PrEP and other HIV and STI prevention tools

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HIV and STI prevention

- PrEP is a highly effective HIV prevention tool
- 'Concerns' exist around the impact on other STIs
- PrEP should be seen as part of a combination approach to HIV and STI prevention

 PrEP is an opportunity for us to engage with those who are already at high risk for poor sexual health

What do the studies tell us about STI risk?



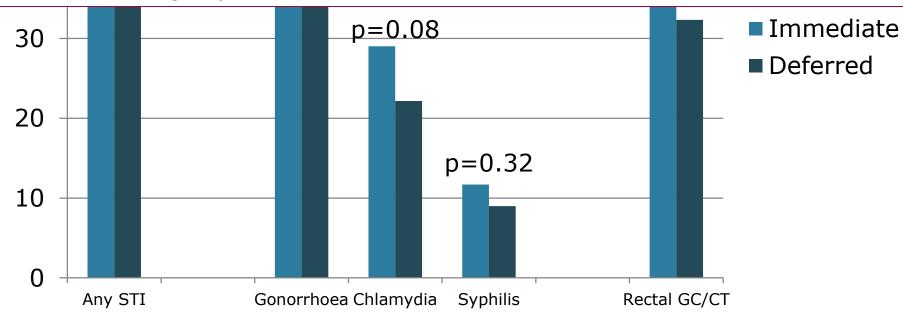


Caveat

Number of screens differed between the groups:

e.g. Rectal gonorrhoea/chlamydia

974 in the IMM group and 749 in the DEF



McCormack *et al* Pre-exposure prophylaxis to prevent the acquisition of HIV-1 infection (PROUD): effectiveness results from the pilot phase of a pragmatic open-label randomised trial. *Lancet* 2016; **387**: 53–60.

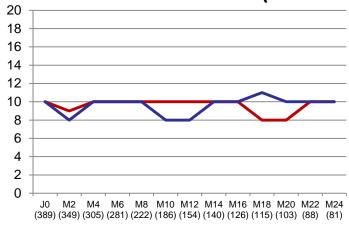
Risk compensation

- In the iPrEx study, there was no evidence of risk compensation.
- In the iPrEx-OLE study, both groups reported decreases in reported condomless receptive anal intercourse
- In the PROUD study, there was no difference in the total number of sexual partners at 1 year or in the frequency of bacterial STIs
- However, a greater proportion of the immediate group reported condomless receptive anal sex with 10+ partners at 1 year compared to the deferred group (21% vs 12%, p=0.03).



Sexual Behavior

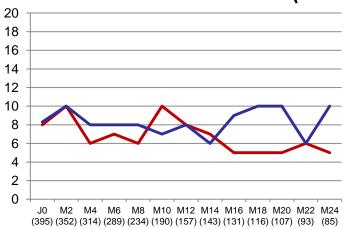
Median Nb of Sexual Acts (last 4 weeks)

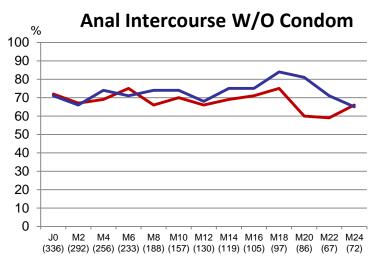




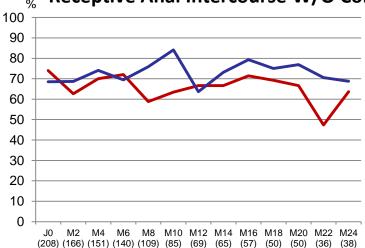
Placebo

Median Nb of Sexual Partners (2 months)





Receptive Anal Intercourse W/O Condom





Sexually Transmitted Infections

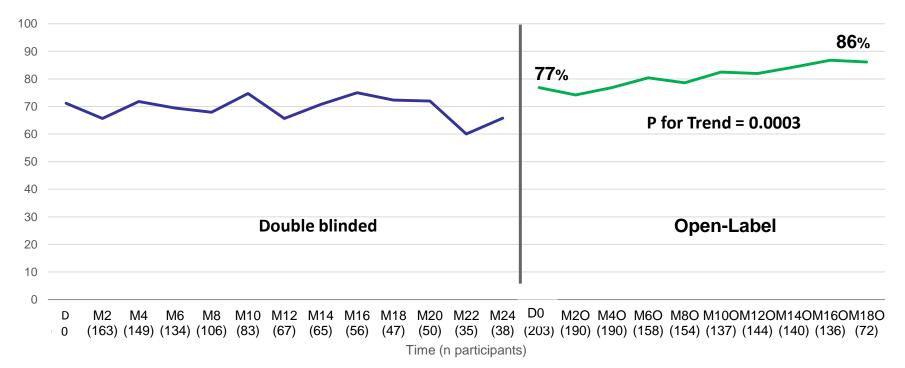
276 STIs were diagnosed in 141 participants

	TDF/FTC n=199		Placebo n=201		P value
	Nb Pt (%)	Nb Events	Nb Pt (%)	Nb Events	
Chlamydia	43 (22)	61	34 (17)	48	0.23
Gonorrhoea	38 (19)	50	45 (22)	67	0.42
Syphilis	19 (10)	19	19 (10)	25	0.98
HCV	3 (<2)	3	3 (<2)	3	1.00
Any STI	76 (38)	133	65 (32)	143	0.22



IPERGAY open-label extension: Efficacy 97% after median 18.4 months

Proportion Pts with Condomless Sex for Last Receptive Anal Intercourse



 No significant change in median Nb of partners or sexual acts during the open-label phase (P= 0.42 and P= 0.12)





IPERGAY: open-label extension

	Double-Blind Median FU: 9.3 months n=400		Open-Label Median FU: 18.4 months n=362		
	Nb Pt (%)	Nb Cases	Nb Pt (%)	Nb Cases	
Chlamydia	81 (20)	114	122 (34)	158	
Gonorrhea	88 (22)	123	117 (32)	175	
Syphilis	39 (10)	45	68 (19)	77	
HCV	5 (1)	5	5 (1)	5	
All STIs	147 (37)	287	210 (58)	415	

Incidence rate of first STI: 35.2 vs 40.6/100 PY in the double-blinded and OLE phases



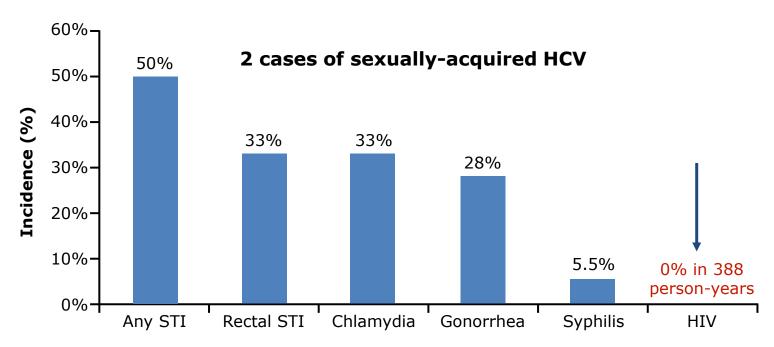


Kaiser Permanente cohort

Incidence of STIs among PrEP users

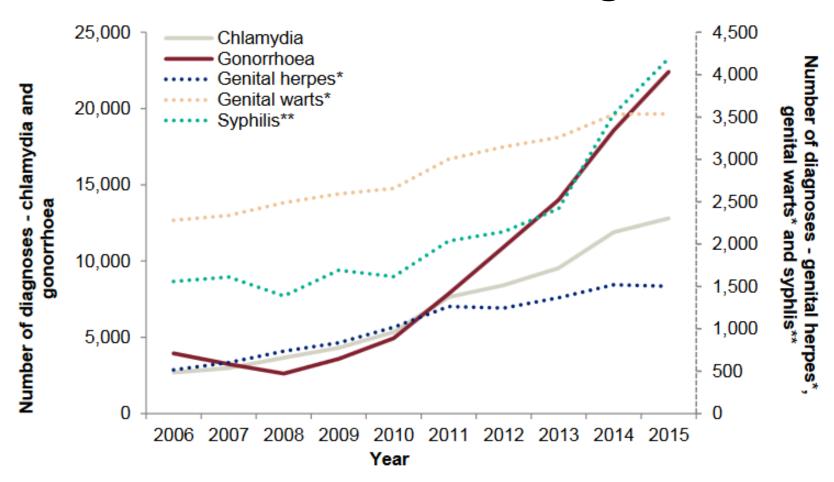
A study of 657 PrEP users (mostly MSM) from 2012–2015 within the Kaiser Permanente integrated healthcare system, San Francisco

STI incidence after 12 months of PrEP use



Of those taking part in the study, 187 were diagnosed with at least 1 STI during follow-up, and 78 individuals were diagnosed with multiple STIs

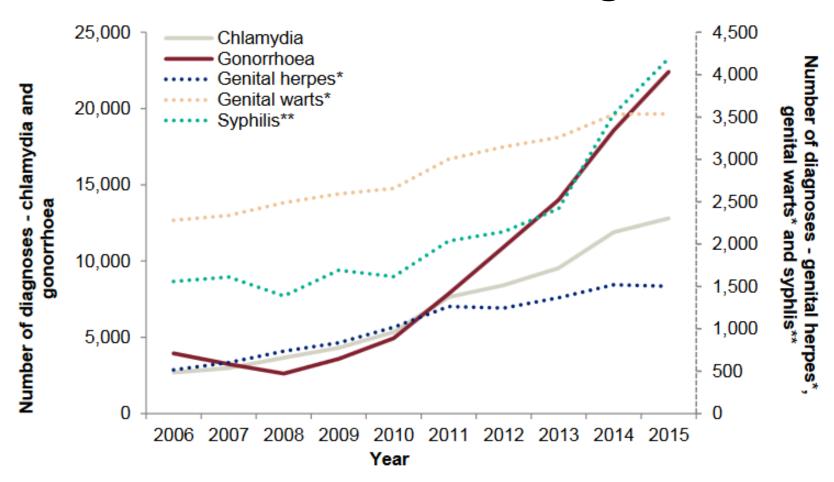
STI rates in MSM: Increased STI testing?



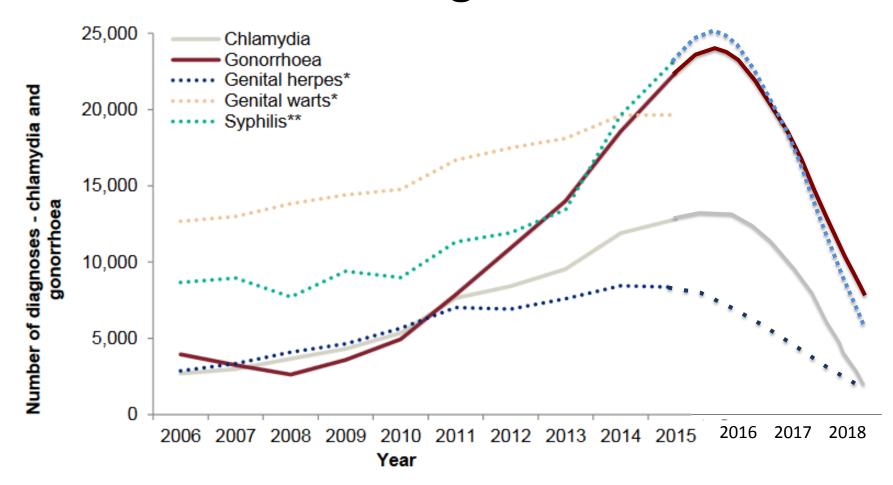
The potential of PrEP for wider STI prevention

- PrEP (by definition) is an intervention for those who already have higher rates of STIs
- PrEP is an opportunity for better STI testing
 - PrEP engages those at high STI risk in testing and prevention services
 - STIs may be diagnosed and treated sooner
 - Shorter periods of transmissibility
 - Better partner notification
 - Risk reduction advice and intervention
 - Condoms
 - Behaviour change intervention
 - Chemsex support

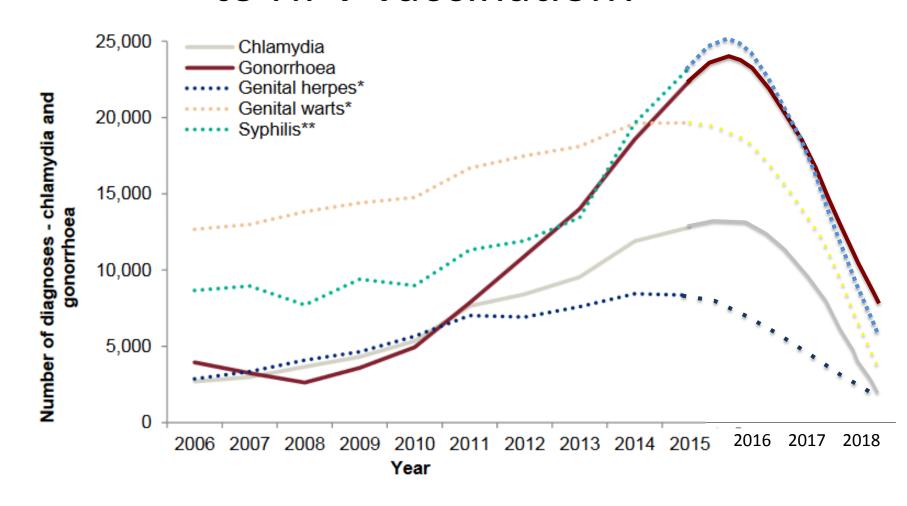
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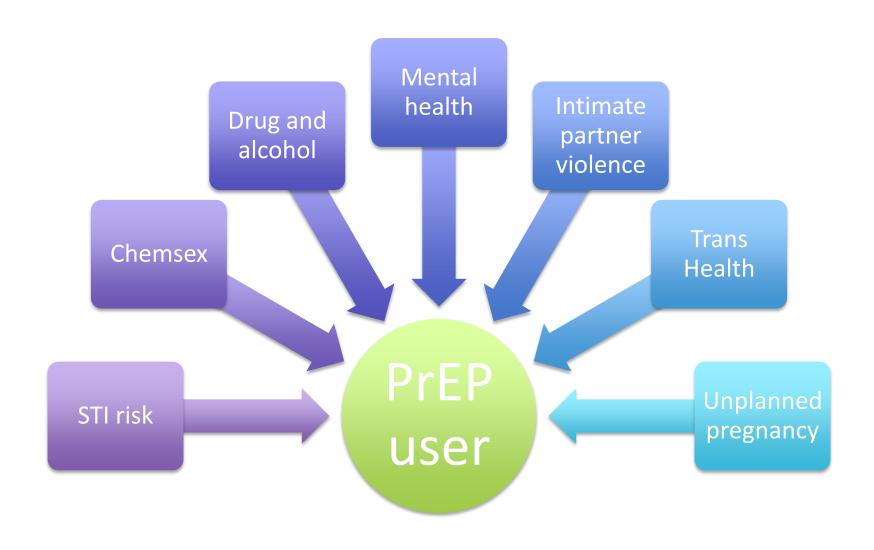
Potential impact of increased STI testing?



Potential impact of a equitable access to HPV vaccination?



Integrated support services with PrEP



What about HIV prevention?



EveningStandard

News > Health

London doctors on verge of defeating HIV thanks to new programme

ROSS LYDALL | Wednesday 11 January 2017 11:04 GMT

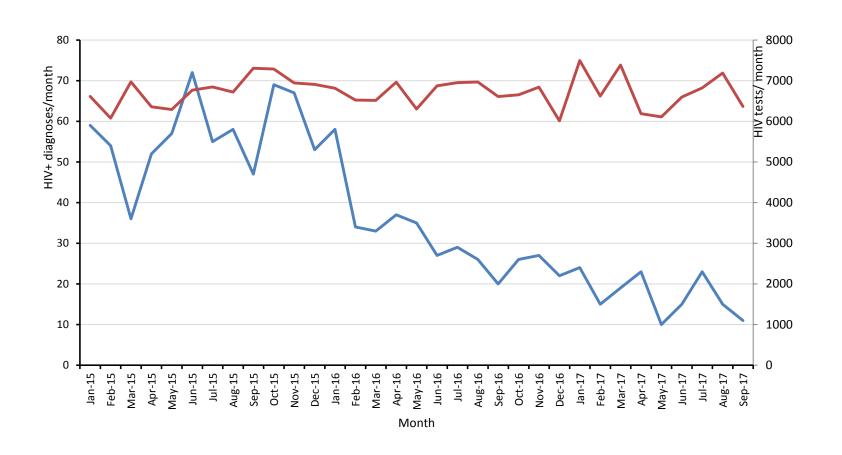








New HIV diagnoses at 56 Dean Street: 2015-2017



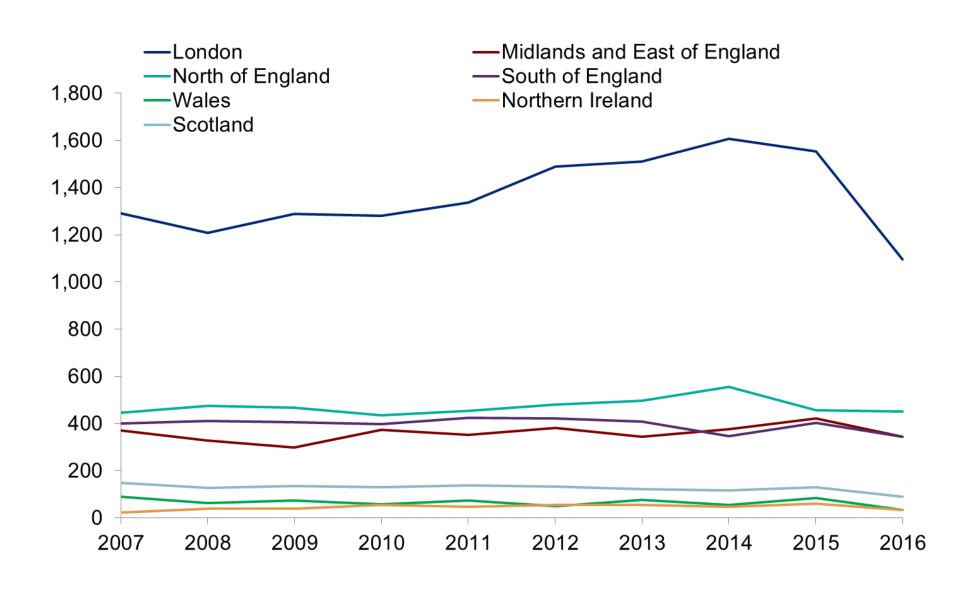
What is driving the reduction in HIV diagnoses?

HIV testing?

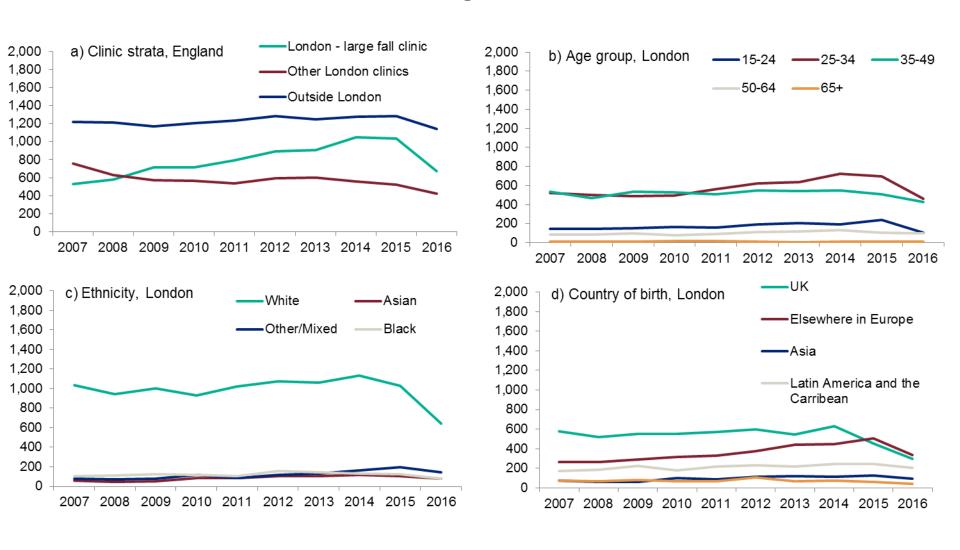
PrEP?

Treatment as Prevention?

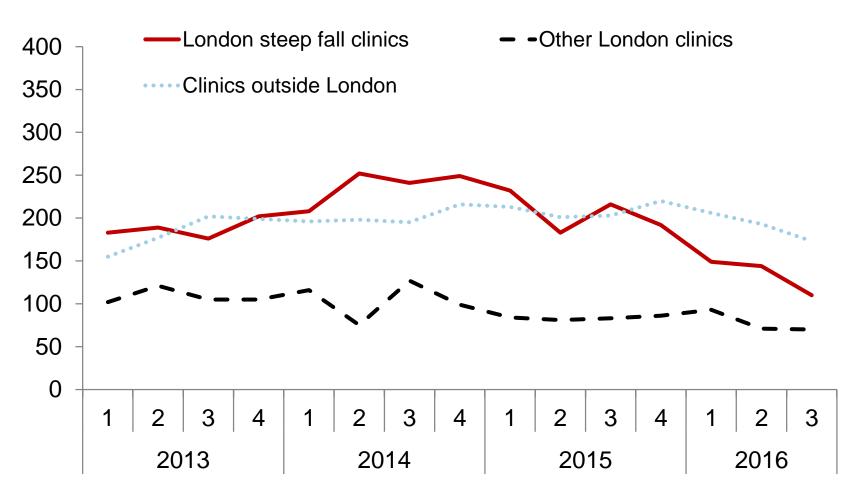
Geographical trends of new HIV diagnosis among gay and bisexual men: United Kingdom, 2007 to 2016



HIV diagnoses among gay and bisexual men, by population characteristics: England and London, 2007 to 2016

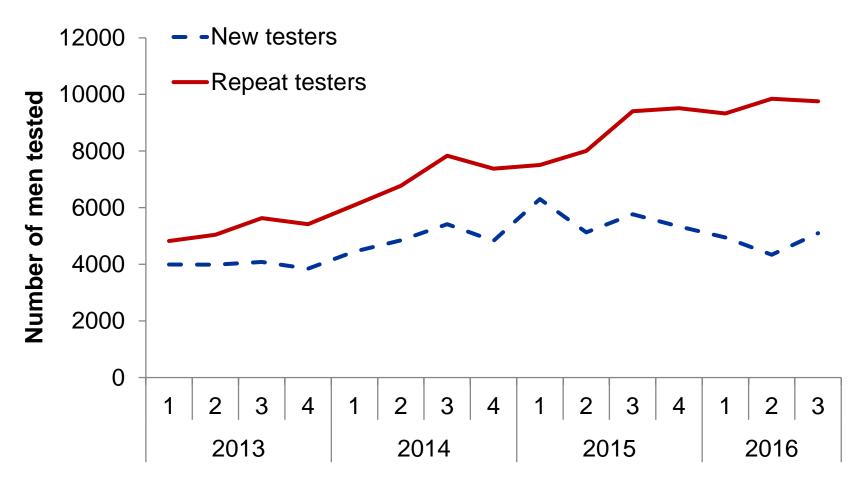


New HIV diagnoses among gay men attending sexual health clinics England



Steep fall definition: Clinics with >20% decrease in HIV diagnoses between Oct 2014-Sep 2015 and Oct 2015-Sep2016, and over 40 diagnoses during this period.

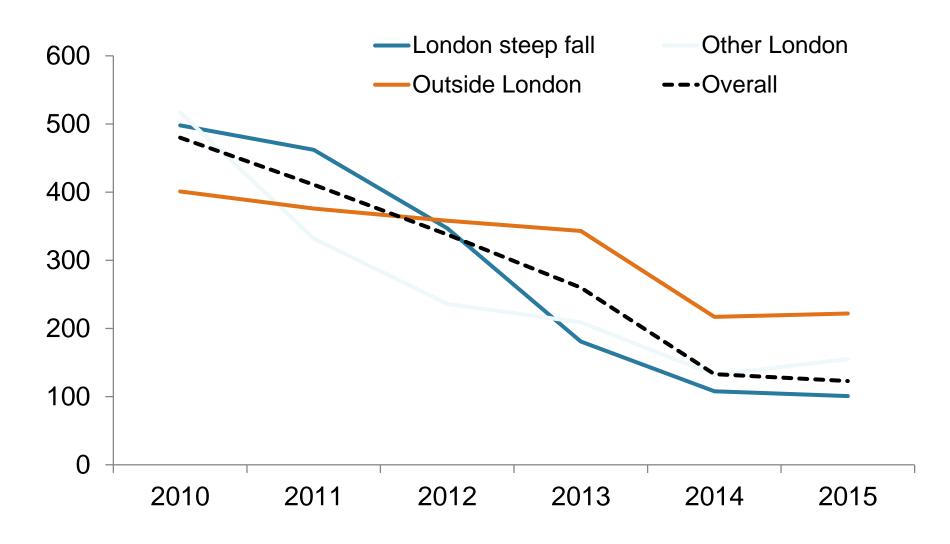
HIV tests among gay men attending London Steep Fall clinics by frequency of HIV testing



Steep Fall: Clinics with >20% decrease in HIV diagnoses between Oct 2014-Sep 2015 and Oct 2015-Sep2016, and over 40 diagnoses during this period.

Delpeche Towards elimination of HIV amongst gay and bisexual men in the United Kingdom. BHIVA Conference 2017

Median days from HIV diagnosis to ART initiation among gay men in England



Summary

- PrEP is a fundamental component to HIV prevention
- PrEP is contributing to the drop in HIV infections and diagnoses in MSM
- We now need to ensure that all at risk benefit from the same effect

 PrEP gives us the opportunity to provide better and more impactful sexual health services