# Relinking diagnosed but untreated HBV/HCV infected individuals to care in the United States (interim results)

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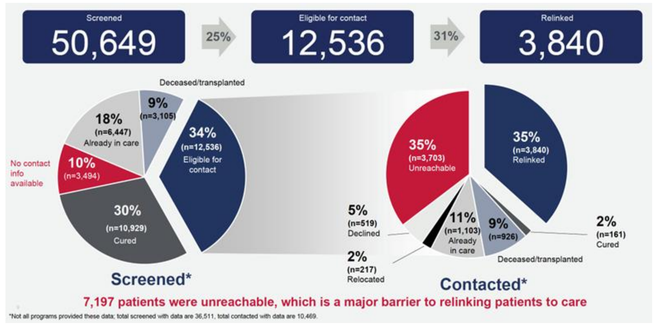
## Introduction

A study conducted by the U.S. CDC showed that 65-73% of all hepatitis C virus (HCV) RNA positive individuals were lost to follow up within one-year after their test results.1 An estimated 700,000 HCV infected individuals in the United States (U.S.) have been diagnosed but untreated (DBU) while an estimated 345,000 hepatitis B virus (HBV) infected individuals have been diagnosed but lost to follow-up. Relinking these individuals to care can help the U.S. progress toward the 2030 WHO elimination targets.

A study conducted by Mount Sinai has shown that contacting DBU individuals can result in a 31% linkage to care.




## Aim

The objective of this project was to expand on the Mount Sinai study and provide grants to community health organizations, universities, healthcare centers, and state health agencies to contact HCV/HBV DBU individuals and link them back to care. Furthermore, the study sought to evaluate the efficacy of relink programs across diverse populations and settings.

## Method

Two rounds of requests for proposals were solicited. An independent advisory group reviewed the proposals and selected those to be funded. The grants were awarded based on size of the DBU registry, program cost, program duration, the target population (people who inject drugs, sex workers, homeless, former incarcerated, immigrants, pregnant women, and the general population), and geographical distributions.

The program provided search terms for EPIC, the largest electronic record system in the U.S., to identify HCV/HBV DBU individuals. Additionally, a customizable patient registry was developed and distributed to track progress. In addition, copies of a free patient registry was provided to all grantees for their use. These tools were also provided on-line for non-grantees to access (https://cdafound.org/relink/relink-resources/). Location of all grantees were provided in Google Maps for referrals of patients moving across states (https://cdafound.org/relink/map/).

Data (excluding personal health information) were reported quarterly by all grantees. Quarterly meetings facilitated the exchange of best practices and the discussion of any issues or barriers. The project encompassed both HCV and HBV database users and was treatment-agnostic.

## Results

- 35 proposals were received and 12 were funded in round one and 28 proposals were received and 10 were funded in round two.
- A total of $3.8 million was committed for disbursement with an average cost of $180 per HCV/HBV DBU individual linked to care.
- Access to treatment remained the largest barrier although grantees all had or have developed skills to navigate the Medicaid (U.S. public insurance for low-income individuals).
- This barrier was significantly less in California where recent laws allow for expanded access to everyone including migrants.
- Challenges in drug reimbursement was followed by a low linkage to care among individuals with unstable housing. Overall, the lowest linkage to care rates were observed in these populations.

| Relink Populations | Contacts Attempted | Contact Successful | Linked | % Successful of All Contacts | % Linked of Successful Contacts | % Linked of All Contacts |
|---|---|---|---|---|---|---|
| Homeless | 299 | 67 | 3 | 22% | 4% | 1% |
| Current/ Former PWID | 2,097 | 450 | 81 | 21% | 18% | 4% |
| Pregnant/ Postpartum | 20 | 9 | 1 | 45% | 11% | 5% |
| Uninsured/ Underinsured | 444 | 154 | 25 | 35% | 16% | 6% |
| Immigrants | 344 | 212 | 31 | 62% | 15% | 9% |
| General Population | 1,492 | 469 | 146 | 31% | 31% | 10% |

## Conclusions

Linkage to care programs can help countries achieve the WHO elimination targets by linking HBV/HCV DBU individuals back to care. However, the rates of linkage to care will be highly dependent on the population with much lower linkage to care among high-risk populations. In the US, access to treatment and reimbursement remains a major barrier.

## Acknowledgement

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## References

1. Thompson, et. al. Vital Signs: Hepatitis C Treatment Among Insured Adults — United States, 2019–2020, MMWR MMWR, Vol. 71, No. 32, p1011, 2022.
2. Wyatt B, Perumalswami PV, Mageras A, et al. A Digital Case-Finding Algorithm for Diagnosed but Untreated Hepatitis C: A Tool for Increasing Linkage to Treatment and Cure. Hepatology 2021; 74(6): 2974-87.

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