Improving Patient Engagement in HIV Care: Health Department Strategies

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Overview

• Goal: to review the current state of health department Data to Care activities
• Key findings from outcomes reported to date
  – Surveillance-based outreach
  – HIV Clinic-based outreach
• Brief review of other strategies
• Recommendations
Examples of Data to Care Strategies

1. Health Department → HIV Clinic → Patient
   - Data in
   - Data back

2. Health Department → HIV Clinic → Patient
   - Check-in

3. Health Department → Patient

Health Department
HIV Clinic
Patient
Key Finding #1: Retention in care is not as low as first estimated

In Seattle-King County, less than half of patients who appeared to be out of care were actually out of care.

Buskin SB, et al STD 2014; PHSKC Program data; Bove, JAIDS 2015
Key Finding #1: Retention in care is not as low as first estimated

Cases with no CD4 or VL for ≥12 months

6 state collaborative (AK, ID, MT, OR, WA, WY)

3866

51% moved or died + 20% in care

47-88% of cases found not to be out of care upon investigation

Based on Presentations at the National HIV Prevention Conference, Atlanta, GA, Dec 6-9, 2016 from: Brantley (1910), Nagavedu (2231), Cassidy-Stewart (1650), Tesoriero (1484), Morrison (1503), Dombrowski.

Similar findings have been reported from health department investigators throughout the U.S.
Viral Suppression Among Persons Diagnosed with HIV

* Outcomes among persons with diagnosed HIV infection
Key Finding #2: In most cases, our Data to Care efforts do not lead to successful re-engagement in HIV care

<table>
<thead>
<tr>
<th>Project Area</th>
<th>Eligible Cases</th>
<th>Contacted N (% of eligible)</th>
<th>Re-linked N (% of eligible)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Department-Based</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana</td>
<td>1148</td>
<td>527 (46)</td>
<td>252 (22)</td>
</tr>
<tr>
<td>Maryland</td>
<td>312</td>
<td>65 (21)</td>
<td>25 (8)</td>
</tr>
<tr>
<td>Tennessee</td>
<td>465</td>
<td>251 (54)</td>
<td>79 (17)</td>
</tr>
<tr>
<td>Clinic-Based</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York State</td>
<td>363</td>
<td>233 (64)</td>
<td>166 (46)</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>416</td>
<td>--</td>
<td>228 (55)</td>
</tr>
</tbody>
</table>

Sources: Presentations at the National HIV Prevention Conference, Atlanta, GA, Dec 6-9, 2016
[Brantley (1910), Nagavedu (2231), Cassidy-Stewart (1650), Tesoriero (1484), Morrison (1503)]
*Projects used different definitions and methodologies. Category names used above are not necessarily the same as those the authors used to describe each group*
### Key Finding #3:
Many persons who achieve successful outcomes do so in the absence of an intervention.

<table>
<thead>
<tr>
<th>Project</th>
<th>Eligible Cases</th>
<th>Contacted N (% eligible)</th>
<th>Outcome N (% eligible)</th>
<th>Achieved Outcome Before Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Relinked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seattle (HIV Clinic)</td>
<td>157</td>
<td>37 (24)</td>
<td>116 (74)</td>
<td>89</td>
</tr>
<tr>
<td>Seattle -KC (health dept.)*</td>
<td>822</td>
<td>243 (30)</td>
<td>301 (37)</td>
<td>161</td>
</tr>
</tbody>
</table>

*Number of eligible cases in this table differs from earlier slides because this group includes persons with no CD4 or VL reported for ≥12 months and persons with VL>500 at the time of last report.

Over half of the successful outcomes occurred before we contacted the patient.
Did our efforts make an impact?
Implementation of Data to Care Program in Seattle-King County: Stepped Wedge Cluster Randomization

- Time
- Analysis Start Date
- Analysis End Date
- Patients of Dr. A
- Order of doctor clusters randomly assigned

- Intervention Start Date = Doctor Contacted
- Control Period
- Intervention Period
Data to Care Intervention in Seattle & King County

HIV Surveillance Team

Eligibility
- No CD4 or viral load reported for ≥12 months, OR
- VL >500 at time of last report

Contact medical provider
- Notify providers which patients are out of care
- Allow opt-out on behalf of individual patients
- Obtain updated contact information

Contact patient
- Structured interview
- Define barriers to care
- Assist with re-engagement through health systems navigation, brief counseling, referral to support services
Key Finding #3: Many persons who achieve successful outcomes do so in the absence of an intervention.
• Maybe part of the problem with our first Data to Care efforts is that we have been putting a lot of effort into returning people to the same system that failed to engage them in the first place.

• Bigger picture:
  - We are still in the early stages of Data to Care
  - How can we more efficiently identify out-of-care persons who can benefit from an intervention?
  - What interventions do we need?
  - Need to match intensity to the needs of the PLWH
Other Possible Methods of Identifying Out-of-Care PLWH

(All of which can be enhanced by the use of surveillance data)

- Health information exchanges
- Inpatient hospitalization
- Jails
- STD Clinic
- STD partner services
- Peer referral
Health Information Exchanges

• LaPHIE (Louisiana Public Health Information Exchange)
  - Electronic Health Record
  - HIV surveillance
  - "Out of care" message to healthcare team

• Public Health – Seattle & King County Relinkage Program
  - Electronic Health Record
  - "Out of care" message to public health relinkage team
Project HOPE Trial – RCT in 11 Hospitals

HIV+ adults admitted to the hospital
- VL>200 & CD4<500
- Substance use

- Navigation intervention
- Navigation intervention + Financial incentives
- Treatment as usual

Metsch et al, JAMA 2016
Effect of Patient Navigation +/- Financial Incentives on Viral Suppression among Hospitalized Patients with HIV & Substance Use

**Project Hope RCT**

- Usual Treatment
- Navigation
- Navigation + Incentives

*Metsch LR, et al, JAMA 2016*
MAX Clinic - Seattle & King County

Identification of Potential MAX Patients

Case Coordinators [Disease Intervention Specialists (DIS)]
• Intensive support & outreach
• Single point of contact for patients & providers
• Calls, text messages
• Meet patients in hospital, clinic, home, or jail

Enrollment of Patients in MAX Clinic

• Walk-in medical care, 5 afternoons per week (in STD Clinic)
• Snacks and meal vouchers (each visit, up to once weekly)
• Cell phones and bus passes (contingent renewal)
• Cash incentives (q2 months)
  • $25 for visit + lab draw
  • $100 for suppressed VL & 1x bonus for 3 in a row ($100)
### Patients Enrolled in MAX Clinic  
**Jan-Dec 2015 (N=50)***

<table>
<thead>
<tr>
<th>Referral Source</th>
<th>Count (Percentage)</th>
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<tbody>
<tr>
<td>Provider/Case Manager</td>
<td>23 (46%)</td>
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<tr>
<td>Public Health Outreach</td>
<td>23 (46%)</td>
</tr>
<tr>
<td>Peer</td>
<td>4 (8%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CD4 count (cells/mm$^3$)*</th>
<th>Count (Percentage)</th>
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</thead>
<tbody>
<tr>
<td>&lt;200</td>
<td>27 (54%)</td>
</tr>
<tr>
<td>200-500</td>
<td>15 (30%)</td>
</tr>
<tr>
<td>&gt;500</td>
<td>6 (12%)</td>
</tr>
</tbody>
</table>

| Illicit stimulant or opioid use**      | 44 (88%)           |
| Unstable housing                      | 29 (58%)           |
| Hepatitis C co-infection              | 17 (34%)           |

*CD4 count missing for 2 patients  
**Reported using methamphetamine, crack cocaine, cocaine or heroin in past 12 months, at time of enrollment
HIV Care Continuum Outcomes of MAX Patients Enrolled in the First 12 Months of the Program (N=50), as of 5/1/2016

Currently 80 patients, ~55% suppressed

Median enrollment 9 months
Summary & Recommendations

• The Data to Care strategy should be one component of a public health strategy to improve the HIV care continuum.
• Efficiency is likely to improve as quality of surveillance data improves.
• Surveillance-based outreach alone is not enough (but is a good place to start).
• Data sharing with external organizations is crucial for a comprehensive Data to Care strategy.
• To meet the NHAS goal of 80% viral suppression among HIV-diagnosed persons, we need
  – a range of interventions
  – more creative strategies for the highest needs PLWH.