

Developing Indicators to Monitor Effectiveness of HIV Prevention for men who have sex with men

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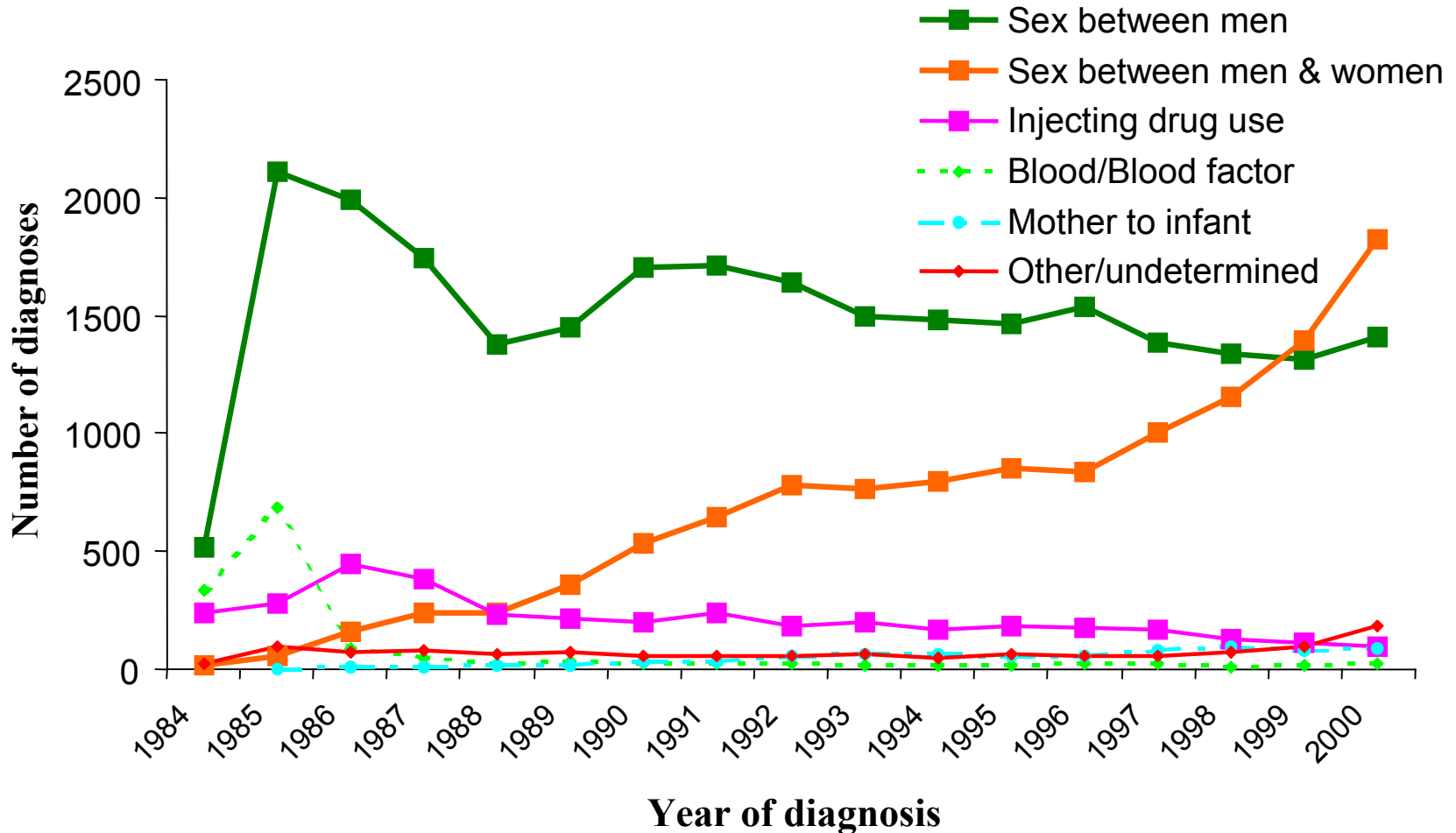
Communicable Disease Surveillance Centre

Content:

HIV Prevention indicators

- Setting the scene: Recent trends in STIs, and HIV in Britain.
- HIV Prevention indicators
 - Why are we interested?
 - How can we measure it?
 - What are the gaps?

Reports to CDSC of all HIV infected individuals by year of diagnosis*



* numbers, particularly for recent years, will rise as further reports are received

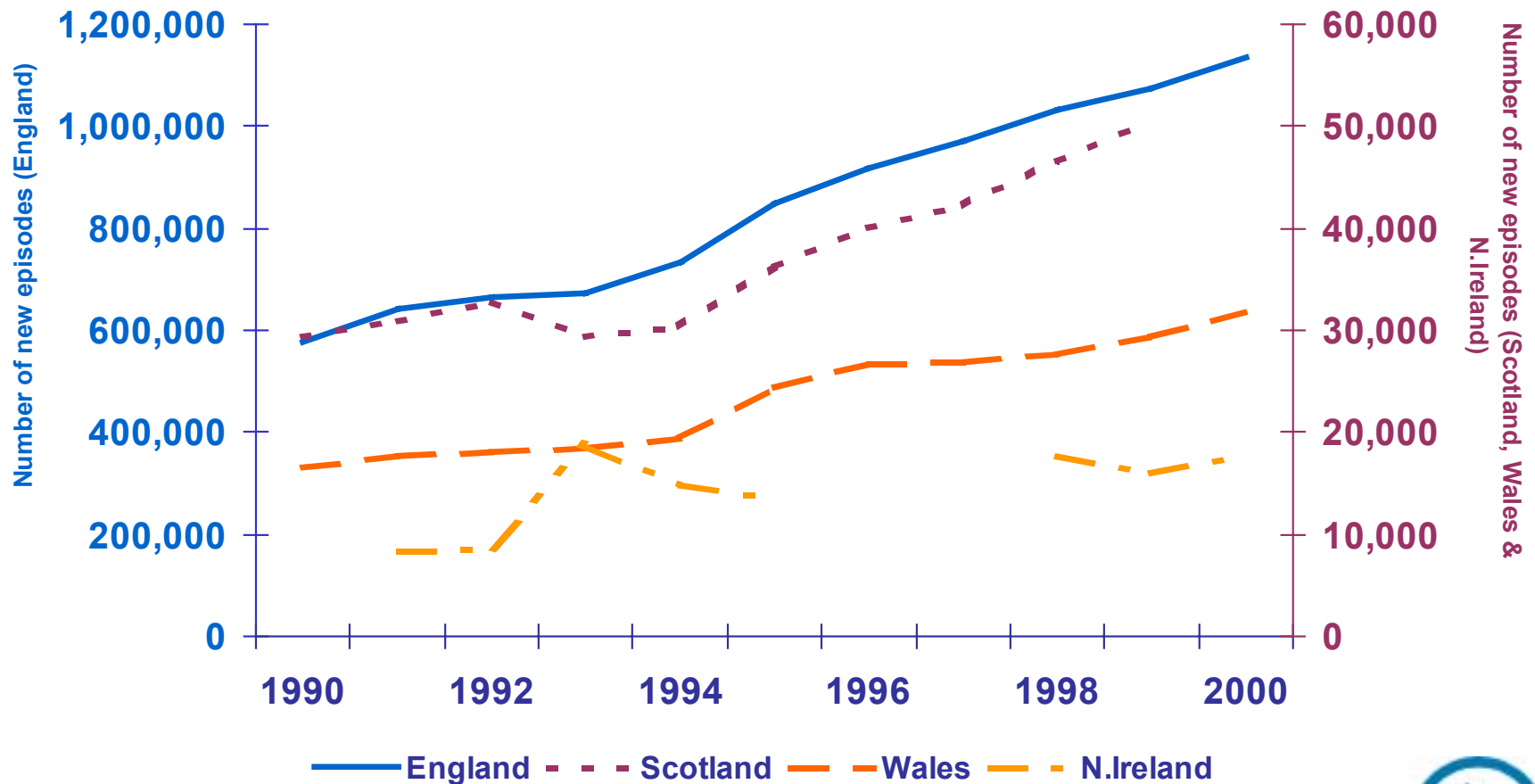
Estimated number of adults* with HIV infection in the UK at end of 2000

Exposure category	Number diagnosed	Number undiagnosed	Total
Sex between men	13800	3200 (19%)	17000
Injecting drug use			
males and females	1300	200 (13%)	1500
Sex between men & women			
males	3300	3100 (48%)	6400
females	5200	2900 (36%)	8100
Blood products			
males and females	500	0 (0%)	500
Total	24100	9400 (28%)	33500

*Persons aged over 15 years

All diagnoses and workload at GUM clinics, by country: 1995-2000*

*Data are currently unavailable from Scotland for 2000 and from N.Ireland for 1990,1996 & 1997



New diagnoses of selected STIs in GUM clinics

England, Wales & Northern Ireland: 2000

	% change		
	2000	1999-2000	1995-2000
Genital warts	66,044	-1%	19%
Chlamydia	64,000	18%	107%
Gonorrhoea	20,663	29%	102%
Genital herpes	16,803	0%	7%
Syphilis	333	57%	145%

HIV Prevention Indicators: Rationale

- Evaluate and monitor the effectiveness of prevention activities (through use of appropriate markers).
- Monitor changes in clinical spectrum of disease which may be relevant to HIV transmission (transmissibility and infectivity)
- Can also monitor other factors which influence the spread of infection within the community targeted by prevention activities
 - Sexual behaviour
 - Access to and use of health care

Primary HIV Prevention

- **Definition:** Activities to prevent transmission or acquisition of HIV
- How can we evaluate primary prevention activities?
- What are the gaps in our surveillance?

Population targets and health promotion aims.

Making it count 2000

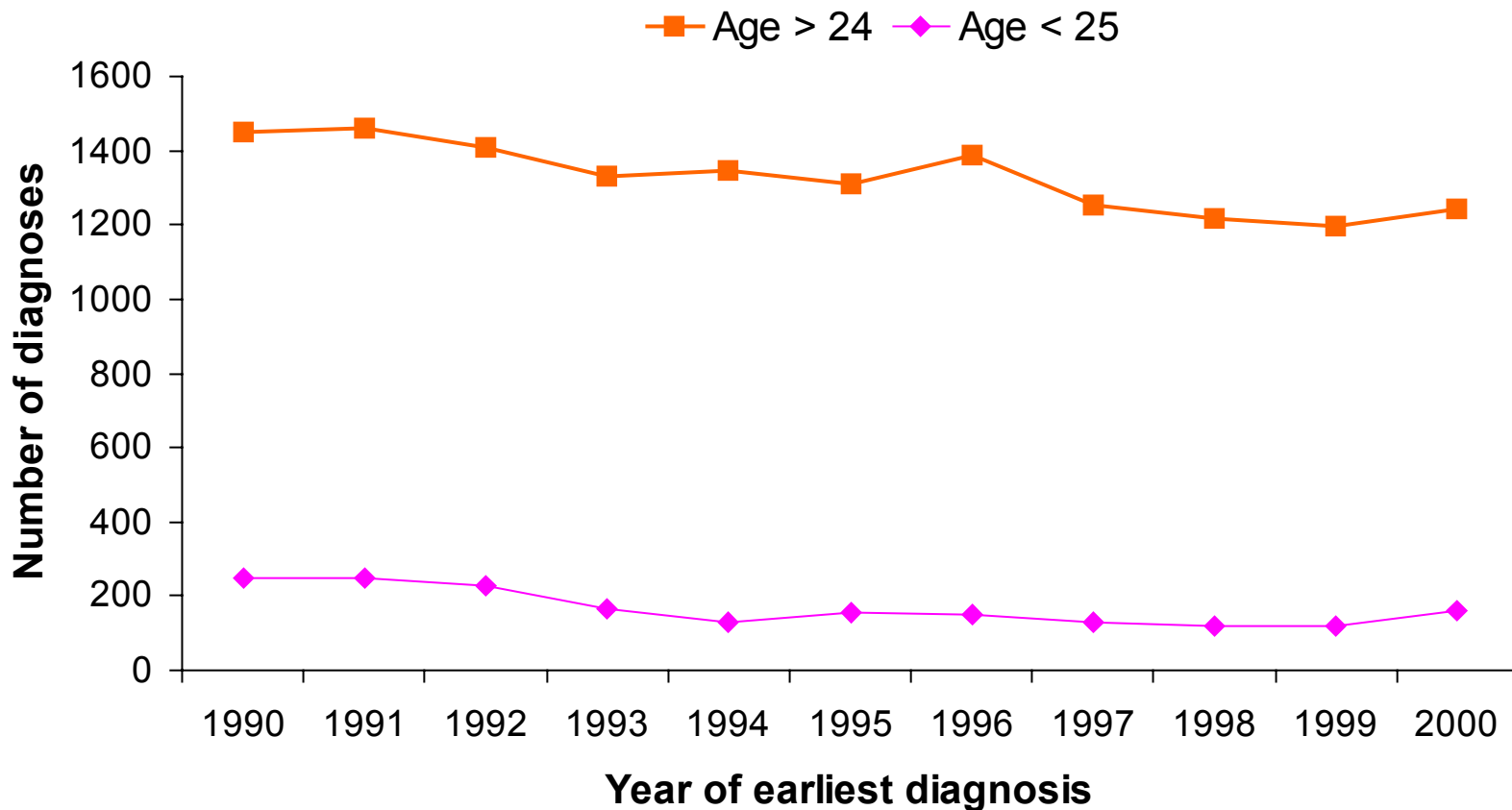
- Strategic targets
 - A reduction in the number of occasions of sdUAI
 - A reduction in condom failure among all users
 - A reduction in the prevalence of gonorrhoea and NSU infections

Indicators to monitor effectiveness of HIV prevention interventions

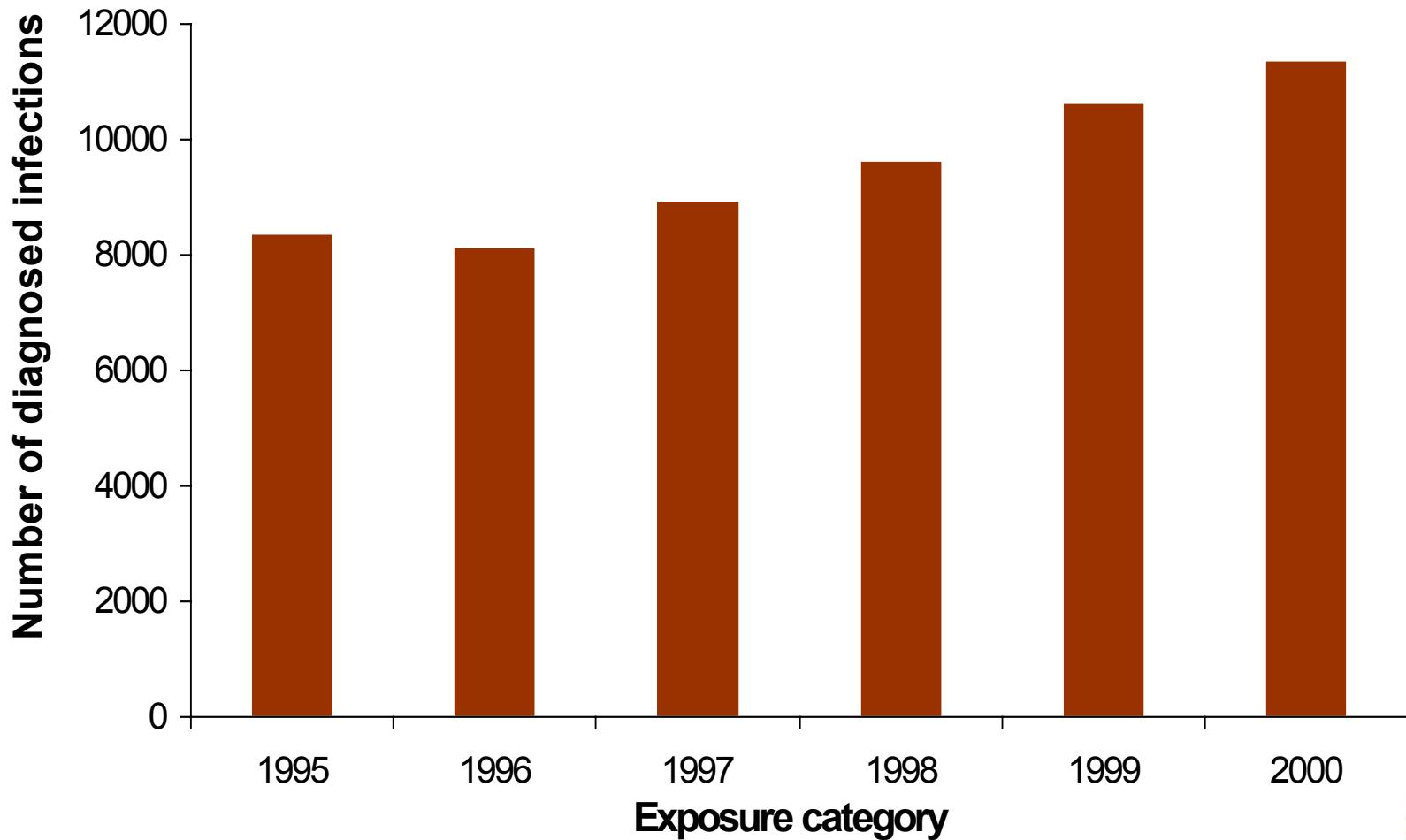
- Four areas relevant to HIV transmission and disease prevention among homosexual men
 - HIV prevalence
 - HIV incidence
 - Risk behaviour
 - Healthcare utilisation

New diagnoses of HIV infection in the UK: Sex between men

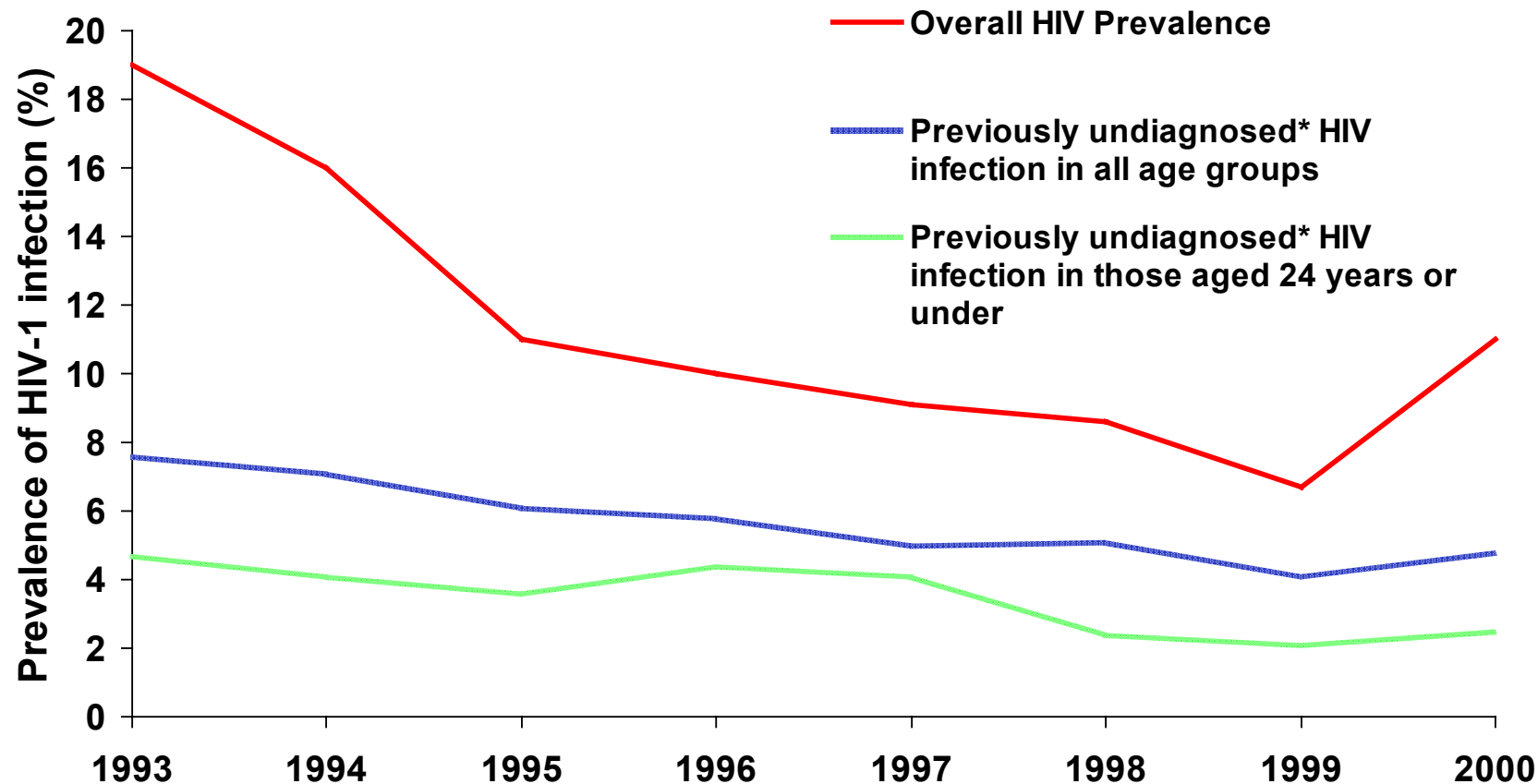
**numbers, particularly for recent years, will rise as further reports are received*



Trends in prevalent diagnosed HIV infections in men who have sex with men seen for care in England, Wales & N Ireland: SOPHID 2000

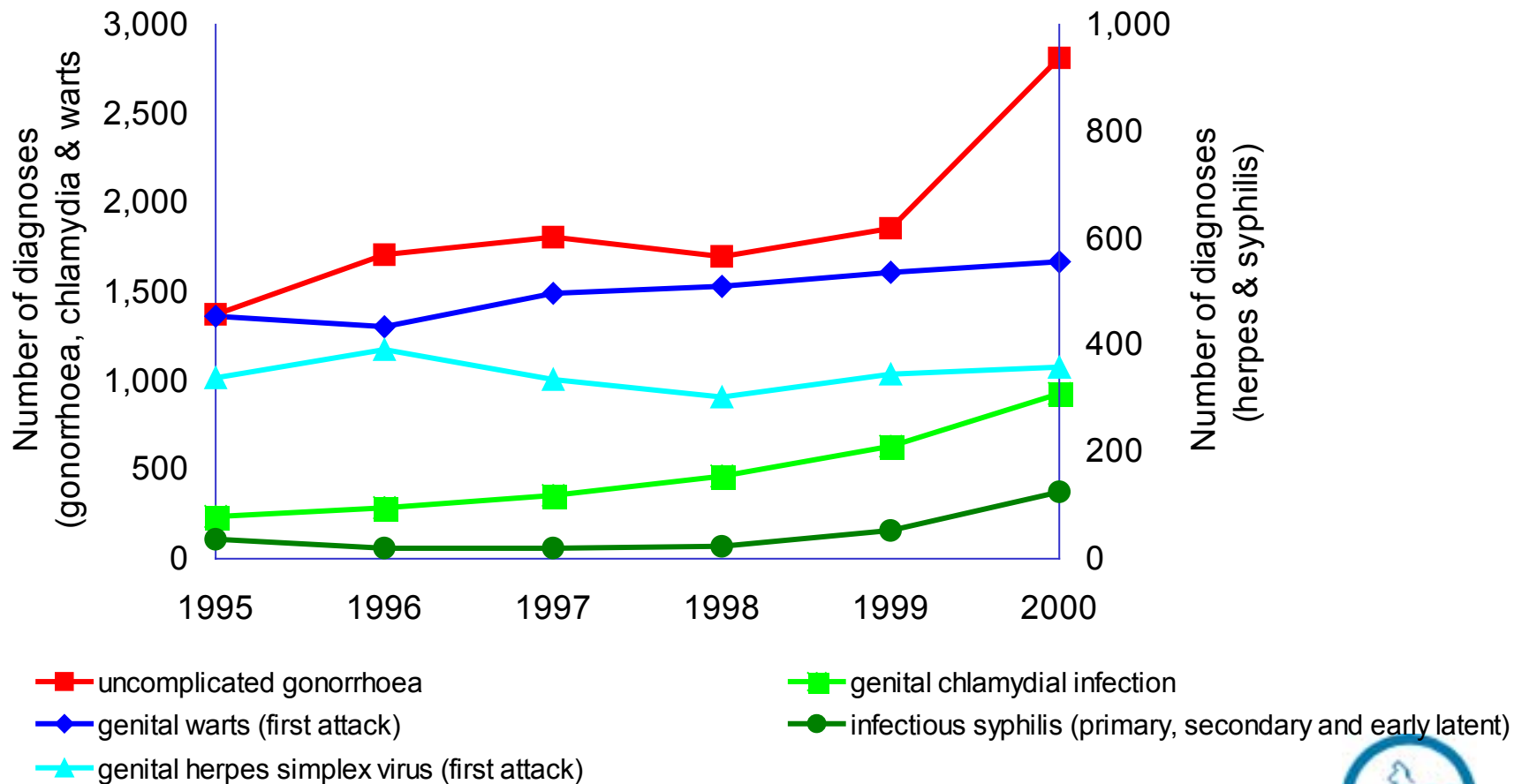


HIV infection prevalence in genitourinary clinic attendees London: **homosexual and bisexual men**



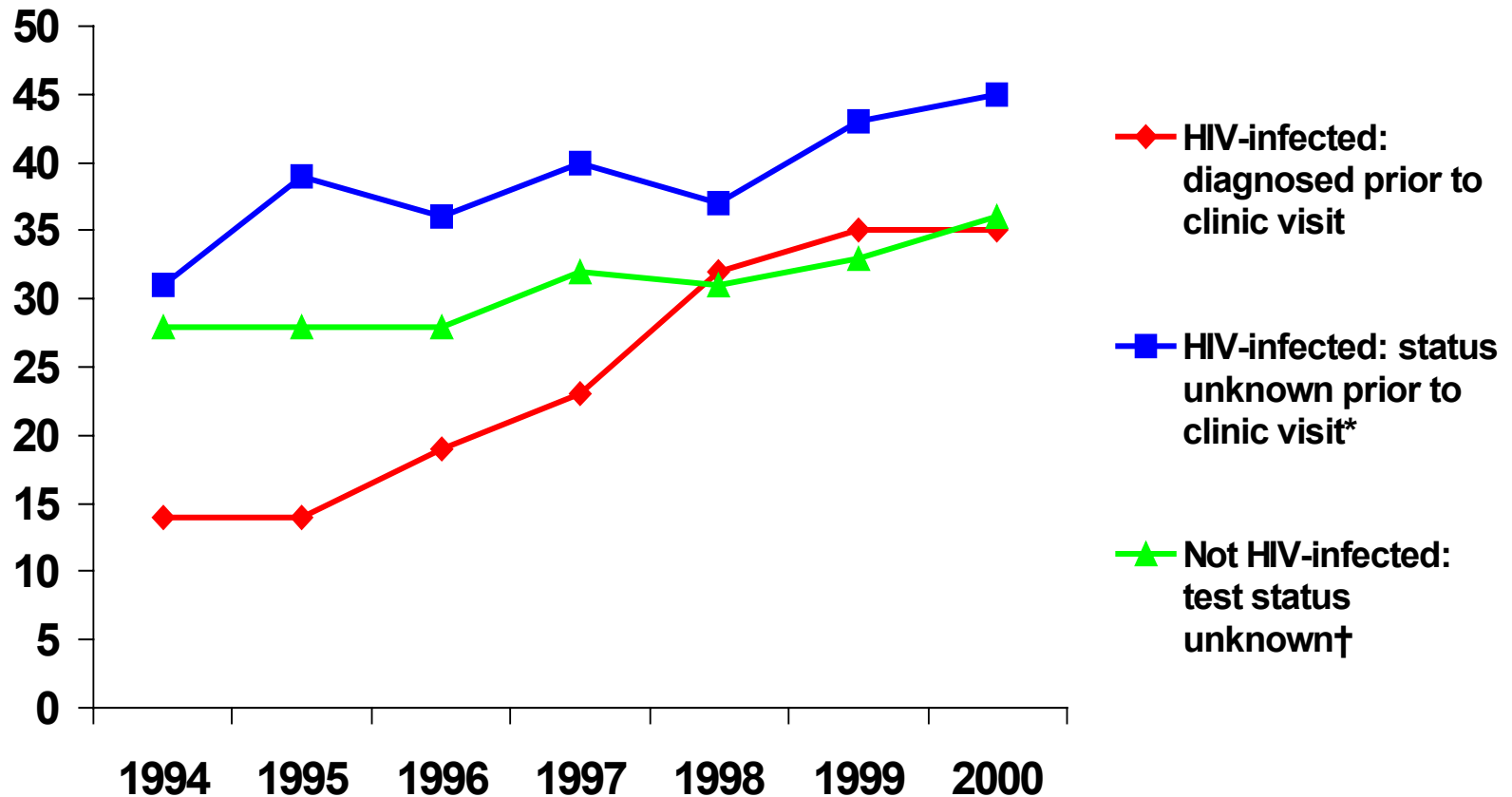
*Previously undiagnosed includes those newly diagnosed at this visit as well as those staying undiagnosed, but excludes those who had been diagnosed earlier

New diagnoses of selected STIs in men who have sex with men, England & Wales: 1995 to 2000



Percentage of homo/bisexual men with an acute STI according to their HIV infection status

England & Wales, and Northern Ireland



*Will include those HIV infected men who had their HIV infection diagnosed during this clinic attendance

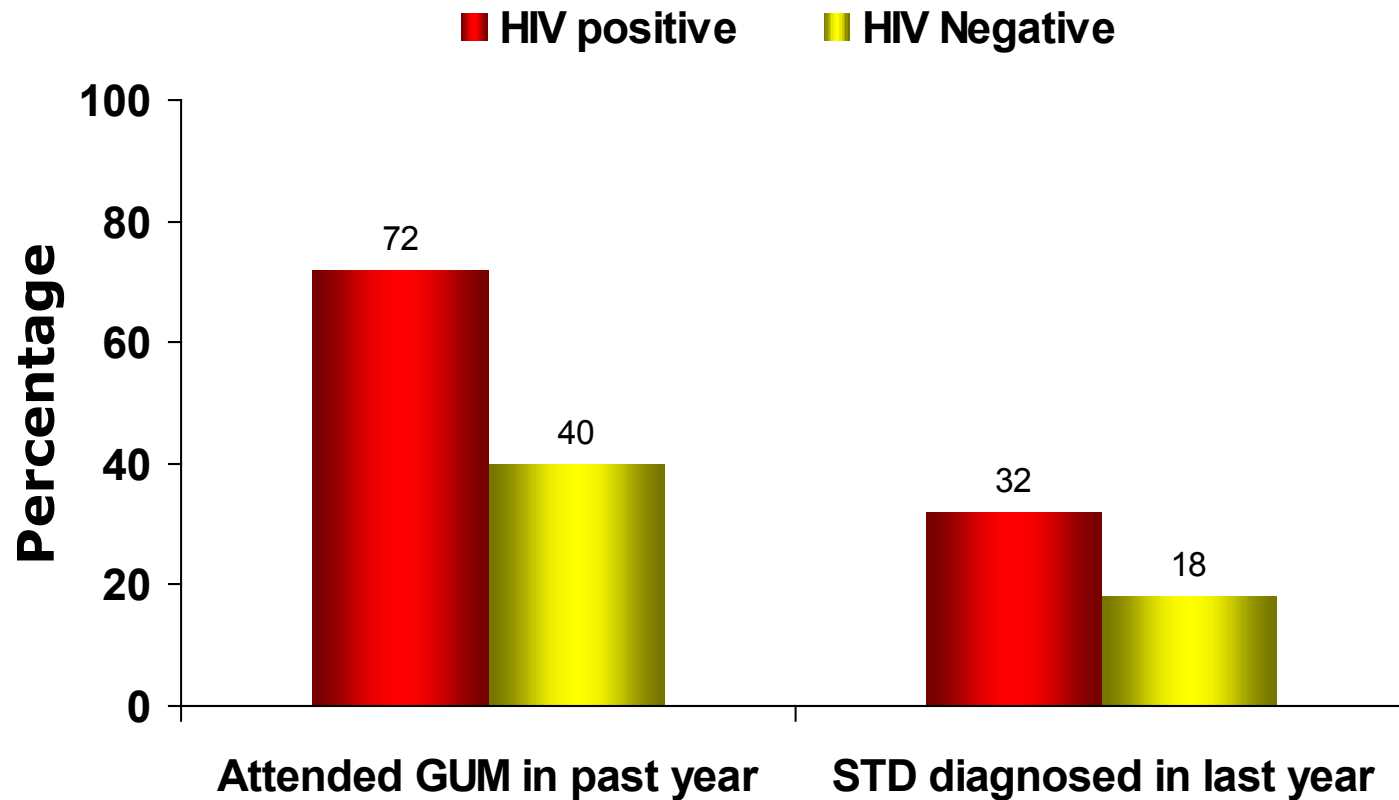
†Data is not collected on the voluntary confidential HIV test history of those who are not infected with HIV as from unlinked anonymous testing

HIV and STIs in Gay men:

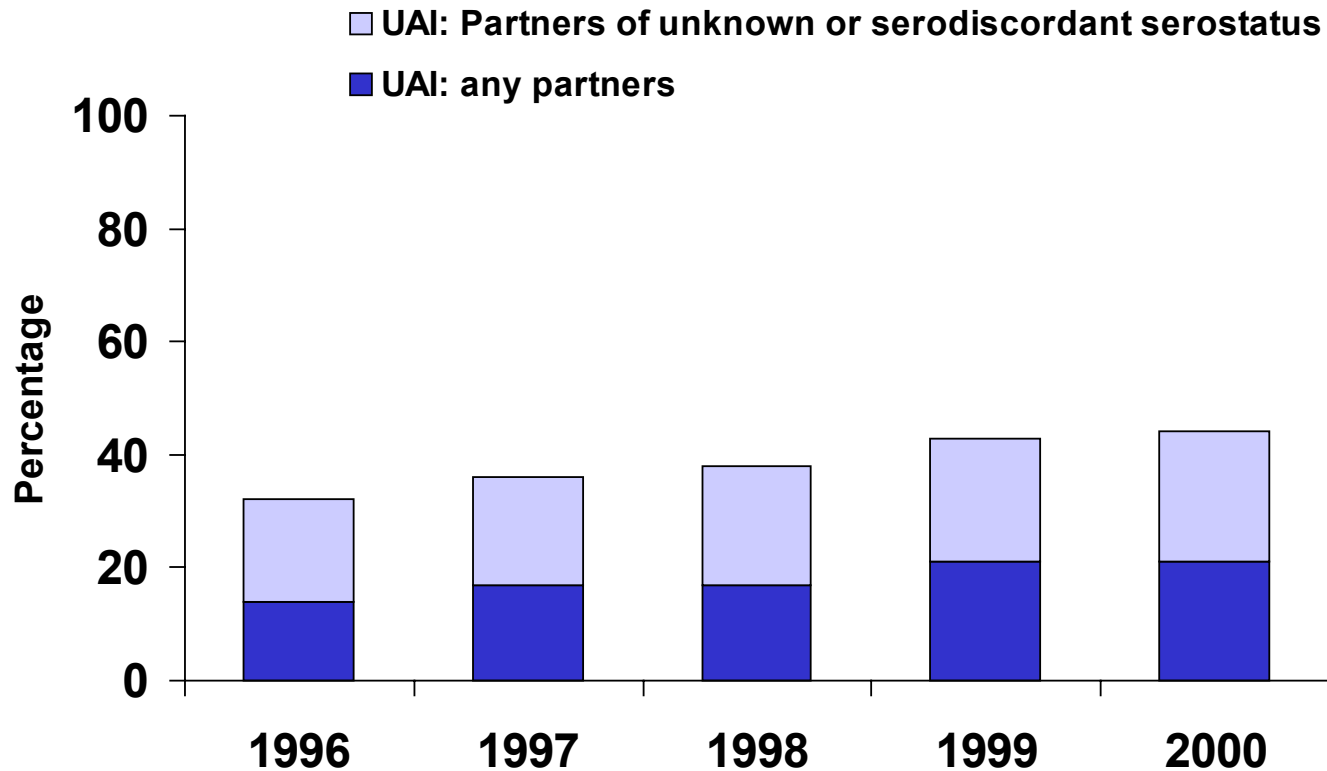
Summary of prevalence and incidence data

- Background HIV prevalence is increasing due to both a decrease in deaths and an increase in new diagnoses.
- There have been large increases in STIs, particularly gonorrhoea in recent years.
- There is no evidence of a decrease in undiagnosed HIV prevalence in GUM clinic attenders aged under 25. This is considered a marker of recent HIV incidence.
- There has been an increase in HIV positive men presenting at GUM clinics with an acute STI.

Behavioural Surveillance: Gay men in London Reported STIs in the past year

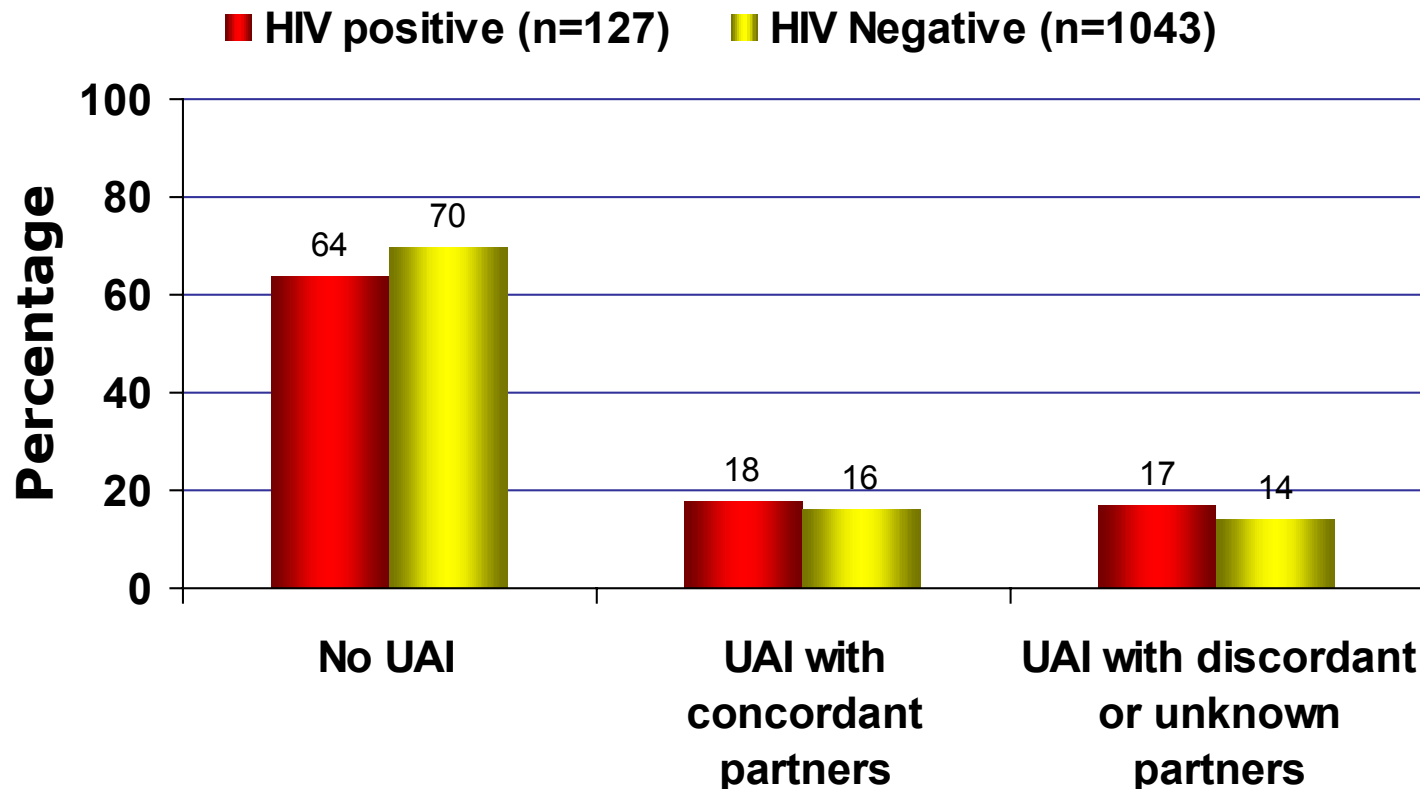


Behavioural Surveillance: Gay men in London UAI in the past year

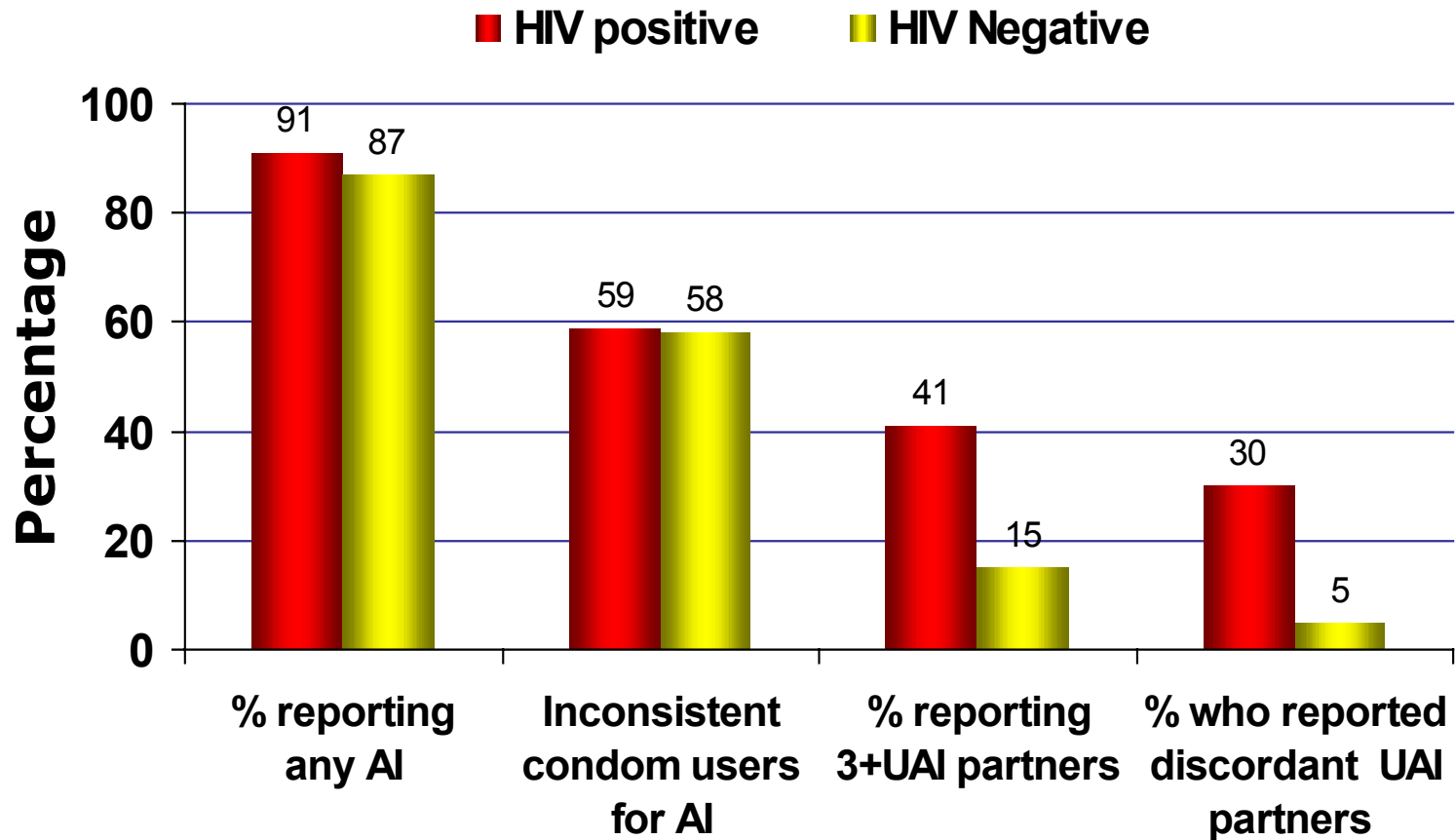


Behavioural Surveillance: Gay men in London

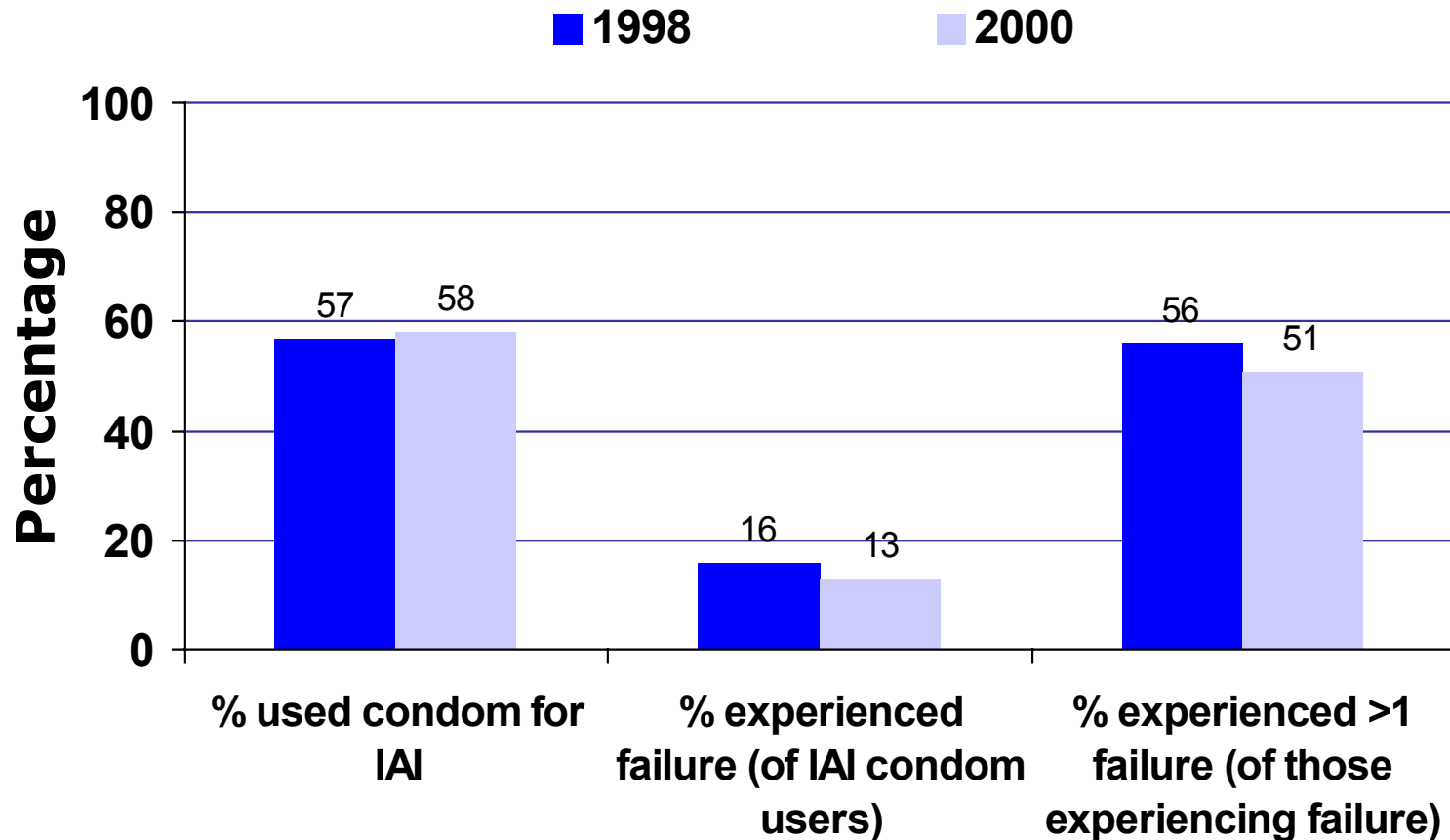
Sero-concordant/discordant UAI in the past 3 months



Behavioural surveillance: National survey of gay men Vital Statistics, National GMS 1999



Behavioural surveillance: National survey of gay men Condom failure in the last year



Behavioural Surveillance: Summary of surveys of Gay men

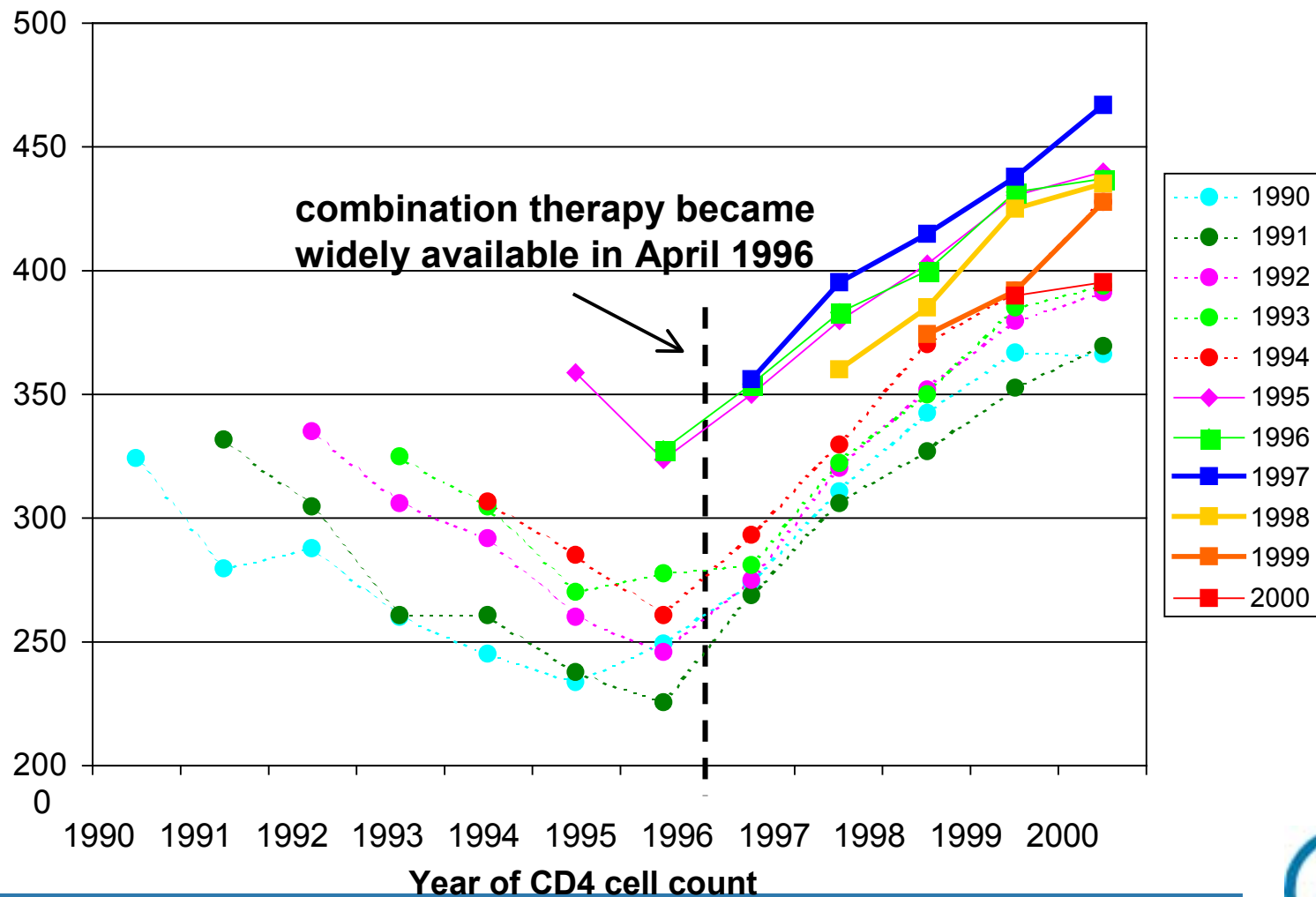
- Reported condom failure decreased between 1998 and 2000.
- The proportion of gay men in London reporting sero-discordant UAI in the past year has increased.
- A higher proportion of HIV positive men reported discordant UAI in the past three months than HIV negative men.
- The consistency of these results in both community studies carried out in bars and at national pride surveys suggests a true trend is being observed.

Secondary HIV Prevention

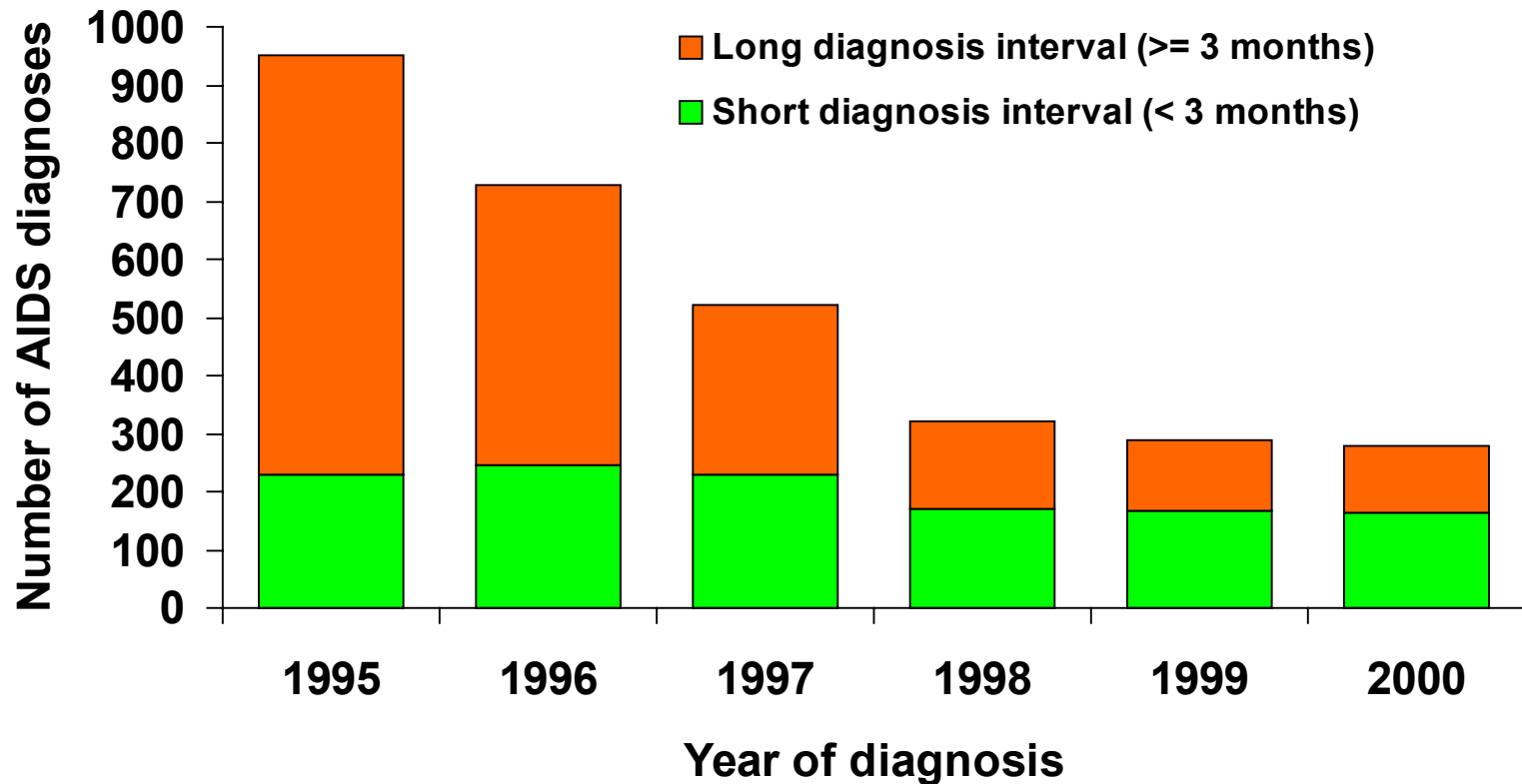
- **Definition:** Measures for the early detection and prompt and effective interventions to protect health of those HIV infected

Median CD4 Cell Count By Year for Cohorts of Newly Diagnosed HIV Patients (England & Wales)

* Each cohort represents all patients newly diagnosed with HIV in the labelled year with CD4 counts reported to CDSC

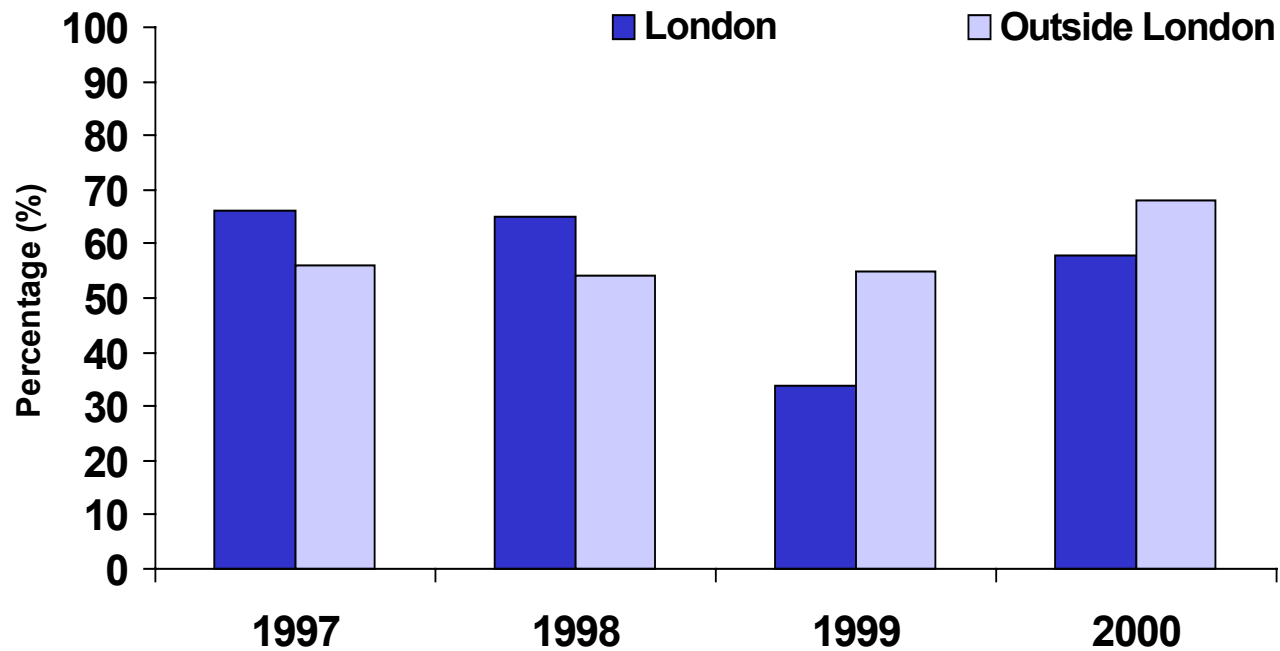


Interval between diagnosis of HIV infection and of AIDS: UK data. Men who have sex with men



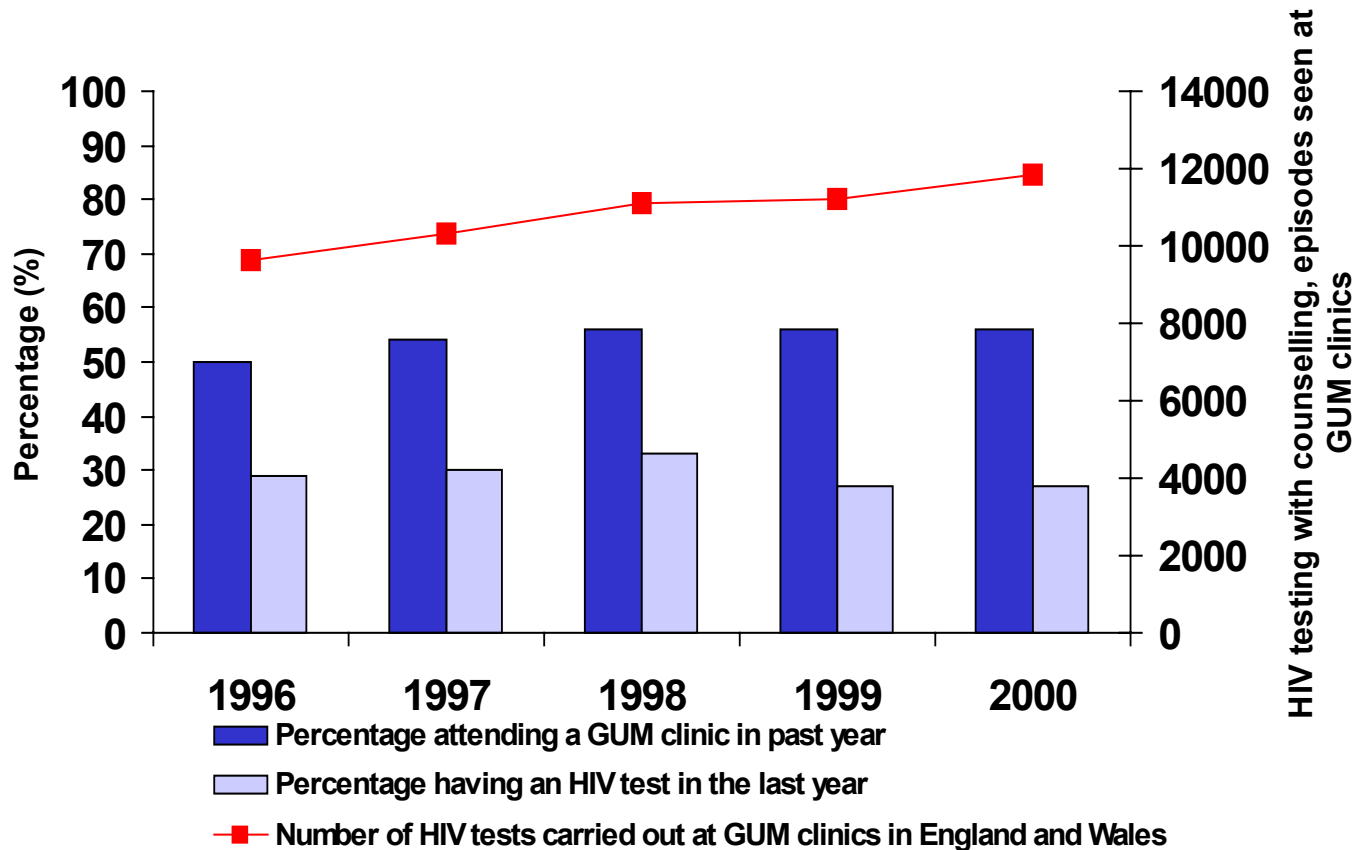
Cases of AIDS diagnosed and reported by the end of the June in the year following the year of AIDS diagnosis*

Behavioural Surveillance: GMS National study HIV test ever



Behavioural Surveillance: Gay men in London

GUM Clinic attendance and HIV test in last year



Secondary prevention

- The number of gay men HIV testing is increasing.
- Median annual CD4 counts have risen dramatically following HIV diagnosis indicating the success of antiretroviral therapy.
- The number of AIDS cases has decreased, however the number of men first testing HIV positive at AIDS diagnosis has remained the same.

Prevention Indicators:

Where are the gaps in surveillance data?

- National population surveys while useful for creating a national picture, can't produce local data
 - limitation in local decision-making
 - locally relevant information needed to help interpret core indicators
- The addition of attitudinal data within these indicators would add more context to aid in the interpretation of prevention indicators

Conclusions

- Existing surveillance systems contain relevant data that can be used to monitor prevention outcomes. The integration and review of this data can facilitate more effective HIV prevention and community planning.
- A comparison of all the Prevention Indicator estimates can aid the interpretation of programme effectiveness by providing a quantitative, although incomplete, picture of outcomes of activities to prevent HIV transmission.
- A close assessment including a contextual analysis is required before conclusions about the impact of programme activities on outcomes can be drawn.

ACKNOWLEDGEMENTS

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