



## Dr Valerie Delpech

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Speaker Name	Disclosure Statement
Dr Valerie Delpech	
Date	







# UK epidemic & Cascade of care

Dr Valerie Delpech Public Health England



## United Kingdom

- Free and accessible health care (almost)
- Effective HIV treatment since the mid 1990s
- Antidiscrimination laws
- Shift in cultural norms
- A tolerant society (almost)





## 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

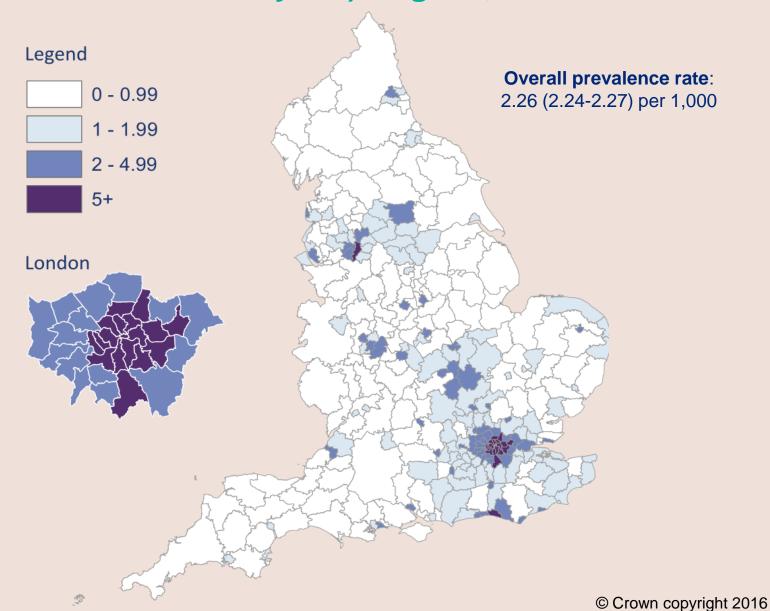
# Public Health England

### HIV in the UK

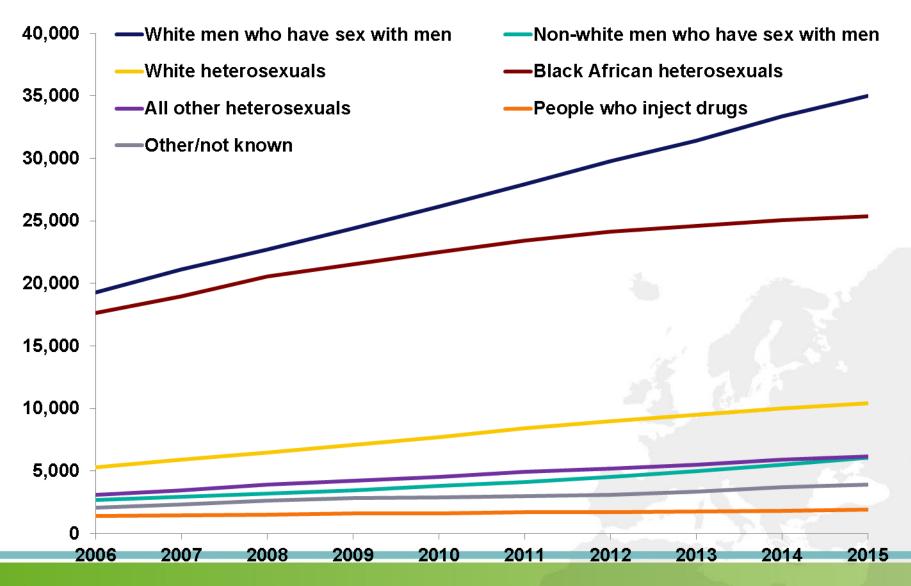
- Almost all HIV infections are acquired sexually
- HIV continues to impact most on stigmatised and marginalised communities (because of their sexual identity and/or behaviour, use of illicit drugs, residency status etc..)
- The epidemic is diversifying, with complex transmission dynamics
- Life expectancy 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



# Diagnosed HIV prevalence (per 1,000 population aged 15-59 years): England, 2015



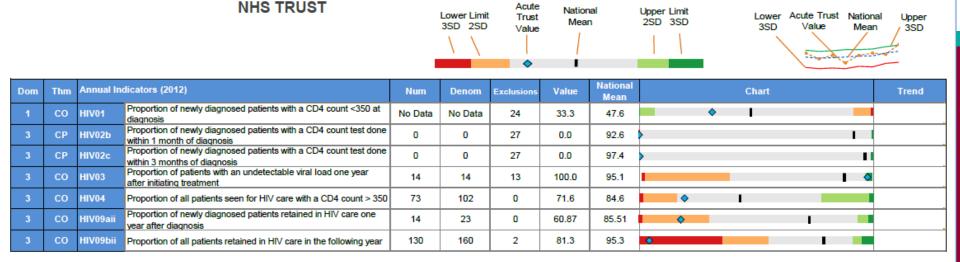
### People living with diagnosed HIV, UK, 2006 2015





## HIV Clinical Dashboard indicators England

Indicator	Specification	2012	2014
Late diagnosis	To monitor timeliness of diagnosis  CD4 cell count <350 cells/mm³ within 3  months of diagnosis	47%	40%
Link to care	To monitor prompt integration into care following HIV diagnosis:  CD4 cell count taken within 1 month of diagnosis	88%	93%
Retention in care - new patients	To monitor the retention in care among newly-diagnosed adults:  New diagnoses seen for care in the next survey year	86%	89%
Retention in care - all patients	To monitor the retention in care among adults seen for care in the last 12 months  Adults seen for HIV care and also seen in the net survey year	96%	95%
Viral load suppression	To monitor the effectiveness of ART after initiating treatment  Viral load <200 copies/ml at 12 months of starting ART (window period 3 – 15 months)	92%	95%
CD4 response	To monitor immune status of adults regardless of treatment status  CD4 cell count ≥350 cells/mm³ after at least 12 months in HIV care	83%	86%



Spine Charts

SPC Sparklines

#### Trust Comments

#### Data from PHE

3.

4.

8.

- 1. Data sources: Integrated HIV surveillance data: HIV and AIDS New Diagnoses Database (HANDD), The Survey of Prevalent HIV Infections Diagnosed (SOPHID) and CD4 Surveillance scheme (CD4) held by the HIV & STI Department, Centre for Infectious Disease Surveillance & Control, Public Health England
- Results are for adults aged 15 years and above seen for care in England
  - Data are small when presented by local areas and therefore data should be interpreted cautiously and with explicit reference to the confidence intervals
- Adults can have multiple reports of new HIV diagnoses both from within and between trusts. Linkage using pseudo-anonymised patient identifiers ensures that adults are not over counted.
- 5. The date of diagnosis is largely based on the date of Anti-HIV antibody test result. Where multiple dates of diagnosis are provided, the earliest date is selected. Consequently, a patient "diagnosed" at your trust may not appear in this metric if an earlier diagnosis date is found for the same patient at a different trust. Data for your Trust will include all adults diagnosed within the Trust regardless of site.
- 6. Date of first CD4 count test date is largely based on the date of the first CD4 count received in the CD4 laboratory scheme (unless missing, where the data from clinician new HIV diagnosis report is used).
- Adults can have multiple reports of treatment and care from within and between trusts. Adults were usually assigned to the site providing treatment or the last site providing HIV care in a survey year.
  - To produce the VL suppression outcome, where there are multiple VL numbers available for a patient, the lowest VL was used.
- 9. To produce the immunological response outcome, where there are multiple CD4 test results available for a patient, the last CD4 result was used.
- 10. National mean is the indicator of patients seen for HIV care at NHS trusts in England
- 11. All indicators are produced by first trust of providing HIV care



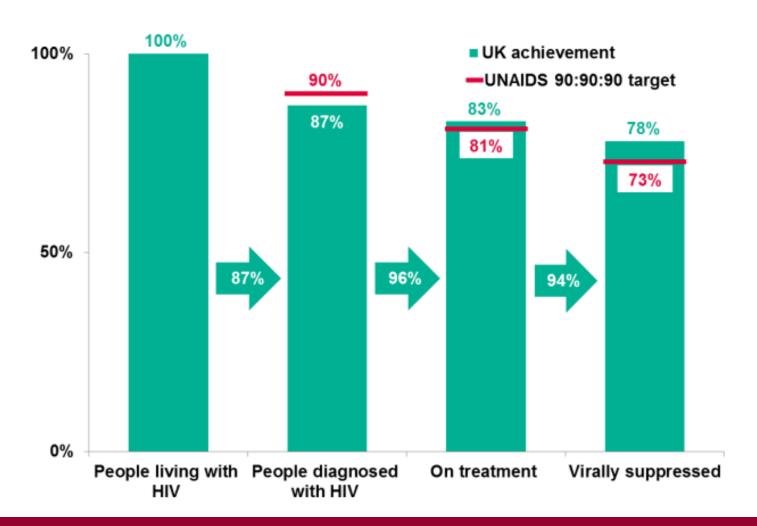
## Revised dashboard indicators 2016/2017

Indicator	Description & Provenance	2015/6	2016/7
Late diagnosis	Proportion of newly diagnosed adults a CD4 count of <350	Yes	Yes
Very late diagnosis	Proportion of newly diagnosed adults a CD4 count of <200	No	Yes
Linkage to care	Proportion of newly diagnosed adults seen for care in 1 month	Yes	Yes
Virological success in people established on ART	Proportion of adults who had an undetectable viral load at least one year after starting therapy	Yes	Revised!
Virological success in people newly starting ART	Proportion of adults who had a undetectable viral load within one year after starting therapy	No	New!
Retention in care -newly diagnosed	Proportion of newly diagnosed adults retained in care in the following year of diagnosis	Yes	Yes
Retention in care - all patients	Proportion of all adults retained in care in the following year	Yes	Yes
Patients with CD4 count >350	Proportion of HIV diagnosed adults with the last CD4<350	Yes	Drop
ART coverage – all adults in care	Proportion of HIV diagnosed adults seen for HIV care and receiving ART	No	New!
ART coverage – patients with the last CD4<350	Proportion of patients with the last CD4 count<350 and receiving ART	No	New!

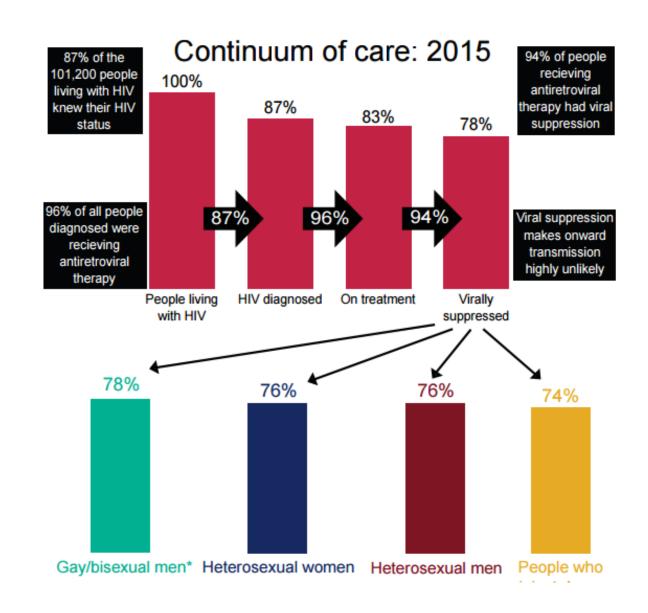
Challenges: How do we capture complex care and psychosocial care needs as well as patient engagement in their care?



# UK HIV continuum of care: progress against UNAIDS targets



## UK: equalities in HIV health care



## People accessing HIV care, England

**4** 168

Clinics submitted 4 consecutive quarters of HARS data

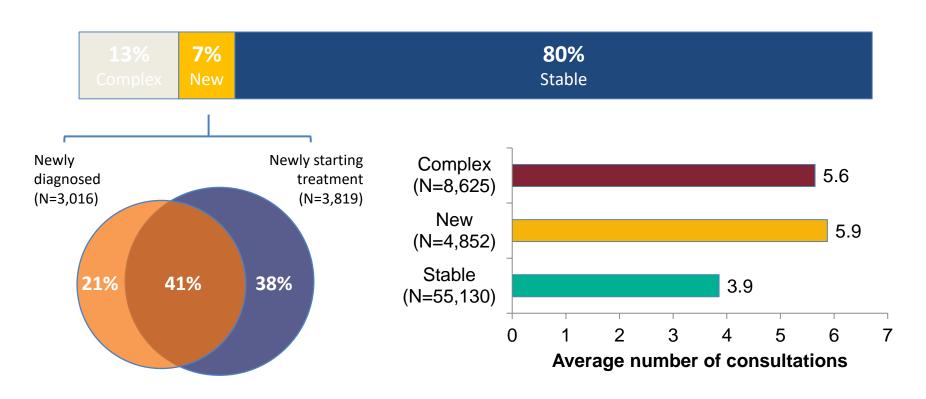
**№ 68,607** 

Patients in 2016 (85% of patients in 2015)

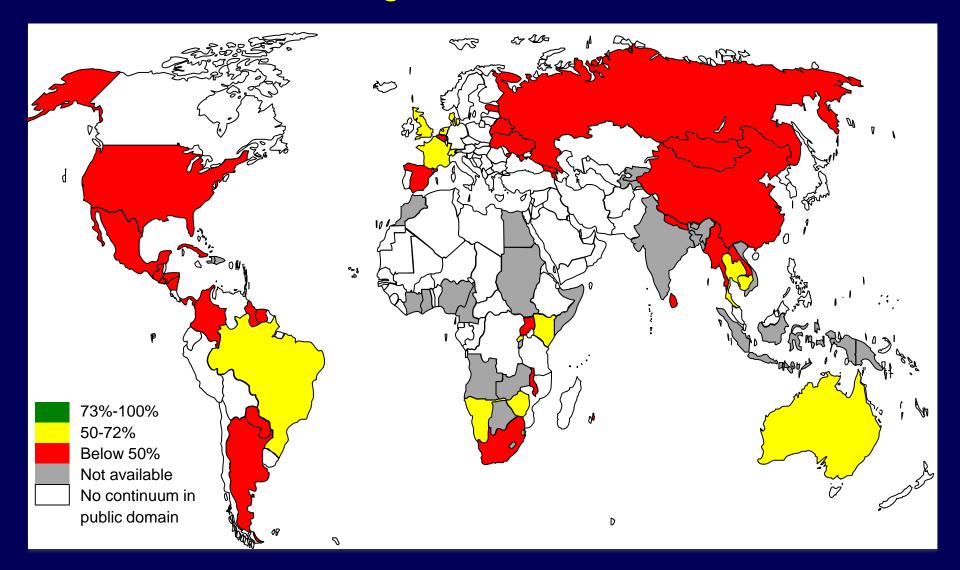
**4** 

4.2

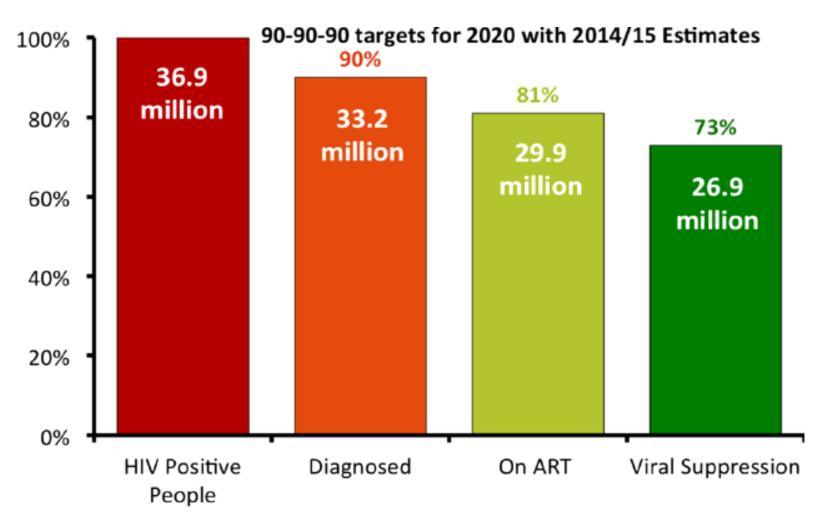
Average annual number of consultations



# People living with HIV with viral suppression (2010-2016) UNAIDS target 73%, Granich, 2016



### Can the UNAIDS 90-90-90 target be achieved?



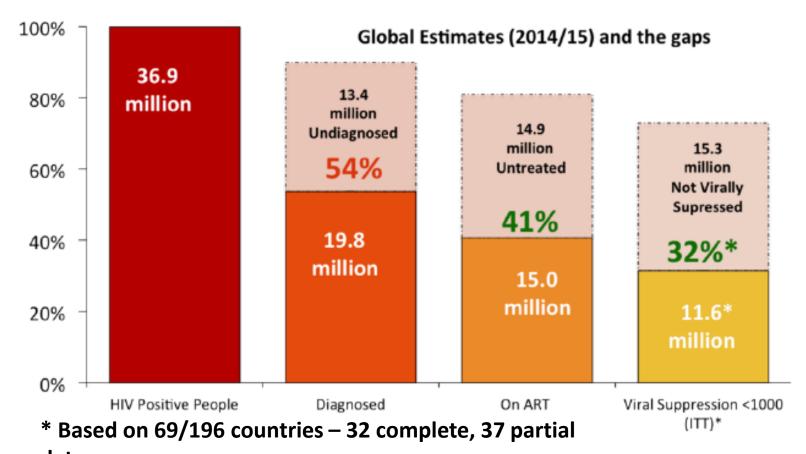


## Global comparison of cascades

### Global and European Cascades

- Dublin Declaration, ECDC. Drew et al, Human Immunodeficiency Virus (HIV) Continuum of Care in Europe and Central Asia, HIV Medicine 2016
- 2. 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;
- 3. Reuben Granich, Somya Gupta, Irene Hall, John Aberle-Grasse Shannon Hader, Jonathan Mermin. Current State of Global HIV Care Continua, IAPAC conference 2016

# Current global estimates for the care cascade Levi et al 2016\*



Levente analysis of national HIV treatment cascades. BMJ Glob Health 2016;

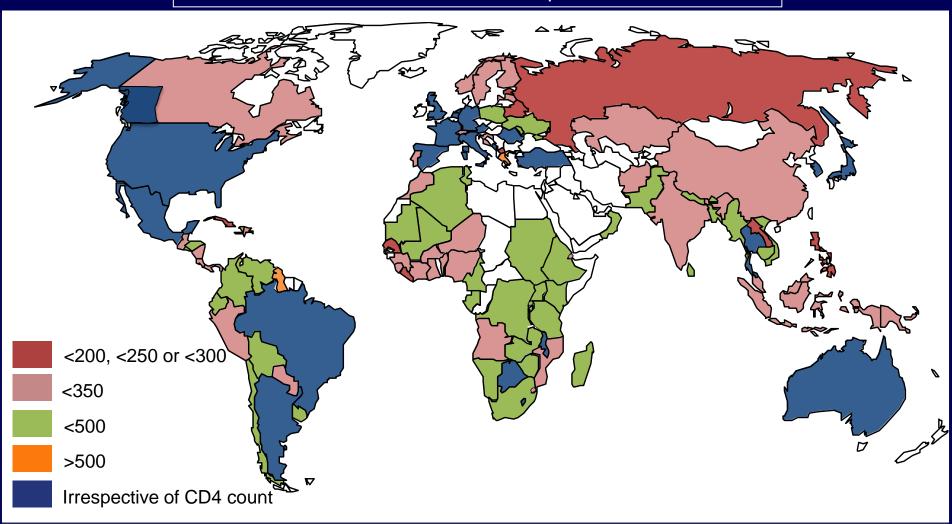


## **Cascade Reviews: Findings**

- No country analysed met the "90-90-90 targets". (now Sweden)
  - Huge disparities between countries was observed
  - Diagnosed Range (T 90%) 87% (the Netherlands) 11% (Yemen)
  - Treatment coverage (T 81%): 71% (Switzerland) 3% (Afghanistan).
  - Viral suppression (T 73%): 68% (Switzerland) 7% (China).
- HIV treatment cascade success is influenced by many factors including epidemic scale, sociocultural determinants, healthcare and legal systems,.
- Diagnosis was the greatest challenge encountered worldwide. Most countries donot have up to date guidelines
- Providing ART was the most frequent barrier for many countries.
   treatment and services costs,

# ART CD4 cell count initiation for asymptomatic people (120 countries)

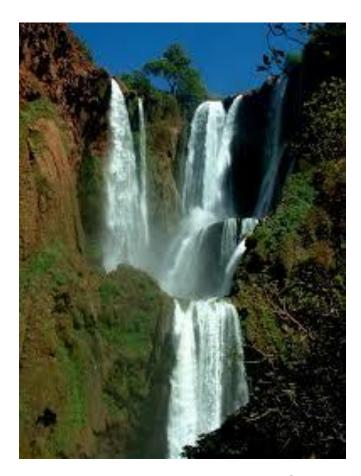
2015 WHO Recommendation : Irrespective of CD4 count



**Source**: www.HIVpolicywatch.org



## Cascades: summary of break points or 'leaks'



Large break points in LIC countries with some data



No data for most countries



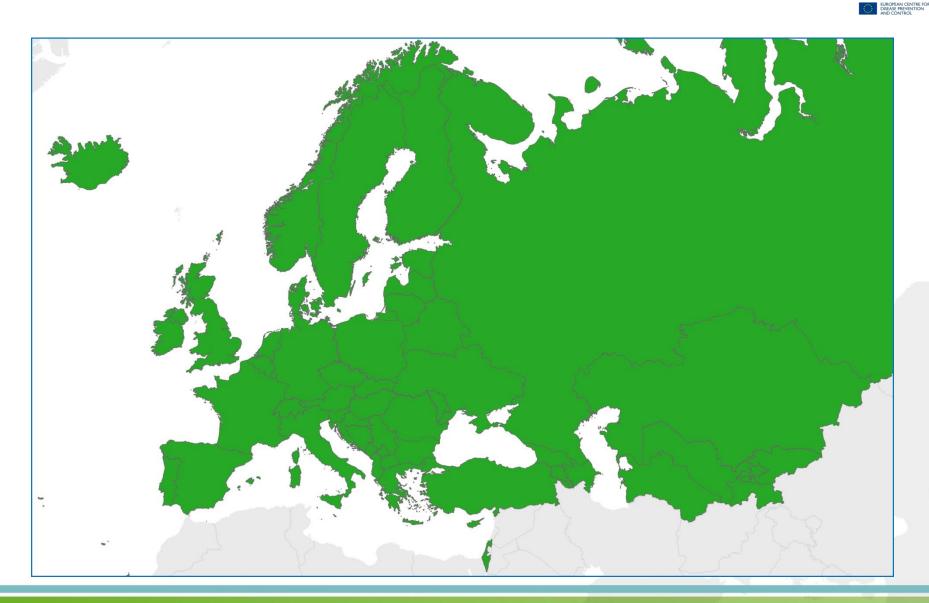
Lack of common definitions – international comparisons difficult

The global situation: UNAIDS 90 90 90 targets by 2020 too ambitious, however huge scale up from <3 million on ART in 2005 to 20 million in 2015



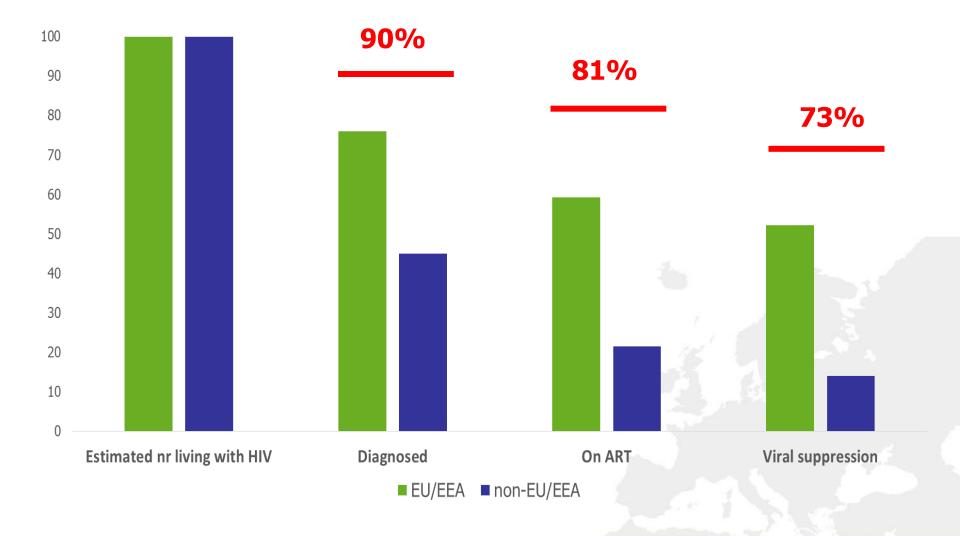
Keep calm and carry on....

## 55 countries covered by the Dublin Declaration



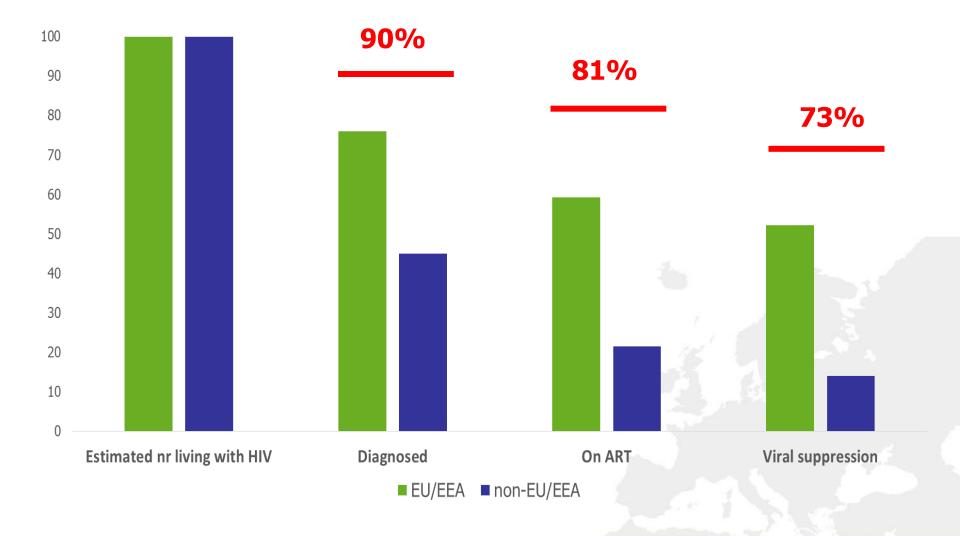
# How are countries in Europe performing against the 90-90-90 treatment targets? N=16





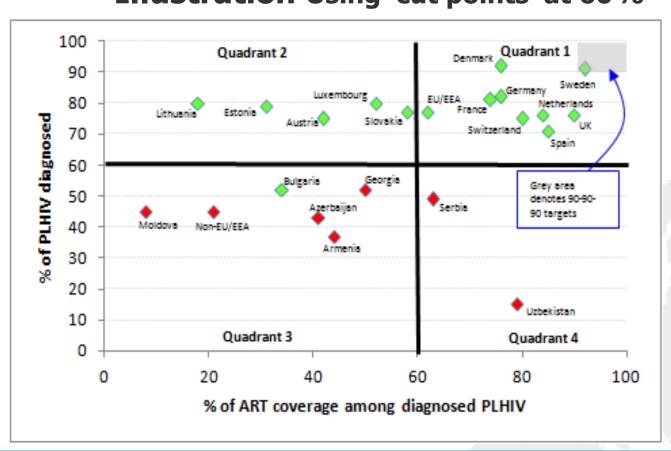
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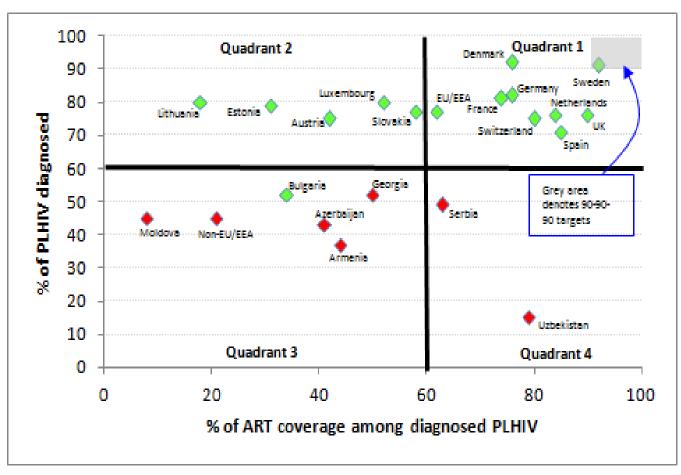


# How are European and Central Asian countries performing in ensuring people living with HIV are diagnosed and treated? Illustration Using 'cut points' at 60%





# Dublin Declaration data: Performance in ensuring people living with HIV are diagnosed and treated? :Using 'cut points' at 60%

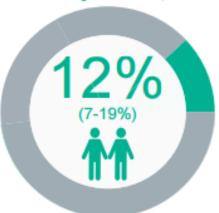


Drew, Human Immunodeficiency Virus (HIV) Continuum of Care in Europe and Central Asia, HIV Medicine, 2016

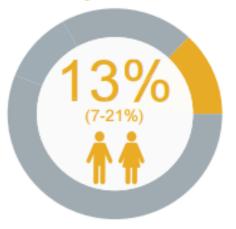


# Percentage of people living with undiagnosed HIV:

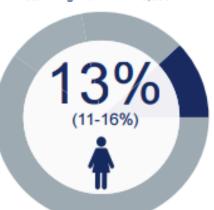




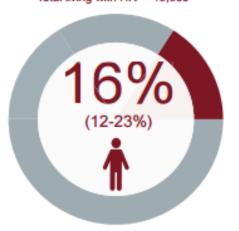
People who inject drugs Total living with HIV = 2,500



Heterosexual women Total living with HIV = 29,900



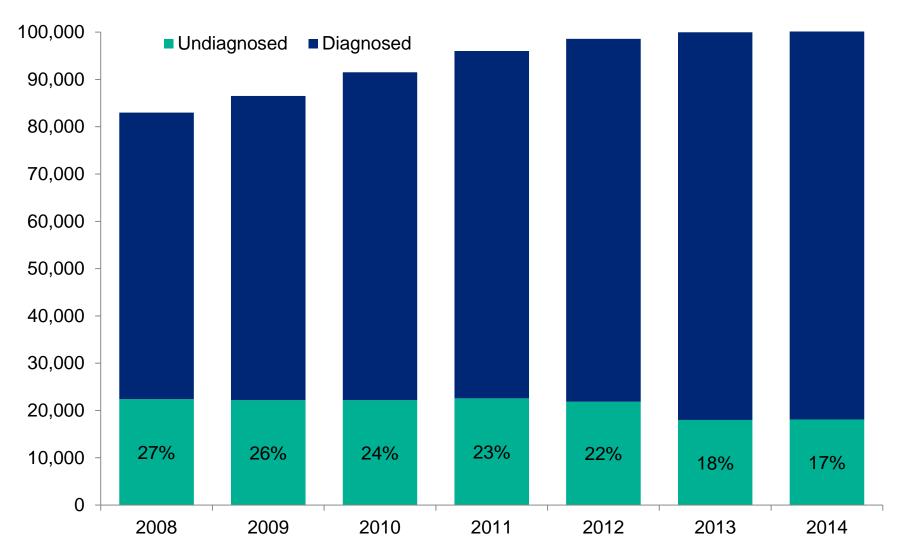
Heterosexual men Total living with HIV = 19,600



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



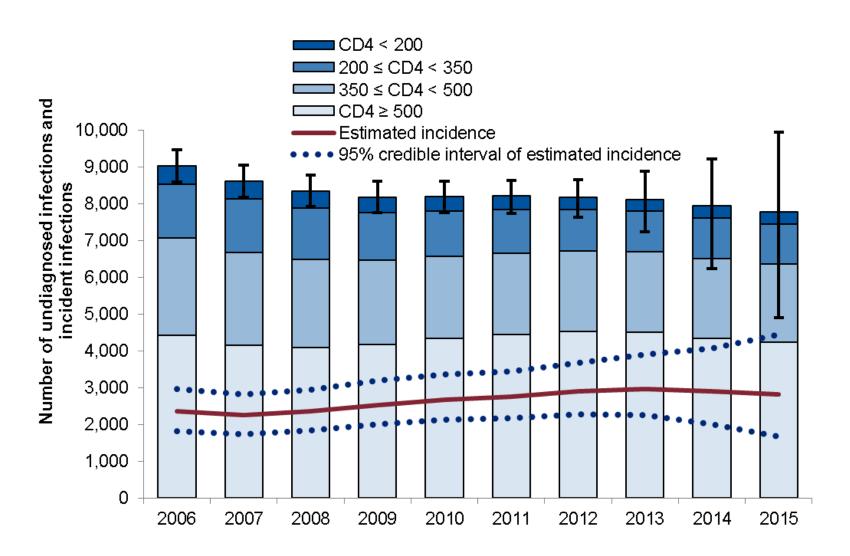
# Estimated number persons living with HIV infection (diagnosed and undiagnosed): UK, 2008-2014



# Monitoring transmission

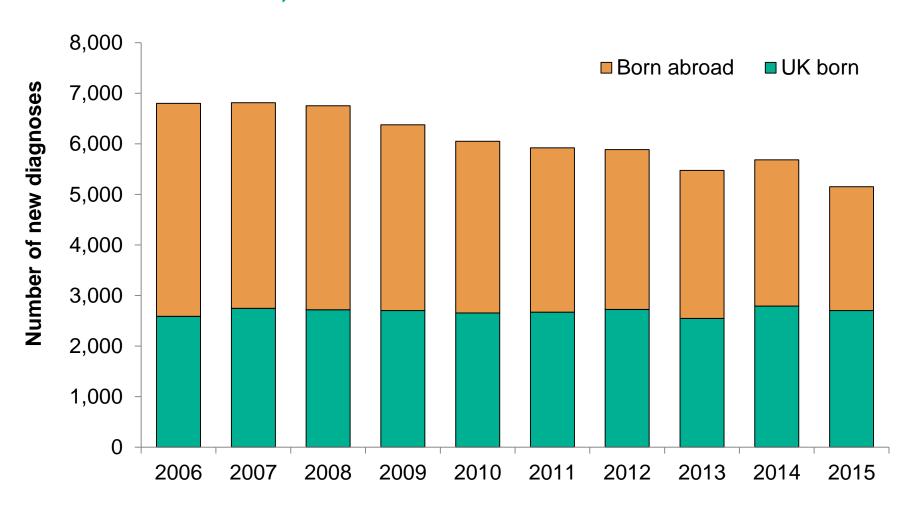


# Back-calculation estimates of HIV incidence and number of prevalent undiagnosed HIV infections among gay/bisexual men aged 15 years and over: England, 2006-2015





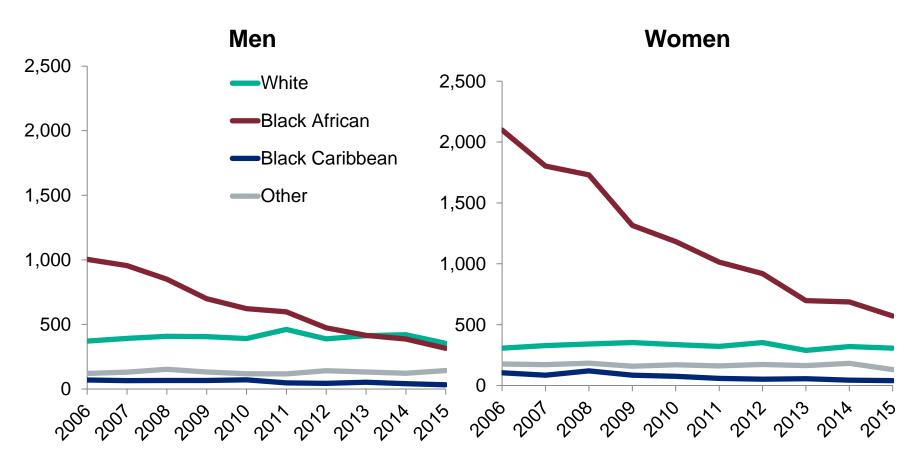
# New HIV diagnoses by place of birth: UK, 2006-2015



HIV in the UK – an update



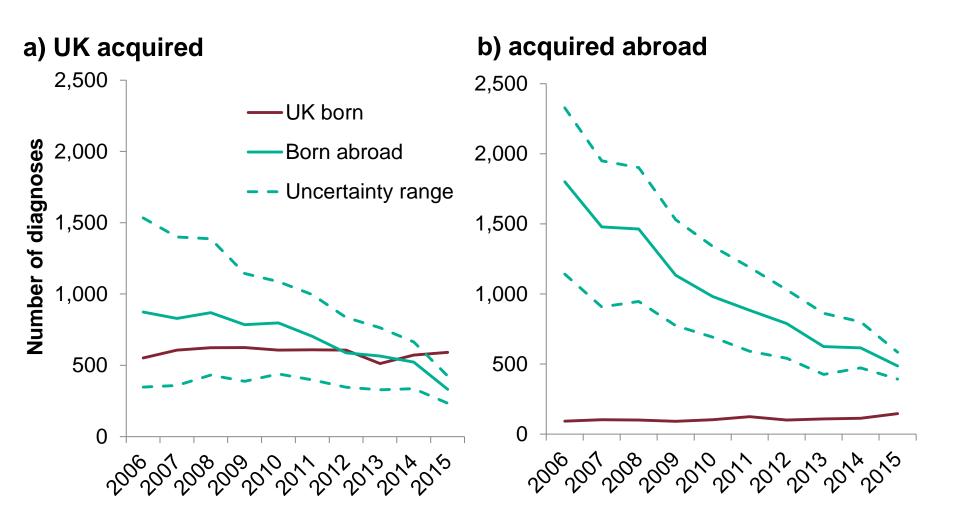
## New HIV diagnoses among heterosexuals, UK





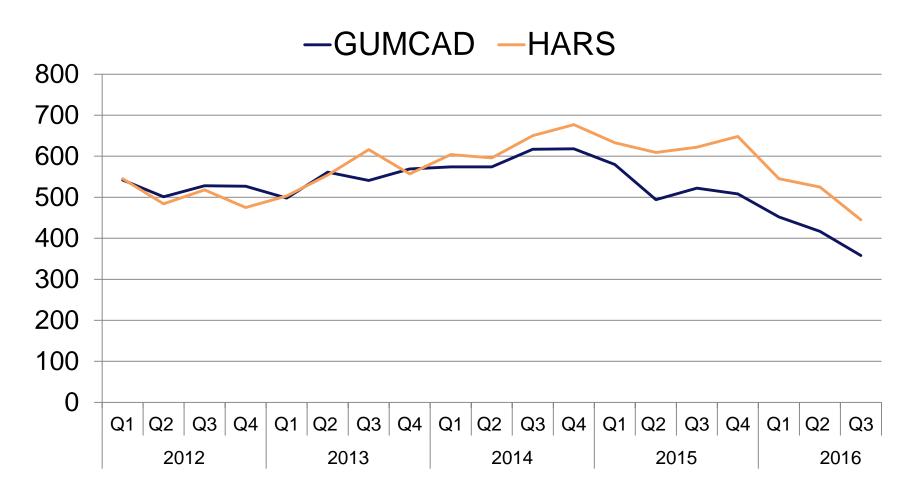
HIV in the UK – an update

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





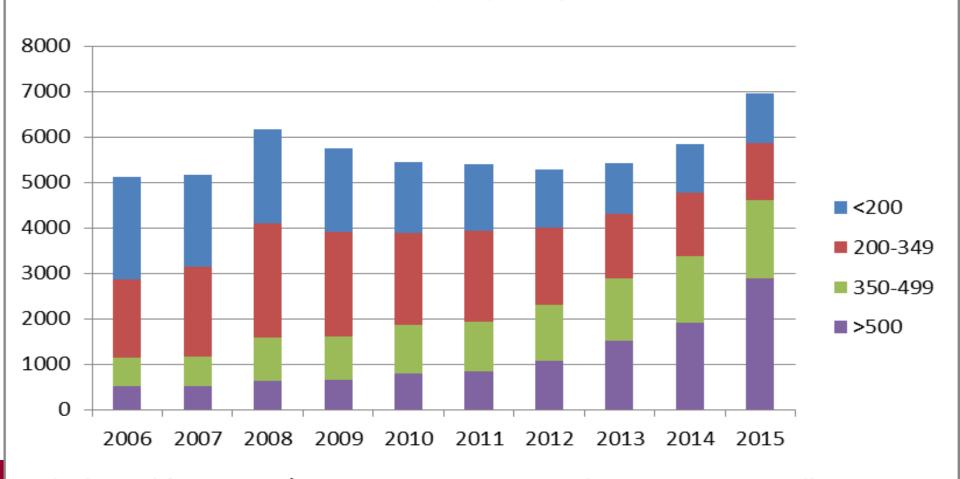
# New HIV diagnoses among gay & bisexual men in England



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



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



<sup>\*</sup>Adjusted for missing/inconsistent CD4 count at diagnosis, 24% overall



## **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 Testing Week: 19 – 25 November 2016



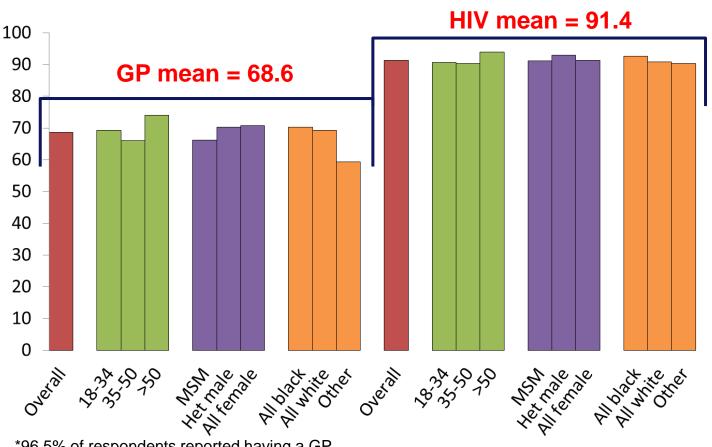




# Greater inclusion of people living with HIV

### Satisfaction with Care – HIV specialist and GP

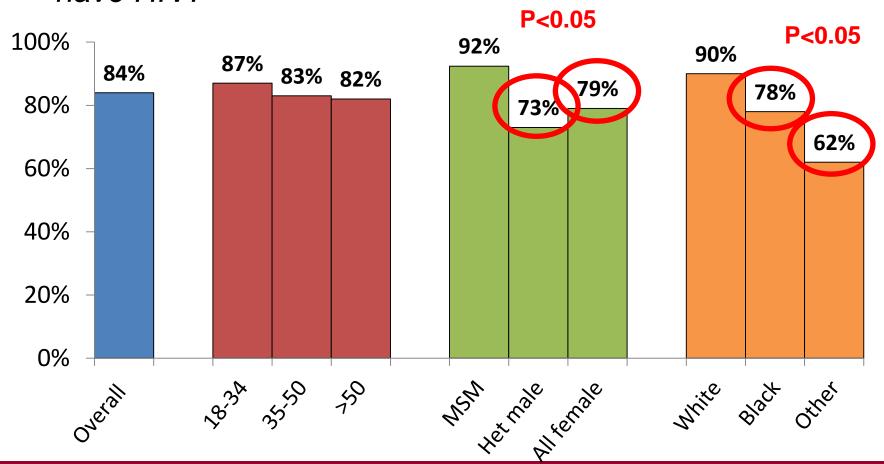
### "Overall, how would you rate your GP/HIV specialist services?"





### **Disclosure**

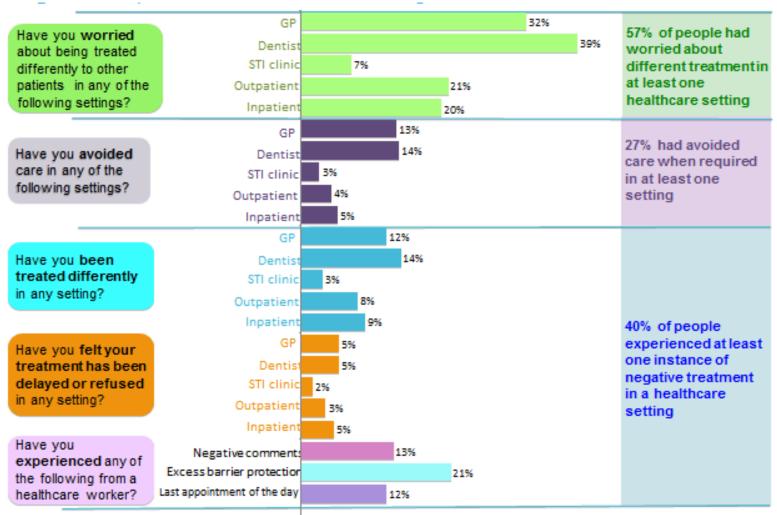
"Apart from health care staff, have you told anyone that you have HIV?"





# 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





### Key messages

There is **no indication of inequalities** in HIV care received through the National Health Service **by gender, ethnicity and HIV exposure**.

In the UK, all subpopulations of people living with HIV have reached the UNAIDS targets of 90% diagnosed on ART and 90% VL suppression for those on ART.

Young people living with diagnosed HIV had lower outcomes however

Improvements over time are due to earlier prescribing and uptake of ART to prevent HIV transmission as per British HIV Association guidelines and as well as an open cohort effect.

People living with HIV are experiencing stigma and discrimination in the health care setting despite high clinical care outcomes



## 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



## 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