HIV self-testing: feasibility and acceptability of a large scale national service

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A substantial increase in HIV testing is required to:

- Reduce late diagnosis of HIV
- Reduce undiagnosed HIV
- Support a combination HIV prevention approach:
  - Early treatment for those who are positive
  - Staying negative strategies for those who are not

There are well recognised barriers to HIV testing which may be addressed by HIV self testing

Self-testing remains on the margins of our approach to HIV testing
Methods (1)

- We piloted a national HIV self-testing service
- A dedicated website was created and the service was promoted through social media.
- The service was offered to men who have sex with men (MSM) and Black Africans
- Participants provided demographic information, contact details and answers to HIV risk assessment questions.
- An HIV self-testing kit was then posted to them.
HIV self testing kit

- Biosure HIV self-testing kit (licensed in April 2015)
- Finger-prick 2\textsuperscript{nd} generation blood test (2.5µl)
- Detects HIV-1 and HIV-2
- Result read in 15 minutes
- 99.7% sensitive
- 99.9% specific
- Reactive result needs confirmatory blood testing
Methods (1)

- Service users were asked to log onto a secure page on the website to inform us of their result.
- Text reminders were sent at days 7 and 10.
- Those who reported a reactive result were called for support or advice and to ensure access to care for confirmatory testing.
- An online satisfaction survey was sent to everyone who gave consent to be contacted.
Results

- The pilot ran from 24\textsuperscript{th} June - 5\textsuperscript{th} Aug 2016.

- 4,975 kits were ordered.

- 3,021 people (62\%) informed us of their result.

- 4,865 (97.8\%) orders were from men and 4,820 (99\%) identified as MSM.

- 3,780 (76\%) tests were ordered from people of white British ethnicity

- 168 (3.4\%) identified as Black African.

- 4,458 (91.4\%) of kits were ordered from urban settings.
## Test orders

<table>
<thead>
<tr>
<th>Order source</th>
<th>Orders</th>
<th>Results (%)</th>
<th>Mean age</th>
<th>Reactive results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grindr</td>
<td>1697 (34.1%)</td>
<td>1057 (62.2%)</td>
<td>32</td>
<td>12</td>
</tr>
<tr>
<td>Facebook</td>
<td>1685 (33.9%)</td>
<td>1009 (59.9%)</td>
<td>32</td>
<td>8</td>
</tr>
<tr>
<td>Organic</td>
<td>1216 (24.4%)</td>
<td>677 (55.7%)</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>THT website</td>
<td>358 (7.2%)</td>
<td>218 (60.1%)</td>
<td>31</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>19 (0.4%)</td>
<td>12 (63.2%)</td>
<td>35</td>
<td>0</td>
</tr>
</tbody>
</table>

- 85% accessed the service via their mobile
- 11% via desktop
- 4% via tablets
Results reporting

Results reported by number of days after order

Text reminders

Days after order

Results reported
Results: risk assessment

- 19% had never had an HIV test before
- 37% had last tested >1 year ago.
- 81% reported 2 or more partners in the last year.
- 68% reported condomless anal sex in the previous 3 months with 28% reporting this with 2 or more partners.
- 47% reported “sometimes” having sex under influence of drink or drugs and 14% said this occurred “most of the time” or “always”
Reported test results

<table>
<thead>
<tr>
<th>Gender / sexuality</th>
<th>Orders</th>
<th>Results reported (%)</th>
<th>Reactive results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men who have sex with men (MSM)</td>
<td>4820</td>
<td>2896 (60.1)</td>
<td>28</td>
</tr>
<tr>
<td>Heterosexual women</td>
<td>82</td>
<td>43 (52.4%)</td>
<td>0</td>
</tr>
<tr>
<td>Heterosexual men</td>
<td>45</td>
<td>19 (42.2%)</td>
<td>0</td>
</tr>
<tr>
<td>Trans women</td>
<td>12</td>
<td>6 (50%)</td>
<td>0</td>
</tr>
<tr>
<td>Trans men</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Women who have sex with women (WSW)</td>
<td>6</td>
<td>4 (66.7%)</td>
<td>0</td>
</tr>
<tr>
<td>Bisexual women</td>
<td>4</td>
<td>2 (50%)</td>
<td>0</td>
</tr>
</tbody>
</table>
Reactive results

- 28 people (0.92%) reported a reactive result.
- 3 (10.7%) people already knew they were HIV positive.
- One result was confirmed as a false positive.
- Of the remaining 24 all were MSM.
- Contact was made with 22 (92%) all of whom had accessed confirmatory testing and HIV services.
### User Satisfaction Survey

<table>
<thead>
<tr>
<th>N = 602 (12.1%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported their result</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Why did you choose an HIV self-test?</th>
<th>I wanted an immediate result</th>
<th>379 (64.0%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Clinic opening times are inconvenient</td>
<td>219 (36.9%)</td>
</tr>
<tr>
<td>I did not want an STI test in person</td>
<td>210 (35.5%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I would use the service again</th>
<th>585 (98.0%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would recommend to a friend I expected to test <strong>negative</strong></td>
<td>582 (97.3%)</td>
</tr>
<tr>
<td>I would recommend to a friend I expected to test <strong>positive</strong></td>
<td>435 (72.7%)</td>
</tr>
<tr>
<td>I would be willing to pay for the service</td>
<td>340 (56.9%)</td>
</tr>
</tbody>
</table>
Summary

- We have demonstrated both the feasibility and acceptability of HIV self-testing in a large scale pilot.
- We successfully targeted a group of high risk MSM who were not testing regularly (or at all).
- HIV self testing offers an efficient and potentially cost effective addition to existing HIV testing strategies.
- We need to better understand self-testing in non-MSM and which models of delivery are most cost-effective.
Acknowledgements

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www.hivst.org