PrEP Impact Trial: Background

2008 – 2014: PrEP efficacy and effectiveness established through randomised trials

2014 – 2016: Multi-disciplinary, multi-stakeholder working group developed PrEP policy proposals for England – Consultation and Impact Assessment Reports and Policy Proposition (October 2016)

November 2016: PHE advised NHS England on a series of key outstanding questions concerning PrEP need, uptake and duration of use, all of which directly effect the certainty of cost-effectiveness, the budgetary impact and the return on investment of a publically funded equitable service

December 2016: Joint announcement by NHS England & PHE of a trial of at least 10,000 participants over three years to answer the policy questions and to begin by the Summer of 2017

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How well does clinical outcome predict recent MSM behaviour?

Risk level (diagnosis in prior year and/or at first GU clinic attendance of year)	Recent behaviour of sub-sets of MSM GUM clinic attendees – Four ad-hoc studies							
	2012-13 Behavioural Study 1,367 HIV-ve MSM 5 clinics (last 3 months)		**2014-15 GUMCAD v3 Pilot** 867 MSM, 5 clinics (last 3 months)		**2011 Clinical Notes Audit** 584 HIV-ve MSM, 15 clinics (last 6 months)		**2012-14 PROUD trial** (545[1] HIV-ve MSM, 14 clinics) (last 3 months)	
	≥5 partners	≥1 URAI partner	≥5 partners	≥1 URAI partner	≥5 partners	≥1 URAI partner	≥5 partners	≥1 URAI partner
High-risk (bacterial STI)	**39%** 190/491	**46%** 161/353	**20%** 30/149	**33%** 41/124	**9%** 9/102	**67%** 31/46	**87%** 208/239	**87%** 202/233
Most-at-risk (rectal bacterial STI Sub-set)	***28%*** *34/120*	***62%*** *42/68*	***42%*** *8/19*	***56%*** *9/16*	*n/a*	*n/a*	***82%*** *63/77*	***95%*** *69/73*
Medium-risk (no bacterial STI)	**32%** 269/842	**35%** 212/614	**15%** 52/338	**28%** 68/245	**6%** 20/359	**59%** 116/198	**58%** 69/120	**81%** 92/114

Comparison of responses to behavioural questions with contemporary GUM clinic electronic patient record
Each data cell contains **x/n**, where **n** is the survey number in the clinical outcome risk level AND who answered the behavioural question, and **x** is the number of those who had the behaviour. Second row is italicised as subjects in this row are a subset of the row above.

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PrEP Impact Trial: Aims & Objectives

Aim

Test the hypothesis that consensus estimates using best available data on PrEP need, uptake and duration of use are correct and, if not, provide accurate measures across the complexity of the population likely to benefit

Objectives

a) To measure PrEP-eligibility, PrEP-uptake, duration of PrEP-eligibility and duration of PrEP-use among Genitourinary Medicine (GUM) clinic attendees

b) To determine whether or not incident HIV infections in trial participants are due to non-adherence or biological failure

c) To measure change over time in HIV diagnoses and incidence rate in those at high HIV risk

d) To measure change over time in bacterial STI diagnoses and incidence in those at high HIV risk

e) To measure the PrEP 'prevention care continuum ' by clinic throughput and in different regions

PrEP Impact Trial : Drug and MHRA opinion

a) Bioequivalent branded or generic Tenofovir Disoproxil (TD)/ Emtricitabine (FTC);

b) TD/FTC that has UK or EU market authorisation (MA) for treatment or for treatment and PrEP;

c) To be used off label, for event-based-dosing (EBD) in accordance with established practice supported by clinical evidence;

d) If chosen drug only has MA for treatment , then it will be used off label, for both PrEP and EBD in accordance with established practice supported by clinical evidence;

e) MHRA has declared the PrEP Impact Trial is not an 'interventional clinical trial' and the MHRA algorithm classifies it as a 'non-interventional clinical trial'.

PrEP Impact Trial: Implementation Issues

1. A ‘non-interventional’ trial
2. In accordance with established practice supported by clinical evidence
3. Regular clinical risk assessment
4. As a component of ‘active risk reduction’
5. In line with national guidance
6. Relationship of existing or imminent guidelines to ‘established practice’

PrEP Impact Trial: Three Eligibility Criteria

1. Men (Cis- and trans) and trans women

a. Have sex with men;
b. Have had an HIV negative test during an earlier episode of care in the preceding year;
c. Report condomless intercourse in the previous 3 months;
d. Affirm likelihood of condomless intercourse in the next 3.

2. HIV negative partner of HIV positive person when

a. The HIV positive partner is not known to be virally suppressed (<200 copies/ml for 6 months or more);
b. Condomless intercourse is anticipated before treatment of the HIV positive partner takes effect.

3. HIV negative persons who

Are clinically assessed and considered to be at similar high risk of HIV acquisition as those with a serodiscordant partner who is not known to be virally suppressed.

What is 'high risk' for HIV acquisition?

Risk group	Estimated HIV incidence	95% CI
All	0.15%	0.13%-0.17%
MSM	1.34%	1.15%-1.53%
HIV test 42-365 days prior to current attendance	2.4%	2.0%-2.8%
Diagnosed with bacterial STI in previous year and/or at current attendance	3.3%	2.8%-4.0%
Diagnosed with rectal bacterial STI in previous year and/or at current attendance	5.2%	3.7%-6.7%
Received post-exposure prophylaxis (PEP) in previous year	3.3%	1.7%-6.3%
Heterosexuals	0.03%	0.02% -0.04%
Black African heterosexuals	0.17%	0.08%-0.27%

Numbers eligible for PrEP by local authority of residence

Band	Number of local authority residents eligible for PrEP Range per Band	Number of Local Authorities per Band
A	0-50	99
B	51-100	25
C	101-200	16
D	201-300	7
E	301-650	5
	Total	152

BASHH 2012 Recommendations for STI testing in MSM

How frequently should STI testing be offered to MSM?

All sexually active MSM should be tested for STIs at least annually.

MSM at high risk of STIs should be tested every 3 months.

High risk includes:

— any unprotected sexual contact (oral, genital or anal) with a new partner

— following the diagnosis of a new STI

— drug use may be a marker of high risk behaviour and a detailed sexual history is required in this group.

PrEP Impact Trial – the National Team

Local Teams to be added

Chief-Investigator: Professor Brian Gazzard – Chelsea and Westminster NHS Foundation Trust

Co-Investigators: Dr Anne Sullivan, Professor Sheena McCormack, Professor Noel Gill, Dr Monica Desai, Dr John Saunders, Dr Valerie Delpech, Dr Laura Waters, Dr Cecilia Priestley, Dr Kaveh Manavi

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