

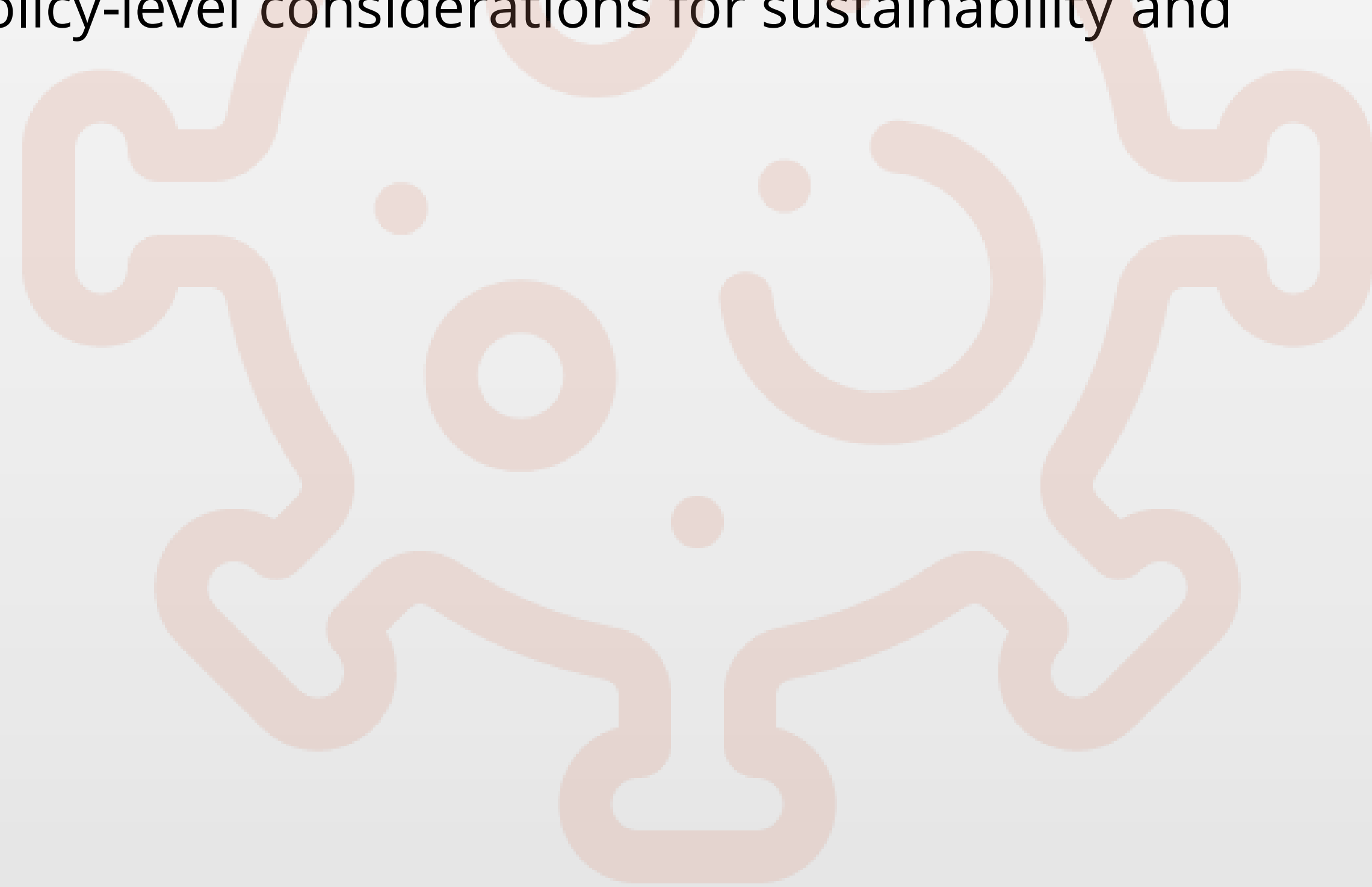
REAL-WORLD IMPLEMENTATION OF POINT-OF-CARE (POC) HCV RNA TESTING IN A MOBILE UNIT IN HOMELESS ENCAMPMENTS AND SHELTERS IN ONTARIO, CANADA: LEARNINGS AND CONSIDERATIONS FOR COMMUNITY-BASED HCV PROGRAMS UTILIZING THE GeneXpert® System

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BACKGROUND

Loss to follow-up (LTFU) remains a significant challenge in HCV elimination efforts. Over a 24-month period, more than 450 HCV-infected clients in our HepCURE program were LTFU due to long turnaround times (10-14 days) for lab results. To expedite diagnosis and linkage to care, HepCURE began a test-and-treat pilot project to evaluate the effectiveness of point-of-care (POC) HCV RNA testing in marginally housed/unhoused individuals who use drugs, and identify system-level and policy-level considerations for sustainability and scalability.



DESCRIPTION OF MODEL

HepCURE deployed a mobile unit, equipped with the GeneXpert® System and staffed with 2 laboratory technicians and nurse practitioner (NP), to initiate HCV testing in encampments and shelters across 2 regions (covering more than 5 cities) in Ontario, Canada. Staff performed point-of-care (POC) antibody test, and positive results were confirmed on-site with the Xpert HCV Viral Load Fingerstick, and dried blood spot (DBS) testing. Clients who agreed to wait for the results of the Xpert HCV Viral Load Fingerstick were provided a small monetary incentive. Viremic clients were immediately given the option for treatment.



EFFECTIVENESS

Results from May 19, 2023 – September 22, 2023:

Number of Participants Tested	188 tests were performed using the Xpert HCV Viral Load Fingerstick <ul style="list-style-type: none"> No individuals refused testing
Proportion of Participants with Viremia	49% (93/188) had viremia <ul style="list-style-type: none"> 42% (78/188) did not have detectable virus 9% (17/188) had invalid results or errors <ul style="list-style-type: none"> 10/188 invalid results 7/188 errors
Proportion Linked to Care	56% (52/93) were linked to care <ul style="list-style-type: none"> 45% (41/93) were lost to follow-up
Proportion Initiated on HCV Treatment	81% (42/52) initiated treatment, 10 of whom have already completed treatment [SVR12 pending] <ul style="list-style-type: none"> 9/52 initiated treatment but did not complete treatment (note: treatment discontinuation typically occurred within 1-2 weeks from treatment initiation) 1/52 client was pregnant (and linked to care but did not initiate treatment)

CONCLUSIONS & NEXT STEPS

Our ongoing test-and-treat pilot project using POC HCV RNA testing showed modest rates of follow-up in a large sample of homeless and marginally housed people who use drugs over a 4-month period. To our knowledge, it is the first community-based program in Canada to integrate POC HCV RNA testing using a mobile unit.

Over the coming months, we intend to expand our pilot program to include pharmacies, safe injection sites, and correctional settings. We also plan to:

- Train and staff mobile units with RPNs because of provincial requirements (i.e., only licensed healthcare professionals can administer the Xpert HCV Viral Load Fingerstick) to enable NP to provide care remotely and to help us provide more holistic care
- Screen with partner pharmacies to enable same-day treatment in an effort to mitigate residual LTFU
- Provide other wraparound services that will serve the diverse needs of our clients

To ensure sustainability and scalability of our program, however, we will need to mitigate the impact of system-level challenges (i.e., limited battery power of mobile unit, lack of genotyping capabilities of GeneXpert® System, high cartridge cost), and policy-level barriers (i.e., provincial laboratory-based requirements for drug reimbursement).

CONTACT INFORMATION

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DISCLOSURE OF INTEREST

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