

It may take many villages, but progress can be made toward HCV elimination among people who inject drugs

Kimberly Page

Department of Internal Medicine, MSC10 5550, University of New Mexico Health Sciences, 1 University of New Mexico, Albuquerque, NM 87131, USA

Treatment barriers continue to limit provision and uptake of highly effective treatment for many people with chronic hepatitis C virus (HCV) infection. In the United States, notable barriers include both patient level (for example, poor access to healthcare, lack of health insurance, low diagnosis and treatment uptake rates, and fear of discrimination), and system level (such as costs and administrative rules, including requirements for prior authorizations, abstinence from substance use and alcohol, and prescriber restrictions, among others¹). The high prevalence of HCV infection among PWID (People Who Inject Drugs), globally, warrants novel approaches to HCV treatment to reduce prevalence and ongoing transmission.² The cascade of care, or sequence of steps that individuals must go through to receive HCV treatment, from diagnosis to sustained virologic response is not promising,^{3–5} despite studies showing that PWID with HCV can be engaged and successfully treated for HCV.^{6–8} Notwithstanding the lack of concerted population level approaches to, progress is being made in small increments by dedicated and creative groups to test and provide models of care for PWID. In this issue of *Lancet Regional Health - Americas*, Lettner et al.,⁹ present results from a novel program in Toronto, Canada, that brings together many of the elements proposed as needed to improve HCV treatment uptake and completion among PWID: access to testing and medication, integrated care, trust, and community support.¹⁰ The authors describe the program as low barrier - and although patients did actually face many barriers, the program provides essential strategies for successful HCV treatment programs for PWID.

In this study, which was conducted at a Supervised Consumption Service called “*keepSIX*”, an HCV treatment program was implemented that offered point-of-care (POC) HCV RNA testing, on-site providers including nurses and physicians who could conduct pre-treatment assessments and prescribe and dispense medications. Overall, among 64 participants who were HCV RNA positive, 89% (57/64) were eligible for treatment, 67.2% (43/64) were linked to co-located HCV care (intake with the health center’s HCV Treatment Nurse).

Of those linked to onsite HCV treatment, 67.4% (29/43) initiated treatment, and 86.2% (25/29) achieved SVR. Overall, a substantial proportion - 43.9% (25/57) of those eligible were cured of HCV infection, demonstrating a successful HCV treatment model. This success is notable since the participants faced many of the same barriers - especially at the system-level - extant in healthcare systems. The term “low barrier” is used to describe programs or services that are designed to be easily accessible and available to individuals who may face obstacles to receiving healthcare, such as financial or logistical barriers. However, there are situations where a program or service that is marketed as “low barrier” may not actually be low barrier in practice. Participants with HCV in this study were still required to have confirmatory HCV RNA testing from a reference laboratory, and to have two consecutive positive HCV RNA tests six months apart for confirmation of chronic HCV viremia. Further, the study was impacted by the COVID-19 pandemic, which challenged healthcare delivery everywhere. The median time from first positive HCV RNA test to linkage to care was 63 days (IQR: 6–230 days), and the median time between first positive HCV RNA test and treatment initiation was 265 days (IQR: 177–503 days). Despite these drawbacks, the program offered key factors necessary for low-barrier HCV treatment access which need to be highlighted. (1) Physical accessibility: the program was co-located in a space where PWID could feel safe, access support, engage in harm reduction strategies, and obtain primary care. Inherent in such a space is trust, which was indeed a motivation for treatment identified in this study. (2) Cultural competence: an Indigenous Health Promotor was available at the supervised consumption service creating a culturally safe healthcare space. As American Indian and Indigenous people are disproportionately impacted by HCV in the U.S. and Canada,¹¹ having such a resource can be a pivotal factor for access to and uptake of treatment. (3) Cost: Since the program was in Canada, where all Canadian residents have reasonable access to medically necessary hospital and physician services without paying out-of-pocket, participants received treatment for free.

While POC HCV testing was available, and the authors attributed much success to that, especially in contributing significantly to identifying people with current HCV infection, it was not likely the main factor. What is evident was that participants were in a safe, non-judgmental setting and there was underlying trust.



The Lancet Regional Health - Americas
2023;22: 100510

Published Online 17 May 2023

<https://doi.org/10.1016/j.lana.2023.100510>

DOI of original article: <https://doi.org/10.1016/j.lana.2023.100490>

E-mail address: Pagek@salud.unm.edu.

© 2023 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

In this case it is important to look beyond the marketing language of a program or service and consider whether it is truly accessible and low barrier in practice, especially for individuals who face multiple barriers to healthcare access. Trust is an essential component of healthcare and research. It is the foundation of the relationship between patients and healthcare providers, as well as between researchers and study participants. Without trust, patients may not feel comfortable sharing their medical history or discussing their concerns, and study participants may be hesitant to enroll in clinical trials or provide accurate information. Trust, in healthcare and research, encourages honest communication, increases adherence to treatment, promotes engagement, increases public support, and promotes health equity. When people have confidence in the healthcare system and research institutions, they are more likely to support funding for, and participate in, public health initiatives. The researchers and providers at the *keepSIX* supervised consumption service provided an innovative healthcare delivery model responsive to the needs of a marginalized and underserved population. Successful HCV treatment for PWID can effectively reduce incidence of the infection.¹² While national and state programs continue to be considered for HCV elimination efforts, it may be the villages - like this one at the *keepSIX* supervised consumption service that ultimately contribute to real progress.

Disclosures
None.

Declaration of interests
The authors have no interests to declare.

Acknowledgements
Funding: Dr. Page receives research funding support from NIH (1UG1DA049468, RM1DA055301, 1R01AI158666, U54GM104944, 1U01TR002756, 1ULTR001449) and CDC (1R01CE003356). The

content of this commentary is solely the responsibility of Dr. Page and does not necessarily represent the official views of any funders.

References

- 1 2023 National snapshot report. Hepatitis C: state of medicaid access; 2023. published online Feb 15. <https://stateofhepc.org/2023-national-snapshot-report/>. Accessed April 20, 2023
- 2 Feld JJ, Ward JW. Key elements on the pathway to HCV elimination: lessons learned from the AASLD HCV special interest group 2020. *Hepatol Commun*. 2021;5:911–922.
- 3 Jiang X, Parker RL, Vouri SM, et al. Cascade of hepatitis C virus care among patients with substance use disorders. *Am J Prev Med*. 2021. published online June 28. <https://doi.org/10.1016/j.amepre.2021.04.013>.
- 4 Facente SN, Patel S, Hecht J, et al. Hepatitis C care cascades for 3 populations at high risk: low-income trans women, young people who inject drugs, and men who have sex with men and inject drugs. *Clin Infect Dis*. 2021;73:e1290–e1295.
- 5 Carmody MD, Wagner K, Bizstray B, et al. Cascade of care for hepatitis C virus infection among young adults who inject drugs in a rural county in New Mexico. *Public Health Rep*. 2023; 333549221143086.
- 6 Akiyama MJ, Norton BL, Arnsten JH, Agyemang L, Heo M, Litwin AH. Intensive models of hepatitis C care for people who inject drugs receiving opioid agonist therapy: a randomized controlled trial. *Ann Intern Med*. 2019;170:594–603.
- 7 Grebely J, Mauss S, Brown A, et al. Efficacy and safety of ledipasvir/sofosbuvir with and without ribavirin in patients with chronic HCV genotype 1 infection receiving opioid substitution therapy: analysis of phase 3 ION trials. *Clin Infect Dis*. 2016;63:1405–1411.
- 8 Litwin AH, Lum PJ, Taylor LE, et al. Patient-centred models of hepatitis C treatment for people who inject drugs: a multicentre, pragmatic randomised trial. *Lancet Gastroenterol Hepatol*. 2022;7:1112–1127.
- 9 Lettner B, Mason K, Greenwald ZR, et al. Rapid hepatitis C virus point-of-care RNA testing and treatment at an integrated supervised consumption service in Toronto, Canada: a prospective, observational cohort study. *Lancet Reg Health Am*. 2023;22:100490.
- 10 Trooskin SB, Dore G, Kostman J. We must do better: addressing HCV treatment barriers in persons who inject drugs in the United States. *J Infect Dis*. 2020;222:S773–S781.
- 11 Bruce V, Eldredge J, Leyva Y, Mera J, English K, Page K. Hepatitis C virus infection in indigenous populations in the United States and Canada. *Epidemiol Rev*. 2019;41:158–167.
- 12 Iversen J, Wand H, McManus H, Dore GJ, Maher L. Incidence of primary hepatitis C virus infection among people who inject drugs in Australia pre- and post-unrestricted availability of direct acting antiviral therapies. *Addiction*. 2023;118:901–911.