HIV prevention: developments since 2012

9 May 2016

Yusef Azad, Director of Strategy, NAT
Overview

- Developments in (our understanding of) the UK HIV epidemic
- Policy direction
- Changes in English health and social care system
- New issues, new interventions
- Some conclusions
Developments in (understanding of) the epidemic

HIV incidence – PHE/UCL analysis and modelling

Country of origin and country of acquisition – migration and the diversification of the epidemic

Continuing rise in HIV tests in sexual health clinics

Increases in STIs among MSM

‘Chemsex’
New HIV diagnoses by exposure group: United Kingdom, 2004 - 2013

- Sex between men (adjusted)
- Heterosexual contact (adjusted)
- Injecting drug use (adjusted)
- Not reported

Year of first HIV diagnosis in the UK:


Number of new HIV diagnoses:

0 1,000 2,000 3,000 4,000 5,000 6,000

New HIV diagnoses and number of persons accessing HIV care in the United Kingdom: 2014

1 Estimated through the CD4 back-calculation; numbers will vary compared to Table 1 and Appendix 1.
The HIV epidemic – MSM incidence

- Incidence remains unchanged despite 3.7-fold expansion of HIV testing and an increase in ART uptake from 69% (2001) to 80% (2010)
- ‘resurgence in unsafe sexual practices’ - see concomitant epidemic in bacterial STIs, impact of social media ‘accelerating wider partnership formation’
- Ongoing importance of ‘primary prevention and earlier, more targeted testing’ and need for treatment at diagnosis

Birrell P at al Lancet Vol 13 April 2013
The HIV epidemic – MSM incidence

- Benefits from TasP and higher testing rates have been counteracted by ‘only modest increases in condomless sex [which] are enough to overcome the beneficial effects of ART.’

- ‘Much higher rates of HIV testing combined with initiation of ART at diagnosis would be likely to lead to substantial reductions in HIV incidence. Increased condom use should be promoted to avoid the erosion of the benefits of ART and to prevent other serious STIs’. Phillips A et al  PLOS One Feb 2015
The HIV epidemic – Black African incidence

- ‘the first incidence estimates among heterosexual men and women of black African ethnicity, the ethnic group most affected by HIV in the UK’
- Black African incidence 4-5 times higher than overall heterosexual incidence
- Rose non-significantly from 0.15% (0.05%-0.26%) to 0.19% (0.05%-0.33%)
- Only approx. one eighth of MSM incidence
The HIV epidemic – incidence summary

- About two thirds of annual HIV transmissions are amongst MSM and almost all of the remaining third amongst heterosexuals, of whom about a half are from black African communities.

- Over the last decade we have been containing the HIV epidemic, but have not seen any significant decline in transmission rates (and there are recent worrying signs of increases in MSM).

- A combination approach is essential to reducing HIV incidence, with significantly higher and earlier diagnosis rates, treatment initiated at diagnosis and prioritising of condom promotion.
New HIV diagnoses\(^1\) among MSM by probable country of infection: UK, 2004-2013

\(^1\) Numbers have been adjusted for missing exposure category and region of birth.
Number of new HIV diagnoses by region of birth, MSM, UK: 1999-2013
New HIV diagnoses among heterosexuals born in Africa, by country of birth (n>50 per year): UK, 2004-2013

- Ghana
- Malawi
- South Africa
- Nigeria
- Zimbabwe

Public Health
England
New HIV diagnoses among heterosexuals born outside of the UK and Africa (n>50), by region of birth: UK, 2004-2013

- Asia
- Europe
- Latin America and the Caribbean

Countries:
- Portugal
- India and Thailand
- Jamaica
Continuum of HIV care: UK, 2014

- HIV infected (n=103,700): 100%
- HIV diagnosed† (n=85,600): 83%
- On treatment (n=76,900): 75%
- Undetectable VL* (n=72,800): 70%

* Viral load (VL) < 200 copies/ml
† Number diagnosed estimated from MPES
Numbers of new HIV diagnoses and HIV tests (England only), MSM: 1999-2013
HIV test coverage\(^1,2\) in STI in England, by PHE Centre: MSM attendees, UK, 2014

\(^1\) HIV test coverage measures the percentage of eligible new STI clinic attendees who had an HIV test. Patients known to be HIV positive, or for whom an HIV test was not appropriate (for instance, those with a very recent HIV test) were excluded.

\(^2\) “Below BASHH guidelines” indicate a coverage less than 80% which is in line with the 78% national guidelines. "Exceeds" indicates a coverage between 80 - 89% and "Optimal" indicates 90% or above.

\(^3\) Numbers of clinics in each PHE Centre Area add up to 100%.
HIV test coverage\(^1,2\) in STI in England, by PHE Centre: heterosexual attendees, UK, 2014

<table>
<thead>
<tr>
<th>PHE Centre Area (Number (^3) of clinics)</th>
<th>Exceeds</th>
<th>Below BASHH Guidelines</th>
<th>Optimal</th>
</tr>
</thead>
<tbody>
<tr>
<td>London (33)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Midlands (21)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Midlands (13)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East of England (25)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yorkshire and Humber (21)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North East (13)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North West (38)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South East (35)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South West (24)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 HIV test coverage measures the percentage of eligible new STI clinic attendees who had an HIV test. Patients known to be HIV positive, or for whom an HIV test was not appropriate (for instance, those with a very recent HIV test) were excluded.

2 “Below BASHH guidelines” indicate a coverage less than 80% which is in line with the 78% national guidelines. “Exceeds” indicates a coverage between 80 - 89% and “Optimal” indicates 90% or above.

3 Numbers of clinics in each PHE Centre Area add up to 100%.
Percentage of all STI diagnoses in men which were among MSM: England, 2010-2014

- Data from routine GUM service returns
- * First episode; **Includes diagnoses of primary, secondary & early latent syphilis
- Chlamydia data from 2012 onwards are not comparable to data from previous years (please see ‘Notes’ slide for more details)
- Data type: service data
Number of STI diagnoses among MSM: England, 2005-2014

- Data from routine GUM service returns; New HIV diagnoses sourced from HIV & AIDS New Diagnoses & Deaths Database
- * First episode; ** Includes diagnoses of primary, secondary & early latent syphilis
- Chlamydia data from 2012 onwards are not comparable to data from previous years (please see ‘Notes’ slide for more details)
- Data type: service data
Number of STI diagnoses among MSM by HIV status: England, 2014

- Data from routine GUM service returns
- * First episode; ** Includes diagnoses of primary, secondary & early latent syphilis
- HIV diagnosed includes those who were diagnosed with HIV more than 6 weeks prior to their STI infection
- Data type: service data
Number of gonorrhoea diagnoses among MSM by LA of residence: England, 2014

- Data from routine GUM service returns
- Data type: residence data
The HIV epidemic - Chemsex

- Antidote – 3% of presentations involved use of 3 chemsex drugs 2005; 85% 2012 – not so clear that this rate of increase has continued post-2012
- ‘Overall, 6.6% (n=979) had used any of the three chemsex drugs (crystal, meph and G) in the last 4 weeks in England. The figure was 14.3% for all men living in London, 21.9% for all men living with diagnosed HIV in England, and 32.7% for men living with diagnosed HIV in London.’ – Ford Hickson Sigma Research, LSHTM, Personal Communication re GMSS 2014, 5 May 2016
- Higher prevalence of chemsex amongst men living with HIV – see ‘Positive Voices’ PHE Prufall et al CROI 2016 – 29% in last 12 m, with 10% injecting
The HIV epidemic - Chemsex

Association with HIV/STI sexual risk behaviour – what is impact on incidence?

Wider harms of deaths, overdoses, other physiological impacts, mental health problems

Challenge to health promotion and to service design – new interventions and pathways needed

Relates to wider and profound changes – increased use of apps, ‘privatisation’ of gay scene – house parties etc
- **Policy direction – key documents**
  - Public Health Outcomes Framework Aug 2013
  - ‘Framework for Sexual Health Improvement in England’ DH March 2013
  - ‘Health promotion for sexual and reproductive health and HIV: Strategic action plan 2016 to 2019’ PHE Dec 2015
  - ‘Promoting the health and wellbeing of gay, bisexual and other MSM’ PHE 2014/15
  - HIV Prevention England tender documents
- **Policy direction – some key messages**
  - Wider health issues and determinants of poor sexual health
  - e.g. alcohol, smoking and drug use, and mental health
  - Ongoing emphasis on condom promotion and HIV testing – and also other/biomedical options
  - Focus on STIs and link to HIV epidemic
  - Social marketing, behaviour change, digital/social media, improved learning/evaluation
Policy direction

- No national strategy for sexual health and HIV
- No ‘Making It Count’
- No ‘The knowledge, the will and the power’

Are we using the policy framework and documents we do have as well and as imaginatively as we can?
Changes in the health and social care system

Health and Social Care Act 2012 – new system in place from 1 April 2013

Local authorities with responsibility for public health, including HIV prevention and sexual health clinic services, as well as some HIV testing outside sexual health clinics

Only open access sexual health clinic is ‘mandated’

NHS England continues to commission some prevention interventions e.g. ante-natal HIV screening and PEP
Changes in the health and social care system

Ring-fenced public health budget – but first frozen for 15/16, then stolen (£200m in 15/16), and now falling – annual 3.9% ‘savings’ over next 5 years

Change of local culture around HIV prevention with introduction of politics

Immense pressure on LA budgets – ambition to reduce costs of sexual health clinics?

Threats to open access? More use of postal test kits? Requirement for online triage?
- Changes in the health and social care system
  - Currently surveying all England LAs for 2015/16 and expectations for 2016/17
  - Request data on all interventions where reduction in HIV incidence is one of primary objectives and those targeted are considered to be at elevated risk of HIV
  - Also request data on HIV testing commissioned outside the sexual health clinic
Local authorities in London: 2014/15

- 5 local authorities reported spending nothing
- 12 reported spending < £50K
Local authorities outside London: 2014/15

- 3 local authorities reported spending nothing
- 12 reported spending <£50K
HIV prevention spending in 2014/15

In 2014/15 we estimate that about **£10 million** was spent on HIV prevention and testing in local authorities with a high prevalence of HIV (extrapolated to **£15 million** across England).

**£55 million** the ring-fenced budget for HIV prevention in 2001/02

**£38 million** HIV prevention spend in 2005/06 extrapolated from a survey of local authorities
- Changes in the health and social care system
- There has been a long-standing decline in local HIV prevention investment, inherited by LAs
- Too early to determine whether move to LAs will affect levels of investment – but some councils not doing enough!
- No strong overall relationship between prevalence and expenditure
- Outreach work still main intervention commissioned by value (e.g condom distribution, small media distribution, work in bars/social events etc)
Changes in the health and social care system

35 of 58 LAs not commissioning any additional HIV testing in 2014/15 – increased since then?

Most testing commissioned in community, with African communities mainly targeted in London, and MSM outside of London

Little testing commissioned in other healthcare settings

How can LAs best use their limited funds to prevent local HIV transmissions?
- New technologies/New issues
- TasP (Treatment as Prevention) – NHS England now commissions early treatment for preventive purposes – but was happening on the ground anyway
- Waiting for NHS England to agree a policy to commission treatment for all from diagnosis
- Prevention strategies need to include retention in care, support in adherence and information on TasP for people with HIV
- And of course increasing rates of diagnosis ...
Number\(^1\) of patients starting ART by CD4 count at initiation\(^2\): UK, 2005-2014

<table>
<thead>
<tr>
<th>Year</th>
<th>&lt;200</th>
<th>200-349</th>
<th>350-499</th>
<th>&gt;500</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>5,500</td>
<td>5,500</td>
<td>2,000</td>
<td>1,000</td>
</tr>
<tr>
<td>2011</td>
<td>5,000</td>
<td>5,000</td>
<td>2,000</td>
<td>1,000</td>
</tr>
<tr>
<td>2012</td>
<td>4,500</td>
<td>4,500</td>
<td>2,000</td>
<td>1,000</td>
</tr>
<tr>
<td>2013</td>
<td>4,000</td>
<td>4,000</td>
<td>2,000</td>
<td>1,000</td>
</tr>
<tr>
<td>2014</td>
<td>3,500</td>
<td>3,500</td>
<td>2,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>
New technologies/New issues

Home sampling – Dean Street, GMFA, THT, Test.HIV

See *Dr Mike Brady oral abstract BHIVA 2014* – on THT home sampling service Jan – Sept 2013 and Nov 2013-March 2014

Online questionnaires – 32% never tested before

Overall positivity of 1.7% in Phase 1 and 1.0% in Phase 2 – good linkage into care

Much more challenging to promote to African communities though higher positivity rates
New technologies/New issues

Home testing – kits made lawful from 2014 and Biosure kit now on market since Apr 2015
27,917 units sold from then to Feb 2016
50.4% had never tested before
75.3% ‘non-metropolitan’
Ordering linked to social media promotion and HIV in the news

See Dr Mike Brady oral abstract BHIVA 2016
- New technologies/New issues
- PANTHEON study of MSM and cost-effectiveness of testing strategies – Sigma/UCL/Royal Free
- Home testing/sampling – African Health and Sex Survey 2013/14 Sigma Research
- Asked about preferred setting for HIV test
  - 30.2% GP
  - 29.0% Sexual health clinic
  - 18.0% Home testing
  - 6.6% HIV/African organisation
  - 5.8% Home sampling
New technologies/New issues

- PrEP—Increasing evidence of efficacy of PrEP (e.g. IPreX, Partners PrEP, Ipergay) and of effectiveness (PROUD)
- Working for PrEP on NHS to those at high risk asap
- What will be impacts in the meantime of accessing of generic PrEP online from overseas? And should we promote generic PrEP access?
- Are we ready to promote PrEP alongside condom use? Support both MSM and BME heterosexuals in identifying value?
New technologies/New issues

“PrEP could prevent a large number of new HIV infections if other key strategies including HIV testing and treatment are simultaneously expanded and improved. Without PrEP, HIV incidence in MSM in the UK is unlikely to decrease substantially by the end of this decade.”


Some conclusions – since 2012 ...

- HIV incidence remains more or less unchanged, possibly increasing slightly amongst MSM
- Analysis and modelling suggest importance of *all* prevention interventions being in place for incidence to reduce
- The epidemic continues to become more diverse, with migrants’ needs being a key issue
- STI increases especially amongst MSM need to be addressed
Some conclusions – since 2012 ...

- Chemsex continues to attract attention – part of a wider phenomenon of a ‘privatisation’ of gay sexual life – use of apps, house parties etc

- There is far less money in the system to respond to need ... and far more politics

- New tools are ‘coming on line’ – TasP, PrEP, home testing – how can they be optimally used to support prevention efforts?
Thank you and discussion

Please email further questions or comments to yusef.azad@nat.org.uk or 020 7814 6767
NAT (National AIDS Trust)

SHAPING ATTITUDES

CHALLENGING INJUSTICE

CHANGING LIVES