8-2023

Greater Portland Health Homeless Opioid User Service Engagement Program: Final Evaluation Report

Mary Lindsey Smith PhD
University of Southern Maine, Catherine Cutler Institute, m.lindsey.smith@maine.edu

Evelyn Ali BS
University of Southern Maine, Cutler Institute, evelyn.ali@maine.edu

Tyler Egeland BA
University of Southern Maine, Cutler Institute

Katharine Freund MPH

Thomas Chalmers McLaughlin MSW, PhD
University of New England

See next page for additional authors

Authors

Mary Lindsey Smith PhD; Evelyn Ali BS; Tyler Egeland BA; Katharine Freund MPH; Thomas Chalmers McLaughlin MSW, PhD; and Katie Rosingana BA

August 2023

HOUSE: HOMELESS OPIOID USER SERVICE ENGAGEMENT PROGRAM

FINAL EVALUATION REPORT

Mary Lindsey Smith PhD, MSW
Evelyn Ali
Tyler Egeland
Katharine Freund MPH
Thomas McLaughlin PhD, MSW
Katherine Rosingana

Preble Street

GREATER PORTLAND HEALTH
CARING FOR THE WHOLE COMMUNITY

SURE Substance Use Research and Evaluation
University of Southern Maine

Suggested Citation:

Smith ML, Ali E, Egeland T, Freund K, McLaughlin, TC, Rosingana K. HOUSE: Homeless Opioid User Service Engagement Program Final Evaluation Report. Portland, ME: University of Southern Maine, Catherine E. Cutler Institute; August 4, 2023.

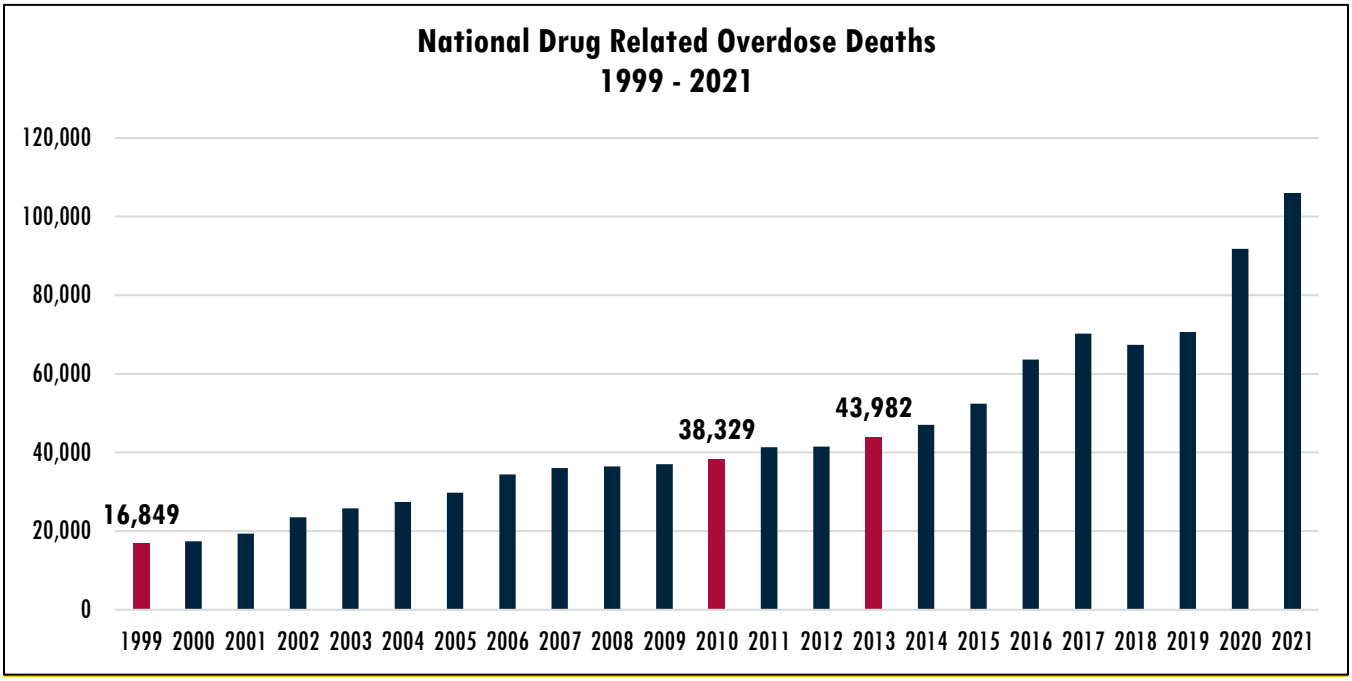
Table of Contents

Introduction

The high rate of opioid misuse and subsequent addiction is a national and local public health crisis with significant impacts on morbidity and mortality as well as health care expenditures. Moreover, the rising use of opioids not only has devastating impacts on individuals with OUD and their families, but it also has a compounding ripple effect with negative broader societal impacts including increases in crime and criminal justice involvement; impacts on labor markets, workforce engagement and productivity; and reduces overall quality of life for impacted individuals, families, and communities.

The CDC's Injury Center tracks overdoses involving natural & semi-synthetic opioids, methadone, synthetic opioids, and heroin. The CDC has identified three waves of overdoses in the past 30 years, indicated by red bars in the chart below (Figure 1). The first wave of overdoses has been associated with an increase in deaths involving prescription opioids during the late 1990s. The second wave occurred in 2010 with an increase in Heroin-involved overdose deaths. Soon after, in 2013, the third and most recent wave of overdoses involved a rise in deaths involving synthetic opioids (fentanyl), which have increased exponentially (Figure 2).[1]

FIGURE 1

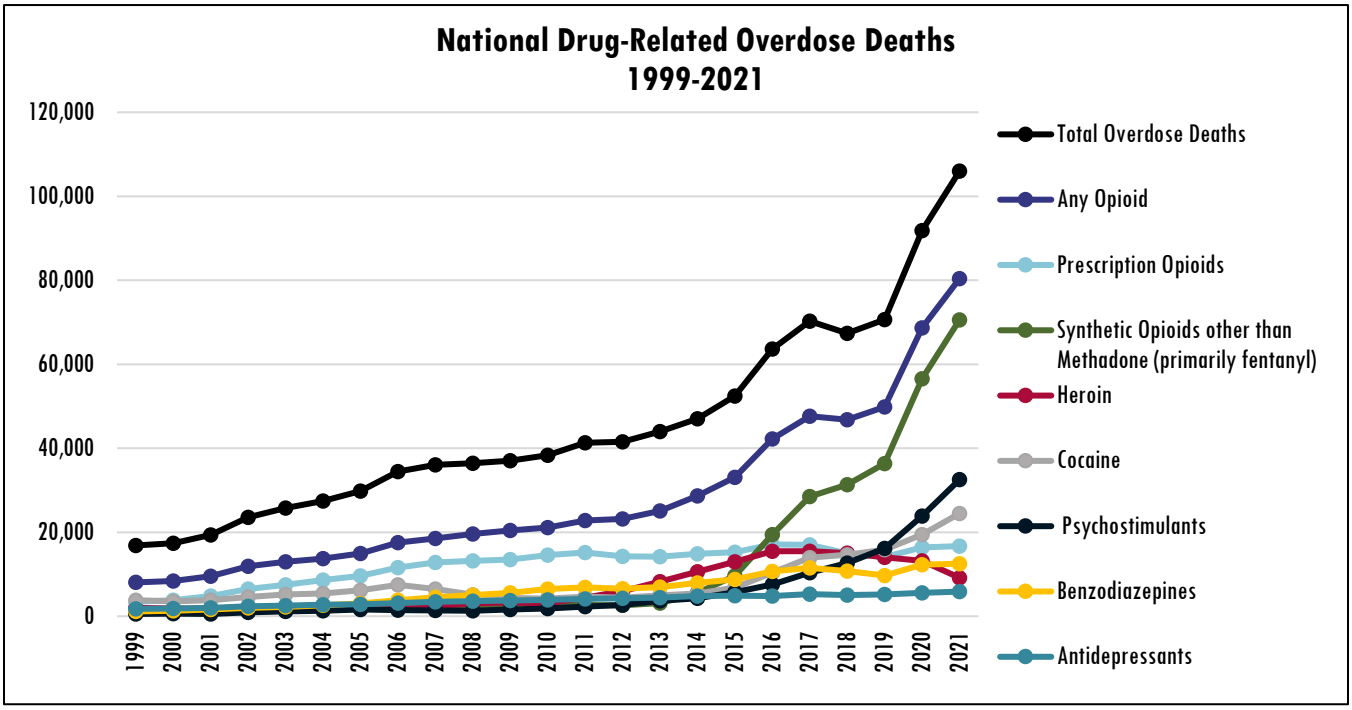


(Source: CDC WONDER)

[1] U.S. Department of Health & Human Services. Opioids. Center for Disease Control and Prevention. Updated March 10, 2021. Accessed June 28, 2023. https://www.cdc.gov/opioids/data/analysis-resources.html#anchor_data_analysis.

National drug-related overdose death trends began to increase for all substances, with the exception of antidepressants, beginning in 2014. However, the sharpest increases in drug-related fatalities were related to prescription and synthetic opioids (Figure 2).

FIGURE 2



(Source: CDC WONDER)

In 2021, 106,000 Americans died from drug overdoses involving any illicit or prescription drug, which is nearly 6.5 times the number of drug overdose deaths in 1999. During 2021, Maine's age-adjusted drug overdose death rate was 47.1 deaths per 100,000 people and total number of drug overdose deaths was 611.[2]

Maine has been hit particularly hard by the opioid epidemic; trends in fatal overdose deaths in the state mirror national trends and have increased dramatically since 2014. In 2021, Maine had the 10th highest rate of opioid-related overdose deaths in the nation despite being below the national average rate of prescribing opioids.[3][4] The introduction of COVID-19 has only exacerbated the problem; in 2021 there were 611 drug related deaths in Maine, a 21% increase from 2020, and most deaths were caused by opioids (83%).[5] This number only continues to rise with a staggering 10,573 overdoses reported in the

[2] National Center for Health Statistics. Drug Overdose Mortality by State. Center for Disease Control and Prevention. Updated March 1, 2022. Accessed March 28, 2023. https://www.cdc.gov/nchs/pressroom/sosmap/drug_poisoning_mortality/drug_poisoning.htm.

[3] Center for Disease Control and Prevention. Drug Overdose Mortality by State. Updated March 1, 2022. Accessed June 28, 2023. https://www.cdc.gov/nchs/pressroom/sosmap/drug_poisoning_mortality/drug_poisoning.htm

[4] Center for Disease Control and Prevention. United States Opioid Dispensing Maps. Updated September 22, 2022. Accessed June 28, 2023. https://www.cdc.gov/drugoverdose/rxrate-maps/state2020.html

[5] Sorg, M. (2021). Maine Drug Death Report for 2020. Retrieved June 28, 2023 from: file:///C:/Users/m.lindsey.smith/AppData/Local/Temp/2020_Annual_ME_Drug_Death_Rpt-Final-508.pdf.

state in 2022, 715 of which were fatal. This represents the highest rate of recorded overdose deaths in the state's history—which can largely be attributed to fentanyl.[6]

While fatal overdoses continue to rise nationally and in the state of Maine, the non-fatal overdose rates for all opioids and heroin have decreased both nationally and in the state of Maine. Maine has experienced a decrease in all opioid related overdoses between 2022 and 2023 (-8%), but the change was not significant.[7] As of 2023, non-fatal overdoses attributed to heroin have decreased significantly from the previous year both nationally (-33%) and in Maine (-52%).[7] It is important to note that information on non-fatal overdoses is limited due to incomplete/missing data, change in reporting, updates over time, suspected overdoses, unreported/undercounted overdoses, and visits that are not mutually exclusive. Reductions in non-fatal overdose occurring simultaneously with increases in fatal overdoses are most likely driven by the increased hazards of synthetic opioids in the drug supply leading to higher rates of opioid related morbidity.

Living in high stress situations with limited access to healthcare makes individuals who are experiencing homelessness (IWAEH) particularly vulnerable to both opioid use disorder (OUD) and opioid overdoses. For example, in a recent study in Massachusetts, researchers found that fatal overdoses are 9 times more likely among IWAEH when compared to those in stable housing. The majority of these overdose deaths among IWAEH (81%) were caused by opioids, which is significantly higher than the national rate of 61%.[7] Moreover, a recent large cohort study of IWAEH in Boston found that drug overdoses accounted for 1 in 4 deaths, with synthetic opioid and polysubstance being the primary contributors to mortality in recent years.[8]

Until recently, data on fatal overdoses among IWAEH was not available in Maine however, recently available data on overdoses among IWAEH in Maine indicates they are at high risk for substance related morbidity and mortality. In 2022, 37% of the fatal overdoses in the state were among individuals with a prior history of overdose and 11% of them were among individuals whose housing status was recorded as undomiciled/transient housing status. Rates of fatal overdoses among IWAEH in Maine are most likely much higher as the state is still in the process of implementing systems to enhance data monitoring and tracking of demographic and social determinate key factors associated with overdoses in the state.

These studies as well as recently available data on rates of overdoses among IWAEH in Maine, point to the importance of increasing access to comprehensive evidence-based programming including harm reduction, treatment, case management, and ongoing recovery supports to meet the multifaceted needs of this highly vulnerable population. Homelessness and a lack of reliable housing is often a barrier to achieving stability for individuals who are experiencing homelessness with an OUD. To meet the complex needs of IWAEH with OUD, the Department of Health and Human Services funded a pilot program in 2021, the Homeless Opioid User Service Engagement (HOUSE) Program. The services resulting from this pilot are intended to provide comprehensive treatment, case management, housing services and peer

[6] Sorg, MH, Soucier, DS, Leidenfrost, A (2022). Maine Monthly Overdose Report. Retrieved June 28, 2023 from: https://mainedrugdata.org/wp-content/uploads/2023/01/2022-12-ME_Monthly_OD_Report_final.pdf

[7] Poe B and Boyer A. Addressing the Opioid Epidemic: How the Opioid Crisis Affects Homeless Populations. National Health Care for the Homeless Council. 2017; (August). https://nhchc.org/wp-content/uploads/2019/08/nhchc-opioid-fact-sheet-august-2017.pdf. Accessed March 18, 2022.

[8] Fine DR, Dickins KA, Adams LD, et al. Drug Overdose Mortality Among People Experiencing Homelessness, 2003 to 2018. JAMA Netw Open. 2022;5(1):e2142676. doi:10.1001/jamanetworkopen.2021.42676.

support in an effort to support long-term recovery and reduced opioid related morbidity and mortality among IWAEH with OUD.

HOUSE Program Overview

Portland is the largest city in the state of Maine with a population of 68,408, and it serves an immediate geographic area of approximately 250,000 residents (U.S. Census, 2020). The city is situated in Cumberland County, which has a population of 307,451as of July 1, 2022. In 2022, there were more than 2,000 drug overdoses in Cumberland County, 130 of which were fatal.[9] Portland residents account for less than 25% of Cumberland County residents, but represent approximately 31% of uninsured people and 54% of opioid-related overdose deaths. A primary focus of our substance use outreach, the Bayside neighborhood census tract, is one of the most diverse and impoverished neighborhoods in Maine: poverty rate of 47.3% vs. Portland's 19.7%; non-white population of 24.4% vs. Portland's 8.4%; unemployment rate of 18.9% vs. Portland's 4.7%; and income of only 41% of the city's median income. Bayside is a Designated Health Professional Shortage Area for those experiencing homelessness. Greater Portland Health's Homeless site is located the Bayside neighborhood and aims to provide a spectrum of patient-focused services. **Of the 10% of fatal overdoses in the state in 2023 that were able to be attributed to an IWAEH, the majority (38%) of those occurred in Cumberland County- the target service area for the HOUSE Program.[10]**

Given the high rates of overdoses in the Bayside area as well as the shortage of providers and services to meet the complex medical and social determinant of health (SDOH) needs of IWAEH, with funds from the State of Maine, Greater Portland Health and Preble Street collaborated to implement the HOUSE Program. The HOUSE Program was implemented in the Greater Portland metropolitan area with a specific focus on expanding the continuum of care at Greater Portland Health's Bayside Homeless site to include comprehensive SUD treatment, case management and housing services to IWAEH. As part of the HOUSE Program, clinicians at Greater Portland Health provide clients with low-barrier Medication Assisted Treatment (MAT), while staff at Preble Street provide casework support and rapid housing assistance to individuals who have been identified as being at high risk of overdose, are experiencing homelessness, and are diagnosed with an OUD.

HOUSE Program Objectives and Outcomes

The ultimate goal of the HOUSE Program was to assist IWAEH with attaining and sustaining recovery using the Substance Abuse and Mental Health Services Administration working definition of "a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential".[10] For IWAEH with OUD, this process can be lengthy and require setting realistic, achievable outcomes, while offering all the support and resources necessary for each individual to progress in self-direction toward personal short and long-term goals. For this population, ensuring access, assertive outreach and harm reduction psychotherapy is key to engagement and progress toward stability and recovery. The short-term goal of the HOUSE Program was to help high risk vulnerable individuals with OUD reach stabilization so that they are in turn eligible for other treatment and recovery services in the community. Program objectives included:

---

[9] Sorg, MH, Soucier, DS, Leidenfrost, A (2022). Maine Monthly Overdose Report. Retrieved June 28, 2023 from: https://mainedrugdata.org/wp-content/uploads/2023/01/2022-12-ME_Monthly_OD_Report_final.pdf

[10] Substance Abuse and Mental Health Services Administration (2014). Recovery: National and Regional Resources: Region VIII. Retrieved from: https://www.samhsa.gov/sites/default/files/samhsa-recovery-5-6-14.pdf.

- ❖ minimizing risk of opiate poisoning in a highly vulnerable population, IWAEH with OUD, by providing low barrier, patient-focused access to HOUSE Program services;
- ❖ providing a safe learning environment where IWAEH with OUD could identify individualized short and long terms goals and develop new skills and tools for healthy living; and
- ❖ connecting IWAEH with OUD with the recovery community and its associated resources.

In addition, the program aimed to use the Housing Assistance Fund to provide up to 40 individuals, who are among the most vulnerable and unstable in Maine, with rapid access to low-barrier treatment and stable housing to support their recovery.

Program Evaluation

Overview

The primary goals of the HOUSE Program evaluation were to: (1) document implementation strategies and identify barriers and facilitators to implementation; (2) evaluate the efficacy of the intervention strategies at increasing access to harm reduction, treatment and recovery supports for IWAEH with OUD; (3) examine the impact of housing liaison services and Assistance Funds on housing stability among IWAEH with OUD; (4) assess the cost effectiveness and return on investment of the intervention strategies and (5) examine the impact of the intervention strategies on participant engagement and outcomes.

The HOUSE Program evaluation used a convergent mixed-methods design which involved the collection of multiple qualitative and quantitative data points over time which were analyzed, triangulated, and reported throughout the course of the project. To ensure we gained a robust and multi-dimensional understanding of the HOUSE Program, data collection efforts were designed to systematically examine the resources, activities, and processes affecting the implementation, adoption, and efficacy of the project. Key data sources for the HOUSE Program process and outcomes evaluation included: administrative and clinical data, client assessments, key stakeholder interviews, and survey data.

It is important to note that participation in the evaluation component of the HOUSE Program was voluntary; individuals were asked to provide written consent during the intake process for the program. Therefore, the in-depth participant level outcomes presented in this report are only based on data and feedback from individuals who consented to participate in the evaluation. This information is supplemented with broader programmatic outcomes from all participants using de-identified data made available to the evaluation team through administrative and program monitoring reports submitted as part of the grant reporting requirements.

Qualitative Data Collection

Key Stakeholder Interviews

Key stakeholder interviews were conducted with staff from Greater Portland Health and Preble Street including doctors, nurses, case managers, social workers, Directors, Project Coordinators, and counselors in years 1 and 2 of the grant. These interviews covered a broad range of topics and were designed to elicit more in-depth feedback on program implementation and progress (Appendix B). All interviews were conducted over Zoom and were transcribed verbatim for analysis. Evaluation staff conducted 9 interviews in year 1 and 5 interviews in year 2 (n=14).

Staff and Provider Feedback Survey

A brief survey was distributed to key project staff including case managers, housing liaisons, peer support specialists and medical staff to document program implementation and inform the process evaluation. Key domains included: key project milestones; modifications to implementation approach or program design; programmatic successes or challenges; and lessons learned (Appendix C). Surveys allowed HOUSE Program staff and providers to offer anonymous open-ended feedback about the program design, roll-out, and impact. Surveys were distributed through the online survey software Qualtrics and the evaluation team sent up to three multiple follow-up emails in an attempt to encourage feedback and improve response rates. Approximately five staff members from GPH and Preble Street involved with the implementation of the pilot project responded annually for a total of 9 survey responses over the project period.

Quantitative Data Collection

As described above, the evaluation component of the HOUSE Program was voluntary and clients needed to provide written consent to include their clinical and administrative data, including arrest and detention records, in the evaluation component of the project. Greater Portland Health and Preble Street served 44 clients ["client(s)"] over the duration of the HOUSE Pilot Program. Of those, 20 clients consented to participate in further in-depth research and evaluation of the HOUSE Program ["participant(s)"]. Nine clients refused (n=8) or revoked (n=1) their consent to participate. Overall, programmatic staff engaged 65% of HOUSE Program participants in the evaluation consent process and 47% of HOUSE clients were consented into the evaluation component of the project. The majority of the administrative and clinical data presented in this report is reflective of this subset of participants.

Administrative and Clinical Data

Greater Portland Health sent the evaluation team HOUSE Program participant files through a secure file transfer protocol. Participant files included intake forms, level of care and self-sufficiency matrix questionnaires, service plan documentation, case management notes, and Health Information Network records (HINs). Other program data included program quick service reports, program attestation records, GPRA (Government Performance Results Act) assessments, and performance measuring reports (PMR). Please note that PMRs and GPRA data include findings from all HOUSE clients, regardless of whether or not they consented to participate in the evaluation, because this data was de-identified administrative or programmatic reporting data made available to the evaluation team as part of routine grant reporting requirements.

Program Participant Survey

In year 2, evaluation staff conducted a survey of program participants to understand their satisfaction with the program and its services (Appendix A). The paper surveys were deployed by GPH administrative staff during in-office engagements. Restrictions on grant funds did not allow for the provision of incentives for participation in the survey so response rates were low; additional efforts were made to gather feedback from outreach efforts (n=4). The survey was anonymous and participation was voluntary.

Data Analysis

Descriptive Statistics

Quantitative data were analyzed using appropriate descriptive statistics including frequencies and means. Demographic and social determinant data was extracted from intake forms, questionnaires, and GPRA assessments. Data about housing over time was determined through analysis of case management notes. Other data about service engagement was extracted from quick services, attestation records, and HIN reports. GPRA and PMR data were de-identified and are analyzed and presented for all clients.

Cost Analysis

The purpose of the cost analysis was to assess the cost efficacy and return on investment of the HOUSE Program with clients who engage in services and housing. The first year of the grant, January to December 2021, will serve as the baseline. For the purposes of this study, baseline is defined as client costs associated with the first year of engagement in the program, as well as the frequency of hospital inpatient stays, emergency room visits and medical transports. From baseline, we measured changes in cost and service use, arrests, jail stays, and emergency department utilization over the course of the next 18 months, January 2022 through June 2023. This is a similar process which has been used in other evaluative measures to assess cost benefit effectiveness of social service interventions.[11]

The benefit of this methodology comes from the fact that clients in this program receive case support and medical services through providers associated with the grant. As such, data on social service visits, medical appointments, and hospitalizations will reside with these providers and are accessible through data agreements and Institutional Review Board approval for this project. Data on law enforcement contacts and jail nights were collected separately.

Qualitative Analyses

Qualitative data from key informant interviews and surveys were systematically coded to explore implementation process and the efficacy of the HOUSE Program's harm reduction, treatment and recovery activities. Qualitative data analysis was done iteratively to build a coding scheme for all textual data based on the grounded theory technique, in which codes are drawn from the text and coding involves frequent comparative analysis of the data.

All qualitative data files were reviewed by at least two members of the evaluation team and coding discrepancies were resolved through discussion and/or enhanced definition of codes.

[11] Osborne S, Harrison G, O'Malia A, Barnett AG, Carter HE, Graves N. Cohort study of a specialist social worker intervention on hospital use for patients at risk of long stay. BMJ Open. 2018 Dec 22;8(12):e023127. doi: 10.1136/bmjopen-2018-023127. PMID: 30580267; PMCID: PMC6307584.

Methodological Limitations

The goal of the HOUSE Program was to build existing treatment infrastructure at GPH and Preble Street to meet the needs of IWAEH with OUD as well as expand upon this structure to address pressing social needs, including housing, for this highly vulnerable and complex population. Systemic change does not occur quickly and, in this case, sustainability efforts are underway to continue the work of the Program. Therefore, all findings must be interpreted with sensitivity toward the scope of the attempted change in the system and its long-term potential beyond the project period. There are a number of methodological limitations of the HOUSE Program including:

FIGURE 3

Report Terminology: Clients vs. Participants

HOUSE **Clients** are all individuals served by the HOUSE Program

HOUSE Evaluation **Participants** are HOUSE clients who completed informed consent to participate in the evaluation.

Client data is reported on when evaluators received their information in de-identified or aggregated program administrative files, such as the GPRA and PMR.

- Delays in project start up due to administrative issues and COVID-19, the evaluation team was not able to start work until September of 2021. Therefore, evaluation activities did not occur simultaneously with project implementation as originally intended and some activities had to be modified to meet the condensed evaluation timeline.
- Changes to the evaluation timeline led to the evaluation using a more retrospective lens to examine program implementation in year one, which may have increased the misrepresentation of historical knowledge and events and decreased the pool of persons with day-one knowledge of the program. However, these methodological issues may be partially mitigated by adjustments to the program implementation timeline which also experienced delays.
- The evaluation only includes in-depth clinical and criminal justice information on individuals who consented to participate in the evaluation (See Figure 3). Consent to participate was originally intended to be obtained at intake but due administrative hurdles that delayed the implementation of the evaluation, consent needed to be obtained retroactively. While all attempts were made to obtain consent from the 44 individuals who had used services in the first year of the project, the HOUSE Coordinator and evaluation team were unable to able to engage 35% of HOUSE clients in the evaluation consent process due to program attrition at the time of the implementation of the retroactive consent process.
- This evaluation relies heavily on administrative and clinical data derived from screening tools, electronic medical records, case management notes and Maine's Health Information Exchange. Not all the administrative and clinical data available for this evaluation is ideal. Many of the program participants had missing or incomplete data on key performance measures of interest.
- GPRA assessments were not administered using the standardized GPRA protocol due to administrative confusion on programmatic data collection requirements and contracting delays. As a result, intake data for clients was collected after they had been engaged in program services, such as case management, for a month or more. Therefore, our use of GPRA data was limited and reflects change overtime among clients rather than change from program baseline.
- Grant spending restrictions did not allow for the provision of incentives to HOUSE Program participants for feedback via surveys, interviews or focus groups so information on satisfaction with services and programmatic impacts from HOUSE Program participants is limited.
- HealthInfoNet records used to analyze engagement with other healthcare services may not comprise all contacts with Emergency Medical Services (EMS) and hospitals. Records are unavailable for EMS agencies and hospitals that do not participate in HealthInfoNet data repository program which is voluntary. Data in the HealthInfoNet system goes through a quality assurance process creating a lag time between submission and availability; only records that

were accessible for review during the evaluation period were included in the analysis. It is also important to note that individuals can opt out of having their data shared within the HealthInfoNet system; only 6 of 20 participants had no records available in the system. It is not possible for us to determine if these individuals did not utilize any hospital or EMS services or if they opted out from data sharing with HealthInfoNet.

- ❖ All the data derived from qualitative interviews are subject to the standard interview limitations and biases.

The information presented in this report should be interpreted within the context of these limitations.

Program Implementation

Implementation Successes and Challenges

Successes

Feedback from HOUSE Program staff and providers indicates that while there were challenges with program implementation throughout the grant period, particularly in the first year of the project, the program has had several successes in improving access to care and resources for their clients. Some key stakeholders who provided feedback through interviews and/or surveys agreed that the implementation of the HOUSE Program largely went according to the outlined plan, highlighting the benefits of partner collaboration which were supported by the accessibility and close physical proximity of Greater Portland Health staff. While COVID-19 presented some challenges, key stakeholders discussed ways in which the COVID-19 pandemic bolstered the implementation of the HOUSE Program, such as increasing the number of resources available to clients and enhancing their awareness of and collaboration with partnering organizations (including Preble Street case managers). Key informants also shared that they became more comfortable working with individuals with polysubstance use and expressed the importance of flexibility and patient-focused approaches when working with their clients to adapt to their specific care needs.

> *"This program facilitates communication between an outside case manager and the medical and mental health team. With the funding of those regular meetings, sessions, and protected time for the providers to attend those, I think it catalyzed any sort of progress that the patient was making and allowed everybody just to be on the same page."*
>
> - Key Informant Interviewee

In addition to improved partner collaboration, key informants also discussed connecting clients with harm reduction services, providing intensive case management and outreach and helping clients achieve housing stability as some of the key successes resalted to the program's implementation.

Challenges

Key informants widely reported challenges in program implementation which led to delays in project start-up and service delivery. Key informants reported that they were unable to access any of the funding from the program during the first several months of the grant due to delays in finalizing and approving the contract. Project partners were implementing the program without an active agreement and as such were not able to access resources until the appropriate agreements were in place. In addition, key informants largely experienced challenges with grant-related administrative paperwork and reporting requirements which were, at times, unclear, and often took away from the time that HOUSE Program staff could have been spending with clients. Key informants also reported a lack of clarity regarding the inspection requirement for accessing Maine State Housing funds which could have been avoided with further clarification up front at the start of the grant. Several key informants felt it would have been helpful for the state to train administrative and clinical staff on necessary grant details, offering instructions on implementing the grant prior to program start up, as this was a complicated project with time-consuming administrative and reporting requirements.

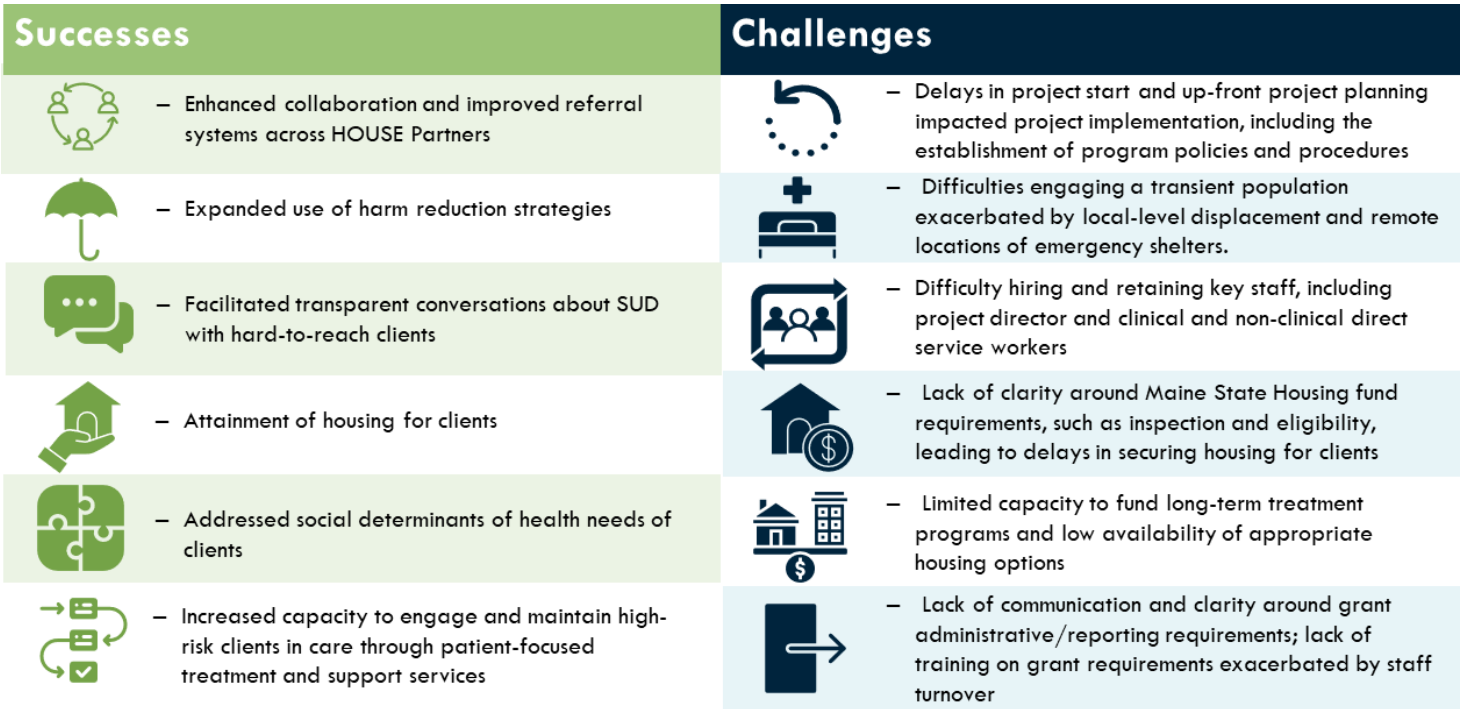
In addition to administrative challenges, the most frequently cited challenge to program implementation was a lack of up-front planning and oversight. This lack of planning led to confusion regarding the client enrollment process: how to identify clients, determining which program they should

enroll into, how to enroll them, and how long they should be enrolled. This posed challenges to staff as they were planning and implementing the program simultaneously. This was further exacerbated by staff shortages and turnover, most often without transition of knowledge, which imposed an increased burden on clinical and programmatic staff as they trained each other "on the fly" on tracking client engagement and outcomes data. Interviewees felt the repercussions of these staffing shortages filtered down to the patients.

> *"In retrospect, pausing on bringing clients to get [program infrastructure] in place … is critical instead of building the plane while you're flying it-- because otherwise you're constantly building the plane throughout the course of the grant instead of getting those things in place."*
>
> - Key Informant Interviewee

For some, these implementation challenges were further compounded by a general unwillingness among HOUSE clients to meet with social workers, particularly in the initial stages of the program when the COVID-19 pandemic restrictions were in place. Many participants shared that the isolating nature of the pandemic had a negative impact on the implementation of the HOUSE Program, as it made clients harder to reach when in-person visits and group counseling halted. Also, telehealth was not always an option because clients often did not have access to phones or other means of communication, making it difficult to aid the people who need it the most. Further, participants speculated that the COVID-19 pandemic may have been the cause of the initial delay of the HOUSE Program with staff being diverted elsewhere to focus on vaccination efforts while simultaneously creating more rapid staff turnover.

FIGURE 4: SUCCESSES AND CHALLENGES OF THE HOUSE PROGRAM AS REPORTED BY KEY INFORMANTS



Access to Care and Care Integration

Successes

Key informants reported that the HOUSE Program has expanded access to MAT for unsheltered individuals, noting successes with building connections in the community and opening conversations regarding substance use. The HOUSE Program's increased transparency surrounding substance use and the resources available reportedly made it easier for clients to access MAT. Participants shared that the program has helped build connections with both clients and other organizations in the area: improved client relationships help to ensure individuals received the best pathway to treatment, while improved interorganizational relationships expand the availability of those services as well as the funding needed to support unsheltered individuals and promote patient retention. Interorganizational collaboration improvements were described as improving access to MAT in a few different ways, including:

> *"I think one of the biggest takeaways of HOUSE is there's a large portion of folks in Bayside now that use substances that don't feel stigmatized, that feel held and cared for by this community and are on a different trajectory. That impact has been huge on this community and the folks that we've helped. It's been an amazing shift."*
>
> - Key Informant Interviewee

- improved partner organization's ability to work more closely together to determine which clients were appropriate for the program's level of care;
- enhanced partner organization's MAT philosophy with an increased emphasis on patient-focused approaches to care;
- expanded the ability to provide warm handoffs between providers and organization; and
- Increased the ability of HOUSE Program staff and providers to identify and navigate different ways to get clients access to treatment and support services.

Interviewees reported improvements in care integration which led to enhanced therapeutic relationships between providers and/or staff and clients; care integration and coordination was facilitated by warm handoffs and a new-found ease of accessing services. Interviewees noted the program is continuing to bring in new X-waivered providers and can provide more intensive case management as well as patient outreach in conjunction with services provided by Greater Portland Health.

A key success of the program highlighted by key informants was facilitating secure housing for 70% of clients at recovery residences, group homes, and independent housing.

Challenges

Key informants commonly discussed the daily dosing requirement as a barrier to accessing care since reliable transportation can be a challenge for their clients. Further, medication adherence overall was sometimes restrictive in that not only did the grant require participants to use MAT, but only one type of MAT was allowed. Therefore, if a client wanted to switch to a medication that works better for them or if they wanted to get off MAT altogether, they would lose access to all the other benefits of the program. This challenge was commonly discussed for clients seeking housing assistance, case management, and counseling—services they wanted and would greatly benefit from, but at the expense of forfeiting their medical autonomy to abide by the medication adherence requirement of the grant. To remedy this, key informants suggested a program based on diagnosis rather than medication adherence.

Stakeholder Recommendations for Improving Services for IWAEH with OUD

HOUSE Program staff and providers offered several recommended areas of focus for continuing to improve access to care and care integration for IWAEH with OUD. Key recommendations include implementing strategies that focus on increased reimbursement and access to behavior health services, enhanced staffing capacity including increasing the use of case managers and community health workers, as well as the expansion of services to support social determinants of health during treatment and throughout the recovery process. They also discussed the need for a housing liaison/navigator- a dedicated individual whose sole function is to facilitate the housing process and engage with landlords.

> *"Our patients are hard to reach, and they have chaotic lives. I mean, that's who we're targeting - so it's appropriate that we had trouble doing it because it meant that we were going for the right people. We weren't trying to get the easy fruit. It's going out, connecting with them, building relationships, having them come in and being flexible as they're getting onto the program … building in habits that are sustainable and really patient-centered."*
>
> - Key Informant Interviewee

Key informants shared their ideas for programmatic enhancements to improve access to care for IWAEH with OUD-- largely the need to increase housing options overall and to enhance community outreach to raise the visibility of information on available resources and how to access them as well as promote harm reduction, treatment engagement, and retention. Additionally, clients could benefit from a skills-based training component of the program which teaches them how to complete more common tasks such as budgeting, laundry, or grocery shopping.

FIGURE 5

Recommendations for Improving Access and Care Integration for Individuals who are Experiencing Homelessness with OUD

Access and Capacity

- Expanded access to behavioral health services
- More case management services
- Expand the use of community health workers
- Increase access to long-term treatment programs
- Expand provision of MAT in primary care to include methadone

Support in the Community

- Continued education of the community, employers, and landlords
- Enhance transportation options
- Increase housing resources (independent housing, supporting housing, sober housing for people on MAT)

Patient-Centered Care

- Expand the use of trauma-informed care
- Expand harm reduction strategies and approaches
- Implement more holistic approaches to patient care

HOUSE Participant Overview, Engagement & Outcomes

Participant Overview

Demographics

The HOUSE Program served 44 clients over the two-year project. Of those, 20 clients consented to participate in the HOUSE project's evaluation ["participant(s)"]. 9 clients refused or revoked consent to participate in the evaluation.

The project's participants were primarily between the ages of 35-44 years old, with a mean age of 40 years old at the time of their consent to participate in the evaluation (Figure 6). Seventy-five percent of the study participants were male (Figure 7) and all of the program participants reported that their primary race was white.

FIGURE 6

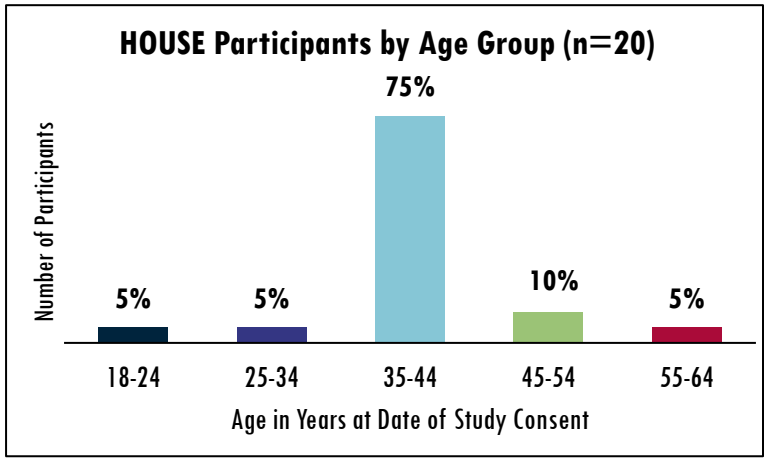
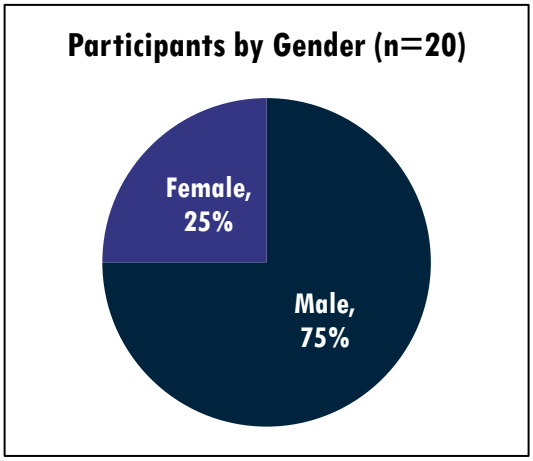


FIGURE 7



Substance Use

The program's design was intended to comprehensively address participants' opioid use and housing problems. Intake workflows assessed other related substance use factors. As collected by the intake assessment, 38% reported having an alcohol problem, and 35% reported problematic drug and alcohol use in combination. This data was supported by the data collected from participants levels of care questionnaire collected at intake, indicating that 35% were using alcohol, 76% were using stimulants, 24% were using benzodiazepines, and 53% were using marijuana (n=17).

Treatment History

In order to assess the client's appropriateness for participation in the HOUSE Program, the level of care questionnaire also included questions about the clients' prior engagement with medication-assisted treatment and its success. Ninety-four percent of HOUSE Program participants reported previous experience with MAT (n=17). Among them, 93% of respondents reported that they had success with their prior MAT experience (n=14).

Social Determinants

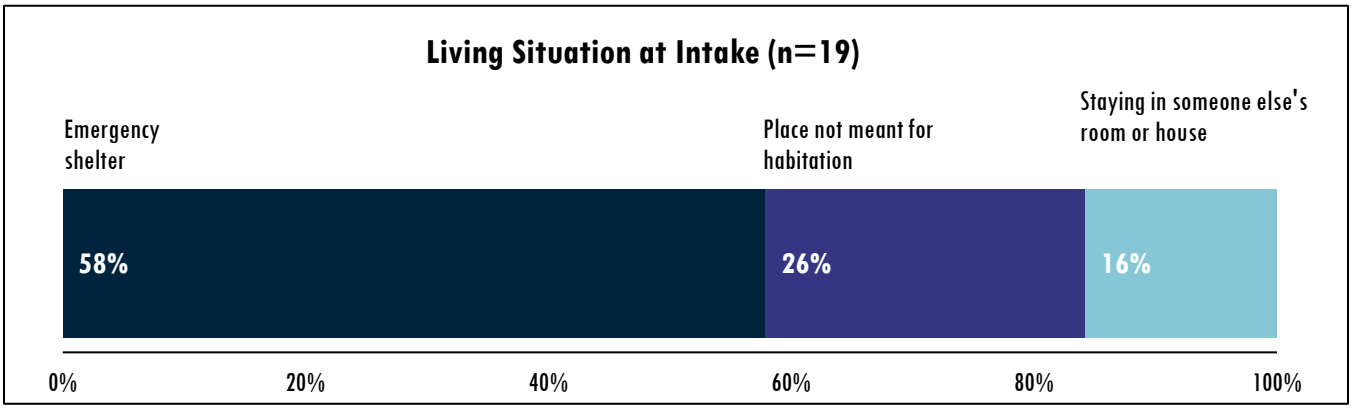
Housing Status

The HOUSE Program was designed to serve IWAEH, which includes several different living situations that participants self-reported at intake. As shown in Figure 8, over half of participants reported that the last place they had stayed at intake was an emergency shelter (58%).

About a quarter reported staying in a place not meant for habitation, including living out of a vehicle or campsite. Three participants reported that they were staying with friends or "couch surfing". Slightly less than half of participants reported that they had been in this living situation between 3 months and a year (44%). Further, 33% of participants had been in their self-reported living situation for over a year.

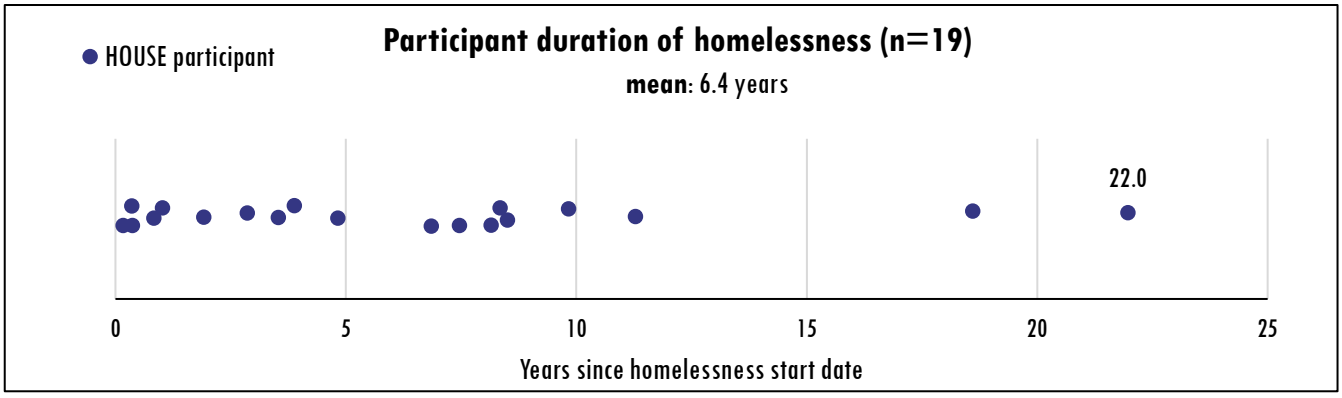
Regardless of how participants described their living situation at intake, 90% of participants described sleeping on the streets, in emergency shelters, or in shelter housing over 4 times in the past three years.

FIGURE 8



Participants were also asked the approximate date that their homelessness began. This distribution is shown in Figure 9. The mean length of time that participants had experienced homelessness was 6.4 years. Excluding the two participants who had experienced homelessness for a length of time greater than 15 years, the mean duration of homelessness was 4.7 years and 68% of the participants had been homeless for more than 2 years.

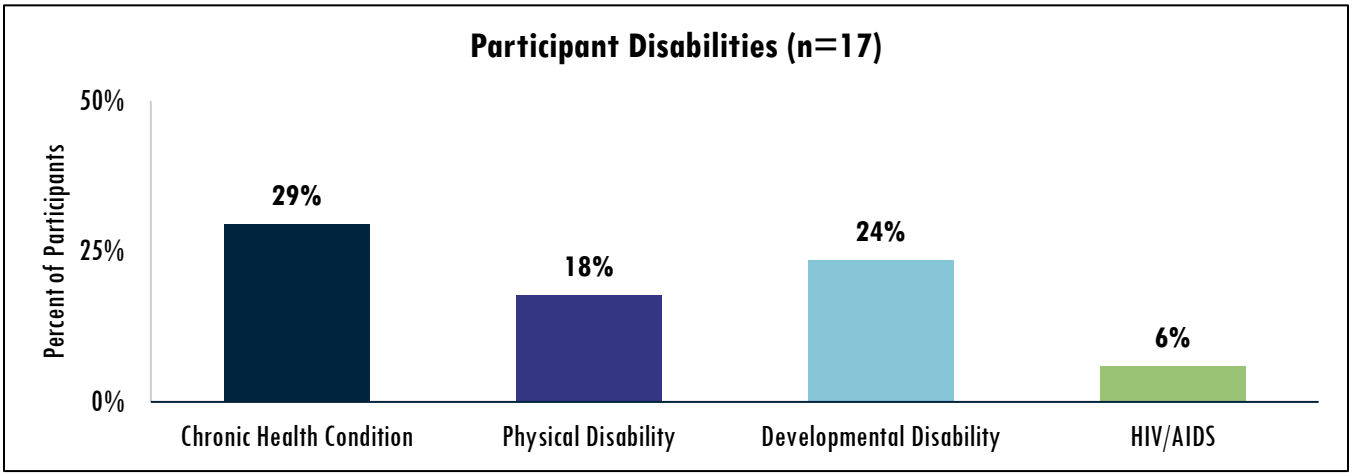
FIGURE 9



Disability and Co-Occurring Conditions

The HOUSE intake assessment collected data about participants' self-reported disabilities. As shown in Figure 10, many participants reported not having a chronic health condition, physical, or developmental disability. If they did self-report a disability, participants most commonly reported that they had a chronic health condition. Further, on the level of care assessment, 88% reported that they had been diagnosed with a psychiatric condition and 44% had unmet pain needs.

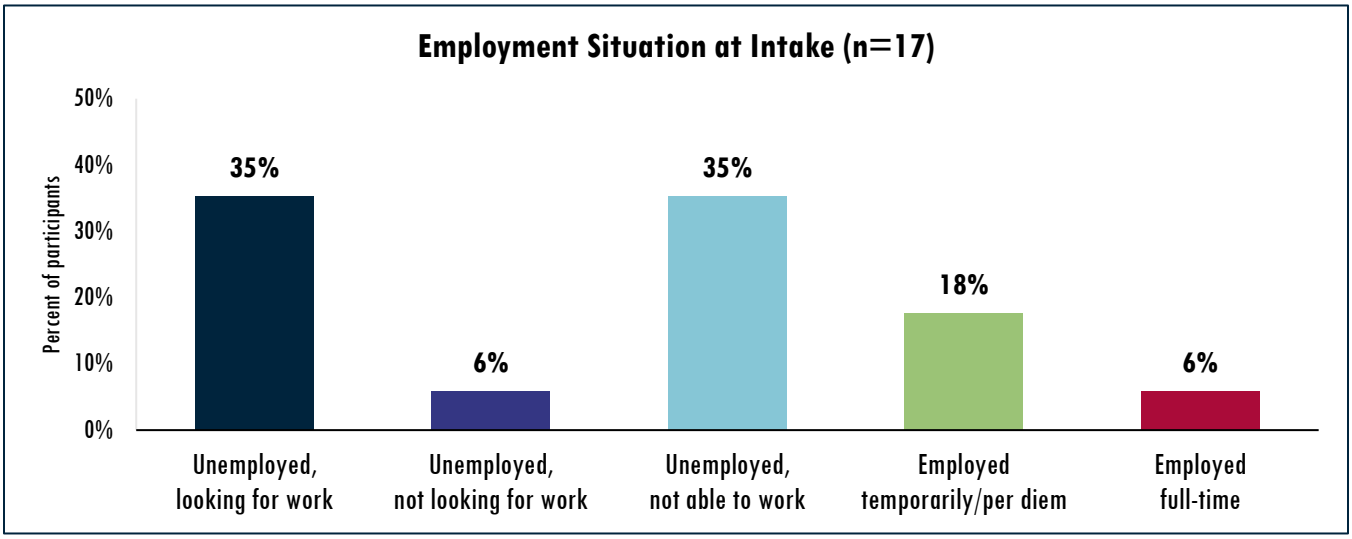
FIGURE 10



Employment Status

At intake assessment, participants were asked about their employment situation. Over three-quarters of the participants for whom this data was complete were unemployed at intake (Figure 11). The unemployed participants most often self-reported that they were looking for work or that they were unable to work. Three participants (18%) were employed temporarily or performed day labor. One participant (6%) reported being employed full-time.

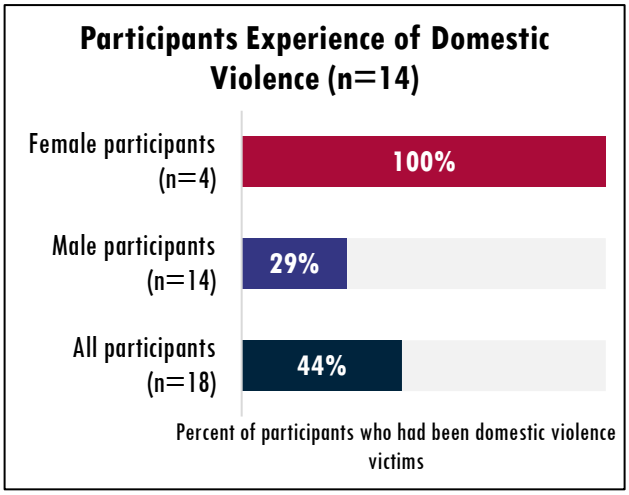
FIGURE 11



Domestic Violence

At intake, participants were asked a series of questions about their historical experience with domestic violence. Among the participants for whom this data is available (Figure 12), 44% reported that they had been victims of domestic violence. Notably, all of the women who participated in the HOUSE Program reported that they had been victims of domestic violence at some point in their lifetime. Among the participants who were victims of domestic violence (n=8), the majority had experienced it over a year before program intake. None of the participants reported currently being the victim or fleeing from domestic violence. Prevalence of domestic violence among study participants is consistent with national findings of domestic violence as a major risk factor for housing insecurity.[12]

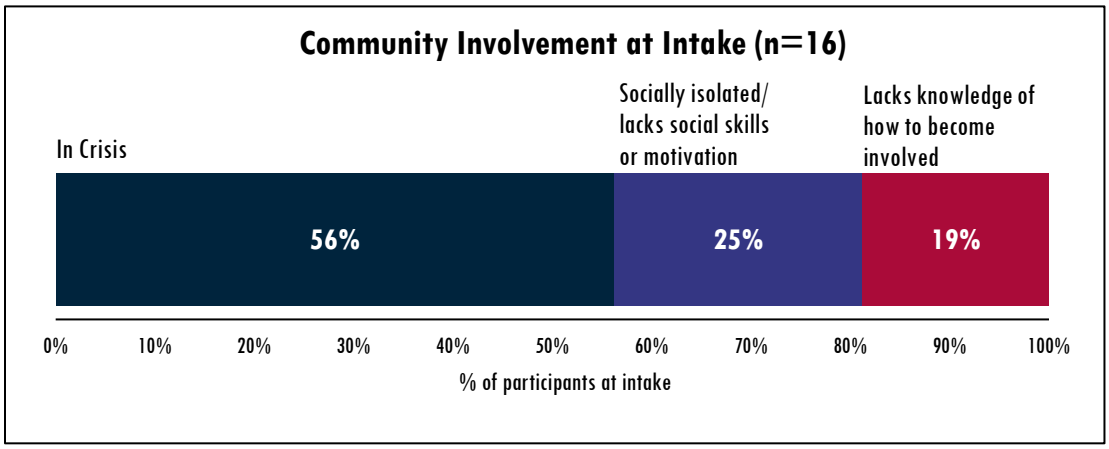
FIGURE 12



Social Connectedness and Community Engagement

At intake, staff administered the self-sufficiency matrix to participants. Overall, data collected from the self-sufficiency matrices at intake indicates that participants typically had under-resourced and limited support networks and community involvement.

FIGURE 13

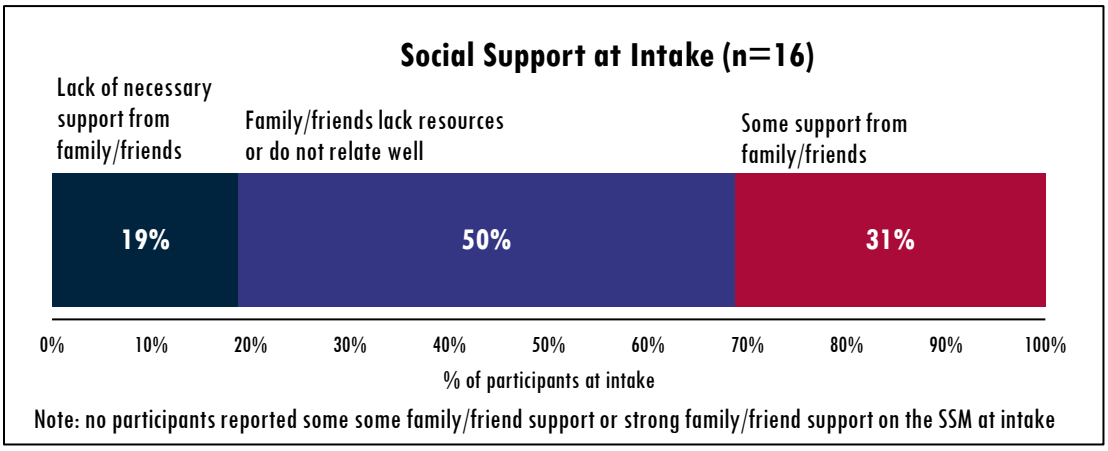


No program participants reported having some or currently active community involvement on the self-sufficiency matrix at intake. The majority of participants (56%) reported not having any community involvement due to being in crisis or "survival mode" (Figure 13). Further, half reported that their family

[12] Baker CK, Billhardt KA, Warren J, Rollins C, Glass NE. Domestic violence, housing instability, and homelessness: A review of housing policies and program practices for meeting the needs of survivors. *Aggression and Violent Behavior.* 2010;15:430-439.

or friends lacked the ability or resources to help them and that their family members did not relate well with one another (Figure 14).

FIGURE 14

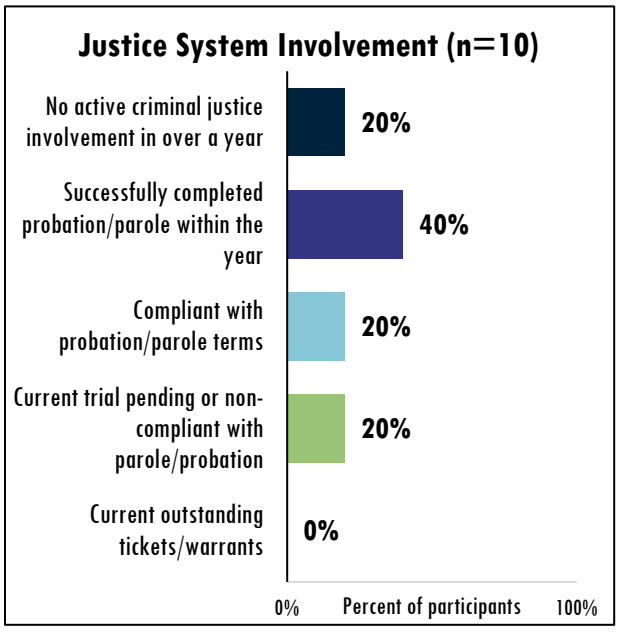


The level of care forms also captured information about participants' relationships. Over half (59%) of program participants reported that they had a supportive friend or family member in their lives. Additionally, if they reported a partner (n=11), 64% indicated that their partner did not use drugs or alcohol.

Crime and Justice System Involvement

Information about the participants' involvement with the criminal justice system was collected by several different assessment tools during the intake process. Please note that GPRA data include finding from all HOUSE clients, regardless of whether they consented to participate in the evaluation because this data was de-identified administrative or programmatic reporting data made available to the evaluation team as part of routine grant reporting requirements.

FIGURE 15



As a part of the level of care questionnaire, 25% of participants (n=16) indicated they had current legal troubles. One participant reported they had been convicted of drug trafficking charges, and 2 participants reported they were currently on probation. More detailed data was collected from participants at intake on the self-sufficiency matrix. While none of the participants reported that they currently had outstanding tickets or warrants, 40% had a trial pending or were on probation or parole (Figure 15).

Intake GPRA assessments also inform level of criminal justice involvement among clients. Only one of the twenty-six clients reported they had been arrested in the 30 days prior to their first GPRA assessment. Additionally, 24% were awaiting trial and 12% were on parole or probation (n=25). However, only 20% reported that they had not committed any crimes in the 30 days prior to the assessment.

Service Engagement

Initiation and active engagement among consented HOUSE participants according to attestation records is shown in Figure 16 and Figure 17. There are records of engagement with case management before initial attestation records in July of 2021.

FIGURE 16

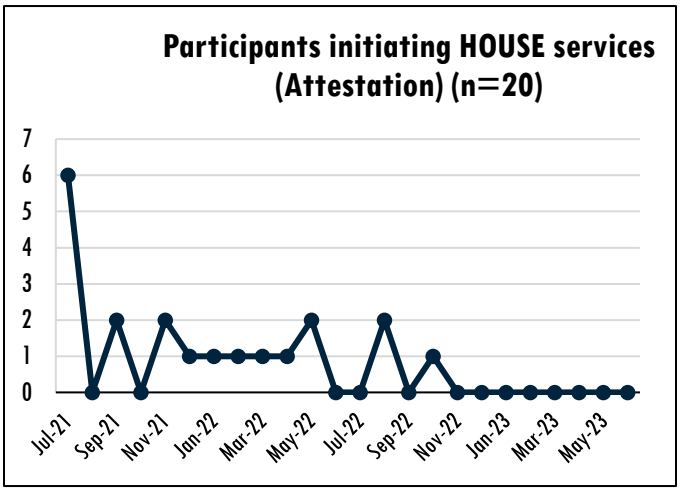
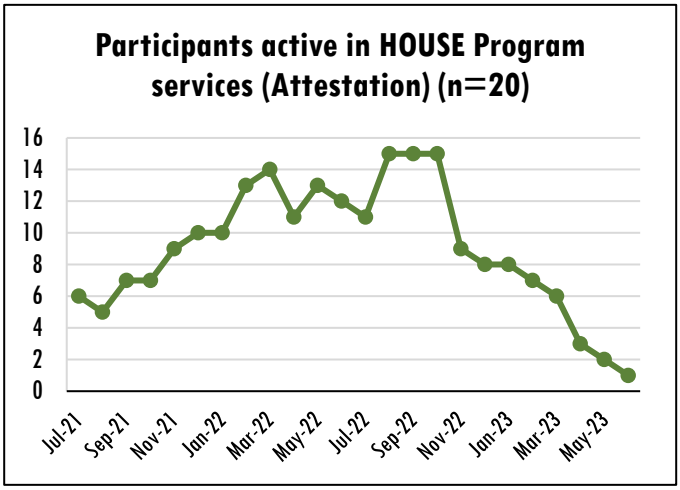
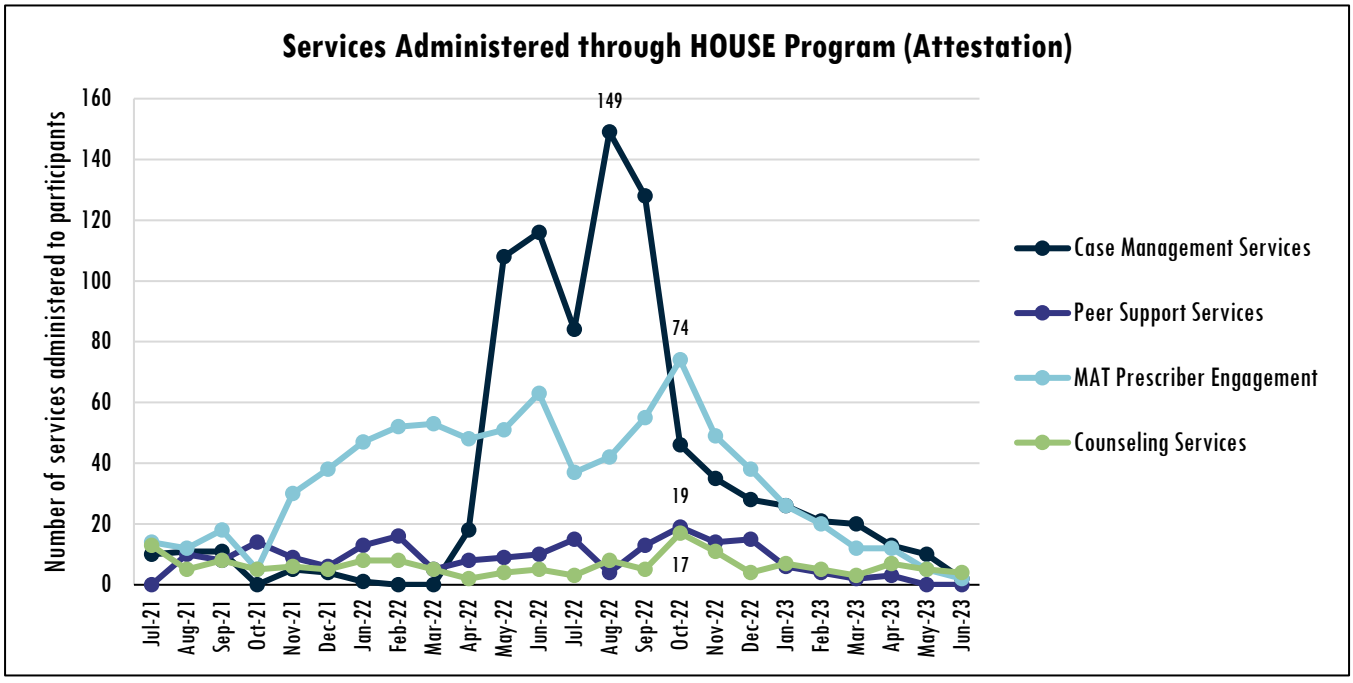


FIGURE 17



According to the attestation, while program initiation was greatest in July 2021 at the beginning of the contracting period, initiation stabilized from November 2021 to May 2022. The greatest number of total participants were active in August through October of 2022, in which 15 participants were engaged with at least one service administered through the HOUSE Program.

FIGURE 18



The HOUSE Program provided a continuum of services to participants including MAT for OUD, intensive case management, behavioral health counseling and peer support services.

Shown in Figure 18, all services were limited from July to October 2021, largely due to administrative issues. Engagements with MAT prescribers as a part of the HOUSE Program began to rise in November of 2021, and case management contacts rose sharply in May 2022. The use of case management services were markedly higher than all other services during Summer 2022. Engagement with counseling services and peer support services was stable but lower than other services provided through the HOUSE Program.

Case Management

There was a total of 834 case management contacts attributed to participants in the HOUSE Program. The total number of contacts was highest from May to October of 2022; the highest number of monthly contacts was 149 in August 2022, when there were 15 participants active in the HOUSE Program.

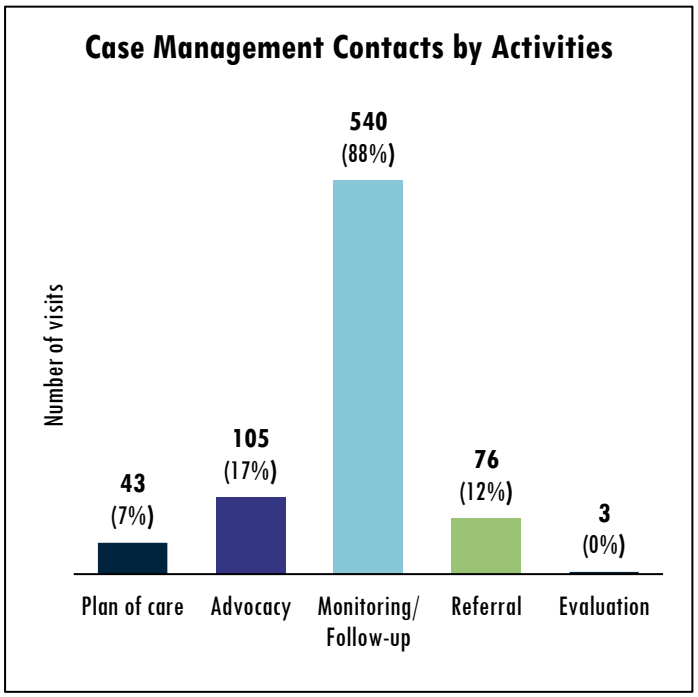
The average number of monthly contacts with case management for active HOUSE participants was 3.5 over the duration of the program. The mean monthly number was consistently greater than 1.5 contacts from April 2022 to the end of the program. This average number of case management contacts was greatest in August 2022 with 9.9 engagements.

With available HOUSE Program case management notes, evaluators reviewed makeup of case management contacts in regard to contact length, activities, and service areas for participants.

Based on the 656 case management notes included in the analysis, 65% of all case management contacts were approximately 30 minutes or less. However, 9% of case management contacts were approximately 90 minutes or greater. The mean length of case management contacts among HOUSE Program participants was about 38 minutes.

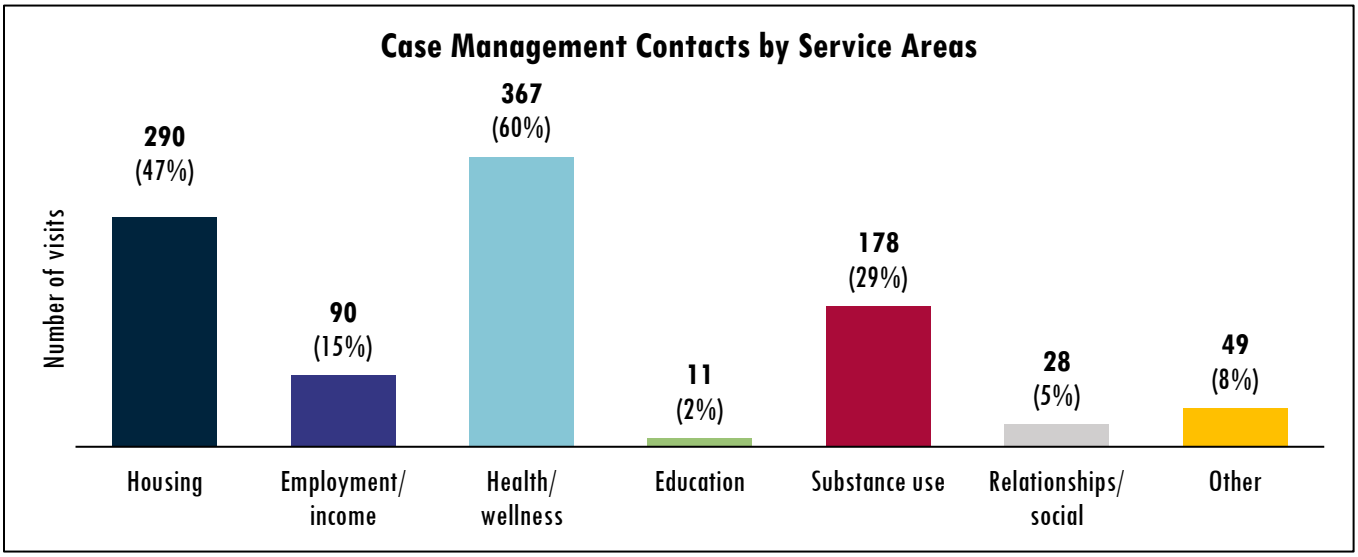
Five categories of case management activities were captured by notes: evaluation, referral, monitoring/follow-up, advocacy, and/or plan of care activities (Figure 19). Several activities could be documented for one case management contact. Monitoring/follow-up for participants was overwhelmingly the most common type of activity, documented in 88% of case management notes. Advocacy was the second most common, in which a case manager conducted advocacy on a participant's behalf, documented on 17% of notes.

FIGURE 19



Similarly, case management contacts could also cover several topical "service areas" based on documentation (Figure 20). The most common among these was health and wellness (367 contacts; 60%), followed by housing (290 contacts; 47%). Substance use was documented as a service area for 29% of contacts. Employment/income, education, and relationships were less common service areas for case management contacts, documented on less than 15% of case management notes.

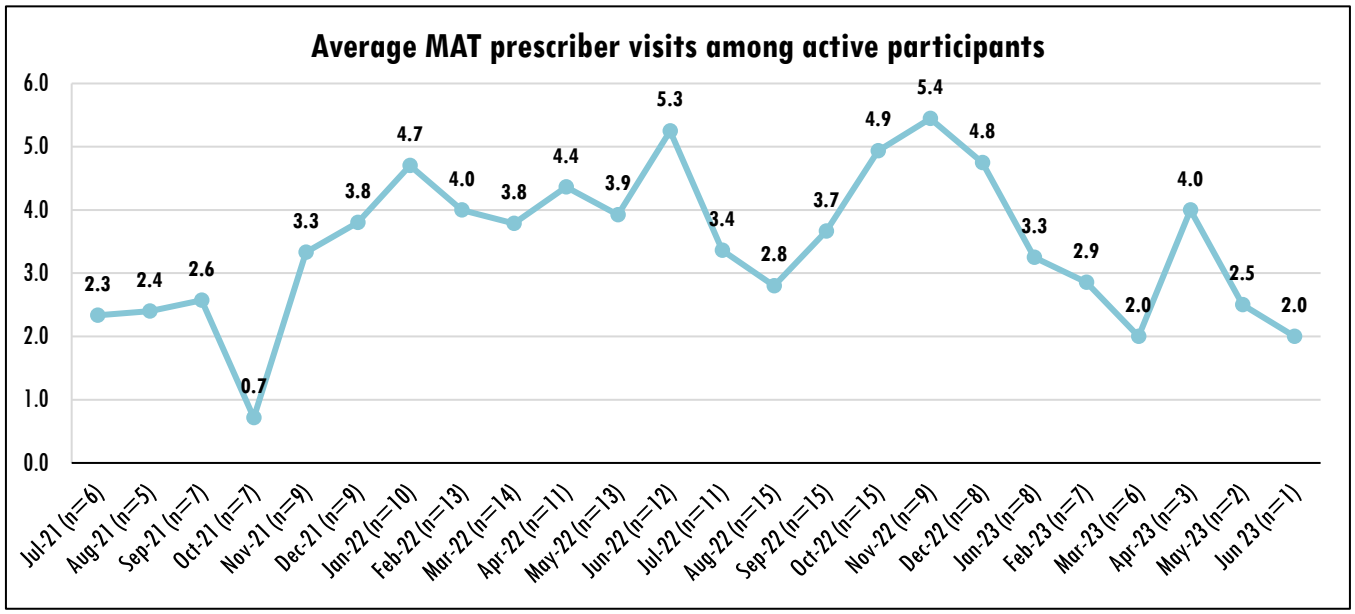
FIGURE 20



Medication-Assisted Treatment

MAT prescriber visits administered through the HOUSE Program by GPH began to rise sharply in November 2021 and consistently remained above 30 visits until a steady decline in 2023. The greatest number of visits was 74 in October 2022 (Figure 18). Not shown, from June 2022 to April 2023, 100% of active HOUSE participants had at least one monthly visit with their MAT prescriber.

FIGURE 21



The average number of monthly visits with GPH MAT prescribers per active HOUSE participants was consistently equal to or greater than 2 visits, except for in October 2021 (Figure 21). In all months of 2022, the mean number of monthly visits was at least 2.8. This number peaked in November 2022 with 5.4 average monthly visits. The average number of monthly engagements with the program MAT prescriber over the program was 3.4 among active clients, indicating near-weekly average visits with a prescriber.

Program Expenditures

The HOUSE Program made funds available to support clients in several different ways. The client assistance fund (CAF) provided funds to support client well-being, and the housing fund supported costs associated with gaining housing.

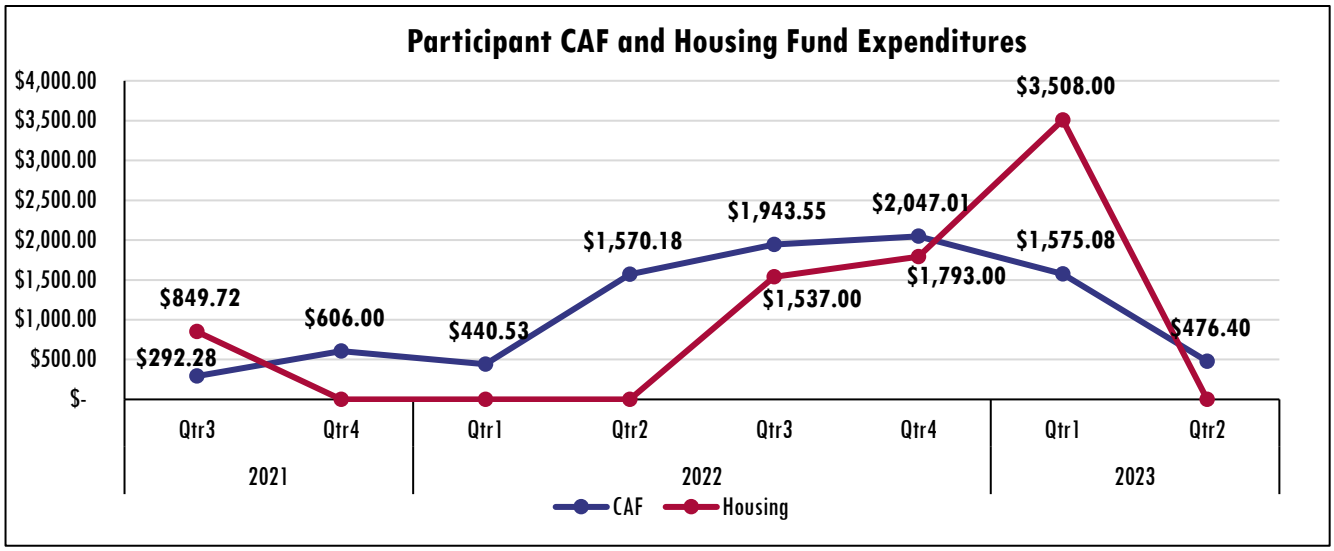
The mean monthly CAF expense per active participant was $42.20. The HOUSE Program spent a total of $8,954 in CAF funds on 295 purchases over the course of the program; the average purchase amount was $31.63. The five most common kinds of purchases were for transportation, phones or phone service, obtaining Government identification, and camping supplies.

TABLE 1

Type of purchase	Quantity	Aggregate cost
Bus passes	126	$912.11
Phone/Phone service	73	$4718.83
Identification/Birth certificates	28	$401.95
Taxi rides	18	$1040.50
Camping supplies	12	$638.80

A total of 6 participants used the program's housing fund over the duration of the program for rent or security deposits. This number represents 50% of the 12 participants who obtained housing through the program. Participants used the fund a total of 12 times. The mean amount for a housing fund charge was $640.64.

FIGURE 22



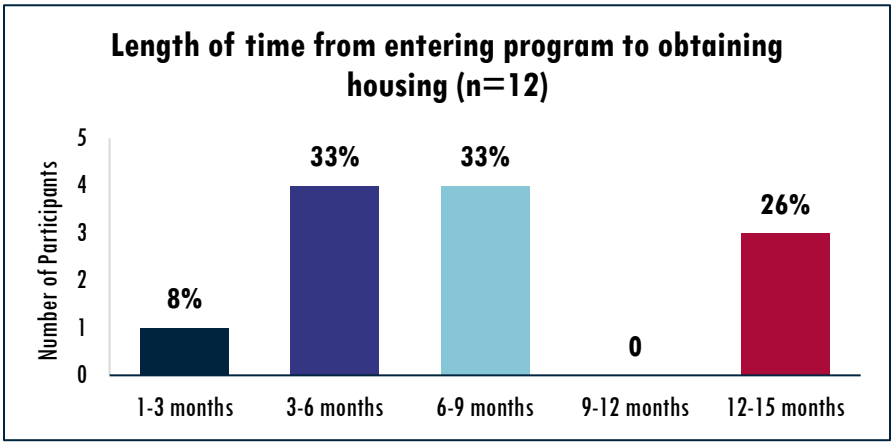
Participants' utilization of the CAF and housing funds increased over the duration of the program (Figure 23). The CAF was mostly used between the second quarter of 2022 and the first quarter of 2023. Participants' client assistance expenditures were greatest during the second half of 2022, with quarterly expenditures totaling $1,943.55 (Q3) and $2,047 (Q4). This peak corresponds with periods of greatest HOUSE Program participant engagement, with 15 participants engaged in both Q3 and Q4. The housing fund increased in use during the third quarter of 2022. Housing expenditures were highest during the first quarter of 2023 at $3,508, in which fewer participants (7) were engaged. Overall, these findings somewhat correspond with number of active participants during the HOUSE Program duration, with fewer participants engaged in 2021 and the second quarter of 2023.

Participant Outcomes

Housing

Among the 20 program evaluation participants, 60% obtained housing during their engagement in the program. The mean length of time to obtain housing after entering the program for HOUSE Program participants was 7.8 months. The distribution of the participants' time in the program before being housed is shown in Figure 23.

FIGURE 23



Of the 12 participants who obtained housing, 58% maintained stable housing for at least 3 months according to case management notes.

Social Determinants of Health

Participants' self-reported data about their social determinants of health, including employment, food security, and family support, was collected at baseline and throughout the duration of the program using the self-sufficiency matrix (SSM)[13]. Eighty percent of participants (n=16) completed the SSM at intake

[13] Cummings, Camilla, "An Exploration of the Psychometric Properties of the Self-Sufficiency Matrix Among Individuals and Families Currently or At Risk of Experiencing Homelessness" (2018). *College of Science and Health Theses and Dissertations.* 316.

("Assessment 1") and 55% participants (n=11) received a second assessment during program engagement ("Assessment 2").

Rates of self-reported employment were consistently low across both assessments. At assessment 1, 2 individuals (13%) reported any employment compared to 2 individuals (18%) at Assessment 2 (not shown). These individuals self-reported inconsistent temporary or part-time work which may possibly be associated with the high rate of disability self-reported by participants at program intake. GPRA data supports this finding; 71% of clients reported that they were unemployed due to disability at discharge.

Clients were asked about their access to food, and relatedly, their use of food stamps and other assistance in meeting their food needs. At Assessment 1, only 19% of participants reported that they could meet their basic food needs with or without assistance and 18% of participants reported this at Assessment 2, a slight decrease in proportion to baseline (Figure 24). Poorer ratings included use of SNAP or inability to meet food needs. While programmatic activities included aiding with applications to supplemental income, the lack of increase in food stability may be related to low rates of employment, even at discharge from the program. This is further substantiated by feedback from key stakeholders related to the need for basic life skills training as a critical component of the continuum of services for IWAEH with OUD because life skills are key for entering and engaging in the labor force; stable employment is a key driver of housing and food security.

FIGURE 24

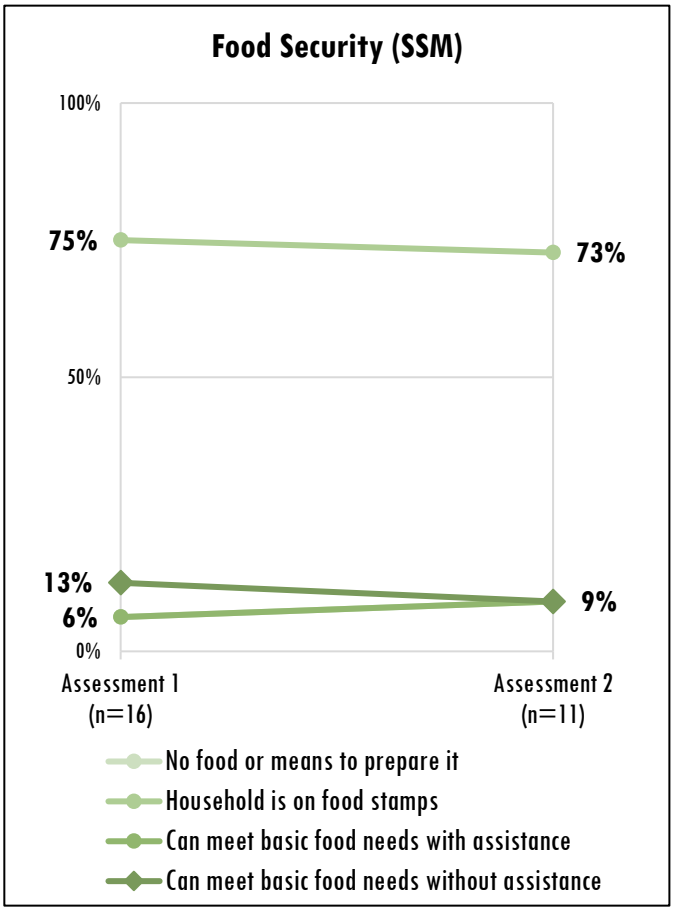
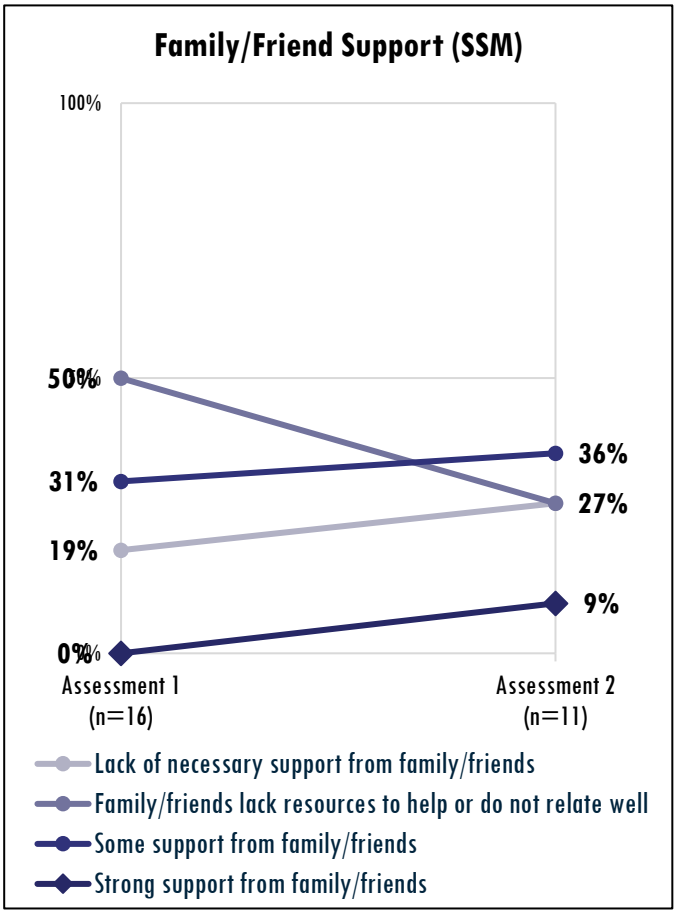


FIGURE 25



The SSM also included a measure of support from family or friends. This rating increased over the program, with an increase in participants who reported receiving some support or strong support from family/friends from Assessment 1 (31%) to Assessment 2 (45%). Further, GPRA data among all clients indicates increasing engagement with their support network over the duration of the program. There was an increase in the proportion of clients who reported they had interacted with supportive family or friends in the 30 days prior to the assessment from 34% at their first assessment (n=26), 90% at their second assessment (n=10), and 85% at their final discharge assessment (n=7)

Healthcare Utilization

There was a total of 107 HealthInfoNet records reviewed among the 20 HOUSE participants over the course of the implementation period, indicating a total of 85 contacts with emergency medical services or hospital services (inpatient hospitalization or emergency department visits). The total number of these service contacts by type is shown in Figure 27. Not shown, 30% of HOUSE participants had no contact with EMS or hospital services documented in HealthInfoNet records.

FIGURE 26

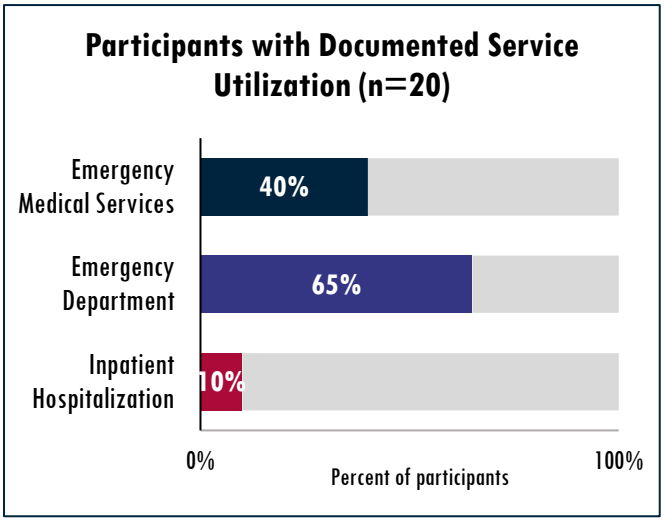
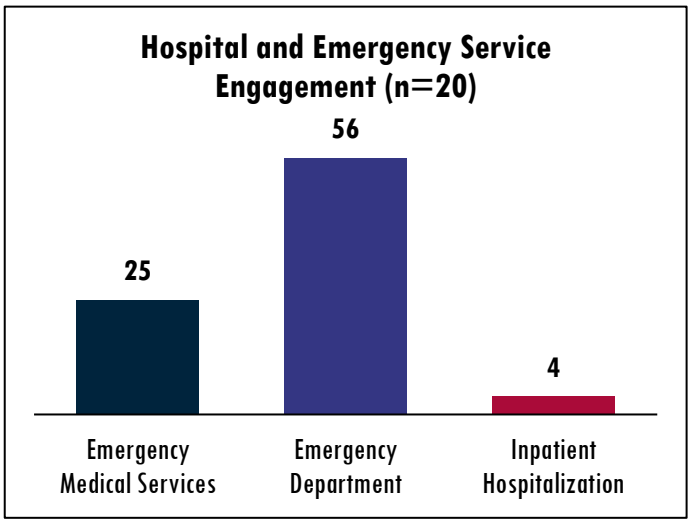


FIGURE 27



EMS services

EMS service documentation from HealthInfoNet indicated that there were 25 total documented EMS contacts with HOUSE participants during the HOUSE Program. Twelve percent of HOUSE Program participants' interactions with EMS were for medical transports from one facility to another. Of the documented EMS contacts, the majority (76%) were the result of 911 activations. Among these, 58% resulted in transport to a medical facility. Forty percent of HOUSE participants had a documented EMS contact in the community while participating in the program (Figure 26). The mean number of EMS contacts among HOUSE participants was 1.25. Excluding participants who had no documented contact with EMS, the mean was 2.8. **The most common reasons for 911 activations were pain, injury, illness, or suspected overdose.** However, several activations documented that the participant did not have a complaint or medical emergency.

Emergency Department Utilization

There were 70 records indicating 56 unique visits to the emergency department among HOUSE participants. **Most of the HOUSE participants (65%) utilized the emergency department during the program (Figure 27).** Each participant averaged 2.3 emergency department visits. Excluding patients

with no documented emergency department visits, the average number of visits was 4.3. The most common reason for visiting the emergency department was for general mental health problems (15 visits), followed by infection and withdrawal (both 10 visits).

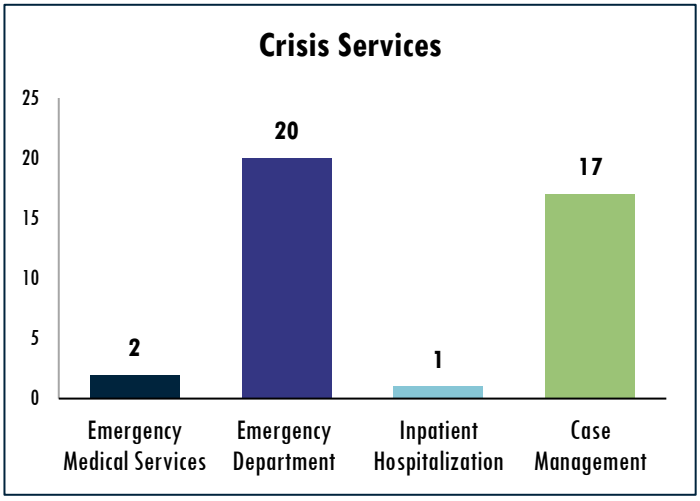
Hospitalizations

There were 10 records from HealthInfoNet that indicated 4 separate hospitalizations among participants during the HOUSE Program. Only 10% of HOUSE participants had a documented inpatient stay during the program (Figure 26). Among participants who were hospitalized, each averaged 2 visits. The average inpatient stay was for 3.25 days. **The primary reasons for hospitalization were infections (75%, 3 stays) or mental distress (25%, 1 stay).**

Crisis intervention

Crisis Intervention was identified by searching for "crisis" and "withdrawal" in Case Manager notes and Health Information Network records. There were 40 total services delivered in healthcare or case management settings related to crisis (Figure 28). Within case management notes, 17 sessions were identified as relating to crisis services. Within HealthInfoNet records of EMS and hospital engagement, services were reportedly rendered in 23 contacts. Crisis services were most commonly delivered in the emergency department setting (20 ED visits). **The majority of crisis services were for mental distress including suicidal thoughts, paranoia, or withdrawal symptoms.**

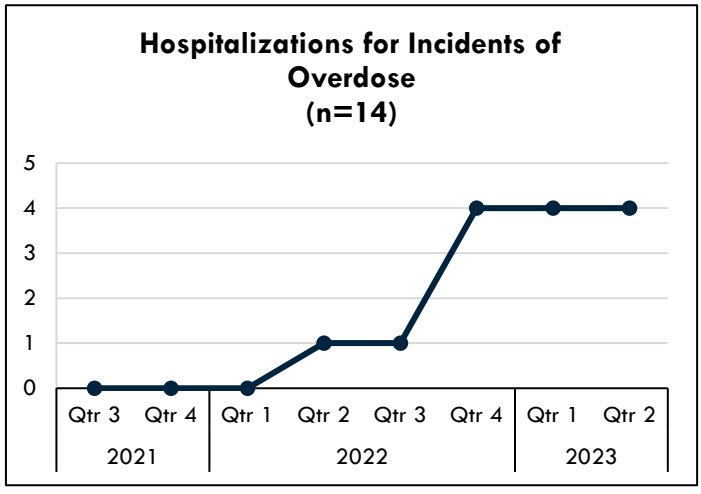
FIGURE 28



Overdose

According to the PMR, **there were 14 unique hospital services due to overdose among active HOUSE clients during the program period**. The number of reported quarterly overdoses increased over the duration of the program, with the greatest number (4) occurring in the final 3 quarters of the program (Figure 29). Please note that PMR data on overdoses include finding from all HOUSE clients, regardless of whether they consented to participate in the evaluation because this data was de-identified programmatic reporting data made available to the evaluation team as part of routine grant reporting requirements.

FIGURE 29



Crime and Justice Involvement

GPRA assessments collected data throughout program participation among active clients about criminal justice involvement; the GPRA data presented below includes finding from all HOUSE clients, regardless

of whether they consented to participate in the evaluation because de-identified programmatic reporting data was made available to the evaluation team as part of routine grant reporting requirements.

Notably, there was a 66% decrease in the average number of crimes that clients reported committing in the 30 days prior to the assessment (Figure 30). Not shown, 42% of clients (n=7) reported that they had not committed any crimes in the 30 days prior to the discharge interview, compared to 20% at their first assessment (n=25).

FIGURE 30

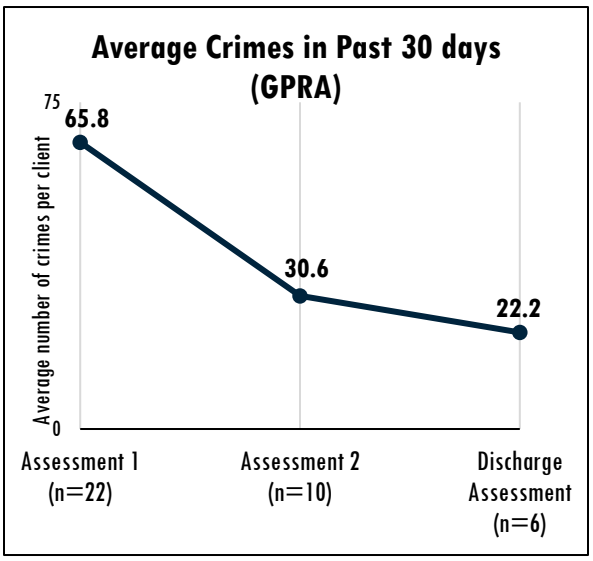
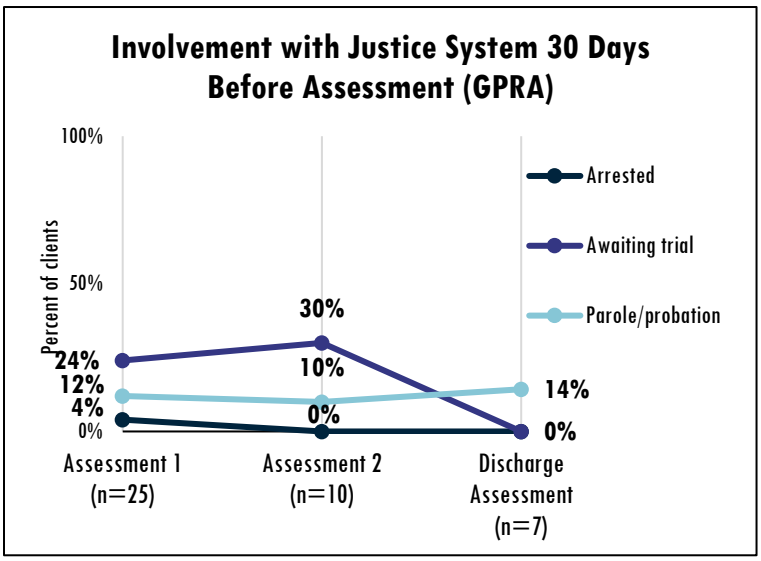


FIGURE 31

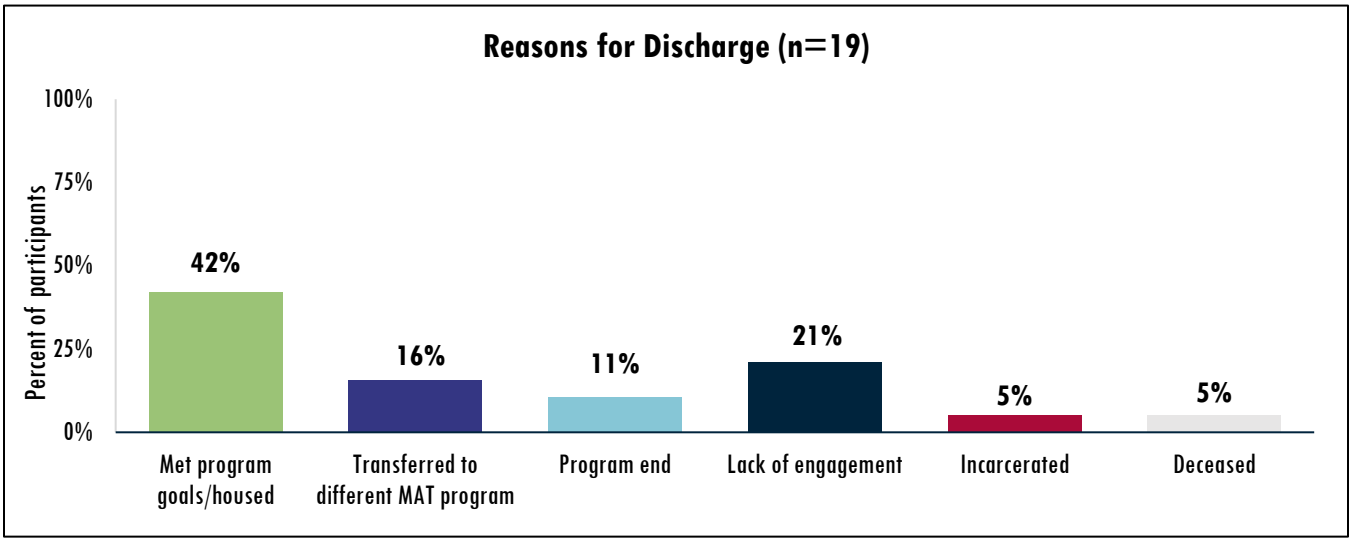


Other forms of involvement with the criminal justice system typically decreased among HOUSE clients over the course of the program. In the 30 days prior to the discharge assessment, no clients were awaiting trial, compared to 24% at their first assessment (Figure 31). While the proportion of clients on parole or probation in the 30 days prior to the assessment was stable across the assessment points, the frequency decreased from 3 clients at first assessment to 1 client at discharge. Further, no clients reported being arrested in the 30 days prior to the second assessment or the discharge assessment, compared to 4% of clients at their first assessment.

Program Discharge

Client discharge was documented in the GPRA, case management notes, and other administrative records. Among consented participants for whom discharge reasons were documented, 42% were discharged because they had achieved program goals, including obtaining housing. Other common reasons for discharge were a transfer to a different MAT program or lack of engagement in program services.

FIGURE 32



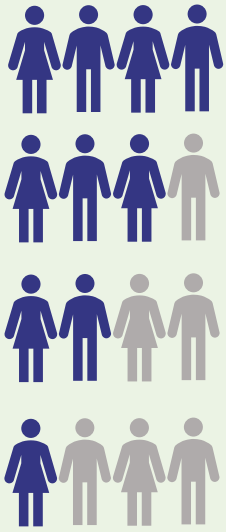
Participant Satisfaction

Participant satisfaction surveys, completed by four participants (20% of all HOUSE participants), indicated GPH and Preble Street were providing high-quality, patient centered care for participants.

Below, Figure 33 summarizes how many participants agreed or strongly agreed with statements about access to care and quality of care they received through the HOUSE Program.

FIGURE 33

Participant Beliefs about Program Access and Quality of Care



All four respondents agreed that program staff were willing to answer their questions, provided useful information, supported their recovery, and treated them with respect.

Three out of four respondents agreed that the program environment felt safe, staff were willing to help them find other services, and that they could get timely access to the program.

Two out of four respondents agreed that the staff provided them with additional supports to meet their daily needs, explained things in a way that was easy to understand, and that they were comfortable sharing with staff about their substance use.

Only one out of four respondents agreed that they felt comfortable providing feedback to program staff about how to improve the program.

Survey respondents were also asked about access to the program and what factors made accessing treatment and recovery supports more challenging. All respondents learned about the program's services from social support staff, peers, or healthcare providers. All four respondents agreed that the lack of a computer, smartphone, and/or internet access for telehealth services as well as the stigma associated with substance use and a lack of access to stable housing made it difficult to seek and maintain engagement in treatment for substance use disorders. There was also relatively strong agreement (mean rating of 3.5 or higher on a scale of 1-5) that stringent program policies and requirements as well as a lack of transportation were barriers to accessing and staying in treatment. Overall, most barriers were agreed upon and lower mean ratings were generally influenced by neutral ratings of agreement; only one person disagreed that lack of time due to employment or lack of funds were barriers.

Program Cost Analysis

This analysis assesses the HOUSE intervention's cost-benefit effectiveness with clients who engage in services and housing. The first year of the grant, January to December 2021, was the baseline for the analysis. For the purposes of this study, baseline is defined as client costs associated with the first year of engagement in the program as well as the frequency of hospital in-patient stays, emergency room visits, and medical transports. From baseline, we measured change in cost and service use, arrest, jail, and emergency room data over the remainder of the project, which spans from January 2022 through June 2023. This is a similar process used in other evaluative measures to assess cost-benefit and effectiveness of social service interventions.[14] The benefit of this methodology comes from the fact that all clients in this program receive case support and medical services through providers associated with the grant. As such, data on social service visits, medical appointments and hospitalizations will reside with these providers and were accessible through data agreements; data on law enforcement contacts and jail nights was collected separately.

Cost-Benefit Analysis

There was a total of 21 participants who were involved in the program from the beginning. Of those 21 participants, 7 were housed and completed the program. Of the 13 included in the initial report as a baseline, 7 remained in the program in the second phase of the analysis, January 2022-June 2023. Table 2 provides a comparison of the 7 clients who were part of the initial baseline reporting and were either still engaged in the program or had completed the goals of the program during the subsequent reporting period. As the data suggests here, there is observable reductions in all categories for these participants.

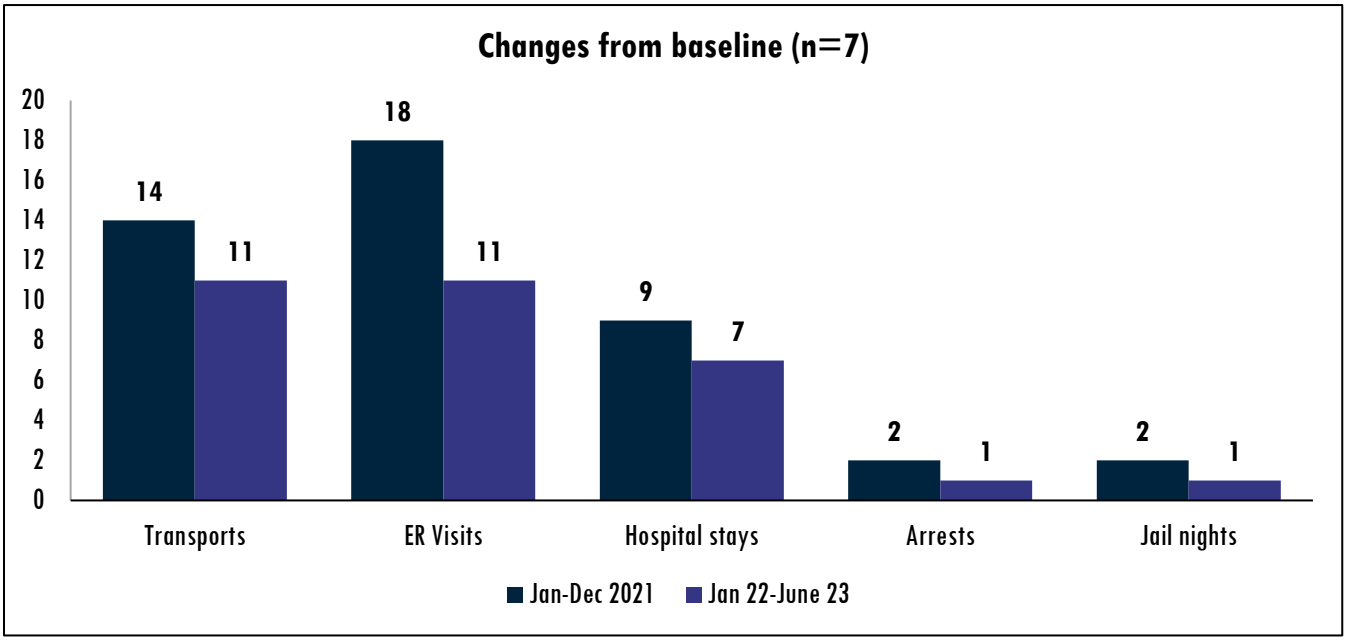
TABLE 2: COSTS/ACTIVITY BY CLIENT

Client	December 2021-Baseline Hospital stays/ER visits/Transports	December 2021-Baseline Arrests/jail nights	June 2023 Hospital stays/ER visits/transports	June 2023 Arrests/jail nights
1	9 days/2 transports/13 emergency room visits	1 arrest/1 jail night	4 days/8 transports/7 emergency room visits	0
2	1 emergency room visit/2 transports	1 arrest/1 jail night	3 days/3 transports/3 emergency room visits	1 arrest
3	1 emergency room visit	0	0	0
4	1 emergency room visit	0	0	1 jail night
5	1 emergency room visit	0	0	0
6	1 emergency room visit	0	0	1 arrest
7	0	0	1 Emergency room visit	0

[14] Osborne, S., Harrison, H., O'Malia, A., Barnett, AG, Carter, HE, & Graves, N. (2018). *Cohort study of a specialist social worker intervention on hospital use for patients at risk of long stay*, BMJ Open, 10.1136/bmjopen-2018-023127, **8**, 12, (e023127).

Moreover, as Figure 34 suggests, HOUSE participants who were actively involved in the project had reduced transports to the hospital, reductions in ER visits, reductions in hospital stays, and reductions in arrests and jail nights.

FIGURE 34



As has been observed in other utilization and cost analysis studies,[15] a small number of participants accounted for a large proportion of service utilization and arrest/jail activity. In this case, 28% of the participants (n=2) accounted for all the hospitalizations, 96% of all transports to the emergency room, and 82% of emergency room visits.

Participants in this program reported the average length of time homeless before admission was 6.8 years. This is perhaps associated with the chronic nature of homelessness of the participants before admission to the program, which has also been found to correlate to increased health and mental health conditions requiring medical and/or psychiatric intervention. Even with the high utilizers of service, the post-baseline data reveal reductions in all five categories. These reductions align with Dirmyer (2016)[16] findings which highlight the importance of alternative, community-based health care approaches for people who have experienced chronic homelessness.

[15] Salit, S. A., Kuhn, E. M., Hartz, A. J., Vu, J. M., & Mosso, A. L. (1998). Hospitalization costs associated with homelessness in New York City. *New England Journal of Medicine, 338*(24), 1734-1740.

[16] Dirmyer, V. F. (2016). The frequent fliers of New Mexico: hospital readmissions among the homeless population. *Social Work in Public Health, 31*(4), 288-298.

Cost Savings Estimates

According to nationally published data, the average length of stay in the hospital is 4.3 days. In comparison, the average length of time of all participants in this program was 3.25 days. Moreover, according to data published by CompareMaine, the average daily hospitalization cost in Portland, Maine is $2,883.04, basic emergency room visit costs averages are $561, and MedCu transport average cost are $432. As such, this suggests a cost savings associated with the HOUSE Program. For the cohort of participants who were included in the initial data (January 2021-December 2021), estimates of cost savings are as follows:

TABLE 3: ESTIMATES OF COST SAVINGS

Costs	January 21-December 21	January 22-June 23	Difference
Hospital stays	$25,947.36	$20,181.28	$5,766.08
Emergency room visits	$10,098	$6,171	$3,927
Transports	$6,048	$4,752	$1,296
Total	$42,093.36	$31,104.28	$10,989.08

As Table 3 suggests, based on available data for the costs of a night in the hospital, average emergency room visit and average ambulance transport, savings from the 7 participants can be observed in each category.

Based on the available data, the cost-effectiveness of the program suggests cost savings in both medical and criminal justice involvement categories. The data also suggests a level of stabilization among the 7 participants who either completed the program's goals or were discharged when the program ended.

Conclusion

Individuals who are experiencing homelessness who are opioid dependent face high levels of social instability, greater comorbidities, and more chronic drug use putting them at increased risk for opioid related morbidity and mortality. The HOUSE Program was a comprehensive program designed to pilot the efficacy of addressing both the medical and social needs of IWAEH with OUD residing in the Portland area.

Findings from the process evaluation indicate that organizations interested in implementing comprehensive treatment and services models for IWAEH with OUD, such as the HOUSE Pilot Program, would greatly benefit from a dedicated planning period prior to program implementation. Establishing clear policies and procedures as well as establishing referral pathways and mechanisms to enhance care integration are critical to supporting the efforts of both non-clinical and clinical staff. Moreover, navigating the complex rules and requirements of State Housing Authorities can hinder efforts to establish timely access to stable housing for IWAEH; implementing a dedicated Housing Liaison has the potential to reduce some of these barriers. As is the case throughout Maine and nationally, difficulties hiring and retaining staff to support programs for IWAEH create a number of barriers to program implementation and ensuring continuity of care for clients. One strategy for reducing the barriers related to staff shortages and turnover is to have clear documentation of roles and responsibilities, programmatic requirements and processes as well as desired program goals and outcomes to help facilitate the rapid translation of institutional and programmatic knowledge to new employees. A summary of key lessons learned and recommendations for enhancing the implementation of similar efforts in the future are presented below.

FIGURE 35

Lessons Learned from HOUSE Program Administration

Delayed contracting led to simultaneous planning and implementation of program and confusion about reporting and administrative grant requirements. Ensure transparency and clarity on grant administrative policies, reporting and deliverables as well as providing training to key implementation staff on programmatic goals, programmatic processes as well as outcomes.

Program staff, including leadership, had high rates of turnover which was a challenge to continuity in program data collection and reporting. Greater level of guidance from the state is needed to ensure continuity of data collection processes for complex programs serving vulnerable populations.

Formal collaboration with the Maine State Housing Authority is critical to improve the effectiveness and efficiency of initiatives to house IWAEH. In addition, efforts to address the housing stability of IWAEH with OUD can be further enhanced by increasing internal organizational capacity to address housing issues with a dedicated housing liaison.

There remain challenges to addressing treatment and social determinants of health needs among IWAEH with OUD due to the State's rurality as well as an overall lack of treatment and support infrastructure in Maine such as long-term treatment programs, affordable housing, and access to transportation.

Findings from the program's outcomes evaluation demonstrate that, while there remain challenges to engaging this population, the use of evidence-based treatments in combination with intensive case management and peer supports can be an effective way to maintain stabilize patients in care and address both their medical and housing needs. Furthermore, comprehensive programming to meet the complex needs of IWAEH with OUD is an effective way to improve both treatment outcomes and overall quality of life through addressing SDOH that are often barriers to treatment engagement and obtaining long-term recovery (Figure 36).

FIGURE 36

Key Findings from HOUSE Participant and Client Data

History of homelessness. At program intake, 84% participants were sleeping in an emergency shelter, or a place not meant for living, such as a car or tent. Participants had experienced homelessness for a mean of 6.4 years.

Crime and justice involvement. There was a 66% decrease in the average number of crimes that clients reported committing in the 30 days prior to the GPRA assessment from intake to discharge. No clients were awaiting trial at discharge.

Social engagement. The proportion of clients who reported they had interacted with supportive family or friends in the 30 days prior to the GPRA more than doubled from the first to the second assessment.

Service utilization. 40% of participants had contact with EMS services and 60% received emergency room services during the program. However, only 10% of participants were hospitalized.

Participant Satisfaction. Respondents had high ratings of satisfaction with the program's quality of care. All respondents agreed that program staff provided useful information, supported their recovery, and treated them with respect.

Housing Outcomes. Among the 20 program evaluation participants, 60% obtained housing during their engagement in the program. The majority (58%) of these participants maintained stable housing for at least 3 months.

Program Discharge. Meeting program goals was the most common discharge reason (42%). Lack of engagement (21%) or transfer to another program (19%) were slightly less common.

Treatment Engagement. Active participants had an average of 3.4 monthly visits with MAT prescriber, indicating near-weekly engagement.

Cost. Cost-effectiveness data for the 7 participants involved in the baseline analysis who completed the program goals or were involved in the program at its conclusion suggests cost savings in both medical and criminal justice involvement categories.

IWAEH and those vulnerably housed experience disproportionately high rates of OUD/SUD and associated harms, yet barriers to services and support are common for these individuals. Despite higher rates of physical and co-occurring behavioral health conditions, IWAEH attend primary care and

preventive services, such as screenings and check-ups, less often than the general population.[17] Moreover, despite high rates of OUD/SUD among IWAEH, they are also less likely to access SUD treatment services and more likely to disengage from SUD treatment.[18] Barriers to accessing appropriate care can include: prior negative health care experiences; competing priorities such as obtaining shelter and/or food; and access barriers such as stigma, transportation, costs of care and/or medications, lack of continuity of care, challenges with strict program polices as well as issues navigating the complex health system and associated administrative processes.[16,19] These barriers can lead to delayed or no treatment which, in turn, can increase the risks of more serious health problems.[20] Despite the complexities associated with meeting the needs of this highly vulnerable population, research pertaining specifically to IWAEH with co-occurring OUD/SUDs is limited.[21] Findings from the evaluation of the HOUSE Program offer promising insights into offering effective programing for IWAEH with OUD. Evaluation findings indicate that using patient-focused approaches that combined comprehensive treatment with intensive case management to address SDOH, with a specific focus on achieving housing stability, can have a significant impact on client engagement and enhance both clinical and social outcomes. Moreover, findings indicate that comprehensive programming that address both the medial and social needs of IWAEH with OUD has the potential to reduce both medical and criminal justice related expenditures over time.

[17] Keogh C, O'Brien KK, Hoban A, O'Carroll A, Fahey T. Health and use of health services of people who are homeless and at risk of homelessness who receive free primary health care in Dublin 58. BMC Health Serv Res 2015;15:1–8. doi: 10.1186/s12913-014-0652-8

[18] Luchenski S, Maguire N, Aldridge RW, Hayward A, Story A, Perri P, et al. What works in inclusion health: overview of effective interventions for marginalised and excluded populations. Lancet (London, England) 2018;391:266–80. doi: 10.1016/S0140-6736(17)31959-1

[19] Bowden-Jones Dr O, Finch Dr E, Campbell Dr A. Drug-related harms in homeless populations and how they can be reduced. Acmd 2019.

[20] O'Toole TP, Pollini RA, Ford DE, Bigelow G. The health encounter as a treatable moment for homeless substance-using adults: The role of homelessness, health seeking behavior, readiness for behavior change and motivation for treatment. Addict Behav 2008;33:1239–43. doi: 10.1016/j.addbeh.2008.04.015

[21] Miler JA, Carver H, Masterton W, Parkes T, Maden M, Jones L, Sumnall H. What treatment and services are effective for people who are homeless and use drugs? A systematic 'review of reviews'. PLoS One. 2021 Jul 14;16(7):e0254729. doi: 10.1371/journal.pone.0254729. PMID: 34260656; PMCID: PMC8279330.

Appendices

Appendix A:
Program Participant Survey

HOUSE Program Participant Feedback Survey

Introduction

We would like to know about your experience receiving services, including medication assisted treatment, through Greater Portland Health's HOUSE program. Hearing from you will help us learn how our program can become better for you and other patients.

Participation

This survey should take approximately 5-10 minutes of your time. This survey is confidential, and your name will not be connected to your responses. Participation is completely voluntary, if you choose not to provide feedback, it will not impact your ability to receive services at Greater Portland Health in any way. Our goal is to learn about our patients' experiences with our program and use your feedback to improve our services. You can choose to answer all, some, or none of the questions. Your participation is voluntary, and you may withdraw from the study at any time without penalty.

Individual responses will be kept confidential to the maximum extent permitted by law. Completed surveys will be stored on secure drives at the Cutler Institute; only the core research team will have access to the survey data. A summary of our findings from the survey will be included in evaluation reports, which will be submitted to Greater Portland Health and the Maine Department of Health and Human Services.

Risks and Benefits of Participation

There are no anticipated risks associated with participating in this survey. Although there are no direct benefits to participating in this survey, by completing the questionnaire you will be providing important feedback that could help improve services for individuals experiencing homelessness who are also impacted by opioid use. Participation is voluntary. You may discontinue your participation at any time without penalty.

If you have any questions or concerns about your rights as a research subject, you may call the Research Compliance Administrator, Office of Research Integrity and Outreach, USM at (207) 780-4517, or usmorio@maine.edu.

For questions or more information concerning this research you may contact Mary Lindsey Smith, PhD, MSW, at the University of Southern Maine at (207-228-8370) or m.lindsey.smith@maine.edu

If you choose to participate, please check "I accept" below.

[ ] I accept

1. How did you learn about the HOUSE program at Greater Portland Health (check all that apply)			
Internet	○	Friends / Peers	○
Radio or television	○	Family members	○
211 phone line	○	Health Care Provider	○
Law Enforcement	○	Social Service Organization	○
Other Specify:			

The following items are about your experiences with the HOUSE Program at GPH and Preble Street

2. On a scale of 1 – 5 where 1 is "Strongly Disagree" and 5 is "Strongly Agree", please rate how you feel about your experiences at the needle exchange program.

		Strongly Disagree 1	2	3	4	Strongly Agree 5
a.	I feel I have been able to get timely access to services through the HOUSE program	○	○	○	○	○
b.	I feel Greater Portland Health and Preble Street provide environments where I feel safe	○	○	○	○	○
c.	I feel comfortable asking staff at Greater Portland Health and Preble Street questions about substance use and recovery	○	○	○	○	○
d.	I feel comfortable sharing information about my own substance use with staff at Greater Portland Health and Preble Street	○	○	○	○	○
e.	I feel comfortable providing feedback to staff Greater Portland Health and Preble Street on how they can improve services	○	○	○	○	○
f.	I feel that staff at Greater Portland Health and Preble Street are willing to answer questions I might have	○	○	○	○	○
g.	I feel that staff at Greater Portland Health and Preble Street have provided me with useful information on substance use and recovery	○	○	○	○	○
h.	I feel that staff at Greater Portland Health and Preble Street explain things to me in a way that is easy to understand	○	○	○	○	○
i.	I feel the staff at Greater Portland Health and Preble Street are willing to assist me with finding other treatment, recovery or support services I may need	○	○	○	○	○

j.	I feel that staff at Greater Portland Health and Preble Street have provided me with additional supports to meet my daily needs (i.e. food, supplies, hygiene products)	○	○	○	○	○
k.	I feel that staff at Greater Portland Health and Preble Street listen to me and treat me with respect	○	○	○	○	○
l.	I feel that staff at the Greater Portland Health and Preble Street have supported my recovery	○	○	○	○	○

3. What is the HOUSE program doing well to meet your needs?

4. What can Greater Portland Health and Preble Street do to improve programming to better meet your needs?

5. Have you experienced, or do you believe that there are barriers that make <u>seeking or continuing treatment or recovery services</u> for your substance use difficult?

On a scale of 1 – 5 where 1 is "Strongly Disagree" and 5 is "Strongly Agree", please rate the greatest barriers you face while trying to maintain ongoing engagement in treatment for your substance use.

	Strongly Disagree				**Strongly Agree**
	1	**2**	**3**	**4**	**5**
a. Lack of insurance or funds to support treatment and/or medication	○	○	○	○	○
b. Lack of time due to employment	○	○	○	○	○
c. Lack of child care	○	○	○	○	○
d. Lack of recovery support services in your community	○	○	○	○	○
e. Lack of computer, smartphone or internet for telehealth services	○	○	○	○	○
f. Lack of transportation	○	○	○	○	○
g. Lack of stable housing	○	○	○	○	○
h. Stigma associated with substance use	○	○	○	○	○
i. Inflexible treatment program policies/requirements	○	○	○	○	○
Other (Please Specify):					

6. Is there anything else you want the people providing you with services through the HOUSE program to know about your experience with the programs and services?

Thank you for taking time to complete the survey. IF you are comfortable, please complete the information below so we can get a better understanding of the individuals using the HOUSE Program Services.

What is your age?	○ 18 – 24 years of age ○ 25 – 34 years of age ○ 35 – 44 years of age ○ 45 – 54 years of age ○ 55 - 64 years of age ○ 65 – 74 years of age ○ 75 + years of age
What is your gender?	○ Male ○ Female ○ Non-binary ○ Prefer not to say
What is your Race?	○ White ○ Black or African American ○ American Indian or Alaska Native ○ Asian ○ Native Hawaiian or Other Pacific Islander ○ Other

Thank you for completing our survey.

Appendix B:
Key Stakeholder Interview Guides

HOUSE Program Key Stakeholder Interview Guide: Year 1

INTRODUCTION

As a part of the Cutler Institute's evaluation of the HOUSE Program, we would like to gain a better understanding of the implementation process from the project partners. This is a state initiative designed to help increase access to treatment and support services for individuals experiencing homelessness with opioid use disorder (SUD) treatment/services in Southern Maine and we are interested in hearing your thoughts on the first year.

Participation: This should take approximately 45 minutes of your time. Your participation is voluntary. No names or identifying information will be included in our summary report.

There are no anticipated risks with this interview. Your answers will help the Greater Portland Health (GPH) and Maine DHHS understand and improve upon implementation efforts made thus far. Your answers will not affect your relationship with GPH or the State of Maine.

Questions: Do you have any additional questions before we get started?

We record these conversations for note taking purposes only. No one else has access to the audio recording outside of our Cutler team. Is it OK to proceed?

Okay, let's begin... [start recorders]

1. Program Implementation: Successes and Challenges

We'd like to ask you about the first year of the HOUSE Program and your general feedback on the "big picture," successes and challenges.

1. In your experience, has the implementation of the HOUSE Program gone according to the outlined plan? If not, what modifications to the program were necessary?

2. In your opinion, what factors (positive or negative) have influenced the implementation of this project?

   PROBES:
   - Internal (e.g. organizational characteristics or training)
   - External (e.g. structural, reimbursement)
   - Individual (e.g. provider attitudes)
   - COVID/ Pandemic

3. We would like to get more information on how COVID-19 pandemic may have been a factor over the last year and a half. Did it affect the implementation of this project? Why/why not?

4. What is the one thing you learned about your own agency or organization's ability to meet the needs of individuals with OUD during the COVID-19 pandemic? (positive or negative)

   Probes: How did you adapt? Are there plans to keep COVID-specific changes in place going forward?

2. Project Strategies, Access to Care/ Care Integration

These next questions focus on the strategies deployed as part of this project, and how they may or may not have translated to real-time improvements.

5. Thus far, what project strategies and processes have been the most successful in expanding access to Medication-Assisted Treatment and support services as part of the HOUSE Program?

   PROBE: If you had to pick your number one success so far, what would it be?

6. Have you observed any improvements in access to care and/or care integration for individuals with opioid use disorders as a result of the HOUSE Program?

   PROBE: Do you have any recommendations for what is needed in order to improve access and care integration? (resources, outreach activities, policy updates, workflows)

7. In your opinion, what activities or strategies have been the least successful in expanding access to Medication-Assisted Treatment and support services as part of the HOUSE Program?

   PROBE: What were the challenges to expanding and enhancing access to high quality MAT services as part of this Project?

3. Wrap Up

8. Is there anything else you think we should know about your work that we have not asked about?

Thank you for your feedback today, we appreciate your time!

[end recorders]

HOUSE Program Key Stakeholder Interview Guide: Year 2

INTRODUCTION

As a part of the Catherine Cutler Institute's evaluation of the HOUSE Program, we would like to gain a better understanding of the implementation process as well as the HOUSE Program outcomes from the project partners. The HOUSE Program is a state initiative designed to help increase access to treatment and support services for individuals experiencing homelessness with opioid use disorder in Southern Maine and we are interested in hearing your thoughts.

Participation: This should take approximately 45 minutes of your time. Your participation is voluntary. No names or identifying information will be included in our summary report.

There are no anticipated risks with this interview. Your answers will help Greater Portland Health (GPH) and Maine DHHS understand the implementation efforts and impact of the HOUSE Program. Your answers will not affect your relationship with GPH or the State of Maine.

Questions: Do you have any additional questions before we get started?

We record these conversations for note taking purposes only. No one else has access to the audio recording outside of our Catherine Cutler team. Is it OK to proceed?

Okay, let's begin... [start recorders]

1. Program Implementation: Successes and Challenges

We'd like to ask you about the HOUSE Program and your general feedback on the "big picture," successes and challenges related to expanding services for individuals with OUD experiencing homelessness.

9. In your experience, did the implementation of the HOUSE Program go according to the outlined plan? If not, what modifications to the program were necessary?

10. What were the key successes related to this project's implementation of expanded MAT and other services for individuals with OUD experiencing homelessness?

    PROBE: Of these key successes, which do you consider the greatest success?
    Did you achieve the goals you wanted to achieve?

11. In your opinion, what challenges or obstacles did you face implementing the HOUSE Program?

    PROBES:
    What was the greatest challenge encountered implementing the HOUSE Program?
    How did you address these challenges?

12. Do you have suggestions on how the challenges you've described can be alleviated in future grants or programs of a similar nature?

2. Project Strategies, Access to Care/ Care Integration

These next questions focus on the strategies deployed as part of this project, and how they may or may not have translated to real-time improvements and how the project partners might expand and sustain the work moving forward.

13. Have you observed any improvements in access to care and/or care integration for individuals with opioid use disorders experiencing homelessness as a result of the HOUSE Program?

    PROBE: Do you have any recommendations for what else is needed in order to further improve access and care integration? (resources, outreach activities, policy updates, workflows)

14. In your opinion, what impacts, if any, did the case management, housing, and support services provided by the HOUSE program have on treatment engagement, retention, and program participant outcomes?

    PROBE: Do you have any suggestions for additional support services that would be helpful for individuals with OUD experiencing homelessness that would support treatment engagement and long-term recovery?

15. In your opinion, do you believe Greater Portland Health and Preble Street will be able to sustain successful components from the HOUSE Program?

    PROBE: What components? Why/ why not?
    What is needed to sustain components of the program?
    How are you going to try and sustain success?

3. Wrap Up

Finally, before we finish our conversation today……

16. As you enter into the final months of the program, knowing what you know now, is there anything that you would do differently or would wish had happened differently with the program roll-out?

17. Is there anything else you think we should know about your work that we have not asked about?

Thank you for your feedback today, we appreciate your time!

[end recorders]

Appendix C:
Key Stakeholder Feedback Survey

Introduction:

Greater Portland Health has contracted with Muskie School of Public Service at the University of Southern Maine to evaluate the HOUSE program. The goals of the evaluation are to understand the barriers and facilitators to expanding access to medication-assisted treatment (MAT) and housing supports for individuals with opioid use disorder experiencing homelessness, and to assess the outcomes of the initiative. As part of this effort, the Cutler is conducting surveys for each of the participating sites to gather information from HOUSE program staff and providers on the roll out of the program to document successes, challenges and lessons learned to inform both the implementation and evaluation of this project.

Participation:

This survey should take approximately 5-10 minutes of your time. The survey is completely voluntary; your participation will have no impact on your relationship with your employer, Greater Portland Health, or the Cutler Institute. Additionally, your position and work performance will not be judged or impacted by your answers to the questions on this survey. You can choose to answer all, some, or none of the questions. ***Your participation is voluntary, and you may withdraw from the study at any time without penalty.***

Individual responses will be kept confidential to the maximum extent permitted by law. Completed surveys will be stored on secure drives at the Cutler Institute; only the core research team will have access to the survey data. A summary of our findings from the survey will be included in evaluation reports, which will be submitted to the Maine Department of Health and Human Services and Greater Portland Health.

Risks and Benefits of Participation:

There are no anticipated risks associated with participating in this survey. Although there are no direct benefits to participating in this survey by completing the questionnaire you will be providing important feedback that could help influence the implementation of the initiative. Participation is voluntary. You may discontinue your participation at any time without penalty.

If you have any questions or concerns about your rights as a research subject, you may call the Research Compliance Administrator, Office of Research Integrity and Outreach, USM at (207) 780-4517, or usmorio@maine.edu

For questions or more information concerning this research you may contact Mary Lindsey Smith, PhD, MSW, at the University of Southern Maine at (207-228-8370) or m.lindsey.smith@maine.edu

If you chose to participate, please click yes to consent, and proceed to the survey.

1. Progress Narrative

Please provide a brief overview of key achievements and whether, in your opinion, the HOUSE program is on/off track in terms of (1) overall program progress for year and (2) meeting programmatic goals.

2. Implementation Status

a) Were there any changes in the project implementation approach or program design in the first year of the HOUSE program? If so, please describe.

b) Where there any challenges associated with program implementation during the first year of the HOUSE program? If so please describe.

3. LESSON LEARNED

Please provide a few examples of highlights of HOUSE project learnings. These can either be successes or challenges, but show how adaptive learning is used in the program to improve HOUSE program delivery.

4. Partnership and collaboration

Are there any aspects of the partnership or stakeholder engagement that have occurred over the last year that you would like to highlight?

5. Other relevant information

Is there any other activities or relevant information that you would like to document related to the HOUSE program from the past year?