HIV partner services are associated with earlier diagnosis and timely linkage to HIV medical care

Presented at AIDS 2012 – Washington, D.C., USA

**INTRODUCTION**

NYC health department established the Field Services Unit (FSU) in 2006 to address several public health issues:
- Persistent problem of late diagnosis
  - ~25% of New Yorkers were diagnosed with AIDS within 31 days of their HIV diagnosis
- Delayed linkage to care
  - ~25% with no VL/CD4 1 year after initial diagnosis
- Field Services Unit assists providers with HIV partner services
  - Notification and testing of named partners and linkage to HIV medical care for partners testing positive
- FSU participating facilities were selected because they were located in NYC neighborhoods with high HIV prevalence and mortality

**METHODS**

**Population**
- Newly diagnosed with HIV between 2007 and 2009 in NYC
- 13 years or older
- Three mutually exclusive groups:
  - FSU partners: diagnosed as a result of HIV partner services
  - FSU patients: diagnosed in a FSU participating facility and interviewed for HIV partner services
  - Citywide patients: diagnosed at non-FSU participating facilities

**Data sources**
- NYC Department of Health and Mental Hygiene HIV Surveillance Registry
  - Populated-based registry of all persons diagnosed with AIDS (since 1981) and HIV (since 2000) in NYC
- Field Services Unit database
  - FSU interviewed patients and notified and tested their partners

**Measures**

Demographic variables
- Age at HIV diagnosis, sex, race/ethnicity, CDC transmission risk
- HIV-related clinical outcomes variables
  - Concurrent HIV/AIDS diagnosis
  - Timely initiation of care
  - Retention in care
  - Time to VL suppression for patients with a CD4 count <350

**Data analysis**

Differences analyzed using Chi-square tests and T-tests

**RESULTS**

**Table 1. Demographics**

<table>
<thead>
<tr>
<th></th>
<th>FSU partners (n=77)</th>
<th>FSU patients (n=1645)</th>
<th>Citywide patients (n=5365)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (median years)</td>
<td>33</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>Male</td>
<td>66%</td>
<td>64%</td>
<td>77%</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>48%</td>
<td>61%</td>
<td>43%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>44%</td>
<td>33%</td>
<td>32%</td>
</tr>
<tr>
<td>White</td>
<td>6%</td>
<td>4%</td>
<td>21%</td>
</tr>
<tr>
<td>MSM</td>
<td>36%</td>
<td>31%</td>
<td>46%</td>
</tr>
</tbody>
</table>

All P < .0001

**Figure 1. Concurrent HIV/AIDS diagnosis (AIDS diagnosis within 31 days of HIV diagnosis)**

FSU partners (n=77) 16%  FSU patients (n=1645) 34%  Citywide patients (n=5365) 25%

P < .0001

**Figure 2. Initiation in care (CD4/VL within 3 months of diagnosis)**

FSU partners (n=77) 91%  FSU patients (n=1645) 93%  Citywide patients (n=5365) 75%

P < .0001

**Figure 3. Retention in care for those who initiated care (≥2 labs [CD4/VL] separated by ≥91 days within a 12 month period)**

FSU partners (n=73) 58%  FSU patients (n=1615) 55%  Citywide patients (n=4994) 51%

P = 0.003

**Table 2. Time to undetectable VL for patients with CD4<350**

<table>
<thead>
<tr>
<th></th>
<th>N (%***) (CD4&lt;350)</th>
<th>Mean (months)</th>
<th>Median (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSU partners</td>
<td>n = 39</td>
<td>31 (79%)</td>
<td>6.8</td>
</tr>
<tr>
<td>FSU patients</td>
<td>n = 894</td>
<td>736 (82%)</td>
<td>7.1</td>
</tr>
<tr>
<td>Citywide patients</td>
<td>n = 2526</td>
<td>1982 (78%)</td>
<td>9.1</td>
</tr>
</tbody>
</table>

All P < .0001

**CONCLUSIONS**

Partner Services can help to:
- Diagnose HIV patients younger and at an earlier stage of disease
- Link patients successfully and promptly to care
- Improve retention in care and lead to faster viral load suppression
- Expanding partner services could reduce HIV transmission through earlier diagnosis and treatment of HIV

**ACKNOWLEDGEMENTS**

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