Using Individualized Provider Feedback to Improve HIV Screening in a High Volume Emergency Department

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Disclosures

• Gilead FOCUS grant
Missed Opportunities Are Common

- Missed opportunities for HIV screening are common
- Significant opportunities exist to reduce new HIV infections by improving primary and secondary prevention services

Why Are We Missing Opportunities?

- Resident Sexual Health Screening Survey
- 52 item questionnaire on the provision of routine sexual health services
  - 7 questions specifically on HIV testing

<table>
<thead>
<tr>
<th>Primary Specialty</th>
<th>Respondents</th>
<th>Total Residents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Medicine</td>
<td>66</td>
<td>128</td>
<td>52%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>38</td>
<td>80</td>
<td>48%</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>24</td>
<td>60</td>
<td>40%</td>
</tr>
<tr>
<td>Ob/Gyn</td>
<td>14</td>
<td>30</td>
<td>47%</td>
</tr>
<tr>
<td>Total</td>
<td>142</td>
<td>298</td>
<td>48%</td>
</tr>
</tbody>
</table>

Why Are We Missing Opportunities?

How Strongly Do You Agree with the Following Regarding Routine HIV Screening

- I consider HIV screening for the majority of my patients
- I successfully screen the majority of my patients for HIV
- I consider HIV screening to be one of my job responsibilities

[Bar chart showing agreement levels by profession]
Why Are We Missing Opportunities?

Top 3 Barriers to HIV Screening

- Outside scope of practice
- Time constraints
- Inadequate resources (nursing, beds, rooms)
- Following up lab results
- Obtaining follow-up for positives
- Reimbursement
- Low prevalence
- Delivering positive results
- Higher priority issues
- Issues surrounding minors

#ADHERENCE2019
How Can We Change this Complex Environment
Consideration #1

• Intervention to improve HIV testing across multiple institutions
Consideration #2

• Intervention to improve HIV testing across multiple EMRs
Consideration #3 - Feedback Intervention Theory

Actionable Feedback Theory

Provider Feedback

Testing Performance Overview Beta

NOTE: Clear codes before searching for single providers or sites; you will include other provider's cohorts.

Enter Your Provider ID Here: 31393A
Choose STI Here: HIV

6/2018 to 11/2018
- Tested: 823
- Never Tested: 533
- 35.2%

12/1/2018 to 12/18/2018
- Tested: 91
- Never Tested: 45
- 50.5%

Total Patients
Tested: 823
Never Tested: 533

Aggregate Performance by Age Group

Grand Total
- 36.8%
- 100.0%

13 to 29
- 45.3%
- 21.0%

30 to 49
- 42.7%
- 30.5%

≥50
- 29.3%
- 48.5%

Total Patients
Tested: 914
Never Tested: 578

Patients
0 100 200 300 400 500 600 700 800 900 1000
Building Support

1. Physician Champion
2. Ability to follow-up positive results
3. Allow providers to quality control their own performance
Monthly Feedback Via Text & Email Notifications

Greetings!

We have attached your individual HIV and HCV screening rates over the month of December and the prior 6 months. For comparison, the averages for all attendings in our department for the month of December was:
- HIV screening rate: 45%
- HCV screening rate: 44%

Our goal is to increase the overall ED screening rate to 70%.

Explanation for screening rates:
The Denominator:
* Every patient you saw at Millstein Hospital, Allen Hospital
* Over the age of 18
* For which you were the primary author for a note
The Numerator
* Number of those patients who had a lifetime HIV (or HCV) screening

If you ever have a patient you need to refer for HIV, HCV, and PEP/PrEP services you can call 917-580-1682 from 9a-5p Monday – Friday. If you ever see someone that is HCV positive; please call this number for a patient navigator to come down and link them to care.

Please feel free to reach out to me with any questions, comments or concerns. We would love your feedback on what you think about the project, suggestions for improvement or anything else!

Sincerely,
Fereshteh & the NYP Sexual Health Service team
ED HIV Testing 2014 - 2019
ED HIV Testing – Pre/Post
HIV Testing By Age

Testing breakdown by Age group Pre Provider Feedback Reports (N=2,771)

- <17: 3% (93)
- 18-29: 45% (1,248)
- 30-39: 23% (636)
- 40-49: 13% (345)
- 50+: 16% (449)

Testing breakdown by Age group During Provider Feedback Reports (N=4,997)

- <17: 3% (154)
- 18-29: 40% (2,008)
- 50+: 20% (1,012)
- 30-39: 22% (1,098)
- 40-49: 15% (725)
HIV Testing By Gender

Testing breakdown by Gender Pre Provider Feedback Reports (N=2,771)

- Male: 44% (1,216)
- Female: 56% (1,555)

Testing breakdown by Age group During Provider Feedback Reports (N=4,997)

- Male: 41% (2,059)
- Female: 59% (2,938)
HIV Testing By Previous Testing Status

Testing breakdown by Age group Pre Provider Feedback Reports (N=2,771)

- Previously Tested: 47% (1,306)
- Newly Tested: 53% (1,465)

Testing breakdown by Age group During Provider Feedback Reports (N=4,997)

- Previously Tested: 41% (2,025)
- Newly Tested: 59% (2,972)
Next Steps in the ED - Sustainability

![Graph showing sustainability data]

Data Source: QlikView Database via Tableau
Data Range: 04/01/18 - 06/30/19
Data Extracted: 06/30/19
Next Steps – Outpatient

Table 2. Proposed randomization/implementation

<table>
<thead>
<tr>
<th>Clinic</th>
<th>*Month 0</th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3</th>
<th>Month 4</th>
<th>Month 5</th>
<th>Month 6</th>
<th>Month 7</th>
<th>Month 8</th>
</tr>
</thead>
<tbody>
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<td>1 and 2</td>
<td>C</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
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<tr>
<td>3 and 4</td>
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<tr>
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<td>7 and 8</td>
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<td>C</td>
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<td>I</td>
<td>I</td>
<td>I</td>
</tr>
</tbody>
</table>

C=control, I=intervention

*In-person training at each clinic site and email sent to provider summarizing NYP policy regarding HIV, HCV, and STI screening
Summary

- Missed opportunities for appropriate HIV testing remains a major barrier to key ETE strategies (TasP, PrEP)
  - Time constraints and higher priority issues are major barriers to HIV testing
- **Provider feedback can result in a significant increase in HIV testing in the Emergency Department**
  - Including significant gains in individuals tested for the first time
- Lessons learned
  - A local physician champion can successfully drive dissemination and adoption
  - Additional IT tools and workflows can greatly facilitate complex follow-up processes
  - Promote buy-in by allowing individuals to QC their testing rates
- Further follow-up is needed to determine
  - If HIV testing gains are sustainable
  - If feedback results in increases in HIV testing in other settings
  - How can we further drive HIV testing
Thanks

Research Team:
• Fereshteh Sani
• Kenneth Ruperto
• Jacek Slowkowski
• Lawrence Purpura
• Aaron Schluger
• Susan Olender
• Matthew Scherer
• Peter Gordon

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Questions?