Self-testing for HIV: initial experience of the UK’s first kit

Dr Michael Brady
Medical Director, Terrence Higgins Trust
Consultant in Sexual Health & HIV, Kings College Hospital
HIV testing rates in the UK remain unacceptably low

17% of those living with HIV remain undiagnosed\(^1\)

Mathematical modelling data (MSM) show:
- Increasing testing rates would reduce HIV incidence\(^2\)
- HIV testing (with other prevention strategies) could nearly half the expected infections between now and 2020\(^3\)

There are well recognised barriers to testing and services do not have capacity to manage increased volumes of testing

HIV self testing may address these issues

---

\(^1\)HIV in the United Kingdom. 2015 report. PHE
\(^2\)Philips A \textit{et al} Potential impact on HIV incidence of higher HIV testing rates and earlier antiretroviral therapy initiation in MSM. 2015 Sep 10;29(14):1855-62
HIV self testing

- Legalised in the UK in April 2014
- Biosure HIV self-testing kit licensed in April 2015
- Finger-prick 2nd generation blood test (2.5µl)
- Result read in 15 minutes
- Post Marketing Surveillance data
- April 2015 – February 2016

Disclosure: I have no financial relationship with Biosure
HIV self-testing

- Available to buy on-line (£29.95)
- Post marketing surveillance:
  - Number and timing of orders
  - Gender of client
  - Postcode of residence
- User feedback:
  - E-mail and telephone feedback
  - User surveys
  - [http://www.peblfeedback.com/hivselftest](http://www.peblfeedback.com/hivselftest)
Results

- 27,917 units sold between April ‘15 – February ‘16
- 10.5% have ordered a test more than once
- 50.4% (1644/3259) had never tested before

<table>
<thead>
<tr>
<th>Gender</th>
<th>April 2015 – February 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>76.6%</td>
</tr>
<tr>
<td>Female</td>
<td>23.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Geographical location</th>
<th>April 2015 – February 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Non-metropolitan’</td>
<td>21,027 (75.3%)</td>
</tr>
<tr>
<td>London</td>
<td>4,841 (17.3%)</td>
</tr>
<tr>
<td>Manchester</td>
<td>879 (3.2%)</td>
</tr>
<tr>
<td>Birmingham</td>
<td>492 (1.8%)</td>
</tr>
<tr>
<td>Leeds</td>
<td>360 (1.3%)</td>
</tr>
<tr>
<td>Liverpool</td>
<td>318 (1.1%)</td>
</tr>
</tbody>
</table>
HIV self-test: order history

Similar pattern of testing behaviour seen in home sampling services

Brady et al. Home HIV sampling linked to national HIV testing campaigns: a novel approach to improve HIV diagnosis. Third joint conference of BHIVA and BASHH. April 2014 (O21)
HIV self-test: kit performance

- Issues of kit performance rely on self-reporting
- Currently no standardised way of recording and confirming access to care

- 6 reported false reactives (0.02%)
  - Expected to be in the range of 53 to 56.

- 12 reported invalid tests (0.04%)
  - Device problems, failure to generate a control line
HIV self test: user feedback

- 1334 (4.7%) provided some kind of feedback
- From a sample of 555,
  - 97.5% would use it again
  - 98.1% said the test was easy to do
  - 99.4% said it was easy to read
HIV self test: user feedback (101)

“Simple”

“Easy”

“Convenient”

“Discrete”

“Clear instructions”

“Value for money”

“Nearest clinic too far away“

“Waiting for result from clinic is stressful“

“Amazing”

“Excellent”

“Privacy”

“Horrendous”

http://www.peblfeedback.com/hivs elftest
Conclusions (1)

- HIV self testing is proving popular in a ‘private’ setting
- Lower than expected levels of kit failure or false positives
- User feedback very positive
- Ordering closely linked to social media promotion and ‘HIV’ in the news
Conclusions (2)

- Post marketing surveillance gives only a limited picture
- Ideal to integrate data collection with statutory returns
- More data are needed on:
  - How the test would perform if available for free
  - How the test will perform when targeted at those most at risk
  - The experience of receiving a reactive result
  - How to ensure and confirm access to care
  - Impact on testing rates and sexual behaviour
Acknowledgements

Biosure UK Ltd

- Gary Carpenter
- Brigette Bard

michaelbrady@nhs.net