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: $25 on getting blood drawn for HIV tests and $100 for meeting with a clinician and developing a care plan. Newly diagnosed persons and those who were 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) qualify for a $70 gift card if their plasma viral load was 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
  o 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 HIV test and 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, individuals who consented to HIV care according to New York State or Washington, D.C. law and newly found to be HIV-positive at participating HIV test sites were eligible. For continuity in care and viral suppression, individuals who consented to HIV care according to New York State or Washington, D.C. law and initiated care at participating HIV care sites were eligible.

Study Sample
Because the study was a site-randomized effectiveness trial, patients were not formally enrolled in the trial.
• For linkage to care, baseline was assessed among the linkage-to-care cases in surveillance during April 1, 2010 to March 31, 2011. Across the 34 testing sites, the baseline sample is characterized by the following*: 
  o Average number of HIV-positive cases per quarter (n=35)
  o 73% male; 27% female
  o 25% 13-24 years old, 28% 25-34 years old, 17% 35-44 years old, 22% 45-54, 8% ≥55 years
• For continuity in care and viral suppression, baseline was assessed in HIV positive patients in care in surveillance during January 1, 2010 to March 31, 2011. Across the 37 care sites, the baseline sample is characterized by the following*:
  o Average number of HIV positive patients in care per quarter (n=374)
  o 64% male; 36% female
  o 10% 13-24 years old, 14% 25-34 years old, 26% 35-44 years old, 33% 45-54, 17% ≥55 years

Assignment Method
HIV test and care sites were separately randomized to the FI intervention or standard of care (SOC) comparison. Thirty-seven test sites (18 in the Bronx and 19 in Washington, D.C.) participated in the linkage to care component. Thirty-nine HIV care sites (20 in the Bronx and 19 in Washington, D.C.) participated in the continuity of care and viral suppression components.

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 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.
  o In subgroup analyses, the proportion of patients with continuity in care was higher in FI sites compared to SOC sites in Bronx, NY (p < 0.001), Washington, D.C. (p =0.03), hospital-based sites (p =0.001), community-based sites (p = 0.02), smaller sites with ≤196 patients at baseline (p = 0.02), larger sites with >196 patients at baseline (p = 0.005), and sites with higher viral suppression (baseline > 66%) (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.
  o In subgroup analyses, the proportion of patients achieving viral suppression was higher in FI sites compared to SOC sites in Washington, D.C. (p = 0.006), hospital-based sites (p = 0.007), and sites with higher viral suppression (baseline > 66%) (p = 0.03).
• The proportion of inconsistent 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 inconsistent virally suppressed patients achieving viral suppression was higher in FI sites compared to SOC sites in Washington, D.C. ($p < 0.001$), hospital-based sites ($p = 0.01$), larger sites > 196 patients at baseline ($p = 0.008$), and sites with higher viral suppression (baseline > 66%) ($p = 0.02$).

**Considerations**

*Non-significant findings on relevant outcomes*
- Financial incentives did not significantly increase linkage to care compared with SOC ($p = 0.65$).

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

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

**Funding**
The HIV Prevention Trials Network (HPTN) 065 study is sponsored by the National Institute of Allergy and Infectious Diseases, the National Institute of Mental Health, and the National Institute on Drug Abuse, U.S. National Institutes of Health, under Cooperative Agreements #UM1 AI 068619 and UM1 AI 068617, as well as the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention.

*Obtained from supplementary online content and correspondence with author.*

## REFERENCES AND CONTACT INFORMATION


**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](mailto:wme1@cumc.columbia.edu)