

17<sup>TH</sup> ANNUAL CONFERENCE OF THE  
BRITISH HIV ASSOCIATION (BHIVA)

British HIV Association  
**BHIVA**

**Dr Martin Fisher**  
Royal Sussex County Hospital, Brighton

6-8 April 2011, Bournemouth International Centre

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COMPETING INTEREST OF FINANCIAL VALUE $\geq$ £1,000:	
Speaker Name	Statement
Dr Martin Fisher:	Dr Fisher has acted in a Consultancy capacity, received speakers fees or grant support from the following companies: Abbott, Bristol Myers Squibb, Gilead, Merck, Tibotec, Theratechnologies, Viiv.
Date	1 April 2011

6-8 April 2011, Bournemouth International Centre

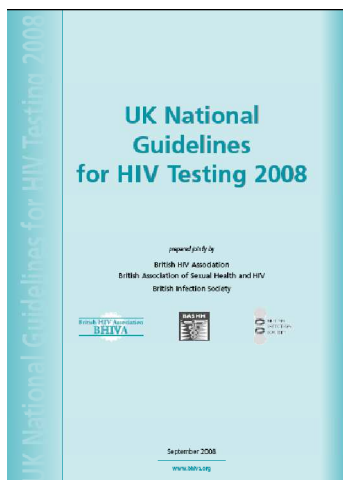
## Roll-out of expanded HIV testing: *How are we doing?*

Martin Fisher  
Brighton and Sussex University Hospitals

### Background

- Significant numbers of individuals with HIV in the UK remain undiagnosed
- Results in potentially avoidable effects on individual and public health
  - Late diagnosis: morbidity and mortality
  - Onward transmission
  - Cost
- Many of these individuals have been in contact with healthcare (and other) services

## 2008 BHIVA/BASHH/BIS Guidelines



- Increasing “normalisation” of HIV testing
- High prevalence groups
  - Men who have sex with men
  - High prevalence countries
- Testing in clinical indicator diseases and specific clinical healthcare settings
- Testing in primary care and acute medical care in areas of high HIV prevalence

## How are we doing?

- Are the testing guidelines feasible and acceptable?
- Are the testing guidelines being implemented?
- Are the testing guidelines working?
  - Are testing rates improving in high prevalence groups?
  - Are we reducing undiagnosed infection and late diagnosis?
- Expanded HIV testing and the new NHS

## DH Funded Pilots

Setting	Location	Offer Rate	Uptake Rate	Number tested	New cases	Positivity (/1000)
Acute Medicine / A&E	London (A&E)	63%	61%	2123	4	1.8
	London (AMU)	40%	70%	383	4	10.4
	Brighton (AMU)	40%	91%	1413	2	1.4
	Leicester (AMU)	-	-	984	10	10.2
Secondary Care	London (OPD)	67%	72%	604	0	0
Primary Care	London	41%	67%	1001	0	0
	London	70%	62%	2713	19	7
	Brighton	48%	60%	1473	2	1.3
Community	London (Black Africans)			305	3	9.8
	London (Black Africans and MSM)			297	6	20
	Sheffield (MSM)			59	0	0

See: Thornton et al, #P129; Rayment et al, #O7; Bryce et al, #O8

## Gilead Funded Pilots



- 2009/10
  - 3 in 1° care/community
  - 3 in 2° care
  - Uptake: 31% - 86%
  - Seropositivity: 0-4%
- 2010/11
  - 18 testing projects
  - Includes:
    - Men via antenatal testing
    - Colposcopy
    - Lymphopaenia via laboratory
    - CIDs in primary care
    - TOP services
  - 19<sup>th</sup> May 2011 meeting

UK AND IRELAND  
FELLOWSHIP  
PROGRAMME

GILEAD  
SUSTAINING  
COMMUNITIES

## Testing Guidelines

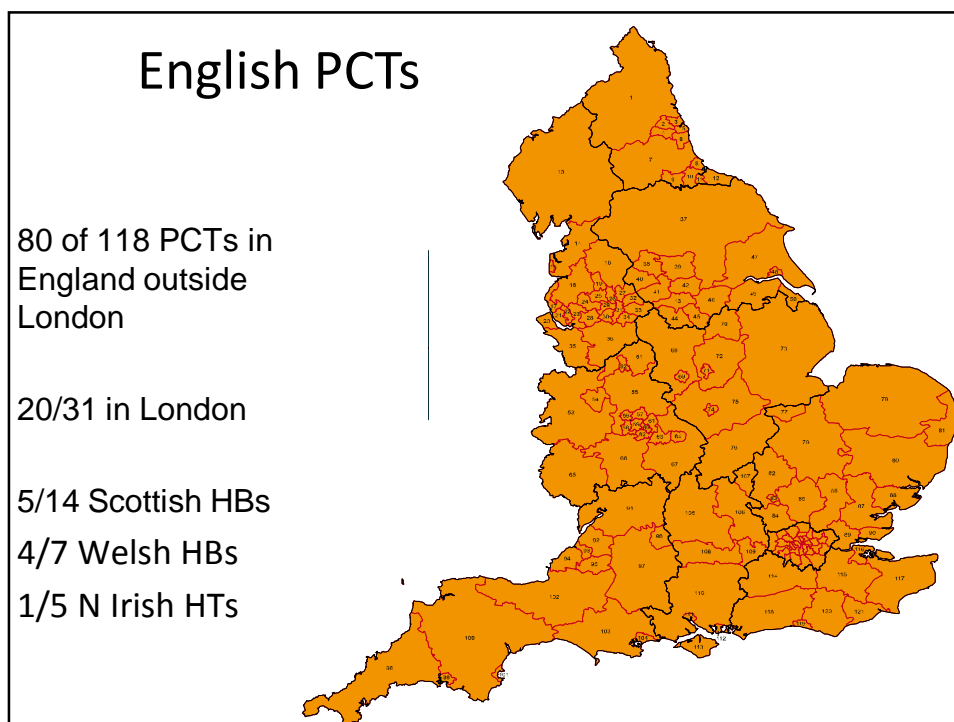
*“The introduction of universal HIV testing in these settings should be thoroughly evaluated for acceptability and feasibility and the resultant data made available to better inform the ongoing implementation of these guidelines”*

Results from pilots:

- feasible
- acceptable

## Are the testing guidelines being implemented?

- BHIVA survey of UK testing practise
- Survey of testing recommendations from other organisations/guidelines
- Recommendations versus practise



## What do we think is happening? BHIVA Survey 2011

Service	High prevalence PCT (n=34)				Low prevalence PCT (n=98)				Overall adherence
	routine	selective	Not offered	Not answered	routine	selective	Not offered	Not answered	
TB	29 85%	2 6%		3 8%	63 64%	24 25%	1 1%	10 10%	92/119 77%
hepatitis	19 56%	6 18%		9 26%	47 48%	38 39%	1 1%	12 12%	68/111 61%
1° care	10 29%	6 18%	10 29%	8 24%	11 11%	10 10%	56 57%	21 21%	10/26 38%
Medical Admissions	2 6%	27 8%	3 9%	2 6%	1 1%	70 41%	18 18%	9 9%	2/32 6%

- 100/149 PCTs in England; Scotland, Wales, and Northern Ireland

*See: BHIVA Audit session, Simon Ellis, Thursday 17.00*

## Recommendation for HIV Testing in Clinical Indicator Diseases

Specialty	CID	Guideline	Test recommended	Test considered	HIV mentioned	No mention	Comments
<i>Respiratory</i>	MTB	Pulmonary (BTS/NICE)		√			Risk assessment
		CNS (BIA)	√				
	Bacterial pneumonia	BTS			√		"guidelines do not apply"
<i>Neurology</i>	Dementia	SIGN			√		In diagnostic criteria for Alzheimers
	Peripheral neuropathy	NICE				√	
	CNS Lymphoma	BCSH	√				

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<i>Dermatology</i>	Psoriasis	BAD SIGN				√	
<i>Gastroenterology</i>	Chronic diarrhoea	BSG			√		Refers to "non-HIV" persons
	HBV	NICE (RCP/BSG)			√		Excludes patients with HIV
	HCV	SIGN BSG			√		Test patients with HCV for HIV
<i>Oncology</i>	Head and neck cancer	SIGN				√	
	Anal cancer	BSColp. NICE	√		√		
	Lymphoma	NICE BSCH			√ √		Increased in HIV; HIV patients may not consent

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Gynaecology	CIN/Cx Ca VIN	NSC RCOG			√	√	HIV test offer discouraged
Misc	Non-specific symptoms	NICE (CFS)		√			If history suggestive of chronic viral infection

13/47 Clinical Indicator Diseases have Specialist Guidelines  
4/13 (31%; or 9% of total) recommend or consider HIV testing

HPA Survey of Specialist Societies involved in managing CIDs  
11/17 were aware of BHIVA/BASHH/BIS testing guidelines  
4/17 aware that this related to their speciality  
5/17 included HIV testing in their guidelines

## Recommendations versus practice: *what is actually happening?*

- HPA surveillance:
  - GUM testing
  - Antenatal testing
- Regular surveys
  - High prevalence groups
    - UCL, Sigma, etc.
- **No** surveillance
  - Clinical indicator diseases
  - Other clinical settings
  - Acute general medicine
  - Primary care
- Auditable standards within testing guidelines

CID	setting	Test rate	reference
MTB	Birmingham	14-43%	2010; #114
	Dublin	63%	2010; #117
	Essex	76%	2010; #282
	Leeds	59%	2010; #283
	London	51%	Thorax, 2009 <i>Rodger et al</i>
Lymphoma	Essex	7%	2010; #282
	Sheffield	13%	2010; #122
Hepatitis B	Essex	22%	2010; #282
	Blackpool	8%	2010; #281
	Brighton	66%	2011; #P83
Hepatitis C	Essex	20%	2010; #282
	Blackpool	39%	2010; #281
	Brighton	40%	2011; #P83



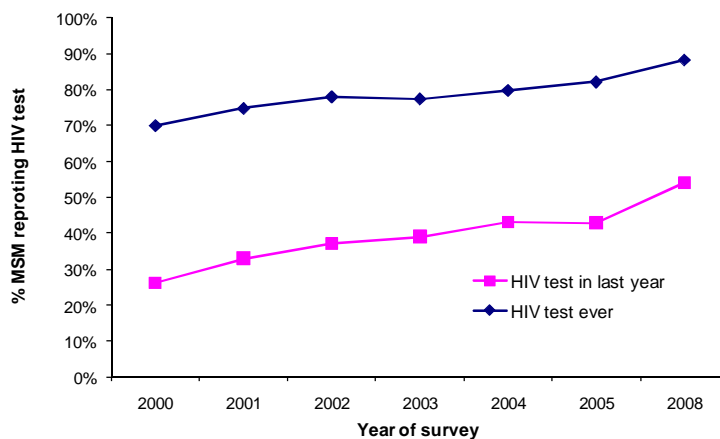
## Are the testing guidelines working?

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- Are we seeing more new diagnoses in non-traditional settings?
- Are we reducing late diagnosis?
- Are we reducing undiagnosed HIV?

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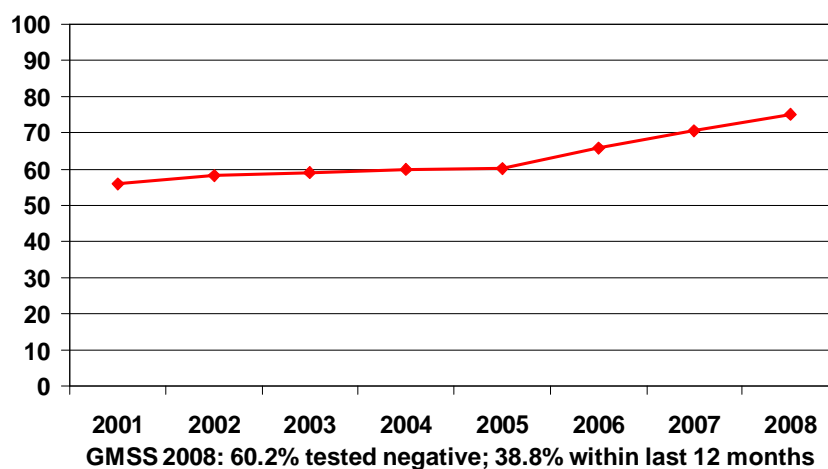
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Proportion MSM in the community reporting having had an HIV test, London: 2000-2008

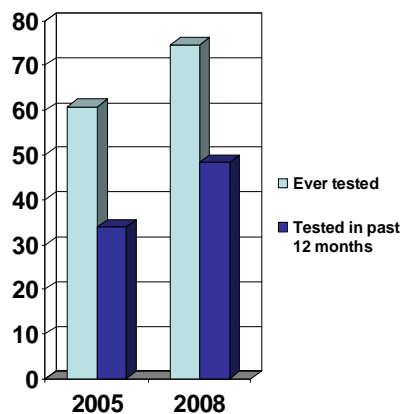


University College London/Health Protection Agency

Proportion of MSM ever tested  
Gay Men's Sex Survey, SIGMA (2001-2008)



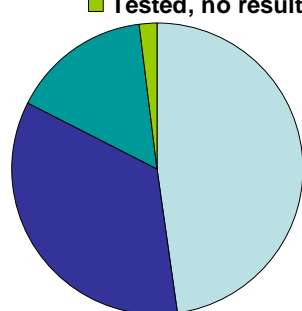
## HIV testing in MSM in Scotland



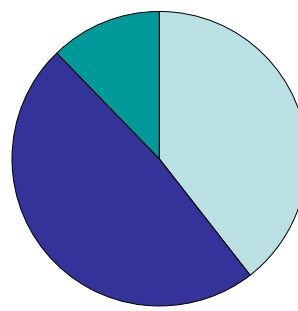
- Community sample of MSM in Glasgow and Edinburgh
- Increase in ever tested:
  - 60.8 to 74.6% ( $p < 0.001$ )
- Increase in recent tested
  - 34 to 48.3% ( $p < 0.001$ )

*McDair and Hart, Sex Transm Infect, 2011*

## HIV Testing in Black Africans Bass Line Survey (SIGMA Research)



2007



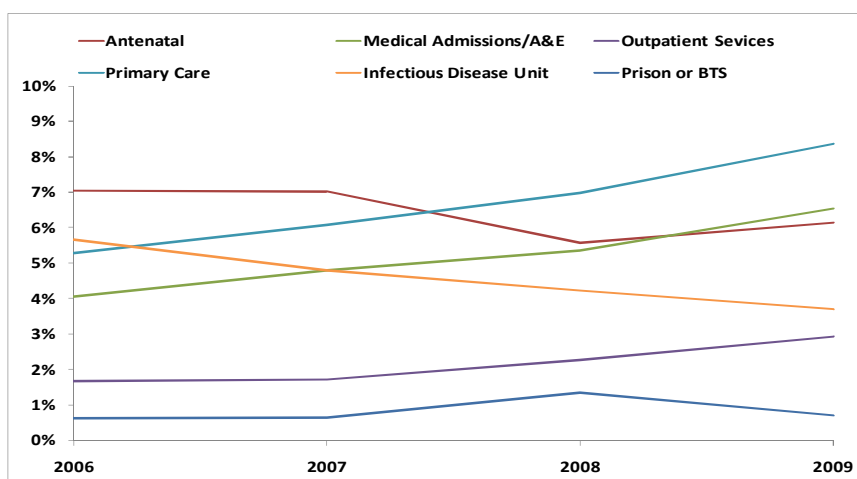
2008-9

**Ever tested: increase from 52.4% to 60.5%;  
of negative tests, 49.5 and 51% in past 12 months**

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## Diagnosing site of new HIV diagnoses (2006-2009)



(over 70% made in GUM annually)

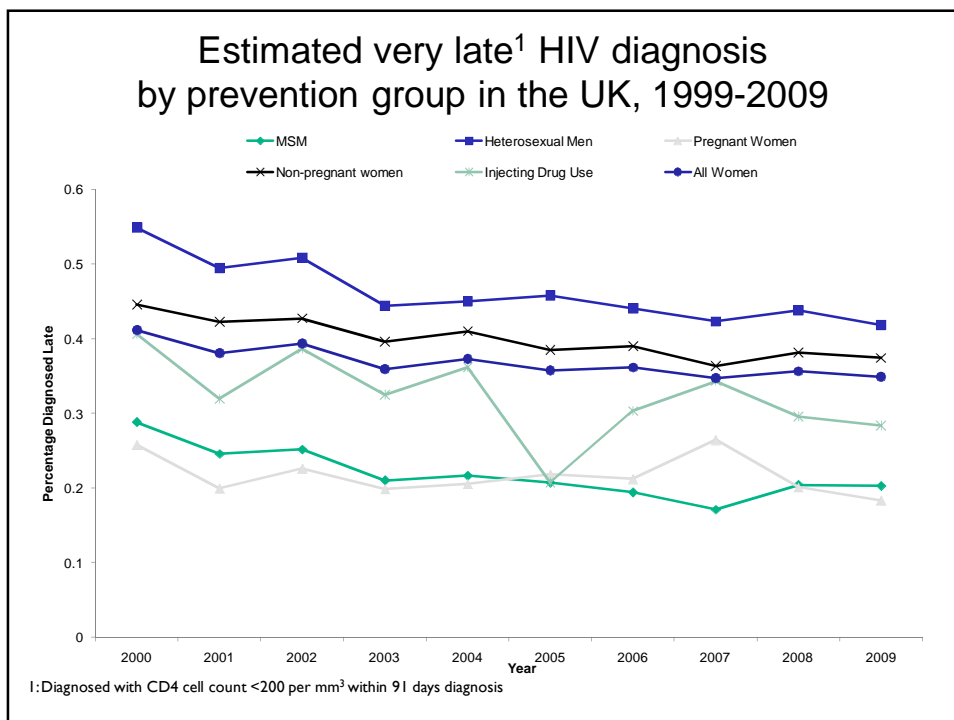
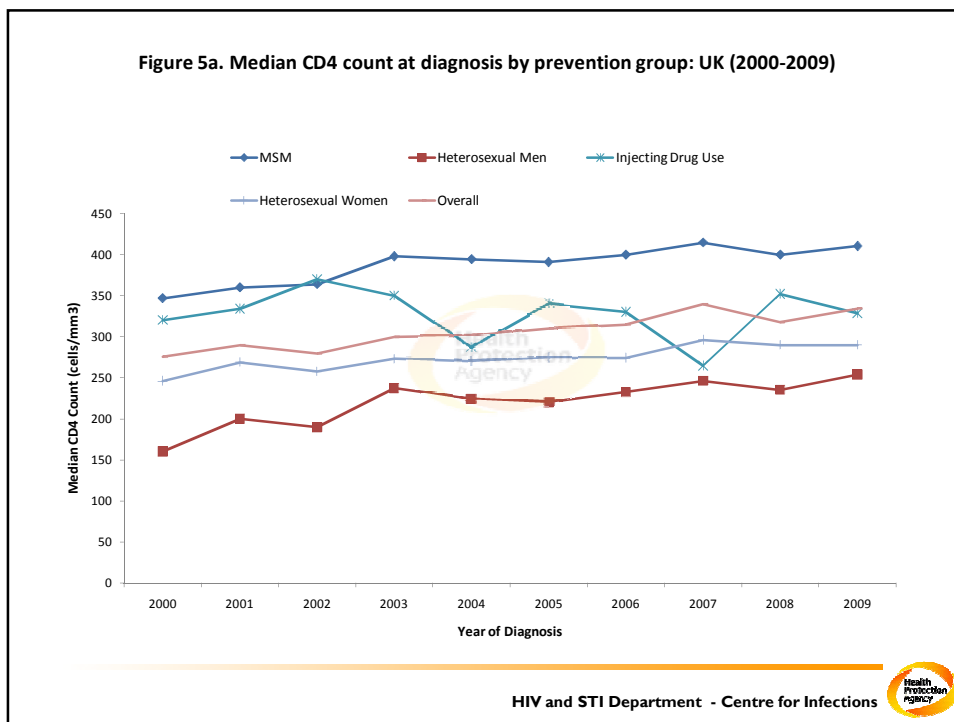
*Kall et al, #P161*

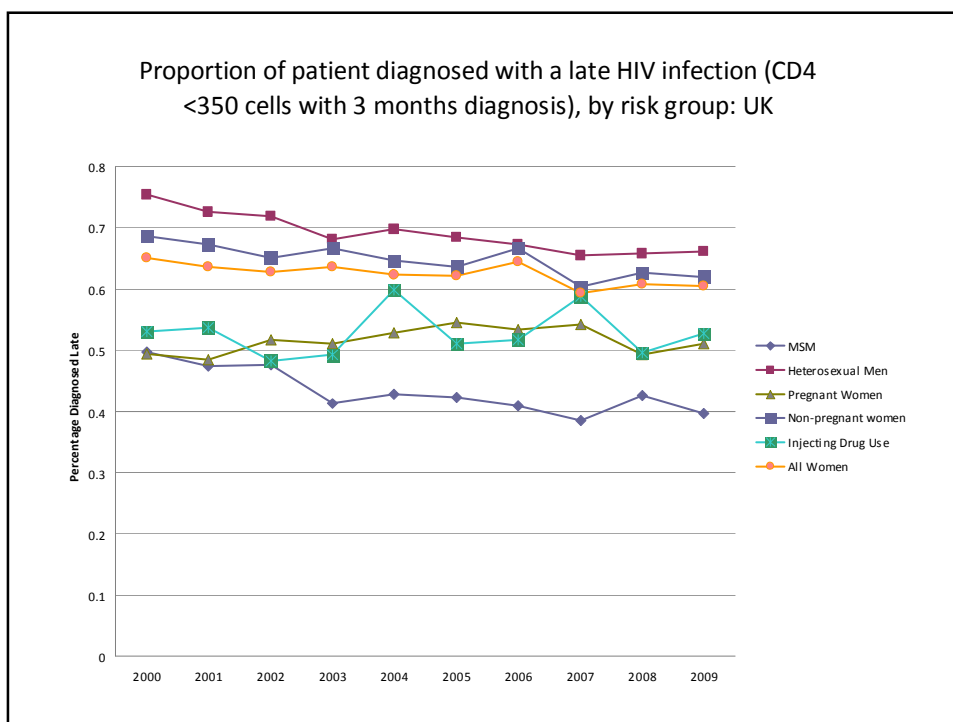
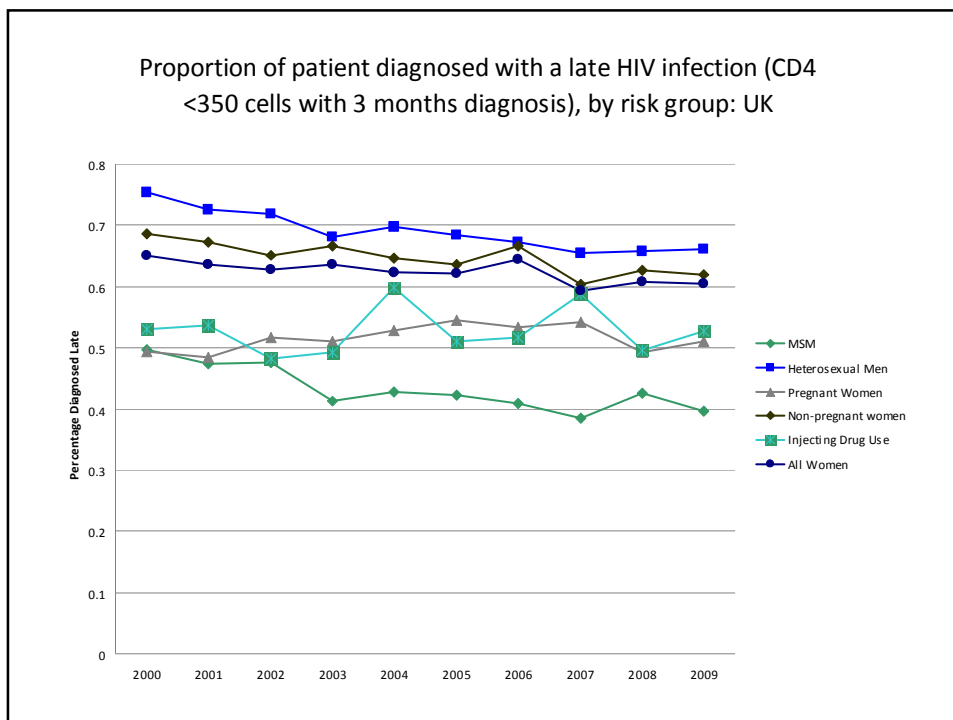
See also:

- #P136: use of laboratory data as surveillance of site and rate of HIV testing in primary care
- BHIVA Audit: 10% of new diagnoses made in primary care

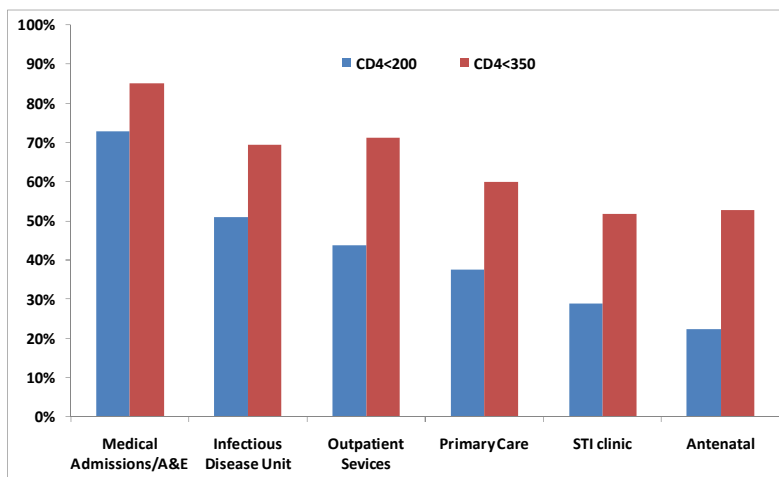
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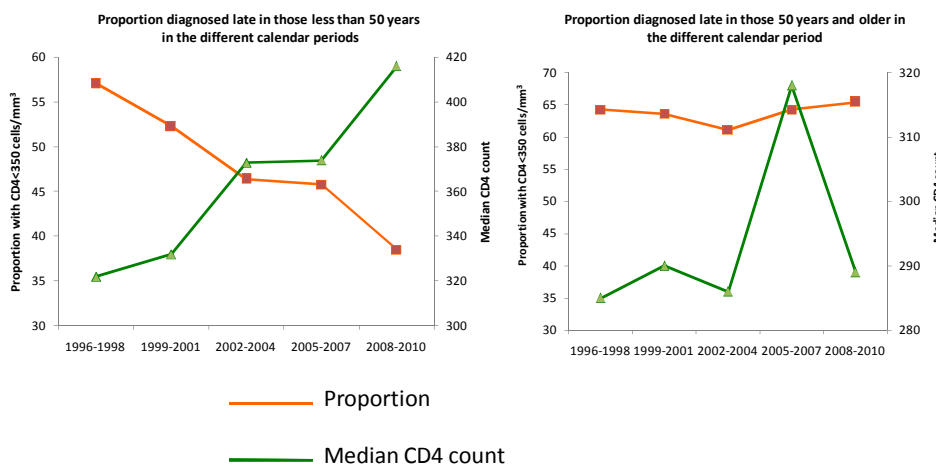


## Late and Advanced HIV Diagnoses by Site of Diagnosis (2006-2009)



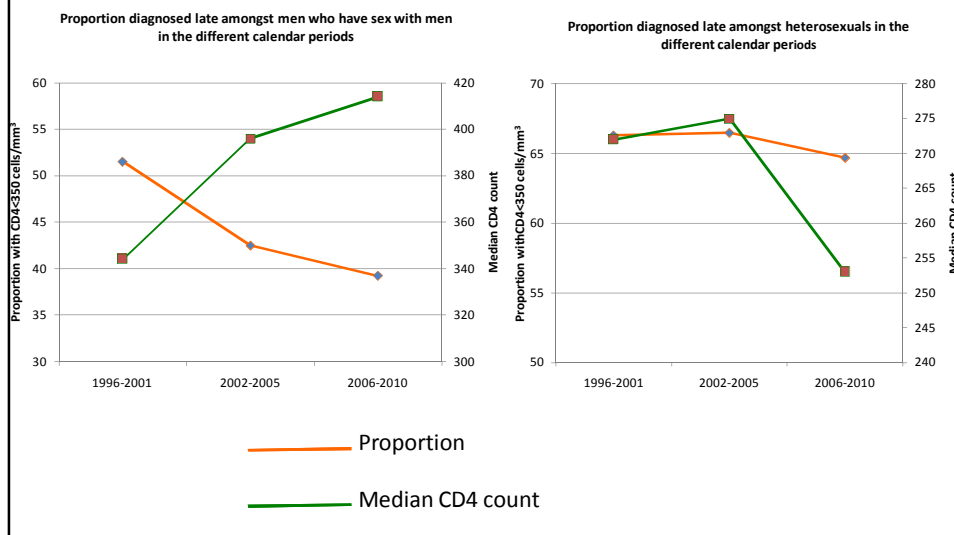
Kall et al, #P161

## Proportion of late presentation according to age at diagnosis



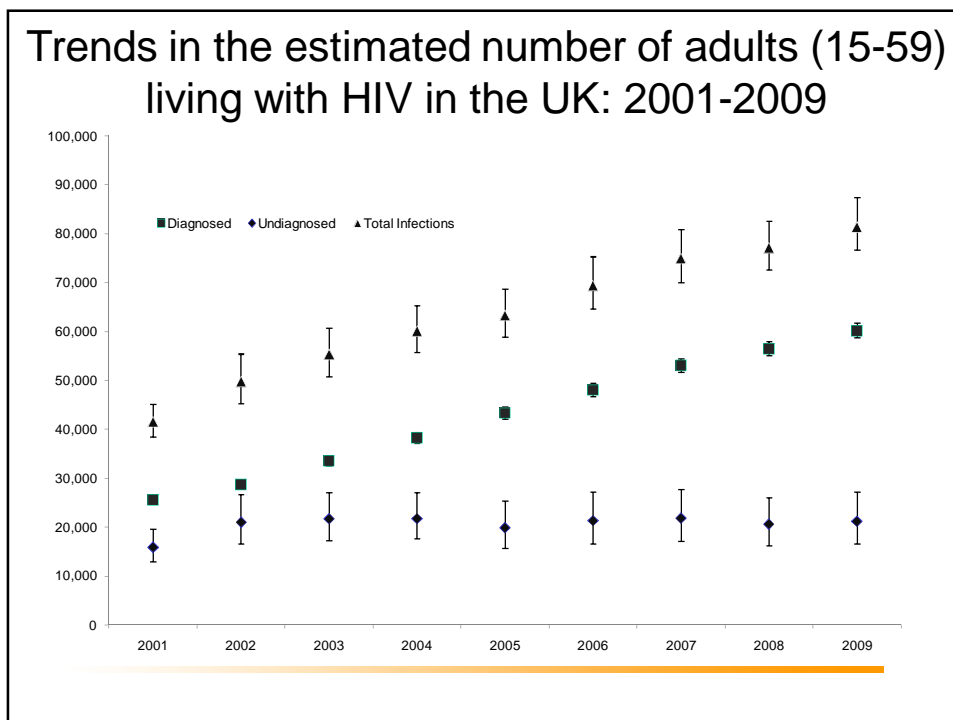
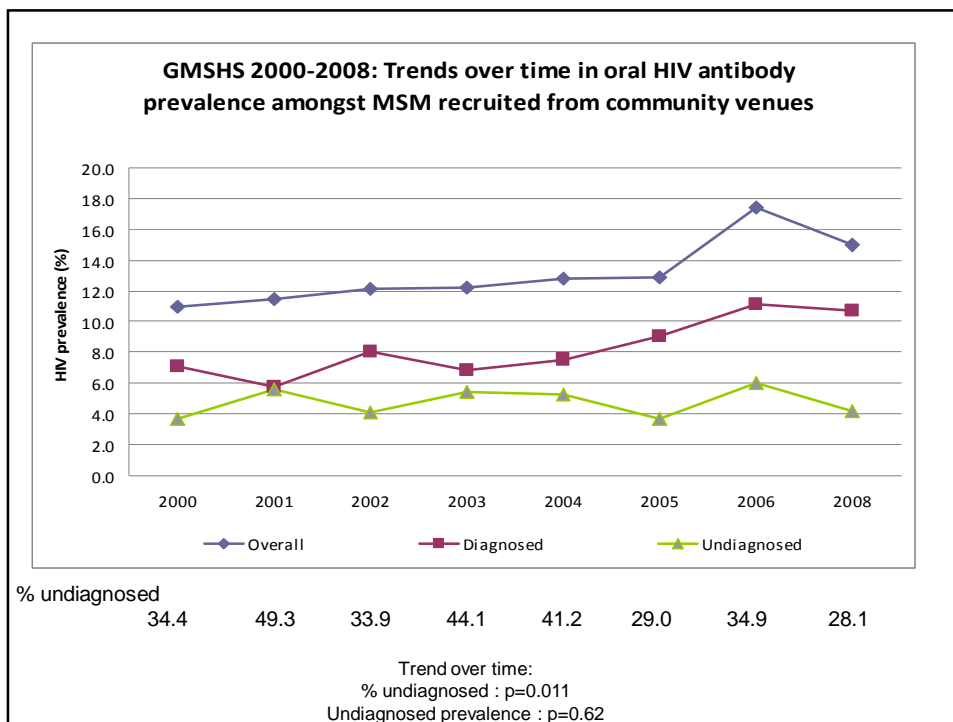


## Proportion of late diagnosis according to HIV risk group

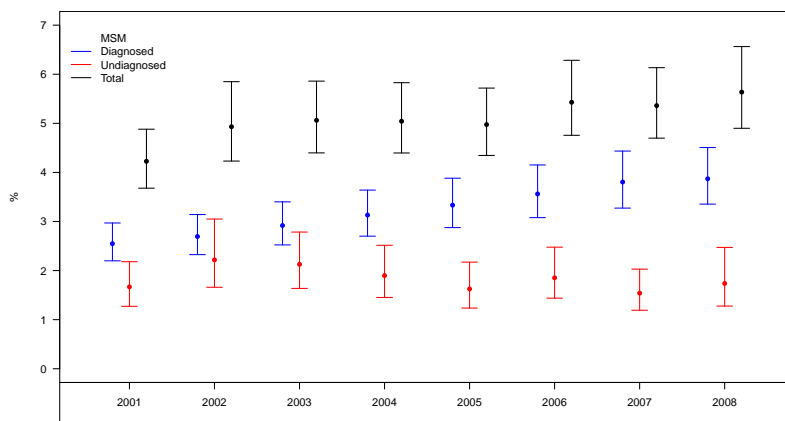


## Are the testing guidelines working?

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## Trends in the estimated number of MSM (15-44) living with HIV in the UK: 2001-2008

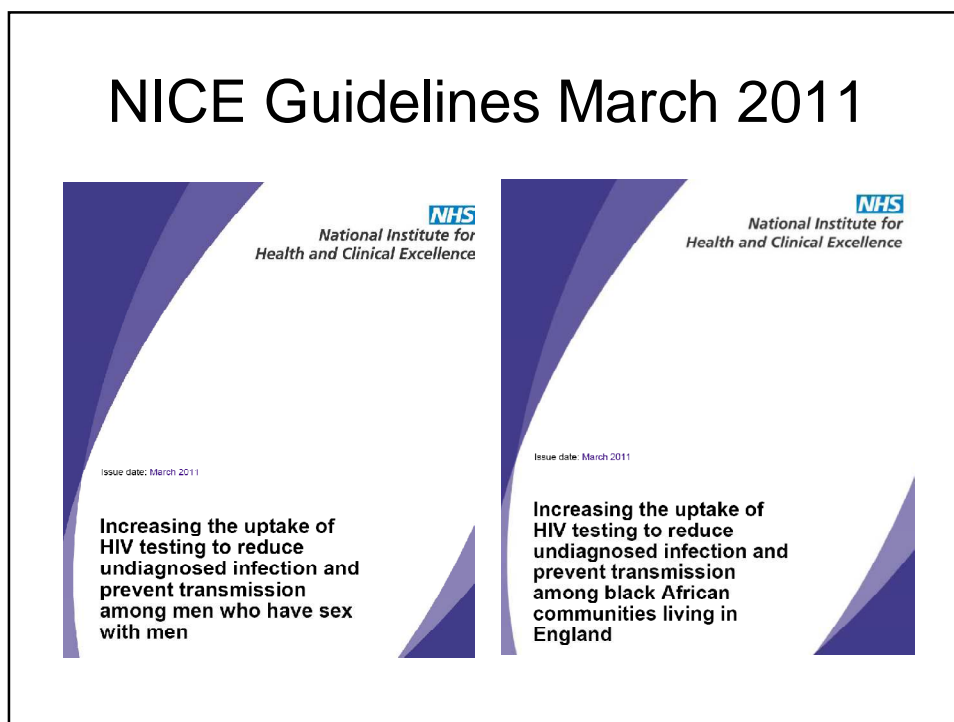


Presnais et al. Insights into the rise in HIV infections in England and Wales from 2001 to 2008 from a Bayesian synthesis of prevalence evidence. AIDS 2010

## HIV testing and the new NHS

- NICE HIV testing guidelines 2011
- Cost-effectiveness of expanded HIV testing
- HIV testing, surveillance and the new commissioning structure

## NICE Guidelines March 2011



## Summary of NICE recommendations

- Endorses recommendations within BHIVA/BASHH/BIS Testing Guidelines
  - Focus on two main high prevalence groups
- Encourages increased testing in non-GUM healthcare settings
  - Testing in TOP, TB, hepatitis, lymphoma clinics
  - Focus on high prevalence areas
    - Testing in acute admissions and GP registrants
- Annual testing in primary care for MSM
- Increased community testing for MSM
  - Saunas, PSEs
  - Use of newer testing technologies
- Emphasises need for clear referral pathways

## Cost-effectiveness

- US model: cost effective if prevalence  $>0.5/1000$
- French model: cost-effective if prevalence  $>1/1000$
- Cost-effectiveness data from DH pilots in primary and secondary care yet to be presented
- HPA 2009: Every infection averted would save £280-380,000 in direct healthcare costs
  - £1.1billion if all infections in UK in 2008 prevented
- NICE cost impact model:
  - based on testing of high prevalence groups and including assumptions of prevalence, treatment benefit, reduction in onward transmission
  - Allows costing of implementation of NICE recommendations at a local level
- Cost-effectiveness of repeat testing strategies?

## HIV testing and the new NHS commissioning structure

- Proposed indicator: proportion of patients presenting with a CD4  $<350$
- Where does “expanded” HIV testing sit within proposed new commissioning structure?
- Critical role of HPA for ongoing surveillance
- ? Public health premium should follow chosen indicator



*Healthy Lives, Healthy People:  
Transparency in Outcomes*

*Proposals for a Public Health Outcomes Framework*

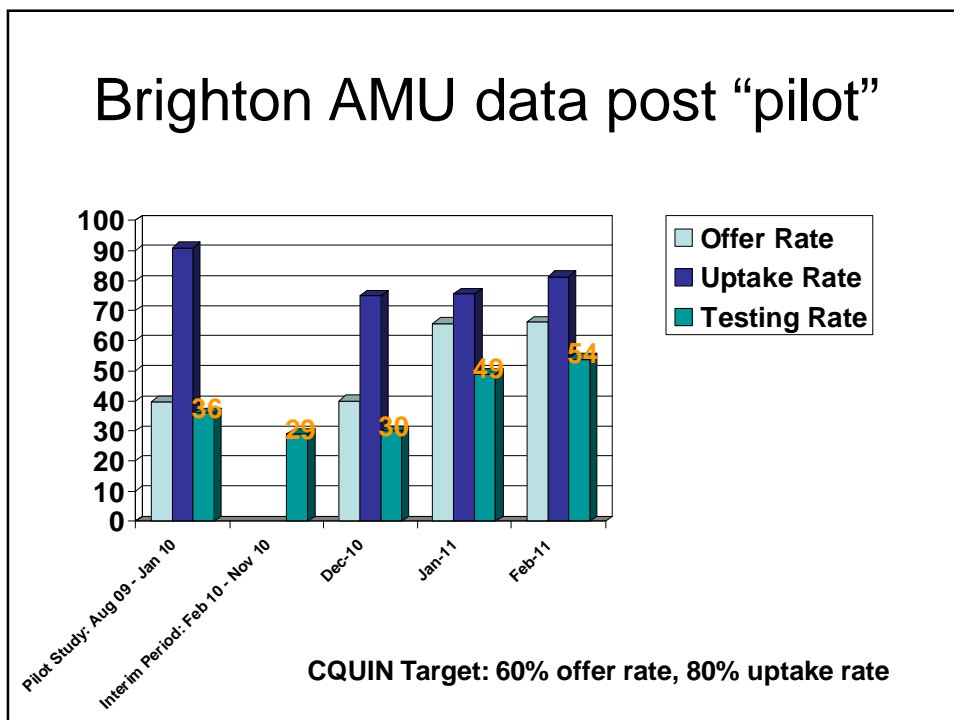
*A Consultation Document*

# Halve It ✓

EARLY TESTING SAVES LIVES.

- Halve the proportion of people diagnosed late with HIV (CD4 count <350mm3) within 5 years
- Halve the proportion of people living with undiagnosed HIV within 5 years

001/UKM/10-10/PM/1785a



# Sea Change?

**Brighton : 2006**  
 Late diagnosis  
 Missed Opportunities

**Bournemouth 2011**  
 Expanded HIV testing  
 New opportunities  
*16% of presented abstracts*

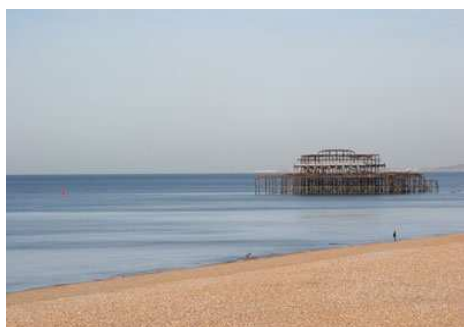
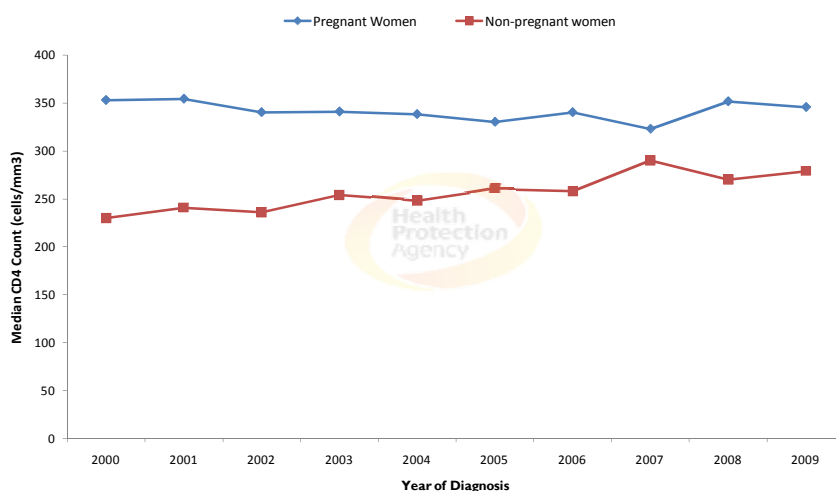


Figure 5b. Median CD4 count at diagnosis; pregnant and non-pregnant women UK (2000-2009)



HIV and STI Department - Centre for Infections



## Summary

- Increasing recommendation of expanded HIV testing
  - BHIVA/BASHH/BIS, NICE.....
- Pilots all show acceptability of expanded testing
  - High patient uptake rates
  - Patient acceptability far outstrips physician acceptability
- Trend towards increased testing rates and reduced late diagnosis
- As a result of .... or coincident to testing guidelines?
  - Relatively limited implementation of guidelines
  - Low awareness in non-HIV physicians
  - Low inclusion of testing in non-HIV clinical guidelines

## Recommendations

- Continue to lobby for “top-down” approach
  - Politically (e.g. “Halve It”, support of White Paper)
  - Organisationally (implementation of NICE guidelines)
  - Engagement of other specialist societies
  - Education and incentivisation (public health indicator and/or QOFF)
- Continue “bottom-up” approach in local areas
  - Informing of significance of late diagnosis
  - Informing of recommendations within testing guidelines
  - Audit of testing in clinical indicator diseases with involvement of relevant clinical team
  - Case-by-case discussion with all “missed opportunities”?
- Broaden access to HIV testing within non-healthcare settings



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- Health Protection Agency
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  - Jonathan Roberts
- British HIV Association
  - Jane Anderson
  - Hilary Curtis
  - Simon Ellis
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- UCL
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  - Vicky Jones
- Gilead
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