

Review of HIV Testing Recommendations for HIV Indicator Conditions in Specialty and Primary Care in Spain

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Background

□ The HIV indicator Disease Across Europe Study (HIDES)

1. Conditions which are AIDS defining among PLHIV*

Strongly recommend testing:

Neoplasms:

- Cervical cancer
- Non-Hodgkin lymphoma
- Kaposi's sarcoma

Bacterial infections

- Mycobacterium Tuberculosis, pulmonary or extrapulmonary
- Mycobacterium avium complex (MAC) or Mycobacterium kansasii, disseminated or extrapulmonary
- Mycobacterium, other species or unidentified species, disseminated or extrapulmonary
- Pneumonia, recurrent (2 or more episodes in 12 months)
- Salmonella septicaemia, recurrent

Viral infections

- Cytomegalovirus retinitis
- Cytomegalovirus, other (except liver, spleen, glands)
- Herpes simplex, ulcer(s) >1 month/ bronchitis/ pneumonitis
- Progressive multifocal leucoencephalopathy

Parasitic infections

- Cerebral toxoplasmosis
- Cryptosporidiosis diarrhoea, >1 month
- Isosporiasis, >1 month
- Atypical disseminated leishmaniasis
- Reactivation of American trypanosomiasis (meningoencephalitis or myocarditis)

Fungal infections

- Pneumocystis carinii pneumonia
- Candidiasis, oesophageal
- Candidiasis, bronchial/ tracheal/ lungs
- Cryptococcosis, extra-pulmonary
- Histoplasmosis, disseminated/ extra pulmonary
- Coccidioidomycosis, disseminated/ extra pulmonary
- Penicilliosis, disseminated

2a. Conditions associated with an undiagnosed HIV prevalence of >0.1 %**

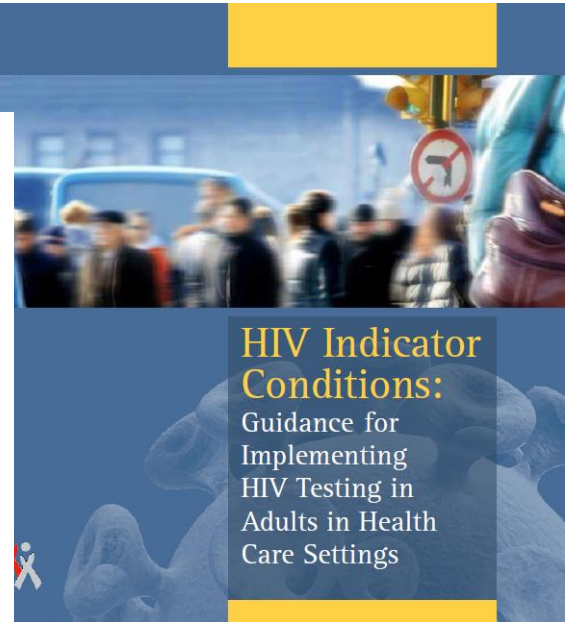
Strongly recommend testing:

- Sexually transmitted infections
- Malignant lymphoma
- Anal cancer/dysplasia
- Cervical dysplasia
- Herpes zoster
- Hepatitis B or C (acute or chronic)
- Mononucleosis-like illness
- Unexplained leukocytopenia/ thrombocytopenia lasting >4 weeks
- Seborrheic dermatitis/ exanthema
- Invasive pneumococcal disease
- Unexplained fever
- Candidaemia
- Visceral leishmaniasis
- Pregnancy (implications for the unborn child)

2b. Other conditions considered likely to have an undiagnosed HIV prevalence of >0.1%

Offer testing:

- Primary lung cancer
- Lymphocytic meningitis
- Oral hairy leukoplakia
- Severe or atypical psoriasis
- Guillain-Barré syndrome
- Mononeuritis
- Subcortical dementia
- Multiplesclerosis-like disease
- Peripheral neuropathy
- Unexplained weightloss
- Unexplained lymphadenopathy
- Unexplained oral candidiasis
- Unexplained chronic diarrhoea
- Unexplained chronic renal impairment
- Hepatitis A
- Community-acquired pneumonia
- Candidiasis



3. Conditions where not identifying the presence of HIV infection may have significant adverse implications for the individual's clinical management despite that the estimated prevalence of HIV is most likely lower than 0.1%

Offer testing:

- Conditions requiring aggressive immuno-suppressive therapy:
 - Cancer
 - Transplantation
 - Auto-immune disease treated with immunosuppressive therapy
- Primary space occupying lesion of the brain.
- Idiopathic/ Thrombotic thrombocytopenic purpura

Background

- European guidelines recommend HIV testing for individuals presenting with certain indicator conditions (IC) in addition to AIDS defining conditions (ADC)

OptTEST results slide – guideline review

All OptTEST countries have national HIV testing guidelines which specifically refer to HIV testing when a person presents with an HIV indicator condition

	ESTONIA	CZECH REPUBLIC	FRANCE	GREECE	POLAND	SPAIN	UK	BELARUS	GEORGIA	UKRAINE
Sexually transmitted infections	•	•	•	•	•	•	•	•	•	•
Malignant lymphoma	•	•		•	•	•	•	•	•	•
Anal cancer/dysplasia	•			•	•	•	•			•
Cervical dysplasia	•			•	•	•	•		•	
Herpes zoster	•				•	•	•			•
Hepatitis B or C (acute or chronic)	•	•	•	•	•	•	•	•	•	•
Mononucleosis-like illness	•				•	•	•	•	•	
Unexplained leukocytopenia/thrombocytopenia lasting >4 weeks	•			•	•	•	•	•		•
Seborrheic dermatitis/exanthema	•				•	•	•			•
Invasive pneumococcal disease					•	•	•	•	•	•
Unexplained fever				•	•	•	•	•	•	•
Candidaemia	•				•	•	•	•	•	•
Visceral leishmaniasis						•			•	
Pregnancy (implications for unborn child)	•	•	•	•	•	•	•	•	•	•

Ann Sullivan, HepHIV2017 Conference, Malta

Background

- “The Spanish Guide Recommendations for early diagnosis of HIV in the Health Sector”
Spanish Ministry of Health 2014.

**Guía de
Recomendaciones
para el diagnóstico
Precoz del VIH en
el ámbito sanitario**

INFORMES, ESTUDIOS E INVESTIGACIÓN 2014
MINISTERIO DE SANIDAD, SERVICIOS SOCIALES E IGUALDAD

Background



HIV testing in indicator conditions

Learning session

Why test for HIV?

MENU

HIV indicator conditions

You can see the list of indicator conditions associated with each specialty by clicking on the buttons below. We recommend that you click on your own specialty at least. [Alternatively you can click here to see the full list of indicator conditions](#)

Respiratory/ Pulmonology	Neurology and neurosurgery	Dermatology/ genitourinary medicine	Gastroenterology/ hepatology
Oncology	Gynecology/ Obstetrics	Haematology	Infectious Diseases/ Internal medicine
Rheumatology	Ophthalmology	Ear Nose Throat	Nephrology

**Specialty: Dermatology/dermatovenereology/
genitourinary medicine**

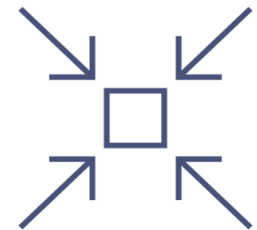
- Kaposi's sarcoma
- Herpes Simplex ulcer(s)
- Atypical disseminated leishmaniasis
- Penicilliosis, disseminated
- Seborrheic dermatitis/exanthema
- Herpes zoster
- Sexually transmitted infections
- Hepatitis B or C (acute or chronic)
- Severe or recalcitrant psoriasis
- Candidaemia
- Candidiasis

Yellow: Conditions which are AIDS defining among PLHIV - strongly recommend testing.
Blue: Conditions associated with an undiagnosed HIV prevalence of >0.1% - strongly recommend testing. Other conditions considered likely to have an undiagnosed HIV prevalence of >0.1% - offer testing.
Green: Conditions where not identifying the presence of HIV infection may have significant adverse implications for the individual's clinical management despite that the estimated prevalence of HIV is most likely lower than 0.1% - Offer testing.

ZOOM

Objective

To review the Spanish Specialty and Primary Care guidelines for **AIDS defining conditions (ADCs)** and **Indicator Conditions (ICs)**, regarding their HIV testing recommendations



Methods

- The HIDES study “HIV indicator disease across Europe Study” identified: **25 *AIDS defining conditions (ADCs)*** and **48 *indicator conditions (IC)***
- The Spanish specialty guidelines were identified using Specialty Societies, Associations, State Agencies or College websites and google.
- Each guideline was checked if :
 - (1) HIV was mentioned, and
 - (2) HIV testing was recommended according to “The Spanish Guide Recommendations for early diagnosis of HIV in the Health Sector” Spanish Ministry of Health 2014.
- Each guideline was reviewed by two independent researchers.

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Results

- A total of 104 guidelines were identified: 21 for ADCs, 75 for ICs and 8 for both
- At least one guidelines (range 1-19) was identified for 60% (15) of ADCs and 69% (33) for ICs
- Pulmonary or extrapulmonary tuberculosis was the one included in most guidelines (8) and sexually transmitted infections (19) were the ICs with the most guidelines

Results

Table 1: Source of information where guidelines were identified

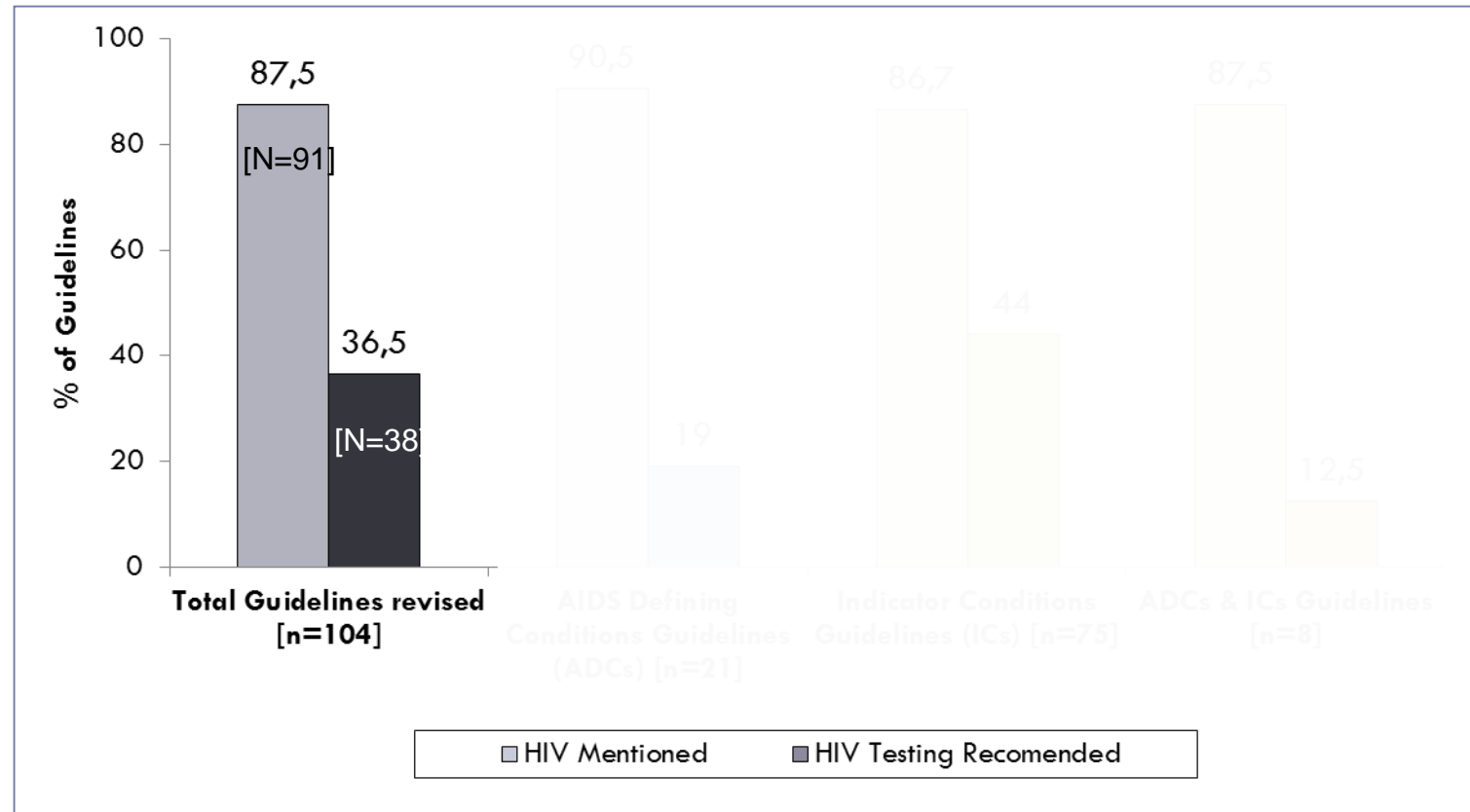
Scientific Society (N=51)	N
Spanish Academy of Dermatology and Venerology	2
Spanish Society of Pathological Anatomy	1
Spanish Society of Hematology and Hemotherapy	3
Spanish-Leonese Society of Hematology and Hemotherapy	1
Spanish Society of Infectious Diseases and Clinical Microbiology	23
Spanish Society of Internal Medicine	1
Spanish Society of Neurology	2
Spanish Society of Medical Oncology	3
Spanish Society of Nephrology	1
Spanish Society of Gynecology and Obstetrics	3
Spanish Society of Pneumology and Thoracic Surgery	2
Spanish Society of Penitentiary Health	2
Spanish Association of Pediatrics	5
Spanish Society of Intensive, Critical and Coronary Units	1
Spanish Society of Preventive Medicine, Public Health and Hygiene	1

Website	N
Fisterra (Primary Care)	30
GuíaSalud (Health National System Guidelines)	1
PubMed	4

Other Organizations (N=18)	N
General Council of the College of Physicians	2
Ministry of Health, Social Services and Equality	2
Health Institute Carlos III	13
Government of Cantabria	1

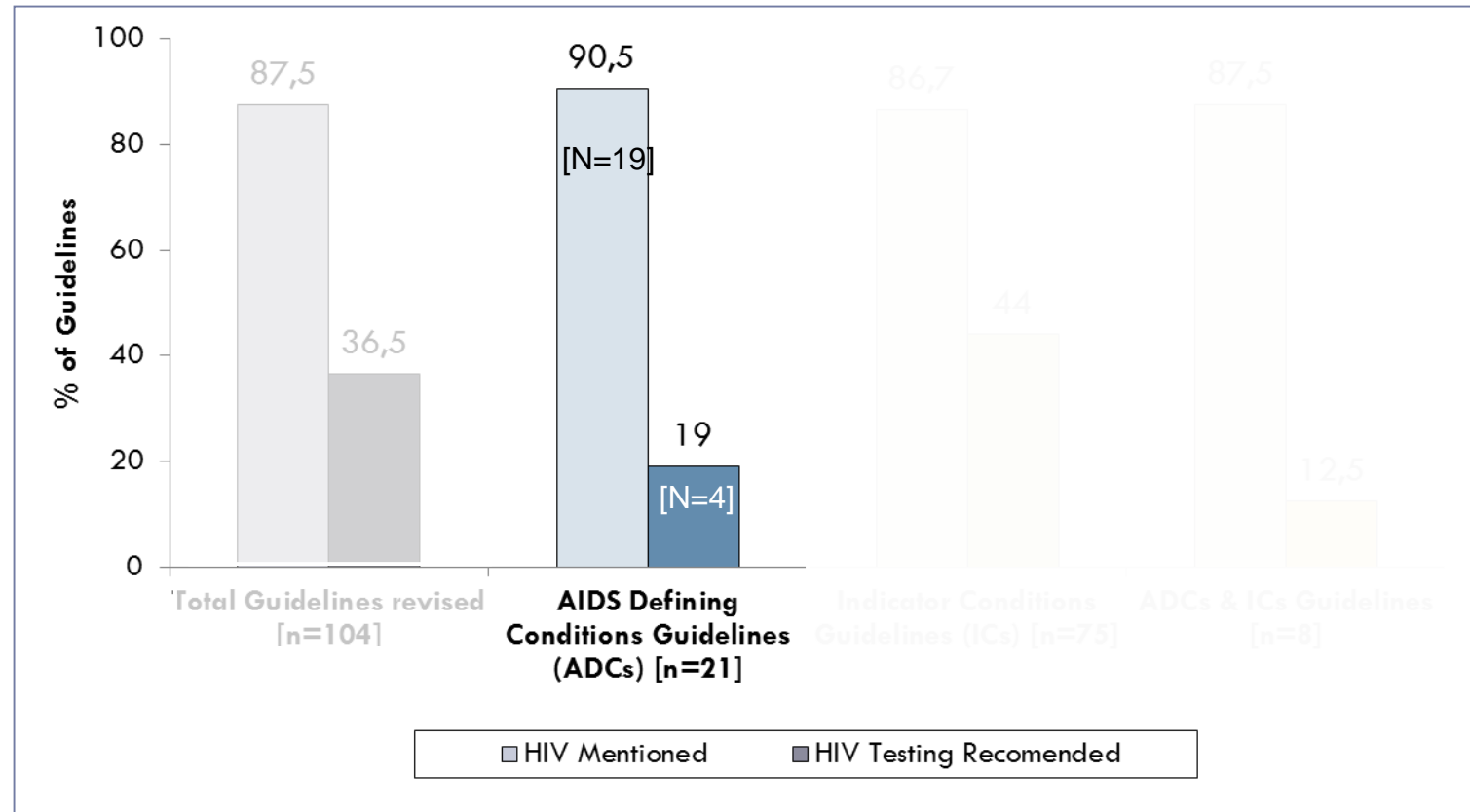
Results

Figure 1: Proportion of guidelines where HIV discussed and/or testing recommended



Results

Figure 1: Proportion of guidelines where HIV discussed and/or testing recommended



Results

Table 2: Number of specialty guidelines identified, number of guidelines that mention HIV infection and recommend HIV testing for ADCs

AIDS Defining Conditions		HIV mention N (%)	HIV testing recommendation N (%)
Neoplasms			
Cervical cancer	5	4 (80)	0
Non-Hodgkin lymphoma	2	1 (50)	1 (50)
Kaposi's sarcoma	1	1 (100)	0
Primary cerebral lymphoma	1	0	0
Bacterial infections			
Mycobacterium Tuberculosis, pulmonary or extrapulmonary	8	8 (100)	3 (37)
MAC or Mycobacterium kansasii, disseminated or extrapulmonary	1	1 (100)	0
Viral infections			
Cytomegalovirus, other (except liver, spleen, glands)	1	1 (100)	0
Parasitic infections			
Cerebral toxoplasmosis	1	1 (100)	0
Cryptosporidiosis diarrhoea, >1 month	3	3 (100)	0
Fungal infections			
Pneumocystis carinii pneumonia	1	1 (100)	1 (100)
Cryptococcosis, extra-pulmonary	3	3 (100)	0
Penicilliosis, disseminated	1	1 (100)	0

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Cryptococcosis, extra-pulmonary	3	3 (100)	0
Penicilliosis, disseminated	1	1 (100)	0

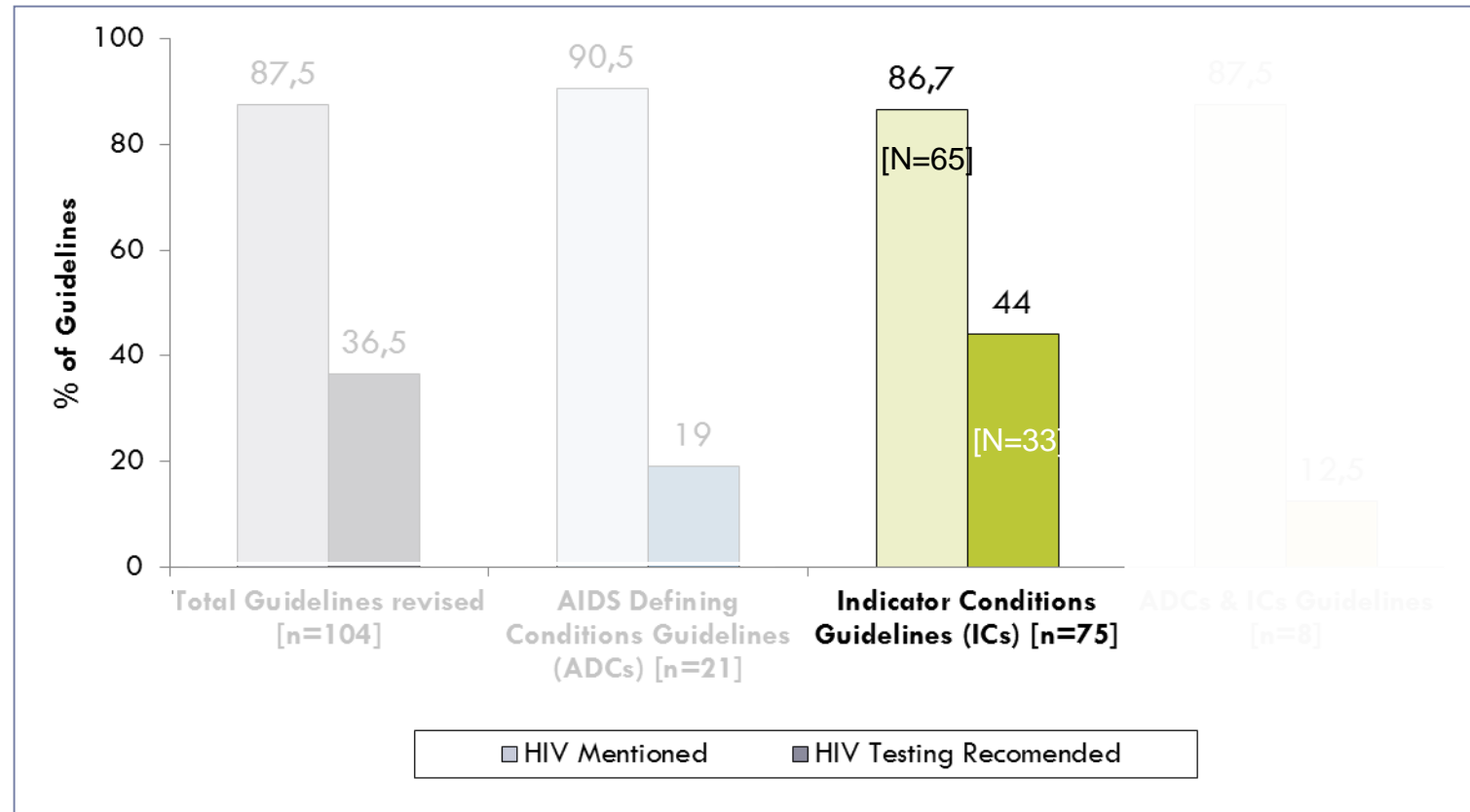
Results

Table 3: List of ADCs without guidelines

AIDS Defining Conditions
Bacterial infections
Mycobacterium, other species or unidentified species, disseminated or extrapulmonary
Pneumonia, recurrent (2 or more episodes in 12 months)
Salmonella septicaemia, recurrent
Viral infections
Herpes simplex, ulcer(s) >1 month/bronchitis/pneumonitis
Progressive multifocal leucoencephalopathy
Parasitic infections
Isosporiasis, >1 month
Atypical disseminated leishmaniasis
Reactivation of American trypanosomiasis (meningoencephalitis or myocarditis)
Fungal infections
Candidiasis, oesophageal
Candidiasis, bronchial/tracheal/lungs
Histoplasmosis, disseminated/extrapulmonary
Coccidioidomycosis, disseminated/extrapulmonary

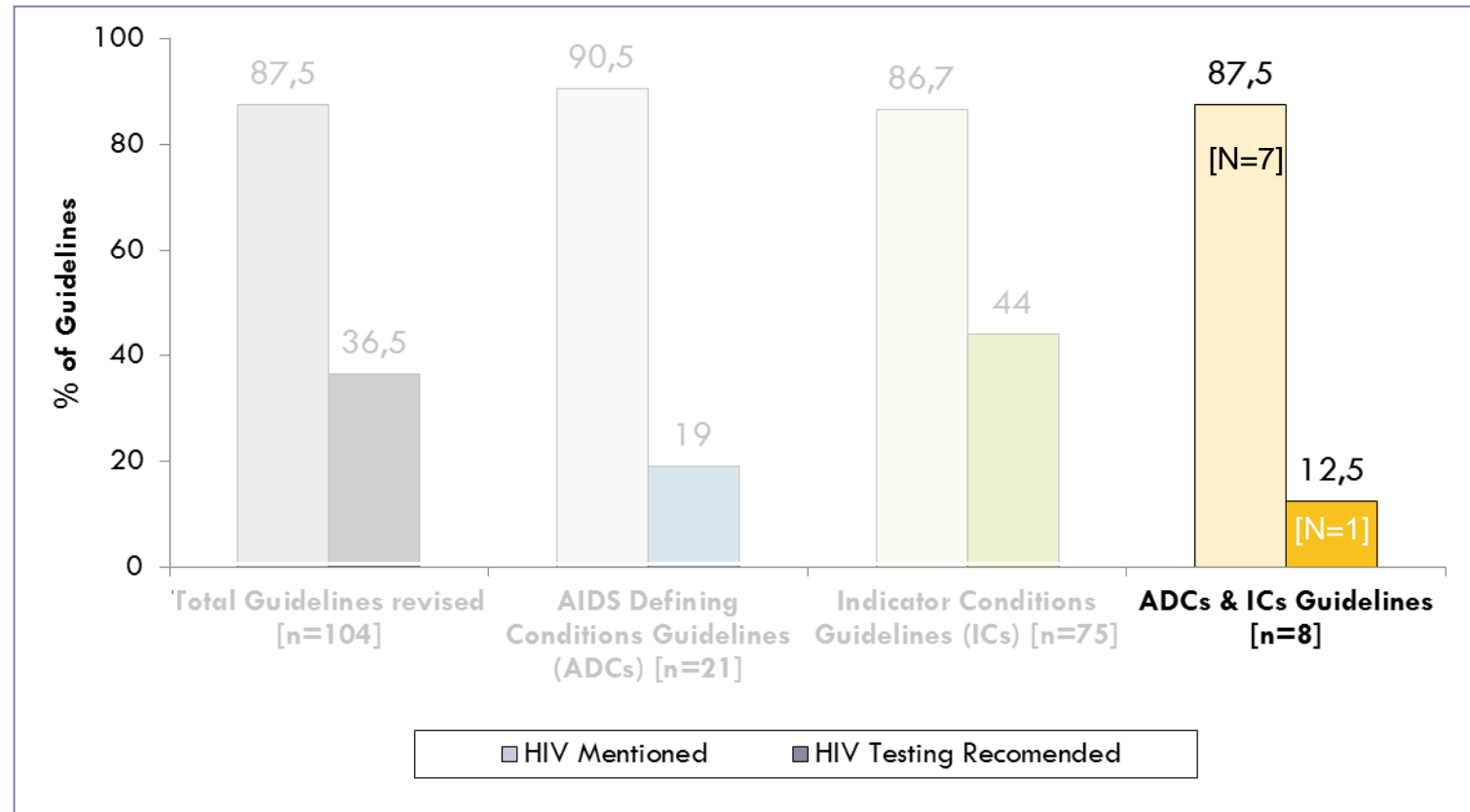
Results

Figure 1: Proportion of guidelines where HIV discussed and/or testing recommended



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Results

Table 4: Number of specialty guidelines identified, number of guidelines that mention HIV infection and recommend HIV testing for ICs

Indicator Conditions		HIV mention N (%)	HIV testing recommendation N (%)
Renal			
Unexplained chronic renal impairment	2	1 (50)	0
Hematology			
Malignant lymphoma/Hodgkin's lymphoma	3	2 (67)	2 (67)
Unexplained leukocytopenia/thrombocytopenia lasting >4 weeks	2	2 (100)	2 (100)
Idiopathic/Thrombotic thrombocytopenic purpura	1	1 (100)	0
Oncology			
Primary lung cancer	1	0	0
Cervical dysplasia	3	3 (100)	0
Seminoma	1	0	0
Castleman's	1	1 (100)	0
Other			
Pregnancy (implications for the unborn child)	2	2 (100)	1 (50)
Sexually transmitted infections	19	19 (100)	15 (79)
Unexplained fever	1	1 (100)	1 (100)
Mononucleosis-like illness	2	1 (50)	1 (50)
Candidaemia	1	1 (100)	0
Visceral leishmaniasis	2	2 (100)	0
Candidiasis	2	1 (50)	1 (50)
Conditions requiring aggressive immuno-suppressive therapy: Cancer; Transplantation; autoimmune	1	1 (100)	1 (100)

Results

Table 4: Number of specialty guidelines identified, number of guidelines that mention HIV infection and recommend HIV testing for ICs

Indicator Conditions		HIV mention N (%)	HIV testing recommendation N (%)
Respiratory			
Community-acquired pneumonia	4	3 (75)	1 (25)
Invasive pneumococcal disease	2	2 (100)	0
Aspergillosis	1	1 (100)	0
Neurology			
Lymphocytic meningitis	1	0	0
Guillain-Barré syndrome	1	0	0
Subcortical dementia	1	1 (100)	1 (100)
Peripheral neuropathy	1	1 (100)	1 (100)
Multiple sclerosis-like disease	2	2 (100)	1 (50)
Dermatology			
Herpes zoster	3	3 (100)	1 (33)
Seborrheic dermatitis/exanthema	1	1 (100)	1 (100)
Severe or atypical Psoriasis.	2	1 (50)	0
Gastroenterology			
Hepatitis A	3	2 (67)	0
Hepatitis B (acute or chronic)	8	6 (75)	3 (37)
Hepatitis C (acute or chronic)	5	5 (100)	2 (40)
Unexplained weight loss	1	1 (100)	1 (100)
Unexplained chronic diarrhoea	1	1 (100)	0
Salmonella, shigella or campylobacter	2	2 (100)	0

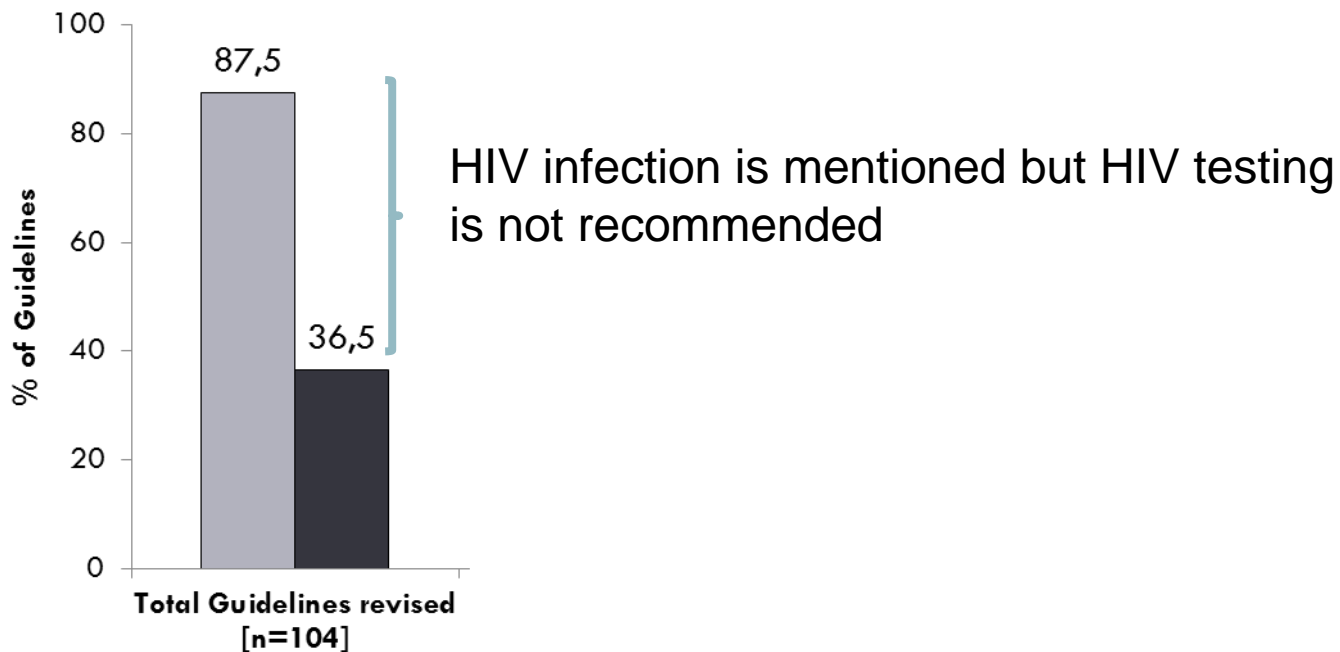
Results

Table 5: List of ICs without guidelines

Indicator Conditions
Neurology
Mononeuritis
Cerebral abscess
Transverse myelitis
Leucoencephalopathy
Gastroenterology
Unexplained oral candidiasis
Oral hairy leukoplakia
Oncology
Anal cancer/dysplasia
Vaginal intraepithelial neoplasia
Head and neck cancer
Ear, Nose and Throat Specialist
Chronic parotitis
Lymphoepithelial parotid cysts
Ophthalmology
Infective retinal diseases including herpes viruses and toxoplasma
any unexplained retinopathy
Other
Unexplained lymphadenopathy

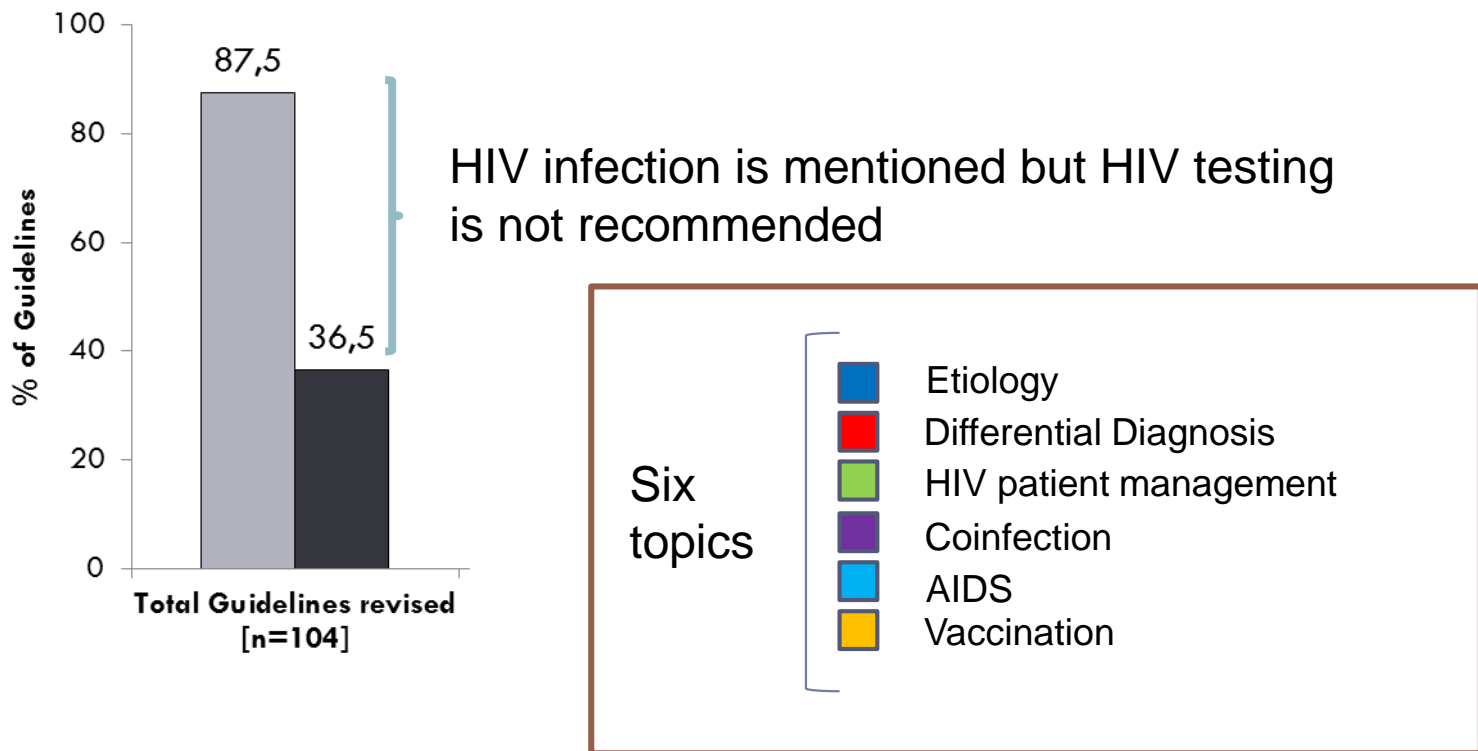
Results

Figure 1: Proportion of guidelines where HIV discussed and/or testing recommended



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Results

HIV infection was **mentioned** but was **not recommended HIV testing** in 51 guidelines. Figure 2 shows the different topic addressed in theses guidelines.

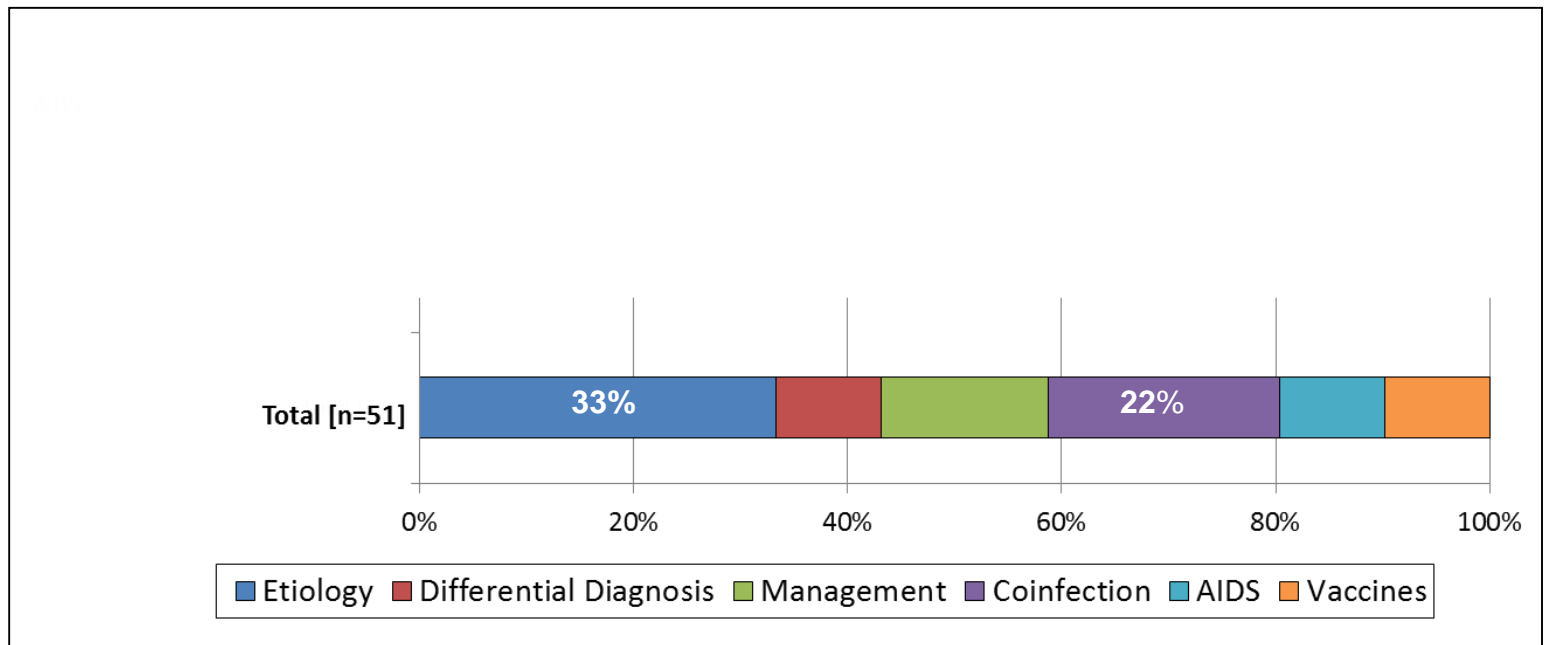


Figure 2: Distribution of topics addressed in the guidelines that DID NOT RECOMMEND HIV TESTING, but MENTION HIV INFECTION

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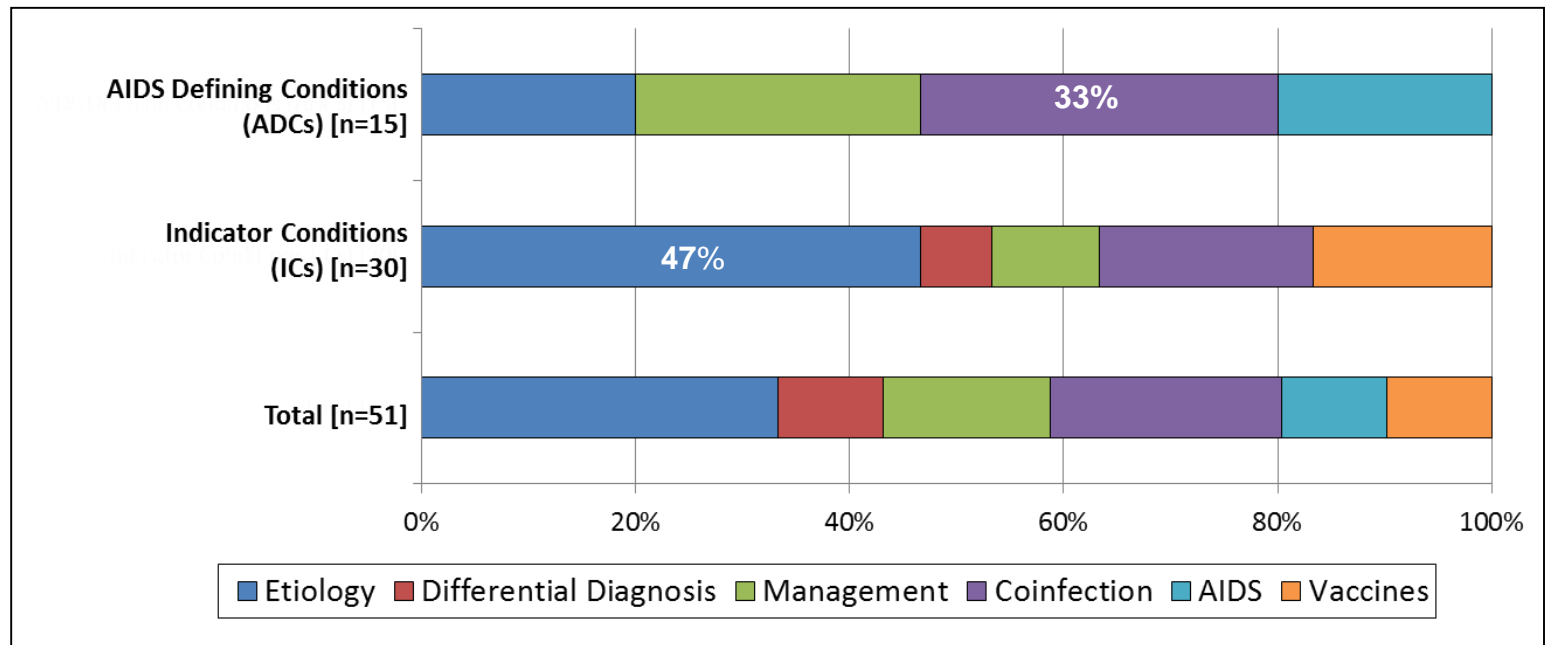


Figure 2: Distribution of topics addressed in the guidelines that DID NOT RECOMMEND HIV TESTING, but MENTION HIV INFECTION

Results

- ❑ 33% of the guidelines were published or updated after 2014
- ❑ Of the 34 guidelines published after 2014, 31 (91%) **mentioned HIV infection** and 14 (41%) **recommended HIV testing**

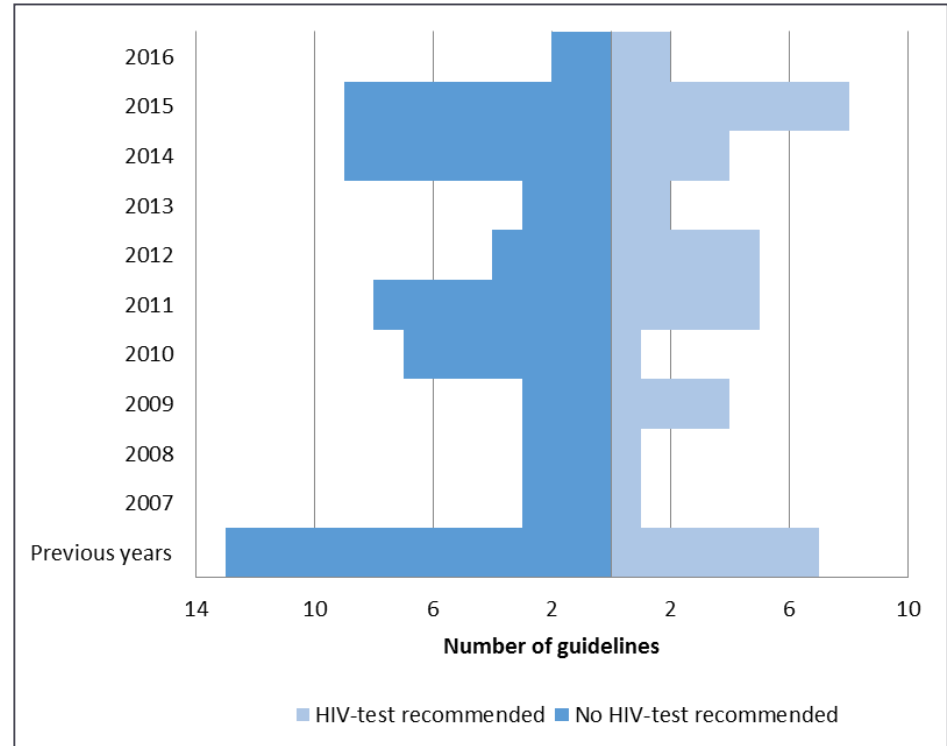


Figure 3. Distribution of 104 revised guidelines according to HIV testing recommendation and year of publication

Results

OptTEST results slide – guideline review (Strategic pack)



UK and European HIV testing guidelines were reviewed to produce a list of 25 ADCs and 49 ICs

		ADC		IC		both	
		no.	%	no.	%	no.	%
Guideline	UK	12		36			
	Spain	21		75		8	
HIV Mentioned	UK		53		53		
	Spain		91		87		88
HIV test recommended	UK		35		39		
	Sp		19		44		13

Ann Sullivan, HepHIV2017 Conference, Malta

Evaluation of HIV testing recommendations in specialty guidelines for the management of HIV indicator conditions

Lord E et al. HIV Medicine (2017), 18:300-304

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Limitations

- Search for the guidelines: there is no specific methodology
- Not all conditions have a specific guidelines
- Only most accessible or most used guidelines



Conclusions

- ❑ Most of the revised guidelines pertaining AIDS defining conditions and Indicator Conditions in Spain discuss HIV infection but, the recommendation on HIV testing is scarce and insufficient
- ❑ It is necessary to expand and improve the information available in all the sanitary services that involve increasing early HIV diagnosis
- ❑ Recommendation HIV testing using indicator conditions strategy must be included in the routine care
- ❑ The specialty guidelines must incorporate this recommendation to improve HIV testing and early diagnosis of HIV infection