



Public Health
England

Towards elimination of HIV in the most affected communities living in the United Kingdom

Valerie Delpech

On behalf of the HIV & STI teams at Colindale
Public Health England



Take home messages

- Combination prevention is working!
- We are witnessing and recording a down turn in new HIV diagnoses among gay and bisexual men
- 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
- Prep use likely to have also contributed to the fall in new diagnoses but we need to scale up and better track its use



Facts for 2015

>100,000 people living with HIV in the UK
About one in six unaware

> 85,000 people accessing HIV 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



Projected HIV incidence

Model of MSM epidemic in the United Kingdom

No. new infections
per year

5000
4000
3000
2000
1000
0

base test rate	ART at 350	base test rate	ART at diagnosis
test rate +	ART at 350	test rate +	ART at diagnosis
test rate ++	ART 350	test rate ++	ART at diagnosis

95% CI
given for two
lines to
illustrate
uncertainty
over mean
effect

2015

2020

2025

2030

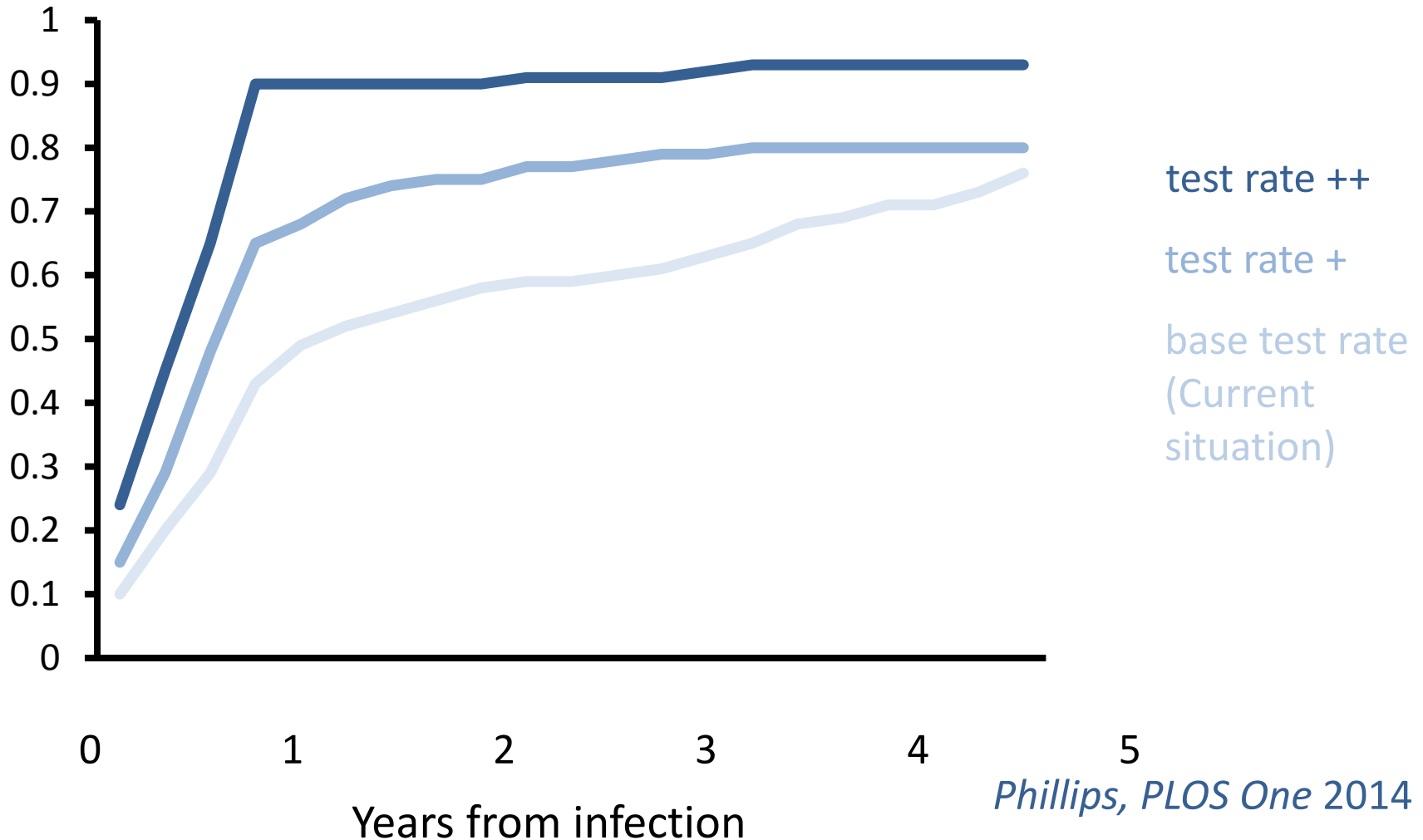
Year

Phillips, PLOS One 2014



Probability of diagnosis by time from infection, Model of MSM epidemic in the United Kingdom

Proportion



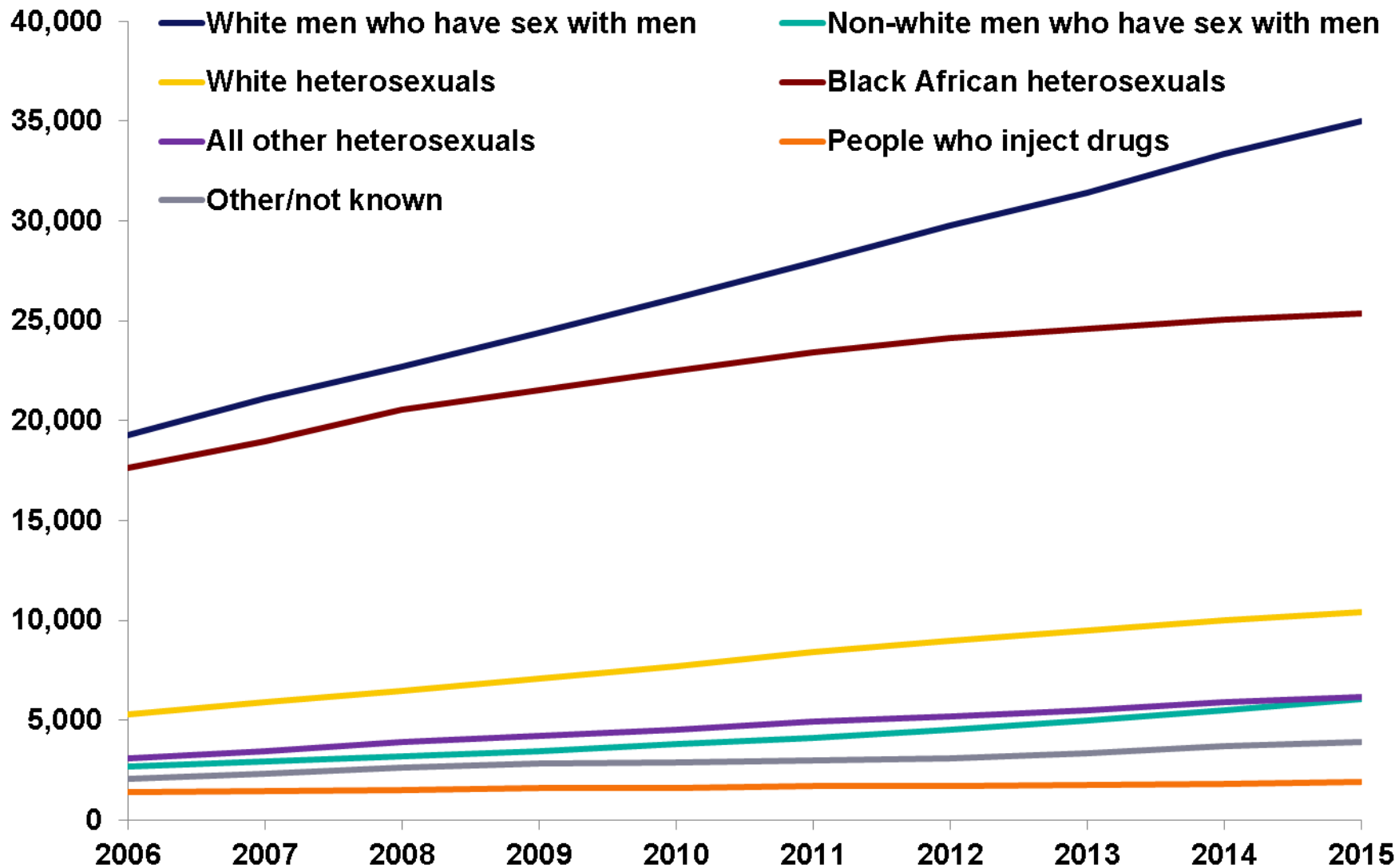


HIV in the UK

- Almost all HIV infections are acquired sexually
- HIV continues to impact most on stigmatised and marginalised communities (because of their sexual identity and/or behaviour, use of illicit drugs, residency status etc..)
- The epidemic is diversifying, with complex transmission dynamics
- Life expectancy is that of the general population when diagnosed promptly
- Care for some is complex and many patients have multiple health conditions
- People living with HIV continue to experience stigma by their communities, health care workers and work place
- These factors discourage HIV testing so that some people remain unaware of their infection for many years – this impacts on their health and risk of transmitting their infection to their sexual partners



People living with diagnosed HIV, UK, 2006 - 2015





Public Health
England

People accessing HIV care



168

Clinics submitted 4
consecutive quarters of
HARS data



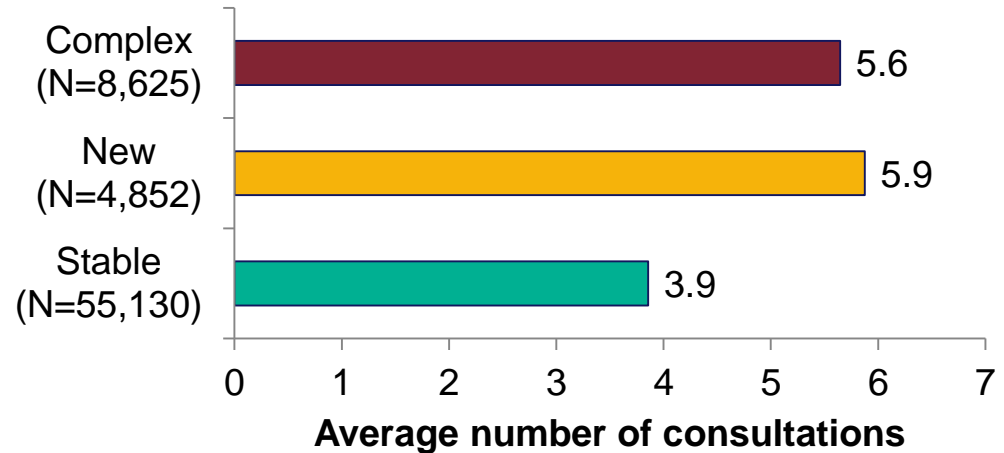
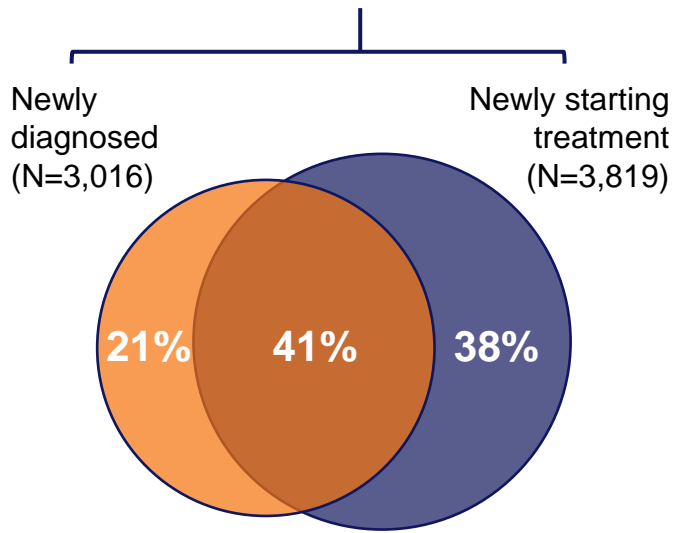
68,607

Patients in 2016 (85% of
patients in 2015)



4.2

Average annual number
of consultations





Context

- Open access, high quality and free and STI & HIV testing and care
- Long history of health promotion programmes with relatively high uptake of condoms among gay men
- New NICE testing guidelines
- New testing modalities (POCT, home sampling and testing)
- New treatment guidelines promoting earlier treatment for TasP
- PROUD trial
- Internet access of Prep



Monitoring

What we monitor

- New HIV diagnoses by setting and CD4 count
- HIV testing offer and uptake through STI clinics
- Uptake of antiretroviral therapy after diagnosis
- Estimates of undiagnosed infections
- Estimates of HIV incidence rates in MSM
 - 5-10 /1,000 overall
 - 30+/1,000 among men with a bacterial infection

WHO refers to HIV elimination as <1 new case/ 1,000 population

- Behaviour data

Don't monitor - PREP yet!

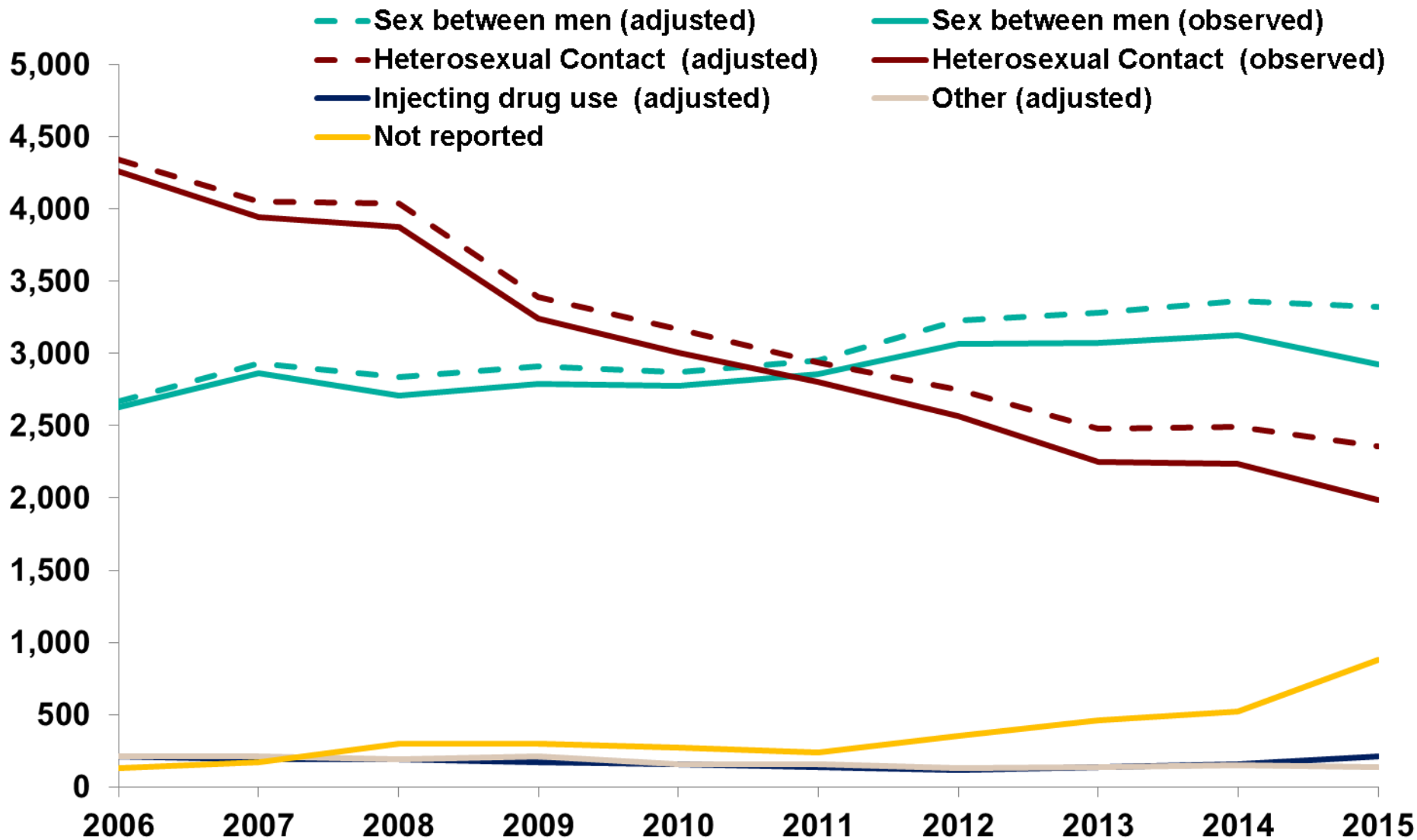


Public Health
England

New diagnoses



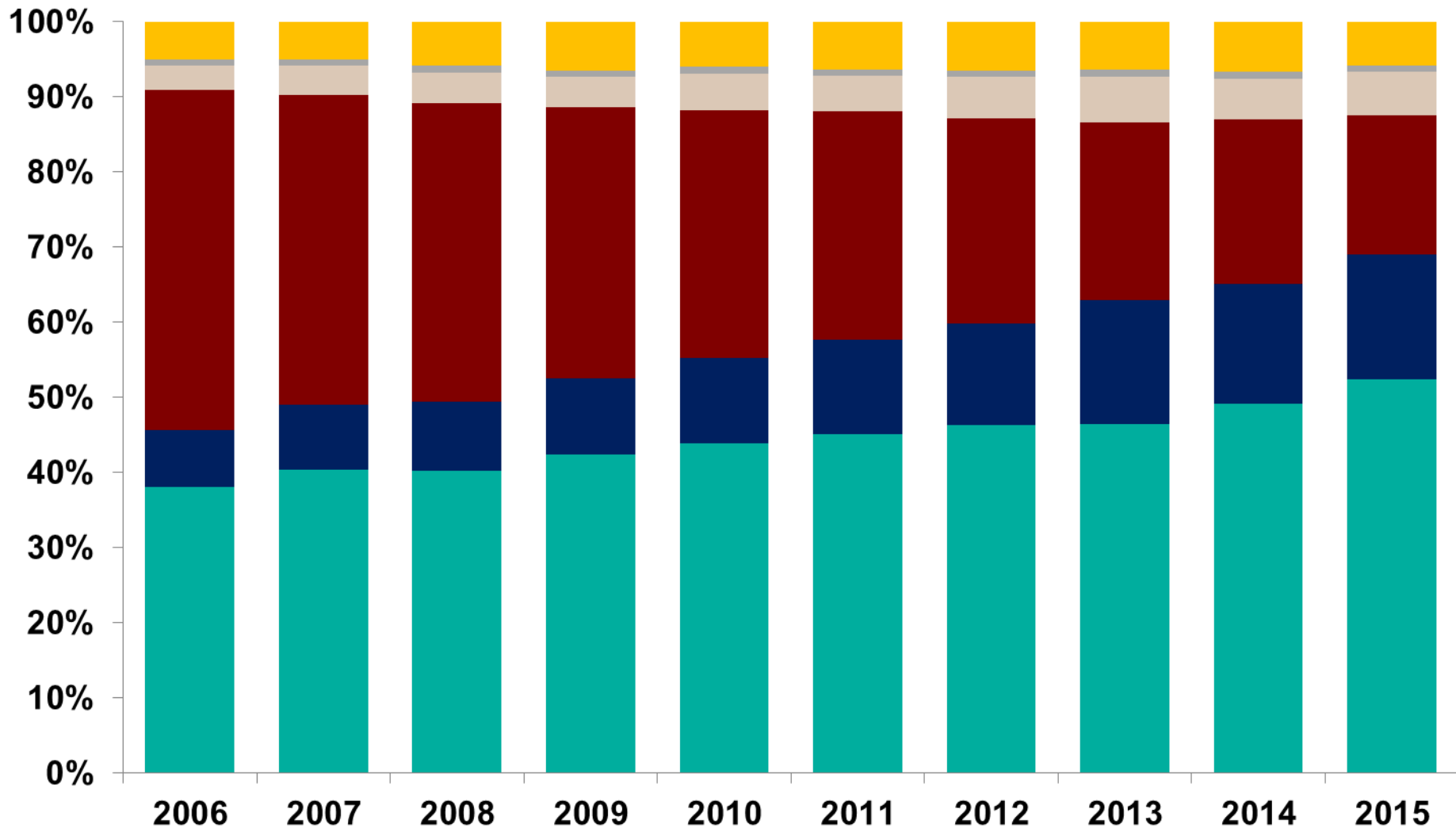
Number of people newly diagnosed with HIV by exposure category: United Kingdom, 2006 - 2015





Proportion of people newly diagnosed with HIV by world region of birth: United Kingdom, 2006 - 2015

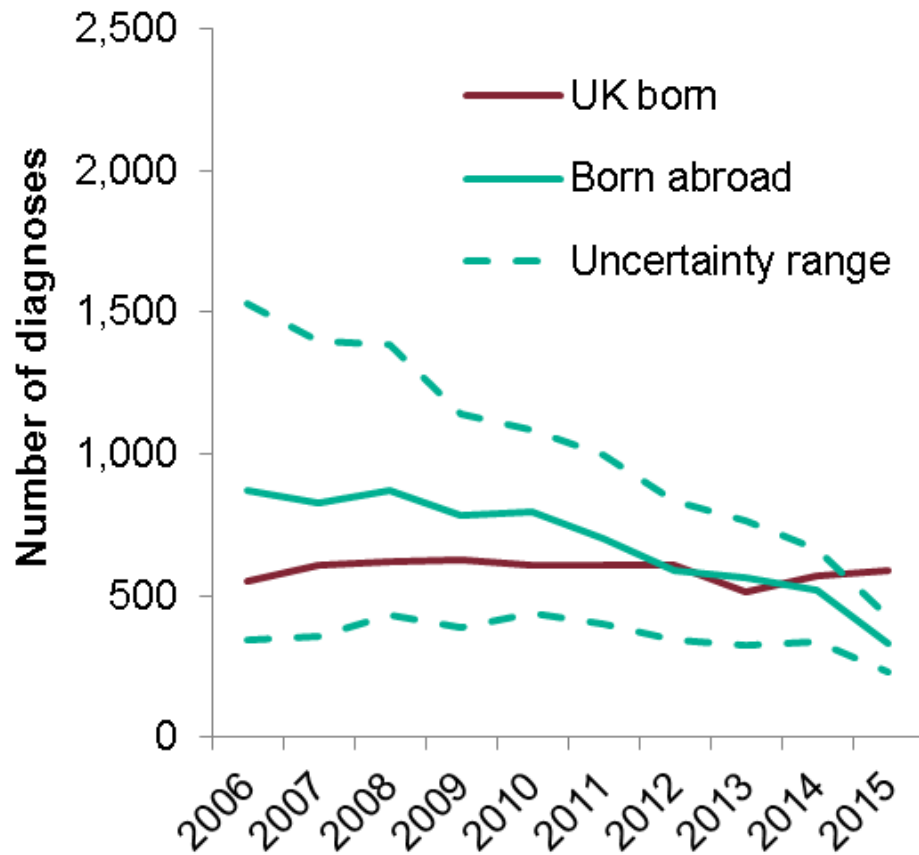
■ UK ■ Rest of Europe ■ Africa ■ Asia ■ Australasia ■ The Americas



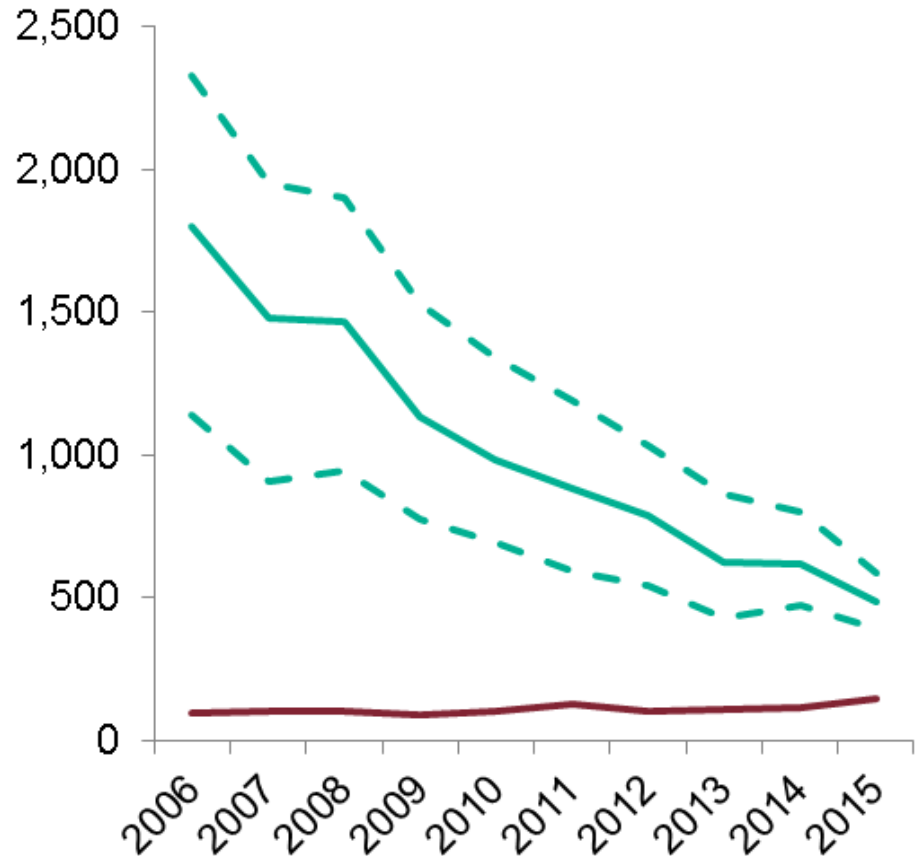


New HIV diagnoses among heterosexuals by region of birth and probable country of acquisition: UK, 2006-2015

a) UK acquired



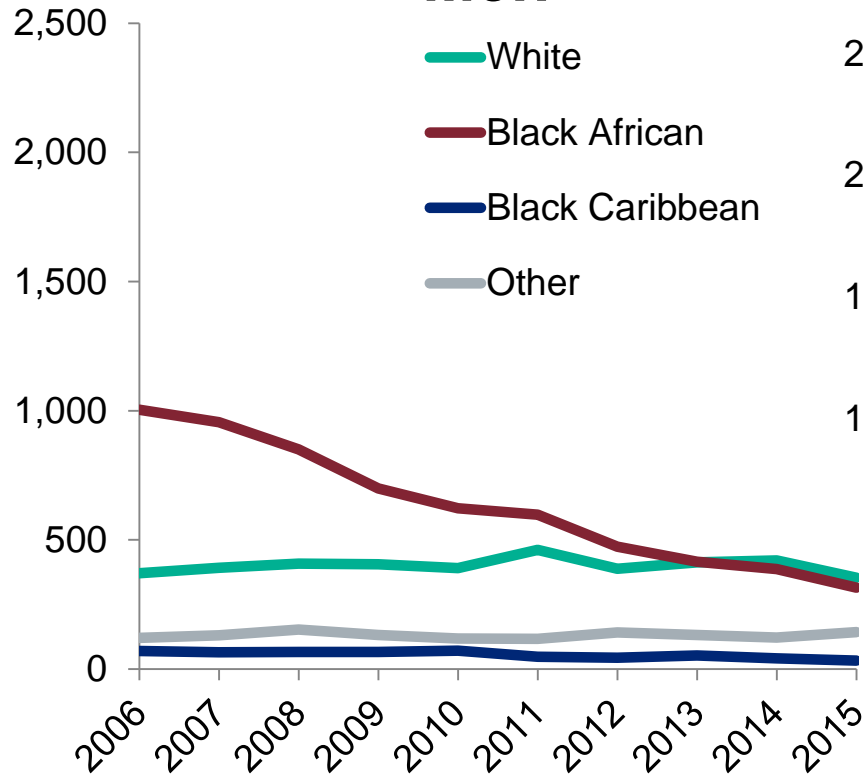
b) Acquired abroad



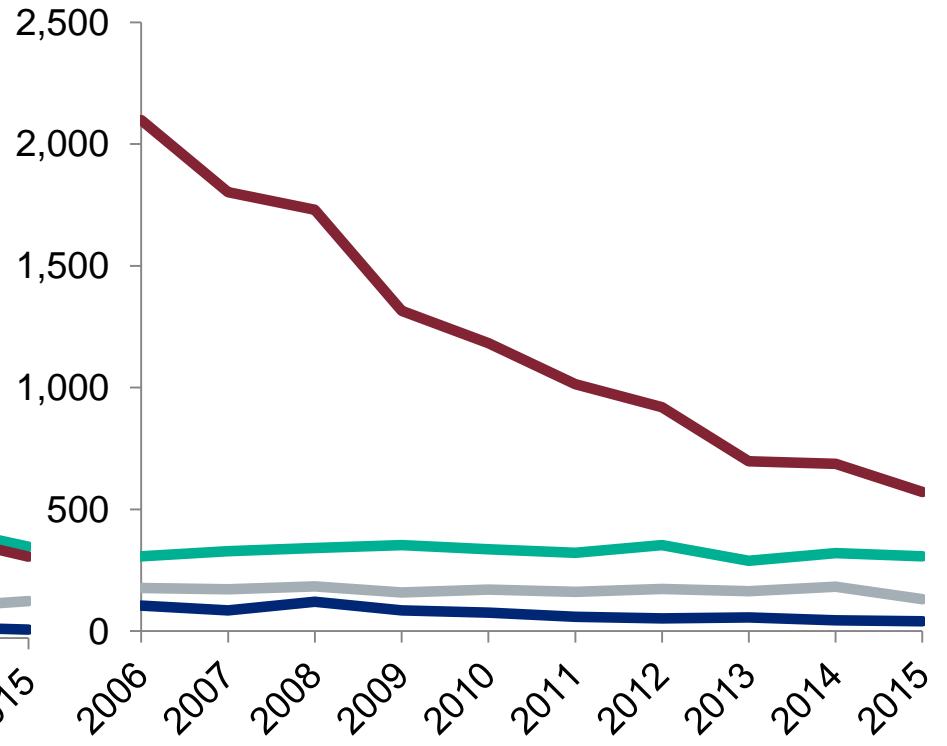


New HIV diagnoses among heterosexuals, UK

Men

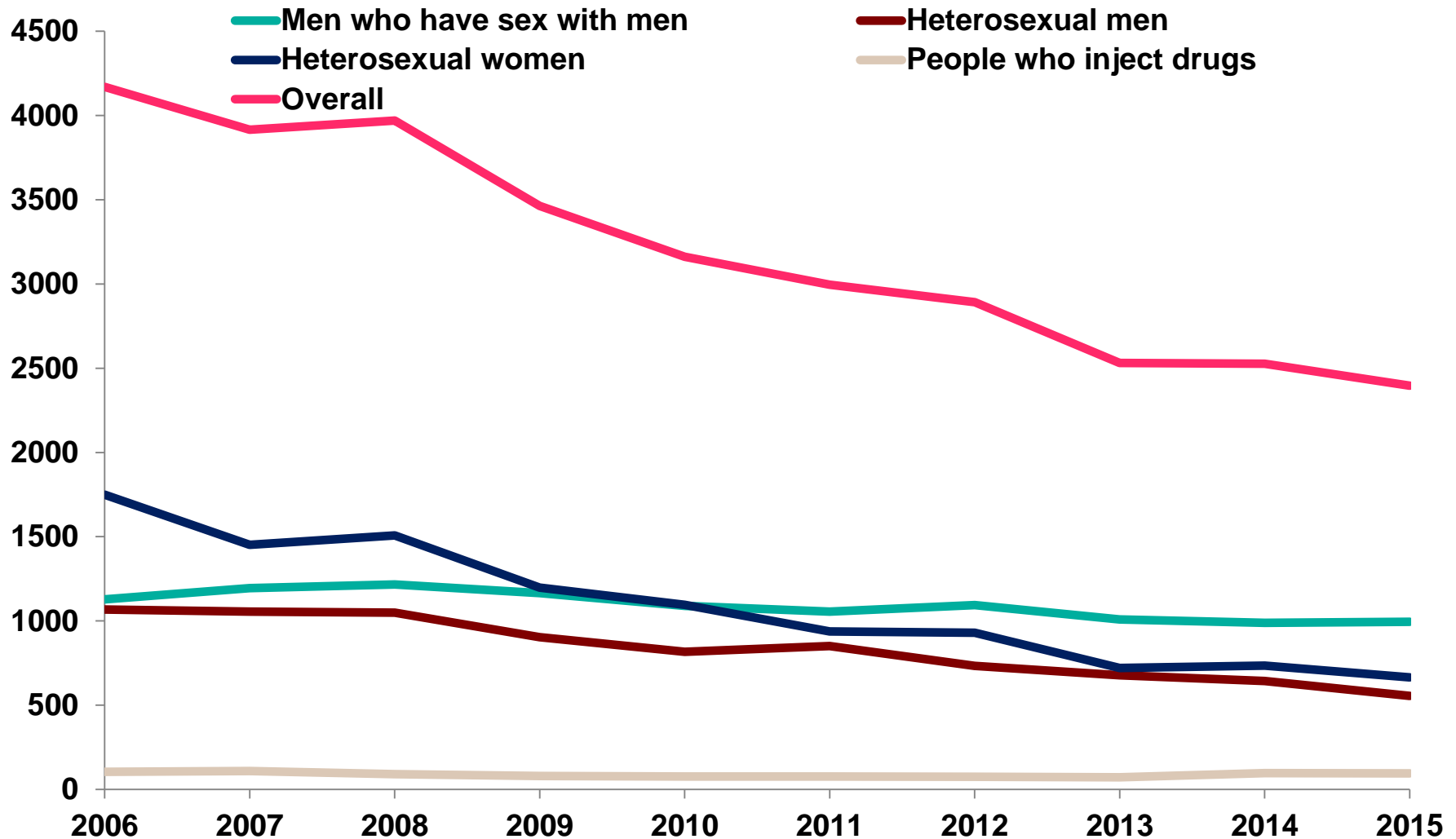


Women



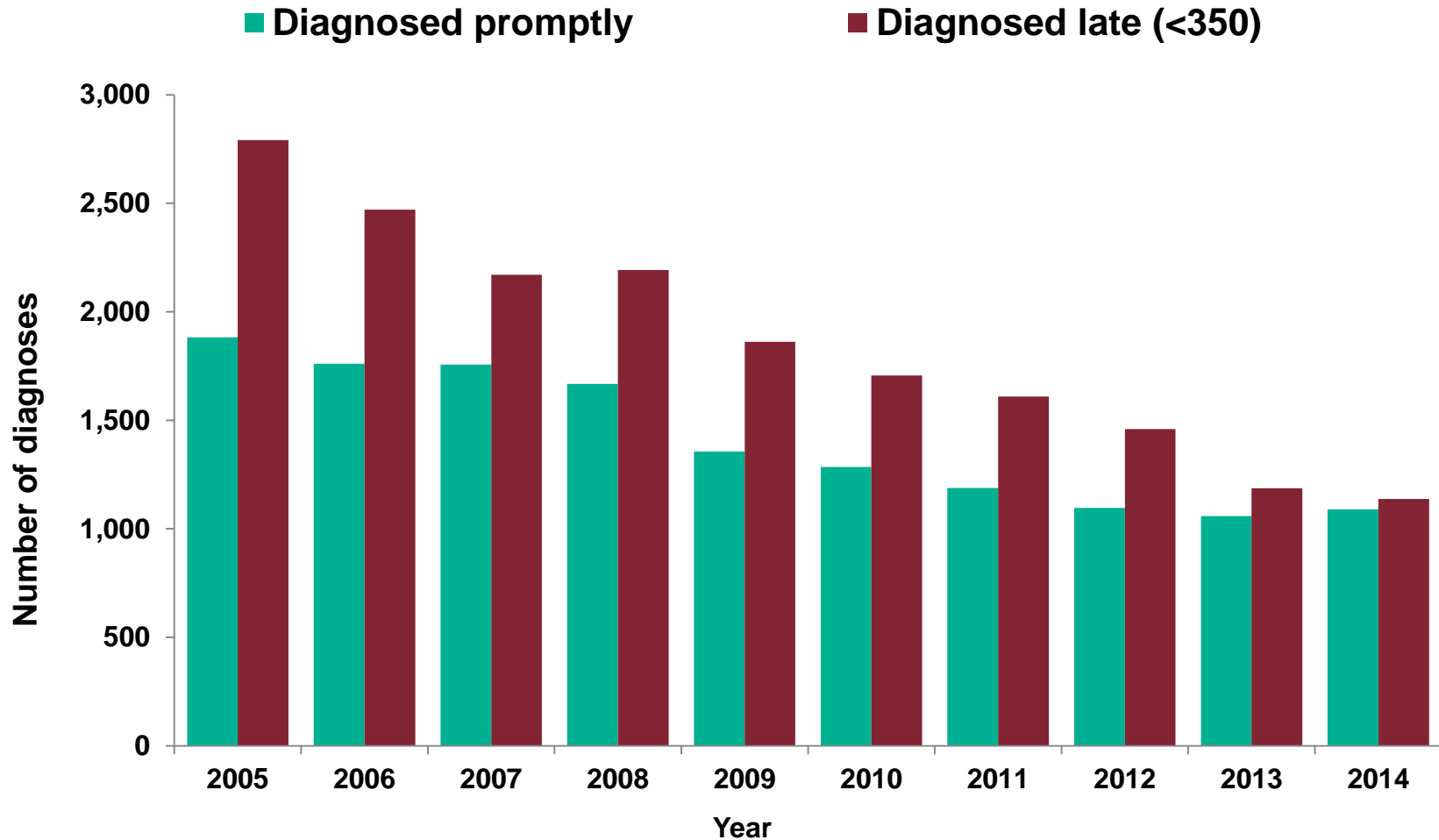


Number of people diagnosed at a late stage of HIV infection by exposure category: UK



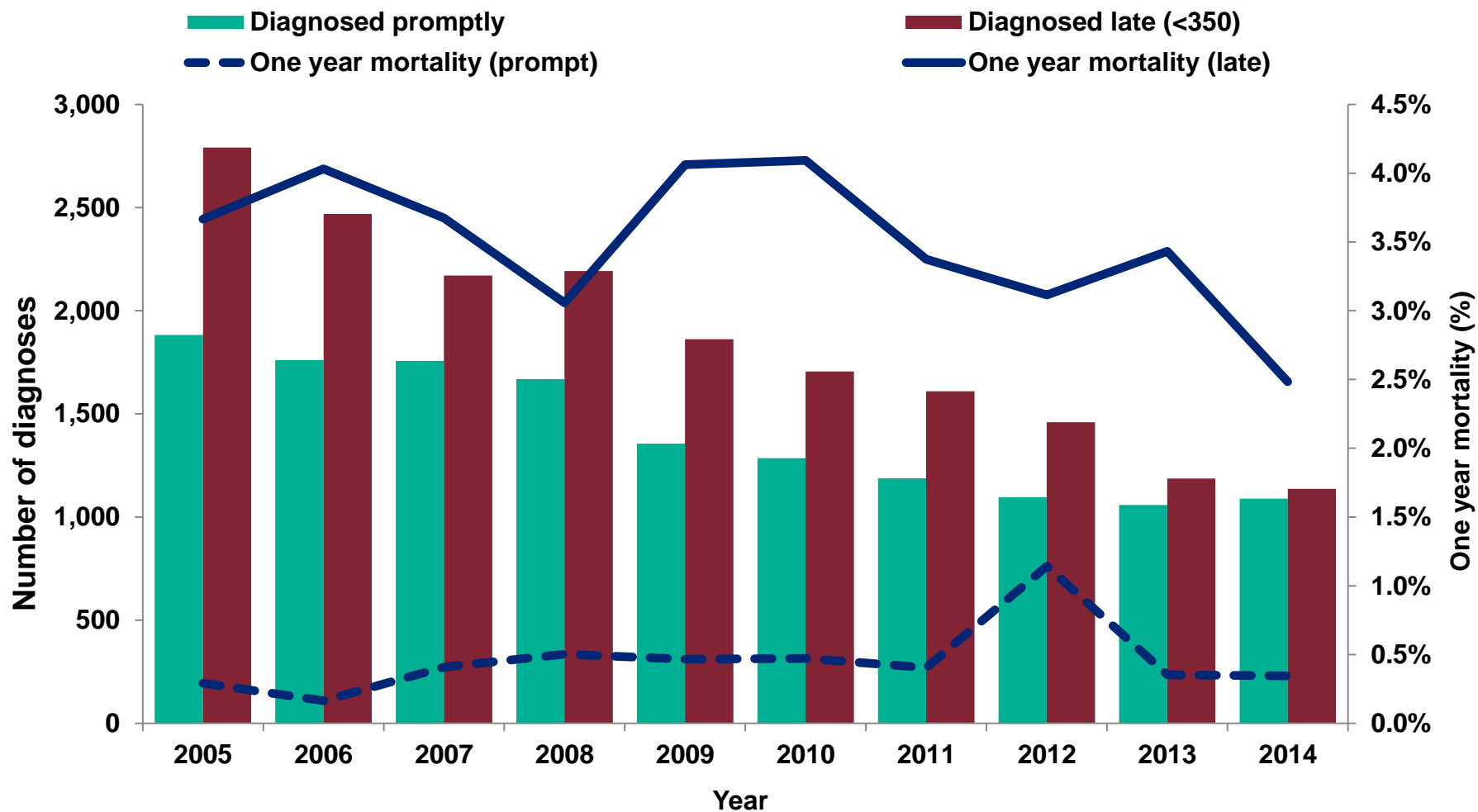


New HIV diagnoses (prompt and late) among heterosexuals: UK



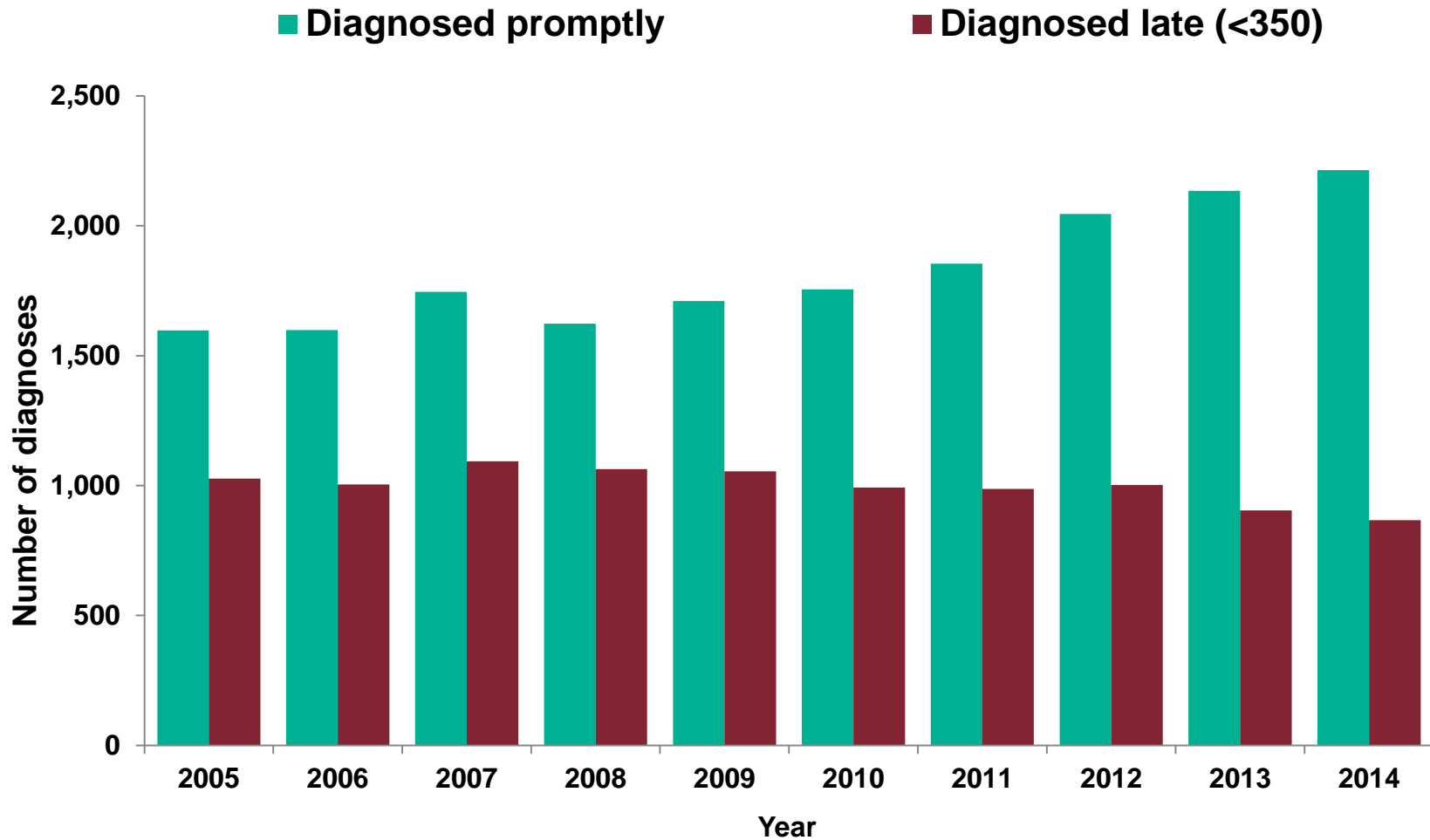


New HIV diagnoses and one year mortality (prompt and late) among heterosexuals: UK



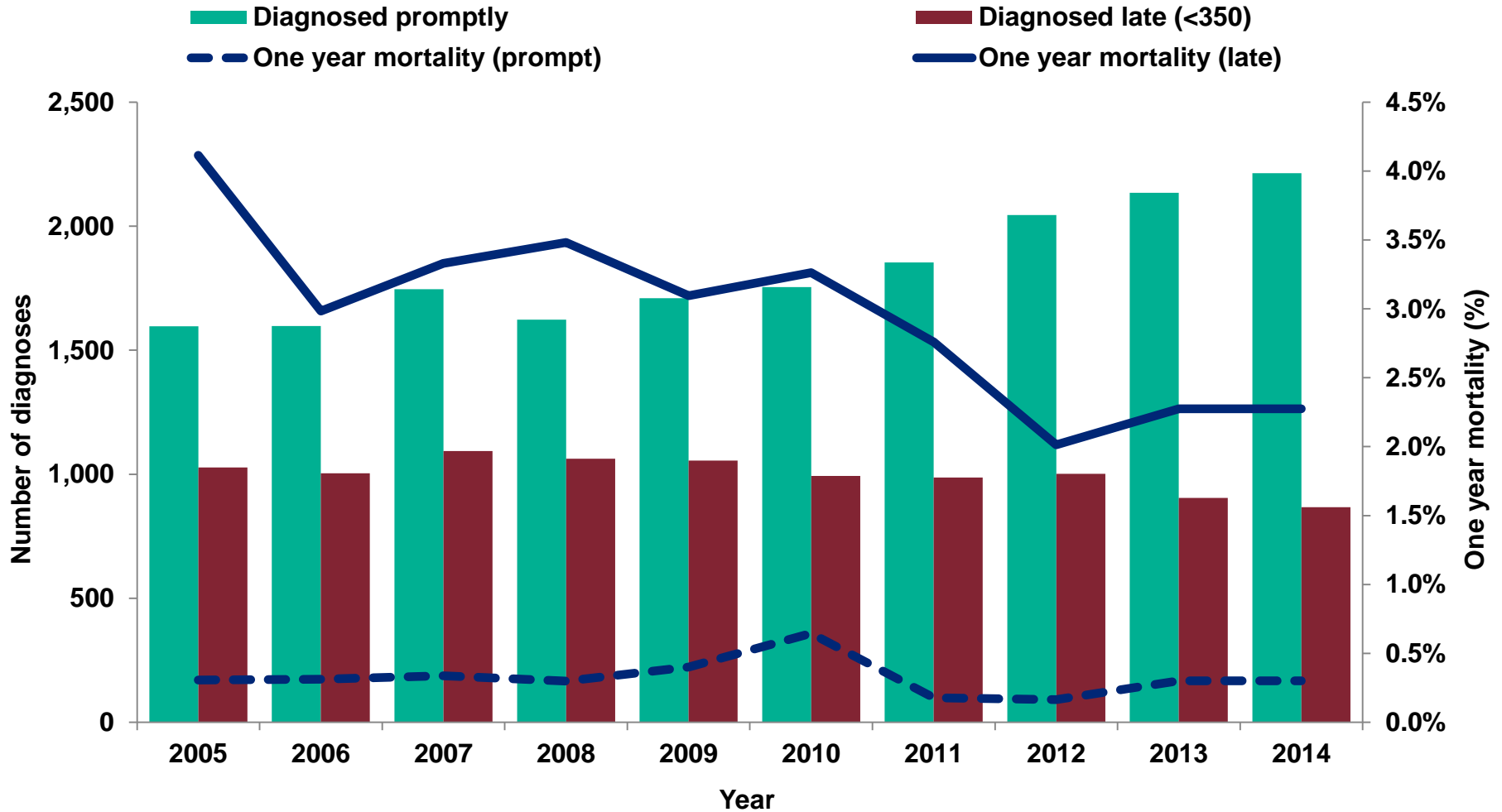


New HIV diagnoses (prompt and late) among MSM: UK





New HIV diagnoses and one year mortality (prompt and late) among MSM: UK



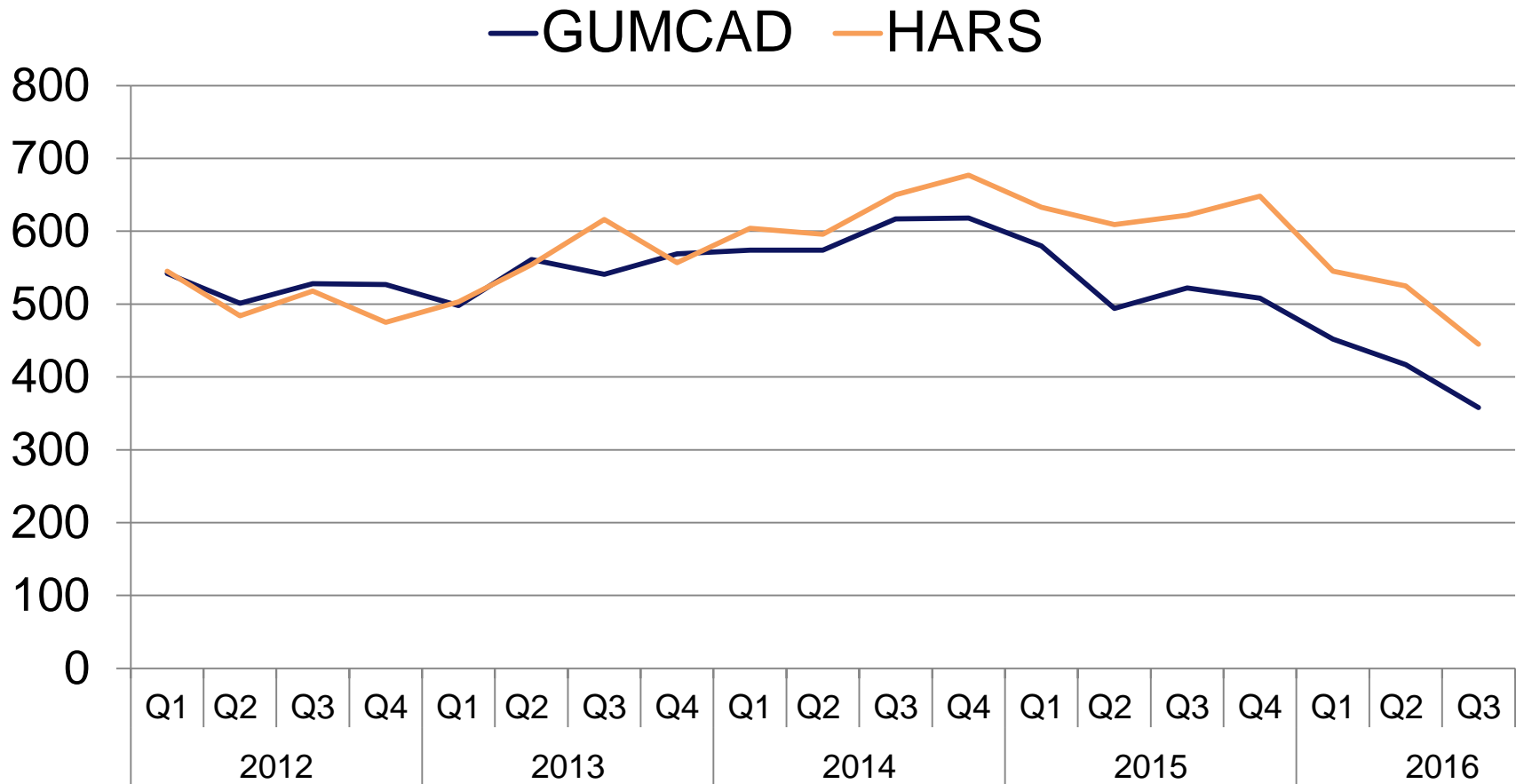


Public Health
England

Diagnoses through STI clinics



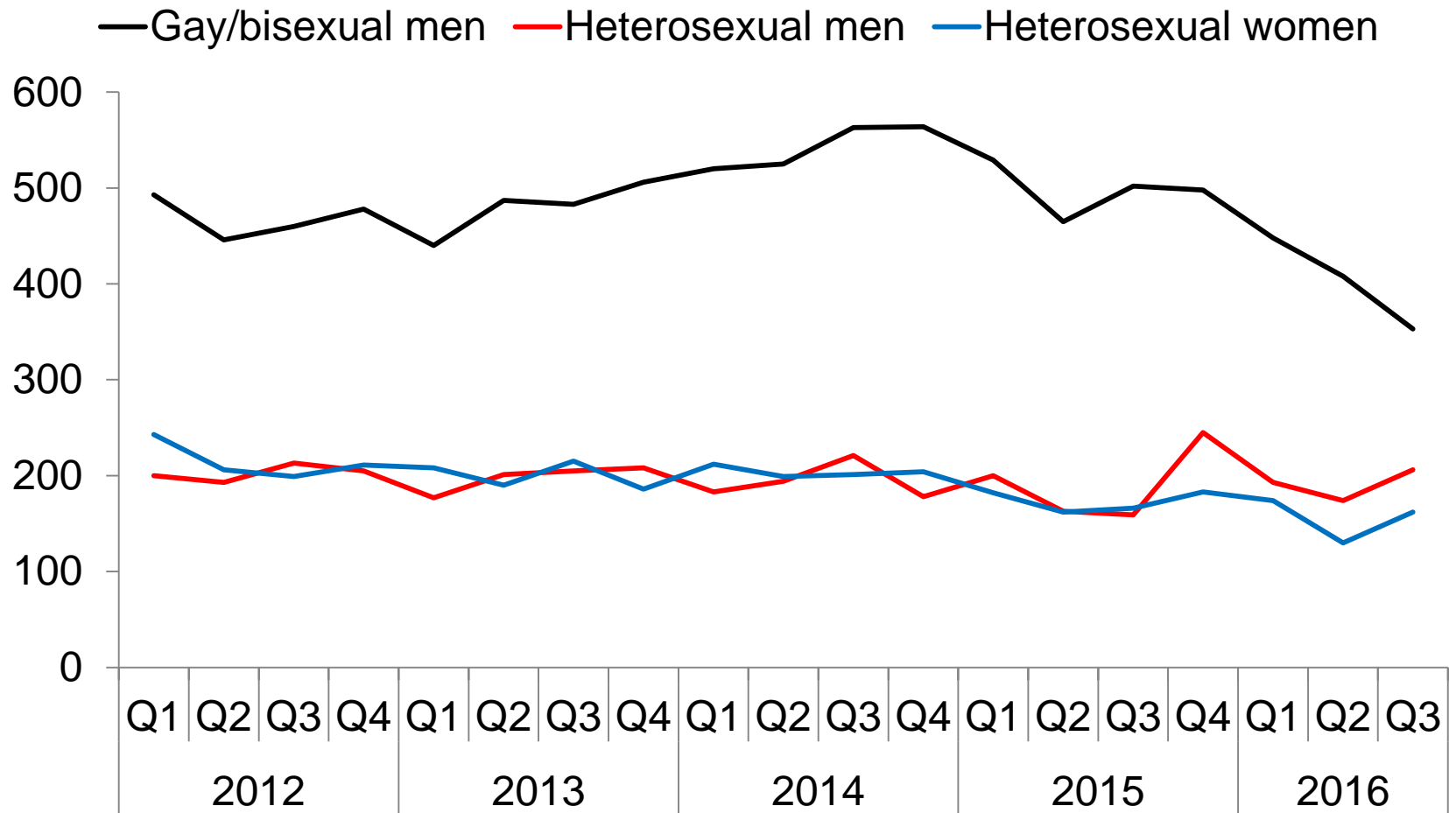
New HIV diagnoses among gay & bisexual men in England



Note: There has been a year on year increase in the median CD4 cell count at diagnosis over this period indicating earlier diagnosis



New HIV diagnoses among adults attending sexual health services





Public Health
England

Investigation into drop in new diagnoses among gay & bisexual men attending STI clinics

3 Clinic Strata

1. **Clinics with a large fall:** >20% drop and > 40 diagnoses between Oct 2014-Sep 2015 and Oct 2015-Sep2016

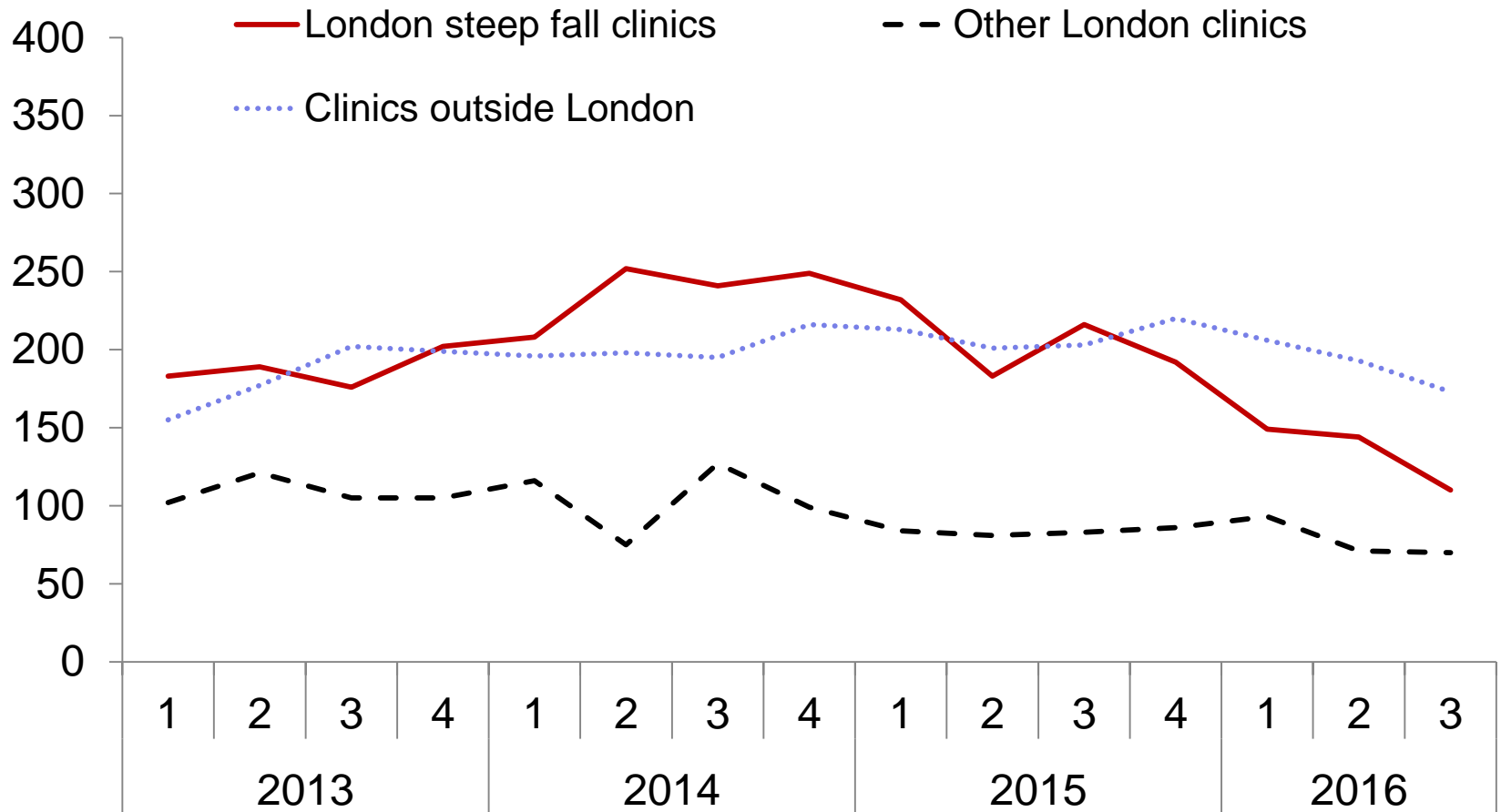
Dean St, Mortimer Market, Homerton, St Mary, Guy and St Thomas

2 Other London clinics

3 Clinics in other parts of England



New HIV diagnoses among gay men attending sexual health clinics England



Steep fall definition: Clinics with >20% decrease in HIV diagnoses between Oct 2014-Sep 2015 and Oct 2015-Sep 2016, and over 40 diagnoses during this period.



Public Health
England

Testing Testing Testing



Innovation and scaling up of HIV testing

- POCT widely used
- HIV Self Sampling:
 - person takes a sample (saliva or blood from a finger prick), and sends it to a laboratory for testing.
 - Results are then given by the service, advising you what to do next
 - THT and PHE services (discussed this pm)
- HIV Self Testing:
 - Person performs an HIV test on themselves, in a non-medical setting (e.g. home), and sees a result immediately
 - 6th April 2014: Repeal of the HIV testing and Services Regulations
 - SELPHII Study of underway

18-25
NOVEMBER
**EUROPEAN
HIV-HEPATITIS
TESTING
WEEK**
2016
TEST.TREAT.PREVENT.
www.testingweek.eu

Home

About Testing Week

Why test

Evidence

Get involved

Success stories

FA

Google™ Custom Search

FOLLOW US ON:



COUNTING DOWN TO EUROPEAN
HIV-HEPATITIS TESTING WEEK : NOVEMBER

1
DAYS

22
HOURS

33
MINUTE

Sign-up is now open for European HIV-Hepatitis Testing Week 2016

Now in its fourth year and the second time hepatitis testing has been included, European HIV-Hepatitis Testing Week will take place from 18-25 November 2016.

Testing week is spanning the length and breadth of the continent with partners participating from over 50 European countries. Check out the live feed to see the latest organisations that have signed-up to implement testing week activities in their country. Sign-up now to put your organisation on the map!

Sign up for European HIV
Testing Week 2016

National HIV Testing Week: 19 – 25 November 2016



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.

Terrence Higgins Trust logo: **terrence HIGGINS TRUST**

IT STARTS WITH ME logo

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. 268627) and in Scotland (SC039984). Company reg. no. 1778149.

Health & Care logo



Public Health
England

Testing of MSM in STI clinics

Information on new diagnoses and testing among all gay men attending sexual health clinics (GUMCAD)

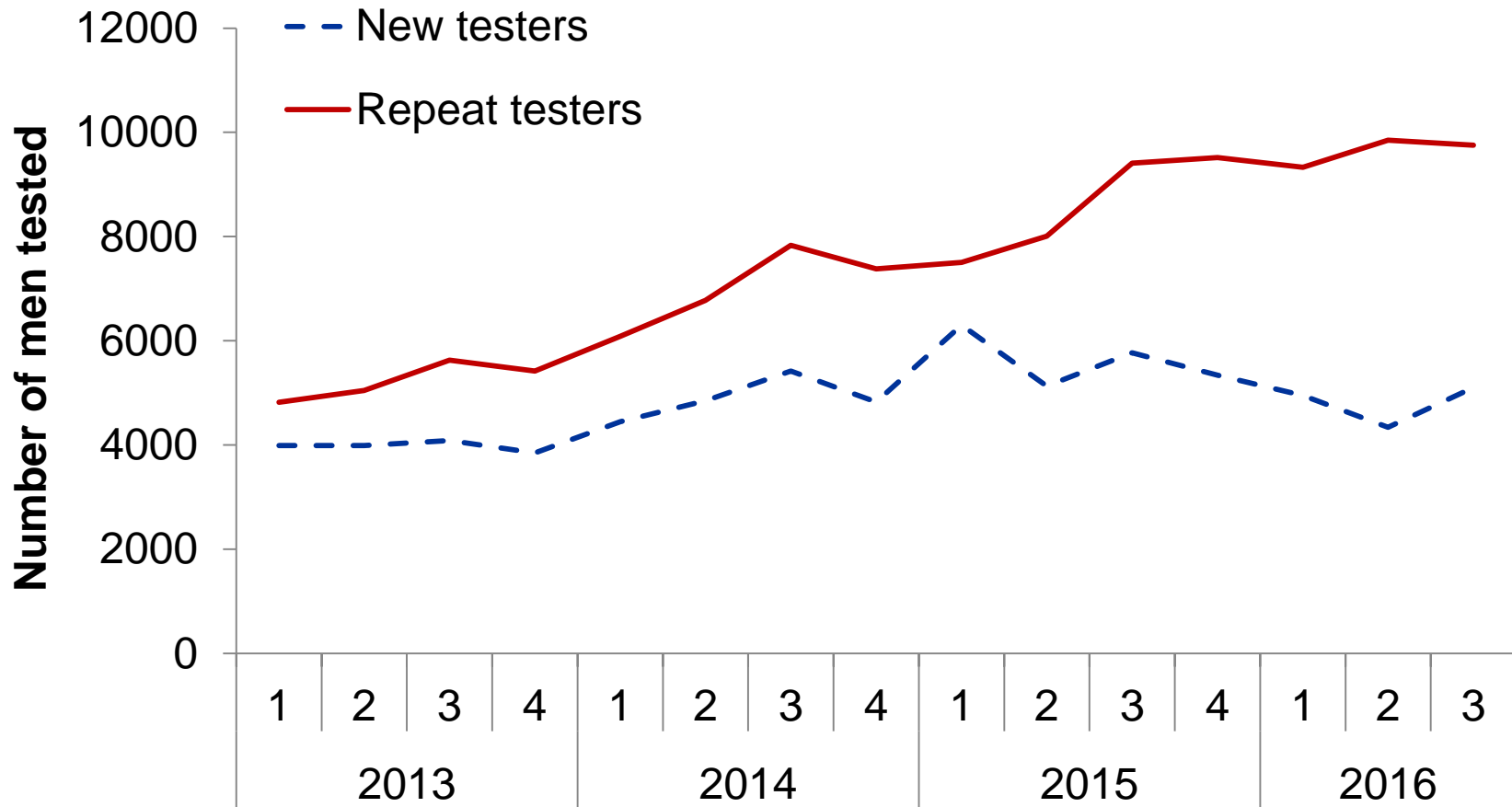
Clinic Strata

- 1. Clinic with a large fall**
- 2 Other London clinics and**
- 3 Clinics in other parts of England**

Testing data on men attending for HIV test at the same clinic in the last 2 years (repeat testers) and those who had a new test in last 2 years



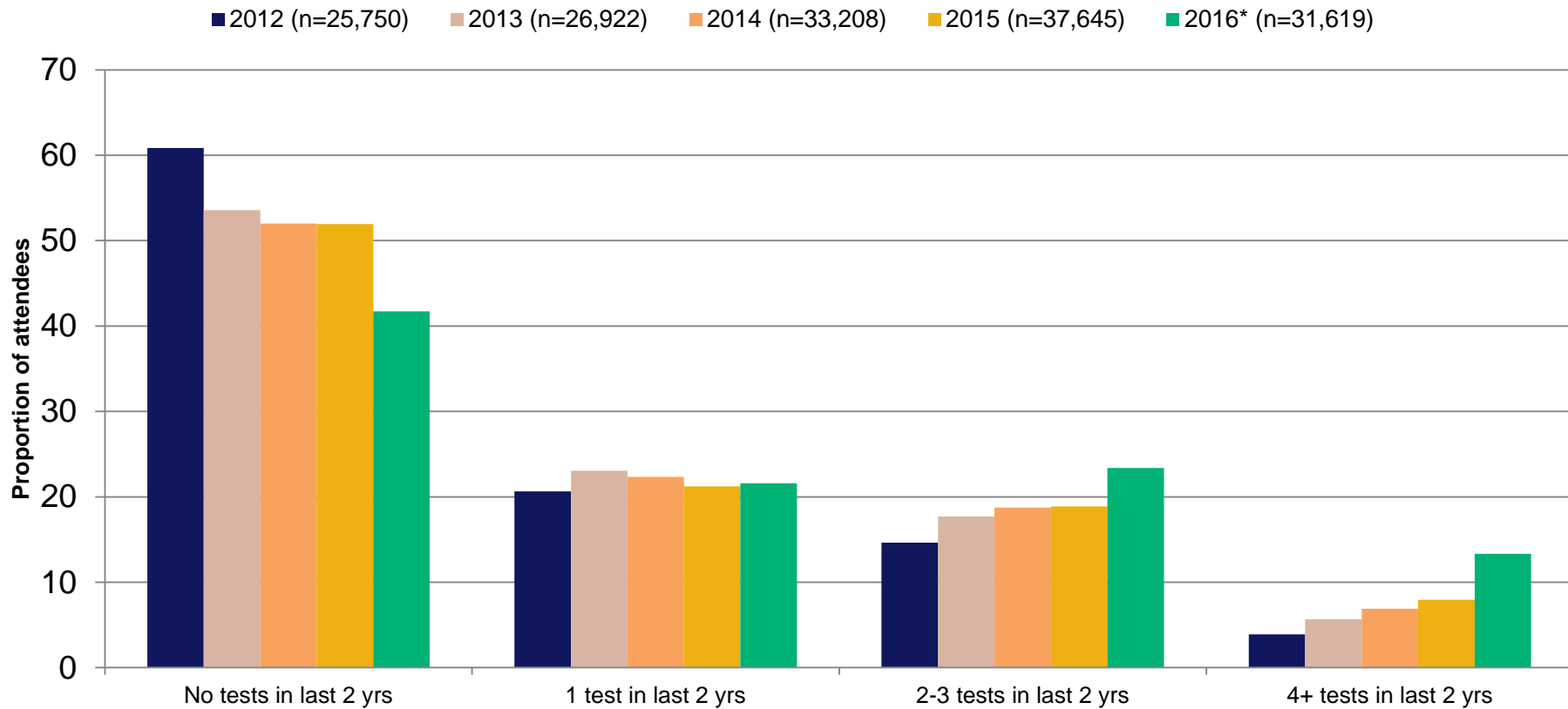
HIV tests among gay men attending London LF clinics by frequency of HIV testing



Steep Fall: Clinics with >20% decrease in HIV diagnoses between Oct 2014-Sep 2015 and Oct 2015-Sep2016, and over 40 diagnoses during this period.

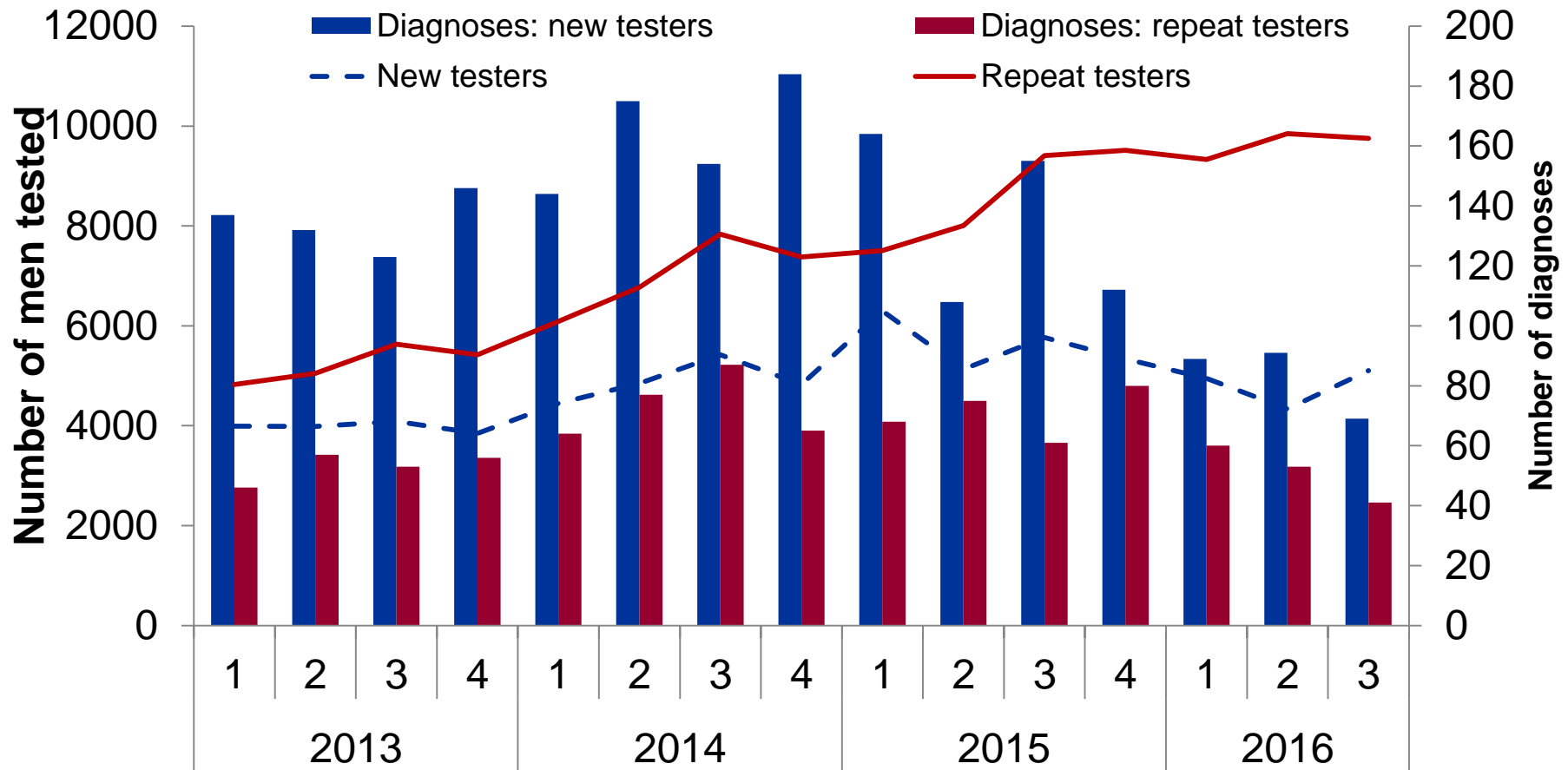


Frequency of HIV testing among men attending LF clinics (n=5)



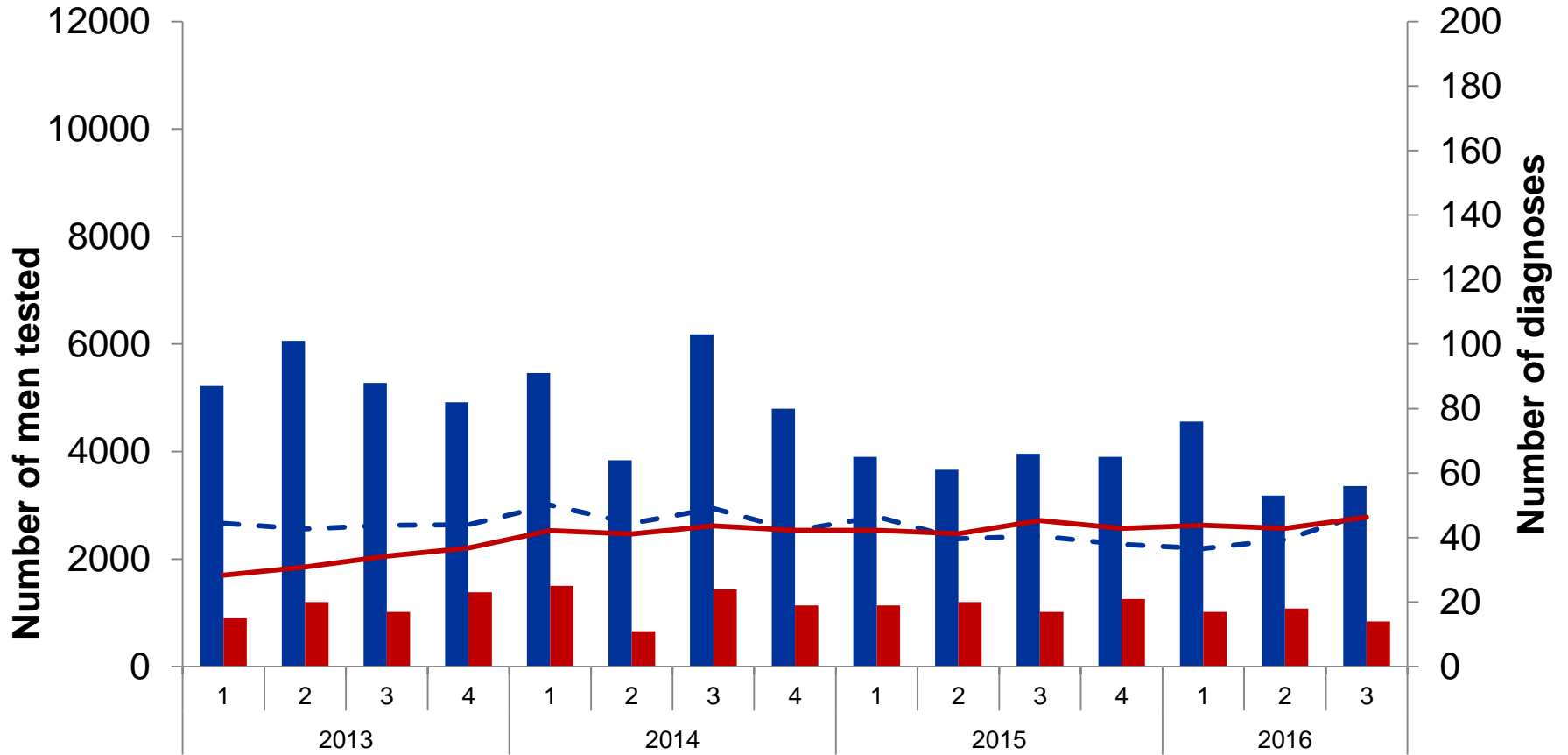


HIV tests and new diagnoses among gay men attending London LF clinics (N=5)



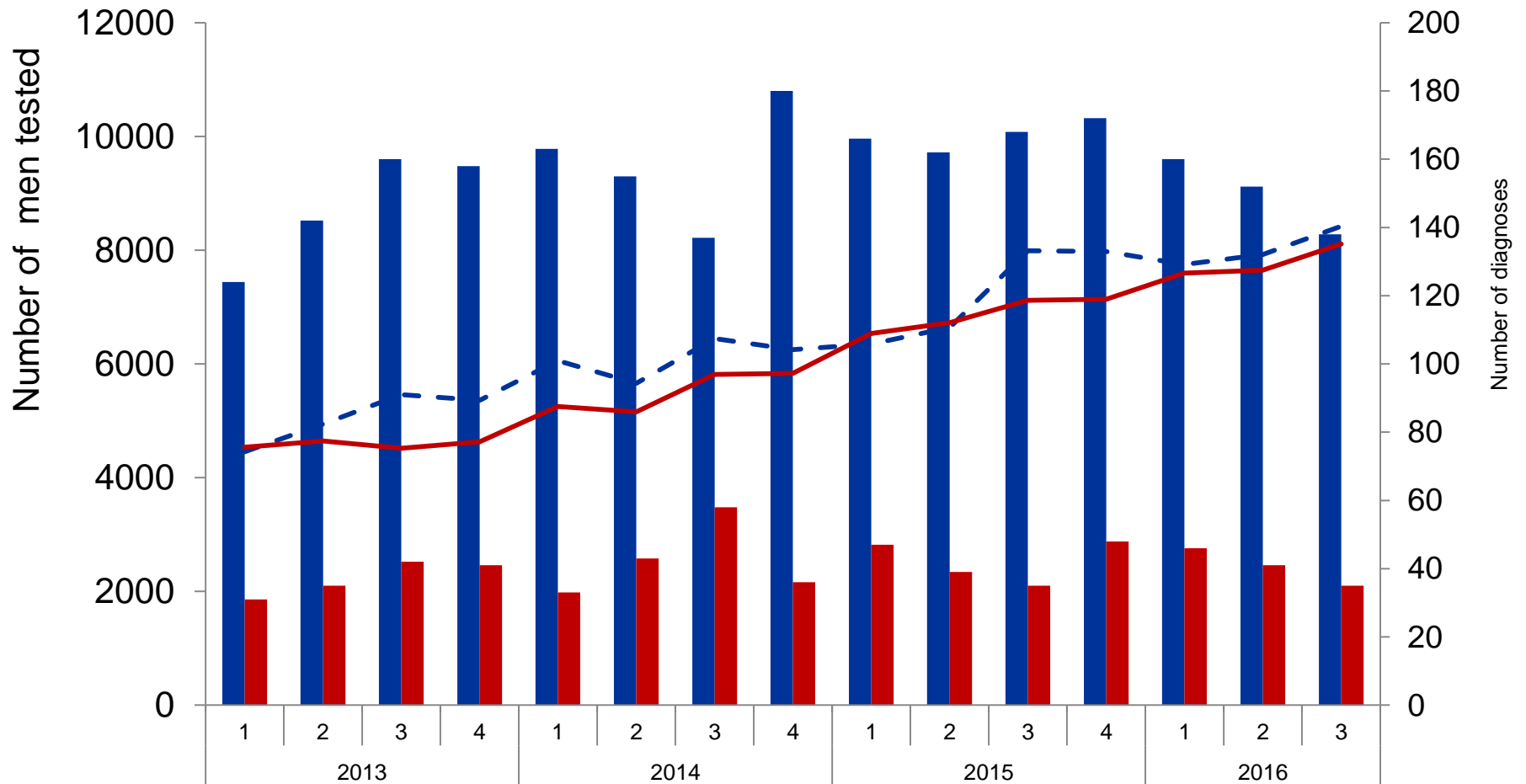


HIV tests and new diagnoses among gay men attending other London clinics (N=30)





HIV tests and new diagnoses among gay men attending clinics in the rest of England (N=190)



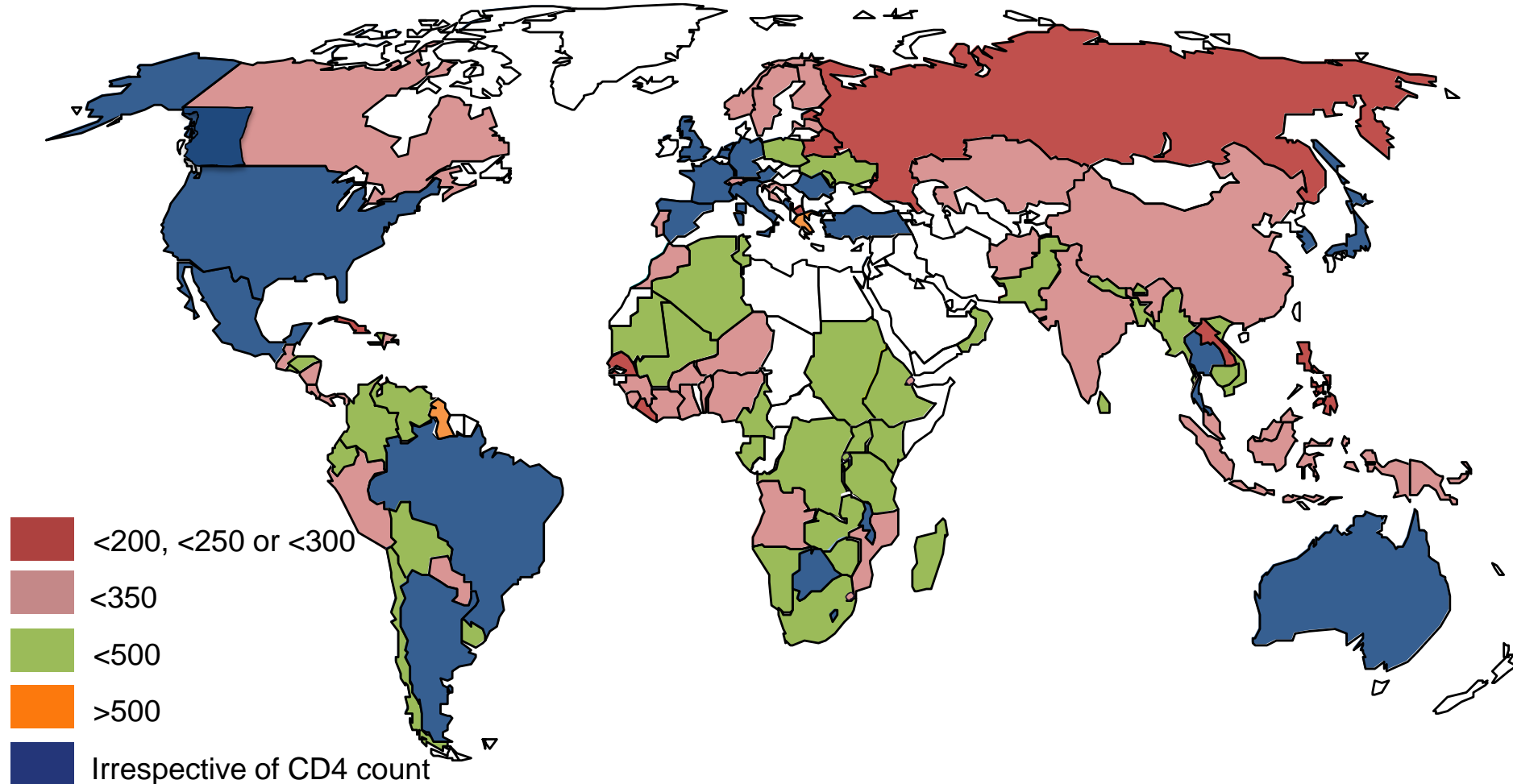


Public Health
England

Treatment as Prevention

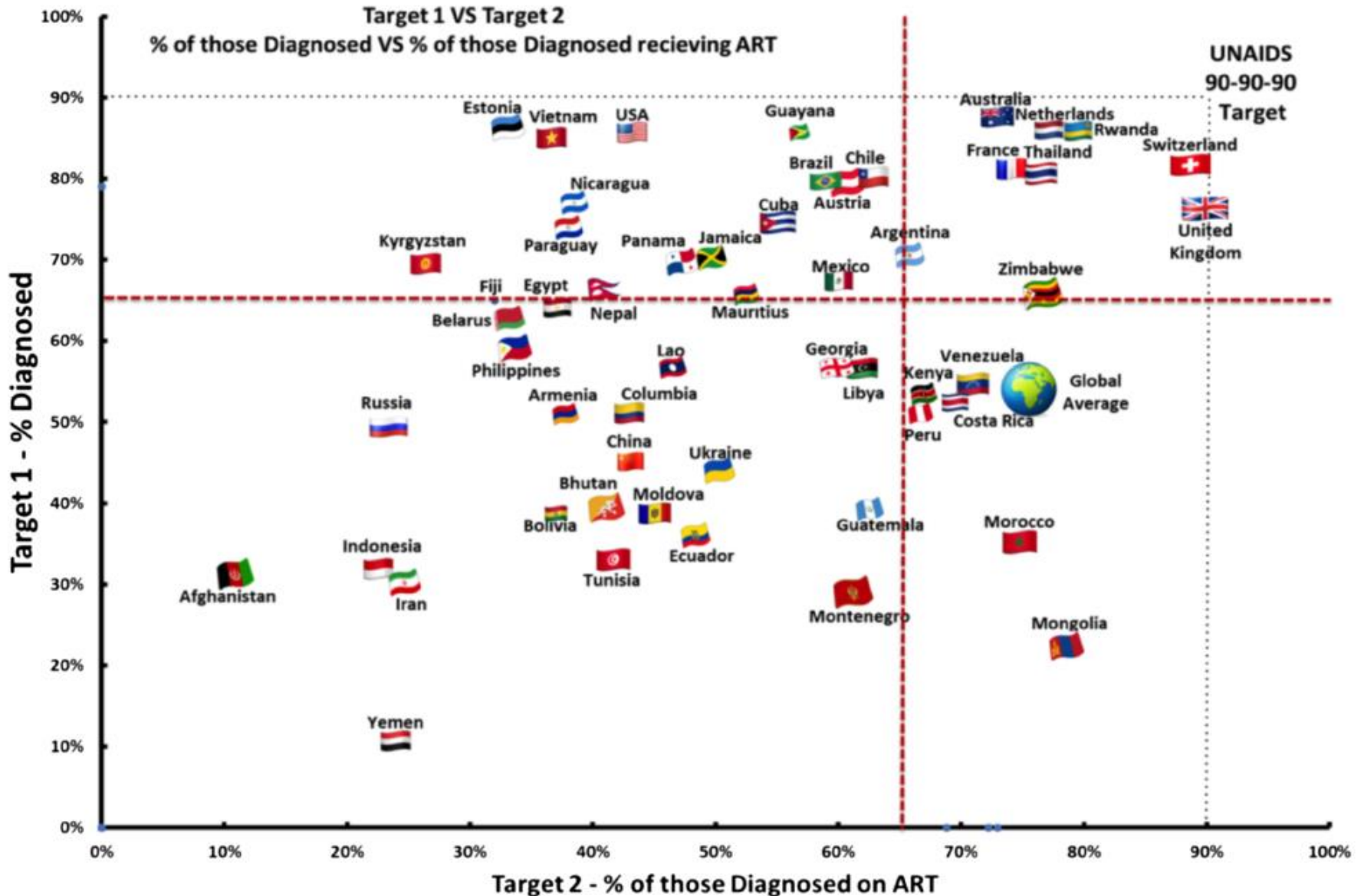
ART initiation by CD4 count (120 countries)

2015 WHO Recommendation : Irrespective of CD4 count



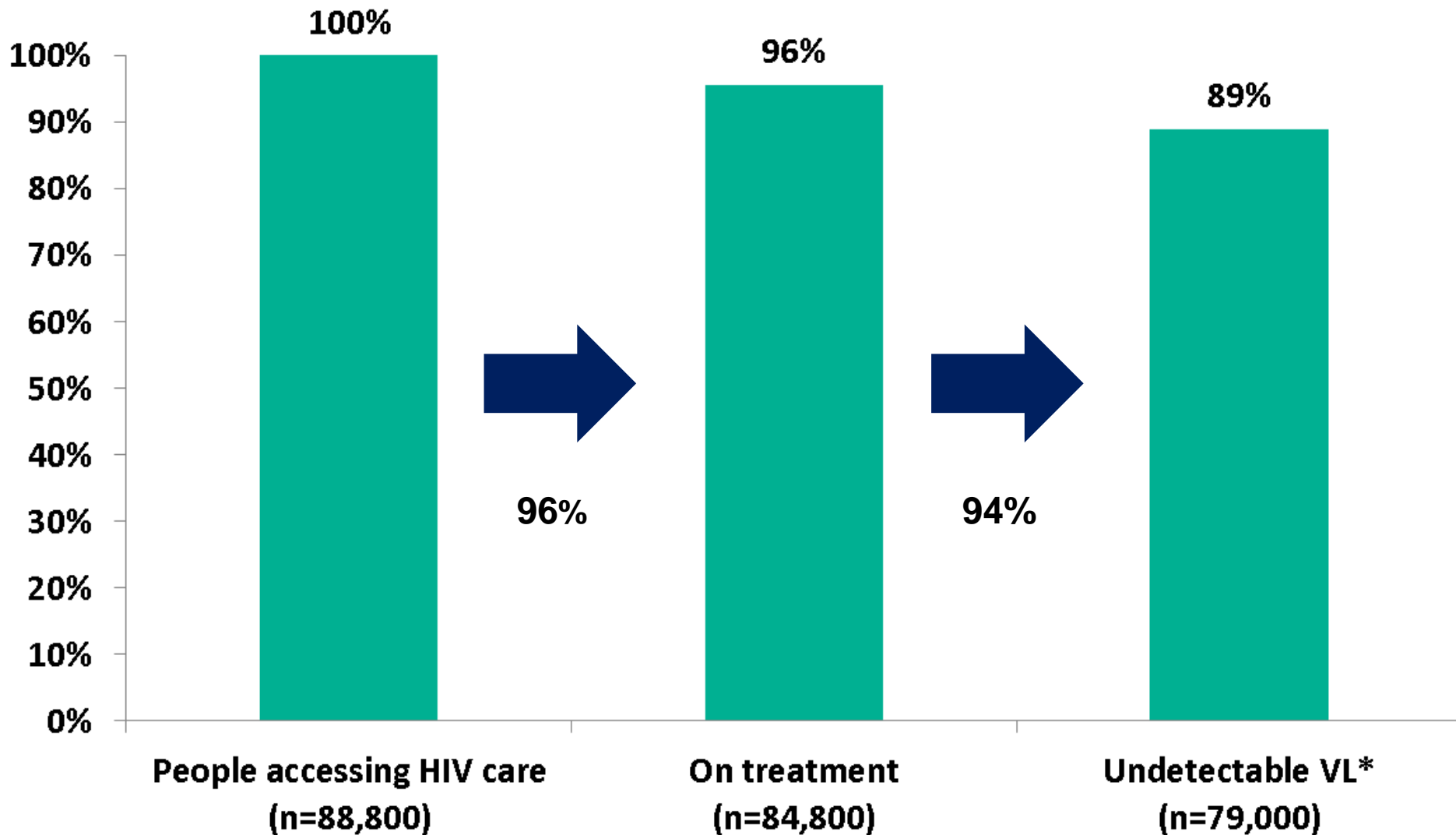
Source: www.HIVpolicywatch.org

% Diagnosed versus % on ART, Levi 2016



Levi J, Raymond A, Pozniak A, Vernazza P, Kohler P, Hill A. Can the UNAIDS 90-90-90 target be achieved? A systematic analysis of national HIV treatment cascades. *BMJ Glob Health* 2016;

Continuum of HIV care: United Kingdom, 2015

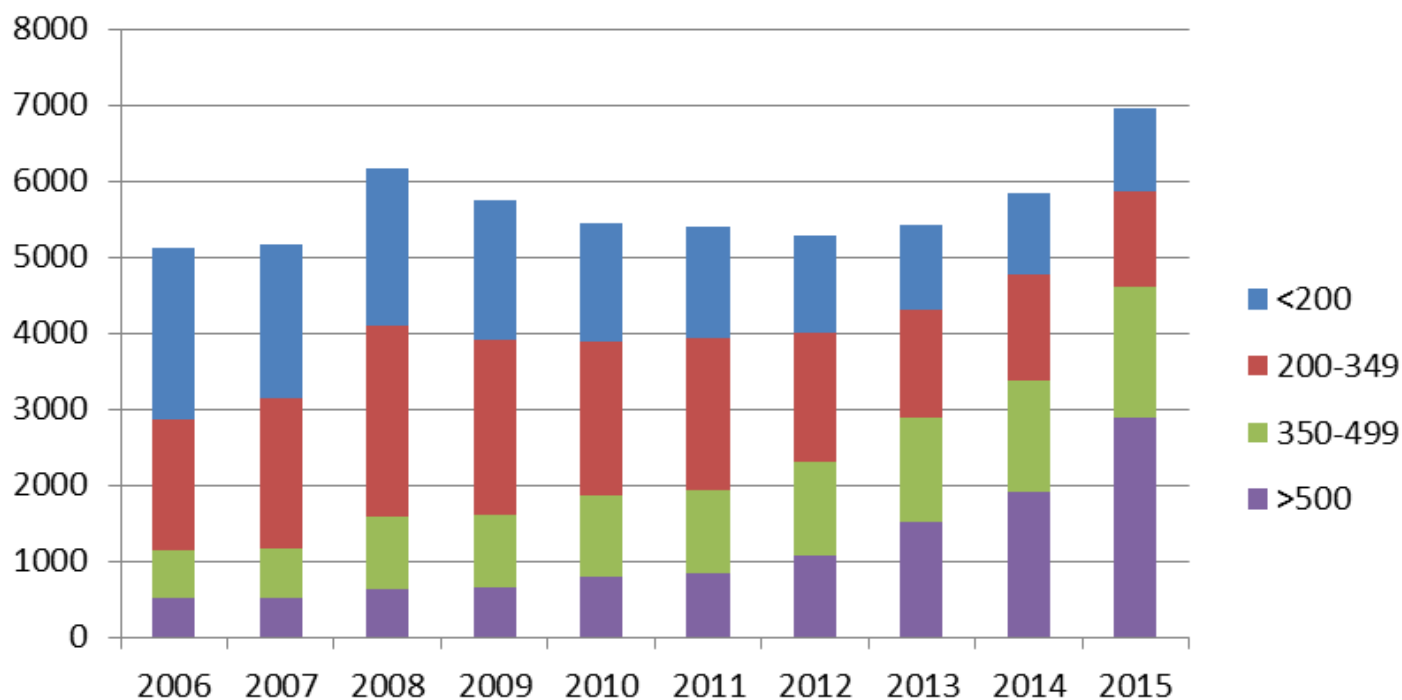


*Viral load (VL) ≤ 200 copies/mL

Excludes those with a missing viral load (14%)



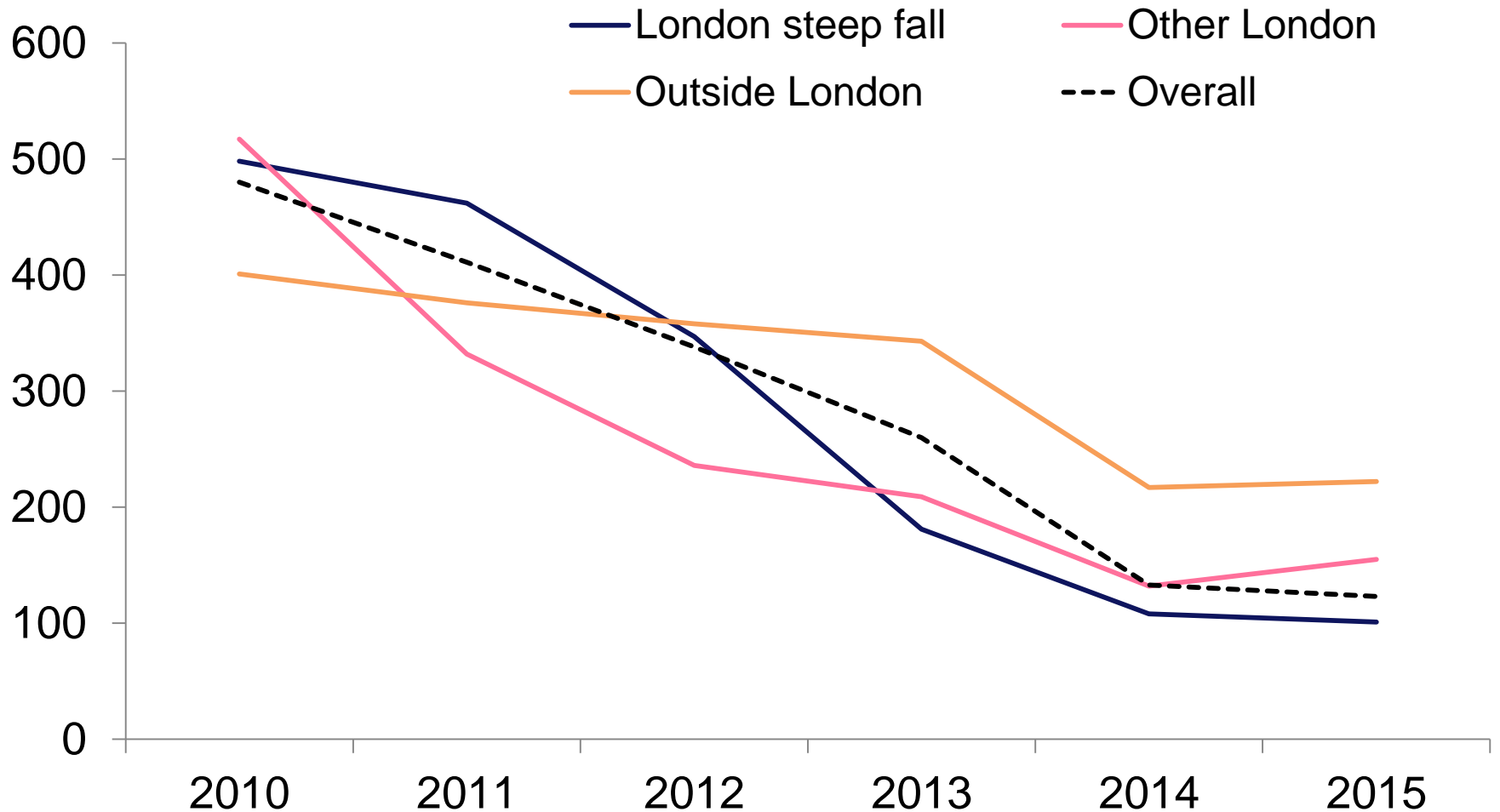
Adjusted* number of adults with diagnosed HIV infection starting treatment, by CD4 count at ART initiation: UK



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

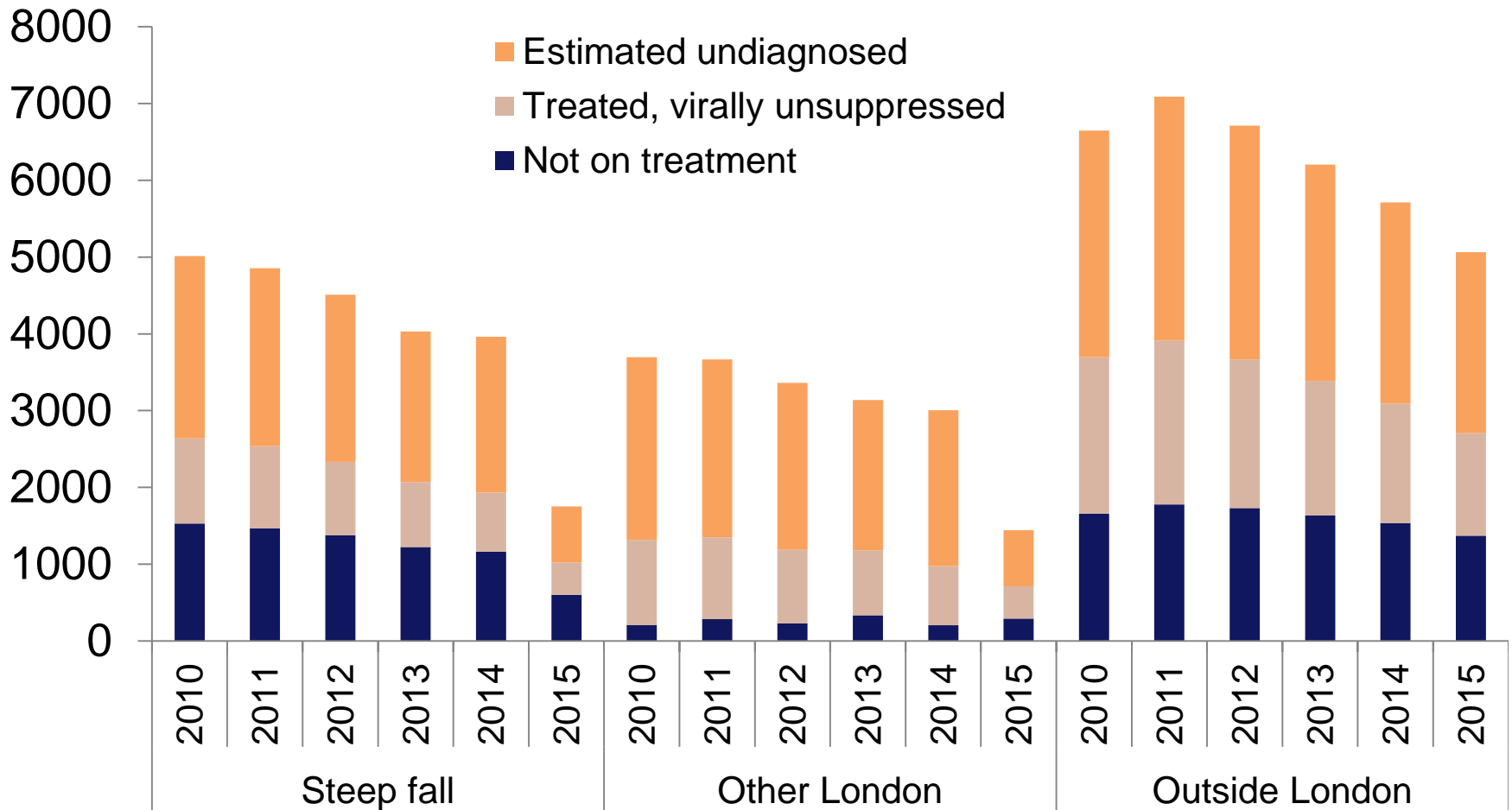


Median days from HIV diagnosis to ART initiation among gay men in England





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

Men with transmissible Viral Load

- Assumption that all men that are undiagnosed or have a viral load >200 copies/mL at date last seen for HIV care can potentially transmit HIV

Men at high risk of HIV acquisition

- HIV negative men with a documented STI in previous year was defined as **High risk**

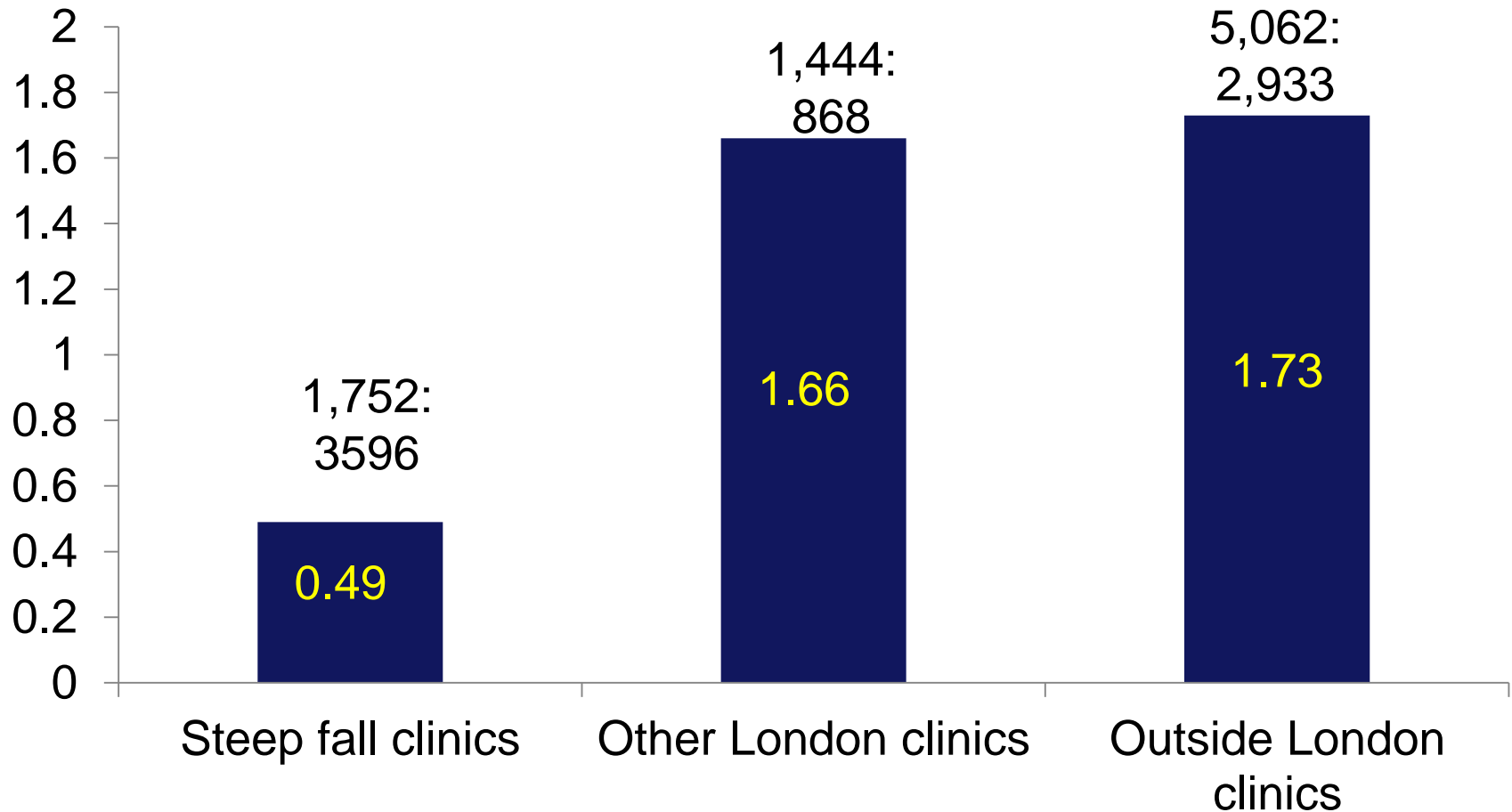
Transmissibility Ratio:

Total number of men with transmissible VL

Total number of high risk men since at clinic



Transmissibility ratio by clinic strata, 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

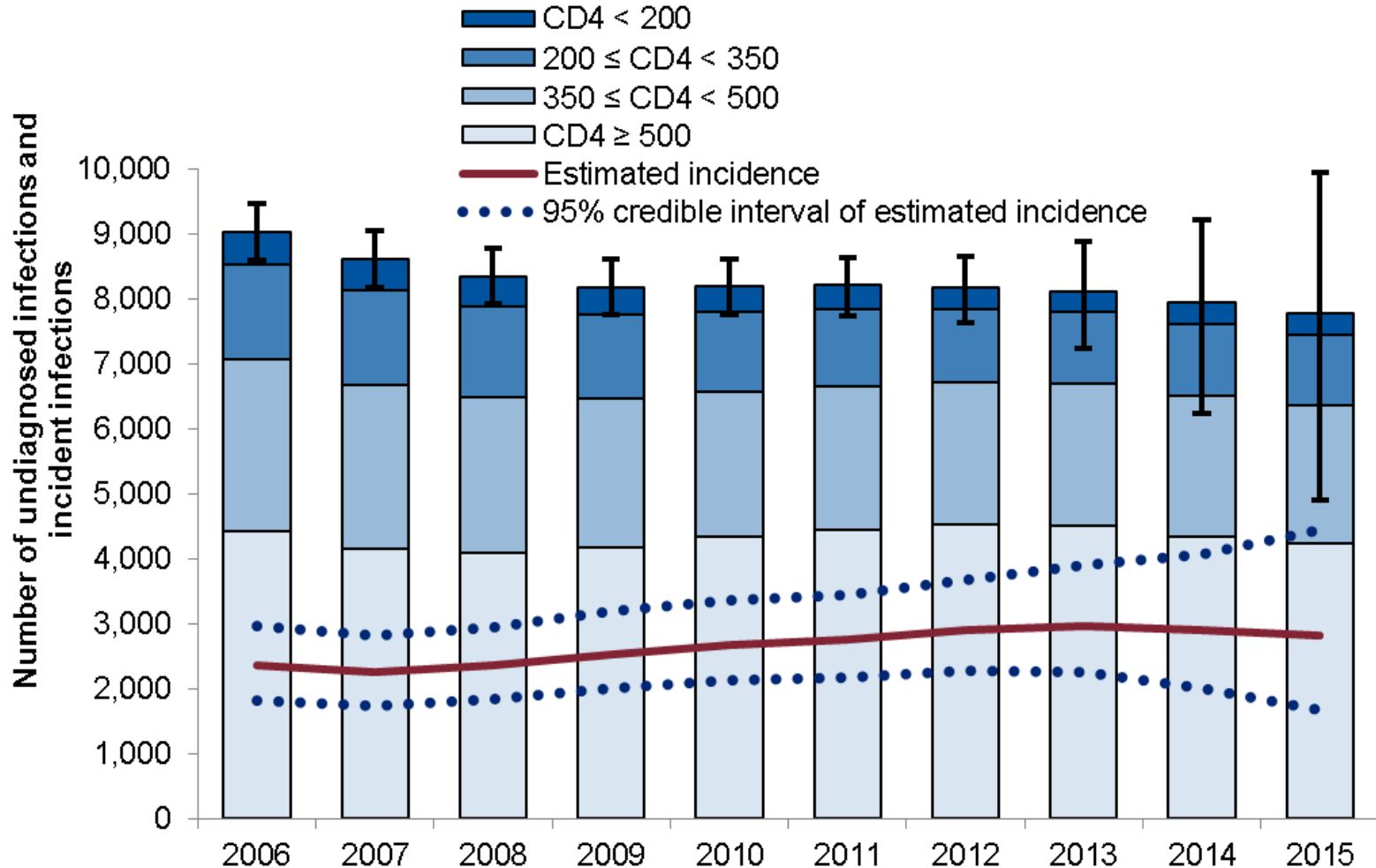


What's next?

- 2016 data & incidence estimates
- Expansion of early testing and ART on diagnosis
- Availability and monitoring of Prep
- Engagement and inclusion of all most at risk persons



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





Gender identity consultation and agreed questions

Representatives from CliniQ, LGBT Foundation, Action for Trans Health, National LGB&T Partnership, Public Health England

Q1 Gender identity

Which of the following options best describes how you think of yourself?

Female (including trans woman)

Male (including trans man)

Non-binary

In another way*

Not stated (PERSON asked but declined to provide a response)

Not known (not recorded)

Q2 Trans status

Is your gender identity the same as the gender you were given at birth?

Yes

No

Not stated (PERSON asked but declined to provide a response)

Not known (not recorded)

- Coded as "Other" in the NHS data dictionary
- Please note that a text field may be added to this field to provide a description of 'in another way'
- However note there are no text field in the HARS dataset



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 and Prep across all parts of the country for all people at greatest risk of HIV whilst maintaining other primary prevention efforts
5. We have a unique opportunity to monitor our impact at local and national level through our public health systems



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



Public Health
England

Thank you