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Spectrum of Engagement in HIV Care and its impact on HIV transmission: Examples from France & UK

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Background

- Effective combination antiretroviral treatment (cART) improves the prognosis of HIV infection and AIDS and lowers the risk of HIV transmission.
- New international treatment recommendations urge clinicians to offer cART to all patients regardless of CD4 cell count.
- Despite new cART eligible criteria and increasing availability of cART, many HIV-infected individuals are not receiving cART.
- To receive cART and ultimately achieve viral suppression:
 - get tested and diagnosed with HIV,
 - be linked to HIV medical care,
 - remain in care,
 - be prescribed cART.
- Having a high proportion of people with HIV with undetectable viral load is generally perceived as critical to the success of cART to prevent HIV transmission.

HIV care cascade

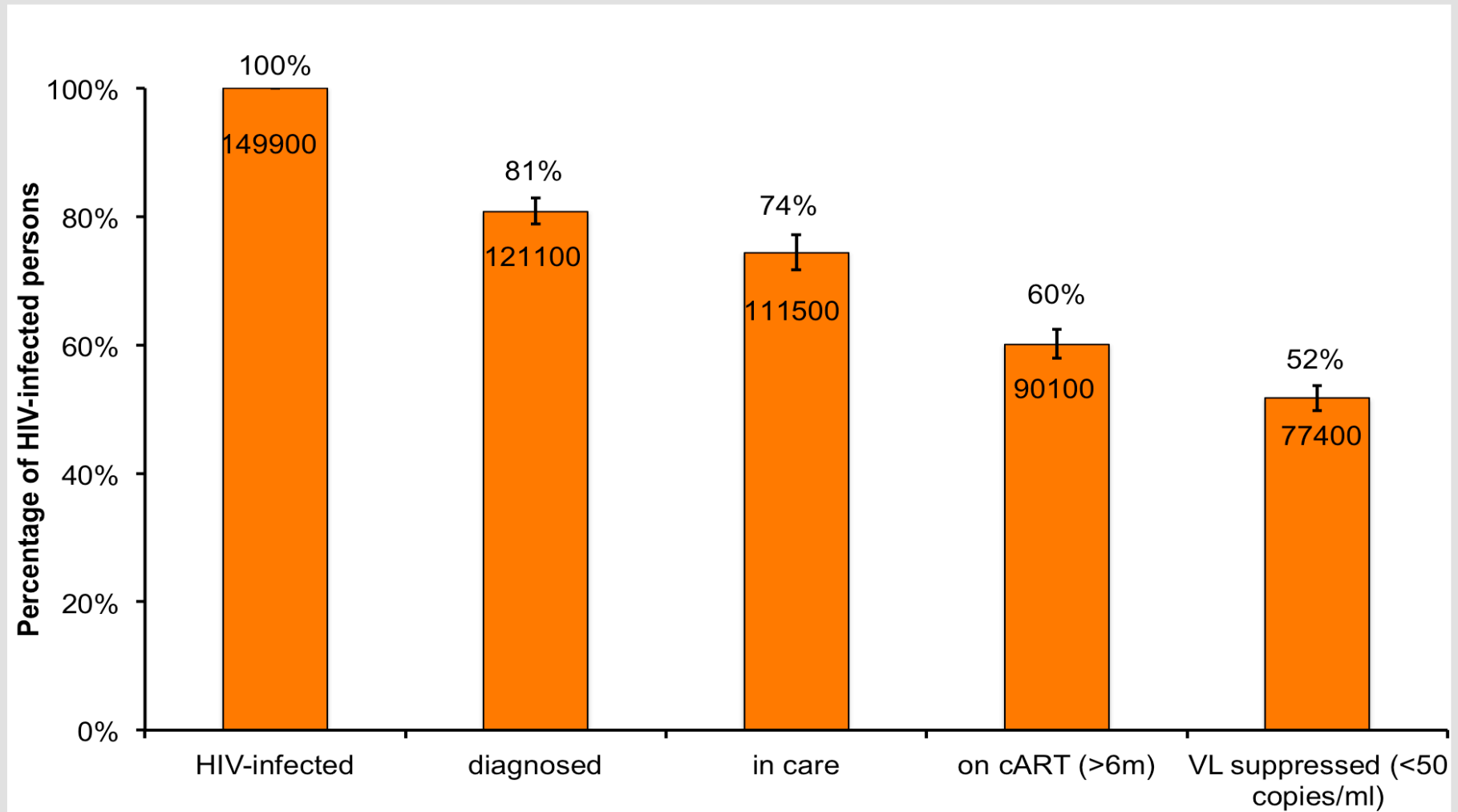
- A way to show, in visual form, the proportion of HIV-infected individuals in a country or community in each step of the engagement in HIV care.
- It shows the proportion of individuals living with HIV/AIDS who are actually receiving the full benefits of the medical care and treatment they need.
- It helps identify strengths and gaps in services, as well as future priorities.

HIV care cascade in France

Data & Methods – French care cascade

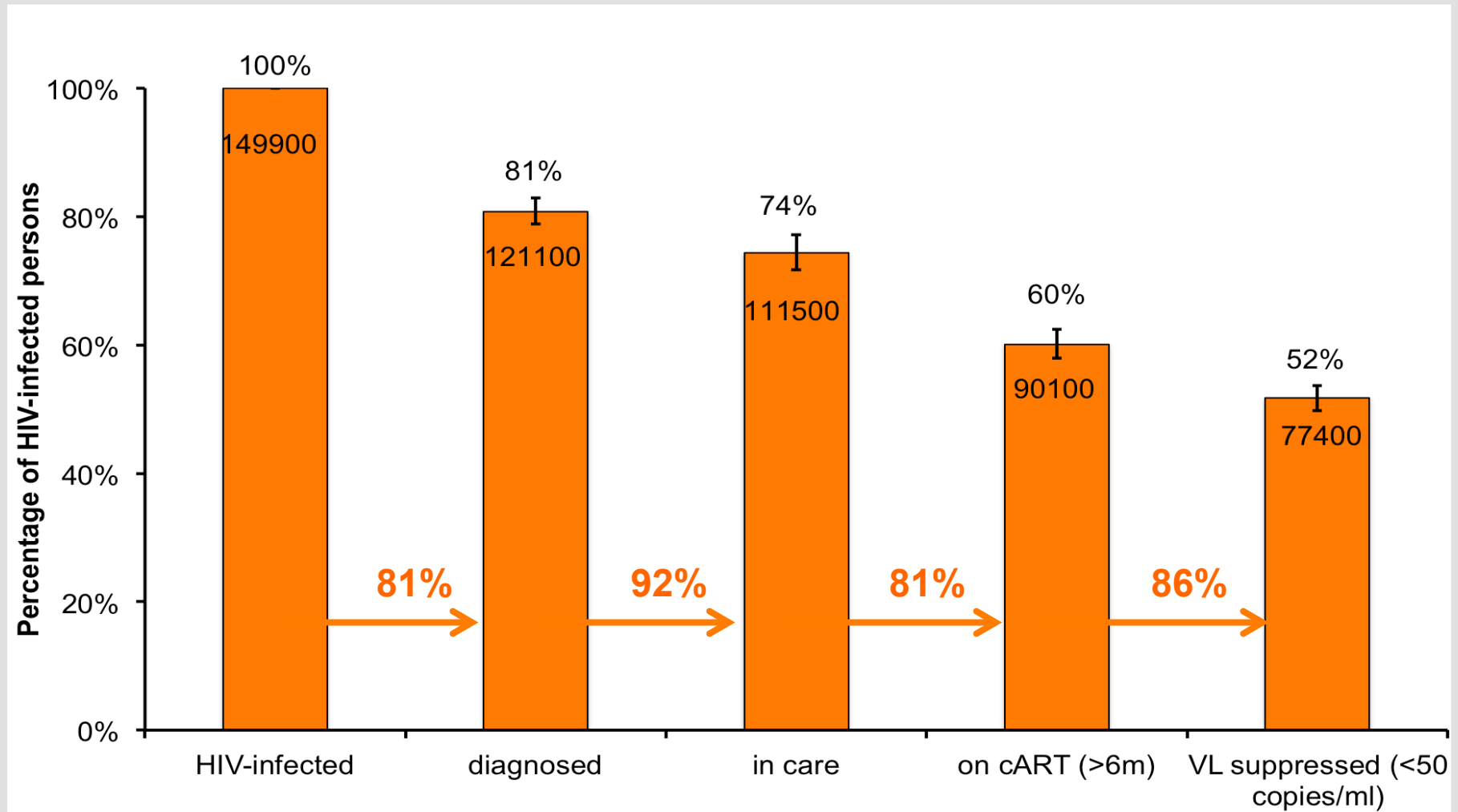
- **HIV-infected individuals in care:** data from the French health insurance scheme on the number of individuals having long-term disease agreement for HIV (LTD7); all HIV-infected individuals newly enrolled in care in France are eligible for LTD7, which exempts patients from co-payments.
- **HIV-infected individuals in care receiving cART (>6 months) and those achieving complete viral suppression on cART (<50 copies/mL):** Proportions of HIV-infected patients under care who were receiving cART (>6 months) and those achieving complete viral suppression (<50 copies/mL) were estimated using data from the FHDH-ANRS-CO4 cohort, which is representative of HIV patients in care in France.
- **Undiagnosed HIV-infected individuals:** HIV surveillance data and a new back-calculation model (Supervie V, et al. HIV in Europe Copenhagen 2012 conference, Copenhagen, Denmark, March 18–20 2012: PS6/05).
- **HIV-infected individuals diagnosed but not yet in care:** data on the estimated number of undiagnosed HIV-infected individuals and the proportion of individuals who knew their HIV status for more than 3 months among individuals newly enrolled in care. This proportion was estimated using data from FHDH-ANRS-CO4 cohort.

Engagement in HIV Care in France in 2010



Supervie V. & Costagliola D. The spectrum of engagement in HIV care in France: strengths and gaps. *20th Conference on Retroviruses and Opportunistic Infections*. Atlanta, USA: March 2013. Abstract #: 1030.

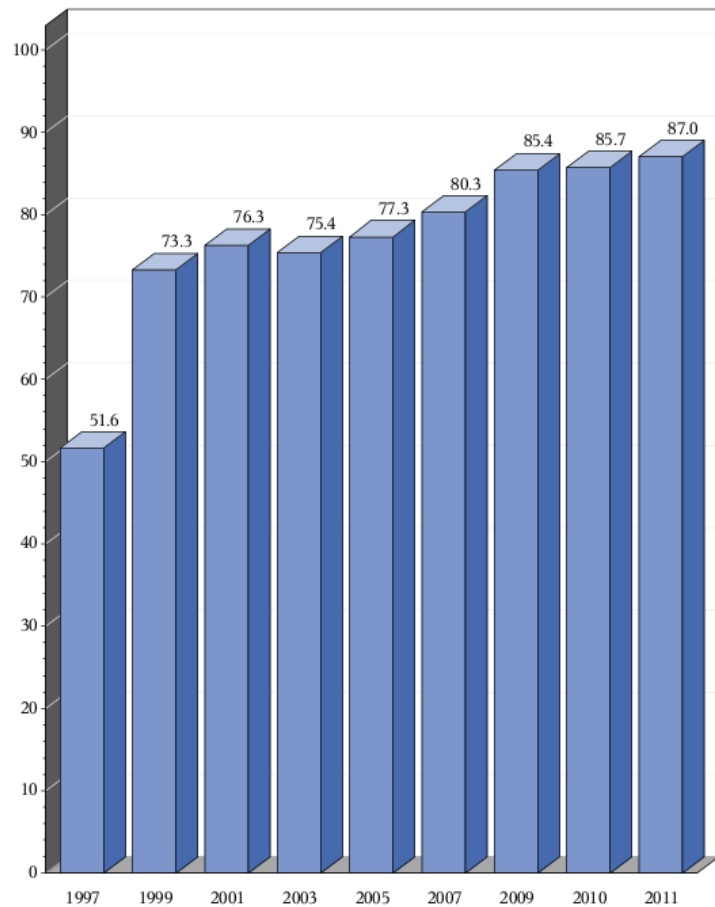
Engagement in HIV Care in France in 2010



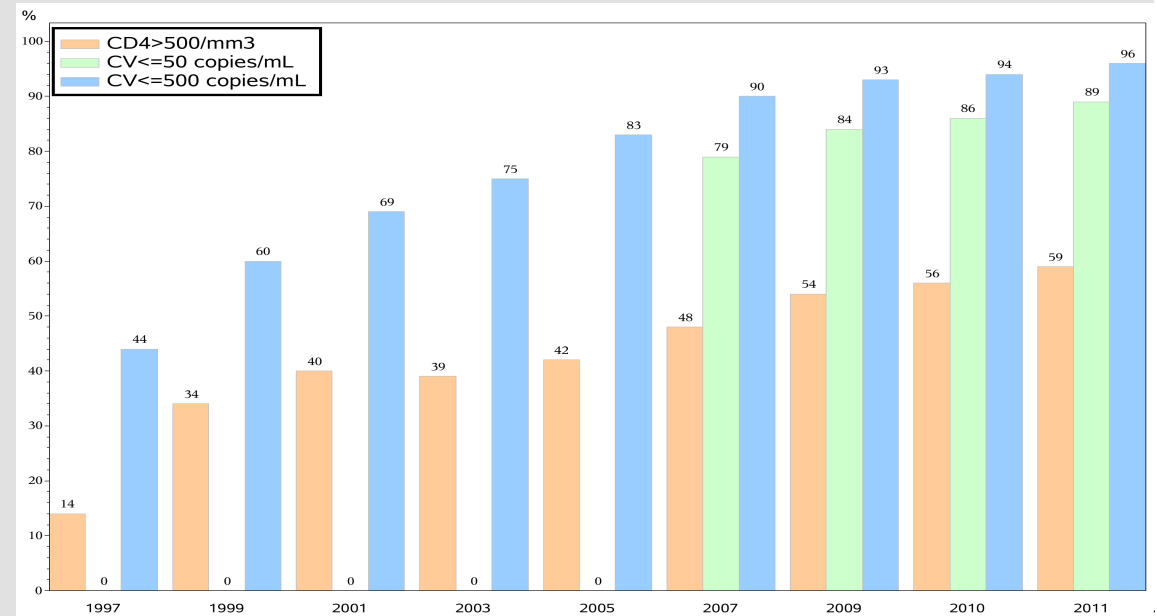
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cART coverage and viral suppression rates among HIV-infected patients in France

cART coverage

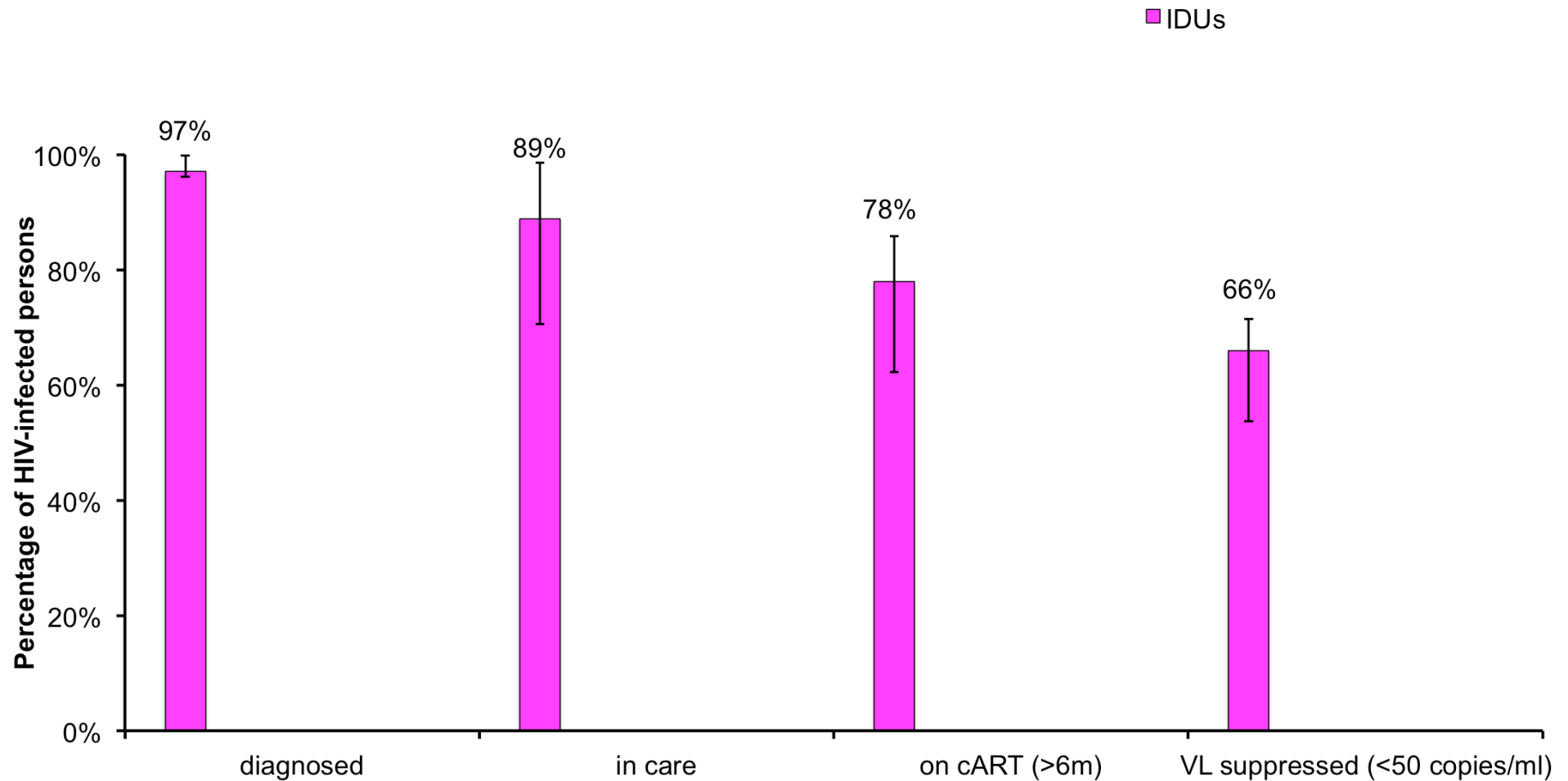


Viral suppression rates



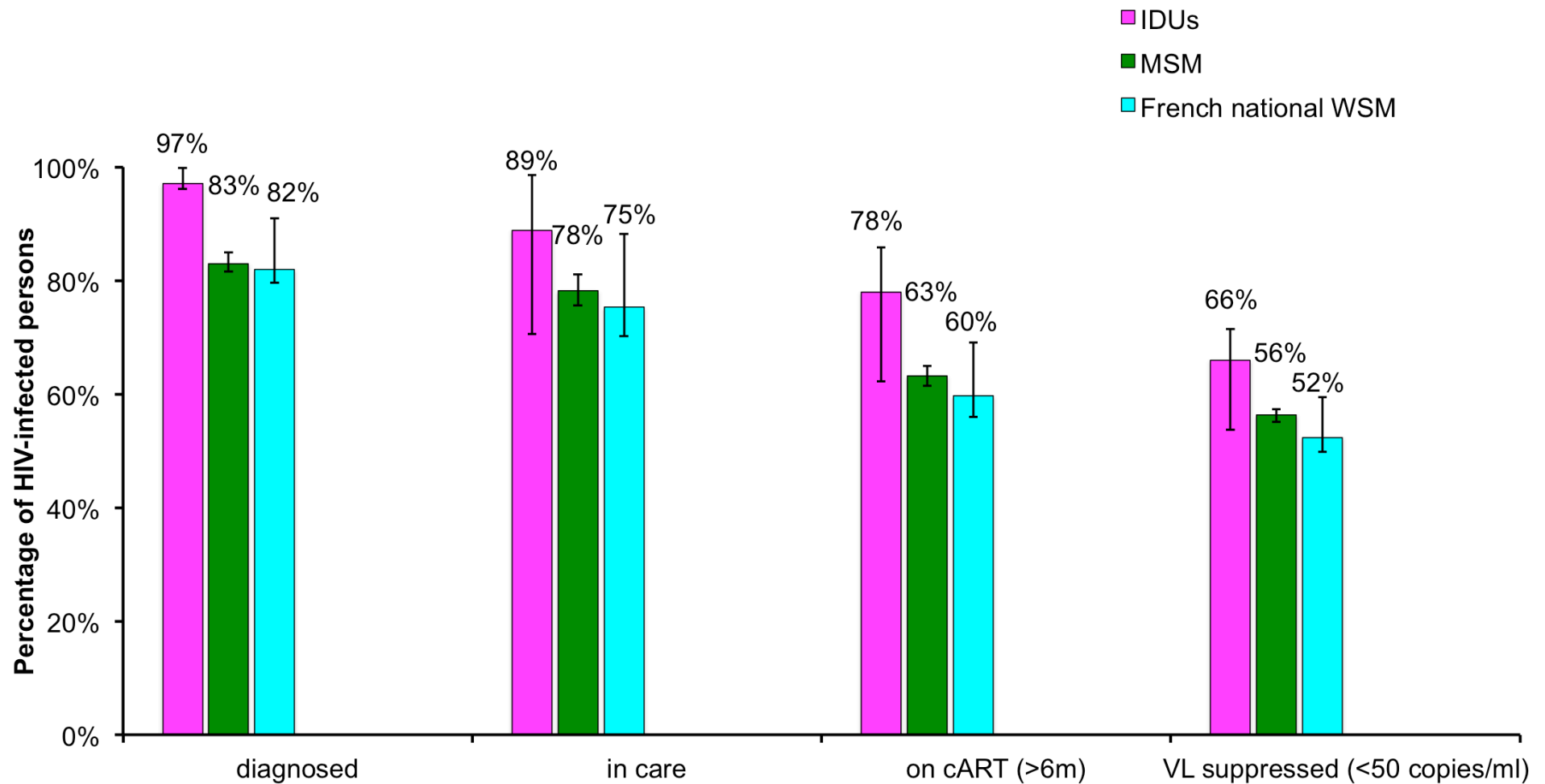
Source: FHDH-ANRS-CO4 cohort

Engagement in HIV Care in France in 2010 by transmission group



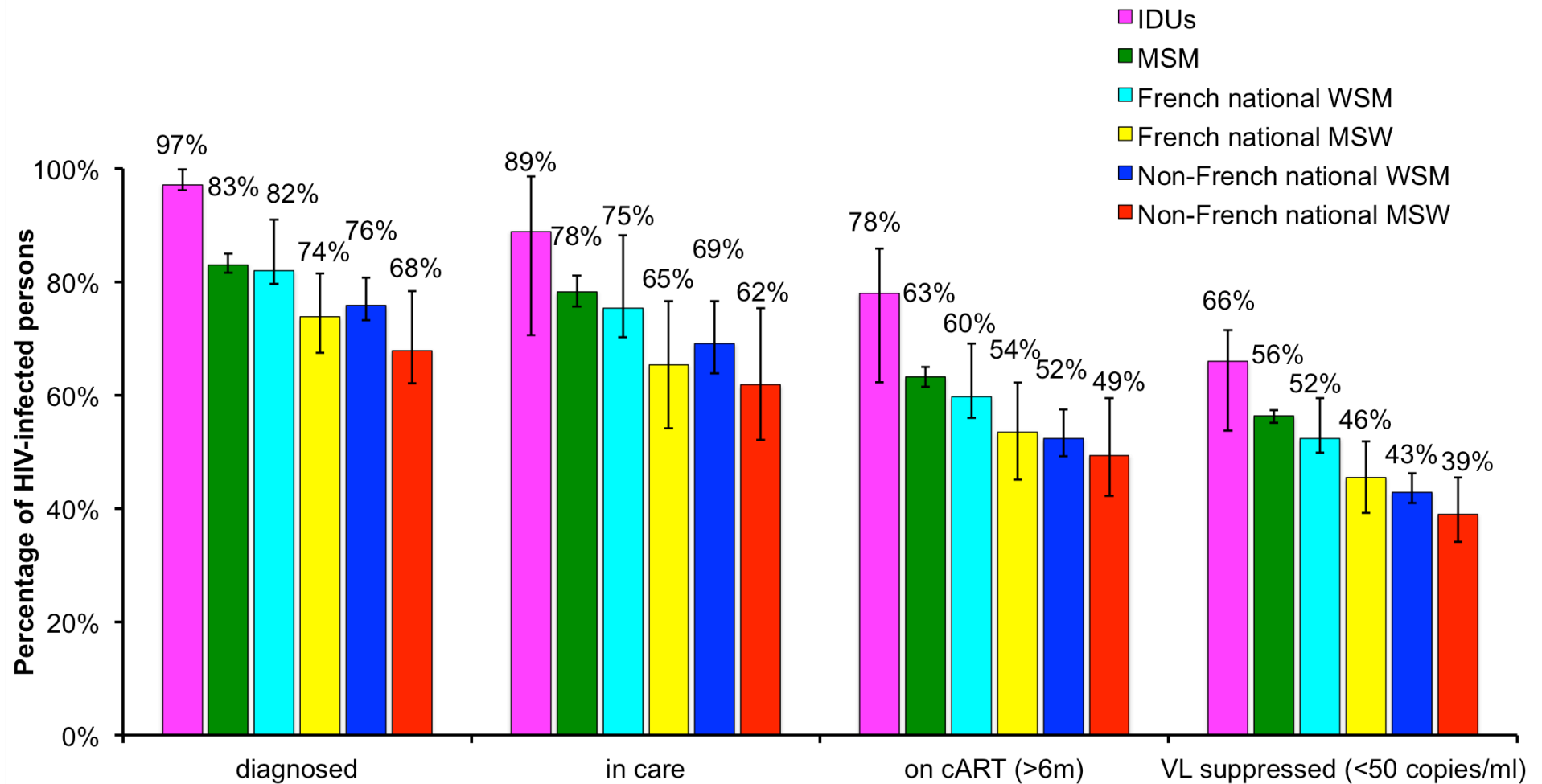
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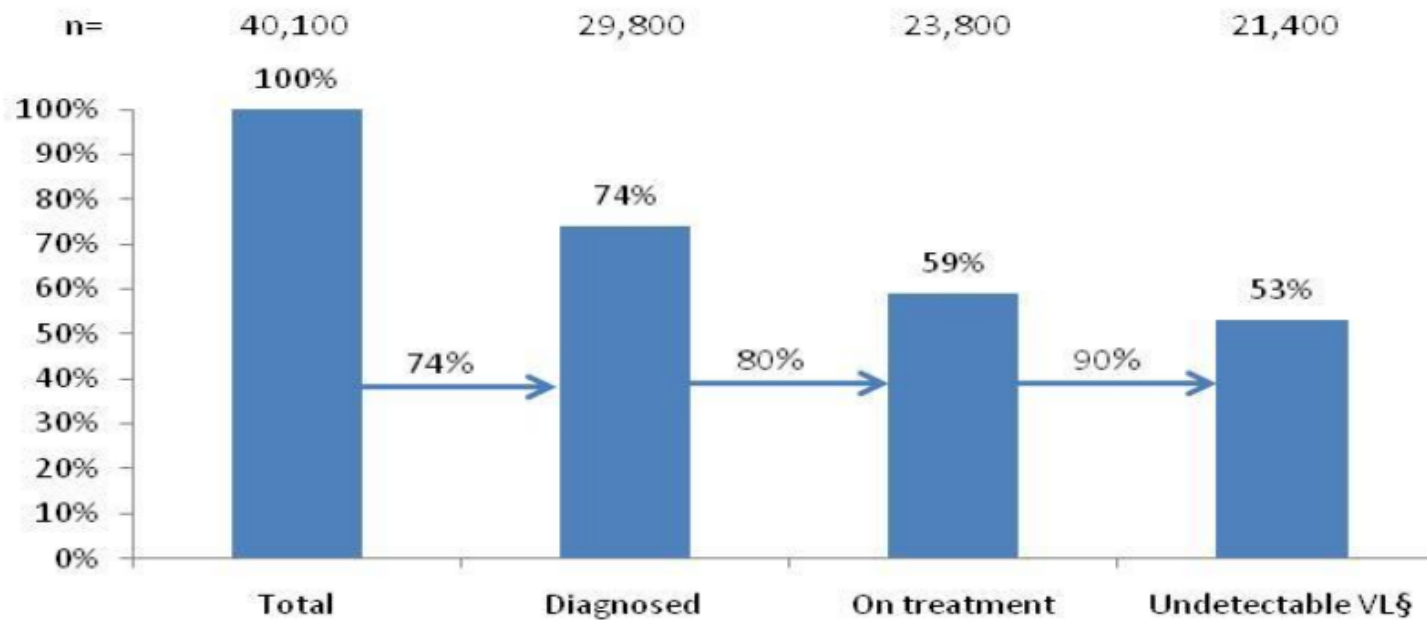
Engagement in HIV Care in France in 2010 by transmission group



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HIV care cascade in UK

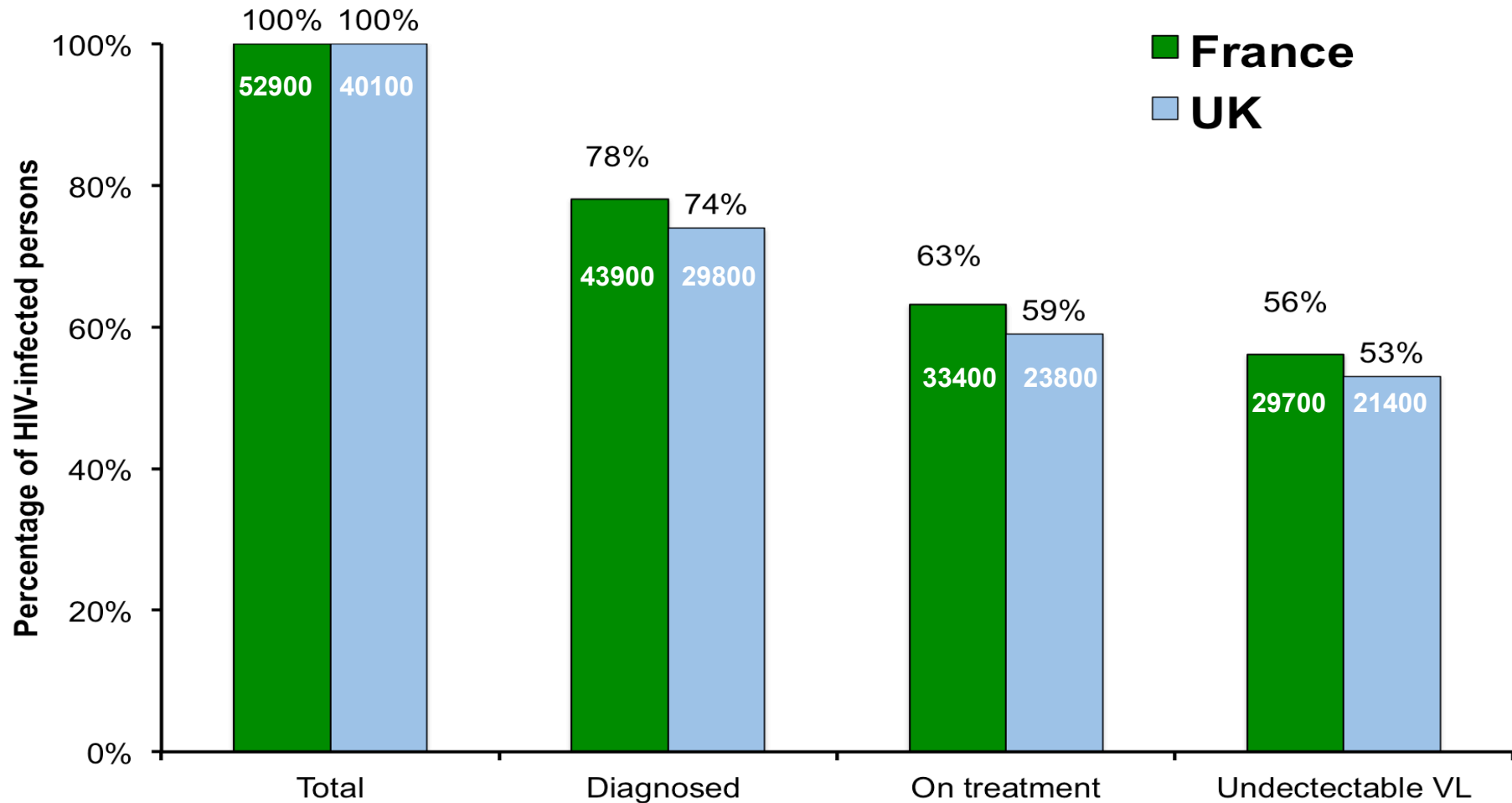
MSM living with HIV by diagnosis, treatment and viral load status: UK, 2010



* Numbers were adjusted by missing information and rounded to the nearest 100.
§ Viral load <50 copies/ml after HIV treatment initiation in the year of initiation.



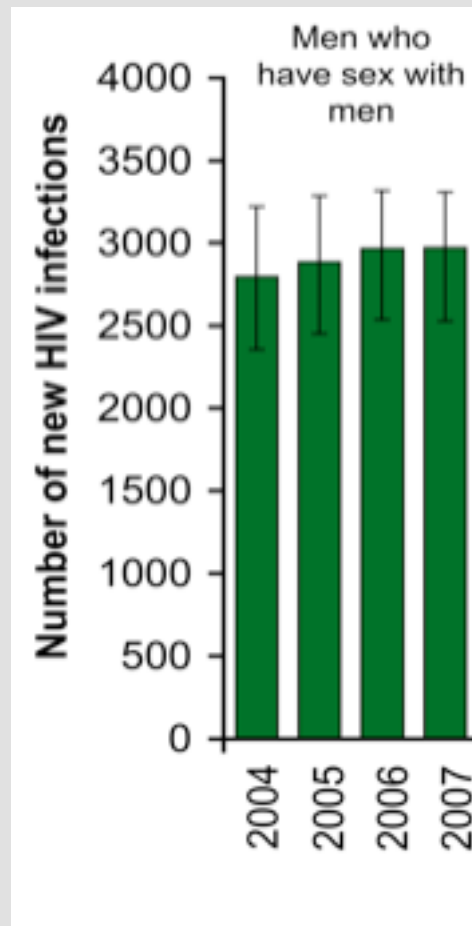
HIV Care cascade in France & in UK in 2010 among MSM



Delpech, V. Health System Concerns Related to TasP and Most At Risk Populations. *IAPAC Treatment as Prevention and PrEP*. London, UK: June 2012.
Supervie V. & Costagliola D. The spectrum of engagement in HIV care in France: strengths and gaps. *20th Conference on Retroviruses and Opportunistic Infections*. Atlanta, USA: March 2013. Abstract #: 1030.

Trends in HIV incidence among MSM

France



UK

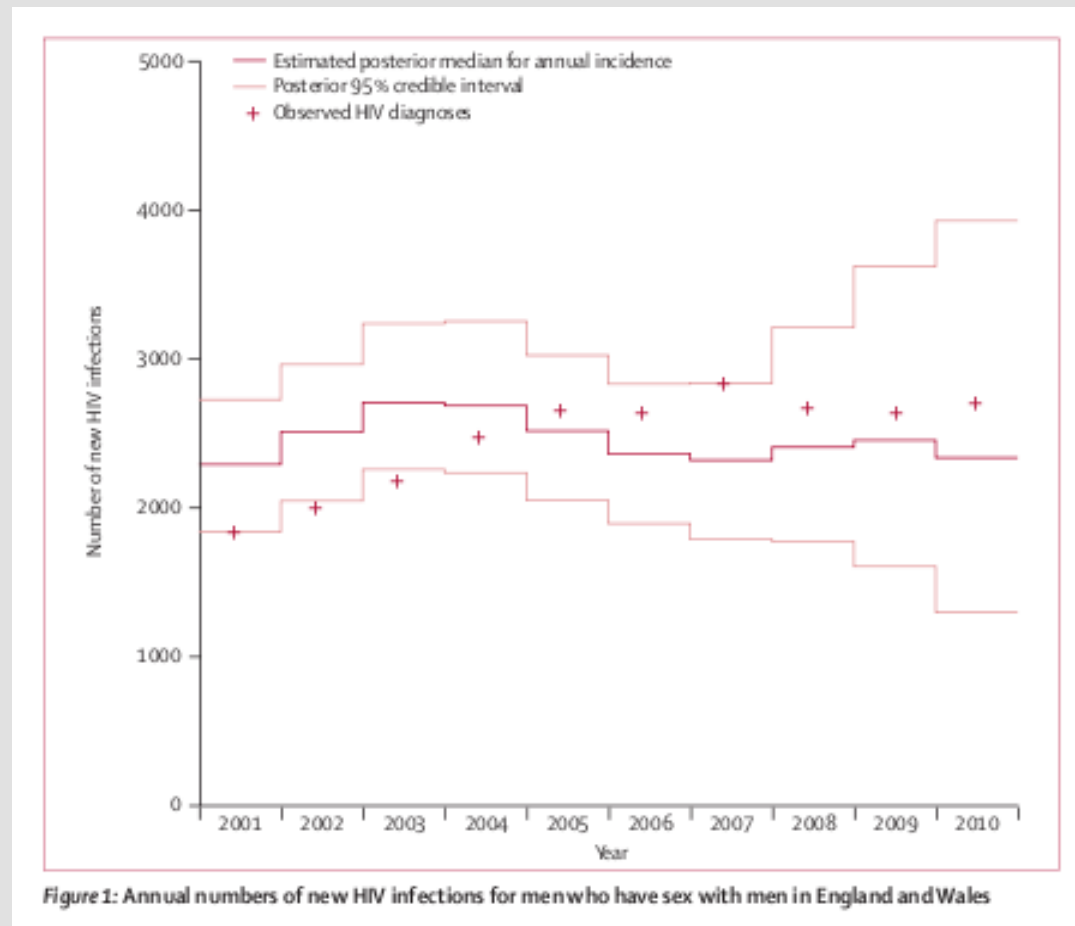


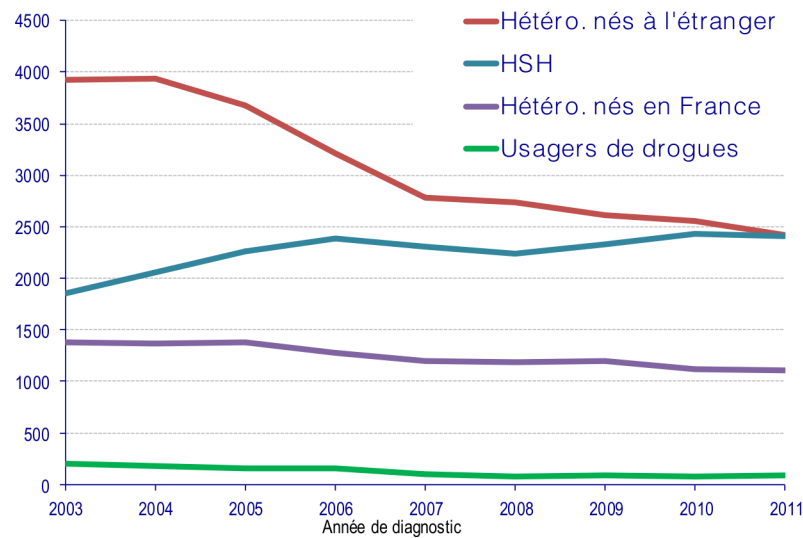
Figure 1: Annual numbers of new HIV infections for men who have sex with men in England and Wales

Ndawinz JD, Costagliola D, Supervie V. (2011) New method for estimating HIV incidence and time from infection to diagnosis using HIV surveillance data: results for France. *AIDS* 25:1905-13

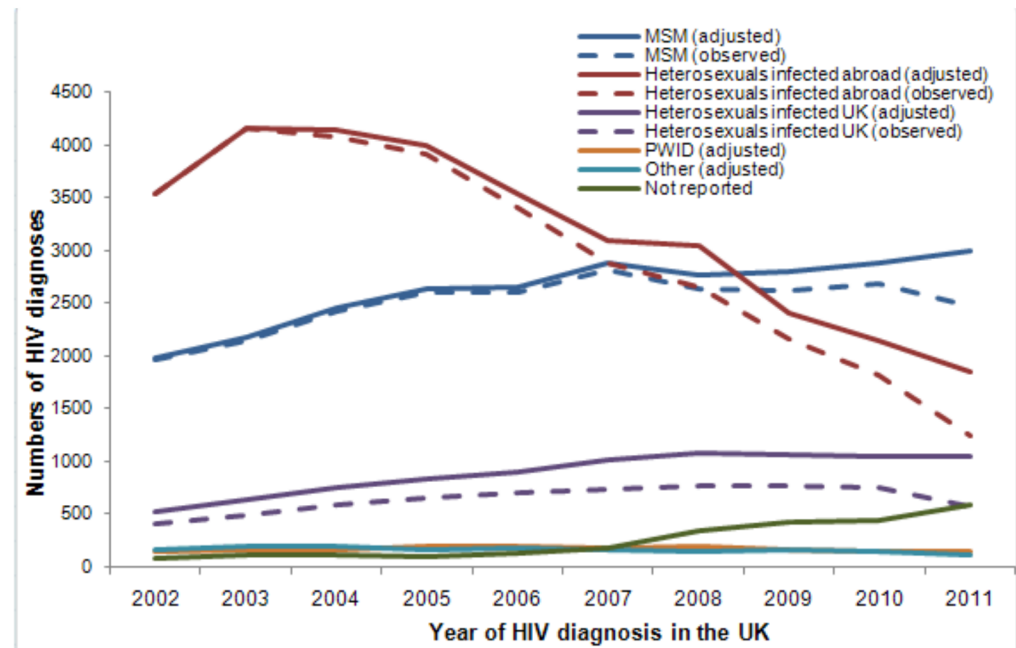
Birrell P.J., Gill ON, Delpech VC, Brown AE, Desai S, Chadborn TR, Rice BD, De Angelis D. (2013) HIV incidence in men who have sex with men in England and Wales 2001–10: a nationwide population study. *Lancet* doi: 10.1016/S1473-3099(12)70341-9. [Epub ahead of print]

Trends in new HIV diagnoses

France



UK



Sources : InVS, données DO VIH au 31/12/2011 corrigées pour les délais, la sous déclaration et les valeurs manquantes et HPA, United Kingdom new HIV diagnoses to the end of December 2011

Strengths of the health care systems

- High access to HIV testing

- 74% of HIV-infected individuals diagnosed in UK
- 81% of HIV-infected individuals diagnosed in France

- High access to HIV care

- >95% in care within 3 months in UK
- >96% in care within 6 months in France

- High retention in care

- > 95% retained in care annually in UK
- 94% (median, interquartile range: 80-100); defined by having a CD4 measurement at least every 6 months (evaluated in FHDH ANRS CO4)

- High cART coverage

- 87% of persons with a CD4 count <350 receiving cART in UK
- 81% of HIV-infected individuals in care in France receiving cART (>6 months) in France

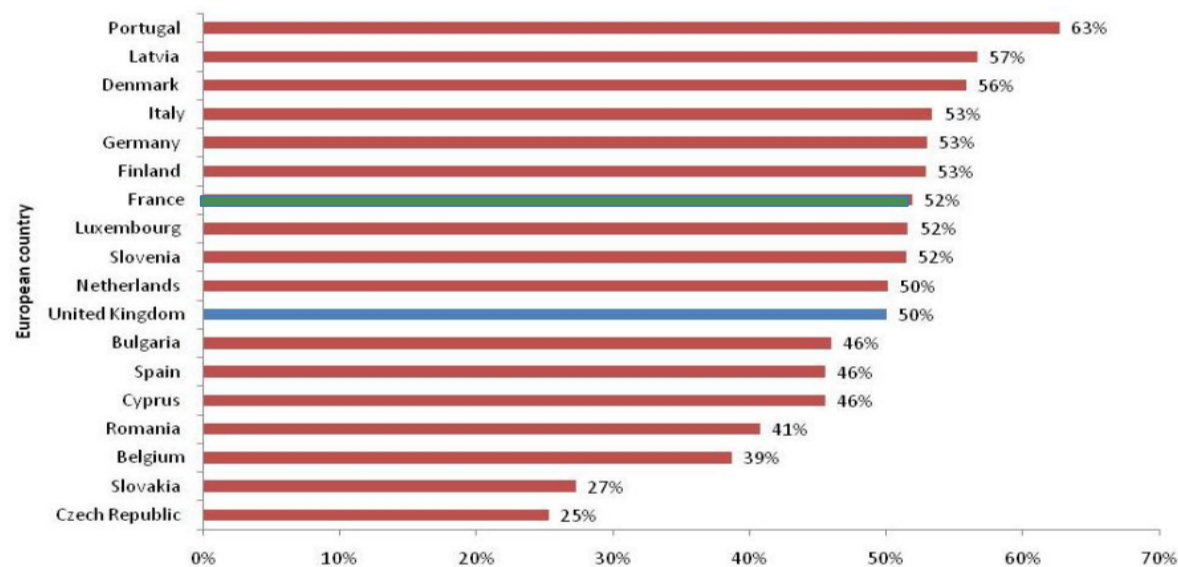
- High viral suppression rates

- 90% of treated HIV-infected MSM have undetectable viral load in UK
- 86% of treated HIV-infected individuals have undetectable viral load in France

Gaps

- Undiagnosed HIV infections: 19% in France, 26% in UK
→ account for most HIV transmission
- Late HIV diagnoses
→ associated with increased risk of HIV-related morbidity and mortality

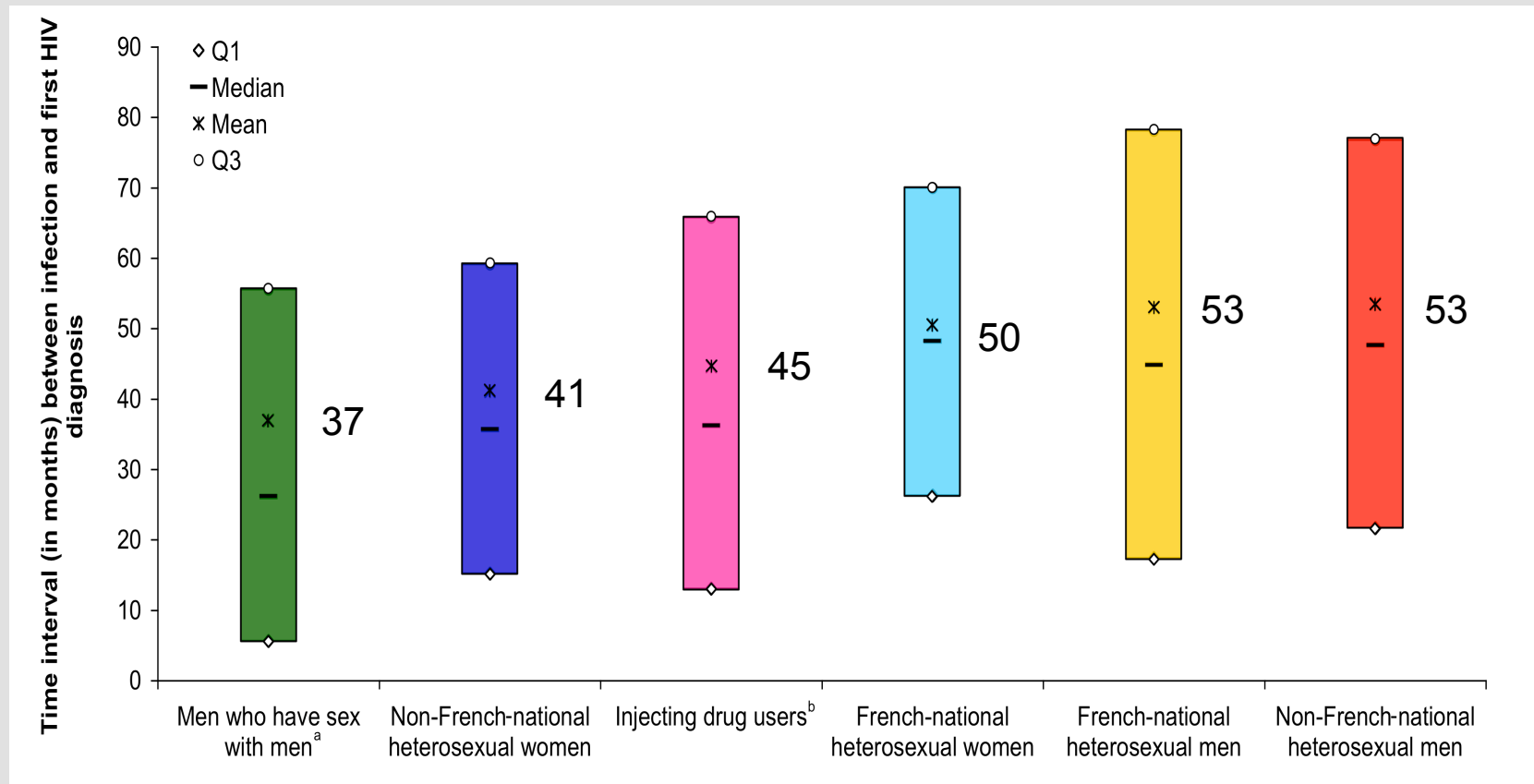
Late HIV diagnoses (CD4 <350 cells/mm³)
in Europe 2010



Future Challenges

Decreasing the time interval between infection and diagnosis

- in France:



- in UK : mean time-to-diagnosis interval of 38 months among MSM

Ndawinz JD, Costagliola D, Supervie V. (2011) New method for estimating HIV incidence and time from infection to diagnosis using HIV surveillance data: results for France. *AIDS* 25:1905-13

Birrell P.J., Gill ON, Delpech VC, Brown AE, Desai S, Chadborn TR, Rice BD, De Angelis D. (2013) HIV incidence in men who have sex with men in England and Wales 2001–10: a nationwide population study. *Lancet* doi: 10.1016/S1473-3099(12)70341-9. [Epub ahead of print]

Conclusions

- High prevalence of viral suppression among HIV-infected individuals in France and UK.
- Nevertheless, the level of viral suppression is too low to turn down the epidemic, especially among MSM where HIV transmission does not decrease although 56% (in France) and 53% (in UK) of HIV-infected MSM have undetectable viral load.
- Higher rates of HIV testing are required to reduce rates of undiagnosed HIV and late HIV diagnosis. Essential to increase HIV testing opportunities.
- Expanded HIV test and treat programs will certainly increase life expectancy of HIV-infected individuals but are unlikely to halt the HIV epidemic without further interventions.

Acknowledgements

- Valerie Delpech