Shared Medical Appointments - Health Care and Housing Coordination

Jamie Taylor PhD[1], Kate Marple-Cantrell MCP, MA[2], Cheryl Ho MD[3], Lara Weinstein MD, MPH, DrPh[4], Ed Stellon MS, MA, LPC[5], Edith Yang, MPP[6], Alexandra Bernardi MPA[7]

[1]The Shared Housing Institute, [2]The Cloudburst Group, [3] Valley Homeless Healthcare Program, Santa Clara Valley Health, [4]Sidney Kimmel Medical College, [5]Heartland Alliance, [6]MDRC, [7]MDRC

Abstract:

Objectives. To address social determinants of health (SDOH) for people experiencing opioid use disorder (OUD) and homelessness, a clinical model called HomePath links clinical care delivering Medications for Opioid Use Disorder (MOUD) through Shared Medical Appointments (SMA) and housing supports. This concept paper provides early lessons covering 12 months of launching and operating SMAs in three Healthcare for the Homeless clinics (or "sites") focused on OUD treatment, health, and housing care coordination.

Methods. The HomePath feasibility study was an implementation study that assessed the promise of the HomePath model of coordinated SMA, and housing supports to improve health and housing outcomes, compared with standard individual-level medical care, among people experiencing OUD and homelessness. Data collection comprised of quarterly meetings with all site leaders to track progress and monthly meetings with site clinic and housing staff about SMA challenges. Notes from these meetings documented practices and SMA development for 12 months. The study team conducted a baseline survey and completed 6 site visits (2 per study site) to conduct staff interviews and focus groups with patients in all 3 clinics. Lessons learned were summarized from SMA implementation in clinics in Philadelphia, PA, Chicago, IL, and Richmond, VA.

Results. According to clinic staff and SMA group members, both patients and the SMA medical teams benefitted from the SMA group appointments for MOUD. SMAs were beneficial to improving patient communication and providing immediate referral support and interconnected treatment approaches for SDOH and OUD. Clinics reported on the potential cost-effectiveness of the SMA model, providers noted improved communication and integration between medical and housing teams, and patients reported increased trust and participation in their health care treatment.

Conclusions. There is an urgent need to address the growing population of people experiencing homelessness and OUD. Findings suggest that delivering SMAs, with a focus on SDOH, can both facilitate clinical staff's provision of quality care, and enhance standard, individual-based medical care. Multiple challenges to expanding MOUD access are mitigated by the SMA approach, resulting in 1) increased collaboration across treatment teams, 2) support for peer-to-peer effects on treatment, and 3) increase linkages between housing and SMA healthcare providers. This HomePath SMA model of care, which directly addresses the intersection of housing and medical needs, has the potential to increase access and adherence to MOUD and housing stability for people experiencing homelessness. Early implementation lessons point to a model that, with appropriate training for clinic and housing staff, is transferrable to sites across the country.

I. Introduction

Recent studies across the nation have presented the extraordinary need for housing and clinical services directed towards unhoused populations to recognize the high risk of opioid use and overdose.[1,2] Drug overdoses are sharply increasing among the population experiencing homelessness; overdose is the leading cause of death among people without housing in Los Angeles and New York City, increasing by 80 percent between 2021 and 2022 in both cities.[3,4] For non-elderly adults experiencing homelessness, opioids are implicated in most drug overdose deaths.[5,6] A 2022 study reported that in San Francisco, twice as many people experiencing homelessness in the city died in the first year of COVID compared to the previous years, with 82 percent of the deaths associated with drug overdose, mostly from synthetic opioids such as fentanyl.[7] Another recent study of people experiencing homelessness in Boston found that the growth of synthetic opioids such as fentanyl was a major contributor to increasing mortality. This study found that between 2004 and 2018, drug overdose mortality increased by 81 percent in the group of people experiencing homelessness, 12 times higher than overdose mortality in comparable non-homeless populations.[8]

Fentanyl, known to be up to 100 times more potent than morphine, is FDA-approved to treat severe pain. Yet the rise in national drug-related overdose deaths is primarily driven by illegally manufactured fentanyl. The Centers for Disease Control (CDC) recommends rapid expansion of community-based overdose prevention practices.[9] These findings highlight the growing clarion call for expanded, evidence-based opioid use disorder (OUD) treatment, especially among people experiencing homelessness.

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[1] Yamamoto A, Needleman J, Gelberg L, et al. Association between homelessness and opioid overdose and opioid-related hospital admissions/emergency department visits. *Social Science & Medicine.* 2019; 112585.

[2] Doran K, Rahai N, McCormack R, et al. Substance use and homelessness among emergency department patients. *Drug and alcohol dependence*, *188*, 2018; 328-333.

[3] 2021 Homeless Deaths Report - NYC Records NYC Records and Information Services.

[4] Mortality among People Experiencing Homelessness in Los Angeles County: One Year Before and After the Start of the COVID-19 Pandemic April 2022. Los Angeles County Department of Public Health.

[5] Baggett TP., Hwang, S, O'connell J, Porneala, et al. Mortality among homeless adults in Boston- shifts in causes of death over a 15-year period. *JAMA internal medicine*. 2013; *173*(3), 189-195.

[6] Bauer L, Brody J, Leon C, et al. Characteristics of homeless adults who died of drug overdose: A retrospective record review. *Journal of Health Care for the Poor and Underserved.* 2016; 27(2), 846-859.

[7] Cawley C, Kanzaria HK, Zevin B, Doran KM, Kushel M, Raven MC. Mortality Among People Experiencing Homelessness in San Francisco During the COVID-19 Pandemic. *JAMA Netw Open.* 2022;5(3):e221870. doi:10.1001/jamanetworkopen.2022.1870

[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).

[9] CDC website: What is fentanyl? What can be done?.

Medications for Opioid Use Disorder (MOUD) are FDA-approved, evidenced-based treatment for OUD. While there is no longer a waiver required for providers to prescribe buprenorphine, a common MOUD, many people with OUD remain unable to access this lifesaving treatment.[10] Further, living without housing intensifies the difficulty of accessing and maintaining adherence to MOUD services, with demand far surpassing programmatic and clinical capacities.[11,12,13]

Providers who care for unsheltered populations have found combining MOUD with supports to address broader social determinants of health (SDOH), such as the linkage of supportive housing options to health and treatment services, is essential for long-term recovery.[14] When a medically vulnerable, unhoused person with OUD is engaged in healthcare services that include MOUD and connected to SDOH supports that include housing, there is greater potential to increase both health and housing stability than when providing MOUD services alone.[15]

There are few standardized approaches for housing organizations to coordinate and collaborate directly with primary care clinics, and knowledge of MOUD options is limited throughout most housing systems. Yet, linking substance use disorder treatment with housing supports has been found to improve treatment outcomes for people experiencing homelessness.[16] A recent study found that patients who received treatment for OUD had better treatment response when OUD interventions identified supports that transitioned people from homelessness into permanent housing.[17]

To address the evidence gap for expanding effective MOUD treatment models in the homelessness services sector, the HomePath SMA model is a treatment approach that combines a shared medical

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[10] Krupp J, Hung F, LaChapelle T, Yarrington ME, Link K, Choi Y, Chen H, Marais AD, Sachdeva N, Chakraborty H, McKellar MS. Impact of Policy Change on Access to Medication for Opioid Use Disorder in Primary Care. South Med J. 2023 Apr;116(4):333-340.

[11] Hood J, Banta-Green C, Duchin J, et al. Engaging an unstably housed population with low-barrier buprenorphine treatment at a syringe services program: Lessons learned from Seattle, Washington. *Substance abuse*. 2019; 1-9.

[12] Gerber E, Gelberg L, Rotrosen J, et al. Health-related material needs and substance use among emergency department patients. *Substance abuse*. 2019 1-7.

[13] McLaughlin MF, Li R, Carrero ND, Bain PA, Chatterjee A. Opioid use disorder treatment for people experiencing homelessness: A scoping review. Drug and Alcohol Dependence. 2021;224:108717.

[14] McLaughlin MF, Li R, Carrero ND, Bain PA, Chatterjee A. Opioid use disorder treatment for people experiencing homelessness: A scoping review. Drug and Alcohol Dependence. 2021;224:108717.

[15] Padwa, H., Bass, B., & Urada, D. (2022). Homelessness and publicly funded substance use disorder treatment in California, 2016–2019: Analysis of treatment needs, level of care placement, and outcomes. *Journal of Substance Abuse Treatment*, *137*, 108711.

[16] Padwa, H., Bass, B., & Urada, D. (2022). Homelessness and publicly funded substance use disorder treatment in California, 2016–2019: Analysis of treatment needs, level of care placement, and outcomes. *Journal of Substance Abuse Treatment*, *137*, 108711.

[17] Pro, George & Liebert, Melissa & Remiker, Mark & Sabo, Samantha & Montgomery, Brooke & Zaller, Nickolas. (2022). Homeless Opioid Treatment Clients Transitioning to Dependent and Independent Housing: Differential Outcomes by Race/Ethnicity. Substance Use & Misuse. 57. 1-9.

appointments (SMAs) version of MOUD with housing supports. This study explored the implementation of SMA clinical treatment with housing supports and tracked the outcomes of treatment adherence and well-being in three Healthcare for the Homeless clinics in Philadelphia, PA, Chicago, IL, and Richmond, VA.

SMAs have been successfully used for chronic health conditions such as diabetes, hypertension, and obesity for over a decade, with several randomized control trials showing that SMAs are effective for chronically ill patients, including improved blood pressure outcomes for diabetic patients[18] and reduced emergency room visits for older adults with chronic illness.[19,20] Experimental and non-experimental research on SMAs for opioid use disorder has shown that participants in group-based settings had higher treatment retention, and lower alcohol and opioid use than patients who were assigned to usual medical care.[21,22,23,24,25] These results were also observed in studies with patients experiencing housing instability or homelessness in addition to opioid use disorder.[26,27] Studies of SMAs for MOUD have also found encouraging patient satisfaction with the group visit format, increased coping skills, and improved social measures such as more stable housing, increased time spent working, increased participation in outside recovery groups, and fewer legal difficulties.[28] Peer effects is one of the pathways identified for patients to benefit from SMAs that is distinct from other types of treatments for opioid use disorder.

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[18] Edelman, D., Fredrickson, S.K, Melnyk, S.D., et al. Medical clinics versus usual care for patients with both diabetes and hypertension: a randomized trial. *Annals of Internal Medicine.* 2010; 152(11):689-96.

[19] Colman, E.A., Eilertsen, T.B., Kramer, A.M., et al. Reducing emergency visits in older adults with chronic illness. A randomized, controlled trial of group visits. *Effective Clinical Practice* 2001; 4(2):49-47.

[20] Daum A, Rivera HC, Nykiel S. Shared Medical Appointments Role in the Opioid Epidemic Era: A Tool for Integration of Care. J Addict Res Ther. 2017;08(03).

[21] Imani S, Vahid MKA, Gharraee B, Habibi M, Bowen S, Noroozi A. Comparing mindfulness-based group therapy with treatment as usual for opioid dependents: a pilot randomized clinical trial study protocol. Iranian Journal of Psychiatry and Behavioral Sciences. 2015;9(1).

[22] Roll D, Spottswood M, Huang H. Using shared medical appointments to increase access to buprenorphine treatment. *The Journal of the American Board of Family Medicine*. 2015;28(5):676-677.

[23] Miotto K, Hillhouse M, Donovick R, et al. Comparison of Buprenorphine Treatment for Opioid Dependence in 3 Settings. Journal of Addiction Medicine. 2012;6(1):68-76.

[24] Suzuki J, Zinser J, Klaiber B, et al. Feasibility of implementing shared medical appointments (SMAs) for office-based opioid treatment with buprenorphine: a pilot study. *Substance abuse*. 201536(2):166-169.

[25] Sokol R, Albanese C, Chaponis D, et al. Why use group visits for opioid use disorder treatment in primary care? A patient-centered qualitative study. *Substance abuse*. 2018;39(1):52-58.

[26] Doorley SL, Ho CJ, Echeverria E, et al. Buprenorphine shared medical appointments for the treatment of opioid dependence in a homeless clinic. Substance abuse. 2017;38(1):26-30.

[27] McLaughlin MF, Li R, Carrero ND, Bain PA, Chatterjee A. Opioid use disorder treatment for people experiencing homelessness: A scoping review. Drug Alco1; 224:1087172021 Jul 1;224:108717.

[28] Roll D, Spottswood M, Huang H. Using shared medical appointments to increase access to buprenorphine treatment. *The Journal of the American Board of Family Medicine*. 2015;28(5):676-677.

Peers can improve the experience of patients in SMAs by combatting isolation, contributing learning, providing inspiration, and creating opportunities for patients to build trust with their care team.[29]

II. Intervention description: the HomePath SMA Model

Over past 10 years, Valley Homeless Health Care Program (VHHP) in Santa Clara County, CA, has been operating several SMAs, all serving people formerly or currently experiencing homelessness and OUD. Their SMA expertise[30] was the foundational model for HomePath SMA. MDRC, with support from Arnold Ventures, conducted a feasibility study of HomePath to explore whether this SMA and care coordination model could eventually be scaled to rigorously test its effects on housing stability and improved care outcomes. This concept paper outlines early implementation lessons from the three clinics in Philadelphia, Chicago, and Richmond that adapted VHHP's original SMA-Housing model.

The HomePath SMA model consists of group-based clinical care delivered by a multidisciplinary team of providers, including a medical provider waivered to prescribe specific medications for OUD; a psychologist, psychiatrist or other behavioral health specialist; and a peer specialist, meeting together in the same one-hour appointment with 10-12 patients experiencing homelessness and opioid use disorder. During an SMA, the interdisciplinary provider team works together - addressing each patient's complex medical and non-medical needs individually - in a group setting, with a team focus on SDOH support services. Housing coordination staff were also available either in the group appointment or as adjacent referrals. Patients have opportunities to share experiences and advice with each other and keep each other accountable.

HomePath's SMA clinical teams were focused on treatment retention and housing stability in this whole-person group visit model, with the goals of reducing homelessness and increasing access to appropriate health care. The evaluation team worked in collaboration with VHHP to plan for and launch SMA clinics at Pathways to Housing PA in Philadelphia, Heartland Alliance Health in Chicago, and the Daily Planet Health Services in Richmond, Virginia. During the one-year development of these newly sited SMAs, the multidisciplinary SMA team from VHHP conducted training and site visits to build clinical staff capacities.

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29 Kirsh SR, Aron DC, Johnson KD, et al. A realist review of shared medical appointments: How, for whom, and under what circumstances do they work? *BMC Health Serv Res*. 2017;17(1):113.

30 Doorley SL, Ho CJ, Echeverria E, et al. Buprenorphine shared medical appointments for the treatment of opioid dependence in a homeless clinic. Substance abuse. 2017;38(1):26-30.

They provided guidance on SMA basics and continued regular technical assistance check-ins virtually to facilitate the SMA start-up in all three sites.

HomePath SMA Health and Housing Coordination

The HomePath SMA model provided patients with comprehensive access to primary and mental health care and housing supports. Most patients had long histories with unstable housing and lack of access to appropriate health care. At the time of study enrollment, nearly half (46 percent) of HomePath study participants were experiencing homelessness, as many had been placed in housing prior to the study period.[31] In the year before encountering HomePath, 85 percent reported having attended some kind of substance abuse or alcohol abuse treatment, 81 percent reported having received mental health services or counseling, and 73 percent said that they had visited an emergency room or hospital. Each clinic standardized the coordination of housing and health care support for patients in a different way. Moving people into and keeping them in fully housed situations took coordination from either a housing staff person on the SMA team, or housing referrals made by the SMA staff.

Traditionally, substance use disorder treatment, housing, and shelter providers, and the medical system exist in separate societal and organizational siloes. For housing, patients must navigate a regions' Coordinated Entry System (CES) which triggers a housing and service match based on the prioritization of housing needs after assignment to temporary shelter. There is never enough housing to meet housing needs, leaving people with OUD on the streets and in shelters for a long period of time. While unhoused, people must also manage a network of medical appointments or coordination of medications or referrals as another separate system that often does not interface with housing or shelter services. High-need patients thus are attempting to simultaneously navigate their medical needs in clinical systems, maintain temporary shelter, and determine how to enter substance use treatment through multiple separate systems. The HomePath SMA model provides an integrated approach for patients to access these disparate services. Coordinating care across the housing and health care systems, SMA providers extended the critical network of SDOH support and recovery options for their patients.

[31] HomePath is intended to serve individuals experiencing chronic homelessness. Not all study participants were experiencing homelessness at the time of study enrollment because some were placed in housing before they were enrolled in HomePath for clinical care. In particular, all of the Pathways to Housing PA study participants had been recently placed in their on-site supportive housing units, so while they had been previously experiencing chronic homelessness, they were in supportive housing at the time of study enrollment.

This formal housing-health collaboration required a cross-sector understanding of the SMA approach to MOUD for both housing and health providers. This learning process occurred in all three HomePath sites during a yearlong stakeholder engagement process involving clinic leaders, members from the local Continuums of Care (CoC), data experts, medical directors, outreach staff, organizational leaders, and researchers. These stakeholders engaged in a complex, knowledge-sharing, consensus-building process to advance this integrated model of housing and health care. This co-creation process also illuminated the challenges and constraints of launching and continuing to improve on a housing-healthcare coordination model.

HomePath's SMA clinical teams in Philadelphia, Chicago, and Richmond were all focused on increasing treatment retention and housing stability to reduce homelessness and increase access to appropriate health care, but the housing and health coordination models were distinct at each site. At Pathways to Housing PA, housing and healthcare care services are already woven into integrated care through an onsite partnership that includes a Federally Qualified Health Center (FQHC) and Project HOME Healthcare Services; primary care based MOUD was offered as both individual MOUD care and in SMA models. In the Richmond site, a housing coordinator staff position was embedded into their new SMA model, whereby the Housing Outreach Coordinator was a member of the SMA team. In Chicago, where housing and medical providers had not yet formalized coordination between the housing and clinic sectors, coordination between housing providers and SMA clinic remained under development.

III. Evaluation Method and Findings

The HomePath feasibility study is an implementation study that collected a mix of operational, quantitative, and qualitative data to assess whether the HomePath clinics could recruit enough patients for the SMAs, how quickly the SMAs could be launched and replicated, and whether SMA patients' health and housing outcomes showed promise of being an improvement over the outcomes of patients who had access to as-usual, individual clinical services.

Data for the study were collected from several different settings: operational, process-related data were gathered from notes from quarterly meetings with all site leaders to track progress and monthly meetings with site clinic and housing staff about SMA successes and challenges. Notes from these meetings documented practices and SMA development for 12 months.

The study team also completed 6 visits (2 per study site) to provide training and technical assistance to launch the SMAs and monitor program implementation. In early 2020, right before travel restrictions due to COVID-19 were put in place, the study team conducted 90-minute in-person interviews with 2-3 staff at each of the three clinics. The goal of these interviews was to better understand how the HomePath SMA treatment model compared with standard treatment for OUD, and to learn more about how patients experienced the group-based aspect of the SMA and the housing and health care coordination element of the program. The staff roles varied by study site depending on the structure of each site's SMA team; interviewees included clinic directors, medical providers, behavioral health specialists, a clinical social worker, a psychiatrist, a peer specialist, and a housing coordinator.

To capture the voices of patients participating in the HomePath SMA, the study team held three 60-minute focus groups with patients, one at each of the sites. Site staff provided SMA patients with basic information about the voluntary focus group at least 2 weeks in advance. Focus groups were scheduled for the same day as existing SMAs to minimize barriers to participation; between 4-10 patients attended each group discussion. Through these conversations, the study team sought to learn more about patient experience in the SMA clinic, their motivation to seek treatment, the appeal of the SMA model compared to individual MOUD services, and ways the SMA could be improved. Prior to their participation, patient consent was collected, and patients received lunch and a $25 gift card in recognition of their time. Audio from all conversations was recorded with consent from interviewees.

Lessons from the HomePath SMA feasibility study include: (1) operational lessons for establishing and running a new SMA for MOUD; (2) improvements to the patient experience from the HomePath model compared with as-usual clinical care; and (3) provider perspectives of the quality of care they are able to provide using this housing-healthcare coordination model.

A. Launching and Developing the HomePath SMA Model

Core SMA elements: During quarterly check-in meetings with clinic staff, clinicians discussed their perspectives of the core elements of an SMA for people with OUD and housing instability, based on VHHP's original SMA model and adapted for each clinic's context. Key to the SMA is a multidisciplinary provider team meeting with a group of 10-15 patients, at the same time. Primary care, mental health, and social services were seen as foundational disciplines in the HomePath SMA team for OUD. Peer specialists, SMA team staff with lived experience of housing instability and/or OUD, were widely recommended. Providers stated that the role of psychiatry was “ideal but could be covered by other mental health providers.” SMA providers at all sites expressed that when present, the medical provider and psychiatrist add value by providing information and services to patients that are critically interrelated, connecting physical health symptoms with mental health issues and medications. In one site, the behavioral health specialist stated, “It is very helpful to have a medical provider and psychiatrist present in the SMA. They provide ground-truthing science and take care of things right away - abscesses, blood pressures, etc. These are things that people wouldn’t necessarily come back in for or stick around for.” Participating organizations also emphasized that all SMA team members should be adequately trained in a harm reduction and Housing First approach. Housing First is when a patient’s housing status is not dependent on the timing or sequence of treatment, allowing people to stay housed while on their individual recovery path.

Routine intake and check-in activities: Staff reported that intake and check-in activities before each SMA helped establish rapport among the group and give providers a sense of their patients’ current status in their recovery journeys and mental health. SMA clinicians recommended that future iterations of the SMA include the use of a written pre-clinic questionnaire containing the PHQ-2, questions about the frequency of depression symptoms and substance use in the past two weeks, and the Opioid Craving Scale for all patients.[32,33] Additionally, providers recommended that every SMA open with four basic check-in questions: *1) What is your name? 2) How are you feeling today? 3) What is your goal this week? 4) Who can you ask for help?* Two sites used a set check-in routine for each SMA, including a standard check in question for each patient to provide an update on their weekly goal. These goals ranged from calling someone before they use, going to extra meetings, going to a grocery store with friend, or completing a job application.

Appointment logistics that accommodate collective needs of the SMA patients: All sites sought to set clear expectations for patients and maximize SMA accessibility to increase patient engagement. To achieve these goals, clinics faced logistical considerations related to setting meeting times, meeting access, and intake processes. All sites experimented with holding the SMA meeting at different times during the day to maximize attendance. One site established a cutoff time that patients had to arrive by

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[32] See https://www.apa.org/pi/about/publications/caregivers/practice-settings/assessment/tools/patient-health for a description of the Patient Health Questionnaire (PHQ-9 and PHQ-2).
[33] See https://www.fda.gov/media/143616/download for the Opioid Craving Scale.

to enter the group and made it clear that participants were expected to stay the duration of the appointment, which strengthened group cohesion. Two of the three sites also provided refreshments during the meeting and transportation assistance (public transit passes) to incentivize attendance. With respect to intake, one site originally had problems with medical and behavioral health SMA intake components taking too long during the SMA, so they changed their workflow for intake to occur before the group meeting. In the other sites, intake was done on a separate day from the SMA.

Retention improvements with supportive services: While some patients did not return to the SMA after their initial intake, according to each clinic's healthcare providers, SMA client retention was on par with, or better, than regular MOUD client retention. SMA staff reported that generally, once a participant attended one SMA, they were very likely to continue attending on a regular basis. However, for newly housed patients, the recurring challenge of readiness for SMA treatment emerged as an issue. One clinic established harm reduction support for a housing navigator or case manager to follow-up periodically after people are housed to see if they have any new interest in MOUD treatment. Embedding this practice into the process of implementing SMAs can be a critical support to further improving client retention.

Psychoeducation: According to clinical teams, SMA patients across sites often appreciated psychoeducation more than the SMA reflection discussion time. Psychoeducational topics presented at SMA meetings included depression, the brain and addiction, the brain and trauma, neurobiology, neurotransmitters, physiology, benefits of journaling and meditation, first drug experiences (blending psychoeducation with individual awareness of changes in their own bodies), as well as physical health topics like Hepatitis C. One site's clinical team included a pharmacist who provided additional psychoeducation about chemical dependency.

B. Patient Benefits

According to providers, the HomePath model offered several advantages over individual appointments for MOUD to patients. As stated by one practitioner, "Client trust in the medical system is a major issue when working with this population, since so many people have not been in a respectful environment before, it can take a long time to build patient trust." Providers reported that SMAs helped patients build trust by creating an environment with less pressure on participation in a group meeting, in contrast to an individual MOUD appointment. Creating a trusting environment was also essential for supporting people with complex trauma histories. An SMA clinician explained, “The SMA has been psychotherapeutic, with patients more comfortable talking. The SMA team does not ‘treat’ trauma in the SMA, but they refer clients to other groups more geared toward trauma care and offered individual appointments. As clients’ housing becomes more stable, clients start to open up and deal with trauma-related issues in their lives.”

Patients also appear to have benefitted from the availability of peer supports. SMA patients were able to connect with peers who shared their experiences of both homelessness and substance use disorder. One focus group participant explained, “A lot of times I feel like I’m unique, the only one dealing with something. Come here, find out a lot of people dealing with the same issues. Nice to have somewhere where you can be open and honest…I usually feel better when I leave out of group than when I came in. Being made to feel like I'm not so different when I leave.” The peer specialist serves as another source of shared background and understanding and lends credibility to the rest of the team. Recognizing these benefits, one site chose to incorporate a recovery specialist with lived experience of homelessness as a core SMA team member. Another site provided access to a peer specialist in their Housing Team, which was formally coordinating with the SMA team.

Sites also identified housing coordination as a key source of added value to patients in SMAs. One site operated both a multi-disciplinary housing team and an SMA clinical team, working together to address SDOH as well as addressing medical and psychiatric needs. In that model, the sharing of information and patient updates happened continuously between and across housing and medical teams. In another site, the housing specialist was embedded directly in the SMA team. Having a housing support staff position participating in the SMA model allowed for direct housing connection and referrals to occur during and after group meetings. Because the SMA met weekly, housing outreach workers had a dedicated time that allowed them to check in with clients about their housing needs efficiently, as patients also received medical care. The housing coordinator also worked with housing providers to refer eligible people to the SMA, coordinating around clients at CoC case conferencing meetings.

Finally, providers reported that the multidisciplinary SMA team supported patients to build community, resulting in their receipt of more recovery strategies and service referrals than would occur in individual MOUD appointments. One SMA provider observed, “The multidisciplinary team combines motivational interviewing with access to information to help patients reach their goals. Through the building of community and relationships, we can address the social determinants of health and navigate the health system." The multidisciplinary team also created efficiency benefits for patients, allowing them to accomplish more within a single office visit than they otherwise would have, and often removing the need to return for multiple individual follow-up appointments.

C. Provider Benefits

HomePath SMA providers reported the group-based model of care required them to learn new ways to partner around communication, allowing for time to learn from each other as well as from each patient. One medical director reported that the experience of seeing other specialists (including housing and recovery specialists) working together as an interdisciplinary team during SMAs was especially valuable. That SMA team's outreach coordinator and social worker stated they learned a lot about OUD and medication that was helpful for their roles, and the behavioral health consultant felt that SMAs helped break down silos among providers across all their clinics. According to staff, these improvements helped more patients access care and stay in care longer.

One SMA medical director stated, "What is effective in the SMA is the interdisciplinary team, and their ability to work effectively together. At the root of SMAs is the question - who is your care team? It is key to ensure SMA start-up training and support is around what makes an effective team, and how you work together, developing the rapport you have with each other for improved care." Another SMA provider summarized, "The relationships and connections that have grown between participants, providers, case managers through the SMA are a valuable resource for each client's road to recovery."

SMA providers also reported it was generally fine to have some turnover of SMA providers due to scheduling, knowing substitute providers can have very different styles. When the need for coverage arose in the SMA care team, warm handoffs between new and old SMA team members helped avoid disruptions in care or group dynamics that could arise when bringing on a new provider team member.

SMAs may also bring efficiency gains for clinics, either by replacing regular MOUD visits to take the pressure of individual MOUD appointments off primary clinic services or by using SMA groups to increase capacity to serve more patients. This feasibility study saw instances of each of these types of efficiency gains within HomePath clinics.

IV. Discussion

The HomePath SMA feasibility study provided an important opportunity to observe the process of SMA formation across three clinics in different geographical contexts across the country and to consolidate lessons learned from both providers and patients. Ensuring success in SMA execution required troubleshooting meeting logistics and forming consensus on the core structure of the SMA provider team and their ongoing meeting format. Once the SMAs were up and running, both providers and patients reported seeing many of the benefits of SMAs that were consistent with what is documented in the literature, including increased patient trust through sustained interaction with the provider team and other patients, and added value in the SMA above and beyond what patients experience in individual MOUD appointments. Importantly, the HomePath patients also reported receiving more extensive assistance with other SDOH, most notably housing referrals and supports, as well as additional medical and psychiatric assistance, at times removing the need for individual follow-up appointments. Providers reported benefits from the interdisciplinary team approach and leveraged the SMA meetings to increase clinic capacity to provide MOUD to patients.

At the end of a 12-month follow-up period after the SMAs launched, the three HomePath sites had established multi-disciplinary clinic teams to meet the complex needs of their SMA clinic patients and increased their capacity hold SMAs to serve this population. Findings from the feasibility study suggest that, with a few hours of quality training and technical assistance from experienced SMA practitioners, the HomePath SMA model could be replicated in clinics across the country to meet growing client demand and needs of people experiencing homelessness and struggling with OUD. HomePath may be a scalable model to help address the growing opioid epidemic and homelessness crises across the country.

V. Conclusion

Vulnerable people need comprehensive, coordinated care that effectively addresses SDOH. **The relationship between housing stability and OUD management is bi-directional: it is difficult to manage MOUD for opioid use disorder without housing, and it is extremely challenging to maintain housing without treatment for OUD.** This SMA model’s coordination framework offers an opportunity for inter-related service information to flow between the healthcare and housing systems, strengthening the recuperative capacities of both to create synergy and effective housing, treatment outcomes. The collaboration between housing and medical providers provides a unique platform for population health and housing improvements. By supporting their client’s participation in an integrated SMA model of care, housing case managers can link clients to a full continuum of healthcare services, just as healthcare providers can increase OUD treatment adherence by providing or referring to permanent housing in addition to multidisciplinary supports.

Across sites, SMAs whose integrated medical team coordinated with housing services strengthened clinical approaches to multi-level client care for people with complex comorbidity issues. Just as importantly, the differences between the practices in the three cities demonstrate that the model can be adapted to variable local conditions. Expanding this coordinated model of care may increase system capacity to meet the growing needs of people who are experiencing homelessness and OUD, positioning this emerging model as a crucial system response to a growing public health crisis.