BACKGROUND

• There is increased interest in the use of financial incentives to achieve desired health outcomes, including adherence behaviors.

• The HPTN 065 Study, a large study funded by NIH, NIH, and conducted by the National Institute of Allergy and Infectious Diseases (NIAID), examined the feasibility of a test, link-to-care, plus stratify strategy for HIV prevention in the Bronx, NY, and Washington, DC.

• As part of the HPTN 065 study, the effects of financial incentives on viral suppression in the Bronx, NY, and Washington, DC, were examined.

• Financial incentives were shown to be associated with a significant increase in viral suppression and with continuity in care at sites randomized to financial incentives compared to those randomized to standard of care.

• Financial incentives were associated with 3.9% (90.7%-6.6%) higher viral load suppression and with 8.7% (4.2%-13.2%) higher continuity in care among patients at sites randomized to financial incentives versus standard of care in the study of care.

• Whether these effects are durable beyond withdrawal of financial incentives is unclear.

• We assessed viral suppression and continuity in care post-intervention withdrawal at financial incentive versus standard of care at sites to determine the durability of financial incentives on these two outcomes.

METHODS

• A total of 37 (20 Bronx, NY; 17 Washington, DC) HIV care sites with 51,782 patients in care (28,439 Bronx, NY;23,243 Washington, DC), were site-randomized to financial incentives or standard of care.

• At financial incentive sites, from February 2011 through January 2013, patients on ART could earn a $70 gift card quarterly if they were virally suppressed.

• Laboratory data were reported to the US HIV Surveillance Database and these data were used to determine the following outcomes at site level:

  • Viral suppression: viral load defined as <400 copies/ml in treated patients (62 visits in last 15 months)

  • Continuity in Care: CD4+ cell count or HIV viral load in prior 5 quarters

• Post-intervention analyses were assessed for the financial incentives after discontinuation of financial incentives (April to December 2013).

• Generalized estimation equations (GEE) was used to compare financial incentive and standard of care site-level outcomes post-withdrawal of the intervention.

RESULTS

Table 1. Effects of Financial Incentives During and Post-intervention on Viral Suppression and Continuity in Care

<table>
<thead>
<tr>
<th>Number of Sites</th>
<th>Intervention Increase in percent with VS (95% CI), P Value</th>
<th>Intervention Increase in percent with CC (95% CI), P Value</th>
<th>Intervention Increase in percent of CC (95% CI), P Value</th>
<th>Intervention Increase in percent of VS (95% CI), P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>2.3% (1.9%, 2.7%)</td>
<td>2.7% (3.0%, 3.4%)</td>
<td>7.8% (14.2%, 11.2%)</td>
<td>7.3% (10.0%, 14.6%)</td>
</tr>
<tr>
<td>Bronx, NY</td>
<td>1.6% (1.2%, 2.0%)</td>
<td>2.0% (2.4%, 3.0%)</td>
<td>6.0% (10.5%, 12.0%)</td>
<td>5.9% (10.0%, 11.8%)</td>
</tr>
<tr>
<td>Washington, DC</td>
<td>4.0% (3.9%, 13.2%)</td>
<td>4.6% (4.1%, 5.0%)</td>
<td>8.0% (5.0%, 20.7)</td>
<td>6.8% (3.4%, 19.5)</td>
</tr>
<tr>
<td>Hospital-based</td>
<td>1.9% (1.8%, 2.0%)</td>
<td>2.2% (1.7%, 3.7%)</td>
<td>7.0% (12.7%, 13.2%)</td>
<td>6.2% (10.9%, 12.6)</td>
</tr>
<tr>
<td>Community-based</td>
<td>1.2% (1.0%, 1.4%)</td>
<td>1.4% (1.1%, 1.8%)</td>
<td>6.0% (12.7%, 19.0)</td>
<td>5.7% (11.4%, 16.7)</td>
</tr>
<tr>
<td>Smaller</td>
<td>1.1% (1.0%, 1.3%)</td>
<td>1.3% (1.0%, 1.7%)</td>
<td>5.6% (11.4%, 12.2)</td>
<td>5.0% (11.4%, 16.2)</td>
</tr>
<tr>
<td>Larger</td>
<td>1.9% (1.6%, 2.2%)</td>
<td>2.0% (1.6%, 2.4%)</td>
<td>7.0% (7.0%, 12.2)</td>
<td>6.0% (10.0%, 12.0)</td>
</tr>
<tr>
<td>Lower base VS</td>
<td>2.0% (1.8%, 2.1%)</td>
<td>2.0% (1.7%, 2.3%)</td>
<td>7.0% (11.4%, 12.2)</td>
<td>6.0% (11.4%, 16.2)</td>
</tr>
<tr>
<td>Lower base CC</td>
<td>1.9% (1.8%, 2.1%)</td>
<td>2.0% (1.7%, 2.3%)</td>
<td>7.0% (7.0%, 12.2)</td>
<td>6.0% (11.4%, 12.2)</td>
</tr>
<tr>
<td>Higher base VS</td>
<td>3.4% (2.0%, 5.7%)</td>
<td>3.2% (2.0%, 4.7%)</td>
<td>7.0% (13.4%, 21.3)</td>
<td>7.0% (13.4%, 21.3)</td>
</tr>
</tbody>
</table>

CONCLUSION

• Post discontinuation of financial incentives, data from this large study evaluated the evidence of durable effects of financial incentives, both on viral suppression and continuity in care.

• These findings suggest that behaviors motivated by financial incentives may last beyond the provision of the financial incentives, increasing the potential cost-effectiveness of this strategy.

• Research in the effects of financial incentives on behaviors should evaluate the durability of positive effects.

REFERENCES


HIV care site randomization to FI or SOC balanced by baseline:

- Size of HIV care site's HIV-positive patient case load
- Proportion of HIV-positive patients with VL suppression

Figure 1. NEEDS LABEL

FINANCIAL INCENTIVES

STANDARD OF CARE

DC

Bronx