

FINANCIAL INCENTIVES

Evidence-Based for Retention in HIV Care

Evidence-Based Structural Intervention

INTERVENTION DESCRIPTION

Goal of Intervention

- Improve linkage to HIV care
- Improve retention in HIV care
- Improve viral suppression

Target Population

- HIV positive persons who are newly diagnosed
- HIV positive persons who are treatment-experienced and in care

Brief Description

Financial Incentives for Linkage to Care (HPTN 065) is an intervention where clinicians provide financial incentives (FI) to increase linkage to care, continuity (retention) in care, and viral suppression among HIV-positive persons. Individuals who test positive receive a coupon, within 3 months of diagnosis, for two cash equivalent gift cards: one for \$25 when they get their blood drawn for HIV tests and a second for \$100 for meeting with a clinician and developing a care plan. Persons who are newly diagnosed and those who are engaged in care (i.e., those who had at least 1 prior viral load measurement at the HIV test and care site within the last 3 to 9 months before the program began) qualify for a \$70 gift card if their plasma viral load is suppressed (HIV RNA <400 copies/mL) for a maximum of once every three months for the duration of the FI component of the study.

Theoretical Basis

None reported

Intervention Duration

- Test sites provided FIs once every 3 months for 14 months, and care sites once every three months for almost 24 months.

Intervention Setting

- HIV/AIDS test and care sites

Deliverer

- Clinicians

Delivery Methods

- Incentives

Structural Components

- Social Determinants of Health – Survival
 - Provided FIs in the form of cash equivalent gift cards
 - \$25 on getting blood drawn for HIV tests
 - \$100 for meeting with a clinician and developing a care plan
 - \$70 gift card if plasma viral load is suppressed (HIV RNA < 400 copies/mL) for a maximum of once every three months

INTERVENTION PACKAGE INFORMATION

An intervention package is not available at this time. Please contact **Wafaa El-Sadr**, School of Public Health, Columbia University, 722 W 168th St, PO Box 18, 13th floor, New York, NY 10032.

Email: wme1@cumc.columbia.edu for details on intervention materials.

EVALUATION STUDY AND RESULTS

Study Location

The original evaluation was conducted in both HIV testing and HIV care sites in Bronx, New York and Washington, D.C. from February 2011 through January 2013.

Key Intervention Effects

- Increased continuity (retention) in HIV care
- Increased viral suppression

Recruitment Settings

HIV/AIDS test and care sites

Eligibility Criteria

For linkage to care, patients were eligible if they consented to HIV care according to New York State or Washington, D.C. law and were tested at a participating HIV testing site and found to be HIV positive. For continuity in care and viral suppression, patients were eligible if they consented to HIV care according to New York State or Washington, D.C. law and initiated care at participating HIV care sites.

Study Sample

Because the study was a site-randomized effectiveness trial, patients were not formally enrolled.

- For linkage to care, baseline was assessed among the linkage-to-care cases in the surveillance system during April 1, 2010 to March 31, 2011. Across the 34 testing sites, the baseline sample is characterized by the following*:
 - *Average number of HIV-positive cases per quarter (n=35)*
 - *73% male; 27% female*
 - *25% 13-24 years old; 28% 25-34 years old; 17% 35-44 years old; 22% 45-54 years old; 8% ≥55 years old*

- For continuity in care and viral suppression, baseline was assessed in HIV positive patients reported to be in care during January 1, 2010 to March 31, 2011. Across the 37 care sites, the baseline sample is characterized by the following*:
 - Average number of HIV positive patients in care per quarter (n=374)
 - 64% male; 36% female
 - 10% 13-24 years old; 14% 25-34 years old; 26% 35-44 years old; 33% 45-54 years old; 17% ≥55 years old

Assignment Method

HIV testing and care sites were separately randomized to the FI intervention or standard of care (SOC) comparison. Thirty-seven testing sites (18 in the Bronx [9 sites allocated to F1 and 9 sites to SOC] and 19 [10 sites allocated to F1 and 9 sites to SOC] in Washington, D.C.) participated in the linkage to care component. Thirty-nine HIV care sites (20 in the Bronx [10 sites allocated to F1 and 10 to SOC] and 19 [9 sites allocated to F1 and 10 sites to SOC] in Washington, D.C.) participated in the continuity of care and viral suppression component.

Comparison

The SOC group received no FIs.

Relevant Outcomes Measured

- Linkage to care was defined as the proportion of individuals testing positive at each HIV test site who were linked to care within 3 months as indicated by CD4+ cell count or viral load test results in the surveillance system.
- Continuity (retention) in care was defined as the proportion of patients engaged in care (i.e., those who had at least 1 prior viral load measurement at the HIV test and care site within the last 3 to 9 months) with CD4 cell count or HIV viral load test results in the surveillance system during at least 4 of the prior 5 calendar quarters.
- Viral suppression was defined as proportion of patients engaged in care with the most recent viral load less than 400 copies/mL measured within 6 months.

Participant Retention

Because participant retention is not a criterion for the Linkage to, Retention in and Re-engagement in HIV Care chapter, the Prevention Research Synthesis project does not evaluate that information.

Significant Findings on Relevant Outcomes

- The proportion of patients with continuity in care was higher by 8.7% (95% CI, 4.2% - 13.2%, $p < 0.001$) at FI sites compared to SOC sites.
 - In subgroup analyses, the proportion of patients with continuity in care was higher in FI sites compared to SOC sites in:
 - Bronx, NY (Increase in percent [IEP] = 8.0, 95% CI: 4.1 -11.9; $p < 0.001$)
 - Washington, D.C. (IEP = 10.1; 95% CI: 1.2 – 19; $p = 0.03$)
 - hospital-based sites (IEP = 8.7; 95% CI: 3.4 – 14; $p = 0.001$)
 - community-based sites (IEP = 9.4; 95% CI: 1.7 – 17.1; $p = 0.02$)
 - smaller sites with ≤ 196 patients at baseline (IEP = 10.3; 95% CI: 1.5 – 19.2; $p = 0.02$)
 - larger sites with > 196 patients at baseline (IEP = 8.0; 95% CI: 2.4-13.6; $p = 0.005$), and
 - sites with higher viral suppression (baseline > 66%) (IEP = 8.7; 95% CI: 3.6 – 13.8; $p < 0.001$).

- The proportion of patients achieving viral suppression was higher by 3.8% (95% CI, 0.7 – 6.8%, $p = 0.01$) at FI sites compared to SOC sites.
 - In subgroup analyses, the proportion of patients achieving viral suppression was higher in FI sites compared to SOC sites in:
 - Washington, D.C. (IEP = 6.6%; 95% CI: 1.9% - 11.3%; $p = 0.006$),
 - hospital-based sites (IEP = 4.9%; 95% CI: 1.4% - 8.5%; $p = 0.007$),
 - sites with lower viral suppression (baseline $\leq 66\%$) (IEP = 5.6%; 95% CI: 0.0% - 11.3%; $p = 0.049$), and
 - sites with higher viral suppression (baseline $> 66\%$) (IEP = 3.6%; 95% CI: 0.3% - 7.0%; $p = 0.03$).
- The proportion of baseline inconsistently virally suppressed patients achieving viral suppression was higher by 4.9% (95% CI, 1.4 – 8.5%, $p = 0.007$) at FI sites compared to SOC sites.
 - In subgroup analyses, the proportion of inconsistently virally suppressed patients achieving viral suppression was higher in FI sites compared to SOC sites in:
 - Washington, D.C. (IEP = 8.7%; 95% CI: 3.9% - 13.4%; $p < 0.001$),
 - hospital-based sites (IEP = 5.9%; 95% CI: 1.3% – 10.5%; $p = 0.01$),
 - larger sites > 196 patients at baseline (IEP = 4.1%; 95% CI: 1.1 – 7.0; $p = 0.008$), and
 - sites with higher viral suppression (baseline $> 66\%$) (IEP = 4.6%; 95% CI: 0.8% - 8.4%; $p = 0.02$).

Considerations

Non-significant findings on relevant outcomes

- Financial incentives did not significantly increase linkage to care compared with SOC (adjusted odds ratio = 1.10; 95% CI: 0.73 – 1.67; $p = 0.65$).

Other related findings

- This intervention is also determined to be evidence-based for the Structural Interventions (SI) Chapter.

Additional findings

- The FI intervention was evaluated for durability of the effects on viral suppression and continuity of care outcomes after financial incentives ended (El-Sadr et al., 2019). Both outcomes were assessed during the 9 months after the FI intervention withdrawal.
 - The proportion of patients with continuity in care was higher by 7.5% (95% CI: 2.0% - 12.9%, $p=0.007$) at FI sites compared to SOC sites.
 - In subgroup analyses, the proportion of patients with continuity in care was higher in FI sites compared to SOC sites in:
 - Bronx, NY (Increase in Percent [IEP] = 5.9%; 95% CI: 1.4% - 10.4%; $p = 0.01$),
 - hospital-based sites (IEP = 8.0%; 95% CI: 1.3% - 14.6%; $p = 0.019$),
 - sites with higher viral suppression (baseline $> 66\%$) (IEP = 7.9%; 95% CI: 1.6% - 14.2%); $p = 0.014$).
 - The proportion of patients who achieved viral suppression was higher by 2.7% (95% CI: -0.3% - 5.6%) at FI sites compared to SOC sites, but this difference was not statistically significant ($p = 0.076$).
 - In subgroup analyses, the proportion of patients achieving viral suppression was higher in FI sites compared to SOC sites in:
 - hospital-based sites (IEP = 4.8%; 95% CI: 1.6% - 7.9%; $p = 0.003$) and
 - smaller sites with ≤ 196 patients at baseline (IEP = 11.5%; 95% CI: 1.9% - 21.1%); $p = 0.019$).

Implementation research-related findings

- None reported

Process/Study execution-related findings

- Prior to study initiation, the authors consulted with the study’s community advisory group to determine the appropriate value of the FI.

Adverse events

- None reported

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*Obtained from supplementary online content and correspondence with author.

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Researcher: Wafaa El-Sadr, MD, MPH, MPA

School of Public Health
Columbia University
722 W 168th Street, PO Box 18
13th floor, New York, NY 10032

Email: wme1@cumc.columbia.edu

