Retention in Care Services Reported by HIV Care Providers in the United States – National HIV Provider Survey, 2013-2014

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Conflict of Interest Disclosure
Jason Craw, MPH

- Has no real or apparent conflicts of interest to report.
Acknowledgments

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- Medical Monitoring Project/Provider Survey
  - Providers, participating facilities, local health department staff, community and provider advisory boards, and the CDC Division of HIV/AIDS Prevention’s Clinical Outcomes Team
BACKGROUND
Current Retention in Care Guidelines

- International Association of Providers of AIDS Care (IAPAC) Guidelines for Optimizing the HIV Care Continuum for Adults and Adolescents
  - Systematic monitoring of retention in care for all patients
  - Patient education, support for keeping clinic appointments
  - Proactive engagement and re-engagement in care

- Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States (“PwP Guidelines”)
  - Proactive strategies to engage and retain patients in care
  - Evidence-based methods/strategies to retain patients in care

Objectives

- Describe providers’ perspectives on why patients miss scheduled follow-up appointments
- Estimate the percentage of U.S. HIV care providers who report working in a facility that provides recommended retention in care services to patients
- Identify factors associated with providing recommended retention in care services
METHODS
Data Sources

- 2013 Medical Monitoring Project (MMP) Provider Survey
  - National probability survey with 2-stage sampling design
    - 16 states and 1 territory (Puerto Rico)
    - 622 HIV care facilities
  - Data collected from June 2013 through January 2014
  - Survey respondents
    - Physicians, nurse practitioners, and physician assistants
    - Facility response rate: 81% (505 facilities)
    - Adjusted provider response rate: 64% (1234 respondents)
- Facility characteristic data from HIV clinic administrators
Outcomes of Interest

- Provider-perceived reasons why patients miss follow-up appointments
  - e.g., emotional/psychological, homelessness, mental health, substance abuse, transportation
- Provider’s facility delivered one or more of the following retention services
  - Appointment reminders
  - Missed visit follow-up
  - Patient navigation services
  - Reinforcement of the importance of attending follow-up visits
  - Systematic monitoring of retention in care of all patients
- Provider’s facility delivered all five retention services
Independent Variables of Interest

- HIV facility characteristics
  - Private facility
  - Ryan White HIV/AIDS Program (RWHAP) funding
  - Facility size (number of HIV patients served)
Data Analysis

- Prevalence estimates calculated for outcomes of interest
  - Estimated standard errors account for complex survey design
- Associations between retention services and facility characteristics
  - Rao-Scott chi-square tests
- Data weighted to account for unequal selection probabilities, non-response
- Estimates representative of all U.S. HIV care providers
RESULTS
## Provider Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Weighted %</th>
<th>(95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>44</td>
<td>(37-50)</td>
</tr>
<tr>
<td>Age &lt;50</td>
<td>42</td>
<td>(37-46)</td>
</tr>
<tr>
<td><strong>Provider type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician</td>
<td>79</td>
<td>(74-85)</td>
</tr>
<tr>
<td>Nurse practitioner</td>
<td>15</td>
<td>(10-20)</td>
</tr>
<tr>
<td>Physician assistant</td>
<td>5</td>
<td>(3-8)</td>
</tr>
<tr>
<td>HIV specialist*</td>
<td>58</td>
<td>(51-64)</td>
</tr>
<tr>
<td>Provides primary care</td>
<td>83</td>
<td>(78-88)</td>
</tr>
</tbody>
</table>

* As defined by the HIV Medicine Association and the American Academy of HIV Medicine
## Percentages of Providers by Facility Characteristics

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Weighted %</th>
<th>(95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWHAP-funded facility</td>
<td>48</td>
<td>(35-60)</td>
</tr>
<tr>
<td>Private facility</td>
<td>42</td>
<td>(33-51)</td>
</tr>
<tr>
<td>Facility size (estimated number patients)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small: &lt;50 patients</td>
<td>29</td>
<td>(22-37)</td>
</tr>
<tr>
<td>Medium: 50-400 patients</td>
<td>45</td>
<td>(37-53)</td>
</tr>
<tr>
<td>Large: &gt;400 patients</td>
<td>25</td>
<td>(20-31)</td>
</tr>
</tbody>
</table>
Provider-perceived Reasons Why Patients Miss Follow-up Visits

- Mental health: 41%
- Substance abuse: 36%
- Transportation: 34%
- Emotional/psychological: 30%
- Reluctance to admit following provider advice: 19%
- Homelessness: 11%

Reasons for missed visits
Retention in Care Services Provided

<table>
<thead>
<tr>
<th>Types of Retention in Care Services</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reinforcing importance of follow-up visits</td>
<td>96%</td>
</tr>
<tr>
<td>Appointment reminders</td>
<td>89%</td>
</tr>
<tr>
<td>Missed visit follow-up</td>
<td>82%</td>
</tr>
<tr>
<td>Systematic monitoring of retention</td>
<td>53%</td>
</tr>
<tr>
<td>Patient navigation</td>
<td>33%</td>
</tr>
</tbody>
</table>
Total Number of Retention Services Provided

[Bar chart showing:
- 84% for ≥3 of 5
- 55% for ≥4 of 5
- 21% for 5 of 5

Percentage

Number of Retention Services Provided Within Facility]
Provision of All Five Retention Services by Ryan White Funding (RWHAP) and Facility Type

*associations significant (p<0.0001)
Provision of All Five Retention Services by Facility Size

*association significant (p<0.01)
DISCUSSION
Discussion

- Several provider-perceived reasons for missed follow-up appointments
  - Mental health, substance abuse, and transportation problems
    - Identify onsite or external sources for support service referrals
- Only 1 in 5 providers work in facilities providing all 5 retention services
  - 1 in 2 work in facilities that conduct systematic monitoring of retention in care
  - 1 in 3 work in facilities that provide patient navigation services
- Certain facilities may need assistance implementing recommended services
  - Non-RWHAP-funded facilities
  - Private facilities
  - Facilities serving smaller numbers of patients
Limitations

- Possible social desirability and recall bias
- Provider lack of awareness of all retention-related services provided
- Survey did not include questions on every recommended retention strategy cited in recent guidelines
Future Considerations

- Promote awareness of retention in care guidelines, particularly among:
  - Facilities not receiving RWHAP funding
  - Private facilities
  - Small facilities
- Research barriers to providing retention in care services
- Study interventions to increase delivery of clinic-based retention services
- Include retention services as quality-of-care indicators