



HIV Services Clinic and Community

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HIV TERMINOLOGY

- Human Immunodeficiency Virus (retrovirus)
- HIV test (antibodies) 3/12 "window"
- Viral load (RNA copies/ml)
- CD4= T4= T helper=T cell (lymphocytes)
- AIDS (Acquired Immune Deficiency Syndrome)

Figure 1.1: New HIV and AIDS diagnoses and deaths in HIV-infected individuals in London clinics, 1999-2008

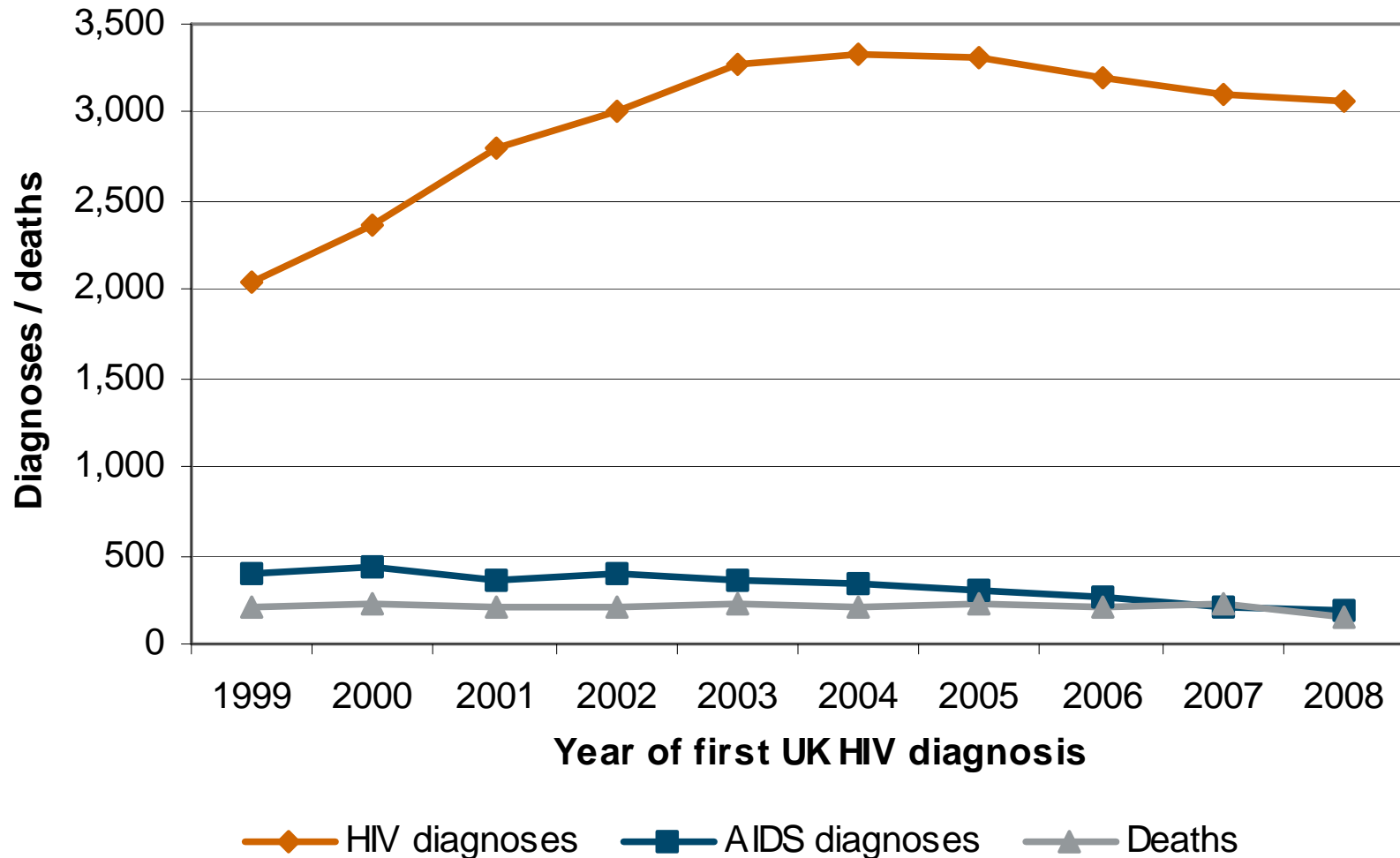


Figure 1.2: Exposure category of newly diagnosed HIV infected individuals in London clinics, 1999-2008

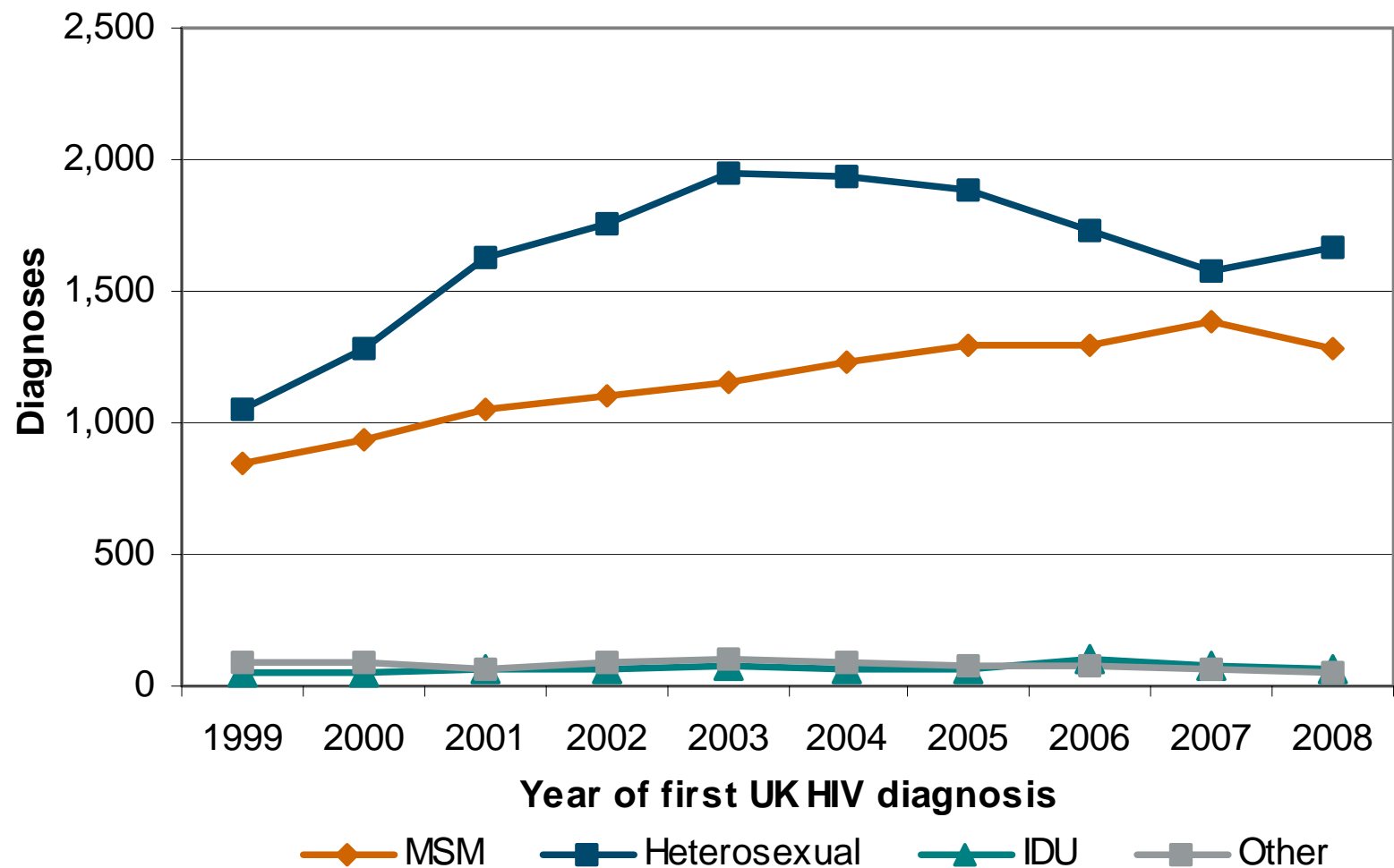


Figure 1.3: New HIV diagnoses made in London clinics by ethnicity, 1999-2008

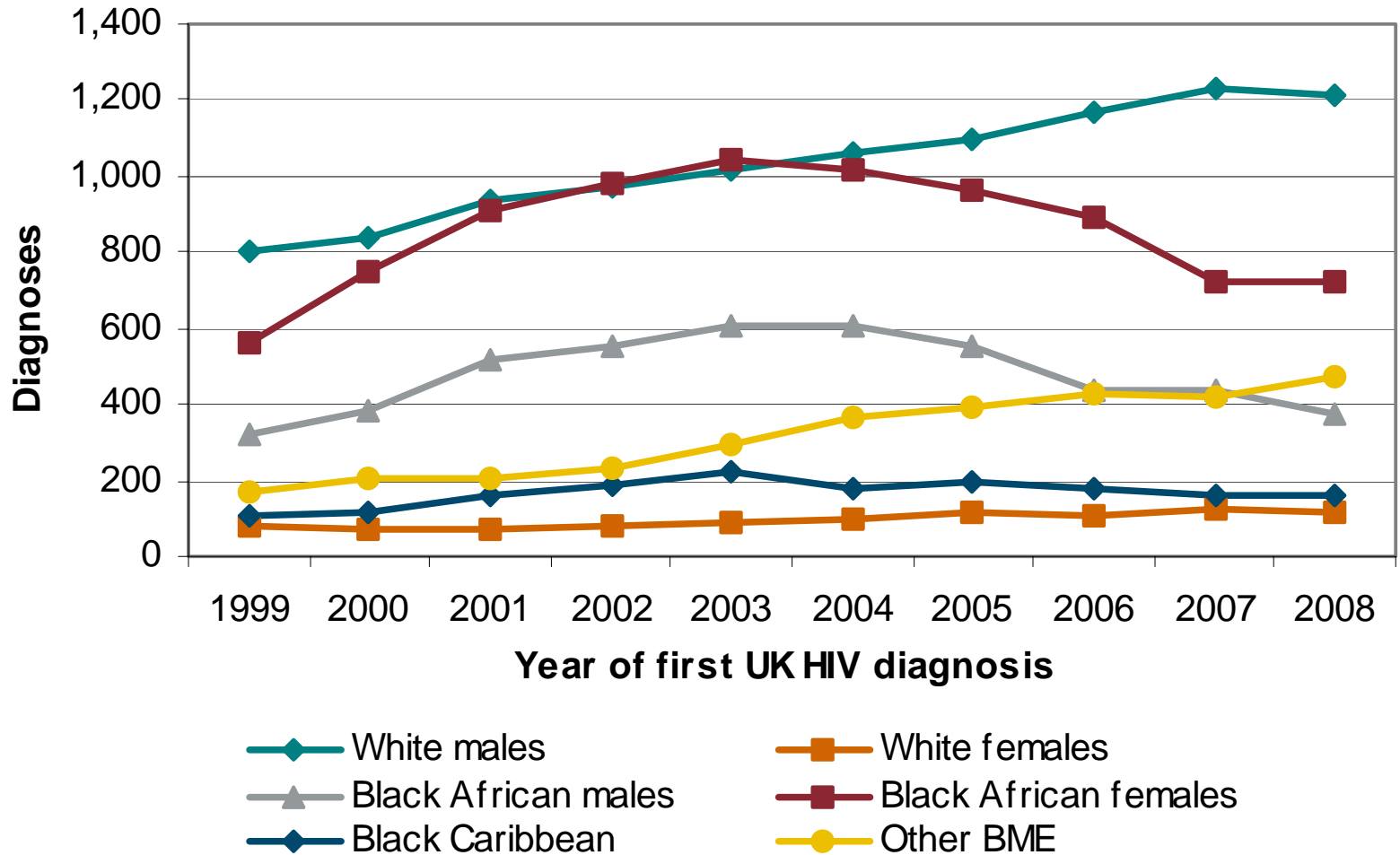


Figure 2.1: Diagnosed HIV positive London residents seen for care by London sector, 1999-2008 (SOPHID data)

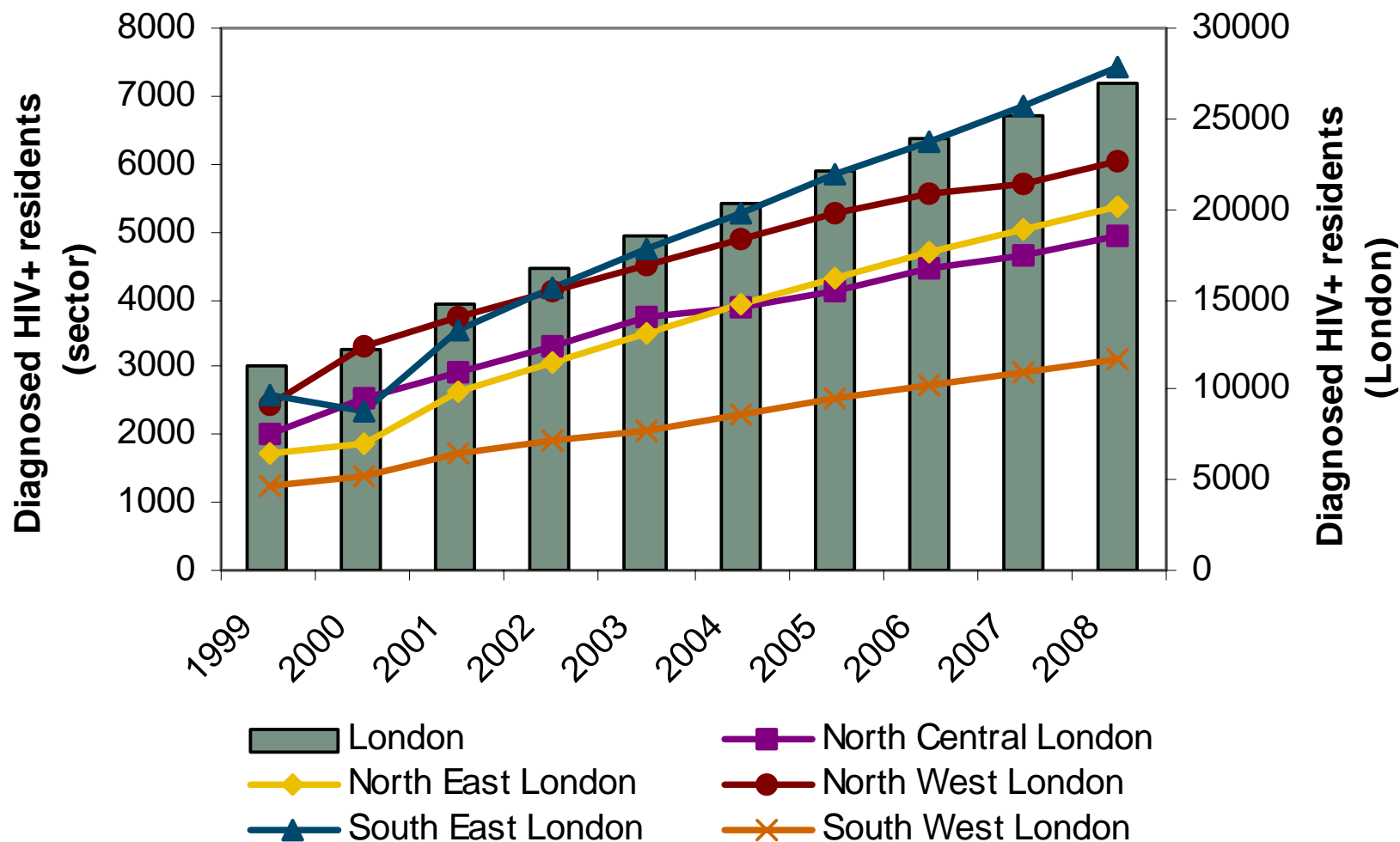


Figure 2.3: Prevalence of diagnosed HIV in London residents aged 15-59 by PCT, 2008

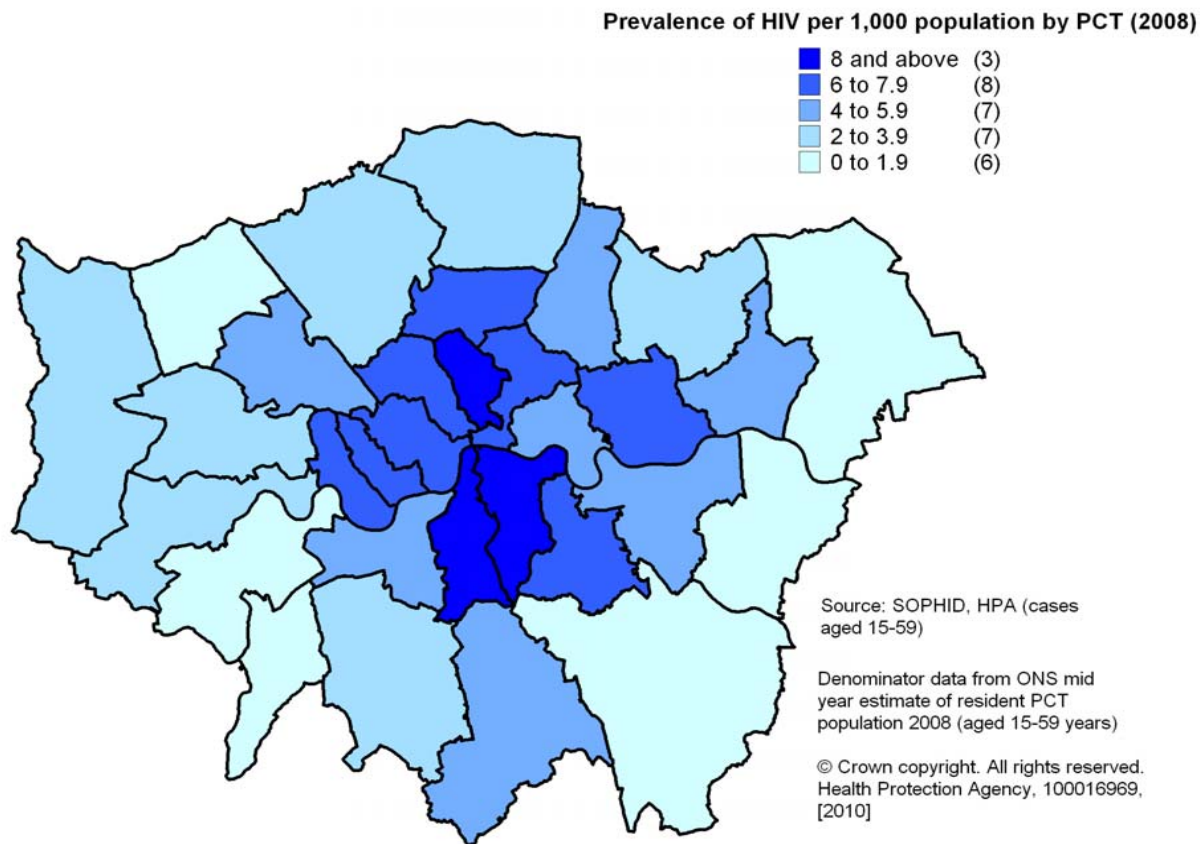


Figure 3.1: Rate of previously undiagnosed HIV in GUM clinics attendees in London, 1999-2008

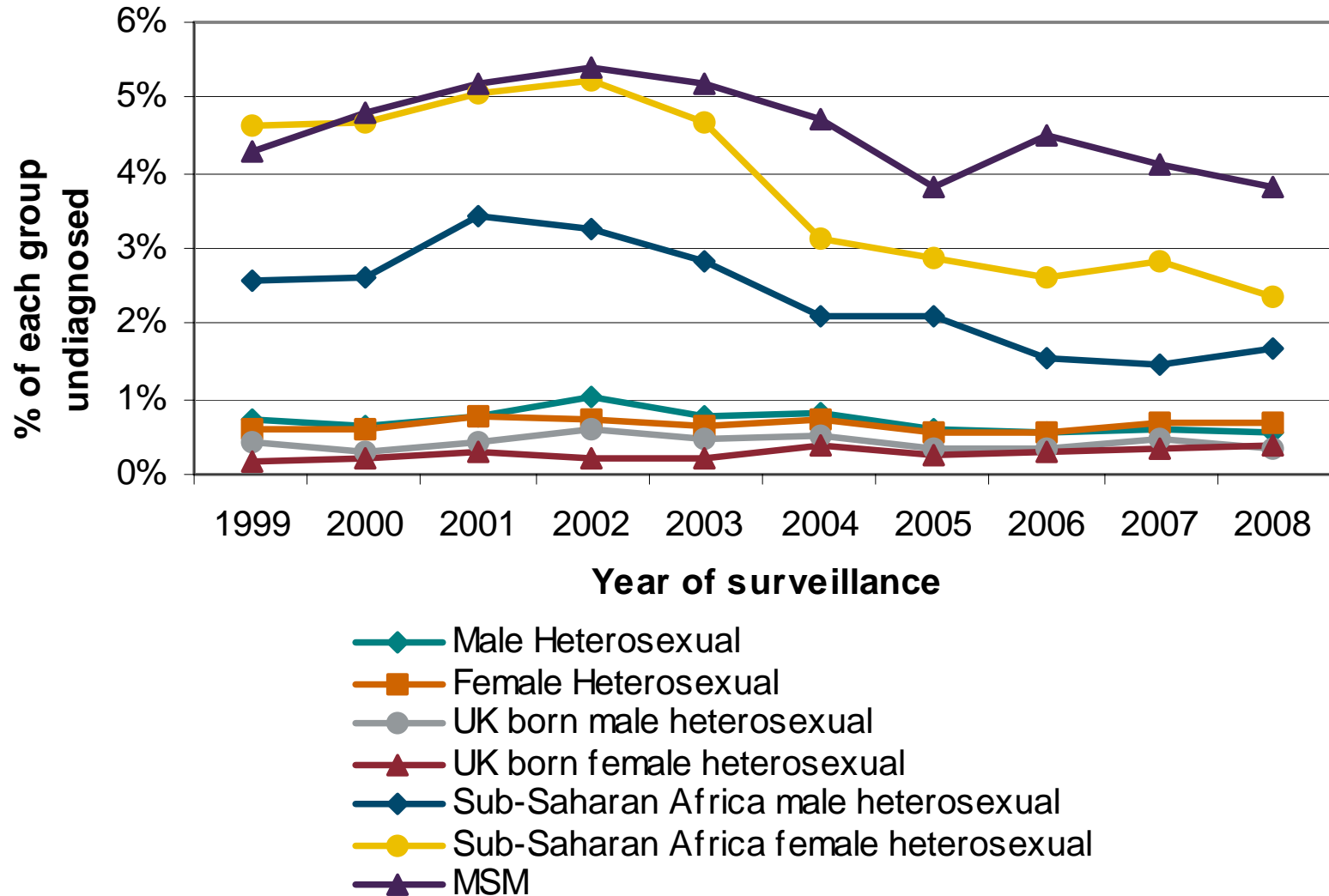


Figure 3.2: Rate of GUM clinics attendees in London who left the clinic with their HIV still undiagnosed, 1999-2008

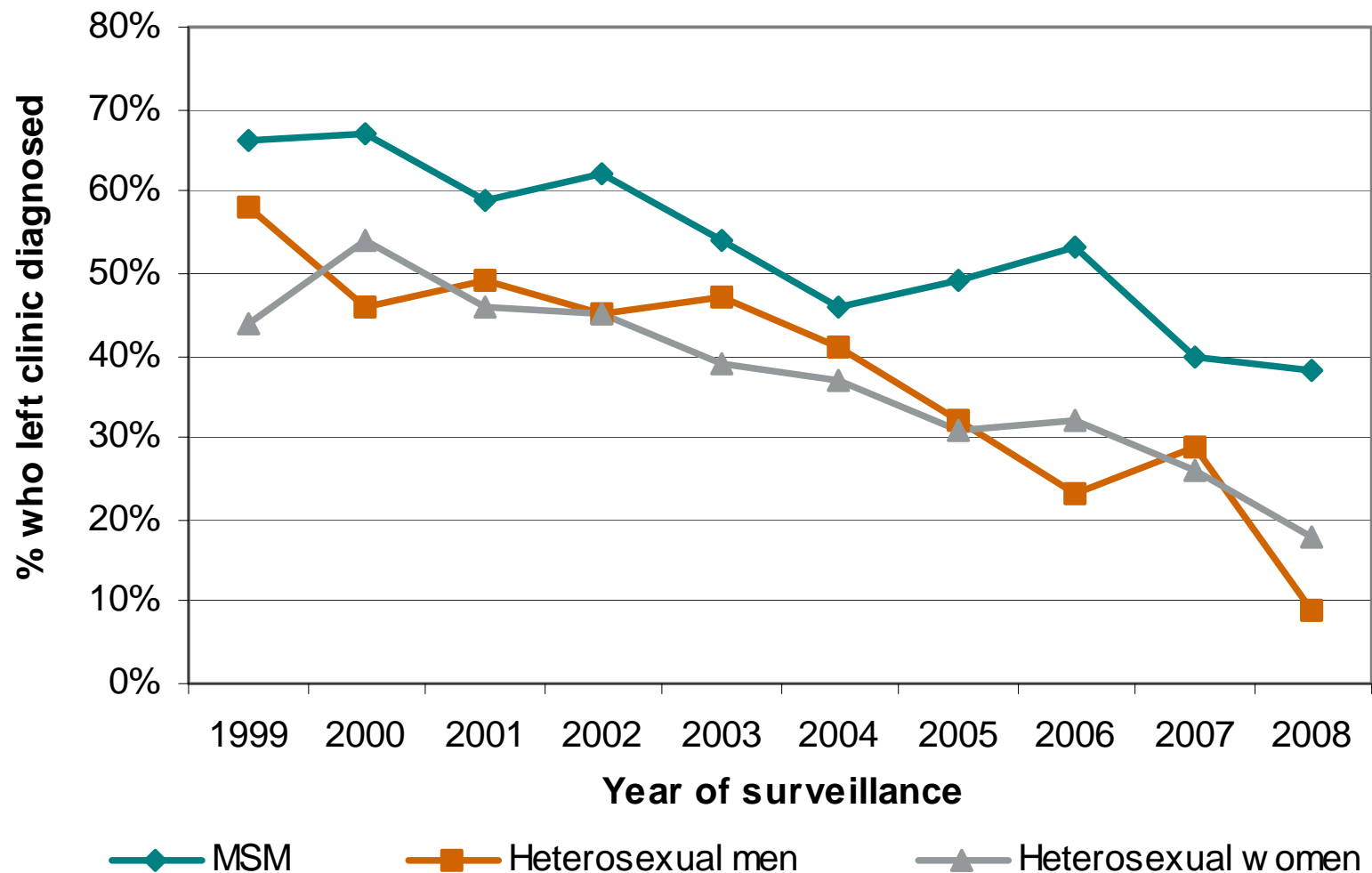


Figure 4.2: Proportion of HIV-infected London residents aged 15 years or above with a CD4 count of <200 cells per mm³ by risk group and year of new diagnosis, 2007-2008

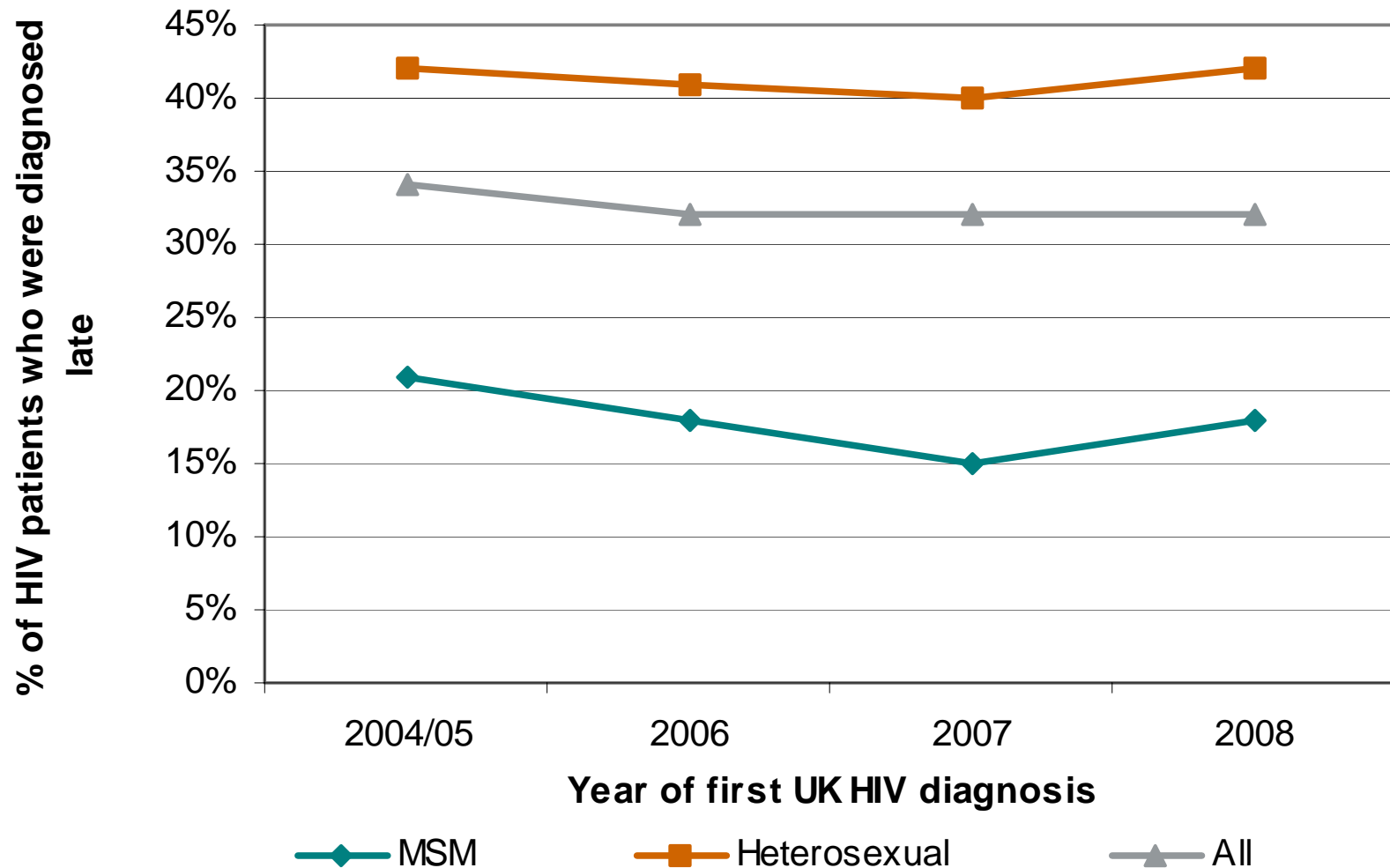
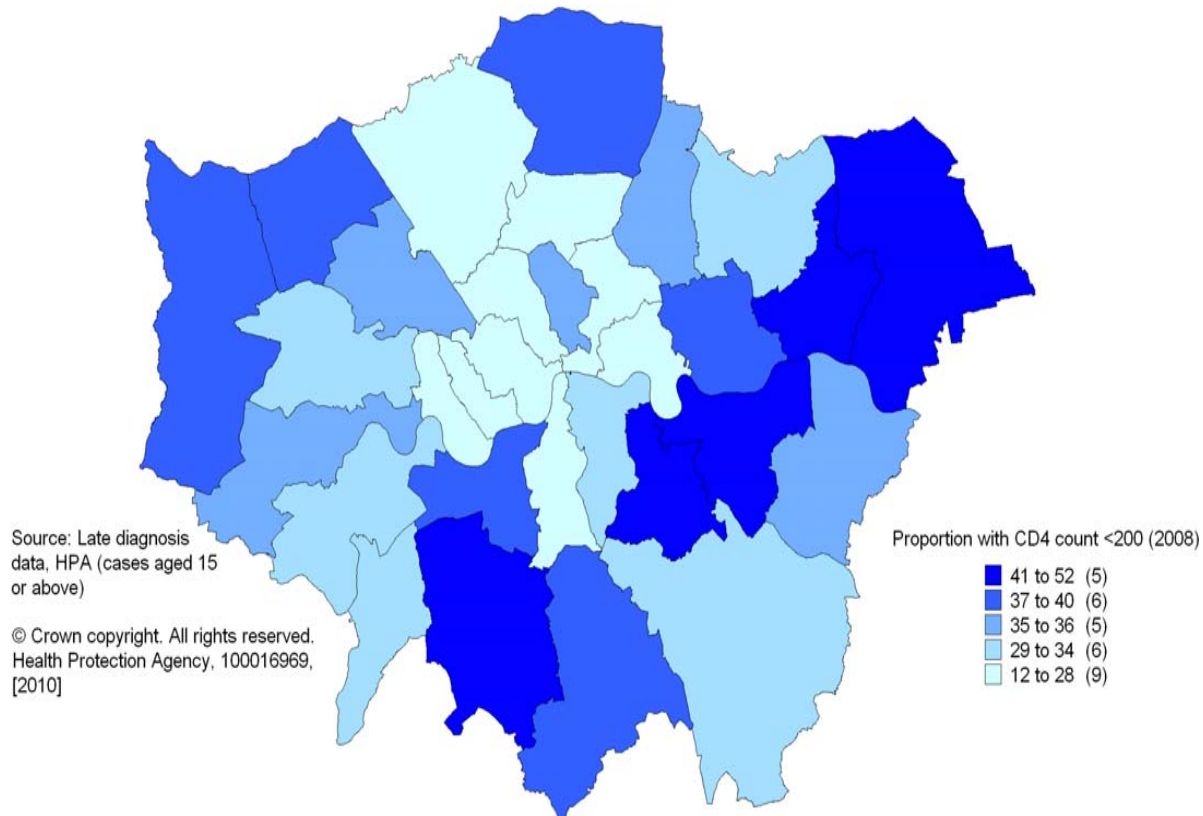
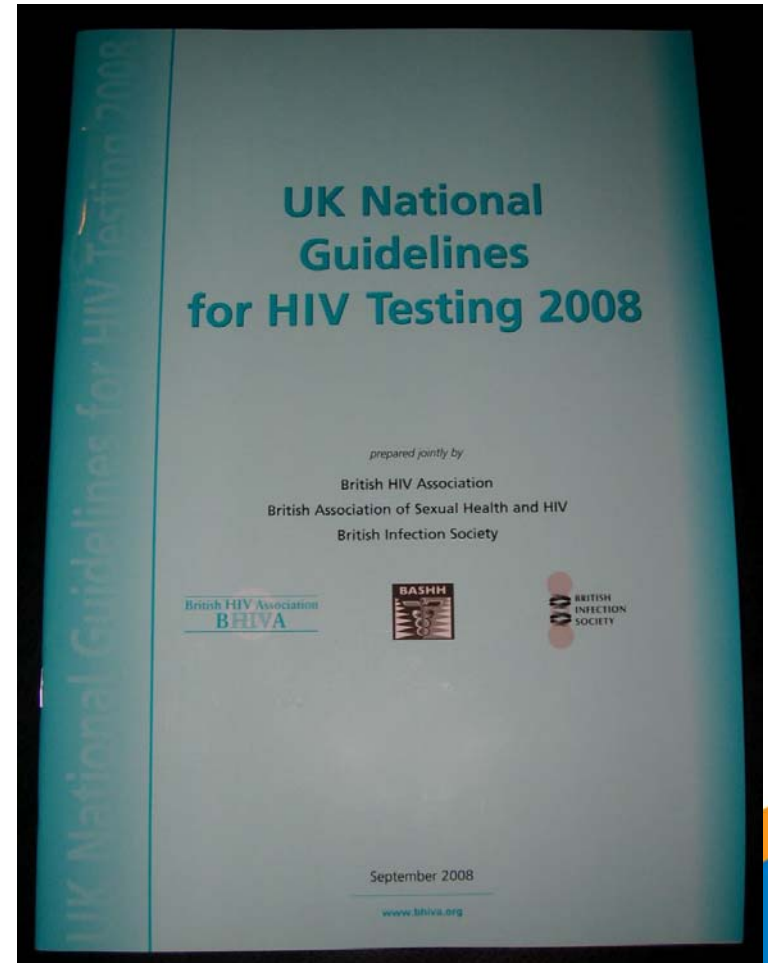
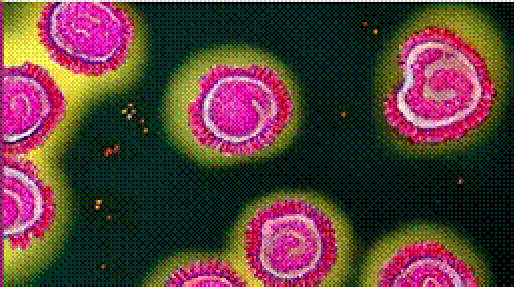


Figure 4.3: Proportion of HIV-infected London residents aged 15 years or above where CD4 cell count <200 cells per mm³ by PCT, 2008



HIV for non-HIV specialists



Recommendations for Testing

- Universal Testing, eg. GUM, antenatal clinics
- High local HIV prevalence, testing for all general medical admissions and all adults registering in general practice
- AIDS & Clinical Indicator Diseases
- Those with recognised risk factors for HIV

Table 1. Primary Care Trusts in England where the prevalence of diagnosed HIV infection exceeded two adults per 1,000 population (aged 15-59 years) in 2007.

Primary Care Trust	accessing HIV-related care (15-59)	population, in 1,000s (15-59)	prevalence per 1,000	
			Rate	Rank
London				
Barking And Dagenham	427	101.7	4.20	19
Barnet	507	205.5	2.47	31
Brent Teaching	676	179.8	3.76	21
Camden	1,181	169.0	6.99	9
City And Hackney Teaching [†]	1,132	147.1	7.70	5
Croydon	824	214.4	3.84	20
Ealing	549	204.5	2.68	28
Enfield	587	178.0	3.30	23
Greenwich Teaching	711	144.2	4.93	14
Hammersmith And Fulham	906	122.6	7.39	6
Haringey Teaching	1,024	155.0	6.61	11
Hillingdon	336	157.6	2.13	32
Hounslow	516	147.2	3.51	22
Islington	1,110	136.1	8.16	3
Kensington And Chelsea	943	121.4	7.77	4
Lambeth	2,339	196.2	11.92	1
Lewisham	1,098	176.5	6.22	12
Newham	1,175	166.6	7.05	8
Redbridge	404	159.4	2.53	29
Southwark	1,830	194.5	9.41	2
Sutton And Merton [‡]	619	249.9	2.48	30
Tower Hamlets	836	152	5.50	13
Waltham Forest	654	145.1	4.51	16
Wandsworth	880	204.4	4.31	18

NATURAL HISTORY OF HIV

Acute infection - seroconversion

Asymptomatic

HIV related illnesses

AIDS defining illness

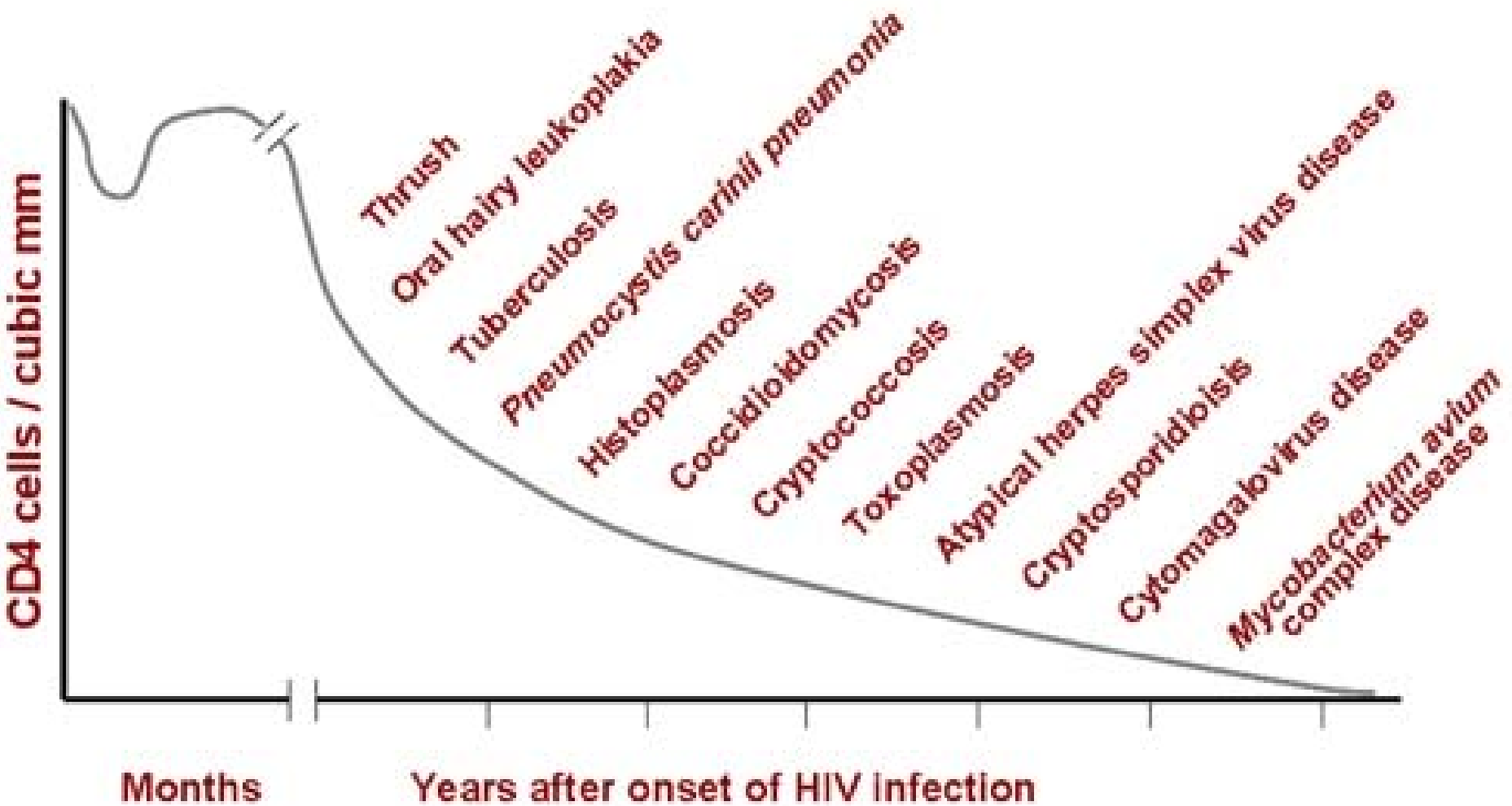
Death

NATURAL HISTORY OF HIV INFECTION

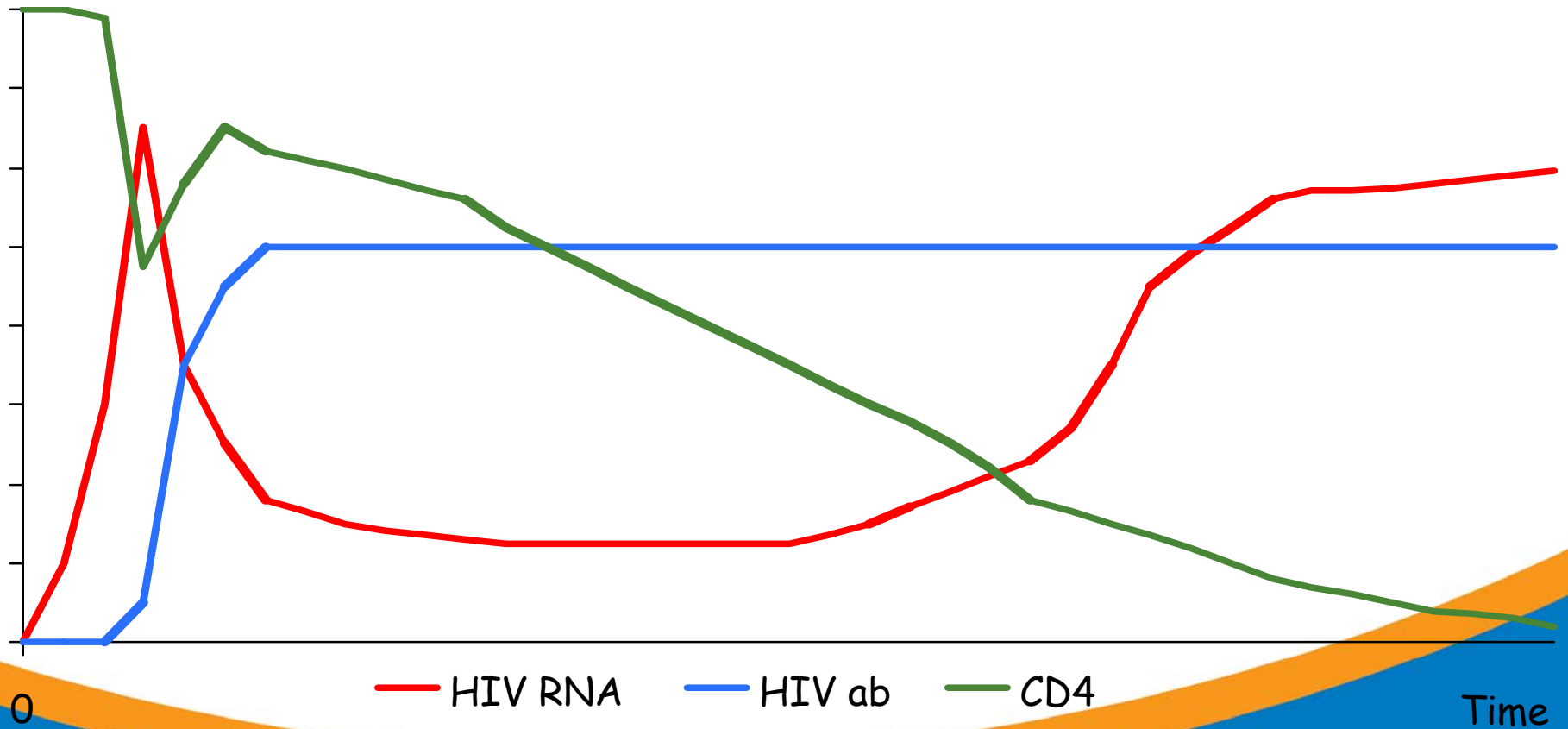
Over course of infection

- CD4 count declines & HIV viral load increases
- Increasing risk of developing infections and tumours
- The severity of these illnesses is greater the lower the CD4 count
- Most AIDS diagnoses occur at CD4 count <200

Natural History of HIV-1 Infection



BLOOD TEST RESULTS OVER TIME



BENEFITS OF EARLY DIAGNOSIS

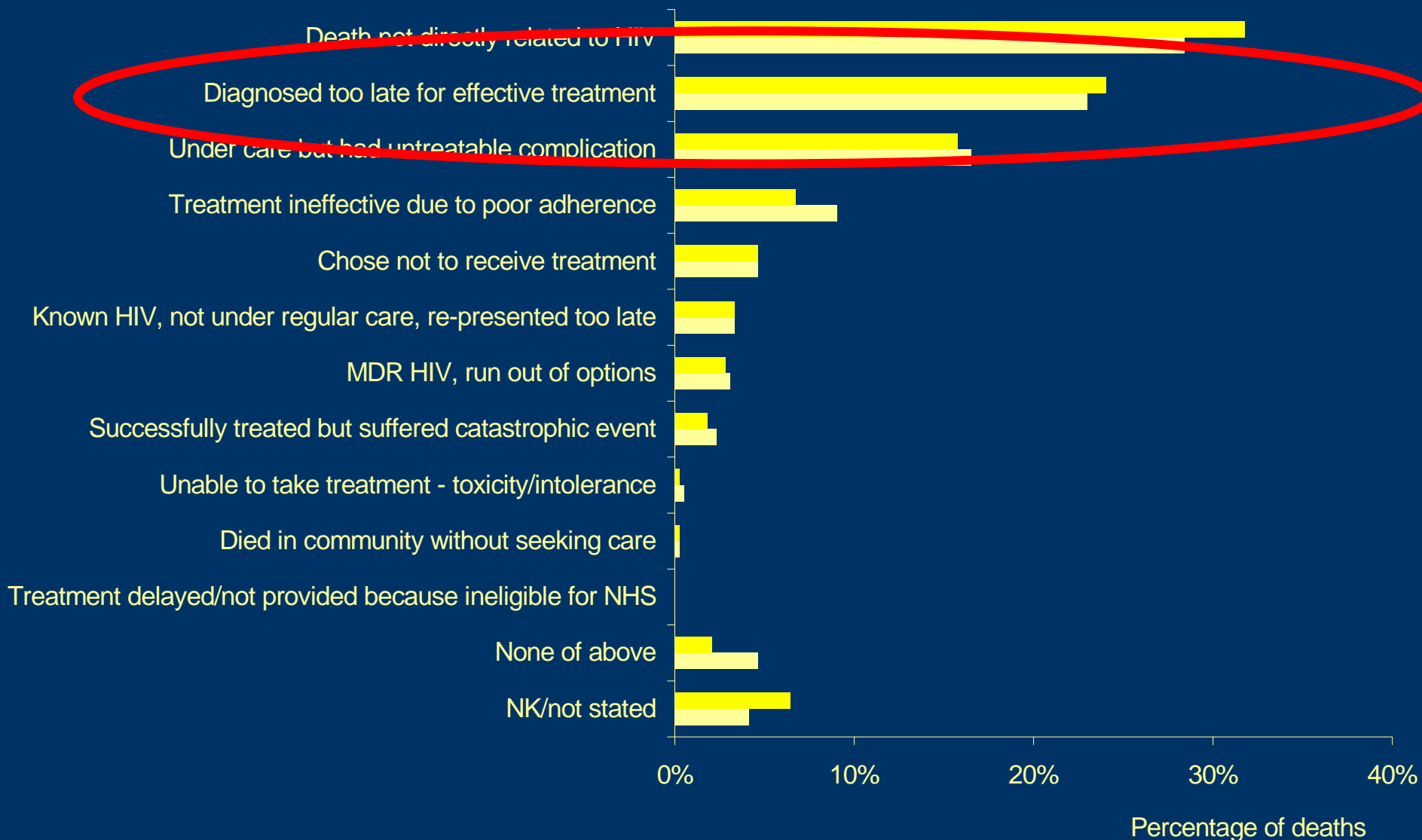
- Treatments available (HAART) not a cure, but do prevent people becoming unwell
- Prophylaxis against opportunistic infections if appropriate
- Appropriate investigations if unwell
- Reduce perinatal transmission
 - treatment for mother
 - delivery method
 - avoidance of breastfeeding (in UK)

OTHER BENEFITS

- Minimise the risk of infecting others
- Partner notification
- Ability to inform important life decisions
- Relief of anxiety about knowing HIV status
- Access to help from social services, drug services etc

Benefits vs Quality of Life vs Stigma in certain population groups.

BHIVA Audit 2006, Scenarios leading to death



HIV At-Risk Groups for Testing

- If HIV (including primary HIV) enters the differential diagnosis- any HIV indicator-disease
- All patients with an STI
- Sexual partners of HIV positive patients
- Men who have sexual contact with men
- Female sexual contacts of men who have sex with men
- Patients with a history of injecting drug abuse
- Patients from a country with high HIV prevalence (>1%)
- All patients who report sexual contact abroad or in the UK with individuals from a country with high HIV prevalence

Which Test do we use ?

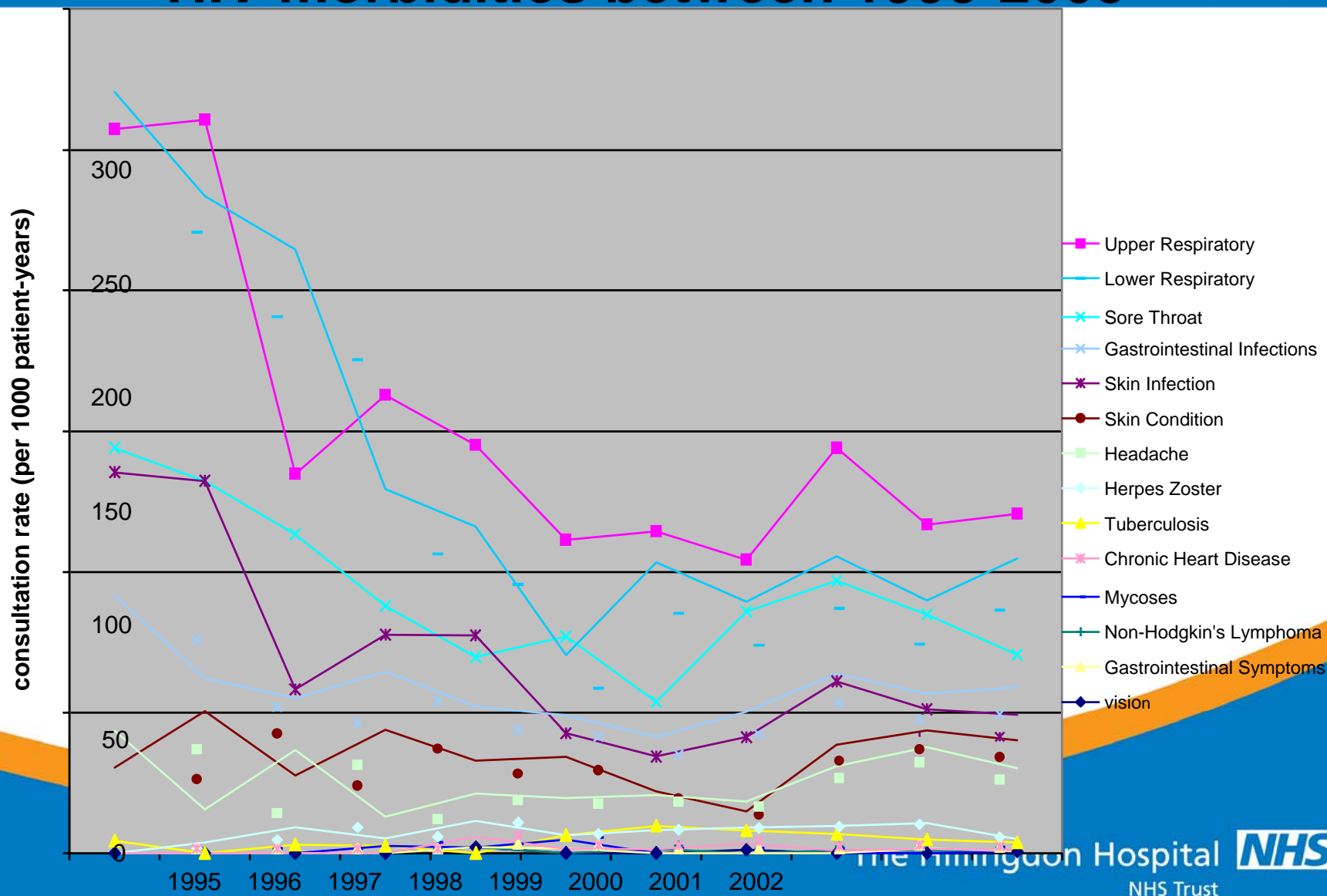
- First line Assay – Fourth generation tests (HIV antibody, p24 antigen tested simultaneously)
Adv: Reduces detection time from 6 weeks to 4 weeks
- HIV RNA Assay (Viral load)- not recommended for screening, expensive, and probability of false positives.

HIV Care in the Community

In the early days many HIV clinics had Walk-In Services for HIV patients and encouraged patients to attend whatever the problem.

GP's were often unaware of the HIV status.
This should no longer be the case.

(GP and Nurse) consultation rate for common HIV morbidities between 1995-2005



HIV Primary Care Consultations

- Over 50% of HIV +ve patients have disclosed to their GP their status (1995 to 2005)
- Among these, annual consultation rates reduced from 7894.8 per 1000 person-years in 1996 to 5054.7 in 2005
- GP consultation rates were higher than Nurse consultation rates

Patient Concerns:- Finances

- HIV is no longer an impediment for Health or Life insurance
- People living with HIV can get a mortgage and own their own house.
- Any health problem can affect insurance (back pain, depression, hyperlipidemia).
- Non-disclosure of HIV invalidates insurance policies
- Negative HIV tests do not affect insurance.
- Positive ones do, but so do panic attacks.

HIV Sero-conversion / Primary HIV

- Approximately 30 - 60% of patients have a seroconversion illness.
- Abrupt onset 2 - 4 weeks post exposure, self limiting 1 - 2 weeks
- Symptoms generally non-specific and differential diagnosis includes range of common conditions
- Serological tests for HIV antibodies may be negative or show indeterminate response











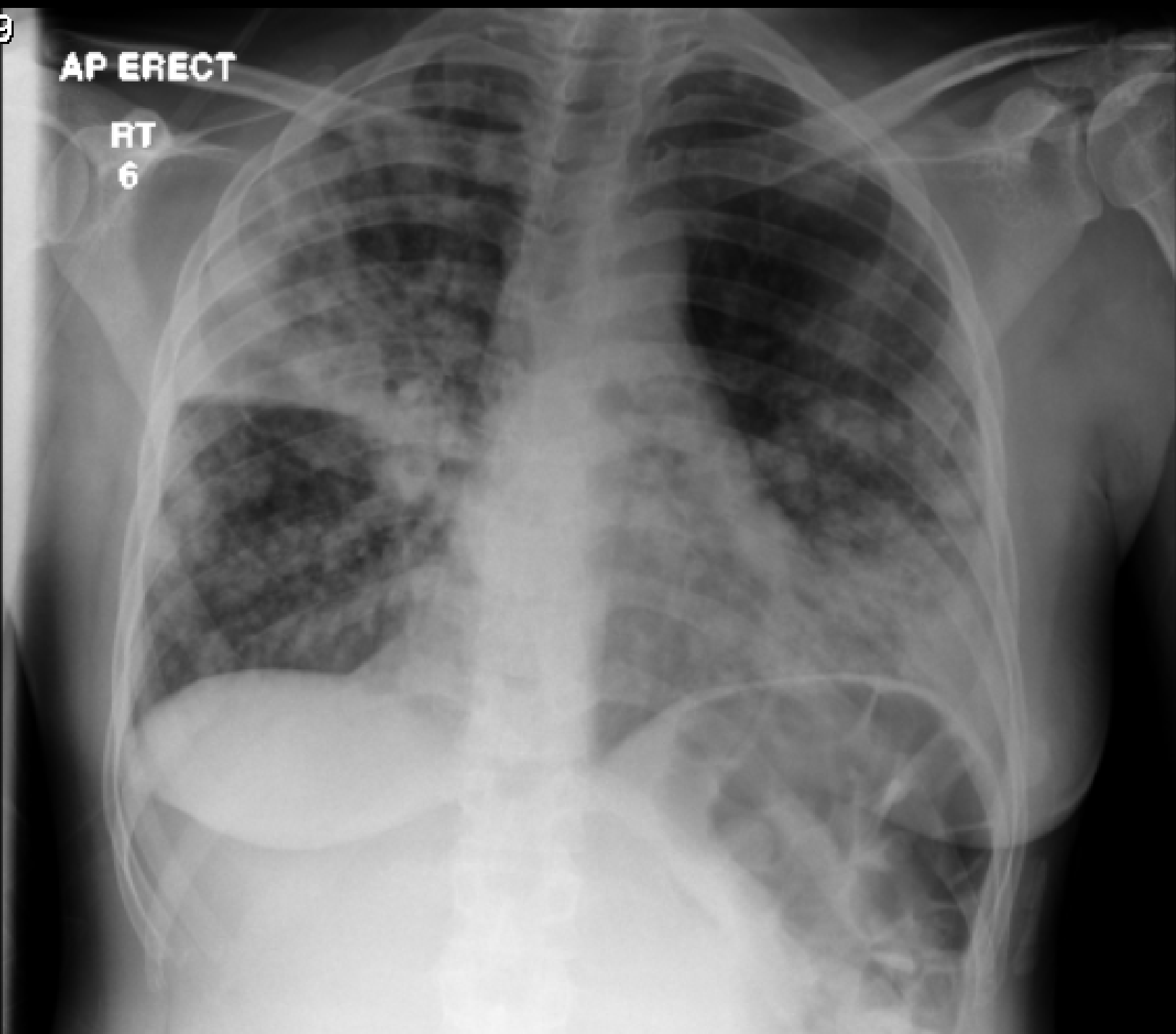




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Contacts and References

- www.medfash.org.uk/.../HIV_for_non_HIV_specialists.pdf
- www.bhiva.org/HIVTesting2008.aspx
- Benedict.Holden@thh.nhs.uk
- Diane.Reid@thh.nhs.uk