HIV testing in a London Emergency Department - the first 31 weeks

Hannah Alexander – Locum Consultant Newham University Hospital
Background

• NICE recommends HIV testing in Emergency Departments in areas of high and extremely high prevalence

King’s College Hospital

Source: Public Health England, November 2013
Background

• Opt out HIV testing was introduced on the 8th August 2016

• All patients 18 and over having bloods taken

Why am I having an HIV test today?

What is HIV?
HIV stands for the Human Immunodeficiency Virus. It is a virus which weakens the body’s immune system - the body’s defence against diseases. If left untreated people with HIV are at greater risk of certain infections and cancers and can have a reduced life expectancy.

Can HIV be treated?
There is no cure for HIV but it can be treated, sometimes with just one pill a day. People with HIV can have a normal life expectancy if...
Methods

• A list of all HIV tests done each week is generated by virology
• The number of full blood counts taken over the same week is used as a surrogate for the number of patients having a blood test
• Testing rates calculated each week
• Demographics of the patients diagnosed in ED compared to those tested over the same period in GU
• Electronic notes checked to determine if HIV had been considered when patient newly diagnosed
Results
25,639 adults have had a blood test in ED

12,604 have had an HIV test (49%)

102 patients have tested positive

- 19 newly diagnosed
  - 18 in care
- 77 known positive
  - 72 in care
- 6 are untraceable
  - 5 had disengaged
Testing rates

% Testing

Daily attendance of ED handovers

Regular feedback sent to ED staff

F2 changeover

Feedback survey sent to ED staff

Month 1 Month 2 Month 3 Month 4 Month 5 Month 6 Month 7 Month 8

19 % tested in 1st week – 62% tested in 31st week
## Demographics

<table>
<thead>
<tr>
<th></th>
<th>Emergency Department</th>
<th>GUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number newly diagnosed</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Number tested</td>
<td>12,604</td>
<td>5918</td>
</tr>
<tr>
<td>Point prevalence undiagnosed HIV</td>
<td>1.5/1000</td>
<td>2.5/1000</td>
</tr>
<tr>
<td>Age – mean (range)</td>
<td>42 (21-61)</td>
<td>38 (24-56)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>10 Black African/Caribbean</td>
<td>10 Black African/Caribbean</td>
</tr>
<tr>
<td>Risk - MSM</td>
<td>4/19</td>
<td>9/15</td>
</tr>
<tr>
<td>CD4 at diagnosis – mean (range)</td>
<td>233 (13-738)</td>
<td>522 (24-884)</td>
</tr>
<tr>
<td>Retained in care</td>
<td>1 has not engaged</td>
<td>4 have not engaged</td>
</tr>
<tr>
<td></td>
<td>1 has transferred care</td>
<td>1 has moved away</td>
</tr>
</tbody>
</table>
### 19 new diagnoses

<table>
<thead>
<tr>
<th>Case</th>
<th>Age</th>
<th>Gender</th>
<th>CD4</th>
<th>Diagnosis</th>
<th>Admitted</th>
<th>HIV considered?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50</td>
<td>M</td>
<td>65</td>
<td>Toxoplasmosis</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>2</td>
<td>43</td>
<td>M</td>
<td>17</td>
<td>Toxoplasmosis</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>3</td>
<td>42</td>
<td>M</td>
<td>44</td>
<td>Cryptococcal meningitis</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>4</td>
<td>28</td>
<td>M</td>
<td>423</td>
<td>Seroconversion</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>5</td>
<td>47</td>
<td>F</td>
<td>179</td>
<td>Seroconversion</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>6</td>
<td>49</td>
<td>M</td>
<td>13</td>
<td>PCP</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>7</td>
<td>35</td>
<td>M</td>
<td>19</td>
<td>PCP</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>8</td>
<td>26</td>
<td>F</td>
<td>148</td>
<td>Toxoplasmosis</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

6 had AIDS defining conditions, 2 were seroconverting.
Discussion

• Testing patients who are presenting to ED and having bloods skews towards more advanced presentations
• 10/19 were diagnosed very late
• Issues with patients being untraceable
• Point prevalence of undiagnosed HIV is less than we anticipated
Discussion

• ED testing provides an excellent opportunity to diagnose HIV
• Linkage into care greater than in sexual health services
• Patients diagnosed are primarily Black African/Caribbean heterosexual
• Prompt appropriate management where AIDS defining condition
The next steps

- Local commissioning secured
- Consider expansion to patients not having bloods taken
- Ongoing monitoring to determine if mean CD4 count rises
Acknowledgements

• The Elton John AIDS Foundation
• Michael Brady
• Mary Poulton
• Emily Mabonga
• Killian Quinn
• Cyril Noel and the staff of KCH Emergency Department