An Online Survey of HIV Testing and Pre-Exposure Prophylaxis Attitudes and Practice Habits among Physicians at an Academic Medical Center

Jason Zucker, Caroline Carnevale, Jeremy Gold, Alex Borsa, Matt Scherer, Alwyn Cohall, Peter Gordon, Magdalena Sobieszczyk, Susan Olender

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Disclosures

• None
Background

• There remain existing opportunities to reduce new HIV infections by improving primary and secondary prevention services.

• Adolescents are at high risk of HIV and STIs and engaging pediatricians in primary and secondary HIV prevention efforts is critical.
Background

- Persons aged 13–29 years represent 23% of the U.S. population, but account for 40% of diagnoses of HIV.
- HIV diagnoses by age groups (/100,000)
  - 13–15 years (0.7)
  - 16–17 years (4.5)
  - 18–19 years (16.5)
  - 20–21 years (28.6)
  - 22–23 years (34.0)
  - 24–25 years (33.8)
  - 26–27 years (31.3)
  - 28–29 years (28.7)
- “These findings underscore the importance of targeting primary prevention efforts to persons aged <18 years, specifically those aged 16–17 years, and continuing through the period of elevated risk in the mid-twenties.”

Background

U.S. Food and Drug Administration Approves Expanded Indication for Truvada® (Emtricitabine and Tenofovir Disoproxil Fumarate) for Reducing the Risk of Acquiring HIV-1 in Adolescents

May 15, 2018 10:58 AM ET

— First Agent Indicated for Uninfected Adolescents at Risk of Acquiring HIV —

FOSTER CITY, Calif.--(BUSINESS WIRE)--May 15, 2018-- Gilead Sciences, Inc. (Nasdaq:GILD) today announced that the U.S. Food and Drug Administration (FDA) has approved once-daily oral Truvada® (emtricitabine 200 mg/tenofovir disoproxil fumarate 300 mg)—in combination with safer sex practices—to reduce the risk of sexually acquired HIV-1 in at-risk adolescents. The safety and efficacy profile of Truvada for HIV prevention in uninfected adults, a strategy called pre-exposure prophylaxis (PrEP), is well established, and Truvada for PrEP was first approved for use in adults in 2012.

The addition of the adolescent indication is based on a study in HIV-negative individuals 15 to 17 years of age. In the United States, adolescents and young adults 13 to 24 years of age comprised 21 percent of all new infections in 2016, according to the U.S. Centers for Disease Control and Prevention, and 81 percent of those infections were among young men who have sex with men (YMSM).

Truvada for PrEP is now indicated in combination with safer sex practices to reduce the risk of sexually acquired HIV-1 in at-risk adults and adolescents weighing at least 35 kg. Individuals must have a negative HIV test immediately prior to initiating Truvada for PrEP. Truvada has a boxed warning in its product label regarding the risks of post treatment acute exacerbation of hepatitis B and the risk of drug resistance with the use of Truvada for PrEP in undiagnosed early HIV infection. Further important safety information, adverse drug reactions and prescribing considerations are included below.

“Study ATN113 has demonstrated that Truvada for PrEP is a well-tolerated prevention option for adolescents who are vulnerable to HIV,” said Sybil Hosek, PhD, Clinical Psychologist at the Cook County Health and Hospital System’sStruger Hospital, Chicago, and lead investigator of the study. “In addition to traditional risk-reduction strategies, healthcare providers and community advocates are now equipped with another tool to help address the incidence of HIV in younger at risk populations.”
Aims

1. Evaluate providers' attitudes and beliefs about their role in screening for sexual health services

2. Understand and compare differences in providers' attitudes and beliefs about screening in different clinical environments

3. Identify barriers to routine screening in different clinical environments
Methods

• We conducted a convenience sample of residents
  – Internal Medicine
  – Pediatrics
  – Emergency Medicine

• Conducted online via Qualtrics

• E-mails sent out by program directors and chief residents
  – E-mails sent out 4 times between August 2017 and June 2018
Methods

- Survey (Up to 52 questions)
  - Covering 5 sexual health domains
    - HIV
    - PrEP
    - PEP
    - HCV
    - STI

- Conducted in Qualtrics
- Reimbursement of $25 provided
- Average duration
  - 18.8 minutes
Methods

<table>
<thead>
<tr>
<th>Likert scale 1 - 5</th>
<th>Reported Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong Disagree -&gt; Strongly Agree</td>
<td>Percent of individuals choosing agree (4) or strongly agree (5)</td>
</tr>
<tr>
<td>Extremely knowledgeable -&gt; Not knowledgeable at all</td>
<td>Percent of individuals choosing very (4) or extremely knowledgeable (5)</td>
</tr>
<tr>
<td>Extremely comfortable -&gt; Not comfortable at all</td>
<td>Percent of individuals choosing very (4) or extremely comfortable (5)</td>
</tr>
<tr>
<td>Please rank your top 3 potential barriers to routine HIV screening</td>
<td>Percent of individuals choosing a barrier in their top 3</td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th></th>
<th>Internal Medicine</th>
<th>Pediatrics</th>
<th>Emergency Medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed Survey</td>
<td>54</td>
<td>35</td>
<td>10</td>
</tr>
<tr>
<td>Eligible for Survey</td>
<td>128</td>
<td>78</td>
<td>48</td>
</tr>
<tr>
<td>Response Rate</td>
<td>42%</td>
<td>45%</td>
<td>21%</td>
</tr>
</tbody>
</table>
On what percentage of your patients over the age of 13 do you perform an in-depth sexual history

- Pediatrics: 68%
- Internal Medicine: 32%
- Emergency Medicine: 25%
I consider HIV screening to be one of my job responsibilities: 71% for Pediatrics, 78% for Internal Medicine, 60% for Emergency Medicine.

I consider HIV screening for the majority of my eligible patients: 31% for Pediatrics, 80% for Internal Medicine, 30% for Emergency Medicine.

I successfully screen the majority of my eligible patients for HIV: 17% for Pediatrics, 59% for Internal Medicine, 20% for Emergency Medicine.
It is important to provide HIV screening in the outpatient setting.

Results:

- Pediatrics: 97% for outpatient screening
- Internal Medicine: 98% for outpatient screening
- Emergency Medicine: 90% for outpatient screening

- Pediatrics: 85% for inpatient screening
- Internal Medicine: 60% for inpatient screening
- Emergency Medicine: 83% for inpatient screening

- Pediatrics: 83% for emergency screening
- Internal Medicine: 74% for emergency screening
- Emergency Medicine: 50% for emergency screening
HIV Screening Barriers

- Outside scope of practice
- Time constraints
- Inadequate resources (nursing, beds, rooms)
- Following up lab results
- Linkage to care
- Low prevalence
- Delivering positive results
- Higher priority issues
- Issues surrounding minors

For Pediatrics, Internal Medicine, and Emergency Medicine.
How knowledgeable are you about the New York City DOH Guidelines for the use of PrEP?

- Pediatrics: 26%
- Internal Medicine: 44%
- Emergency Medicine: 50%

How comfortable are you assessing eligibility for PrEP?

- Pediatrics: 14%
- Internal Medicine: 43%
- Emergency Medicine: 40%

I would be comfortable providing PrEP services to my patients:

- Pediatrics: 11%
- Internal Medicine: 24%
- Emergency Medicine: 20%

I know where to refer patients for PrEP services at my institution:

- Pediatrics: 9%
- Internal Medicine: 31%
- Emergency Medicine: 20%
Results

PrEP Linkage Questions

- Pediatrics
- Internal Medicine
- Emergency Medicine

<table>
<thead>
<tr>
<th>Question</th>
<th>Pediatrics</th>
<th>Internal Medicine</th>
<th>Emergency Medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is important to initiate linkage to PrEP in the ED</td>
<td>80%</td>
<td>78%</td>
<td>30%</td>
</tr>
<tr>
<td>It is important to initiate linkage to PrEP in the Inpatient Setting</td>
<td>63%</td>
<td>43%</td>
<td>70%</td>
</tr>
<tr>
<td>It is important to initiate linkage to PrEP in the Primary Care Setting</td>
<td>94%</td>
<td>96%</td>
<td>90%</td>
</tr>
<tr>
<td>It is important to initiate linkage to PrEP in the Outpatient Infectious Diseases Clinics</td>
<td>94%</td>
<td>94%</td>
<td>80%</td>
</tr>
</tbody>
</table>

#ADHERENCE2018
PrEP Screening Barriers

- Outside scope of practice
- Time constraints
- Inadequate resources (nursing, beds, rooms)
- Following up lab results
- Linkage to care
- Low prevalence
- Higher priority issues
- Lack of formal training
- Issues surrounding minors

Barriers

Pediatrics | Internal Medicine | Emergency Medicine
Summary

• The majority of providers recognized the importance of HIV testing and linkage to prevention services

• Pediatric providers were more likely to take a sexual history but less likely to consider or successfully screen patients for HIV

• Overall few providers would feel comfortable providing PrEP services or know where to refer a patient for PrEP

• Lack of formal PrEP training was a top barrier to the provision of PrEP services across groups

• Other barriers to the provision of HIV prevention services varied across specialties

• These represent opportunities for targeted interventions
Thanks

Research Team:
• Caroline Carnevale
• Jeremy Gold
• Alex Borsa
• Matt Scherer
• Alwyn Cohall
• Peter Gordon
• Magdalena Sobieszczyk
• Susan Olender

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COLUMBIA UNIVERSITY IRVING MEDICAL CENTER
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Lack of formal PrEP training was a top barrier to the provision of PrEP services across groups.

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