Public Health Systems Approaches for Linkage and Retention in HIV Care

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Outline

• Rationale for a population-based approach to linkage and retention
• HIV surveillance basics
• Health department intervention examples
Clinic-Based Retention Programs

• Crucial, but invariably neglect many PLWHA
  – Patients spread across array of providers
  – Many providers lack means to systematically identify patients who have fallen out of care & resources to re-engage them
  – Not all HIV+ persons are eligible for case management
  – Ryan White Clinics – 1/3 of PLWHA in Seattle

• Coordination across clinics is necessary for a population-based approach
Population-Based Retention Interventions

• Goal is to address needs of entire population
• Surveillance data allow monitoring of retention in care across clinical sites
• Increasing support for using surveillance data to direct interventions
  – Evolution in the role of surveillance
  – CDC focus: “High impact prevention”
  – HIV advocates and community representatives

HIV Surveillance, Public Health, and Clinical Medicine — Will the Walls Come Tumbling Down?
Amy L. Fairchid, Ph.D., M.P.H., and Ronald Bayer, Ph.D.  

NEJM 2011

Falling Through the Cracks

Ryan, POZ 2013
Project Inform Think Tank

- HIV advocates & community representatives from >10 organizations
- Local & federal health officials
- Academic researchers
- Guidance for health departments
- Consensus statement

“the benefits [to more active use of collected data] potentially outweigh the risks so that we encourage local jurisdictions to actively engage stakeholders in considering the use of surveillance data along with other tools to systematically increase access to care, ensure better linkages to services, and improve retention in care.”
HIV Laboratory Surveillance Basics

Provider orders CD4 or viral load

Laboratory reports CD4 and VL results

Health department matches results to a reported HIV case or investigates

- Not HIV
- New case
- Previously reported case

Health department reports de-identified data to CDC
Areas with Laws and Regulations for Reporting all CD4 and Viral Load Values, March 2012

Laboratory reporting (laws and regulations):
- Not all values
- All values, specified
- All values, not specified

Puerto Rico
Virgin Islands, U.S.

Slide courtesy NASTAD
Key Limitations of Surveillance Data

- Assumption that missing data indicates out-of-care
  - Incomplete laboratory reporting
  - Visits without lab testing
  - Out-migration
    - Out-of-care estimate in King County decreased from 31% to 16% when adjusted for out-migration
    - Denver data corroborate this
- Feasible with resource constraints?
  - Large cities: thousands of cases appear to be out of care
  - Huge “backlog” of cases – likely no longer residing in area
HIV Care Cascade in King County (2011) and the U.S. (2009)

- **U.S., 2009 (N=1,148,200)**
- **King County (KC) Laboratory Surveillance and Case Investigation, 2011 (N=7,169)**

<table>
<thead>
<tr>
<th>State</th>
<th>% of all PLWHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV-infected</td>
<td>100%</td>
</tr>
<tr>
<td>HIV-diagnosed</td>
<td>99%</td>
</tr>
<tr>
<td>Linked</td>
<td>78%</td>
</tr>
<tr>
<td>Retained</td>
<td>71%</td>
</tr>
<tr>
<td>Prescribed ART</td>
<td>59%</td>
</tr>
<tr>
<td>VL suppressed (&lt;200)</td>
<td>23%</td>
</tr>
</tbody>
</table>

*Hall et al, XIX International AIDS Conference*
Linkage in King County

• Linkage assistance for all newly diagnosed persons through HIV partner services (PS)

• Persons diagnosed through public health-funded programs referred to One-on-One program
  – Meet with disease intervention specialist & HIV physician
  – Assisted with first HIV care appointment

• Cases not closed until linkage confirmed
  – All new cases reviewed monthly

• 93% linkage to care within 3 months in 2011
Retention in King County

1. Surveillance-based identification of PLWHA with
   – No labs in past 12 months OR
   – CD4 <500, VL >500 at last report in past year
2. Lists sent to most recent providers for review
3. HD calls eligible PLWHA to offer program
4. Structured one-on-one interview
   – Identify barriers to care and ART use & develop plan
   – 45 minutes, $50 compensation
   – Referral to/ coordination of services
5. Summary to medical provider & case manager
6. F/u call in 1 month (and prn), additional referrals
High Needs Outreach Workers

• Clinic and CBO-based
  – “case manager extenders”

• Interface with public health when out-of-care persons need additional assistance relinking

• Assessment of care engagement among HIV+ persons admitted to Harborview Medical Center (county hospital)

• Lead clinic-based patient tracing activities
CAPP Uptake to Date

613 Eligible Cases
508 cases - provider allowed contact
   (83% of eligible)
242 PLWHA successfully contacted
   (48% of provider allowed; 39% of eligible)
215 accepted relinkage assistance
   (89% of contacted; 35% of eligible)
200 completed the individual intervention or
   have a pending appointment
   (93% of accepted; 33% of eligible)

105 cases - provider refused contact
266 PLWHA – no response or no current contact information
27 declined relinkage assistance
15 no-showed to appointment and did not complete interview by phone

Ongoing cluster randomized evaluation
Primary outcome: time to viral suppression
STDs: A Window of Opportunity?

- King County STD Clinic, 2004-2008
  - 501 MSM with previously diagnosed HIV
    - 86% in care
    - 58% on ART

- WA State, 2007-2010
  - Random sample of 1103 MSM GC and CT cases
    - 25% previously diagnosed with HIV
    - 87% in care
    - 63% on ART

Dombrowski, JAIDS 2011 and Golden, ISSTDR 2011
Washington, D.C.

• “Recapture Blitzes”
  – Clinics generate lists of patients with no visits in 6 months
  – Match clinic lists with surveillance registry
  – If no visit with another provider (i.e. no labs in past 6 months) or death, then
  – Clinic staff perform re-linkage outreach
    • 15-20 calls per re-link
Louisiana

Louisiana Public Health Information Exchange (LaPHIE)

Automated Interface of public health records and LSU electronic medical records at the point of care to identify and flag

• Tested HIV+ but may be unaware of results
• Out of HIV care (no CD4 or VL on file)
LaPHIE

Message from health department

Suggested actions for clinicians
Los Angeles County

- **Navigator Program**
  - Work with Ryan White funded clinics (N=30) to identify persons out of care
  - Outreach to conduct modified ARTAS intervention

- **Project Engage**
  - In-care patients bring in out-of-care peers from their social network (incentives for both)
  - Cross-matched with surveillance data
San Francisco

• Linkage and Retention Program
  • Referrals from Ryan White clinics, jails, community sites
  • Out-of-care persons who re-test HIV+
  • Persons covered under MediCal expansion who require clinic switch
  • Health department assists with “patient navigation”

– RSVP pilot project (Re-engaging Surveillance-identified Viremic Patients)
Conclusions

• Surveillance-based re-linkage to HIV care is a promising approach
  – Remains hampered by data quality issues
  – Needs rigorous research

• Multiple models of health department interventions
  – Clinic interface, direct contact, electronic data transfer

• Coordination of activities across systems is key
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