barriers that impacted treatment access during COVID-19.



Staffing difficulties

Other common system-level issues included changes in the drug supply, COVID-19 adaptations to services, temporary pauses in accepting new patients, and in-person visit limitations. Only two facilities saw telehealth service issues as being a barrier to care, perhaps reflecting that providing additional take-home medications were effective during this period, which was a noted mitigating factor in open-ended responses by participating programs. Therapy participation is a requirement of outpatient treatment programs and one clinic found that patients left the program when they were asked to complete required group and individual therapy hours upon resuming in-person services. None of the programs selected neighborhood safety around the treatment centers or hours of operation as barriers to treatment. Only one facility reported that there were no changes to their capacity or census during this period.

When asked what factors led to better patient retention during the COVID-19 pandemic, the most impactful, noted by six programs, was the take-home bottle waiver. The loss of the take-home bottle waiver after the end of the federal emergency order was also noted as having a range of impacts on services and service engagement. One stated that the disparity between the methadone take-home regulations and buprenorphine prescription rules made some patients seek buprenorphine even when not clinically appropriate. Another found that patients were angry if they did not meet the criteria to take home medication after the pandemic, leading to patients leaving treatment and another found that foot traffic increased when take-home privileges were revoked. Programs also noted a wide range of other supportive factors that helped with retention including providing telehealth services, giving staff work cell phones, increased check-ins, quicker dose stabilization, health measures, the return of staff on-site, and referring patients to higher level of care and managing their progress with care managers and certified peer specialists. Since the end of the national emergency, three programs noted that they have increased in-person sessions.

When asked if they could identify factors that might prevent premature treatment termination or to better engage in recovery in the future, recommendations included service changes including increased staffing, case management, access to mental health services (particularly trauma-informed), and more effective rapid titration of methadone dose at time of treatment entry (establishment of a multidisciplinary rapid engagement team) and use of medication that is effective for fentanyl and xylazine use. They also saw the need for more resources for housing, transportation, and basic needs and for social supports such as a sense of community within their treatment programs, better family connections, connection to self-step/twelve-step organizations and faith organizations, daily engagement, encouragement, positive reinforcement, identifying strengths, connecting to resources, and not being vilified due to substance use when receiving external medical treatment

Programs were also asked to identify patient-level factors that they thought might have also impacted the likelihood that patients would access their services during COVID-19, which are presented in Figure 2. The most common reasons that providers recognized as preventing patients from wanting to access services were reduced patient demand and decreased patient retention. This could reflect providers' perceptions that patients are increasingly preferring to use other MOUD or a perception that MOUD is less effective for addressing the withdrawal of fentanyl and xylazine. A lack of technological access inhibiting use of telehealth and a lack of stable housing were also selected by 33% of programs. Only one program did not perceive there being any unique patient factors that impacted their capacity or census. No one selected a lack of benefits or employment as a barrier to treatment, which suggests that providers at this level of care are largely treating those who have already been linked to insurance coverage and perhaps that COVID-19 related benefits were working as intended to support those most in need of assistance during the pandemic.

When you put a Sponish Person in group when anybody is speaking English & that sponish person come in our group, night, he don't understand nothing. They short on staff with that.

- outpattent focus group

Figure 2. Program Directors' perceptions of the patient-level factors that impacted access to methadone services during COVID-19



Notably, few providers recognized the lack of social support, social isolation, or co-morbid mental health challenges as particular challenges preventing treatment access, despite widespread experiences of loss of support and increasing mental health issues in the broader community. Only two programs cited a lack of childcare as being prohibitive (In an open-ended response, one of these programs noted that they had to close their childcare services during the pandemic), which is also counter to national shortages in childcare causing difficulties completing daily activities within many families during this period. This could reflect that these challenges were not considered unique to the COVID-19 pandemic, and future research should clarify if these treatment barriers are seen as major barriers as pandemic-related disruptions continue to dissipate.

C. QUALITATIVE METHODS

Between November 2022 and June 2023, we conducted 13 focus groups with 70 people with a history of opioid use in Philadelphia (Table 2). Participants were recruited from non-profit organizations, OUD treatment programs, and through street intercept.

Table 2. Focus Groups Conducted in Philadelphia, PA with People with a History of Opioid Use

Focus Group	Number of Participants	Recruitment Information	Date
CRS-Community Based	3	Non-profit organization	November 29, 2022
CRS-Hospital Based	3	Non-profit organization	November 29, 2022
Inpatient	10	OUD treatment programs and non-profit organization	January 31, 2023
Outpatient (2 groups)	10	OUD treatment programs and non-profit organization	January 27, 2023
Methadone	3	OUD treatment programs	December 13, 2022
Buprenorphine	5	OUD treatment programs and non-profit organization	December 14, 2022
Harm Reduction	6	Street intercept	February 17, 2023
Pregnant and Parenting People	7	OUD treatment program	April 12,2023
Black Women (2 groups)	7	OUD treatment programs and non-profit organization	March 30, 2023 and April 26, 2023
Black Men	7	OUD treatment programs and non-profit organization	April 4, 2023
Latino Men	9	OUD treatment program	June 6, 2023



Mural in PPA municipal lot in North Philadelphia.

Participants were contacted by phone or in person and a member of the study team explained the study aims and procedures. Eligibility criteria included participants 18 and older with a history of opioid use, experience with OUD treatment in Philadelphia with public insurance, as well as criteria for each focus group (e.g., a history of methadone program use for the methadone focus group, identifying as a Black man for the Black men focus group). Interested participants provided verbal informed consent. Focus groups were conducted at the Thomas Jefferson University Center City campus (CRS, inpatient, outpatient, methadone, buprenorphine, Black women, Black men focus groups), at hosting organizations (pregnant and parenting people, second focus group with Black women, Latino men focus groups), or at a public library meeting room (harm reduction focus group). Participants received a \$50 ClinCard for their time upon completion of the focus group. Study procedures were approved by the Thomas Jefferson University Institutional Review Board and the Institutional Review Board of PDPH.

Prior to the initiation of focus groups, a community advisory board (CAB) of people with lived experience of opioid use was formed. The CAB met three times to help develop focus group guides and each focus group guide was piloted with two to three CAB members, then revised. All members of the study team were involved in the development of focus group guides. Faculty at the Maternal Addiction Treatment, Education and Research program reviewed and provided recommendations for the pregnant and parenting people focus group.

Focus groups were facilitated by authors MKR, TEC, JG, and SG. The CRS focus groups captured information on participant experiences of accessing OUD treatment, but primarily focused on participant experiences of navigating others through the OUD treatment system. The other focus group guides varied by concentration, but all captured information about experiences accessing treatment for OUD in Philadelphia, barriers and facilitators to entry and retention in the treatment system, comparisons to other treatment types, experiences with incarceration and discrimination, and recommendations for the OUD treatment system. Focus groups were recorded and transcribed verbatim and cleaned before analysis to remove any remaining identifying information. Author MKR analyzed the CRS focus groups and wrote summaries of each, and authors TEC, JG, and SG edited the documents. For the remaining 11 focus groups, authors MKR, TEC, JG, and SG developed a codebook and coded interviews in NVivo. Both deductive (arising from research questions and interview guides) and inductive codes (arising from the text) were defined and applied to interviews using both directed and convention content analysis.^{25,26} All interviews were coded by two members of the study team. After all interviews were coded, the output for each code was read by individual study team members, who then wrote summaries of each code containing hyperlinks to source text.

i. Recommendations & Dissemination

Emerging themes from focus group analysis were presented to CAB members over the course of two meetings. **The CAB provided feedback on these findings and helped develop recommendations contained in this report.** Members of the research team met monthly with Pew and representatives from DBHIDS.

Like the community don't want drugs night? But they don't want halfway houses or houses to help people... damned if you do... damned if you do... damned if you do...

D. QUALITATIVE RESULTS

Seventy people with a history of OUD participated in 13 focus groups. Forty percent of the sample identified as Black, 34.3% as White, and 24.3% as Puerto Rican. The majority of the sample (52.9%) was male. Most (60.9%) had used at least one illicit drug in the past month, primarily heroin/fentanyl (15.2%) and crack cocaine (10.7%). Only 5.1% of the sample had not accessed formal OUD treatment or harm reduction services of some kind in the past month (Table 3). In their last attempt to access OUD treatment, nearly a quarter had tried to access through an emergency department, and nearly a quarter had tried by going directly to an assessment center (see Table 4).

Table 3. History of Drug Treatment Engagement among Focus Group Participants (n=70) in Philadelphia, PA, November 2022-June 2023

Drug treatment/services engaged in, n (%)ª	Within last 30 days	More than 30 days - less than a year	More than a year ago
Outpatient treatment Intensive outpatient treatment Inpatient/ residential treatment Harm reduction program Methadone Buprenorphine Other ^b None	40 (30.0) 21 (15.2) 6 (4.3) 13 (9.4) 20 (14.5) 30 (21.7) 1 (0.7) 7 (5.1)	50 (25.6) 26 (3.3) 30 (15.4) 19 (9.7) 25 (12.8) 38 (19.5) 1 (0.5) 6 (3.1)	55 (20.1) 45 (16.5) 52 (19.0) 27 (9.9) 34 (12.4) 50 (18.3) 4 (1.5) 6 (2.2)
Number of lifetime unsuccessful attempts to access treatment – median (range)2 (0-20)			
^a categories are not mutually exclusive and will not sum to 100% ^b includes naltrexone/Vivitrol and withdrawal-only treatment			

Across focus groups with consumers of OUD treatment, participants discussed their experiences accessing OUD treatment in Philadelphia. Most had a history with various treatment types and were able to speak about their experiences with different modalities in different groups (e.g., some methadone focus group participants discussed buprenorphine or inpatient treatment at length).

Robust support systems at treatment facilities and harm reduction programs were noted in most of the focus groups. Two participants in the buprenorphine group and one in the Latinx group indicated that tangible supports such as transportation to the clinic, appointments, and other activities were invaluable to accessing care. Linkage to other resources was also highlighted, such as childcare supplies and services, houses, identification services, food, and income. Salient themes from analysis included frustrations with the assessment process; reflections on facilitators and barriers by treatment type, including inpatient, methadone, and buprenorphine; and recommendations across treatment types (e.g., hours of operation, neighborhood location of treatment). Participants spoke of multiple instances of treatment, using language that did not map precisely onto the ASAM levels of care. Therefore, we present results here by treatment type and by theme. Sections referencing perspectives from both treatment consumers with OUD and CRS, treatment consumer content and quotes are presented first. Quotes are attributed to specific focus groups.

Table 4. Sociodemographic Characteristics of Focus Group Participants (n=70) in Philadelphia, PA, November 2022-June 2023

	Participants n(%)
Age -mean (SD)	45.1 (10.5)
Gender Identity Male Female Transgender Female Nonbinary	37 (52.9) 31 (44.3) 1 (1.4) 1 (1.4)
Ethnicity Not Latino/Hispanic/Latinx Latino/Hispanic/ Latinx	53 (75.7) 17 (24.3)
Race White African American/Black Asian, Native Hawaiian, Pacific Islander Other ^a	24 (34.3) 28 (40.0) 1 (1.4) 17 (24.3)
Age of first opioid use – mean (SD)	21.6 (7.1)
Drugs used in the past month Heroin/fentanyl Crack cocaine Powder cocaine Methamphetamines Xylazine/tranq PCP/ wet Benzodiazepines, not prescribed Prescription opioids, not prescribed Buprenorphine, not prescribed Methadone, not prescribed Other ^b None	17 (15.2) 12 (10.7) 9 (8.0) 8 (7.1) 6 (5.3) 3 (2.6) 3 (2.7) 2 (1.7) 2 (1.8) 1 (0.8) 5 (4.5) 44 (39.3)
Last attempt to access treatment system Emergency Department/ hospital Assessment center Social worker at community-based organization Substance use treatment center Other ^c NA/ never accessed treatment	18 (25.7) 17 (24.3) 12 (17.1) 10 (14.3) 7 (10.0) 6 (8.6
Reasoning for seeking treatment ^d Wanting to stop using Social support recommendation Health concerns Financial To decrease tolerance Incarcerated Court-mandated Court-mandated Complications with school or job Other ^e NA/ never accessed treatment	50 (45.0) 13 (11.7) 12 (10.8) 7 (6.3) 3 (2.7) 3 (2.7) 2 (1.8) 2 (1.8) 13 (11.7) 6 (5.4)
Has had an overdose in their lifetime Overdoses in past year – mean (SD)	38 (59.4) 1.7 (3.6)

^a all participants that identified as Hispanic/Latino chose 'Other' for race. ^b includes cannabis ^c includes primary care clinic, incarceration, and parole officer

^d participants could choose all that apply
^e includes medical hospital stay, mental health, pregnancy, and change in MOUD clinic



Mural on commercial building in Harrowgate section of Philadelphia.

i. Assessment

The first step in the OUD treatment process is to complete a lengthy assessment to determine the appropriate level of care and to link individuals to treatment providers. Participants **described the assessment process as complex**, noting "paperwork" and insurance being some of the complications experienced before even being assessed. However, the chief complaint was about the wait time before the assessment process could even begin.

If I went to a crisis center, you have to sit there for 18 hours, sick, whatever it is. If you have to wait that long, I think that they shouldn't make you not be sick waiting there. That's one of the things that I had a problem with. ⁵⁵

Buprenorphine focus group

This was discouraging to patients, many of whom left before treatment placement due to the severity of withdrawal symptoms. At times, participants had to wait at the assessment for many hours before being told that there were no beds available. Participants who had been using drugs for some time commented on how much worse the withdrawal experience was in the current drug supply. Xylazine in particular was noted as being a particularly excruciating withdrawal with a more rapid onset. Withdrawal was noted as a trigger to go and use again.

Participants echoed their frustration with the large number of questions and paperwork that needed to be completed to access treatment. For example, a participant expressed that the "paperwork got misconstrued as far as [their] insurance," resulting in a social worker having to intervene to obtain temporary coverage. Paper and "Repetitive" or "redundant" questions were particularly challenging for some participants. A consensus among the group was the need for treatment facilities to share information to reduce the repetitiveness of questions. Frustration stemming from being in active withdrawal during the assessment process also contributed to aversive experiences while attempting to access care. For example, a participant stated, "You're already tired, you already

want to get some rest" which was later reiterated by other participants as an irritant when having paperwork "'thrown' in your face." A recommendation was made that before having to complete paperwork, people should be allowed to "rest" and "lay down" as it would "make a whole bunch of difference."

One participant's journey illustrates this

process through a description of the bureaucratic, availability, and logistical barriers she needed to overcome before accessing treatment. Like many other participants, she was originally assessed at an emergency department and referred to an inpatient facility outside of Philadelphia. Upon arrival, the facility did not have any paperwork for her and sent her back to an assessment center in the city. The assessment center told her they did not have any beds available and could only place her in a facility the following day. The participant did not have housing, so she had to find a friend who was willing to let her stay at her house until the next morning. The process took an entire day while going through withdrawal symptoms. Reflecting on this experience, she said:

"

I was so sick. When I say so sick – because as soon as we got off the train with my kids – first of all, I've been on [buprenorphine] forever. But I relapsed. So, I got kicked off of the [buprenorphine] clinic at [facility]. So, coming home, you know, I was sick as a dog ... So, you know, I just stuck in there. I didn't give up.

-Black women focus group



Policy Recommendation Address withdrawal from both xylazine and opioids.

Many Certified Recovery Specialists (CRS) also spoke about the wait during the assessment process: "

So, first of all, the procedure to get an assessment to even be able to be considered for an available bed in the city of Philadelphia is grueling to say the least. Twelve, 15, 18 hours people sit in a waiting room just to get them done to find the bed to hopefully get placement. Which does not always happen. So, you just waited 15, 18 hours while you're withdrawing and you're sick. And at the end of it, you may or may not get the bed that you went there seeking.

-Hospital CRS focus group

In fact, the assessment process was named by the majority of CRS as a significant barrier to treatment, and - similar to patient focus groups many said if they could change one thing about the treatment system, it would be the assessment process, citing, "Like that window, when that window closes, there's a lot of success stories out there that got lost because they couldn't get through assessment.", "The ASAM assessment, biggest block by far that we deal with." "All roads lead back to the assessment process. To trying to get these people help.", and "They literally could do the assessment right over the phone, and find the bed, and we could just ship the person straight there. So, if other county insurances do exactly that, why can't CBH do it?"

CRS observed that patients are ineligible for withdrawal management unless they are also using alcohol or benzodiazepines; they are instead referred to MOUD, a suboptimal solution when current MOUD approaches do not adequately address the withdrawal from the current drug supply. Further, they noted that some facilities will not accept patients in active withdrawal due to liability concerns.

ii. Reflections on Facilitators and Barriers by Treatment Type

Inpatient Treatment. Many participants entered inpatient treatment for OUD after their initial assessment. CRS noted structural issues around inpatient stays, such as critical delays in treatment

bed availability. Many patients waiting for an inpatient slot did not have phones and could not be contacted when a slot became available. Patients discussed being authorized for inpatient stays of one month at a time by insurance and having to request extensions, a process that caused anxiety sometimes. Most participants completed their inpatient programs, though one self-discharged after being placed on a behavioral contract, which is a written agreement outlining the expected behavior to remain in the program, due to a disagreement with another patient.

When asked about what made staying in inpatient treatment difficult, responses varied. The most frequently named barriers to inpatient care were not being able to stop going to work, financial responsibilities such as paying rent, and caring for children or pets. When their families intervened to address their drug use, a few women said they immediately struggled with how they would be able to care for their children or home if they were to seek inpatient treatment. These barriers mattered not only for entering treatment but also affected their post-treatment care continuity, as many participants lacked resources (financial or through family support) to be housed or support themselves post-discharge.

Multiple participants felt they were not getting enough food at the inpatient facility they were at; when they asked staff for more food, they were told by staff they would need to see the nutritionist to be able to receive more. Some patients had the means to get food from the vending machine, which was used as currency among patients. Participants also said they were not getting enough to eat at recovery houses, even though they had to pay to stay there.



Policy Recommendation Provide support for longer inpatient stays.

CRS noted that lifting the smoking ban had removed a large barrier to both entering and staying in inpatient treatment. The topic of inpatient length of stay arose multiple times in both CRS focus groups, saying:

"

And the other thing is, keep them in treatment longer. You'd have less recidivism. Because think about it. In the first [month], I'm probably just starting to feel like a human again, right? And now you're already kicking me back outside. If I had to pick just one that I thought would make the biggest impact, it would be longer stays of treatment. Three to six months as opposed to [one month]. Because then you've actually given that person a chance.

-Hospital CRS focus group

CRS described how inpatient treatment is often a time when they are not able to meet with people with OUD, as they cannot "double bill" insurance (e.g., insurance is billed for the inpatient stay and therefore a CRS cannot bill for their time until they are discharged). This means continuity of care – transitioning into CRS services after discharge – is more difficult than it would be if they would go in to build rapport and lay the groundwork to sign people up for outpatient services to ensure continuity of care after discharge from inpatient care.

Disrupted relationships with family members and a lack of employment or funds to afford rent are significant challenges for individuals to address upon discharge from inpatient facilities and are not conducive to continued abstinence from opioids. If people become connected to a CRS, then CRS often help them fill out paperwork from the Office of Addiction Services to pay for placements in recovery houses, but CRS noted that the long processing time often prevents a placement from occurring. Due to the billing issue noted above, CRS are not able to assist with this process during an inpatient stay.

Methadone: There were conflicting views about the most effective form of MOUD, with some participants stating buprenorphine was effective and others endorsing methadone. Methadone was reportedly effective at higher doses but had to be gradually increased over time. Some participants were abstinent from substances while others reported still supplementing their dose with opioids to lessen withdrawal from fentanyl dependence during induction or to occasionally achieve a euphoric state. Not being medicated enough with methadone was also noted as causing one participant to leave treatment.

Participants enrolled in methadone maintenance had been in programs ranging from five months to 20 years. Many expressed a wish to graduate from their program eventually or change to a buprenorphine program while others said they would likely stay on methadone for the rest of their lives. Participants named many internalized and externally perceived barriers to retention in methadone treatment. The greatest barrier to retention in methadone treatment was the 'hassle' of going to the clinic every day to receive their dose and compared it to a job, saying:

"

With the methadone it was a big hassle. Every day you get home you go to the frigging clinic and sit there for hours and deal with people you didn't want to have to deal with, you know what I mean? It was like an everyday all day thing. It's a job, that's what it is, going to the methadone clinic is a job. -Buprenorphine focus group

Some participants endorsed methadone stigma, the belief that methadone is "just replacing one drug for another". This was both an internalized belief and experienced from others, such as family members. Withdrawal from methadone was referenced as being long and unpleasant and some transitioned to buprenorphine to avoid it.

For example, one participant in a methadone program was arrested and not provided with methadone doses. He was placed on buprenorphine due to the subsequent withdrawal and decided to remain on it to not have to go through the methadone withdrawal again. A couple of participants discussed how programs' seemingly arbitrary rules disrupted their recovery and left them susceptible to withdrawal. For example, their dosage was reduced as a consequence of a missed clinic session, even though counselors thought they needed an increased dose. A participant felt that punitive restrictions on medications could interfere with someone's recovery:

"

I think the majority of times you can actually push someone away, that actually is like on the cusp of changing. So, they can be using and you're like, 'Oh, you used again.' They kick you off. -Buprenorphine focus group

The requirement of daily groups at methadone programs was discussed across focus groups. One participant described it as an all-day process that was difficult when feeling sick from withdrawal and being required to complete a group session before receiving medication. Clinics were reported to regularly place "holds" on methadone for a variety of reasons such as signing paperwork or a required counseling session, causing patients to wait for hours before receiving their medication. For example:

"

You can get put on hold like this: You didn't talk to your counselor, on hold. You didn't show up for a group, on hold. And then you got to go to work or something, well, you're screwed because you're not getting dosed. You got to choose. You got to choose between work or dosing.

-Outpatient focus group

The CRS groups also noted daily methadone program requirements as a barrier to remaining in methadone treatment:

"

But then you also hit that wall where some of these clinics, they want this every single day thing for hours a day. How are you going to hold a job? How are you going to take care of your child that you're just getting back into your life? How are you going to pay your bills when you are literally chained to this facility for hours at a time? That's a huge barrier for people to build their lives back together. Isn't that the whole point of MAT to help you build your life back, and get a life back?

-Community CRS focus group

Buprenorphine: Participants discussed prior or current experiences with buprenorphine in all focus groups. One drawback of buprenorphine treatment discussed was the waiting period before induction to avoid precipitated withdrawal. The experience of precipitated withdrawal from taking buprenorphine too early was enough to discourage one participant in a methadone program from trying buprenorphine again in the future:

"

...If you take the [buprenorphine] too early you get thrown into precipitated withdrawal. Now, I don't know if you know what that is. It's like cold turkey instantaneously and there's nothing to get rid of it. It's happened to me twice. So that's why I'll never take a Sub or Subutex again.

Another drawback of buprenorphine was the temptation to be in a program to sell the medication since it had street value. Overall, participants preferred buprenorphine since they did not feel the high they had when on methadone, though a couple of participants said they did if there was an interaction with other medication they were prescribed. The fentanyl-xylazine combination in the drug supply was noted as a barrier to successful buprenorphine initiation due to the inability of buprenorphine to address xylazine withdrawals and the absence of effective xylazine withdrawal management by treatment programs.

iii. Urine Drug Screens

Participants were asked how they felt about compulsory urine drug screens at MOUD programs. Most of the participants in focus groups about methadone and buprenorphine were stabilized on the medications and not using other drugs. Some said urine drug screens helped keep them abstinent from other drugs, and others noted that people using other substances would probably feel differently about urine drug screens. The exception was for other drugs that were prescribed to them, such as gabapentin or cough syrup with codeine, being flagged by a MOUD doctor as a "violation" of program terms. One participant reported that he had screened positive for methamphetamine after taking Wellbutrin and this impacted his ability to get take-home methadone doses. This participant now brings in someone else's urine so he can take his antidepressant and methadone. One man prescribed methadone also talked about UDS as a condition of employment as an embarrassment and one woman found the process of having someone watch her urinate embarrassing and violating:

"

No, they have to watch you. They watch you. But I just think it's uncomfortable. I mean, you're going there for help. Think you're a crime. They're watching to make sure you don't switch your pee out for somebody else's for somebody else's, you know what I mean?

-Outpatient focus group

Policy Recommendation Change insurance requirements for specific opioids to be present in urine detection screenings to cover MOUD initiation.

iv. Programmatic Barriers

Participants noted structural barriers related to the program locations, hours of operation, requirement for group therapy, language services, and insurance.

Locations of Care and Transportation:

Transportation was frequently noted in most groups as one of the biggest barriers to accessing OUD treatment. This was particularly pronounced among unhoused focus group participants. Having monthly transportation passes was noted as particularly useful in accessing treatment (e.g., medication appointments, groups), as well as to meet other daily needs like shopping for groceries and running other errands, though public transportation was also acknowledged as being unreliable at times. For some participants, transportation was especially a barrier when the treatment they were trying to access had limited hours:

"

I just wanted to say my clinic is in South Philly and I live in South Philly, but it's like two buses and on the weekends they close at 9:45. So literally I would say I probably miss at least once one day a weekend because it's too early and it's just too much for me to get on a bus and get down. So, I probably miss at least— It's my fault, being lazy, but because it's so much in such a short time they're only open for two hours on a weekend.

-Outpatient focus group

Related to transportation, the location of services arose in focus groups. Specifically, since many treatment programs are in neighborhoods heavily impacted by drug use, these may also be triggering environments for substance use. A few participants said that living in an area where it is the 'norm' to see people who are using drugs or where they had used drugs in the past made it harder to stay committed to recovery. One person said he chose to go to a clinic that was outside of the area he lived in because he would not have to be in an area where people were selling or using drugs when going to get dosed. One CRS said: "

The guy who's been using dope and fentanyl for the last 10 years and is trying to get it together doesn't want to go back on the [subway] to the spot where he was getting high. Like, there's a lot of studies that show, like, that muscle memory, right? He had every intention on going to the clinic. But he wound up in the shooting gallery.

The issue of location was discussed in a focus group with pregnant and parenting people:

Interviewer: How important is location to you when you're accessing treatment? Interviewee 4: It's very important. Interviewee 2: It's like at least a nine or ten. Interviewee 5: I mean I live right down the street from [a large treatment center] but I chose to come all the way down here because [that program] is just – Interviewee 2: Because some girls talk about how when they're leaving their house and they live like Kensington, they have to drive past or walk through needles and all kinds of things that could like –

Interviewee 3: Trigger them.

Interviewee 2: Trigger them, yeah. But it's none of that in these doorways. The streets are clean.

Interviewee 5: And they don't sell pills and stuff right outside [my] clinic. Like most clinics, they do, they sell pills right outside them.

-Pregnant and parenting focus group

The community participants lived in was also seen as creating barriers to treatment access by not wanting people in their community to use drugs but also not wanting to have treatment programs in their neighborhoods. One participant stated:

"

Like, the community don't want drugs right? But then they don't want halfway houses or houses to help people ... damned if you do, damned if you don't.....

–Black men focus group

CRS noted the need for greater assistance with transportation to treatment:

"

Now some places, like if they're all on maintenance meds, they'll give them like a transpass for the month. But it's still, like, that takes a little bit of time. It's a process. So, you know, they do have barriers a lot of times. Like, "How am I going to get to this clinic? I'm homeless." Like, you know. Or "The clinic that's close to me, I'm not allowed to go back to that one.

-Community CRS focus group

Another CRS cited examples of when patients would refuse to go to treatment located in the neighborhoods where they used drugs, instead saying "I literally just fought my way out of Kensington to try to get help."

Hours: While all CRS endorsed the importance of MOUD, they noted that more clinics should offer evening and weekend hours for people who were working and parenting. Discussing his own experience, a CRS said:

"

Like my personal experience, like, I had to do their evening IOP classes. Right after I had my son and I was working, because like I couldn't do the daytimes with the newborn and, you know, doing it and a job. So that was – I feel like not enough outpatient clinics offer that evening [option].

-Community CRS focus group

Group Therapy: The frequency of participation in groups varied, with some attending once every other week and others three times a week. For some programs, like methadone, participation in groups was mandatory. For other types of programs (e.g., recovery services at a community-based organization), it was not required. Some participants felt that groups were beneficial to recovery, while others - who often appeared to be more stabilized in their recovery - cited it as a barrier to stabilization in other areas of their lives (for example, getting in the way of other life commitments). Group requirements to come in most days, paired with a requirement to attend group before methadone dosing, were described as counterproductive:

"

See, even with the two days a week, I wouldn't mind it. But with now going every day and it's like an all-day process, because you have to go there and get medicated, or you got to do the group first, and then they let you get medicated. So, if you're sick in the morning, it's like you got to sit through a group that you're sick as shit, you know? It's an all-day process because the meetings are an hour and a half, you know? Because you got to do 45 minutes and then they give you a break, and then another 45 minutes – It depends what place you go to. You have to do it or you don't get medicated.

-Buprenorphine focus group

In the pregnant and parenting group, multiple women expressed the importance of having women's groups to go to. Even outside of the group, they found a community of peers to facilitate recovery:

"

I just feel like that I just like how even if you don't make a meeting like an NA meeting like just talking to everyone just for a few minutes is like sharing. It's like a meeting in itself. And I like how we're able to like be able to hang out and just get things off our chest and I just like how it's like family. Because blood isn't always considered family.

-Pregnant and parenting focus group

Insurance, Cost: The topic of insurance arose during the inpatient focus group, with one participant noting: "Sometimes, at different times, I didn't want to leave, but my insurance wouldn't keep paying for it." In general, participants felt that they needed more time in an inpatient treatment program to be successful, but some felt the time they were authorized to stay was too short and getting shorter than it used to be. There was some anxiety about the countdown of the authorized time:

Interviewee 4: The way CBH approaches certain things, it's like if you know you're going to need an extension after 30 days, why make you wait until Day 28 to even ask for the extension? It's like ... if you need like an extra 30 days, they won't give you another 15 days here, 15 days there. But then you can't even put in for a request for an extension until Day 28 of your first 30 days. Then they will ask you another set of damn questions. It's like OK, can we answer these questions after you give me my extension? Cause like if you don't have the questions right, you don't get the extension. Then you've got to sit there and wait for them to send you to another rehab where you've got to start the process all over again. Interviewer: What would be better for you guys then in that situation for them to do? Interviewee 4: Number One, like I said, give me more than 30 days. Thirty days, you're just basically getting to clear the cobwebs out of your ears.

Language: Language was discussed mostly in the Latino group, which was conducted in Spanish. All of the participants were recruited from a recovery house for Latino men and most spoke limited to no English.

The participants reported that methadone providers did not have many bilingual staff. It was suggested that there should be translators available to work with patients in facilities without bilingual providers.

The Spanish-speaking recovery house felt like the only option to receive help since other resources had a lack of bilingual staff. Other services such as therapy had limited availability to take on Spanishspeaking patients and there is a long wait to be connected. One participant felt there were many services that he was not able to get connected with because of his lack of English. Everything available at inpatient facilities, including groups, was in English, making it difficult for people who did not speak English to participate or benefit from them. Another participant said he felt forced to change groups because another patient in the group did not like it when he spoke Spanish and he felt he was being talked about.

One participant noted times when Spanishspeaking participants attended Englishspeaking groups and were unable to follow the conversations.

"

The only thing they lacking up there in the outpatient, right, when you put a Spanish person in a group when anybody is speaking English and that Spanish person come in our group, right, he don't understand nothing. They short on staff with that.

-Outpatient focus group



Policy Recommendation Train more staff who speak Spanish & other languages. The most consistent theme for all focus groups concerned the importance of staffing in OUD treatment programs.

v. Staffing

Participants discussed the importance of having staff members that were empathetic, caring, supportive, and who genuinely wanted to learn about the individual's life experiences. Having staff members that had similar life experiences to the participants and not just "book knowledge" was noted as important. One participant mentioned how working with people with similar experiences helped the facility feel warm and welcoming. Another participant said working with a staff member who was in recovery made him feel more comfortable. Three participants discussed how having staff with not only a psychology and/ or medical degree but also lived experience would be beneficial. Conversely, in multiple focus groups, participants discussed a lack of lived experiences of opioid use among treatment staff. Having a degree but limited personal experience made it more difficult to forge meaningful relationships between patients and providers, even if patients felt the staff had their best interests in mind. The lack of experience was noted as impacting group counseling dynamics. One woman said:

"

But I feel like nobody that got in that group is qualified, to be honest. They're not qualified. I don't care what degrees you have. First off, to be honest, the average addict has one of the highest IQs. So, it doesn't matter what degrees they have. Like our survival, like literally depends on our life ... and the things, like, when I'm in group, I don't be wanting to share about shit that I've been through because they're gonna look at me different because they haven't had to struggle. They haven't had to, they never been through this stuff. So, when we go into group, we're just in here to [meet program requirements] and bounce. -Black women focus group
Participants felt that there were facilities and staff members that were there solely for the money or a job, with one participant talking about how once it "became about the money" it didn't become about treatment anymore. In many focus groups, participants discussed instances of conflict with staff that impacted their care. Some participants felt that treatment staff were policing them and always waiting to catch them "messing up" in the program. A participant in one of the outpatient focus groups discussed the impact of this, saying:

"

One thing about an addict, we don't like to be accused. When I fall on a protocol, per se. And then when you're been accused and you're not doing right, of course, that first thought is going to be, like, fuck it, I want to use some dope. I'm going to get some work. This shit ain't working out.

-Outpatient focus group

Participants discussed that some staff in OUD treatment settings lacked empathy for the vulnerable and grueling process as patients transitioned from drug use. One person said when they approached a counselor in a moment of crisis trying to get connected to treatment, the staff person told them they had personal things they wanted to do that day instead. Another participant expressed a common sentiment from participants.

"

People that don't give a fuck, they don't, uh, they don't understand what you're going through so they just be, like, 'Ah, you're just being a baby' or you're just – you know, it's, like, they treat you like shit and it's, like, what's the point of it? If I'm going through pain or something, that's your job to actually come out and actually give a fuck about what's going on with me. Why don't you? If you don't, then get the fuck out this job. **D** –Outpatient focus group Multiple participants talked about instances when treatment staff retaliated against them after a disagreement. One participant described a situation where he got in a heated disagreement with staff at an inpatient facility and the staff said, "Why don't you AMA so we can fight outside?". Another participant said she got in a physical altercation with a nurse while she was pregnant and the security footage was deleted, leaving her unable to prove what she had experienced. Another participant who only spoke Spanish described experiencing racism from a counselor who would tell him to 'shut up' when she heard him speaking Spanish.

Some felt that staff were young and inexperienced in general, making them unable to provide participants with critical support. A few participants felt these employees were underqualified for their roles and cited a belief that programs were hiring whomever they could to address fast turnover. Participants discussed the impact of this high staff turnover on programs. Multiple participants said that everyone they felt cared about them left or was let go from the programs they worked with, with less experienced and empathetic staff remaining. Establishing new therapeutic relationships and divulging personal information to someone new was described as challenging, as illustrated by this focus group interaction:

Interviewee 1: A lot of them leave, too, after a minute.

Interviewee 3: You tell them your life story-Interviewee 2: -- life story and then you got to repeat it again to this one. Interviewee 3: Fifty times. Interviewee 1: In my four years I've been there I've had four counselors. Interviewee 2: That's what I can't stand. Interviewee 3: Me, too.

-Methadone focus group

vi. Wounds

Participants consistently noted changes in the drug supply. They discussed the earlier transition from heroin to fentanyl and voiced concern for several additional perceived adulterants in fentanyl, including xylazine. One speaker in the buprenorphine group disclosed that he had xylazine wounds in his legs:

"

The effects on your body is so much different now because now that they put that fentanyl in it and the tranq, I have holes all over my legs. I can't ever wear shorts again. I had holes an inch thick in my leg ... It's crazy because even if you don't miss, you still get the hole in your leg. Before when it was just regular dope, the only way you would get an abscess or anything is if you miss.

-Buprenorphine focus group



Policy Recommendation Expand alternative treatment locations, wound care, mobile, and outreach services.

Some CRS noted that many patients they worked with needed dialysis and said no treatment center would accept patients needing the procedure.

A woman discussed trying to access outpatient treatment with wounds and being treated poorly because the wounds smelled. She discussed with emotion how the experience of stigma felt. Issues surrounding wounds and treatment access were critical themes in the CRS focus groups. Patients with advanced wounds were often unhoused and, unable to access treatment, returned to an environment with myriad barriers to wound healing, which was often needed before they could enter treatment:

"

There's just not enough. There's not enough detox beds. There's not enough rehab beds. Especially with the "opiates" that are out there now. We're seeing flesh wounds where there's tendons, there's bone, there's major muscle damage, right? There's two 4.0 facilities with BCH, right? Or Philadelphia, whatever, that will contract, right? There's only 70 beds. So a lot of these people wind up discharging to, say, a skilled nursing facility. If they're even willing to accept them. Because if you have substance use disorder stamped on your chart, nobody wants to deal with you. And a lot of these patients wind up being discharged back to shelters, back to the flop house, back to the streets. And so the [physical therapy] is not getting done, the wound care's not getting done, and trying to treat someone for substance use disorder is also not getting done. I'm not understanding why the change hasn't been made. Because this isn't new.

-Community CRS focus group

vii. Patient Conflict

Conflicts between patients were not well addressed in some treatment programs. One participant had a disagreement with another patient at an inpatient facility and when the provider tried to address it by putting him on a behavioral contract, he left the program. Another person said that he was assigned to the same room at an inpatient facility as a person he was in a physical altercation with at a shelter previously. Another participant said she did not feel safe after being threatened with scissors by another person at an inpatient facility and there were no consequences.

viii. Housing

The topic of housing arose in multiple focus groups, especially in the harm reduction focus group, where most participants were unhoused. Participants wanted access to housing resources and the social services component offered by some organizations to help meet other needs. Housing through case workers at nonprofit organizations was difficult to connect to for some participants but was seen as more attainable than opportunities through the Philadelphia Housing Authority (PHA). Lack of access to housing made retention in treatment difficult (e.g., having buprenorphine stolen from a tent or lacking resources to travel to a different part of town every day for treatment).

ix. Parenting

Five of seven participants in the pregnant and parenting group talked about how it was important to have a space where they were around individuals of similar identities. One woman in a parenting program staffed primarily by women said she felt like the staff cared and were able to relate to her struggles because they were all women and mothers. Another participant mentioned how she felt safe and was able to focus on treatment without distractions because it was a women's clinic. One focus group was held at a MOUD program for pregnant and parenting people to discuss challenges and facilitators to treatment from their perspective. Participants in this group reported it was important for them to be in a program that had resources for their child, emotional support for parents, flexibility on scheduling, and meaningful groups. The safety of the area their treatment provider was in was also important, especially when bringing their children with them to appointments.

Some participants worried that what they said to a provider could lead to Department of Human Services (DHS) involvement. One participant discussed venting to her counselor about having difficulty with her child and that it led to a DHS report. Another participant who was pregnant with her first child when she entered treatment said that if she had other children, she may not have asked for help because of DHS issues that could result from asking for drug treatment. The participants discussed having DHS involvement because they were patients at a methadone clinic during pregnancy. Two people - one community-based CRS and one parenting woman – noted a lack of resources for parents in longer-term recovery, specifically housing. The parenting woman talked about the tension between continued sobriety and accessing services:

"

So I was on the waiting list for the [housing program] because I called them and they're like, well, what drugs are you currently on? I was like I had - I was almost a year clean at that point. I said I have almost a year clean. Well, we can't help you, you have to be on, actively using. And then I called [another housing program], same question, what drugs are you on? I'm not, I'm clean. We can't help you. And it's like they literally – like that's how we ended up having to go to the shelter anyway. Because of the other places, they would not take me with my clean time. And I was not willing to use, right.

-Pregnant and parenting focus group

The CRS said:

"

One of my biggest things for another population would be 'Daddy and Me' or 'Mommy and Me' houses. People get into recovery, they get their kids back. And then they have nowhere to go because maybe they have a criminal background or they don't have enough money saved. So it's like, yes, our recovery house system for OAS and everything is awesome. But what about the population for mothers with kids or dads with kids? Why isn't that offered? Because, what, do you want them to go rent a room that might not be in a safe house for a kid? And the people who find recovery, get jobs, get apartments, why don't we have apartment complexes for people in recovery with kids? -Hospital CRS focus group

Policy Recommendation

Increase housing for all stages of recovery, during transitions between levels of care, & that allows family unification and preservation.

X. Incarceration

Many participants had a history of incarceration and many participants had experienced withdrawal during incarceration. A few participants had been court-ordered to attend inpatient treatment for OUD. Some were linked to buprenorphine treatment through their incarceration in the Philadelphia Department of Prisons. At least one participant recognized the heightened risk of overdose in the period immediately following incarceration.

Several participants spoke about their experiences with incarceration and many of them notedhow terrible withdrawal in jail was. For two Latino participants, withdrawal was exacerbated by their inability to communicate in English with jail staff. One of the two was enrolled in a community methadone program when he was arrested but could not communicate to anyone for three weeks that he needed medication.

xi. Sexuality and Gender

Across focus groups, participants reported that they did not observe differences in treatment concerning race, ethnicity, or sex. However, some participants expressed that treatment facilities as a whole and patients and staff were not welcoming to persons that identify as part of the LGBTQIA+ community. One participant described an overall positive experience with some providers, nurses for example, that were inquisitive about her identity and preferred pronouns. However, the participant referred to some treatment facilities as "old school" and reported that jokes were made about the addition of "letters" to the LGBT acronym.

xii. Race and OUD Treatment

Participants almost uniformly reported that race did not play a role in how people were treated in treatment, with inpatient programs being accepting of all persons. However, some participants who expressed this proceeded to describe situations where they believed programs were more permissive with White patients than Black and other patients of color. To be taken more seriously, one Black woman felt that she had to code switch consciously adjust her language to appeal to a White provider - when interacting with doctors. Participants of color indicated that while staff at treatment programs were often White, it was not uniformly so. When asked whether racial concordance was important in treatment, about half said it was not, but approximately half said it helped to talk to someone of the same race who may have common life experiences. One woman who appreciated having a Black counselor said a White counselor would have been fine, but:

"

I'm just saying, as far as having someone of my, you know, same race as me it was like, 'Okay. Like, you can identify too', you know, their growing up, you know, all of that. So that's where I was at with it. **99** –Black women focus group

According to some Black participants, Black people with OUD preferred pills, contributing to their preference for buprenorphine in pill form despite being offered methadone while in treatment. Preferences for MOUD in the Black community were noted as having shifted, with methadone being described as "more common back then" compared to the present.



Policy Recommendation Support the creation and retention of a skilled, diverse, well-trained OUD workforce.

"So, first of all, the procedure to get an assessment to even be able to be considered for an available bed in the city of Philadelphia is grueling to say the least. Twelve, 15, 18 hours people sit in a waiting room just to get them done to find the bed to hopefully get placement. Which does not always happen. So, you just waited 15, 18 hours while you're withdrawing and you're sick. And at the end of it, you may or may not get the bed that you went there seeking." -Hospital CRS focus group

E. GIS Maps of Treatment Services within Philadelphia

Using GIS maps, we examined how locations of care are distributed across Philadelphia for each ASAM level of care and by medications prescribed (methadone vs. all other MOUDs) to illustrate gaps in service provision. Maps are based on information provided by DBHIDS in June 2023 and notes are made about congruence with information from the state's DDAP website in August 2023.

Four groups of maps are included. The first group includes maps of all treatment sites, all assessment centers, all outpatient sites, all inpatient sites, all mobile wound care sites, and at the individual ASAM level. Each of these maps is over laid with population density.

The second group of maps overlays all inpatient sites and all outpatient sites and assessment centers with the proportion of those who have public insurance.

The third group of maps presents the areas that are within twenty minutes of travel time by walking, SEPTA, and driving of all inpatient sites and all outpatient and assessment center locations.

Finally, the fourth group of maps focuses on the population density of each of the four major race/ ethnicities of Philadelphia (non-Hispanic White, non-Hispanic Black, Hispanic/Latinx, and Asian) for all inpatient sites and all outpatient and assessment centers.

i. Population

In the first set up of maps, each of these are overlaid with population density, with lighter shades of green indicating lower levels of population density and darker shades representing increasingly more population-dense areas. Sites where methadone services can be obtained are marked in red across all maps so that the overlap of these services across levels of care may be seen. Across all levels of care, there are numerous inpatient sites that are outside the city limits and these sites are not included in the "all sites" map below. Additional maps of each level of care will focus on those that are within the city limits or nearby for ease of viewing.

Across all the levels of care, treatment locations are found within the most populous or dense areas, though there are notable gaps around the edges of the city to the South, West, Northeast, North, and Northwest areas (Map 1).



Market-Frankford El in Kensington section of Philadelphia.

Map 1: All Treatment Sites Overlaid with Population Density



Before accessing any level of care, individuals can go to one of eight assessment centers to help them become linked to the appropriate level of care. Five of the assessment centers are co-located with treatment services and four are not collocated with treatment services (Map 2).



Map 2: All Assessment Centers Overlaid with Population Density

For all outpatient services, locations of care are more heavily located in places with higher population density but with noticeable gaps in the areas in the Northeast, Northwest, and Southwest parts of the city. No outpatient sites are outside the city limits. Methadone sites are primarily concentrated near the center of Philadelphia and near the SEPTA Market-Frankford train line. (Map 3).



Map 3: All Outpatient Sites Overlaid with Population Density

There are very few inpatient sites in the North and Northeast, and low coverage in the Northwest, West, and Southwest areas as well. While the sites are largely available within the densely populated areas of the city, there are several areas of high population density without inpatient care located within them. Importantly, many inpatient sites are outside the boundaries of Philadelphia and therefore will not be included in the maps that depict all inpatient sites overlaid with the proportions of race/ethnicity, public insurance coverage, and transportation distances (Map 4).



Map 4: All Inpatient Centers Overlaid with Population Density

ii. Treatment by ASAM Levels of Care.

Level 1.0. Outpatient services are largely clustered in the interior regions of the city and highly correspond to areas of higher population density, though important gaps remain in the Northern and Western areas, particularly for those needing methadone services. This suggests a high level of need to ensure that coverage is available within the less populated areas and areas more peripheral to the city. It is not possible to estimate the exact number of treatment slots available within these sites as there is no formal tracking of non-methadone service providers, so it will be important to determine the volume of services available in future studies (Map 5).

Level 2.1. Intensive outpatient services introduced into the treatment system in the late 1980s were seen as appropriate for individuals needing more services than those provided at the outpatient level of care. The 2021 move away from the Pennsylvania Client Placement Criterion to the ASAM levels of care, resulted in a drastic change in the availability of services that meet criteria for intensive outpatient services.^{30,33} More intensive outpatient services are centrally located and only one site, located in West Philadelphia, which provides methadone services. This could point to a significant coverage gap for those



Level 2.5. There is only one location that provides level 2.5 services and we do not have an estimate of the number of treatment slots available or their utilization rates for the location identified by DBHIDS. The DDAP website identifies three locations of care that provide this level of care within the locations provided by DBHIDS and 110 beds. It could be a critical area for future research to examine whether this level of care is sufficiently available, as it may be largely inaccessible on a routine basis for most residents, given the intensive hours required for this level of care (Map 7).

Level 3.1. Six of the seven sites are pictured below, as one is in Bensalem, PA. Only one of these sites also provides outpatient methadone services. The corresponding sites are not clearly linked with the state's list of inpatient bed types and one site (The Net at 2205 Bridge Street) is not included in the state's list of licensed facilities for inpatient care. Four of the sites within the city's limits are in lower density areas and only one is in the high density of Center City. According to DDAP, there are 70 inpatient transitional living facility beds (level 3.1) (Map 8).



Level 3.5. The most commonly offered level of inpatient care, level 3.5 facilities provided 1,829 beds for services, according to the state's website (DDAP). Two of these facilities also provide outpatient methadone services, which could be helpful for care continuity. Nine of these facilities were outside the limits of Philadelphia, comprising about one third of the available beds. There was only one facility in the entire Northeast area of the city, and most were concentrated within more densely populated census tracts in the center of the city (Map 9).





SEPTA bus stop in Center City section of Philadelphia.

Level 3.7. All three of the 3.7 level sites are within Philadelphia's city limits and are concentrated in the center and Western parts of the city, which are in higher density neighborhoods. One of these sites also provides outpatient methadone services and one site is described as closed on the state's DDAP website, which means that there may only be two sites providing this level of care and no estimates of the number of beds could be derived from the DDAP website (Map 10).

Level 3.7WM. This level of withdrawal management services has eight of the 15 facilities within the city limits, which are almost exclusively in higher population density areas. There is very little access to these facilities within the Northern or Western halves of the city. According to the state, this reflects 177 beds in 10 locations (9 of which were identified as providing 3.7WM services on the city's list). One facility provides methadone services on an outpatient basis (Map 11).



Level 4.0. Only one of the three sites that provides level 4.0 services are within the city's limits and that site was identified as closed on the state's website, which means that there are no level 4.0 facilities within Philadelphia at present. However, Kensington Hospital is listed as providing this level of care on the state's DDAP website, but it was not included in the data from the city. DDAP's website identified 103 level 4.0 beds through sites DHBIDS identified as providing other levels of care. The number of beds available by DDAP may reflect a recent program initiative through the city, which is partnering with all the major universities in the city, which had a goal to launch beds at two sites in February 2023 to increase the capacity to treat those with serious wounds (Map 12).

Level 4.0WM. DBHIDS identified five sites as providing Level 4.0WM care, of which three are within the city's limits in high density census tracts, though one of these is closed according to the state. There are 53 beds at this level of care available according to the state's DDAP website (Map 13).



iii. Census tracts and Public Insurance

The second group of maps have the proportion of those with public insurance within each census tract. These maps are overlaid with 1) all outpatient sites and all assessment centers and; 2) all inpatient sites. These maps are presented in red with lighter shades representing a lower proportion of the census tract with public insurance and darker shades representing census tracts with a higher proportion of the census tract with public insurance.

There was high congruence between areas with inpatient services and higher ratios of people with public insurance (Map 14). Outpatient services were also frequently located within areas with higher proportions of public insurance (Map 15).



*Please note, any tracts under 100 for population size were recoded as "unpopulated".

vi. Travel

Travel time to clinics is a particularly important concern, particularly for those who need to access methadone services daily. While services that are close to home may be preferable to many people, some may prefer treatment centers that are outside their neighborhood due to the wish for privacy around treatment. Therefore, it may be ideal to have locations with many overlapping polygons of access, as this would indicate the potential of choice for locations.

Inpatient services are highly concentrated within the city and many inpatient services are within a 20-minute walking distance of locations that are centrally located and within the city's limits. There is scant access to inpatient services in the Northeast and along the city's perimeter. Not pictured are inpatient services that are outside the city limits and are not within walking distance. There is scant access to inpatient services in the Northeast and along the city's perimeter. Not pictured are inpatient services that are outside the city limits and are not within walking distance (Map 16).

Outpatient and assessment centers are also highly accessible via walking within central areas of the city, with many polygons overlapping with other locations. However, services are less accessible along the periphery of the city, particularly in the southwest, west, northwest, and northeast parts of the city (Map 17).

Map 16: Inpatient Sites with 20 minutes of



Map 17: Outpatient & Assessment Sites with

Public transit increases the range of inpatient locations within the city limits that are accessible within twenty minutes. Though it is important to note that these travel times are a snapshot in time of the afternoon on weekdays and during weekday, commuting hours and could differ if estimated on a weekend or evenings. Similar to the walking distances, in more central locations there is overlapping access to outpatient care within twenty minutes on SEPTA, but access is weaker along the periphery of the city. (Map 18). Access to outpatient and assessment centers is also high within twenty minutes on public transit. Notable exceptions are in the Northeast, Northwest, and parts of the Southwest of the city (Map 19).

" I literally Just fought My way out of Kensington to try to get help." - Community CRS focus group



Allegheny El station in Kensington section of Philadelphia.



Methods & Results - 54.

Almost all inpatient sites within the city's limits are accessible within twenty minutes driving time. Many of the inpatient beds that are outside the city (not pictured) require longer than twenty-minute driving distances. (Map 20). Outpatient services are also highly accessible by car, with a notable exception being the Northwestern region. Many of the polygons of travel time overlap, meaning that people have multiple options for care within the same travel areas. (Map 21).



Jefferson Station, Center City section of Philadelphia.



Methods & Results - 55.

v. Census tracts and race/ethnicity

The city of Philadelphia is highly segregated. Therefore, we examined whether locations of services were concentrated within areas that have a higher or lower proportion of individuals from one of four race/ ethnicity categories. The next group of maps reflects the proportion of each census tract of a single race/ ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic/Latinx, and non-Hispanic Asian) that is overlaid with maps that depict: 1) all outpatient sites and all assessment centers and; 2) all inpatient sites. These maps are presented in distinct colors for each race/ethnicity group with lighter shades representing a lower proportion of the neighborhood of the named race/ethnicity and darker shades representing census tracts with a higher proportion of the race/ethnicity.

Below, the proportion of each census tract that is composed of non-Hispanic Black individuals is presented in green and with the locations of inpatient facilities within the city's limits. Inpatient services are concentrated in census tracts that have higher proportions of Black residents, though Southwest, North, and West Philadelphia still have some noticeable gaps in coverage (Map 22).

The proportion of non-Hispanic white individuals in each census tract is presented in blue. Lighter shades of blue represent a lower proportion of individuals who are White within each census tract and darker shades indicate higher proportions. Inpatient services are largely located along the edges of White predominant areas along the East side of the city. There is sporadic coverage within the Northeast area that is predominantly White and few locations within the White predominant areas of Northwest Philadelphia (Map 23).

The proportion of individuals who identify as Hispanic/Latino/a/x in each census tract is represented in shades of pink, with darker coloring indicating a higher proportion. Census tracts that are predominantly comprised of individuals from Hispanic/Latino/a/x ethnic backgrounds are largely clustered in an area that is north and central in the city. There are no inpatient facilities in the areas with the highest proportions of Hispanic/Latino/a/x backgrounds, though there are several that surround this cluster (Map 24).

The proportion of individuals who identified as Asian are presented in different shades of orange, with darker shades indicating a higher proportion of people of Asian descent. Inpatient services and areas that are comprised of higher densities of individuals of Asian descent have high overlap, with a notable exception in the Northeast part of the city, where there is a larger cluster of individuals from Asian descent and only one inpatient facility on the periphery (Map 25).

In just saying; as far ashaving Someone of my, you Know, Same race as me it was, 'okay, like, you can identify', too, youknow their growing up, you know, all of that, so that's where I Was with it." -Blackwomen tows grap



Map 22 Inpatient Sites with Percent Black



Map 24 Inpatient Sites with Percent Asian



*Please note, any tracts under 100 for population size were recoded



Assessment centers are fairly accessible within Black predominant census tracts in Northern Philadelphia but are largely absent from those in South Philadelphia. Outpatient services are often provided within Black predominant areas as well (Map 26).

There is a similar pattern for assessment centers and outpatient facilities as being largely outside or along the edges of White-predominant areas, though there is better coverage within the Northeast for outpatient services than was available for inpatient services (Map 27)

There are several outpatient and assessment centers that are within and surround the higher population density in the north central part of the city, which could suggest good access to services. However, it is unclear from these data if Spanish language services are provided within these facilities and that is important to explore in future research (Map 28).

Outpatient sites and assessment centers largely overlapped with areas of higher proportions of individuals of Asian descent apart from the Northeast region (Map 29).



The Stamp of Incarceration Mural in Callowhill section of Philadelphia.



Other MOUD, No Assessment Assessment Only

Methadone Other MOUD +Assessment Other MOUD, No Assessment Assessment Only

*Please note, any tracts under 100 for population size were recoded as "unpopulated".

Methods & Results - 59.

Services

Percent White

1.01-10

10.01-30

30.01-50

50.01-100

Other MOUD +Assessment

Assessment Only

Percent Asian

1.01-5

5.01-10

10.01-30

30.01-60

Unpopulated

0-1

Services

Methadone

Unpopulated

Other MOUD, No Assessment

0-1



Photo of neighborhood in Kensington section of Philadelphia

5. LIMITATIONS

There are several notable limitations to our study. Our GIS maps reflect a point in time of the accessibility of services and do not include estimates of capacity at each ASAM level. Focus group participants, with the exception of the harm reduction group, were recruited primarily through treatment programs. This likely biased data to indicate more favorable experiences with the treatment system as these were people largely receiving care that kept them in treatment. This is an important limitation as some reflections on barriers to accessing and staying in treatment represented experiences with a different drug supply than the current supply in Philadelphia. Sampling from the broader community would have captured a more diverse range of opinions. Each type of treatment had 1-2 focus groups, potentially impacting our ability to achieve saturation by treatment type. However, we asked about all types of treatment in all focus groups. Importantly, conducting focus groups spanning the spectrum of services allowed us to better capture the breadth of services while obtaining rich data. Our Latinx focus group was comprised solely of men. Their views likely differ from that of Latina women. We also did not include focus groups concentrated on experiences with recovery houses, as it was beyond the scope of this project. However, recovery houses occupy a unique space within the treatment landscape and future studies should explore this further.

Our survey of methadone providers largely focused on the barriers during COVID-19, which does not fully map onto the framing of the focus group questions. However, providers were asked to identify factors that would improve retention in the future and their responses had some good conceptual overlap with the focus group responses. Areas of overlap included the need for more resources for withdrawal management, housing, transportation, basic needs, and for better staffing. However, some points that were raised by providers were not described by the focus group participants, such as social supports within their treatment programs, better family connections, connection to self-step/twelve-step organizations and faith organizations, daily engagement, encouragement, positive reinforcement, and identifying strengths. Importantly, focus group participants highlighted the need for staff who have lived experience, better training, and better interpersonal skills rather than a focus on the absolute number of staff.

'I think the majority of times you can actually push someone away, that is on the cusp of Changing. So, they could be using and youre like 'Oh, you used again. They kick you off. -Buprenorphine focus group

6. POLICY RECOMMENDATIONS & CONCLUSIONS

Philadelphia is a major epicenter of the opioid crisis and has a large, complex treatment system that is comprised of many enterprising and dedicated providers working to help people with their recovery from substance use. While the goal of this report is to develop recommendations for how to improve services, it is important to acknowledge that there are numerous ongoing local and city-led initiatives that are designed to meet the needs of this rapidly evolving crisis, such as the distribution of naloxone, fentanyl test strips, and xylazine test strips, the addition of new mobile and wound care services, and the opening of new Level 4.0 treatment beds in Eagleville Hospital and Kensington Hospital in 2023 to meet the increasingly complex healthcare needs of people who use drugs. Efforts are being made to coordinate services across the different levels of care and in partnership with the numerous stakeholders who are working to address this crisis. There are hopeful signals that our healthcare systems are beginning to adapt to the novel challenges of the contamination of the drug supply with fentanyl and xylazine and that large swaths of the city have access to outpatient services within 20 minutes through walking, SEPTA, or via a car. However, significantly more resources and support are needed to improve withdrawal management from these substances and reliable access to transportation to treatment providers.

Our policy recommendations were developed based on the results of our focus groups, GIS maps, methadone program director survey, extant literature, as well as feedback from our participant advisory board. These recommendations are based on the lived experiences of our participants and may not always reflect what current policies support. It is possible that their experiences may not reflect the current state of a particular program, but our data do reflect their perceptions of what barriers exist to their accessing or remaining in services and those perceptions are affecting how and when people seek services. Recent policy changes and initiatives may already be in progress to address some concerns but, despite official policies, our data find that many aspects of care are not being implemented in ways that they should. Our recommendations are grouped by actors that can take a leading role in enacting policy changes.



Lincoln Legacy Project Mural in Center City section of Philadelphia.

A. Recommendations for DBHIDS

Recommendations that can be addressed, at least in part, at the local level through coordination by DBHIDS with other city and state agencies (e.g., PDPH, DDAP):

Understanding the scope of OUD and the treatment system locally

Improve public-facing resources on treatment availability: There is an urgent need for a coordinated effort to enable real-time bed, space, level of care and program availability at sites in the greater Philadelphia area. There remain critical discrepancies between the information that DBHIDS and DDAP provide about the locations and levels of care available. For example, there were six locations that were identified by DBHIDS as providing inpatient care that could not be confirmed on DDAP's website. Nor were there any level 4 beds within Philadelphia that were identified by both the DDAP website and by DBHIDS, though each identified programs as existing in different locations. Coordination of the tracking of program vacancies between the state and the city would improve access to available services and facilitate planning for needed additional services. Funding for website should include professional end user-experience testing to ensure the website is accessible to a range of consumers.

Improve service planning and evaluation through a comprehensive survey of need: Compounding the issues around trying to determine whether the current system has an adequate number of treatment beds at the levels of care that they are needed was the lack of a comprehensive and reliable estimate of the need for services within Philadelphia. Many estimates are outdated or based on the number of people who have had an overdose, which may not include many individuals in need of services.

Assessment

Improve consumer experiences during the

assessment process: CRS repeatedly noted assessment centers as a major barrier to OUD treatment initiation. More centers are needed with at least some of these facilities accessible at any time, day or night. Centers are needed in a broader range of neighborhoods to speed entry into programs, with options to be assessed over the phone. One possible solution to explore is allowing CRS to be ASAM-certified to reduce lags in treatment connection.



Other participants noted the extreme length of the assessment process which, coupled with withdrawal, is a deterrent for successful connection to treatment. Exploring novel options for comfort care for those in withdrawal is strongly recommended to decrease patients leaving before the assessment process is complete.

Inpatient

Address withdrawal from both xylazine and opioids: Emerging literature has documented the complicated withdrawal management needs for patients ceasing use of fentanyl adulterated with xylazine. The PDPH issued a health alert to guide clinicians on supporting patients through withdrawal.³⁴ These guide-lines should be provided to all OUD treatment providers that will interact with patients in withdrawal (e.g., assessment centers, inpatient programs, MOUD programs).

Increase available treatment slots: The number of treatment slots or beds available to those who have public insurance, such as Medicaid, Medicare, or through the County is markedly fewer than those perceived as available in prior research as less than a quarter of sites that were mapped using data from SAMHSA by Drake and Colleagues (2020) are available to those on public insurance.¹⁷ Our qualitative data on the wait times for inpatient services from our qualitative data suggest that there is a need for additional inpatient services, especially for those who might be deemed ineligible for lower levels of care due to comorbid health conditions. In our focus groups, we identified this as an urgent concern for those who need dialysis as many facilities were not set up to accommodate this need.



Continuation of current efforts to create more inpatient beds that can support those who have complex comorbid conditions and wounds is critical to ensuring that individuals who are in crisis or at key points in their recovery do not experience critical delays in access. The rapid changes to the drug supply during COVID-19 has increased the urgent need to provide higher levels of care to address the increasing medical needs of people who use drugs.

There is also a need to ensure that beds are actually accessible to those with OUD, as programs may systematically carve out people who use substances with overly restrictive criteria for admission. Our participants described how skilled nursing facilities have not accepted patients because of their current or past OUD or the current need to take MOUD. This means that they are often left without needed support during periods of crisis. The Americans with Disabilities Act is increasingly being applied through lawsuits to protect the rights of people with OUD to access evidence-based treatment.³⁵ One policy lever to consider is using this Act to compel programs that serve people with OUD, such as skilled nursing facilities, to accept these patients and provide specialized services tailored to the health needs of people who use drugs.

Address patient concerns about extending inpatient treatment stays: The process to extend insurance coverage for inpatient stays beyond one month was noted by both patients and CRS as anxiety-inducing and counterproductive to recovery. Implementing processes to approve extensions earlier in the month would address these concerns, allowing patients and staff to focus on a known longitudinal process for this form of treatment.



Outpatient

Increase financial, housing, and transportation resources: A lack of funds and housing were significant deterrents to initiating treatment among participants. Transportation came up across many focus

groups and was noted in both CRS focus groups, as well as through the CAB, as a barrier to treatment access. As noted above, car ownership rates in Philadelphia are lower than in most major cities and maps presented here demonstrate that treatment is most accessible by car.¹⁸ All noted a need for monthly passes to be able to enter and continue accessing treatment sources, with many also noting a need to be able to conduct other business, such as grocery shopping. The CAB also recommended the ability of programs to use rideshares or taxis to send people between different parts of the system of care (e.g., from an assessment center to inpatient treatment). This may be particularly helpful for those who are in withdrawal to get directly into treatment, avoiding triggers to use they may encounter on public transportation.



Expand alternative treatment locations, wound care, mobile, and outreach services: Services are highly accessible by all forms of transportation for those who live in the center of Philadelphia, but notable gaps remain along the periphery of the city. Adaptive services that can meet individuals where they are geographically could help to alleviate these care gaps for outpatient care.

The GIS maps from the present study suggest that many services are provided within non-Hispanic Black neighborhoods. On its face this could appear to mean that these services will be highly accessible to the changing demographics of this crisis as predominantly among those who are non-Hispanic Black. However, research indicates that people with OUD sometimes express a desire to access treatment outside of their own neighborhoods.^{36,37} Proximity to treatment does not necessarily make that treatment accessible if people want treatment further away or are banned from a facility due to fighting or other reasons. Increasing provision of mobile services could help to create adaptive access to MOUD that meets the needs of areas with little or no services or to provide alternatives for those who are not able to access local services due to their own preferences or because they are ineligible at a particular location.



Providing services within areas that are not associated with drug use would also be beneficial. Location of services in neighborhoods where drug use is common was noted as triggering for many participants, especially in CRS focus groups, who shared anecdotes of people being offered free samples of drugs while waiting in line for services. Participants in the pregnant and parenting group noted safety as a concern when accessing treatment with their children and a greater range of options that are child friendly is preferable. Taken together, there is a clear need for treatment facilities across Philadelphia in neighborhoods most impacted by the overdose crisis,

but also in a diversity of other areas.

Mobile wound and MOUD services are also key services to further invest in as the rapid increase of grievous wounds related to xylazine and the flexible placement of services in new locations were both key concerns among our participants. Increasing outreach efforts to reach those who are disconnected from care is also key to preventing early mortality and overdose.

Boost treatment on demand by increasing availability: Hours of operation were not included in our maps but were frequently raised by participants as a barrier to care, as they desired more accessible hours on weekends, early mornings, and evenings and more facilities that allow for walk-in appointments and that are open 24 hours. Participants identified a need for more program hours overall to allow for greater flexibility and accommodation for clients. DBHIDS's website allows for people to look up locations

for services but allowing for people to use check boxes to select for facilities that offer specific hours or that specialize in specific programming would greatly improve how user-friendly the website could be for those rapidly looking for services while in crisis.

Enhance harm reduction services, especially emerging approaches: Harm reduction services are an essential part of the continuum of care for people who are not in treatment or people who are in treatment but continuing to use drugs. The city currently supports Prevention Point Philadelphia and other harm reduction organizations in Philadelphia. PDPH and DBHIDS are instrumental in distributing naloxone and fentanyl test strips to organizations and individuals across the city. These initiatives should continue to receive financial investment to continue and expand. In addition, the city should support point-of-care drug checking services in which consumers can bring in a sample of drug to be scanned with equipment able to detect substances and potentially dangerous adulterants such as xylazine and levamisole, among others.

Encourage MOUD programs to not use punitive responses to continued drug use or programmatic compliance issues: DBHIDS can support clearer practice guidelines around addressing buprenorphine treatment and diversion. Buprenorphine and methadone diversion is most commonly motivated to help others manage withdrawal, "saving up" part of a prescription in pursuit of euphoria, or selling for financial reasons.^{38,39} Research indicates that increased "take homes" of methadone during COVID-19 was not associated with higher overdose risk and diversion was rare.^{14,15} Each reason can be addressed by programs through encouraging patients to link those in their social networks to MOUD treatment, discussions to weigh the benefits and negatives of increasing patient doses, and structuring programs to provide support to patients by linking them to public benefits for income and to increase food security. Drug screens positive for opioids and other substances should lead to conversations rather than punitive measures. This is especially important as recent research findings indicate that higher doses of buprenorphine are associated with greater treatment retention.⁴⁰ CRS recommended the use of peers to have frank discussions with patients to develop strategies to decrease diversion. For example, CRS facilitation of greater access to housing, transportation, medical care, and insurance access can decrease financial motivations for diversion.

Increase housing for all stages of recovery, during transitions between levels of care, and that allows family unification and preservation: CRS observed many barriers to treatment retention related to housing: inpatients with no housing being discharged to shelters, patients with severe wounds and unable to access a treatment slot until a wound had healed sleeping on the street with no access to sterile conditions for wound healing, and parents unable to access treatment-related housing while with their children. Unhoused participants referenced stolen MOUD and an inability to access treatment resources while confronting the daily realities of homelessness. CRS noted that once people stop



using opioids and other substances, they may no longer be eligible for programs that facilitate recovery. This ranges from other OUD treatment to housing programs. One woman reported that she was unable to leave a shelter with her children because she was not actively using substances. Programs to support this population of people with OUD should be supported in tandem with outreach efforts to make sure OUD treatment programs, especially for people transitioning out of residential care, know about their options. Taken together, these anecdotes display a systematic barrier to stable housing, a social determinant of health that is driving both treatment access and retention.

Continue to improve treatment initiation to linkage to community-based care for incarcerated people: Some CRS and other participants noted increased access to MOUD for people incarcerated in the Philadelphia Department of Prisons (PDP). MOUD initiation, however, was often noted to take place many days, or even weeks, after incarceration began. PDP should assess its process for initiation to identify earlier opportunities to start medication. CRS indicated a need for outreach and warm handoffs for people in jail and state prisons to facilitate treatment post-release. The CAB discussed a lapse in treatment access sometimes experienced by people exiting incarceration. The city should support and evaluation and expansion of programs like Linkage and Engagement after Prison (LEAP), which provides case management to people with OUD during and after incarceration. LEAP, operated by the nonprofit Action Wellness, should partner with CRS services.

Workforce

Support the creation and retention of a skilled, diverse, well-trained OUD workforce: The most commonly cited barrier to retention in OUD treatment by focus group participants, CAB members, and methadone program directors was related to program staff. Focus group participants cited many examples of leaving treatment due to conflicts with staff. Most common, however, were issues with staff training, empathy, and turnover. Program directors of methadone programs noted that they are unable to meet the salary expectations of applicants, which is harming their recruitment during a period of high turnover. DBHIDS can advocate with the state to increase reimbursement for staff to prevent this turnover. DBHIDS can also assist with these issues by recommending enhanced training for program staff with a focus on soft skills. This is particularly important as patient conflict was reported as a common reason for patients leaving or being removed from treatment programs. Staff trained in de-escalation can help create and support conflict resolution approaches to keep these patients in treatment. These efforts can also explore enhanced reimbursement models that will allow programs to increase staff compensation to prevent attrition, hire more qualified staff, and to provide regular staff training.

CAB members were unaware that programs need to post the number for a CBH complaint line. Requiring these to be distributed to patients at intake, with the purpose of the number verbally communicated to patients, as well as guidelines on posting numbers in more prominent locations, can easily address this gap. One participant recommended site visits to assess conditions and staffing. The CAB also recommended developing mentorship programs for staff with lived experience to work with staff without this background to enhance their skills and empathy. The cost of CRS training may be prohibitive to many. DBHIDS could offer free CRS training to individ-



uals in recovery and explore incentives for treatment providers to employ CRS so they can increase employment opportunities.

Participants in our focus groups with Black and Latinx members expressed a preference for a treatment provider of the same race as them, which echoes research findings that people often prefer patient-provider racial concordance.⁴¹⁻⁴³ Recruiting a more racially and ethnically diverse staff may help with treatment retention and successful treatment outcomes. Recruiting staff across the LGBTQIA spectrum is also essential to providing culturally-competent care. In the Latino focus group, many participants shared experiences of poor treatment and stigma due to language barriers. There is a clear need for more Latinx-specific programming, recovery houses, and other treatment resources.

Support programs train and hire staff who speak

Spanish and other languages: Across programs, there is an urgent need for more bilingual staff. Recovery Houses were the preferred locations for Latino/a/x patients due to language access, but this may be attributable to few other treatment resources available for patients who did not speak English fluently. Many Latino participants described poor treatment due to language barriers. Specialized services are needed, but all treatment programs need the presence of bilingual staff members.

Increase the number of CRS and peer supports:

CRS providers play a vital role in linking patients



to treatment resources, assisting them with transitions between levels of care, and providing support informed by personal experience. Patients repeatedly voiced a preference for working with people who had lived experience of opioid use. CRS' expertise in navigating the treatment system and understanding the fragmented system as a whole can address critical barriers to long-term treatment for OUD. CRS reported high caseloads impacting their ability to comprehensively address complex patient needs. For example, CRS cannot meet with patients while engaged in inpatient stays for billing purposes, which impairs patient continuity of care. A policy change shifting reimbursement strategies would enhance their ability to ensure patients have a discharge plan after inpatient treatment. CRS should also be engaged by DBHIDS and other entities in needs assessments and program planning and improvement. As experts in both the granular and broader intricacies of the OUD treatment system, they can provide creative solutions to common concerns, such as providing patients with phones when they leave inpatient treatment so they can remain connected to CRS and other treatment resources, or involving CRS more heavily when patients are in recovery houses.

B. OPPORTUNITIES FOR DBHIDS TO SUPPORT FEDERAL AND COMMONWEALTH POLICY CHANGE

Support treatment entry through increased use of telehealth: Telehealth access to MOUD support is still needed and is supported by ASAM as a key strategy to help connect people to substance use treatment.⁴⁴ There is extensive evidence that use of telehealth created a vital lifeline for those needing MOUD during the pandemic and we urge for continued advocacy to support its use for assessment, initiation, and retention in services.⁴⁵ Telehealth services should be used for phone-based assessments to identify the level of care needed, find a treatment provider, and send people directly into treatment.

Change the requirement of insurers that specific opioids are present in urine to initiate MOUD:

In Pennsylvania, prior authorizations to initiate MOUD with medical assistance coverage (MA) need to include clinical documentation of medical necessity such as clinical notes or laboratory test results.⁴⁶ Some patients use drugs sold as "dope" that may not show up as positive for an opioid in a urine drug screen, making it difficult to get MA coverage for a buprenorphine prescription. Because of the instability of the local drug supply and the fact that many MOUD clinics may not have access to new patients' medical history or clinical documentation, there should be more flexibility with UDS requirements to initiate MOUD.





Healing Walls, Philadelphia Mural arts project in Fairhill section of Philadelphia

7. FUNDING

This research was made possible by a grant from The Pew Charitable Trusts.

8. MEET THE TEAM

Erin L. Kelly, PhD Dr. Kelly is an Assistant Professor in the Department of Family and Community Medicine at Thomas Jefferson University (TJU), a Visiting Scholar in the Center for Social Medicine and Humanities at the University of California, Los Angeles, the Director of a Health Resources and Services Administration (HRSA) funded T32 Jefferson Mental Illness, Addiction, and Primary care (JeffMAP) post-doctoral fellow-ship program, and the Co-Director of the Center for Supportive Healthcare. Dr. Kelly is a psychologist with over 20 years of experience working with individuals with serious mental illnesses (SMI) and substance use disorders and has published over 45 research articles addressing their physical health, mental health, healthcare, substance use, and housing.

Megan K. Reed PhD, MPH Dr. Reed is a Research Assistant Professor in the Center for Connected Care, the Department of Emergency Medicine, and the College of Population Health at Thomas Jefferson University. Dr. Reed is an NIH-funded harm reduction researcher interested in designing and evaluating structural interventions in partnership with people who use drugs. Her areas of research are overdose prevention, structural barriers to engaging in risk reduction strategies, community-based participatory research, and drug checking.

Lara C. Weinstein MD, MPH, DrPH Dr. Weinstein is a Professor in the Department of Community and Family Medicine, the Director of the Center for Supportive Healthcare, the Program Director of an Addiction Medicine Fellowship, the co-Director of a Health Resources and Services Administration (HRSA) funded T32 Jefferson Mental Illness, Addiction, and Primary care (JeffMAP) post-doctoral fellowship program, and a co-founder of an innovative new Bridge Program and Shellers Clinic. Dr. Weinstein has dedicated her 20+ year career to realizing health equity for people with experiences of psychiatric disabilities, addiction and complex chronic disease. As a board-certified family physician and public health researcher, she provides clinical care through Project HOME Health Services (PHHS) Federally Qualified Health Center at the PHHS Pathways to Housing PA satellite, where she is the director of integrated care and research for the Pathways to Housing PA Housing First organization.

Robert Sterling, PhD Dr. Sterling is the Co-director of the Division of Interdisciplinary and Career-Oriented Programs as well as Director of Graduate Programs in Clinical Research at Drexel University, College of Medicine. Trained as an Organization Psychologist, he is the former director of the Division of Substance Abuse Programs in Thomas Jefferson University's Department of Psychiatry and Human Behavior.

Tracy Esteves Camacho, MPH Ms. Esteves Camacho is a Clinical Research Coordinator at Thomas Jefferson University in the Center for Connected Care working primarily on harm reduction research. She has been working with people who use drugs for over 10 years, with an interest in Latinx populations who inject drugs and are living with HIV. Her experience includes the development and implementation of social and medical services in a community setting tailored to people who use drugs.

Jeffrey Gillingham, MPH Mr. Gillingham is a project coordinator in the Department of Family and Community Medicine and is a recent MPH graduate with a specialization in Community Health and program design, planning, implementation, and evaluation for public health initiatives. He has implemented, overseen, and evaluated the Thomas Jefferson University OUD/SUD warm handoff program since 2020, which utilizes Certified Recovery Specialists (CRS), where he is responsible for identifying areas for programmatic improvement, data analysis, and collaborating with community stakeholders and partners (PRO-ACT/SE Council of PA). **Shané Gill, PhD, LPC** Dr. Gill is a Post-Doctoral Research Fellow in the Jefferson Mental Illness, Addiction, and Primary Care (Jeff-MAP) T32 Fellowship in the Department of Family and Community Medicine. She has over a decade of experience in behavioral health and five years of experience in professional counseling. Within the past two years, Dr. Gill transitioned from clinical to research, to focus on racial and ethnic disparities in behavioral health screening and diagnosis, with a particular interest in promoting health equity across the African Diaspora. Dr. Gill has collaborated on projects regarding substance use disorders and MOUD treatment across the Philadelphia healthcare system, Black and LatinX patients' experiences of the MOUD treatment system across Philadelphia, a scoping review of MOUD treatment models, and recently, Afro-Latinx patients experiences of bias in primary care settings.

Shimrit Keddem, PhD, MPH, MUSA Dr. Keddem is Assistant Professor in the Department of Family Medicine and Community Health at the University of Pennsylvania, and Co-Director of the Qualitative Research Core at the US Department of Veterans Affairs (VA) Center for Health Equity Research & Promotion (CHERP). Dr. Keddem is a health services researcher and educator with expertise in qualitative and mixed methods. Through her research, Dr. Keddem seeks to improve healthcare programming especially for vulnerable and disadvantaged populations.

Diane Abatemarco, PhD, MSW Dr. Abatemarco is the Director of Maternal Addiction Treatment, Education and Research and is a Professor at Jefferson College of Nursing. Her primary research focuses on innovative interventions to enhance maternal and child health. Throughout her career, Dr. Abatemarco has conducted studies and surveys regarding HIV treatment among pregnant women, tobacco prevalence among pregnant women, and preterm birth and maternal health, among other topics. In addition, she created a mindfulness intervention to prevent poor delivery and birth outcomes. Dr. Abatemarco received her PhD in Health Studies from Temple University and her MSW in Social Work Research from Rutgers University.

Meghan Gannon, PhD, MSPH Dr. Gannon is a population health researcher dedicated to improving health outcomes and social support in pregnant and parenting people with substance use disorders. Serving in executive leadership and as faculty in TJU's Maternal Addiction Treatment Education and Research (MATER) Program, she has experience and expertise in experimental and mixed methods research, working with an often misunderstood and highly underserved subpopulation. She also serves as the Director of Community Partnerships at MATER, working collaboratively with community stakeholders and organizations to facilitate comprehensive support for pregnant and parenting people with OUD.

Simran Rahi, BS, MA Ms. Rahi has a master's in public health from Thomas Jefferson University and is a 3rd-year medical student. Her research expertise is in GIS analysis and individuals who use drugs.

Melissa Denish, BS Ms. Dinesh has a BS in biochemistry from Elon University, with minors in psychology and criminal justice studies. Her clinical research interests and experience include exploring rare neuro-developmental conditions like Tay-Sachs disease, as well as the intersection of physical health, mental health, and the criminal justice systems.

Adrienne Chapman, Alexandra Kirsch, and Mariah Cierra Hughes-Hicks are the design team for the report. They are students in the Health Communication Design program at Thomas Jefferson University.

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