

How to Enhance Provider Initiated HIV Testing:

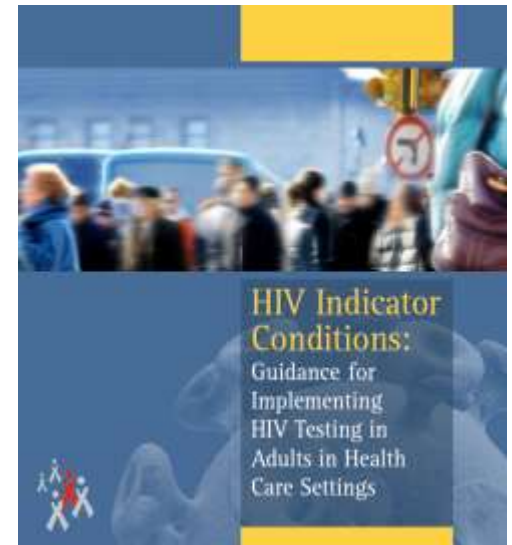
Review of national speciality guidelines'
recommendations for HIV testing in Spain, UK
and Estonia (OptTEST)

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Background

- HIV testing recommended in:
 - ▣ AIDs Defining conditions (ADCs)
 - ▣ Indicator conditions (ICs) (associated with undiagnosed prevalence >0.1%)
- Extent to which **non-HIV specialty** guidelines recommend HIV testing in ICs & ADCs unknown



HIDES 1 & 2

□ HIDES 1

■ Across 8 key ICs:

- HIV prevalence = 1.8%
(95% CI 1.4- 2.3)
- All associated with prevalence >0.1%

□ HIDES 2

- HIV prevalence exceeded cost-effectiveness threshold of 0.1% among patients presenting with 10/14 ICs

- Sexually Transmitted Infections
- Malignancy or lymphoma
- Cervical or anal cancer/dysplasia
- Herpes zoster
- Hepatitis B/C Virus (acute or chronic)
- Mononucleosis-like illness
- Unexplained leukocytopenia, thrombocytopenia (>4 weeks)
- Seborrhoeic dermatitis/exanthema

Aims

□ **Step 1:**

- ▣ Pilot a methodology in UK reviewing specialty guidelines to ascertain if HIV was discussed and testing recommended

□ **Step 2:**

- ▣ Apply methodology across Europe as part of the Optimising testing and linkage to care for HIV across Europe (OptTEST)

Methods

Definition of ADC/ICs



- List of:
- 25 ADCs
 - 49 ICs



AIDS DEFINING CONDITIONS (ADCs)	
Neoplastic	Viral Infection
Cervical cancer	CMV retinitis
Non-Hodgkin lymphoma	CMV, other (except liver, spleen, glands)
Kaposi's sarcoma	HSV ulcer(s) >1 month/bronchitis/pneumonitis
Primary cerebral lymphoma	Progressive multifocal leucoencephalopathy
Bacterial Infection	Parasitic Infection
MTB, pulmonary or extrapulmonary	Cerebral toxoplasmosis
MAC or Mycobacterium kansasii, D/EP	Cryptosporidiosis diarrhoea, >1 month
Mycobacterium, other/unidentified species D/EP	Isosporiasis, >1 month
Pneumonia, recurrent (≥2 episodes in 12 months)	Atypical disseminated leishmaniasis
Salmonella septicaemia, recurrent	Reactivation of American trypanosomiasis
Fungal Infection	
Pneumocystis carinii pneumonia	Histoplasmosis, D/EP
Candidiasis, oesophageal	Coccidioidomycosis, D/EP
Candidiasis, bronchial/tracheal/lungs	Penicilliosis, disseminated
Cryptococcosis, extra-pulmonary	
INDICATOR CONDITIONS (ICs)	
Respiratory	Dermatology
Community acquired pneumonia	Herpes Zoster
Invasive pneumococcal disease	Seborrheic dermatitis/ exanthema
Aspergillosis	Severe or atypical psoriasis
Neurology	Gastroenterology
Lymphocytic meningitis	Hepatitis A
Guillain-Barré syndrome	Hepatitis B (Acute Or Chronic)
Subcortical dementia	Hepatitis C (Acute Or Chronic)
Peripheral neuropathy	Unexplained weight loss
Primary cerebral space occupying lesion	Unexplained oral candidiasis
Mononeuritis	Unexplained chronic diarrhoea
Multiple sclerosis-like disease	Oral hairy leukoplakia
Cerebral abscess	Salmonella, Shigella or Campylobacter spp.
Transverse myelitis	Ear/Nose and Throat (ENT)
Leucoencephalopathy	Chronic parotitis
Ophthalmology	Lymphoepithelial parotid cysts
infective retinal diseases	Oncology
Any unexplained retinopathy	Primary lung cancer
Haematology	Anal cancer/ dysplasia
Malignant lymphoma/Hodgkin's lymphoma	Cervical dysplasia
leukocytopenia/thrombocytopenia lasting >4 weeks	Vaginal intraepithelial neoplasia
Idiopathic/thrombotic thrombocytopenic purpura	Seminoma
Ear/Nose And Throat (ENT)	Head and neck cancer
Chronic parotitis	Castleman's
Lymphoepithelial parotid cysts	Renal medicine
Other	Unexplained chronic renal impairment
Sexually transmitted infections	Candidaemia
Unexplained fever	Visceral leishmaniasis
Unexplained lymphadenopathy	Candidiasis
Mononucleosis-like illness	Conditions requiring immunosuppression

Guideline literature searches

UK Example: Unexplained leukocytopenia or thrombocytopenia > 4/52

Browsing of relevant society websites for published guidelines

British Society for Haematology [www.b-s-h.org.uk]

British Committee for Standard in Haematology [www.bcshguidelines.com]

Scottish Haematology Society [www.scotheam.org]

Searches of national guideline body websites (search string as below)

NICE [www.nice.org.uk/guidance]

SIGN [www.sign.ac.uk]

NICE clinical knowledge summary [<http://cks.nice.org.uk/>]

Searches of BMJ best practice (search string as below)

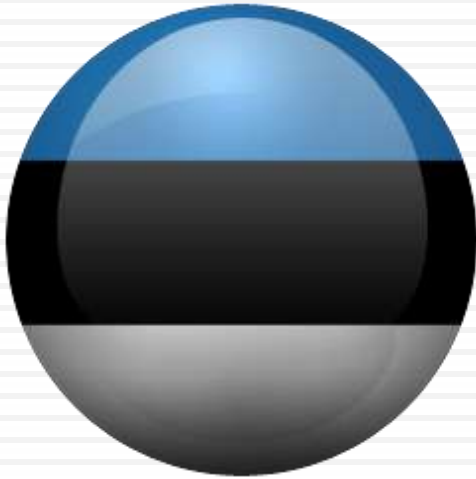
[<http://bestpractice.bmj.com/>]

Search of www.google.co.uk

Search strings: (Leukocytopenia or lymphopenia or lymphocytopenia or neutropenia or thrombocytopenia or leucopenia or leukopenia or low platelets or myelodysplasia)

AND (guideline or guidance or guidelines or protocol or guide)

Results



Anna Vassilenko



Victoria Hernando



Emily Lord

Number of identified guidelines



Guidelines for:
48% ADCs
73% ICs

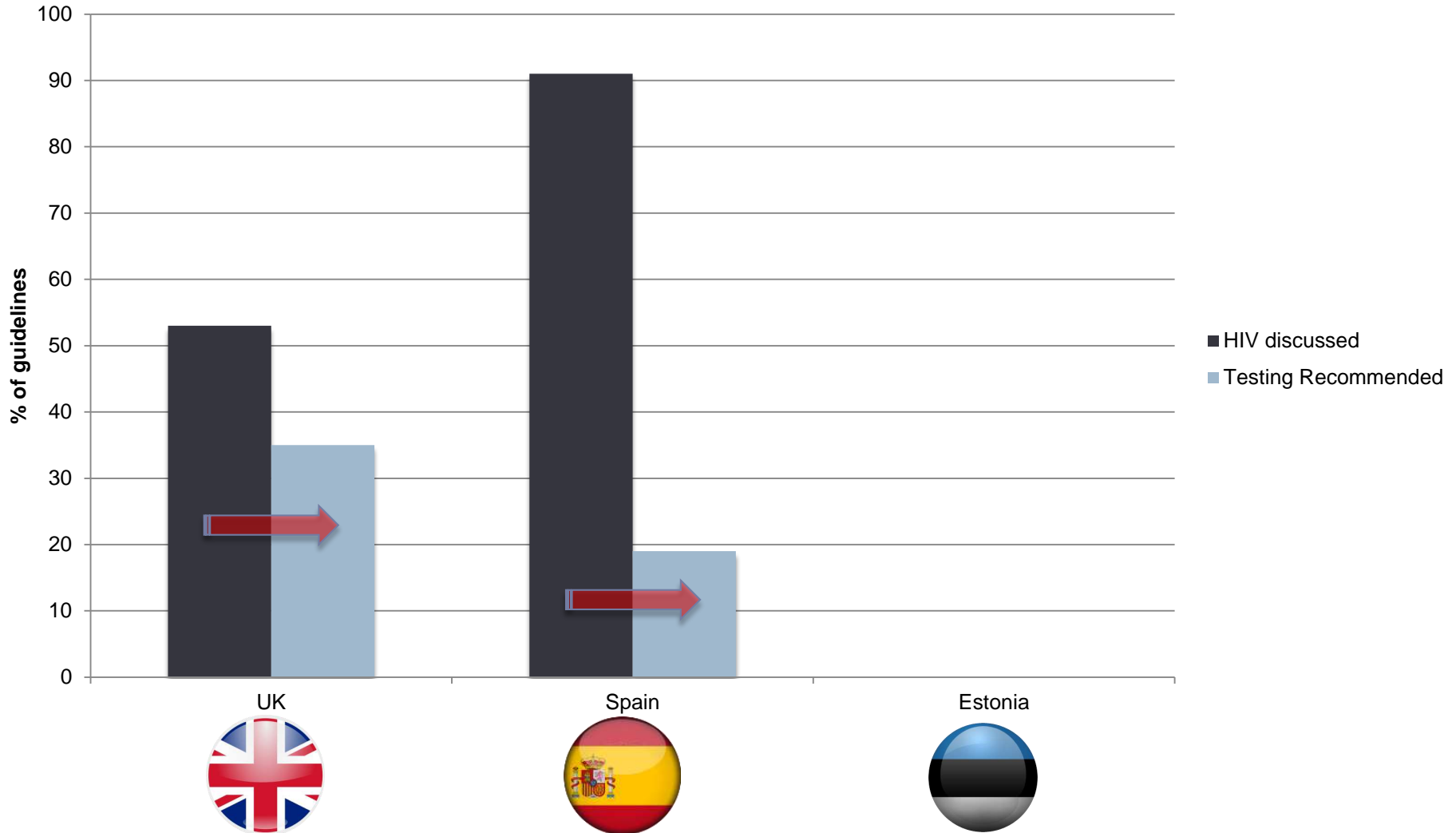


Guidelines for:
60% ADCs
67% ICs



Guidelines for:
8% ADC
1% ICs

Guidelines reviewed for ADCs





At least one
guideline
recommended
HIV testing for
6 /25 ADCs
(24%)

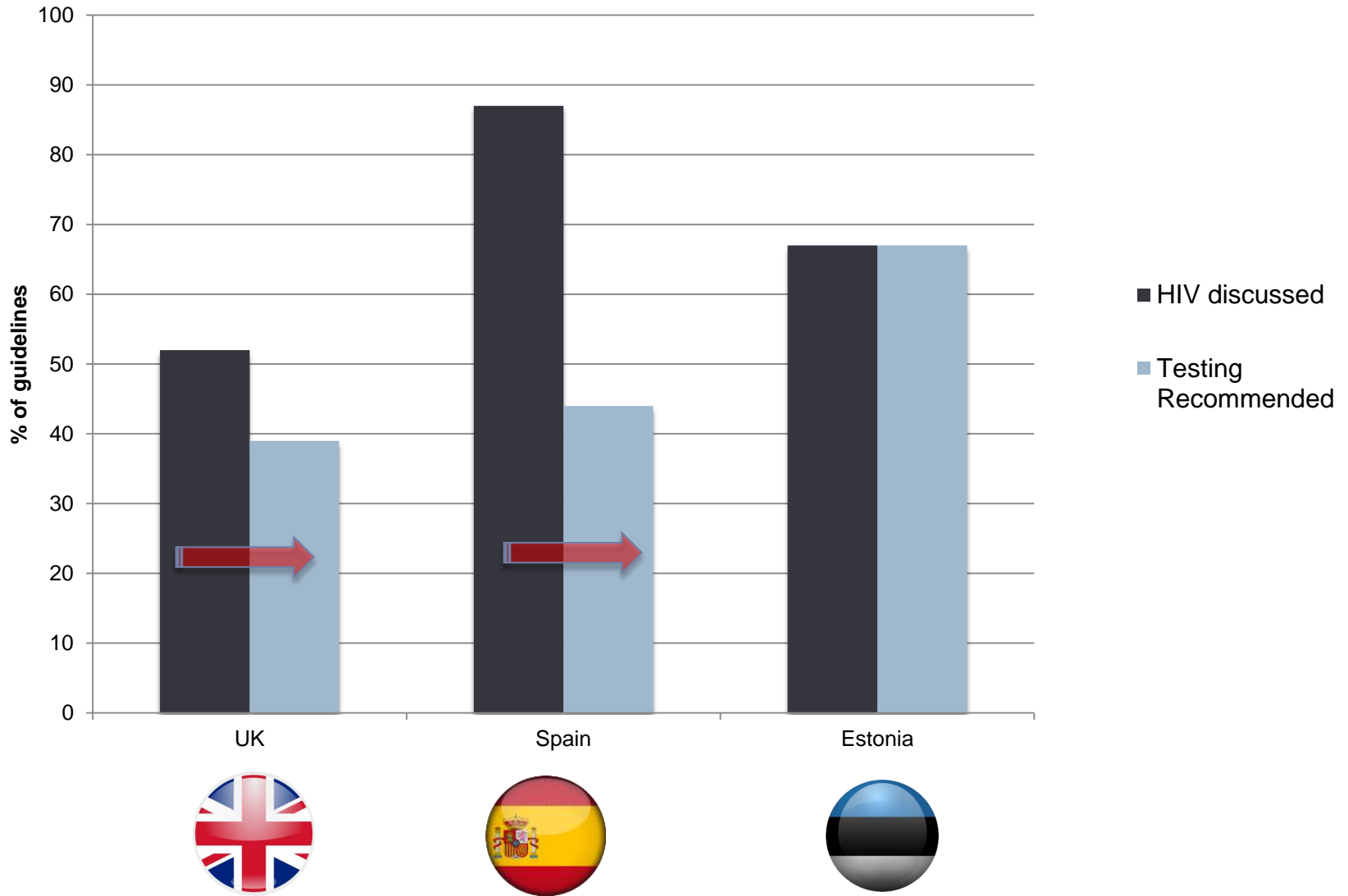


At least one
guideline
recommended
HIV testing for
3/25 ADCs
(12%)



Not one
guideline
recommended
HIV testing for
any ADCs

Guidelines reviewed for ICs





At least one
guideline
recommended
HIV testing for
16 /49 ICs
(33%)

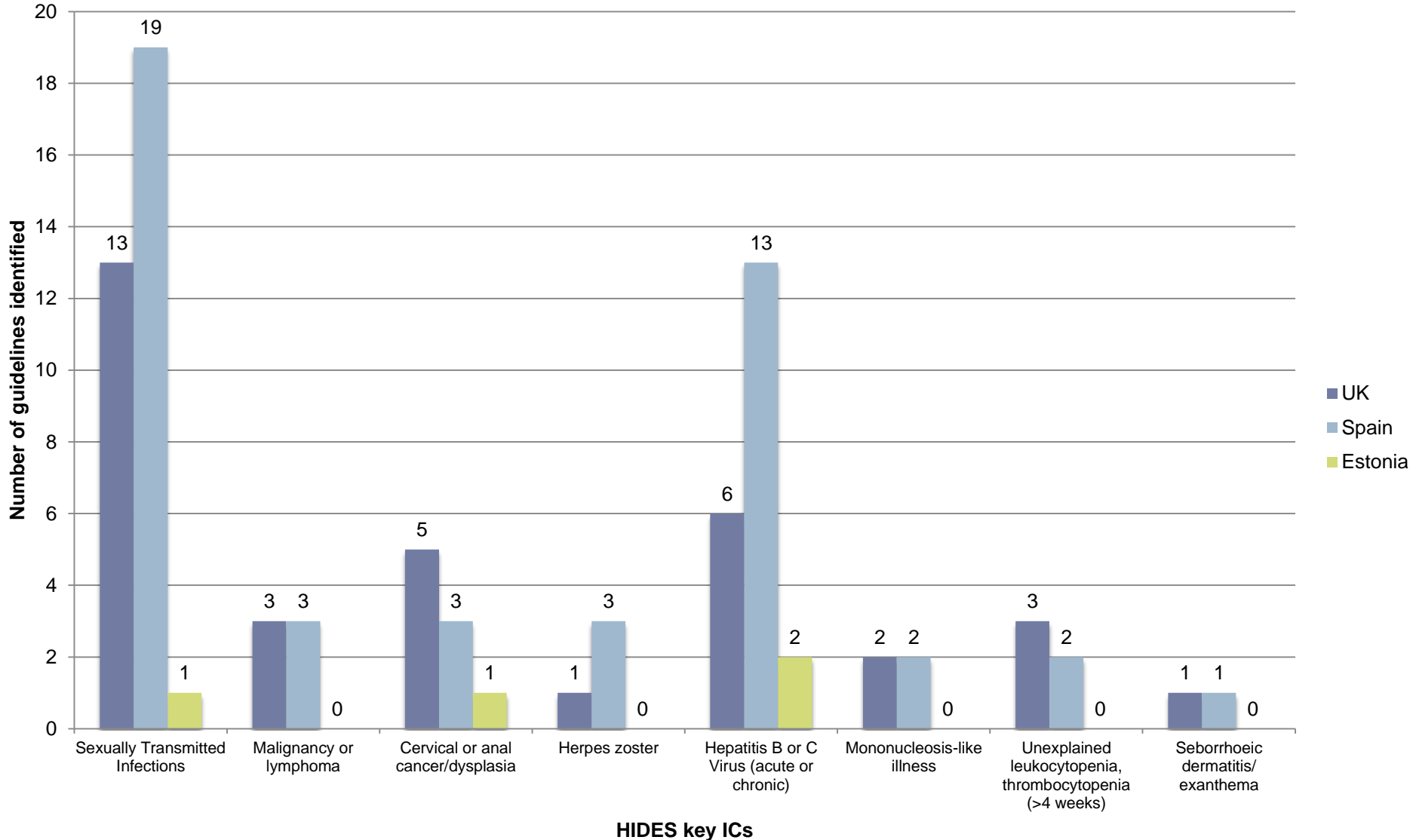


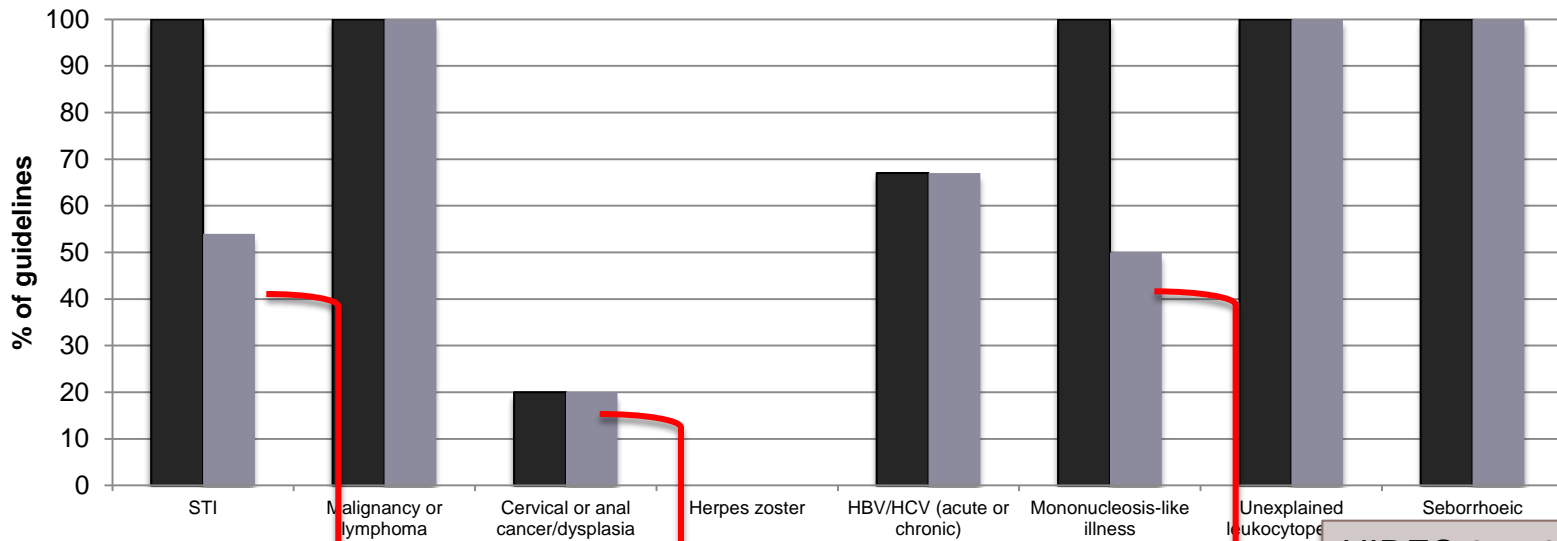
At least one
guideline
recommended
HIV testing for
17/49 ICs
(35%)



At least one
guideline
recommended
HIV testing for
4/49 ICs (8%)

HIDES: 8 Key ICs: no. of guidelines identified



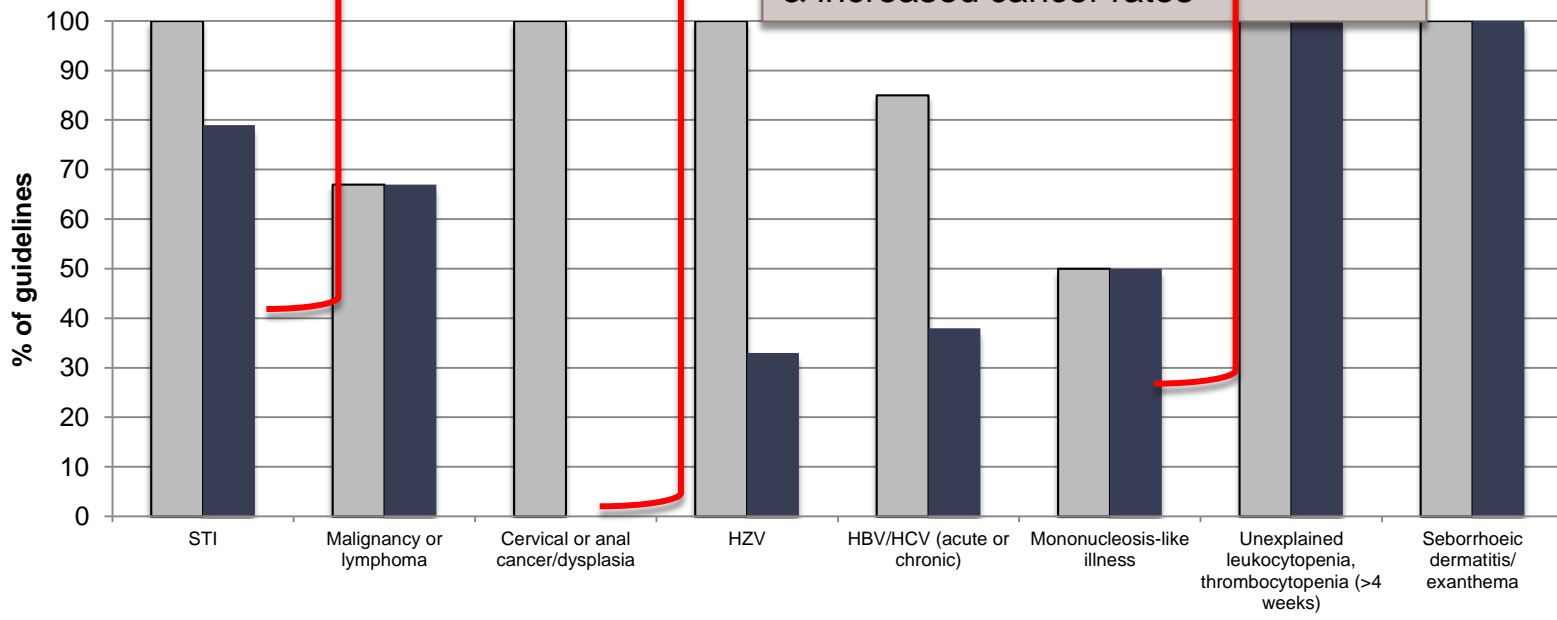


■ HIV discussed
■ testing recommended

Presence of one STI should **always** prompt HIV

HIV: higher incidence of dysplasia – & increased cancer rates

HIDES 2: 5.3% with suspected mononucleosis +ve for HIV



□ HIV discussed
■ testing recommended

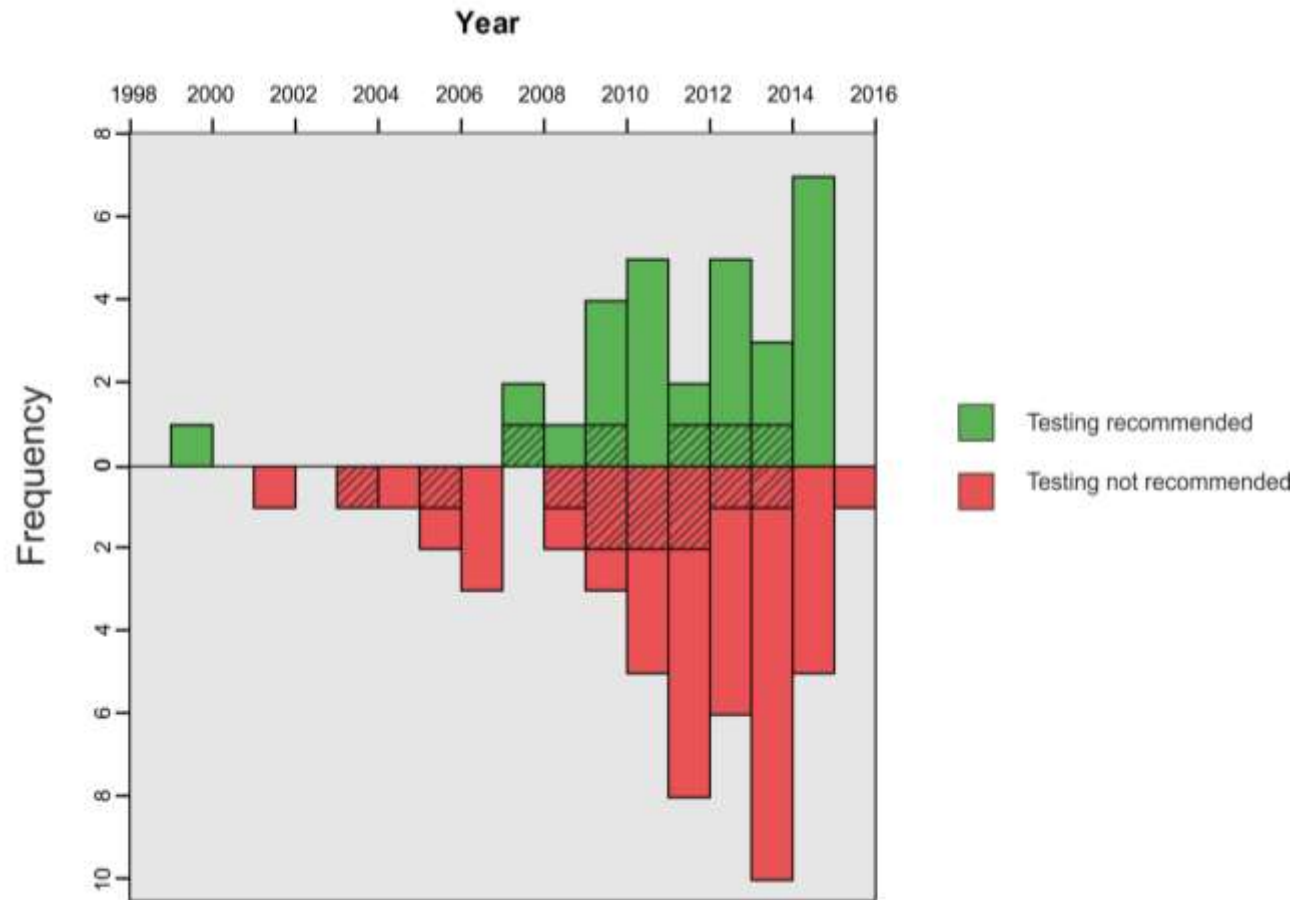
HIDES Key ICs



Date of publication of guideline

Recommendation for HIV testing in ADCs and ICs, stratified by year of guideline publication:

no association observed between publication year and recommendation to test ($p=0.620$)



AIDS defining conditions are indicated by shaded boxes



Further data:

□ Similar outcomes to data presented....	Total Number Guidelines	ADCs		ICs	
		HIV mentioned	Testing advised	HIV mentioned	Testing advised
Ireland Niamh Lynn	ADC: n=2 IC: n=6	100%	100%	50%	0%
Belarus Anna Vassilenko	ADC: n=6 IC: n=20	83%	67%	80%	75%

Limitations

- Lack of established methodology for searching for national guidelines
- Not all conditions have a specific guidelines
- Degree of subjectivity to determination of a testing recommendation
 - ▣ In some cases guidance was ambiguous

Conclusions

- Indicator condition guided HIV testing is acceptable and feasible
 - Important part of the strategy to disrupt HIV transmission and promote earlier diagnosis

- Medical specialists managing ICs may be unaware of:
 - Testing recommendations
 - Prevalence of undiagnosed HIV among patient with ICs
 - Cost of not making an early diagnosis

References

- Sullivan AK, Raben D, Reekie J, et al. Feasibility and effectiveness of indicator condition-guided testing for HIV: results from HIDES I (HIV indicator diseases across Europe study). PLoS One. 2013; 8:e52845.
- Raben D, Mocroft A, Rayment M, et al. Auditing HIV Testing Rates across Europe: Results from the HIDES 2 Study. PLoS One. 2015; 10:e0140845.
- Initiative HiE. HIV Indicator Conditions: Guidance for Implementing HIV Testing in Adults in Health Care Settings. 2012.
- British HIV Association BAoSHaHaBIS. UK national guidelines for HIV testing. London, <http://www.bhiva.org/documents/Guidelines/Testing/GlinesHIVTest08.pdf>, 2008.