Community-Embedded Low-Barrier Care: A Model for Engaging People With Complex Needs in HIV Treatment and Prevention

Maria A. Corcorran, 1a, 9 Jimmy Ma, 1a, 9 Margaret L. Green, 10 Raaka G. Kumbhakar, 10 Eve Lake, 1 Elizabeth Dhal Helendi, 2 Luke Sumner, 2 Lorie Ann Larson, 2 Julia C. Dombrowski, 1,3,0 and Shireesha Dhanireddy 1

Department of Medicine, University of Washington, Seattle, Washington, USA, 2 Aurora Commons, Seattle, Washington, USA, and 3 HIV/STI/HCV Program, Public Health—Seattle and King County, Seattle, Washington, USA

People living homeless and people with substance use disorders are at increased risk for HIV but experience multiple intersecting barriers to accessing medical care. Low-barrier care has emerged as a strategy to engage persons with complex needs in care, particularly in the fields of HIV and substance use treatment. We describe our experience implementing low-barrier whole person care for HIV treatment and prevention at 3 community-embedded sites in King County, Washington, and outline key operational and clinic characteristics that helped facilitate success.

Keywords. HIV; homelessness; low-barrier care; substance use.

People living homeless, particularly those with co-occurring substance use disorders, experience increased vulnerability to HIV acquisition, and unstable housing has been linked to lower rates of viral suppression among people with HIV (PWH) [1]. Over the past decade, there have been numerous outbreaks of HIV among people who inject drugs and are unstably housed, and housing instability has similarly been linked to increased rates of other infectious diseases, including viral hepatitis and sexually transmitted infections (STIs) [2-7]. Unhoused women are particularly vulnerable to HIV and STIs due to a combination of sociobehavioral, biologic, and structural factors, such as higher rates of exchange sex and receptive syringe sharing, and have represented many of the new HIV diagnoses in recent outbreaks [4, 8-11].

Despite being at increased risk for HIV and other infectious diseases, people living homeless experience multiple complex barriers to accessing medical care. Structural barriers, including poverty, unstable housing, limited transportation, and health

Received 09 December 2024; editorial decision 03 April 2025; accepted 05 April 2025; published online 8 April 2025

Open Forum Infectious Diseases®

© The Author(s) 2025. Published by Oxford University Press on behalf of Infectious Diseases Society of America. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs licence (https://creativecommons. org/licenses/by-nc-nd/4.0/), which permits non-commercial reproduction and distribution of the work, in any medium, provided the original work is not altered or transformed in any way, and that the work is properly cited. For commercial re-use, please contact reprints@oup.com for reprints and translation rights for reprints. All other permissions can be obtained through our RightsLink service via the Permissions link on the article page on our site-for further information please contact journals.permissions@oup.com. https://doi.org/10.1093/ofid/ofaf219

care costs, are often compounded by co-occurring substance use and untreated mental health disorders, making engagement in traditional primary care systems challenging [12-15]. Differentiated service delivery models adapt health structures to meet the needs of individuals and have emerged as strategies to align health resources with patient needs, particularly in the field of HIV care [16-18]. However, many differentiated service delivery models focus exclusively on PWH and miss opportunities to engage populations at risk for HIV, including people living homeless, in HIV prevention. A whole person approach to care aims to engage persons in high-quality care regardless of HIV status, combining HIV testing, HIV prevention, and HIV treatment, with the goal of reducing HIV infections, stigma, and health disparities while increasing uptake of proven HIV prevention interventions [19].

In Seattle and King County, Washington, the HIV epidemic has historically been concentrated in urban areas among White men who have sex with men, and the overall rate of viral suppression among PWH is high (85%) [20]. Nevertheless, new diagnoses of HIV in the county are marked by substantial racial, geographic, and socioeconomic disparities. In 2018, an outbreak of new HIV diagnoses among heterosexual persons who were living homeless in north Seattle, most of whom injected drugs, exposed the vulnerability of this marginalized population to HIV and resulted in a 286% increase in HIV infections among people who inject drugs [4, 21]. In 2023, an estimated 18% of new HIV diagnoses occurred among people living homeless, and county-wide viral suppression was lower among PWH experiencing homelessness or unstable housing when compared to the general population [20]. Additionally, over the past several years, an increasing proportion of new

^aM. A. C. and J. M. are co-first authors.

Correspondence: Maria A. Corcorran, MD, MPH, Harborview Medical Center, Department of Medicine, University of Washington School of Medicine, 325 9th Ave, Box 359782, Seattle, WA 98104 (corcom@uw.edu).

diagnoses has occurred in south King County, an area that is more racially diverse and geographically dispersed and that has relatively few health resources for marginalized populations, such as people living homeless, people who inject drugs, and PWH [20].

In response to these needs, we established 3 low-barrier, community-embedded, status-neutral clinics in north Seattle and south King County focused on engaging persons with complex needs in HIV prevention, HIV treatment, and comprehensive primary care (Figure 1). These low-barrier care clinics are housed within community-based organizations and provide a novel approach to HIV prevention and treatment by bringing services directly to trusted locations where people experiencing homelessness and other complex barriers to care already visit. The low-barrier clinics co-locate services to minimize structural and systems-level barriers and expand the reach of HIV treatment and prevention services, especially to populations that have historically been out of care. In an effort to promote dialogue and discussion on strategies and best practices for engaging populations with complex barriers to care in HIV treatment and prevention services, we describe our experience implementing these whole person community-embedded low-barrier clinics and outline key characteristics that helped drive success.

AURORA-SHE (SAFE. HEALTHY. EMPOWERED.) CLINIC

Overview and Historical Context

The Aurora–SHE Clinic is a whole person low-barrier clinic for people experiencing complex barriers to care in north Seattle (Table 1). The clinic is run by the University of Washington's Harborview Medical Center (HMC) but housed within Aurora Commons, a community-based nonprofit organization serving unhoused neighbors. Through its drop-in day center, Aurora Commons provides a daily meal, coffee, access to kitchen space, laundry, bathrooms, and a clothing closet, as well as a safe and welcoming place to rest. Aurora Commons similarly provides nonmedical case management and advocacy services, helping neighbors with a variety of needs: housing, photo identification cards, phones, and other basic needs.

In 2018, following a request from Aurora Commons leadership to provide accessible, walk-in, trauma-informed sexual health services for women who exchange sex, HMC opened a 1-day/week clinic at Aurora Commons for female-identifying persons. This clinic, the SHE Clinic (Safe. Healthy. Empowered.), was run out of a mobile medical van, which parked outside of Aurora Commons 1 day per week. This initial iteration of the SHE Clinic was funded by the state health department and staffed by a physician, registered nurse, and social worker, and it received support from the Aurora Commons advocates. Over time and with the availability of additional funding, the SHE Clinic gradually expanded to include additional days of service and more robust nursing and social work support.

Current Operations, Staffing, and Services

In 2021, due to an identified need to expand low-barrier primary care and HIV prevention and treatment services, HMC and Aurora Commons were jointly awarded Ending the HIV Epidemic funding through a competitive process to build out a dedicated clinic space within Aurora Commons' day drop-in center and expand full clinical services to 4 days a week, with services now being inclusive of male-identifying and nonbinary individuals. Given this expansion of care, the clinic name was also modified to the Aurora–SHE Clinic.

In its current state, all clinic visits at the Aurora-SHE Clinic are walk-in, without penalty for missed or late visits, and there are no prespecified targets for daily visit number or time per visit. Daily staffing at the Aurora-SHE Clinic includes a physician, a registered nurse, 2 medical social workers, and 1 program coordinator. Physician time is split among 5 providers, all of whom have expertise in internal medicine and HIV care. The medical staff continues to be supported by the Aurora Commons' advocates, who provide nonmedical case management and advocacy services, particularly in the areas of housing and temporary shelter. Staff from the Aurora-SHE Clinic and Aurora Commons are well integrated, with clinic personnel attending weekly Aurora Commons staff meetings and Aurora Commons advocacy staff attending daily clinic huddles. HMC and Aurora Commons provide their staff with trainings in trauma-informed culturally sensitive care and de-escalation safety techniques through their organizational resources.

Clinical services at the Aurora-SHE Clinic focus on HIV testing, treatment, and prevention, such as provision of antiretroviral therapy and HIV preexposure prophylaxis (PrEP); STI testing and treatment; and treatment of substance use disorders, including medications for opioid use disorder (MOUD). However, despite an initial focus on HIV prevention, the clinic has evolved to serve as a medical home for most patients, and it provides comprehensive primary care services, inclusive of routine vaccinations, blood draws, wound care, and chronic disease management. The clinic is well integrated within the University of Washington medical system and able to provide internal referrals for procedures and specialty services. Given the high number of pregnancies diagnosed at the Aurora-SHE Clinic, the clinic has established a partnership with a University of Washington family medicine clinic in north Seattle to provide expedited access to prenatal services and a full complement of reproductive health care. For pharmacy services, the Aurora-SHE Clinic utilizes HMC's long-term care pharmacy to provide next-day delivery of medications to the clinic, excluding controlled substances.

Key Factors Facilitating Success

An early analysis of the SHE Clinic, performed in 2019, showed that among 76 women who accessed Aurora Commons, those who accessed the SHE Clinic (n = 41) were more likely to report STI testing in the past 3 months (83% vs 63%, P = .03),

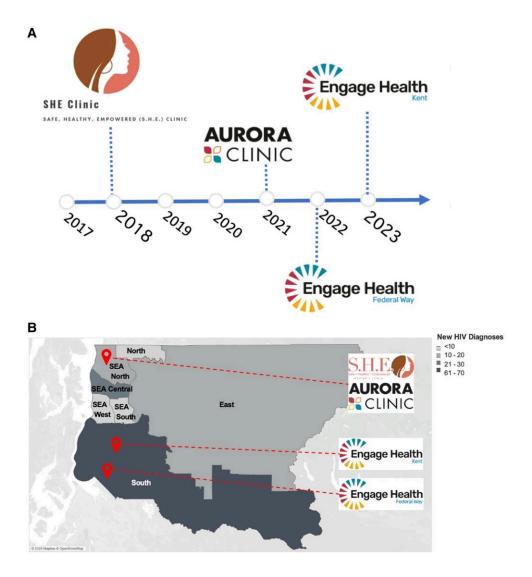


Figure 1. Timeline and geographic location of community-embedded low-barrier care clinic implementation in King County, Washington. *A*, Timeline of community-embedded low-barrier care clinic implementation. *B*, Geographic location of the 3 community-embedded low-barrier care clinics and regional distribution of new HIV diagnoses in King County, Washington, 2023.

receipt of MOUD (58% vs 14%, P = .001), and receipt of PrEP (49% vs 0%, P < .001) when compared with those who had not accessed the SHE Clinic (n = 35) [22]. Similarly, when compared with nonadopters, early adopters of the SHE Clinic had a substantially lower rate of nonemergent visits to the emergency department in the 6 months following SHE Clinic implementation when compared with the 6 months prior to implementation [22].

Accordingly, we identified several factors based on our consensus opinion that are key to the Aurora–SHE Clinic's success and would be essential components of scale-up of similar endeavors in other community-embedded settings (Table 2). First and perhaps most important, the partnership with Aurora Commons is critical to the clinic's success. Aurora Commons has been serving the community and establishing

a culture of trust since 2011. It is through this partnership that the medical staff gains buy-in and is seen as "friends of friends" by a population that has experienced significant institutional trauma within the traditional medical system. Most referrals to the clinic come from the Aurora Commons' community engagement specialists and advocacy staff, who play a critical role in building rapport and trust with neighbors. This partnership also allows for more comprehensive wraparound services, providing access to basic needs, housing advocacy, medical case management, and primary care and HIV prevention services under one roof. Similarly, close collaboration between clinic and Aurora Commons staff allows for more coordinated patient outreach and retention efforts. While clinic staff frequently employ text, phone, and email for outreach to patients, Aurora Commons staff augment those

Table 1. Characteristics of the 3 Low-Barrier Care Clinics in King County, Washington

	Aurora-SHE Clinic	Engage Health–Federal Way and Kent
Location (year established)	North Seattle (2018, expanded in 2021)	Federal Way (2022), Kent (2023)
Community partner	Aurora Commons	Catholic Community Services of Western Washington
Target population	People experiencing homelessness or other complex barriers to care with or at risk for HIV in north Seattle	People experiencing homelessness or other complex barriers to care with or at risk for HIV in south King County
Funding	Ending the HIV Epidemic, Washington State Dept of Health	Ending the HIV Epidemic, SAMHSA
Daily clinic staffing	1 medical provider, 1 registered nurse, 2 social workers, 1 program coordinator	1 medical provider and 1 social worker covering both sites; 2 registered nurses and 2 program coordinators, 1 each per site
Services offered	 HIV testing and treatment PrEP and PEP STI and viral hepatitis testing and treatment MOUD, overdose education, and naloxone Comprehensive primary care and wound care Medication delivery and blood draws Routine vaccinations Specialty referrals and coordination 	 Same services as the Aurora–SHE Clinic Nurse care manager model for MOUD Housing Opportunities for Persons With AIDS housing vouchers and case management
Incentives	Provided for Receipt of STI/HIV test results HIV primary care visit Picking up ART Picking up PrEP Completing outside appointment	Provided for Receipt of STI/HIV test results HIV primary care visit Picking up ART Picking up PrEP Completing outside appointment
No. of unique patients seen, Sep 2023–Dec 2024	581	648
Mean encounters per clinic session	9.5	9.0

Abbreviations: ART, antiretroviral therapy; MOUD, medications for opioid use disorder; PEP, postexposure prophylaxis; PrEP, preexposure prophylaxis; SAMHSA, Substance Abuse and Mental Health Services Administration; SHE, Safe. Healthy. Empowered; STI, sexually transmitted infection.

efforts by linking individuals who access the drop-in space back to the clinic and often perform outreach to patients in the community or accompany them to medical appointments.

The partnership with Aurora Commons similarly facilitates clinical services being conducted with a trauma-informed approach. By understanding the institutional trauma that many patients have experienced within the health care system, which is layered atop chronic, complex community trauma, the clinic space was intentionally designed to be less triggering and to feel more like a living room than a health care setting. There is artwork and colorful paint on the walls, decorative and warm lighting, an area rug, and a couch and seating area. This environmental configuration helps to set the underlying tone for the clinic, making the space feel approachable and inviting. Within the space at the Aurora-SHE Clinic, there is an emphasis on attending to the physical and psychological safety of patients by creating a culture of consent and avoiding retraumatization. This goes hand in hand with placing patients' stated priorities at the forefront of care, focusing on what can be accomplished in the moment, often at the cost of higher throughput and efficiency.

The third key clinic characteristic facilitating success is the low-barrier care philosophy, which we define in line with prior published work [16]. At the Aurora–SHE Clinic, all visits are offered on a walk-in basis in an effort to eliminate barriers related to scheduling and offer maximal access to care for patients with a high incidence of acute medical needs. Within the clinic,

care is trauma informed and has a heavy focus on harm reduction principles. High-intensity case management focuses on patient-identified priorities, and the team engages in extensive cross-agency collaboration, coordinating with outside medical providers, housing agencies, and mental health case managers, among others, to promote integrated patient-centered care. Finally, financial and other incentives are provided to promote engagement in care. At the Aurora–SHE Clinic, patients receive a gift card for following up for testing results (STI, HIV, and/or viral hepatitis), attending outside appointments, picking up PrEP or antiretroviral therapy, and returning for HIV primary care.

ENGAGE HEALTH-FEDERAL WAY AND ENGAGE HEALTH-KENT

Overview and Historical Context

Engage Health comprises 2 low-barrier, status-neutral walk-in clinics for people with complex barriers to care in Federal Way and Kent, 2 municipalities in south King County. The clinics are operated by HMC and co-located within 2 day and hygiene centers run by Catholic Community Services of Western Washington (CCS), the largest private nonprofit provider of services for people experiencing poverty and homelessness in the Puget Sound region. The day and hygiene centers offer drop-in gathering spots for clients, with access to toilets, showers, laundry services, kitchen space, computers, and spaces for

Table 2. Key Factors Facilitating Success of Community-based Whole Person Low-Barrier Care in King County, Washington

Key Factor	Description
Close partnership and embedded within community organization	Clinics are co-located within community-based organizations Trust is gained through partnership with a trusted organization ("friend of a friend") Community-based partner organizations offer synergistic services and resources
Trauma-informed environment and approach to care	 Medical space is intentionally designed to not appear clinical Space feels approachable, inviting, and nontriggering, responsive to many patients' history of institutional trauma Care is provided with a trauma-informed approach, centering patient priorities and needs while avoiding care that is not asked for or desired
Low-barrier care model	 Walk-in appointments High-intensity case management Focus on harm reduction principles Incentives for engagement, testing, and care for HIV, sexually transmitted infections, and viral hepatitis
Nurse-centered care model	Nurses extend limited physician and social work capacity and move patient care forward through their roles as care managers for treatment of HIV, opioid use disorder, and sexually transmitted infections. Nurses are a stable presence at each clinic site, building close relationships with patients and providing counseling and coordination of care
Extensive cross-agency collaboration to meet patient needs	Close collaborations with outside community partners, the carceral system, and other health systems allow for close transitions in care and expand the reach of low-barrier clinics Expedited and formalized referral processes (eg, methadone, obstetrics/gynecology care) expand services, facilitate care, and improve low-barrier clinics' overall impact on health
Diversified and flexible funding	 Funding that is not disease specific facilitates a more comprehensive whole person approach to care, allowing for care to be delivered across the continuum of HIV treatment and prevention Multiple funding sources allow for expanded operating capacity, beyond what would be possible with a single funder

community and rest. CCS operates multiple "family center services" out of these day center hubs for their surrounding communities, offering nonmedical case management, housing, advocacy, mental health and substance use care, and homelessness outreach services, among others. Importantly for unhoused

PWH receiving services at the clinics, CCS is also an agency-level recipient of funding from the Housing Opportunities for Persons With AIDS program.

In 2021, Public Health–Seattle and King County identified south King County as having the greatest regional gap between available HIV services and new infections and, after a planning and solicitation process, was jointly awarded CCS and HMC Ending the HIV Epidemic funding to establish new clinics in Federal Way and Kent. In addition, in 2022 HMC expanded office-based opioid treatment using the Massachusetts nurse care manager model for the new low-barrier clinics in south King County after receiving a grant from the Substance Abuse and Mental Health Services Administration [23]. Clinical space build-out in Kent and hiring for clinical and outreach advocacy staff at both locations occurred in 2022 and 2023. Engage–Federal Way had existing space built out and opened in December 2022, while Engage–Kent opened in August 2023.

Current Operations, Staffing, and Services

Similar to the Aurora-SHE clinic, all visits at the Engage Health clinics are walk-in, and there are no prespecified targets for daily visit number or time per visit. The current daily medical staffing model for Engage Health was adapted from the Aurora-SHE Clinic and includes a medical provider (split between 2 individuals), 2 registered nurses, 1 medical social worker, and 2 patient care coordinators. When fully staffed, each clinic has a nurse and a patient care coordinator who primarily work at their specific sites, while the provider of the day and the social worker move together and split time equally between the Federal Way and Kent clinics throughout the week, providing remote support as needed for the other site. Medical staff work closely with CCS's nonmedical case managers, outreach advocates, and mental health personnel, especially for housing/shelter, mental health, and care coordination. HMC and CCS teams meet daily at each site and communicate electronically to coordinate outreach, care, and logistics, as well as monthly across sites to discuss patients and overarching clinic operations and needs.

As HMC employees, clinic staff at Engage Health receive training through institutional resources in trauma-informed culturally sensitive care and de-escalation safety techniques at hire, with periodic refreshers. CCS staff members receive similar training through agency resources. HMC and CCS staff have completed additional training in topics such as sex trafficking and trauma-informed overdose response and harm reduction. Several of these trainings have led to joint protocols and recurring practice sessions for safety and overdose response.

Staffing for HMC and CCS has been an ongoing challenge in the initial 2 years of Engage Health, leading to several adjustments in clinic hours. Flexibility in staff roles and responsibilities (eg, nursing assistance with case management and outreach) and incorporation of remote or joint visits (eg, using on-site nursing support with off-site physician or social work support) have enabled continued delivery of quality services throughout staffing shortages.

Similar to the Aurora–SHE Clinic, the Engage Health clinics adopt a trauma-informed approach and employ a low-barrier care philosophy, as well as focus on the care and prevention of HIV, STIs, viral hepatitis, and substance use disorders, while serving as a medical and/or primary care home for many individuals. The same services are available at Engage Health as the Aurora–SHE Clinic: PrEP, HIV treatment, MOUD, comprehensive primary care, STI testing and treatment, medication delivery, and laboratory testing. Referrals from Engage Health primarily go outside the University of Washington system due to the clinics' distance from other affiliated facilities and pharmacies.

A unique addition for Engage Health's services is provision of MOUD through the Massachusetts nurse care manager model [23], a nurse-centered approach to opioid use disorder care that extends services and access while allowing for development of more stable recovery relationships from the consistency of having the same nurse and program coordinator at each site. Engage Health also collaborates closely with CCS's mental health clinical and outreach program, Counseling, Recovery, and Wellness, to create a more comprehensive approach to care for mental health and addiction.

Key Factors Facilitating Success

Engage Health grew from the successful foundation developed by the Aurora-SHE Clinic and Aurora Commons. In contrast to their more organic progression, Engage Health emerged from a more deliberate planning process involving several wellestablished institutions to specifically address HIV care and associated care needs in south King County. Although a formal evaluation of Engage Health's impact remains ongoing, between September 2023 and December 2024, the clinics successfully engaged 648 unique patients in primary care services (including 61 persons with HIV), conducted >2952 in-person visits, and successfully housed 5 of 6 unhoused PWH eligible for the Housing Opportunities for Persons With AIDS program. The same 3 key intervention components—close relationship between clinic and trusted community partner, trauma-informed care and environment, and low-barrier care philosophy—have been essential to Engage Health's growth and success.

Two additional adaptations important for Engage Health can facilitate scale-up of low-barrier care models in community settings: (1) the expansion of a nurse-centric model of care and (2) close partnerships with public health, other health systems, and community organizations. At Engage Health, close partnership with HMC's office-based opioid treatment group leveraged its

expertise and facilitated the expansion of a nurse care manager model for opioid use disorder, which expanded to similarly include care of HIV and STIs. Nurses extend limited provider and social work time and move patient care forward through their roles as care managers. The nurses and program coordinators are a stable presence at each clinic site, building close relationships with patients, and they provide counseling, outreach (via phone, text, email, and direct contact within the day center space), care coordination, laboratory draws, and treatment in consultation with physicians, social work, and CCS team members. Their efforts are key to continued patient engagement and retention in care. Additionally, close collaborations with public health and partners in the community, carceral system, and other health systems have allowed Engage Health to extend and deepen important services, such as methadone and obstetrics/gynecology care, and serve as a landing spot, especially in transitional periods (eg, discharge from jail or hospital), for PWH, substance use disorders, and other complex barriers to care in the south King County community.

Across Engage Health and the Aurora–SHE Clinic, flexibility of funding sources, such as Substance Abuse and Mental Health Services Administration, Ending the HIV Epidemic, and state funding, has paved the way for early sustainability and allowed services to adopt a more expansive whole person approach to HIV care. While other established funding streams, including Ryan White, focus on PWH, the diversity of current funding has allowed Engage Health and the Aurora–SHE Clinic to work more comprehensively across the spectrum of HIV care and prevention, incorporating an approach that emphasizes not only diagnosis and treatment but also biomedical prevention, substance use treatment, and other harm reduction approaches.

Challenges and Limitations to Implementation Success

Despite several key factors facilitating early success of our lowbarrier care clinics, challenges and limitations persist. Although funding flexibility can be seen as a strength, current funding is not sufficient to meet the ongoing and growing needs of the population. There are frequently far more patients who wish to access services than can be seen in 1 day, and it often takes multiple visits to build sufficient trust to engage patients in HIV testing and other prevention services. Similarly, the patchwork approach to funding, paired with uncertainty regarding the future of federal funding, creates inherent vulnerability for the clinics, as loss of any 1 funding stream threatens the sustainability of services as a whole. Additionally, despite the provision of comprehensive HIV and primary care, the Aurora-SHE and Engage Health clinics are not equipped to provide the full complement of secondary and tertiary medical services, and referrals back into the traditional health care system for services such as diagnostic imaging and subspecialty consultation are still needed. Despite intensive care coordination on the part of Aurora–SHE and Engage Health staff, receipt of care outside the community-based clinic setting remains challenging for many patients due to ongoing structural and system-level barriers. Finally, working in low-barrier care can be emotionally demanding, with high rates of secondary trauma and staff burnout. The Aurora–SHE and Engage Health clinics have experienced staff turnover and staffing shortages, which have episodically affected service delivery and delayed programmatic growth.

CONCLUSIONS

Modifying health structures for vulnerable individuals using a trauma-informed, low-barrier care philosophy and embedding health care in community settings where trust has been built are important strategies for reaching people who experience complex barriers to care. Through our experience implementing 3 low-barrier, community-embedded, whole person clinics in King County, Washington, we identified several key factors that have facilitated early success and may be critical for similar scale-up efforts in other jurisdictions: (1) partnership and colocation within a trusted nonclinical community organization, (2) trauma-informed environment and care delivery, (3) lowbarrier care philosophy and commitment to adaptation, (4) a nurse-centered care model, (5) cross-agency collaboration and referral processes to extend reach, and (6) diversity in funding streams. These lessons can inform successful implementation and adaptation of health structures for low-barrier care in other diverse communities and settings to improve the care of individuals with complex needs.

Notes

Acknowledgments. We acknowledge the following individuals for their contributions to establishing and running the low-barrier care clinics. Aurora-SHE Clinic: Monica Brown, Stacey Jones, Ari Calderone, Sherice Davis, Tram Nguyen, Matt Williams. Engage Health: Jessica Carrico, Amanda Stafford, Deva Patterson, Oscar Rosales Castaneda, Bianca Clemming, Omeid Heidari. Aurora Commons: Sparrow Etter Carlson, Mary Schmitz, Audrey Dankwah, Natalie Neumiller, Sydney Diggs, Lety Rodriguez Ortiz. Catholic Community Services of Western Washington: Tuvaelagi Siufanua, Whonakee King, Dan Wise, Don Clayton, Casey Wishart, Julie Goodman, Bailey Niall, Jocelyn Molina, Marcus Fielding, Kizzy Howard, David Harris. Harborview Madison Clinic: Eric Mose, Michelle Knight, Walter McKenzie, Christine McKay. Office-Based Opioid Treatment Team: Addy Adwell, Elsa Tamru, Joseph Merill, Judith Tsui. Public Health-Seattle and King County: Sara Magnusson, Rebecca Hutcheson, Matthew Golden.

Financial support. This work received no financial support, and there are no financial conflicts of interest to disclose.

Potential conflicts of interest. All authors: No reported conflicts.

References

 Aidala AA, Wilson MG, Shubert V, et al. Housing status, medical care, and health outcomes among people living with HIV/AIDS: a systematic review. Am J Public Health 2016; 106:e1-23.

- Des Jarlais DC, Sypsa V, Feelemyer J, et al. HIV outbreaks among people who inject drugs in Europe, North America, and Israel. Lancet HIV 2020; 7:e434–42.
- Peters PJ, Pontones P, Hoover KW, et al. HIV infection linked to injection use of oxymorphone in Indiana, 2014–2015. N Engl J Med 2016; 375:229–39.
- Golden MR, Lechtenberg R, Glick SN, et al. Outbreak of human immunodeficiency virus infection among heterosexual persons who are living homeless and inject drugs—Seattle, Washington, 2018. MMWR Morb Mortal Wkly Rep 2019; 68: 344-9.
- Williams SP, Bryant KL. Sexually transmitted infection prevalence among homeless adults in the United States: a systematic literature review. Sex Transm Dis 2018: 45:494–504.
- Plotzker RE, Burghardt NO, Murphy RD, et al. Congenital syphilis prevention in the context of methamphetamine use and homelessness. Am J Addict 2022; 31: 210-8
- Bartholomew TS, Onugha J, Bullock C, et al. Baseline prevalence and correlates of HIV and HCV infection among people who inject drugs accessing a syringe services program; Miami, FL. Harm Reduct J 2020; 17:40.
- Larney S, Mathers BM, Poteat T, Kamarulzaman A, Degenhardt L. Global epidemiology of HIV among women and girls who use or inject drugs: current knowledge and limitations of existing data. J Acquir Immune Defic Syndr 2015; 69(suppl 2):S100-9.
- Nerlander LM, Hess KL, Rose CE, et al. Exchange sex and HIV infection among women who inject drugs—20 US cities, 2009. J Acquir Immune Defic Syndr 2017; 75(suppl 3):S333–40.
- Blankenship KM, Reinhard E, Sherman SG, El-Bassel N. Structural interventions for HIV prevention among women who use drugs: a global perspective. J Acquir Immune Defic Syndr 2015; 69(suppl 2):S140-5.
- Hodges-Mameletzis I, Fonner VA, Dalal S, Mugo N, Msimanga-Radebe B, Baggaley R. Pre-exposure prophylaxis for HIV prevention in women: current status and future directions. Drugs 2019; 79:1263–76.
- Owens L, Micks E, Moreno C, Glick S. Reproductive health care utilization by women who inject drugs and exchange sex in the Seattle area. Subst Use Misuse 2020; 55:2020–4.
- Allen ST, O'Rourke A, Hamilton White R, et al. Barriers and facilitators to PrEP use among people who inject drugs in rural Appalachia: a qualitative study. AIDS Behav 2020; 24:1942–50.
- Paisi M, Crombag N, Burns L, et al. Barriers and facilitators to hepatitis C screening and treatment for people with lived experience of homelessness: a mixed-methods systematic review. Health Expect 2022; 25:48–60.
- Thorndike AL, Yetman HE, Thorndike AN, Jeffrys M, Rowe M. Unmet health needs and barriers to health care among people experiencing homelessness in San Francisco's mission district: a qualitative study. BMC Public Health 2022; 22:1071.
- Dombrowski JC, Ramchandani MS, Golden MR. Implementation of low-barrier human immunodeficiency virus care: lessons learned from the Max Clinic in Seattle. Clin Infect Dis 2023; 77:252–7.
- Phillips A, Shroufi A, Vojnov L, et al. Sustainable HIV treatment in Africa through viral-load-informed differentiated care. Nature 2015; 528:S68-76.
- Hickey MD, Imbert E, Appa A, et al. HIV treatment outcomes in POP-UP: drop-in HIV primary care model for people experiencing homelessness. J Infect Dis 2022; 226(suppl 3):S353–62.
- Centers for Disease Control and Prevention. Issue brief: status neutral HIV care and service delivery eliminating stigma and reducing health disparities. Updated November 28, 2022. Available at: https://www.cdc.gov/hiv/pdf/policies/issue-brief/Issue-Brief-Status-Neutral-HIV-Care.pdf.
- 20. HIV Epidemiology Unit, Public Health Seattle & King County and the Infectious Disease Assessment Unit, Washington State Department of Health. HIV Epidemiology Report 2024, Volume 93. https://cdn.kingcounty.gov/-/media/king-county/depts/dph/documents/health-safety/disease-illness/hiv-sti/hiv-epi-annual-reports/2024-hiv-aids-epidemiology-annualreport.pdf?rev=30c8bee7837 a4339ab613c0e6e57d63c&hash=A2E3FAE07E2B670EDCB9BD3C76D46764. Accessed April 22, 2025.
- Buskin SE, Erly SJ, Glick SN, et al. Detection and response to an HIV cluster: people living homeless and using drugs in Seattle, Washington. Am J Prev Med 2021; 61(5 suppl 1):S160–9.
- Stewart J, Stadeli KM, Ásbjörnsdóttir KH, et al. Use of a community center primary care clinic and subsequent emergency department visits among unhoused women. JAMA Netw Open 2021; 4:e213134.
- Korthuis PT, McCarty D, Weimer M, et al. Primary care-based models for the treatment of opioid use disorder: a scoping review. Ann Intern Med 2017; 166: 268–78.