Wisconsin AIDS/HIV SPNS Initiative: Interim Evaluation of Linkage-to-Care and Social Networks Testing Programs

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Introduction
In August 2011, the federal Health Resources and Services Administration selected Wisconsin as one of six states to participate in the Special Project of National Significance (SPNS) grant, Systems Linkages and Access to Care for Populations at High Risk of HIV Infection Initiative – Demonstration States. This grant opportunity focused on improving access to and retention in high-quality medical care and treatment for HIV-positive persons. The initiative targets populations at high risk for HIV infection, including those who are unaware of their HIV status, have never been linked to medical care, or have lapsed from medical care. Through this opportunity, the AIDS/HIV Program has implemented two strategies:
- Developing Linkage to Care (LTC) Specialists to assist HIV-positive individuals with linking to and remaining engaged in medical care.
- Expanding Social Networks Strategy testing (SNS) to increase HIV testing in high-risk target populations.

This article reviews initial data collected through the SPNS grant and the preliminary evaluation results of the LTC and SNS interventions.

Linkage to Care Specialists
LTC Specialists serve as patient navigators, helping clients connect to HIV medical care and develop the knowledge and skills necessary to be active participants in their health care. The efforts of the LTC Specialists are intensive and time-limited, with the goal of ensuring that clients will be able to maintain engagement in HIV medical care through either self-management or traditional case management services when work with the LTC Specialist ends. Through the first 17 months of the initiative, 269 clients have enrolled in the LTC program and 116 clients have been discharged (Figure 1).

Figure 1. Cumulative LTC Enrollment and Discharge over Time, 2013-2014

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Who are the clients?
LTC Specialists work with five client populations:

- Newly Diagnosed: clients first diagnosed with HIV infection during the previous 90 days.
- New to Care: clients previously diagnosed (more than 90 days ago) with HIV infection but not previously linked to HIV medical care.
- Out of Care: clients who have not attended an HIV medical visit during the previous six months.
- Post-incarceration: clients previously diagnosed with HIV infection who are referred by and recently released from a Wisconsin Department of Corrections institution.
- At Risk: clients who meet one or both of the following criteria:
  - Have missed two or more consecutive HIV medical appointments.
  - Have a detectable viral load while on HIV treatment.

Of the 269 clients enrolled in the LTC program, over half have been newly diagnosed or had been out of care (Figure 2).

![Figure 2. Linkage-to-Care (LTC) Client Type](image)

While it is too early to see the long-term results of newly diagnosed clients working with an LTC Specialist, it is hypothesized that intensive work with an LTC Specialist will prevent clients from falling out of medical care.

Aligning with both national and state epidemiologic data, the majority of LTC clients (55%) self-identify their risk as men who have sex with men (MSM) (Figure 3). Further analysis of the demographic data for the 269 clients enrolled in the initiative shows that more than 75% are male, over 60% are Black, and almost one-third are between the ages of 19 and 30.
Stable housing is important in allowing those living with HIV/AIDS to access comprehensive health care and adhere to their complex drug therapies. Table 1 shows the gender, age, and racial information of the LTC clients, as well as their housing status. Almost half of the clients are unstably or temporarily housed.

Table 1. Demographics of LTCS Participants

<table>
<thead>
<tr>
<th>Gender</th>
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<tbody>
<tr>
<td>Male</td>
<td>77%</td>
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<tr>
<td>Female</td>
<td>20%</td>
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<tr>
<td>Transgender – Male-to-Female</td>
<td>3%</td>
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</table>

<table>
<thead>
<tr>
<th>Age</th>
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<tbody>
<tr>
<td>19-24</td>
<td>12%</td>
</tr>
<tr>
<td>25-29</td>
<td>19%</td>
</tr>
<tr>
<td>30-34</td>
<td>13%</td>
</tr>
<tr>
<td>35-39</td>
<td>12%</td>
</tr>
<tr>
<td>40+</td>
<td>43%</td>
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<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
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</thead>
<tbody>
<tr>
<td>Black</td>
<td>62%</td>
</tr>
<tr>
<td>White</td>
<td>30%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>16%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
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<table>
<thead>
<tr>
<th>Housing Status</th>
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<tbody>
<tr>
<td>Stable Housing</td>
<td>55%</td>
</tr>
<tr>
<td>Temporary Housing</td>
<td>22%</td>
</tr>
<tr>
<td>Unstable Housing</td>
<td>22%</td>
</tr>
</tbody>
</table>
Upon leaving the program...

Half of the 116 clients who have been discharged were discharged due to successful completion of the LTC program. Other clients were discharged before service completion for various reasons (Figure 4).

Of the clients who successfully completed the program:
- 49% were discharged to self-management or brief services.
- 51% were discharged to case management.

![Figure 4. Discharge Reason for LTC Participants](image)

What barriers did clients face?

A main focus of the LTC Specialist is to help clients identify and address barriers that have previously prevented them from obtaining HIV medical care. These barriers can impede access to services, affect the health of the individual, and can range broadly from mental health concerns to having reliable child care during appointments.

At the start of the LTC program, clients self-identify barriers to care. Upon discharge, clients assess the progress in reducing previously identified barriers.

The most common barriers listed at intake for LTC clients were:
- Mental health concerns (68.7%).
- Not being able to afford medical expenses (64.7%).
- Not having access to reliable transportation (48%).
- Fearing others will find out HIV status (48%).
- Not wanting to be reminded of having HIV (46.7%)

With few exceptions, the majority of clients found they had fewer barriers to care at discharge than at intake (Figure 5). Figure 5 is based on the 24 people who have successfully completed barrier surveys at both intake and discharge.
Is Linkage to Care effective?
With the goal of helping HIV-positive individuals remain in care and adhere to treatment, the timing of being linked to care is crucial. The sooner the client is linked to care, the sooner the client has the opportunity to be virally suppressed. The LTC program has been successful in linking newly diagnosed individuals to care within 90 days (Figure 6). Over 80% of newly diagnosed LTC clients are linked to care within 90 days, compared to only 64% of those in the control group.

Similarly, LTC clients have a higher percentage of viral suppression than those not in the LTC program (Figure 7).

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3 The non-LTC control group is created by selecting subjects within the Enhanced HIV/AIDS Reporting System database who are similar to clients enrolled in the LTC program, and is balanced on the metrics included in the database.
Figure 7. Viral Suppression in Newly Diagnosed Subjects – Most Recent Lab (within 18 months)

The increases in newly diagnosed subjects being linked to care within 90 days and having viral suppression are both statistically significant (p-value=.00479 and 0, respectively). While preliminary, these results demonstrate that the LTC program has the potential to improve client health.

Expansion of Social Networks Strategy Testing
Social Networks Strategy testing (SNS) is a peer-driven recruitment strategy allowing HIV testing and prevention messages to be dispersed through the social networks within a community. This intervention is directed at reaching high-risk persons who may be infected but unaware of their HIV status. Newly and previously diagnosed HIV-positive and high-risk HIV-negative recruiters are enlisted on an ongoing basis; they then provide HIV counseling, testing, and referral to members of their networks. SNS testing has been in place in Wisconsin since 2008. It has successfully identified high-risk individuals with HIV infection and has yielded higher positivity rates than traditional HIV testing in Wisconsin. The intervention is implemented through a standardized protocol and standards focused on ensuring program effectiveness.

In the first year of the expansion of SNS through the SPNS initiative, there have been 638 members of recruiters’ social networks tested. These members are known as network associates.

Figure 8. Cumulative Social Networks Strategy (SNS) Testers over Time, 2013-2014
Who are the network associates?
To date, the network associates tested through this initiative have been primarily male (79%), MSM (50%), ages 19-29 (49%), and Black (48%). Of all network associates, 58% have stable housing and 42% either have temporary housing or are homeless. The full demographic profile is shown in Table 2 and demonstrates that SNS is reaching the populations at greatest risk for HIV infection in Wisconsin.

Table 2. Demographics of Network Associates

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>79%</th>
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<td>Female</td>
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<td>17%</td>
</tr>
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<td>Transgender – Male-to-Female</td>
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<td>Age</td>
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<tr>
<td>13-18</td>
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<tr>
<td>19-24</td>
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<tr>
<td>25-29</td>
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<tr>
<td>30-34</td>
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<td>35-39</td>
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<tr>
<td>40+</td>
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<tr>
<td>Race/Ethnicity</td>
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<tr>
<td>Black</td>
<td>48%</td>
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<tr>
<td>White</td>
<td>29%</td>
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</tr>
<tr>
<td>Hispanic/Latino</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>More than one race</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>HIV Risk</td>
<td></td>
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</tr>
<tr>
<td>MSM</td>
<td>50%</td>
<td></td>
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<tr>
<td>IDU</td>
<td>28%</td>
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<tr>
<td>MSM/IDU</td>
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<tr>
<td>High-Risk</td>
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<tr>
<td>Heterosexual</td>
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<tr>
<td>Other</td>
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<tr>
<td>Housing Status</td>
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<tr>
<td>Stable Housing</td>
<td>58%</td>
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</tr>
<tr>
<td>Temporary housing</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Homeless</td>
<td>12%</td>
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Is Social Networks testing more effective at finding new positives than traditional HIV testing?
In the first year of the SNS program, five people were newly diagnosed HIV-positive. Preliminary findings show the positivity rate of SNS is significantly greater than that found in publicly funded testing sites administering standard, non-SNS, CTR tests (Figure 9).
Summary
The Linkage to Care (LTC) and Social Network Strategy (SNS) testing initiatives are unique opportunities to improve the quality of life for persons living with HIV in Wisconsin and to decrease the incidence of HIV infections. Both initiatives will continue past the end of the grant period in August 2015. The final evaluation results will inform how these initiatives will look in the future. In addition, due to the effectiveness of the LTC program in particular, the Wisconsin AIDS/HIV Program is committed to integrating the lessons learned and LTC best practices system wide in HIV medical case management in Wisconsin.

For further information or questions, please contact Claudia Habib at 608-266-3031, or email Claudia.Habib@dhs.wisconsin.gov.