

# HRSA HOMELESS INITIATIVE

## *Health Resources and Services Administration Special Projects of National Significance “Building Medical Homes for Multiply Diagnosed HIV-Positive Homeless Populations”*

### Evidence-Informed Structural Intervention

#### INTERVENTION DESCRIPTION

##### Goal of Intervention

- Build and maintain sustainable linkages to mental health and substance use treatment
- Improve timely entry, engagement and retention in HIV care and supportive services
- Increase access to stable or permanent housing
- Reduce perceived external stigma related to HIV, mental health disorders, substance use disorders, and homelessness

##### Intended Population

- People with HIV (PWH) who are homeless or unstably housed, and diagnosed with mental health or substance use disorders

##### Brief Description

The *HRSA Homeless Initiative* was part of a national multisite intervention project in nine geographically diverse U.S. sites designed to reduce barriers to HIV care, address unmet needs in housing, and reduce perceived external stigma among people with HIV (PWH) who were homeless or unstably housed and diagnosed with mental health and/or substance use disorders. This structural-level intervention utilized care coordinators and navigators to improve timely entry, engagement, and retention in HIV care and supportive services; build and maintain sustainable linkages to mental health and/or substance use treatment, and HIV primary care; increase access to stable or permanent housing; and create a patient-centered medical home (PCMH). Core components of the intervention included: (1) having navigators or care coordinators provide client-centered care, (2) offering expedited access and linkage to comprehensive HIV care and services, (3) providing behavioral health and primary HIV medical care, and (4) establishing or strengthening partnerships with housing providers (e.g., property managers) to enable access to stable housing. In addition, each site developed components to address its local needs based on health care, housing availability, and support services.

##### Theoretical Basis

- Patient-centered medical home framework

##### Intervention Duration

- Ongoing

### Intervention Settings

- Comprehensive HIV/AIDS community-based service organizations
- Federally qualified community health centers
- Outpatient or mobile health care facilities associated with large university-based or hospital systems
- Public health departments

### Deliverer

- Care coordinators
- HIV care providers
- Housing providers
- Peer/patient navigators

### Delivery Methods

- Counseling
- Motivational interviewing
- Patient navigation

### Structural Components

- Access
  - Increased access and linkage to HIV care and services
  - Increased access to stable housing through partnerships with housing providers (e.g., property managers)
- Physical Structure – Integration of services
  - Integrated behavioral health services into HIV medical care
  - Established or strengthened partnerships between HIV care providers and housing providers
- Social Determinants of Health – Survival
  - Increased access to stable housing through partnerships with housing providers (e.g., property managers)

## INTERVENTION PACKAGE INFORMATION

Intervention materials are available at <https://targethiv.org/library/implementation-manuals-building-medical-homes-multiply-diagnosed-hiv-positive-homeless>

Please contact **Serena Rajabiun** for details on intervention materials.

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## EVALUATION STUDY AND RESULTS

### Study Location Information

The original evaluation study was conducted in Dallas, TX; Dunn, NC; Houston, TX; Jacksonville, FL; New Haven, CT; Pasadena, CA; Portland, OR; San Diego, CA; and San Francisco, CA between 2013 and 2017.

### Key Intervention Effects

- Increased viral suppression rates
- Reduced perceived external HIV stigma

### **Recruitment Settings**

- Community-based service organizations
- Hospitals
- Jails/prisons
- Mental health and/or substance use treatment facilities

### **Eligibility Criteria**

Participants were eligible if they were 18 years or older; confirmed HIV positive; currently homeless or unstably housed as defined by the U.S. Department of Housing and Urban Development; and had previous or current substance use disorders or mental illness. Participants also met one or more of the following criteria: were newly diagnosed with HIV; were out of care for at least 6 months and had not been seen by a prescribing health care provider; had missed previous medical appointments without rescheduling; had a detectable viral load at the time of enrollment; or were recently released from jail or prison.

### **Study Sample**

The baseline study sample of 700 PWH is characterized by the following:

- *47% non-Hispanic Black, 25% non-Hispanic White, 21% Hispanic, Latino or Latina, 7% other/multiracial*
- *74% male, 21% female, 5% transgender or other*
- *Mean age of 43 years*
- *35% with more than high school education, 33% graduated from high school, 32% with less than high school education*
- *83% unstably housed, 17% with temporary housing*
- *33% with recent incarceration (past 12 months)*
- *Individuals with moderate to high risk for substance use: 50% cocaine, 41% alcohol, 34% amphetamines, 21% opiates*
- *50% with detectable viral load prior to enrollment*

The subsample of 598 PWH included in the secondary analysis on perceived external HIV stigma is characterized by the following:

- *47% non-Hispanic Black, 30% non-Hispanic White, 15% Hispanic, Latino or Latina, 8% other/multiracial*
- *76% male, 21% female, 4% transgender or other*
- *Mean age of 42 years*
- *Individuals with moderate to high risk for substance use: 51% cocaine, 41% alcohol, 33% amphetamines, 24% opiates*
- *50% with detectable viral load prior to enrollment*

### **Assignment Method**

None reported

### **Comparison**

The study used a pre-post research design. Cohort study participants' pre-intervention (baseline) survey responses were compared to their post-intervention responses at 6 and 12 months after enrollment.

### **Relevant Outcomes Measured**

- Viral suppression was defined as viral load less than 200 copies/mL and was measured at baseline and 12 months post-enrollment.

- Perceived HIV external stigma was measured at 6- and 12-months post-enrollment on a sub sample (n = 548) and assessed as a summary score based on the following six items:
  - People I know would treat someone with HIV as an outcast
  - People I know would be uncomfortable around someone with HIV
  - People I know believe that a person with HIV is dirty
  - People I know would reject someone with HIV
  - People I know would not want someone with HIV around their children
  - People I know think that a person with HIV is disgusting
- Linkage to HIV care was defined as at least 1 HIV primary care visit within 90 days of enrollment for participants who were newly diagnosed or had been out of care for more than 6 months at the time of enrollment.
- Retention in HIV care was defined as 2 HIV primary medical appointments at least 90 days apart during the 12 months study period.
- ART prescription was defined as having been prescribed ART in the past 6 months and included receipt of existing and new ART prescriptions.

### Participant Retention

Because participant retention is not a criterion for the Structural Interventions (SI) chapter, the Prevention Research Synthesis project does not evaluate that information.

### Significant Findings on Relevant Outcomes

- There was a significant increase in the percentage of participants who were virally suppressed from baseline to 12 months (49.9% vs 72.6%; Percentage Point Difference (PPD) = 22.7%, 95% CI: 17.7% - 27.6%, Chi Square = 75.9,  $p < 0.0001$ ).
- Among a subpopulation of 548 PWH experiencing homelessness or unstable housing, there was a significant decrease in the percentage of participants who reported perceived external HIV stigma from baseline to 6 months (81.0% vs 61.4%;  $p < 0.001$ ), and from baseline to 12 months (81.0% vs 57.8%;  $p < 0.001$ ). Perceived external HIV stigma was also significantly lower over time at 6 months ( $b = -0.81$ , 95% CI = -1.33, -0.29,  $p < 0.001$ ) and at 12 months ( $b = -1.09$ , 95% CI = -1.63, -0.55,  $p < 0.001$ ), compared to baseline.
  - This finding was also reported as a significant decrease in the mean scores of perceived external HIV stigma from baseline to 6 months (16.5 vs 15.1,  $p < 0.001$ ) and from baseline to 12 months (16.5 vs 14.7,  $p < 0.001$ ).

### Strengths

- None identified

### Considerations

#### *Additional significant positive findings on non-relevant outcomes*

- There was a significant decrease in the percentage of participants who reported perceived external stigma related to homelessness, substance use disorders, and mental health disorders from baseline to 6 months (38.9% vs 20.5%;  $b = -0.24$ , 95% CI = -0.41, -0.08,  $p < 0.001$ ), and from baseline to 12 months (38.9% vs 13.7%;  $b = -0.35$ , 95% CI = -0.52, -0.18,  $p < 0.001$ ).

#### *Non-significant findings on relevant outcomes*

- None reported

*Negative findings*

- None reported

*Other related findings*

- Perceived external HIV stigma was evaluated in a sub-analysis (Maskay et al., 2018), and included the following sites: Dallas, TX; Dunn, NC; Houston TX; New Haven CT; Portland, OR; and San Francisco, CA.
- Pre-intervention data were not reported for linkage to HIV care, retention in HIV care, or ART prescription; PRS did not evaluate these outcomes. However, eligibility criteria specified the following: “were newly diagnosed with HIV; were out of care for at least 6 months and had not been seen by a prescribing health care provider; had missed previous medical appointments without rescheduling;”
- Among study participants, 59.6% (n = 417) were able to transition from unstable housing to more stable housing in the post-intervention period.
- Compared to participants who became or remained unstably housed, participants who achieved stabilized housing had significantly greater odds of being retained in care (n= 596; Adjusted Odds Ratio (AOR) = 2.12, 95% CI=1.11—4.05), prescribed ART (n = 570; AOR = 2.06, 95% CI=1.62—2.63), or achieving viral suppression (n = 559; AOR = 1.62, 95% CI=1.03—2.55).

*Implementation-research related findings*

- None reported

*Process/Study execution-related findings*

- None reported

*Adverse events*

- None reported

\*Calculated by the PRS Project and confirmed by the study authors.

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## REFERENCES AND CONTACT INFORMATION

Maskay, M. H., Cabral, H., Davila, J. A., Davich, J. W., Marcus, R., Quinn, E. K., & Rajabiun, S. (2018). [Longitudinal stigma reduction in people living with HIV experiencing homelessness or unstable housing diagnosed with mental health or substance use disorders: An intervention study.](#) *American Journal of Public Health, 108*(Suppl. 7), 546-551.

Rajabiun, S., Tryon, J., Feaster, M., Pan, A., McKeithan, L., Fortu, K., Cabral, H. J., Bome, D., & Altice, F. L. (2018). [The influence of housing status on the HIV continuum of care: Results from a multisite study of patient navigation models to build a medical home for people living with HIV experiencing homelessness.](#) *American Journal of Public Health, 108*, S539-S545.

Rajabiun, S., Davis-Plourde, K., Tinsley, M., Quinn, E. K., Borne, D., Maskay, M. H., et al. (2020) [Pathways to housing stability and viral suppression for people living with HIV/AIDS: Findings from the Building a Medical Home for Multiply Diagnosed HIV-positive Homeless Populations Initiative.](#) *PLoS ONE 15*(10): e0239190.

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