

Implementation of HIV PrEP in Scotland:



First Year
Report

Executive
Summary



Health Protection Scotland (HPS) and **Information Services Division (ISD)** are divisions of NHS National Services Scotland.

HPS website: www.hps.scot.nhs.uk

ISD website: www.isdscotland.org

Published by Health Protection Scotland and Information Services Division

First published February 2019

© Health Protection Scotland and Information Services Division 2019

Reference this document as:

Health Protection Scotland and Information Services Division. Implementation of HIV PrEP in Scotland: First Year Report [Report]

HPS and ISD have made every effort to trace holders of copyright in original material and to seek permission for its use in this document. Should copyrighted material have been inadvertently used without appropriate attribution or permission, the copyright holders are asked to contact HPS or ISD so that suitable acknowledgement can be made at the first opportunity.

HPS and ISD consent to the photocopying of this document for professional use.

All other proposals for reproduction of large extracts should be addressed to either:

Health Protection Scotland
NHS National Services Scotland
Meridian Court, 5 Cadogan Street,
Glasgow
G2 6QE Tel: +44 (0) 141 300 1100
Email: nss.hpsenquiries@nhs.net

Information Services Division
NHS National Services Scotland
Gyle Square, 1 South Gyle Crescent,
Edinburgh
EH12 9EB Tel: +44 (0) 131 275 7777
Email: nss.isdmaternity@nhs.net

The Scottish Health Protection Network (SHPN) is an obligate (jointly owned) network of existing professionals, organisations and groups in the health protection community across Scotland. The aims of the network are:

- To ensure Scotland has a Health Protection service of the highest quality and effectiveness that is able to respond to short term pressures and to long term challenges.
- To oversee the co-ordination of Scotland's health protection services under a network that promotes joint ownership and equitable access to a sustainable and consistent service.
- To minimise the risk and impact of communicable diseases and other (non-communicable) hazards on the population of Scotland and to derive long term public health benefits (outcomes) through the concerted efforts of health protection practitioners across Scotland.

In line with the above, SHPN supports the development, appraisal and adaptation of health protection guidance, seeking excellence in health protection practice.

Preface

In July 2017, Scotland was the first country in the UK to implement HIV PrEP (HIV Pre Exposure Prophylaxis) – a national biomedical HIV prevention programme involving the provision of oral antiretroviral drugs to those at sexual risk of HIV – alongside comprehensive STI and HIV prevention services. In clinical trials PrEP has been shown to reduce the risk of sexually transmitted HIV by 75-86%.

Scotland is the first country worldwide to provide PrEP nationally as part of routine state-funded care to people who meet risk-based eligibility criteria.

This Report describes the implementation, monitoring, uptake, and limited outcomes associated with the first year of PrEP services. A scientific report with detailed epidemiological analysis is in preparation and an evaluation of service-level impact of providing PrEP services is in progress.

The Report was prepared by a writing committee stemming from Scotland's National HIV PrEP Coordinating Group: Nicky Coia, Claudia Estcourt, David Goldberg (Chair), Pauline McGough, Rak Nandwani, Nicola Steedman, Ruth Robertson, and Lesley Wallace. It has been written on behalf of the National Coordination Group and its subgroups.

Executive Summary

Introduction

- HIV PrEP (HIV Pre-Exposure Prophylaxis) is a novel prophylactic biomedical intervention comprising of two HIV antiretroviral drugs. Studies published in 2014 and 2015 demonstrated that when PrEP is prescribed to HIV negative people (especially men who have sex with men [MSM]) at risk of becoming infected sexually, their probability of HIV infection acquisition is reduced by approximately 86%.
- In 2016, the European Medicines Agency (EMA) approved Truvada® for use as HIV PrEP.
- In April 2017, the Scottish Medicines Consortium approved Truvada® for use within NHS Scotland and on 1st July, HIV PrEP became available officially in sexual health clinics throughout the country.
- Scotland was the first country in the UK to approve the provision of HIV PrEP by the NHS.

Implementing the HIV PrEP Service in Scotland

- PrEP is delivered in NHS Scotland using the existing network of specialist sexual health services (with alternative GP-led arrangements for the island NHS Boards).
- A considerable challenge was the absence of additional funding allocated for PrEP drugs or extra service support costs at a time when specialist sexual health services were already facing appreciable cost savings and increasing rates of sexually transmitted infections.
- Comprehensive training, coordinated and supported by NHS Education Scotland, was delivered to the specialist service multidisciplinary workforce responsible for PrEP assessment and care.
- Through partnership working the following public awareness raising resources were developed and deployed:
 - Prep.scot website
 - Know About PrEP– Prevent HIV
 - PrEP in Scotland
- A data collection system, incorporating the addition of newly devised specific codes to the Scotland-wide sexual health IT information system (NaSH), was developed and implemented.
- Standard appointment duration was insufficient to address PrEP assessment and other sexual health needs and health promotion. This required significant change in models of care in some health boards.
- NHS National Services Scotland National Procurement successfully commissioned, at significant cost saving, generic drugs for availability to sexual health services in November 2017.
- From January 2018, it was appreciated that the number of people commenced on PrEP was higher than had been projected; continuing high numbers of individuals starting PrEP for the first time, combined with the cumulative effect of those who had previously started PrEP, led to an exacerbation of pressure on services.

- Despite the service pressures and multiple challenges, one of the hallmarks of the first year of the NHS-delivered PrEP programme in Scotland has been the multi-disciplinary, multi-agency working across territorial and national NHS Boards, Scottish Government, the third sector and professionals with PrEP expertise elsewhere in the UK and abroad.
- Programme oversight has been greatly facilitated through the creation of a National PrEP Coordination Group and its three subgroups, and a governance arrangement which ensures accountability through NHS Board executives to the Minister for Public Health within Scottish Government.

Monitoring the Uptake of PrEP in Scotland

- NHS-supplied PrEP has been prescribed in 11 of 14 Scottish NHS Boards.
- 1,872 individuals were prescribed PrEP at least once in the first year of the Scottish NHS PrEP programme.
- 99% of those prescribed PrEP were MSM; the majority reported condomless anal sex with multiple partners as a reason for being eligible for NHS PrEP.
- 39% of those prescribed PrEP were in the age range 20-29 years and almost a third were aged 40 or above.
- The majority (74%) of those prescribed PrEP were prescribed a daily regimen rather than an event based one; around 1 in 10 patients were prescribed both types of regimen.
- Around one fifth of those prescribed PrEP were attending sexual health services for the very first time or for the first time in NaSH history; this suggests that PrEP is drawing patients in to services who are at high risk for HIV and other STIs.

Evaluating the Impact of HIV PrEP

- Less than five (1 to 4) MSM prescribed PrEP (at least once) HIV seroconverted; further investigations showed that PrEP drug levels were below protective levels at the time of suspected HIV acquisition.
- The majority of the 1,846 MSM prescribed PrEP were commenced on it during July-December 2017; accordingly, around 1000 person years of exposure post-initiation of PrEP was experienced during the first year. This means that the incidence of HIV among this group for the period July 2017-June 2018 was 0.1% - 0.4% (1-4 per 1000).
- Among those prescribed PrEP, rates of gonorrhoea (including rectal) testing and numbers diagnosed positive increased between the two 12 month periods either side of NHS PrEP introduction but rates of actual infection remained similar. Such rates were higher among those ever versus never prescribed PrEP; this observation indicates that the former are at higher risk of gonorrhoea (and therefore HIV) infection and that the eligibility criteria for PrEP are likely to be appropriate.
- Similar observations were recorded for chlamydia with an increase in testing and diagnoses among MSM ever prescribed PrEP but no overall change in the proportion positive pre and during the first year of NHS PrEP.

- The increases in gonorrhoea and chlamydia diagnoses could be attributed to either improved detection, an actual increase in the incidence of infection or a combination of both; the explanation is likely to be the “combination” one but the ratio of the contributions is uncertain.

Research

- Scotland’s “first in the UK” implementation of PrEP as routine care in sexual health services has provided unique opportunities for research to inform PrEP care in Scotland, the wider UK and internationally.
- A strong research portfolio, drawing on strengths in mixed methods, multidisciplinary research has been developed.
- Current research themes include optimising PrEP clinical services, exploring opportunities for “ePrEP” (PrEP care online), PrEP community advocacy, PrEP and women of colour, and missed opportunities for PrEP in people who acquire HIV.
- Current combined PrEP-related research income is around £600,000.

Discussion

- During the first year of NHS PrEP implementation, 1,872 individuals were prescribed PrEP in sexual health settings throughout the country. This total exceeded predictions not least because a considerable number of high risk (for HIV) individuals who had never, or not for years, attended such services were possibly drawn to them by the concept of PrEP.
- Despite i) the short lead-in time following SMC approval to PrEP becoming available, ii) PrEP being a unique intervention, iii) the unavailability of additional funding for service implementation, iv) existing pressures on sexual health clinics and v) the extensive demand for PrEP as above, year one has been a resounding success in terms of establishing a new nationwide service – the first of its type in the UK and one of the first worldwide.
- This outcome speaks to the quality of the service providers, in particular the clinical staff, the existing model of integrated sexual health service delivery in Scotland, and existing and new coordination arrangements which ensure the sharing of best practice, consistency in approach and optimal governance and accountability.
- While nearly two thousand people were prescribed PrEP in the first year, very large numbers had been on it only a few months by the end of that year; accordingly, a further evaluation at the end of year two will be required to provide an informed understanding of impact and several years will be needed to undertake more sophisticated analyses to evaluate impact optimally.
- It is highly encouraging that only 1 to 4 of those prescribed PrEP – i.e. people at highest risk of HIV infection– acquired their HIV following initial prescription.
- With respect to PrEP impact on STIs other than HIV, likewise, it is too early to make well informed conclusions. What has been learned, however, is that among people prescribed PrEP, an increase in the number of those with gonorrhoea and chlamydia has been detected following the commencement of PrEP when compared to a similar time frame pre-PrEP ; this increase in diagnoses, however, has aligned with an increase in testing for these infections.

- In common with many settings, uptake has been largely limited to MSM because the awareness raising focus had been on this group for a number of years and the HIV risk among MSM having condomless penetrative anal sex with multiple partners is higher than that for any other group; it is crucial, however, that PrEP is seen as an intervention for all at high risk of HIV. More needs to be done to raise PrEP awareness among women, transgender/trans people and heterosexual men; in year two further work, including research, will be undertaken to decide how best to address their needs and, thereafter, tailor services appropriately and proportionately without generating unnecessary alarm and excessive demand.
- The development of new acceptable models of PrEP care, involving for example eHealth, could increase access to PrEP and reduce the burden on sexual health services.
- Further work on the cost-effectiveness of PrEP as a national prevention strategy needs to be undertaken.

Conclusion

- In conclusion, Scotland is one of the first countries worldwide to have successfully established a PrEP service which is truly national, free at the point of delivery and, to date, generally accessible to most deemed at high risk of acquiring HIV. In terms of HIV prevention, the early signs are favourable. While it is too early to draw conclusions on the impact of PrEP on high risk sexual behaviour and other STIs, there are some pointers suggesting an increase; but any possible increase is likely to be offset by PrEP's HIV impact and its ability to attract people at risk of HIV who would not normally access sexual health services and who, consequently, can reap the benefits of these.
- On a cautionary note, the success of the service implementation, and the cumulative nature of PrEP uptake, means that pressures on sexual health services which have already caused difficulties affecting both users and providers will continue to increase unless additional resources or efficiencies are identified. In year two, a formal evaluation of that impact is being undertaken.