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## University College London

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## Do MSM test for STIs/HIV as per 2016 national guidelines and what factors influence testing? Findings from a large online community-based survey in England

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Centre for Population Research in Sexual Health and HIV,  
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University College London

*On behalf of:*

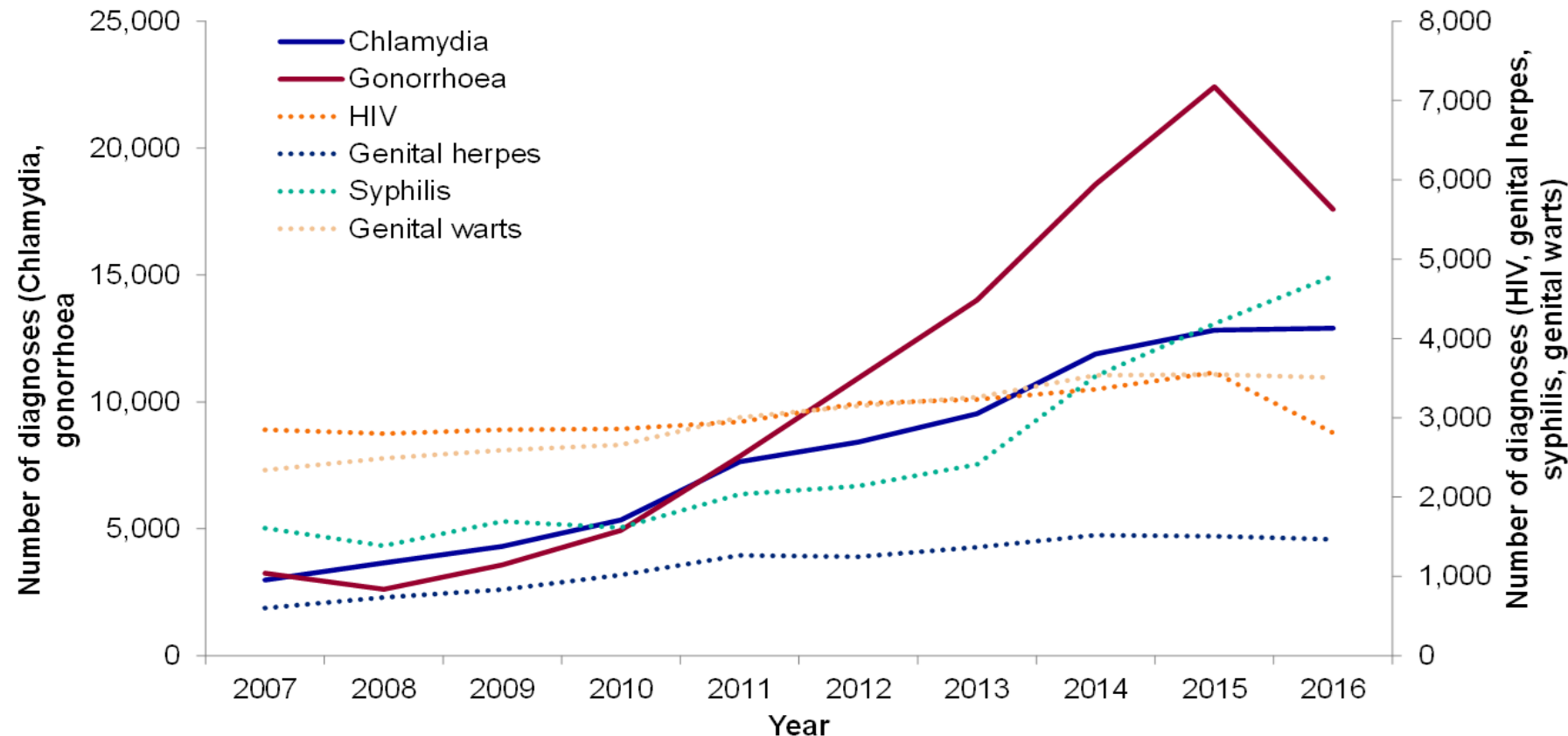
**David Reid, Dr Peter Weatherburn, Stella Fabiane, Paula Blomquist,  
Dr Catherine Mercer, Dr Gwenda Hughes**

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# Background

- **MSM continue to be disproportionately affected by STIs & HIV**



- New HIV diagnoses sourced from the HIV and AIDS Reporting System (HARS). All other data from specialist and non-specialist SHS (GUMCAD returns)
- \* First episode; \*\*Includes diagnoses of primary, secondary & early latent syphilis
- Chlamydia data from 2012 onwards are not comparable to data from previous years (please see 'Notes' slide for more details)
- Data type: service data

# \*UK national sexual health care among MSM guidelines 2016: STI/HIV testing

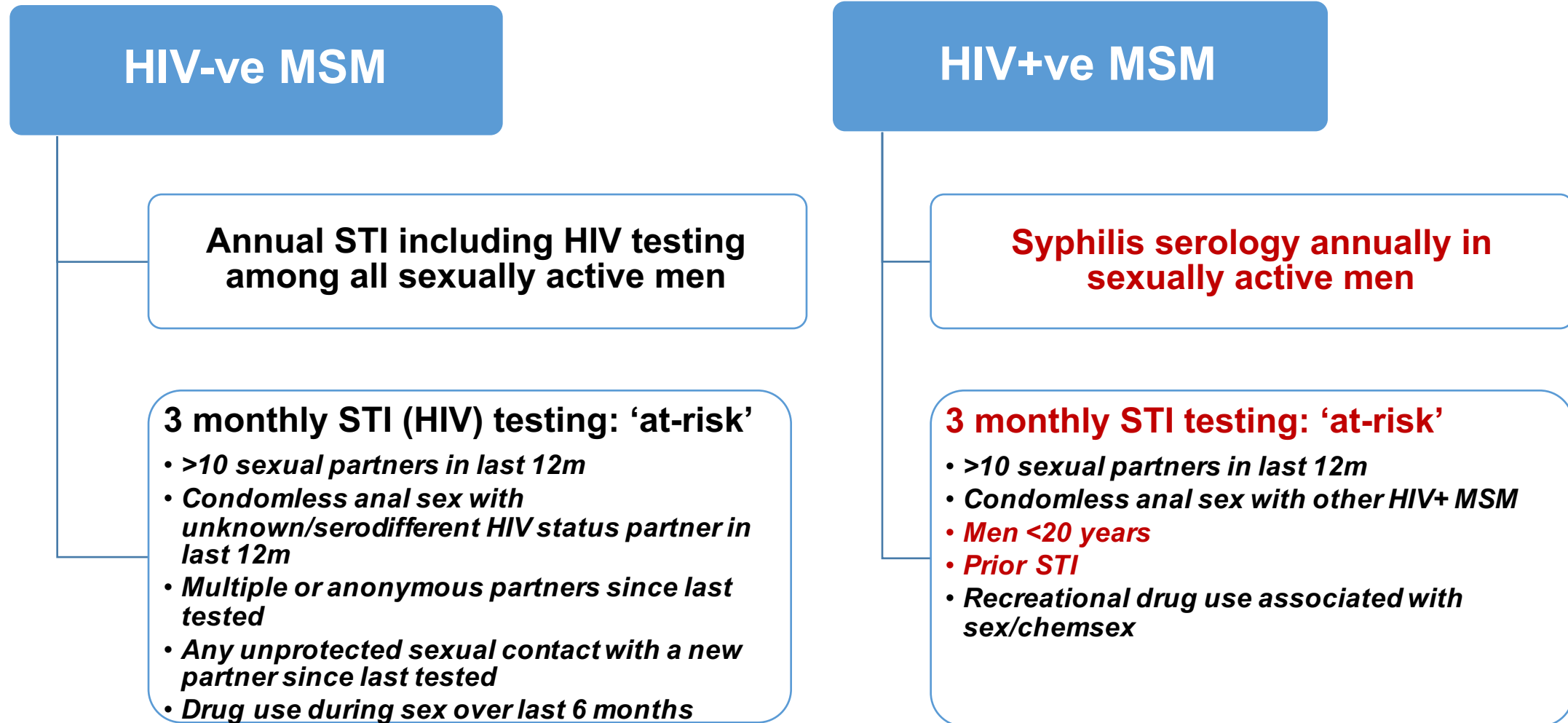
## HIV-ve MSM

**Annual STI including HIV testing among all sexually active men**

### **3 monthly STI (HIV) testing: 'at-risk'**

- *>10 sexual partners in last 12m*
- *Condomless anal sex with unknown/serodifferent HIV status partner in last 12m*
- *Multiple or anonymous partners since last tested*
- *Any unprotected sexual contact with a new partner since last tested*
- *Drug use during sex over last 6 months*

# \*UK national sexual health care among MSM guidelines 2016: STI/HIV testing



## Aims

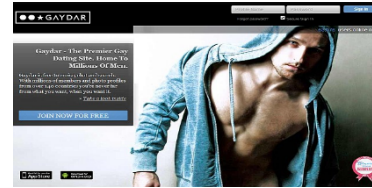
**Qs 1. Does STI (and HIV) testing behaviour among MSM reflect national STI/HIV testing guidelines:**

- a. for annual testing**
- b. for 3 monthly testing among men 'at-risk' of STIs/HIV**

**Qs 2. Is STI knowledge and engaging in at-risk behaviours associated with STI/HIV testing among MSM?**

# Methods

- Online survey: March-May 2017 in UK
- Recruitment: gay-orientated dating websites (Grindr/Scruff/Gaydar)
- Men aged >15 & sexually active in the last 12m
- Engagement in at-risk behaviours:



## HIV-ve MSM

- >10 sexual partners in last 12m**
- Condomless anal sex with unknown/serodifferent HIV status partner in last 12m
- Multiple or anonymous partners since last tested
- Any unprotected sexual contact with a new partner since last tested
- Drug use during sex over last 6 months

## HIV+ve MSM

- >10 sexual partners in last 12m**
- Condomless anal sex with other HIV+ MSM
- **Men <20 years**
- Recreational drug use associated with sex/chemsex

# Methods

11 TRUE statements: transmission/symptoms/treatment STIs and HIV



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The chances of HIV being passed on during sex between men are greater if either man has certain STIs.

- |   |                                 |
|---|---------------------------------|
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| 2 | <i>I wasn't sure about this</i> |
| 3 | <i>I didn't know this</i>       |
| 4 | <i>I don't understand this</i>  |
| 5 | <i>I don't believe this</i>     |

- Choose one of these responses for each of the 11 true statement

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## 11 TRUE statements: transmission/symptoms/treatment STIs and HIV

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- Scored '1' for each statement they 'knew'
- Scores <6 treated as having "low" STI knowledge

## Data analysis

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  - STI knowledge
  - At-risk behaviours
  - Testing

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  - STI knowledge
  - At-risk behaviours
  - Testing
- **Multivariate logistic regression models separately for HIV-ve & HIV+ve men:**
  - STI testing (outcome), and STI knowledge and engaging in at-risk behaviours
  - Adjusting for confounders: age, ethnicity, education
  - Adjusted odds ratios (aOR) were calculated

## Study sample

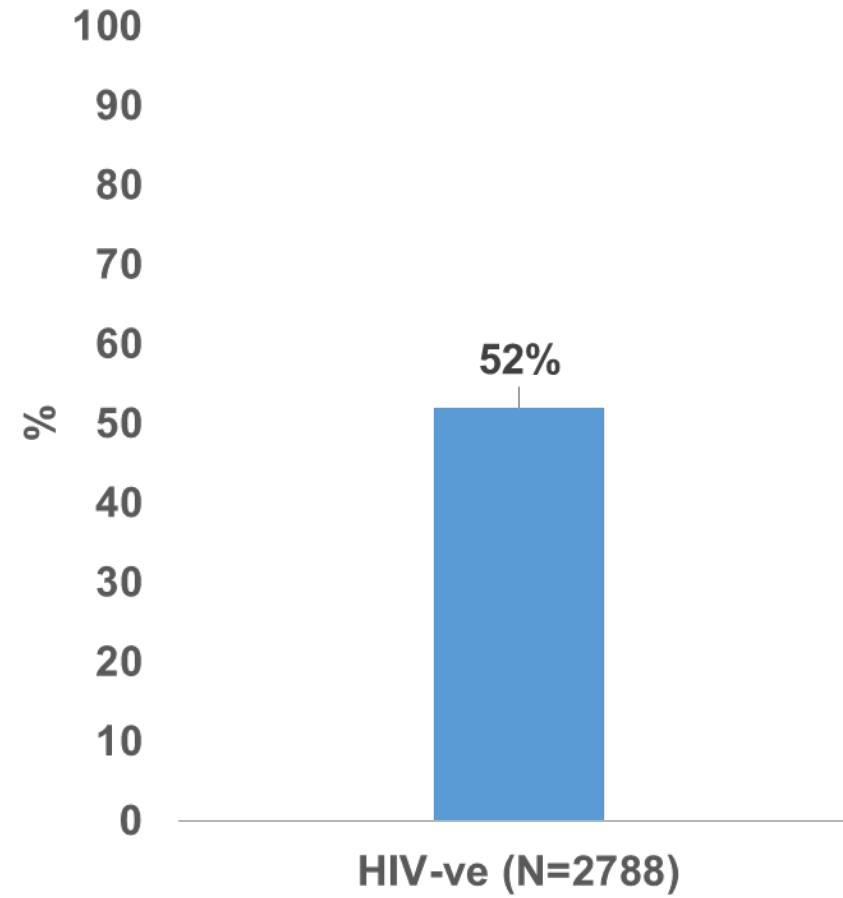
	HIV-ve MSM (n=3157)	HIV+ve MSM (n=489)	p-value
Median age (IQR)	44 (32-53)	48 (39-54)	p<0.001
Non-white ethnicity	10%	5%	p=0.015
Education: degree & above	52%	50%	P=0.404

# Results

**Qs 1. Does STI (and HIV) testing behaviour among MSM reflect national STI/HIV testing guidelines:**

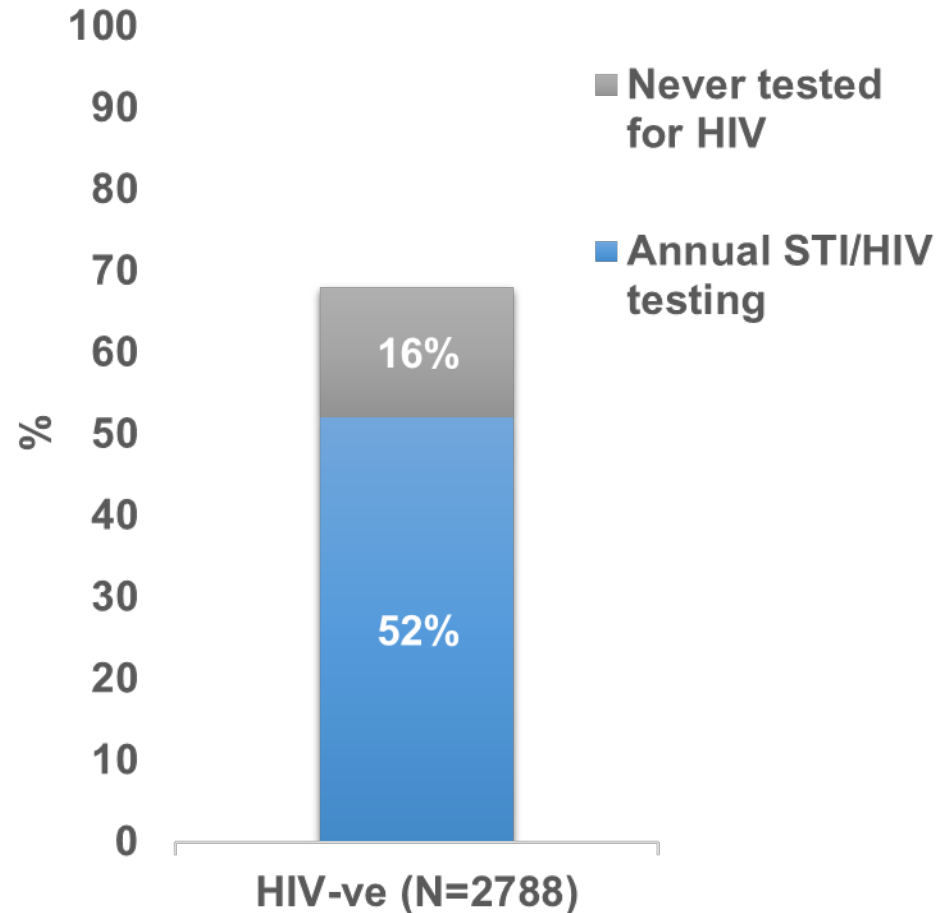
- a. for annual testing**
- b. for 3 monthly testing among at-risk men**

# Annual STI/HIV testing among MSM by HIV status

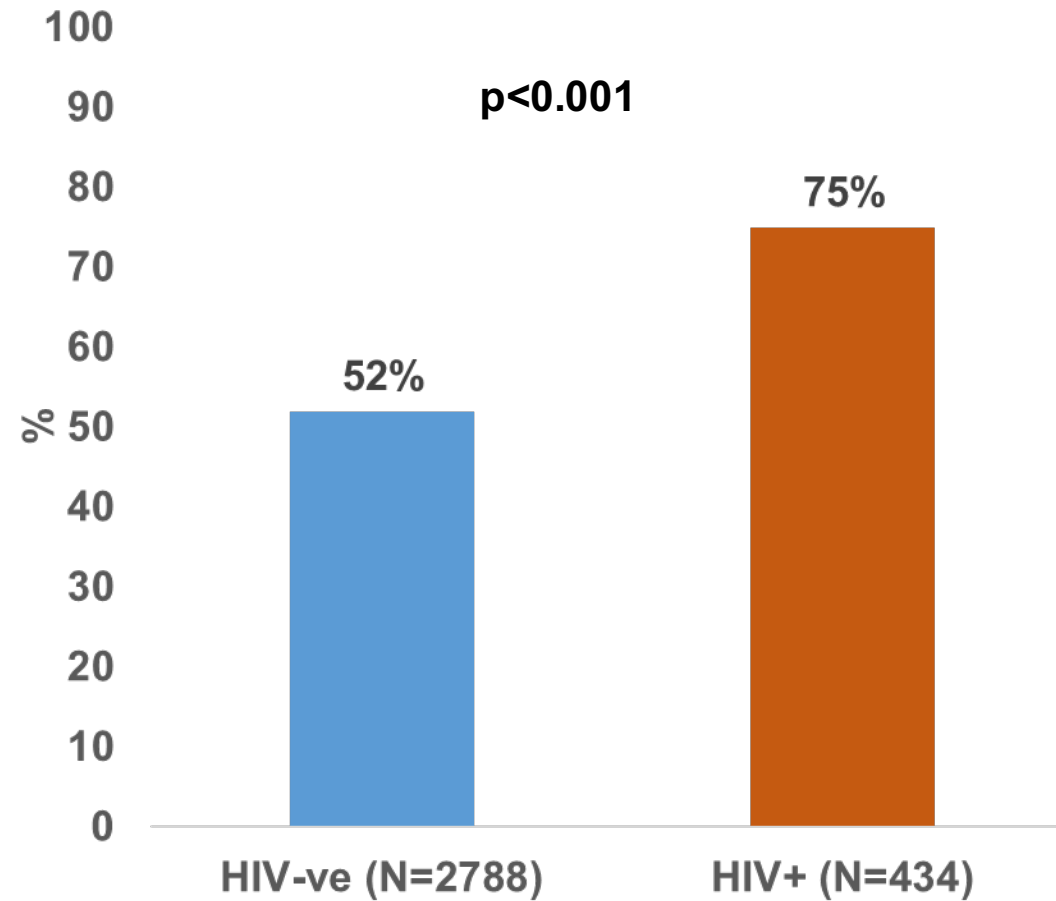




# Annual STI/HIV testing among MSM by HIV status



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# RESULTS

**Qs 1. Does STI (and HIV) testing behaviour among MSM reflect national STI/HIV testing guidelines:**

- a. for annual testing**
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# At-risk behaviours in the last 3m by HIV status

	HIV-ve MSM (n=3,157)	HIV+ve MSM (n=489)	p-value
>10 partners	13%	23%	p<0.001
Condomless anal sex	53%	69%	p<0.001
>1 new partner	65%	68%	p=0.25
Recreational drug use (last 12m)	9%	25%	p<0.001
Condomless anal sex with unknown/serodifferent HIV status partners	12%	*18%	

\*Only among men who were not on ART or had a detectable viral load

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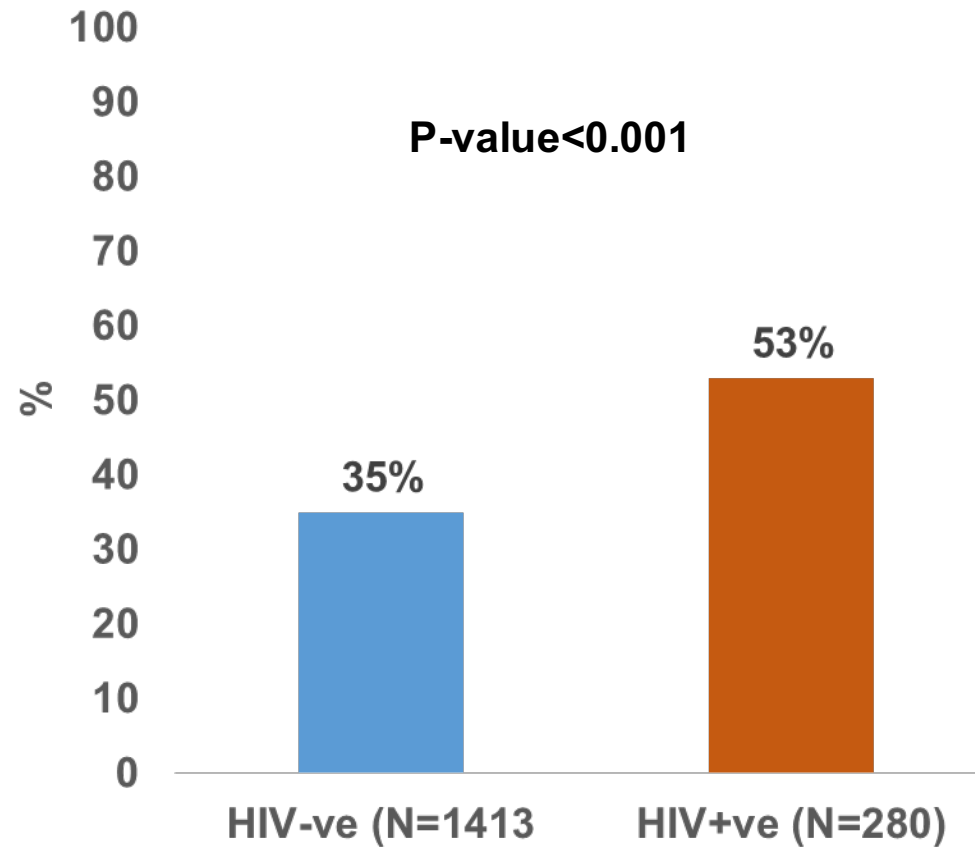
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Recreational drug use (last 12m)	9%	25%	p<0.001
Condomless anal sex with unknown/serodifferent HIV status partners	12%	*18%	NA
<b>Engagement in ≥1 'at-risk behaviours'</b>	<b>57%</b>	<b>74%</b>	<b>NA</b>

\*Only among men who were not on ART or had a detectable viral load

## STI/HIV testing in last 3 month: **at-risk men**

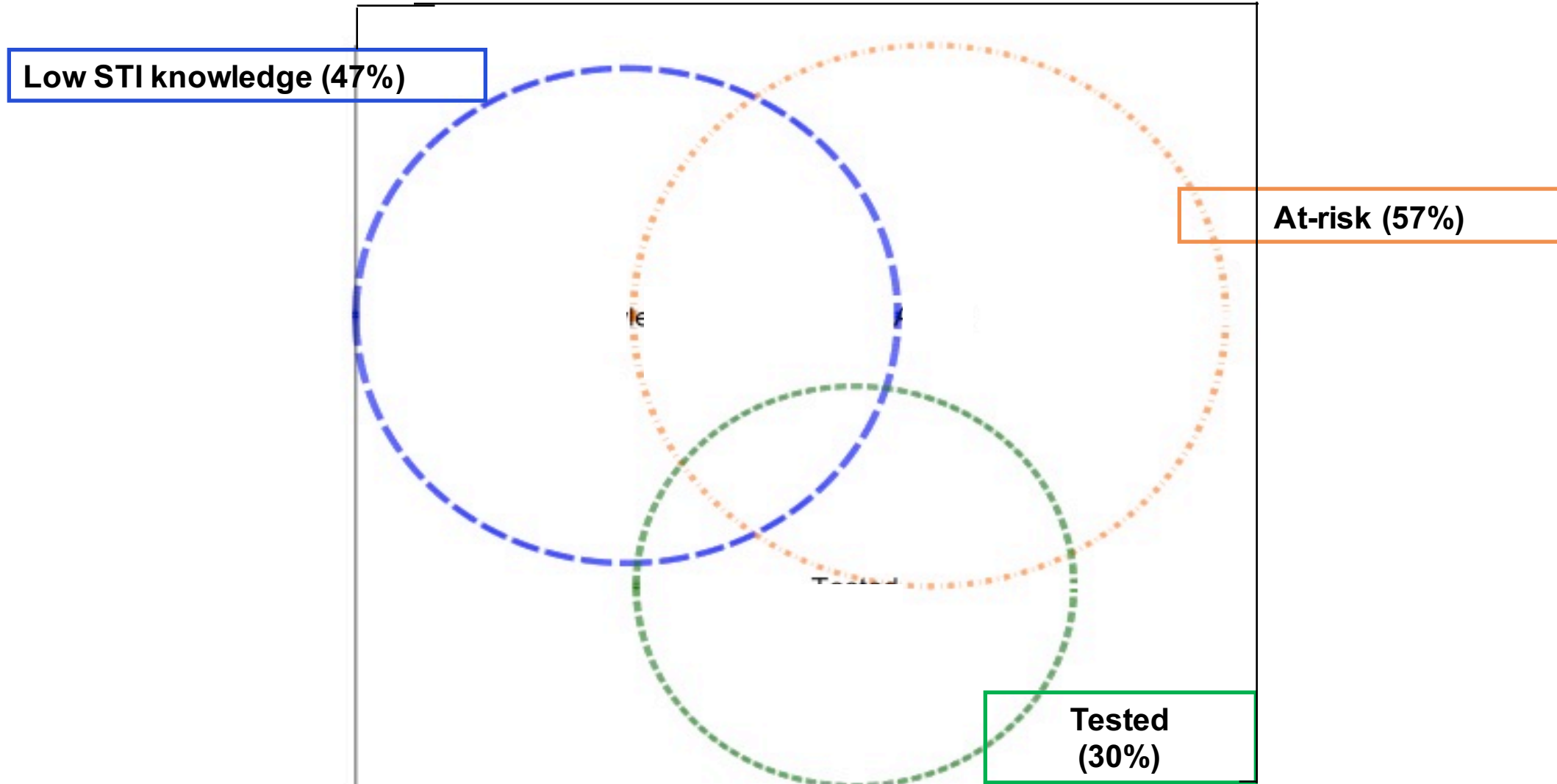


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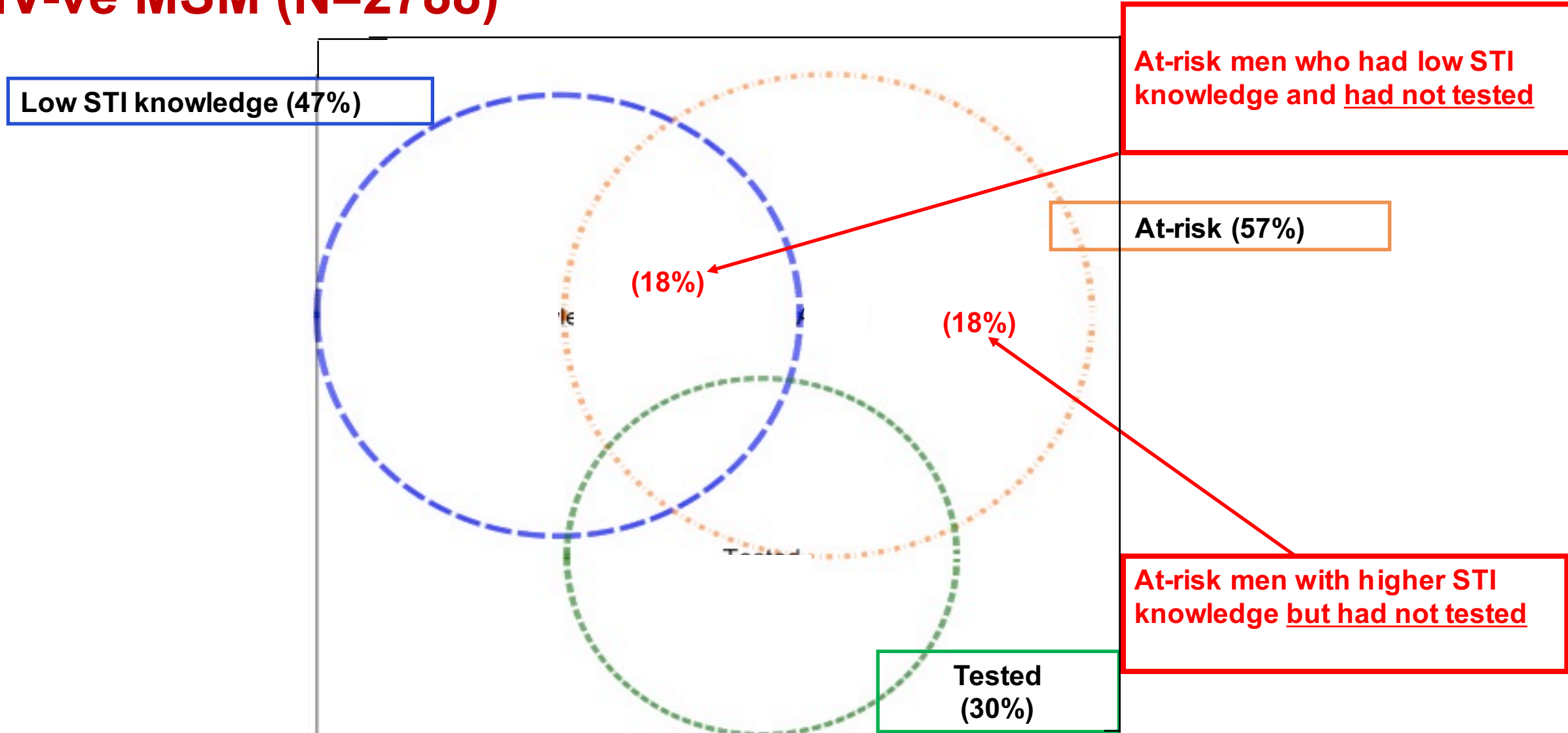
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# STI knowledge, at-risk behaviours and testing in 3m: HIV-ve MSM (N=2788)



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## Association between STI/HIV testing in last 3m, knowledge and behaviours: **HIV-ve MSM (n=2788)**

- Engaging in at-risk behaviours was independently associated with STI/HIV testing as these men were more likely to test

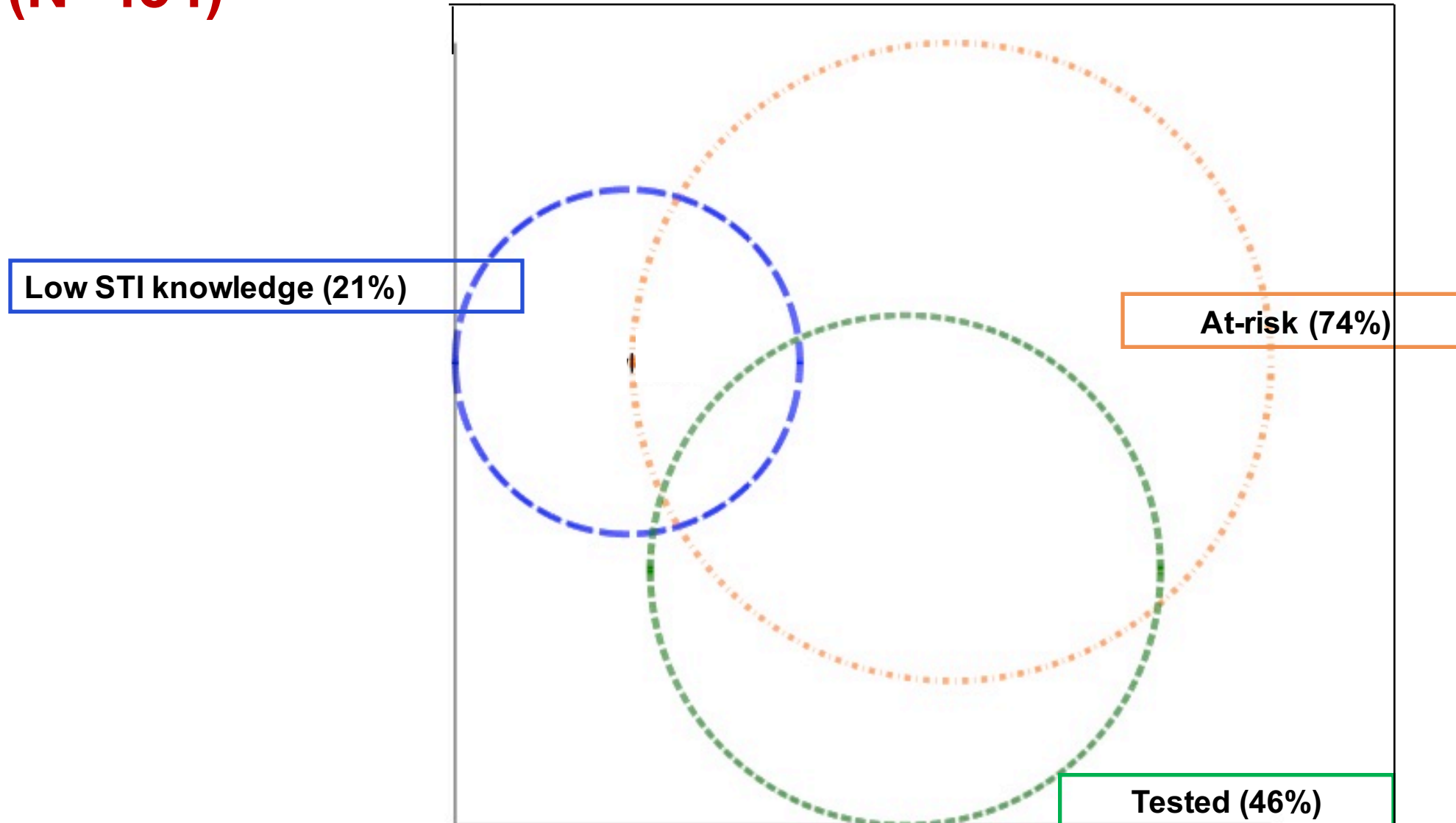
	Tested	Not tested	AOR
Not at-risk	25%	75%	1
At-risk	34%	66%	1.53 (1.29-1.82)

## Association between STI/HIV testing in last 3m, knowledge and behaviours: **HIV-ve MSM (n=2788)**

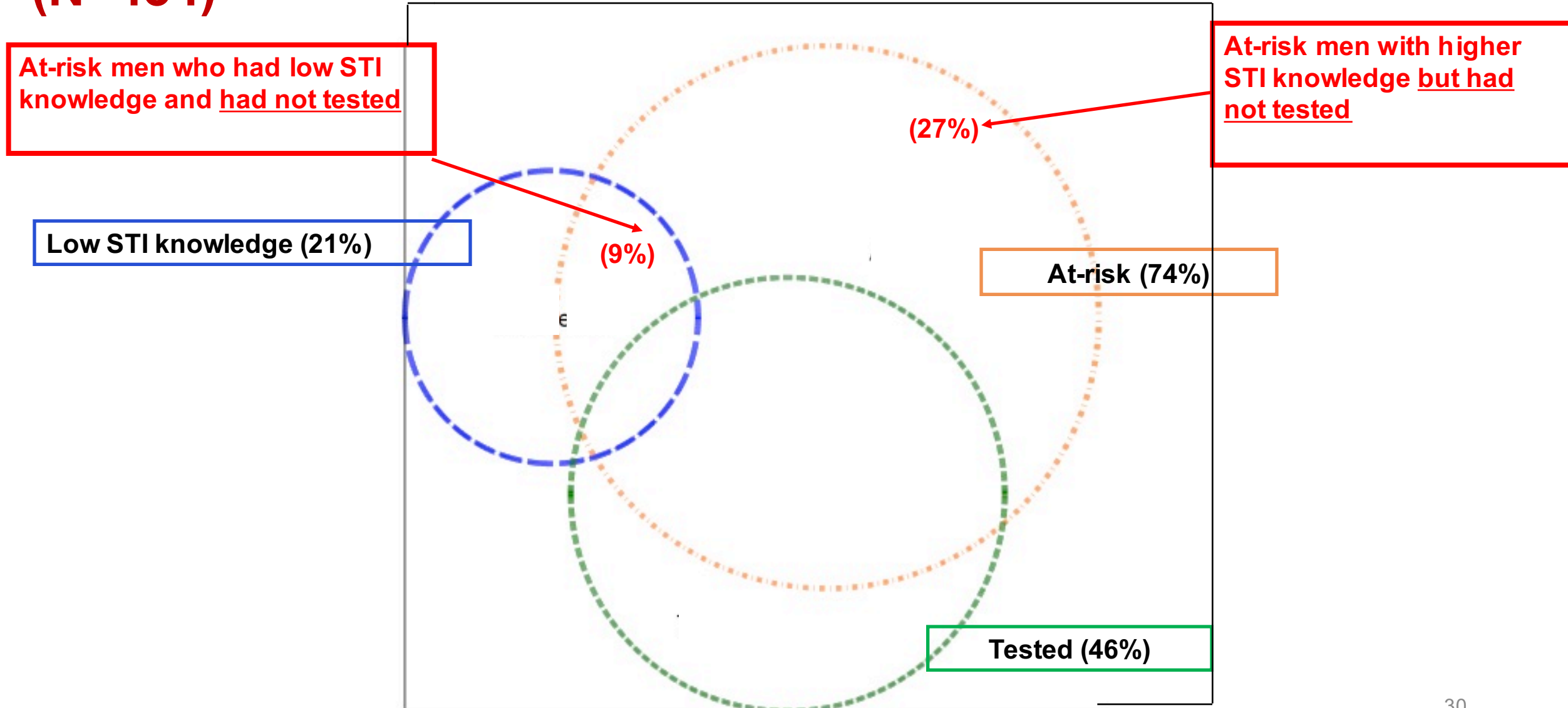
- Engaging in at-risk behaviours was independently associated with STI/HIV testing as these men were more likely to test
- **STI knowledge independently associated with STI/HIV testing as those with low knowledge were less likely to test**

	Tested	Not tested	AOR
<b>At-risk</b>			
<i>No</i>	25%	75%	1
<i>Yes</i>	34%	66%	1.53 (1.29-1.82)
<b>STI knowledge</b>			
<i>High</i>	35%	65%	1
<i>Low</i>	24%	76%	0.58 (0.49-0.69)

# STI knowledge, at-risk behaviours and testing: HIV+ve MSM (N=434)



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## 4 key messages

1. **Annual STI/HIV testing among sexually-active MSM, and in last 3m among MSM at-risk of STIs/HIV remains below recommended standards, esp among HIV-ve MSM.**
2. **Knowledge about STIs and risk perception is low, esp among HIV-ve MSM**
3. **Engaging in at-risk behaviours is independently associated with STI/HIV testing in MSM**
4. **STI knowledge is independently associated with STI/HIV testing in HIV-ve MSM**

## Strengths and limitations

- **Online recruitment:**
  - sample is not representative of all MSM
  - But enabled recruitment of MSM across the UK
- **Anonymous self-reported data**
- **No data on previous STI diagnosis/biological data**



## Implications for policy and practice

- **Recall MSM @3m for STI/HIV testing**
  - Engaging in at-risk behaviours
- **Reminders on electronic patient records about annual testing for HIV+ve MSM**
- **Online platform of dating sites can be used to promote STI risk reduction and knowledge, and encourage testing among men at-risk of STIs/HIV:**
  - **Bristol University (HPRU)**

<http://bbsti.hpru.nihr.ac.uk/>

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**Thank all the study participants**

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