

Warsaw Summit 2019

Is PrEP working? How about U=U? And how would we know?

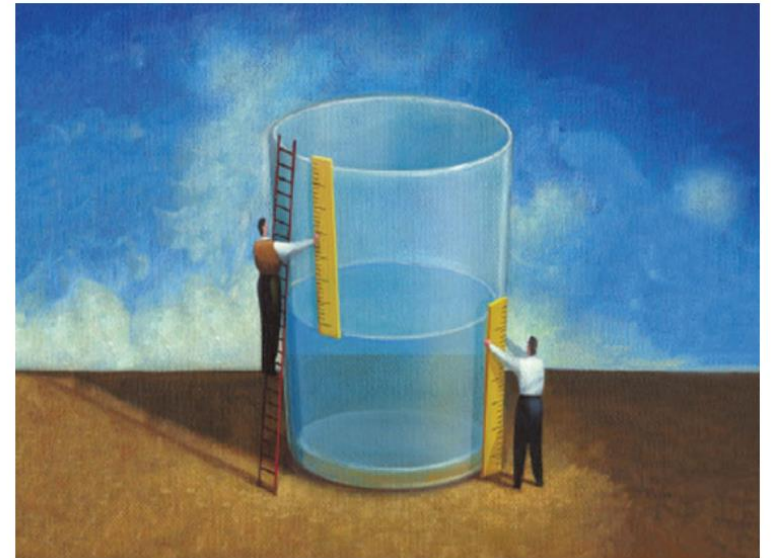
Valerie Delpech
Public Health England
Watipa

What I plan to cover

- **Valerie:** I have asked you to take a look at
- the evidence for the public health effects of PrEP.
- Does PrEP work on a population level? How would we know if it was? What's the evidence? Where from (UK? US? Australia? Lower income settings?)
- How do we disentangle, if we can, the effect of PrEP from the effect of U=U and does it matter?
- And finally, though we will be looking at this in more detail, to what extent does the effect of PrEP go beyond its mere efficacy and act as a catalyst for better sexual healthcare and health-seeking behaviours? A lot in 20 minutes, I know. - GUS

Questions – Raise your hand (glass!)

- Can we end HIV in our life time?
- If we can will we?
- Is Prep the solution we have been waiting for?



Take home message

- PrEP works and is working, it is a key prevention tool and is cost-saving
- PrEP can be scaled up relatively quickly provided there is a good infrastructure to monitor its impact at the individual and population level.
- The relative contribution of PrEP in reducing transmission is context and setting specific
- PrEP will work best as part of Combination Prevention Programme specific to needs of the local community

TASP

Traitement AS Prévention

Traitement comme moyen de prévention

—

**Le TasP et la
PrEP : les deux
faces d'une
même
médaile**



Is Prep working (in the real world)?

Efficacy vs Effectiveness

Efficacy for men yes

Efficacy for women ???

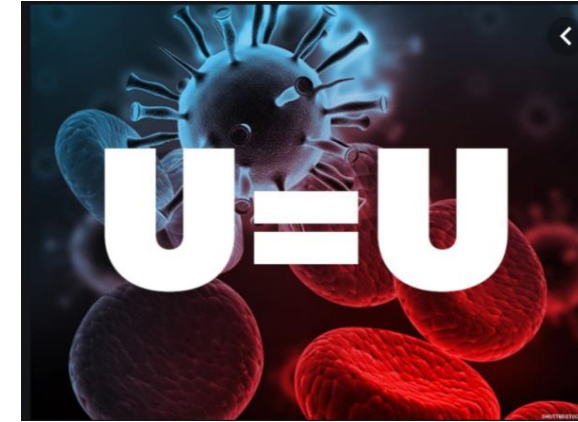
‘We urge the regulators to hold product developers to a higher standard in drug development plans that will gain sufficient data across a range of populations in a timely and efficient manner’

What modelling work tells us

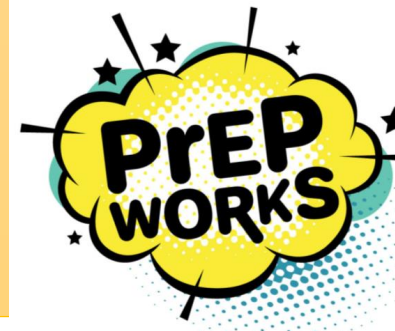
- There is agreement that PrEP works, is cost-effective and benefits health (eg from Netherlands, UK, Germany)
- Cost saving models extend to a 40 year period – this time can be substantially reduced if using low-cost drugs and services
- The number of persons who are at high risk and on PrEP is a key parameter to the epidemiological and economic impact
- Other important parameters including cost of ARVs, daily vs event based PreP use and uptake by low risk persons
- However models rely on assumptions that are only true today and may not be good predictors of the future....

COMBINATION PREVENTION

Combination or high-impact prevention is a set of strategically-selected interventions that matches the needs of a given country or community--and is delivered at the scale needed to make an impact. It means doing less of something and far more of others. It means making tough decisions and measuring impact. Above all, it means moving with clarity and speed. (AVAC)



—
Le TasP et la
PrEP : les deux
faces d'une
même
médaille



TASP

Traitement AS Prévention

Traitement comme moyen de prévention



Euro Surveill. 2019 Feb 14; 24(7): 1800398.

doi: [10.2807/1560-7917.ES.2019.24.7.1800398](https://doi.org/10.2807/1560-7917.ES.2019.24.7.1800398)

PMCID: PMC6381659

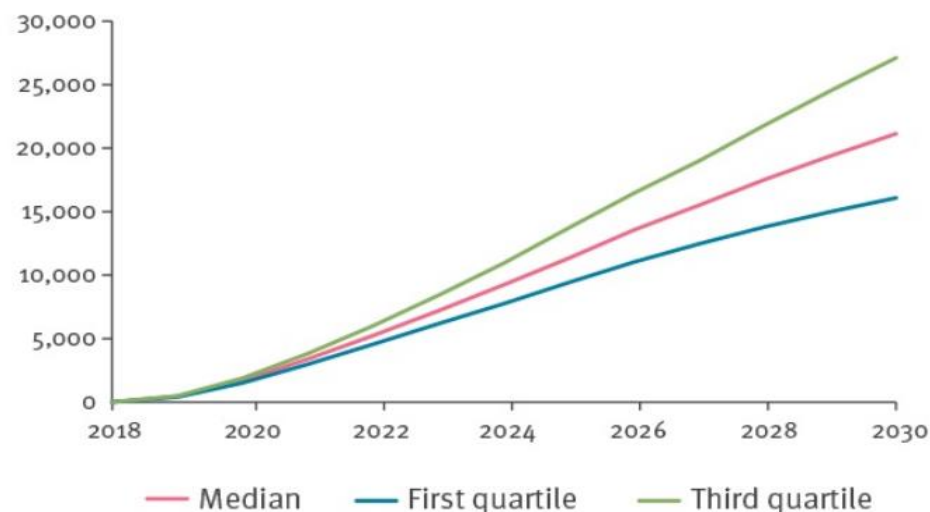
PMID: [30782266](https://pubmed.ncbi.nlm.nih.gov/30782266/)

Cost-effectiveness and budget effect of pre-exposure prophylaxis for HIV-1 prevention in Germany from 2018 to 2058

David A M C van de Vijver,¹ Ann-Kathrin Richter,² Charles A B Boucher,¹ Barbara Günsenheimer-Bartmeyer,³ Christian Kollan,³ Brooke E Nichols,^{1,4,5} Christoph D Spinner,^{6,7} Jürgen Wasem,² Knud Schewe,⁷ and Anja Neumann²

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Cumulative number of infections averted



Abstract

Go to:

Background

Pre-exposure prophylaxis (PrEP) is a highly effective HIV prevention strategy for men-who-have-sex-with-men (MSM). The high cost of PrEP has until recently been a primary barrier to its use. In 2017, generic PrEP became available, reducing the costs by 90%.

Aim

Our objective was to assess cost-effectiveness and costs of introducing PrEP in Germany.

Methods

We calibrated a deterministic mathematical model to the human immunodeficiency virus (HIV) epidemic among MSM in Germany. PrEP was targeted to 30% of high-risk MSM. It was assumed that PrEP reduces the risk of HIV infection by 85%. Costs were calculated from a healthcare payer perspective using a 40-year time horizon starting in 2018.

Results

PrEP can avert 21,000 infections (interquartile range (IQR): 16,000–27,000) in the short run (after 2 years scale-up and 10 years full implementation). HIV care is predicted to cost EUR 36.2 billion (IQR: 32.4–40.4 billion) over the coming 40 years. PrEP can increase costs by at most EUR 150 million within the first decade after introduction. Ten years after introduction, PrEP can become cost-saving, accumulating to savings of HIV-related costs of EUR 5.1 billion (IQR: 3.5–6.9 billion) after 40 years. In a sensitivity analysis, PrEP remained cost-saving even at a 70% price reduction of antiretroviral drug treatment and a lower effectiveness of PrEP.

Conclusion

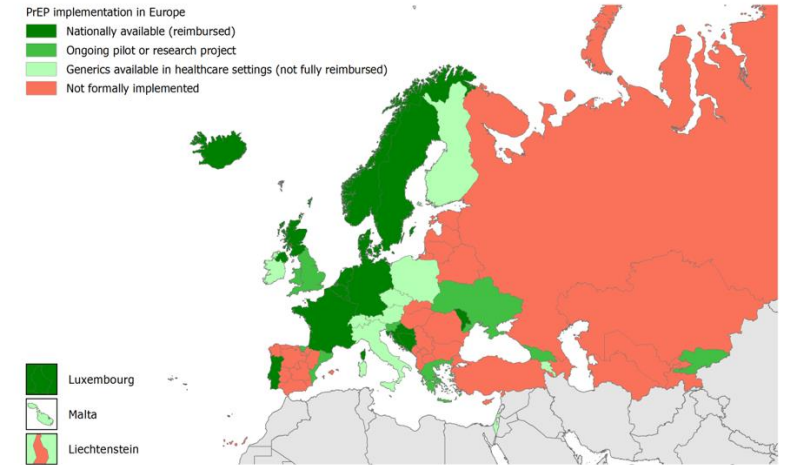
Go to:

Introduction of PrEP in Germany can reduce the HIV epidemic among MSM in a cost-saving manner. PrEP is predicted to remain cost-saving even when generic versions of antiretroviral drug treatment become available. Introduction of PrEP will, however, require short-term financial investments which are predicted to result in substantial cost-savings after a period of at least 10 years.

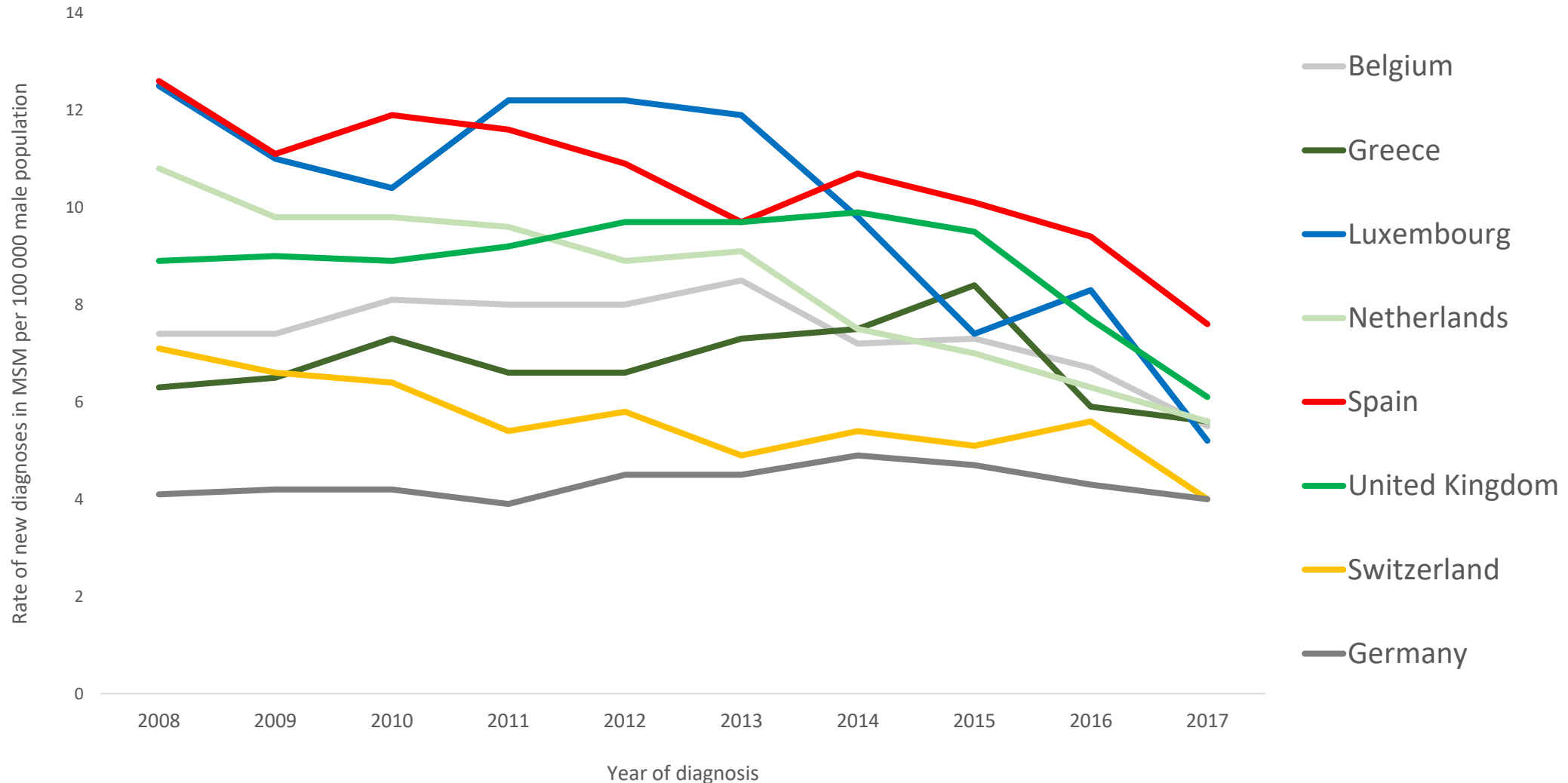
Population-level effectiveness

- Few International examples
- Uptake has been slower and has been geographically patchy.
- Sydney/NSW Australia is probably best case study to date.
- In the USA, HIV PrEP was approved in 2012, and CDC estimated that 492 000 MSM (25% of all sexually active MSM) would benefit from PrEP. So far uptake is slow and better in some cities eg San Francisco
- Few countries in Europe have implemented PrEP

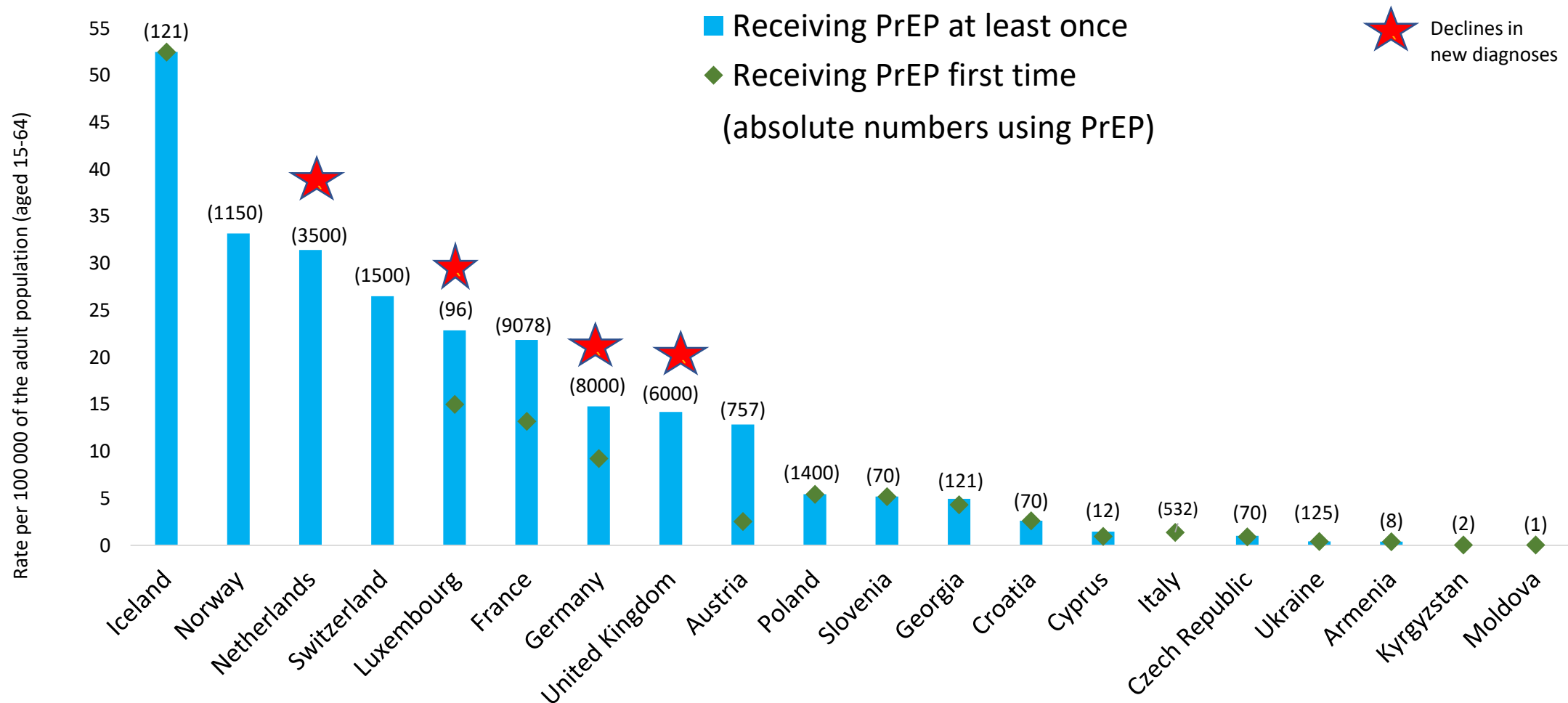
Figure 1: Status of PrEP implementation in Europe and Central Asia, Dublin Declaration monitoring, September 2019



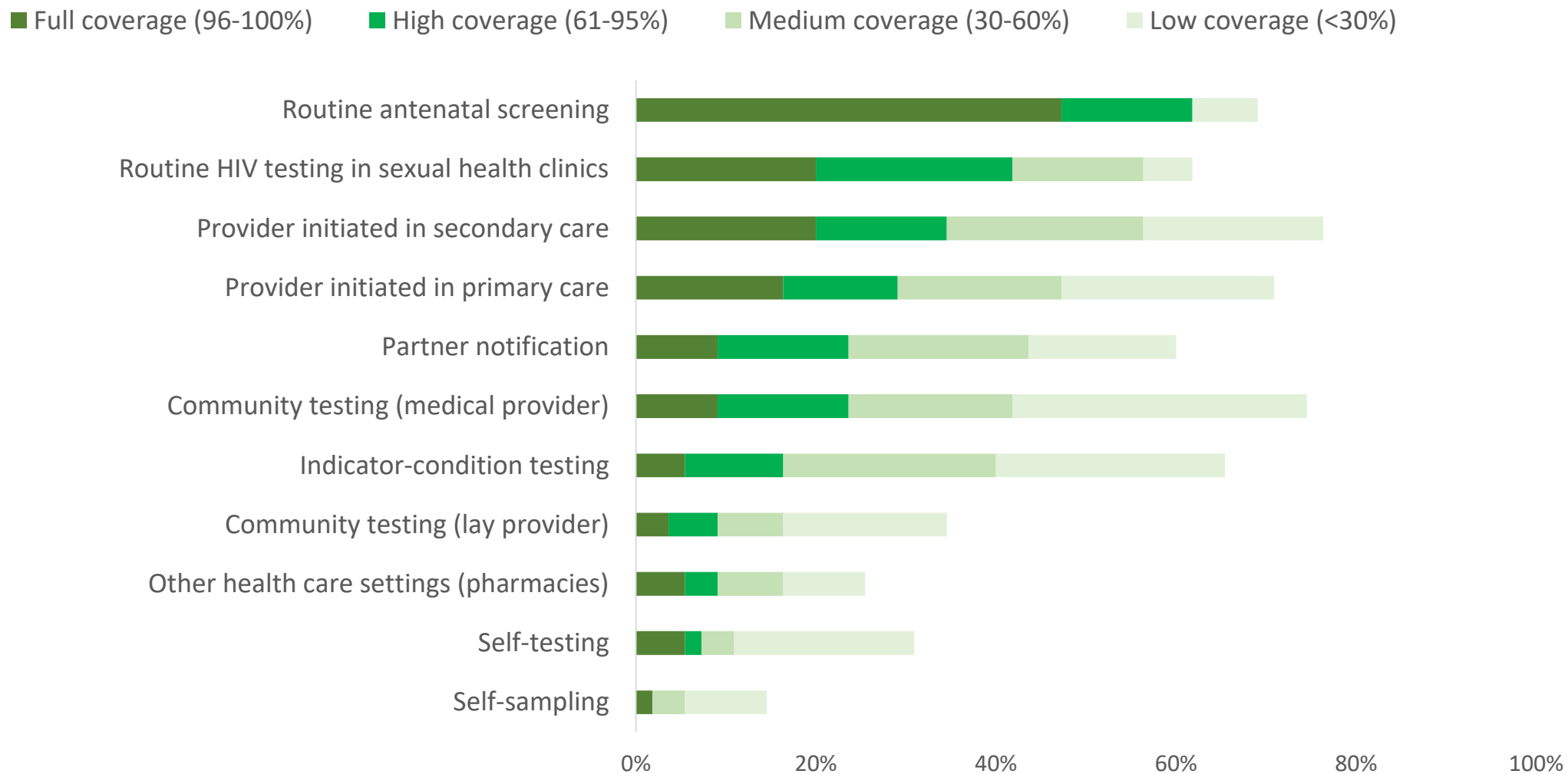
Countries showing declines in the rates of new HIV diagnosis reported in MSM 2008-2017



Numbers receiving PrEP in the last 12 months per 100 000 of the adult population (aged 15-64), 2018



Coverage of diverse modes of HIV testing



Prep is working but its impact will depend on numerous factors...

❖ Individual

❖ System

❖ People



The screenshot shows the homepage of the PrEP website. The header is a blue bar with the PrEP logo and navigation links: 'About PrEP', 'PrEP tool', 'PrEP on the NHS', 'Buy PrEP now', 'How to take PrEP', and 'PrEP Chats'. The main content area has a background image of a couple. A white box on the right side of the image contains the text 'What is PrEP?' followed by a description: 'PrEP is a pill that protects you from HIV. It is a course of tablets that you take before and after sex.' Below this is a 'Find out more' button. The bottom of the page is divided into two columns. The left column, titled 'Who needs PrEP?', lists criteria for who should take PrEP and includes a note about 100% protection against HIV. The right column, titled 'PrEP on the NHS', lists where PrEP is available in the UK.

What is PrEP?
PrEP is a pill that protects you from HIV. It is a course of tablets that you take before and after sex.
[Find out more](#)

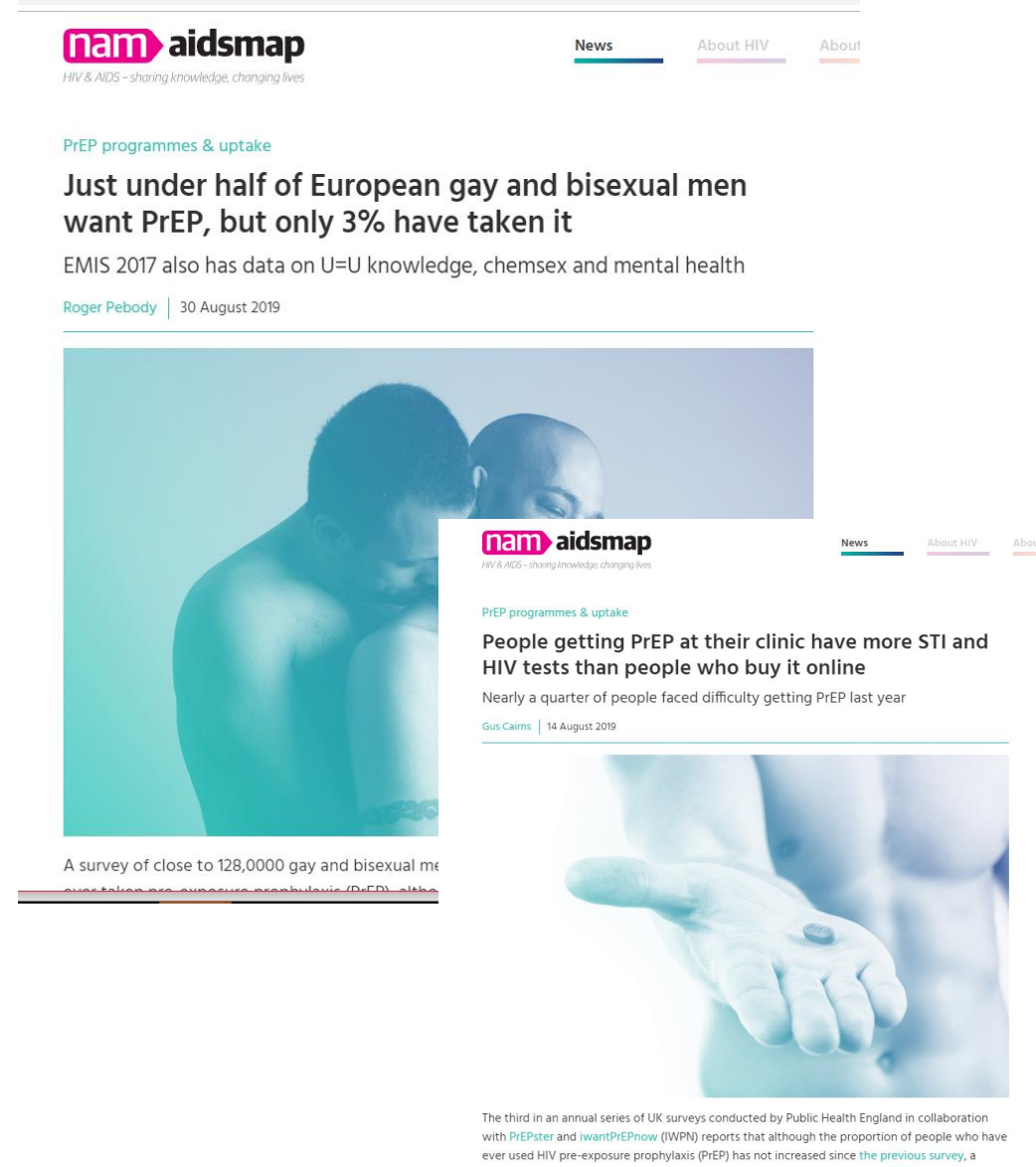
Who needs PrEP?
Anyone who:
• is HIV negative
• has sex in a variety of situations where condoms are not easily or always used
• wants to protect themselves from HIV.
If you are HIV negative and take PrEP properly, you will have almost 100% protection against HIV.
If you are HIV positive, PrEP is not suitable for you. You need antiretroviral treatment.

PrEP on the NHS
• Scotland – PrEP is provided on the NHS throughout Scotland
• Wales – PrEP is available from all NHS genitourinary medicine (GUM) clinics as part of a 3-year trial called
• England – PrEP will be available on the NHS to 10,000 people, being enrolled now, as part of the PrEP IM
• Health and Social Care in Northern Ireland have started offering PrEP through a pilot.

The Impact of Prep will depend on...

Individual factors

- ❖ Taking it - awareness, access, affordability, tolerability
- ❖ Getting monitored – awareness, access and affordability of baseline and ongoing HIV and other tests
- ❖ Getting treatment if seroconvert – awareness of U=U, access and affordable HIV care



The screenshot shows the 'nam aidsmap' website with the tagline 'HIV & AIDS - sharing knowledge, changing lives'. The navigation bar includes 'News', 'About HIV', and 'About'. The main content area features two articles under the heading 'PrEP programmes & uptake'.

Article 1:
Just under half of European gay and bisexual men want PrEP, but only 3% have taken it
EMIS 2017 also has data on U=U knowledge, chemsex and mental health
Roger Pebody | 30 August 2019

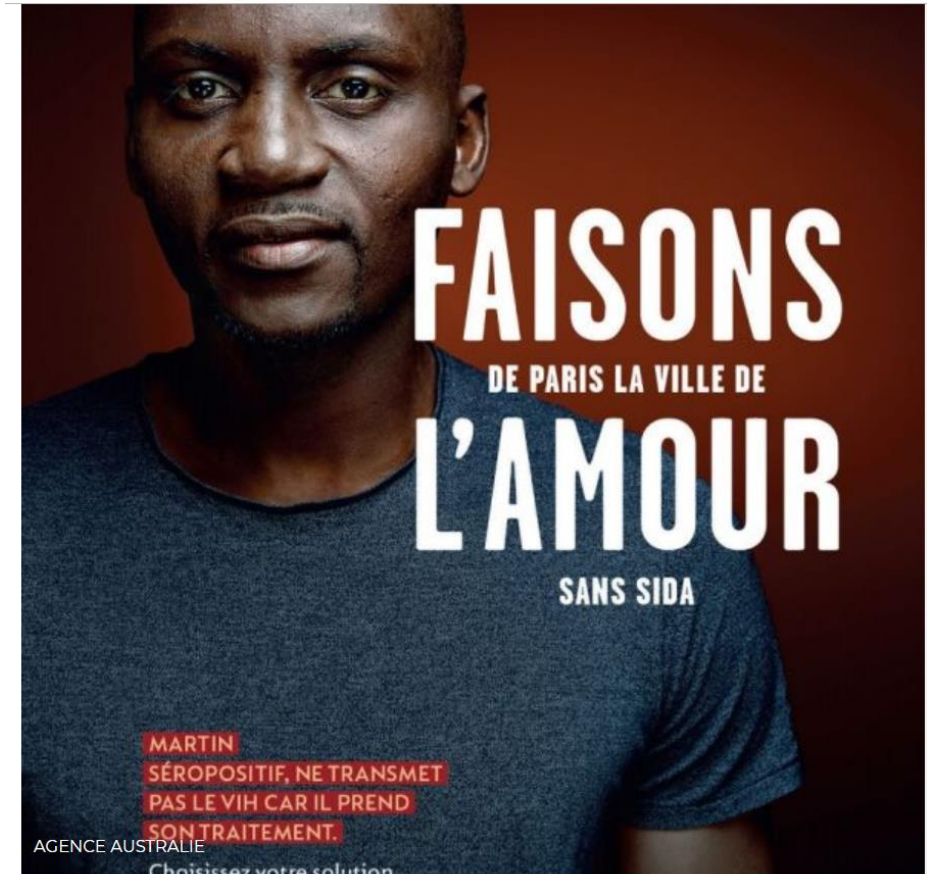
Article 2:
People getting PrEP at their clinic have more STI and HIV tests than people who buy it online
Nearly a quarter of people faced difficulty getting PrEP last year
Gus Cairns | 14 August 2019

Below the articles, there is a large image of a hand holding a pill, and a caption that reads: 'A survey of close to 128,000 gay and bisexual men...'. At the bottom, a footer states: 'The third in an annual series of UK surveys conducted by Public Health England in collaboration with PrEPster and iwantPrEPnow (IWPN) reports that although the proportion of people who have ever used HIV pre-exposure prophylaxis (PrEP) has not increased since the previous survey, a'.

The Impact of Prep will depend on...

System factors

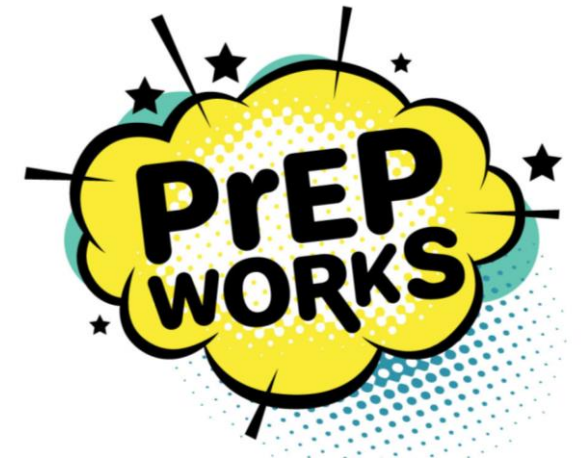
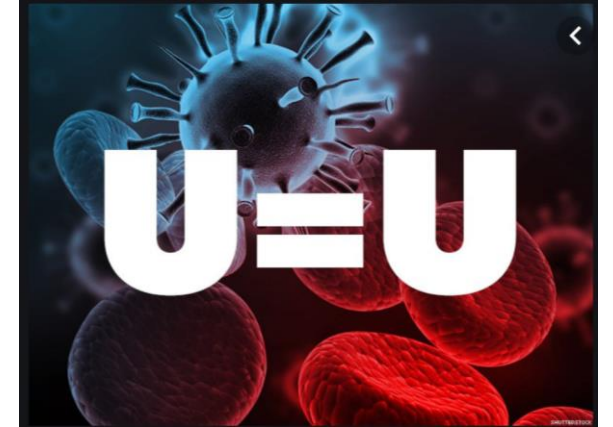
- ❖ Political will, funding, policies and guidelines
- ❖ Roll out of other combination prevention tools (eg condoms)
- ❖ Roll out of 'Test and Treat' strategies
- ❖ Scaling up of HIV and STI testing and other tests among Prep users



The Impact of Prep will depend on...

People factors

- ❖ Context of the epidemic
(prevalence/undiagnosed/incidence)
- ❖ Community ownership and engagement
- ❖ Testing 'culture' and coverage
- ❖ Knowledge of U=U
- ❖ Knowing who will most benefit
(?defining high risk ?size)
- ❖ Surveillance and monitoring systems to
guide the response (eg testing, HIV case
surveillance, people in HIV care)



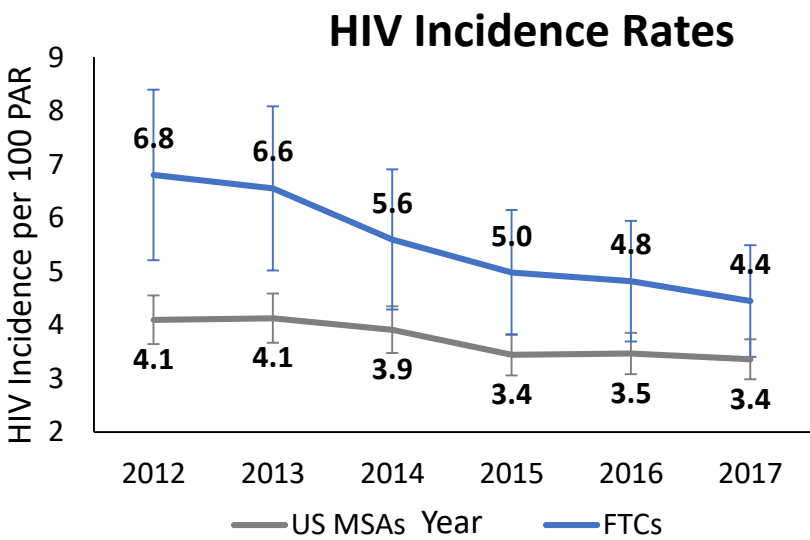
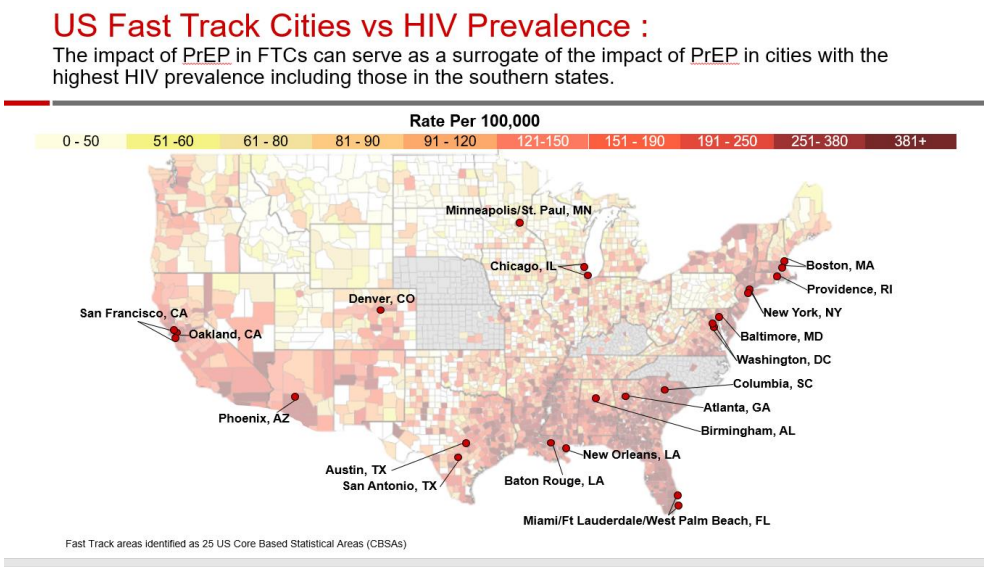
The Impact of PrEP on HIV Incidence in 19 FTCs in the US, 2012-2017

Mera R¹, **Hawkins T¹**, Bush S¹, Nguyen C¹, Anderson J¹, Asubonteng J¹, Das M¹ and McCallister S¹¹Gilead Sciences

Results: PrEP Use vs. HIV Incidence Rate in the 19 FTCs

PrEP Quintiles	PrEP utilization in 2017 (Among People At Risk) (95% CI)	HIV Incidence Rate in 2017 (Per 100 PY PAR)
1 (Lowest)	1.1% (0.9 – 1.2)	5.39 (5.25 – 5.53)
2	2.7% (2.5 – 2.9)	5.27 (5.14 – 5.41)
3	5.6% (5.1 – 6.1)	5.22 (5.08 – 5.36)
4	9.6% (9.0 – 10.3)	5.15 (5.01 – 5.28)
5 (Highest)	18.5% (16.8 – 20.3)	4.55 (4.43 – 4.66)

In 2017, HIV incidence was 15.7% lower among FTCs with the highest PrEP use (18.5 per 100 PAR) compared to those with the lowest PrEP use (1.1 per 100 PAR)



What will it take to 'End the HIV epidemic in the US': An economic modeling study in 6 cities .

Dr. Bohdan Nosyk



BRITISH COLUMBIA
CENTRE *for* EXCELLENCE
in HIV/AIDS



Our Objective

- Considering 16 evidence-based interventions to diagnose, treat and prevent HIV infection, we aimed to identify the highest-valued combination implementation strategies to reduce the public health burden of HIV/AIDS in six US cities.
- Value was estimated for interventions at previously- documented scale, and ideal implementation
 - How close can we get to the EtE incidence reduction targets?
- Value judged on the basis of quality-adjusted life years
 - International consensus as best practice
 - Captures, weighs benefits of reduced morbidity, mortality and transmission
 - Focus on equity, maximizing population health

Bohdan Nosyk, PhD^{1,2}, Xiao Zang, MSc^{1,2}, Emanuel Krebs, MA¹, Benjamin Enns, MA¹, Jeong E Min, MSc¹, Czarina N Behrends, PhD³, Carlos Del Rio, MD⁴, Julia C Dombrowski, MD⁵, Daniel J Feaster, PhD⁶, Matthew Golden, MD⁵, Brandon DL Marshall, PhD⁷, Lisa R Metsch, PhD⁸, Shruti H Mehta, PhD⁹, Ankur Pandya, PhD¹⁰, Bruce R Schackman, PhD³, Steven Shoptaw, PhD¹¹, Steffanie A Strathdee, PhD¹² on behalf of the localized economic modeling study group supported by the US National Institute on Drug Abuse (R01-DA041747)



Our focal cities: Home to 24.1% of the US population of people living with HIV/AIDS



Total adult 15-64 Population (% projected change to 2040)

Total population (2016)	3,812,143 (37%)	1,874,601 (-1%)	6,964,983 (-2%)	1,821,311 (16%)	5,865,683 (3%)	1,503,497 (15%)
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Adult 15-64 Population by race/ethnicity (% projected change in proportion by 2040)

Black / African American	1,336,469 (-1%)	553,665 (5%)	568,815 (-1%)	296,354 (-2%)	1,304,687 (-1%)	95,550 (1%)
Hispanic / Latinx	391,265 (10%)	102,495 (3%)	3,385,948 (4%)	1,246,583 (7%)	1,703,286 (4%)	137,818 (7%)
Non-Hispanic White and others	2,084,409 (-9%)	1,218,441 (-8%)	3,010,220 (-3%)	278,374 (-5%)	2,857,710 (-3%)	1,270,129 (-8%)

People Living with HIV (rate/100,000)[†]

Prevalence	31,961 (670)	16,931 (718)	48,100 (564)	26,128 (1,120)	117,260 (959)	7,768 (312)
New diagnoses	1,618 (33)	441 (19)	1,720 (20)	1,150 (49)	2,608 (21)	248 (10)
National Rank ^Δ	2	25	27*	1	21*	75*



Selected Evidence-Based Interventions

Selected from the CDC's Compendium of Evidence-Based Interventions and Best Practices for HIV Prevention

Protect

- Syringe services program (SSP)
- Medication for opioid use disorder (MOUD) with buprenorphine
- MOUD with methadone
- Targeted pre-exposure prophylaxis (PrEP) for high-risk MSM & MWID



Diagnose

- Opt-out testing in ER
- Opt-out testing in primary care (PC)
- EMR testing offer reminder
- Nurse-initiated rapid testing
- MOUD integrated rapid testing



Treat

- Case management for initiation
- Care coordination for retention
- Care coordination for retention, targeted
- EMR alert of suboptimal ART
- Same-day ART initiation
- Enhanced personal contact
- Re-linkage program

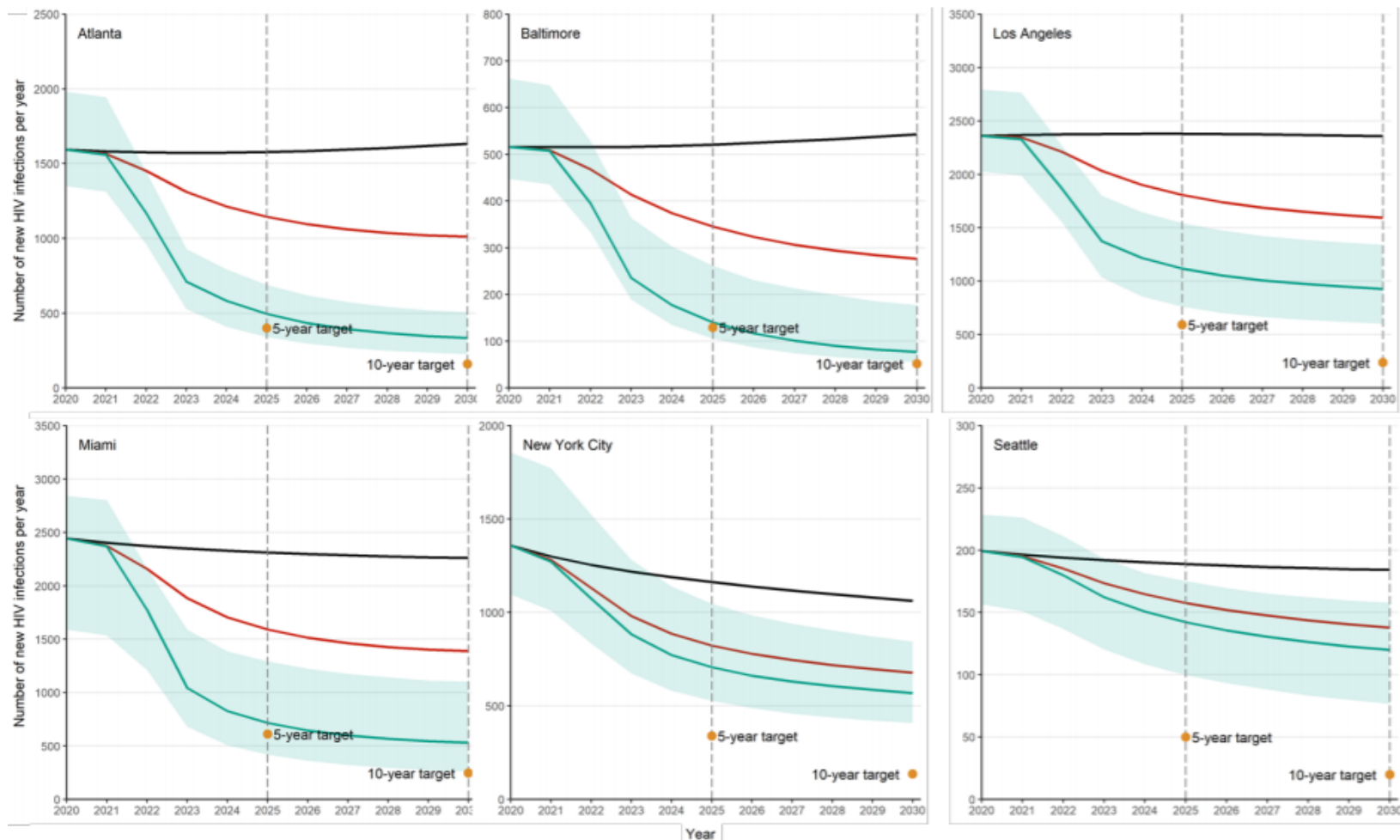


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Nosyk et al, FTC

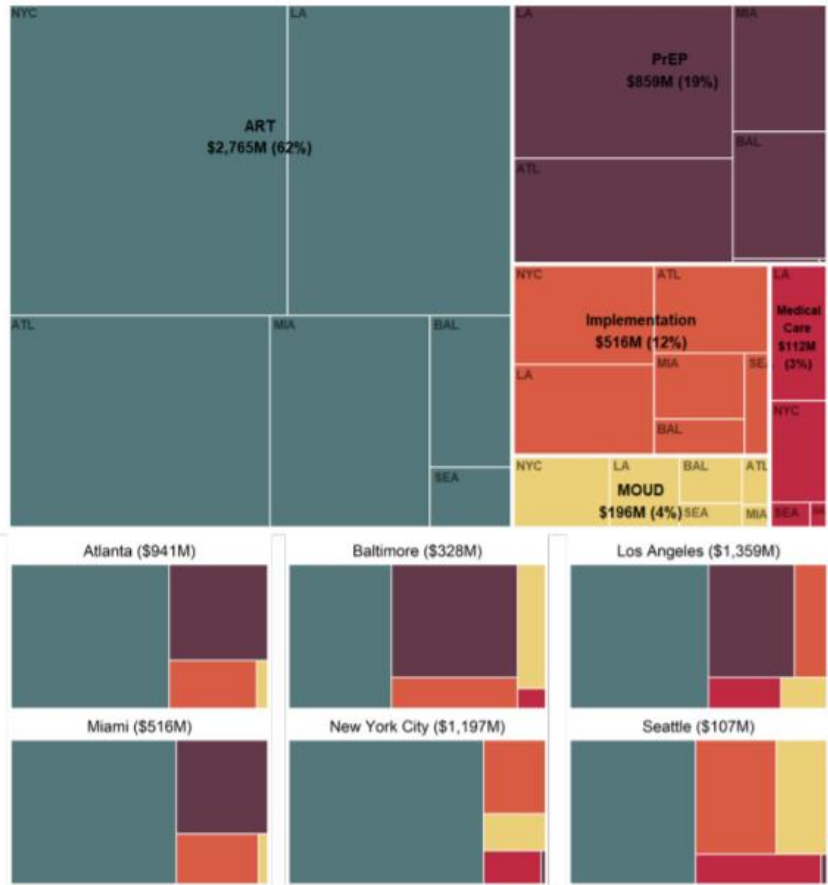
Estimated impact on HIV incidence: 2020-2030



— Status Quo — Previously-documented Scale — Ideal Implementation

- **Previously-documented scale:** incidence reductions of 30.8% (Seattle) to 50.1% (NYC) by 2030
- **Ideal Implementation:** approaching EtE targets in Atlanta, Baltimore and Miami; LA, NYC and Seattle reaching 60.7%, 58.1% and 39.8% reductions.

Estimated expenditures to implement optimal strategies at previously-documented scale: 2020-2030



- Strategies implemented at previously-documented scale-up: estimated cost of \$4.45B in present-value by 2030.
- Investment would be front-loaded, peaking at an annual expenditure of \$671M in 2024.
- Implementing these strategies for our focal cities would require 2.3 times the proposed US national budget allotment for 2020 to the 'Ending the HIV Epidemic' initiative.

Nosyk et al. Submitted 2019.



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in HIV/AIDS





Conclusions

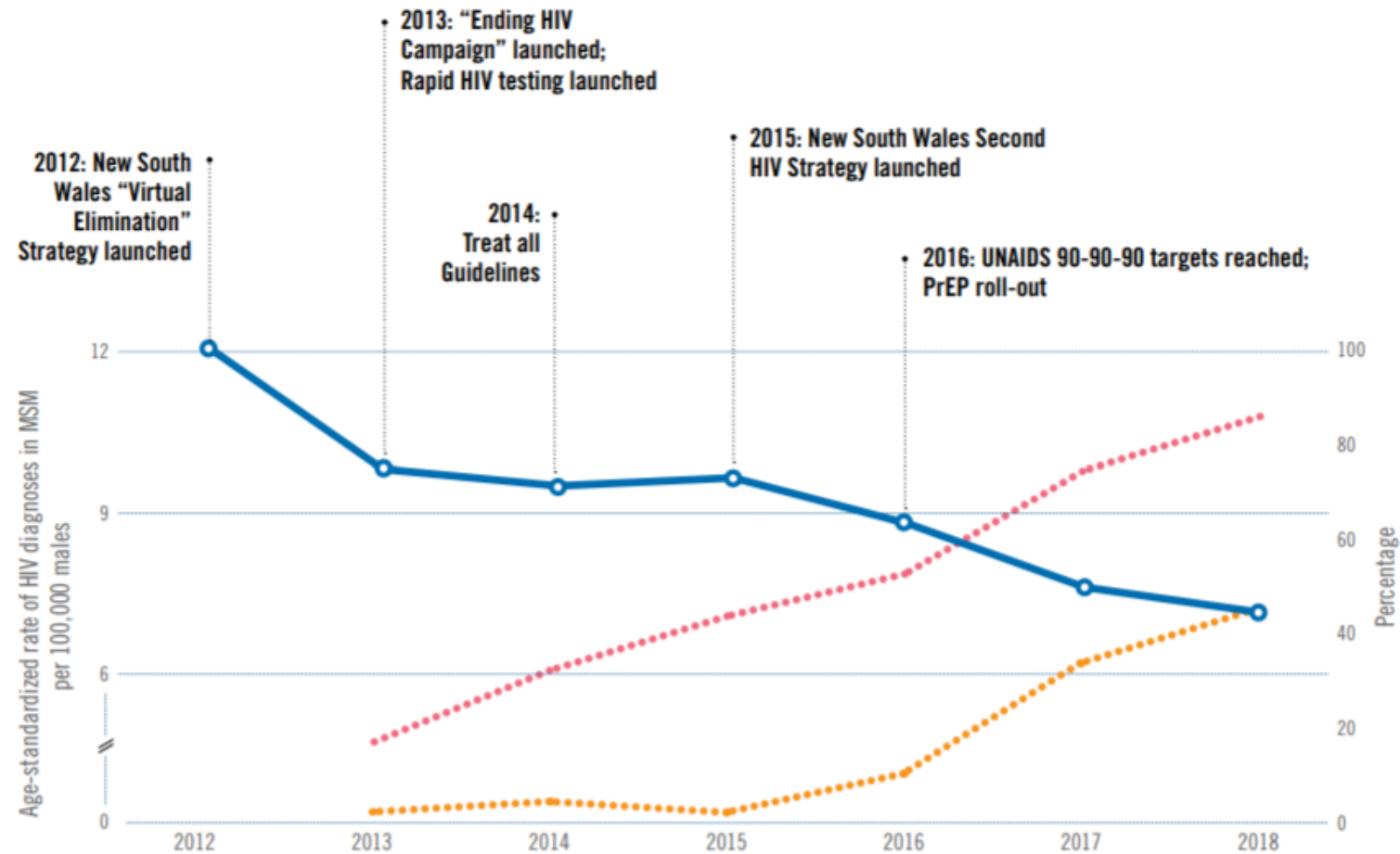
- The EtE goals are not attainable without large reductions in new infections among black and Hispanic MSM in particular.
 - At ideal implementation, incidence in 2030 among black and Hispanic MSM in Miami would be reduced by 78.8% and 84.7%, nearly eliminating disparities relative to white MSM
- We only considered costs of delivering interventions directly impacting HIV-related outcomes. People who are most likely to be living with or acquire HIV are frequently living in poverty, without stable housing or reliable health insurance, hindering access to care. The limited scale-up of delivery for interventions incorporated in this study reflects these realities.
- Interventions will need to be augmented with efforts to:
 - reduce stigma
 - improve health literacy
 - address capacity constraints in healthcare delivery
 - reduce other social and structural barriers to healthcare access

Limitations

- Simplifying assumptions in the structure of the model; transmission
- Limits in the evidence base on which it was built
- Interventions we assessed are not exhaustive
- Uncertainty on the potential scale of delivery, and the attributable costs of implementation, delivery and sustainment

New South Wales, Australia

Interventions: ■ Percent of high-risk MSM on PrEP ■ Percent of MSM on treatment by 6 weeks



Translating Progress
into Success to
End the AIDS
Epidemic



amfAR

AVAC

FRIENDS

Population-level effectiveness of rapid, targeted, high-coverage roll-out of HIV pre-exposure prophylaxis in men who have sex with men: the EPIC-NSW prospective cohort study



Andrew E Grulich, Rebecca Guy, Janaki Amin, Fengyi Jin, Christine Selvey, Jo Holden, Heather-Marie A Schmidt, Iryna Zablotska, Karen Price, Bill Whittaker, Kerry Chant, Craig Cooper, Scott McGill, Barbara Telfer, Barbara Yeung, Gesalit Levitt, Erin E Ogilvie, Nila J Dharan, Mohamed A Hammoud, Stefanie Vaccher, Lucy Watchirs-Smith, Anna McNulty, David J Smith, Debra M Allen, David Baker, Mark Bloch, Rohan I Bopage, Katherine Brown, Andrew Carr, Christopher J Carmody, Kym L Collins, Robert Finlayson, Rosalind Foster, Eva Y Jackson, David A Lewis, Josephine Lusk, Catherine C O'Connor, Nathan Ryder, Emanuel Vlahakis, Phillip Read, David A Cooper*, for the Expanded PrEP Implementation in Communities New South Wales (EPIC-NSW) research group

Rapid roll out: Target of 37000 men - recruited over 8 months, >4000 person years follow up. 2 seroconversions both non-adherent. Declines in new diagnoses and new infections over period

The study was promoted by ACON and other HIV non-governmental organisations, clinicians, researchers, and the NSW Ministry of Health. Potential participants were risk using a brief online questionnaire, administered by clinicians or peer educators

‘Our results support the population-level effectiveness of PrEP less than 2 years after commencement of PrEP roll-out. Rapid, targeted, high-coverage roll-out to scale was accompanied by rapid reductions in HIV incidence at the population level. PrEP is a highly effective element of the combination prevention approach in MSM.’

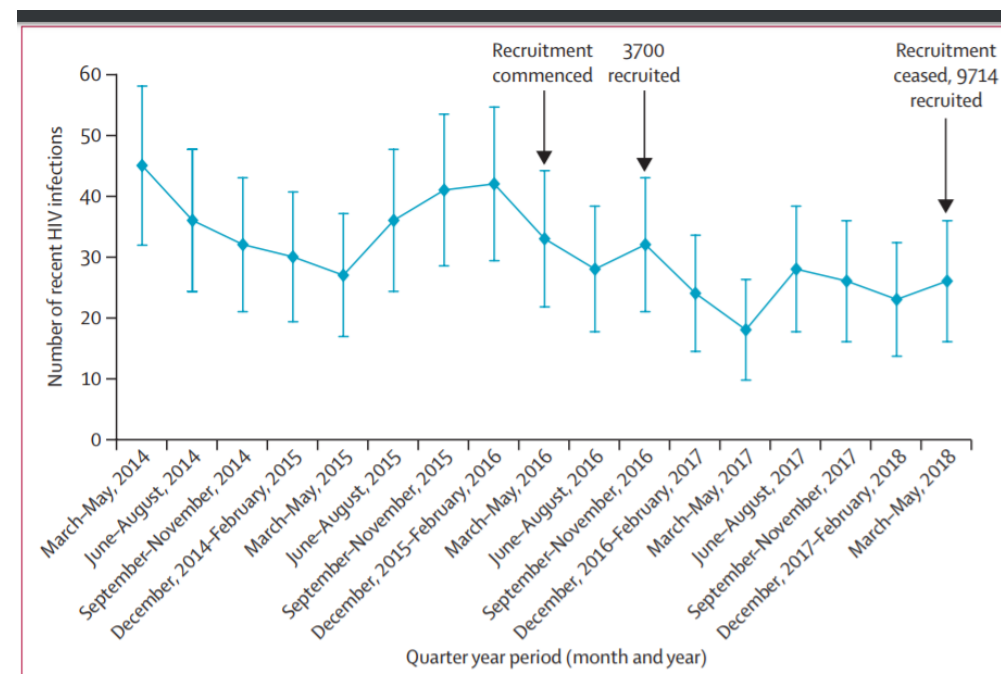


Figure 3: Trend of recent HIV infections in men who have sex with men in New South Wales by quarter, March 1, 2014, to May 31, 2018

95% CIs were calculated as the normal approximation from the Poisson distribution of number of recent HIV infections. These should be interpreted as an indicator of random variation, and should not be used to infer statistical significance of the difference between points.

	Number (%)
Receptive condomless anal intercourse with at least one casual male partner of HIV-positive or unknown status	3357 (91%)
Diagnosis of infectious syphilis or anal gonorrhoea or anal chlamydia	632 (17%)
Use of crystal methamphetamine	961 (26%)
Condomless anal intercourse with an HIV-positive regular partner who is not on antiretroviral treatment or has detectable viral load	282 (8%)
Previous PrELUDE study participant	159 (4%)

Table shows data for 3633 of 3700 participants in the EPIC-NSW study; eligibility criteria were missing for 67 participants (2%). Multiple responses were possible.
EPIC-NSW=Expanded PrEP Implementation in Communities–New South Wales.

Table 2: Enrolment behavioural risk eligibility criteria in the 3 months before enrolment

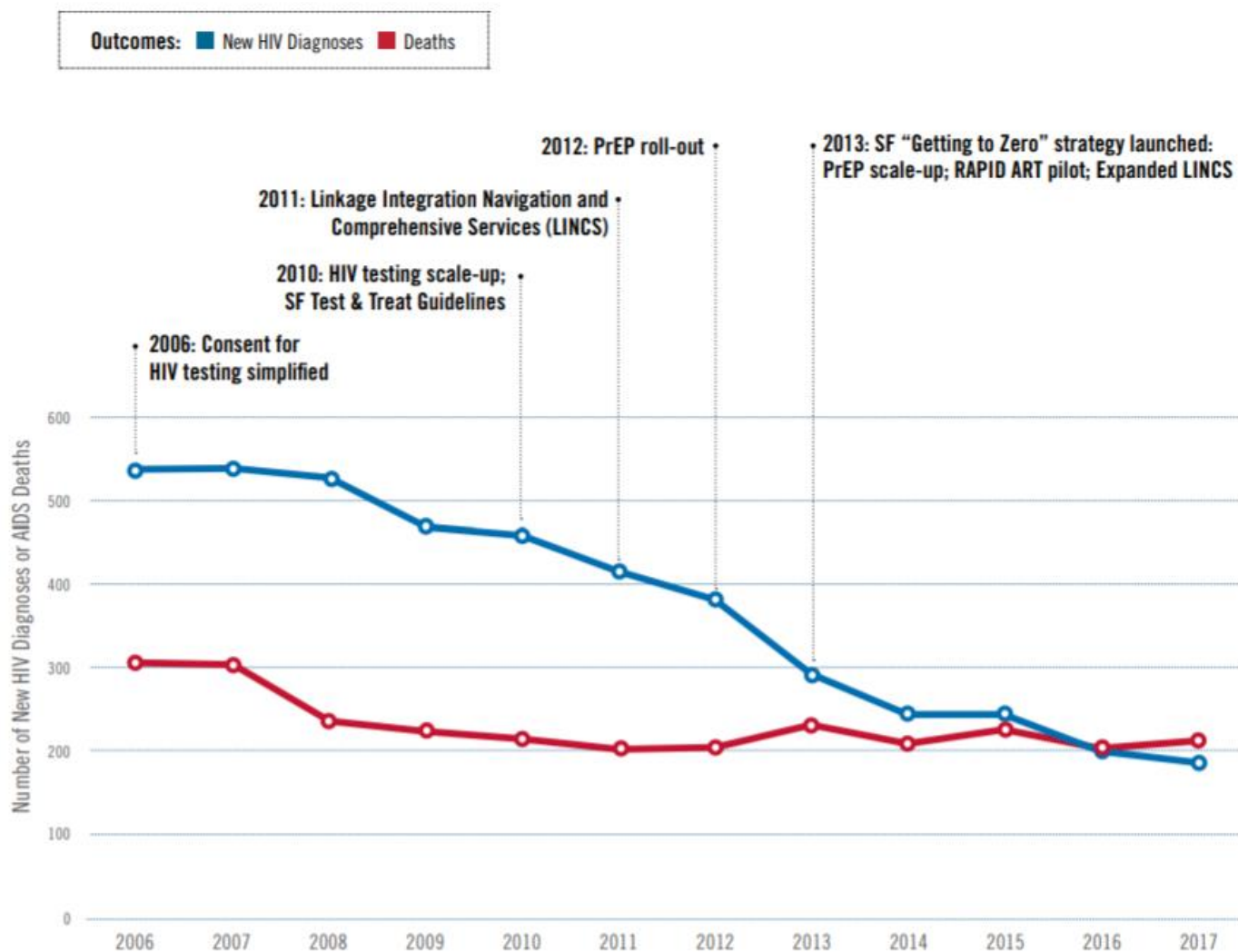


Much greater demand and uptake than anticipated
7621 participants by 12 months, almost 10,000 by 18 months 20% of sexually active gay-identifying men living in New South Wales who were HIV negative or HIV status unknown.

The continuing high rate of PrEP initiation in NSW reflects a less restrictive definition of high risk than in the initially and increasing rates of condomless anal intercourse.

Public funding of PrEP began April 1, 2018 and allows PrEP prescription by all Australian general practitioners. This should assist in ensuring more equitable reductions in HIV diagnoses.

San Francisco, California



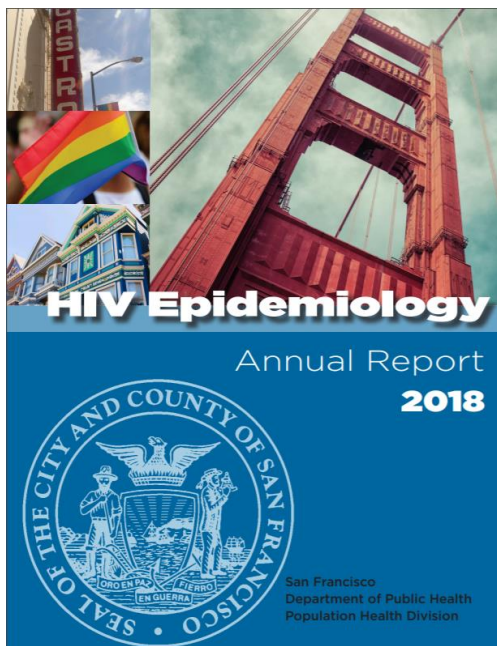
Translating Progress
into Success to
End the AIDS
Epidemic



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FRIENDS
OF THE AIDSVIS



15,990
SAN FRANCISCO RESIDENTS
WERE DIAGNOSED AND
LIVING WITH HIV AS OF
12/31/2018

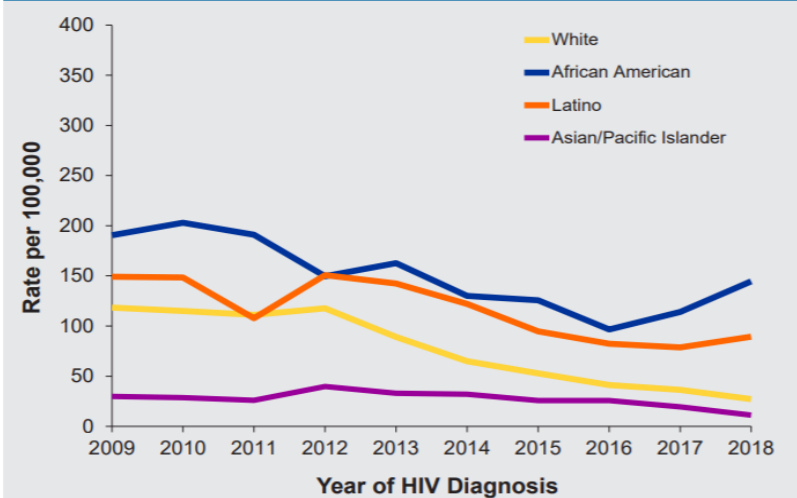
12% OF PLWH IN
CALIFORNIA

2%
OF PLWH IN THE UNITED
STATES

San Francisco

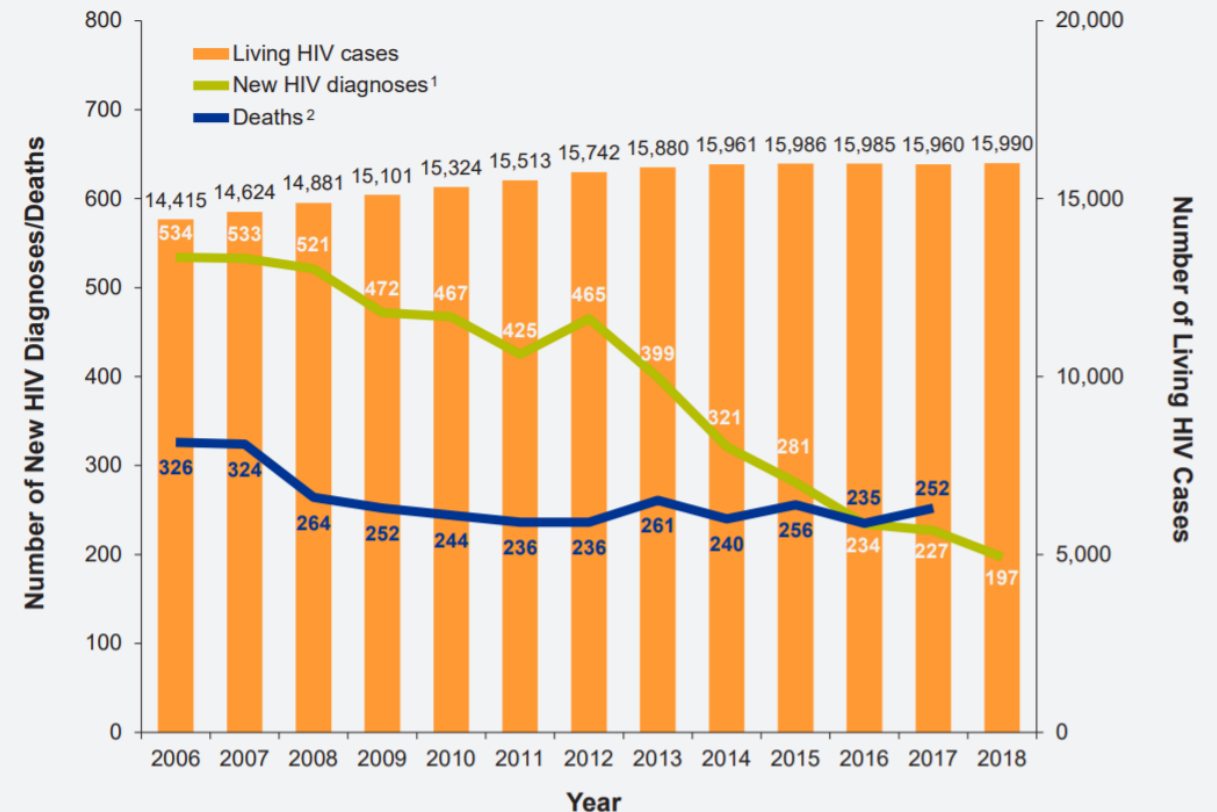
Monitoring key indicators

Figure 2.2 Annual rates¹ of men newly diagnosed with HIV per 100,000 population by race/ethnicity, 2009-2018, San Francisco



¹ See Technical Notes "HIV Case Rates and HIV Mortality Rates." Includes persons with HIV by year of their initial HIV diagnosis. Excludes transfemale cases. Rates for Native American and multi-racial cases are not calculated due to small numbers.

Figure 1.2 HIV diagnoses, deaths, and prevalence, 2006-2018, San Francisco



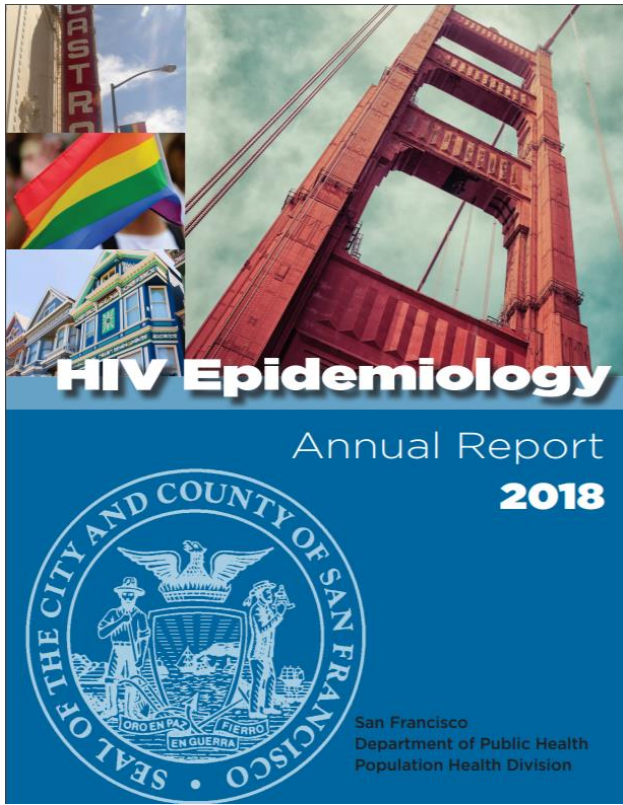
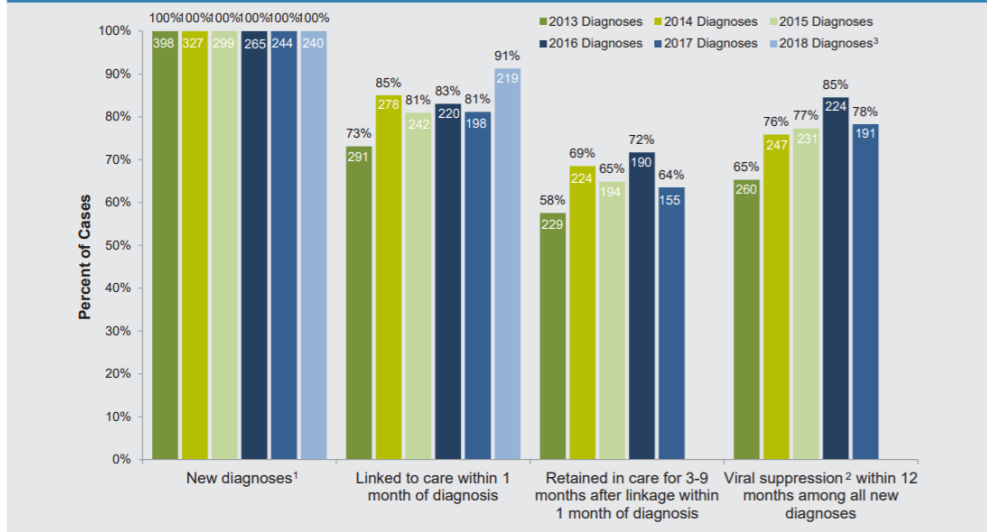


Figure 3.1 Continuum of HIV care among persons newly diagnosed with HIV, 2013-2018, San Francisco



- 1 Number of new diagnoses shown each year is based on evidence of a confirmed HIV test and does not take into account patient self-report of HIV infection.
- 2 Defined as the latest viral load test within 12 months of HIV diagnosis <200 copies/mL. See Technical Notes "HIV Care Outcomes and Definitions."
- 3 Retention in care and viral suppression data are not available yet for persons diagnosed in 2018.

Figure 3.8 Kaplan-Meier estimates of time from HIV diagnosis to viral suppression among persons diagnosed with HIV by year of diagnosis, 2013-2017, San Francisco

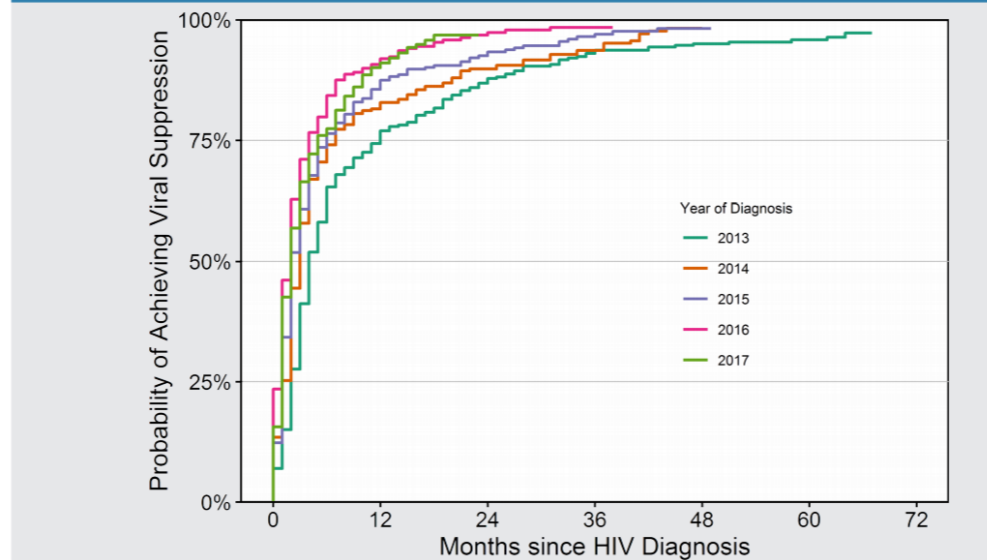
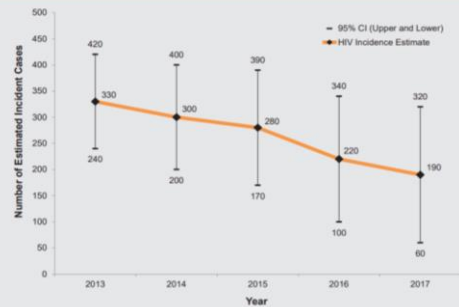


Figure 1.4 Estimated number of new HIV infections, 2013-2017, San Francisco



CI: Confidence Interval.



San Francisco

Key indicators of the PrEP continuum

were evaluated from two population-based studies; 369 HIV-negative trans women from Trans*National Study, 2016-2018 and 399 men who have sex with men (MSM) from National HIV Behavioral Surveillance System, 2017

Figure 16.1 PrEP Cascade among MSM and trans women, 2016-2018, San Francisco

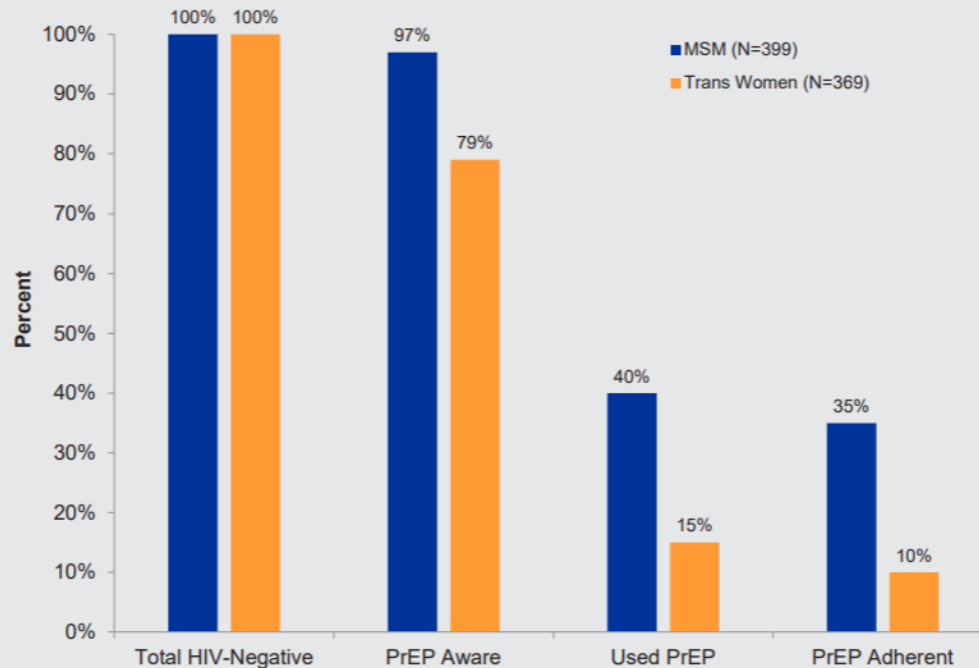
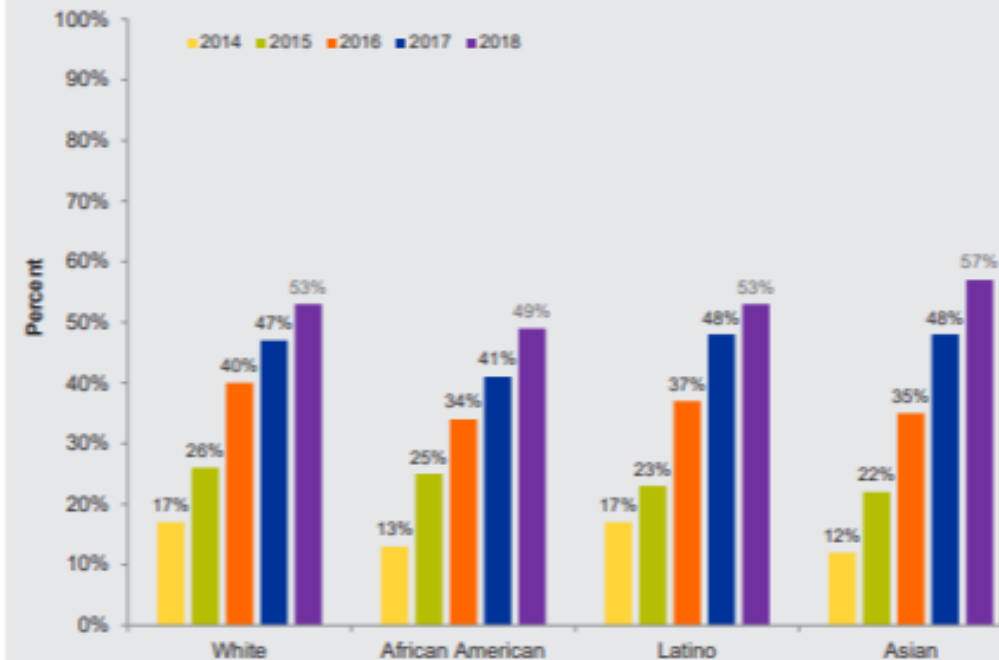


Figure 16.2 Proportion of MSM currently on PrEP by race/ethnicity, San Francisco City Clinic patients 2014-2018

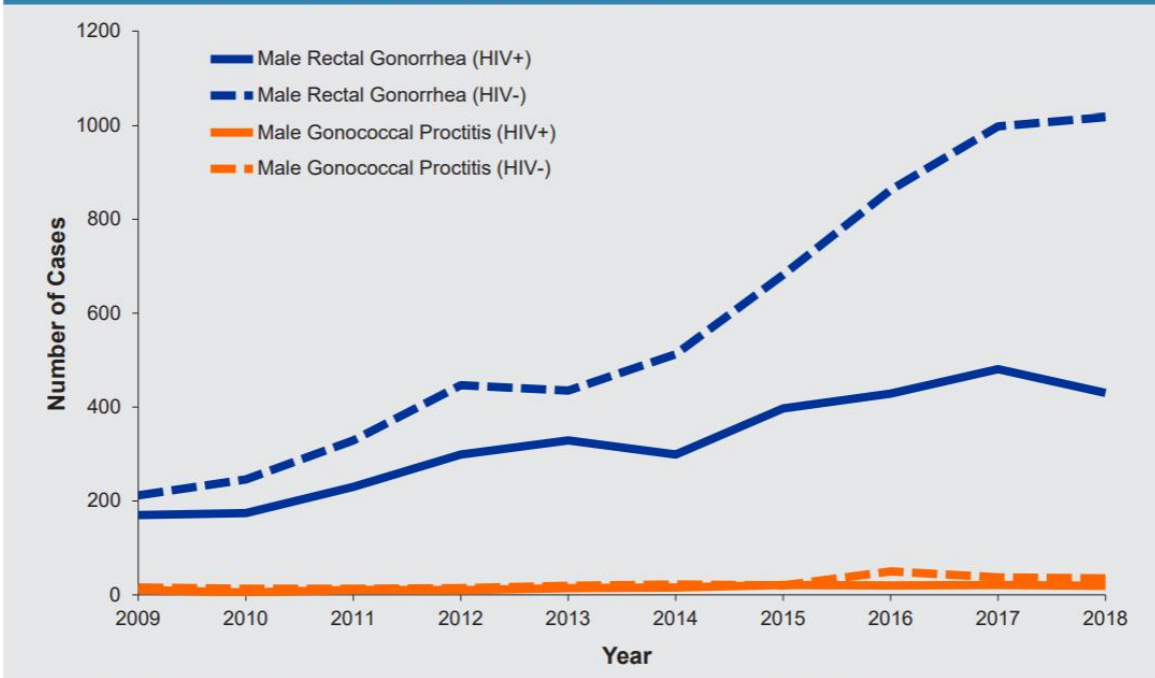




San Francisco

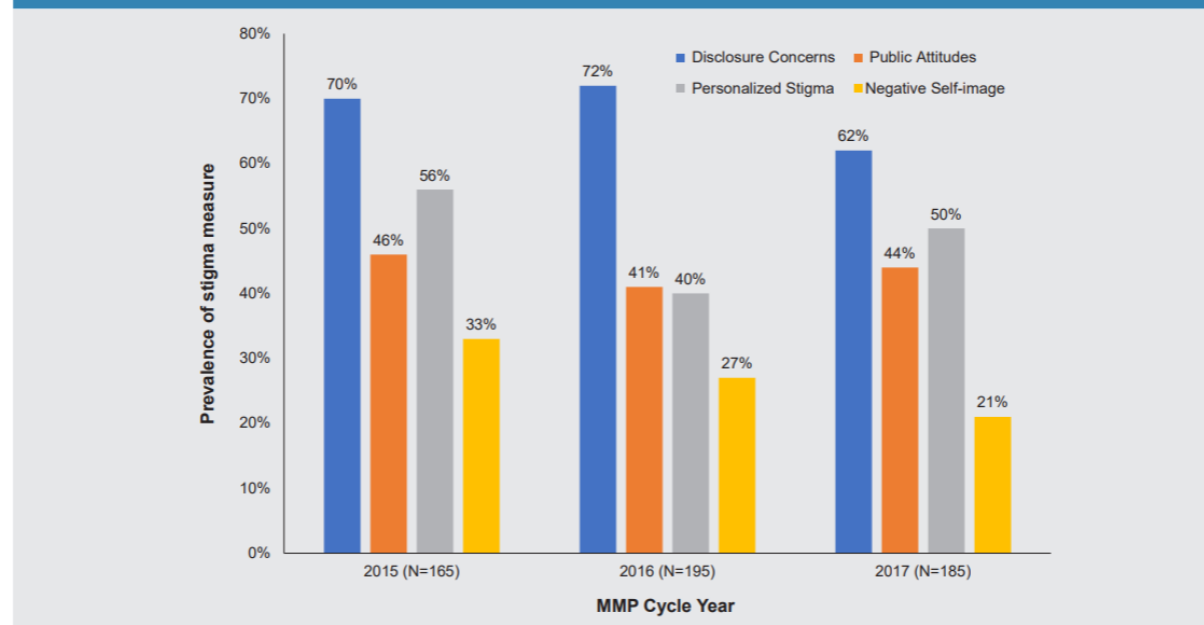
Monitoring of other key indicators

Figure 7.3 Male rectal gonorrhea and male gonococcal proctitis among MSM by HIV serostatus¹, 2009-2018, San Francisco

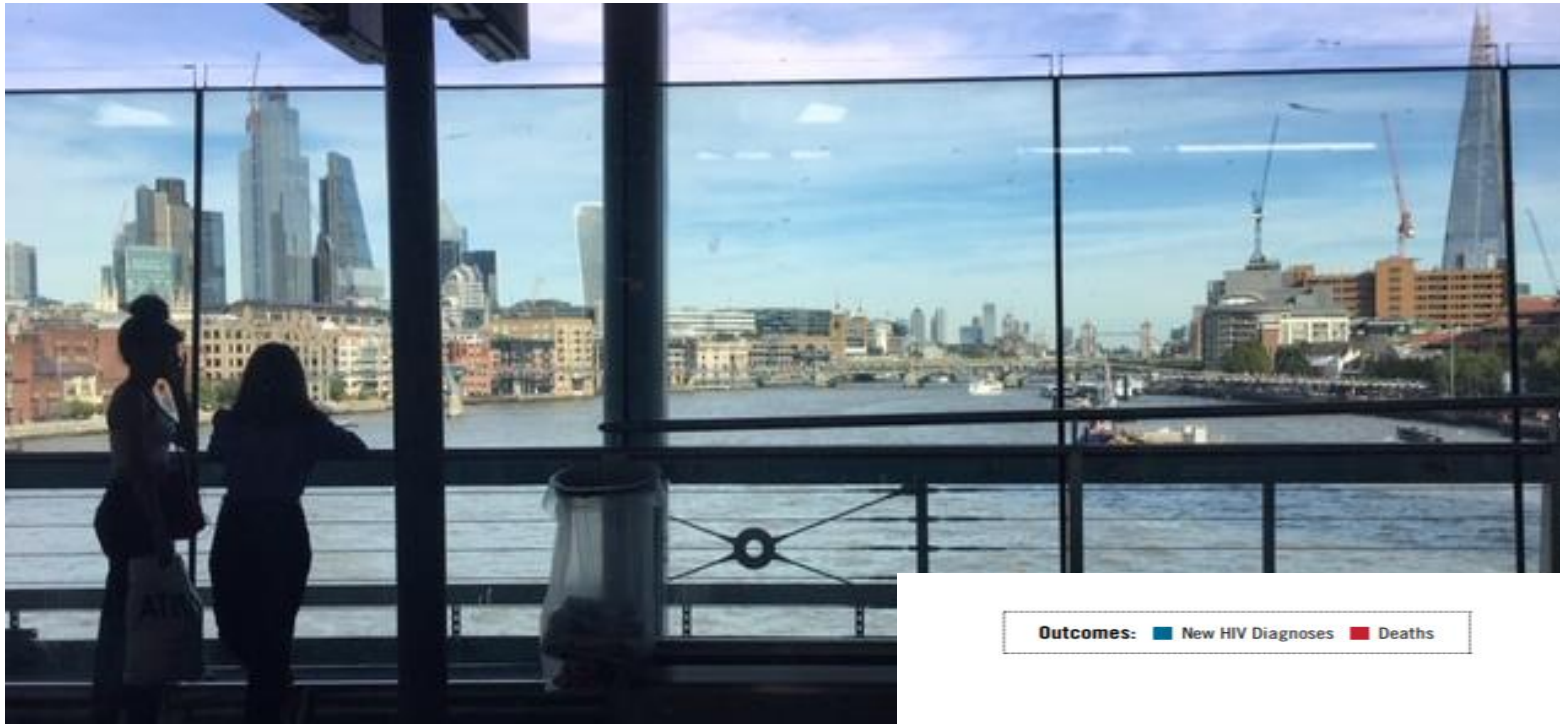


¹ Data on male rectal gonorrhea and gonococcal proctitis originate from San Francisco Department of Health STD case registry.

Figure 17.1 Prevalence of stigma measures¹ by Medical Monitoring Project, 2015-2017, San Francisco

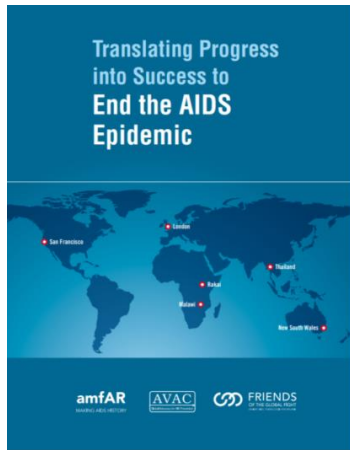
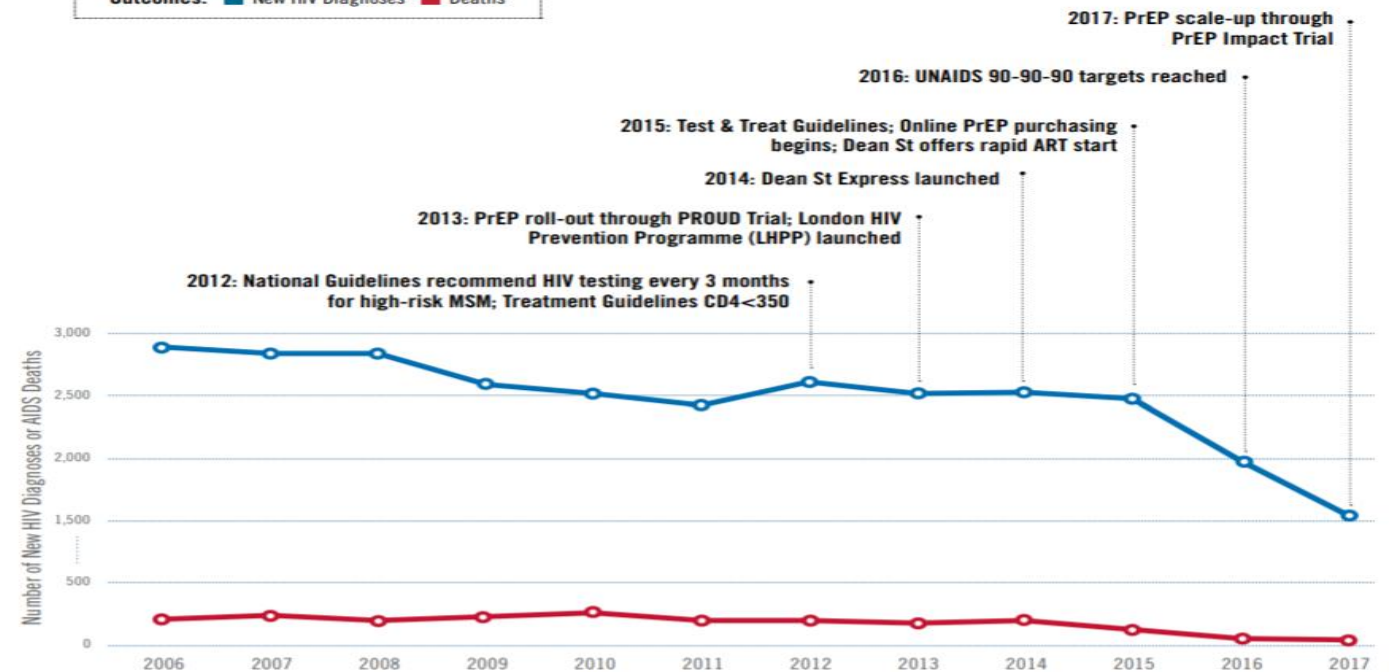


- 1 Stigma prevalence counted as "agree" or "strongly agree" to each stigma dimension as outlined below.
- 2 "I am very careful who I tell that I have HIV" or "I worry that people who know I have HIV will tell others."
- 3 "Most people think that a person with HIV is disgusting" or "Most people with HIV are rejected when others find out."
- 4 "I have been hurt by how people reacted to learning I have HIV" or "I have stopped socializing with some people because of their reactions of my having HIV" or "I have lost friends by telling them I have HIV."
- 5 "I feel that I am not as good a person as others because I have HIV" or "Having HIV makes me feel unclean" or "Having HIV makes me feel that I'm a bad person."



London, England

Outcomes: ■ New HIV Diagnoses ■ Deaths





Rapid communication

Fall in new HIV diagnoses among men who have sex with men (MSM) at selected London sexual health clinics since early 2015: testing or treatment or pre-exposure prophylaxis (PrEP)? |

Alison E Brown^{1,2}, Hamish Mohammed^{1,2}, Dana Ogaz¹, Peter D Kirwan¹, Mandy Yung¹, Sophie G Nash¹, Martina I Nicky Connor¹, Valerie C Delpech¹, O Noel Gill¹

Conclusions The 17% fall in new HIV diagnoses in MSM in England between October 2014–September 2015 and October 2015–September 2016 was focussed in five clinics which experienced a 32% decline.

The fall seen at these five clinics coincided with accelerated treatment at diagnosis and a substantial increase in HIV testing, particularly repeat testing. The volume of tests and rapid treatment following diagnosis is now likely to have reached a level that decreases the number of men with transmissible levels of virus thereby reducing transmission.

The use of PrEP among high-risk MSM, although limited at this stage, will also have contributed to the fall in new diagnoses.

FIGURE 1

New HIV diagnoses among men who have sex with men attending sexual health clinics by year and quarter, England, 2013–2016 (n = 7,291 HIV diagnoses)

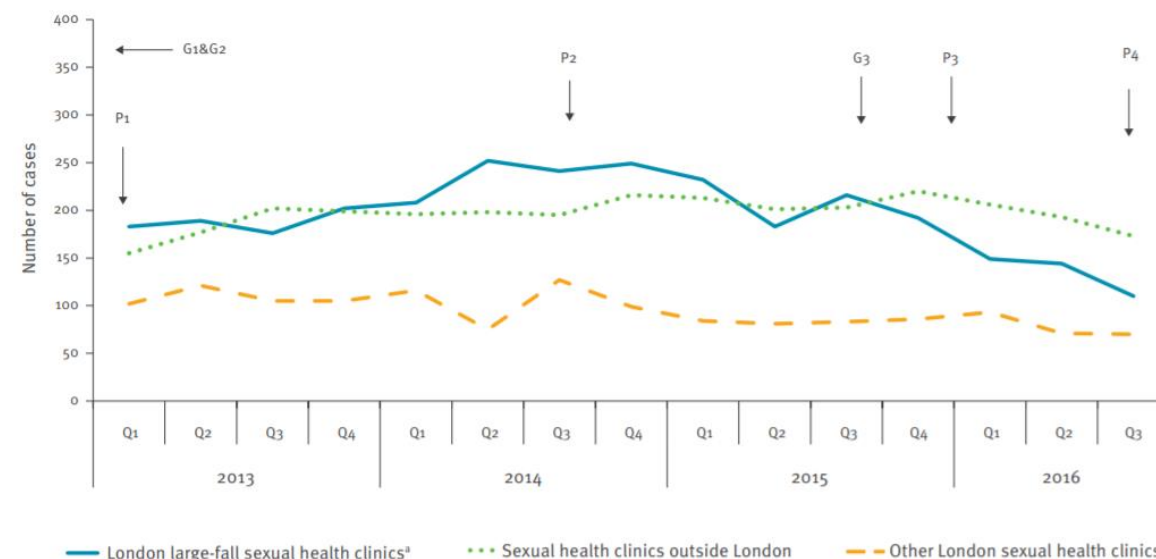
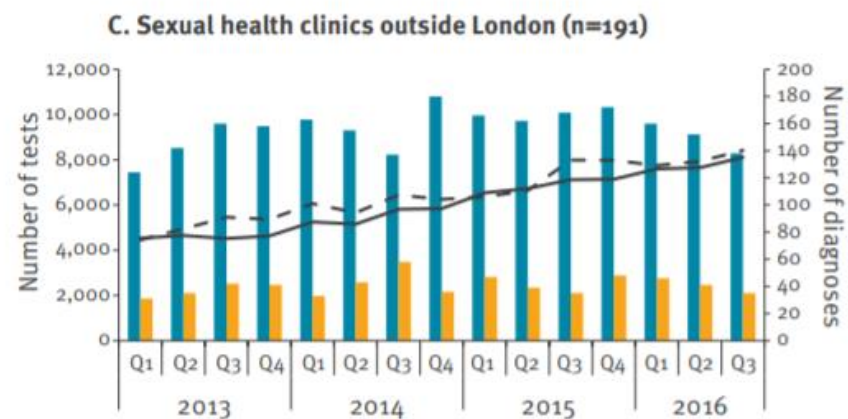
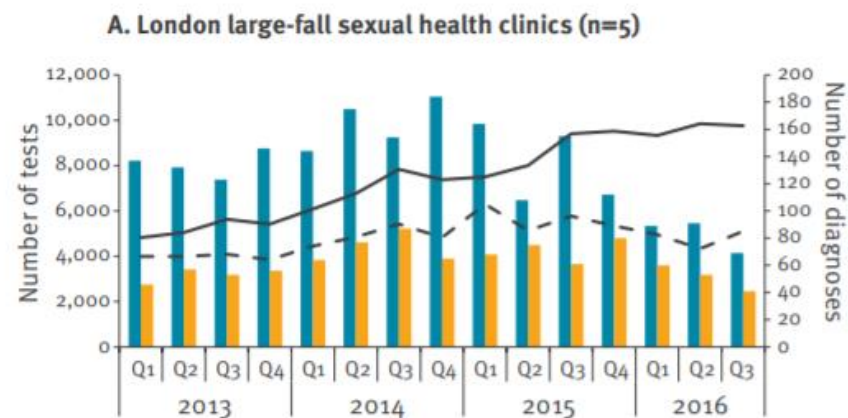


FIGURE 2

Number of HIV tests and diagnoses in men who have sex with clinic group, England, 2013–2016



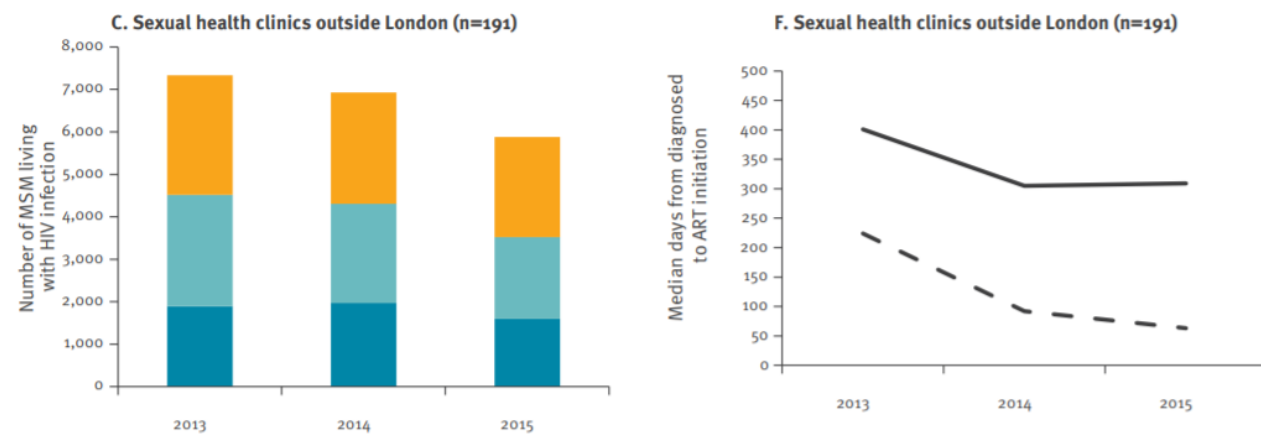
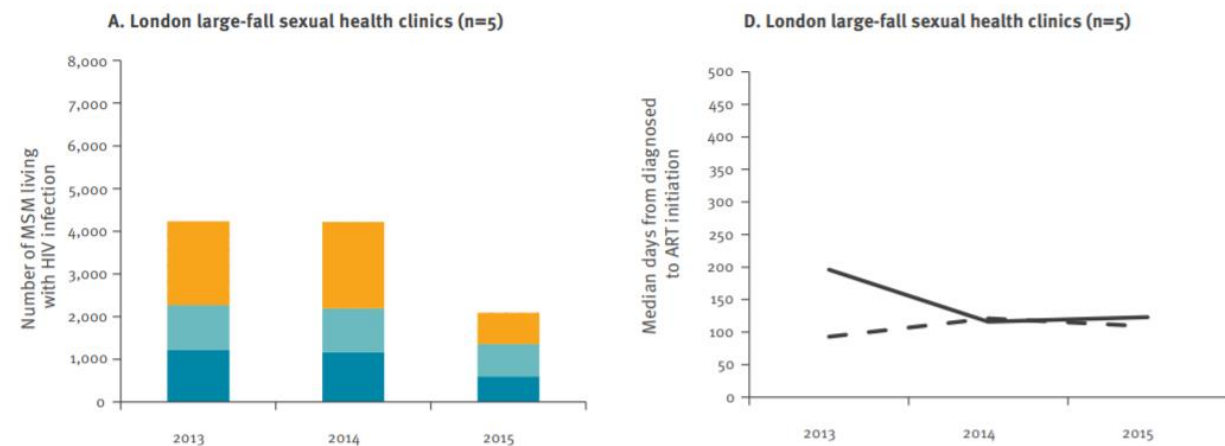
New testers: Repeat testers:

Diagnoses Diagnoses

-- Tests -- Tests

FIGURE 3

Numbers of men who have sex with men living with HIV infection who are undiagnosed, diagnosed and untreated or treated and non-suppressed viral load (A-C) and median time (days) from HIV diagnosis to ART initiation, by CD4 count at ART start (D-F) by clinic group, England, 2013–2015



CD4 cell count

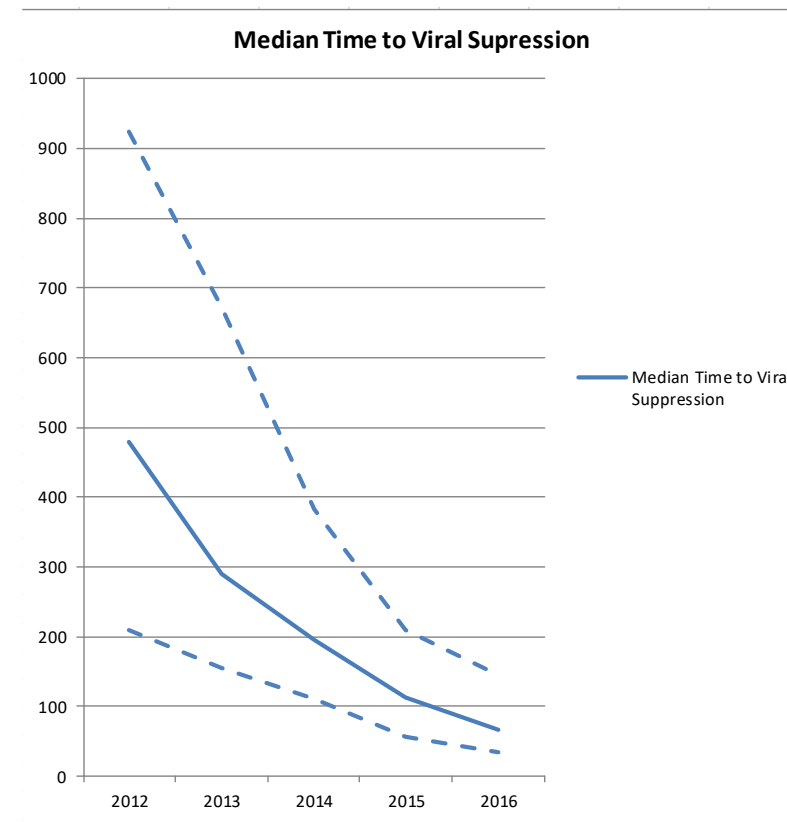
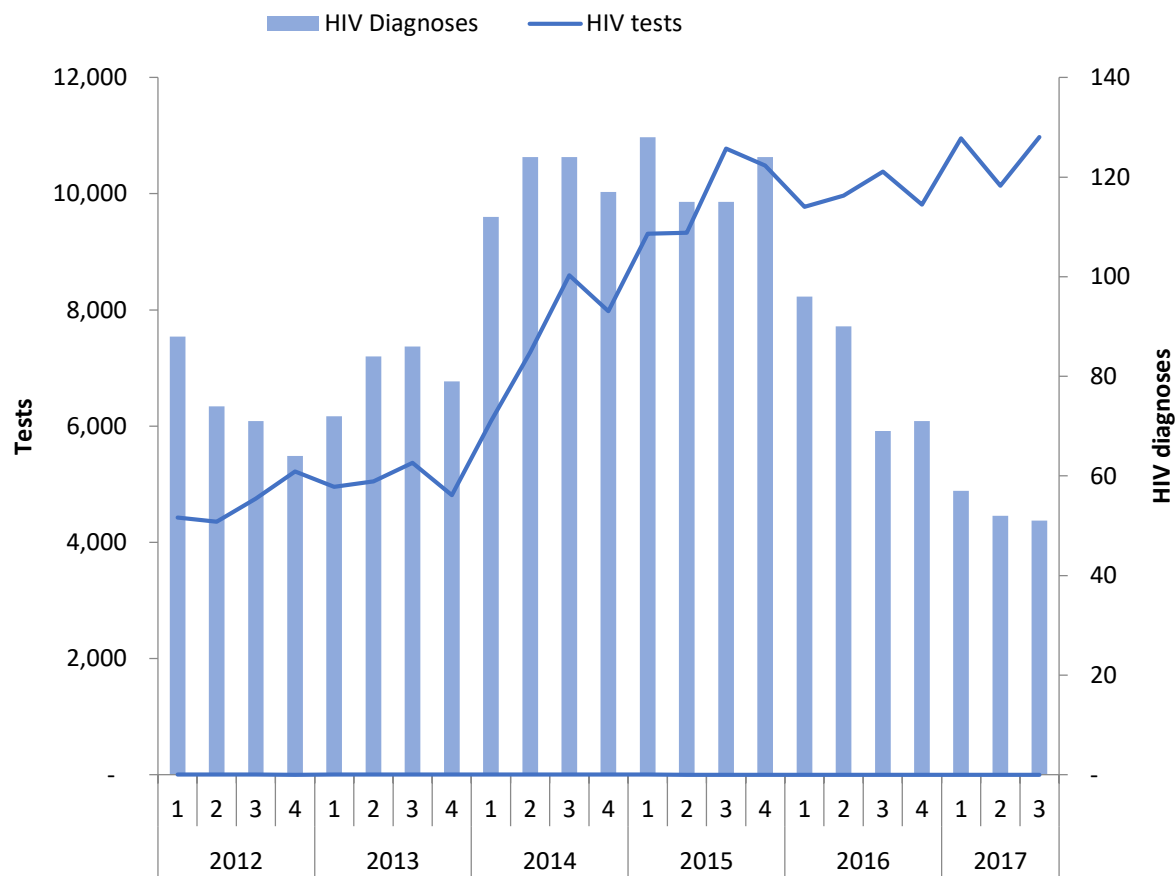
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Undiagnosed Unsuppressed Untreated



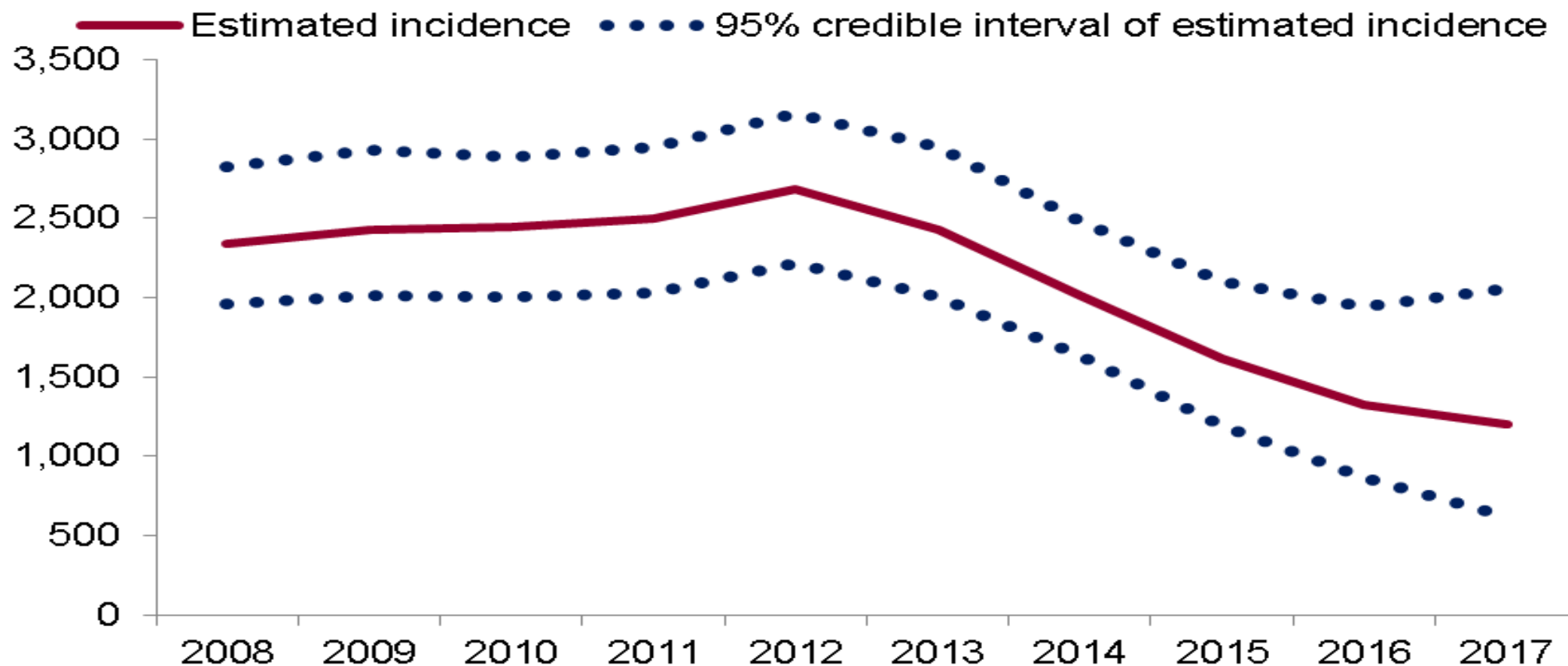
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Tests, new diagnoses and time to viral suppression
for gay, lesbian and bisexual men





Estimates of HIV incidence in gay and bisexual men: England, 2008 to 2017



The London Vision

We have a shared ambition to make London the world's healthiest global city, and the best global city in which to receive health and care services.



We know we need to work together across public services and wider society, both to make the most of opportunities for good health and tackle issues that cause poor health and health inequalities. The London Vision sets out our shared priorities as a partnership and will guide us as we design London-wide and local action together with Londoners.

The Vision represents a major milestone in our partnership. It builds on significant collaborative work over several

years through which we have achieved things like a new social movement for better mental health (Thrive LDN), the first London Estates Strategy, and much more. It is the beginning of a conversation about the next phase of this collaborative work, and an important invitation to you – professionals, partner organisations, the community and voluntary sector and members of the public – to discuss and debate it with us.

What is the partnership?

The partnership is made up of:



MAYOR OF LONDON

PrEP Impact Trial

A pragmatic health technology assessment of PrEP and implementation

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Welcome to the PrEP Impact Trial website

PrEP is a new way for people to reduce their risk of acquiring HIV.

The PrEP Impact Trial is recruiting 26,000 participants who are at a high risk of HIV, across England.

ABOUT PrEP



ABOUT PrEP

Sex Transm Infect. 2019 Apr 22. pii: sextrans-2019-054009. doi: 10.1136/sextans-2019-054009. [Epub ahead of print]

Preparing for PrEP: estimating the size of the population eligible for HIV pre-exposure prophylaxis among men who have sex with men in England.

Mitchell HD¹, Desai S¹, Mohammed H², Ong KJ¹, Furegato M¹, Hall V¹, Desai M¹, Saunders JM^{1,3}, Hughes G¹, Field N^{1,4}, Gill ON¹.

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Abstract

OBJECTIVES: The size of the population of men who have sex with men (MSM) who may be eligible for HIV pre-exposure prophylaxis (HIV-PrEP) in England remains unknown. To plan for a national PrEP implementation trial, we estimated the number of MSM attending sexual health clinics (SHCs) that may be eligible for HIV-PrEP in England.

METHODS: Sexually transmitted infection (STI) surveillance data from 2010 to 2015 from the GUMCAD surveillance system were used to estimate the annual number of HIV-negative MSM who may be eligible for HIV-PrEP in England. Based on national eligibility criteria, we identified HIV-negative MSM attending SHCs with a HIV-negative test in the past year and used diagnosed bacterial STI (past year) in this group as a proxy for condomless sex and eligibility for HIV-PrEP. We estimated HIV incidence per 100 person-years (py) in these groups in 2014.

RESULTS: During 2010-2015, the number of HIV-negative MSM attending SHCs with a HIV-negative test in the past year doubled from 14 643 to 29 023, and HIV incidence in this group was 1.9 (95% CI 1.6 to 2.2) per 100 py in 2014. In the same period, the subgroup with a bacterial STI diagnosis (past year), and therefore considered potentially eligible for HIV-PrEP in this analysis, increased from 4365 (30%) to 10 276 (35%). HIV incidence in this subgroup was 3.3 (95% CI 2.7 to 4.0) per 100 py in 2014.

CONCLUSIONS: In 2015, approximately 10 000 HIV-negative MSM were considered potentially eligible for HIV-PrEP based on clinic history in GUMCAD. These data were used to inform the initial recruitment target for the PrEP Impact Trial and will inform future evaluations at a population level.

News Release

New HIV diagnoses fall by a third in the UK since 2015

Annual HIV data published today show a continued decline with new diagnoses at their lowest level since 2000.

Data published today by Public Health England (PHE) reveal that new HIV diagnoses in the UK have fallen to their lowest level since 2000. New diagnoses fell by almost a third (28%) from 6,271 in 2015 to 4,484 in 2018.

New HIV diagnoses have been declining in both gay and bisexual and heterosexual populations. The steepest falls have been seen among gay and bisexual men, where new diagnoses declined by 39% between 2015 and 2018. The biggest falls have been among gay and bisexual men who are:

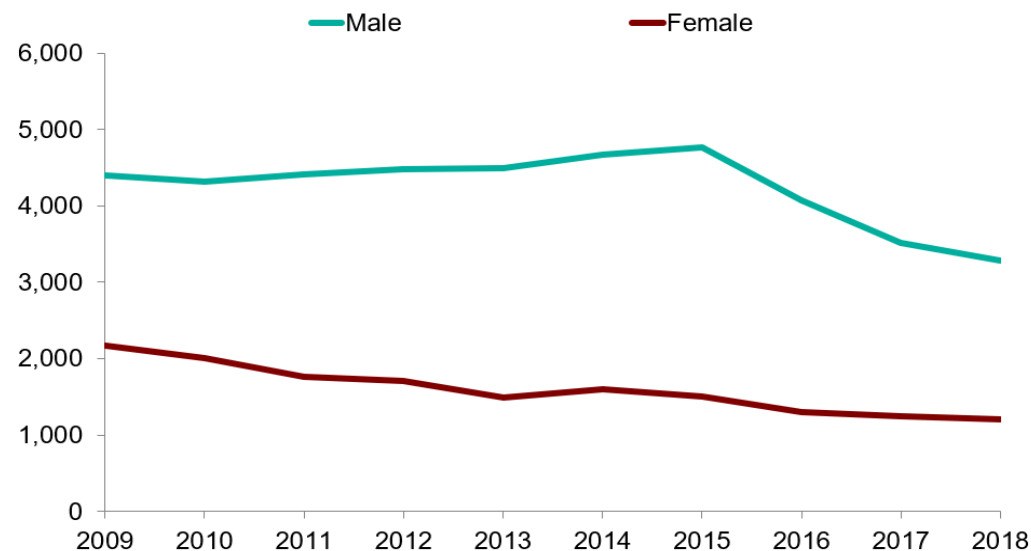
- white (46% decrease from 2,353 in 2015 to 1,276 in 2018)
- born in the UK (46% decrease from 1,627 in 2015 to 873 in 2018)
- aged 15-24 (47% decrease from 505 in 2015 to 269 in 2018)
- living in London (50% decrease from 1,459 in 2015 to 736 in 2018)

During the same period, new diagnoses have also fallen by a quarter (24%) among people who acquired HIV through heterosexual contact.

The continued decline of HIV diagnoses is largely due to the success of combination HIV prevention over the past decade, which includes HIV testing, condom provision, the scale-up of pre-exposure prophylaxis (PrEP) and anti-retroviral therapy (ART) – drugs that keep the level of HIV in the body low and prevent the virus being passed on.

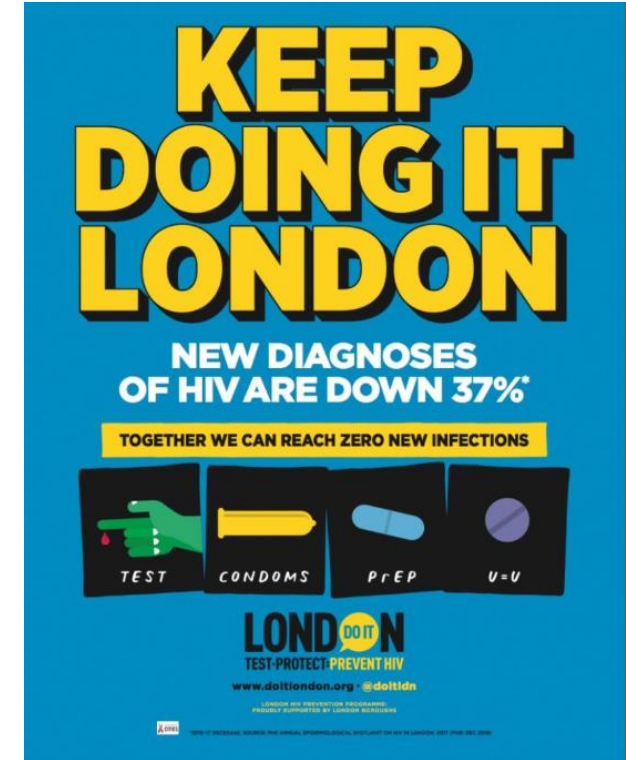
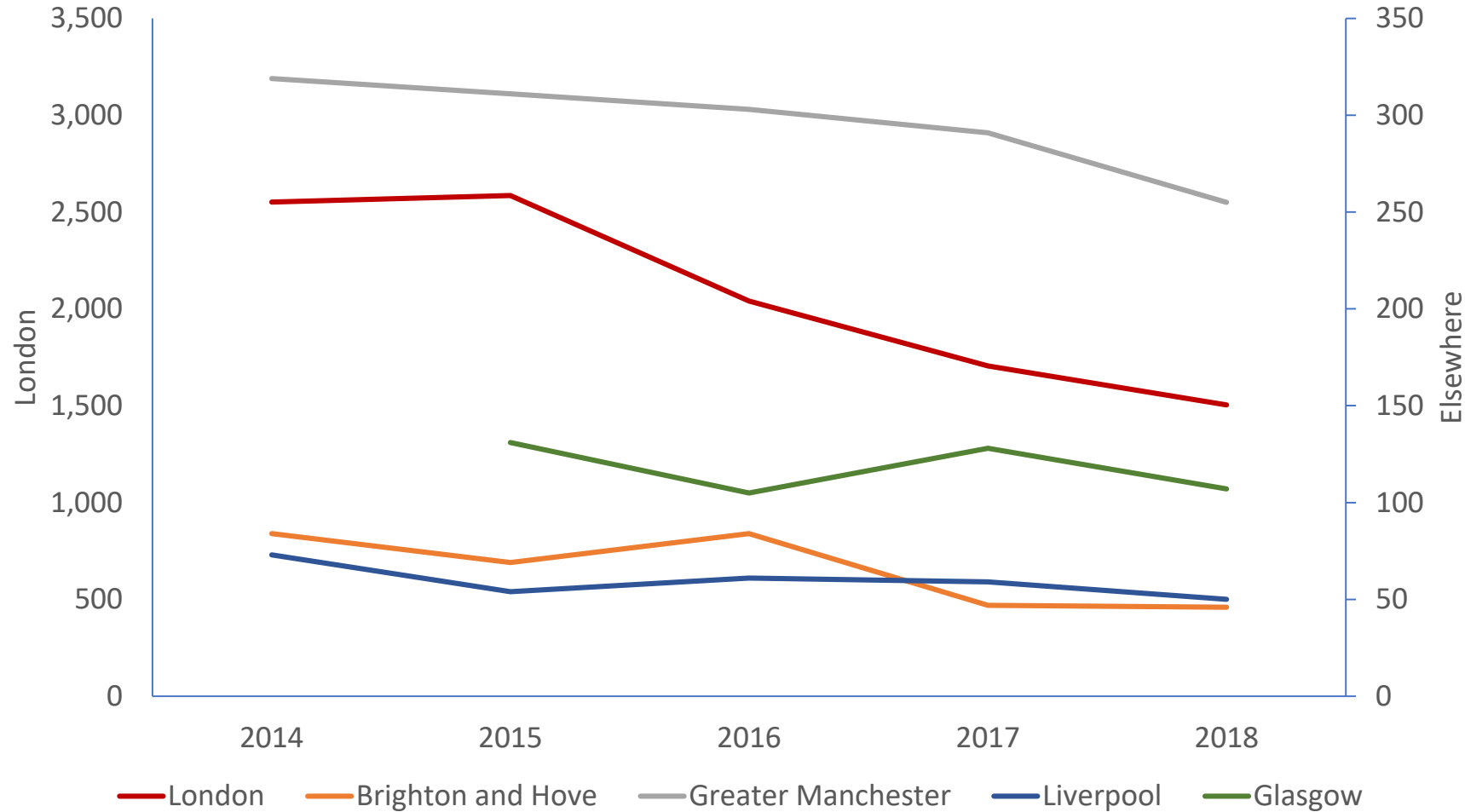
Dr Valerie Delpech, Head of HIV Surveillance at Public Health England, said: "It is thanks to the enormous testing and prevention efforts in the UK that we are seeing further declines in new HIV diagnoses, which have now reached their lowest in almost 20 years. People with HIV now benefit from effective treatments that stop the virus being passed on to sexual partners and the number of people diagnosed late is lower than ever before.

Number of new HIV diagnoses by gender¹: United Kingdom, 2009 to 2018



¹ New HIV diagnoses totals for males and females are based on gender identity and include trans people. The overall total includes people who identify gender in another way and those with gender identity not reported.

Number of new HIV diagnoses in selected UK cities, 2014-2018





The Association of Directors of Public Health (UK)

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ADPH Press Statement: PrEP extension welcome but unresolved funding puts roll-out at risk

July 8, 2019 in [ADPH Updates](#), [Policies](#), [Sexual and Reproductive Health](#) by [Lucy Sutton](#)

On Friday 5th July NHS England announced that it would fund the NHS costs for the additional roll-out of places on the PrEP trial. This is very welcome, but by no means enough to enable roll-out and risks unfairly raising expectations.

The Government has left the issue of local authority costs unresolved despite repeated calls by the LGA and the ADPH, and as a result some clinics are already saying they will not have the necessary capacity to deliver more places for PrEP.

ADPH and LGA fully support increased PrEP availability, and would like to see the full roll-out, but this requires funding. Whilst the Government leaves funding unresolved this remains a barrier to roll-out. The previous extension of the trial announced in March 2019 has already created an unfunded £7million cost on councils.

ADPH Vice President Jim McManus said:

"The Government has given no thought to the strain this will put on local authorities at a time when they are already trying to meet unfunded burdens, contravening the Government's own policy position on not creating such new burdens on councils.

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VOTRE NOUVEAU CONTRAT ADAPTÉ À VOS BESOINS
EN QUELQUES CLICS !

L'énergie est notre avenir, économisons-la !

Health

HIV diagnosis for 15 men waiting for drug on NHS

By Ben Hunte
LGBT correspondent

4 October 2019



David is one of at least 15 people who tested positive for HIV while waiting to access Prep.

At least 15 people in England have tested HIV positive while waiting to get a place on a trial for a pill which prevents the disease.

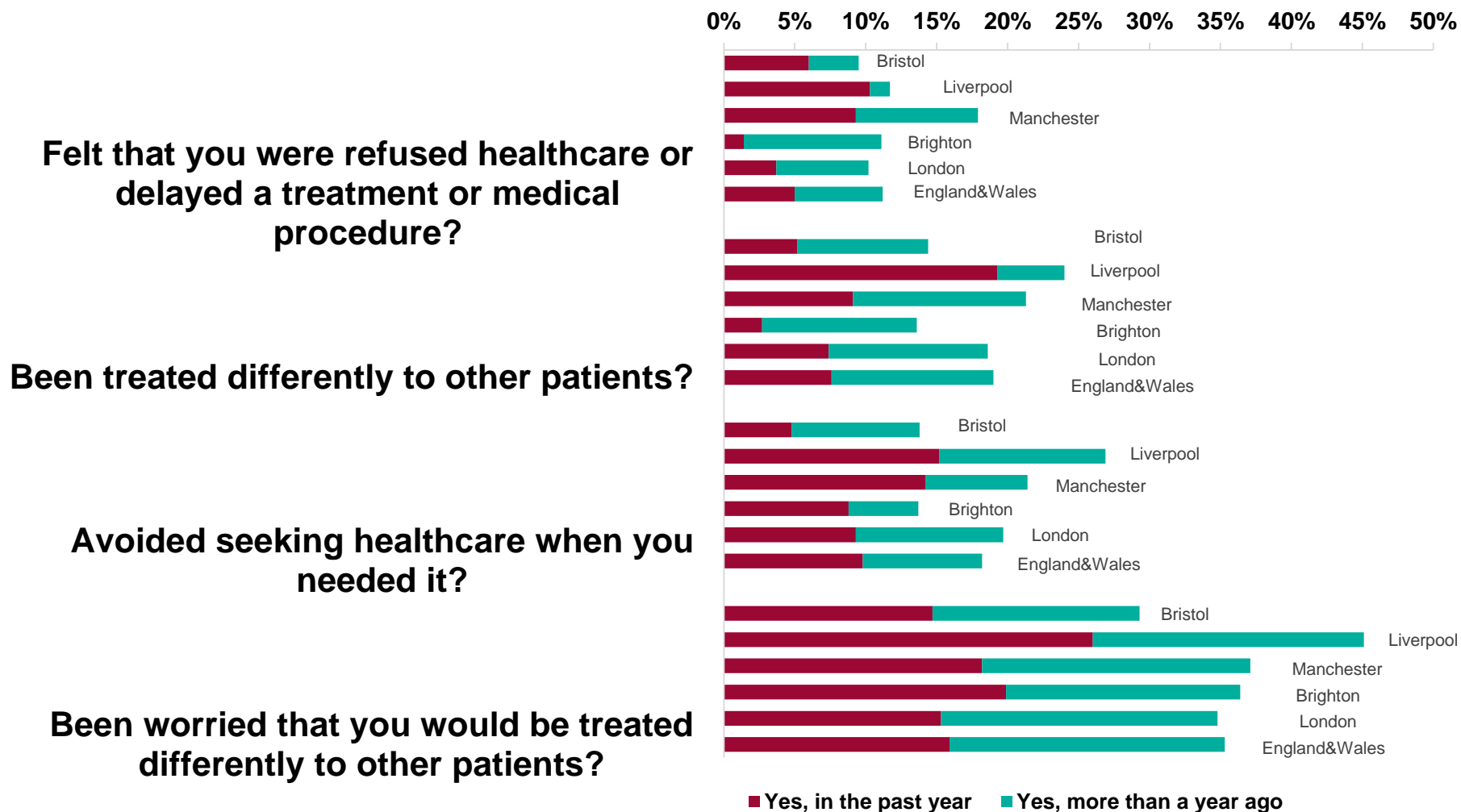
Pre-exposure prophylaxis (PrEP) is a daily tablet which can stop a person from getting HIV.

England is the only place in the UK where places on a trial to access the drug through the NHS are restricted.

The Department of Health said plans are under way for "routine commissioning" when the trial ends next year.

PrEP is freely available for high-risk patients in Scotland and the British HIV Association, which represents healthcare professionals involved in the treatment and care of people with HIV, is calling for the same in England.

Stigma and discrimination, Positive Voices 2017: UK Cities



PozQoL Scale Assessing quality of life among People living with HIV



13 items across 4 domains

Health concerns

I worry about my health
I worry about the impact of HIV on my health
I fear the health effects of HIV as I get older

Psychological

I am enjoying life
I feel in control of my life
I am optimistic about my future
I feel good about myself as a person

Social

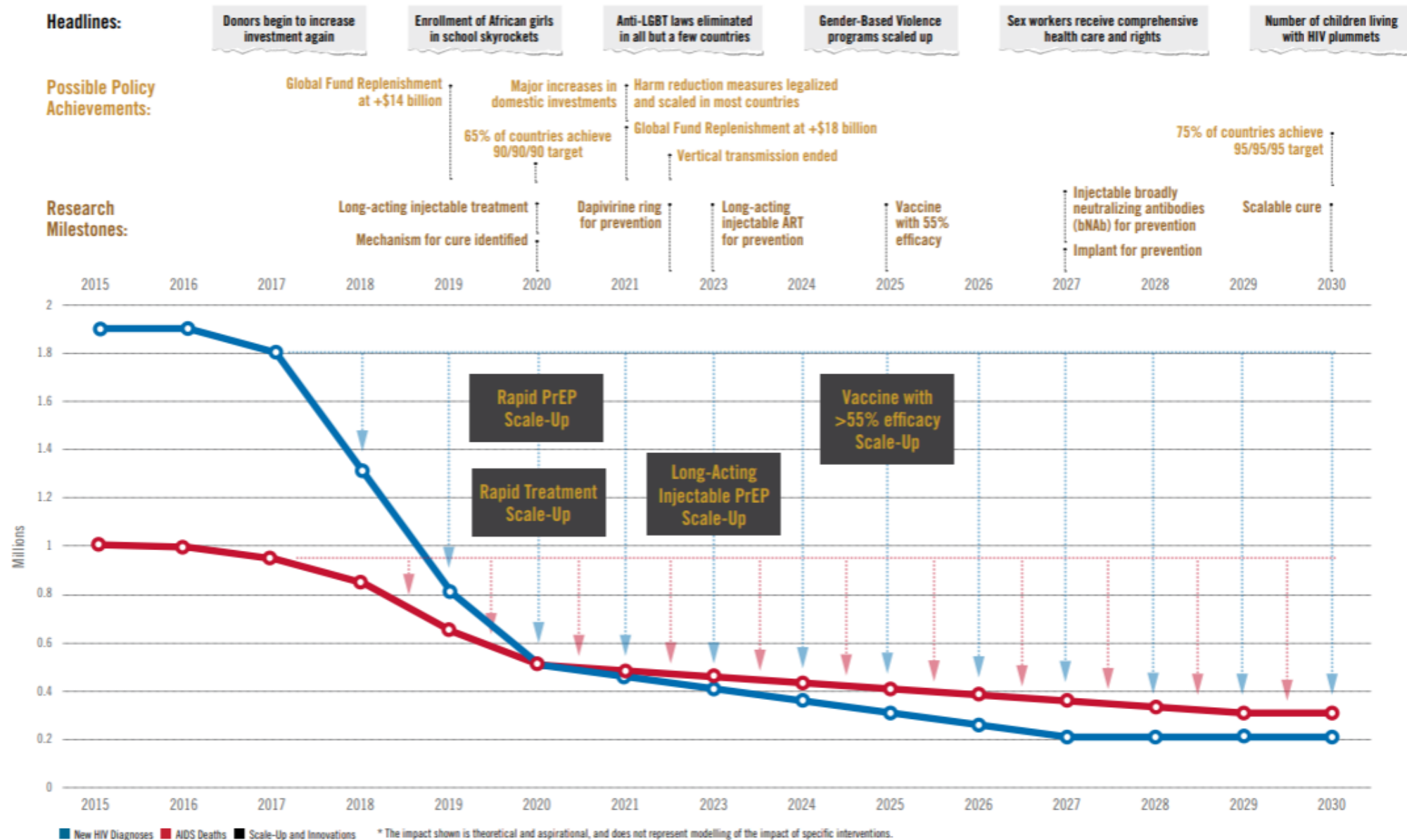
I feel that HIV limits my personal relationships
I lack a sense of belonging with people around me
I am afraid that people might reject me when they learn I have HIV

Functional

I feel that HIV prevents me from doing as much as I would like
Having HIV limits my opportunities in life
Managing HIV wears me out

Ending the Epidemic: Headlines of the Future

This graph¹ depicts UNAIDS Fast-Track targets. Remarkable strides have been made at the global level, with declines in new HIV diagnoses to 1.8 million and AIDS-related deaths to 940,000 in 2017. Still, we remain off-track for reaching UNAIDS 2020 targets, particularly for HIV incidence. Closing the gaps between actual and projected progress (illustrated by the dotted lines) will require urgent progress on structural barriers and development and scale-up of evidence-based policies, products, and research. Only with a global commitment to accelerating these interventions will we begin to see a steeper drop in incidence and deaths.



Take home message

- PrEP works and is working, it is a key prevention tool and is cost-saving
- PrEP can be scaled up relatively quickly provided there is a good infrastructure to monitor its impact at the individual and population level. The demand may be higher than anticipated.
- The relative contribution of PrEP in reducing transmission is context specific influenced by many factors (individual, health system and population level)
- PrEP will work best as part of Combination Prevention Programme specific to needs of the local community. Monitoring progress is vital.
- The Combination Prevention strategies need to be evidence-based, pragmatic, rights-based and community-owned.
- Successful implementation means PrEP for all who need it and at the time they need – ie addressing health inequalities



Public Health
England

PositiveVoices
the national survey of people living with HIV

Acknowledgements

We gratefully acknowledge People living with HIV for providing their information and the continuing collaboration of clinicians, microbiologists, immunologists, public health practitioners, occupational health doctors and nurses and other colleagues who contribute to the surveillance of HIV and STIs in the UK

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