OPIOID NEEDS ASSESSMENT:
Understanding Community Factors for Opioid Use Disorder

July 2024

Needs Assessment Report for The Greater Prince William Region

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Summary

With funding from the Virginia Department of Health American Rescue Plan Act State & Local Fiscal Recovery Funds Targeted Community Outreach grant, centered around community engagement in the post COVID-19 era, the Prince William Health District (PWHD) conducted an opioid needs assessment to identify gaps in services and protective factors. The needs assessment was designed to allow key stakeholders to strategically plan and implement a cohesive response to the opioid epidemic in the Greater Prince William Region, comprised of Prince William County and the cities of Manassas and Manassas Park. The needs assessment followed a mixed-methods approach using available VDH data for the region and listening sessions and key informant interviews with various stakeholders and community partners. Below is a summary of the needs assessment. For more details, please refer to the full body of the report.

Key Findings

Overdoses

There were **454 opioid-use disorder (OUD) deaths** in the Greater Prince William Region from 2018-2023, with the highest spike in deaths in the second quarters of 2020 and 2021.

- The number of nonfatal opioid-related **overdoses has more than doubled since 2017**, with over 300 per year since 2020.
- White males ages 24 to 45 still make up the burden of the nonfatal overdoses, overdose trends have steadily dropped since 2021. In contrast, **overdoses are increasing** among the 20 to 24 age group, adolescent females, and Black and Latino adults.
  From 2017 to 2023, **500% Hispanic increase**, 237% Black increase, and 106% White increase.
- The heaviest burden of nonfatal opioid overdoses is in the central and east ends of the Greater Prince William region, with the greatest need for resources in the 20111, 22193, and 22191 zip codes.
- While overdoses decreased in 2023 for most age groups, there was an **increase in opioid-related overdoses** among those **ages 0-10 years and 45-64 years**.

Injury Hospitalization

Injury hospitalization data show a **massive cost burden** related to substance use disorder, OUD in particular. Hospitalizations also mirror the trends seen in overall overdose injury and fatality, with minority group increases.

- **Hospitalizations** have **nearly doubled** since 2018 for individuals **ages 20-24** years, while all other age groups show a decrease or minimal increase.
- While other races have decreased since 2021, **Black and Hispanic** individuals have **increasing** OUD hospitalizations.
- **$8.78 million** in hospital costs related to substance use disorder in 2022 alone, with $3.33 million in hospital costs related specifically to OUD.
- **$1.03 million** in hospital costs related to 11 infants treated for neonatal abstinence syndrome in 2022.

Related Behaviors

Data related to the behaviors surrounding fatal overdoses show that there are **several potential opportunities for intervention** prior to overdose, including mental health factors, criminal justice system involvement, and bystander presence.

- **52%** of fatal overdoses **ingested** the substance, 32% snorted, 28% injected, and 15% smoked.
- **84%** of **overdose** incidents **occurred in a home** or apartment, with 66% of deaths occurring at home.
- **79%** of overdose victims had **at least one bystander present**, with 27% receiving Naloxone.
- **26%** of fatal overdoses **had a child witness** the event.

Priority Populations

Listening sessions included representatives of the Latino community, adolescents, individuals in active drug use, and those in recovery. Three voiced needs are listed below. Please see the body of the report for more details.

- Address **stigma** at all levels as it inhibits access to care, communication with potential resources, and services received.
- Establish **peer recovery specialist services** to bolster knowledge of and access to current systems.
- Recognize the **need for a multifaceted, cross-systems approach** to address commonly co-occurring disorders with the connection between OUD and mental health hurdles.

The Ecosystem

Key informant interviews included treatment providers, first responders, community-based organizations, the faith community, representatives of the criminal justice system, local education agencies, the child welfare system, and housing services. Three key action steps are listed below. Please see the body of the report for more detail by sector.

- Offer **educational support** to increase understanding of available resources and capacity building to increase skilled staff.
- Focus on **collaboration as a bridge to services** to address gaps and data communication to understand breadth of and trends in opioid use.
- Strive for a **holistic approach**, addressing connected issues such as housing and mental health and emphasizing adolescent outreach.

Recommendations

Based on the findings of this assessment, we present the following recommendations for all interested stakeholders to consider as they work to support population health with a thriving, supportive, and well-connected community of resources.

1. Evaluate opportunities to address disparities in minority and adolescent access to the system to mitigate their burden in the epidemic.
2. Consider ways to address communication barriers, both within and across the various systems of the opioid ecosystem, to ease accessibility to resources.
3. Explore opportunities for cross-systems training to maximize opportunities for collaboration and referrals.
4. Increase awareness and education to reduce stigma and improve the capacity of the overall ecosystem.
5. Maintain collaborative structures for continual reassessment of progress, improvements, and incorporation of community voice to be able to identify and address any new barriers that may arise.

> *"There's a **very small window** when individuals are ready to quit using and we need to get them signed up for immediate services. **We miss that small window more and more because we don't have the resources available**."*
> *– Listening Session Participant*

Introduction

In 2023, Prince William Health District (PWHD) received the Virginia Department of Health (VDH) American Rescue Plan Act (ARPA) State & Local Fiscal Recovery Funds (SLFRF) Targeted Community Outreach (TCO) grant; a grant centered around community engagement in the post COVID-19 era. This three-year award targets increasing engagement with communities and stakeholders who share a vision of reducing overdoses and injuries due to opioid use disorder (OUD)[*] in the region. The first year of the grant is tailored to conducting an opioid needs assessment to identify gaps in services and protective factors. This needs assessment will allow key stakeholders to strategically plan and implement a cohesive response to the opioid epidemic in the Greater Prince William region, comprised of Prince William County and the cities of Manassas and Manassas Park.

The framework used to conduct the assessment is *The Principles: A Quick Guide to Conducting a Needs Assessment* from John Hopkins University[1]. We expanded the scope of the PWHD needs assessment to explore the intersection of communities and OUD using *The Opioid Crisis: A Contextual, Social-ecological Framework*[2] and RAND Corporation's, *America's Opioid Ecosystem*[3] (Appendix 1). This needs assessment evaluated the capacity and needs of multiple touchpoints within the ecosystem through a mixed methods approach including secondary quantitative data sources and qualitative data from informational interviews, listening sessions, and community feedback.

When addressing community, it is vital to understand how the Social Determinants of Health (SDOH) give insight to the interrelated factors that contribute to an individual's health and wellbeing. According to the US Department of Health and Human Services, SDOH are the conditions in the environment where people live, work, worship, and age, that affect a wide range of health and quality-of-life outcomes[4]. The five different domains include socioeconomic status, education levels, housing environments, healthcare access, and employment conditions. These themes were continuously observed throughout this needs assessment.

The assessment supports the current landscape for increased behavioral health capacity, specifically aimed at intervening in the addiction crisis. The Virginia Department of Health's State Health Commissioner, Dr. Karen Shelton supports Governor Glenn Younkin's Executive Order 26, *Right Help, Right Now* initiative[5]. Order 26 details the need for behavioral health transformation by:

- Curbing illicit drug activity and trafficking
- Enhancing prevention programs
- Bolstering recovery efforts
- Expanding education throughout communities

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* Opioid use disorder (OUD) and substance use disorder (SUD) are used interchangeably throughout this assessment.

- Increasing the overall access to evidence-based treatment through a strategic and coordinated response.

VDH is a proud partner with The Virginia Opioid Abatement Authority (VA OAA)[6]. The VA OAA is the guiding body dedicated to overseeing and remediating the opioid epidemic in Virginia by providing financial support designated for treating, preventing, and reducing opioid use disorder throughout the Commonwealth. The OAA encourages established and new partnerships with local governments, providers, and the recovery community to implement evidence-based best practices. This assessment assists our key stakeholders and community members who have applied for OAA funding to develop targeted interventions effectively and efficiently for the Greater Prince William region.

This community-based needs assessment for the Greater Prince William region is divided into the following six sections:

1) Community overview
2) Impact of opioid use in the Greater Prince William region
3) Opioid overdose data
4) Findings from priority population listening sessions
5) Findings from key informant interviews
6) Recommendations

Acknowledgements

We want to thank the agencies and organizations listed below who have helped make this community-based research possible.

Action in Community Through Service (ACTS)
Alburtus Project
Arm and Arm INC
Brightview
Chapel Springs Church
Church of Christ
City of Manassas Department of Social Services
City of Manassas Fire Rescue
City of Manassas Park Community Services
City of Manassas Park Fire Department
City of Manassas Park Police Department
City of Manassas Park Public Schools
City of Manassas Police Department
Department of Community Services
Department of Criminal Justice - Re-Entry
Federal Bureau of Investigations (FBI) - West Field Office
George Mason University - Empowered Communities Opioid Project

George Mason University - Mason and Partners
Georgetown South Community
Good Shephard Lutheran Church
MainSpring Recovery
Manassas Addiction Center LLC
Manassas Park Department of Social Services
National Alliance for Mental Illness (NAMI) Prince William
Prince William County Department of Social Services
Prince William County Police
Prince William County Public Schools
Prince William Fire and Rescue
Prince William Region Adult Detention Center
Savida Health
Street Light Ministries
The Chris Atwood Foundation
Virginia Department of Health- Prince William Health District
Woodbridge Methadone Clinic

Community Overview

The Prince William Health District (PWHD) serves the localities of Manassas City, Manassas Park City, and Prince William County (PWC) including cities and towns such as Brentsville, Coles, Potomac, Gainesville, Neabsco, Occoquan and Woodbridge.

Since 1990, Prince William County has undergone substantial expansion securing its position as Virginia's second-largest jurisdiction. PWC has evolved into one of the most culturally diverse regions in Virginia, spread over 336 square miles with an estimated 486,943 residents. This is roughly a 21% increase from April 2010 when the population was 402,002 individuals. In terms of ethnicity: 25.8% of individuals identify as Hispanic, and 74.2% identify as non-Hispanic. Racial demographics for this jurisdiction include 84.6% of people who identify as one race, and 15.4% of people who identify as two or more races. Single race related composition includes 38.5% White, 19.9% Black or African American, 0.1% American Indian and Alaska Native, 10.2% Asian, and 10.7% other race[7]. Currently, PWC's median household income is $113,831, with 6.4% of residents living in poverty. Census data from 2022 indicates that about 6.9% of PWC is uninsured[7,8].

Woodbridge is the largest city based on population density in PWC and is predominantly urban. Based on Census data from 2022, 8.8% of the Woodbridge population alone is living in poverty and the median household income from 2017 to

2021 was $80,820[7]. This same data indicates that 20.2% of the population is uninsured.

The City of Manassas is another urban area, covering 9.8 square miles with an estimated population of 42,640 residents in 2022. The median household income in this area is $110,559 with 4.7% living in poverty. In terms of ethnicity, 38.8% identify as Hispanic, and 61.2% are non-Hispanic. Racial demographics include 37.8% White, 13.0% Black or African American, 6.0% Asian, 0.1% American Indian or Alaskan Native, some other race 0.4% and 3.9% of individuals who identify as two or more races. Data gathered in 2022 indicates that 19.4% of the population is uninsured[9].

The City of Manassas Park measures three square miles and houses 17,123 residents as of the most recent 2022 Census. The median household income was $91,673 with 5.1% of individuals living in poverty. In terms of ethnicity, 41.9% identify as Hispanic and 58.1% non-Hispanic. Racial demographics include 30.1% White, 12.4% Black or African American, 11% Asian, 0% Native American and Alaska Native, Native Hawaiian and other Pacific Islander and 0.1% some other race, and 4.5% for individuals who identify as two or more races. 36.6% identify as foreign-born individuals[10].

Impact of Opioid Use in the Greater Prince William Region

The addiction crisis has had multiple rippling effects felt at both the national and local level for decades. This assessment aims to capture the socioecological impact of OUD within the Greater Prince William region from 2017-2023.

The definition of OUD based on the American Psychiatric Association DSM-5 is a set of cognitive, behavioral, and physiological symptoms marked by the inability to stop opioid use despite negative consequences. When severe, it can present as a chronic, recurring condition with compulsive opioid use that is often termed as addiction. OUD can cause serious medical, mental health, employment, legal, and family problems [11].

Please be advised that this report discusses sensitive topics to include mental health, substance use, trauma, injuries, and deaths associated with OUD.

Findings

Overdose Related Data

This section explores fatal and non-fatal overdose data from specific VDH sources, Office of the Chief Medical Examiner (OCME) and Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). The assessment includes VDH data from the State Unintentional Drug Overdose Reporting System (SUDORS), Injury Hospitalization data and the VDH Needs Assessment Tool for Drug Overdose and Related Outcomes data dashboard. The assessment also includes information on the Overdose Mapping and Application Program (ODMAP) tool to highlight additional data sources that contribute to the landscape of information. It's important to emphasize that all available datasets have different reporting periods and various criteria for reporting purposes. This may lead to differences in overall counts. Race and ethnicity are currently shown as counts, not as percentages of the population. This is further elaborated within the strengths and limitations of each data source described within this document. Each data source heading is hyperlinked for more information that can also be found in Appendix 2.

OCME Fatal Overdose Data

The reporting period for OCME data is January 2018 through December 2023. At the time of this needs assessment, Quarter 4 2023 data is still in preliminary status due to pending cases at the time of this publication.

Since 2018, there have been 454 OUD deaths in the Greater Prince William Region according to the VDH OCME. The largest spikes in opioid related deaths were in quarter 2 of 2020 and quarter 2 of 2021 as seen in Figure 1. This mirrors the national and state trends in opioid related overdoses[12,13]. While overdose rates have continued to slowly decrease, they are not at COVID-19 pre-pandemic levels. Dr. Rahul Gupta, Director of the White House Office of National Drug Control Policy states that this may be attributed to the rise in accessibility of naloxone, the return to "normalcy" of medical access and recovery community supports, and effective drug supply interruption[14].

The largest spikes in opioid related deaths were during COVID-19 lockdowns. Numbers still have not dropped to pre-pandemic levels.

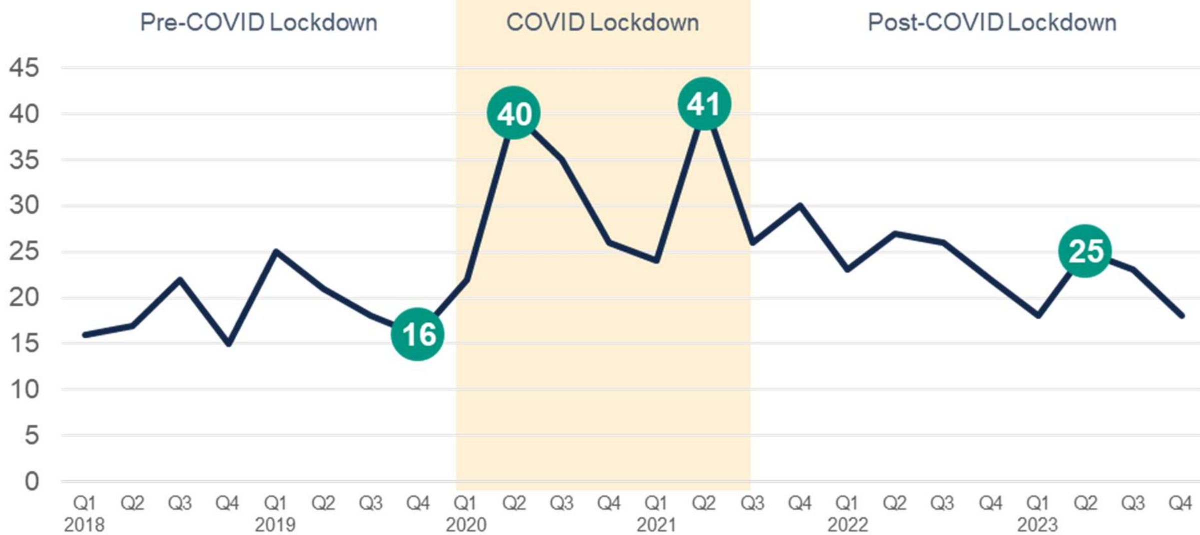


Figure 1. OCME Fatal Opioid Overdose Rates from Q1 2018 – Q4 2023

Other demographic data including race and ethnicity counts in Figure 2, age distributions shown in Figure 3 and trends by age in Figure 4. Figure 2 demonstrates disparities in individuals, largely within white populations at 302 individuals, followed by Black/African Americans at 128 individuals, and Non-White Hispanics by 57 individuals. Figure 3 highlights the greatest burden of fatalities falls within the 24-45 age group.

More than half of the burden is among white individuals (59%); more than one-third of deaths occur in those identifying as Black (25%) and Hispanic (11%).

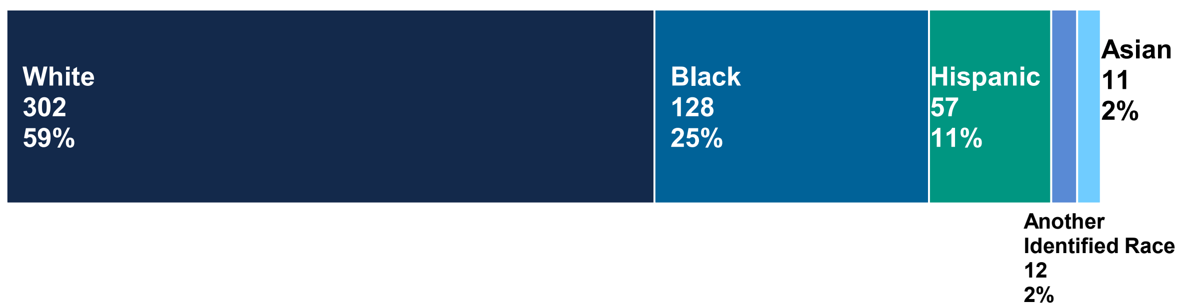


Figure 2. Race/Ethnicity Distribution

The greatest burden of opioid-related fatality is among those ages 25 to 44 years.

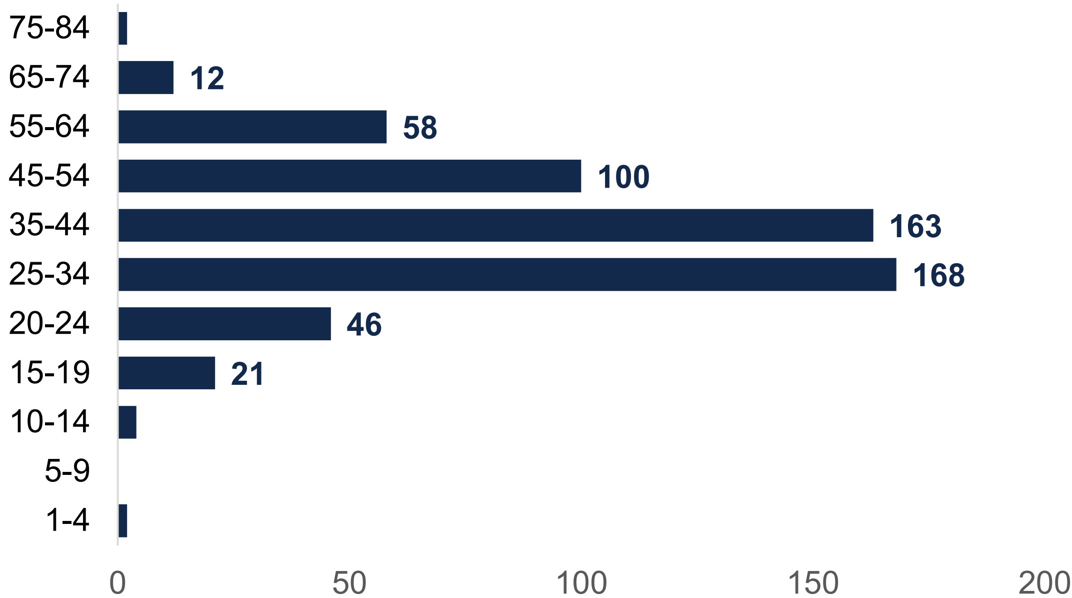


Figure 3. Overall OCME Age Distribution in Prince William Region
** Counts not shown are below 5 and suppressed per VDH data sharing guidelines*

While the highest burden of overdose fatalities falls among those ages 25 to 44, as shown above, a deeper dive into the year-over-year data show a marked increase in the younger population. In 2022 alone, 10.2% of all overdose deaths occurred within the 10-19 age cohort, indicating the need for earlier intervention as youth have increased uptake in substance use behaviors post COVID-19 pandemic[15]. A notable difference shown in Figure 4 is the increasing trend of overdose fatalities in the 20-24 age groups since 2020[11,12,13,15,16]. While all other age groups declined in overdose fatalities post-COVID lockdown, the 20-24 age group showed a sharp increase in 2023. This is an age group that has previously fallen under the radar, with the 25-44 age group bearing the bulk of the burden. This finding further underscores the need for early intervention.

While all other age groups declined in overdose deaths post-COVID lockdown, the 20-24 age group showed a sharp increase in 2023

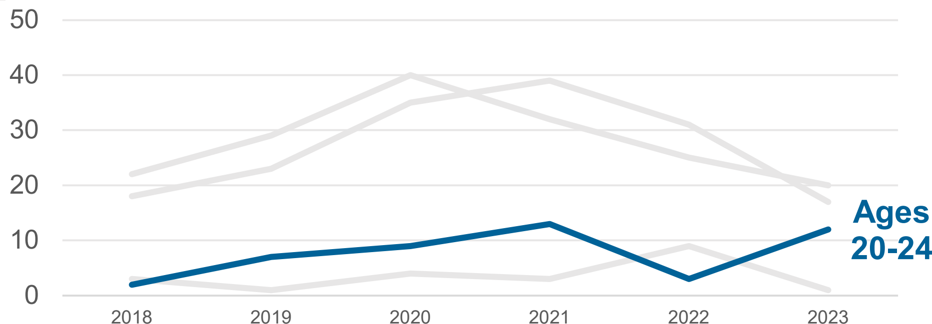


Figure 4. OCME by year by age

ESSENCE Non-Fatal Overdose Data

The reporting period of ESSENCE data in this report is from July 1, 2017, through December 31, 2023 for all Prince William Health District residents in any Northern Virginia medical setting.

The number of nonfatal opioid-related overdoses has more than doubled since 2017, with over 300 per year since 2020

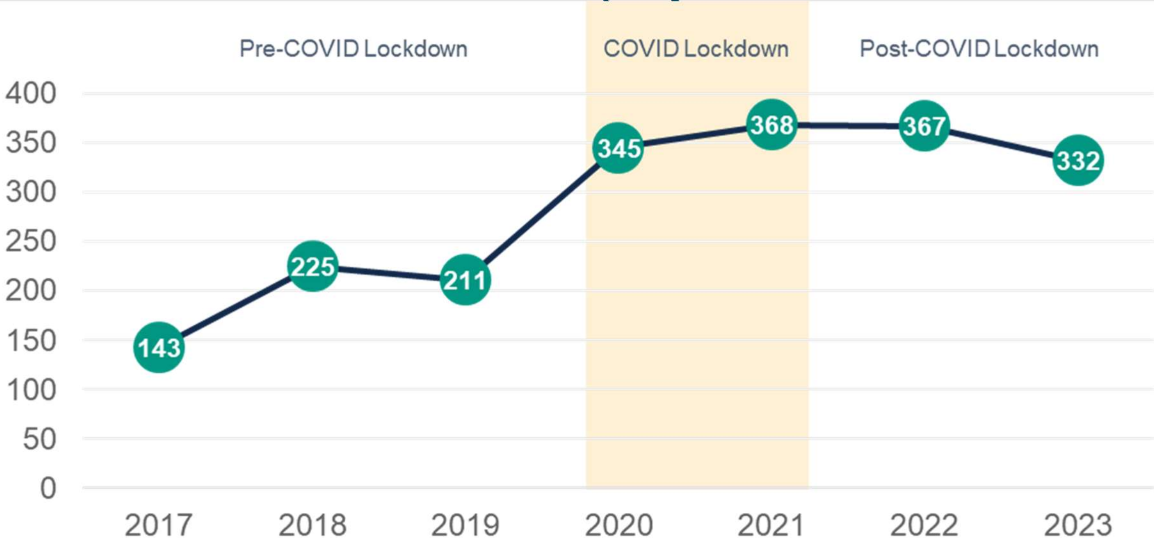


Figure 5. ESSENCE Unspecified Overdose Related Incidents from Q2 2017-Q4 2023

ESSENCE data in the reported period aligns with national and state trends with a spike of overdose related incidents during the COVID-19 pandemic in 2020 through 2021. According to the CDC's Drug Overdose Surveillance and Epidemiology (DOSE) system, national levels of opioid related overdoses have increased by 1% from June 2022 to June 2023[17]. However, in the PWHD there is a 9.5% decrease in overall overdose related incidents based on the counts in Figure 5. The current rate of emergency department (ED) visits in PWHD per VDH syndromic surveillance as a monthly average for year 2023 is 11.5 per 100,000 population[17].

While more than half of nonfatal overdoses are among ages 19-49 for both genders, females are showing a growing burden of ED visits in the 11-18 age group.

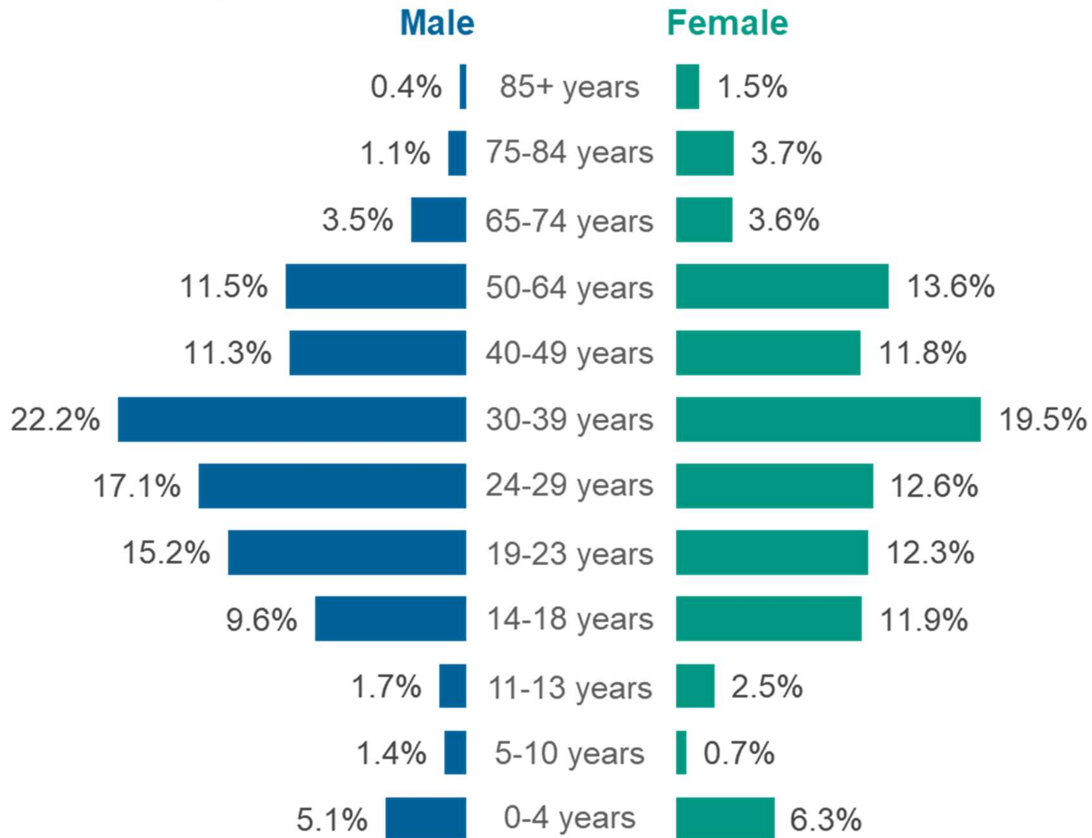
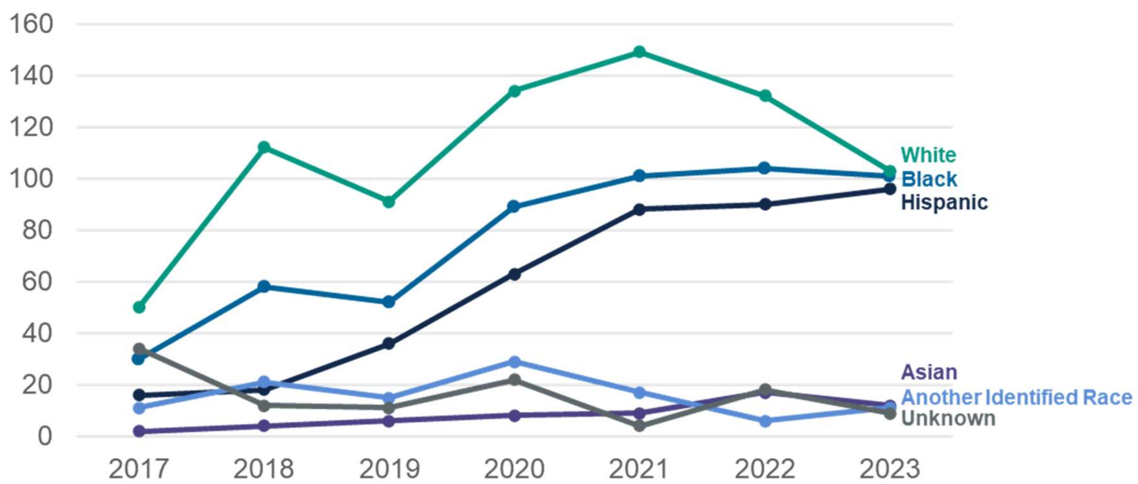


Figure 6. ESSENCE Gender Population Pyramid by age, 2017 to 2023

Figure 6 shows age distribution by gender. The highest non-fatal overdoses between both genders are in the 30-39 age group, however nearly a quarter of incidents are within adolescent and young adult populations aged 14-23. Specific to the female population, is an upward trend in overdoses for 11–18-year-old girls. Further research is needed to understand this change in female risk factors and best prevention practices for this population.

When addressing racial disparities, historically the data has reflected OUD predominantly in the White/Caucasian population. Figure 7 mirrors that demographic trend, however, in the post COVID-19 era, there is a decreasing number of incidents in the white cohort. There has been an alarming rise since 2020, with a reported 237% increase in the Black/African American population and a 500% increase in the Hispanic population since 2017. This may be attributed to the lack of access to medication for opioid use disorder (MOUD), along with stigma in minority populations around substance use and or mental health conditions[11,13,16,19].

From 2017 to 2023, nonfatal overdoses fluctuated across all races, with notable increases among those identifying as Black, Hispanic, or White.



Demographic trends show exponential increase in nonfatal overdoses for Hispanic and Black individuals from 2017 to 2023

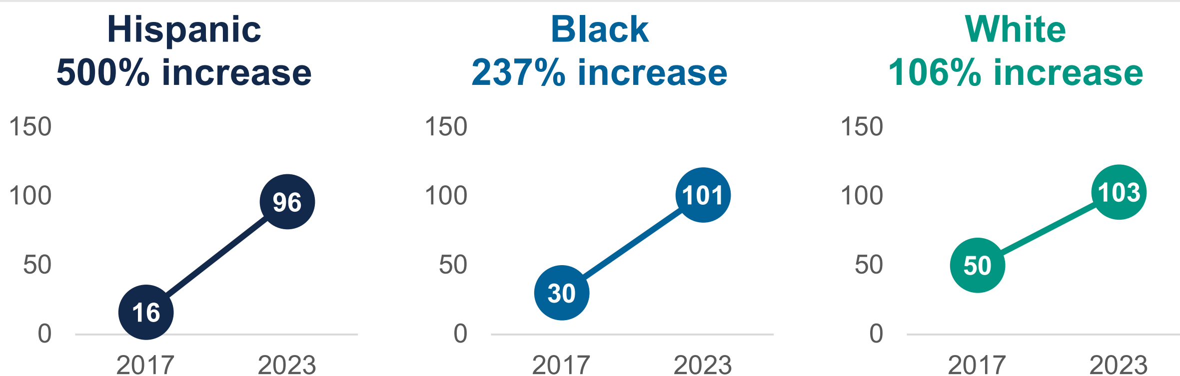
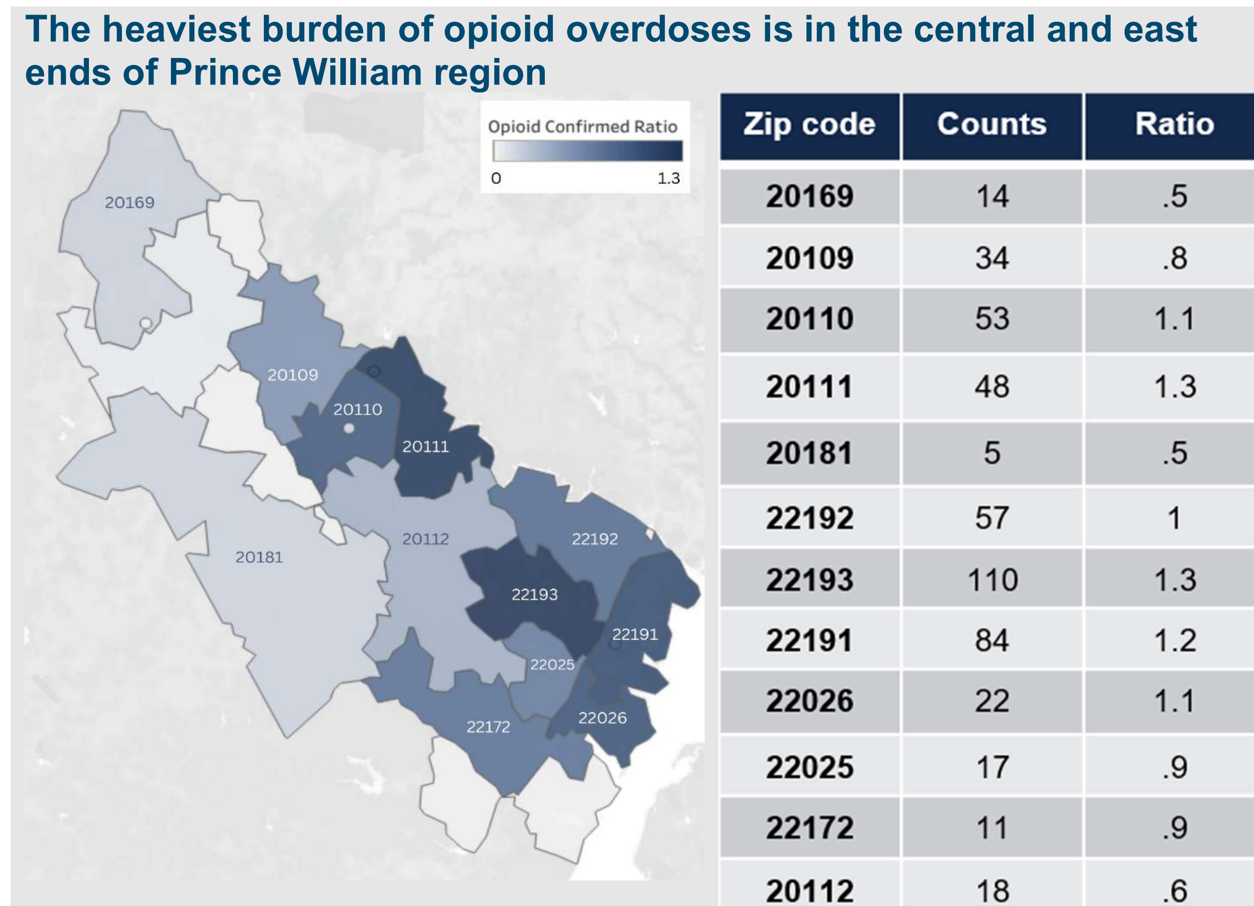


Figure 7. ESSENCE Race and Ethnicity, 2017 to 2023 % increase

ESSENCE Opioid Specified

The PWHD opioid specified dataset utilizes data analytics through dashboard visualization features to further aggregate ESSENCE data by ethnicity, race, gender, and age group. Please refer to Appendix 2 for a more detailed description of methodology and approach to opioid specified ESSENCE data. Figure 8 shows a geocoded map that reflects confirmed ED visits by the number of 1,000 individuals per zip code using Census data. The table to the right of the map includes both counts of opioid overdose incidents and the ratio per 1,000 people. This value has been standardized to reflect population density ratios to measure and compare the impact on different communities.



Zip code	Counts	Ratio
20169	14	.5
20109	34	.8
20110	53	1.1
20111	48	1.3
20181	5	.5
22192	57	1
22193	110	1.3
22191	84	1.2
22026	22	1.1
22025	17	.9
22172	11	.9
20112	18	.6

Figure 8. ESSENCE Opioid Specified Map
** Zip codes not listed include counts under 5 that were suppressed.*

Opioid specified ESSENCE findings highlight trends not seen in other data sources. Figure 9 highlights disparities in 2022 to 2023 where the 0-10 and 45-64 age groups increased, while all other targeted age groups decreased. This may indicate a need for education around safe prescription practices in older age groups and safe storge practices for individuals who have young children. Furthermore, the notable decrease in the 25-44 age band could be correlated to individuals refusing care when experiencing

an opioid overdose as discussed in key informant interviews in subsequent sections or the expansion of naloxone saturation in the community.

While overdoses decreased in 2023 for most age groups, there was an increase in opioid-related overdoses among those ages 0-10 years and 45-64 years

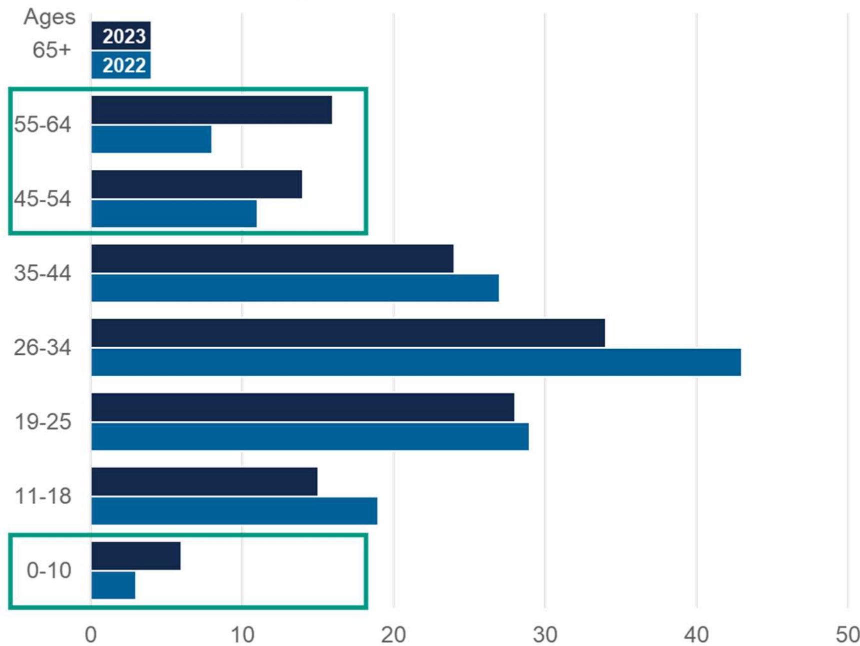


Figure 9. Opioid Specified ESSENCE Age Distribution

Injury Hospitalization Data

The reporting period for injury hospitalization data throughout the Prince William Health District is from Q1 2018 through Q4 2022. All substance uses hospitalizations include drugs with the potential for abuse and dependence including heroin, cocaine, non-heroin opioids, benzodiazepine-based tranquilizers and amphetamines[20]. Opioid use includes opium, heroin, other opioids, methadone, synthetic narcotics, unspecified narcotics, and other narcotics[21,22]. Costs were calculated using the mean number of days an individual was hospitalized along with the mean cost to treating an individual. Injury hospitalization data will be discussed from an all-substances perspective, OUD specific lens and the impact of neo-natal abstinence syndrome on the hospital care system.

Evaluating data for all substance use, there has been remarkable increase in hospitalizations seen during 2020, which can be correlated to COVID-19 lock down spikes seen in other data sources.

$8.78 million

The total cost spent for 433 individuals with SUD in 2022

SUD costs were calculated using the average cost for a 4-day length of stay ($20,287.88) for PWHD residents

For the 20-24 years age group, hospitalizations for SUD have nearly doubled since 2018.

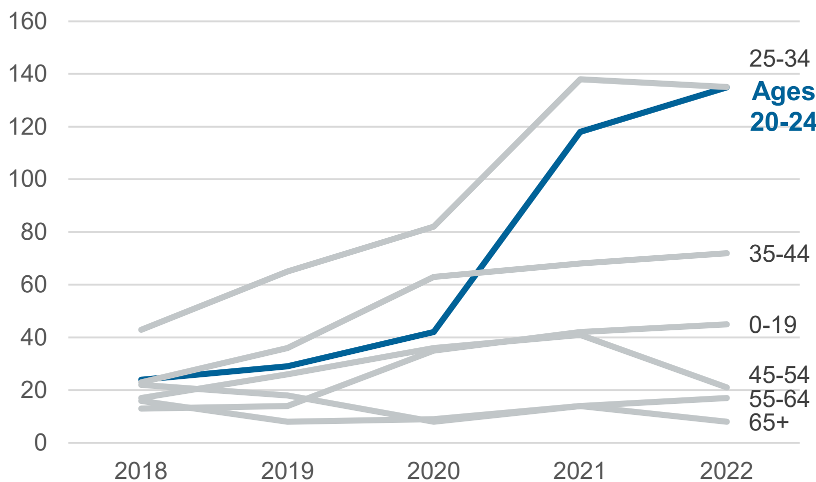


Figure 10. All Substance Use by Age

A significant factor illustrated in Figure 10 shows the 20-24 age group drastically increase by 92.5%, while all other age groups remain statistically stable or decreasing over time. It is relevant to include all substance use hospitalizations in the community needs assessment to serve as a baseline for polysubstance use related incidents in the community.

Black and Hispanic individuals have increasing rates of OUD hospitalizations

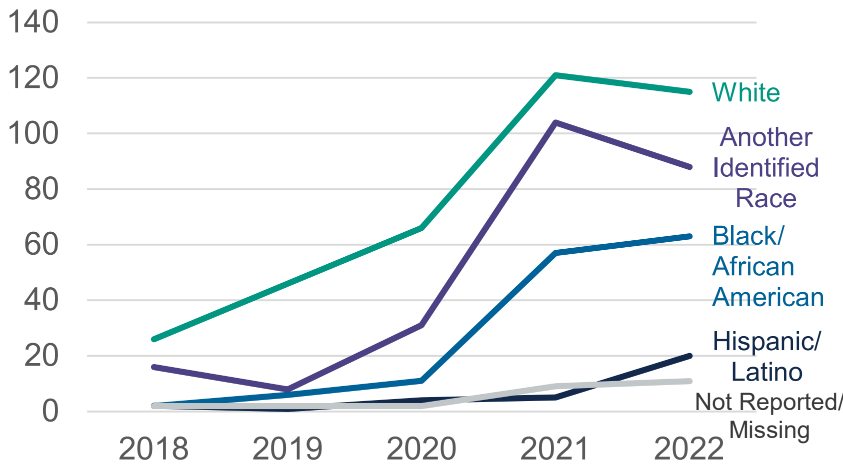


Figure 11. Opioid Use Hospitalizations by Race

Racial demographics resemble other data sources reported in this community needs assessment with a historic burden in white populations, however, Figure 11 shows a significant increase in minority populations. Black/African American and Hispanic individuals are the only groups who are increasing in hospitalizations in comparison to other demographics.

Specific OUD related hospitalization trends mirror SUD trends with a greater burden on young adult populations between 20-34 seen on the right in Figure 12. Individuals in the 20-24 age group being hospitalized for OUD has increased 183% since 2018, with the sharpest increase seen starting in 2020.

The 20-24 age group has increased by 183% over the last 5 years.

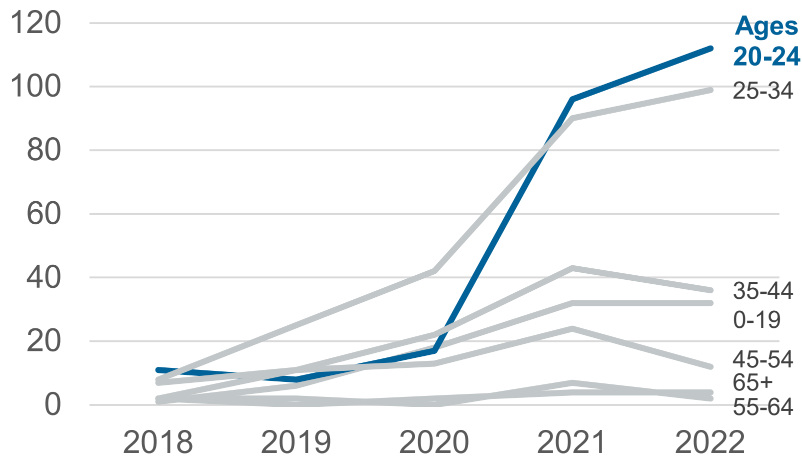


Figure 12. OUD Hospitalizations by Age

$3.3 Million

The total cost for 297 individuals with OUD in 2022

Costs associated with individuals being hospitalized for OUD include the mean length of stay of 4 days, using the mean cost of $11,211 for PWHD residents.

Gender discrepancies also exist when evaluating hospital admissions for OUD shown in Figure 13. Females were hospitalized more often in the pre-COVID 19 era at half the frequency of their male counterparts, however since 2021 we have seen an increase among this demographic while male hospitalizations are decreasing.

Female hospitalizations are increasing, almost level with males, though male are decreasing and have historically been higher than female.

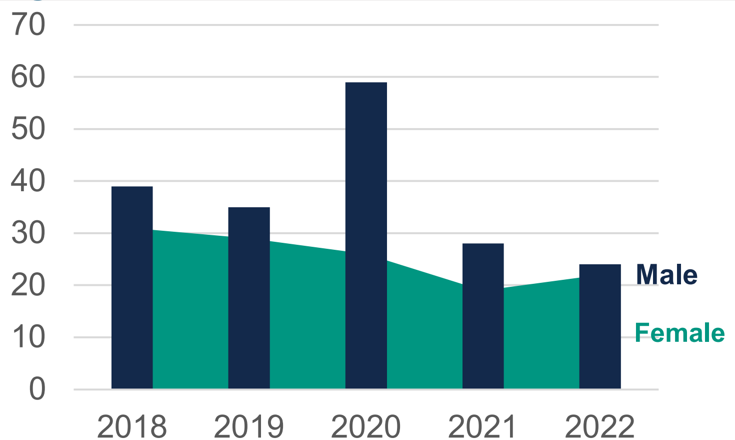


Figure 13. OUD Hospitalizations by Gender

Other information provided using the Injury Hospitalization data is the impact of neonatal opioid withdrawal syndrome (NOWS). NOWS is interchangeable with the term neonatal abstinence syndrome (NAS). NOWS counts include all inpatient cases where infants under the age of one had exhibited any withdrawal symptoms.

NOWS counts fluctuated throughout the past five years, with an average of 18 per year.

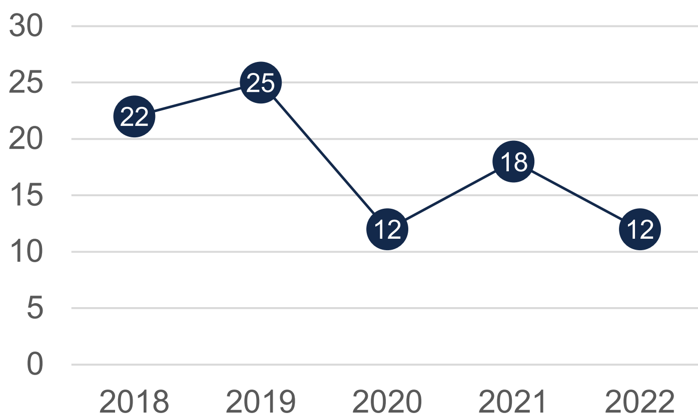


Figure 14. NOWS Counts

Treatment for NOWS depends on many factors such as exposure to a substance, infant health, and whether the infant was considered full term[23]. Standards of care can include nonpharmacological interventions such as skin to skin contact, breastfeeding, and quiet dark rooms for mild cases of NOWS to handling more severe withdrawal symptoms through medication such as oral morphine until symptoms are managed.

$1.03 Million

The total cost for 11 infants with NOWS in 2022

The average length of stay for NOWS infants over the last 5 years was 19 days with a mean cost of $86,478 for PWHD residents.

It's important to capture the cost associated with SUD on our overall region's health systems. In the last 5 years, residents within the Greater Prince William region have over $30.8 million in SUD related hospitalization costs. These costs are only associated with hospitalizations to include overdose related incidents and hospitalizations due to substance use related in-patient stays. These costs do not include loss of labor or associated burden on ancillary systems such as police and EMS, criminal justice, social services, and education.

In the last 5 years, hospitalization costs totaled
$30.8 Million

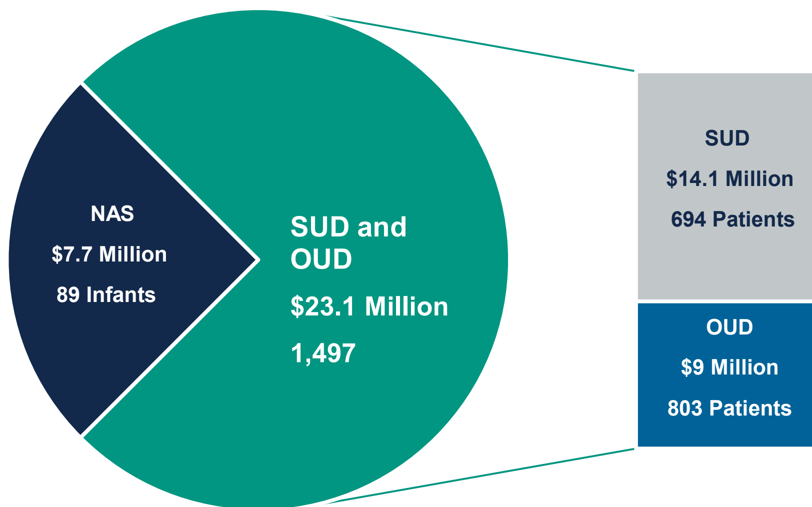


Figure 15 visualizes the impact of overall SUD related costs, per patients over the last 5 years. It's noteworthy to show that NAS makes up 25% of overall costs for only 89 infants.

Figure 15 Overall Hospitalization Costs 2018-2022 in PWHD

SUDORS Data

The reporting period for SUDORS data is January of 2019 through June of 2022 for all applicable Prince William Health District residents as shown in Figure 16

There were a total of 289 drug-related overdoses in the Greater Prince William Region from 2019 to 2022

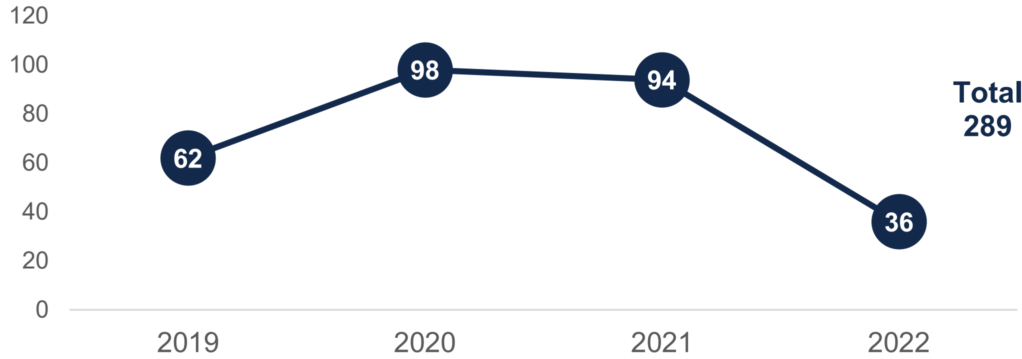


Figure 16. SUDORS Overdose deaths Q1 2019-Q2 2022

SUDORS data is similar to OCME and ESSENCE data in demographic breakdowns including age, race, and gender as seen in the race/ethnicity and age category graphs below.

As shown in Figure 17, SUDORS data show those identifying as White, non-Hispanic contribute to more than half of the overdose deaths (57%), with Black, non-Hispanic at 23%, Hispanic at 15%, and Asian/Pacific Islander at 3% of the deaths.

From 2017 to 2022, those identifying as White, non-Hispanic made up more than half of the overdose deaths (57%)

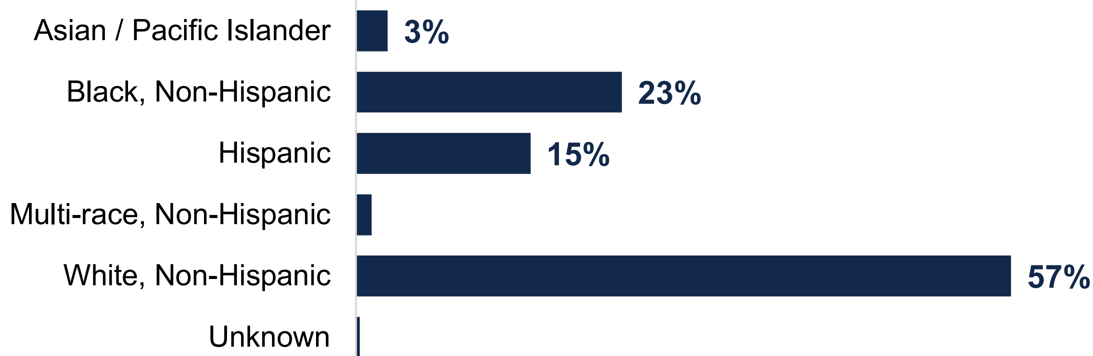


Figure 17. SUDORS Overdose deaths by race Q1 2019-Q2 2022

As shown in Figure 18, the largest burden of overdose deaths from 2019-2022 was among those aged 25 to 44 at 61%, with one-fourth occurring in those ages 15 to 24 (13%) and 45 to 54 (14%).

From 2017 to 2022, those ages 25 to 44 made up 61% of the burden of overdose deaths

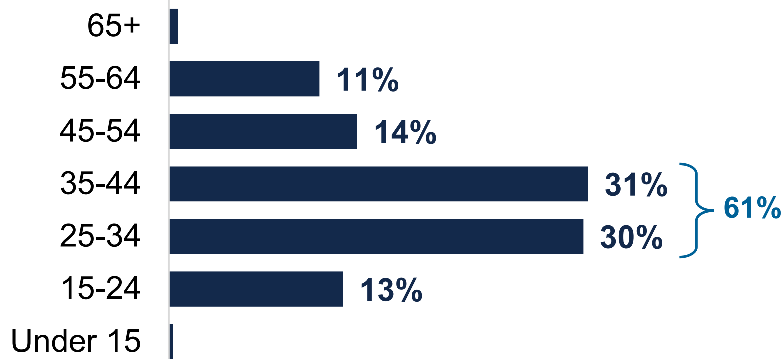
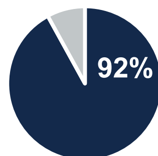


Figure 18. SUDORS Overdose deaths by age Q1 2019-Q2 2022

Key findings from SUDORS data highlight concerning substance use trends as found through toxicology and medical examiner reports. Of the 289 cases, 92% tested positive for opiates and 39.4% tested positive for cocaine. The rise in overdose deaths involving fentanyl and stimulants is considered the "fourth wave" of the drug overdose epidemic. This trend has been seen nationally, with cocaine and fentanyl being seen more and more in the Northeastern United States[3,11].

92% of overdose victims tested positive for opiates and 39% tested positive for cocaine

Positive for Opiates



Positive for Cocaine

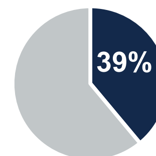


Figure 19. SUDORS Overdose deaths by drug type Q1 2019-Q2 2022

The route or method of drug administration is based on evidence captured at the scene, witness accounts, and autopsy evidence on how the substance may have been consumed leading up to the fatal overdose. More than one route of administration can be applicable to an individual[24,25]. As shown in Figure 20, of the 289 individuals within the data set, 52% of individuals ingested the substance of choice; 32% snorted, 28% injected, and 15% smoked either by pipe or tinfoil.

More than half of individuals (52%) ingested the substance, with nearly one-third (32%) snorting the substance

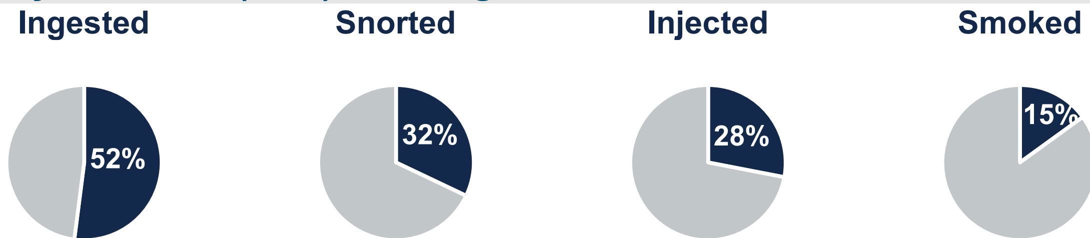


Figure 20. SUDORS Overdose deaths by location Q1 2019-Q2 2022

Another key indicator to emphasize is where most overdose deaths occur. As shown in Figure 21, the majority of deaths happen at a home or apartment (66%), followed by a medical setting such as an emergency department or hospital setting (18%).

Two-thirds of overdose deaths (66%) occurred in a home or apartment

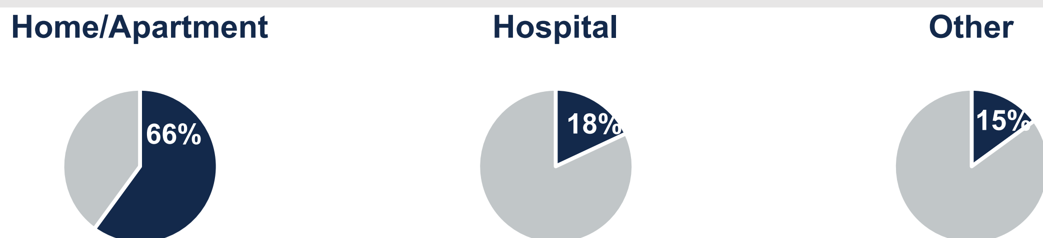


Figure 21. SUDORS Overdose deaths by location Q1 2019-Q2 2022
Total does not equal 100% due to rounding

In addition to understanding the location of the overdose death, it is important to emphasize the location of the actual overdose incident. As shown in Figure 22, the vast majority of overdose incidents occurred in a home or apartment (84%), with 6% occurring at a hotel/motel and 4% in a motor vehicle. The additional 6% of overdose locations included a commercial establishment, detention facility, natural area, office building, parking lot, and street, though each of these had fewer than five cases during the reporting period.

84% of overdose incidents occurred in a home or apartment

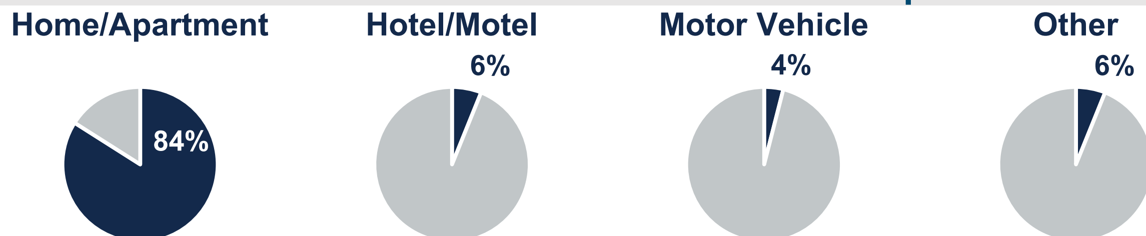


Figure 22. SUDORS Overdose deaths by location Q1 2019-Q2 2022

Potential Opportunities for Intervention to Prevent Overdose

One of the unique benefits of the SUDORS data source is that it helps in understanding the circumstances and related behaviors connected to drug overdose deaths. This allows stakeholders to identify and address potential opportunities for intervention to prevent overdose. These opportunities align with the various touchpoints identified as key resources in the opioid ecosystem. For this data source, the potential opportunities include data related to treatment for substance use disorders, mental health diagnoses, bystander presence, prior overdose, and whether the individual was recently released from an institutional setting. Regarding history of treatment for substance use disorders, 7% of the overdose victims were receiving treatment at the time of their death, with 18% having a prior history of treatment. With 23% of victims reported to have a prior non-fatal overdose, this highlights a gap in uptick of substance use disorder treatments.

7% of overdose victims were actively in treatment for substance use disorder and 18% had previously been in treatment

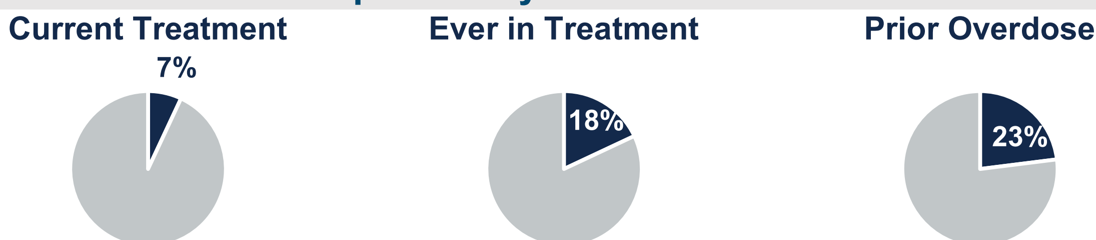


Figure 23. SUDORS Overdose deaths Q1 2019-Q2 2022, History of treatment and overdose

39%

recently released from criminal justice system

The intersection of substance use disorder and the criminal justice system is another significant datapoint that can be used to measure the impact on the various levels of the socio-ecological framework[2]. Although data on being recently released from an institution (within the past 30 days) were only available for 31 of the 289 incidents (11%), of those, 39% were recently released from jail, prison, or a detention facility. The overall impact and significance of the criminal justice system is elaborated on within the qualitative section of the needs assessment.

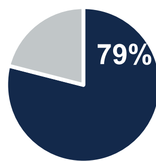
Bystander Presence and Naloxone

The importance of harm reduction techniques highlighted in this dataset includes the use of Naloxone to reverse an opioid overdose, and if a bystander was present at the scene of death. Naloxone is a medicine that reverses an opioid overdose and is considered an opioid agonist. This means naloxone binds to opioid receptors in the brain by blocking other opioids[26]. The term "bystander", according to the SUDORS codebook, includes any individual age 11 or older who was nearby during or shortly preceding a drug overdose who potentially had an opportunity to intervene and respond

to the overdose[27]. These data were not recorded for 112 of the 289 overdose deaths (39%). For the 177 events with bystander data, 79% were reported to have at least one bystander identified at the time of overdose, with 28% reported to have multiple bystanders, 22% to have one bystander, and 29% to have an unknown number of bystanders. Additionally, of the 289 overall overdose fatalities, 27% received Naloxone. This datapoint emphasizes the importance of having Naloxone readily available, as well using harm reduction techniques like utilizing the Never Use Alone Hotline or a buddy system[29].

79% of overdose victims had at least one bystander present, with 27% receiving Naloxone

At Least One Bystander Present



Naloxone Administered

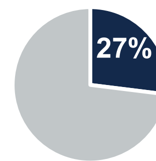


Figure 24. SUDORS Overdose Q1 2019-Q2 2022, bystander and Naloxone treatment

26%

had a child witness

Related to the data regarding the presence of bystanders, the reporting system also collected data on whether or not a child was present for the overdose event. Of the 289 events recorded in the system, whether or not a child witnessed the event was recorded for 101 overdose victims. Of those, 26 (26%) were reported to have a child witness.

Mental Health

Another potential opportunity for intervention prior to a fatal overdose is the mental health of the population. Of the 289 fatal overdoses recorded, 39% of the individuals had a history of mental illness, with only 29% reported to have a history of mental health treatment. As reported above, only 18% of individuals had a history of ever being treated for SUD.

39% of overdose victims had a history of mental illness, with 29% reported having received mental health treatment

History of Mental Illness **History of Mental Health Treatment**

Figure 25. SUDORS Overdose Q1 2019-Q2 2022, mental health history

Additional data were available related to specific mental health diagnoses for 109 of the 289 overdose deaths (38%). Nearly half of individuals had a diagnosis for depression/dysthymia, one-fourth anxiety disorder (25%), and 10% bipolar disorder. Additional diagnoses included attention deficit/hyperactivity disorder (6%), schizophrenia (6%), and post-traumatic stress disorder (2%).

Nearly half of overdose victims (43%) had a depression diagnosis, 25% anxiety disorder, and 10% bipolar disorder

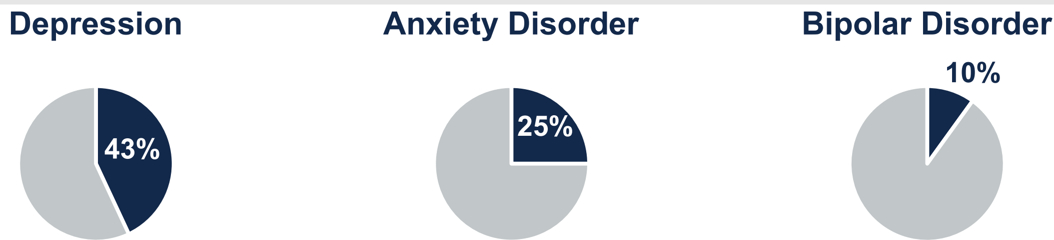
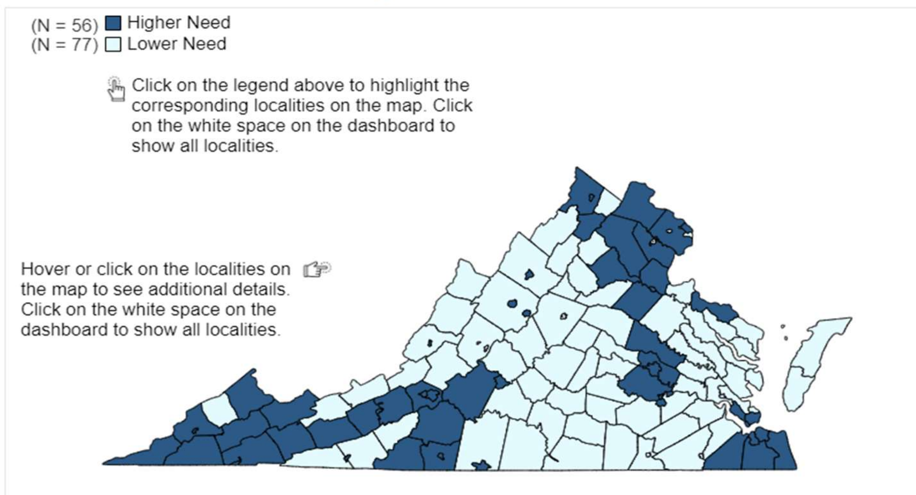


Figure 26. SUDORS Overdose deaths Q1 2019-Q2 2022, Mental Health Diagnoses

Needs Assessment Tool for Drug Overdose and Related Outcomes

The VDH central office developed a Needs Assessment Tool for Drug Overdose and Related Outcomes to help identify which Virginia communities may need additional support from targeted drug overdose related prevention and intervention strategies[29]. Each locality was scored in comparison to the state score of 9. Localities whose score is 10 or higher are considered to be high risk for drug related outcomes.

Needs Assessment Tool for Drug Overdose and Related Outcomes



The assessment score for each Virginia locality is compared to the state score of nine (**9**). If a locality received a score of ten **(10)** or higher, it is considered at higher need for drug overdose-related outcomes and substance use.

Figure 27 VDH Needs Assessment Tool

Prince William County has a score of 11. This locality shows a higher count for drug overdose deaths, ED visits, unemployment rates, volume of prescription opioids and buprenorphine being filled, new Hepatitis C cases within the age range of 18–30-year-olds, and HIV cases along with higher counts of substance use disorder treatment admissions, drug arrests/violations and Naloxone administrations.

The City of Manassas has a score of 5 due to a higher rate of drug overdose deaths, drug related arrests or violations and Naloxone administrations. They have an elevated count for ED visits. Lastly, the City of Manassas Park has a score of 2. Indicators for this municipality include higher counts for ED visits and higher rates for narcotic arrests/violations. It's important to note that while these localities have lower scores, this does not mean that they don't demonstrate a need for opioid use intervention. The PWHD, along with all of Northern Virginia, is a very transient region.

The Overdose Mapping and Application Program (ODMAP)

ODMAP is a tool created by the High Intensity Drug Trafficking Area (HITDA) program. This program provides near real-time suspected opioid overdose surveillance data to public health and public safety agencies. The ODMAP links first responders and relevant record management systems together, allowing strategic planning and mobilization efforts[30]. This geographic mapping tool <u>is not public facing</u>, it is a strategic resource used internally to assist in comprehensive data collection and analysis. For this assessment, we cannot include any geospatial mapping or graphic features as part of our user agreement.

During the reporting period of January 1, 2023, through December 31, 2023 there were a total of 347 incidents reported. Comparatively, the previous years' parallel time frame documented 398 incidents. There was a 12.8% percent decrease in overall opioid related incidents reported to ODMAP from 2022 to 2023. This is similar to the decrease seen in the ESSENCE data between the same timeframe. In 2022, the monthly average was 33 responses, with a peak in July with 41 and lowest drop in November with 21 incidents. The 2023 monthly average dipped to 29. The lowest month was also November with 17 responses and the highest months were March, May, and August with 38 responses.

Overdose responses varied monthly through 2022 and 2023, with an average of 33 responses per month in 2022 and a drop to a monthly average of 29 in 2023.

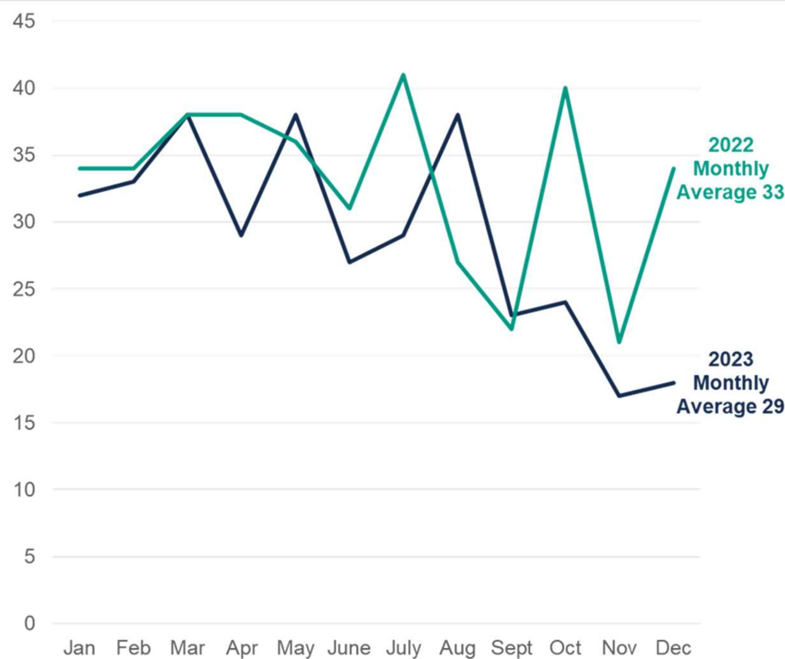


Figure 28. Monthly OD Map reported overdoses 2022-2023

Listening Sessions

Community based listening sessions are crucial to gaining a comprehensive understanding of how OUD impacts the Greater Prince William region. By inviting diverse community members to engage and participate in this needs assessment, their lived experience allows us to uncover underlying root causes and systemic barriers individuals may face when navigating the ecosystem. The PWHD applied to the VDH Institutional Review Board for approval prior to conducting listening sessions with priority populations. Individuals who participated were compensated with $25 gift cards for their valuable input and time.

The four primary populations of interest include the following:

- The Latino Community
- Individuals in Active Addiction
- Adolescents
- Individuals in Recovery

These individuals were identified in quantitative data sources as well as initial outreach with ecosystem touchpoints as populations who face increased barriers to care. These marginalized and underrepresented perspectives add rich insight to identifying possible solutions. Allowing their voice to amplify advocacy efforts, stakeholders can develop equitable policies and programs that respond to their identified needs by reinforcing existing infrastructure through collaborative efforts.

All listening sessions were facilitated by Prince William Health District staff. For the Latino sessions, bilingual staff members supported facilitation with assistance from community liaisons. Analysis of listening sessions include demographic information, such as age, gender, ethnicity/race and zip code, as available. Participants were asked to complete a demographic survey following each listening session. Completion of the survey was completely voluntary and not all participants' demographic data is included in our dataset. Overall, we had 61 listening session participants across 11 sessions. Of the participants who completed the demographic survey, 43 (70%) identified as female and 18 (30%) as male. Only 46 of the 61 participants designated their race and ethnicity, 9 (15%) identified as white, 9 (15%) identified as Black or African American, 5 (8%) identified as other race, 13 (21%) identified as white Hispanic, 10 (16%) identified as other or non-specified Hispanic.

The Latino Community

We conducted three listening sessions in the Georgetown South community center in Manassas City, VA. This community is predominantly Hispanic and of low socioeconomic status. We spoke with 27 participants ages 25-45. The majority of participants were parents. Participants were invited to join the listening sessions via advertisements in the community homeowner's association (HOA) email in addition to the PWHD Community Engagement Specialist attending an in-person "See Something, Say Something" presentation provided by the City of Manassas police department.

Although this summary reflects the viewpoints of the voices who joined our session, it is important to note that this is not an all-encompassing perspective of the Latino community in the Greater Prince William region and should be considered a starting place to keep the conversation going.

Overall, the Latino community participants reflected on barriers such as stigma, communication, and health system access. Areas for opportunity within this community are education sessions bridging school and family communication, community health support to access care, and support addressing stigma and stereotypes. For these listening sessions, quotations are based on translations provided by the facilitation team.

Awareness and Education

There was an overall lack of true awareness around opioids and the burden of the epidemic. While many participants were familiar with the term ‘opioids’, they were not sure what it actually meant and often lumped opiates in with other drugs. Participants were also unsure of the prevalence of opioid use within the region, especially among the adolescent population. The main concern they had around prevalence was the negative influence that can come from peer pressure and social media exposure. They also mentioned stigma, both within the family and the larger community, as a barrier to overall awareness. One area the Latino community did express awareness was the ease of availability, noting that children even receive opioids for things like tooth pain.

> *Parents know that the word exists from TV news, but they do not know what damage it causes to the health, or how it affects health.*

Experiences and Perceptions

When reflecting on their own experiences and perceptions, the Latino participants primarily focused on community resources, the difficulty of discussing such a heavy topic, and their own socioeconomic challenges. In terms of community resources, participants shared that their church communities stood out as their biggest resource for information and support. They also shared that existing cultural stigma made it difficult to discuss such topics within their community, with an assumption that asking too many questions would come across as being nosy. In terms of socioeconomic challenges, many participants shared that they are often working long hours at multiple jobs, resulting in limited time at home.

> *Within family, it is okay to speak about it. Outside of the family, it is not. The reason being is because you do not want to seem in other’s businesses (nosy). When someone overdoses within the community, everyone knows, but no one says a thing about it.*

Barriers and Challenges

Though not expressly named as such, the biggest barrier that surfaced with the Latino community was an overall lack of health literacy. This leads to their self-identified barriers in understanding addiction and accessing vital resources whether for risk prevention or harm reduction. Closely connected to health literacy, communication with service providers is another barrier for this community. Some participants noted a lack of insurance limiting their ability to connect with healthcare providers and build a trusting relationship to share these kinds of concerns.

Additionally, participants noted a burden of lack of translation autonomy, leading them to often rely on their child for translation of medical appointments. Also tied to socioeconomic status and communication barriers, participants noted a lack of a trusted adult as a major barrier in supporting their youth around drug use and its implications. Participants shared difficulty in getting their children to feel safe opening up to talk about harder topics.

> *Lack of trust from children in parents to express their problems. Children trust their friends more than their parents. Sometimes when children need somebody to express problems or feelings parents are not around, but friends are.*

Opportunities, Strengths, and Resources

In terms of future opportunities and resources, the participants shared a need for bilingual resources, community outreach, and holistic offerings from community partners. The leading suggestion was for bilingual resources including general educational outreach materials, information regarding treatment options, and a suggestion of social media campaigns focused on raising parent awareness. The community also suggested community outreach through school and church offerings as a resource for this issue. Additionally, there was reflection on the need for holistic offerings from community partners, with a lens toward family values, showing that the education sector, health sector, and family are all on the same page.

> *Everyone agreed that the only way to start discussing opioid use within the community is by simply putting out information about opioid use (especially in Facebook, where most parents have a presence). They mostly agreed that open communication is the key.*

Adolescents

We conducted three listening sessions with 27 youth ages 14-18. Two listening sessions were conducted with youth living in Georgetown South, a predominantly Latino community in Manassas City, using convenience sampling methods. The third listening session was held virtually with youth recruited from the VDH Youth Advisory Council. Participants varied in socioeconomic status, demographics, and grade level. Youth conversations included overall substance use with questions on opioids.

This summary reflects the viewpoints of the voices who joined our session, it is important to note that this is not a truly representative sample of the adolescent community in the Greater Prince William region. This should be considered a start to the conversation, with a goal for more input from young people in our community.

Overall, the adolescent community participants reflected on challenges to substance use education in traditional school settings, as well as in the community and at home. Barriers for young people accessing resources include stigma and a lack of knowledge of where to locate help if needed. Areas for opportunity within this community are increased resiliency training with components of harm reduction education and lived experience in various platforms for increased reach and efficacy. Having a comprehensive, anonymously accessible guide for youth to learn about local resources would help further empower young people when they don't have a trusted adult to reach out to.

Awareness and Education

Youth have varying levels of awareness and education around substance use. Substance use education is primarily taught in traditional education settings, beginning in middle school and during high school freshman and sophomore health classes. Education is based on vaping and cannabis with some opioid specific education. Youth understand some of the physical and social/emotional consequences related to drug use but feel the need for more comprehensive information and teaching approaches would be more effective.

> *"It's definitely something that's taught in schools, but I don't think they necessarily take the approach like from the perspective of a teenager. They're more looking at it for as an adult, like just say no. It's different than when you're a teenager and it's actually like, you have this need to like fit in."*
>
> *"I think it's really important that people get education in their junior and senior year because those are the years I think that people are more likely to use or experiment with drugs."*

Experiences and Perceptions

There is a high perception of substance use happening among youth and their peers. Some participants reported seeing and hearing substance use happen within schools and their community. When asked about why young people might begin using substances, many reported the impact of peer pressure, the need to fit in, accessibility of substances in the community, self-medication for trauma and stress as well as the "age of experimentation". The way youth perceive substance use education also varies. Some participants feel that the current method of teaching through statistics and scare tactics may leave some youth more concerned, while others feel that many disregard the impact of substance use education.

> *“We hear about it, but don’t really see it. That it [drugs] could be laced with fentanyl, but nobody has seen that happen or experienced it so we don’t take it as seriously.”*
>
> *"It can be really hard to believe sometimes, when they push all the statistics out there, kids can kinda numb over it and don’t care"*

Barriers and Challenges

Young people expressed specific barriers and challenges felt among their age group. Youth expressed challenges when speaking to their parents or a trusted adult about mental health and substance use. They feel the older generation can’t understand the current pressures many young people face or have the tools needed to talk with them about drug use. Along this theme, young people don’t know where to find information or feel comfortable sharing resources with their peers for the fear of judgement or getting in trouble. This leaves many youths sharing their concerns and getting information from their peers.

> *“I think a lot of schools always say like, go to a trusted adult, but a lot of the times not everybody's really close with an adult at school or things like that. So I'd say just some alternate form of a way to like talk to somebody if they didn't have anybody to go to.”*
>
> *“It’s really daunting to think that we would have to, you know, confront someone about it. I’d probably go to a friend who might tell me to go to an adult because I mean, we’re just kids.”*

Opportunities, Strengths, and Resources

Youth participants expressed strong interest in expanding substance use education that has components of resiliency training, desire to hear stories of lived experience from young people in their age group, and components of harm reduction education to know the signs of substance use and how to keep peers safe while in the age of experimentation. Education and outreach should be expanded outside the classroom in various channels, whether that be in community centers or on social media platforms like TikTok and Instagram. This information should also reach across demographics, such as education adapted for minority populations and parents.

Additionally, youth want to access resources in an easy and anonymous way. This can help bypass any stigma associated with substance use. When asking study

participants about ideas for increasing awareness, youth discussed sharing information in places such as the nurse’s office or bathrooms at schools.

Finally, youth are also looking to expand protective factors. As mentioned, the need to incorporate resiliency life skills that address how to build strong relationships, manage stressors, and educate youth not only on the impact of substance use, but to also offer ways to avoid risky behaviors. The need for non-traditional job training was also brought up in listening sessions as an idea for additional protective programming.

> *Having an option where people can just talk to someone anonymously might be easier to, you know, reduce that stigma and cause some people might not wanna come forward because they're worried about what other people will think of them.*

Individuals in Recovery

Understanding the experiences of individuals in recovery is an important touchpoint to learn best practices and barriers. We interviewed nine participants ages 25-54, who identified as having a substance use disorder. All nine participants also identified as having varying degrees of mental health conditions, highlighting the prevalence of co-occurring disorders. The participants we spoke with are certified peer recovery specialists with various lengths of recovery, offering unique insight on not only their journey but the strengths and barriers for the clients they serve. These participants were recruited from Community Services, Mason and Partners Empowered Communities Opioid Project, and the Chris Atwood Foundation. Listening sessions were conducted both in person and in a virtual format.

While this summary captures the viewpoints of those who participated in our session, it is important to recognize that it does not represent the entire recovery community in the Greater Prince William region. This summary is a starting point for further discussion on how to strengthen recovery pathways and services.

Individuals who participated in listening sessions shared their experiences and struggles when reaching recovery with key themes of destabilization when in active cycles of addiction. Barriers to the recovery community include internal and external stigma, especially in minority communities. Access and accessibility to competent medical providers or treatment touchpoints are key challenges to the recovery community as a whole. Opportunities to strengthen infrastructure are expanded education around SUD utilizing peer recovery specialists at ecosystem touchpoints for individuals in recovery, their families, and providers.

Experiences and Perceptions

Individuals who identified as being in recovery had varying determinations of where they started their journey. The term "rock bottom" encompassed the loss of housing, jobs, and relationships that may have led them to interact with the criminal justice system and/or treatment touchpoints. Resources that encouraged recovery include recovery communities within 12 step groups such as Narcotics Anonymous (NA) and Alcoholics Anonymous (AA) and medical treatment for co-occurring disorders. Length of recovery was a key protective factor for how individuals cope with triggers for relapse. Additional protective factors include stabilizing conditions such as employment, housing, and meaningful relationships with family.

> *"I was desperate for help and I honestly felt like I had no other options but to try something different and that was recovery."*
>
> *"So much of my life works better without it [opioids]. You know, I have way more things to be sober for than to be high for. It doesn't fit in my life whatsoever."*
>
> *"I never wanted to be still, I used to think it was boring but now I find it peaceful. I'm at rest, I'm relaxed. I'm safe."*

Barriers and Challenges

There are external and internal challenges individuals in recovery face. External barriers include key components of basic human needs such as safe housing and medical treatment. Limited accessibility to medical insurance compounded with a lack of culturally competent and specialized treatment providers serves as a major hurdle for individuals navigating the treatment sector. There is scarce infrastructure, both in terms of transportation services and treatment center capacity, to support individuals trying to engage when they are ready for treatment, a prime window of opportunity. Furthermore, individuals in recovery feel a lack of education around addiction that results in increased levels of stigma in various environments to include family units, medical professionals, and the employment sector.

Internal barriers rooted in self-stigma and shame around their experience with substance use may also compromise recovery efforts. This may be reinforced with the lack of social and family support. Individuals who have criminal records or barrier crimes find gaining traction in employment disheartening to building a life around sobriety. Additionally, male participants identified increased challenges around finding positive male role models due to cultural gender norms around the intersection of vulnerability, mental behavioral health, and trauma.

> *"If people’s basic needs aren’t being met, recovery is not the priority. There’s a very small window when individuals are ready to quit using and we need to get them signed up for immediate services. We miss that small window more and more because we don’t have the resources available.”*

Opportunities, Strengths, and Resources

Individuals in recovery identified numerous support systems that aid in their journey to sobriety. These include mutual aid groups such as AA and NA meetings, the faith community, treatment touchpoints such as in-patient rehabilitation centers, MAT clinics, counseling services, and sober living. These support systems offer positive mentorship and skill building techniques to cope with trauma and stressors that may contribute to triggers or relapse. The importance of positive role models can be especially challenging for men due to the vulnerability around mental health and trauma.

Opportunities to strengthen the recovery community in the Greater Prince William region include increasing and diversifying in person 12-step groups in terms of philosophy such as SMART recovery meetings, that aren’t faith based, and gender specific groups. There should also be a holistic family support system in place to strengthen the continuum of recovery for those who have SUD.

In the treatment sector, ensuring hospital systems and medical providers have education around addiction and co-occurring disorders is paramount. There is a need for additional detox and residential treatment facilities with recovery housing options with bed-to-bed transfers. This will help strengthen the transitional period of recovery when individuals are most at risk of relapse and overdose. Lastly, incorporating peer recovery specialists as paraprofessionals to ecosystem touchpoints will assist not only those who are navigating the system of recovery, but advocate and educate others on how to best serve individuals with SUD/OUD.

> *“I just never thought I could meet someone who used to use heroin could be a mentor to me because, you know, most people don't make it out alive”*
>
> *“I reach out daily to someone, as far as what I want in my spiritual and physical recovery. I call my sponsor to check in at least once a day, getting into the habit of doing that has really helped me keep something positive on my mind.”*

Individuals in Active Addiction

Reaching those who are still using substances is the primary population of interest in understanding how to close the gaps in care for individuals accessing the social safety net. We interviewed nine individuals ages 25-55 who identified as being in active addiction from Prince William Community Services groups and individuals who utilize comprehensive harm reduction services with the Chris Atwood Foundation. Participants were interviewed in both group and individual settings due to the complexity of recruiting for this marginalized population.

With a smaller sample size of individuals in active addiction, the views are not a full representation of the Greater Prince William region. The details shared in this summary are to highlight and humanize the struggles individuals face in the cycle of addiction. With empathy and understanding, we hope to use these talking points to ensure those with SUD can participate in programming endeavors to combat the opioid crisis.

Individuals in active addiction shared their experiences, barriers, and strengths while living day-to-day with OUD. There were gender differences in how females and males initiated drug use and how they differ in history of trauma. Participants were open about what contributed to their initial opioid use and are aware of varying levels of services. There were numerous physical and emotional components to opioid use that individuals have faced while combatting stigma from high utilization touchpoints to include medical providers, law enforcement and social service programs such as shelters, child welfare services, and employment services. Participants also discussed a need for increased education and strategic Naloxone distribution.

Awareness and Education

Participants were familiar with various types of treatment options to include detox facilities, rehabilitation centers, MAT, and support systems such as mutual aid groups. There were varying opinions on how effective different resource pathways are with mixed reviews on accessing support through community services in the region and philosophies around abstinence-only treatment options. Individuals understood that harm reduction with peer support is a cornerstone of trying to stay safe while in active use and as a resource to get connected to care when ready for recovery.

> *“I’ve tried NA/AA meetings, methadone, suboxone... I've even been to detox 3 times in the past, but It's hard to stay in detox when they treat you like a junkie after so many attempts. I’m still trying though.”*
>
> *“I find these groups helpful; you can talk with other people who can relate, you don’t feel alone or as alone as you would.”*

Experiences and Perceptions

All individuals included in this summary shared contributing factors to what initiated their opioid use. Underlying mental health issues such as anxiety, depression and posttraumatic stress disorder (PTSD) were drivers for the initial stages of their drug use. For some, it started with experimentation that led to harder substances. For others, it started with prescribed opiates, and for women specifically, the post-partum period was a risk factor when their partners were using opioids. Opioid use makes relationships difficult to navigate, especially when trying to hide their addiction from loved ones and navigate healthy intimacy.

All individuals reported having numerous physical and mental challenges related to their substance use. Dental issues, Hepatitis C, and abscesses were common physical side effects. Other challenges individuals reported facing with OUD included the physical withdrawal symptoms, a key driver to staying in the cycles of addiction. Increased anxiety, depression and dissociation paired with stigma add to the shame participants reported facing when in active substance use.

When asked "what would you want others to understand about opioid use and the challenges you face," all individuals stressed the internal struggle they face when battling their addictions. Many shared that they wished people knew just how addictive opioids are and how difficult withdrawal is, physically and mentally.

> *"My anxiety as a kid was really bad. The first time I tried opiates, I was 15, and I knew immediately that I was in love. I'll never forget the first time, it was amazing, all my anxiety disappeared."*
>
> *"You lie to a lot of people that are closest to you. You kind of push them away. Bring in people that aren't the best for you. Your group, the people that you hang around definitely change, and then yeah, you just find that it's all you can think about.*
>
> *"If I could go back, I would never ever touch no pills or nothing. Like withdrawal is a living hell. I wouldn't wish that upon nobody."*

Barriers and Challenges

When asked about what prevents individuals from accessing recovery, some indicated that the physical withdrawal symptoms and emotional trauma are too uncomfortable. For others, it's the roadblock of limited treatment center availability when they decide they are ready for treatment, or family obligations with limited childcare to go to in-patient rehab facilities.

When asked about how stigma plays a role in their experience with opioid use, many noted how medical professionals and criminal justice touchpoints, including law enforcement and probation officers, pass judgement. Participants shared that this perception of judgement leads to them often ending up feeling alienated and disenfranchised when trying to engage in treatment. This sentiment is also felt in familial relationships that further destabilize support systems for individuals in active addiction.

> *“When I wake up, that's the first thing I think about, you know, it's just, you know, when you're using you don't even get high anymore. You just need to be static, stable, normal.*
>
> *“It definitely does drain you just trying to get here, just trying to stay well, it's like having a job in and of itself. There's so much like self-loathing that comes with the process.”*
>
> *“We’re literally trying to get the recovery we need without added on trauma of being pushed away.”*

Opportunities, Strengths, and Resources

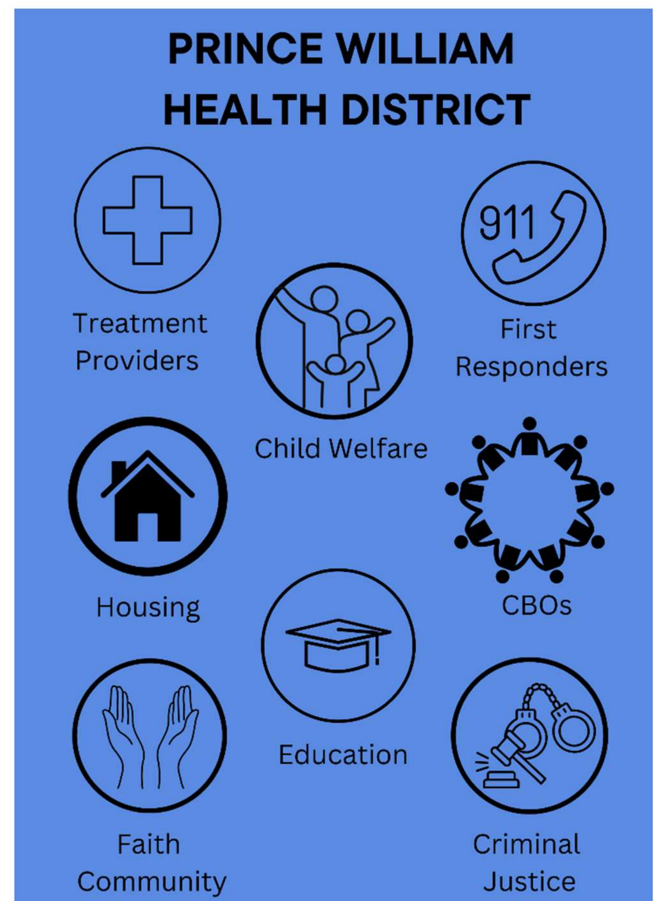
Current resources that are helpful for individuals include access to harm reduction services such as safe syringe programs, peer support services along with treatment centers with MAT and recovery housing options. Identifiable strengths in the current ecosystem include medical insurance and Naloxone, brand name Narcan. When asked about Narcan, all individuals reported using Narcan on others on multiple occasions, while some had experienced opioid overdose reversal themselves. When asked about where they have accessed Narcan, some obtained it through a prescription from a pharmacy, treatment facilities, and comprehensive harm reduction programs.

Opportunities to strengthen the current landscape for individuals in active use include anti-stigma campaigns and educational resources for ecosystem touchpoints. Other areas include expanding Naloxone saturation in high overdose risk populations or areas such as hotels, shelters, and first responder touchpoints.

> *“Having insurance and getting methadone makes a hell of a difference. I don’t have to worry about that scary feeling of getting sick, it’s something I can’t even explain.”*
>
> *“Narcan is a blessing. I can’t imagine how many people wouldn’t be here without it.”*
>
> *“I've used Narcan on my partner like 20 times, I've narcaned so many people I’ve lost count. I like to pick it up in DC at the vending machines at fire stations. I know it saves lives.”*

Informational Interviews

Key informant interviews add unique, in-depth knowledge about a particular topic or population. Interviews are conducted to learn about perspectives, experiences, and challenges regarding OUD, while adding an element of lived experience to the assessment. It’s important to recognize that these discussions offer subjective insight, thus the need for multiple/various interactions to create a rich, full scope analysis. The PWHD understands the importance of speaking with informants in each locality to capture subtle differences in working with different populations and governmental leadership.



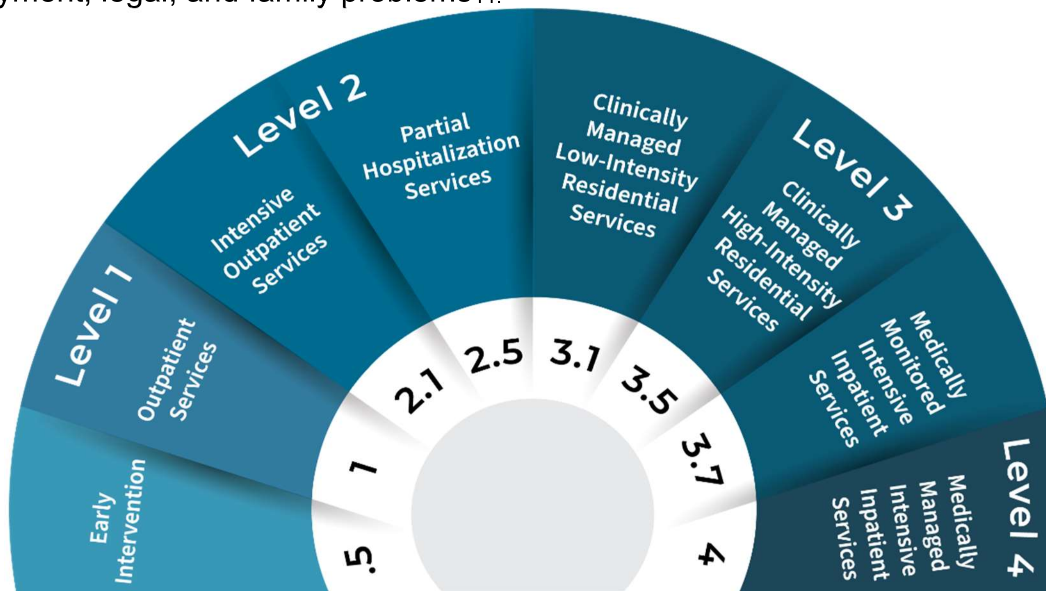
We spoke with a total of 72 individuals across the eight sectors identified as priority components of the overall opioid ecosystem, with at least one representative from each locality in the Prince William Health District. This included 13 treatment providers, 6 individuals who work in various levels of education, 18 first responders, 11 criminal justice representatives, 6 representatives that work with housing insecurity, 3 representatives from welfare services, 10 individuals from community based orgainzations and 5 faith leaders. Interviewees were not asked to complete a demographic survey, so data on age, gender, and race/ethnicity are not available.

In this PWHD Opioid Needs Assessment, RAND’s *America’s Opioid Ecosystem*[3] is utilized as the framework for analysis to identify the various touchpoints that recognize the chasms in which individuals, or their families fall through when engaging in the

social safety net. A Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis is outlined for each touchpoint.

Treatment Providers

In this section we will review the varying medication assisted treatment (MAT) options, as well as the standards for office-based addiction treatment (OBAT) with the American Society of Addiction Medicine (ASAM) levels of care. The range of OBAT levels can be seen in the graphic below. The definition of OUD based on the American Psychiatric Association DSM-5 is a set of cognitive, behavioral, and physiological symptoms marked by the inability to stop opioid use despite negative consequences. When severe, it can present as a chronic, recurring condition with compulsive opioid use that is often termed as addiction. OUD can cause serious medical, mental health, employment, legal, and family problems[11].

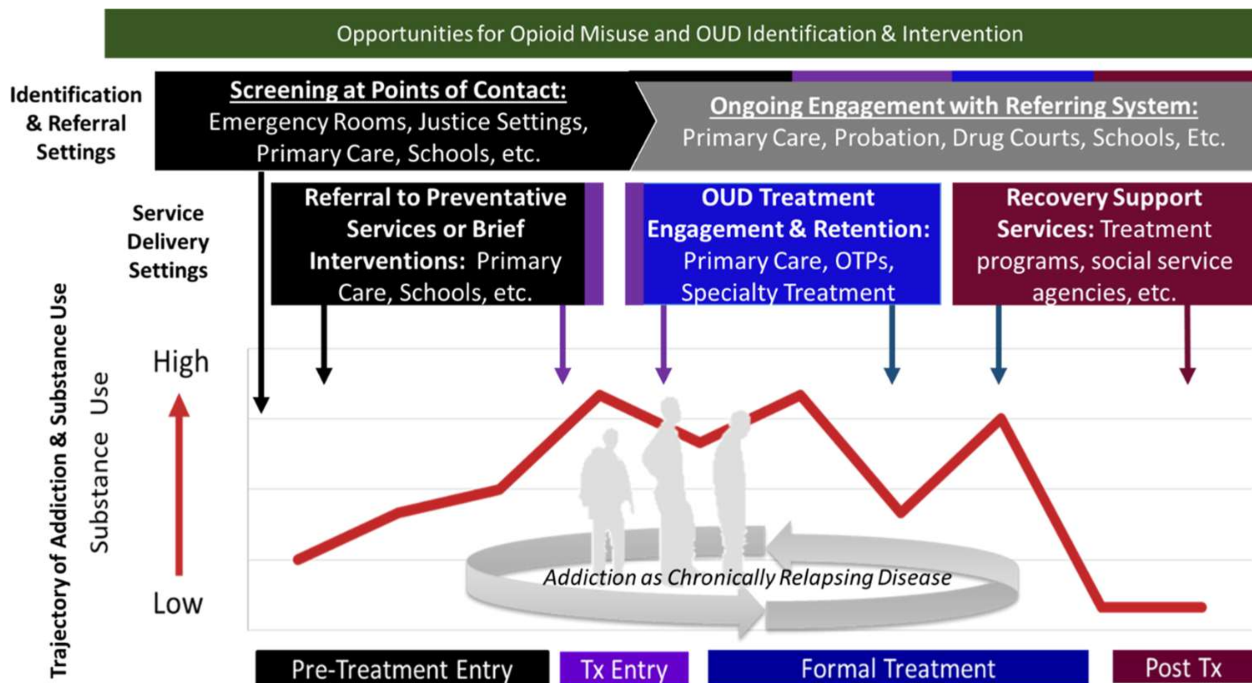


ASAM OBAT Levels of Care (2024)29.

It's important to understand the cascade of care around OUD recovery mechanisms. This model refers to the flow of care an individual is guided through from diagnosis, linkage to appropriate levels of care, treatment initiation, retention, and recovery. All stages within the cascade of care are transitionary and most individuals experience at least one episodic relapse as part of recovery[3].

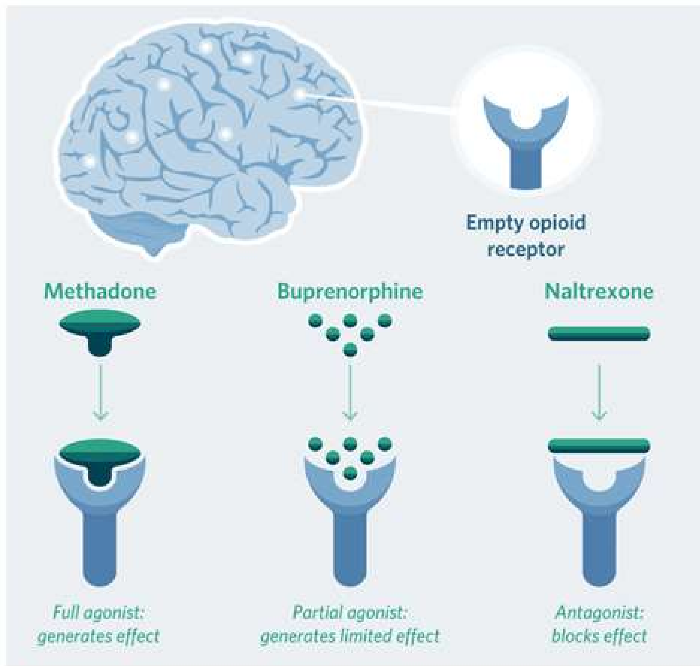
Within the ecosystem of opioid use, various touchpoints can refer an individual to varying levels for treatment, most common of which include the education sector, criminal justice systems and emergency departments. The graphic below visualizes how the cascade of care and various touchpoints are involved in the ecosystem[11,31]. The various touchpoints can serve as the "warm hand off" to treatment and recovery

mechanisms. There is stressed importance of how the medical system and OUD specific treatment interact. Many emergency rooms often see an influx of opioid related incidents from overdoses to patients attempting to access behavioral health services such as detoxification or MAT initation[3,31].



Opioid Use Disorder Cascade of Care. (2020).33

According to the ASAM, specific criteria and dimensions for an individual with SUD determine what level of care they need, in turn the level of care provided at a facility determines a facilities OBAT level[34]. Within the Greater Prince William region most providers serve within a level 0.5 to 3.7, early intervention to medically managed high intensity in-patient treatment. Treatment may include care coordination for emotional, behavioral, and physical conditions. This can be through MAT, cognitive behavioral therapy, group therapy, social service wrap around care and various levels of medical care for those in need of medical management for detoxification purposes.



Evidence based recovery models include medications used to treat the cravings associated with OUD. These medications assist individuals through the stages of detoxification, withdrawal, and recovery. Patients engaged in recovery are encouraged to also utilize other care coordination pathways to ensure protective recovery mechanisms [3,12,31,32,33].

The FDA has three approved medications for opioid use disorder (MOUD). This includes methadone, a full agonist, buprenorphine (Suboxone) a partial agonist, and Naloxone (Naltrexone, Vivitrol) an antagonist as depicted in the graphic on the left[35].

When interviewing various treatment providers in the Greater Prince William region, common topics discussed included the types of barriers they see for patients engaging in treatment, which protective factors or wrap around services they provide to increase retention in care, the major barriers for individuals trying to engage in long term recovery, and whether they provided treatment for youth. The providers listed below are non-exhaustive for the region.

For this assessment, three level 1-outpatient providers of care were interviewed. This included the Woodbridge Methadone Clinic, the Manassas Addiction Center LLC, and the George Mason University's, Mason and Partners MAT Clinic, the latter two providing care to adolescents in need of MOUD.

Three level 2.1 treatment centers and intensive outpatient services were also interviewed. They include Community Services, Brightview, and Savida Health. Community Services does have an adolescent program called New Horizons; however, they do not provide MOUD for youth at this time. Level 2.1 services include an induction process for detoxification and detailed patient medical history, introduction with a physician for medication to include comfort medications, and connection to a case manager. The case manager will then conduct mental health/substance use assessments and connect patients with resources such as housing, insurance, employment, etc. Patients are introduced to their behavioral health counselor or groups that work through psychosocial counseling.

Mainspring Recovery is the only treatment provider in the region offering a 3.5 level of care, which includes a clinically managed 24-hour high intensity residential program to

individuals 18 and older. They are working to develop lower levels of care at 3.1 as well as a 2.5 low intensity residential program and partial hospitalization program (20 hours of intensive care) respectively.

The only site offering a 3.7 level care, medically monitored high-intensity in-patient services, is the University of Virginia Behavioral Health Unit in Manassas, Virginia. Once a patient is stabilized, they are referred to lower levels of care in the community.

Key barriers for individuals trying to access treatment, as identified by practitioners include transportation, childcare, work schedules and culturally equitable care for minority populations. Treatment providers noted that patients who are undocumented tend to have increased barriers around access to treatment due to costs and lack of insurance. Many providers understand the barriers and challenges individuals face when working through the recovery continuum and do their best to connect patients to reliable wrap around services to improve overall outcomes.

Recommendations:

- Treatment providers should evaluate all levels of ASAM office-based addiction treatment (OBAT) care to best identify which facilities can fill in gaps of care in high incident areas. Collaborative clinic efforts to better understand OUD in the region, as well as best practices for varying age groups and demographics could lead to better community treatment outcomes.
- Youth adolescent treatment standards should be identified and shared with all clinicians to fill the gap in care for youth trying to access MOUD.
- Treatment providers should include data analysis to understand clinic trends with their practice records to evaluate treatment adherence patterns for increased effectiveness.

TREATMENT PROVIDERS

S

Strengths

-There are varying levels of ASAM treatment models.
-Clear referral pathways for individuals with OUD.

W

Weaknesses

-Not every provider has treatment protocols for adolescent care.
-No peer recovery specialists available in hospital settings.
-Missing levels of ASAM treatments such as low-barrier recovery housing.

O

Opportunities

-Analyze patient records to identify methods that increase treatment adherence.
-Expanding availability for research and engagement within overall medical system.

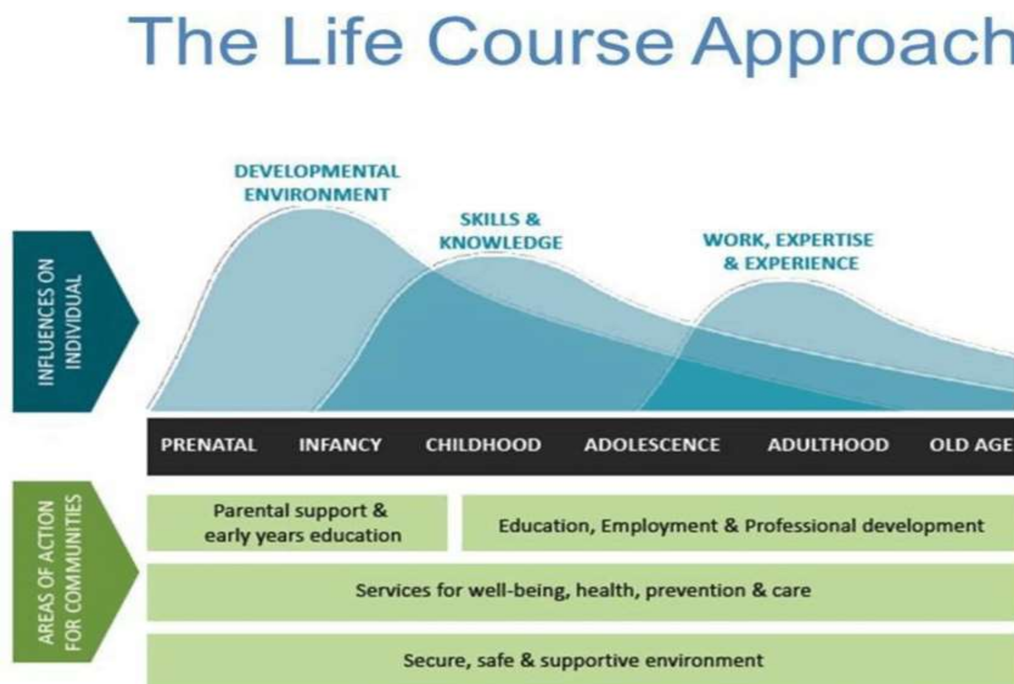
T

Threats

-No adolescent care for MOUD available in the eastern region of the district.

Education

The education sector is often the first touchpoint in the OUD ecosystem. Schools often offer the greatest insight to assist in the identification of at-risk youth in varying stages of development. The Life Course Approach is a theoretical framework that highlights the importance of key developmental periods and the intersection of relative physical and psychosocial factors[36]. The impact of significant events and other influences occurring in early childhood and adolescent periods have long lasting implications into adulthood, as seen in the graphic below[37]. According to Youth.gov, “Substance abuse and problematic patterns of substance use among youth can lead to problems at school, cause or aggravate physical and mental health-related issues, promote poor peer relationships, cause motor-vehicle accidents, and place stress on the family”[38].



Life Course Model. From the Office of the Chief Medical Officer UK (2012)[36].

A concentrated focus on this critical stage of development, considering only youth in the middle and high school settings, allows for multiple opportunities to provide effective education on risky behaviors and protective factors through resilience education[39].The informational interviews performed in an educational setting revealed a common theme that SUD prevention should focus on middle school aged students as this is a time to identify many early risky health behaviors[40]. Quantitative data reinforces the need for early intervention in the region for younger cohorts as overdoses have increased in this age group since the COVID-19 pandemic.

In this sector, interviews were conducted with individuals representing different roles within the education system, including district superintendents, principals, social

workers, New Horizons counselors, and substance prevention experts. Through the course of interviews, protective programming was identified, along with areas for improvement.

Across the three localities, there are identified policies and procedures to increase education and training for at risk youth using prevention and engagement strategies surrounding SUD and mental health conditions. This includes the historic partnership with Community Services and public high schools. There is a virtual cessation course for students and their families with first time violations and a Prince William County student substance use prevention resources webpage on “launch pad”[41].

Furthermore, there is a non-traditional alternative school that offers a higher level of hands-on intervention for students who do not fall within general education systems. Lastly, education systems are integrating townhall style presentations to engage parents who wish to learn more such as Manassas City’s Award Winning E3 series that covers a variety of youth related topics presented by experts in the field. Prince William Public Schools have hosted the “Silent No More” campaign among other outreach events.

Opportunities for improved outreach include addressing concerns about how effectively and transparently school leadership officials communicate substance use incidents to the overall community. Not all entities within the education sector retain the same awareness or acknowledgment of how SUD/OUD impacts youth and their families. One example is demonstrated by key differences in enforcing and sustaining prevention strategies between teachers, school nurses, and social workers. These inconsistencies lead to variance in ability to provide and adequately access substance use services, parent education, engagement, outreach, and resources for specific age groups or social needs.

Identifiable barriers include lack of standard operating procedures across districts and schools, limited trained staff for substance use prevention, and a lack of communication surrounding available resources for staff and parents.

Within the education sector, there needs to be an assessment of youth that are flagged for being at risk or identifiable behaviors of adverse childhood experience (ACEs). This assessment and subsequent interventions/diversion programs can be developed to support the gap in care between school nurses, who interact with students suspected of being under the influence, and administrators, who have the authority to refer students into these school-based prevention/intervention programs. This should also include a tiered approach including primary, secondary, and tertiary prevention/care for students deemed eligible for services based on their assessed needs.

Recommendation:
Overall recommendations are aimed at increasing prevention/intervention touchpoints within middle and high schools.

- This could be accomplished by hiring more substance abuse prevention specialist (SAPS) positions in middle schools to cover the need for prevention-based intervention with pre-packaged curriculums that enhance resiliency skills.

- Expanding the New Horizons program to offer full time staff in the school, which could double or triple the case load capacity to meet the student population needs. This program would also need to include students who are not low income/uninsured to be widely available to all.

- Creating a regional standard operating procedure for primary, secondary, and tertiary interventions for at risk or identified youth that includes parental involvement as a diversion-based program. This would need to be supported by shared data and metrics around opioid related incidents across localities for full transparency and impact.

Strengths

-Infrastructure in place at the high school level to capture and education at-risk students utilizing prevention and engagement strategies with youth on SUD and mental health. Examples include New Horizons, cessation course for first time infractions, internal PWCPS prevention resource page.
-Dedicated alternative school placements for identified high risk students

Weaknesses

-Each school has a siloed approach to New Horizon engagement.
-Absence of clear communication for available resources.
-Limited capacity of New Horizon staff. They only operate at the high school level with a case load capacity of 76 students per year.
-No standard operating procedure for suspected overdoses or referrals to tertiary levels of services/wrap around care.
-Lack of parent engagement, specific to school outreach
-Lack of prevention education in middle school settings outside of Department of Education requirements, no standardized curriculum.
-1 SAPS for all 97 PWCPS, 1 in the City of Manassas, 0 in Manassas Park
-Only disciplinary action is suspension

Opportunities

-Increase education and awareness campaigns around mental health and SUD/OUD
-Increase available school resource with a trauma informed approach for youth and families
-Increase primary, secondary and tertiary levels of prevention and intervention aimed at middle school youth. This includes training school staff of available resources.
-Cultivate and maintain partnerships with community services and other public health organizations for evidence-based interventions.

Threats

-Heightened risk factors for sex trafficking among female youth with OUD.
-No standard operating procedure established for handling at risk middle school youth
-Increased absenteeism or low graduation rates among students
-Burnout among the limited supply of teachers and staff, who are overburdened with education requirements.

First Responders

First Responders are generally the second touchpoint in the ecosystem, specifically in an overdose situation. First responders include police officers, firefighters, and EMTs. Working with different perspectives and professions can offer benefits and challenges to addressing OUD. Police officers come from a law-and-order mindset, whereas firefighters and paramedics are the public safety response for immediate danger or physical distress. Many 9-1-1 calls, dispatch both police and fire and rescue (F&R) depending on the locality, however there is no unified standard operating procedure between police departments (PD) and EMS.

PDs and their officers have unique insight as “boots on the ground” to the addiction crisis. The challenge of changing perspectives on substance use as a disease, not a moral or criminal failing has been difficult for many departments across the nation[42]. According to interviews with PDs across the three localities at varying levels of federal and local law enforcement, most drug activity in the Greater Prince Willaim region is mainly counterfeit fentanyl pills referenced as “percs”, “blues”, and “perc 30s”. OUD has infiltrated a younger population than seen before the pandemic in both the “dealer” and “consumer” populations.

Identifiable drug paraphernalia is tin foil, straws, pens, and glass pipes as smoking is the preferred methods of ingestion. There is some IV drug use, but not as prevalent as it had been during the heroin wave of the addiction crisis. Officers report an alarming rise in the homeless population who have identifiable or self-reported substance use disorders. In the unhoused encampments, they compared the scene to an “open air drug market”. Homelessness is addressed in subsequent sections of the assessment.

Officers in some localities report half of all calls are drug related offenses, mainly in response to overdose situations where two or three doses of Naloxone are routinely required to revive an individual. There is clear frustration in the contributing social determinants of health (SDOH) when responding to compounding community factors. The intersection of increased violence, substance use, poverty, lack of housing and services can lead to hesitancy in increased Naloxone saturation with first responders.

There are increasing levels of frustration from law enforcement due to current laws and procedures. Officers across all localities referenced the Good Samaritan Law, which enables any police engagement for enforcement measures or court-based services such as diversion programs[42]. There is also a demoralizing impact of the 2021 Virginia Special Session hearing, where presumption against bond for criminal defendants made it more difficult to incarcerate individuals for narcotic activity.

During one interview, an officer stated “Substance use is not a crime, it’s an illness, but it can be related to ancillary issues like prostitution, theft, violence, death, loitering, panhandling, all paired with an underlying mental health issue. Our ability to use law enforcement as a connection to recovery seems impossible.” The added impact of OUD on law enforcement can lead to compassion fatigue, especially when most opioid related calls take at least 2 hours with investigation and reporting procedures and paperwork.

Another identifiable barrier during an overdose response, is refusal of care. This is when first responders resuscitate an individual with Naloxone, and that individual refuses any additional care, such as follow up to a hospital where they can be monitored for any further respiratory distress. Medical settings are routinely the best place to engage a "warm hand off" to wrap around services. Patient refusals make connections to community care challenging in the long-term crisis.

Additional barriers and concerns for first responders are the lack of education and awareness of current programming and services for internal and external purposes. Throughout informational interviews, officers were not aware of available services or court diversion programs when dealing with high-risk populations. Officers also mention they do not have any information to share with parents or communities who are asking for help.

Recommendations:

- Increasing training opportunities around stigma, SUD/OUD, and trauma informed responses.
- Implementing evidence-based logic models for preventative paramedicine programs that provide a framework for integrating comprehensive community connection to medical and social services[43]. These tools may work towards bridging the gap between patients who experience an overdose and refuse follow up care. This concept parallels how police departments have community vitality officers for outreach in at-risk populations.

First Responders

S

Strengths

-Infrastructure for intervention and connection to community care
-Mandated training hours for certification with a willingness to learn more about OUD/SUD
-Co-responder units available for mental health conditions
-F&R have a compassionate approach toward OUD and supportive care
-Leave-behind bags are being implemented in Prince William County with plans to expand in the two cities.

W

Weaknesses

-No SOP for follow-up or intervention post patient refusal of service
-Limited availability of bi-lingual/culturally competent providers to address barriers for engaging in service calls
-Compounding factors for compassion burnout include existing stigma for mental health treatment for first responders
-Limited resources to implement any opioid specific intervetion programming within the first responder touchpoint.

O

Opportunities

-Evaluate F&R metrics to develop intervention plans; collaborate with stakeholders to identify high risk areas
-Develop and promote continuing education credit training opportunities on OUD prevention, trauma- informed care and community-based services
-Expand co-responder units to for SUD/OUD related calls
-Community paramedicine prevention programs for F&R touchpoint
-Expand partnerships with police vitality office units for community outreach and education

T

Threats

-Compassion burnout
-Stigma from first responders
-Poor mental health outcomes

Criminal Justice

The criminal justice system (CJS) is the intersection of federal, state, and local laws where correctional agencies include facilities and supervision offices such as probation and parole, judges, lawyers, and police officers who all work towards the common goal of public safety. We will discuss the impact of OUD on both juvenile and adult detention, supervision, and programming throughout the CJS in the Greater Prince William region. Interviews were conducted with leadership at the Adult Detention Center (ADC), Department of Justice Re-Entry and Pre-trial Services and both adult and juvenile probation services.

The burden of OUD on the CJS has far reaching implications. At the national level, researchers "estimate that there are 200,000 to 300,000 arrests annually for opioid possession or supply, and multiple times that number related to crimes committed to obtain money for opioids and crimes related to drug supply"[3]. When examining OUD under the lens of the CJS, it's critical to capture the intersection of racial disparities, risk factors, and protective factors for justice involved individuals. CJS reform has been an ongoing initiative due to the stark differences in people of color being arrested at higher rates. CJS reform has also decreased in punitiveness due to the impact incarceration has on protective factors to include housing, employment, and social supports [3,44,45,46,47].

The interaction of justice involved individuals and OUD is well documented. A research report from the National Institute on Drug Abuse (NIDA), stated that nearly half of all inmates in the United States meet the criteria for SUD[40], while 1 in 4 individuals with OUD has had contact with some part of the CJS within the last year, and tends to increase in severity of both crime and addiction as time of use continues[48]. Furthermore, communities of color are often at higher risk of involvement with the CJS as racial disparities has been a key theme seen in various touchpoints of this assessment [3,11,13,16,19,31,42,47].

The feedback loop of addiction and crime only amplifies in terms of recidivism and cost to the community. It's also important to note that individuals with SUD who are released from jails are 129 times more likely to die from a drug overdose within two weeks of release in comparison to the general public [48,49]. Society is moving away from the stigmatizing outlook of addiction being a key driver of social deviance and moral failing into the public health perspective of being a disease the deserves to be treated. New evidence-based strategies work on addressing addiction as a root cause in the CJS are being implemented across the nation, as well as in the region[50].

These strategies include implementing screening protocols for individuals who are admitted in the CJS, which helps identify those who are at higher risk for overdose and recidivism. Once an individual is placed in a correctional facility, mitigating opioid withdrawal through symptom management helps individuals which can lead to initiating MOUD in detention. Connecting individuals to community-based care upon release increases naloxone distribution and re-entry services to ensure connections are made

back into society are successful. Additionally, working with specialty dockets and drug courts help reduce the stigma associated with SUD while encouraging individuals to engage in treatment and recovery services.

Supervision Services

Juveniles and the CJS highlight varying functions and barriers that are important to bring within the scope the PWHD assessment. Key individuals interviewed include intervention services, psychiatric services, and probation officers. Trends in adolescent behavior drastically shifted in 2019 where most youth went from predominantly cannabis users to fentanyl.

After the COVID-19 pandemic individuals working with this population saw a drop in overdose mortalities, but an increase in non-fatal overdoses and violent crimes, particularly in minority and immigrant youth. There has also been an uptick in female adolescents, as young as 12 or 13. Females are at higher risk for sex trafficking and correlating this with an increase in incidents of running away and/or getting new criminal charges/violations while on probation. This can be in combination with gang related activity seen in the region.

Understanding the need for prevention, intervention and treatment in this population come with a challenge as there are no youth detoxification centers, and very few treatment providers to initiate MAT therapy in this population. "We've seen the trend of youth having to detox in detention, just to keep them safe." When addressing youth detoxing, they are unable to provide the same levels of comfort care seen in the ADC. Many youth are placed in shelter care for up to 21 days before they can be seen at the Manassas Addiction Clinic or other providers while they transition from Suboxone to vivitrol injections.

Barriers for this age group have increased as there are very limited youth services and long wait lists for low barrier programs that support this high-risk population. Suggestions to assist in reducing the burden of care in this specific group include restarting a day reporting center, increasing funding for positions or incentives for the Intervention, Prevention & Education program (IPE). Other protective measures can be

Criminal Justice

"It's a criminal justice *system*, but we work with people."

As of 2021, sentencing guidelines changed Virginia code,§ 19.2-303 for first, second and subsequent violations of probation [51]. If violations are imposed, without any new criminal charges are identified, the following procedures are initiated:

First Violation: No sentence of incarceration in jail or prison

Second Violation: Maximum sentence of 14 days

Third Violation: Imposition of any or all suspended sentence

increased diversion and parent engagement, job training opportunities for youth as well as bolstering school nurses to be a “safe intercept” within the education system.

Moving to adult supervision, 30-40% of all Greater Prince William region under CJS supervision can be identified as having OUD as a driver of CJS involvement. This specific population can be difficult to re-engage back into the community as fentanyl has increased in complexity to treat and support. Unique insights and challenges for this touchpoint within the CJS include how supervision officers work closely with the judges in the court system. Key leadership for community corrections stated that “Judges are involved and invested in the progress of recovery. They don’t want to see a lot of violations for non-compliance as it adds to the frustration to sentencing guidelines”. The sentencing guidelines are shown on the right on the prior page.

Adult Detention Center

The Adult Detention Center (ADC) serves as an important intersection to engage individuals involved with the CJS. The Prince William Regional ADC offers various programs that allows inmates to get connected to treatment and services during their incarceration. Many inmates have co-occurring disorders that encompass both SUD and mental health conditions, with a noticeable rise in the female population. This assessment will review the varying levels of programming and barriers associated with the ADC.

Jail based medication assisted therapy (JMAT) has been identified as a best practice intervention for this high-risk priority population according to the National Institute of Health, HEALing communities study[50]. The ADC Suboxone program started in 2021 for individuals who had already initiated MAT before detainment and for pregnant women. This program was expanded in partnership with George Mason University, Empowered Communities Opioid Project (ECOP) in October of 2022.

ECOP is a comprehensive and transformative initiative centered around addressing challenges for justice involved individuals who have OUD. They serve as a bridge to care program assisting individuals with wrap around services while providing the ADC with a PRN screening tool to identify individuals for OUD when entering the ADC and initiating JMAT for individuals who consented to be treated. They also provide peer recovery services, group therapy and a bridge to care upon re-entry.

ECOP is currently in the ADC 2 days per week in partnership with Community Services who strengthens the connection to care and programming 3 days per week. This innovative program is being nationally recognized and has hopes of expanding to optimize the health and wellbeing of those with OUD. Leadership from the ADC is looking for funding to support a social worker to bolster access to mental health services, as well as a public health nurse to assist in increasing JMAT services in this population.

In addition to providing JMAT, the Prince William Regional ADC has recently opened a re-entry center to create another touchpoint for individuals who may not have been able to get connected to care during their detainment. This re-entry center is staffed for 12 hours a day, with peer support specialists who can assist anyone looking for resources ranging from transportation to health care.

Changes in the ADC population can be attributed to the COVID-19 pandemic, pre-trial release, General Assembly Special Bond policies in 2021 as well as the new sentencing guidelines that were previously discussed. These compounding factors have contributed to a very fluid jail population. Before the pandemic, the ADC had 900 to 1000 inmates at any given time, whereas currently the population sits at below half that amount. Leadership at the ADC has noted that "with inmates coming and going so quickly, it's hard to provide them services or programs that can help rehabilitate them back into society."

Pre-Trial and Re-Entry

Lastly, it's important to capture the pre-trial touch point of the CJS. The pre-trial division works to assist the court in processing defendants while they are out on personal reconnaissance bond. This division is responsible for upholding public safety initiatives while supervising nearly 1400 individuals before trial at any given point. The backbone of pre-trial services works in partnership with community and rehabilitative services. This includes specialty dockets such as the drug court. This evidence based specialized drug court works with substance use related individuals who are encouraged to engage in treatment and recovery services instead of incarceration.

Leadership in this role has identified from various roles within the CJS that increased rates of recidivism are being seen throughout the region, with a spike in violent related offences. There are barriers identified with the 2021 sentencing guidelines for violations, further creating disconnect between the agencies that supervise individuals and supporting the CJS ecosystem. Other barriers identified include the siloed systems of services, lack of substance use specialists working in CJS touchpoints, limited bridge to care systems that track individuals trying to access services and direct funding streams outside of grant opportunities for sustainability factors.

Overarching themes identified in all CJS intervention interviews include how demographics have shifted in the pre and post pandemic era. Diversity in the Greater Prince William region has deepened both in terms of race and ethnicity, as well as population growth in urban, suburban, and rural settings. Variation in crime is evident, with an increased number of violent offences that could be related to the ancillary crimes associated with SUD. Along with the changes in population, correlating factors are seen in a change of politics. There is also a notable difference in mindset around detention and harm reduction treatment related to SUD.

Providing services to individuals with OUD have made case management more difficult. Barriers related to providing services for justice involved individuals includes insurance,

transportation, housing, social supports, and services located on the east end of Prince William County. This is a particularly strong sentiment in the adolescent population as they have seen the most barriers associated with engaging in care due to limited youth services and providers.

Recommendations:

- Increasing the capacity and infrastructure to support recovery efforts. This could be bolstered by having a centralized and collaborative environment between various agencies that work across the CJS continuum of care.
- Invest in bridge to care systems that connect individuals directly to care, instead of having referral-based systems. This will allow streamlined communication and collaboration with care providers in the region.
- Increase direct funding streams to support overall system sustainability.

Criminal Justice

S **Strengths**

-Cross sector stakeholder engagement between CJS and other systems of direct services
-Engaged in evidence-based best practices such as MOUD in Jail settings, drug court, low-barrier bridge to care systems
-Strong partnerships and support with various stakeholders

W **Weaknesses**

-Identified siloed systems of care between CJS agencies
-Lack of formal funding for specialty dockets, understaffing for probation and re-entry services
-Lack of connection with police/first responder touchpoint.

O **Opportunities**

-Utilizing data to track metrics around race, equity and treatment adherence, especially among justice involved individuals to strategically plan programming
-Increase capacity among systems in terms of staffing and funding to better support programming that engages individuals into recovery
-Support Legislation for jail-based Medicaid
-Desire for increased education and reaching across silos for understanding and collaboration

T **Threats**

-Increase in recidivism and community threats in terms of violence, drugs, and crime
-Increased related morbidities, mortalities and sex trafficking

Department of Social Services

The Department of Social Services (DSS) serves as the safety net for individuals with disabilities, in-need families, and the aging population through a variety of programs and services that enhance safety and encourage independence. Programs include public assistance such as food benefits, cash assistance, and Medicaid. Other functions include Child and Adult Protective Services and Homeless Services. For the PWHD assessment, we focus on child welfare and homeless services in the region.

Homeless Services

Individuals experiencing homelessness (IEH) often have higher rates of mortality, serious mental health conditions and SUD/OUD in comparison to the general population[2]. While IEH and individuals with OUD are separate populations, they are both considered to be public health epidemics that create compounding challenges as they often cooccur. According to SAMHSA, "Opioid and other substance use is interrelated with homelessness, increased risk of overdose and related health conditions, as well as barriers to long-term recovery, wellness, and housing stability. One study documented a nine-fold increase in overdose risk among adults who were homeless, compared to those stably housed"[53].

The intersection of homelessness and OUD creates complex challenges for those attempting to navigate multiple branches of the social safety net. Barriers to accessing many safety net programs include lack of insurance, transportation, income, rigid program structures or lack of childcare, which are all issues the safety net aims to mitigate. Additionally, adding stigma – both internal and external – increase the shame individuals face when transversing care. Research also suggests that minority populations face more obstacles than their White counterparts in gaining access to these avenues of care [3,13,16,19,47].

Homelessness

According to Housing and Urban Development (HUD), homelessness can be described as "An individual or family who lacks a fixed, regular, and adequate nighttime residence."[47] This definition is separate from those who experience homelessness and are unsheltered.

Unsheltered individuals are those whose primary nighttime residence is a place not suitable for human habitation (for example, a city sidewalk, vehicle, abandoned building, or park)[52].

"I've got about an hour and half before I start to withdrawal, and I don't have the heart to get on a bus, to get to a treatment facility on the other side of the county, to wait for someone who might be able to see me in under then 2-3 hours? Those of us that are homeless and are extremely addicted don't have the resources to get help for the sickness side, not to mention the 'recovery' part."

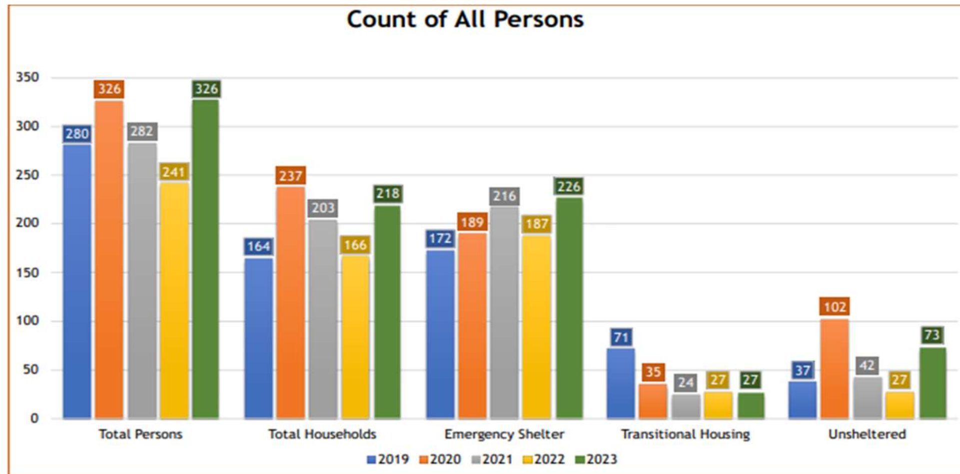
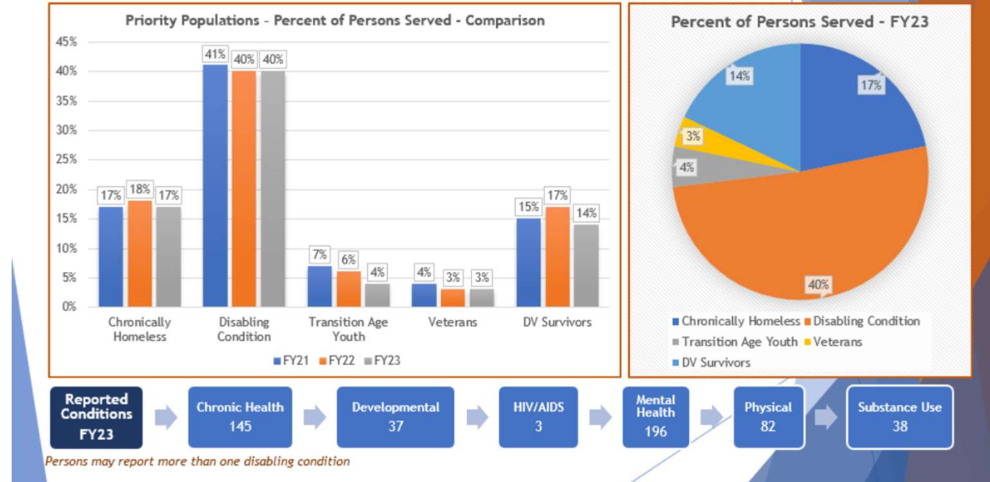


Table 1.0 – Count of All Persons (Five Year Comparison)

Count of all Persons, 2022. Homelessness In Metropolitan Washington

According to *HOMELESSNESS IN METROPOLITAN WASHINGTON Results and Analysis from the Annual Point-in-Time*, which includes the Greater Prince William region, in January of 2023 there was a 35% increase in IEH in comparison to the year before. This increase is displayed in the graph above, representing 326 individuals and 241 respectively[54]. The analysis also reports that African Americans are 2.7 times more likely to experience homelessness in contrast to their White counterparts. Key priority populations of significant impact include individuals with disabilities, domestic violence survivors, those with foster care history, those formally institutionalized and individuals with limited English proficiency.

While not all those experiencing homelessness suffer complicating SUD/OUD, an interview with DSS staff within the region reported an estimated 40% have some cooccurring disability condition as depicted by the graph below. Of the 326 individuals counted in 2023, 8.5% report having a SUD[55]. SUD can be both a cause and a result of homelessness; IEH often use substances as a way to cope with their housing situation[52,56].



PWC Continuum of Care Provider Report Card Presentation, July 2023

Discussing homelessness with various contacts in the opioid ecosystem, there is a notable increase in how SUD impacts the local surrounding community. It was reported for the first time that there was a group of 40+ persons living under a bridge, where an "open air drug market" was in full operation. While that encampment was dispersed, drug use, crime and homelessness had an impact on the surrounding community. Law enforcement has seen increases specifically in ancillary crimes such as theft, trespassing, sex trafficking and drug overdoses.

The need for comprehensive community outreach and programming to assist IEH with SUD/OUD is paramount. This can only begin when and where there is established, sustainable street outreach. Currently, outreach is a patchwork of limited government positions, faith-based community volunteers, and time-bound, grant-funded positions that leave this at-risk community distrustful of outreach workers and their respective organizations[57].

Accessing the current level of services available for this touchpoint begins with conducting the Prince William County (PWC) Coordinated Entry System (CES) assessment that subsequently refers individuals to relevant wrap around services, drop-in centers, or to the 171 shelter beds within the Greater Prince William region and/or other rapid rehousing programs. There is limited transitional and long-term housing availability throughout the county, from either a county-based housing program or any non-profits working in this social sector. Currently, there are no identified recovery housing options in the Greater Prince William region.

There are identified barriers to providing transitional housing to individuals who have untreated SUD/OUD. During an interview with a faith-based organization focused on housing, program managers stated, "It is a challenge housing people who have

substance use issues, they tend to have people coming and going out of the homes or the room. We end up losing leases because the surrounding neighbors or landlords don't want that kind of activity happening. It's a liability when there are young children and families living next door."

A three-pronged approach for this at-risk population needs to include a stable housing plan, wrap around and necessary medical services plan and a person-centered recovery plan to address the intersection of trauma, addiction and the SDOH. This multifaceted approach is tailored to individuals working through different stages of mental health/SUD recovery and could be beneficial for placement into current housing programs. This can be complicated depending on funding stream barriers like Housing and Urban Development (HUD) grants, federal/local fundings and limited private funding.

Recommendations:

- Work toward implementing comprehensive solutions for IEH who also have co-occurring mental health and SUDs.
- Increasing the overall housing system capacity, including recovery housing opportunities.
- Critical recommendations to address disparities in the current homeless support system revolve around the mapping of all available resources, increasing communication with various touchpoints working within the referral system for this priority population[30].

Homeless Services SWOT

S

Strengths

-Increased awareness and public support to address the homeless population and panhandling.
-Initiation of diversifying interprofessional collaboration aimed at addressing housing disparities and facilitating continuum of care resource connection.
-Many non-profits providing meals and supplies to those in need.
-Increased awareness to support grant coordination

W

Weaknesses

-Lack of established jurisdiction surrounding who is responsible for responding to encampments or other OUD/SUD barriers.
-Most services and safety net providers have long wait lists, including shelter beds.
-Lack of sustainable infrastructure available to address root causes from a systemic origin.
-Lack of sustainable, affordable, long-term or recovery housing options in the region.
-Lack of specialized training and resources surrounding SUD in housing organizations.

O

Opportunities

-Service/Care Coordination
-Healthcare Integration
-Increase presence and availability of recovery housing and group living to promote individual reintegration into the community.
-Increasing partnerships with other grassroot organizations to promote interpersonal empathy from lived experience and provide meaningful connections to improve social network and mental health in individuals with SUD/OUD.

T

Threats

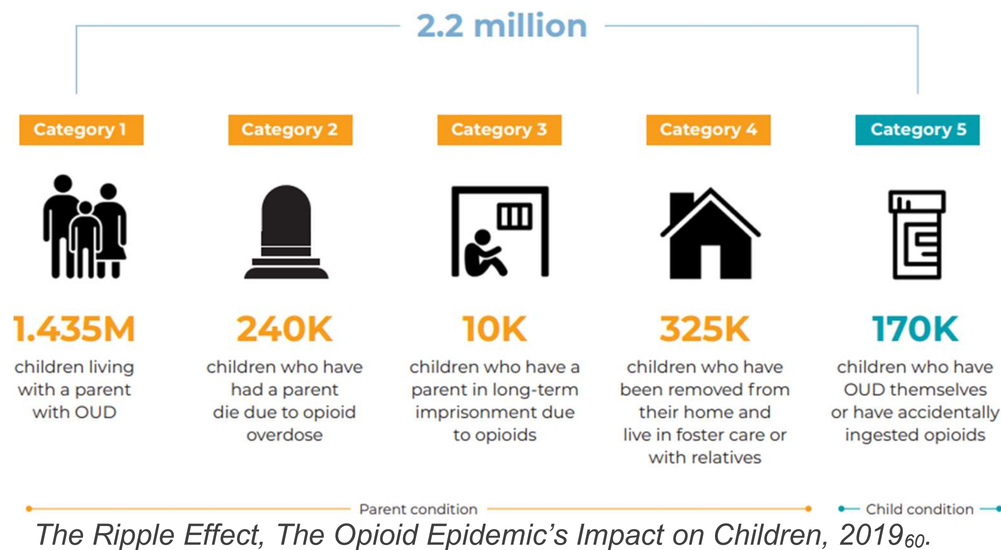
-Increase in unsheltered individuals.
-Increase in opioid related overdoses in our homeless population.

Child Welfare

The child welfare system (CWS) serves to ensure the safety, wellbeing and stability of children and their families. Child Protective Services (CPS) has programs that aim to prevent child abuse and neglect by supporting families via social programs and supervision, reuniting families when recommended safety measures are implemented as applicable and assisting parents/caregivers in finding and securing foster families for situations in which it is unsafe for the child to return home[58].

Within the scope of the addiction crisis, understanding the impact of OUD on children and the child welfare system is imperative. Many families in this priority population face various multigenerational disparities and trauma as a result of OUD. According to both OCME and ESSENCE data, many opioid related incidents occur in individuals between the ages of 25-54, holding significant impact as these are prime child rearing years. The visual representation below describes data from 2017 on how 2.2 million children who have a parent with OUD have been impacted across the U.S.[59]. It's notable that the most impacted individuals are infants under the age of 1[59,60,61]. with prevalence persisting in children under the age of 5[60]. Having a parent with a SUD/OUD is considered an adverse childhood experience (ACE). ACE's hold a direct relationship

with the development of risk factors/risky behaviors, chronic diseases, and adverse mental health outcomes[3,60,61].



The Ripple Effect, The Opioid Epidemic's Impact on Children, 2019[60].

While there is limited data on OUD in the CWS, there is correlation between SUDs and how many children are being placed in foster care. From 2009 to 2016, there was an 8% increase in foster placement due to SUD[61]. According to Child Welfare and Substance Use Disorder Treatment Statistics, as of 2020, 39% of children were removed from their homes and placed in foster care due to parental substance use. Specifically in Virginia, 51-60% of infants under the age of 1 involved in the CWS were removed from parental care due to SUD[62]. This may include infants that were referred to CPS due to neonatal opioid withdrawal syndrome (NOWS)[63]. While the PWHD opioid needs assessment did not review each locality's case load for the intersection of SUD and CPS, the table below shows the number of accepted cases for 2020 through 2023. Numbers included within the parenthesis, are identified NOWS cases. It's noteworthy to correlate this data to injury hospitalization data found in the quantitative portion of this needs assessment. Not all infants and children referred to CPS are hospitalized for their exposure.

This data was compiled from available sources from within the Virginia Department of Social Services[64]. This includes all cases of neglect, abuse and NOWS (shown in parentheses). Anecdotal information gathered through interviewing all CWS localities indicates a heavy burden of caseloads involving OUD in some variation.

	2020	2021	2022	2023
Manassas Park	121	111 (1)	168	149
Manassas	138	103 (1)	155 (1)	150 (7)
Prince William County	3,237 (22)	3,464 (17)	4,005 (12)	4,026 (25)

CPS Cases Overtime. Virginia Department of Social Services, CPS Reports & Studies.

Families and at-risk youth can be referred to the CWS through "voluntary prevention" under two very different pathways. Intervention options under the voluntary prevention umbrella aim to redirect at-risk youth who are currently using substances themselves. Interventions for this population aim to support families who are interested in lowering risk factors for mental/behavioral health conditions and developing resiliency skills and connections to community services and/or treatment facilities. Youth that are referred through the criminal justice system fall under this prevention arm of the CWS.

CPS serves to prevent foster care, child abuse and neglect. Regarding mandatory intervention, participation is required for families that are identified as having children and youth in potentially dangerous situations. The overarching goal of this prevention arm is to implement solutions that keep children safe by providing supports in terms of supervision, behavioral treatment, service provisions or removal of the child until risk factors are substantially decreased[65].

During interviews with both the prevention and intervention arms of the CWS, case workers reported seeing a significant rise in the amount of substance abuse related cases. One caseworker noted, “We used to see more teenagers or families flagged for cannabis use, but we see more polysubstance use with fentanyl or opioids being the primary driver of neglect.” Those working directly with at risk youth have seen indication of substance use behaviors starting at a much earlier age than before, particularly this trend worsened following the COVID-19 pandemic. For some localities, cases for the number of children entering foster care have increased four-fold.

Many families engaged in CPS have well documented histories of multigenerational SUD and mental health issues. Even in cases of sexual or physical abuse, substance use is still involved as an aggregator for those self-medicating for trauma.

There is a drastic need for increased capacity for OUD/SUD related services. Barriers discussed during interviews noted, “There are long waiting lists. We understand that everyone is overwhelmed and understaffed, but we have a serious shortage of youth related services. There must be increased support for direct services, along with options for the complexity of CWS cases.” Other barriers include the eligibility restrictions for funding streams, especially for undocumented families who don’t qualify for many services.

Recommendations:
Suggestions for the CWS are two-pronged, aimed at (I) making the overall system more accessible and effective, and (II) tackling the challenges families and youth face.

- Evaluating CWS funding stream policies for social services may enable the expansion of programs through increasing approval criteria. As a positive result, there will be an improvement in access through direct service funds as well as an ability to assist identified hard to reach minority populations.
- There is also space to improve communication among providers and agencies via referral pipelines, data sharing agreements, targeted workgroups and/or forums for collaboration.
- Recommendations for families and youth at the individual level include increasing provider competencies through education, bilingual resources, and supportive recovery environments.

Strengths

-Protective touchpoint for families with identified trauma or SUD/OUD
-Mandatory reporting agencies include hospitals, teachers, medical providers etc. to provide a well-rounded scope
Provides accessibility for wrap around services such as benefit programs to support families

Weaknesses

-Lack of culturally competent resources (i.e., bilingual providers).
-Long wait lists for services, specifically for children.
-Understaffed CWS results in overwhelming caseloads, consistent burnout and everlasting reduction in overall system capacity.
-Funding stream barriers with specific regard to undocumented families.

Opportunities

-Build infrastructure to streamline referral processes between the CWS and available supports, resulting in increased system capacity.
-Increase communication/data sharing between providers/case workers (implement Care Coordination and Care Integration Models)
-Create anti-stigma campaigns around co-occurring disorders, with a focus on minority populations.
-Partner with CBOs and harm reduction groups for peer support services.

Threats

-Identified increasing risk for youth related overdoses, including infants and toddlers through accidental overdose.
-Increasing rates of ACEs and multigenerational trauma
-Constant burden on the foster care system, resulting in lower quality and/or availability of services.
-Perpetual burnout among providers in the CWS.

Community-Based Organizations

Community-based organizations (CBOs) are non-profits that serve communities by engaging in specific activities that improve the public's needs through education, social engagement, and/or providing health and social services. They work on SDOH factors that contribute to an individual's overall health status and wellbeing [66]. Examples of CBOs might include home visits from community health workers, supportive housing, or care coordination for high health care utilizing populations[67].

CBOs serve as an important bridge between state and local government public health initiatives. They work by filling the gap in traditional services such as health care or department of social services in their community. Looking through the lens of CBOs and OUD, many strategies are identified that support the overall ecosystem of OUD[2,3].

During this touchpoint we interviewed two harm reduction organizations, two housing programs and a mental health advocacy group. These interviews evaluated how OUD impacts the work they do, and how to identify meaningful measures that support closing the gap in care. Understanding the intersection of co-occurring disorders and housing is paramount, particularly when discussing the complexities of how various touchpoints interact with one another.

Harm reduction is an evidence-based approach that meets individuals and their families who suffer from SUD in supportive and engaging ways. Prevention, education, and health practices aimed at minimizing the negative consequences associated with SUD is only one facet of harm reduction. The other key component empowers individuals to reach defined goals using recovery-based services without judgement or stigma. Harm reduction is a core pillar of SAMHSA's approach to the opioid crisis[68]. The backbone of many harm reduction groups includes peer recovery specialists who bring their own lived experience to those in need of treatment, outreach, and recovery support networks[69].

Harm reduction principles are interwoven into many regional programs. Two harm reduction groups, The Alburtus Project, and The Chris Atwood Foundation, work within the Greater Prince William region offering peer support, syringe exchange programs, naloxone distribution, education, and housing resources. There is a mobile harm reduction van that services the region once a week while the other Prince William region-based program is virtual support only. There are no official partnerships in the Greater Prince William region with these harm reduction organizations limiting the reach and impact of these CBOs.

NAMI of Prince William is the local office for the National Alliance for Mental Illness (NAMI), a grassroots mental health advocacy group. They provide a variety of support groups, educational materials, and resources at the national and local level. While they primarily focus on mental health conditions, there is some co-occurring disorder education built into programming. Topics covered include treatment options, importance of supportive housing for at-risk populations and recovery support groups. At the local

level, additional layers of community outreach to schools and parents are offered. There is expressed community need and desire to expand NAMI programming with more substance use education.

While we've already discussed the intersection of individuals experiencing homelessness (IEH), it is noteworthy to highlight the importance of CBOs working as housing providers in the region. Streetlight Ministries is a faith-based housing provider offering medical case management whereas, Action in Community Through Service (ACTS), is a social safety net provider who works with domestic violence, sexual assault victims, and individuals facing unstable housing. Both NAMI and ACTS operate in the PWC Continuum of Care model and partner with Community Services (CS) for wrap around mental health services.

When interviewing a housing director about major barriers for providing housing to individuals with SUD/OUD they stated "periods of transition, both positive and negative, trigger SUD relapse within a 90-day period. Our program only provides housing case management, but to think of the impact our program could have if our staff knew what to look for and how to provide support during these landmark times." Other barriers for housing CBOs are finding it more difficult and expensive to keep leases on various properties. Many housing CBOs keep landlords incentivized to work with populations that experience co-occurring disorders through financial means.

The overarching key theme among these different CBOs is how stigma serves as a major barrier for individuals accessing care and services[70]. While anti-stigmatizing campaigns are launched in harm reduction and mental health advocacy groups, housing CBOs work in varying degrees of training around this type of support. Other barriers highlighted were the lack of data sharing between agencies, from both a community-based data perspective as well as case management and treatment scope. There is a need for cross training and enhanced interconnectedness between agencies.

Recommendation:

- Bringing established CBOs into varying workgroups dedicated to reducing barriers for at risk populations will enrich and strengthen the overall approach to the community safety net. Community engagement begins with partnerships that add dimension to the relationships engrained within the communities we serve. There are various toolkits that detail frameworks and benefits for increasing capacity through engagement[71,72,73].

COMMUNITY BASED ORGAINZATIONS

S

Strengths

-Established history of partnerships and providing services within the community.
-Established infrastructure to provide and expand existing services.

W

Weaknesses

-Lack of integrated data sharing between CBO's, government agencies and treatment providers.
-Lack of consistent funding streams.
-Limited promotion of available community connections for wrap around services or education.
-Limited staff available to fill CSS/CSW positions, limiting system capacity.

O

Opportunities

-Desire for cross-systems training and collaboration through partnerships.

T

Threats

-Limited number of local CBOs that assist in diversifying the social safety environment.

The Faith Community

The faith community and faith-based organizations (FBOs) provide an essential role in the health and wellbeing of individuals, communities, and at-risk populations by providing a sense of belonging, support, and holistic values of engagement. The impact that the faith community has is well documented in terms of societal cohesion, as well as community engagement from public health practice to emergency preparedness and response. Churches and FBOs are an important touchpoint to deliver community needs such as food pantries and health promotion programs in areas of high need or hard to reach communities who have historical distrust of public health practice [74,75,76].

In relation to SUD/OUD, the faith community has long been engaged in recovery and is a hallmark of many mutual aid 12-step programs. There are a variety of 12-step programs that are rooted in a spiritual or higher power perspective such as Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) meetings. Other mutual aid groups such as SMART Recovery or Secular Organizations of Sobriety (SOS) still have some support from FBOs in the form of room rentals to hold meetings. Individuals engaged in these types of support groups have better recovery outcomes and treatment[77].

Leveraging partnerships with FBOs is a hallmark of many federal and state level opioid response plans. SAMHSA recognizes the benefit and success of working with FBOs and offers many grant based programs listed in the *Faith-Based and Community Initiatives* around numerous topics to include homelessness, SUD/OUD, and youth violence prevention among other topic areas [78].The Department of Health and Human Services created *The Opioid Epidemic Practical Toolkit: Helping Faith-Based and Community Leaders Bring Hope and Healing to Our Communities*, giving faith leaders a framework in which to integrate prevention and intervention efforts within their communities[79]. At the state level, current Governor Younkin's "Right Help, Right Now" initiative has pathways for FBOs to apply for microgrants that support mental health and SUD/OUD initiatives to meet the needs of the community[5,80].

During informational interviews with FBOs, common themes were identified. Three houses of worship were interviewed, with different denominations, size of the church and demographic makeup of the congregations. All FBOs offered varying degrees of community outreach and/or programming to include affordable daycare, soup kitchens, and AA/NA support. All three sites have a formal or informal resource referral guide for congregation members in need. None of the organizations currently have Naloxone on site, however they are exploring how to procure and train their staff. Another noteworthy theme was the outreach and partnership many faith leaders had with other houses of worship and denominations.

Faith leaders are aware of the addiction crisis, but not within their own congregations or overall community. Of the three churches interviewed, mental health was a larger concern, especially for those with a substantial adolescent and young adult population. "We haven't had any drug overdose deaths from our members, but we have had to

counsel members if they lost a friend or knew of someone who suffers with addiction or suicidal ideations." One church specifically stated that while they haven't seen or heard of any opioid related substance use, vaping and cannabis use have been topics to address.

All three houses of worship were interested in bringing addiction awareness to the congregation or youth groups. "We want to open our hearts and our doors for people that are struggling. We want to be pillars of connection and advocacy in an active way, rather than passively." The larger churches have been able to include informal programming around mental health. They also have the infrastructure to introduce new ideas to the congregation. The most identified barrier to action for FBOs included stigma, specifically in the elder populations and legal liability concerns about safety, particularly for children. Other barriers include limited capacity for new programming with leadership or organizational changes.

Recommendations:

- Increase awareness within their congregation and staff in terms of SUD/OUD and stigma. This can be accomplished through various toolkits, seminars, and presentations for both in person and virtual training settings.
- Increasing community partnerships in public health practice can generate positive impact in the community. Potential partnerships who can assist FBOs in this matter include Community Services, PWHD, various CBOs such as harm reduction groups, community coalitions and mental health advocacy groups like NAMI.

THE FAITH COMMUNITY

S

Strengths

-Infrastructure established to house programs
-Community-based (accessible) outlets for increased engagement
-Multigenerational reach
-Existing protective factors on a socio-ecological scale

W

Weaknesses

-Must obtain approval from faith leaders or elders to bring in new programs

O

Opportunities

-State-funded opportunities to grow prevention education outreach
-Faith-based organizations have a desire to grow partnerships with public health organizations and other CBOs

T

Threats

-Limited knowledge surrounding opportunities for funding and targeted community engagement

Recommendations

The result of this comprehensive evaluation demonstrates the need for cross-systems collaboration. This can be visualized using the socioecological model, seen in Appendix 1, in conjunction with the RAND Corporation *America's Opioid Ecosystem*. The various touchpoints where inter-professional partnership can strengthen the community level response for OUD is of paramount importance. This is presented in the quantitative portion of the assessment that evaluates trends in opioid overdose across demographics. Alarming trends of overdose incidents in minority and adolescent populations highlights a lack of programming aimed at decreasing disparities in these primary populations. The qualitative portion features key programmatic areas of improvement that close the gap in care that individuals fall into.

Evaluate opportunities to address disparities in system access

As evidenced through all data presented in this needs assessment, the increases in fatal and non-fatal opioid-related overdoses among minority and adolescent communities is a call to action for prevention and recovery pathways. Though overall incidence in most data sources reviewed for this assessment have decreased over the past five years, a closer look at the data indicates that overdose trends are dramatically increasing in the Black and Latino communities. Additionally, women and adolescents are showing an uptick in overdose incidence, two populations not previously on the radar for outreach and support. Further evaluation should explore what is leading to the decreases among White males and increases within other, often more marginalized, populations.

Consider ways to address communication barriers

Identified patterns, seen both at the locality level, as well as within each system, cause barriers for individuals with OUD. There is a grave lack of communication, both internally and externally for stakeholders. Those stakeholders can be different touchpoints, locality partners or individuals trying to access the system. This creates a multitude of confusion for available resources, eligibility of resources, and a culture of "gate keeping" around access. While gatekeeping is a strategy to ensuring the overall system does not get overwhelmed, it leads to those trying to access the system to be disenfranchised and discouraged. Community partners might consider ways to address communication barriers to ease accessibility to resources.

Initiate cross-systems collaboration

Parallel to communication barriers, a lack of cross systems collaboration infringes on collaborative care coordination. If various industries, organizations, and agencies are not aware of one another's mission through standard operating procedures or Shared Services Agreements, various components of partnerships

may break down due to differences in values or long-term goals. This concept also applies to real-time transparent synchronous information sharing. This can be complicated when addressing protected health information, specifically within locality procedures; this is highlighted in the education, first responders, DSS and treatment provider sections. Developing standardized memorandum of understandings may alleviate the delay in care, as well as break down "siloed" systems. By exploring opportunities for cross-systems training, partners can better maximize opportunities for collaboration and referrals.

Increase awareness and education

Increased awareness and education can improve overall capacity, seen at both systematic and locality levels. Program leaders in each respective locality may benefit from reviewing their Shared Services Agreements allowing a more detailed understanding of program elements, budgetary requirements, and eligibility. This could foster more open and honest partnership between local leaders. At the systematic level, increasing education and awareness throughout the organization will improve the capacity of the overall opioid ecosystem. This can reduce stigma, negative attitudes, or historical friction within these systems.

Maintain collaborative structures

The collaborations formed, strengthened, and/or recommended throughout this needs assessment process will be instrumental resources in the maintenance and continual reassessment of progress and improvements related to the state of opioid use in the region. These collaborative structures will be strengthened by and useful for continuing to incorporate community voice into outreach efforts to identify and address any new barriers that may arise.

This PWHD Needs Assessment is the first step in creating strategic partnerships and goals aimed at reducing opioid injuries and deaths. From this process we hope to grow capacity of the overarching community level care around OUD by streamlining current processes, creating communication pathways for transparent resource sharing, and strengthening identified key relationships.

References

1. Johns Hopkins Bloomberg School of Public Health. (n.d.). The Principles Quick Guide to conducting a needs assessment. National Association of Counties. https://www.naco.org/resources/opioid-solutions/principles-quick-guide
2. Jalali, M.S., Botticelli, M., Hwang, R.C. et al. The opioid crisis: a contextual, social-ecological framework. Health Res Policy Sys 18, 87 (2020).
3. Stein, B., Beau K, et.al, (2023). America's Opioid Ecosystem: How Leveraging System Interactions Can Help Curb Addiction, Overdose, and Other Harms. RAND Corporation. https://www.rand.org/pubs/research_reports/RRA604-1.html
4. Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved from https://health.gov/healthypeople/objectives-and-data/social-determinants-health
5. CRUSHING THE FENTANYL EPIDEMIC: STRENGTHENING VIRGINIA'S INTERDICTION AND ENFORCEMENT RESPONSE TO FENTANYL CRISIS. Office of the Governor . (2023, May). https://www.governor.virginia.gov/media/governorvirginiagov /governor-of-virginia/pdf/eo/EO-26---Crushing-the-Fentanyl-Epidemic-Strengthening-Virginia's-Interdiction-and-Enforcement-Response-to-Fentanyl-Crisis.pdf
6. Opioid Abatement Authority. (n.d.). https://www.oaa.virginia.gov/
7. Prince William's dynamic growth. The Virginia Public Access Project. (2022, July 28). https://www.vpap.org/visuals/visual/prince-williams-dynamic-population/
8. Census Reporter. (n.d.). Prince William County, VA. Census Reporter. Retrieved July 2, 2024, from https://censusreporter.org/profiles/05000US51153-prince-william-county-va/U.S. https://www.census.gov/quickfacts/fact/table/princewilliamcountyvirginia,frederickcountyvirginia/PST045222
9. Census Reporter. (n.d.). Manassas City, VA. Census Reporter. Retrieved July 2, 2024, from https://censusreporter.org/profiles/06000US5168394474-manassas-city-manassas-city-va/
10. Census Reporter. (n.d.). Manassas Park City, VA. Census Reporter. Retrieved July 2, 2024, from https://censusreporter.org/profiles/06000US5168594476-manassas-park-city-manassas-park-city-va/
11. Ciccarone D. The rise of illicit fentanyls, stimulants and the fourth wave of the opioid overdose crisis. Curr Opin Psychiatry. 2021 Jul 1;34(4):344-350. doi: 10.1097/YCO.0000000000000717. PMID: 33965972; PMCID: PMC8154745.
12. Centers for Disease Control and Prevention. (2023, August 8). Understanding the opioid overdose epidemic. Centers for Disease Control and Prevention.
13. Centers for Disease Control and Prevention. (2022, July 18). Overdose death rates increased significantly for black, American Indian/Alaska native people in 2020. Centers for Disease Control and Prevention. https://www.cdc.gov/media/releases/2022/s0719-overdose-rates-vs.html#:~:text=In%202020%2C%20overdose%20death%20rates, and%20the%20District%20of%20Columbia.
14. The White House. (2023, August 17). White House ONDCP Director Statement on Flattening Overdose Death Rate Over the Past Year. Retrieved from https://www.whitehouse.gov/ondcp/briefing-room/2023/08/17/white-house-ondcp-director-statement-on-flattening-overdose-death-rate-over-the-past-

year/#:~:text=%E2%80%9CAfter%20years%20of%20tragic%20and,and%20save%20even%20more%20lives.

15. National Center for Drug Abuse Statistics. (2023, January 1). Teenage drug use statistics [2023]: Data & Trends on abuse. NCDAS. https://drugabusestatistics.org/teen-drug-use/
16. Friedman, J., Shover, C. (2023, September). Charting the Fourth Wave : Geographical, Temporal, Race/Ethnicity and Demographic Trends in Polysubstance Fentanyl Related Overdose Deaths in the United States, 2010-2021. Addiction, 118(12) 2245-2486. https://doi.org/10.1111/add.16318
17. Centers for Disease Control and Prevention. (2023b, August 24). Dose dashboard: Nonfatal overdose syndromic surveillance data. Centers for Disease Control and Prevention. https://www.cdc.gov/drugoverdose/nonfatal/dose/surveillance/dashboard/index.html
18. Virginia Department of Health. (2023). (rep.). EMERGENCY DEPARTMENT VISITS FOR UNINTENTIONAL DRUG OVERDOSE AMONG VIRGINIA RESIDENTS. Retrieved from https://www.vdh.virginia.gov/content/uploads/sites/13/2023/07/Emergency-Department-Visits-for-Unintentional-Drug-Overdose-2023-Q2.pdf.
19. Han, B., Einstein, E. B., Jones, C. M., Cotto, J., Compton, W. M., & Volkow, N. D. (2022). Racial and Ethnic Disparities in Drug Overdose Deaths in the US During the COVID-19 Pandemic. JAMA network open, 5(9), e2232314. https://doi.org/10.1001/jamanetworkopen.2022.32314
20. VDH. (2024, June 6). ED Visits for Drug Overdose. Surveillance and Investigation. https://www.vdh.virginia.gov/surveillance-and-investigation/syndromic-surveillance/drug-overdose-surveillance/
21. Counsil of State and Territorial Epidemiologists. (n.d.). CSTE's List of Recommended Indicators [Review of CSTE's List of Recommended Indicators]. Council of State and Territorial Epidemiologists. https://cdn.ymaws.com/www.cste.org/resource/resmgr/crosscuttingi/List_of_Recommended_Indicato.pdf
22. (n.d.). CSTE ICD-10-CM Injury Surveillance Toolkit [Review of CSTE ICD-10-CM Injury Surveillance Toolkit]. Counsil of State and Territorial Epidemiologists . https://resources.cste.org/ICD-10-CM/Drug%20Overdose%20Indicator/Drug%20Overdose%20Indicator.pdf
23. CDC. (2024, May 22). Treat and Manage Infants Affected by Prenatal Opioid Exposure. Opioid Use during Pregnancy. https://www.cdc.gov/opioid-use-during-pregnancy/treatment/infants-opioid.html#:~:text=Key%20points%201%20Neonatal%20abstinence%20syndrome%20%28NAS%29%20can
24. Virginia State Unintentional Drug Overdose Reporting System, Office of the Chief Medical Examiner, Virginia Department of Health.
25. Centers for Disease Control and Prevention. (n.d). State Unitentional Drug Overdose Reporting System (SUDORS). State Unintentional Drug Overdose Reporting System (SUDORS) Fact Sheet (cdc.gov)
26. National Institute on Drug Abuse. (n.d.). Naloxone DrugFacts. National Institute on Drug Abuse. Retrieved July 2, 2024, from https://nida.nih.gov/publications/drugfacts/naloxone
27. Centers for Disease Control and Prevention. State Unintentional Drug Overdose System (SUDORS) Coding Manual Revised 2022 National Center for Injury Prevention and

Control, Centers for Disease Control and Prevention. State Unintentional Drug Overdose Reporting System (SUDORS) CODING MANUAL (cdc.gov)
28. Never Use Alone. (n.d.). Never Use Alone. Retrieved July 2, 2024, from https://neverusealone.com/
29. Virginia Department of Health. (n.d.). Needs Assessment Tool for Drug Overdose and Related Outcomes - Data. Virginia Department of Health. Retrieved July 2, 2024, from https://www.vdh.virginia.gov/data/needs-assessment-tool-for-drug-overdose-and-related-outcomes/
30. Washington/Baltimore High Intensity Drug Trafficking Area. (n.d.). ODMAP. Retrieved July 2, 2024, from https://www.hidta.org/odmap/
31. Patel, S., Sheikh, A., Nazir, N., Monro, S., & Anwar, A. (2020). The Opioid Crisis: How to Lessen the Burden on Emergency Departments by At-risk Populations. Cureus, 12(11), e11498. https://doi.org/10.7759/cureus.11498
32. Blanco, C., Wiley, T.R.A., Lloyd, J.J. et al. America's opioid crisis: the need for an integrated public health approach. Transl Psychiatry 10, 167 (2020). https://doi.org/10.1038/s41398-020-0847-1
33. Williams , A. (2019, February). OUD Cascade of Care and Quality Measure Development. New York Society of Addiction Medicine. Retrieved from https://nysam-asam.org/wp-content/uploads/120pm-Arthur-Robin-Williams.pdf
34. Walker, L. (2023, August 22). ASAM criteria and levels of care in addiction treatment. ASAM Criteria and Levels of Care in Addiction Treatment. https://americanaddictioncenters.org/rehab-guide/asam-criteria-levels-of-care
35. Dydyk AM, Jain NK, Gupta M. Opioid Use Disorder. [Updated 2023 Jul 21]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK553166/
36. Jones, N. L., Gilman, S. E., Cheng, T. L., Drury, S. S., Hill, C. V., & Geronimus, A. T. (2019). Life Course Approaches to the Causes of Health Disparities. American journal of public health, 109(S1), S48–S55. https://doi.org/10.2105/AJPH.2018.304738
37. Office of the Chief Medical Officer UK. (2012). Annual Report of the Chief Medical Officer 2012. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/255237/2901304_CMO_complete_low_res_accessible.pdf
38. Youth.gov. (n.d.). Substance use/misuse. Substance Use/Misuse . https://youth.gov/youth-topics/substance-abuse
39. Alcohol, Drug & Tobacco use. Virginia Department of Education. (n.d.). https://www.doe.virginia.gov/programs-services/student-services/prevention-strategies-programs/alcohol-drug-tobacco-use
40. REPORT OF THE VIRGINIA DEPARTMENT OF EDUCATION. (2022). (rep.). Comprehensive Plan for Virginia's Youth: Universal Cannabis and Other Substance Use Education, Prevention, and Professional Development. Retrieved from https://rga.lis.virginia.gov/Published/2022/HD5/PDF.
41. PWCPS. (2023). (rep.). Substance Abuse Prevention & Support in PWCS. Retrieved from https://go.boarddocs.com/vsba/pwcs/Board.nsf/files/CVUPEE63C245/$file/PWCS%20Substance%20Abuse%20Programs-Sept%2020%20School%20Board.pdf.

42. Smiley-McDonald, H.M., Attaway, P.R., Richardson, N.J. et al. Perspectives from law enforcement officers who respond to overdose calls for service and administer naloxone. Health Justice 10, 9 (2022). https://doi.org/10.1186/s40352-022-00172-y
43. Frazzini, K. (2023, August 30). Community paramedicine: Connecting patients to care and reducing costs. National Conference of State Legislatures. https://www.ncsl.org/state-legislatures-news/details/community-paramedicine-connecting-patients-to-care-and-reducing-costs
44. Jacobs LA, Gottlieb A. THE EFFECT OF HOUSING CIRCUMSTANCES ON RECIDIVISM: Evidence From a Sample of People on Probation in San Francisco. Crim Justice Behav. 2020 Sep;47(9):1097-1115. doi: 10.1177/0093854820942285. Epub 2020 Aug 6. PMID: 34629568; PMCID: PMC8496894.
45. NIDA. 2021, April 13. How is opioid use disorder treated in the criminal justice system?. Retrieved from https://nida.nih.gov/publications/research-reports/medications-to-treat-opioid-addiction/how-opioid-use-disorder-treated-in-criminal-justice-system on 2024, February 14
46. Scott, C.K., Dennis, M.L., Grella, C.E. et al. The impact of the opioid crisis on U.S. state prison systems. Health Justice 9, 17 (2021). https://doi.org/10.1186/s40352-021-00143-9
47. Ojmarrh Mitchell & Michael S. Caudy (2015) Examining Racial Disparities in Drug Arrests, Justice Quarterly, 32:2, 288-313, DOI: 10.1080/07418825.2012.761721
48. NIDA. 2021, May 7. Addiction Should Be Treated, Not Penalized. Retrieved from https://nida.nih.gov/about-nida/noras-blog/2021/05/addiction-should-be-treated-not-penalized on 2024, February 14
49. Binswanger IA, Stern MF, Deyo RA, et al. Release from prison–a high risk of death for former inmates. N Engl J Med. 2007;356(2):157-165. doi:10.1056/NEJMsa06411
50. Opioid- Overdose Reduction Continuum of Care Approach A Guide for Policymakers for Implementing Evidence-Based Strategies that Address Opioid Overdose. (n.d.). Retrieved June 28, 2024, from https://4023e02e-82ff-4e82-af5f-a47435b56092.usrfiles.com/ugd/4023e0_b359da2a1f4e408ba0bccbf3ca98d96f.pdf
51. 1st Edition Sentencing Revocation Report and Probation Violation Guidelines VIRGINIA SENTENCING GUIDELINES. (n.d.). Retrieved June 28, 2024, from http://www.vcsc.virginia.gov/worksheets2021/SRRBookletFINALversion2.pdf
52. SAMHSA, Whole-Person Care for People Experiencing Homelessness and Opioid Use Disorder: A Toolkit (2021). SAMHSA. Retrieved from https://nhchc.org/wp-content/uploads/2021/09/Homelessness_OUD_Toolkit_Part_I_Aug2021.pdf.
53. National Alliance to End Homelessness. (2023, May 23). State of Homelessness: 2023 edition. State of Homelessness: 2023 Edition. https://endhomelessness.org/homelessness-in-america/homelessness-statistics/state-of-homelessness/
54. Homeless Services Planning and Coordinating Committee . (n.d.). (rep.). HOMELESSNESS IN METROPOLITAN WASHINGTON: Results and Analysis from the Annual Point-in-Time (PIT) Count of Persons Experiencing Homelessness (Vol. 2023, pp. 152–170).
55. Prince William Area Continuum of Care. (n.d.). (rep.). Provider Report Card Presentation- Three Year Comparison (FY2023 ed.).
56. National Coalition for the Homeless. (2009, July). Substance abuse and homelessness - national coalition for the homeless. Substance Abuse and Homelessness. https://www.nationalhomeless.org/factsheets/addiction.pdf

57. Kryda AD, Compton MT. Mistrust of outreach workers and lack of confidence in available services among individuals who are chronically street homeless. Community Ment Health J. 2009 Apr;45(2):144-50. doi: 10.1007/s10597-008-9163-6. Epub 2008 Sep 19. PMID: 18807181.
58. Children's Bureau . (2020). (rep.). How the Child Welfare System Works. Retrieved from https://www.childwelfare.gov/pubPDFs/cpswork.pdf.
59. Assistant Secondary of Planning and Prevention . (2022, November). U.S. National and State Estimates of Children Living with Parents Using Substances, 2015– 2019. https://aspe.hhs.gov/sites/default/files/documents/f34eb24c1aff645bed0a6e978c0b4d16/children-at-risk-of-sud.pdf
60. United Hospital Fund. (2019). (rep.). The Ripple Effect: National and State Estimates of the U.S. Opioid Epidemic's Impact on Children. Retrieved from https://media.uhfnyc.org/filer_public/6e/80/6e80760f-d579-46a3-998d-1aa816ab06f6/uhf_ripple_effect_national_and_state_estimates_chartbook.pdf.
61. Turney, K., & Olsen, A. (2019). Household member substance problems and children's health in the United States. SSM - population health, 7, 100400. https://doi.org/10.1016/j.ssmph.2019.100400
62. National Center on Substance Abuse and Child Welfare. (2020). (rep.). Child Welfare and Substance Use Disorder Treatment Statistics. Retrieved from https://ncsacw.acf.hhs.gov/files/statistics-2020.pdf.
63. Loch, S. F., Stein, B. D., Ghertner, R., McNeer, E., Dupont, W. D., Smart, R., & Patrick, S. W. (2021). Neonatal opioid withdrawal syndrome is associated with infant foster care entry at the county level. Health Affairs, 40(11), 1776–1783. https://doi.org/10.1377/hlthaff.2021.00460
64. Virginia Child Protective Service. (2023). (rep.). CPS Accountability Referrals Type Of Abuse Annual Report. Retrieved from https://www.dss.virginia.gov/geninfo/reports/children/cps/all_other.cgi.
65. Crowley DM, Connell CM, Jones D, Donovan MW. Considering the child welfare system burden from opioid misuse: research priorities for estimating public costs. Am J Manag Care. 2019 Jul;25(13 Suppl):S256-S263. PMID: 31361428; PMCID: PMC7895335.
66. Our work with community-based organizations. CDC Foundation. (n.d.). https://www.cdcfoundation.org/community-based-organizations
67. ASTHO. (2020, January). Collaborations between Health Systems and Community-Based Organizations . Collaborations Between Health Systems and Community-Based Organizations . https://www.astho.org/globalassets/report/collaborations-between-health-system-community-based-oragniazations.pdf
68. SAMHSA. (2023, April). Harm reduction. Harm Reduction. https://www.samhsa.gov/find-help/harm-reduction
69. Stack E, Hildebran C, Leichtling G, Waddell EN, Leahy JM, Martin E, Korthuis PT. Peer Recovery Support Services Across the Continuum: In Community, Hospital, Corrections, and Treatment and Recovery Agency Settings - A Narrative Review. J Addict Med. 2022 Jan-Feb 01;16(1):93-100. doi: 10.1097/ADM.0000000000000810. PMID: 33560695; PMCID: PMC8339174.
70. National Academies of Sciences, Engineering, and Medicine. (2016). Ending Discrimination Against People with Mental and Substance Use Disorders: The Evidence for Stigma Change. Washington, DC: The National Academies Press. doi: 10.17226/23442.

71. The Urban Institute. (2021, October). Fostering Partnerships for Community Engagement. Retrieved from https://www.urban.org/sites/default/files/publication/104935/fostering-partnerships-for-community-engagement_0.pdf.
72. SAMHSA. (n.d.). (rep.). Community Engagement: An Essential Component of an Effective and Equitable Substance Use Prevention System. Retrieved from https://store.samhsa.gov/sites/default/files/pep22-06-01-005.pdf.
73. CADCA. (n.d.). 7 strategies to effective community change. Prevent Med Abuse. http://www.preventmedabuse.org/about-the-tool-kit/7-strategies-to-effective-community-change/
74. Gourley, M., Starkweather, S., Roberson, K., Katz, C. L., Marin, D. B., Costello, Z., & DePierro, J. (2023). Supporting Faith-Based Communities Through and Beyond the Pandemic. Journal of community health, 48(4), 593–599. https://doi.org/10.1007/s10900-023-01193-w
75. Santibañez, S., Davis, M., & Avchen, R. N. (2019). CDC Engagement With Community and Faith-Based Organizations in Public Health Emergencies. American journal of public health, 109(S4), S274–S276. https://doi.org/10.2105/AJPH.2019.305275
76. Campisano, D. (2021, July 12). An interfaith and interdisciplinary approach to build stronger communities. College of Public Health News. https://hscweb3.hsc.usf.edu/health/publichealth/news/taking-an-interfaith-and-interdisciplinary-approach-to-building-stronger-communities/
77. Atkins, R. G., Jr, & Hawdon, J. E. (2007). Religiosity and participation in mutual-aid support groups for addiction. Journal of substance abuse treatment, 33(3), 321–331. https://doi.org/10.1016/j.jsat.2007.07.001
78. SAMHSA. (2023, May). Faith-based and Community Initiatives (FBCI). Faith-Based and Community Initiatives (FBCI). https://www.samhsa.gov/faith-based-initiatives
79. US Department of Health and Human Services . (2020). (rep.). The Opioid Crisis Practical Toolkit: Helping Faith-based and Community Leaders Bring Hope and Healing . Retrieved from https://www.hhs.gov/sites/default/files/the-opioid-crisis-practical-toolkit.pdf.
80. Office of the Governor. (2023, October). Governor Glenn Youngkin Announces $800,000 in Micro-Grants to Help People Struggling with Behavioral Health Disorders. Retrieved from https://www.governor.virginia.gov/newsroom/news-releases/2023/october/name-1016350-en.html#:~:text=RICHMOND%2C%20VA%20%E2%80%93%20Governor%20Glenn%20Youngkin,and%20address%20the%20opioid%20crisis.

Terms and Abbreviations

AA- Alcoholics Anonymous
ACE- Adverse Childhood Experience
ACTS- Action in Community Through Service
ADC- Adult Detention Center
ARPA- American Rescue Plan Act
ASAM- American Science for Addiction Medicine
ASAM- American Society for Addiction Medicine
CBO- Community Based Organizations
CDC- Centers for Disease Control and Prevention
CES- Community Engagement Specialist
CJS- Criminal Justice System
CJS- Criminal Justice System
CPS- Child Protective Services
CWS- Child Welfare System
DSS- Department of Social Services
ECOP- Empowered Communities Opioid Project
EMS- Emergency Medical Service
ESSENCE- Electronic Surveillance System for the Early Notification of Community Based Epidemics
FBO- Faith Based Organization
HUD- Housing and Urban Development
IEH- Individuals Experiencing Homelessness
JMAT- Jail based Medication Assisted Therapy
LHDs- Local Health Districts
MAT- Medication Assisted Therapy
MAT- Medication Assisted Therapy
MOUD- Medication for Opioid Use Disorder
NAMI- National Alliance for Mental Illness
NA- Narcotics Anonymous
NIDA- National Institute on Drug Addiction
NOWS- Neonatal Opioid Withdrawal Syndrome
OAA- Opioid Abatement Authority
OD MAP- Overdose Mapping and Application Program
OD2A- Overdose to Action
OBAT- Office Based Addiction Treatment
OCME- Office of the Chief Medical Examiner
OUD- Opioid Use Disorder
PD- Police Department
PWHD- Prince William Health District
PWC- Prince William County
SAMHSA- Substance Abuse and Mental Health Services Administration
SAPS- Substance Abuse Prevention Specialist
SDOH- Social Determinates of Health
SMI- Serious Mental Illness
SOP- Standard Operating Procedure
SOS- Secular Organization of Sobriety
SUDORS- State Unintentional Drug Overdose Reporting System
SWOT- Strength, Weakness, Opportunity, and Threat
VDH- Virginia Department of Health

Appendix 1 Frameworks

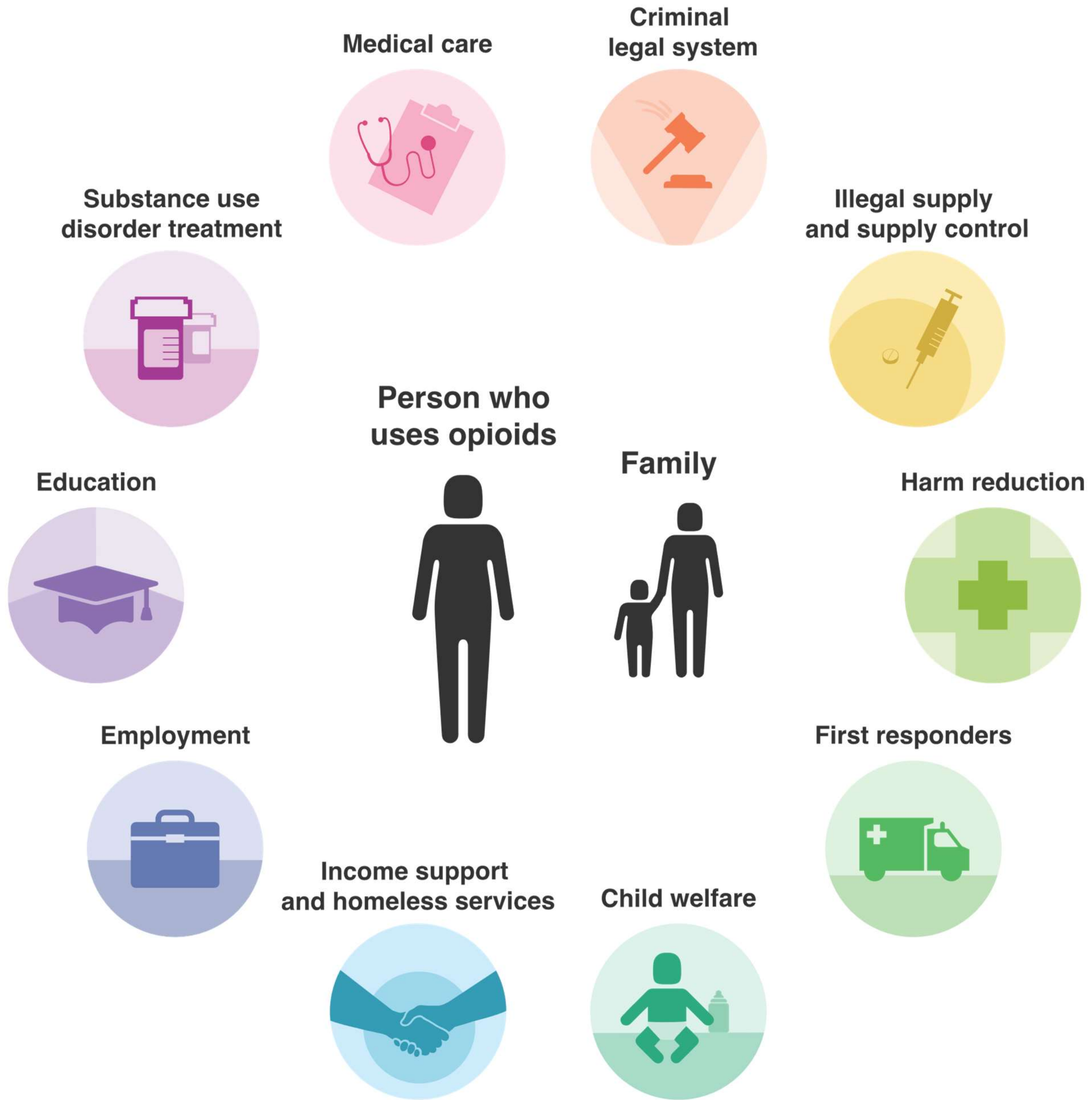


Figure 1: Stein, B., Beau K, et.al, (2023). America's Opioid Ecosystem: How Leveraging System Interactions Can Help Curb Addiction, Overdose, and Other Harms. RAND Corporation.

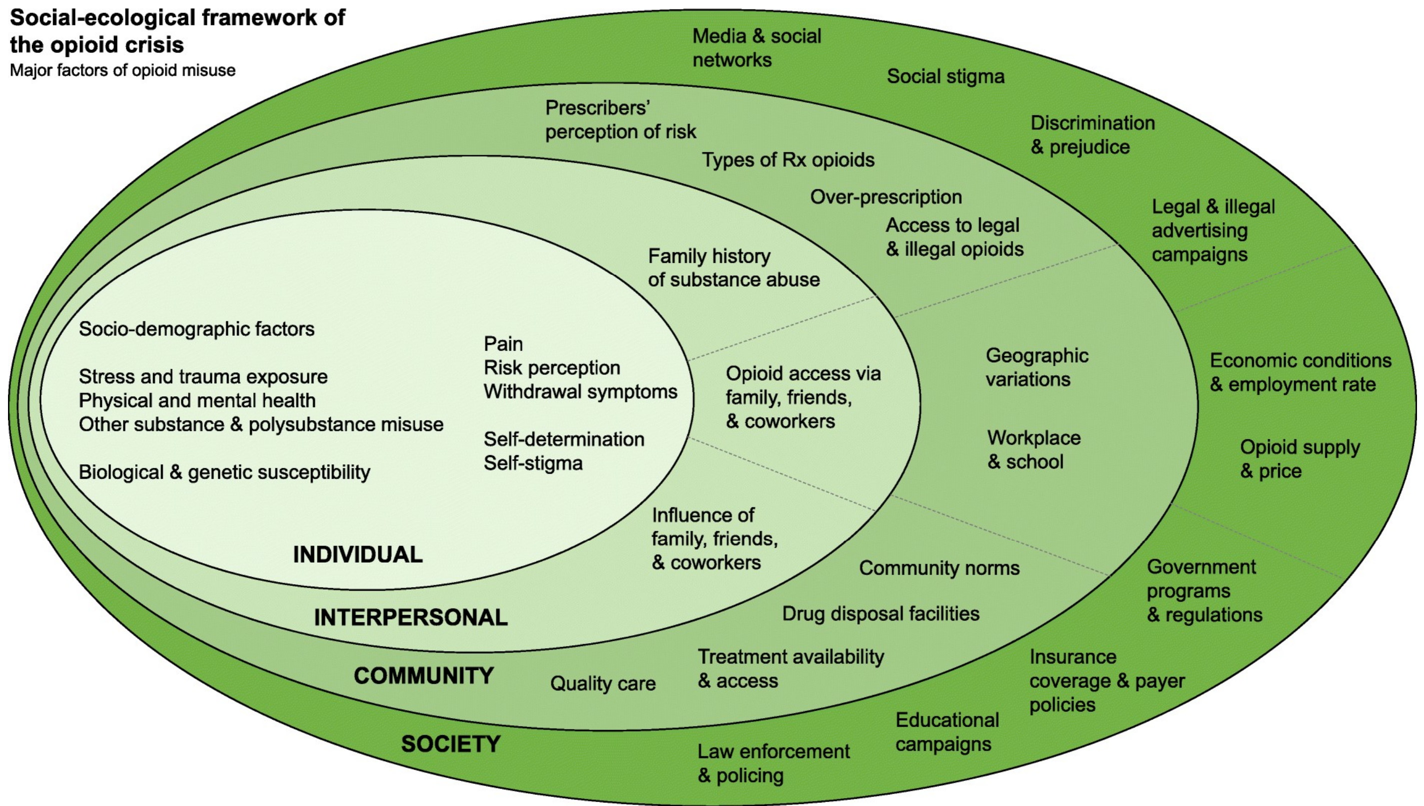


Figure 2 Jalali, M.S., Botticelli, M., Hwang, R.C. *et al.* The opioid crisis: a contextual, social-ecological framework. *Health Res Policy Sys* **18**, 87 (2020).

Appendix 2 Methods

This PWHD community opioid needs assessment utilized both quantitative and qualitative methods to assess the capacity, accessibility, and quality of the current landscape of OUD in the Greater Prince William region. The quantitative portion of this needs assessment uses multiple secondary data sources, allowing for a clear understanding of the demographic qualities of OUD in the region. We have measured the impact of OUD on various populations and can see the evolving trends of substance use through data analysis.

OCME Fatal Overdose Data

Data reported from the Office of the Chief Medical Examiner (OCME), Division of Forensic Epidemiology, is considered highly reliable and a credible resource that determines the cause and manner of deaths that occur in Virginia. All reported or suspected opioid deaths are verified with toxicology testing. Due to the nature of law enforcement and OCME investigations, all deaths are reported based on locality of occurrence and not the residential association of the decedent. This is important when determining actional prevention programming. Limitations of this data include a lack of standardization from state to state, as not all state health departments have an Office of the Chief Medical Examiner. Data is aggregated by locality, gender, race, and age.

ESSENCE Non-Fatal Overdose Data

The Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE) is considered a syndromic data source that allows public health analysts to track trends over time. ESSENCE receives information from emergency rooms and urgent care centers in Virginia. This includes the number of visits they receive, chief complaints of patients, and discharge diagnoses given by the healthcare providers at the end of each visit. Data queries for opioid related overdoses were made using the VDH chief complaint and discharge diagnosis (CC and DD) category, Opioid and Unspecified Overdose (excluding Heroin) V3.

Limitations of this data include older records may not be included due to incomplete record fields. Further limitations include an underreporting of non-fatal overdoses, considering not all non-fatal overdoses are connected to care in a hospital or urgent care center. It’s pertinent to state that “unspecified” overdoses are not explicitly opioid related. It’s important to capture unspecified overdoses for engagement and education around all medication and substance use exposures. The PWHD has developed methodology to better understand opioid specific cases which will be detailed in the subsequent section.

By focusing on only the ESSENCE entries with confirmed opioid use, we were able to highlight the opioid-specific data for the region. This allowed for a deeper dive into the data to separate opioid overdoses and have a clearer picture of their use among our priority populations. Extrapolating these specifics reinforced existing data sources for

local health departments to utilize, adapt, and refine the data at their community levels. This specificity helps to give a clear picture of opioid use disorder versus substance use disorder in non-fatal overdoses, an important distinction to be able to make for more tailored programming in the future.

A limitation of this use of opioid-confirmed cases is that not all data entries are formatted in the same way. For example, hospitals have varied levels of notes, their own charting and workflows, and details recorded for each patient. Additionally, some entries are duplicative. A further limitation is that this was a resource intensive exploration of the data and was not feasible to complete for all six years of the existing data. As such, only 2022 to 2023 overdose data were analyzed through the opioid-confirmed lens.

ESSENCE Opioid-Specified

Using syndromic surveillance systems to capture community-based epidemics allows macro level observations, however, for the purpose of this assessment, the PWHD has closely monitored all available ESSENCE files starting in January of 2022 and reviews monthly to capture true accuracy of opioid related data. Extensive back-end data cleaning measures were conducted to ensure data could translate well into various dashboards used in this assessment. All records were geocoded to determine the impact of hospitalization in the Greater Prince William region. Utilizing this “scrubbed” version of ESSENCE allows the PWHD to collaborate with community-based partners to strategically program across the region. Data sharing agreements are a cornerstone of how local health districts (LHDs) can use health related data to effectively work across touchpoints in the ecosystem. Due to VDH sharing guidelines, this data source is for Prince William Health District partnerships only.

Current VDH case definition as mentioned in the strengths and limitations of ESSENCE data for opioid related incidents must include one the following terms[18]:

- Narcan, Naloxone
- Overdose, poison, ingest, intoxication, unresponsive, loss of consciousness, syncope, altered mental status
- Opioid, opiate, opium, morphine, hydrocodone, oxycodone, hydromorphone, oxymorphone, codeine, buprenorphine, fentanyl, methadone, naloxone, tramadol, suboxone, or medication and drug brand names (Dilaudid, Narcan, OxyContin, Percocet, Vicodin)

Methodology developed for local surveillance included the case definitions noted in the chief compliant and discharge diagnosis, as well as reviewing detailed triage notes from medical providers. Key indicators for opioid related overdoses include low oxygen and or alertness levels that then improve with Naloxone. We have added the following terms to classify ESSENCE opioid overdoses:

- Agonal breathing, cyanotic, apneic, hypoxic

- Unconscious
- Responsive after Narcan
- Pinpoint pupils

Injury Hospitalization Data

Injury hospitalization data includes both fatal and non-fatal in-patient hospitalizations based in Virginia. This data is based on counts which means a patient could be hospitalized more than once for the same injury and it would be counted as two separate hospitalizations. This data set includes the mean length of stay and cost per individual for hospitalizations among Prince William Health District residents.

Limitations for this data include the exclusion of federal hospital systems such as military hospitals. Further limitations include the time when data is released, data tends to lag by a year or more due to the multiple data sources used to compile final reports. Additionally, individuals are only captured as SUD or OUD as the primary reason for hospital admission. Thus, it does not capture when SUD/OUD are related disorders to a different primary diagnosis code. Furthermore, how race and ethnicity demographics are captured can be subjectively recorded or may not allow individuals who identify as two or more races. This may lead to an underreporting in metrics.

SUDORS Data

The State Unintentional Drug Overdose Reporting System (SUDORS) data documents unintentional accidental overdoses that occur within the state of Virginia[19]. SUDORS provides a narrative of who, what, when, where, and why an overdose death may occur. It incorporates multiple sources of data from death certificates, medical examiner/coroner reports, toxicology reports, descriptions of paraphernalia at the scene, naloxone administration and any history of substance abuse, treatment, or relapse[20]. Limitations of this dataset include the aggregated counts which can limit specificity and inference for the populations of interest and timeliness of data sharing due to intensity of investigation.

A strength of this data set is its inclusion of where a person was injured, died, and lived in Virginia, and whether they died from an accidental or unintentional overdose. The PWHD requested 70 different variables for evaluation as listed in the SUDORS coding manual[21]. This data set is standardized and collected nationally per CDC guidelines.

Needs Assessment Tool for Drug Overdose and Related Outcomes

This VDH opioid Needs Assessment tool was created to support current Virginia Governor Glenn Youngkin’s “Right Help, Right Now” initiative. This initiative uses 12 indicators related to drug related injuries and deaths, infectious disease outcomes and socioeconomic factors. This includes data from ESSENCE, OCME, communicable disease reports, criminal justice records along with local level reports on Naloxone distribution, mental health treatment, poverty levels, and unemployment rates[25]. Using

various data sources, CDC population rates, and case counts add to the strength and validity of this resource. Limitations of this assessment tool include varying case definitions for each data source and indicators using 2021 data.

The ODMAP Data

The Overdose Mapping and Application Program (ODMAP) dataset is compiled through EMS record systems for any suspected opioid overdose situation. This geospatial resource has multiple functions to include frequency graphs, details on Naloxone administration and alert functions. When addressing its limitations, it’s important to understand that not all overdose situations result in a 9-1-1 call, and not all emergency calls result in medical transport to an emergency department or medical facility, indicating a likely underreporting of overdose incidents in the area.

Qualitative Data

The second portion of this assessment used qualitative data gathered through informational interviews and community-based listening sessions. This ethnographic method is used to better understand the dynamics of OUD, allowing stakeholders to gain insight into meaningful themes that can highlight risk and protective assets in the opioid ecosystem. The VDH Institutional Review Board (IRB) approved the study protocol and questions used for each informational interview and listening session. Responses were typed and sessions were audio recorded.

Following listening sessions and informational interviews, we analyzed the data by grouping responses by recurring theme. Listening session questions were structured by four different categories including awareness and education; experiences and perceptions; barriers or challenges; and opportunities, strengths, and resources. Thematic analysis was conducted using listening session transcription and notes that were then sifted into reoccurring themes and patterns. We used Microsoft Excel to code and categorize data into meaningful units for comparison. Informational interviews were structured similar to listening sessions by overall strengths, weaknesses, opportunities and threats (SWOT) individuals shared about working within their ecosystem touchpoint.

Listening Sessions

An incredible strength of the listening session data is that we were able to gather evidence straight from priority populations about their experiences surrounding opioid use in the region. Group dynamics can assist in generating themes that may not have been captured in interviews alone. This discussion based qualitative information can offer a platform to hear a range of opinions from general consensus or disagreements allowing for dynamic observation as the data throughout the report illustrate for youth, the Latino population, those in recovery, and in active use. We were able to meet with each of these subgroups to conduct listening sessions with a list of tailored questions aimed at understanding their experiences, resources, barriers, and recommendations

around opioid use in the region. These perspectives will be vital resources for community partners to have meaningful impact on the impact of opioid use in the region in the years to come.

A key limitation of these data is that listening sessions are a resource intensive endeavor, and we were only able to meet with a limited number of each subset of priority populations. As such, the findings cannot necessarily be generalized across the full population subset. Rather, these perspectives should be viewed as a starting place to the conversation, with the hope that we will continue to connect with these groups in the future. A notable limitation of the data from individuals in active use and recovery is that this is a population that suffers the weight of immense stigma and is therefore difficult to recruit into formal in-depth focused conversations. A challenge of this recruitment was the feat of getting people willing to participate in the conversation. As described in the body of the report, the data we were able to record shared robust information that will be helpful in our pursuit of the health and wellbeing of our community, particularly regarding our approach to opioid use in the region.

Informational Interviews

A strength of our process with the informational interviews is that we were able to gather information from an incredible number of sectors related to a community-focused approach to the opioid ecosystem. We heard from several governmental entities including the judicial system and the social services sector, in addition to the education sector, community-based organizations, and even the faith community. This personal insight and industry knowledge around how the opioid epidemic has impacted their industry, leads to the resounding voice on how each sector wants to do what they can to help the individuals in the community see meaningful change around the approach to opioid use in the region. By handling these conversations as independent interviews, we were able to allow each individual focused time to share without the pressure of what to say or how quickly to respond. Additionally, interviews enabled subsequent introductions to their network and paved the way for easier participant recruitment. This individualized focus allowed for a wealth of robust data surrounding their sector's experience with opioid use.

A limitation of this portion of the research is that it was not feasible to meet with every individual from each touchpoint of the ecosystem, so it is not clear whether the findings are all generalizable across the region. As with the listening session data, these findings can be viewed as a starting place for the conversation, with ample information to get the community started on identified barriers and aspirations for future change.