HIV testing in England and the NICE Quality Standards

Dr Nicky Connor
HIV & STI Department
National Infection Service
Public Health England

December 2017

Towards elimination of HIV transmission, AIDS and HIV-related deaths in the UK

- **All**
- **Gay and bisexual men**
- **Heterosexual men and women**

a) Clinic strata, England
- London - large fall clinic
- Other London clinics
- Outside London

b) Age group, London
- 15-24
- 25-34
- 35-49
- 50-64
- 65+

c) Ethnicity, London
- White
- Asian
- Other/Mixed
- Black

d) Country of birth, London
- UK
- Elsewhere in Europe
- Asia
- Latin America and the Caribbean
- Africa
New HIV diagnoses among heterosexuals by ethnicity:
United Kingdom, 2007-2016

Values are adjusted for missing ethnicity
Time to treatment among patients newly diagnosed with HIV: UK, 2011-2016

- Not on Treatment
- > 365 days
- Within 365 days
- Within 180 days
- Within 90 days
- Within 30 days

<table>
<thead>
<tr>
<th>Year</th>
<th>Within 30 days</th>
<th>Within 90 days</th>
<th>Within 180 days</th>
<th>Within 365 days</th>
<th>&gt; 365 days</th>
<th>Not on Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>25%</td>
<td>35%</td>
<td>10%</td>
<td>20%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>2013</td>
<td>26%</td>
<td>34%</td>
<td>10%</td>
<td>18%</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>2014</td>
<td>28%</td>
<td>33%</td>
<td>10%</td>
<td>18%</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>2015</td>
<td>29%</td>
<td>32%</td>
<td>11%</td>
<td>17%</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>2016</td>
<td>30%</td>
<td>31%</td>
<td>11%</td>
<td>16%</td>
<td>10%</td>
<td>7%</td>
</tr>
</tbody>
</table>
Adjusted number of people diagnosed late by exposure group: UK, 2007-2016

Adjusted for missing CD4 count at diagnosis.
NICE Guideline: Increasing HIV testing

Where do people test for HIV?

- Sexual health services
- Hepatitis B
- Hepatitis C
- Lymphoma
- Tuberculosis
- Hospital - admissions and emergency
- General Practice
- Prisons
- Specialist services for people who inject drugs
- Community
- Self-sampling

National Institute for Health and Care Excellence. HIV testing: increasing uptake among people who may have undiagnosed HIV. 2016; Available from: https://www.nice.org.uk/guidance/conditions-and-diseases/infections/hiv-and-aids
NICE guideline: HIV testing in specialist sexual health services

Offer and recommend HIV tests to:

• Everyone who attends for testing or treatment
• Partners of people who test positive for HIV
• Annual or more frequent testing for people in groups with high rates of HIV
Trends in HIV testing and positivity for gay and bisexual men, 2012-2016, England Residents
Trends in the number of missed opportunities in SHS: eligible\(^1\) gay and bisexual attendees not offered an HIV test or offered but declined an HIV test, 2012-2016

\[^1\] eligible SHS attendee: any patient attending a SHS at least once during a calendar year; patients known to be HIV positive or for whom an HIV test was not appropriate, or for whom the attendance was reported as being related to SRH care only are excluded. This includes England residents only.
Trends in HIV testing and positivity for eligible black African men and women attending SHS, 2012-2016, England Residents

1 eligible SHS attendee: any patient attending a SHS at least once during a calendar year; patients known to be HIV positive or for whom an HIV test was not appropriate, or for whom the attendance was reported as being related to SRH care only are excluded. This includes England residents only.
Trends in the number of missed opportunities in SHS eligible\(^1\) black African men and women not offered and HIV test or offered but declined an HIV test, 2012-2016

\(^1\) eligible SHS attendee: any patient attending a SHS at least once during a calendar year; patients known to be HIV positive or for whom an HIV test was not appropriate, or for whom the attendance was reported as being related to SRH care only are excluded. This includes England residents only.
Trends in HIV testing and positivity for eligible\(^1\) other\(^2\) SHS attendees, 2012-2016, England Residents

\(^1\) an other attendee is an attendee who is not a gay and bisexual male, black African man or woman or born in a country with high HIV prevalence\(^3\)

\(^2\) eligible SHS attendee: any patient attending a SHS at least once during a calendar year; patients known to be HIV positive or for whom an HIV test was not appropriate, or for whom the attendance was reported as being related to SRH care only are excluded; includes England residents only.

\(^3\) countries where known HIV diagnosed prevalence is >1% in ages 15-49 [See UNAIDS Report]
Trends in the number of missed opportunities in SHS: other\(^1\) eligible attendees\(^2\) not offered and HIV test or offered but declined an HIV test, 2012-2016

\[\text{Number of opportunities} \]

\[\text{Year} \]

\[\begin{array}{c|c|c|c|c|c}
\text{Year} & 2012 & 2013 & 2014 & 2015 & 2016 \\
\hline
\text{Declined HIV testing} & 200,000 & 500,000 & 400,000 & 300,000 & 400,000 \\
\text{Not offered HIV testing} & 200,000 & 500,000 & 400,000 & 300,000 & 400,000 \\
\end{array}\]

1 an other attendee is an attendee who is not a gay and bisexual male, black African man or woman or born in a country with high HIV prevalence\(^3\)
2 eligible SHS attendee: any patient attending a SHS at least once during a calendar year; patients known to be HIV positive or for whom an HIV test was not appropriate, or for whom the attendance was reported as being related to SRH care only are excluded; includes England residents only.
3 countries where known HIV diagnosed prevalence is >1% in ages 15-49 [See UNAIDS Report]
NICE Quality Standards for HIV testing

• People in at-risk groups advised to test at least annually

• People exposed to HIV by a person newly diagnosed with HIV

• People admitted to hospital or attending an emergency department
  • All (extremely high prevalence area),
  • Those having a blood test (high prevalence area)

• People registering at a general practitioner, or having a blood test (if they have not had an HIV test in the past 12 months)
  • High and extremely high prevalence areas

• People newly diagnosed with an HIV indicator condition
Trends in HIV testing and positivity among gay and bisexual men without a prior HIV test\(^1\), with 1 prior test\(^1,2\) and with 2+ prior tests\(^1,2\), 2013-2016

\(^1\) prior HIV test is an HIV test in the 43-365 days preceding the attendee’s first HIV test in that calendar year.

\(^2\) this data represents testers who returned to test at the same SHS.
HIV testing cascade among gay and bisexual men who have a high HIV risk\(^1\) who attended specialist SHS, 2015-2016

- 25,321 high risk gay and bisexual male attendees in 2015
- 12,231 did they return to the same clinic within 90-365 days?
- 11,321 were they offered at least one HIV test when they attended the clinic?
- 10,776 how many attendees accepted at least one HIV test when they were offered?

\(^1\) Includes gay and bisexual men with an anogenital bacterial STI diagnosis in 2015.
Trends in HIV testing and positivity among black African men and women with and without a prior HIV test, 2013-2016, England Residents

1 prior HIV test is an HIV test in the 43-365 days preceding the attendee’s first HIV test in that calendar year.
NICE Quality Standards for HIV testing

- People in at-risk groups advised to test at least annually
- People exposed to HIV by a person newly diagnosed with HIV
- People admitted to hospital or attending an emergency department
  - All (extremely high prevalence area),
  - Those having a blood test (high prevalence area)
- People registering at a general practitioner, or having a blood test (if they have not had an HIV test in the past 12 months)
  - High and extremely high prevalence areas
- People newly diagnosed with an HIV indicator condition
Partner notification contacts tested for HIV and positivity in specialist SHCs, England residents 2012-2016
NICE Quality Standards for HIV testing

- People in at-risk groups advised to test at least annually
- People exposed to HIV by a person newly diagnosed with HIV
  - People admitted to hospital or attending an emergency department
    - All (extremely high prevalence area),
    - Those having a blood test (high prevalence area)
- People registering at a general practitioner, or having a blood test (if they have not had an HIV test in the past 12 months)
  - High and extremely high prevalence areas
- People newly diagnosed with an HIV indicator condition
Trends in the total number of tests and positives in accident and emergency and all other secondary care settings\(^1\) in data captured by the SSBBV\(^2\), 2016

\(^1\) comprises of HIV tests carried out in all other secondary care services other than A&E except antenatal and HIV services.

\(^2\) from services within the sentinel surveillance of blood borne virus testing who consistently reported between 2014-2016.
NICE Quality Standards for HIV testing

• People in at-risk groups advised to test at least annually
• People exposed to HIV by a person newly diagnosed with HIV
• People admitted to hospital or attending an emergency department
  • All (extremely high prevalence area),
  • Those having a blood test (high prevalence area)
• People registering at a general practitioner, or having a blood test
  • High and extremely high prevalence areas
• People newly diagnosed with an HIV indicator condition
HIV tests and positivity\(^1\) in general practice\(^2\) by diagnosed HIV prevalence band\(^3\) in data captured by SSBBV, England, 2014-2016

\[\text{Tests per 10,000 GP population covered} \times 100\%\]

\[\text{Year and Diagnosed HIV prevalence band} \times \text{Positivity (\%)}\]

\(^1\) number of positive tests/number of total tests (x100%)

\(^2\) GP practices who consistently reported to SSBBV from 2014-2016

\(^3\) based on the diagnosed HIV prevalence data in those aged 15-59 in 2016, banding by service local authority
NICE Quality Standards for HIV testing

- People in at-risk groups advised to test at least annually
- People exposed to HIV by a person newly diagnosed with HIV
- People admitted to hospital or attending an emergency department
  - All (extremely high prevalence area),
  - Those having a blood test (high prevalence area)
- People registering at a general practitioner, or having a blood test
  - High and extremely high prevalence areas
- People newly diagnosed with an HIV indicator condition
HIV testing offer and coverage\(^1\) in notified TB cases\(^2\) by year, England 2012-2016

1 coverage % is defined as % of notified TB cases tested for HIV
2 total with previously unknown HIV status where HIV testing is known and excluding those diagnosed post-mortem
HIV testing: hepatitis B & C

32,114 people test +ve for anti-HCV
45.4% tested for HIV within 6 months
1.9% HIV positive

16,086 people test +ve for HBsAg
45.5% tested for HIV within 6 months
2.4% HIV positive
Where do people test for HIV?

- Sexual health services
- Hepatitis B
- Hepatitis C
- Lymphoma
- Tuberculosis
- Hospital - admissions and emergency
- General Practice
- Prisons
- Specialist services for people who inject drugs
- Community
- Self-sampling

National Institute for Health and Care Excellence. HIV testing: increasing uptake among people who may have undiagnosed HIV. 2016; Available from: https://www.nice.org.uk/guidance/conditions-and-diseases/infections/hiv-and-aids
Proportion of PWID (%) never tested for HIV and not recently tested\(^1\) for HIV accessing health services in the previous year, England 2016

* In the preceding 12 months
** Not tested in the preceding 2 years
HIV tests carried out through self-sampling, self-testing and community testing services, PHE centre, 2016

Number of tests

- London: 20,000
- West Midlands: 4,000
- East Midlands: 2,000
- East of England: 6,000
- North East: 1,000
- Yorkshire and Humber: 8,000
- North West: 10,000
- South West: 6,000
- South East: 12,000

Self-testing tests, Community tests, Self-Sampling tests
Number of people tested in order to diagnose one positive/reactive by service type, 2016

- General practice (Extremely high prevalence areas): 228
- General practice (High prevalence areas): 217
- Community settings: 181
- Secondary care: 175
- Self-sampling: 139

Number of people tested in order to diagnose one positive/reactive by service type.
1. Strengthen combination prevention (condom use, HIV testing, prompt ART and pre-exposure prophylaxis (PrEP)) to eliminate HIV transmission, AIDS and HIV-related deaths in the UK.

2. Focussed HIV Testing in specialist sexual health services
   • Repeat testing for gay and bisexual men
   • HIV partner notification – heterosexuals and gay/bisexual men
   • Testing black African men and women

3. Expand HIV testing
   • general practice and secondary care in high and extremely high prevalence areas
   • Community testing and self-sampling for those at higher risk of HIV

4. Improve HIV testing
   • services for patients with hepatitis B and C
   • Services for people who inject drugs
   • Prisons

Context: PrEP Impact Trial, TasP, Meeting the needs of people living with HIV
Acknowledgements

HIV Testing team: Sophie Nash, Martina Furegato, Noel Gill

HARS: Alison Brown, Peter Kirwan, Cuong Chau, Jameel Khawam, Noel Gill, Valerie Delpech,

Contributors: Colin Campbell, Sara Croxford, Maciej Czachorowski, Jennifer Davidson, Rachel Glass, Luis Guerra, Gwenda Hughes, Georgina Ireland, Maeve Lalor, Louise Logan, Sema Mandal, Hamish Mohammed, Anthony Nardone, Dana Ogaz, Eamonn O’Moore, Claire Reynolds, Ruth Simmons, Bhavita Vishram