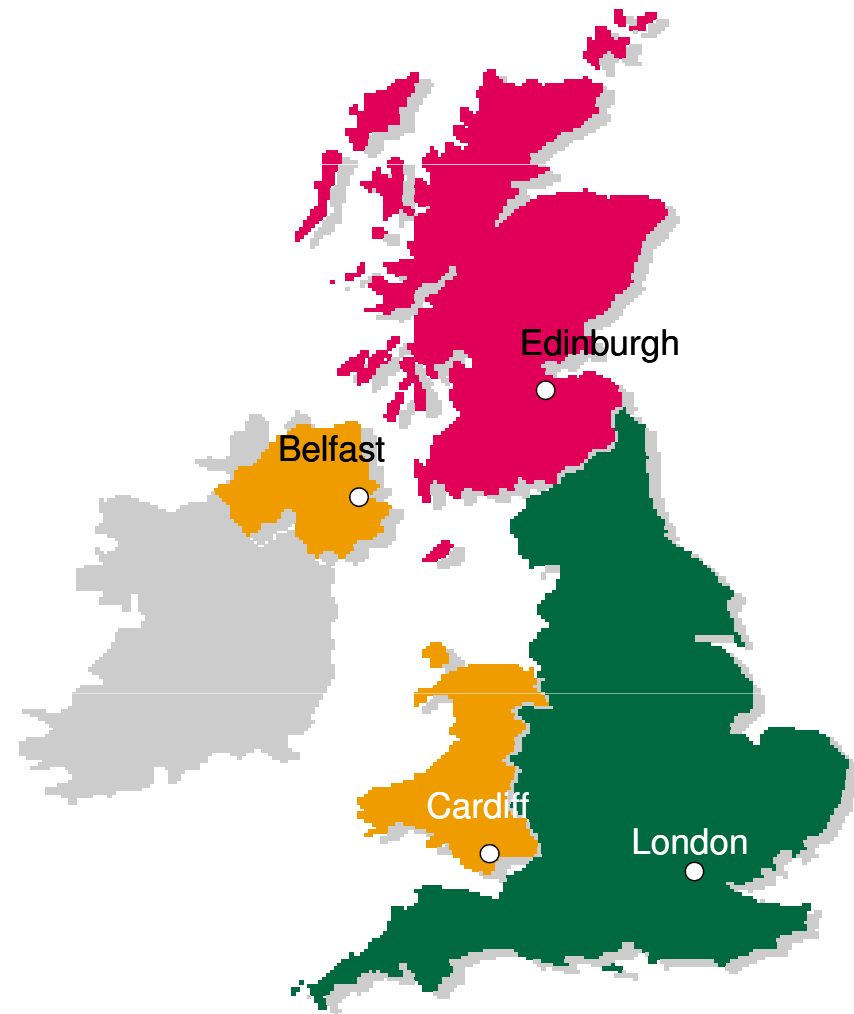


Quality of care & clinical outcomes of people diagnosed with HIV in the UK

Valerie Delpech
Meaghan Kall, Zheng Yin &
Alison Brown
Health Protection Agency
United Kingdom

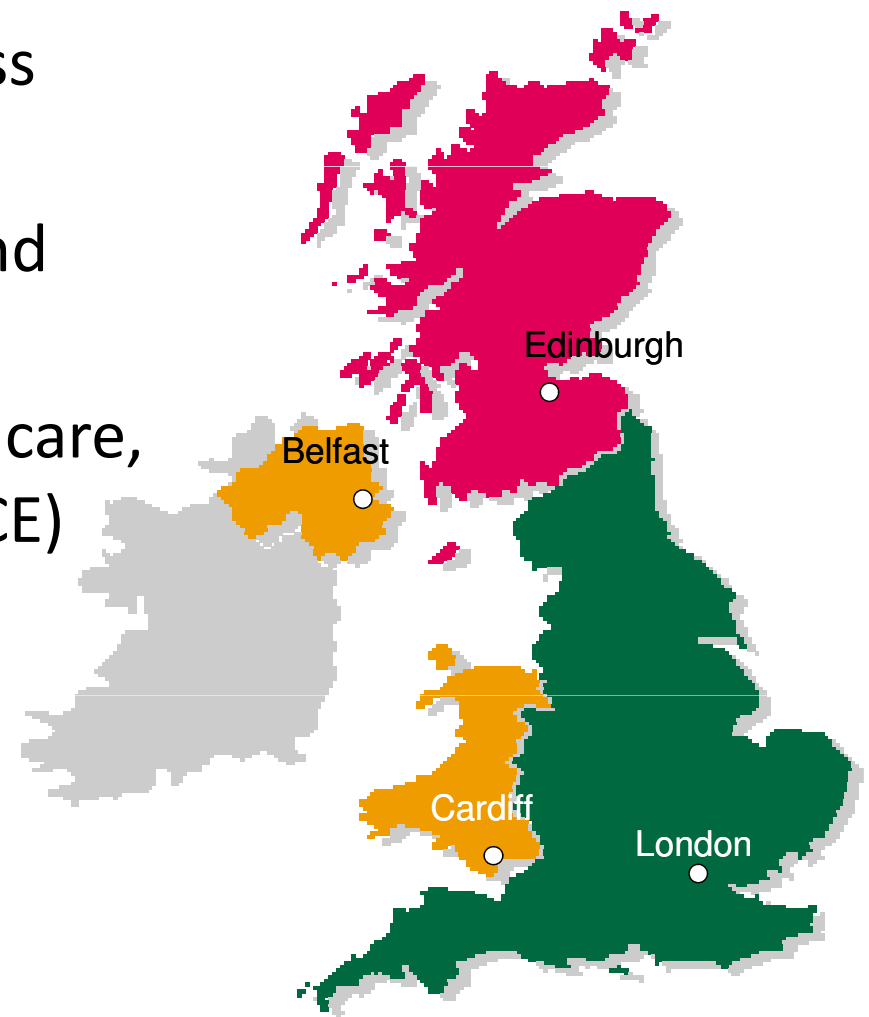
Overview

- Context
- HIV in the UK
- Q of C indicators
- Conclusions
- Challenges



Context

- NHS provides free and open access care to HIV and STI patients
- Backbone – robust surveillance and monitoring system
- Professional (BHIVA) standards of care, clinical and testing guidelines (NICE)
- London Consortium – 4 clinical indicators (2008)
- Restructure of the NHS

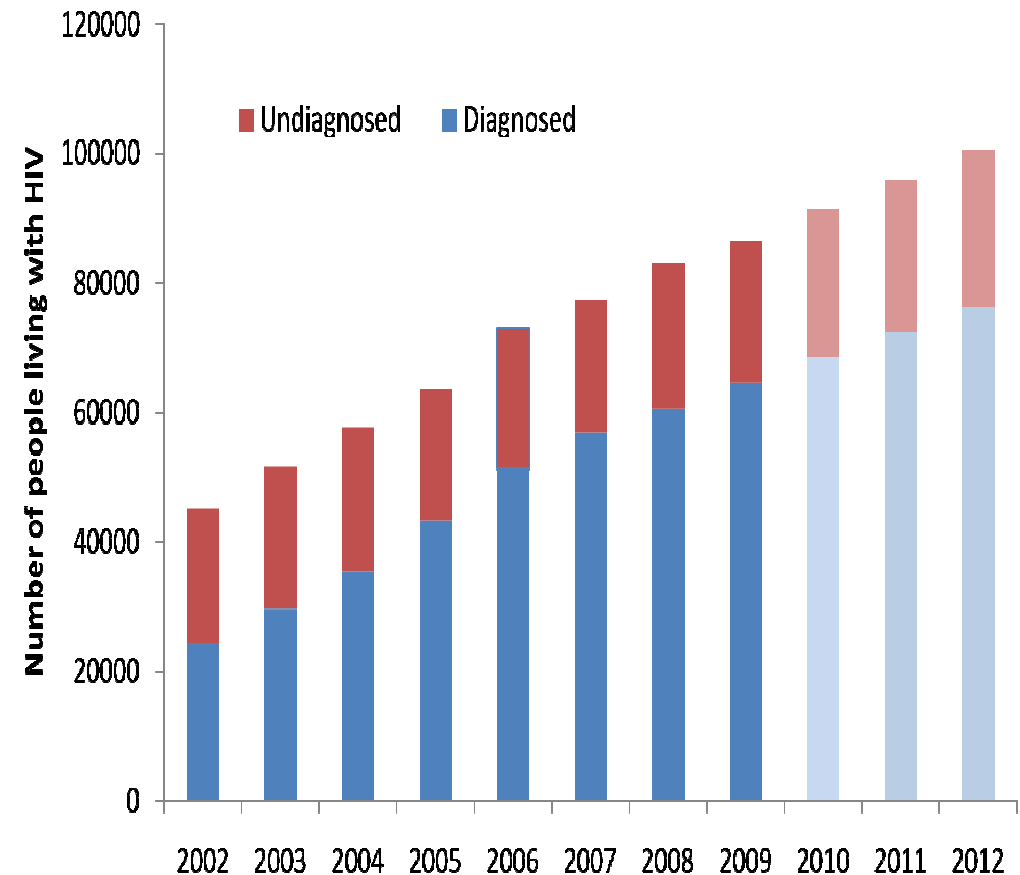


The HIV epidemic in the UK

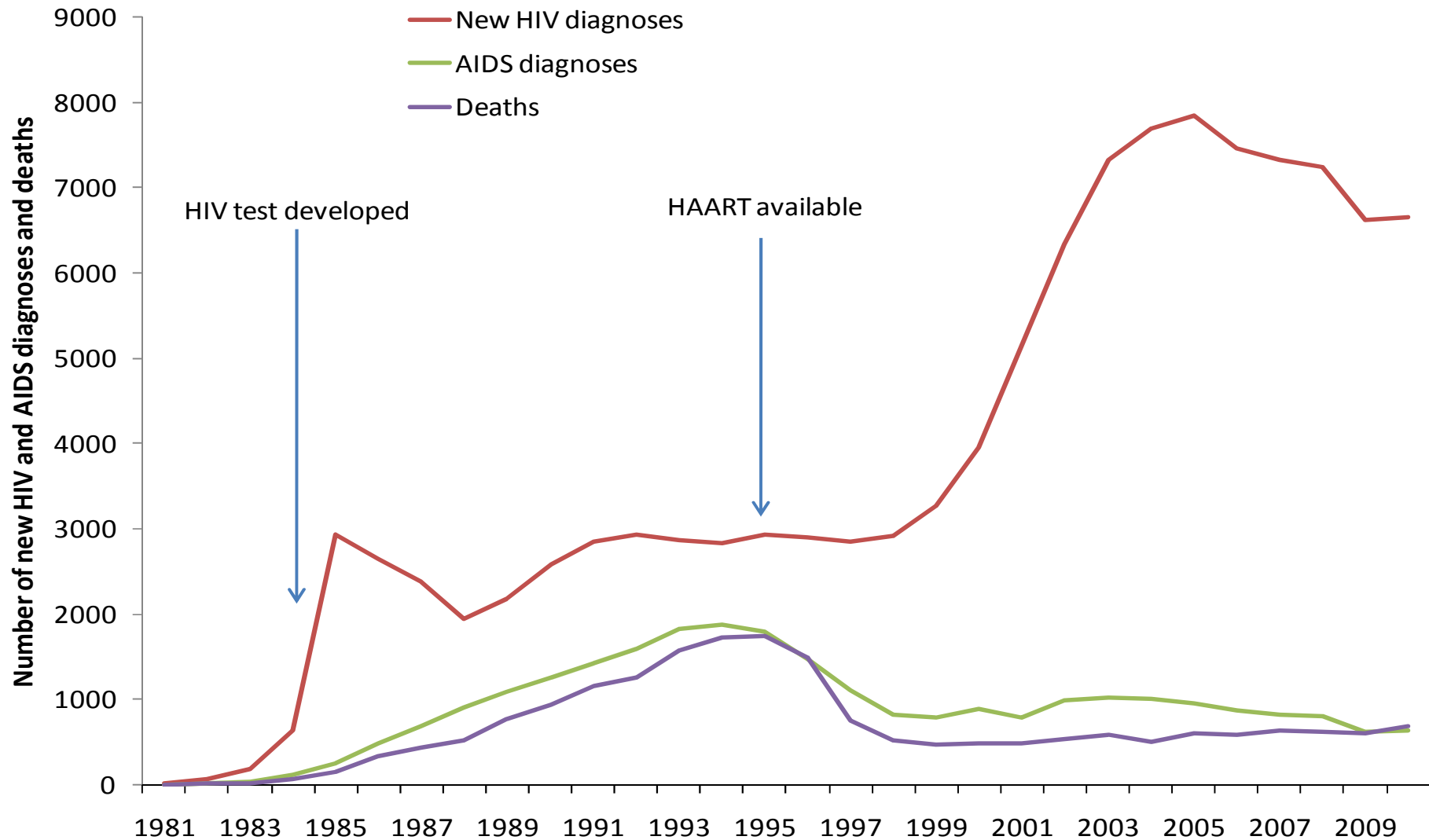
30 years on

- 100,000 living with HIV in 2012 (0.15%)
- Cumulative 27,000 AIDS diagnoses, 20,000 deaths
- Epidemic concentrated in MSM, Africans communities & persons who inject drugs
- 25% remain unaware of their diagnosis
- 6,500 new diagnoses annually, half were probably acquired in UK each year
- Each case prevented would save £250,000 (life time cost)

Estimated number of people living with HIV, UK (MPES)



Annual new HIV and AIDS diagnoses and deaths: United Kingdom, 1981-2010



Quality of HIV care indicators

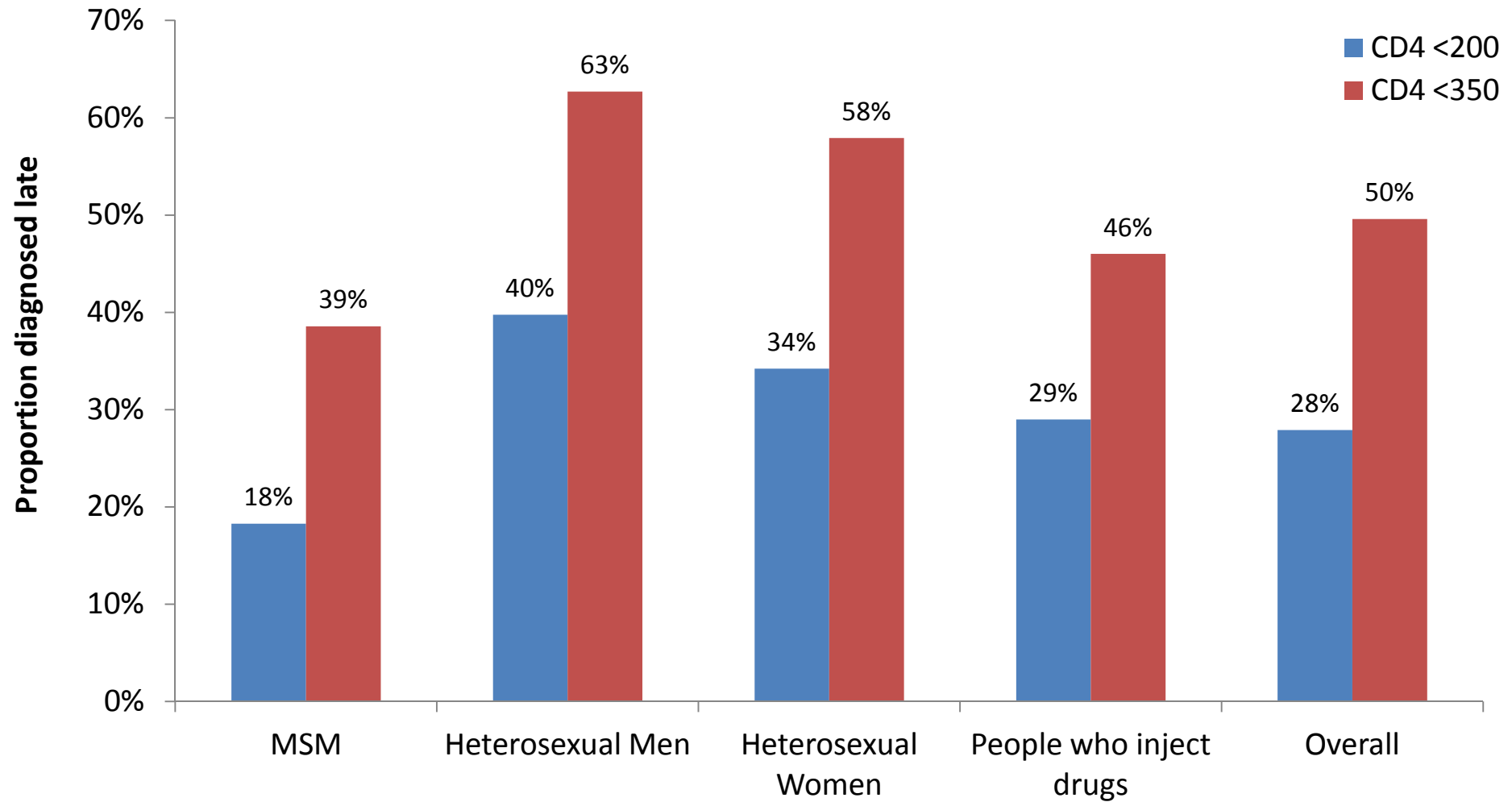
- Early access to HIV testing
- Early integration into care
- Access to ART
- Achieving viral load suppression
- Retention into care
- Successful care & Survival



Quality of HIV care indicators

- *Early access to HIV testing – Late diagnosis*
- Early integration into care
- Access to ART
- Achieving viral load suppression
- Retention into care
- Successful care & Survival

Late diagnoses of HIV by exposure group: UK, 2010

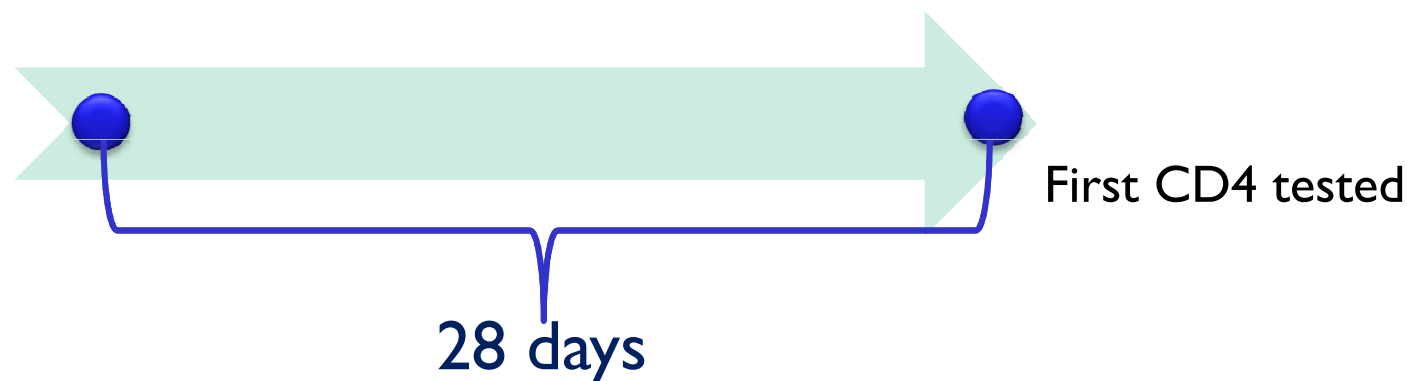


Quality of HIV care indicators

- Early access to HIV testing
- *Early integration into care – First CD4 count*
- Access to ART
- Achieving viral load suppression
- Retention into care
- Successful care & Survival

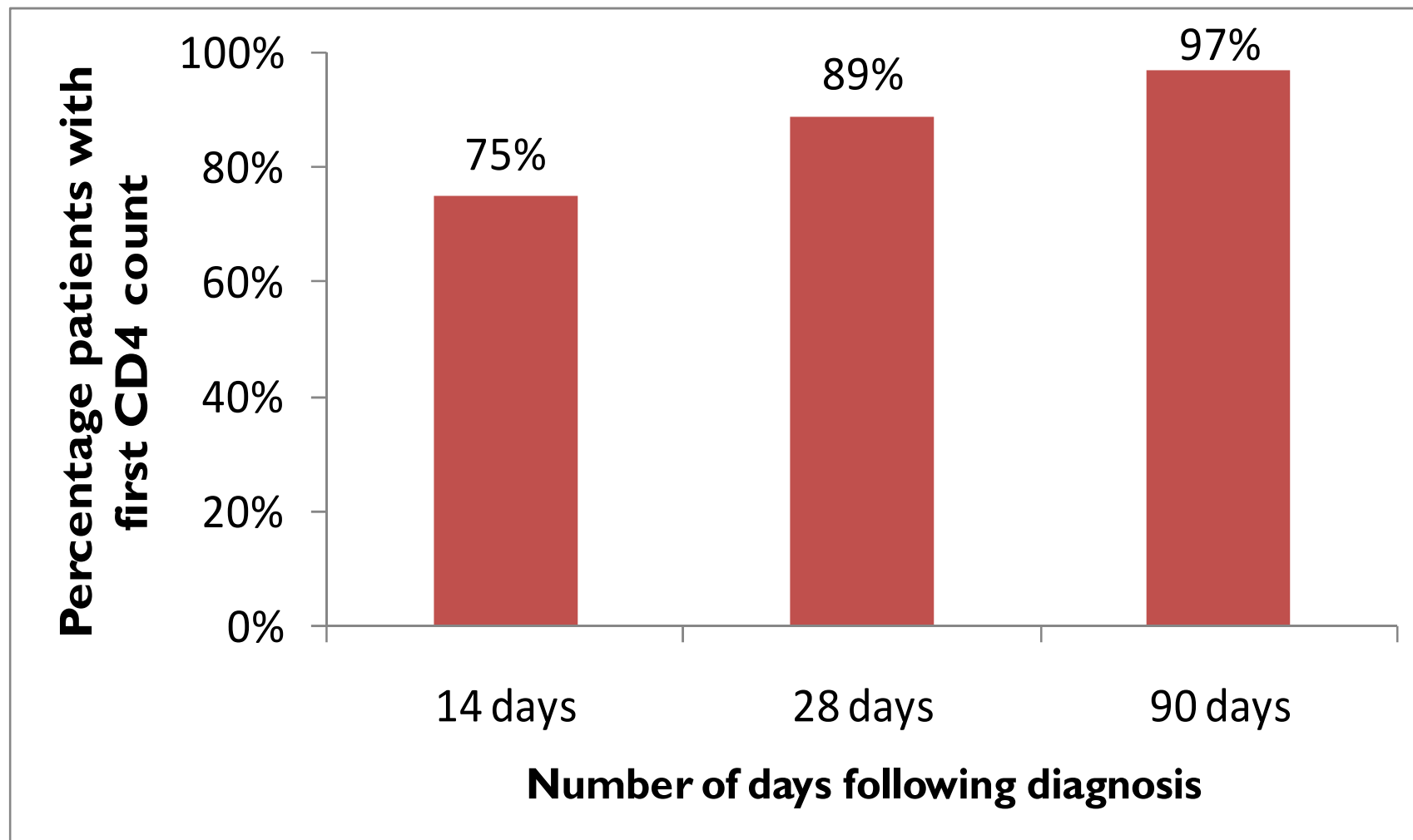
Length of time from HIV diagnosis date to first CD4 count

Date of diagnosis



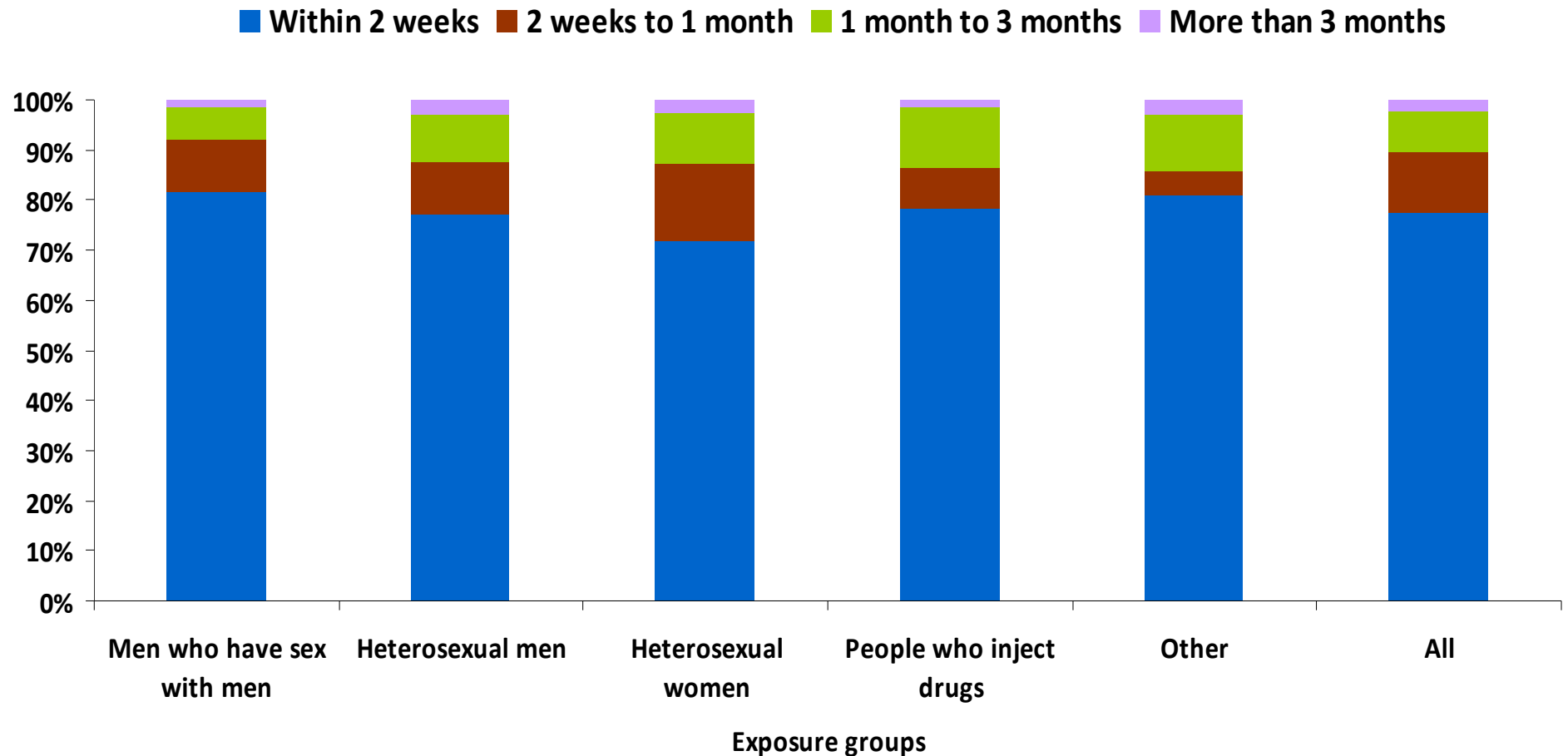
- Standard: BHIVA guidelines 100% within 14 days
- Population: All newly-diagnosed adults with CD4 cell count available
- Data sources: New HIV Diagnoses and CD4 laboratory data

Integration into HIV care following diagnosis: UK, 2010



Integration into HIV care

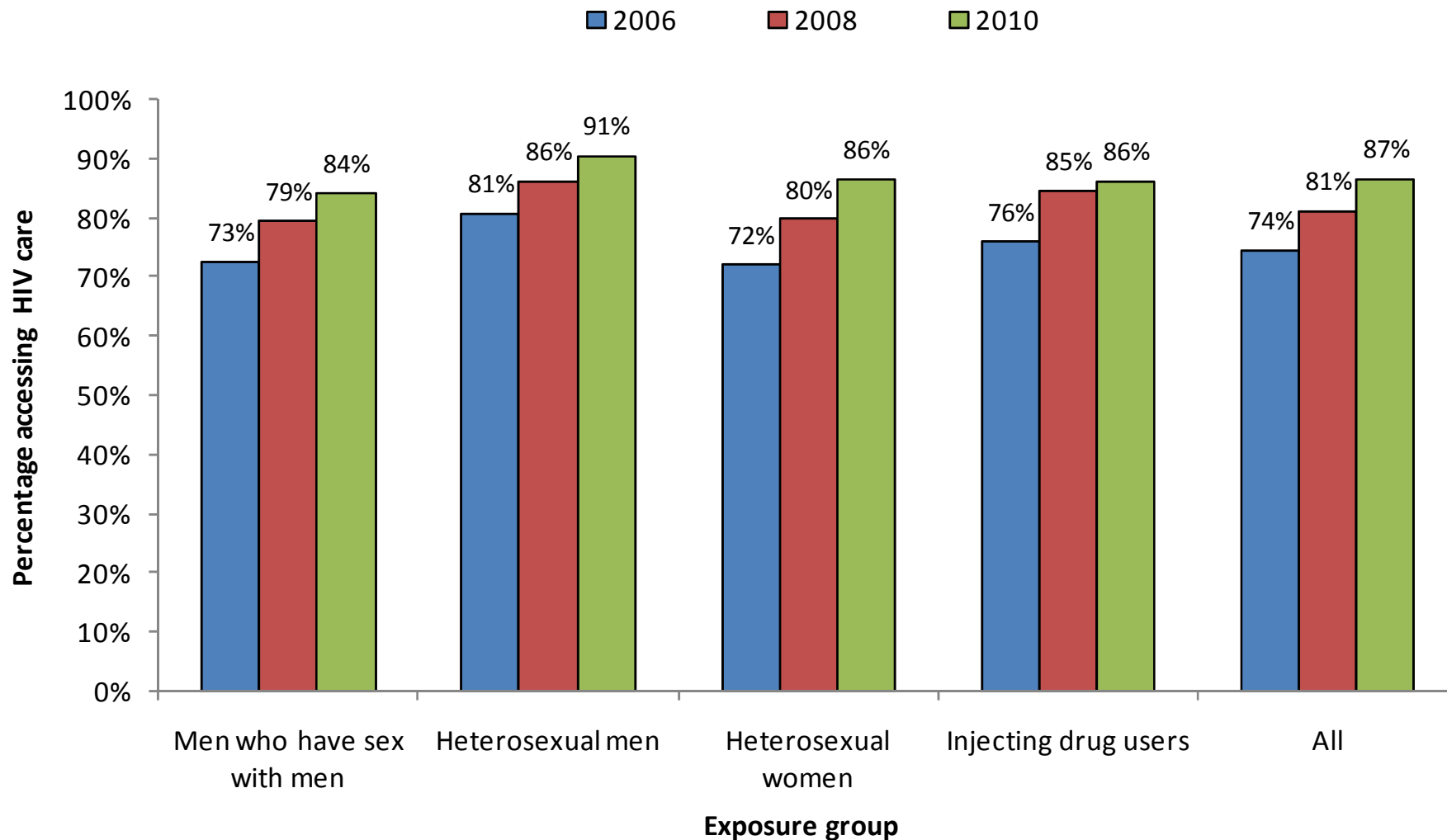
Time of first CD4 count in newly-diagnosed adults (≥ 15 years) : UK, 2010



Quality of HIV care indicators

- Early access to HIV testing
- Early integration into care
- *Access to ART – persons with a CD4 <350*
- Achieving viral load suppression
- Retention into care
- Successful care & Survival

Proportion of HIV diagnosed persons with a CD4 \leq 350 cells/mm³ and receiving ART, UK

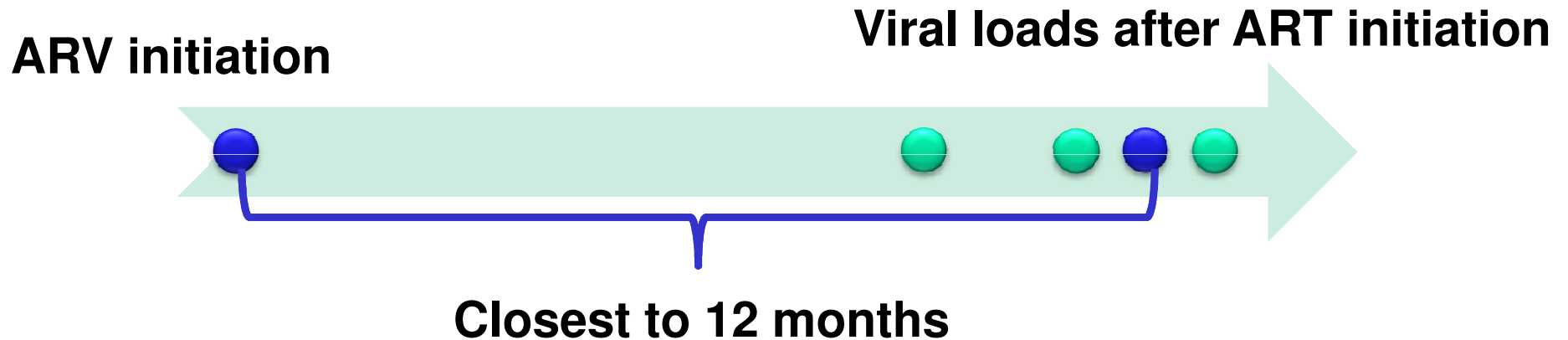


* Excludes persons with antiretroviral therapy data not reported.

Key indicators

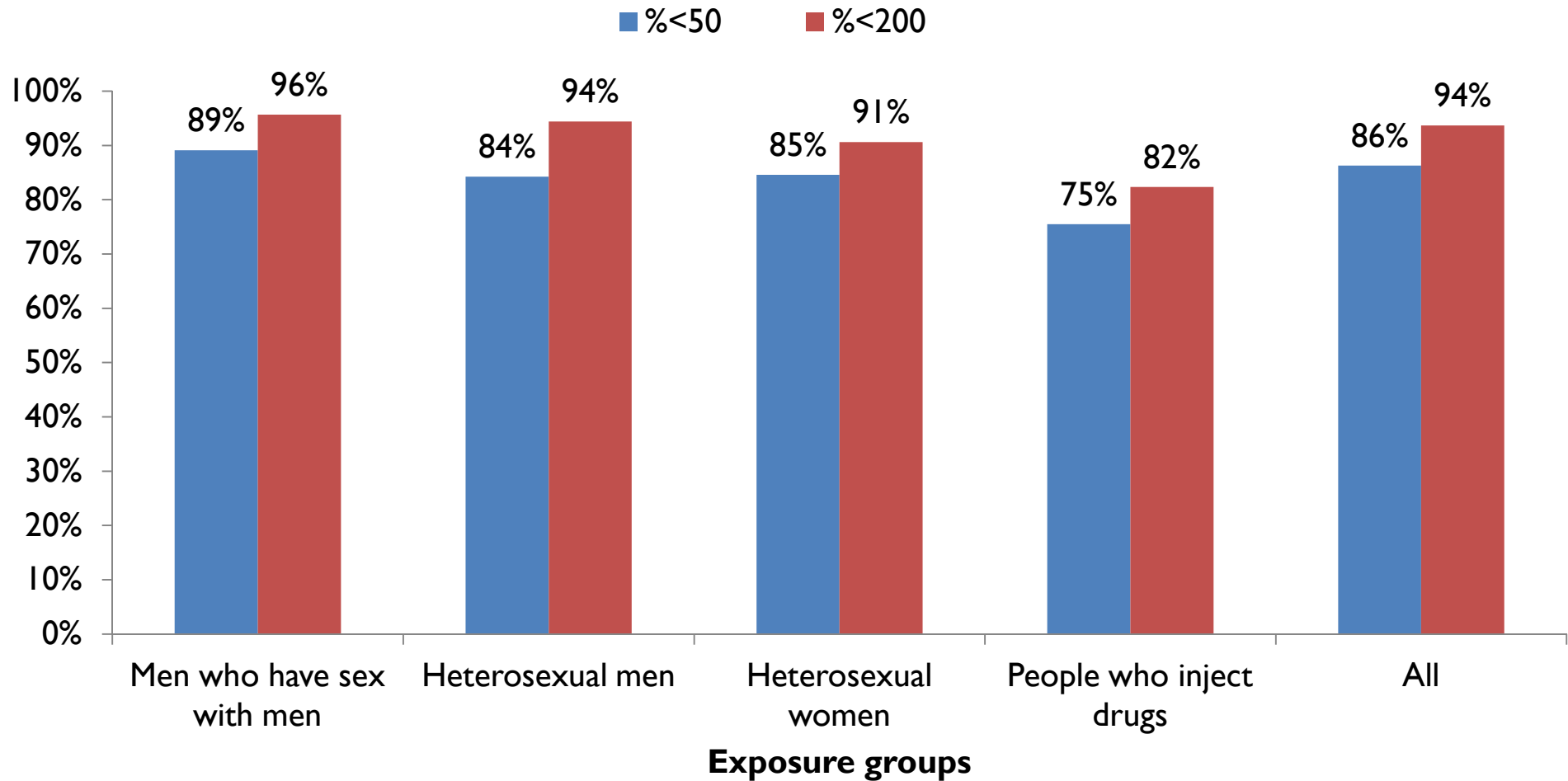
- Early access to HIV testing
- Early integration into care
- Access to ART
- *Achieving viral load suppression after one year treatment*
- Retention in care
- Successful care & Survival

Viral suppression one year after starting ART



- **Standard:** 85% patients had VL<50 copies after a year of starting treatment
- **Population:** Patients seen at the same site one year after starting treatment. Excludes pregnant women
- **Data source:** Survey of persons in care

Undetectable viral load (VL<50 copies/ml) one year after ART initiation by exposure group: UK, 2010



Key indicators

- Early access to HIV testing
- Early integration into care
- Access to ART
- Achieving viral load suppression
- *Retention into care – low LTFU*
- Successful care & Survival

Sexually Transmitted Diseases:

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doi: 10.1097/OLQ.ob013e318214b92e

Original Study

Loss to Follow-Up Among Adults Attending Human Immunodeficiency Virus Services in England, Wales, and Northern Ireland

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Abstract

Aim: To assess the extent to which human immunodeficiency virus (HIV)-diagnosed adults attending HIV-services in England, Wales, and Northern Ireland are lost to follow-up or attend services intermittently.

Methods: A cohort of HIV-diagnosed adults was created by linking records across the 1998 to 2007 national annual Survey of Prevalent HIV Infections Diagnosed. The records were also linked to the national HIV and acquired immune deficiency syndrome New Diagnoses Database (n = 61,495) and to Office for National Statistics death records. Patterns of HIV-service attendance were analyzed.

Results: On average, 90% of adults attending HIV-services in any one year attended the following year. Nearly 5% of adults attending services in any one year were lost to follow-up, a further 4% subsequently attended services intermittently, whereas less than 2% died. Cumulatively, 19% of adults seen for HIV care between 1998 and 2006 were lost to follow-up by the end of 2007. Factors associated with loss to follow-up included being the following: female; aged 15 to 34 years; black-African or “other” ethnicity; not on antiretroviral therapy; recently diagnosed; and infected outside the United Kingdom.

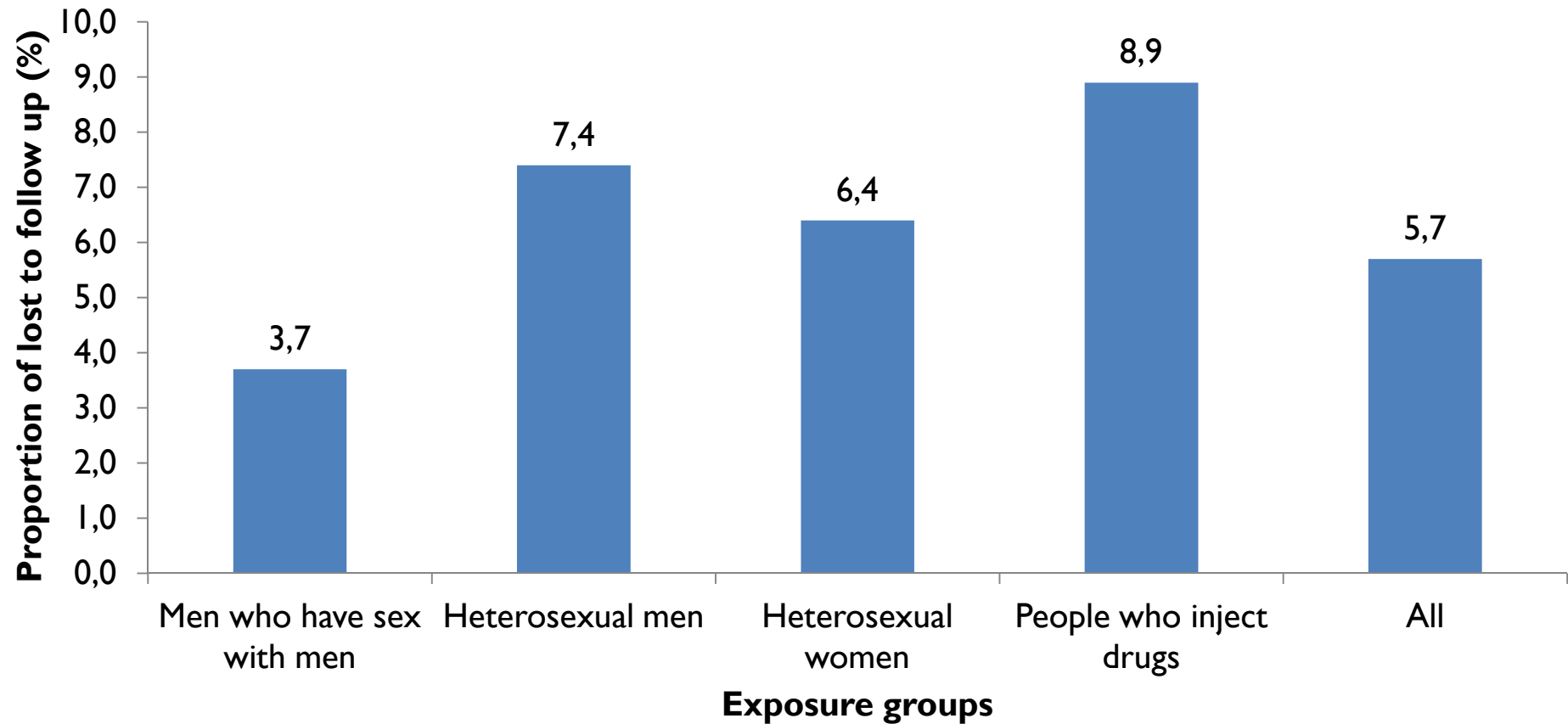
Conclusions: Although the majority of HIV-diagnosed adults in England, Wales, and Northern Ireland attended HIV-services regularly, cumulatively nearly 1 in 5 adults were lost to follow-up between 1998 and 2007. Innovative strategies focusing on those most likely to drop out of regular care should be developed to maintain regular service engagement and to ensure optimal care.

Average annual
LTFU 4.9%

Predictors of LTFU:

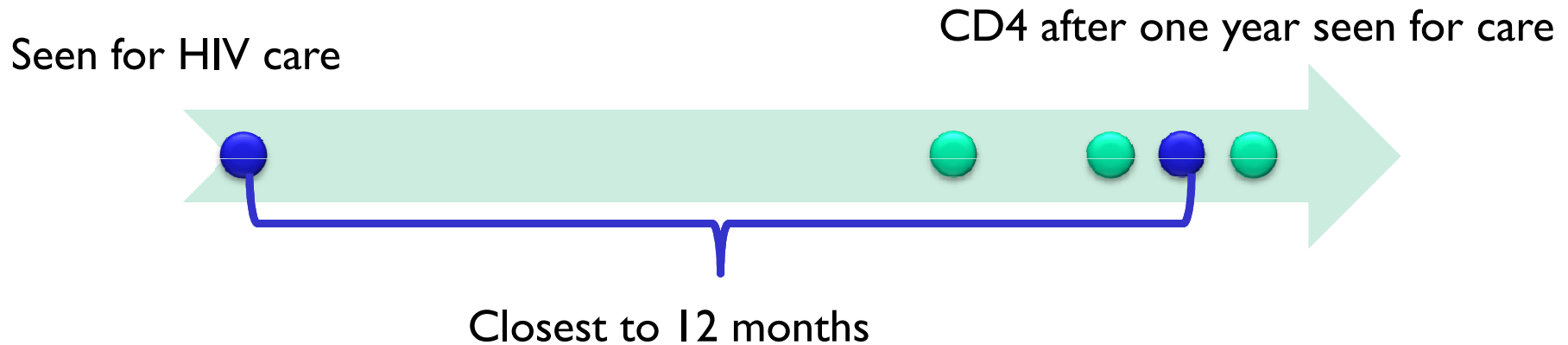
- Female gender (OR: 1.5)
- Aged 15-34 years (OR: 2.3)
- Black African (OR: 2.1)
- Recent diagnosis (OR: 2.5)
- Not receiving ARV (OR: 3.9)

Proportion of adults who were lost to follow up in the next survey year: UK, 2010



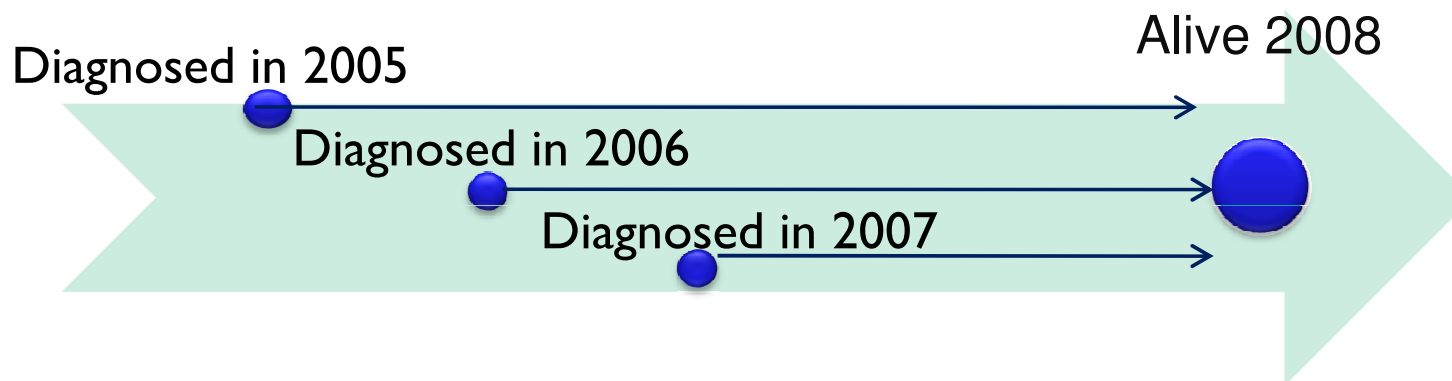
* Among those who were seen for care in 2009

CD4 cell count after one year of HIV care



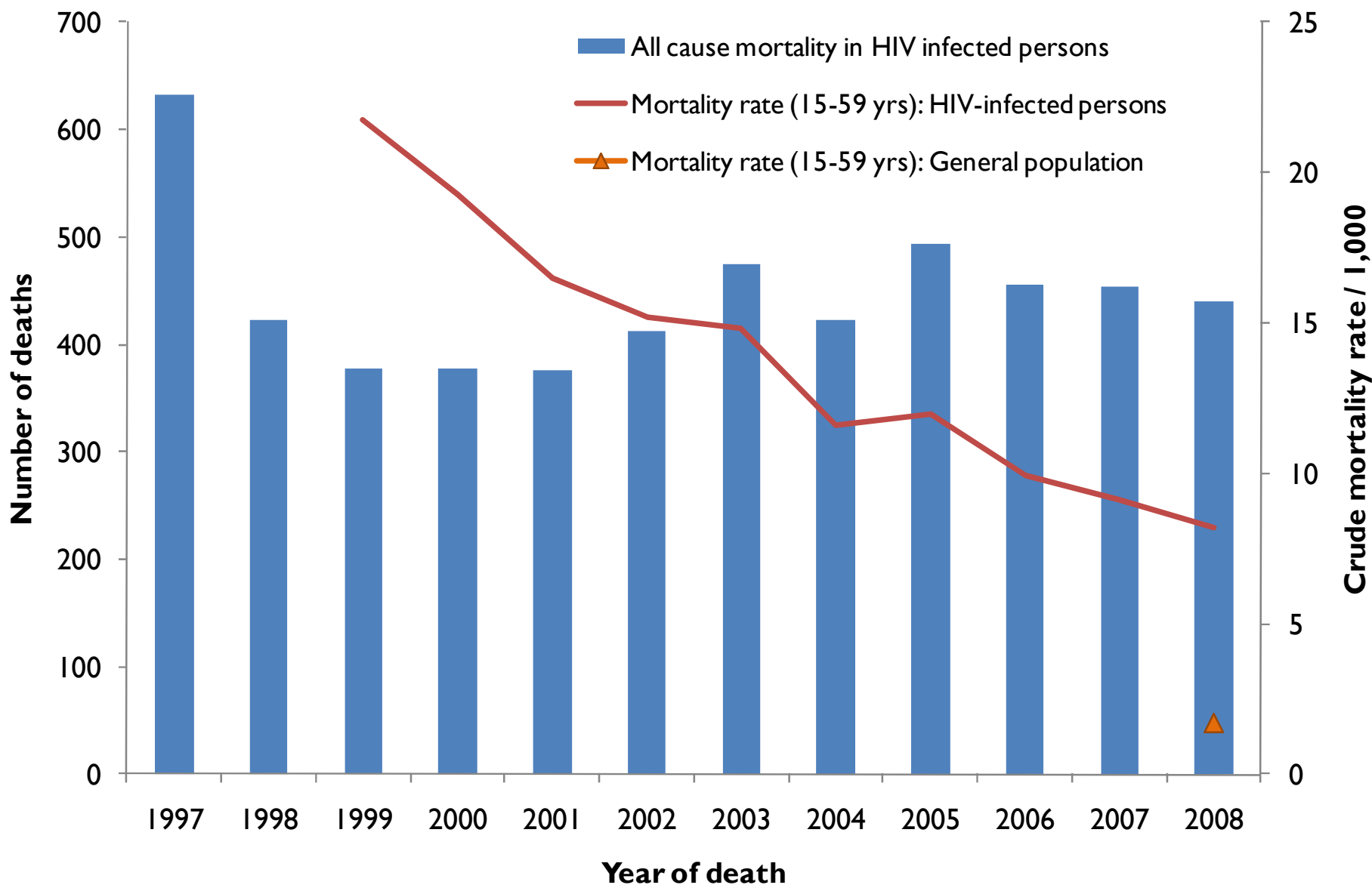
- Standard: 90% patients to have CD4 \geq 200 cells after 1 year
- Population: All patients seen for HIV care
- Data sources: Linking with SOPHID and CD4 Surveillance

Survival at 1, 2, 3 years after HIV diagnosis



- Standard: N/A
- Population: All patients newly-diagnosed in London. Reported by sector, not site.
- Data sources: Linking with SOPHID, CD4 Surveillance and ONS.

All cause mortality among HIV-infected individuals: E&W 1997-2008



Quality of care indicators for adults (aged ≥ 15 years) receiving HIV care: UK, 2010

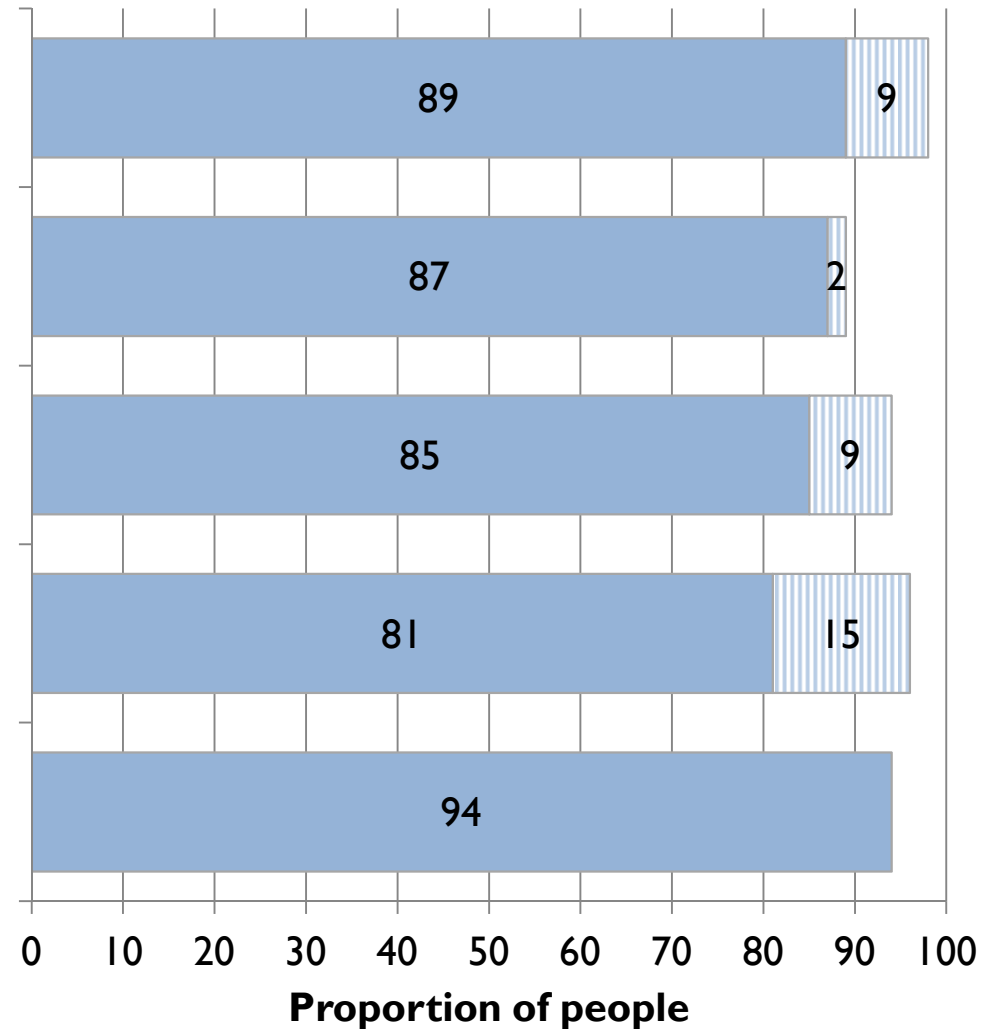
1. 89% of adults who had a CD4 count test within 1 month of their HIV diagnosis (98% within 3 months)

2. 87% of adults who had a CD4 count < 350 cells/mm³ and were receiving antiretroviral therapy (89% among those with a CD4 < 200)

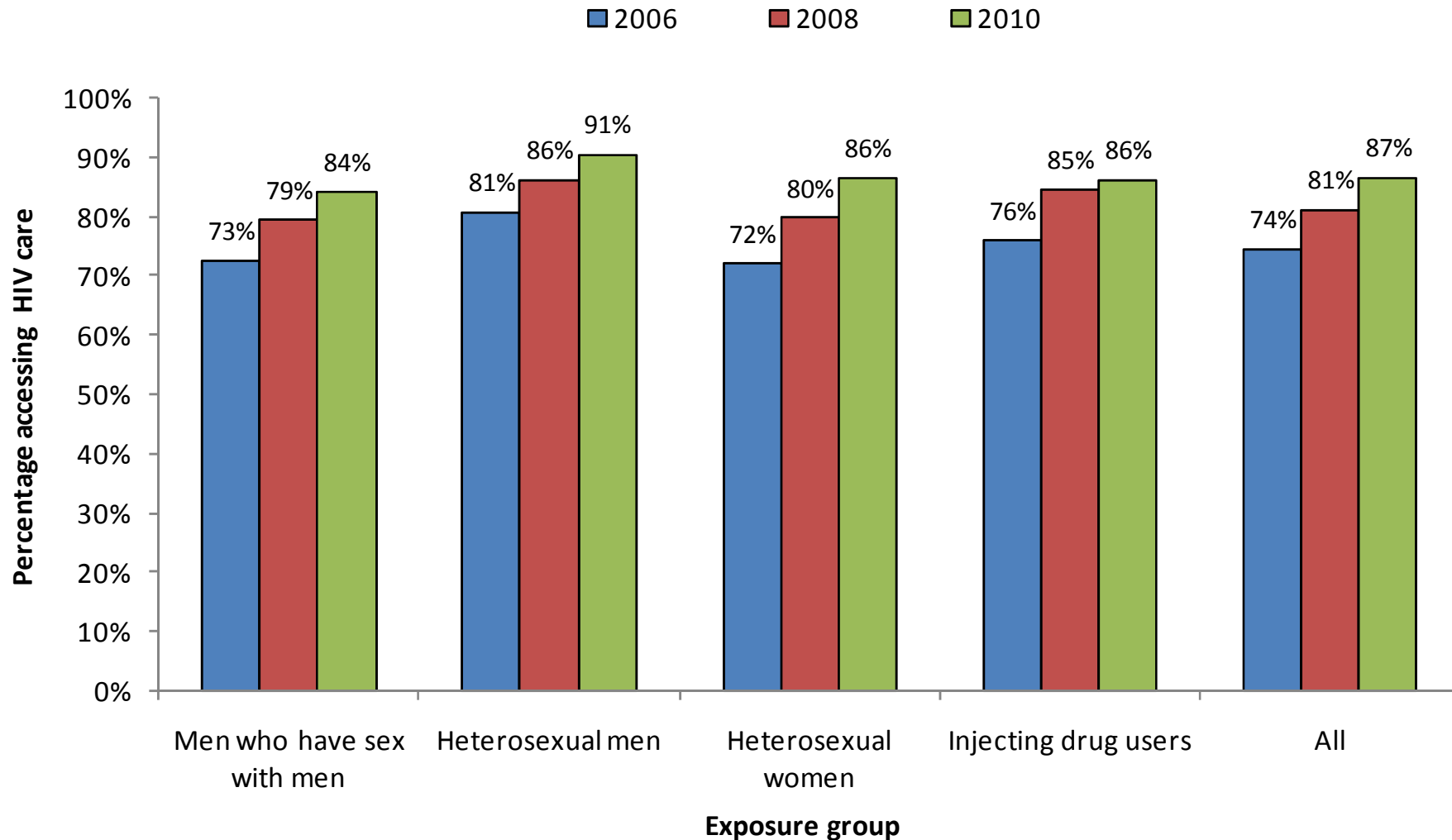
3. 85% of adults who had an undetectable viral load (VL < 50 copies/ml) within one year of starting ART (95% had a VL < 200)

4. 81% of adults who had a CD4 count ≥ 350 cells/mm³ after at least one year in HIV care (94% had a CD4 ≥ 200)

5. 94% of adults not lost to follow up in the next survey year

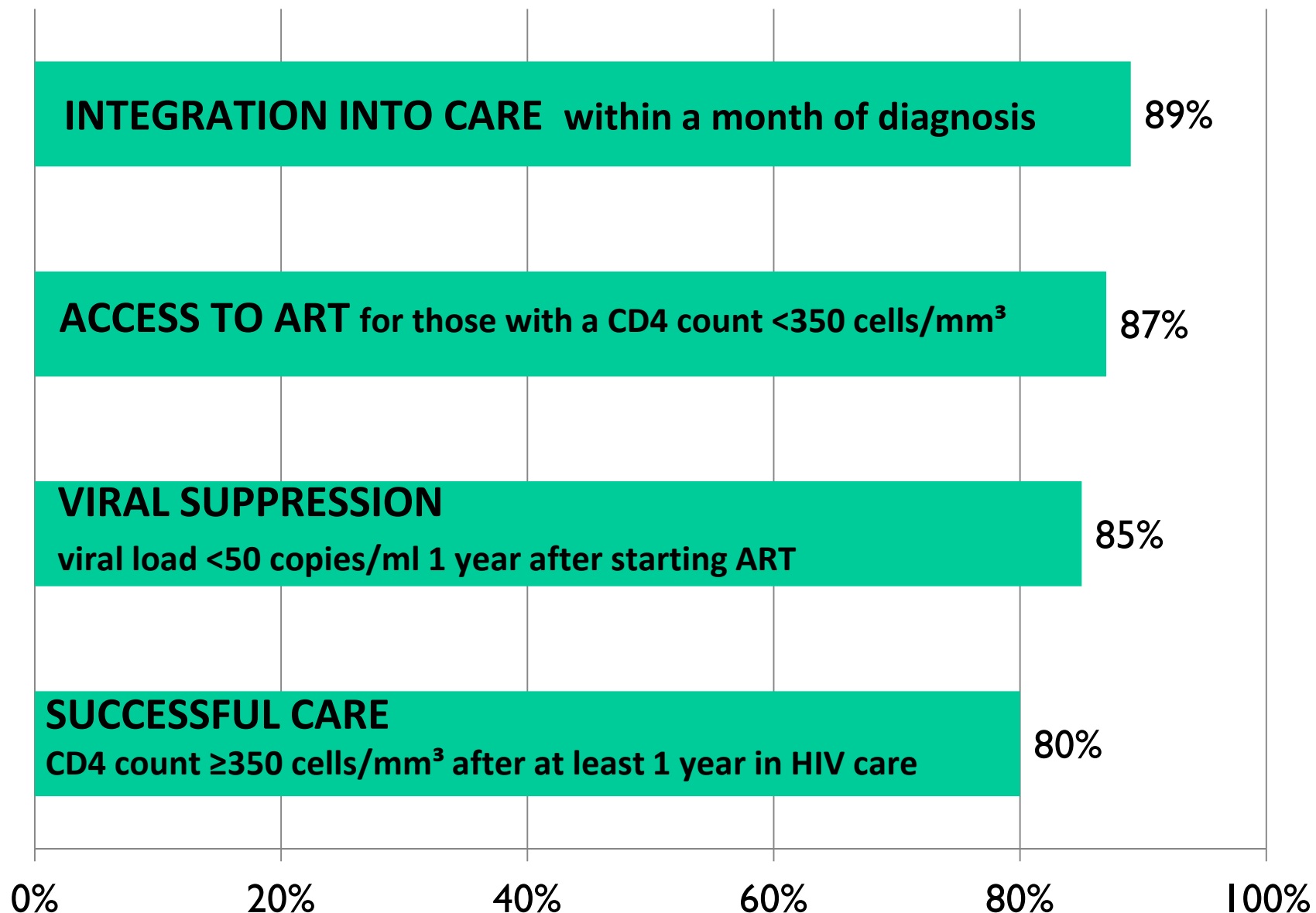


Proportion of HIV diagnosed persons with a $CD4 \leq 350$ cells/mm³ and receiving ART, UK



* Excludes persons with antiretroviral therapy data not reported.

Quality of HIV care in adults United Kingdom, 2010



Conclusions & Challenges

- Access to and quality of care is high in the UK
- Need to consider full spectrum of clinical care from 'pre-diagnosis' through to diagnosis and HIV care (including transfers and LTFU)
- Increasing patient complexity and care
- Ensure NHS restructure does not compromise care
 - pBR, CQUINS, QOF, LES, Dashboards
- Public Health Outcome Framework
 - late diagnosis vs high prevalence areas
- Patient involvement – Pt survey in development
- Tracking of transfers, LTFU, 'health tourism', drug resistance

Thank-you for listening!

www.hpa.org.uk



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