

# Self-testing in the UK context

Dr Michael Brady

Medical Director, Terrence Higgins Trust

Consultant in HIV & Sexual Health, Kings College Hospital

# Context

- HIV testing rates in the UK remain unacceptably low
- Rates of undiagnosed HIV and late diagnoses remain high<sup>1</sup>
- Mathematical modelling data (MSM) show:
  - Increasing testing rates would reduce HIV incidence<sup>2</sup>
  - HIV testing (with other prevention strategies) could nearly half the expected infections between now and 2020<sup>3</sup>
- 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

<sup>1</sup>HIV in the United Kingdom. 2015 report. PHE

<sup>2</sup>Philips A *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

<sup>3</sup>Punyacharoensin *et al* (2016) Effect of pre-exposure prophylaxis and combination HIV prevention for men who have sex with men in the UK: a mathematical modelling study. Lancet Online January 13 2016

# Content

- First year's experience of the Biosure HIV self test kit
- Recent THT/Biosure pilot of on-line offer of HIV self testing
- Future implications

# HIV self testing

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



# 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>



# Results

- 34,529 units sold between April '15 – March '16
- 15.2% have ordered a test more than once
- 50.4% (1644/3259) had never tested before

April 2015 – March 2016		
Gender	Male	72%
	Female	28%
Geographical location	'Non-metropolitan'	24,601 (71.2%)
	London	6,751 (19.5%)
	Manchester	1,259 (3.6%)
	Birmingham	848 (2.5%)
	Leeds	628 (1.8%)
	Liverpool	442 (1.3%)

# HIV self-test: order history



Similar pattern of testing behaviour seen in home sampling services<sup>1</sup>

<sup>1</sup>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)

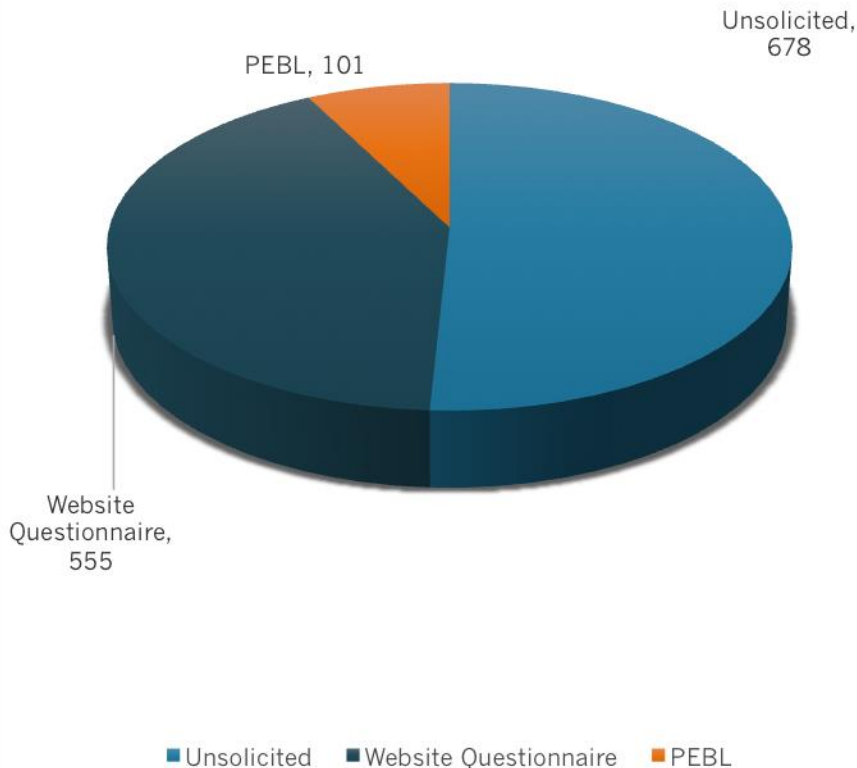
# HIV self-test: kit performance

- 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.
- 16 reported invalid tests (0.05%)
  - Device problems, failure to generate a control line



# HIV self test: user feedback

Sources of 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”

“Privacy”

“Horrendous”

“Excellent”

What do we know about  
how HIV self testing  
might perform in a non-  
private setting?

# PANTHEON

(Prevention And Testing for HIV: Economics and Outcomes of Novel Approaches\*)

The main **RESEARCH QUESTIONS** are:

- Does provision of free HIV self-testing increase rates of diagnosis in MSM?
- Which HIV prevention initiatives (alone and in combination) for reducing HIV incidence are most cost-effective?

# Programme Component Studies

## Workstream 1: Feasibility Studies

- Systematic literature review
- Focus groups with MSM

## Workstream 2: RCT

- RCT to assess impact of HIVST on early HIV diagnosis
- Qualitative interviews with men in RCT

## Workstream 3: Modelling and Economic Evaluation to Assess Cost Effectiveness of Strategies for HIV Prevention in MSM

- Web based longitudinal study of risk behaviours in MSM
- Identification of prevention strategies and costs and effects
- Model the cost-effectiveness of HIV prevention strategies

# Pantheon Workstream 1: Focus Groups

- 47 HIV –ve MSM aged over 18
- London (2), Manchester (1) and Plymouth (1)
- 1 higher risk MSM and 1 ‘never testers’
- Recruited through on-line apps
- Mean age 36 years (20 – 64)
- 20% BME
- 20% not gay identified
- 30% accessed HIV self sampling or testing
- Demonstrated both Biosure and Oraquick tests

# Pantheon Workstream 1: Focus Groups

- Context
  - Strong 'social norm' for regular HIV testing
- Access
  - Access to testing perceived to have increased dramatically
  - HIV-ST seen as a useful addition (esp rural areas)
  - Multiple models of care HIV-ST required
- Test kit features
  - Written information seen as not intuitive, complicated and confusing
  - Strong preference for more sensitive test with shorter window period
  - Both salivary and blood tests important

# Pantheon Workstream 1: Focus groups

- Utility of HIV self testing
  - Acceptability of HIVST was high
    - Confidentiality and convenience
  - Increased opportunity to test and test often
  - Unlikely to test if they thought the test would be positive
  - HIV testing in GUM services still seen as valuable
- Testing experience
  - Over testing seen as likely if HIV-ST available free
  - Instant nature of the result seen as troubling for some men
  - Concerns about capacity to perform self-test
  - Concerns that HIV-ST would lead to increase risk taking through false sense of security



# THT / Biosure self-test pilot

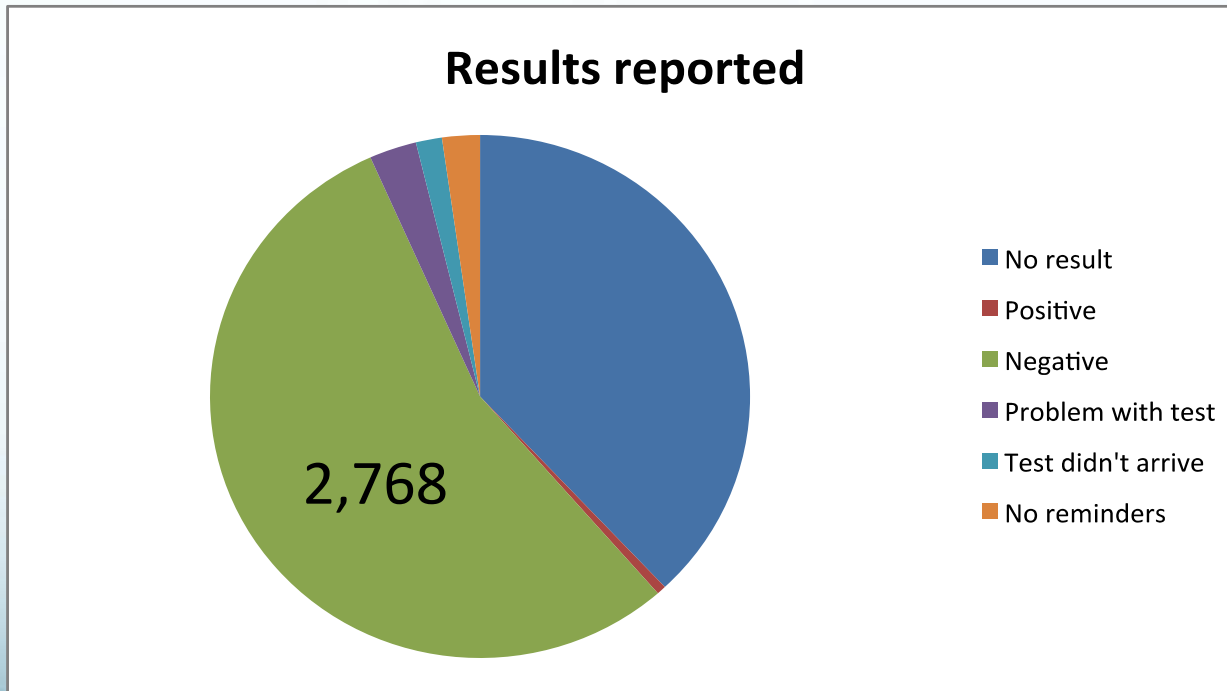
June – August 2016

# HIV self-testing pilot

- 5,000 self testing kits available to order on-line
- Available for MSM and Black Africans
- Service promoted through Facebook, Twitter, Grindr, Scruff
- People were asked to inform us of their result
- Those with reactive / positive result were called to ensure they were coping / had support and had accessed HIV services
- Service ran from 24<sup>th</sup> June – 5<sup>th</sup> August

# HIV self-testing pilot

3,201 reported a result (62%)



- 29 reported positive result
- 3 already known to be positive
- 1 confirmed false positive
- 25 new HIV diagnoses

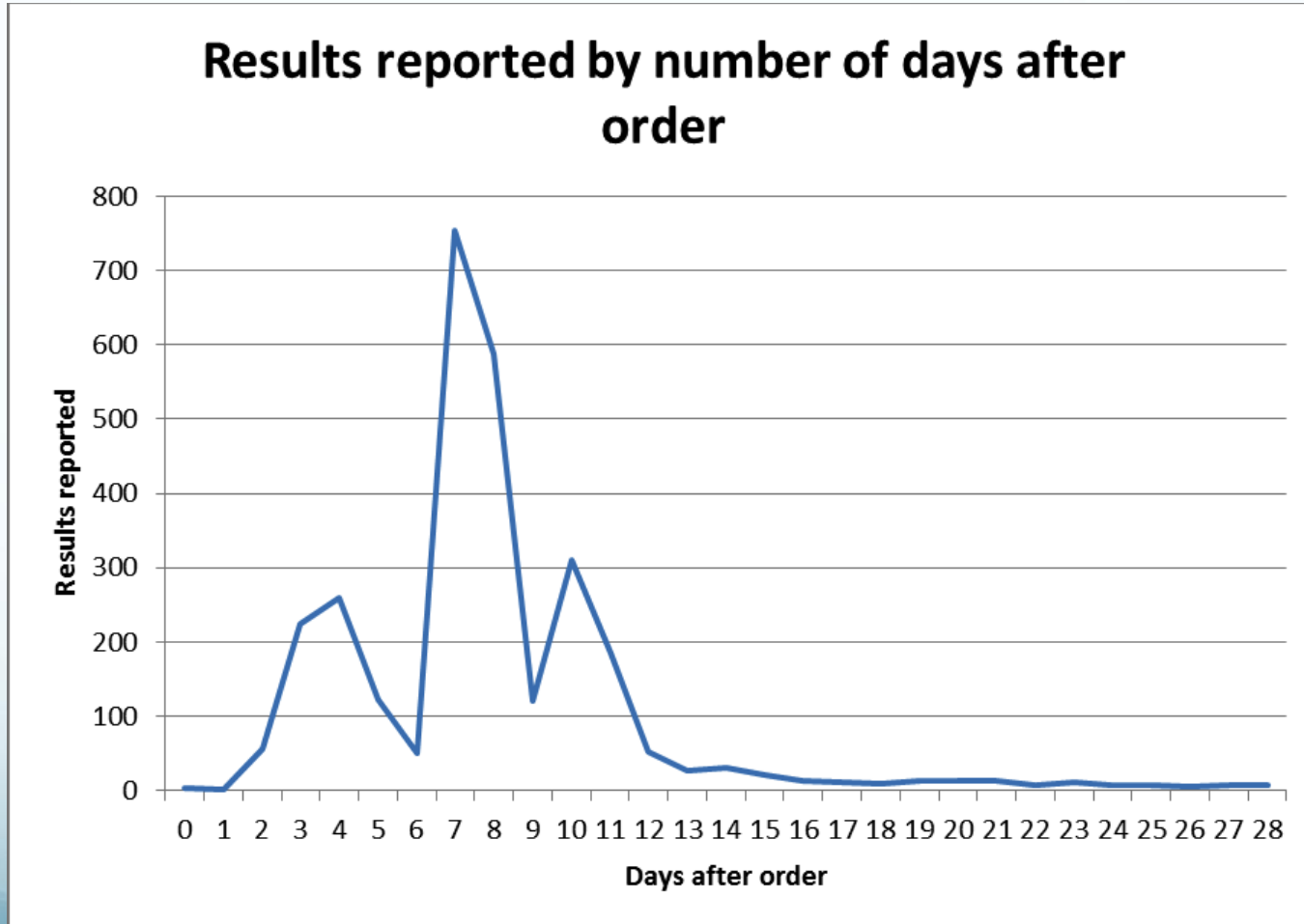
# HIV self testing pilot

- 4,865 (97.8%) orders were from men
- 4,820 (99%) identified as MSM
- 96 women ordered a test (1.8%)
- 6 trans men and 16 trans women ordered a test
- Overall the mean age was 31
- 3780 (76%) tests were ordered from people of white British ethnicity.
- 168 (3.3%) identified as Black African.

# HIV self testing pilot

- 4,458 (91.4%) of kits were ordered from urban settings.
- Most kits were ordered from:
  - Manchester and Salford
  - Glasgow
  - London (South and East)
  - Brighton
  - Leeds
  - Birmingham
  - Cardiff

# HIV self testing pilot



# Risk assessment

- 81% reported 2 or more partners in the last year
- 21% reporting between 6 and 12 partners
- 14% reporting 13 or more.
- The majority (68%) reported condomless anal sex in the previous 3 months
- 28% reporting this with 2 or more partners
- 47% reported “sometimes” having sex under the influence of drink or drugs and 14% reported this occurred “most of the time” or “always”
- Overall 19% had never had an HIV test and a further 37% had last tested over a year ago.

# User satisfaction survey

- 602 responses
- 98.8% of respondents were men
- The majority (51.2%) were aged between 25-39
- 92.9% identified as gay men
- 80.5% were white British.
- 87% of respondents said they had reported their test result



# User satisfaction survey

- Reason for using the service:
  - Wanting an immediate result (64%)
  - Having confidence in THT as an HIV test provider (45%)
  - Inconvenient clinic opening times (37%)
  - Not wanting to attend an STI testing site in person (35%).
- 15% had never tested before
- 70% had tested at an STI clinic
- 28% had previously used a home sampling kit
- 8% had previously paid for a self test.

# User satisfaction survey

- 98% would use the service again
- 99% of respondents describing the website as clear and easy to understand and the ordering process clear and easy to complete.
- 97.3% of respondents would recommend the service to a friend they expected to test negative and
- 73% would recommend it to a friend they expected to test positive.
- 57% said they would be happy to pay for this service
  - 53.8% would be prepared to pay £5;
  - 48% said they would pay £10;
  - 15% would pay £15
  - 9% said they would pay £20.

# Conclusions (1)

- HIV self testing is proving popular in a 'private' setting
- Large scale one-line HIV self testing is feasible and acceptable
- It is possible to reach those at greater risk (especially MSM)
- Ordering closely linked to social media promotion and health improvement campaigns
- Lower than expected levels of kit failure or false positives
- User feedback very positive

# Conclusions (2)

- Post marketing surveillance gives only a limited picture
- Ideal to integrate data collection with statutory returns (GUMCAD)
- Starting to get some experience but 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
  - How to best target testing to all 'at risk' groups
  - The experience of receiving a reactive result
  - How to ensure and confirm access to care
  - Impact on testing rates and sexual behaviour

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[michaelbrady@nhs.net](mailto:michaelbrady@nhs.net)