

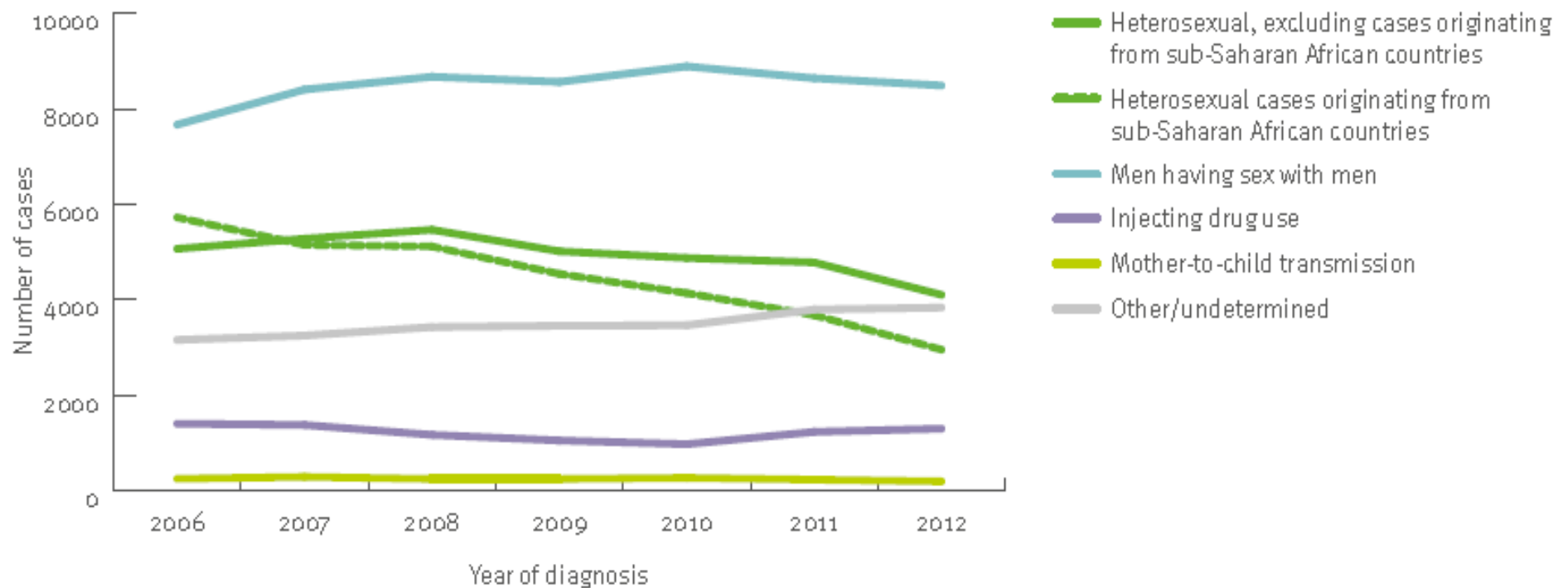
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# Sexual behaviour profile of gay and other men who have sex with men enrolled in the PROUD pre-exposure prophylaxis open-label pilot study in UK

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# European epidemic

**Figure G:** Trends of reported HIV diagnoses, by transmission mode and year of diagnosis, adjusted for reporting delay, EU/EEA, 2006–2012

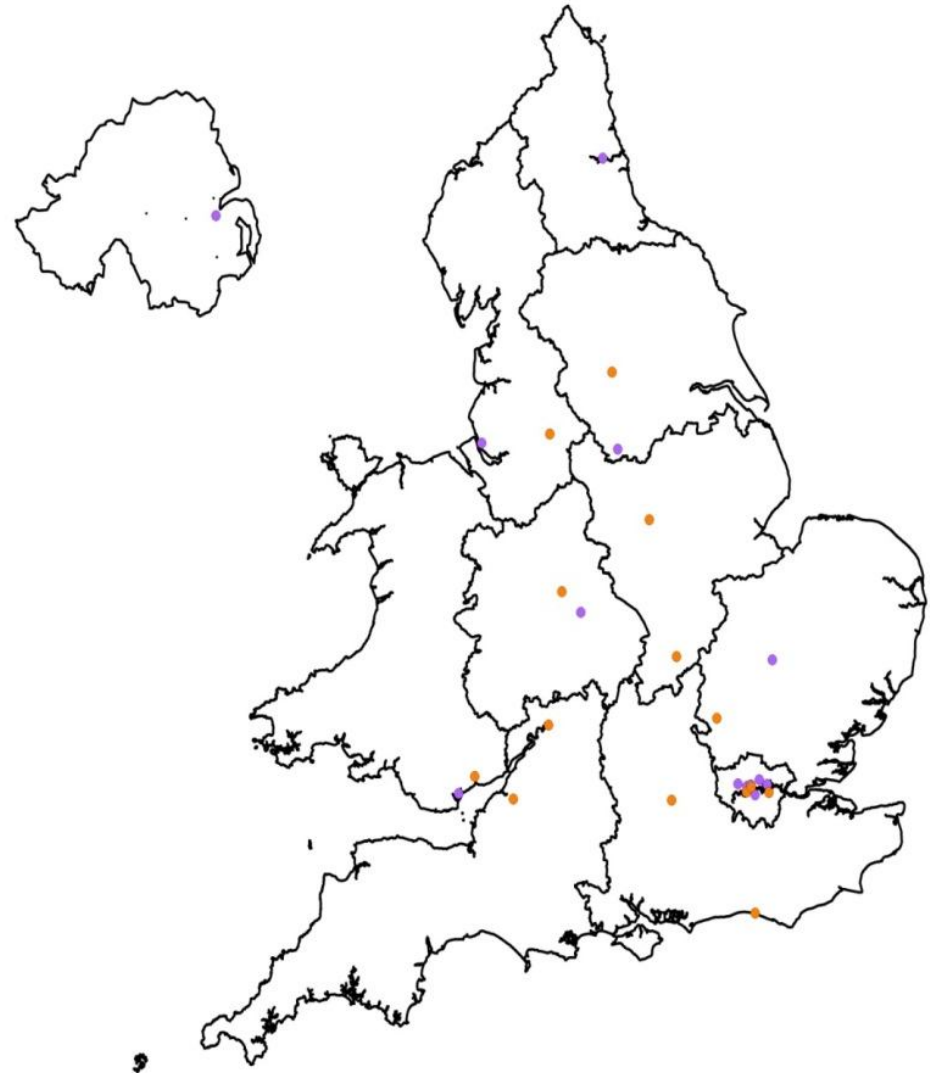


# Network of genitourinary medicine (GUM) clinics

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Public Health England:  
220 sexual health clinics  
in England, Northern  
Ireland and Wales

Accessed by 110,000  
HIV- gay men per year



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# PROUD Pilot Study

**PR**e-exposure **O**ption for reducing  
HIV in the **UK**: an open-label  
randomisation to immediate or  
**D**eferred daily Truvada for HIV  
negative gay men

# PROUD Pilot

500 MSM reporting UAI last/next 90days  
18+, Willing to take a pill

Randomize HIV negative MSM  
(exclude if on treatment for hepB/Truvada contra-indicated)

Truvada **NOW** and MI+

Truvada **IN 12M** and MI+

Follow **3 monthly** for up to 24 months

Follow up  
extended to  
end of study

Main endpoints: recruitment and retention

Effectiveness

# Methods

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- Study recruitment: Nov 2012-Apr 2014
- Study clinics: 13 sexual health clinics
  - 8 in London
  - 5 in Birmingham, Brighton, Manchester, Sheffield, York
- Data collection: baseline self-completed demographic and behavioural paper CRFs
- Analysis: STATA v13

# Baseline demographics (n=535)

Characteristics	Number (%)
<b>Median Age</b>	35 (IQR: 29 – 43)
<b>Age</b>	
18-30	148 (28%)
30-40	210 (39%)
>40	177 (33%)
<b>Ethnicity</b>	
White	419 (78%)
Irish	17 (3%)
Indian, Pakistani, Bangladeshi	18 (4%)
Black Caribbean, African, other	20 (4%)
Mixed ethnic group	24 (4%)
Chinese	10 (2%)
Other	25 (5%)
Missing	2 (<1%)
<b>Born UK</b>	
Yes	318 (59%)
No	216 (40%)
Missing	1 (<1%)

# Baseline demographics

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<b>Characteristics</b>	<b>Number (%)</b>
<b>Maximum Education</b>	
No qualifications	14 (3%)
O-levels/GCSEs/Equivalent	59 (11%)
A-levels/Equivalent	86 (16%)
University Degree or above	324 (61%)
Still in full-time education	19 (4%)
Vocational training	22 (4%)
Other qualifications	10 (2%)
Missing	1 (<1%)
<b>Employment</b>	
Full time	382 (72%)
Part-time	52 (10%)
Students (fulltime)	27 (5%)
Unemployed	44 (8%)
Retired	16 (3%)
Other	11 (2%)



# Baseline demographics

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<b>Characteristics</b>	<b>Number (%)</b>
<b>Sexuality</b>	
Gay/homosexual	508 (95%)
Bi-sexual	16 (3%)
Straight/heterosexual	6 (1%)
Missing	5 (1%)
<b>Current Relationship Status</b>	
Yes and living with partner	159 (30%)
Yes and not living with partner	85 (16%)
No ongoing relationship	290 (54%)
Missing	1 (<1%)

# Baseline Behaviour

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<b>Drug use in last 3 months</b>	<b>% of participants</b>
Mephedrone	37%
GHB/GBL (liquid ecstasy)	32%
Crystal meth (methamphetamine)	18%
Poppers (amyl nitrate)	49%
Viagra	41%
Cocaine (coke)	26%
Cannabis (marijuana, grass)	24%
Ecstasy (E)	17%
Ketamine (K)	17%
Other	6%
Speed (amphetamine)	5%
Anabolic steroids	4%

# Baseline Behaviour

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<b>Clinic visits in last 12 months</b>	<b>Median (IQR)</b>
HIV testing	3 (IQR 2-4)
STI testing	3 (IQR 2-4)

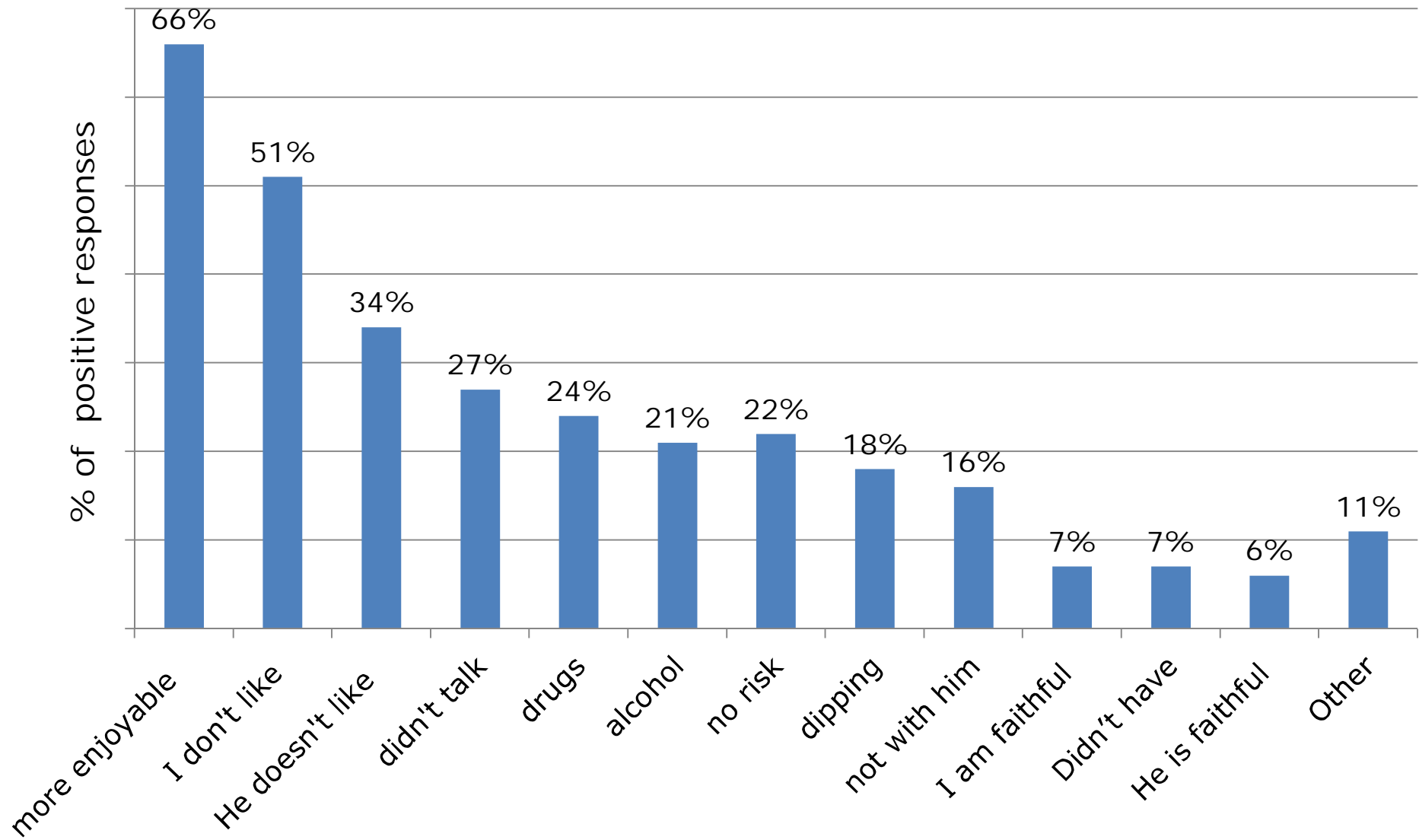
<b>PEP use in last 12 months</b>	<b>Number (%) N=508</b>
At least once	184 (36%)
More than once	71 (14%)

# Baseline Behaviour

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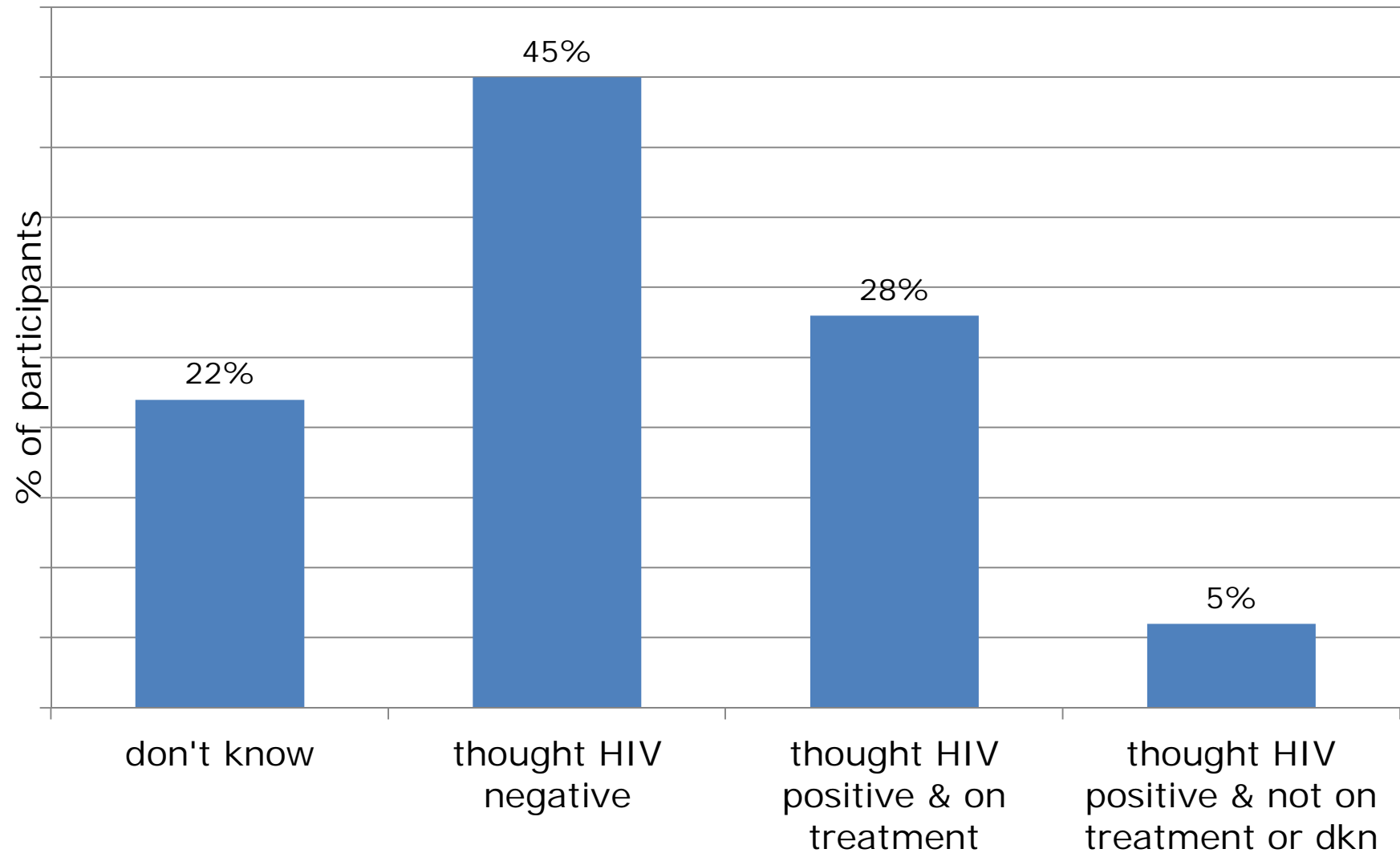
<b>Anal sex partners in last 90 days</b>	<b>Median (IQR)</b>
Median partners	10 (4-20)
Median of condomless partners as receptive	2 (1-4)
Median condomless partners as insertive	2 (1-5)
Median new partners	7 (2-15)

# Reasons for not using a condom at last condomless anal sex



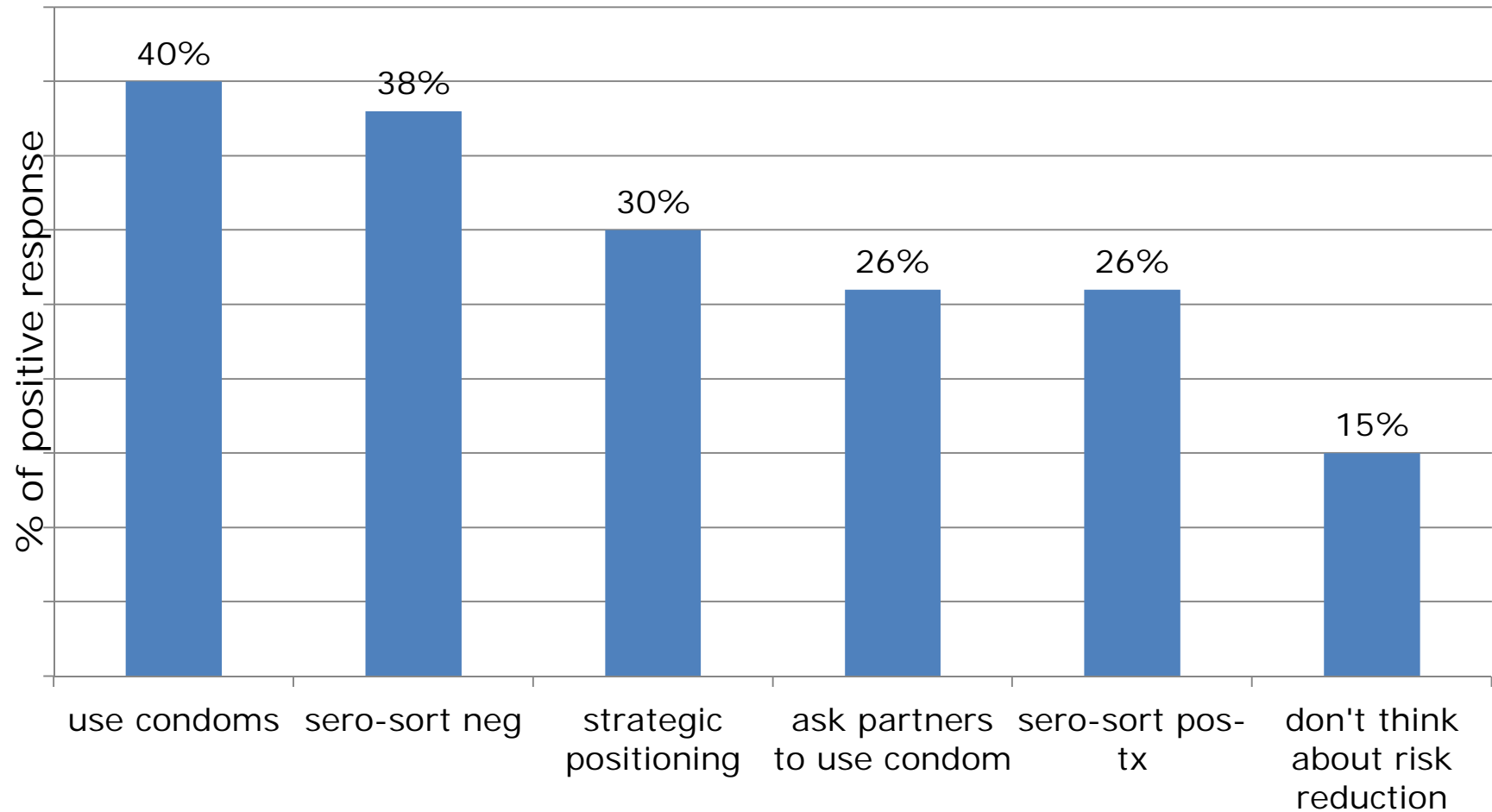
# HIV status of last condomless anal sex partner

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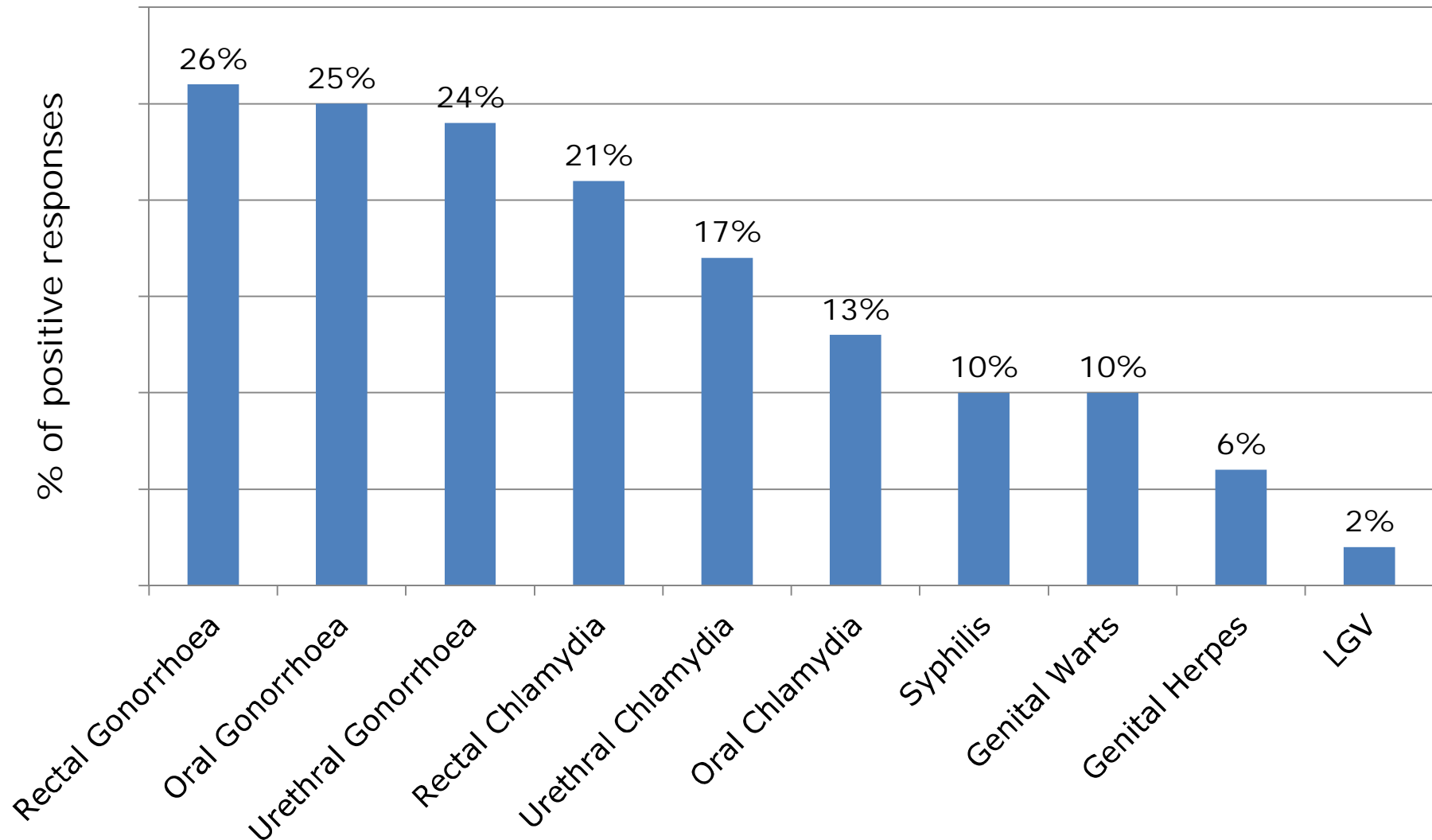
# General HIV risk management strategies

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# Self-reported STIs in last 12 months

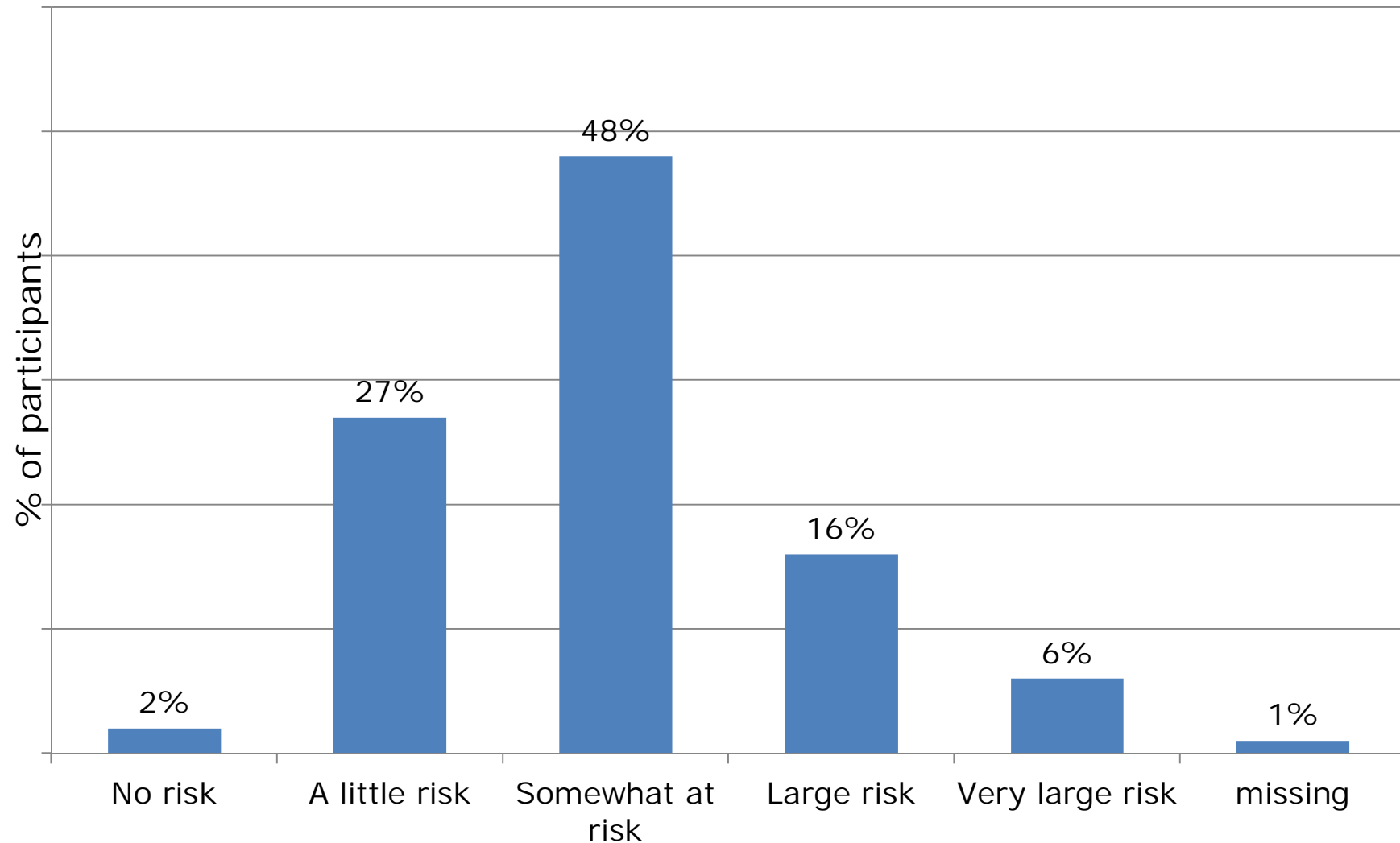
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# General perception of HIV risk during condomless anal sex

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# Summary

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- The PROUD cohort:
  - Median age similar to age at diagnosis
  - Highly educated, predominately employed
  - Engaged with SH clinics & using PEP for prevention
- In comparison to other UK data, participants report higher rates of:
  - Condomless anal sex partners <sup>1</sup>
  - STIs<sup>2</sup>
  - PEP use<sup>3</sup>
  - Drug use, especially drugs associated with chemsex<sup>4</sup>

<sup>1</sup>Phillips et al. (2013) Increased HIV Incidence in MSM Despite High Levels of ART-Induced Viral Suppression. PLoS ONE 8(2);  
<sup>2</sup><http://www.hpa.org.uk/stiannualdatatables>; <sup>3</sup>PHE. STI annual data tables. Table 5: All STI diagnoses & services by gender & sexual risk, 2009-2013; <sup>4</sup>[http://www.ihra.net/files/2012/09/04/Chapter\\_3.3\\_MSM\\_.pdf](http://www.ihra.net/files/2012/09/04/Chapter_3.3_MSM_.pdf)

# Summary

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- Large majority of participants perceived themselves to be at risk
  - Significantly higher perception of risk in those with a recent history of STIs
- Active management of risk at enrolment
  - Appeared to be polarised: condoms or sero-sorting
- PROUD attracted gay men at suitably high risk of HIV to benefit from PrEP.

# Acknowledgements (1)

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## Study participants

### MRC CTU at UCL

Sarah Banbury, Liz Brodnicki, Christina Chung, Yolanda Collaco-Moraes, Monica Desai, David Dolling, David Dunn, Mitzy Gafos, Sajad Khan, Brendan Mauger, Sheena McCormack, Yinka Sowunmi, Gemma Wood

### HIV & STI Dept, PHE

Monica Desai, Sarika Desai, Noel Gill, Anthony Nardone, GUMCAD team, HIV team

### Clinics

Vanessa Apea (Barts Health NHS Trust), Christine Bowman (Sheffield Teaching Hospitals NHS Foundation Trust), Michael Brady (Kings College Hospital NHS Foundation Trust), Martin Fisher (Claude Nichol Centre), Julie Fox (Guy's and St Thomas's NHS Foundation Trust), Richard Gilson (The Mortimer Market Centre), Charles Lacey (York Hospitals NHS Foundation Trust), Nicola Mackie (St Mary's Hospital), Alan McOwan (56 Dean Street), Iain Reeves (Homerton University Hospital NHS Foundation Trust), Gabriel Schembri (Manchester Centre for Sexual Health), Ann Sullivan (John Hunter Clinic for Sexual Health), Steve Taylor (Heart of England NHS Foundation Trust)

# Acknowledgements (2)



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## Trial Steering Committee

**Independent members:** Mike Adler (Co-Chair), Gus Cairns (Co-Chair), Dan Clutterbuck, Rob Cookson, Claire Foreman, Stephen Nicholson, Tariq Sadiq, Matthew Williams

**Investigator members:** Brian Gazzard, Noel Gill, Anne Johnson, Sheena McCormack, Andrew Phillips

## Gilead

Matt Bosse, Rich Clarke, Jim Rooney, Murad Ruf

## University of Liverpool

Saye Khoo

## Independent Data Monitoring Committee

Anton Pozniak, Simon Collins, Fiona Lampe

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**Clinics:** Anthony Bains, Alan McOwan (Lead),

**MRC CTU at UCL:** Sheena McCormack, Mitzy Gafos, Annabelle South

**PHE:** Georgina Fletcher