

HIV Indicator Diseases across Europe Study- HIDES I: results of the pilot phase



HIV in Europe

Ann Sullivan on behalf of the
HIV Indicator Diseases Across Europe Study Group

Background

- Overall rising HIV incidence across Europe
 - ~26,000 new diagnoses in 28 European countries (2009)
 - <2 - \geq 20/100,000 new diagnoses across Europe
- High numbers of undiagnosed HIV
 - 15 - 50% across Europe
 - Late presentation
 - New transmissions

HIV Indicator Diseases across Europe

- HIV in Europe Conference – 2007
 - Indicator condition targeted testing
 - cost effective if HIV prevalence $> 0.1\%$
 - proposed pilot study to evaluate this approach prior to a wider roll out phase

Indicator Conditions

- HIDES I - Conditions with an HIV prevalence greater than 0.1% (1/1000) within a given population, thereby making screening a cost effective strategy
- Currently there is minimal data on HIV prevalence in patients presenting with such conditions or whether they are offered testing, and similarly for those presenting with AIDS defining illnesses
- US data – HIV testing in 4.3% patients with any potential AIDS defining event and only 12.5% with multiple potential AIDS defining events

(Chen JY CROI 2009)

Indicator Conditions (IC)

Pilot survey selected 8 IC

Sexually Transmitted Infections (STI)

Hepatitis B + C

Malignant lymphoma (LYM)

AIN or CIN II or above

Unexplained thrombocytopaenia or neutropaenia >4 weeks

Herpes zoster <65 years

Seborrhoeic dermatitis or exanthema

Mononucleosis-like illness (MON)

Aims

- Overall

to determine the HIV prevalence in different Indicator Conditions across Europe and identify those meeting the proposed 0.1% prevalence for cost effectiveness

- Pilot

- Feasibility and acceptability of IC driven testing
- Develop and evaluate testing models
- Identify challenges and barriers and explore ways to address them
- Data capture and reporting mechanisms

Methods

- Open call inviting centres across Europe to take part if they routinely cared for any of the 8 IC
- HIV tests were routinely offered to consecutive patients presenting to the health care setting with an IC and not known to be HIV positive. The test offer was by clinic or seconded staff.
- Data collected
 - Demographic data and testing behaviour
 - Detailed information regarding risk and previous HIV testing and health seeking behaviour
- 1 survey = 1 condition at 1 site
- Plan for minimum 100 HIV tests per IC, up to 400 per survey

Results - Surveys

- Study period 1st September 2009 – 28th February 2011
- 39 surveys across 17 sites in 14 countries
- 1-5 surveys per centre, 3-6 surveys per IC
- 4 European regions:

North

Denmark

Netherlands

Sweden

United Kingdom

West Central

Austria

Belgium

Germany (2)

East Central

Belarus

Bosnia

Croatia

Poland

Ukraine

South

Italy (2)

Spain

Results – all patients

- Number of patients 3588
- Mean age 36 years
IC range 24 - 53 (MON *cf* LYM)
- Sex 55% male
45% female
- Previous HIV test 36%

Patient characteristics by European Region – all patients

	North	West Central	East Central	South	p-value
	Denmark, Sweden, Netherland, UK	Austria, Belgium, Germany	Belarus, Bosnia, Croatia, Poland, Ukraine	Italy, Spain	
Total (n)	1288	459	1412	429	
%	35.9	12.8	39.4	12.0	
Sex Male (n)	567	302	817	292	<.0001
%	44.0	65.8	57.9	68.1	
Median age (y)	33	37	37	43	<.0001
IQR	28-46	28-47	26-51	32-59	
Sexuality Het (n)	717	274	1365	263	<.0001
%	55.7	59.7	96.7	61.3	
Previous test (n)	743	209	185	153	<.0001
%	57.7	45.5	13.1	35.6	

Results – HIV testing

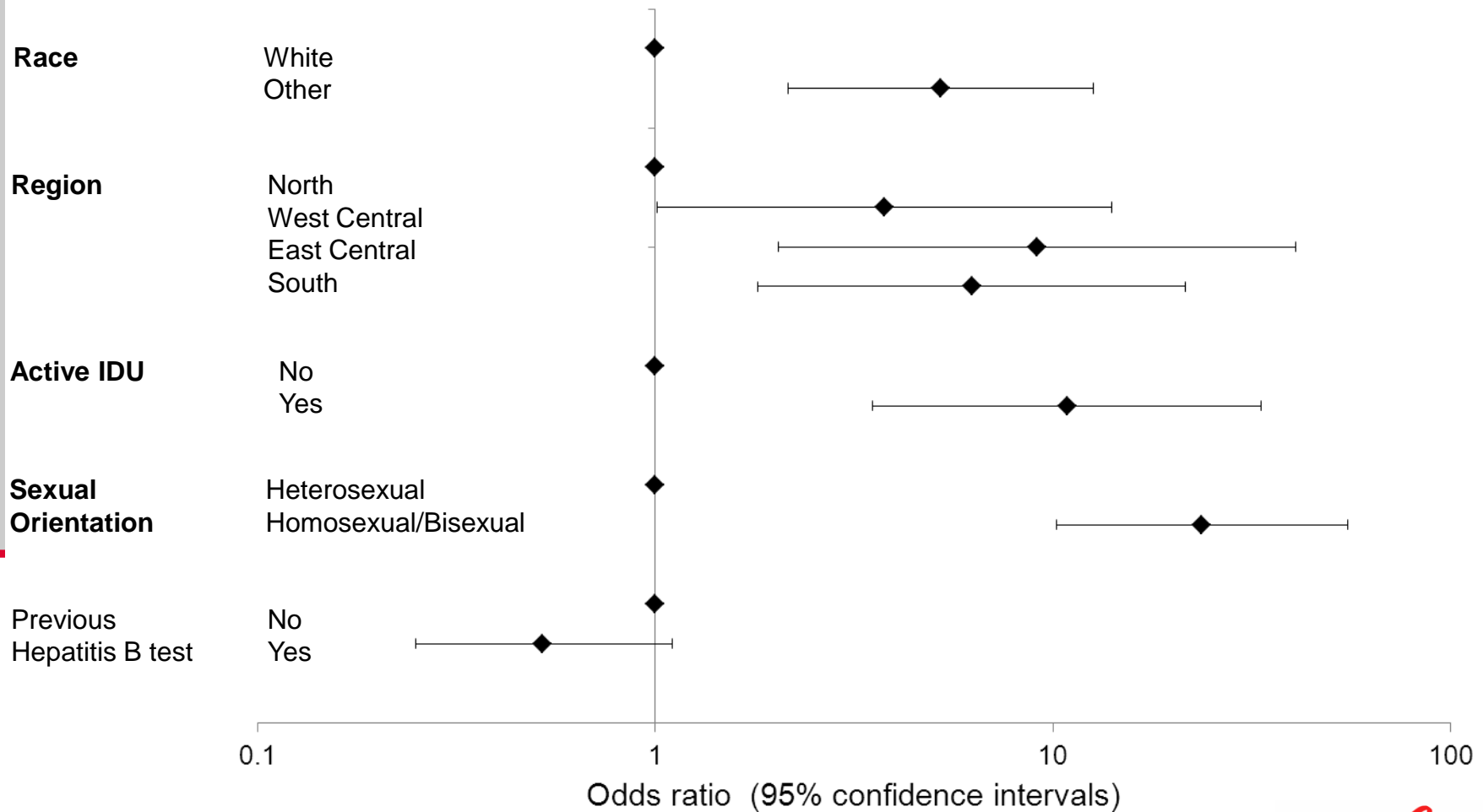
- HIV tests 3588 patients
66 new HIV diagnoses

- HIV prevalence 1.8% 95% CI 1.4 - 2.3

- HIV positive individuals
 - Male 83% Female 17%
 - MSM 58% Heterosexuals (M+F) 42%
 - IDU 9%

		North	West Central	East Central	South	p-value
Total	(n)	1288	459	1412	429	
	%	35.9	12.8	39.4	12.0	
HIV positive	(n)	8	7	23	28	<.0001
	%	0.6	1.5	1.6	6.5	

Adjusted odds ratio for testing HIV positive after presenting for care with an indicator disease*



*Also adjusted for indicator disease

Results – HIV diagnoses per Indicator Condition

	<u>HIV test</u>	<u>HIV +</u>	<u>Prevalence (95%CI)</u>	
<u>Total</u>	3588	66	1.84	(1.42-2.34)
STI	764	31	4.06	(2.78-5.71)
Malignant lymphoma	344	1	0.29	(0.01-1.61)
Cervical or anal dysplasia	542	2	0.37	(0.04-1.32)
Herpes Zoster <65yo	207	6	2.89	(1.07-6.21)
Hepatitis B/C	1099	4	0.36	(0.10-0.93)
On-going mononucleosis-like illness	441	17	3.85	(2.26-6.10)
Leuko/thrombocytopaenia	94	3	3.19	(0.66-9.04)
Seborrheic dermatitis/exanthema	97	2	2.06	(0.25-7.24)

Results - HIV positive individuals

- Previously tested negative 52%
- Median time to last test 1.58 years (0.1-12.7)
- Median CD4 (n=35/66) 400 cells/ μ L
range 11 - 675

Results - HIV positive individuals

- Potential missed opportunities in preceding 5 years
 - previous potentially HIV-related presentations 20%
 - cytopaenia
 - dermatitis
 - Herpes zoster
 - Mononucleosis-like illness
 - oral candidiasis
 - 23% had more than one presentation

- hospitalised 11%
 - AIDS or infection 71%

Barriers to testing

- Political and sociological barriers; including resources, stigma, marginalisation and access to treatment
- Barriers identified within the study
 - Clinician barriers
 - motivation of colleagues in other specialties
 - time pressure
 - skills - education and training

Conclusions

- IC targeted HIV testing is feasible and 'acceptable' (using test uptake as a surrogate marker)
- Effective in diagnosing HIV cases and new diagnoses were made for all IC. Overall exceeded 1/1000
- Missed opportunities for earlier diagnosis
- Challenges exist particularly engaging with clinicians from other specialties
- Roll out and guidelines will need to address variation seen across Europe

Recommendation

All individuals presenting to any healthcare setting with any of the eight indicator conditions should be offered an HIV test

Future plans – HIDES II 2011-2012

- Roll out pilot IC to other settings to enable estimates of each IC's HIV prevalence and identify any variation across Europe
- Initiate surveys for other IC
- European-wide audit of HIV testing in patients presenting with conditions for which routine HIV testing is indicated
- Convene a panel to develop indicator condition targeted HIV testing guidelines; to include representatives from relevant medical specialities and European Health Agencies (ECDC and WHO)

HIDES - Study Group

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HIV in Europe

**Working Together for Optimal
Testing and Earlier Care**

Copenhagen 2012 Conference

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