PREP KNOWLEDGE, ATTITUDES, AWARENESS, AND EXPERIENCE AMONG A NATIONAL SAMPLE OF US PRIMARY CARE AND HIV PROVIDERS

Andrew Petroll¹, Laura Bogart², Keith Horvath³, Timothy Mcauliffe¹

¹Medical College of Wisconsin, ²Harvard University, ³University of Minnesota

10th International Conference on HIV Treatment and Prevention Adherence
Miami, Florida
June 30, 2015
DISCLOSURES

• Gilead Sciences
  – Investigator Initiated Research Funding
  – Clinical Trial Support
• HIV PrEP can significantly reduce HIV acquisition among at-risk individuals
• PrEP adoption and availability depends on medical providers
• PrEP uptake remains too low to affect HIV incidence
• Krakower and Mayer identified the “Purview Paradox” as an important phenomenon affecting PrEP provision
OBJECTIVES

• Understand and compare, among Primary Care Providers and HIV Providers, PrEP
  • Awareness
  • Knowledge
  • Experience
  • Barriers to implementation
  • Capacity

• Extend prior studies by
  • Recruiting a national sample
  • Comparing PCPs and HIVPs
METHODS

• Cross-sectional, 177-item online survey
• Primary Care Providers & HIV Providers
  – Physicians, NPs, PAs eligible
• Databases from 3 national provider organizations
• Recruited from 10 US cities with highest HIV prevalence

• Descriptive statistics used to characterize participants
• Chi-square and Mann-Whitney tests used as appropriate to compare differences between HIVPs and PCPs
5124 INVITATIONS
- 1104 UNDELIVERED

4020 NET INVITATIONS

620 RESPONDERS
- 105 DQ’d

515 COMPLETED

15.4%
## DESCRIPTION OF PARTICIPANTS

<table>
<thead>
<tr>
<th></th>
<th>HIVPs</th>
<th>PCPs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female</strong></td>
<td>42%</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Mean Age</strong></td>
<td>49.5</td>
<td>50.1</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td>58%</td>
<td>49%</td>
</tr>
<tr>
<td><strong>African-American</strong></td>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Latino</strong></td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Asian/Asian-American</strong></td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Private practice</strong></td>
<td>12%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Private organization</strong></td>
<td>26%</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Public organization</strong></td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Comm Health Center</strong></td>
<td>25%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Academic/University</strong></td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td><strong>VA</strong></td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>AIDS service org</strong></td>
<td>3%</td>
<td>0%</td>
</tr>
</tbody>
</table>
SCOPE OF PRACTICE & STUDY
CLASSIFICATION

HIV care only: 240
HIV and Primary care: 275
Primary care, but refer for HIV care
Refer HIV pts out for all care
Never encountered
COMFORT WITH PREP-RELATED ACTIVITIES
Discussing sexual orientation

$p < .001$

- Completely Uncomfortable
- 2
- 3
- 4
- Completely Comfortable

HIVP:

- 87%

PCP:

- 62%
Discussing types of sexual activities

$p < .001$

![Bar chart showing percentages of completely uncomfortable and comfortable levels for PCP and HIVP activities. The chart indicates a statistically significant difference between the two groups with a p-value less than 0.001.](chart.png)
### Screening for HIV

**p = .05**

<table>
<thead>
<tr>
<th></th>
<th>Completely Uncomfortable</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Completely Comfortable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIVP</strong></td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td><strong>PCP</strong></td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

- HIVP: 95%
- PCP: 87%
Ordering correct test for acute HIV

\[ p < .001 \]

- Completely Uncomfortable
- 2
- 3
- 4
- Completely Comfortable

HIVP

- 88%

PCP

- 48%
AWARENESS AND FAMILIARITY
AWARENESS OF PREP

p < .001

% Aware of PrEP

97% HIVPs

76% PCPs
FAMILIARITY WITH PREP

$p < .001$

Very Unfamiliar  2  3  4  Very Familiar

HIVP

PCP

0%  20%  40%  60%  80%  100%
KNOWLEDGE
PREP KNOWLEDGE

• 8 items measured knowledge
  • Testing
    • HIV testing
    • Baseline testing
    • Monitoring
  • ARVs
    • Number, Name
    • Dosing frequency
    • Contraindications
    • Cost
PREP KNOWLEDGE

# ITEMS CORRECT  p < .001

Mean # correct:
HIVPs 6.6
PCPs 5.1
EXPERIENCE
PREP EXPERIENCE
“CASCADE”

HIVP

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>97%</td>
<td>73%</td>
<td>83%</td>
<td>80%</td>
<td>61%</td>
</tr>
</tbody>
</table>

PCP

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>76%</td>
<td>27%</td>
<td>32%</td>
<td>27%</td>
<td>17%</td>
</tr>
</tbody>
</table>
BARRIERS TO PRESCRIBING PREP
% SOMEWHAT OR VERY CONCERNED

- Lack of knowledge
- Prior auth
- ARV coverage
- Counseling time
- Staff capacity
- Capacity
- # follow up appts

PCPs
HIVPs
BARRIERS TO PRESCRIBING PREP

% SOMEWHAT OR VERY CONCERNED

Visit reimbursement
Unwilling to prescribe
Practice restrictions
Discomfort with sex hx
Ethical concerns

PCPs
HIVPs
LIMITATIONS

- Cross-section design
- Low representation from non-physician PCPs
- Response rate: 15.4%
IMPLICATIONS

• Provider interventions need customization
• PCP needs include knowledge of PrEP procedures; navigating logistical barriers
  • May benefit from operationalization models
  • Uncomfortable with aspects of sexual history taking
• HIV Providers
  • High levels of PrEP knowledge and experience
  • Capacity not identified as a barrier
• Next steps:
  • Study models of operationalizing PrEP in varying settings
  • Incorporate skill-building into PrEP educational materials
THANK YOU!

MCW
Jeffrey Kelly
Steven Pinkerton
Timothy McAuliffe
Leah Przedwiecki
Kevin Brown
Kathryn Flynn
Peter Havens

Case Western
Henry Ng

Harvard University
Laura Bogart
Douglas Krakower
Kenneth Mayer

UCSF
Emily Arnold
Brad Hare
Albert Liu

University of Chicago
Abbas Hyderi

University of Minnesota
Jason Baker
Keith Horvath

University of Pittsburg
Ken Ho

University of Washington
Jared Baeten

Funders
Gilead Sciences
NIMH: P30MH052776 21
HIV PATIENTS IN PCP PANELS

Percentage of Providers

Number of HIV patients in PCP panel

< 10
10 - 20
20 - 40
40 - 60
> 60

Percentage
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%