create+equity Project Executive Summary

Findings and recommendations from interviews with providers of unhoused Ryan White consumers.

Local context

Housing is one of the most influential social determinants of health for people living with HIV (PWH). National data show that stable housing has a significant positive impact on the abilities of PWH to access HIV care (Centers for Disease Control and Prevention, 2024). There is also a strong connection between housing and viral suppression, with people experiencing homelessness generally having lower viral suppression rates than those who are housed (Center for Quality Improvement and Innovation, 2020).

These patterns are also observed locally in the Minneapolis-St. Paul Transitional Grant Area (MSP-TGA). Ryan White programmatic data similarly demonstrate that movement along the housing continuum from unstable to stable housing is associated with viral suppression (Peterson, 2021). Further analysis highlights that housing is the most significant predictor of viral suppression and that any other public health intervention alone is unlikely to improve viral suppression for PWH experiencing homelessness (Peterson, 2018). Local data show racial disparities in housing as well, with Native American, African American, and multi-racial clients experiencing higher rates of unstable housing compared to other populations (Peterson, 2021). These data emphasize that housing is also an important racial equity issue.

Accordingly, housing has become a focal point for ending the HIV epidemic locally. These efforts include the create+equity Collaborative, an 18-month national learning collaborative convened by the Center for Quality Improvement and Innovation (CQII) to reduce barriers associated with the social determinants of health for PWH (Center for Quality Improvement and Innovation, 2021). The Hennepin County Ryan White HIV/AIDS Program (HC RWHAP) participated in this collaborative from February 2021 to August 2022 to address housing as a key determinant of health for PWH in the MSP-TGA.

Project background and business need

As part of the Collaborative, the HC RWHAP wanted to improve viral suppression rates of unhoused Ryan White consumers using a CQII-provided intervention. The local project team (consisting of providers, consumers, and government staff) analyzed the drivers to viral suppression for unhoused consumers and identified a CQII intervention to address missing drivers. The team chose "effective agency flow to care and support clients experiencing housing insecurity, including access to case management, referrals, and

other support systems" as the driver of focus (Center for Quality Improvement and Innovation, 2022). Then, the team chose Optimal Linkage and Active Referral as the initial intervention because it focuses on coordinating and integrating services (Center for Quality Improvement and Innovation, 2021).

A pillar of the Optimal Linkage intervention is removing barriers to care to improve service coordination. However, there was a lack of comprehensive qualitative data about the types of barriers consumers were experiencing and how they impacted providers' abilities to coordinate and integrate services. So, in July 2021, the team sponsored the HC RWHAP to spearhead the create+equity Project and collect qualitative data to fill these gaps. This project's goal was to interview providers about their unhoused clients' experiences to better understand barriers and facilitators to stable housing and viral suppression.

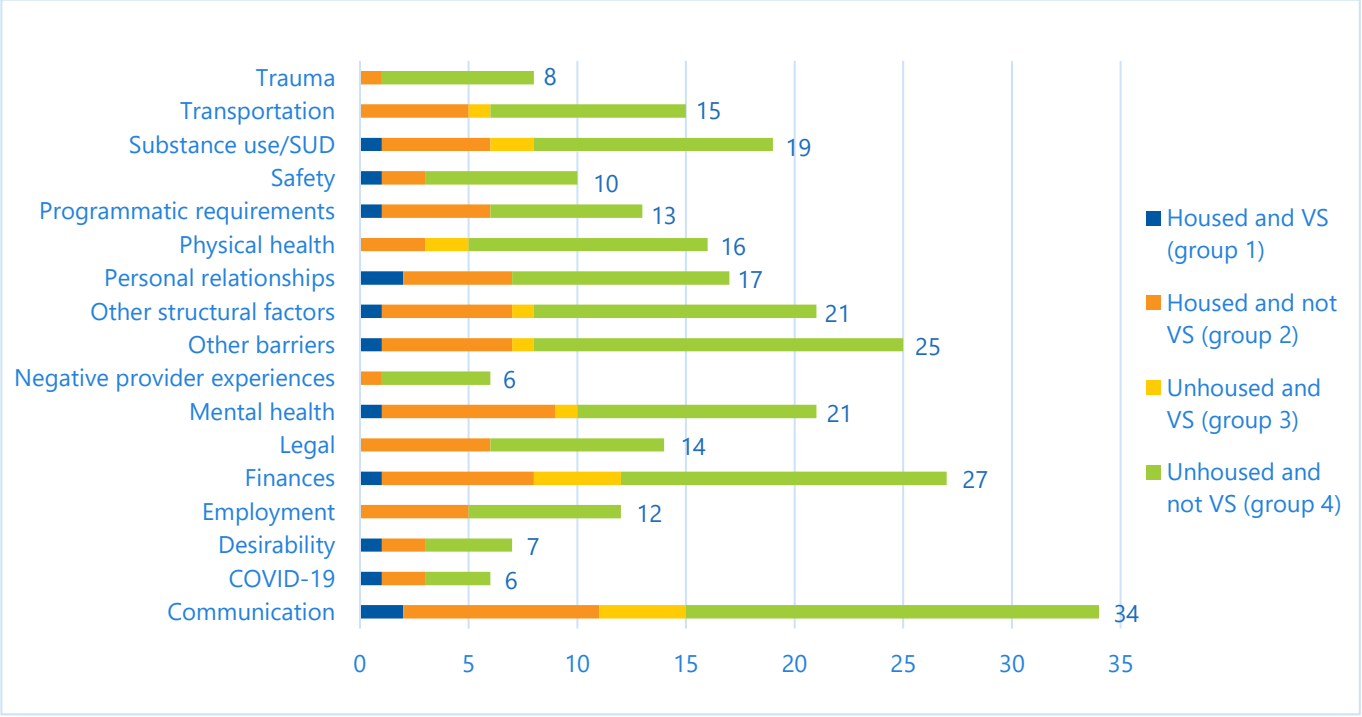
Between February and April 2022, there were 39 semi-structured interviews conducted with providers of a cohort of 35 clients who were unstably housed and not virally suppressed as of August 2021. Providers were chosen based on their closeness to clients and included case managers, substance use counselors, and social workers. Providers were asked about the services their client was using, their client's housing and viral suppression history, and their clients' barriers and facilitators. All interviews were conducted virtually. The interview data were transcribed and analyzed in winter 2022 using established qualitative data analysis methods and software (ATLAS.ti Web version 7.9.0). The results are detailed in this report.

Key findings

Barriers to housing and viral suppression

Clients' barriers were organized into 17 unique categories, which are described below.

"Number of barriers experienced by clients"



Group 1 n = 2, Group 2 n = 9, Group 3 n = 4, Group 4 n = 20. VS = virally suppressed. SUD = substance use disorder.

The graph above shows the number of clients experiencing each barrier by their housing and viral suppression statuses at the time of interview. Only the 12 most common barriers – those that were present, on average, at least once in each interview in a certain group – were analyzed qualitatively.

Qualitative descriptions of common barriers to housing and viral suppression (from most to least frequently experienced)
Providers experienced **communication challenges** with clients due clients' lack of phones. They also experienced internal communication issues, like staff turnover or limited outreach capacity. These created challenges for providers in connecting clients to housing, healthcare, benefits, and other services, and made it difficult for providers to build care plans, advocate for their clients, or address clients' barriers. Communication challenges could also amplify other issues clients faced, like legal issues, by making it difficult for clients to access services or support needed to address these issues.
Clients often did not have sufficient income to meet their basic needs and faced challenges with managing their finances due to struggles with financial literacy. Such **financial challenges** made it harder for clients to afford housing, prioritizing paying rent, or pay for medical care.
Miscellaneous barriers included clients not feeling ready for housing or care, clients having misconceptions about HIV medications or the housing process, internalized and externalized stigma, and cultural barriers. Such phenomena could make housing and HIV management feel inaccessible or undesirable to clients, lead to inconsistent HIV medication adherence, and amplify other barriers.
Mental health challenges caused clients to self-sabotage and struggle with motivation, and they affected clients' cognitive abilities and executive functioning. These issues were distracting, time-consuming, or overwhelming to manage. They made it harder for clients to work towards long-term goals like housing or viral suppression. They could also make it difficult for clients to understand paperwork, navigate systems, or re-engage in care after experiencing setbacks. These challenges created a baseline of instability in clients' lives and amplified other barriers that they faced.
Structural factors included large, overarching systems and processes such as structural racism, the war on drugs, foster care, carceral systems, and bureaucratic complexities. These issues were difficult for both clients and providers to address because they amplified barriers that kept clients trapped in cycles of homelessness. They also affected clients' baseline stability and abilities to prioritize housing.
Substance use issues manifested both as clients' personal experiences with substance use and structural responses to it. On a personal level, SUD could affect clients' abilities to engage in care and adhere to long-term goals around housing or viral suppression. SUD also often led to a baseline of instability in clients' lives, which created and reinforced negative cycles. Furthermore, long-term substance use could also lead to physical health issues (e.g., anoxic head injuries from overdose) or physical safety issues (e.g., being in "trap houses") that then themselves interfered with clients' engagement in care. Finally, on a structural level, the war on drugs or other punitive policies around substance use could create increased legal scrutiny around clients, thus amplifying the number of barriers they faced.

Personal relationships emerged as barriers when there was trauma or violence within clients' personal relationships, when clients had relationships with people with similar life circumstances (which could be negatively synergistic for them), or when clients had no or negative relationships with family members or friends. These relationship challenges created greater stress, instability, feelings of isolation, and violence in clients' lives, which amplified other barriers and made it harder for clients to prioritize long-term goals like housing and viral suppression. They also made it difficult for clients to find support around housing or HIV, particularly when their housing or healthcare was linked to their relationships.
The most common non-HIV **physical health issues** were those related to homelessness (e.g., frostbite, malnutrition), long-term substance use (e.g., high-risk infections, cardiovascular issues) or physical disabilities. These issues were often distracting and time-consuming, causing clients to redirect their resources towards getting healthy as opposed to housing or viral suppression. Some clients were also unable to work because of their physical health issues. On the other hand, these issues could also make it easier for clients to access HIV medications if they led to clients engaging in medical care.
Legal challenges included clients' legal backgrounds and their inabilities to access important legal documents. They created challenges for clients in accessing housing, jobs, or benefits due to background check and identification requirements. Furthermore, legal challenges disrupted clients' communication with providers (e.g., if they were suddenly incarcerated), overlapped heavily with structural barriers (especially the war on drugs), and amplified stress and other mental health issues.
Restrictive **programmatic requirements** included rules that created barriers for clients to access housing (e.g., ID requirements), rules that made it more challenging for clients to access medications (e.g., refill windows), and undesirable housing program rules (e.g., room checks). These policies made the housing process or medication refill process unnecessarily difficult or time-consuming to navigate.
Clients had greater difficulties maintaining housing they considered **undesirable**. Things that made housing undesirable included lack of privacy or independence, safety issues, and location. Living in undesirable housing could also amplify clients' mental health issues, thus creating other barriers.

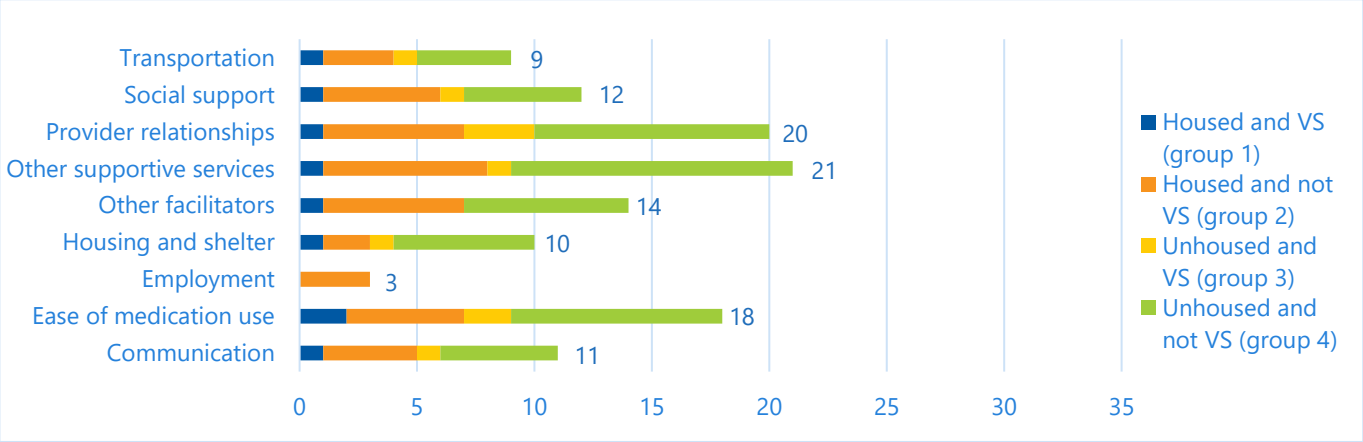
There are many underlying causes to these barriers, but structural factors, substance use, mental health, and homelessness are the most impactful in terms of amplifying other barriers and shaping clients' experiences. In some cases, it is not the client's individual behaviors that are the barrier, but rather the structural responses to these behaviors that create challenges for both clients and providers. Furthermore, clients' individual behaviors are often in response to these structural issues, demonstrating how impactful they can be.

In this way, the data point to a cyclical relationship between barriers, where experiencing barriers can make it harder for clients to engage in care, but their difficulties in engaging in care can then prevent them from getting support to overcome the barrier they are experiencing. This then exacerbates initial barriers and creates further difficulties with engaging in care. Consequently, clients are often trapped in cycles that can lead to their inconsistent engagement in care, and these data suggest that these cycles must be disrupted for clients to have greater baseline stability and engagement in care.

Facilitators to housing and viral suppression

Clients' facilitators are organized into nine unique categories, which are described below.

"Number of facilitators experienced by clients"



Group 1 N = 2, Group 2 N = 9, Group 3 N = 4, Group 4 N = 20. VS = virally suppressed.

The graph above shows the number of clients experiencing each facilitator by their housing and viral suppression statuses at the time of interview. Only the eight most common facilitators – those that were present, on average, at least once in each interview in a certain group – were analyzed qualitatively.

Qualitative descriptions of common facilitators to housing and viral suppression (from most to least frequently experienced)
Being connected to **supportive services** (e.g., case management, health insurance, benefits) reduced clients' barriers to accessing medications and managing HIV and streamlined their housing processes by providing financial or other material support around housing and HIV.
Having **strong relationships** with their providers helped clients feel better supported and made them more likely to engage in care. Strong intra-provider relationships improved coordination of care and streamlined housing processes. There are also specific models that are helpful for building this rapport and trust, such as street outreach, harm reduction approaches, and culturally responsive care.
Things like pharmacy flexibilities around medication refills, staff support around medication adherence, and access to benefits or health insurance helped improve the **ease of medication use** for clients. They reduced clients' barriers to accessing medications by addressing specific issues, such as medication loss/theft, an inability to pay for medications, and lack of client buy-in around adherence.
Miscellaneous facilitators included a client's level of motivation as well as the synergistic relationship between facilitators, where clients were able to access other facilitators more easily if they were already connected to a facilitator. A client's personal desire for housing or viral suppression made it more likely for them to engage in care and prioritize long-term goals. The synergistic relationship between facilitators helped mitigate the impact of barriers and improved clients' baseline stability.

Several clients had emotional, material, and **social support** from family, friends, and other strong advocates. Emotional support helped clients feel less isolated, had positive effects on their mental health, and improved their overall baseline stability. Material support and advocacy helped clients access housing and HIV medications.
It was easier for providers to follow-up with clients who had consistent access to **communication** technologies. This allowed providers to connect clients to care, build care plans with them, advocate for them, and address their barriers. Having access to reliable communication tools also improved clients' baseline stability and their sense of ownership over their care.
Having **housing and shelter** was a key facilitator for HIV management and disrupting cycles of homelessness. It improved clients' baseline stability and abilities to store and access HIV medications.
Transportation, like services related to accessing public transportation (e.g., bus cards) or clients having their own forms of reliable transportation, helped reduce clients' transportation-related barriers to getting to appointments and made it easier for them to remove themselves from unsafe situations.

Most facilitators are the result of clients getting connected to services or having relationships and other elements in place that help them acquire housing or achieve viral suppression. The analysis points to a synergistic relationship between facilitators: when clients are connected to a facilitator, that makes it easier for them to be connected to other facilitators. In addition, there is no single facilitator that is itself sufficient for housing and/or viral suppression. Rather, the synergistic relationship between facilitators is what allows clients to have positive outcomes around housing and HIV.

Furthermore, it is not just important for clients to be connected to services and access facilitators; the way clients are connected to services also matters. Delivery models like wraparound service, one-stop-shop services, coordination of care, streamlined processes, street outreach, and consistent long-term engagement are key to ensuring that clients can actually benefit from the facilitators that they are connected to. In addition, the way that providers interact with their clients and provide services also matters in ensuring that clients can benefit from facilitators. These data show that it is important for providers to be culturally responsive, adopt a harm reduction approach, be non-judgmental and competent, allow clients to be leaders or collaborators in care, and be strong advocates for clients.

Relationship between housing and HIV

These data reinforce that housing status strongly influences viral suppression and that this relationship is observed locally. They do not indicate that the reverse relationship – viral suppression as a barrier or facilitator to housing – is as strong (outside of the potential physical health impacts of unmanaged HIV as a barrier). In general, having stable, secure housing is a facilitator for viral suppression because it creates more stability in clients' lives, makes it easier for them to engage in care, and reduces barriers to medication adherence. Clients who are housed are less focused on basic needs and can dedicate more time to managing their HIV and engaging in care. They can receive HIV medication deliveries and store their medications without fear of theft or loss. Even just consistently remaining in one spot makes it easier for providers to locate and communicate with clients, which allows clients to have more regular access to medical care and supportive services.

On the other side, not having housing is a barrier to viral suppression. Clients who are unhoused are more likely to lose their medications and typically do not have a permanent address at which to receive medication deliveries or important benefits or health insurance paperwork. They are also generally more focused on meeting their basic needs and addressing their daily stressors than they are on managing their HIV. Finally, being unhoused can contribute to or amplify other barriers that clients experience, such as transportation, substance use, or legal barriers, which create further challenges to engaging in care and adhering to medications.

In summary, there is a strong relationship between housing and viral suppression, with stable housing as an important facilitator for viral suppression and homelessness as a barrier to it. It is important to note, however, that housing alone does not guarantee viral suppression on an individual level and that experiencing homelessness does not mean that an individual will be unable to reach viral suppression. Rather, this is a systemic pattern and general relationship observed across the entire dataset and is important for making system-level decisions but not client-level ones.

Discussion and recommendations

Clients are often caught in cycles that both reinforce and are reinforced by the barriers they experience. This is contrasted by the opposing synergistic relationships observed between facilitators. Synthesizing these pieces of information, it is important to focus on disrupting the cycles that clients are trapped in by addressing barriers simultaneously and connecting clients to several facilitators at once. Because the way clients are connected to facilitators impacts their ability to benefit from them, it is important to improve the accessibility of facilitators. Here, increasing coordination of care and streamlining processes can help increase the uptake of facilitators while addressing multiple barriers at once.

To improve systemwide coordination of care, it is important to capitalize on the relationships that providers have with each other to get clients connected to as many facilitators at once. In this process, it is important to present services in a way that makes it easy for clients to use and benefit from them. Low-barrier delivery models can bridge these gaps, particularly if they allow providers to meet clients where they are at, prioritize consistent long-term engagement (even if the client is not ready for housing or HIV management in the short-term), and provide non-judgmental and wraparound care.

Turning to streamlining processes, the data suggest that the longer clients go without housing or HIV medications, the more likely they are to face increasing barriers to housing and viral suppression. Given this, it is important to make housing processes as fast and efficient as possible. This should be in conjunction with giving clients more opportunities to be leaders or collaborators in their care, as this improves clients' motivations to engage in care and reach their housing and HIV management goals.

Finally, the data show that structural factors and substance use are some of the most significant barriers because they are foundational in shaping clients' experiences. Consequently, it is important to address these structural factors and intentionally integrate harm reduction into all aspects of care. Addressing these barriers will require incremental, sustainable changes at all levels over longer periods of time.

Based on these data, the HC RWHAP considered the effectiveness and local relevance of CQII interventions focused on housing, mental health, and substance use. Optimal Linkage and Referral is the

recommended intervention given its relevance and its ability to simultaneously address mental health and substance use-related challenges. This intervention is proactive, addresses systemic barriers and key drivers, improves coordination of care, and has stakeholder buy-in. It may also be helpful to incorporate elements from other relevant interventions to guide the implementation of this intervention.

Limitations

These data and results primarily apply the populations and research questions included in this project. While many of these results may apply to other populations or research questions, generalization is not recommended; use caution if doing so. Furthermore, these data are from providers of Ryan White consumers due to limitations in collecting data from consumers themselves. Consumers' personal experiences and own understandings of their barriers and facilitators to housing and viral suppression may differ from what is presented here. Finally, consumers' backgrounds may affect their experiences with housing and HIV management, but the results are not stratified by their demographics due to limitations in collecting such information from consumers directly.

Conclusion

The findings from this project show that unstably housed Ryan White consumers in the MSP-TGA face several, overlapping barriers to housing and viral suppression. They point to the importance of key facilitators in mitigating these barriers and suggest that improved systemwide coordination of care and streamlined processes can increase the accessibility and uptake of facilitators. Given this, the most applicable intervention is one that addresses structural barriers, focuses on improving systemwide coordination of care, and incorporates harm reduction principles. Optimal Linkage and Referral meets these criteria, is proactive, and has local relevance. Ultimately, this intervention will improve health outcomes for Ryan White consumers experiencing homelessness and housing insecurity and ensure greater health equity in the Twin Cities metro area.

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References

ATLAS.ti Scientific Software Development GmbH. (2023). ATLAS.ti Web (version 7.9.0) [Qualitative data analysis software]. https://atlasti.com

Center for Quality Improvement and Innovation. (2020). *Literature Review on Social Determinants of Health to Implement a National Quality Improvement Initiative: create+equity Collaborative*. Centers for Quality Improvement and Innovation. Retrieved from https://targethiv.org/sites/default/files/media/documents/2020-10/Lit_Review_SDOH_CQII_CE_2020.pdf

Center for Quality Improvement and Innovation. (2021, February). *create+equity Collaborative*. Retrieved from TargetHIV: https://targethiv.org/cqii/create-equity-collaborative

Center for Quality Improvement and Innovation. (2021). *Optimal Linkage and Referral (Active Referral Intervention).* Center for Quality Improvement and Innovation. Retrieved from https://targethiv.org/sites/default/files/cqii-ce-opt-link-ref.pdf

Center for Quality Improvement and Innovation. (2021, August 19). *Resources for the create+equity Collaborative*. Retrieved from TargetHIV: https://targethiv.org/cqii/cec-resources

Center for Quality Improvement and Innovation. (2022, October 6). *create+equity Quality Improvement Interventions*. Retrieved from TargetHIV: https://targethiv.org/cqii/create-equity-interventions

Center for Quality Improvement and Innovation. (2022, October 6). *Driver Diagrams*. Retrieved from TargetHIV: https://targethiv.org/cqii/ce-driver-diagrams

Centers for Disease Control and Prevention. (2024, May 16). *Issue Brief: The Role of Housing in Ending the HIV Epidemic*. Retrieved from HIV: https://www.cdc.gov/hiv/policies/data/role-of-housing-in-ending-the-hiv-epidemic.html

Peterson, A. D. (2018, December 11). Measuring Clients' Movement along the Treatment Cascade Using Multivariate Analysis. Oxon Hill, Maryland, United States.

Peterson, A. D. (2021, August 19). Housing Presentation (Statewide) 2017-2020. Minneapolis, Minnesota, United States.