

A light green map of Europe with country names in white. The map is centered on the continent and shows major geographical features like the British Isles, Scandinavia, and the Mediterranean. Latitude and longitude lines are faintly visible.

HIV testing guidelines in Europe and linkage to care: need for implementation

Western Europe perspective

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Overview

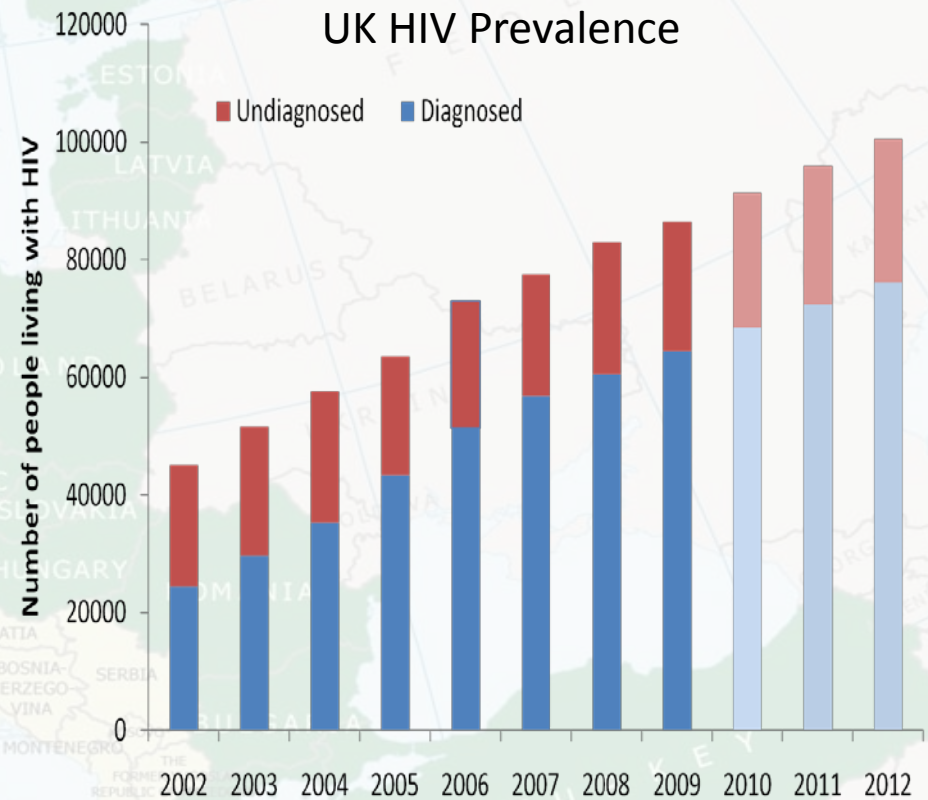
- Context
 - Guidelines
 - Epidemiology
- Implementation
 - Core principles
 - Examples from the UK
- Monitoring & Evaluation
 - the F.A.C.T.S of the program
 - National and international indicators
 - Entry into care & Quality of care indicators

Epidemiology

Who, what, where, when & how to test?

- Key markers

- New diagnoses
- % diagnosed late
 - (low CD4 &/or AIDS)
- Prevalence
 - Total
 - Diagnosed
 - Undiagnosed
- Most affected groups
- Geographical spread
- Time trends



HIV infections diagnosed in 2010

WHO European Region



Characteristics of cases	WHO European Region*	West*	Centre*	East
Number of HIV cases	118 335	25 659	2 478	90 198
Rate per 100 000 population	13.7	6.6	1.3	31.7
Percentage of cases				
Age 15–24 years**	11.6%	10.0%	17%	13%
Female	38%	27%	19%	42%
Transmission mode**				
Heterosexual	43%	24%***	24%	48%
Men who have sex with men	20%	39%	29%	0.7%
Injecting drug use	23%	4%	4%	43%
Unknown	13%	16%	41%	7%

*No data from the following countries: Austria, Liechtenstein, Monaco.

** Countries with no data on age or transmission mode excluded.

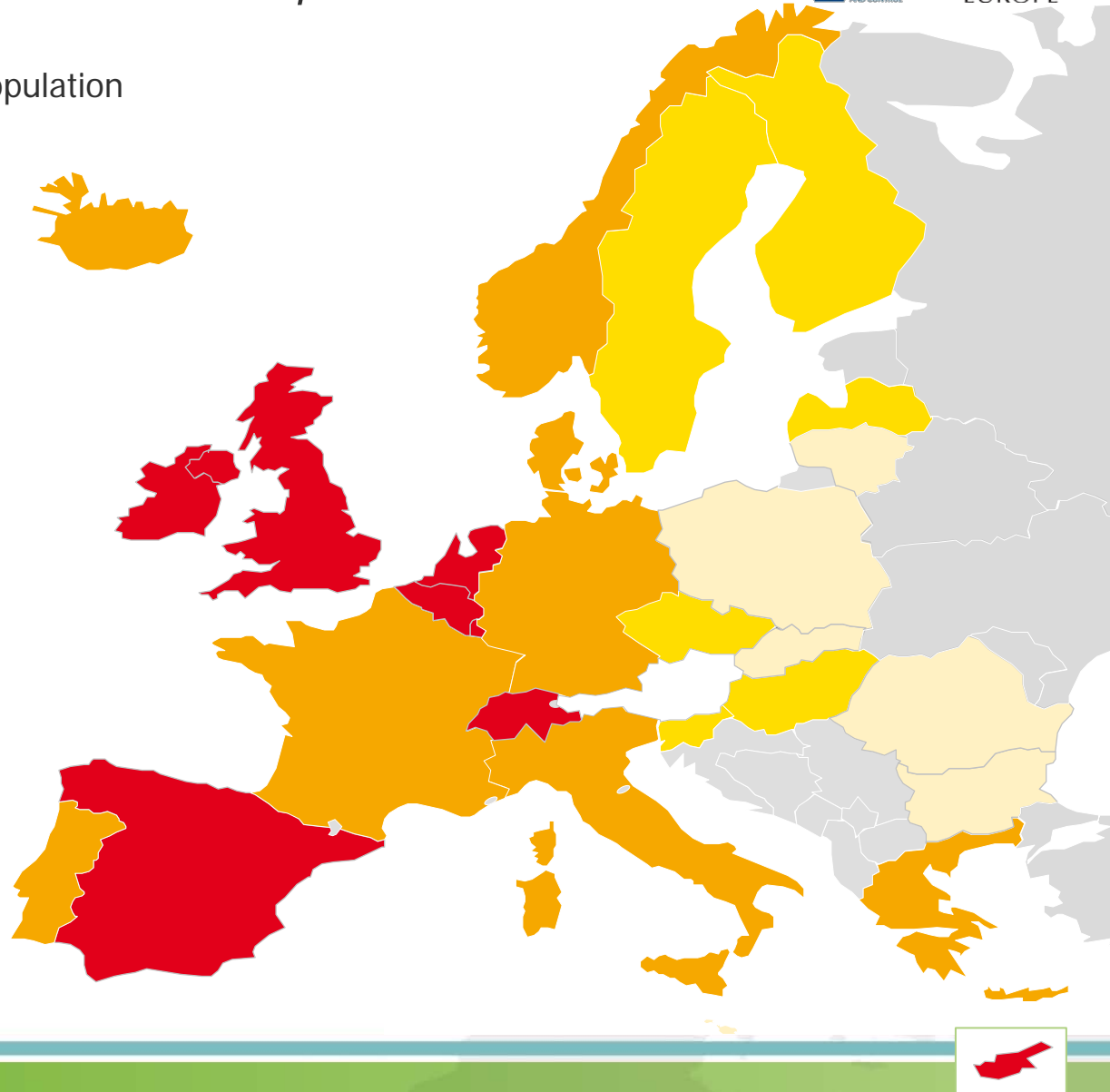
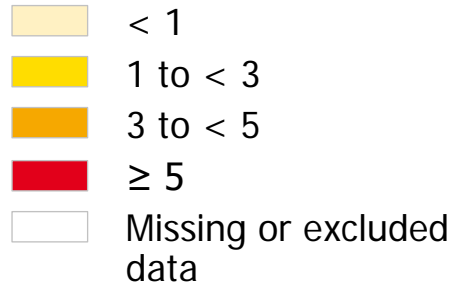
*** Excludes individuals originating from countries with generalised epidemics.

HIV infections diagnosed, 2010

Men who have sex with men, EU/EEA

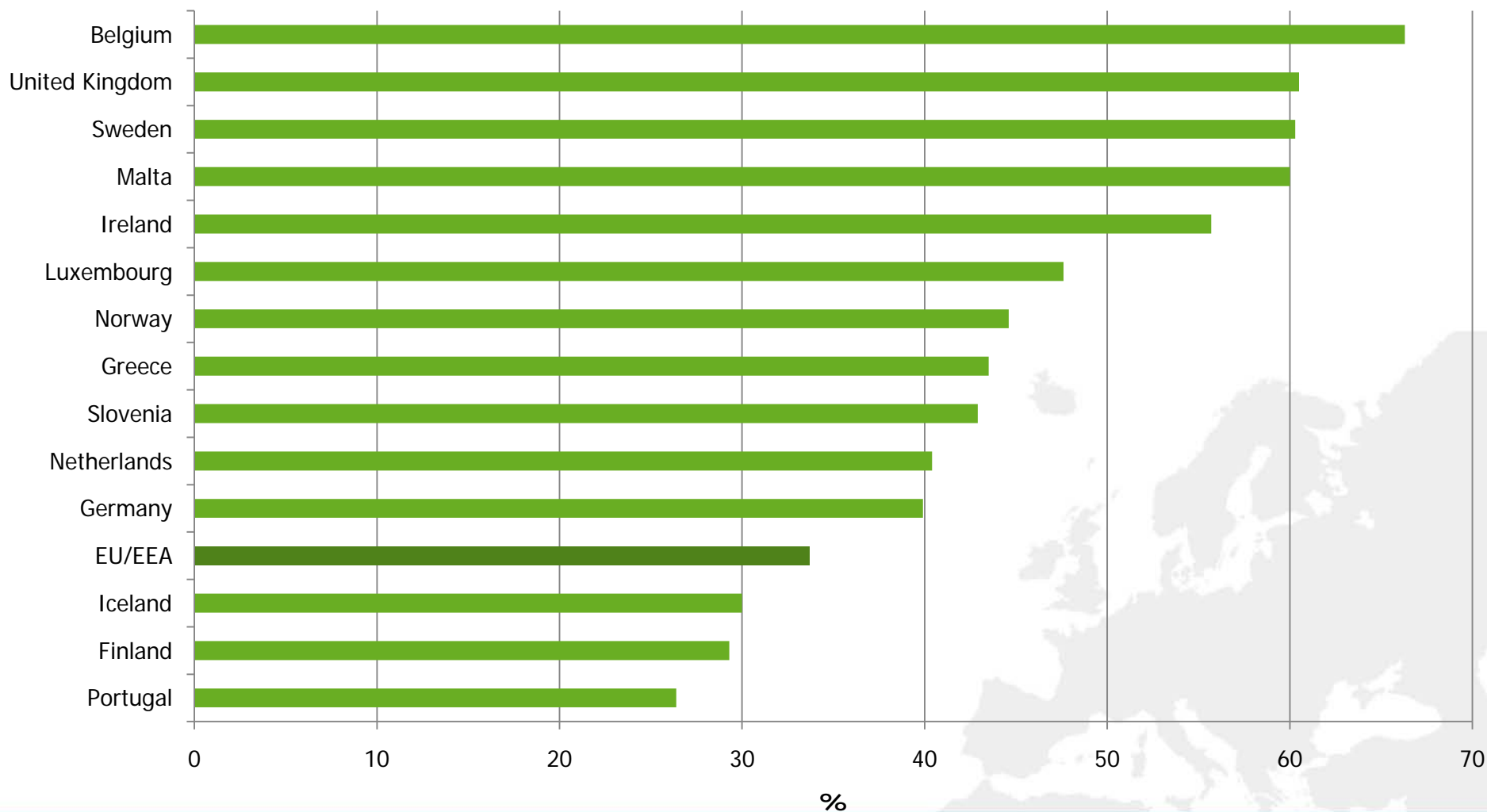


Rate as number per 100 000 male population



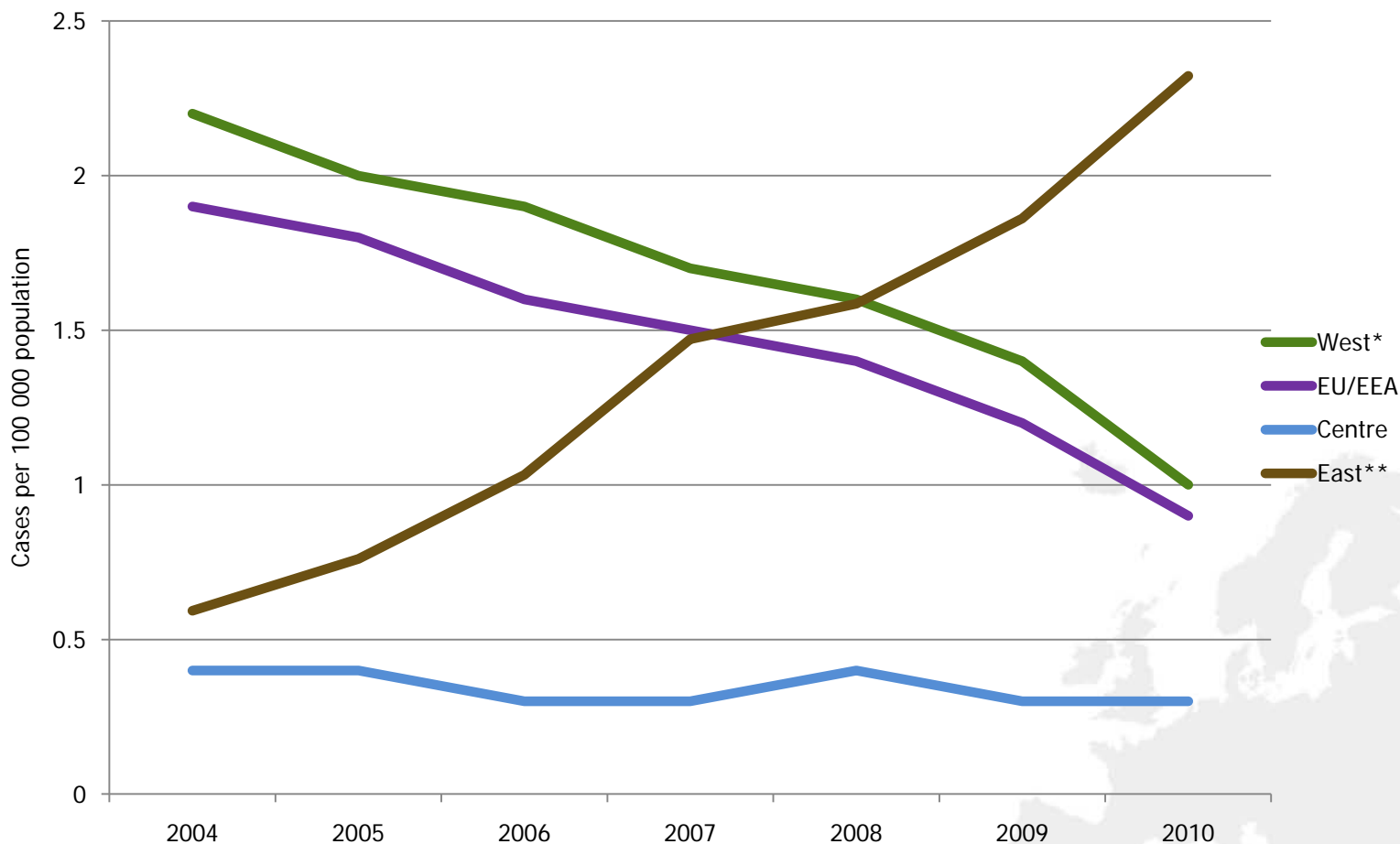
Heterosexually acquired HIV infections

Proportion of cases among persons originating from countries with generalised epidemics, 2010



AIDS diagnoses, 2004–10

WHO European Region



Countries that have consistently reported AIDS since 2004 included: West Austria, Belgium, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, San Marino, Switzerland, United Kingdom; Centre: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, the former Yugoslav Republic of Macedonia, Hungary, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia; East: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kyrgyzstan, Latvia, Lithuania, Moldova, Tajikistan, Turkmenistan, Uzbekistan.

Testing Guidelines

- Number of guidance and guidelines within Europe (1-5)
- Advocate:
 - Routine & universal offer of attendees of specified services:
 - STI clinics
 - Antenatal
 - Termination of Pregnancy
 - Drug dependency services
 - Patients with clinical indicator disease attending a range of healthcare services for example patients with tuberculosis, HBV, HCV and lymphoma
 - Targeted approach for patients at higher risk:
 - from a high prevalence country
 - MSM
 - reporting history of IDU
 - Robust monitoring and evaluation

(1) World Health Organization. Scaling up HIV testing and counseling in the WHO European Region - as an essential component of efforts to achieve universal access to HIV prevention, treatment, care and support. Policy framework. 2010. Geneva: World Health Organization.

(2) Poljak M, Smit E, Ross J. 2008 European Guideline on HIV testing. Int J STD AIDS 2009;20(2):77-83.

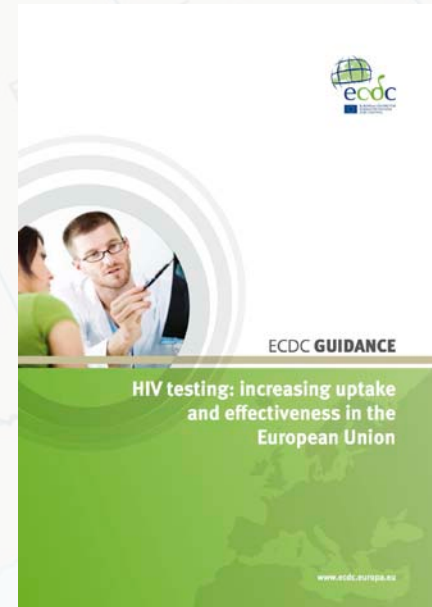
(3) World Health Organization. Guidance on provider-initiated HIV testing and counselling in health facilities. WC 503.1. 2007. Geneva: World Health Organization.

(4) World Health Organization/UNAIDS. Guidance on testing and counselling for HIV in settings attended by people who inject drugs. Improving access to treatment, care and prevention. 2009. Geneva: World Health Organization.

(5) European Centre for Disease Prevention and Control. HIV testing: increasing uptake and effectiveness in the European Union. Stockholm: ECDC; 2010

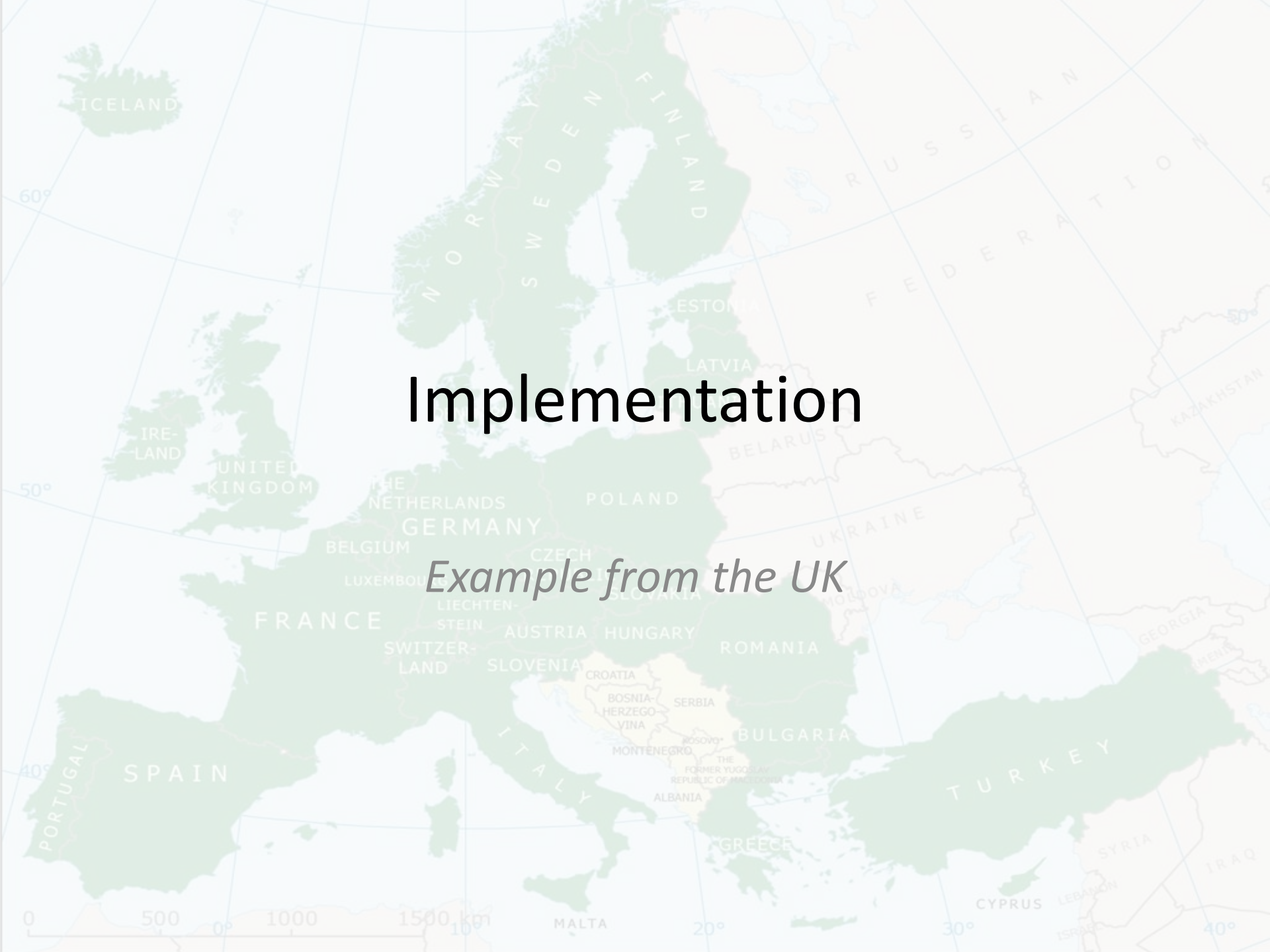
Implementation: Core Principles

- Testing is voluntary, confidential and undertaken with informed consent (which can be verbal)
- Prompt access to affordable (free) treatment, care and prevention services
- Need for political commitment with financial investment for implementation and monitoring
- Reduce Stigma through normalisation of HIV testing
- Remove the legal, structural and social barriers that discriminate and create vulnerable communities
- Make access to HIV testing an integral part of national strategies
- Develop and implement and HIV strategy with the participation of stakeholders

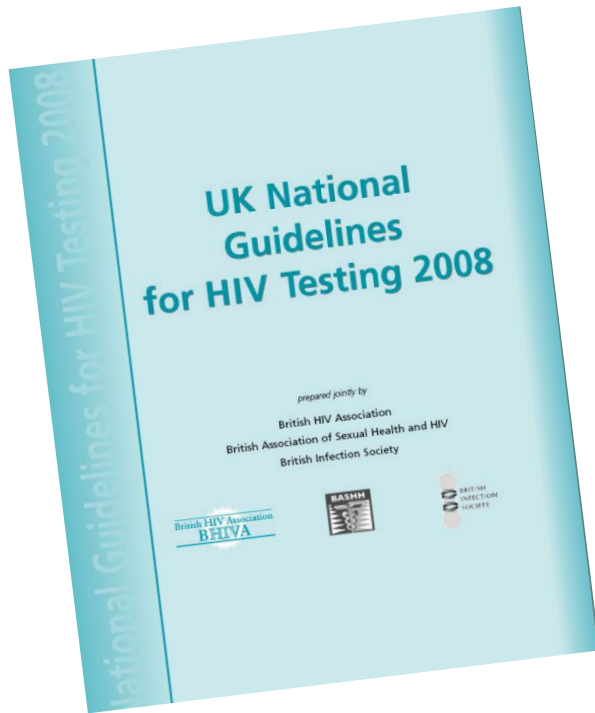


Implementation

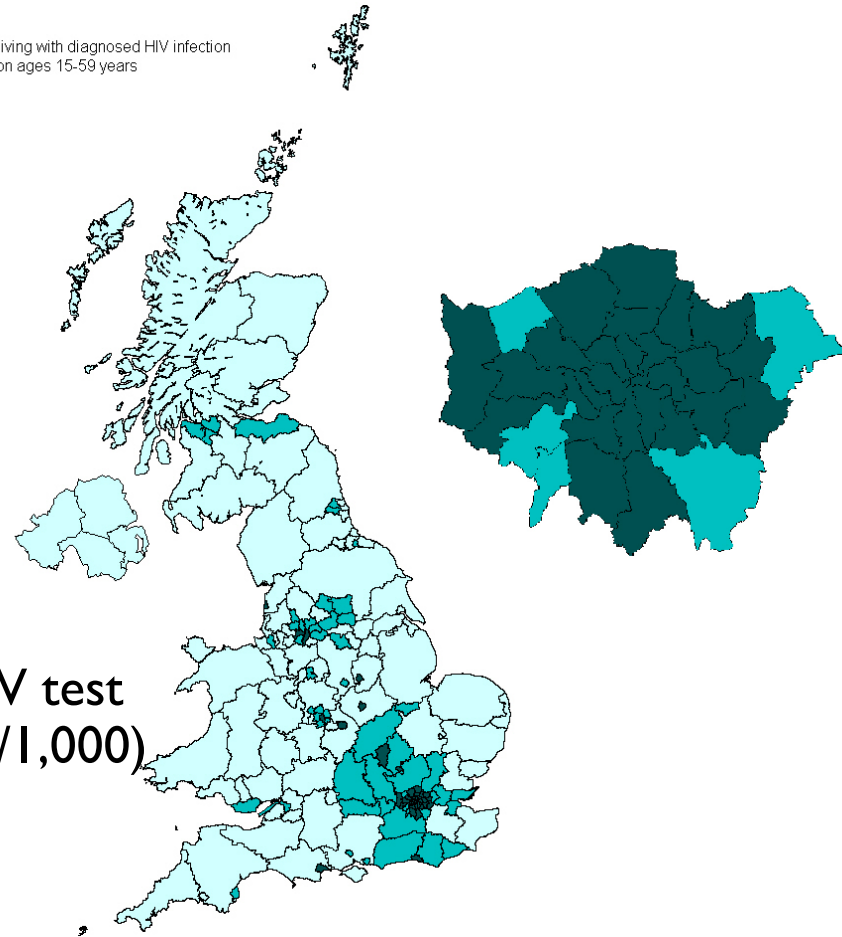
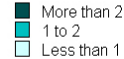
Example from the UK



UK National Guidelines for HIV testing, 2008



Number of people living with diagnosed HIV infection per 1,000 population ages 15-59 years

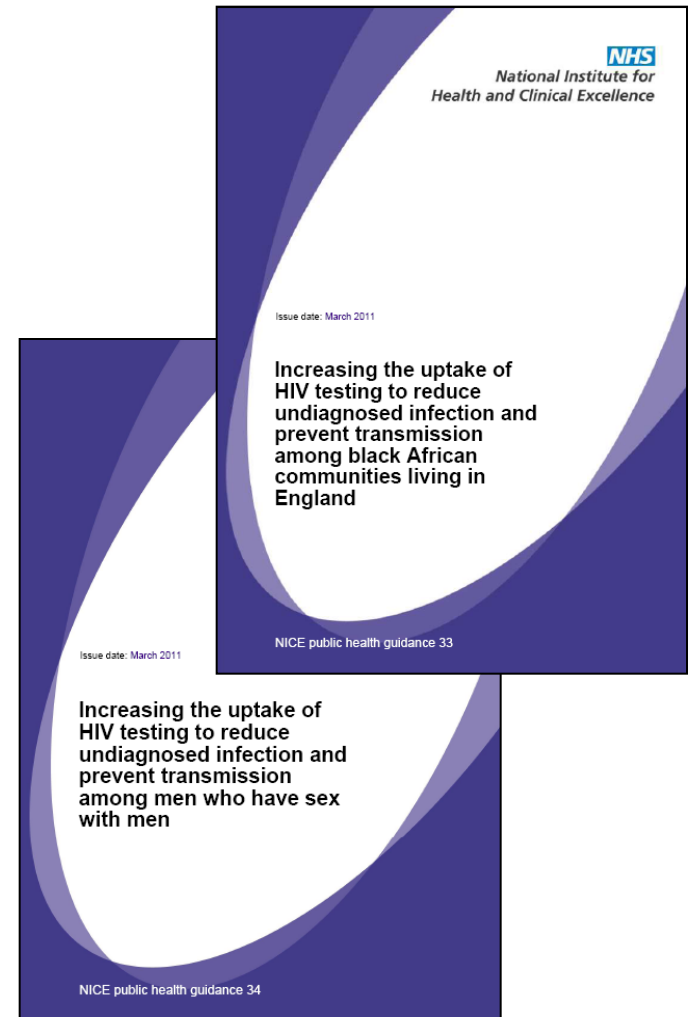


Expand routine offer and recommendation HIV test in areas of high diagnosed HIV prevalence ($>2/1,000$)

- Registrants in primary care
- General medical admissions

Further Policy & Stakeholder Developments

- National Institute of Clinical Excellence (NICE) 2011 published guidance on increasing HIV testing among:
 - Men who have sex with men; and
 - Black African communities
 - Reinforced many of recommendations from UK BHIVA national guidance:
- 'Halve it Campaign' (2010)
- House of Lords Report (2011) recommended expanded HIV testing
- Public Health Outcomes Framework (2012) For England
 - Late diagnosis of HIV key indicator



HIV testing Pilot Projects funded by Department of Health and Gilead Fellowships



- 8 funded by DH, 34 by Gilead
- Aim: Assess the feasibility, acceptability and effectiveness of expanding HIV testing
- Pilots demonstrated:
 - high levels of acceptability among patients
 - feasibility of routine testing in different medical services
- Evaluation of DH projects (HPA)
 - A total of 10,500 HIV test performed with 50 new diagnoses (5/1,000). Positivity rates ranged from 0 to 20.1/1,000
 - 13.6/1,000 in community projects
 - 4.8/1,000 in primary care
 - 3.1/1,000 in hospitals



DH funded HIV testing pilots, Results of hospital projects, UK

Pilot project	Number offered	Number of tests	% Uptake	Number Positive	Positivity (/1000)
London - ACU	551	383	70%	4	10.4
Brighton – ACU	1,553	1413	91%	2	1.8
Leicester - ACU	-	984	-	10	10.2
London – A&E	3,469	2,123	61%	4	1.8
London – OPD	840	600	71%	0	0
TOTAL	-	6,494		20	3.1

"It is acceptable to me to be offered an HIV test in this setting"

95% of questionnaire respondents overall (n=635) agreed with this statement

- no difference by gender or age
- difference by ethnicity in ACU, but was still 82% in non-white
- difference stratified by test uptake:

Setting and test uptake		Proportion agreeing	p
ACU	Accepted test	95%	0.013
	Declined test	78%	
ED	Accepted test	95%	0.003
	Declined test	90%	

HINTS

HIV Testing in Non-Traditional Settings

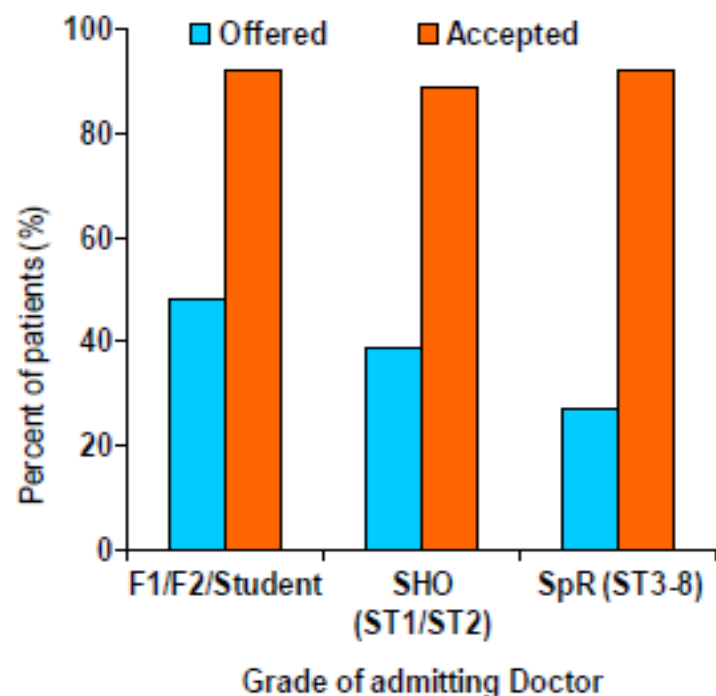
Acceptability among patients in primary care

Preliminary Results

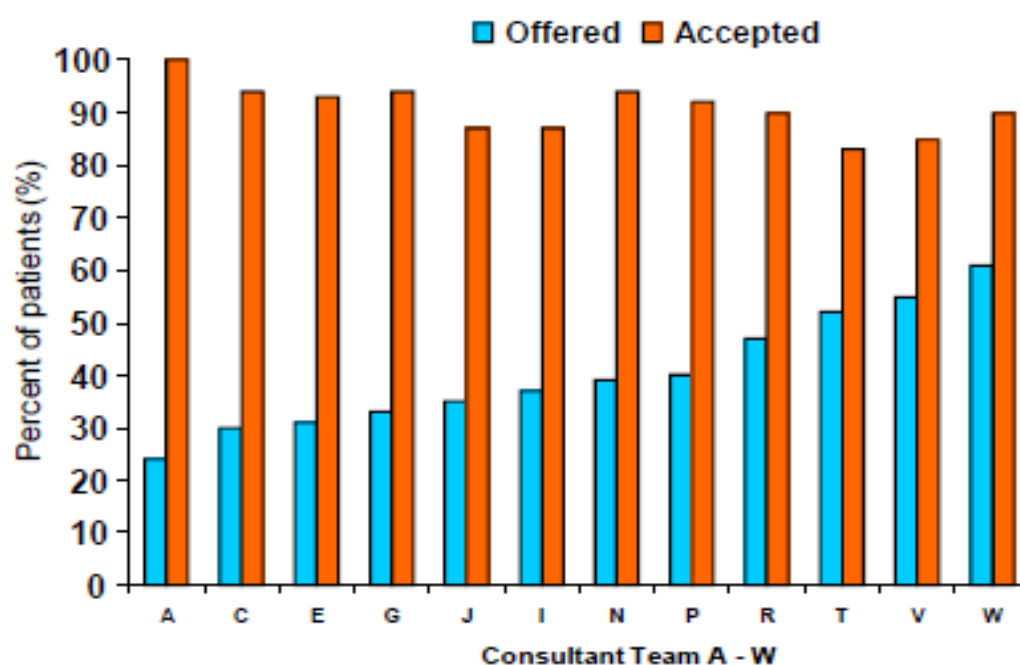
Questionnaire items	% agreeing		
	Accepted	Declined	Total
It was a good idea to offer me an HIV test today during my new patient health check*	97.8	93.5	96.7
I think I may be at risk of HIV*	6.5	2.5	5.5
I had enough time to decide whether or not to have an HIV test today*	85.3	71.1	81.7
I would like to receive my HIV test result straight away*	93.9	51.1	84.1
I am happy to have an HIV test at my doctor's surgery*	98.6	73.3	92.3
I would prefer to have an HIV test at a specialist sexual health clinic*	8.6	10.0	9.0
Overall I would rate my experience of being offered an HIV test as helpful and useful*	94.1	86.2	92.1

* Indicates significant difference by chi-squared test ($p < 0.05$)

Offer and Acceptance by Admitting Doctor



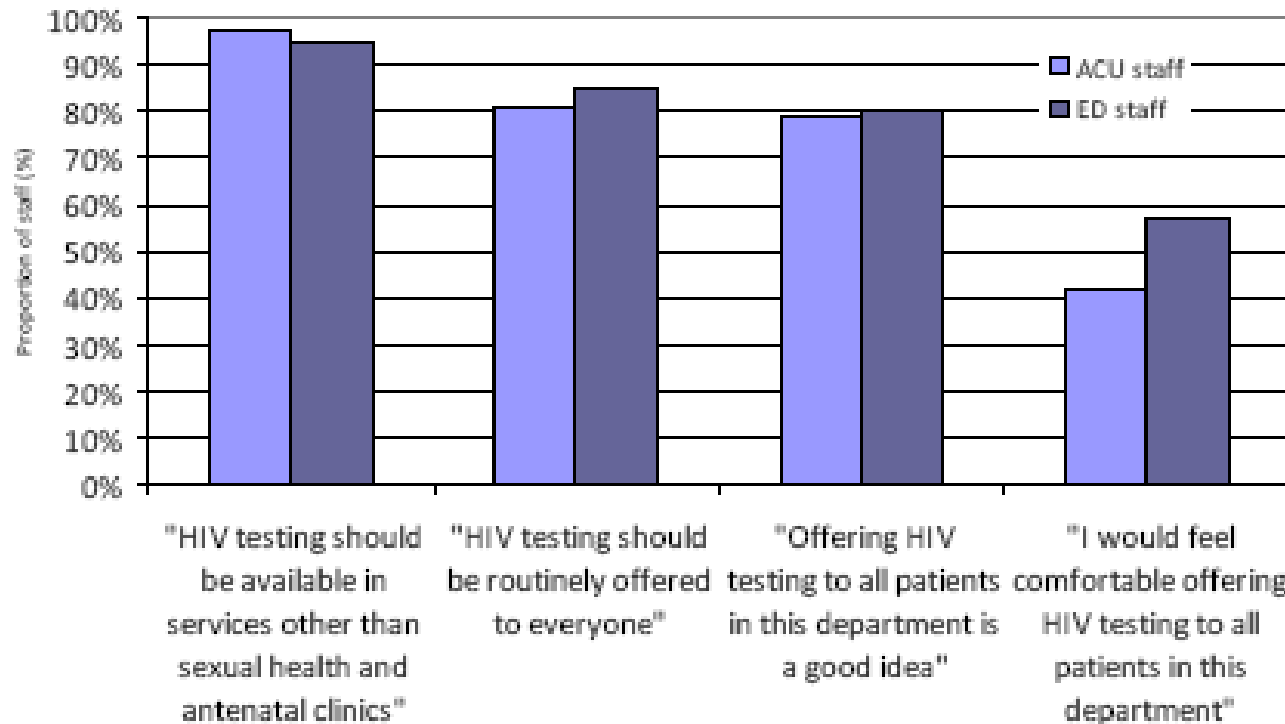
Offer rate differed significantly by grade $p < 0.001$



Offer rate differed significantly by Consultant $p < 0.001$

Staff attitudes towards HIV testing

- 79% of ED and ACU staff were supportive of the need for increased HIV testing, and thought it acceptable for it to be offered in their Department
- BUT only 42% ACU and 57% ED staff agreed they would feel comfortable offering HIV tests themselves



Cost per HIV diagnosed, UK, 2011

Pilot Site	Number HIV diagnosed	Number HIV tests	Cost per HIV diagnosed
Primary Care			
Brighton	2	1,473	£4,673
London	19	2,713	£787
Medical Admissions			
London (Homerton)	4	384	£299
Brighton	2	1,413	£3,870
Leicester	10	984	£818
Newcastle	2	396	£3,793
London (UCL)	2	130	£2,222

- Costs per HIV detected compare well with other studies:
- USA¹: varied from \$1,980 (UCC) to \$9,724 (ED)
 - Netherlands²: €16,900 (STI clinic)

¹ Mehta et al *Pub Health Rep* 2008; ²YBos JM et al *AIDS* 2001;

Cost-effectiveness of expanding HIV testing

- Cost-effective threshold for expanded HIV testing in USA
 - 1 new HIV diagnosis/1,000 tests in general medical services³
- Shown to be cost-effective in:
 - USA¹: testing every 3 years cost \$63,000 per QALY
 - France²: test everyone once cost €56,000 per QALY
- Absence of published data for Europe:
 - Expansion of HIV testing cost of £7,500 per QALY gained (RTI, Gilead Fellowship)- UK
 - No indication in which services HIV testing would be most cost-effective

¹ Paltiel et al *N Engl J Med* 2006; ² Yazadanpanah et al *Plos One* 2011;
³ MMWR 2006

Sustainability

- 5 of 8 DH projects have continued outside of the pilot
 - Inclusion of HIV testing questions in pro-forma
 - Use of local performance indicator (CQUIN)
 - Including POCT tests in primary care contracts for level 1 LES

- Staff training
 - Variation in the offer of an HIV test according to consultant
 - Anxieties about patients questions
 - Anxieties about managing reactive results

Monitoring & Evaluation





Monitoring and evaluation

Examples of indicators to assess local HIV testing initiatives using the FACTS criteria



ECDC GUIDANCE

HIV testing: increasing uptake and effectiveness in the European Union

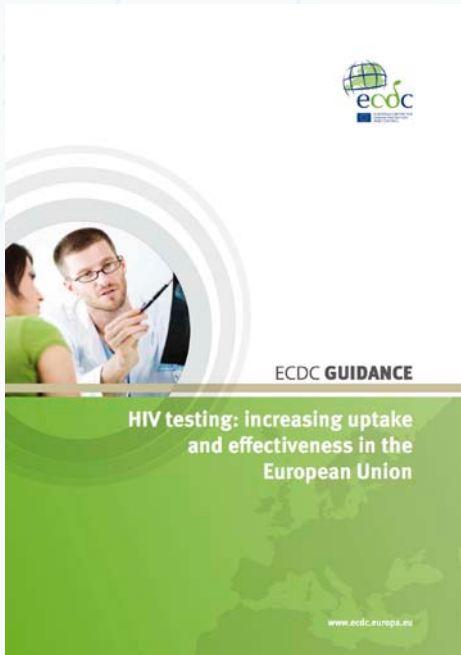
www.ecdc.europa.eu

Table 2: Monitoring and evaluation in specific settings
Examples of indicators to assess local HIV testing initiatives using the FACTS criteria

Criteria for project success	Examples of indicators
Feasibility	Number and % of persons offered HIV testing
	% newly diagnosed individuals who are successfully transferred to care within three months
Acceptability	Number and % uptake of an HIV test (overall and among populations most at risk)
	% of patients agreeing that the offer of an HIV test in this setting is acceptable
	% of patients willing to disclose risk behaviour
	% of patients satisfied with the patient information provided
	% of staff reporting barriers to offer an HIV test in this setting
	% of staff reporting specific training needs
Effectiveness and cost effectiveness	Positivity rate (overall and among populations most at risk)
	Staff costs associated with intervention
	Resource costs associated with intervention
Target populations reached	Outcome of cost-effectiveness model
	% of most-at-risk populations who had an HIV test in the last 12 months and know their results
Sustainability	Positivity rate among most-at-risk populations tested in the setting
	Number and % uptake of an HIV test (overall and among populations most at risk)
	Staff costs associated with intervention
	Resource costs associated with intervention

Compiling the evidence of what works

- Good evidence both acceptable to patients and staff in a variety of settings
 - STI clinics
 - Antenatal care
 - harm reduction services
 - Range of medical settings
 - General practice
- Cost-effectiveness data are required



Monitoring and evaluation

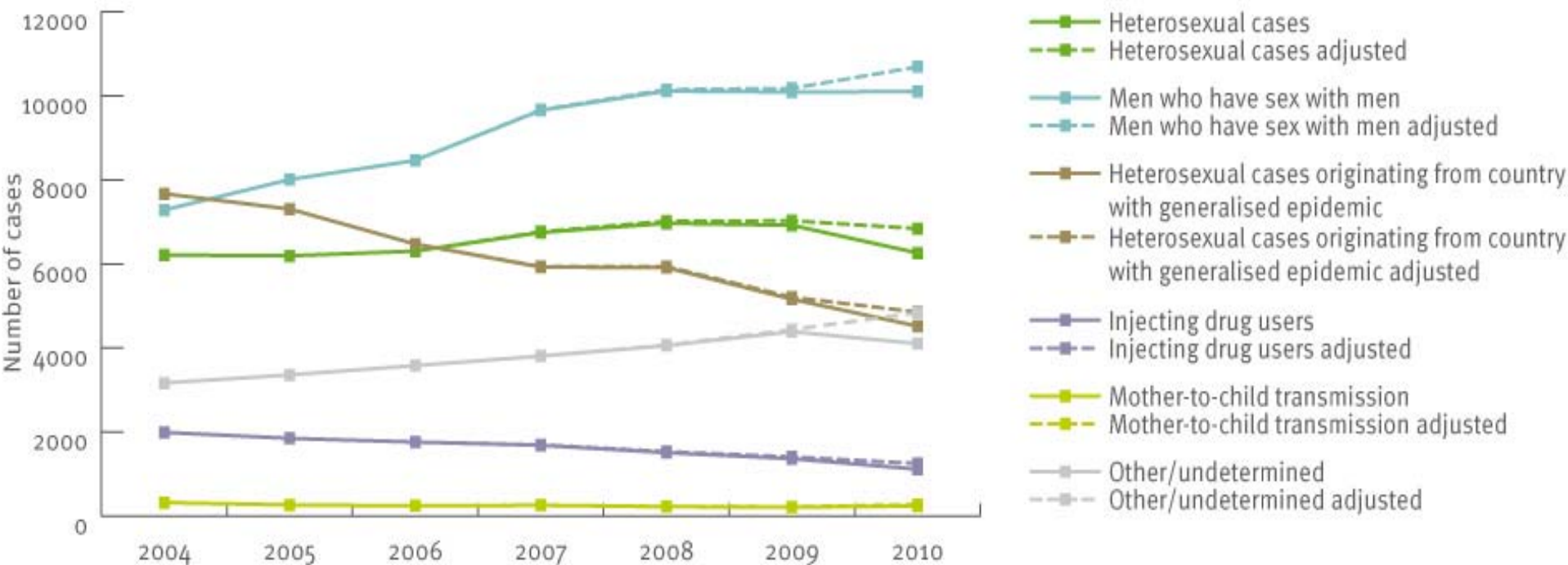
National & international level

Appendix A

Table 1: Monitoring and evaluation at the national/international level


	Examples of indicators	References
Process indicators	Existence of national testing policies and guidelines that are consistent with international standards (WHO/AIDS)	UNGASS (as part of National Composite Policy Index), WHO M&E guide
	% men and women who had an HIV test in the last 12 months and know the results	UNGASS, WHO M&E guide
	% of most-at-risk populations (MSM, IDU, migrants) who had an HIV test in the last 12 months and know their results	UNGASS, WHO M&E guide
	% of pregnant women who have been tested for HIV in the last 12 months and know their results	WHO M&E guide
	% of TB patients who have been tested for HIV in the last 12 months and know their results	WHO M&E guide
	% of STI patients who have been tested for HIV in the last 12 months and know their results	ECDC
Outcome indicators	Numbers and proportions of persons offered testing stratified by setting (particularly, anonymous testing sites and primary care sites)	
	Total number of new diagnoses stratified by most-at-risk populations including unknowns	Dublin Declaration
	Number and % of new diagnoses which are diagnosed late with CD4 <200 (overall and by most-at-risk population)	Dublin Declaration
	Number and % of new diagnoses which are diagnosed late with CD4 <350 (overall and by most-at-risk population)	
	Number and % of new diagnoses which are diagnosed late with AIDS at presentation (overall and by most-at-risk population)	
	% new diagnoses who are recently infected (RITA or other seroconversion algorithms)	
	% of newly diagnosed individuals who are successfully transferred to care within three months (overall and by most-at-risk populations)	WHO M&E guide
Total number and proportion of undiagnosed infections		
Number and proportion in most-at-risk groups of undiagnosed infections		

HIV infection by transmission group and origin in EU/EEA, 2004–10



Predominant transmission group: men who have sex with men

Data were not included or not available from Austria, Estonia and Poland.

A map of Europe and its surrounding regions, including parts of North Africa and the Middle East. The map is color-coded by country, with most of Europe in shades of green and yellow. The text "Access to HIV care and ensuring quality care" is overlaid in the center in a large, bold, black font. A scale bar at the bottom left shows distances from 0 to 1500 km. Latitude and longitude lines are visible across the map.

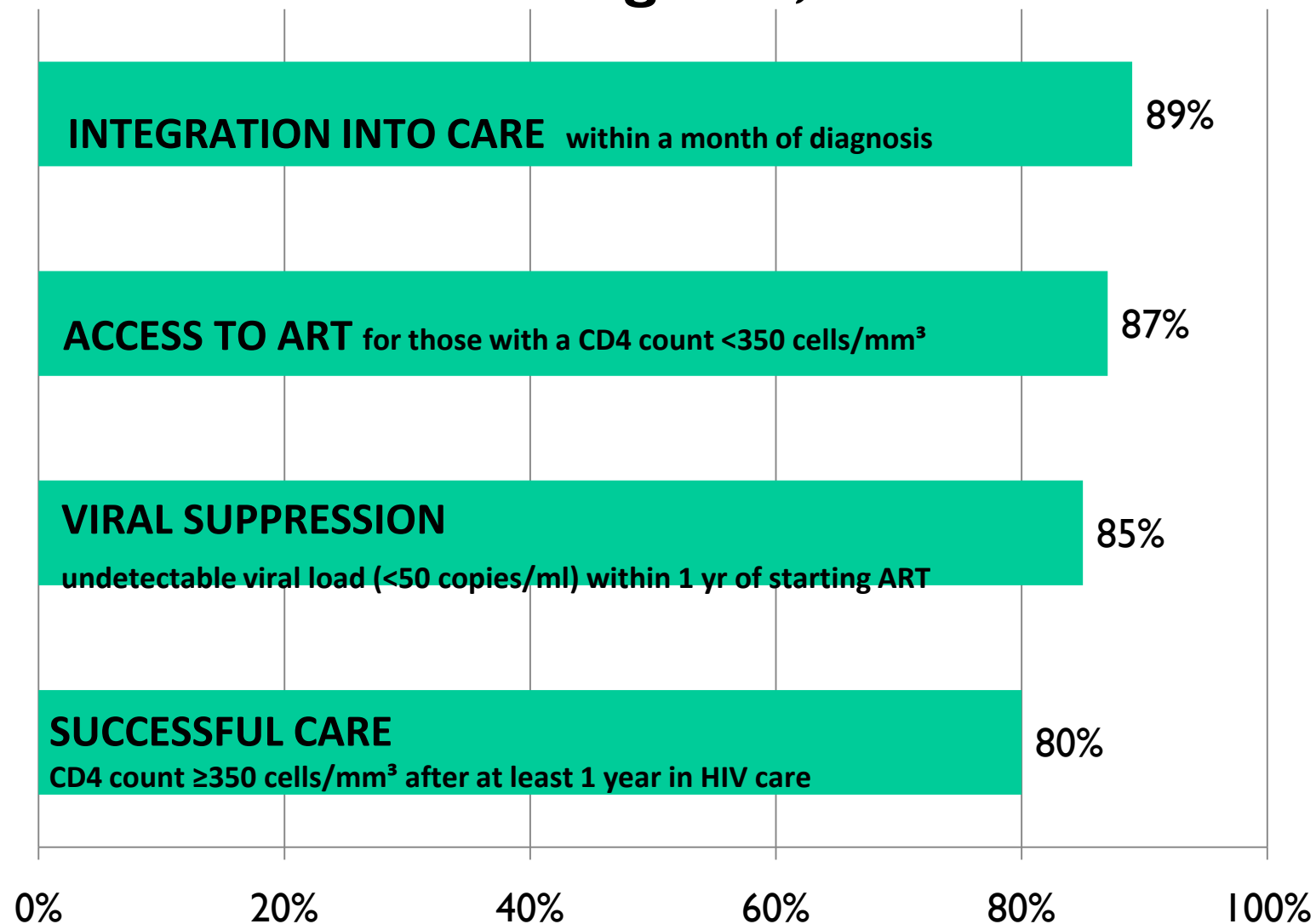
Access to HIV care and ensuring quality care

HIV Quality of Care Indicators



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

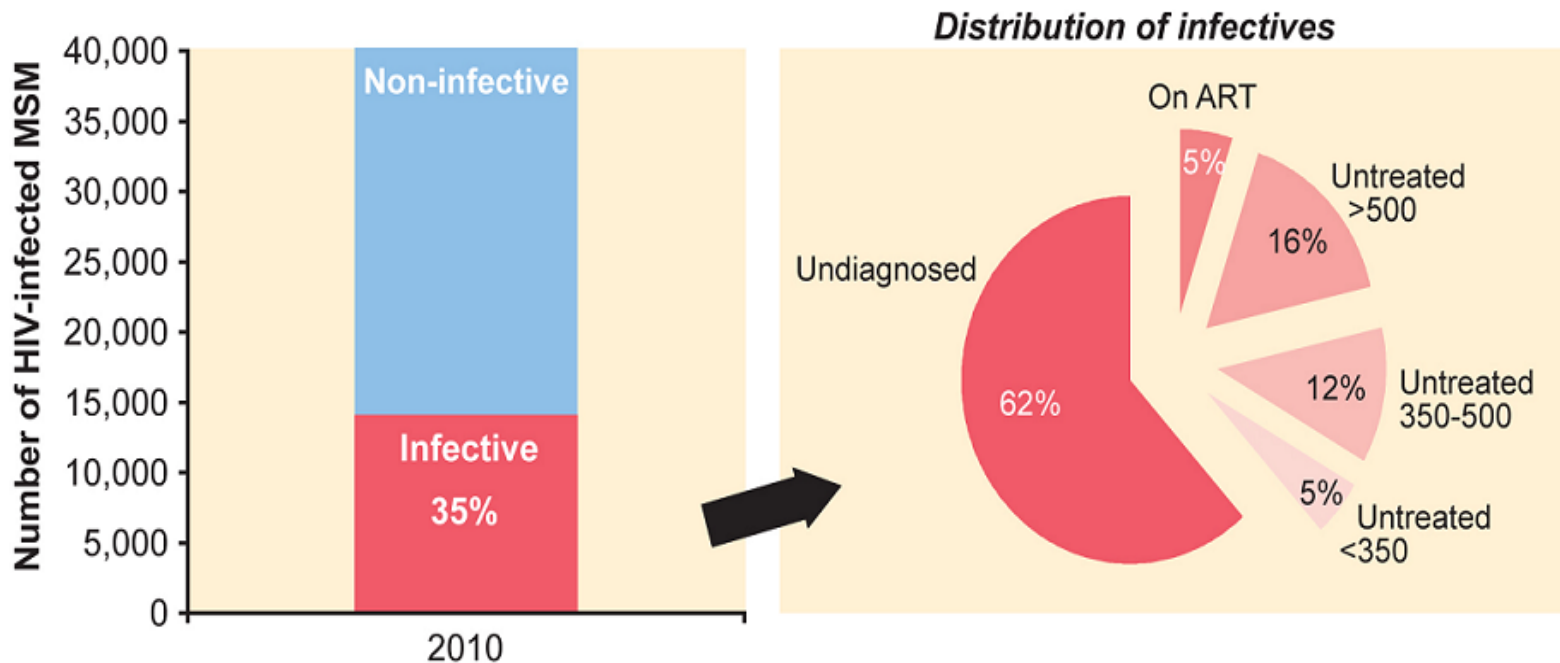
Quality of HIV care in adults United Kingdom, 2010



A map of Europe and its surrounding regions, including parts of North Africa and the Middle East. The map is color-coded: most European countries are in shades of green, while Russia, Ukraine, and parts of the Middle East are in shades of orange. A scale bar at the bottom left shows distances from 0 to 1500 km. Latitude lines are marked at 40°, 50°, and 60° North. Longitude lines are marked at 20°, 30°, and 40° East. The text 'The public health impact of 'treatment as prevention'' is overlaid in the center of the map.

The public health impact of 'treatment as prevention'

Distribution of the infectious population among HIV-infected MSM: UK, 2010



* viral load >1500 copies/ml

Thank-you for listening!

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