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Elimination of HIV in the United Kingdom it is happening!

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United Kingdom

- A (mostly) tolerant society with antidiscrimination laws
- Free and accessible health care through the National Health Service (NHS)
- open access STI clinics (240) & HIV clinics (200)
- Effective HIV treatment since the mid 1990s
- National Institute of Clinical Excellence (NICE) and British HIV Association (BHIVA) | HIV testing guidelines

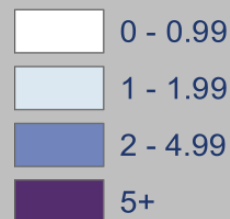




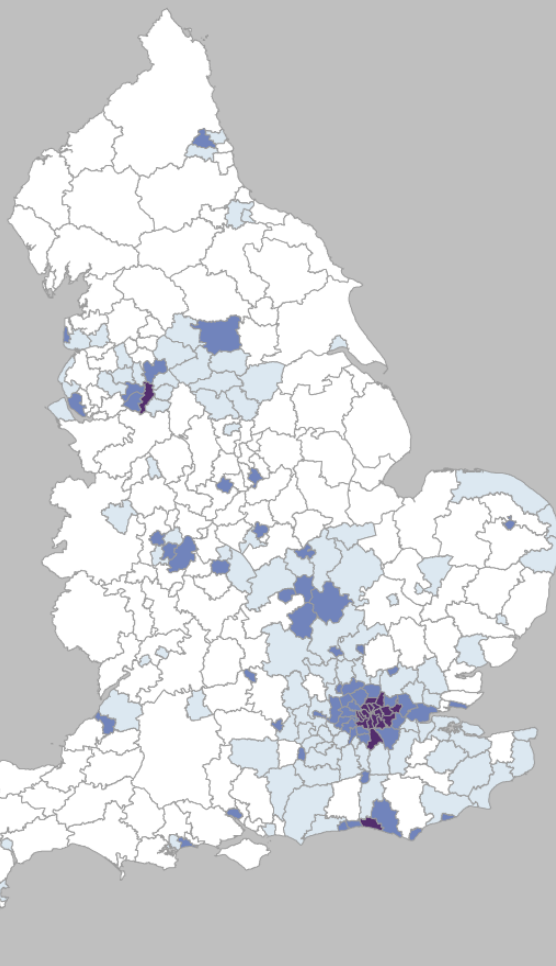
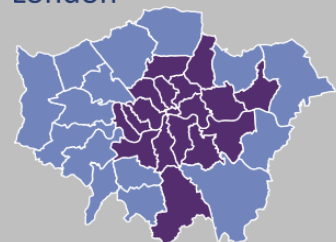
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HIV in the UK: Facts

Legend



London

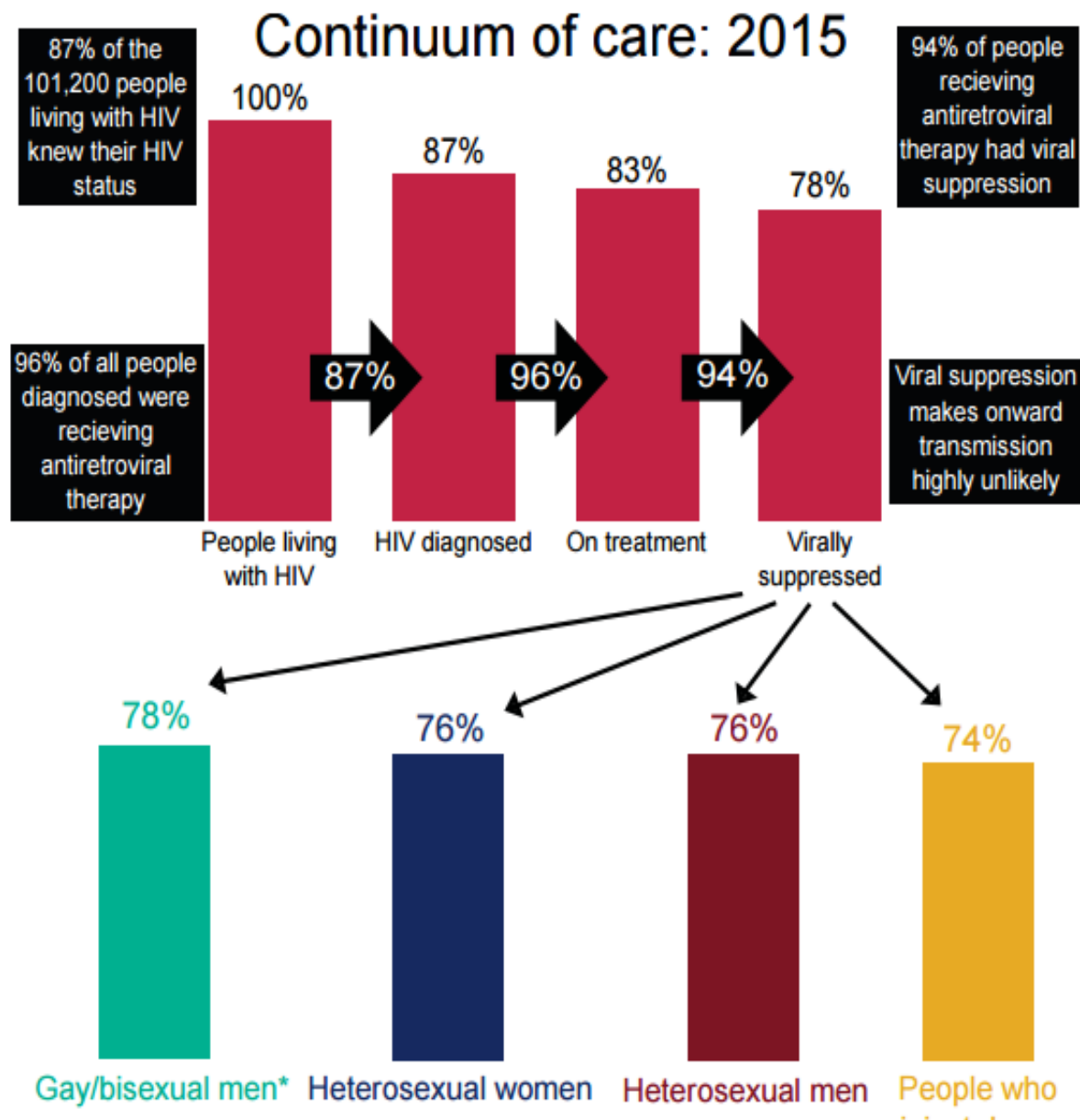


>100,000 people living with HIV
87, 000 diagnosed and in care

6000 people diagnosed (1/10,000)
42% diagnosed late, 300 AIDS reports,

500 deaths among people with HIV
75% in first year of diagnosis, majority are late diagnosed

Diagnosed HIV prevalence :
2.26 (2.24-2.27) per 1,000



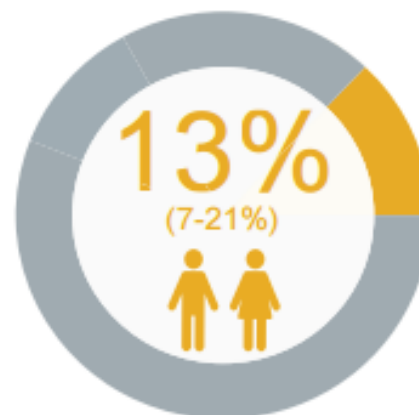


Percentage of people living with undiagnosed HIV:

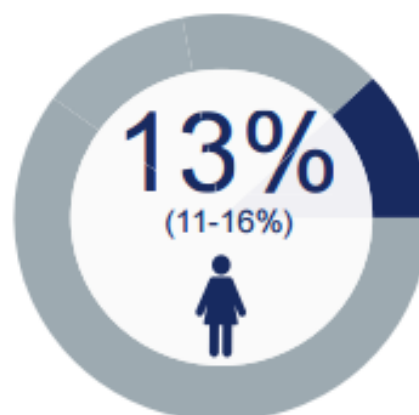
Gay/bisexual men*
Total living with HIV = 47,000



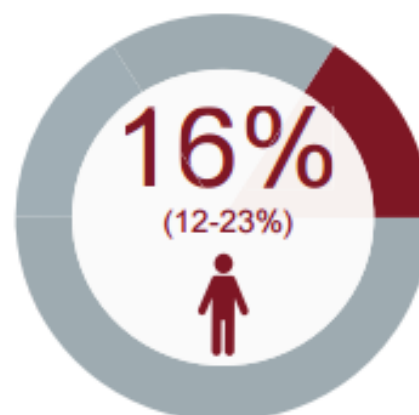
People who inject drugs
Total living with HIV = 2,500



Heterosexual women
Total living with HIV = 29,900



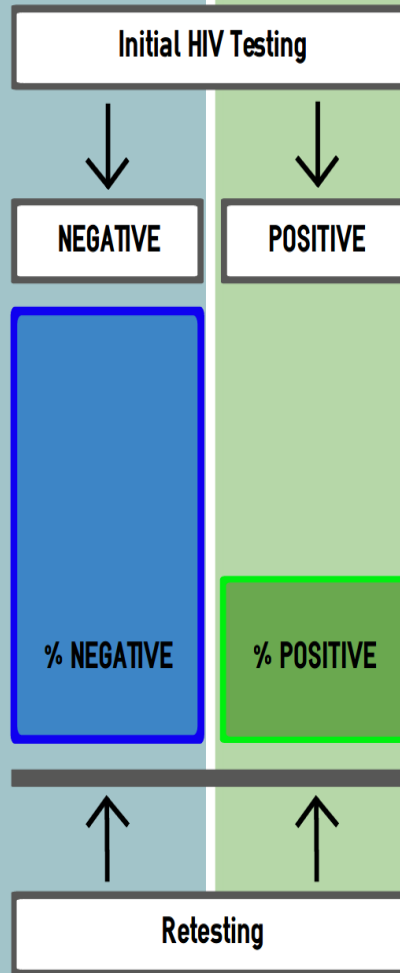
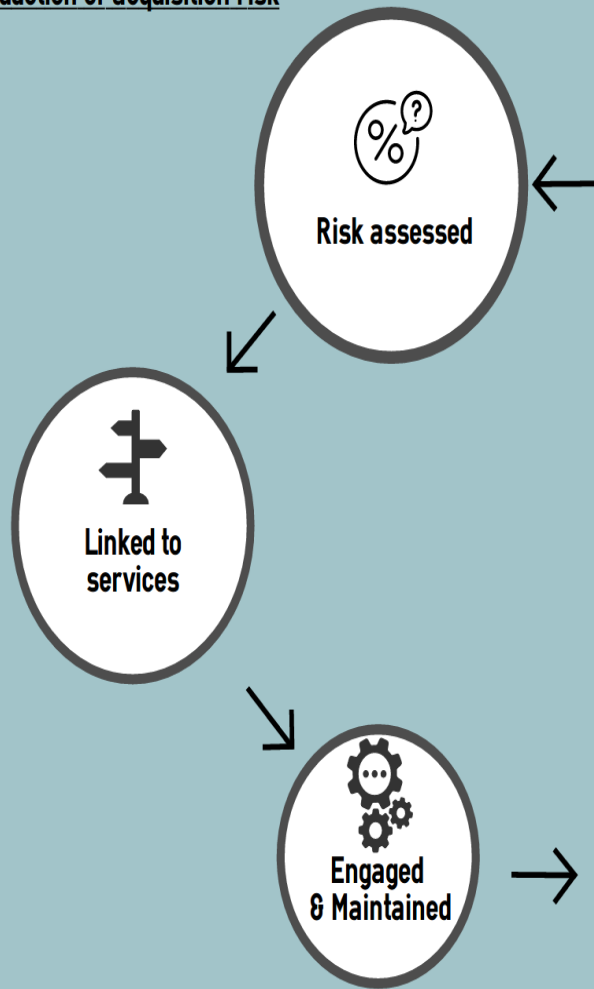
Heterosexual men
Total living with HIV = 19,600



* Gay/bisexual men also includes gay/bisexual men who have injected drugs

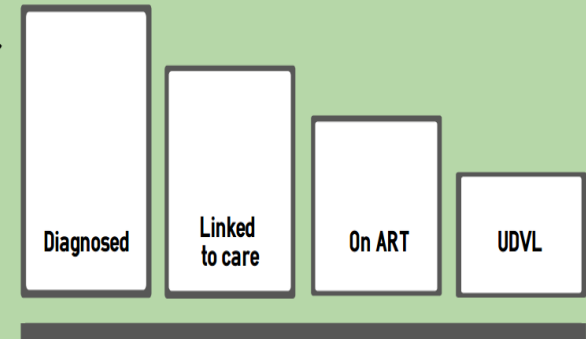
Primary HIV Prevention

Reduction of acquisition risk



Secondary HIV Prevention

Reduction of transmission risk



HIV Care Continuum

Comprehensive HIV Prevention

Adapted from:
Horn et al. J Int AIDS Soc. 2016; 19(1): 21263



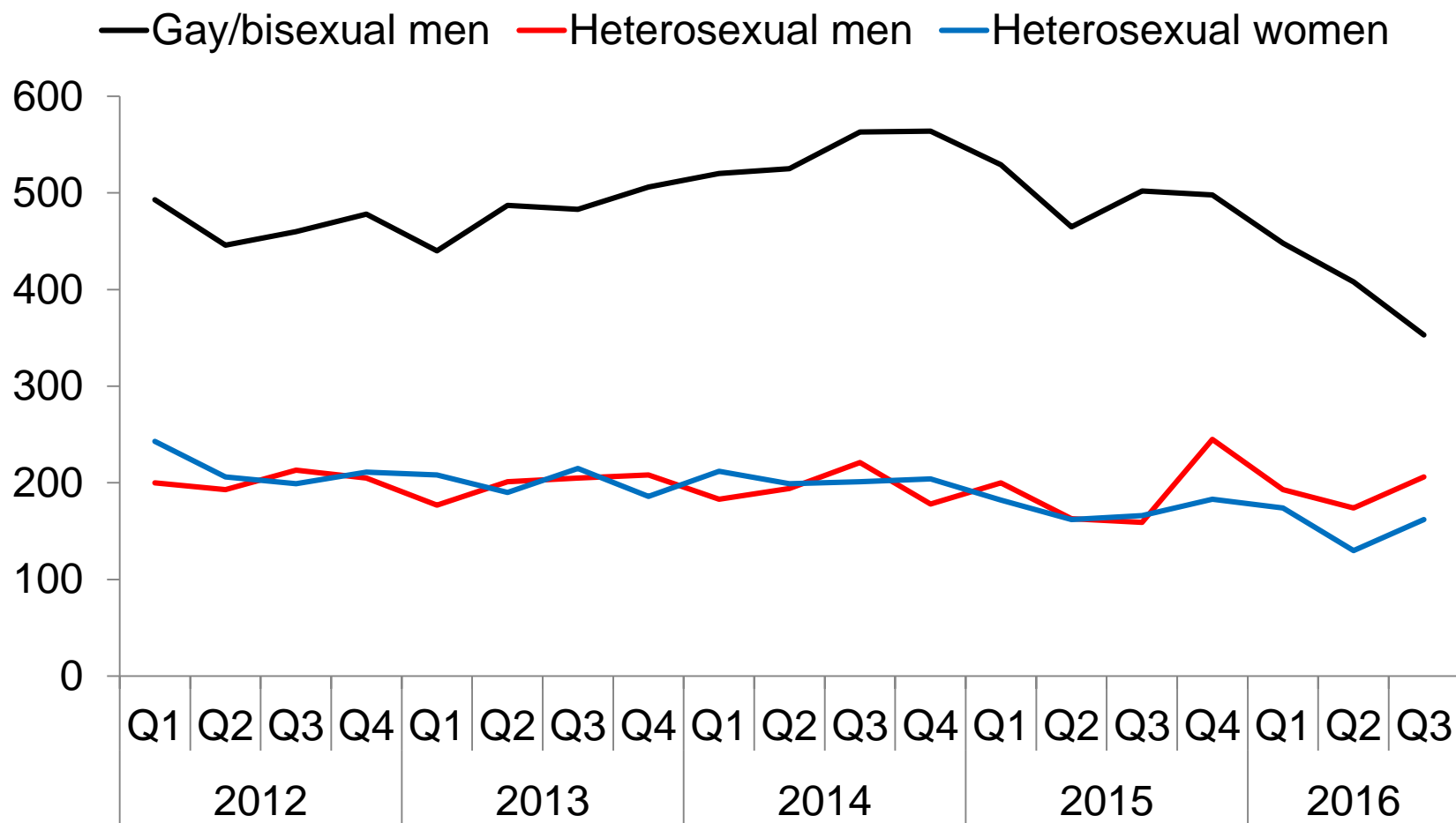
Context

- Long history of health promotion programmes with relatively high uptake of condoms among gay men
 - Increase testing through STI clinics over past decade
 - New testing modalities (eg home sampling and testing)
 - PreP introduced: PROUD trial 2015, internet use since 2016, IMPACT trial Sept 2017
 - We were notified of a decline in new diagnoses in some London clinics in late 2016
- ***We used national and local trends in new HIV diagnoses, HIV testing and uptake of ART to investigate the likely cause of the observed drop in new diagnoses***



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New HIV diagnoses among adults attending sexual health services





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Impact of testing

Background and objective



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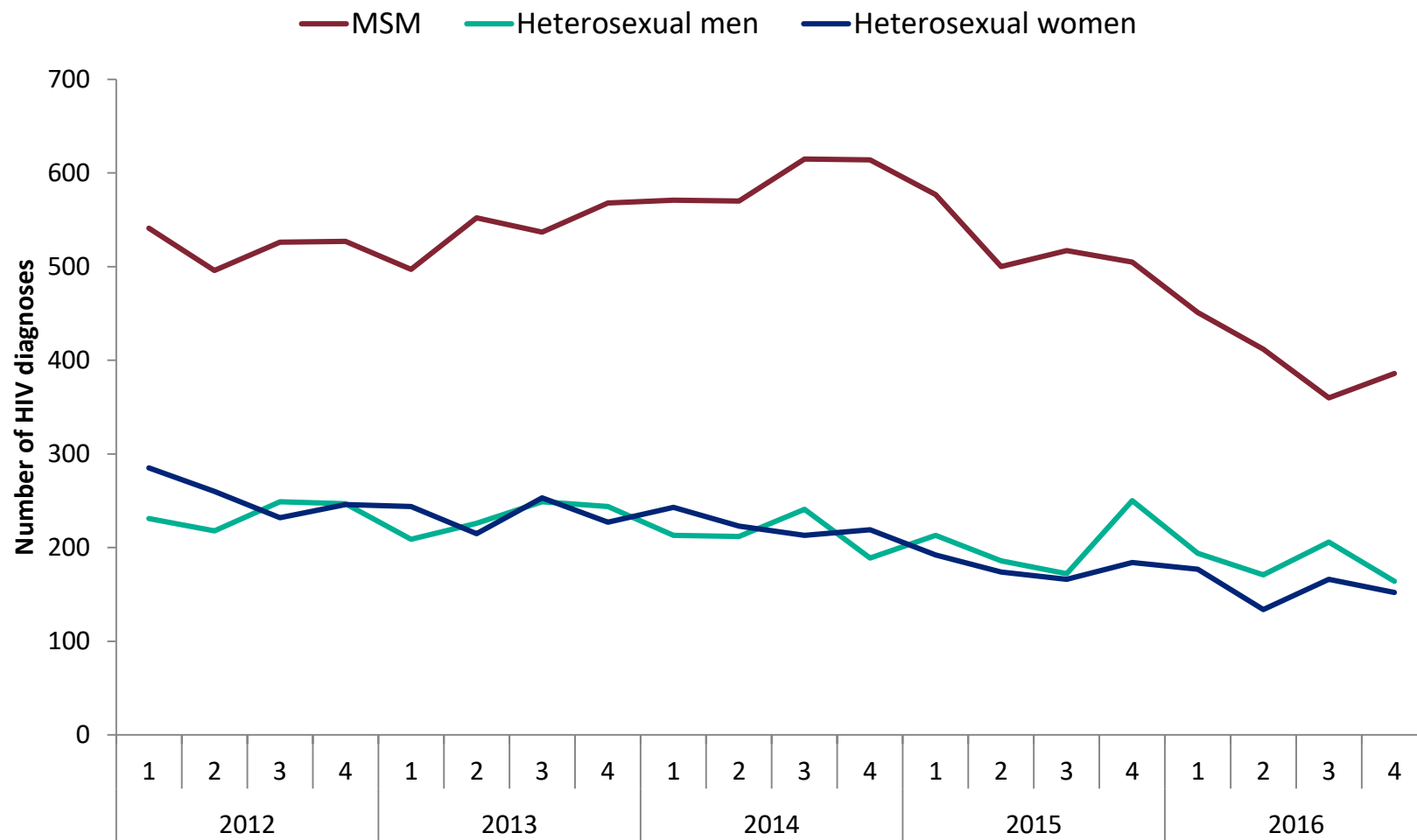
- Gay, bisexual, and other men who have sex with men (MSM) are at highest risk of HIV acquisition in England
- Since 2012, MSM have been advised to test at least annually and up to every 3 months if engaging in condomless sex with new or casual partners^{1,2}
- Select London specialist sexual health services (GUM clinics) have reported recent declines in the number of HIV diagnoses among MSM
- To examine these trends over time, numbers of HIV diagnoses and tests in were obtained from GUMCADv2, the national surveillance system for sexually transmitted infections in England

¹ BASHH/BHIVA 2012 “UK Guidelines on Safer Sex Advice”

² PHE (as HPA) 2012 “HIV in the United Kingdom: 2012 Report”

Number of HIV diagnoses in GUM clinic attendees by quarter and sexual orientation, England 2012-2016

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Further analyses in MSM attending GUM clinics



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- HIV tests and diagnoses (2012-2016) examined by clinic strata:
 - 1) London 'large fall' (LF) clinics (n=5): 15% decline in HIV diagnoses*
 - 2) Other London clinics (n=32)
 - 3) Outside London clinics (n=193)
- Within clinic strata, further examination by HIV testing history:
 - 1) Infrequent tester: no history of HIV test in last year
 - 2) Frequent tester: history of at least 1 HIV test in last year
- HIV diagnoses examined by ethnicity and age-group (2015 vs 2016)

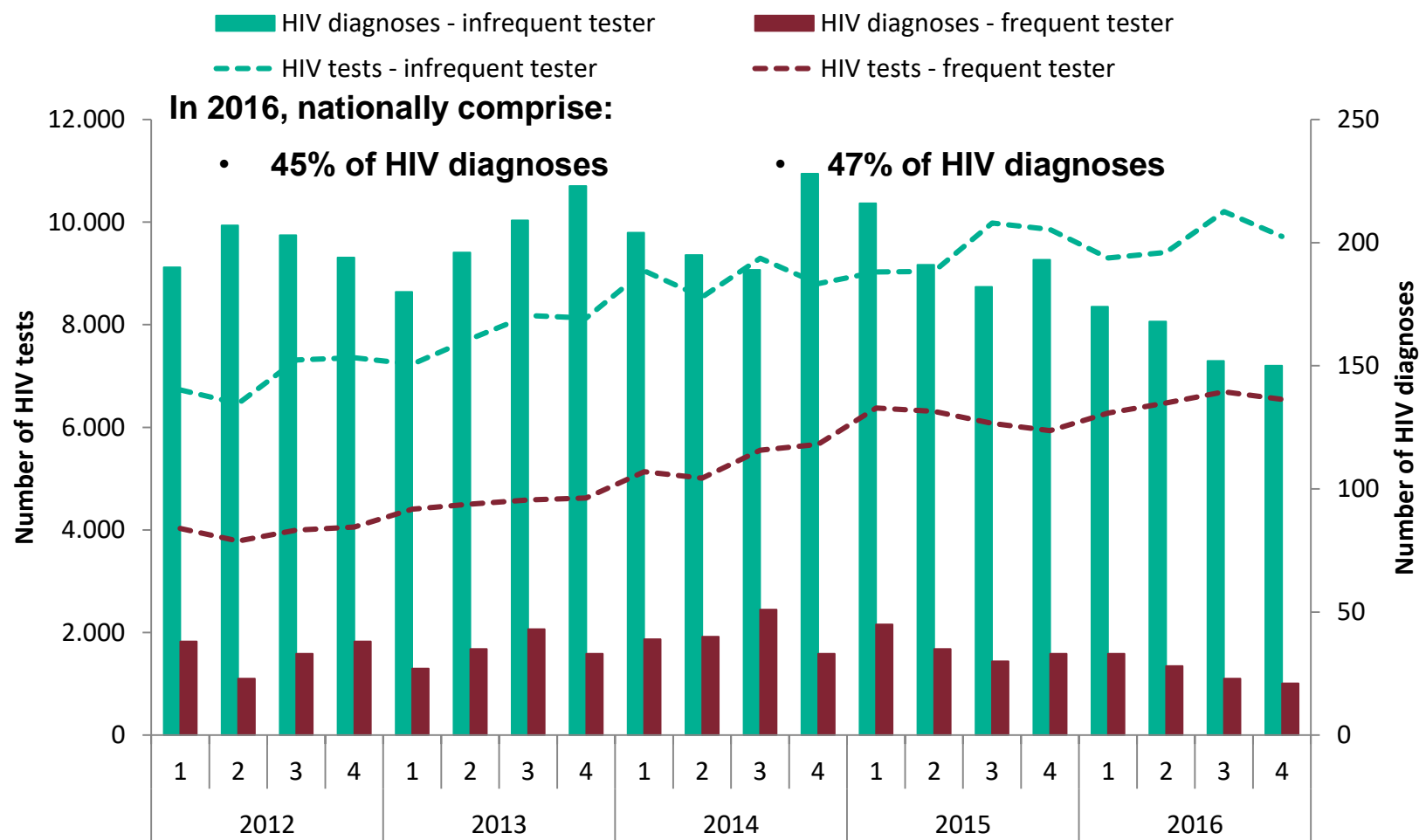
*2015 to 2016 in clinics with at least 40 total diagnoses

- **Dean St, Mortimer Market, St Mary's, Homerton, Guys' and St Thomas'**

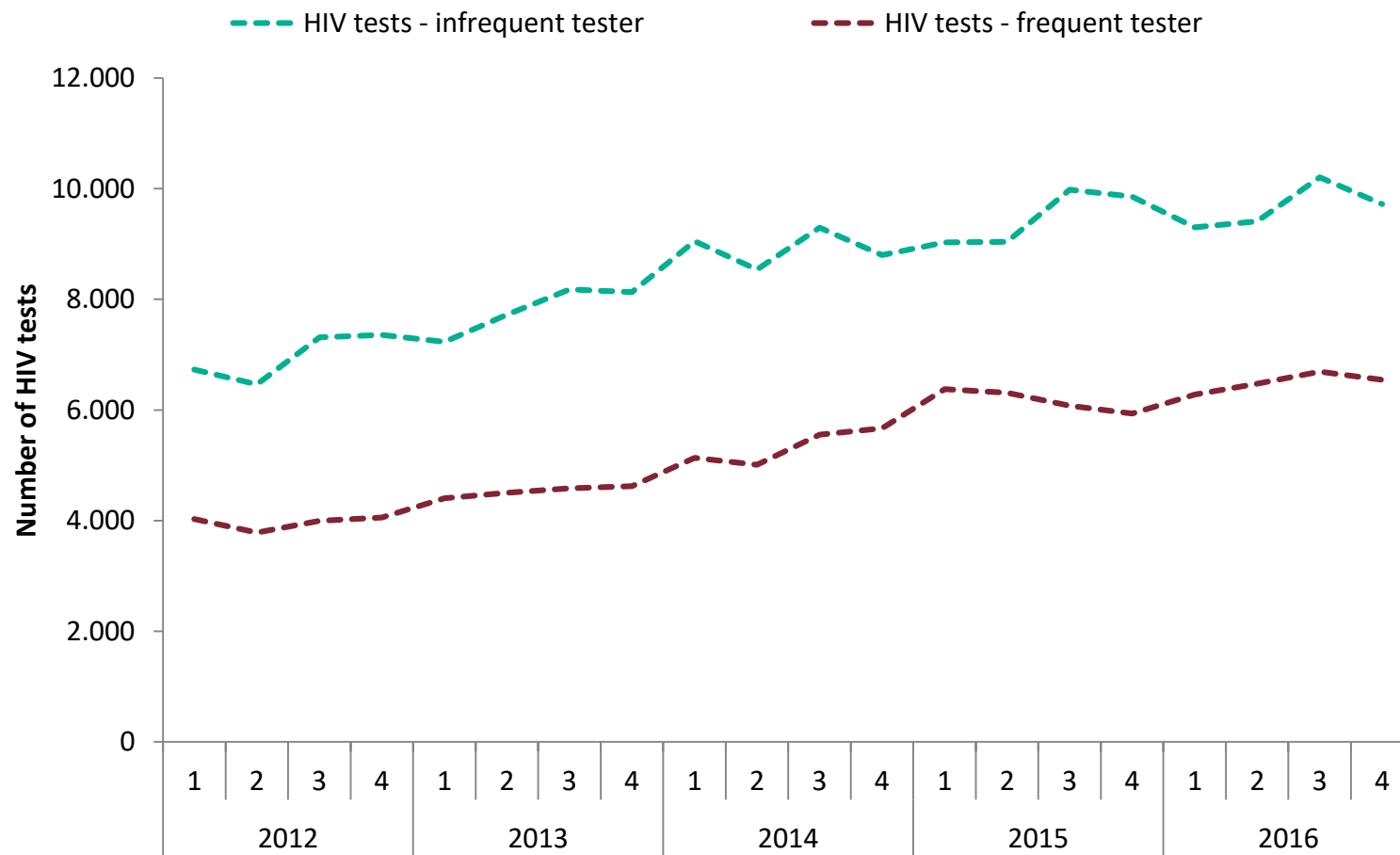
Number of HIV tests and diagnoses among MSM attending Outside London clinics by quarter and HIV test history, England 2012-2016



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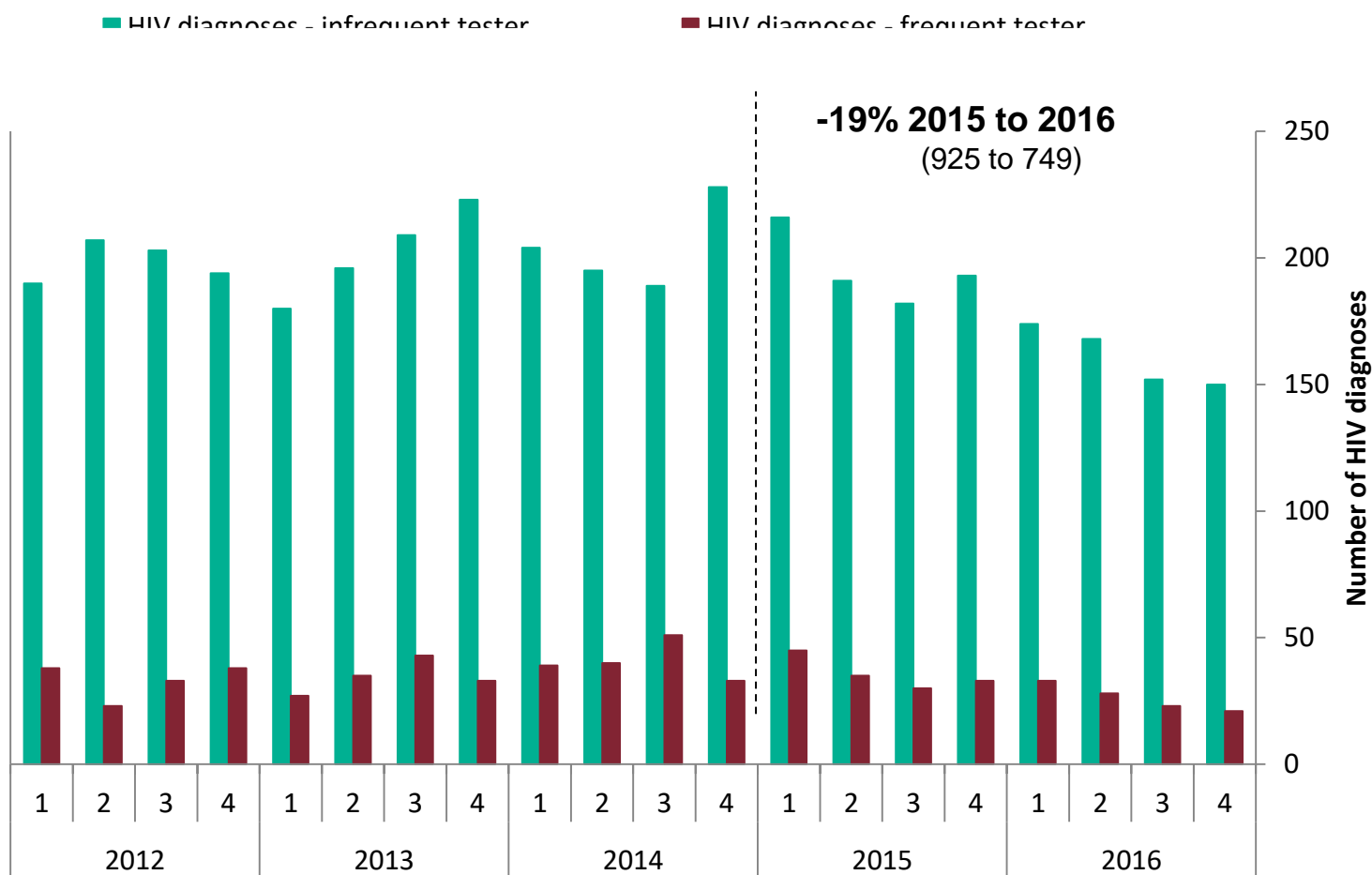


Number of HIV tests and diagnoses among MSM attending Outside London clinics by quarter and HIV test history, England 2012-2016



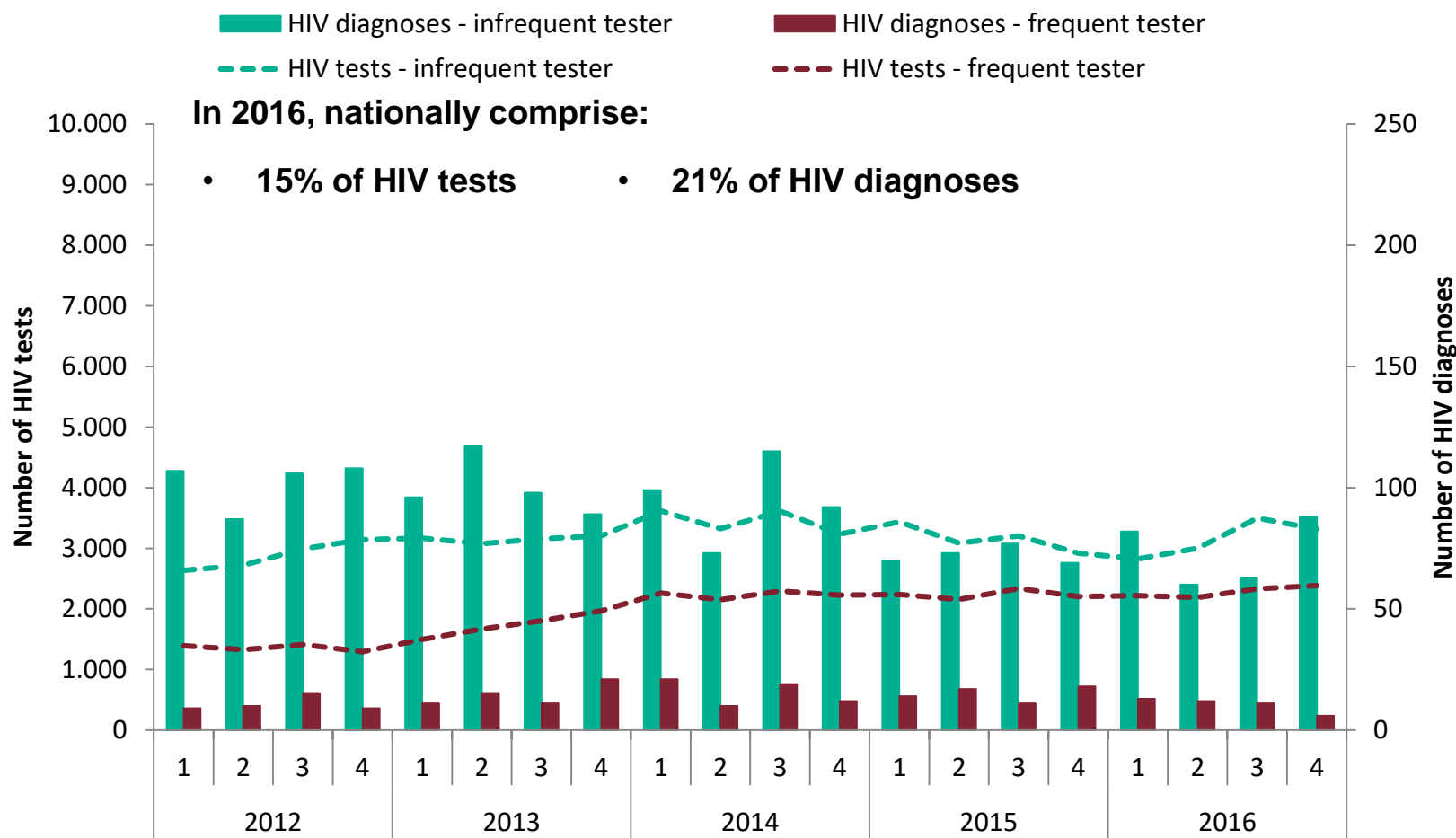


Number of HIV tests and diagnoses among MSM attending Outside London clinics by quarter and HIV test history, England 2012-2016



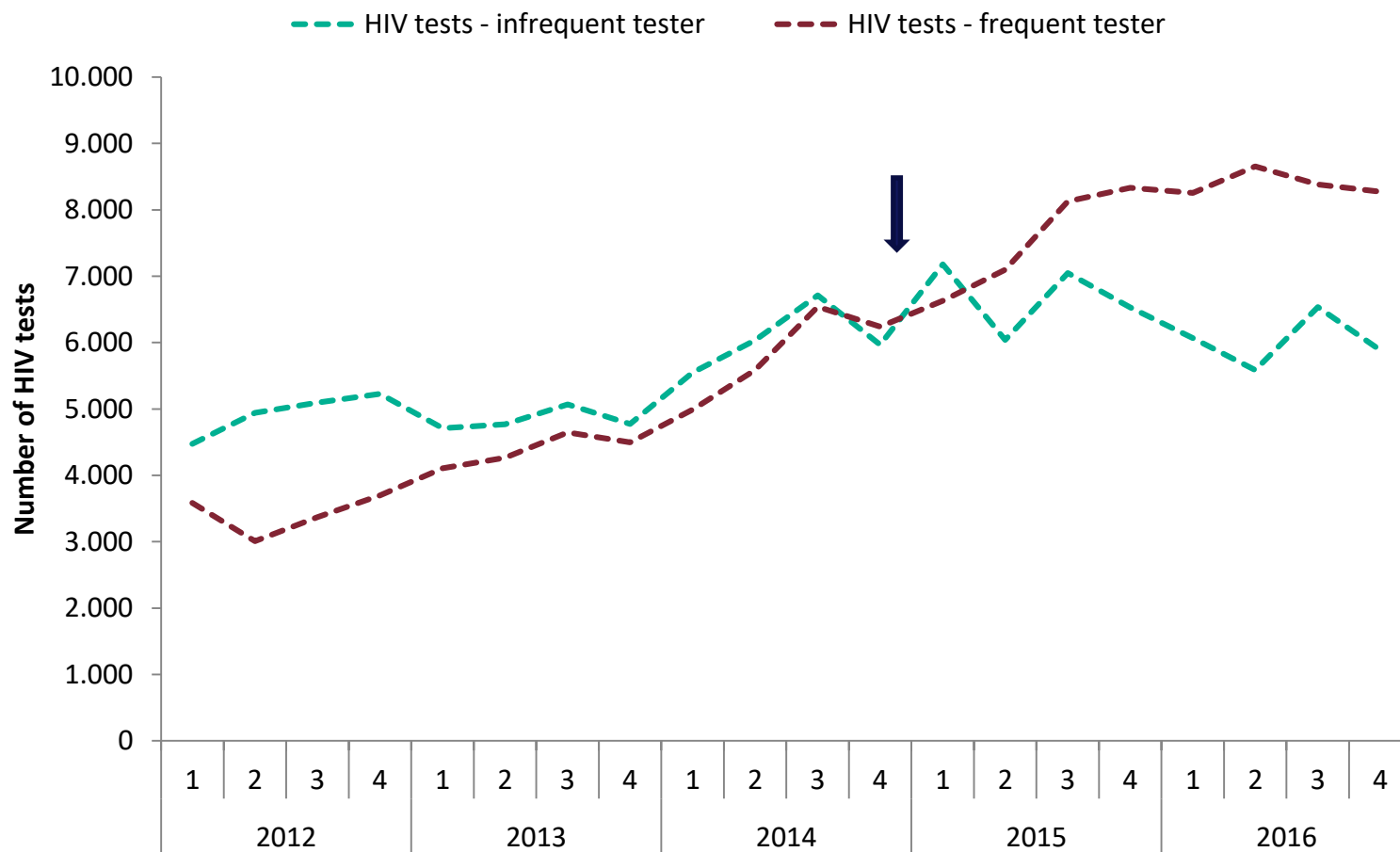


Number of HIV tests and diagnoses among MSM attending Other London clinics by quarter and HIV test history, England 2012-2016



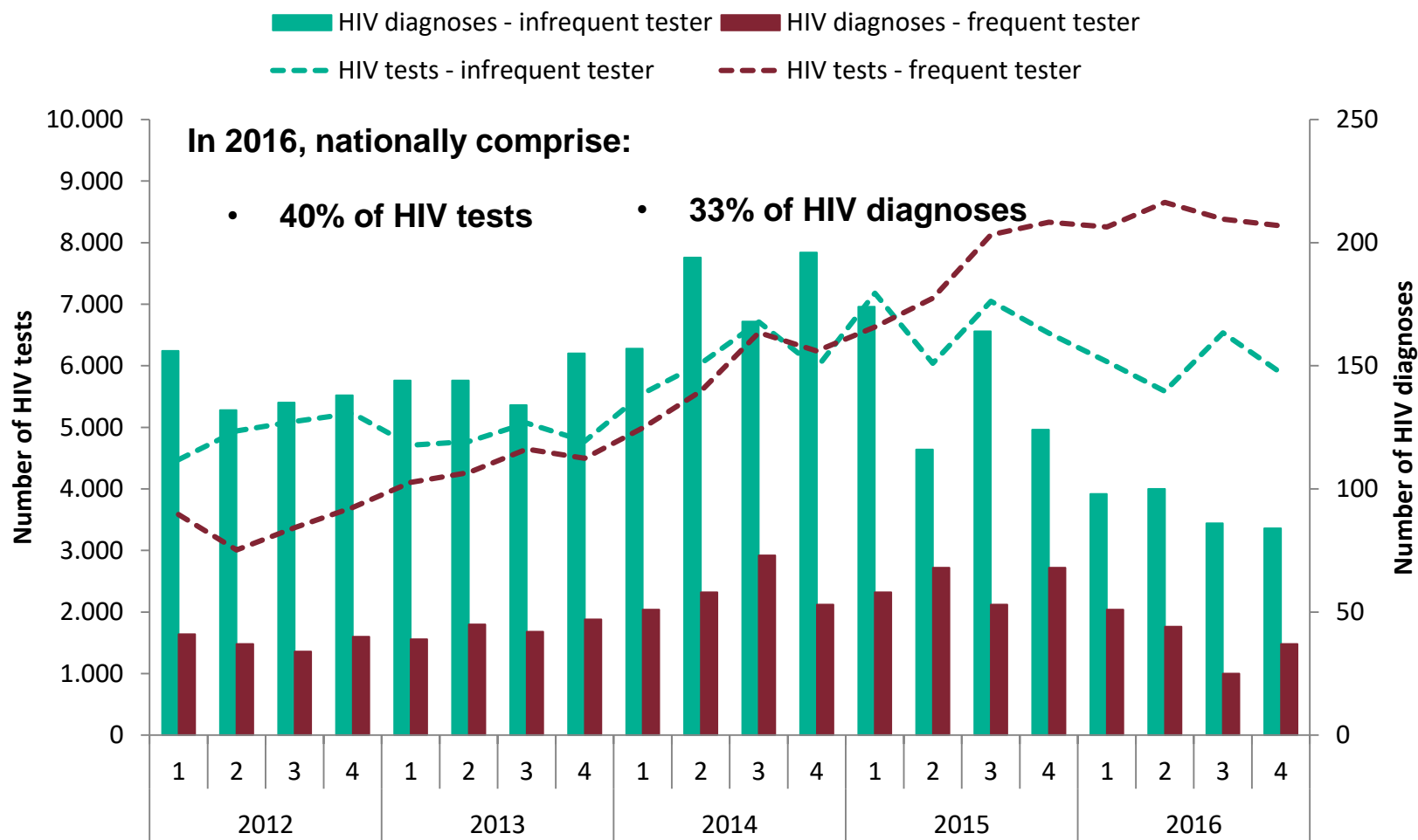


Number of HIV tests and diagnoses among MSM attending London LF clinics by quarter and HIV test history, England 2012-2016





Number of HIV tests and diagnoses among MSM attending London LF clinics by quarter and HIV test history, England 2012-2016



Additional points: London LF clinics



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Publisher: European Centre for Disease Prevention and Control (ECDC), Stockholm, Sweden



“Fall in new HIV diagnoses among gay men at selected London sexual health clinics: testing or treatment or PrEP?”

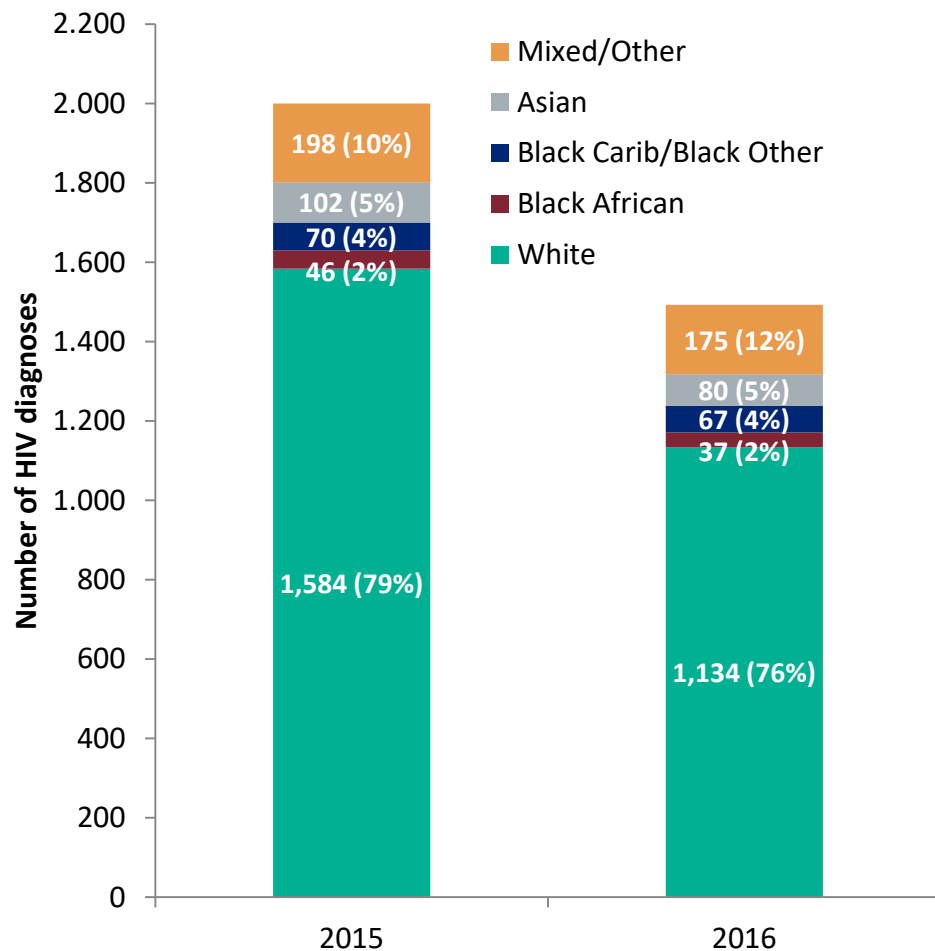
AE Brown, H Mohammed, D Ogaz, PD Kirwan, M Yung, SG Nash, M Furegato, G Hughes, N Connor, VC Delpech, ON Gill, 2017 (in press)

- Median time to treatment lower in those diagnosed at London SF clinics
- Median CD4 counts higher in those diagnosed in London SF clinics



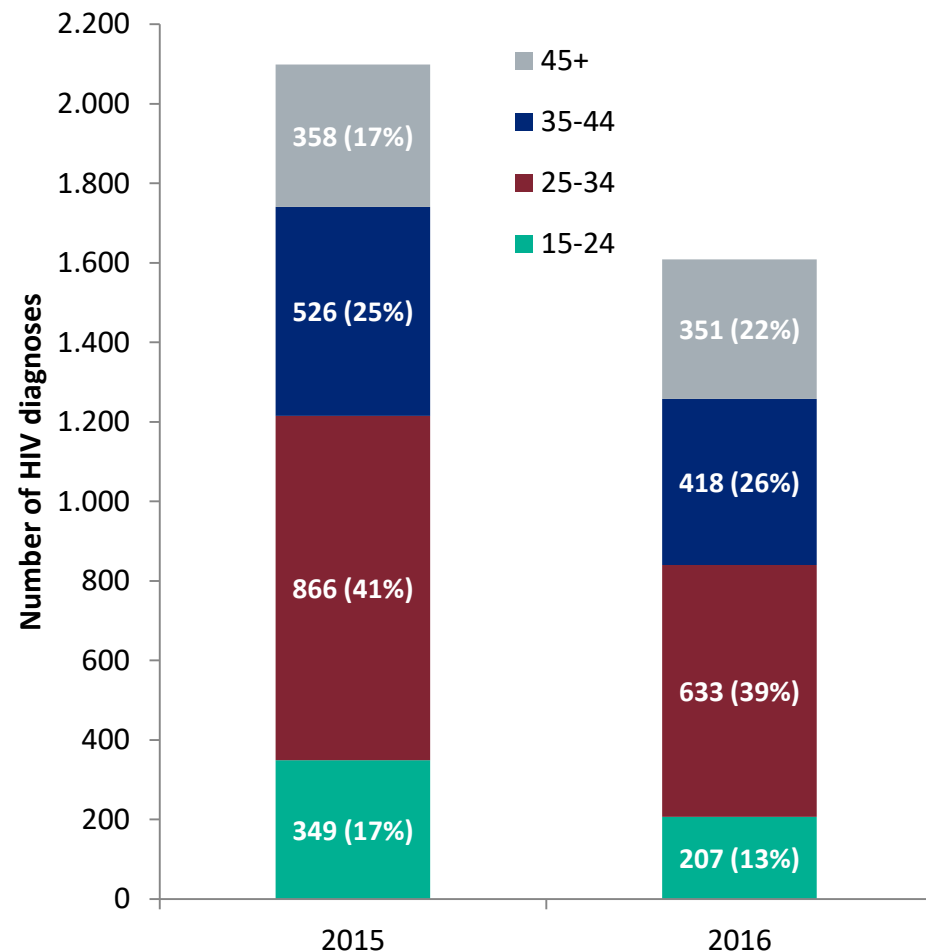
HIV diagnoses in MSM attending GUM clinics by ethnicity and age-group, 2015 vs 2016

Ethnicity*



Age-group*

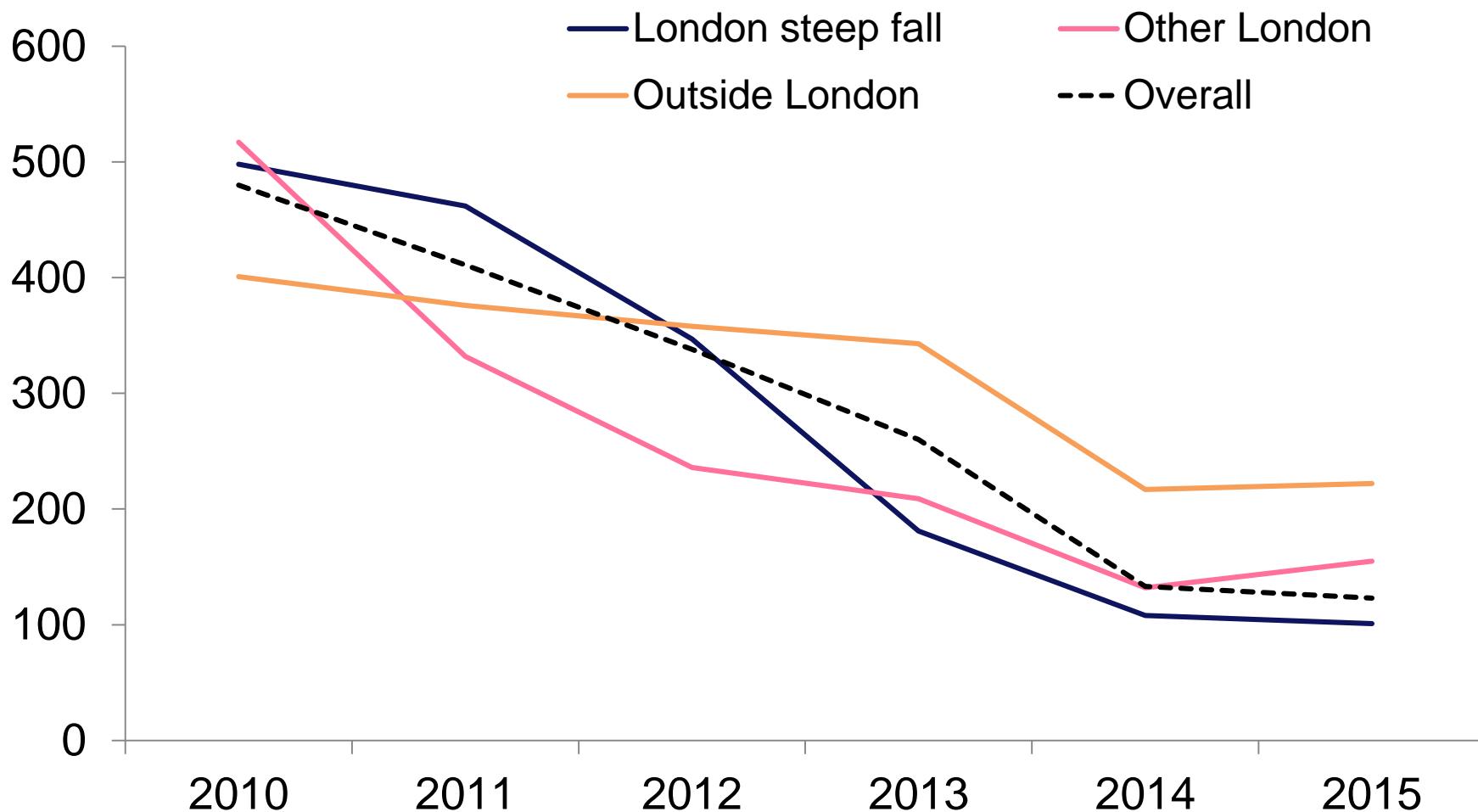
*where specified





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Median days from HIV diagnosis to ART initiation among gay men in England





Conclusions

- There was a decline in national HIV diagnoses among MSM from 2015 to 2016, with smaller decreases noted in heterosexuals
- A substantial fall in new HIV diagnoses among MSM was concentrated at five London clinics in 2016 compared to 2015 (-36%), with lesser declines observed at other London clinics (-4%), and all other clinics elsewhere in England (-19%)
- In MSM, greatest declines were seen in white men and those aged <35
- Combination prevention is driving MSM diagnosis declines
 - Scale-up of repeat testing
 - Accelerated time to treatment following diagnosis
 - PrEP use



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Next Steps

PrEP IMPACT Trial



£10m



10,000



3 years



Address key outstanding questions

- 1) Proportion eligible for PrEP?
- 2) How to identify, engage and maintain all people eligible for PrEP?
- 3) Proportion accepting offer of PrEP?
- 4) Proportions choosing daily or intermittent dosing?
- 5) Duration of PrEP use?
- 6) Impact on HIV incidence?
- 7) Impact on STI incidence?

Primary objective

To measure PrEP-eligibility, PrEP-uptake, duration of PrEP-eligibility and duration of PrEP-use among Genitourinary Medicine (GUM) clinic attendees

Inclusion Criteria

1 Cis- and transgender MSM and trans women

- a) HIV negative test in previous year
- b) Report condomless sex in the previous 3 months
- c) Affirm likelihood of CSI in the next 3 months

2 HIV negative partner of an HIV positive person

- a) HIV positive partner not known to be virally suppressed
- b) CSI anticipated before treatment of HIV positive partner takes effect

3 HIV negative person

Clinically assessed and considered to be at similar risk of HIV acquisition as those with a serodiscordant partner who is not known to be virally suppressed



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Thank you



Acknowledgements

We gratefully acknowledge people living with HIV, clinicians, microbiologists, immunologists, public health practitioners, occupational health doctors and nurses and other colleagues who contribute to the public health monitoring of HIV and STIs in the UK.

Thank you to colleagues at Public Health England in particular: Noel Gill, John Saunders, Nigel Field, KohJun Ong, Martina Furegato, Andre Charlett, Sarika Desai, Kevin Fenton, Victoria Hall, Nalini Iyengar, Anthony Nardone, Luis Guerra, Gwenda Hughes, Hamish Mohammed, Dana Ogaz, Nicky Connor, Alison Brown, Cuong Chau, Peter Kirwan, Jameel Khawam, Zheng Yin and the rest of the HARS and GUMCAD teams



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Impact of Treatment as Prevention

HIV Prevention England

Contract for HIV prevention in most at-risk populations

- held by Terrence Higgins Trust, leading UK sexual health charity

Reduce the HIV incidence by:

- Increasing HIV testing
- Sustaining condom use
- Promote other interventions
- Promote awareness STIs
- Combatting stigma

Means to deliver are:

- Campaign media
- System leadership and local amplification



NATIONAL
HIV 22-30
NOVEMBER
TESTING
WEEK 2014

National HIV Testing Week: 19 – 25 November 2016

A poster for National HIV Testing Week featuring a man with a beard and short brown hair, wearing a black bomber jacket over a white t-shirt. He is looking directly at the camera with a serious expression. The background is a blurred city street at night with colorful lights.

**NATIONAL
HIV
TESTING
WEEK**
19-25 NOVEMBER 2016

**I'M TESTING
FOR HIV.**
It gives me the confidence to
get on with my life without
worrying. *John*

Terrence
Higgins
Trust

IT
STARTS
WITH
ME

ORDER YOUR FREE POSTAL TEST OR FIND A TEST AT:
StartsWithMe.org.uk

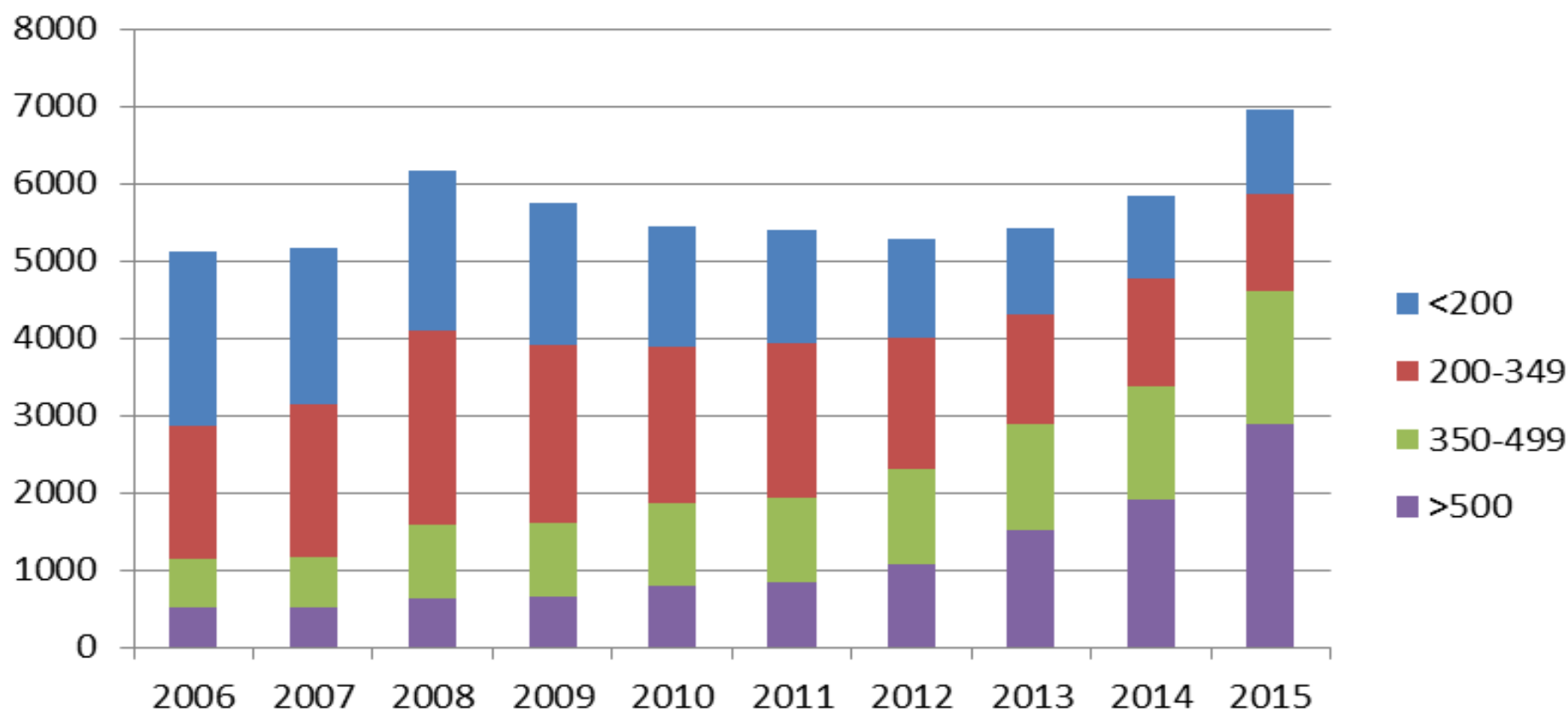
Produced by Terrence Higgins Trust for **HIV PREVENTION ENGLAND**.
Terrence Higgins Trust is a registered charity in England and Wales (reg. no. 288627) and in Scotland (SC039984). Company reg. no. 1778149.

Health & Care
Improvement
Partnership



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Adjusted* number of adults with diagnosed HIV infection starting treatment, by CD4 count at ART initiation: UK



*Adjusted for missing/inconsistent CD4 count at diagnosis, 24% overall

Methodology 2

Information on men diagnosed with HIV from diagnosis and follow up data when attending HIV services (HARS)

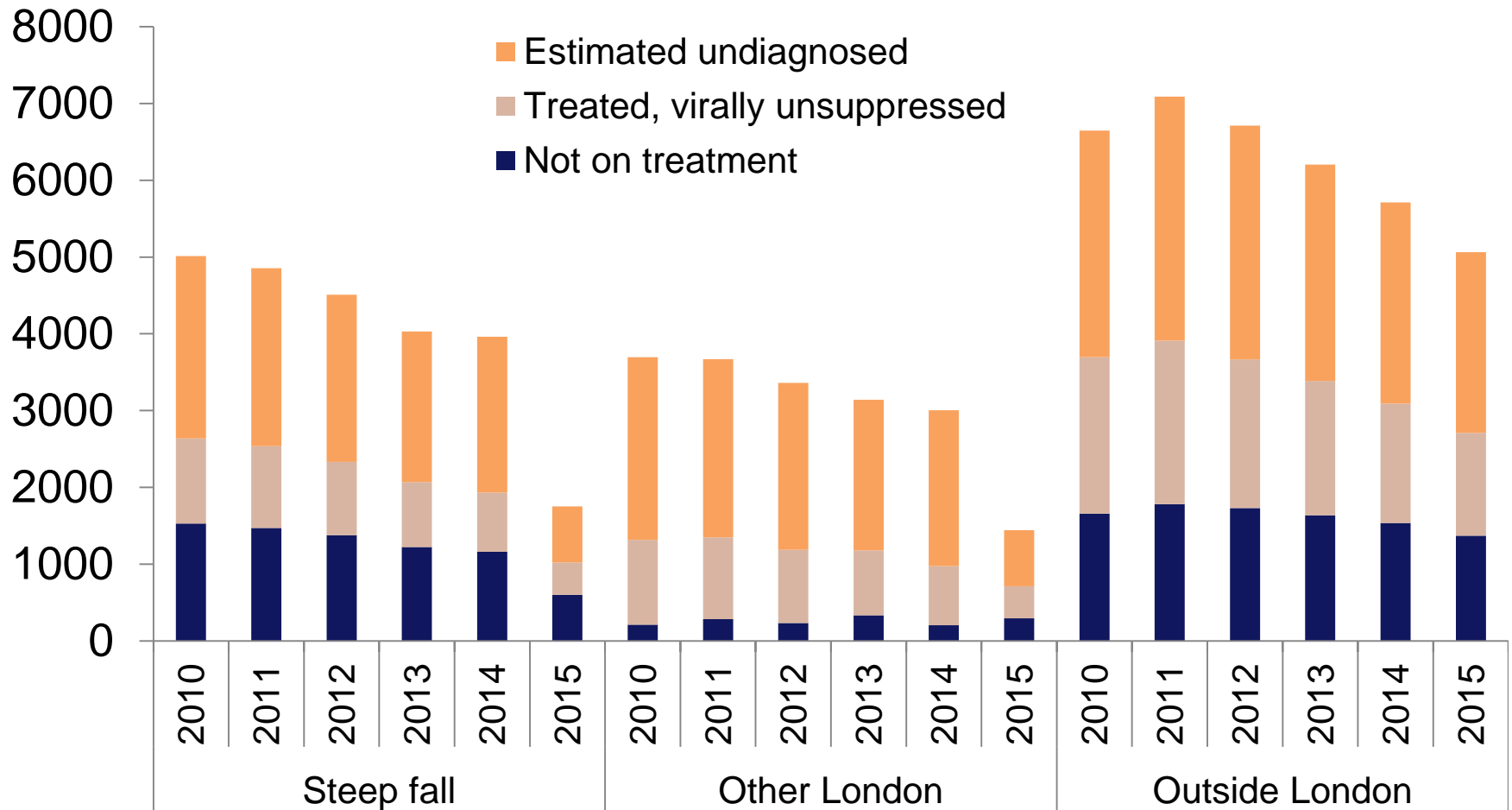
- Median days from diagnosis to ART on available data (about 80%) is used as a proxy for Treatment as Prevention (TasP)

Transmissible Viral Load

- Only persons that are undiagnosed or had a viral load >200 copies/mL at date last seen for HIV care can potentially transmit HIV
- **Persons at high risk of HIV acquisition**
- HIV negative men with a documented STI in previous year was defined as **High risk**

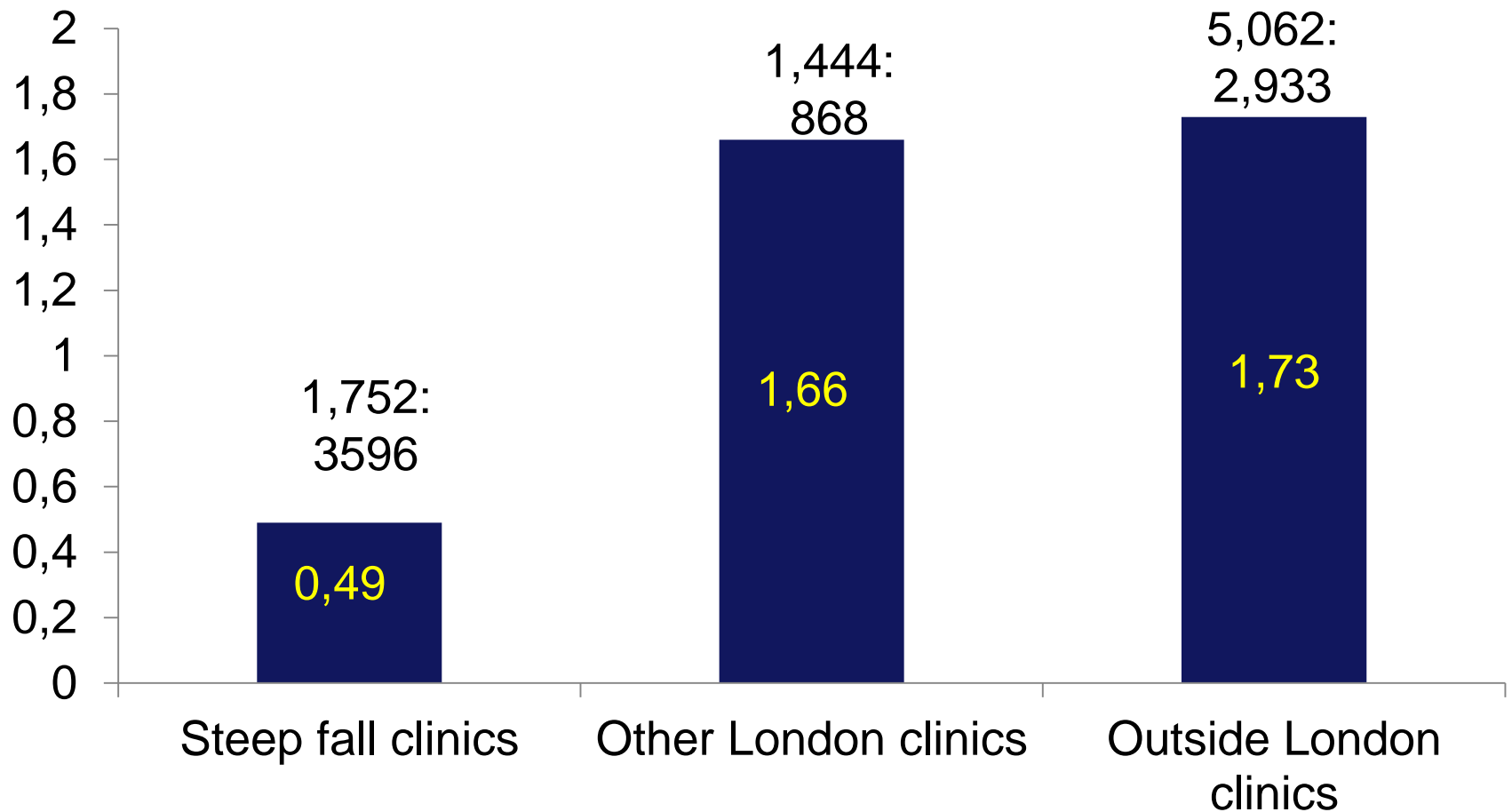
Transmissibility Ratio: Total men with transmissible VL/ Total number of high risk men

Transmissibility: Estimated number of gay men with viral load > 200 copies/mL by clinic strata



*Estimated undiagnosed, diagnosed untreated and those treated with viral load >200 copies/mL

Transmissibility ratio by clinic, 2015



Transmissible VL: Estimated undiagnosed, diagnosed untreated or on ART with viral load >200 copies/mL

High risk men: HIV negative with a history of an STI in previous year

Summary

1. We are witnessing and recording an ecological experiment of the impact of combination prevention on HIV incidence
2. A substantial fall in new HIV diagnoses fell was observed at five London clinics in the third quarter of 2016 compared to the previous year with smaller declines observed at other London clinics, and elsewhere in England.
3. The rise in median CD4 count at diagnosis indicates fall in diagnosis is likely to reflect decrease in incidence
4. We need to consolidate scaling up of testing and early ART across all parts of the country for all groups at greatest risk of HIV
5. Prep use likely to have also contributed to the fall in new diagnoses but its use has been relatively low to date But that is about to change....



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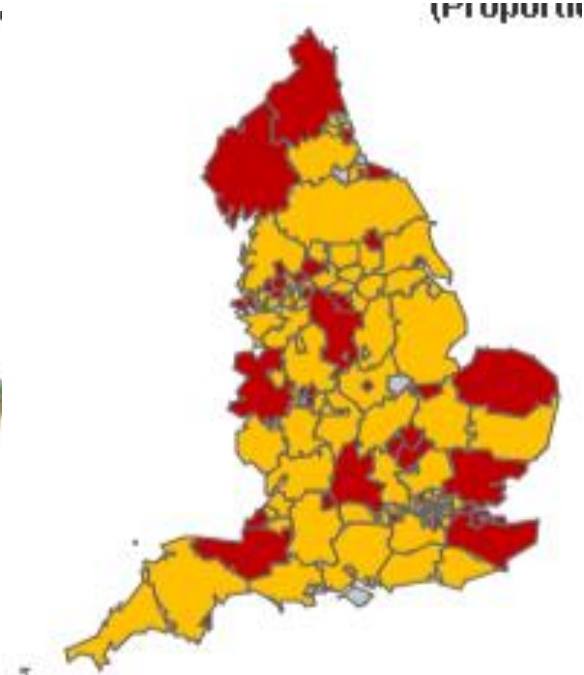
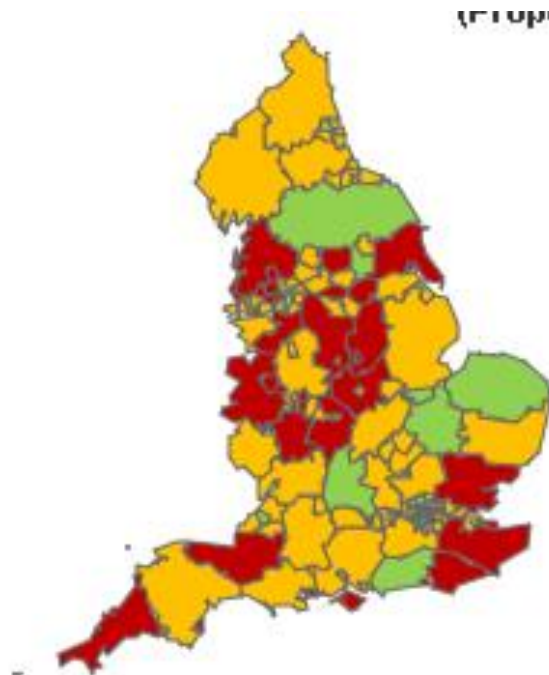
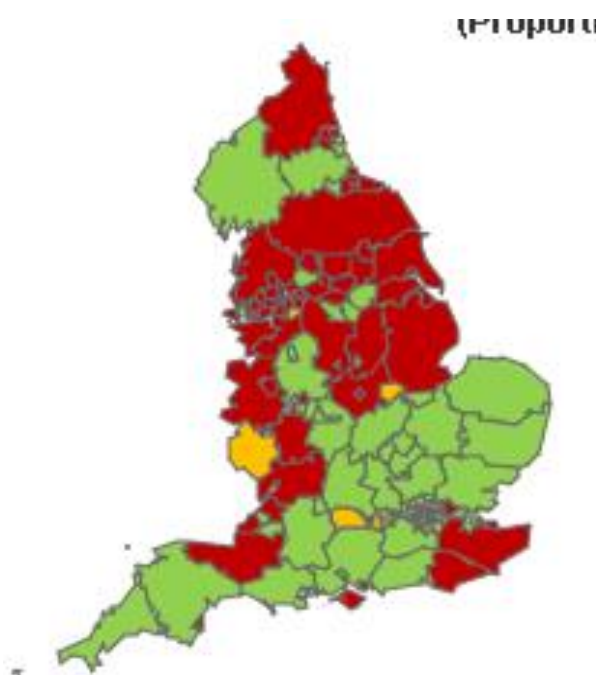
Local monitoring of Prep uptake, testing and new HIV & STI cases

HIV testing coverage / late diagnosis

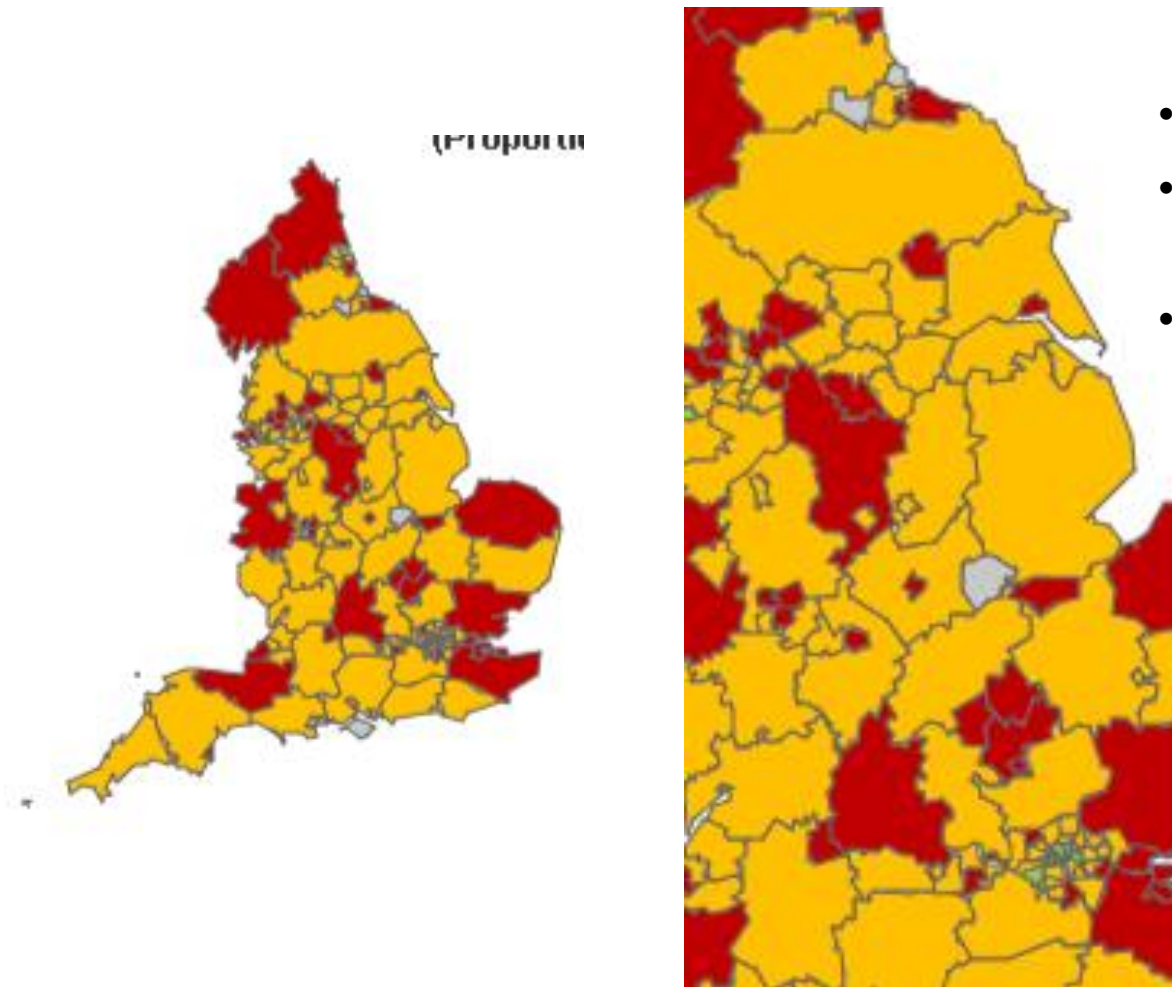
Coverage total

Coverage MSM

Late diagnosis

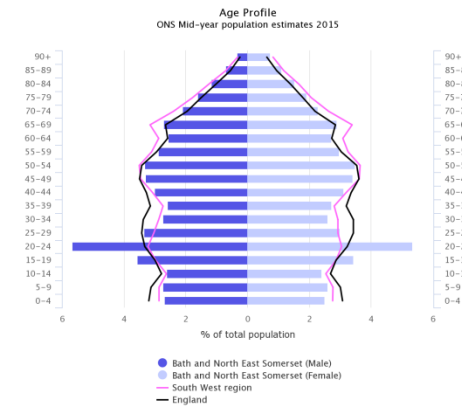
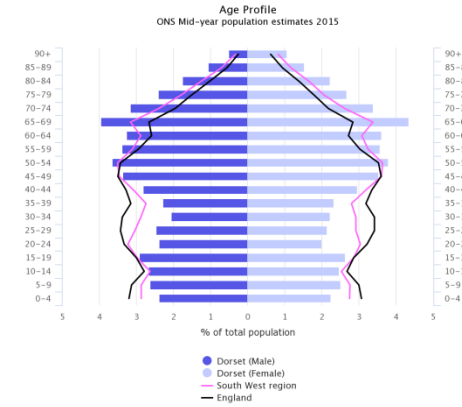
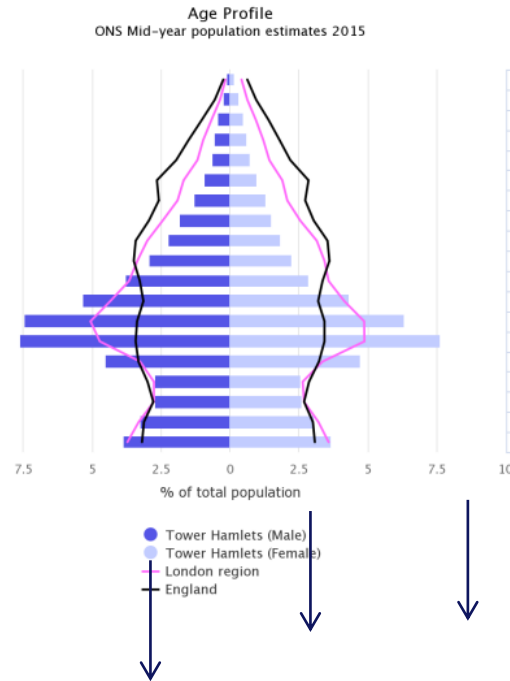
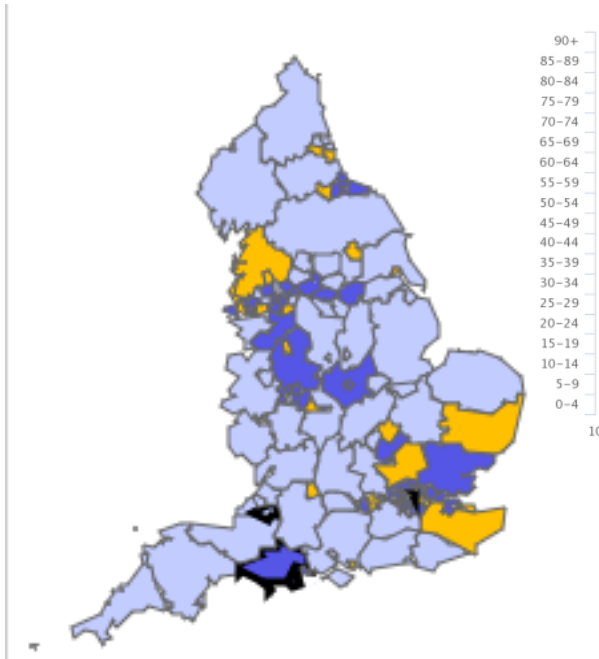


HIV late diagnosis



- Focal areas
- Small numbers in many parts of the country
- Missing areas (fail disclosure parameters)

Context



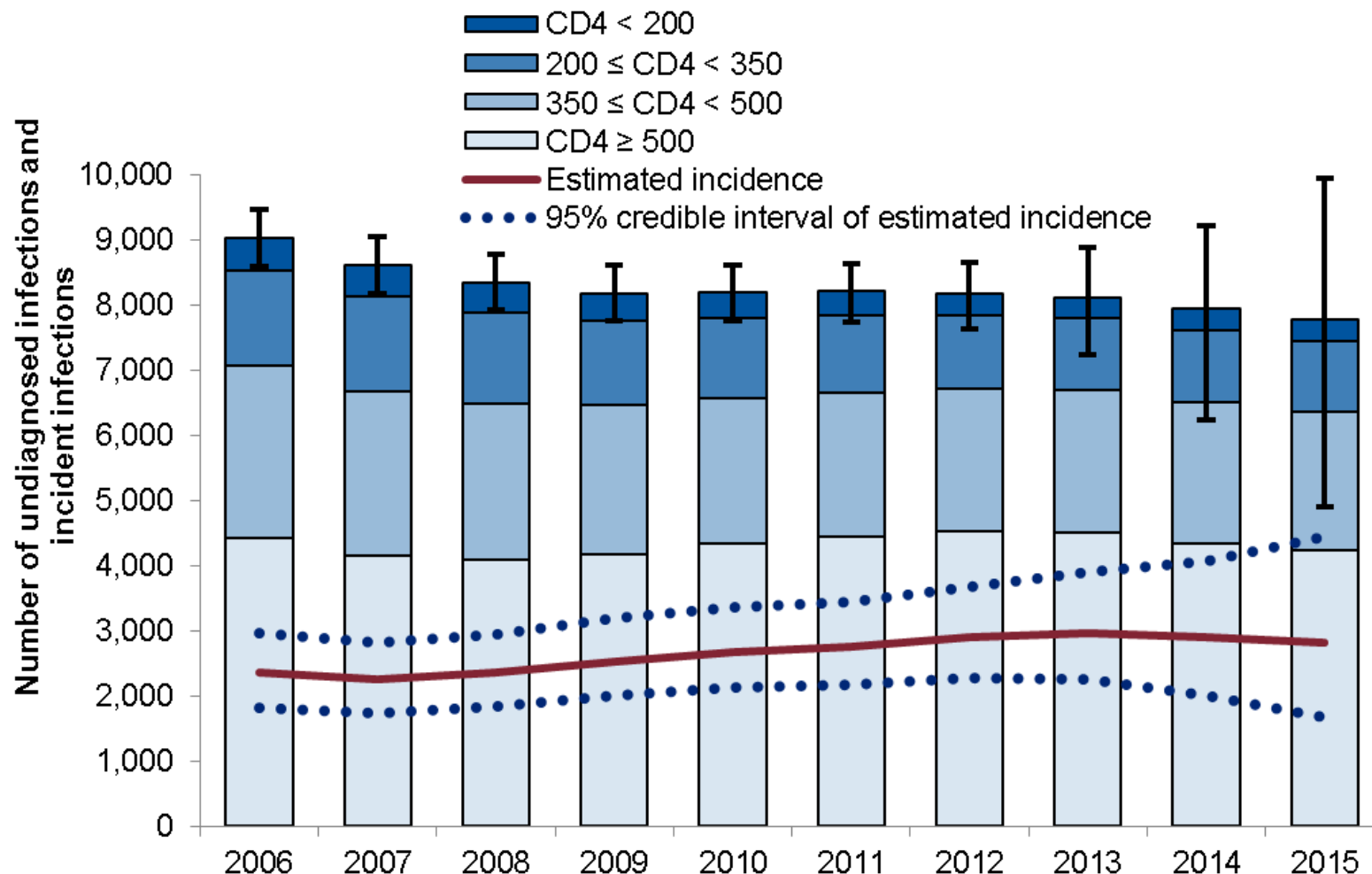


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Monitoring transmission



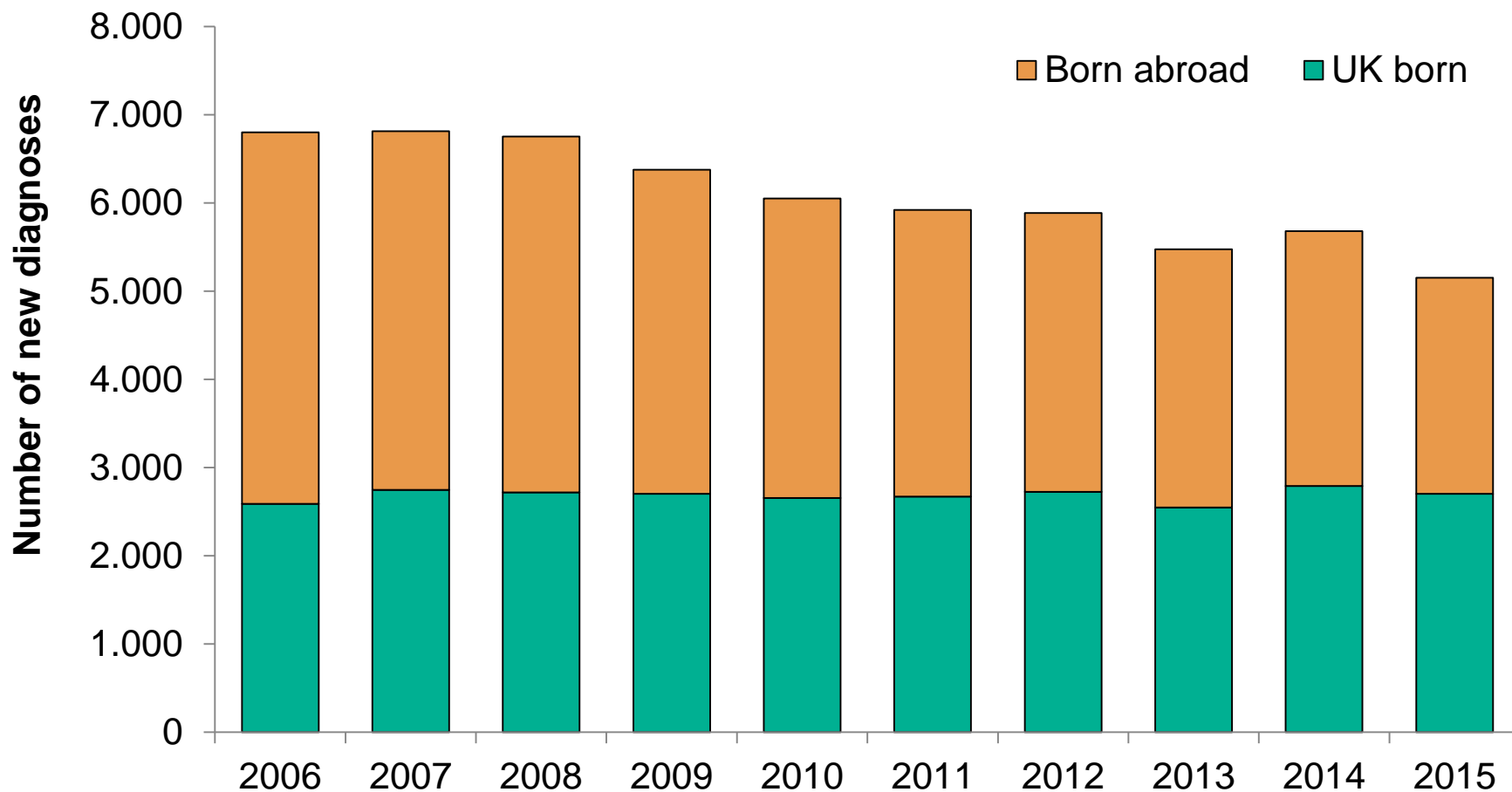
Back-calculation estimates of HIV incidence and number of prevalent undiagnosed HIV infections among gay/bisexual men aged 15 years and over: England, 2006-2015





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New HIV diagnoses by place of birth: UK, 2006-2015

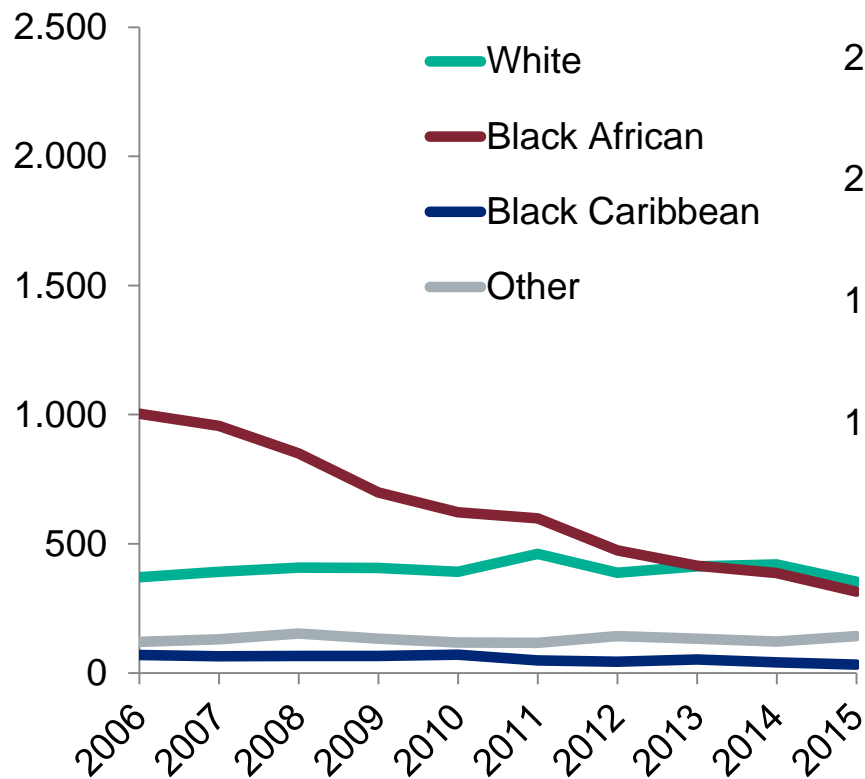




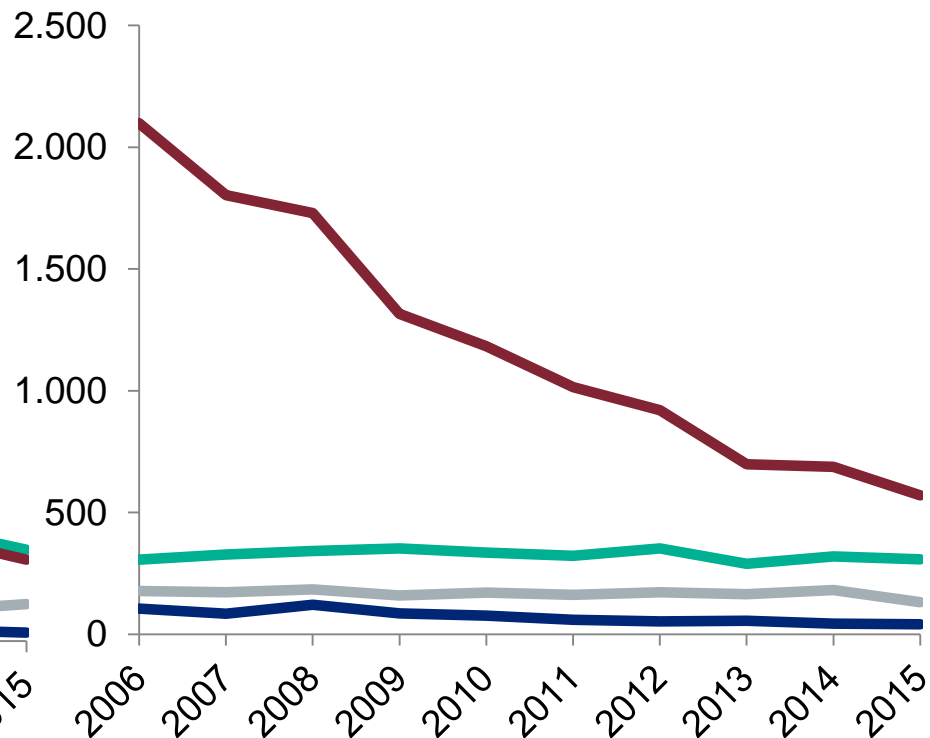
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New HIV diagnoses among heterosexuals, UK

Men



Women

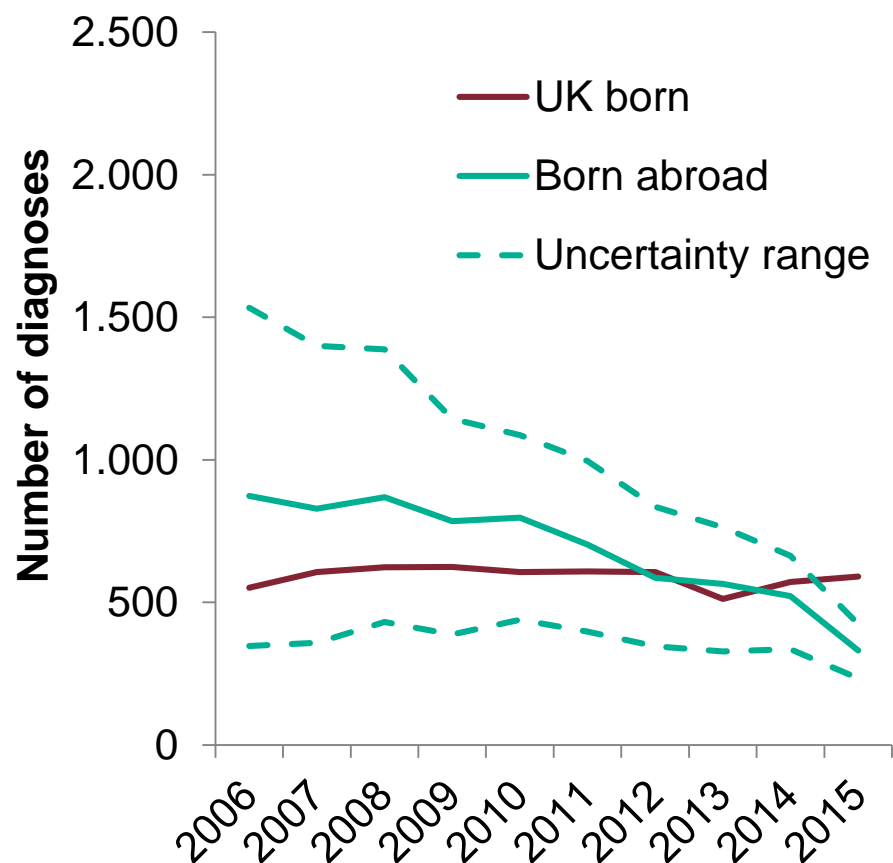




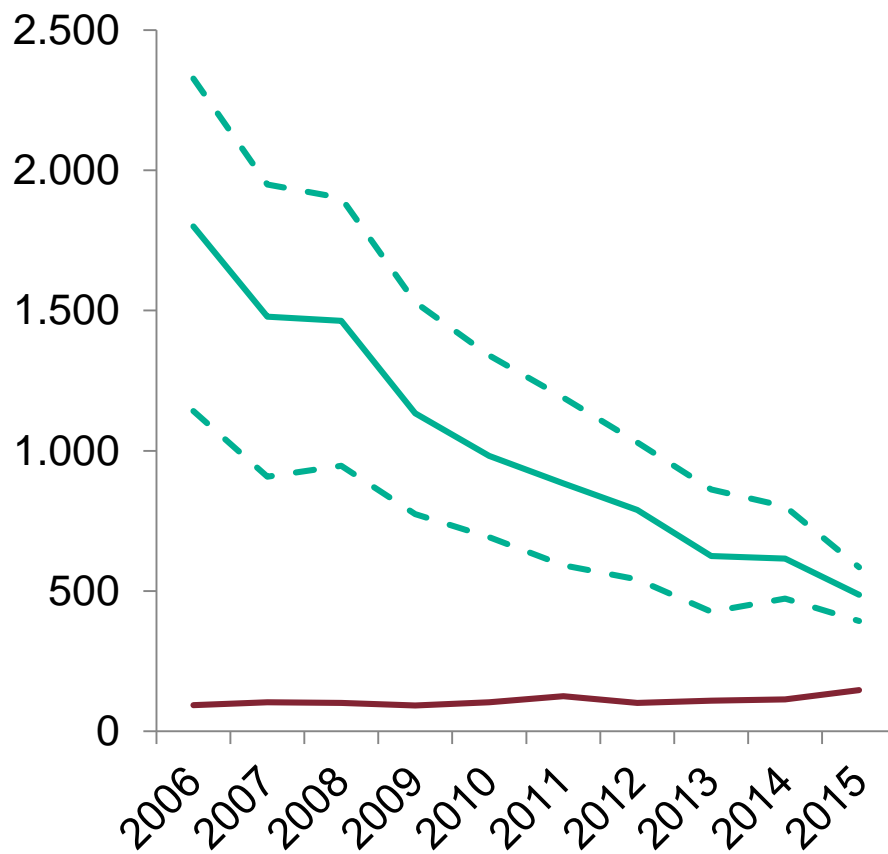
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New HIV diagnoses among heterosexuals by place of birth: UK, 2006-2015

a) UK acquired



b) acquired abroad





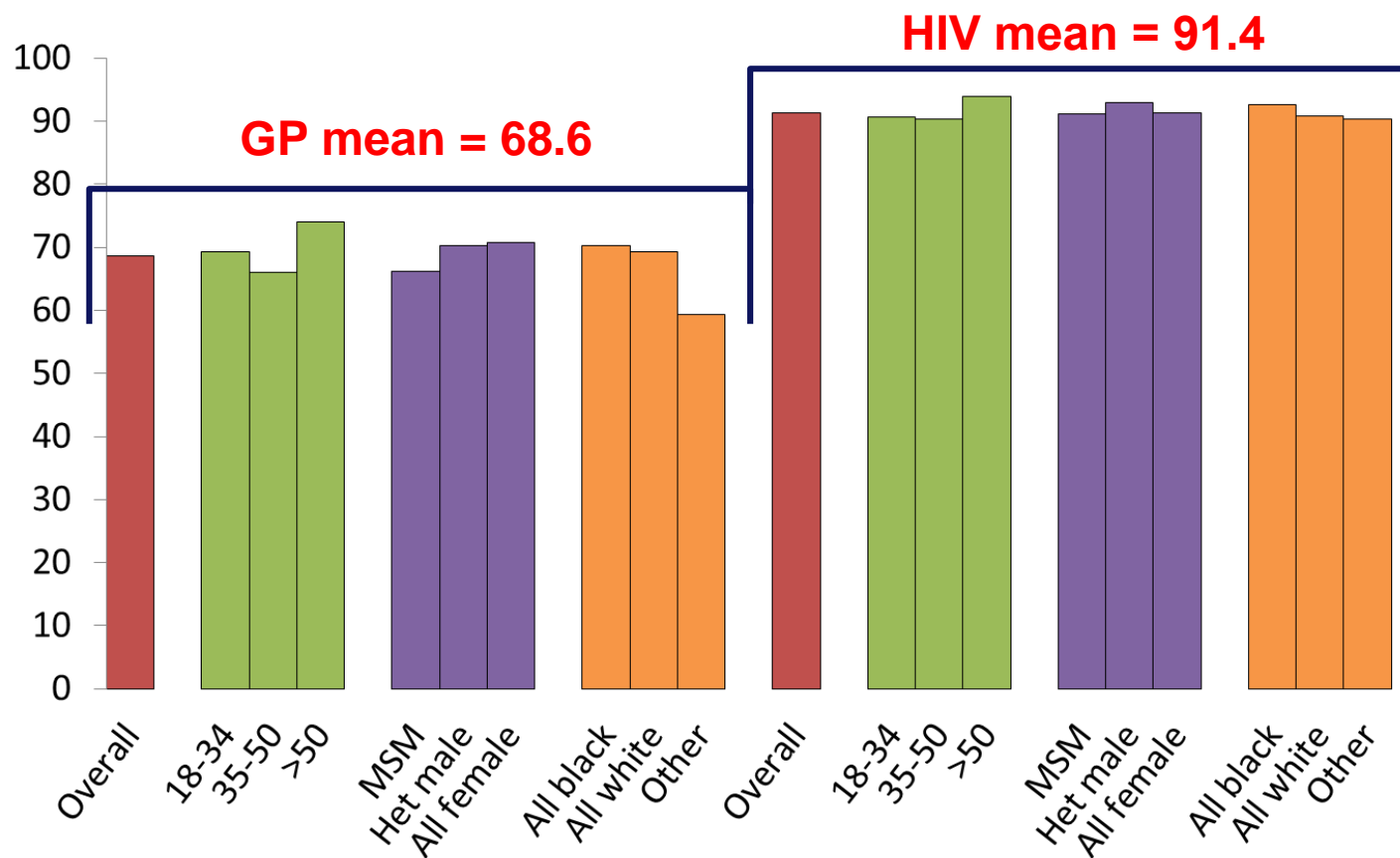
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Greater inclusion of people living with HIV



Satisfaction with Care – HIV specialist and GP

“Overall, how would you rate your GP/HIV specialist services?”

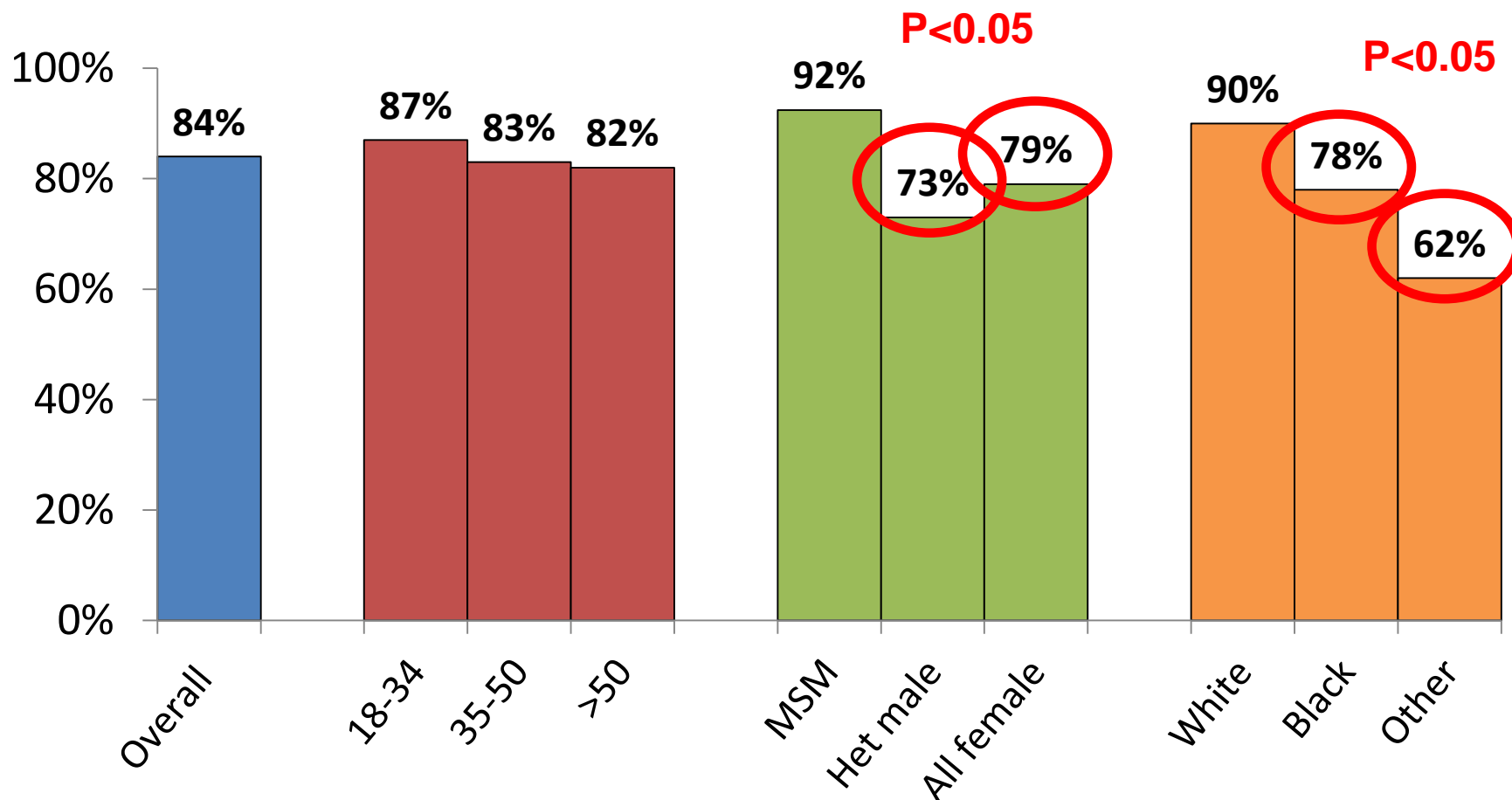


*96.5% of respondents reported having a GP



Disclosure

“Apart from health care staff, have you told anyone that you have HIV?”

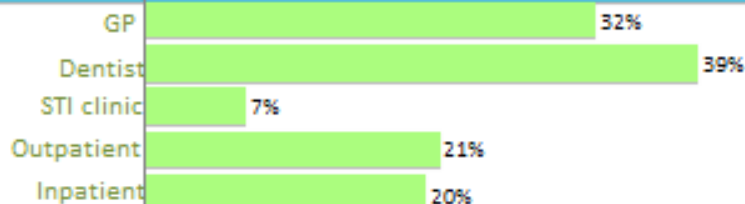




THE PEOPLE LIVING WITH HIV STIGMA SURVEY UK 2015

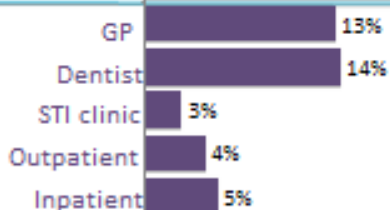
Reported experiences of stigma and discrimination in the last 12 months in the health care setting, 2015

Have you worried about being treated differently to other patients in any of the following settings?



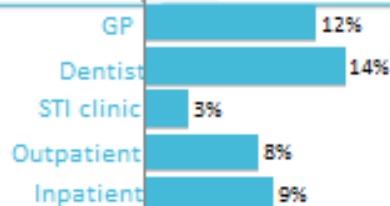
57% of people had worried about different treatment in at least one healthcare setting

Have you avoided care in any of the following settings?



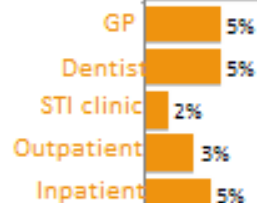
27% had avoided care when required in at least one setting

Have you been treated differently in any setting?



40% of people experienced at least one instance of negative treatment in a healthcare setting

Have you felt your treatment has been delayed or refused in any setting?



Have you experienced any of the following from a healthcare worker?

