

Exploring Organizational Barriers and Strategies for Hepatitis C Health Care Among Medically-Underserved Populations in Arizona: *A Qualitative Study*

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Abstract

Background: Hepatitis C is a major public health concern in the United States, with a particular burden on medically underserved populations (e.g. racially marginalized populations), who experience a disproportionately high mortality risk from the disease. Community-based organizations can help address these disparities by providing accessible healthcare services, however systematic evaluation of these organizations is limited. This study sought to investigate the organizational barriers for HepFreeAZ, a statewide coalition dedicated to eliminating hepatitis C, in providing hepatitis C prevention and treatment to at-risk populations in Arizona. Methods: Semi-structured interviews, guided using the Exploration, Preparation, Implementation, and Sustainment (EPIS) framework, were conducted with members of HepFreeAZ. Inductive thematic analysis was used to identify themes that characterized organizational barriers and facilitators. One researcher independently conducted open coding of all interview transcripts, generating initial codes based on salient patterns in the data. These codes were iteratively refined and organized into thematic clusters. To ensure rigor, an additional research mentor reviewed the coding scheme and participated in consensus meetings to resolve discrepancies. Themes were triangulated with field notes and interview context. Reflexive journaling was employed during analysis to mitigate bias, and a second, independent reviewer not involved in data collection conducted an external audit of the final themes to confirm their credibility and relevance.

Results: Through the study, we identified four key themes and 7 sub-themes for hepatitis C outreach for at-risk populations. The themes included healthcare access, cultural and social perceptions interfering with patient interactions, patient mistrust because of their cultural background bias, and the organization's collaborative and inclusive efforts in healthcare systems.

Conclusion: Our study highlights key organizational challenges and strategies relevant to providing hepatitis C care for at-risk populations. These findings can be generalized to inform other community-based organizations seeking to address diverse health challenges to tailor interventions.

Keywords: Hepatitis C; Underserved Populations; Barriers; Health care interventions; Organizational challenges

1. Introduction

Hepatitis C is the most common bloodborne infection in the United States and a national priority due to its nature of leading infected individuals to chronic liver diseases, such as cirrhosis and liver cancer.¹ Hepatitis C is primarily transmitted through direct contact with the blood of an infected person. Common modes of transmission include sharing needles, sexual contact, sharing personal items contaminated with blood, or being born to an infected mother.²

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In 2023, the Centers for Disease Control and Prevention (CDC) estimated 101,525 newly reported chronic hepatitis C cases, with an overall rate of 36.2 per 100,000 population.³ The burden of chronic hepatitis C among medically underserved populations in the United States is notably higher than the national average. For instance, studies have reported an active hepatitis C infection seroprevalence rate for the homeless populations in the US as 14.7%, compared to the national prevalence of 10.8% from 2013 to 2016.⁴ Similarly, racial minority groups, who also face inequities to healthcare access in the US, experience a high hepatitis C burden. For instance, hepatitis C-related death rates were highest among non-Hispanic American Indian/Alaska Native persons (7.8 per 100,000), followed by non-Hispanic Black persons (4.0 per 100,000), compared to 2.5 per 100,000 in the general population.⁵ Hepatitis C is a curable disease with available treatments, therefore these deaths are preventable. Despite the availability of these effective treatments, barriers persist in connecting at-risk populations with care, such as the lingering fear of treatment among patients due to the side effects associated with previous therapies.⁶ Also, earlier treatments for hepatitis C, like interferon and ribavirin, caused side effects including fatigue, flu-like symptoms, depression, and hematologic abnormalities.⁷ Current antiviral medications, like the direct-acting antivirals introduced in 2011, revolutionized hepatitis C treatment by having fewer side effects. Approximately 95% of individuals who receive treatment are considered virus-free after 8 to 12 weeks.^{8,9} Despite these available treatments, disparities in hepatitis C prevention and treatment remain.

Community-based organizations (CBOs) can play a key role in helping reduce disparities in hepatitis C burden. CBOs are public or private nonprofit entities with a deep understanding of a local community's specific needs and challenges, which makes them uniquely positioned to address local issues.¹⁰ Their support is wide-ranging, including hosting educational seminars¹¹, offering testing and screening programs in accessible locations for community members¹¹, and ensuring language assistance in healthcare services¹². They help at-risk populations overcome systemic barriers for receiving health services. There are CBOs focused on addressing hepatitis C, such as the Toronto Community hepatitis C Program, whose focus is to provide hepatitis treatment and support.¹²

Despite this promise, few studies have rigorously examined the organizational barriers and facilitators that CBOs face in delivering hepatitis C prevention and treatment. Much of the existing literature on CBOs focuses on HIV or general healthcare delivery,¹³ with limited insight into how challenges may differ in the context of hepatitis C. Compared to HIV, hepatitis C lacks long-standing federal infrastructure, has fewer public health campaigns, and is often excluded from routine care systems, despite being curable. These differences in implementing hepatitis C services by CBOs are uniquely challenging, particularly in environments with limited funding, fragmented care networks, and overlapping stigmas related to drug use and immigration status. Understanding these challenges is important for scaling effective, community-driven models for hepatitis C elimination.

The present study contributes to the literature by using an implementation science framework to investigate facilitators and barriers to hepatitis C prevention and treatment for a specific CBO, HepFreeAZ. Rather than presenting a broad overview, this research offers a context-specific understanding of the organizational dynamics, barriers, and facilitators involved in delivering hepatitis C services to underserved populations using HepFreeAZ, a coalition focused on eliminating hepatitis C in Arizona, as a case study. By doing so, it provides practical insights that can inform similar efforts in other regions, especially those facing comparable sociodemographic and structural challenges.

2. Methods

An independent internal review board reviewed and approved the study before study initiation (WCG IRB, work order number:1-1751747-1). All participants provided informed consent prior to participation. To protect confidentiality, participants were not named, and any identifiable information was redacted from the transcripts before analysis. Our research did not involve animals.

2.1. Study Design

This study used a qualitative approach to explore the barriers faced by a community-based organization, HepFreeAZ, which provides hepatitis C care to at-risk populations in Arizona. Qualitative methods were employed to capture the in-depth insights and personal experiences of coalition members and better understand organizational challenges and opportunities.

2.2. HepFreeAZ

HepFreeAZ is a statewide coalition focused on eliminating hepatitis C in Arizona. The coalition is composed of healthcare providers, public health professionals, and representatives from community-based organizations that work to prevent and treat hepatitis C in Arizona.¹⁴ Members contribute expertise from various fields, such as infectious diseases, community health, and immigrant advocacy. The coalition engages in activities such as public health education

campaigns, training for healthcare providers, and community outreach events to improve hepatitis C screening and treatment access.¹⁵

2.3. Respondents and Procedure

The study was conducted with members of the HepFreeAZ coalition. Individuals were eligible to participate in the study if they were adult members of HepFreeAZ who are actively engaged in programmatic or advocacy roles. The exclusion criteria were individuals who did not meet the inclusion criteria and the coalition project director. A convenience sampling strategy was used to recruit participants. The study principal investigator (PI) reached out to coalition members from a roster provided by the coalition project director. Of the 11 individuals contacted, all agreed to participate. Those who responded and met the eligibility criteria were scheduled for an interview. Participants were required to complete electronic informed consent before continuing with the interview.

Interviews were conducted one-on-one via secure video conferencing between May 9 and July 18, 2024. Interviews continued until thematic saturation was reached, when no new major themes emerged during ongoing analysis. This point was reached after 10 interviews, though an additional interview was conducted to ensure diverse representation across roles. Employer types included non-profit community organizations, state and local health departments, and federally qualified health centers.

While the interview guide was initially developed to focus on challenges faced by Hispanic populations, participant responses addressed broader organizational strategies applicable to various medically underserved groups, including individuals experiencing housing instability, undocumented immigrants, and non-English-speaking populations. As such, the analysis was expanded to focus on medically underserved populations more broadly.

2.4. Interview guide

A semi-structured interview guide was used to gather information related to the objectives of the study. This method combines a set of predetermined questions with the flexibility to allow participants from HepFreeAZ to describe their experiences with organizational barriers in more depth. The interview guide was developed using the Exploration, Preparation, Implementation, and Sustainment (EPIS) framework to develop interview questions that could comprehensively evaluate facilitators and barriers to the coalition's activities.¹⁶ The EPIS framework is a widely used model for guiding the implementation and sustainability of evidence-based interventions.¹⁷ It has been applied in various settings, including healthcare¹⁸, community programs¹⁹, and public health initiatives¹⁸, to assess and improve program effectiveness across different stages. This framework guided the development of interview questions by selecting either the phase of program implementation or sustainability, with questions based on the subthemes of the specific stage. A total of 16 questions were included overall. (Appendix) Interviews were conducted by one researcher and lasted between 25 to 43 minutes, with an average duration of 36 minutes.

2.5. Data Analysis

Inductive thematic analysis was used to identify key themes related to organizational barriers and facilitators in providing hepatitis C care for medically underserved populations. Themes were reviewed and refined through an iterative process, ensuring they accurately represented the information conveyed in the interviews. One researcher independently reviewed the transcripts to create initial themes, ensuring a comprehensive and unbiased identification of relevant patterns. These initial themes were then further characterized into sub-themes, with 2 researchers involved in the review to ensure they accurately represented the dataset. A final set of 4 key themes, with 7 sub-themes, were identified. The selected themes were double-checked by a third, non-author researcher to confirm their validity and relevance.

3. Results

The study sample included 11 participants representing a range of roles and organizations: healthcare providers (n=3), community-based program managers (n=3), public health officials (n=2), and outreach workers (n=3). Participants had worked in public health or hepatitis C-related services for a range of 2 to 24 years.

Several primary themes were revealed about HepFreeAZ's hurdles to providing hepatitis C care to at-risk populations. While this study sought to understand these facilitators and barriers for hepatitis C care among medically underserved populations, some factors impact other groups including providing care to other vulnerable groups. These include individuals experiencing housing instability and non-English speaking populations. Key themes identified in the data include Healthcare Access, Cultural and Social Perceptions, Trust and Mistrust in Healthcare, and Collaborative and

Inclusive Efforts. Within these, subthemes such as Language and Education and Housing Instability fall under Healthcare Access, while Cultural Differences and Stigma relate to Cultural and Social Perceptions (Table 1). While “Trust and Mistrust in Healthcare” and “Cultural and Social Perceptions” may appear interrelated, they represent distinct dimensions as the former focuses on historical and systemic distrust in health systems, particularly among undocumented and stigmatized populations, while the latter captures stigma, cultural misunderstandings, and social norms that shape how patients perceive and engage with hepatitis C services. The four major themes were mapped to the corresponding EPIS framework domains. Healthcare Access and Cultural and Social Perceptions aligned primarily with the Exploration and Preparation phases, reflecting early-stage identification of barriers. Trust and Mistrust in Healthcare spanned both Preparation and Implementation phases, as these perceptions shaped both strategic planning and program uptake. Finally, Collaborative and Inclusive Efforts reflected Implementation and Sustainment domains, demonstrating how coalition strategies were operationalized and maintained through partnerships and shared leadership.

Table 1 Description of themes and subthemes

Theme	Sub-theme	Description of Sub-Theme
Healthcare Access	Language and Education	Language diversity in Arizona can lead to communication barriers in hepatitis care.
Healthcare Access	Housing Instability	Many individuals experiencing housing instability lack regular access to healthcare.
Cultural and Social Perceptions	Cultural Differences	Arizona has a diverse population so understanding varying cultural approaches to health is essential.
Cultural and Social Perceptions	Stigma	Hepatitis-related stigma can deter individuals from seeking care.
Trust and Mistrust in Healthcare	Unwilling to Know/Disclose Status	Fear of a hepatitis diagnosis or disclosure remains a barrier. HepFreeAZ supports confidential, non-judgmental testing and counseling to reassure patients and encourage them to take control of their health.
Collaborative and Inclusive Efforts	Advocacy	Through community outreach and legislative engagement, HepFreeAZ pushes for policies that support hepatitis testing, treatment, and prevention initiatives across Arizona.
Collaborative and Inclusive Efforts	Interdisciplinary Action, Inclusive in Decision Making, and Strategic Partnerships	HepFreeAZ integrates medical, social, and public health professionals to address hepatitis through comprehensive services that meet the multifaceted needs of patients.

Coalition members repeatedly identified Healthcare Access as a significant obstacle in providing hepatitis C care to underserved populations. More specifically, Spanish-speaking communities face substantial challenges due to the coalition’s limited availability of bilingual providers and educational materials. Communication gaps between English and non-English speakers result in miscommunication about diagnosis or treatment, which delays care within the coalition. One respondent highlighted this difficulty, stating, “One of the largest [problems] is...the language barrier as there's not that many orgs., like even though this is Arizona, that hire specific Spanish-speaking or at the very least bilingual staff” (HepFreeAZ Interview #11), showing the limitations of current language support efforts in healthcare. The reliance on third-party interpreters also complicates the process further, as information can be lost in translation. Another coalition member spoke about the challenges of working with third-party translators, stating, “They don't speak English well. I speak Spanish. If they don't speak Spanish, then we have an interpreter and things are a lot harder because, man, working through a third-party interpreter is a big challenge. Things are going to get lost in the mix, but we have that resource available.” (HepFreeAZ Interview #11). The ongoing difficulties related to third-party translation services reinforce the need for direct language support. Across participant interviews, Healthcare Access was the most commonly cited and urgent issue. Both frontline outreach workers and program managers described language access as a critical gap that undermined nearly every aspect of care.

In addition to language challenges, the coalition faces difficulty tracking and engaging patients for screening, diagnosis, and treatment due to housing instability. The coalition reported that hard-to-reach populations experiencing homelessness have a higher prevalence, with one respondent saying, "If I think of the population where hepatitis C is most prevalent right now, that's... in settings where they don't have consistent housing or food and some are incarcerated, and so there's a lot of infection spreading from person to person in those scenarios... So many of these people that we need to identify and get screened and diagnosed and cured are in areas where they may not have reliable housing...they may be very hard to find" (HepFreeAZ Interview #1). To address this, HepFreeAZ adopts flexible outreach strategies. As one respondent stated, "We have to work outside the eight-to-four or nine-to-five paradigm to meet people where they are, especially for those with irregular hours like sex workers" (HepFreeAZ Interview #2). HepFreeAZ staff members go directly into high-risk areas. Moreover, outreach workers connect with individuals in informal settings, offering testing on the street or in public areas. Another respondent described their strategy as "to have a number of our staff out in the field... in places where we know many potentially congregate, or where they live... going out and finding the patients" (HepFreeAZ Interview #1).

Also, Cultural and Social Perceptions, which includes the subthemes of Cultural Differences and Stigma, emerged as a barrier faced by the coalition. Cultural differences affect how the immigrant communities understand and respond to hepatitis C. One coalition member explained this by saying, "The stigma surrounding hepatitis C, particularly associating it with drug use, impacts people's willingness to seek care and how they are treated" (HepFreeAZ Interview #11). Another respondent shared, "How she answered that question [about how she was infected with hepatitis C] was going to determine how she was treated moving forward" (HepFreeAZ Interview #2). This emphasizes how assumptions about the disease impact patient interactions within the coalition.

To address these challenges, the coalition provided cultural competency education to its members, so individuals affected by hepatitis C feel more welcomed. One coalition member highlighted this education, "In the coalition ... I've seen there was...one [training] on native populations and I mean...every tribe is different. So...even that, it is a little limited, but it's usually oriented around just cultural competency and how are we approaching certain populations?" (HepFreeAZ Interview #8).

Trust and Mistrust also appeared in conversations with coalition members. Members mentioned that patients express concerns with potential social and legal repercussions of a hepatitis C diagnosis, which leads to reluctance in pursuing treatment. This mistrust was noted as particularly strong among undocumented individuals. One coalition member described this challenge, "One of the barriers to screening is that people just assume that they already have it... and then... [they] didn't want it to be in their medical records... where you no longer qualify [for insurance] because of pre-existing conditions" (HepFreeAZ Interview #2). One coalition member describes this distrust in healthcare's roots, "There's been a lot of mistrust over the years through, you know, like redlining, racist policies that lead people not wanting to seek medical help" (HepFreeAZ Interview #8). Another added, "Mistrust is a huge barrier, especially for people who have been stigmatized and discriminated against, leading them to distrust the medical profession" (HepFreeAZ Interview #7). To bridge these gaps in trust, the coalition leverages the lived experiences of individuals with hepatitis C by inviting them to be part of board meetings and decision-making processes. HepFreeAZ works to reduce power dynamics and ensure the coalition's actions resonate with the communities they serve. One member emphasized, "We make sure any of our volunteers and any of our staff are trained and they're also people with lived experience. So they're not patronizing the person, you know, or telling them what they already know" (HepFreeAZ Interview #3). Mistrust and stigma were also frequently emphasized by community-facing staff and those working directly with immigrant or undocumented populations.

Finally, Collaborative and Inclusive Efforts emerged as a recurring theme concerning optimizing hepatitis C healthcare delivery. The coalition utilized partnerships and community involvement to care for underserved populations. For example, one coalition member specifically noted, "We partner with and build relationships with harm reduction organizations, syringe service program organizations who are connected to sex workers, who are connected to populations who might be unhoused immigrant populations, community health care centers, anyone who engages with people who might use drugs, or who have substance use disorder, alcohol use disorder, veteran populations who may be affected populations, who may come from places or cultures" (HepFreeAZ Interview #4). Coalition members emphasized the importance of their partnerships, with one respondent adding, "The important thing to note about the statewide coalition is it's interdisciplinary. So everybody comes to this work and the table with their strengths" (HepFreeAZ Interview #3). The coalition also has an inclusive decision-making approach. Another respondent highlighted this practice, mentioning, "how is that decision-making structure within the coalition? It's pretty egalitarian. I mean, honestly, like, [REDACTED] is really good about having a suggested agenda and really just putting it out there and making sure that everybody's voice is her. I mean, she's really good at it. I've learned a lot from her actually

facilitating. Yeah, putting the agenda out there and then just allowing people to add to it as needed" (HepFreeAZ Interview #2). Coalition leaders focused more on collaborative solutions and structural adaptations.

Perspectives across participants largely aligned on key issues. There were no directly conflicting viewpoints, but variation emerged in the emphasis placed on certain barriers depending on participants' roles and responsibilities.

4. Discussion

The findings from the study highlight the prevalent organizational barriers and facilitators for HepFreeAZ when providing hepatitis C care to populations in Arizona. Identified subthemes include language, patient housing instability, cultural stigma, patient mistrust, and collaborative efforts.

With respect to organizational barriers, the themes, broadly, align with what has previously been reported as challenges in healthcare provision.²⁰⁻²² In the present study, language barriers and housing instability faced by at-risk populations posed key challenges for HepFreeAZ in providing hepatitis C-related services. Participants in this study emphasized the additional burden of language barriers and limited bilingual services that limit the effectiveness and reach of hepatitis C services for those from non-English speaking communities. For example, participants highlighted how the lack of interpreters and culturally tailored materials is a significant obstacle for non-English-speaking communities to understand prevention and treatment materials. Even when translation services are available through third-party interpreters, coalition members describe sustained communication challenges. This study builds on existing literature that demonstrate how language differences contribute to worsening hepatitis C healthcare disparities. These findings align with broader research showing that healthcare underutilization is often driven by communication challenges, including language.²³ Non-native speakers face diagnosis and treatment delays due to inadequate interpretation services.²⁴ While third-party translation services are commonly used to bridge language gaps in healthcare, they often fail to meet the nuanced needs of patients from diverse linguistic backgrounds.²⁵ The global medical translation industry is substantial, with the market valued at approximately USD 502 million in 2023.²⁶ Addressing the limitations of current translation services could significantly enhance healthcare delivery for non-English speaking communities.

Participants also emphasized the organizational barriers that hindered hepatitis C care for individuals experiencing housing instability. Healthcare providers have difficulty coordinating care for patients who frequently relocate or have unstable living conditions.²⁷ This instability can lead to missed appointments, delayed treatments, and challenges in maintaining consistent care.²⁸ The literature also noted patients may prioritize immediate survival needs, such as securing shelter and food, over healthcare appointments, leading to inconsistent engagement with medical services.²⁷ These disruptions are particularly problematic for hepatitis C, where treatment involves time-limited but sequential medication adherence and follow-up. Knowing that these housing instability-related challenges persist even for organizations that provide prevention and treatment resources, is important for CBOs to consider to ensure these groups are not left behind. CBOs can circumvent some of these housing instability issues. For example, Boston Health Care for the Homeless operates the medical respite Barbara McInnis House, providing room and board, and medical care coordination to unhoused patients who are recovering from treatment.^{29,30}

Coalition members involved in hepatitis C care also mentioned the stigma and cultural beliefs surrounding hepatitis C as a barrier to prevention and treatment. Research has shown that stigma associated with the infection, including its association with drug use, discouraged individuals from seeking care.³¹ These issues are not dissimilar to those faced in HIV care; however, hepatitis C-specific stigma receives less attention in public health discourse. National initiatives like "Ending the HIV Epidemic" (EHE) benefit from decades of infrastructure, community advocacy, and federal funding that have helped reduce stigma and normalize care. In contrast, hepatitis C efforts remain relatively underfunded and decentralized, leading to slower progress toward "hepatitis C elimination" goals.³² This study builds on those findings by highlighting how hepatitis C stigma within underserved communities negatively impacts organizations' ability to provide them with healthcare. HepFreeAZ's organizational structure leverages the lived experiences of at-risk populations to build trust in communities, overcome stigma, and improve healthcare delivery. This approach aligns with a growing body of literature on community engagement in public health, where organizations involve marginalized voices to reduce stigma and improve outreach effectiveness.^{33,34} A similar initiative implemented by the HIV Prevention Trials Network was reported to be successful in building trust and increasing healthcare access by incorporating lived experiences into program delivery.³⁵

In addition, mistrust of healthcare systems among at-risk populations also posed a significant challenge for HepFreeAZ to provide hepatitis C-related services. For example, coalition members highlighted that some individuals may be fearful of social or legal repercussions from a hepatitis C diagnosis, and would rather not engage with organizations like HepFreeAZ to avoid a potential diagnosis being on their medical records. This finding aligns with broader research

indicating that mistrust in healthcare systems due to legal liabilities leads to decreased utilization of medical services among marginalized communities.^{36,37}

One of HepFreeAZ's key strengths was its collaborative structure, which helped expand resources and improve the delivery of hepatitis C care. By partnering with harm reduction organizations and community health centers, the coalition can address the unique needs of at-risk groups as a comprehensive source to health services. Previous research showed that collaborative models that follow similar practices improve trust, communication, and healthcare engagement among marginalized populations.³⁸ For example, the National Harm Reduction Coalition's HepConnect program employs initiatives similar to that of HepFreeAZ to comprehensive care for those in need.³⁸ Also, HepFreeAZ collaborates with other coalitions, like HepFree Hawaii, to learn about successful practices and adapt them to Arizona's unique context. They can address the needs of hard-to-reach populations better with these partnerships.

Limitations

There are limitations to consider. First, the generalizability of these results may be limited by state-specific factors such as Medicaid expansion status, availability of harm reduction services, and demographics of local immigrant communities, which may shape the challenges reported in this study. In states with broader healthcare access, stronger safety nets, or different cultural compositions, some barriers, like lack of insurance coverage or interpreter shortages, may be less pronounced. However, we believe that core themes such as communication gaps, housing instability, stigma, and mistrust are widely reported in public health literature and are likely relevant to CBOs serving underserved populations across the U.S. The organizational strategies employed by HepFreeAZ, particularly its use of partnerships, flexible outreach, and lived experience inclusion, offer a potentially adaptable framework for other regions that seek to strengthen hepatitis C service delivery. Further, we did not collect demographic data, which precluded any stratified analysis of themes by specific subgroups (e.g., lived experience, length of membership). This may have been useful to understand the differences in perspectives in challenges and facilitators, and which perspectives may have been under or overrepresented. Furthermore, interview questions were initially designed to understand disparities in Hispanic populations; however, respondents described organizational strategies broadly. Therefore, subsequent thematic analyses were done with a broader scope in mind to understand organizational processes for at-risk populations, broadly.

Unlike prior work that focuses on patient perspectives, this study offers unique insights from community-based organizations as resource providers. The findings provide actionable insights for HepFreeAZ and similar organizations as they offer a foundation for targeted interventions and policy advocacy. Furthermore, the study highlights the importance of leveraging community-based approaches to address hepatitis C disparities, which aligns with broader public health goals of promoting equity and improving outcomes for underserved populations.

5. Conclusion

This study sheds light on key organizational barriers and facilitators for addressing hepatitis C prevention, diagnosis, and treatment for underserved populations in Arizona. Key challenges include language, patient housing instability, cultural stigma interfering with patient interactions, and patient mistrust because of cultural background bias in healthcare systems. These challenges highlight the importance of embedded bilingual communication resources, cultural sensitivity education, and trust-building initiatives to provide more effective hepatitis C care, especially among vulnerable populations. The findings underscore how CBOs bridge healthcare gaps for underserved populations. By engaging individuals with lived experiences and fostering interdisciplinary collaboration, HepFreeAZ demonstrates community-driven solutions for hepatitis C health disparities.

Compliance with ethical standards

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Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of ethical approval

An independent internal review board (IRB) reviewed and approved the study before study initiation (WCG IRB, work order number:1-1751747-1). All participants provided informed consent prior to participation. To protect confidentiality, participants were not named, and any identifiable information was redacted from the transcripts before analysis.

References

- [1] World Health Organization. Hepatitis C. <https://www.who.int/news-room/fact-sheets/detail/hepatitis-c>.
- [2] Viral Hepatitis Surveillance and Case Management - Hepatitis C | Centers for Disease Control and Prevention (CDC). <https://www.cdc.gov/hepatitis/statistics/surveillanceguidance/HepatitisC.htm> (2023).
- [3] Centers for Disease Control and Prevention (CDC). Table 3.6 – Chronic Hepatitis C: Case Rates by Demographics. *2023 Viral Hepatitis Surveillance Report* <https://www.cdc.gov/hepatitis-surveillance-2023/hepatitis-c/table-3-6.html> (2025).
- [4] Hofmeister, M. G. *et al.* Estimating Prevalence of Hepatitis C Virus Infection in the United States, 2013-2016. *Hepatology* 69, 1020–1031 (2019).
- [5] Centers for Disease Control and Prevention (CDC). Table 3.8 – Hepatitis C: Death Rates by Demographics. *2023 Viral Hepatitis Surveillance Report* <https://www.cdc.gov/hepatitis-surveillance-2023/hepatitis-c/table-3-8.html> (2025).
- [6] McGowan, C. E. & Fried, M. W. BARRIERS TO HEPATITIS C TREATMENT. *Liver Int. Off. J. Int. Assoc. Study Liver* 32, 151–156 (2012).
- [7] Fried, M. W. Side effects of therapy of hepatitis C and their management. *Hepatology* 36, S237–244 (2002).
- [8] Oancea, C. N. *et al.* Global hepatitis C elimination: history, evolution, revolutionary changes and barriers to overcome. *Rom. J. Morphol. Embryol.* 61, 643–653 (2020).
- [9] Bourlière, M. *et al.* Sofosbuvir, Velpatasvir, and Voxilaprevir for Previously Treated HCV Infection. *N. Engl. J. Med.* 376, 2134–2146 (2017).
- [10] Wilson, M. G., Lavis, J. N. & Guta, A. Community-based organizations in the health sector: A scoping review. *Health Res. Policy Syst.* 10, 36 (2012).
- [11] Jose, R., Kahal, D., Testa, K. & Goldstein, N. D. A Qualitative Study of Implementing Universal Hepatitis C Screening Among Adults at an Urban Community-Based Health Provider in Delaware. *Del. J. Public Health* 7, 16–23 (2021).
- [12] Wong, J. A. *et al.* COVID-19 and Asian Americans: Reinforcing the Role of Community-Based Organizations in Providing Culturally and Linguistically Centered Care. *Health Equity* 6, 278–290 (2022).
- [13] Andrulis, D. P. & Brach, C. Integrating Literacy, Culture, and Language to Improve Health Care Quality for Diverse Populations. *Am. J. Health Behav.* 31, S122–S133 (2007).
- [14] Hep Free AZ. *HIV prevention, care, and resources throughout Arizona. Developed and maintained by Aunt Rita's Foundation, HIVAZ is dedicated to providing accurate, thorough information to Arizona residents.* <https://hivaz.org/hep-free-az/>.
- [15] Harm Reduction. *HIV prevention, care, and resources throughout Arizona. Developed and maintained by Aunt Rita's Foundation, HIVAZ is dedicated to providing accurate, thorough information to Arizona residents.* <https://hivaz.org/harm-reduction/>.
- [16] EPIS Framework. *EPIS Framework* <https://episframework.com>.
- [17] Moullin, J. C., Dickson, K. S., Stadnick, N. A., Rabin, B. & Aarons, G. A. Systematic review of the Exploration, Preparation, Implementation, Sustainment (EPIS) framework. *Implement. Sci.* 14, 1 (2019).
- [18] Elder, H. *et al.* Using the exploration, preparation, implementation, sustainment (EPIS) framework to assess the cooperative re-engagement controlled trial (CoRECT). *Front. Public Health* 11, 1223149 (2023).
- [19] McGuier, E. A. *et al.* Advancing research on teams and team effectiveness in implementation science: An application of the Exploration, Preparation, Implementation, Sustainment (EPIS) framework. *Implement. Res. Pract.* 4, 26334895231190855 (2023).

- [20] Lam, D. *et al.* Barriers to Hepatitis C Virus Care and How Federally Qualified Health Centers Can Improve Patient Access to Treatment. *Gastroenterol. Res.* 15, 343–352 (2022).
- [21] Taha, G., Ezra, L. & Abu-Freha, N. Hepatitis C Elimination: Opportunities and Challenges in 2023. *Viruses* 15, 1413 (2023).
- [22] Millman, A. J., Nelson, N. P. & Vellozzi, C. Hepatitis C: Review of the Epidemiology, Clinical Care, and Continued Challenges in the Direct-Acting Antiviral Era. *Curr. Epidemiol. Rep.* 4, 174–185 (2017).
- [23] Ohtani, A., Suzuki, T., Takeuchi, H. & Uchida, H. Language Barriers and Access to Psychiatric Care: A Systematic Review. *Psychiatr. Serv.* 66, 798–805 (2015).
- [24] Balazy, K. E. *et al.* Delays in Care Associated With Non-English-Speaking Patients With Breast Cancer. *J. Natl. Compr. Cancer Netw. JNCCN* jncn20467 (2021) doi:10.6004/jnccn.2020.7797.
- [25] Norström, E., Fioretos, I. & Gustafsson, K. Working conditions of community interpreters in Sweden: Opportunities and shortcomings. *Interpret. Int. J. Res. Pract. Interpret.* 14, 242–260 (2012).
- [26] Medical Translation Service Market 2032 Size, Share, Trend: Industry Statistics – 95+ Pages. <https://www.wicz.com/story/52058670/medical-translation-service-market-2032-size-share-trend-industry-statistics-95-pages>.
- [27] Davies, A. & Wood, L. J. Homeless health care: meeting the challenges of providing primary care. *Med. J. Aust.* 209, 230–234 (2018).
- [28] Paisi, M. *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. Int. J. Public Particip. Health Care Health Policy* 25, 48–60 (2022).
- [29] Medical Respite. *Boston Health Care for the Homeless Program* <https://www.bhchp.org/services/medical-respite/> (2024).
- [30] O’Connell, J. J. *et al.* The Boston Health Care for the Homeless Program: A Public Health Framework. *Am. J. Public Health* 100, 1400–1408 (2010).
- [31] Marinho, R. T. Hepatitis C, stigma and cure. *World J. Gastroenterol.* 19, 6703 (2013).
- [32] Centers for Disease Control and Prevention (CDC). Ending the HIV Epidemic in the US (EHE). *Ending the HIV Epidemic in the US (EHE)* <https://www.cdc.gov/ehe/index.html> (2024).
- [33] Bridget Pratt, Inclusion of Marginalized Groups and Communities in Global Health Research Priority-Setting, *J Empir Res Hum Res Ethics*, 2019 Apr;14(2):169-181.
- [34] Ruano, A. L., Friedman, E. A. & Hill, P. S. Health, equity and the post-2015 agenda: raising the voices of marginalized communities. *Int. J. Equity Health* 13, 82, s12939-014-0082–6 (2014).
- [35] Broder, G. B. *et al.* Standardized metrics can reveal region-specific opportunities in community engagement to aid recruitment in HIV prevention trials. *PLOS ONE* 15, e0239276 (2020).
- [36] Ellis, K. *et al.* Breaching Trust: A Qualitative Study of Healthcare Experiences of People Who Use Drugs in a Rural Setting. *Front. Sociol.* 5, 593925 (2020).
- [37] Soussan, C. & Kjellgren, A. Alarming attitudinal barriers to help-seeking in drug-related emergency situations: Results from a Swedish online survey. *Nord. Stud. Alcohol Drugs* 36, 532–541 (2019).
- [38] Shommu, N. S. *et al.* What is the scope of improving immigrant and ethnic minority healthcare using community navigators: A systematic scoping review. *Int. J. Equity Health* 15, 6 (2016).

Supplementary Information

Interview Prompts

Inner context of implementation

- Can you tell me a bit more about yourself and your role in the HepFreeAZ?
- Can you tell me more about how you collaborate with other roles within the coalition to address Hepatitis C, specifically?

- Can you elaborate on how you report and share new findings or insights related to Hepatitis C community care (e.g., you learn of a better way to link affected individuals to care). How is decision-making structured within the coalition in response to these contributions?
 - Can you elaborate on how you learn about new findings or insights from coalition members related to Hepatitis C community care (e.g., one of the coalition members learns of a better way to link affected individuals to care). How is decision-making structured within the coalition in response to these contributions?
- How are new decisions communicated and disseminated among coalition members? It might help to think of a specific example of a recent change in the coalition and how you found out about it.
 - How are new decisions communicated and disseminated among coalition members? It might help to think of a specific example of a recent change in the coalition and members were notified.
 - How prepared is your organization to implement new strategies or treatments for Hepatitis C?
- It sounds like HepFreeAZ collaborates with other groups (e.g., other organizations, clinics)? Do you work with other groups outside the coalition often within your role? If so, can you provide specific examples and describe to me what that collaboration looked like?
 - It sounds like HepFreeAZ collaborates with other groups (e.g., other organizations, clinics)? Can you provide specific examples of successful partnerships that have been established, and how these relationships contribute to the overall goals of the coalition"
- Related, have there been any partnerships that have not been as successful? If so, could you share the challenges faced and any lessons learned from those experiences?
- Does the coalition provide training and development opportunities for its you to enhance your skills in your role to promote Hepatitis C prevention, screening, and linkage to treatment? If so, can you describe to me some of these opportunities, including how you got involved and the specific skills or knowledge areas they targeted? If not, how would you go about gaining the additional skills needed?
 - Does the coalition provide training and development opportunities for its members to enhance their skills in Hepatitis C prevention, screening, and linkage to treatment? If so, can you describe to me some of these opportunities and what prompted them? If not, are there plans or considerations for implementing such training programs in the future, and what factors contribute to the decision not to provide them currently? Is prevention, screening, or linkages to treatment a problem for your patients? How?
 - What training do staff receive to address cultural and language differences in Hepatitis C care? Do you find that cultural or language differences are a barrier to prevention, screening, or treatment for your patients? How?
 - How are services adapted to be culturally sensitive and accessible to immigrant communities? Do you think more should be done?
- How do you measure the success within your role in the coalition?
 - How do you measure the success in the coalition?

OUTER CONTEXT OF IMPLEMENTATION

- How do the current epidemiological trends of Hepatitis C in Arizona impact and shape your role within the coalition?
 - How do the current epidemiological trends of Hepatitis C in Arizona impact and shape your role within the coalition and the goals of the organization overall?
- Related, how do cultural or social factors in AZ impact how you provide Hepatitis C services within your role?
 - In what ways do societal perceptions or stigmas surrounding Hepatitis C impact the coalition's strategies and communication approaches?

- In what ways do societal perceptions or stigmas surrounding Hepatitis C impact your role?
- How do existing policies and regulations at the local, state, or national levels impact your role in Hepatitis C prevention and treatment strategies? Are these policies helpful or do they present a barrier? In what way?
- What sources of funding support the coalition's Hepatitis C prevention and treatment initiatives, and how stable are these funding streams?
 - Have there been any challenges related to securing or maintaining funding for the coalition's work? If so, how have you navigated these challenges? If not, what factors contribute to there being no challenges?
- How do you share information regarding Hepatitis C from your organization to community members?
 - How do you engage hard-to-reach populations? What would make that easier?
 - How do you identify and engage populations most at risk for Hepatitis C?
- How do you share information regarding Hepatitis C from your organization to other groups (e.g., policymakers, health departments)? Is this difficult?
- Is there anything else you would like to elaborate on in regards to your organizations ability to provide Hepatitis C care, specifically to Hispanic populations?
- Can you tell me about any other current challenges your organization faces in providing Hepatitis C care (or linkage to care) within the communities you serve?
 - Can you tell me about any current challenges that you face providing Hepatitis C care for specifically Hispanic populations in AZ?
 - Is mistrust a barrier commonly dealt with in your experience providing Hepatitis C care?
 - Are language barriers a severe burden you deal with providing Hepatitis C care?
 - Do the work hours of the patients complicate and create challenges in your experience providing Hepatitis C care?