Discover this journal online at
Wiley Online Library
wileyonlinelibrary.com/journal/hiv

HIV MEDICINE

Volume 24, Supplement 3, April 2023
ISSN 1464–2662

EDITORS
Caroline Sabin
Jürgen Rockstroh

BHIVA Spring Conference 2023

Sage Gateshead, St Mary's Square, Gateshead
24–26th April 2023

BHIVA
British HIV Association

DAIG
Deutsche AIDS-Gesellschaft e.V.

EACS European
AIDS Clinical Society

WILEY

HIV MEDICINE

Published on behalf of the British HIV Association and the European AIDS Clinical Society

Editors
Caroline Sabin
Jürgen Rockstroh

Associate Editors
Alejando Arenas-Pinto, UK
Georg Behrens, Germany
Esteban Martinez, Spain
Laura Waters, UK
Milosz Parczewski, Poland
Janine Trevillyan, Australia

Editorial Board
Jane Anderson, *UK*
Jose Arribas, *Spain*
Jason Baker, *USA*
Juan Berenguer, *Spain*
Sanjay Bhagani, *UK*
Stéphane Blanche, *France*
Marta Boffito, *UK*
Anders Boyd, *Netherlands*
Todd Brown, *USA*
Fiona Burns, *UK*
Alexandra Calmy, *Switzerland*
Antonella Castagna, *Italy*
David Chadwick, *UK*
Duncan Churchill, *UK*
Nathan Clumeck, *Belgium*
Fiona Cresswell, *UK*
Mark Danta, *Australia*
Stéphane De Wit, *Belgium*
Joseph Eron, *USA*
Julian Falutz, *Canada*
Sarah Fidler, *UK*
Andrew Freedman, *UK*
Hans-Jacob Furrer, *Switzerland*
Christoph Fux, *Switzerland*
Yvonne Gilleece, *UK*
Magnus Gisslen, *Sweden*
Ravi Gupta, *UK*
Annette Haberl, *Germany*
Scott Hammer, *USA*
Graham Hart, *UK*
Christian Hoffmann, *Germany*
Andrzej Horban, *Poland*
Rusi Jaspal, *UK*
Christine Katlama, *France*
Peter Kelleher, *UK*
Ole Kirk, *Denmark*
Justyna Kowalska, *Poland*
Ken Kunisaki, *USA*
Karine Lacombe, *France*
Jeff Lazarus, *Denmark*
Hermione Lyall, *UK*
Fiona Lyons, *Ireland*
Patrick Mallon, *Ireland*
Catia Marzolini, *Switzerland*
Gail Matthews, *Australia*
Tamyo Mbisa, *UK*
José M Miró, *Spain*
Amanda Mocroft, *UK*
Jean-Michel Molina, *France*
Mark Nelson, *UK*
Cristiana Oprea, *Romania*
Chloe Orkin, *UK*
Lars Peters, *Denmark*
Deenan Pillay, *UK*
Daniel Podzamczer, *Spain*
Frank Post, *UK*
Anton Pozinak, *UK*
Brenda Crabtree Ramírez, *Mexico*
Peter Reiss, *Netherlands*
Pablo Rojo, *Spain*
Christoph D. Spinner, *Germany*
Ann Sullivan, *UK*
Jaime Vera, *UK*
Sharon Walmsley, *Canada*
Ed Wilkins, *UK*
Alan Winston, *UK*
Linda Wittkop, *France*
Robin Wood, *South Africa*

Editorial Office
Associate Managing Editor: Megan Seyler
Editorial Assistant: Subaysala Prabhu
E-mail: HIVedoffice@wiley.com

Production Editor
Ariston Dumlao (e-mail: hiv@wiley.com)

Aims and Scope
HIV Medicine aims to provide an alternative outlet for publication of international research papers in the field of HIV Medicine, embracing clinical, pharmacological, epidemiological, ethical, preclinical and *in vitro* studies. In addition, the journal will commission reviews and other feature articles. It will focus on evidence-based medicine as the mainstay of successful management of HIV and AIDS.

Information for Subscribers
HIV Medicine is published in 12 issues per year. Institutional subscription prices for 2023 are: Print & Online: $2742.00 (US), $3195.00 (Rest of World), €1,886.00 (Europe), £1,488.00 (UK). Prices are exclusive of tax. Asia-Pacific GST, Canadian GST/HST and European VAT will be applied at the appropriate rates. For more information on current tax rates, please go to https://onlinelibrary.wiley.com/library-info/products/price-lists/payment. The price includes online access to the current and all online back files for previous 5 years, where available. For other pricing options, including access information and terms and conditions, please visit https://onlinelibrary.wiley.com/library-info/products/price-lists. Terms of use can be found here: https://onlinelibrary.wiley.com/terms-and-conditions.

Delivery Terms and Legal Title
Where the subscription price includes print issues and delivery is to the recipient's address, delivery terms are Delivered at Place (DAP); the recipient is responsible for paying any import duty or taxes. Title to all issues transfers Free of Board (FOB) our shipping point, freight prepaid. We will endeavour to fulfil claims for missing or damaged copies within six months of publication, within our reasonable discretion and subject to availability.

Claims for Missing or Damaged Print Issues
Our policy is to replace missing or damaged copies within our reasonable discretion, subject to print issue availability, and subject to the following terms: Title to all issues transfers Freight on Board ("FOB") to the address specified in the order; (1) Freight costs are prepaid by Wiley; and (2) Claims for missing or damaged copies must be submitted by the Customer or Subscription Agent within the claims window, as noted below.

Claims window – General
Claims for missing print issues must be sent to cs-agency@wiley.com (and the Subscription Agent or Customer may be referred to a society) within three months of whichever of these dates is the most recent: date of subscription payment; or date of issue publication.

Claims window – India
Both Subscription Agents and Customers in India have 48 hours after receipt of goods to confirm that all content listed on the packing label has been received. In the event of any discrepancy, SPUR Infosolutions, Wiley's delivery partner in India, needs to be notified within forty-eight (48) hours using this email address: support@spurinfo.com. All claims will be checked against SPUR Infosolutions delivery records before the claim is accepted. The above terms for Wiley's claims policy otherwise apply.

Back issues: Single issues from current and recent volumes are available at the current single issue price from cs-journals@wiley.com. Earlier issues may be obtained from Periodicals Service Company, 351 Fairview Avenue – Ste 300, Hudson, NY 12534, USA. Tel: +1 518 822-9300, Fax: +1 518 822-9305,
Email: psc@periodicals.com

HINARI: Access to this journal is available free online within institutions in the developing world through the HINARI initiative with the WHO. For information, visit www.who.int/hinari/en/
Wiley is a founding member of the UN-backed HINARI, AGORA, and OARE initiatives. They are now collectively known as Research4Life, making online scientific content available free or at nominal cost to researchers in developing countries. Please visit Wiley's Content Access – Corporate Citizenship site: http://www.wiley.com/WileyCDA/Section/id-390082.html

Publisher and Business Correspondence
HIV Medicine is published by John Wiley & Sons Ltd: 9600 Garsington Road, Oxford OX4 2DQ, UK. Tel: +44 (0)1865 776868, Fax: +44 (0)1865 714591. Blackwell Publishing was acquired by John Wiley & Sons in February 2007. Wiley's Corporate Citizenship initiative seeks to address the environmental, social, economic, and ethical challenges faced in our business and which are important to our diverse stakeholder groups. Since launching the initiative, we have focused on sharing our content with those in need, enhancing community philanthropy, reducing our carbon impact, creating global guidelines and best practices for paper use, establishing a vendor code of ethics, and engaging our colleagues and other stakeholders in our efforts. Follow our progress at www.wiley.com/go/citizenship.

Journal Customer Services: For ordering information, claims and any enquiry concerning your journal subscription please go to https://hub.wiley.com/community/support/onlinelibrary or contact your nearest office.

Americas: E-mail: cs-journals@wiley.com; Tel: +1 781 388 8598 or +1 800 835 6770 (Toll free in the USA and Canada).

Europe, Middle East and Africa: E-mail: cs-journals@wiley.com; Tel: +44 (0) 1865 778315.

Germany, Austria, Switzerland, Luxembourg, Liechtenstein: cs-germany@wiley.com; Tel: 0800 1800 536 (Germany)

Asia Pacific: E-mail: cs-journals@wiley.com; Tel: +65 3165 0890.

Japan: For Japanese speaking support, Email: cs-japan@wiley.com.

Visit our Online Customer Get-Help available in 7 languages at https://hub.wiley.com/community/support/onlinelibrary

Advertising: Sarah Young, HIV Medicine advertising (email: syoung@wiley.com)

Commercial reprints: Dean Martin (email: dean.martin@wiley.com)

Copyright and Copying
HIV Medicine © 2023 British HIV Association. All rights reserved. No part of this publication may be reproduced, stored or transmitted in any form or by any means without the prior permission in writing from the copyright holder. Authorization to copy items for internal and personal use is granted by the copyright holder for libraries and other users registered with their local Reproduction Rights Organisation (RRO), e.g. Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923, USA (www.copyright.com), provided the appropriate fee is paid directly to the RRO. This consent does not extend to other kinds of copying such as copying for general distribution, for advertising or promotional purposes, for republication, for creating new collective works or for resale. Permissions for such reuse can be obtained using the RightsLink "Request Permissions" link on Wiley Online Library. Special requests should be addressed to: permissions@wiley.com

OnlineOpen
HIV Medicine accepts articles for Open Access publication. Please visit https://authorservices.wiley.com/author-resources/Journal-Authors/open-access/onlineopen.html for further information about OnlineOpen.

Disclaimer
The Publisher, the British HIV Association, the European AIDS Clinical Society and the Editors cannot be held responsible for errors or any consequences arising from the use of information contained in this journal; the views and opinions expressed do not necessarily reflect those of the Publisher, the British HIV Association, the European AIDS Clinical Society or the Editors, neither does the publication of advertisements constitute any endorsement by the Publisher, the British HIV Association, the European AIDS Clinical Society or Editors of the products advertised.

ISSN 1464-2662 (Print)
ISSN 1468-1293 (Online)

For submission instructions, subscription and all other information visit: www.hivmedicinejournal.com

Note to NIH Grantees
Pursuant to NIH mandate, Wiley Blackwell will post the accepted version of contributions authored by NIH grant-holders to PubMed Central upon acceptance. This accepted version will be made publicly available 12 months after publication. For further information, see www.wiley.com/go/nihmandate.

HIV MEDICINE (1464-2662) is published monthly except June and December. US mailing agent: Mercury Media Processing, LLC 1850 Elizabeth Avenue, Suite #C, Rahway, NJ 07065 USA. Periodical postage paid at Rahway, NJ. POSTMASTER: Send all address changes to *HIV MEDICINE*, John Wiley & Sons Inc., C/O The Sheridan Press, PO Box 465, Hanover, PA 17331 USA.

Printed in the UK by Hobbs the Printer Ltd.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13475 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

HIV MEDICINE

Volume 24, Supplement 3, April 2023

BHIVA Spring Conference 2023

This supplement was supported by Gilead Sciences Europe Ltd

BHIVA British HIV Association

DAIG Deutsche AIDS-Gesellschaft e.V.

EDITORS

Caroline Sabin
Jürgen Rockstroh

EACS European AIDS Clinical Society

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13475 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

HIV MEDICINE

Volume 24, Supplement 3, April 2023

BHIVA Spring Conference 2023
Sage Gateshead, St Mary's Square, Gateshead
24-26th April 2023

Contents

Disclaimer

This abstract book has been produced using
author-supplied copy. No responsibility is assumed for any claims, instructions, methods or drug dosages contained in the abstracts; it is recommended that these are verified independently.

The contents contained herein are correct at the time of printing and may be subject to change.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13475 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Check for updates

DOI: 10.1111/hiv.13476

ABSTRACT

Oral Abstracts

O01 | Microelimination of hepatitis C among people living with diagnosed HIV in England

Emma Sidebotham[1], James Lester[2], Cuong Chau[2], Alison Brown[2], Monica Desai[2], Sema Mandal[2], Ruth Simmons[2], Matthew Hibbert[2], Ann Sullivan[2], Graham Cooke[1,3]
[1]Imperial College London, UK. [2]UK Health Security Agency, London, UK. [3]British HIV Association, Letchworth Garden City, UK

Background: In 2018, BHIVA set a target to achieve 100% microelimination of hepatitis C by 2021 for people living with diagnosed HIV. This was thought feasible due to the robust infrastructure around HIV care facilitating the delivery of direct acting antivirals (DAAs) which can cure hepatitis C infection. Here we outline progress towards this ambition.
Method: Data were collected from the comprehensive national HIV and AIDS reporting system (HARS) which links people living with diagnosed HIV across HIV consultations to monitor outcomes. Hepatitis C status is a mandatory field for HARS data collection, and can be completed to indicate infection status, or not having been tested.
Patients were defined as cleared if reported to have no infection for a continuous 28 week period, in accordance with hepatitis C care pathway definitions. Reinfection was defined as evidence of active infection after clearance.
Results: The baseline was March 2015 to March 2016, with 4.6% (3,222 of 70,539) of people seen for HIV care showing evidence of active HCV infection in this period. HCV prevalence was highest among people who inject drugs (50%, 532 of 1,062), those exposed through blood or blood products (22%, 113 of 514), and gay, bisexual and other men who have sex with men (4%, 1,063 of 23,674).
Of the 3,222 with HIV/HCV at baseline, 3,080 were included (exclusion: 12 died before April 2016 and 130 were not seen for care after the baseline period). By the end of 2021, 70% (2,153/3,080) had cleared HCV infection. A further 288 individuals had no infection reported at last attendance, but insufficient followup to confirm clearance. Overall, 21% (639/2,159) of those coinfected at baseline did not clear HCV infection, including 118 individuals reinfected after clearance. Co-infection reduced from 4.6% (3,222 of 70,539) at baseline to 0.9% (639/68,329) by the end of 2021 (on average 6 years of follow up per coinfected individual).
Conclusion: Overall, 70% of patients with HIV/HCV coinfection had cleared their HCV infection by the end of 2021, though given the conservative clearance definition used, this is likely an underestimate. This adds to the growing body of evidence that microelimination is feasible.

O02 | Laboratory implementation of emergency department blood-borne virus (EDBBV) opt-out screening in a London tertiary centre

Raissa Rachman[1], Tristan J Barber[2,3], Fiona Burns[2,3], Russell Durkin[4], Tanzina Haque[1], Dianne Irish-Tavares[1], Jennifer Hart[1]
[1]Department of Virology, Royal Free London NHS Foundation Trust, UK. [2]Department of HIV Medicine, Royal Free London NHS Foundation Trust, UK. [3]Institute for Global Health, University College London, UK. [4]Emergency Department, Royal Free London NHS Foundation Trust, UK

Background: The National HIV Action Plan aims to reduce new HIV infections in England to zero by 2030. Diagnosis and treatment of people living with HIV (PLWHIV) a key component of this strategy. As per this initiative, routine 'opt out' EDBBV testing (HIV, HBV and HCV) was introduced at our Trust in April 2022.
Data surrounding laboratory aspects of 'opt out' testing programmes is limited. We describe our experience to highlight important laboratory considerations to assist implementation of 'opt out' testing.
Method: We reviewed laboratory data for all ED attendees aged >16 who were tested for HIV through EDBBV screening between April-August 2022. Serology testing pathways (including initial screening assay, confirmatory serology assays and molecular testing) were examined.
Review of medical notes determined whether positive results were known PLWHIV or new diagnoses.
Results: In total 12,495 HIV antibody screening tests were conducted. 137 (1.1%) were reactive on initial screening assay (Roche platform; 4th generation antigen/antibody assay). 23 (0.2%) were insufficient for testing.

 © 2023 The Authors. HIV Medicine © 2023 British HIV Association

74 (0.6%) were not tested due to sample errors ie. mislabelling/incorrect sample type.
123/137 samples reactive on screening assay were confirmed on further serological testing (Abbott Architect, 4th generation antigen/antibody assay & Bioplex, 5th generation split antigen/antibody assay). 12/14 samples that did not confirm were also negative for HIV-1 RNA and reported as 'HIV indeterminate'. 2 samples were insufficient for molecular testing.
After removal of duplicate samples, 92 PLWHIV were identified: 37/92 were engaged in HIV services elsewhere and 50/92 were known to our service. 23 samples from known PLWHIV underwent confirmatory serology testing. 5 newly diagnosed PLWHIV were referred to HIV services.
Conclusion: When introducing EDBBV screening there are several laboratory factors to consider.
Steps should be taken to prevent confirmatory serology testing in known PLWHIV. Laboratory algorithms and assays should aim to optimise sample volume and reduce recall for repeat testing in cases when samples are insufficient for confirmatory testing.
Electronic results notification pathways for positive, insufficient and indeterminate results should be developed.
Laboratory collaboration with clinical colleagues is key to ensuring appropriate communication of results and engagement with HIV services, ultimately improving experience and outcomes.

O03 | A review of sexual health and blood-borne virus care provided to inmates at admission into UK prisons and secure facilities

Natasha Bell[1], Katie Humphries[2], Joe Heskin[3], Jon Dunn[4], Sum Yee Chan[5]
[1]Imperial College Healthcare NHS Trust, London, UK. [2]NHS Lothian, Edinburgh, UK. [3]Chelsea and Westminster Hospital NHS Foundation Trust, London, UK. [4]Public Health England, Manchester, UK. [5]Central and Northwest London NHS Foundation Trust, UK

Background: A higher prevalence of high-risk behaviours, such as injecting drugs and commercial sex work, has been documented amongst prisoners (1,2), concentrating and amplifying many blood-borne viruses (BBVs) and sexually transmitted infections (STIs).
A greater need for healthcare services has been identified in this population, with variability and disparity between the public and incarcerated populations. We aim to discover what services are available in UK secure facilities, standardise care and identify areas for improvement.
Method: A Cross-Sectional Study of the 150 secure facilities across the UK, conducted by requesting facility lead healthcare professionals to complete a questionnaire concerning sexual health services (SHS) provided at their facility admission. This was undertaken between 1/9/2021–31/3/2022.
Results: 83/150 (55%) facilities returned completed questionnaires. 80/138 prisons (England (62/114), Scotland (15/15), Ireland (3/3), Wales (0/6)), 3/4 secure hospitals, and 0/10 Immigration Removal Centres. 68 (82%) of the facilities held males only, 7 (8%) females only, and 8 (12%) both genders.
At initial assessment, all patients were reportedly assessed and notified of SHS available. Only 45% were reviewed by a specialist SH professional if further assessments were required. 94% of facilities had access to specialist SHS with 62%.
Testing for all BBVs (HIV, Hepatitis B &C) and STIs (Chlamydia, Gonorrhoea, and Syphilis) were offered at admission in 100% and 87% of cases respectively. Risk assessments for mental health and substance abuse were also completed universally (99%), however, risk assessments for BBVs (81%) and STIs (56%) were not.
Pregnancy testing was offered to females in 60% (9/15) of facilities with only 20% (3/15) assessing pregnancy risk to offer emergency contraception.
Conclusion: The offer of screening for BBVs and STIs was better than anticipated for new admissions to secure facilities as were risk assessments for mental health and substance abuse, although this may be influenced by response bias. A lack was seen in assessment for high-risk sexual practices and onward referral to specialist SHS for review and risk reduction interventions. Poor provision of care for women's reproductive health was noted. A comprehensive picture of care throughout internment, provided by further analysis of our data, would identify areas ripe for further optimisation.

O04 | Implementation of routine opt-out blood-borne virus (BBV) screening in 34 emergency departments (EDs) in areas of extremely high HIV prevalence in England

Rachel Hill-Tout, Stephen Hindle, Matthew Fagg, Niall McDermott, Georgia Threadgold, Beatrice Emmanouil, Mark Gillyon-Powell, Mohammed Absar, Agnes Webb, Adam Cooper, Mark Smith, Ian Jackson
NHS England, London, UK

Background: In December 2021 the English Government committed £20 million over 3 years to expand opt-out HIV testing in EDs in extremely high HIV prevalence areas (>5/1000), a proven way to identify new cases of HIV. In partnership with the NHS England Hepatitis C (HCV) Elimination Programme, this expanded to include

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

testing for Hepatitis B (HBV) and HCV. This initiative launched in April 2022 in 34 EDs in London, Manchester, Salford, Brighton, and Blackpool, building on existing ED testing in pioneer sites.

Method: A working group including HIV clinicians, HCV Operational Delivery Network (ODN) leads, viral hepatitis clinicians, ED clinicians, UK Health Security Agency (UKHSA), Integrated Care System (ICS) leads and community partners established a standard operating procedure and patient information materials based on learning from pioneer sites, a monitoring and evaluation strategy, and a Community Charter. We worked with ICS leads, Trusts and Pathology Networks to rapidly develop new BBV profiles, workflows and implement testing at each site.

Participating sites aim to screen all adult ED attendees having blood tests for any reason for BBVs (4th generation HIV 1/2 antigen antibody test, HCV antibody with reflex HCV ribonucleic acid (RNA) and HBV surface antigen) unless they opt-out. People are informed using prominently displayed posters. HIV and Hepatitis services manage all non-negative results including patient notification, confirmatory testing, and linkage to care.

Results: Between 01/04/22 and 30/11/22 in 33 EDs there were 853,942 ED attendances with blood tests. 571,691 (67%) people were tested for HIV, 184,663 (22%) for HBV and 243,951 (28.6%) for HCV. HIV testing identified 238 people who were newly diagnosed, 124 lost to follow up (LTFU) and 2,800 in care. HBV testing identified 675 new diagnoses and 52 LTFU. HCV testing identified 269 new diagnoses, 46 LTFU, 49 in care and 10 reinfections.

Conclusion: Within 8 months, ED BBV testing identified 1,414 people living with BBVs (newly diagnosed or LTFU) who are now being linked to care. This represents the efforts of hundreds of colleagues in the NHS, and community sector, showing the impact of system-wide collaboration. The next phase aims to increase BBV testing uptake across all sites to 95%

O05 | Impact and experiences of offering HIV testing across the whole city population through primary care clusters and GP surgeries in the Texting 4 Testing (T4T) project

Zsanett Lukacs[1], Lisa Power[1], Zoe Couzens[2], David Gillespie[1,3], Darren Cousins[1,3,4]
[1]Fast Track Cities Cardiff and Vale, Cardiff, UK. [2]Public Health Wales NHS Trust, Cardiff, UK. [3]Cardiff University, UK. [4]Cardiff Royal Infirmary, UK

Background: In 2021, a pilot offer to recommend online HIV self-sampling kits to all population covered by a cluster of GP surgeries in one area of our city successfully diagnosed one individual with late asymptomatic HIV infection and was acceptable to both healthcare workers and practice population. The question remained whether such interventions across the whole city would diagnose further undiagnosed cases and be acceptable to communities.

The Texting 4 Testing (T4T) project secured external funding to support GP surgeries across Cardiff & Vale of Glamorgan to send an SMS text invite to online self-sampling HIV testing to all practice patients aged 16+.

Method: All nine primary care clusters in the region were approached and where agreed, texts were sent from the practice using their EPR systems. The message directed the recipient to the national online HIV self-sampling service and both click-throughs and subsequent test requests were logged with results collated. A subsequent survey of participating GP practices examined the impact on their services.

Results: The total population (including children) of the region is 488,000. Two GP clusters declined to participate. 20 participating GP practices sent 143,526 text messages to residents aged 16+. 3.36% of those contacted clicked through to the self-sampling website and to date 347 HIV tests were requested by those disclosing receiving an invite from their surgery. No reactive HIV tests are reported to date although some STI diagnoses were made through co-testing.

In the practice survey, 80% of practices reported receiving 13 calls in total from patients. Most patients wanted more information (5) or queried the legitimacy of the text (3). The project received no negative comments from surgery staff. The few negative comments received from members of the public were universally people working in healthcare.

Participating practices could expect one phone call to the practice for every 3,000 text messages sent.

Conclusion: Texting patients through GP surgeries is an acceptable strategy to deliver HIV testing at scale and was acceptable to primary care and the general population with minimal disruption to primary care. Negative perceptions of HIV testing were not found in the general population outside of healthcare workers.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

O06 | 'Not PrEPared': barriers to accessing PrEP in England

Adam Freedman[1], Ngozi Kalu[2], Will Nutland[3], Greg Owen[2], Sophie Strachan[4], Deryck Browne[5]
[1]National AIDS Trust, London, UK. [2]Terrence Higgins Trust, London, UK. [3]PrEPster, London, UK. [4]Sophia Forum, London, UK. [5]One Voice Network, London, UK

Background: Pre-exposure prophylaxis (PrEP) is a game-changing drug, but is not reaching its potential. Our intention was to research the barriers to uptake of PrEP in England for those already aware of PrEP and trying to access it through the NHS.
Method: An online community survey of people who tried to access PrEP and had faced difficulties doing so, with over 1,000 respondents, an online survey of PrEP clinicians and FOI request data from all English local authorities relating to PrEP services, alongside 6 qualitative interviews.
Results:

- Only 35% of community respondents reported getting access to PrEP at the time of responding, the majority were first time PrEP requests
- 23% of community respondents reported being turned away from their clinic due to a lack of appointment availability
- 35% of community respondents reported waiting 12 weeks for a call back for a PrEP appointment
- No local authority reported more than 5 women using their PrEP services
- Almost half (48%) of respondents who provided information about their wellbeing while accessing PrEP reported mental health related struggles, including stress and anxiety
- Nearly half of clinical respondents (47%) felt that their clinic did not have sufficient workforce levels to meet current need around PrEP

Conclusion: PrEP access is increasingly challenging for many already aware of the drug and attempting to get it through the NHS. The government needs to properly resource sexual health services along with providing targeted additional funding and support for areas that are struggling to meet demand for PrEP.
Sexual health services should expand training on dispensing & prescribing PrEP for their staff, and about reviewed PrEP eligibility criteria. They also need to undertake audits of clinic capacity and which demographics are accessing PrEP, increase PrEP prescription length and implement new PrEP appointment systems to improve access to all at risk of acquiring HIV.
We need more robust data collection on the demographics of who is accessing PrEP. Service commissioners need to commission PrEP services using evidence-based principles of best practice, produce guidance on how clinicians can expand appointment capacity in PrEP clinics and actively monitor equitable access to PrEP services across all demographics.

O07 | HIV care during the SARS-COV-2 pandemic for Black people with HIV in the UK

Zoe Ottaway[1], Lucy Campbell[1,2], Laura Cechin[1], Julie Fox[2,3], Fiona Burns[4,5], Lisa Hamzah[6], Stephen Kegg[7], Melanie Rosenvinge[7], Sarah Schoeman[8], David Price[9], Rachael Jones[10], Robert Miller[5,11], Denis Onyango[12], Shema Tariq[5,11], Frank Post[1,2]
[1]King's College Hospital NHS Foundation Trust, London, UK. [2]King's College London, UK. [3]Guy's and St Thomas' NHS Foundation Trust, London, UK. [4]Royal Free London NHS Foundation Trust, London, UK. [5]University College London, UK. [6]St George's University Hospital NHS Foundation Trust, London, UK. [7]Lewisham and Greenwich NHS Trust, London, UK. [8]Leeds Teaching Hospitals NHS Trust, UK. [9]Newcastle Hospitals NHS Foundation Trust, UK. [10]Chelsea and Westminster NHS Foundation Trust, London, UK. [11]Central and North West London Foundation Trust, UK. [12]Africa Advocacy Foundation, London, UK

Background: The COVID-19 pandemic disproportionally affected black communities but the impact on HIV care in this group remains poorly understood. We evaluated measures of HIV care during the COVID-19 pandemic in the GEN-AFRICA cohort of black people with HIV living in the U.K.
Method: We evaluated interruptions to HIV care during the COVID-19 pandemic (01/2020-09/2022) in the GEN-AFRICA cohort at nine UK clinics who provided HIV outcomes for >80% of their participants. We ascertained death, transfers of care, loss to follow up for >12 months, the highest HIV viral load and interruptions to antiretroviral therapy (ART). We evaluated factors associated with the composite outcome of HIV viraemia (viral load >200 c/mL) and/or an ART interruption using logistic regression analysis; factors associated (P<0.1) in univariable analysis were included in the multivariable model. We also summarized reasons for ART interruptions where recorded.
Results: 2321 participants (mean age 51.3 years; 55.8% women; pre-pandemic current/nadir CD4 of 500/204 cells/mm3 and HIV RNA <200 c/mL in 92.3%) were in care on 01/01/2020. Thirty (1.3%) subsequently died, 24 (1.0%) transferred care and 48 (2.1%) became lost to

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Table: Factors associated with HIV viraemia/ART interruption

		Univariable		Multivariable	
		OR	p value	OR	p value
Age	20-29 years	1		1	
	30-39 years	0.51 (0.28-0.95)	0.03	0.49 (0.24-1.01)	0.05
	40-49 years	0.32 (0.18-0.57)	<0.001	0.49 (0.26-0.93)	0.03
	50-59 years	0.34 (0.20-0.59)	<0.001	0.50 (0.27-0.95)	0.03
	≥60 years	0.30 (0.17-0.54)	<0.001	0.51 (0.26-1.00)	0.05
Sex	Female (vs. Male)	0.88 (0.69-1.11)	0.28		
Region of ancestry	West Africa	1		1	
	East Africa	0.69 (0.48-0.99)	0.04	0.74 (0.49-1.10)	0.14
	Southern Africa	0.84 (0.60-1.17)	0.31	0.87 (0.59-1.27)	0.46
	Central Africa	1.40 (0.85-2.30)	0.19	1.35 (0.77-2.38)	0.3
	Caribbean	1.04 (0.72-1.50)	0.83	0.95 (0.63-1.45)	0.82
	Other	1.31 (0.82-2.08)	0.26	1.22 (0.71-2.09)	0.57
Time since HIV diagnosis	Per year	0.98 (0.96-1.00)	0.01	1.00 (0.97-1.02)	0.71
CD4 Nadir (≥350 cells/mm3)	Yes (vs. no)	0.87 (0.65-1.17)	0.36		
CD4 Current (≥350 cells/mm3)	Yes (vs. no)	0.74 (0.57-0.96)	0.02	0.83 (0.62-1.12)	0.22
HIV RNA pre-pandemic (<200 copies/mL)	Yes (vs. no)	0.20 (0.14-0.28)	<0.001	0.23 (0.16-0.34)	<0.001
AIDS	Yes (vs. no)	0.54 (0.17-1.72)	0.30		
Diabetes	Yes (vs. no)	0.96 (0.63-1.46)	0.85		
Hypertension	Yes (vs. no)	0.92 (0.71-4.18)	0.50		
Chronic kidney disease (eGFR <60)	Yes (vs. no)	0.82 (0.63-1.05)	0.12		
Cardiovascular disease (IHD/CCF)	Yes (vs. no)	0.94 (0.52-1.72)	0.85		
Obesity (BMI ≥30)	Yes (vs. no)	0.81 (0.63-1.03)	0.09	0.90 (0.68-1.19)	0.45
COVID-19 vaccination	Yes (vs. no)	0.37 (0.27-0.51)	<0.001	0.39 (0.28-0.55)	<0.001
COVID-19 disease	Yes (vs. no)	1.02 (0.76-1.38)	0.88		

eGFR=estimated Glomerular Filtration Rate; IHD=ischaemic heart disease; CCF=congestive cardiac failure; BMI=Body Mass Index

follow up. 523 (22.7%) reported an episode of COVID-19 and 1771 (87.1%) having been vaccinated against SARS-CoV-2. The composite outcome could be evaluated in 2130 (91.8%); 259 (11.2%) had a documented HIV VL >200 c/mL, 228 (9.8%) an ART interruption and 325 (14%) had HIV viraemia/ART interruption. In multivariable analysis, older age, a pre-pandemic HIV RNA <200 c/mL and being vaccinated against SARS-CoV-2 were associated with reduced odds of HIV viraemia/ART interruption (Table) while sex, CD4 (current/nadir), comorbid status and having had COVID-19 were not associated. Reasons for ART interruption were available for 52 participants; 38% cited domestic logistic reasons, 27% issues related to foreign travel, 19% psychological reasons, 12% lockdown or changes to the daily routine and 4% personal choice.

Conclusion: During the COVID-19 pandemic, one in seven black people with HIV experienced an ART interruption and/or HIV viraemia. Pre-pandemic measures of suboptimal engagement in care, pandemic restrictions, and wider health beliefs as reflected by COVID-vaccination, contributed to these undesirable HIV outcomes.

O08 | Clinical presentation of mpox in people with and without HIV

Victoria Pilkington[1,2], Killian Quinn[2], Lucy Campbell[1], Michael Brady[2], Frank Post[1]
[1]*King's College London, UK.* [2]*King's College Hospital NHS Foundation Trust, London, UK*

Background: Early UK surveillance data revealed that people living with HIV (PLWH) were overrepresented within mpox cases, with one third reported in PLWH. However, it is unknown whether mpox infection is more severe in people living with HIV.

Method: All laboratory confirmed mpox cases seen between May-December 2022 in one London hospital trust were identified via pathology reporting systems. Under existing clinical pathways, patients received regular telephone reviews (virtual ward) until deemed safe to discharge. We extracted demographic and clinical data to allow comparison of HIV positive and negative cases. Data were analysed using STATA 17.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Results: 150 cases of mpox were identified (mean age 37.4, 99.3% male, 92.7% MSM), 58 (38.7%) of whom were in PLWH (mean CD4 cell count 513 cells/mm3, 47 (81.0%) with HIV RNA <200 copies/mL). PLWH were older (40.4 vs 35.4yrs, p=0.0013) but otherwise similar to those without HIV. Compared with HIV negative mpox cases, PLWH had similar clinical presentations with similar risk of more widespread manifestations of disease, such as non-dermatological symptoms (87.9% vs 82.6%, p=0.38) and extra-genital lesions (74.1% vs 64.0%, p=0.199). PLWH experienced similar time from onset of symptoms to discharge (mean days 17.1 vs 15.4, p=0.39) and total time under virtual ward review (mean days 11.7 vs 9.01, p=0.13). A similar proportion of PLWH required review in the emergency department (36.2% vs 25.6%, RR=1.41, 95%CI=0.86 to 2.33). A higher proportion of PLWH were admitted to hospital, but this did not reach statistical significance (19.0% vs. 9.30%, RR=2.04, 95% CI=0.86 to 4.76). Of the small sample of PLWH with uncontrolled viral loads (RNA>=200), 2/5 patients (40%) were hospitalised. There were no recorded deaths.

Conclusion: In this cohort of people with mpox, there was a high prevalence of well-controlled HIV co-infection, but we find no evidence that PLWH experience more severe mpox. Whilst there are a higher proportion of hospitalisations, this is not statistically significant and is likely to be impacted by additional caution shown by clinicians in making decisions around mpox care in these patients. All other outcomes analysed indicate that mpox infection was no more severe in our cohort, providing reassurance for patients and clinicians.

O09 | 'If you don't know, how can you know?': a qualitative investigation of HIV pre-exposure prophylaxis knowledge and perceptions among women in England

Melissa Cabecinha, John Saunders, Greta Rait, Hamish Mohammed, Lorraine McDonagh
UCL, London, UK

Background: Coverage of pre-exposure prophylaxis (PrEP) among women in England is low; among those with a PrEP need identified in 2021, 23.3% of women started or initiated PrEP, compared with 71.6% of gay, bisexual and other men who have sex with men. The aim of this study was to investigate how women's knowledge and perceptions of PrEP may contribute to lower levels of coverage.

Method: Eighteen semi-structured interviews were conducted with cisgender women living in England, aged 23-61. Participants were recruited via paid-for advertisements on social media platforms (i.e., Facebook, Instagram), and via Twitter. Interviews were audio recorded and transcribed, and an inductive, reflexive, thematic analysis was conducted to explore women's awareness of PrEP and how knowledge and perceptions of PrEP are acquired and influenced.

Results: Half of the interviewees were aware of PrEP prior to taking part, however among these participants, knowledge around PrEP availability, access, and eligibility was low. General HIV literacy varied, and for some, the distinction between pre- and post-exposure prophylaxis was unclear. Participants were generally in favour of PrEP. In many cases, participants aware of PrEP did not know that it was effective or available for women, in part due to perceptions of who can be affected by HIV. These perceptions were reinforced by HIV stigma; how PrEP, HIV risk-behaviours, and people living with HIV are portrayed or discussed in the media; and a lack of women-specific information on HIV-risk and PrEP-eligibility. Participants highlighted the need to "meet people where they are", e.g., situating HIV prevention and PrEP provision conversations in settings women currently attend for reproductive and sexual health, such as primary-care settings, or through PrEP in relationship and sex education curricula in schools.

Conclusion: These findings suggest that a lack of awareness, knowledge gaps, and assumptions around PrEP-eligibility contribute to low PrEP coverage among women. Education and awareness campaigns should include women-specific information on PrEP availability and clear indications for PrEP candidacy. Addressing HIV stigma, integrating HIV prevention in conversations around sexual health, and expanding PrEP provision outside of SHS may help increase accessibility of PrEP and PrEP information for women.

O10 | Sexually acquired young adults with HIV: a neglected cohort?

Sophie Herbert[1], Kerry Woodgate[1], Rachael Percival[2]
[1]*Northamptonshire Healthcare NHS Foundation Trust, Kettering, UK.* [2]*Northamptonshire Healthcare NHS Foundation Trust, Northampton, UK*

Background: CHIPS+ studies vertically infected (VI) young adults (YA) but less is known about the needs of YA who have acquired HIV sexually (SA). We explored this in our cohort.

Method: All patients aged <30 years on 31/12/2022 were identified. Demographics, CD4 count and HIV VL, antiretroviral (ARV) data, co-morbidities, and social factors were examined.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

	Sexually acquired SA 36/59 (61%)		Vertically Infected VI 23/59 (39%)		
	<25	25-30	<25	25-30	Total
Male	6	17	7	4	34 (57.6%)
female	4	9	4	8	25 (42.4%) (I trans-female)
Total	10	26	11	12	59 (100%)

	Sexually acquired SA	Vertically infected VI
Median age of diagnosis	22 (17-29)	10.5 (1-25)
Median age of disclosure	-	16.5 (8-25)
OI at presentation	5/36 (14%)	6/23 (26%)
Median CD4 at diagnosis	380 (10-810)	260 (1-1180)
Current detectable HIV VL on treatment	4/36 (11.1%)	4/23 (17.4%)
Dol containing regimen	12/36 (33.3%)	12/23 (52.2%)
PI containing regimen	2/36 (5.6%)	11/23(47.8%)
First and only regimen	10/36(27.7%)	4/23 (17.4%).
>3 ARV regimen	6/36 (16.7%)	13/23 (56.5%)
Mental health issues	15/36 (42%)	3/23 (13.0%)
Excess drug/alcohol use	11/36 (30.6%)	0/23 (0%)
Smoke/vape	15/36(41.7%)	3/23(13.0%)

18/36(50%) SA are GBMSM. 18/36 (50%) diagnosed in GU, 5/36 (14%) antenatally,8/36 (22%) in-patients,1 via GP. All VI identify as heterosexual, 19/23(83%) diagnosed <10 years old, 3 in GU (>17 years), 1 in dermatology (age 21). 34/36(95%) SA commenced ARVs at time of diagnosis vs 10/17(58.9%) VI. 6/36 (16.7%) SA had baseline resistance (4 NNRTI,2 NRTI). 3/12 (25%) VI had 1 class, 5 (41.7%) 2 class and 1(8.3%) 3 class resistance. 6/9 (SA and VI) with resistance have current HIV VL <40. 3/21 (14.2%) <25 years have a detectable VL vs 8/38 (21%) aged 25-30 years (4 SA and 4 VI). 12/38 (31.5%) >25 vs 5/21 (23.8%) <25 years had a current or previous history of mental health issues.

Results: 59/1150 (5.1%) patients <30 years were identified.

Conclusion: VI YA have more ARV experience and resistance, but less likely to have mental health issues or drug and alcohol misuse. SA YA have unique challenges which also need consideration.

O11 | Diabetes and hypertensive disorders in pregnant women living with HIV in the UK and Ireland

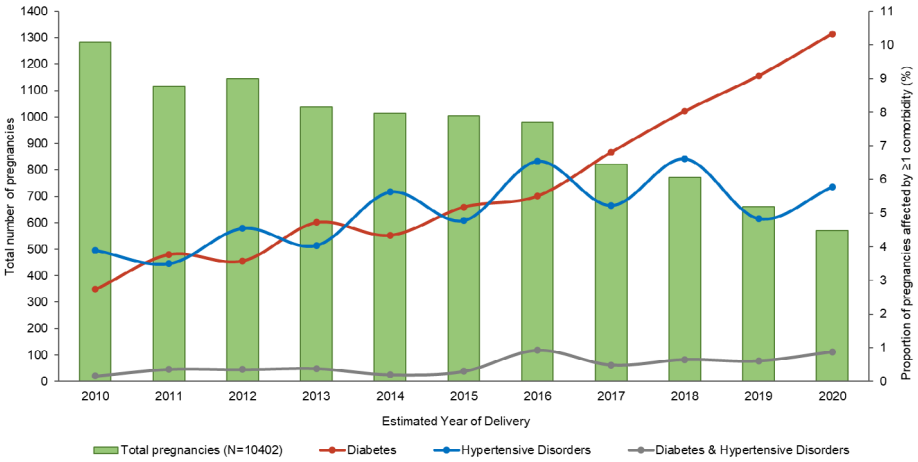
Laurette Bukasa[1,2], Helen Peters[1,2], Claire Thorne[1,2]
[1]*Integrated Screening Outcomes Surveillance Service (ISOSS) a part of the Infectious Diseases in Pregnancy Screening (IDPS) Programme, commissioned by NHS England, UK.* [2]*UCL Great Ormond Street Institute of Child Health, London, UK*

Background: Diabetes and hypertensive disorders (HD) in pregnancy are associated with adverse birth outcomes, including in women living with HIV (WLWH). Our aim was to estimate their prevalence and to compare maternal characteristics and birth outcomes in pregnant WLWH with and without these comorbidities.

Method: ISOSS monitors all pregnancies to diagnosed WLWH in the UK (England only from 2020). We included pregnancies with deliveries between 2010-2020 at ≥24 gestational weeks. Diabetes was reported pre-existing diabetes or gestational diabetes and HD was pre-eclampsia, hypertension, or pregnancy-induced hypertension. The comparison group were pregnancies in WLWH without comorbidities. Outcomes assessed were preterm birth (PTB, <37 weeks), low birthweight (LBW, <2500g), small-for-gestational age (SGA, <10th percentile, INTERGROWTH-21) and birthweight z-scores (INTERGROWTH-21).

Results: There were 10402 pregnancies in 9016 women; diabetes was reported in 554 (5.3%) pregnancies and HD in 511 (4.9%), with 8232 pregnancies in the comparison group. Prevalence of diabetes and HD increased over time, particularly for diabetes (Figure). More women with diabetes were aged 35-39 years (41.5% vs 29.3%), belonged to Black or Asian ethnic groups (84.4% vs 77.4%) and conceived on treatment (72.9% vs 64.0%) than in the comparison group (p<0.01). For women with HD, a greater proportion were aged ≥40 years (24.7% vs 10.2%) and of African origin (80.0% vs 70.0%) (p<0.01). Prevalence of PTB, LBW and SGA was 12.2% (1267/10402), 13.5% (1379/10219) and 9.97%

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License



†Ireland until 2018, England only from 2020

Figure: Diabetes and hypertensive disorders in pregnant women with HIV in the UK and Ireland†

(1019/10219) respectively. PTB and LBW was more frequent in women with diabetes (19.0% vs 7.7%; 13.4% vs.8.84%) and women with HD (41.1%; 46.0%;) than in the comparison group; whilst SGA was prevalent in women with HD (21.1% vs. 8.22%). Median birthweight z-scores were 0.44 (IQR: -0.36,1.24), -0.49 (IQR: -1.17, 0.23) and 0.07 (IQR: -0.60, 0.76) respectively, for the diabetes, HD, and comparison groups.

Conclusion: The prevalence of comorbidities has changed significantly over time with implications for birth outcomes. Further research is required to understand possible mechanisms and optimise pregnancy outcomes for women.

O12 | Monitoring clinical practice of BHIVA-supported breastfeeding guidelines for women living with HIV in the UK

Kate Francis, Rebecca Sconza, Claire Thorne, Helen Peters

Integrated Screening Outcomes Surveillance Service (ISOSS) part of the Infectious Diseases in Pregnancy Screening (IDPS) programme, commissioned by NHS England, and based at UCL Great Ormond Street Institute of Child Health, London, UK

Background: The British HIV Association (BHIVA) recommends formula-feeding to eliminate the risk of postnatal transmission, but state that virologically-suppressed treated women living with HIV (WLWH) with good adherence may be supported to breastfeed ('supported breastfeeding'). Guidelines recommend monthly maternal/infant testing.

Method: The Integrated Screening Outcomes Surveillance Service conducts surveillance of all pregnancies to diagnosed WLWH in the UK. We describe clinical practice of supported breastfeeding using population-level data from 2012-2021.

Results: Among 8513 livebirth deliveries, 203 (2.4%) were reported as having supported breastfeeding with some women breastfeeding >1 infant. Cases increased four-fold from <10 per year 2012-14 to 40-50 2019-21. 94.5% (190/201) were in women diagnosed pre-pregnancy and 84.0% (170/201) were in women born abroad, with 78.7% (154/197) from sub-Saharan Africa (4 unknown). Median maternal age was 35yrs (IQR: 31,40) and breastfeeding duration ranged from 1day-2years.

Reported reason(s) for breastfeeding via clinicians included: bonding (158), health benefits (137), family/friends' expectations/pressures (51) and HIV-disclosure concerns (60) (>1 reason reported in many). Partners were unaware of maternal HIV status in 16%, and GPs in 7%.

80.2% (77/96) of mother-infant pairs were known to have had monthly testing arranged as per BHIVA guidelines. Attendance issues were reported in 32.5% (25/77) of cases.

Breastfeeding was reported to have stopped in 150/203, mostly as planned; however, in 10 this was due to maternal viral load rebound. Among these 150 infants, 106 had ≥18months negative antibody test, 5 discharged <18month antibody, 34 are awaiting confirmatory testing and 5 were lost-to-follow-up before infection status was confirmed.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Conclusion: Numbers of women choosing supported breastfeeding in the UK are small but increasing. Cases remain varied, particularly regarding duration and attendance for monthly testing. There are no vertical transmissions to date amongst the supported breastfeeding group, but some infants are lost-to-follow-up and/or still in follow-up. Among UK vertical transmissions , a number are attributable to breastfeeding where clinicians were told the woman intended to formula-feed who may have been eligible for supported breastfeeding. Ongoing monitoring of clinical management remains essential to support future guidelines.

O13 | Antiretroviral therapy (ART) inhibits the growth of cervicovaginal microbiome species *in vitro*: potential role in preterm birth (PTB)

Veronica Georgiana Preda[1,2], Lauren A Roberts[2,3], Rachael A Quinlan[1,2], Charlotte-Eve S Short[1,2], Graham P Taylor[1,2], Julian R Marchesi[2,3]
[1]*Section of Virology, Department of Infectious Disease, Imperial College London, UK.* [2]*March of Dimes European Prematurity Research Centre, Imperial College London, UK.* [3]*Division of Digestive Diseases, Department of Metabolism, Digestion and Reproduction, Imperial College London, UK*

Background: PTB (<37 weeks gestation) is the main cause of infant mortality worldwide and is high in HIV infection. Despite reducing HIV vertical transmission to <1% and enabling immune reconstitution, PTB rates have not declined with effective ART. Protease inhibitors were associated with two-fold increase in PTB whilst zidovudine monotherapy (ZDVm) was associated with low rates. Bacterial vaginosis (BV) increases PTB risk, but the mechanism is unknown. BV is characterized by abundant adverse bacteria, e.g. *Gardnerella vaginalis* (*G. vaginalis*) and *Lactobacillus iners* (*L. iners*) and lack of the protective lactobacilli, i.e. *L. crispatus*. Some ART inhibit growth of gut pathobionts. We hypothesized that ART inhibits the growth of vaginal bacteria.
Method: Broth microdilution method was used to determine the minimum inhibitory concentration (MIC) and IC50 values for BV prescribed antibiotics, Metronidazole (MTZ) and Ciprofloxacin (CIP) (controls) against *G. vaginalis* DSM4944, *L. iners* DSM13335, *L. crispatus* DSM20854. MICs and IC50s of current nucleoside reverse transcriptase inhibitors were determined and compared with these controls.
Results: MTZ inhibited the growth of *G. vaginalis* (MIC 1.8 μg/mL, IC50 6 μg/mL), but not *L. iners*. CIP inhibited *L. iners* (MIC 0.2 μg/mL, IC50 1.3 μg/mL). ZDV showed inhibitory properties against *G. vaginalis* with an MIC of 39.9 μg/mL (IC50 142.6 μg/mL). For *L. iners*, the MIC of ZDV was 5.4 μg/mL (IC50 19 μg/mL). The MIC of abacavir against *G. vaginalis* was 4 μg/mL (IC50 13.7 μg/mL), but abacavir did not inhibit *L. iners*. Emtricitabine inhibited the growth of *L. iners* with an MIC of 78.7 μg/mL (IC50 136.7 μg/mL), but not *G. vaginalis*. Tenofovir disoproxil fumarate and lamivudine did not inhibit *L. iners* and *G. vaginalis*. None of these compounds inhibited the growth of *L. crispatus*.
Conclusion: A direct effect of ART on the vaginal microbiota was observed for ZDV, emtricitabine and strikingly abacavir *in vitro*. The MIC of abacavir being similar to that of MTZ. This provides insight into their potential activity *in vivo* and a possible protective role in HIV PTB, as has been clinically observed with ZDVm and with abacavir/lamivudine/zidovudine in the Mma Bana study.

O14 | Comparison of pregnancy outcomes for mothers living with perinatally acquired HIV, behaviourally acquired HIV, and those not living with HIV

Shivani Shah[1], Graham Taylor[2], Hermione Lyall[1], Caroline Foster[1]
[1]*Imperial College Healthcare NHS Trust, London, UK.* [2]*Imperial College London, UK*

Background: Outcomes for the third generation born to mothers living with perinatally acquired HIV (MLWPaHIV) are emerging. We aimed to compare antenatal, perinatal, and postnatal outcomes for infants between MLWPaHIV, mothers living with behaviourally acquired HIV (MLWBaHIV), and mothers not living with HIV (MHIV-).
Method: All MLWPaHIV booking at a London centre from 2015 were matched by ethnicity and nearest date of delivery to MLWBaHIV. To investigate the impact of age and HIV status, MLWPaHIV were further matched by age, ethnicity and year of delivery to MHIV-. Data extracted from e-records included: demographics, viral load (VL) and pregnancy related variables.
Results: All women were of Black ethnicity except one MLWBaHIV from South Asia. All infants of MLWHIV were uninfected with one intrauterine death (32/40) in a MLWPaHIV.
Conclusion: In this single centre comparison study MLWPaHIV were more likely to have hypertension and deliver preterm/LBW infants requiring neonatal and social care. Studies are required to investigate the

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

	MLWPaHIV (n=19)	MLWBaHIV (n=17)	MHIV- (n= 33)
Booking age (years) median (IQR)	25 (4)	35 (9)	24 (4)
Maternal BMI n (%)			
<18	0 (0%)	1 (5.9%)	1 (3.1%)
18-24	15 (78.9%)	6 (35.3%)	15 (45.5%)
25-29	1 (5.3%)	5 (29.4%)	11 (33.3%)
>30	3 (15.8%)	5 (29.4%)	6 (18.1%)
Booking gestation n (%)			
<13 weeks	11 (64.7%)	8 (47.1%)	21 (63.6%)
13-26 weeks	6 (35.3%)	8 (47.1%)	9 (27.3%)
>27 weeks	0	1 (5.8%)	3 (9.1%)
Booking VL >200 c/ml	6 (31.6%)	3 (17.6%)	-
Delivery VL >200 c/ml	0	1 (5.9%)	-
Social Care	11 (57.9%)	7 (41.2%)	8 (24%)
Child protection plan	5 (26.3%)	1 (5.9%)	1 (3%)
Maternal hypertension	3 (15.8%)	1 (5.9%)	1 (3%)
Mode of delivery n (%)			
Elective C/section	6 (31.6%)	7(41.2%)	0
Emergency C/section	5 (26.3%)	3 (17.6%)	5 (15.2%)
Vaginal delivery	8 (42.1%)	7 (41.2%)	28 (84.8%)
Preterm delivery <37/40	6 (33.3%)	3 (17.6%)	3 (9%)
Low birth weight (LBW) <2500g	8 (47%)	4 (23.5%)	4 (12%)
Neonatal Unit admission	5 (29.4%)	2(11.7%)	2(6%)
Any breastfeeding	0	5 (31.2%)	32 (97%)

longterm outcomes for children born to MLWPaHIV. Preterm delivery was high in all MLWHIV.

O15 | High-risk HPV prevalence and serostatus in women living with perinatally acquired HIV (the SHiP study)

Tamara Elliott[1,2], Merle Henderson[1,2], Ellie Crook[2], Sara Ayres[2], Simon Beddows[3], Kavita Panwar[3], Corrina Wright[4,5], Deirdre Lyona[2], Miranda Cowen[2], Hasit Patel[5], David Smith[5], Sarah Fidler[1,2], Caroline Foster[2]

[1]Imperial College London, UK. [2]Imperial College Healthcare NHS Trust, London, UK. [3]HPV Unit, UK Health Security Agency, London, UK. [4]North West London Pathology, London, UK. [5]Cervical Screening London, Health Service Laboratories, UK

Background: Women living with HIV are at an increased risk of HPV-related cervical intraepithelial neoplasia and cancer, and are eligible for annual cervical screening through primary HPV testing aged 25-65 and HPV vaccination up to 40 years (BHIVA guidelines). HPV vaccines that have been available in the UK are Cervarix (HPV16/18), Gardasil (HPV6/11/16/18) and more recently the nonavalent Gardasil 9 (HPV6/11/16/18/31/33/45/52/58). In this study we aim to explore high-risk HPV (hrHPV) prevalence and serological responses to HPV vaccination in a cohort of young women with perinatally acquired HIV (PaHIV).

Method: Eligible people with a cervix aged 18+ with PaHIV were recruited opportunistically. A cervical sample was taken for cytology and on-site HPV analysis using Cepheid GeneXpert (reported as negative or positive for any combination of HPV16, 18/45, or other hrHPV subtypes P3 (31/33/35/52/58), P4 (51/59) or P5 (39/56/66/68)). Vaccine history was obtained via clinical records or patient self-reported. Serum antibody binding to HPV6/11/16/18/31/33/45/52/58 virus-like particles was determined using a Luminex-based assay.

Results: 57 people were recruited: median age 25 years (range 18-34), 47 (82.5%) of black ethnicity and median CD4+ count 681 cells/μL (range 78-1600). 46 (80.7%) provided a cervical sample, and 56 (98.2%) provided serum.

14/46 (30.4%) cervical samples were hrHPV positive, none of which had high-grade changes on cytology. 2/14 (14.3%) were positive for HPV16, 0 for 18/45, 6 (42.9%) for P3, 7 (50.0%) for P4 and 4 (28.6%) for P5. 5/14 (35.7%) were positive for multiple subtypes. Of the 2 positive for HPV16, 1 was HPV unvaccinated and 1 had unconfirmed vaccine status. 9/12 (75.0%) positive for other hrHPV subtypes were HPV vaccinated.

Of the 40/57 (70.2%) who received HPV vaccination, 39 had HPV serological analysis; 29/39 (74.4%) were consistent with receiving Cervarix/Gardasil, but 10/39 (25.6%) were seronegative for one or both of HPV16/18.

Conclusion: In this small observational cohort study, 30% were positive for hrHPV and only 70% received HPV vaccination despite being eligible. Reassuringly, none of the vaccinated participants tested positive for hrHPV 16/18, but 22.5% of those vaccinated tested positive for other hrHPV subtypes, suggesting a potential benefit of the nonavalent vaccine in this vulnerable cohort.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

O16 | Lenacapavir with bNAbs teropavimab (3BNC117-LS) and zinlirvimab (10-1074-LS) dosed every 6 months in people with HIV

Joseph Eron[1], Susan Little[2], Gordon Crofoot[3], Paul Crook[4], Peter Ruane[5], Dushyantha Jayaweera[6], Edwin DeJesus[7], Sarah E Waldman[8], Megha Mehrotra[9], Laurie VanderVeen[9], Hailin Huang[9], Sean Collins[9], Jared Baeten[9], Neal Marshall[10], Marina Caskey[11]
[1]University of North Carolina, Chapel Hill, USA. [2]University of California San Diego, USA. [3]Crofoot Research Center Inc, Houston, USA. [4]Eastern Carolina University, North Carolina, USA. [5]Ruane Medical and Liver Health Institute, Los Angeles, USA. [6]University of Miami Miller School of Medicine, USA. [7]Orlando Immunology Center, USA. [8]University of California Davis, Sacramento, USA. [9]Gilead Sciences, Inc, Foster City, USA. [10]Gilead Sciences, Ltd, London, UK. [11]Rockefeller University, New York, USA

Background: Lenacapavir (LEN) is a first-in-class HIV-1 capsid inhibitor in development for long-acting HIV treatment and prevention. Teropavimab (3BNC117-LS) and zinlirvimab (10-1074-LS) are broadly neutralising antibodies (bNAbs). Teropavimab targets the CD4 binding site of HIV-1 glycoprotein (gp) 120; zinlirvimab binds to the V3 loop of gp120. We conducted a phase 1b randomised clinical trial to evaluate the safety and efficacy of LEN + teropavimab + zinlirvimab dosed every 6 months in people with HIV.
Method: Participants were adults living with HIV virologically suppressed ≥2 years (HIV-1 RNA <50 copies/mL) on ART, sensitive to both bNAbs by HIV proviral DNA phenotype (PhenoSense mAb IC90 ≤2ug/mL, Monogram Biosciences), a CD4 nadir ≥350, and CD4 count ≥500 at study entry. Participants were randomised 1:1 to two active treatment groups consisting of LEN (927 mg subcutaneous after oral loading) + teropavimab (30mg/kg IV) + zinlirvimab (10mg/kg in Group 1 and 30mg/kg in Group 2 IV). The primary endpoint was safety; secondary endpoints included week 26 virologic outcomes by FDA Snapshot analysis.
Results: Of 124 screened participants, 55 were sensitive to both bNAbs, 21 were randomised, and 20 received the complete study regimen. The median age was 44 years (IQR 34, 51); 14% were female; 14% Black, 14% Asian, 33% Hispanic/Latinx; median CD4 count was 909 (IQR 687, 1270). There were no serious adverse events (AEs), no grade 4 or 5 AEs, and no AEs leading to study drug discontinuation. Two participants had grade 3 AEs: one with injection site cellulitis and one with injection site erythema at the site of LEN injection. One participant in Group 1 had a confirmed HIV RNA ≥50 copies/mL (155 copies/mL, confirmed 524 copies/mL) at Week 16 and resuppressed with re-initiation of baseline ART; one participant in Group 2 withdrew consent at Week 12 (with HIV-1 RNA <50 copies/mL). 18/20 (90%) participants had HIV-1 RNA <50 copies/mL at Week 26.
Conclusion: The combination of LEN + teropavimab + zinlirvimab was well-tolerated with high efficacy for 6 months in selected virologically suppressed persons living with HIV. These results provide a proof-of-concept that this combination could provide long-acting treatment for HIV with twice-yearly dosing.

O17 | Rate of persistent depressive symptoms among participants in the Pharmacokinetic and clinical Observations in PeoPle over fiftY (POPPY) study

Hajra Okhai[1,2], Alan Winston[3], Frank Post[4], Marta Boffito[5], Patrick Mallon[6], Jaime Vera[7], Ian Williams[1], Memory Sachikonye[8], Margaret Johnson[9], Jane Anderson[10], Cristina Prechtl[3], Caroline Sabin[1,2]
[1]Institute of Global Health, University College London, UK. [2]National Institute for Health Research (NIHR) Health Protection Research Unit (HPRU) in Blood-borne and Sexually Transmitted Infections at University College London, UK. [3]Imperial College Healthcare NHS Trust, London, UK. [4]King's College Hospital, London, UK. [5]Chelsea and Westminster Hospital, London, UK. [6]University College Dublin, Ireland. [7]Brighton and Sussex University Hospital, UK. [8]UK Community Advisory Board (UK-CAB), London, UK. [9]Royal Free Hospital, London, UK. [10]Homerton University Hospital, London, UK

Background: Few studies have examined persistent depression among people with HIV. We determined the proportion of individuals with persistent depressive symptoms in the POPPY Study and compared the characteristics of those with and without a diagnosis of depression in this group.
Method: POPPY participants (people with HIV ≥50/<50 years, and people without HIV ≥50 years) who completed the Patient Health Questionnaire-9 (PHQ-9) or/and Center for Epidemiological Studies Depression (CES-D) tools at study entry/follow-up were included. PHQ-9≥10 or CES-D≥16 were considered indicative of moderate/severe depressive symptoms. Among those with persistent depressive symptoms over the two visits, we compared the baseline demographic, social and clinical characteristics of those with and without a diagnosis of depression (self-reported) using χ^2 tests.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Table: Demographic, social and clinical characteristics at study entry of POPPY participants with persistent depressive symptoms with and without a diagnosis of depression

		Persistent depressive symptoms	Diagnosed depression		p-value
			No	Yes	
N		198 (183^)	72 (67^)	126 (116^)	
Study group	People with HIV ≥50 years	135 (68.2%)	53 (73.6%)	82 (65.1%)	0.44
	People with HIV <50 years	48 (24.2%)	14 (19.4%)	34 (27.0%)	
	People without HIV ≥50 years	15 (7.6%)	5 (6.9%)	10 (7.9%)	
Gender	Female	35 (17.7%)	17 (23.6%)	18 (14.3%)	0.01
	Male	163 (82.3%)	55 (76.4%)	108 (85.7%)	
Ethnicity	Black African	21 (10.6%)	12 (16.7%)	9 (7.1%)	0.04
	White	177 (89.4%)	60 (83.3%)	117 (92.9%)	
Born in the UK	Yes	135 (68.2%)	48 (66.7%)	87 (69.0%)	0.73
	No	63 (31.8)	24 (33.3)	39 (31.0)	
Sexuality	MSM	151 (76.3%)	47 (65.3%)	104 (82.5%)	0.01
	Heterosexual	47 (23.7%)	25 (34.7%)	22 (17.5%)	
In a relationship		49 (24.7%)	23 (31.9%)	26 (20.6%)	0.08
Employed		55 (27.8%)	23 (31.9%)	32 (25.4%)	0.32
Completed university education		64 (32.3%)	21 (29.2%)	43 (34.1%)	0.47
Current smoker		68 (34.3%)	19 (26.4%)	49 (38.9%)	0.08
Current alcohol user		160 (80.8%)	59 (81.9%)	101 (80.2%)	0.76
Recreational drug user		60 (30.3%)	18 (25.0%)	42 (33.3%)	0.22
Injection drug user		24 (12.1%)	5 (6.9%)	19 (15.1%)	0.09
Hepatitis B/C co-infection		42 (21.2%)	12 (16.7%)	30 (23.8%)	0.23
Undetectable viral load*		167 (91.3%)	60 (89.6%)	107 (92.2%)	0.54
CD4 T-cell count <500 cells/mm^3*		49 (26.8%)	22 (32.8%)	27 (23.3%)	0.16

MSM: men who have sex with men. ^number of people with HIV in this group. *n's for these rows are based on people with HIV only.

Results: Analyses included 898/1299 (69.1%) POPPY participants, 472 with HIV ≥50 years, 220 with HIV <50 years and 206 without HIV. Most participants were male (736, 82.0%), men having sex with men (MSM, 652, 72.6%) and of white ethnicity (808, 90.0%). At study entry, 274 (30.5%) individuals were experiencing moderate/severe depressive symptoms, 177 (37.5%), 69 (31.4%) and 28 (13.6%) of the three groups, respectively. Of these, approximately 70% (n=198) had evidence of persistent depressive symptoms at follow-up, a median of 2.2 years later; this proportion was higher among those with HIV than those without HIV (135 (76.3%), 48 (70.0%) and 15 (53.6%) in the three groups, respectively, p=0.04). Less than two-thirds (126/198, 63.6%) of those with persistent depressive symptoms had a diagnosis of depression, with no significant difference between the three groups (82 [60.7%], 34 [71.8%] and 10 [66.5%], respectively, p=0.44). Women (51.4% vs 66.3% of men), heterosexuals (46.8% vs 68.9% of MSM), those of black African ethnicity (42.9% vs 66.1% of white participants), those in a relationship (53.1% vs 67.1% of those not), non-smokers (59.2% vs 72.1% of smokers) and those not reporting injection drug use (61.5% vs 79.2% of those reporting injection drug use) were less likely to report a diagnosis of depression.

Conclusion: Persistent depressive symptoms were more common in people with HIV than in people without HIV, with depression often being undiagnosed in this group.

O18 | Prevalence of transmitted drug resistance among adults newly diagnosed with a recent HIV infection: a national survey

Anna Maria Geretti[1,2,3], Juan Juan Ledesma[4], David Bibby[4], Hodan Mohamed[4], Carmen Manso[4], Gary Murphy[4], Alison Brown[4], Daniel Bradshaw[4], Saye Khoo[5], Francesca Incardona[6], Jean L Mbisa[4]

[1]University of Rome Tor Vergata, Rome, Italy. [2]University of Verona, Italy. [3]King's College London, UK. [4]UK Health Security Agency, London, UK. [5]University of Liverpool, UK. [6]EuResist Network, Rome, Italy

Background: Treatment guidelines recommend that people newly diagnosed with HIV are tested for evidence of transmitted drug resistance (TDR) prior to starting ART. Testing for TDR to reverse transcriptase and protease inhibitors is well established in routine care. Testing for TDR to integrase strand-transfer inhibitors (InSTI) is less consistent. To inform treatment guidelines, we determined the prevalence of InSTI TDR in a national cohort of adults with recently acquired HIV infection.

Method: Samples were collected from newly diagnosed adults for surveillance purposes and stored at UK HSA. Recent (within 4 months) HIV infection was identified using the UK HSA Recent Infection Testing Algorithm. Resistance-associated mutations (RAMs) in integrase, protease and reverse transcriptase were detected by ultra-deep sequencing, classed according to established lists of TDR surveillance mutations, and described according to

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

their frequency in each sample as majority (>20%) or minority variants (2-20%)

Results: The analysis included 1201 individuals (largely white MSM) randomly selected from those sampled in each year from 2015 to 2019 and determined to have a recent infection. Prevalence of majority (>20%) RAfor any drug class was 87/1172 (7.4%) overall, increasing from ∼6% in 2015-2016 to ∼8.5% in subsequent years; by drug class, overall prevalence was 3.5%, 3.7%, 2.5% and 0.3% for the NRTIs, NNRTIs, protease inhibitors (PIs) and InSTIs, respectively. Samples with majority InSTI RAcomprised 1/180 (0.6%) in 2017 (E138K) and 2/187 (1.1%) in 2018 (E92G and E138K, respectively); no other samples contained majority InSTI RAMs. Prevalence of minority (2-20%) RAfor any drug class was 134/1119 (12%) overall, ranging from 7.9% in 2017 to 16.5% in 2015; by drug class, overall prevalence was 5.7%, 3.0%, 6.4% and 2.9% for the NRTIs, NNRTIs, PIs and InSTIs, respectively. The prevalence of minority InSTI RAMS was 3.9% in 2015 and 4.2% in 2019.

Conclusion: In the period 2015-2019, InSTI RAwere uncommon in newly diagnosed adults with a recent HIV infection. They most often occurred as minority variants and without a clear temporal trend. Although minority variants are probably not likely to affect the activity of preferred first-line InSTI-based regimens, studies are needed to establish their clinical significance.

O19 | Waist circumference cut-offs for metabolic syndrome and insulin resistance in women and men of African ancestry living with HIV

Laura Ribeiro Cechin[1], Lourdes Dominguez[1], Lucy Campbell[1,2], Lisa Hamzah[3], Julie Fox[2,4], Royce Vincent[1,2], Louise Goff[2], Frank Post[1,2]

[1]King's College Hospital NHS Foundation Trust, London, UK. [2]King's College London, UK. [3]St George's University Hospitals NHS Foundation Trust, London, UK. [4]Guy's and St Thomas' Hospital NHS Foundation Trust, London, UK

Background: People living with HIV are at greater risk of cardiovascular disease. Metabolic syndrome (MetS) is a cluster of cardiovascular risk factors including central obesity. Validated waist circumference (WC) cut-offs have not been established for black populations (with or without HIV). We analyzed the relationship between WC and MetS in GEN-AFRICA participants, a cohort of black people with HIV, aiming to identify population-specific WC cut-offs for black women and men.

Method: We obtained fasting blood samples for HDL-cholesterol, triglycerides, glucose and insulin, and standardized measurements of blood pressure and waist circumference. We also measured HbA1c and calculated insulin resistance (HOMA-IR). We analyzed correlations between WC and MetS components, HbA1c and HOMA-IR. Receiver operating characteristic (ROC) curves models were fitted and the optimum WC cut-off for each parameter was determined using the Youden method.

Results: A total of 383 patients (55% women, median age 52 years, median CD4 count 538 cells/mm3, 94% viral load <200 copies/mL) were included. The median BMI was 32.3/28.2 kg/m2 and the median waist circumference 98/97 cm for women/men participants, respectively; 91%/64% had WC >80/94 cm and using these WC cut-offs for white populations, 25%/32% met the criteria for MetS. We found WC to be weakly correlated with components of the MetS: HDL-cholesterol (R2 values for women/men: -0.05/-0.11), triglycerides (0.12/0.12), glucose (0.14/0.19), systolic (0.13/0.13) and diastolic (0.16/0.14) blood pressure, and with HbA1c (0.11/0.21)

Table 1: Characteristics of ROC curves used for the identification of waist circumference cut-off values for the diagnosis of metabolic syndrome in women and men

	Area under ROC curve (95% CI)	Waist circumference cut-off value in cm (95% CI)	Sensitivity (95% CI)	Specificity (95% CI)
Female population				
HDL-c <1.3 mmol/L	0.51 (0.42, 0.61)	100 (71, 126)	0.52 (0.37, 0.65)	0.55 (0.46, 0.62)
Triglycerides >1.7 mmol/L or on fibrates	0.66 (0.56, 0.76)	96 (93, 105)	0.95 (0.68, 1.00)	0.43 (0.28, 0.73)
Systolic BP ≥130mmHg (or on anti-HPT meds)	0.58 (0.50, 0.66)	92 (84, 118)	0.82 (0.18, 0.93)	0.38 (0.22, 0.96)
Diastolic BP ≥85mmHg (or on anti-HPT meds)	0.59 (0.51, 0.67)	101 (87, 121)	0.58 (0.15, 0.90)	0.63 (0.27, 0.99)
Fasting glucose ≥5.6 mmol/L (or DM)	0.66 (0.59, 0.74)	92 (89, 103)	0.96 (0.90, 1.00)	0.33 (0.26, 0.40)
HbA1c ≥6.5% (or DM)	0.70 (0.62, 0.78)	100 (93, 102)	0.87 (0.74, 1.00)	0.58 (0.32, 0.69)
HOMA-IR ≥1.5 (or on oral anti-DM meds)	0.67 (0.59, 0.75)	100 (98, 103)	0.70 (0.54, 0.81)	0.65 (0.53, 0.77)
Male population				
HDL-c <1.0 mmol/L	0.57 (0.47-0.68)	89 (88, 102)	1.00 (0.64, 1.00)	0.28 (0.21, 0.35)
Triglycerides >1.7 mmol/L or on fibrates	0.54 (0.43-0.65)	93 (85, 115)	0.80 (0.20, 0.94)	0.38 (0.20, 0.93)
Systolic BP ≥130mmHg (or on anti-HPT meds)	0.66 (0.57-0.74)	97 (91 103)	0.62 (0.42, 0.82)	0.71 (0.46,0.86)
Diastolic BP ≥85mmHg (or on anti-HPT meds)	0.65 (0.57, 0.74)	97 (93, 103)	0.60 (0.41, 0.81)	0.72 (0.47, 0.87)
Fasting glucose ≥5.6 mmol/L (or DM)	0.57 (0.48, 0.67)	98 (85, 115)	0.59 (0.20, 0.92)	0.63 (0.23, 0.94)
HbA1c ≥6.5% (or DM)	0.65 (0.55, 0.75)	98 (90, 106)	0.68 (0.38, 0.92)	0.66 (0.30, 0.86)
HOMA-IR ≥1.5 (or on oral anti-DM meds)	0.64 (0.55, 0.73)	96 (91, 115)	0.72 (0.25, 0.86)	0.58 (0.39, 0.96)

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

and HOMA-IR (0.24/0.25). Except for lipids among the male participants, ROC curves for each of the MetS components, HbA1c and HOMA-IR identified substantially higher WC cut-offs than those established for white populations. However, low areas under the curve (<0.70) indicated that WC had poor discriminatory value, low sensitivity, and low specificity for identifying individuals with adverse cardiometabolic profiles (Table 1).

Conclusion: The weak correlation between WC and each component of MetS, HbA1c and insulin resistance in this population precluded the generation of meaningful population-specific WC cut-offs to define MetS. Whilst reductions in WC are likely to be beneficial to health, our results do not support the use of individual WC targets for black populations with HIV.

O20 | Eligibility for long-acting cabotegravir/ rilpivirine in youth aged 12–25 living with perinatally acquired HIV

Fionnuala Ryan[1], Nicola E Mackie[2], Hana Jayadel[1], Sara Ayers[2], Caroline Foster[1,2]

[1]*Department of Paediatric Infectious Diseases, Imperial College Healthcare NHS Trust, London, UK.* [2]*Department of GUM/HIV Medicine, Imperial College Healthcare NHS Trust, London, UK*

Background: Long acting cabotegravir/ rilpivirine (LA-CAB/RPV) is a licensed recommended switch option for adults living with HIV on suppressive antiretroviral therapy (ART) as per the British HIV Association (BHIVA) guidelines. As long acting injectable therapy, it is appealing for patients who find oral daily medication challenging, including some youth living with perinatally acquired HIV (YLWPaHIV) struggling with adherence. The 2022 BHIVA guidelines included eligibility criteria for LA-CAB/RPV. This review aimed to identify YLWPaHIV potentially eligible for LA-CAB/RPV and describe reasons for ineligibility.

Method: All YLWPaHIV aged 12-25 years old by 1st January 2023 attending transition services at a London centre were deemed eligible. The BHIVA 2022 interim LA-CAB/RPV guidelines were used as the standard. Data collected from electronic case records and anonymised in excel included: body mass index (BMI), viral load, CD4 count, ART and history including adherence, hepatitis B coinfection and HIV subtype. Virological failure on integrase inhibitors (INSTI) or Non-nucleoside reverse transcriptase inhibitors (NNRTI) and cumulative resistance mutations were also recorded.

Results: 121 YLWPaHIV median age 19.9 years (interquartile range 18-23), 25/121 (21%) under 18 years, 69/121 (58%) female, 89/121 (74%) Black African were included. 41/121 (34%) met all BHIVA eligibility criteria for LA-CAB/RPV, of whom 2 were already established on LA-CAB/RPV. 8/41 eligible patients were under 18 years. 50/121 (41%) were ineligible due to; resistance mutations (NNRTI (44), INSTI (1)), HBV coinfection (1), BMI >35 (3) and recurrent loss to follow up (1). The remaining 30/121 (25%) YLWPaHIV would require multidisciplinary (MDT) risk benefit discussion regarding LA-CAB/RPV due to concerns around; adherence (6/31), BMI 30-35 (7/31), previous severe side effects with NNRTIs (6/31) and historical periods off ART but without documented resistance (16/31).

Conclusion: Only one third of YLWPaHIV met all BHIVA eligibility criteria for LA-CAB/RPV. A further quarter may be eligible but are potentially at increased risk of virological failure. Eligible youth preferences are being sought however LA-CAB/RPV is currently unlicensed for adolescents under 18 years. A flexible, creative approach is necessary to successfully implement LA-injectable therapies in transition services, including access to medications outside conventional hours and in community settings.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13476 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Check for updates

DOI: 10.1111/hiv.13477

ABSTRACT

Themed Poster Abstracts

TP01 | Blueteq is not just about cost, it's an opportunity to optimise antiretroviral therapy

Sinead Peare, Stephanie Tyler, Ranjababu Kulasegaram
Guy's and St Thomas' NHS Foundation Trust, London, UK

Background: In February 2022 NHS England and Improvement changed the way it purchases Antiretrovirals (ARVs) to a national procurement agreement allowing equal access to ARVs across the country. Symtuza, Rezolsta, Evotaz and Eviplera no longer became routinely recommended and decisions to continue were to be through a Multi-disciplinary Team (MDT) meeting and Blueteq submission. This review aims to investigate the extent to which the implementation of Blueteq created the opportunity for prescribers to switch ARVs and the impact of this on cost savings.
Method: Patients on Symtuza, Rezolsta, Evotaz and Eviplera were identified from the Trust's dispensing platform and upon clinical review, data was collated surrounding the switch and reasons for patients remaining on existing treatment. The data was then collated, cost of therapies added and then analysed to calculate cost savings.
Results: 822 patients were identified as currently taking ARVs needing a Blueteq submission and as of the 1st December 2022, 677 patients reviewed, of which 39% have switched therapies. The most common reasons for remaining on existing treatment were patient preference, with a focus on Single Tablet Regimens (STRs) and adherence. 76% of patients continued on Symtuza and of those that switched only 7% switched to the individual components compared to 51% of those switching off Eviplera. 36% of patients who switched off Eviplera/Symtuza switched on to alternative STRs and 65% of patients switching off Rezolsta/Evotaz switched off Protease Inhibitors (PIs). Overall switches resulted in a saving in drug spending by almost £30,000 per month although 40% of patients taking either Eviplera, Evotaz or Rezolsta were switched to more expensive regimens.
Conclusion: The Blueteq initiative has led to a proactive approach in initiating the review of patients taking boosted PIs. However Symtuza is the only STR containing a protease inhibitor, and as such patients needing a PI and STR have not switched treatment. Although savings have been made it should be noted that patient-focused treatment meant that often patients switched to more costly ARVs. Blueteqs have been used as an opportunity to discuss ARVs with patients and ensure they continue to take the medication that best suits their needs.

TP02 | Opportunities to improve opt-out blood-borne virus screening in two large London emergency departments

Cassandra Fairhead[1], Russell Durkin[1], Jennifer Hart[1], Fiona Burns[1,2], Jessica Pinto[1], Alan Hunter[1], Douglas Macdonald[1], Tristan J Barber[1,2]
[1]Royal Free London NHS Foundation Trust, UK. [2]Institute for Global Health, University College London, UK

Background: 'Opt-out' HIV screening in Emergency Departments (ED), recommended by RCEM and NHSE, is an excellent opportunity to diagnose blood borne viruses (BBV) early and improve outcomes. In April 2022 two EDs initiated 'opt-out' BBV screening. This retrospective, mixed-methods study evaluates patient, staff and process-related screening barriers; explores demographic differences in uptake and identifies strategies for improvement.
Method: Those eligible for screening from July-October 2022 (unique adults aged ≥16 receiving blood tests in ED) were identified through Electronic Patient Records. The impact of age, sex, ethnicity, attendance time and admission status on HIV, hepatitis B (HBV) and hepatitis C (HCV) screening was assessed. ED staff identified through stratified random selection were interviewed to understand their experience of screening.
Results: There were 33388 opportunities for screening. At Hospital 1 and 2 respectively, 53.65% (8687/16193) and 63.87% (10983/17195) received screening for at least one BBV. 136 HBV, 164 HCV and 86 HIV screens were positive, including 5 new HIV diagnoses.
Attendees between 5pm-11pm, when ED is busiest, were less likely to receive screening (Hospital 1: OR 0.49, 95% CI 0.46-0.53; Hospital 2: 0.47, 95%CI 0.44-0.50). At Hospital 1, black patients (OR 0.86, 95%CI 0.77-0.96), patients

 © 2023 The Authors. HIV Medicine © 2023 British HIV Association

≥80y (OR 0.87, 95%CI 0.79-0.95) and admitted patients (OR 0.89, 95%CI 0.83-0.96) were less likely to receive screening. At Hospital 2, women were less likely to receive screening (OR 0.80, 95%CI 0.75-0.85).

20 nurses, ED-assistants and doctors were interviewed. Staff perceived time pressure a dominant barrier, frequently reporting that in difficult-to-bleed patients screening was missed: 'To be honest, the red top is the least prioritised'. Time pressures limited explanation of screening: "We don't really have time to tell them, it's too busy". However, staff viewed the conversation itself straightforward and felt able to (though did not routinely) offer further information to patients who declined.

Conclusion: Screening was acceptable to patients and staff, with good uptake. Demographic variations represent important areas for further investigation. Time pressure is a significant barrier: initiatives to empower staff to provide succinct screening information and to assist laboratories to optimise sample volume requirements may improve performance.

TP03 | Patient evaluation of Klick, a technology-enabled, nurse-delivered HIV outpatient pathway

Sara Day, Yodit Fissahaye-yimer, Alex Harvey, Caroline Rae
Chelsea and Westminster Hospital, London, UK

Background: Developing and harnessing innovative solutions using digital technology has the potential to revolutionise healthcare delivery. Klick is a technology enabled pathway that launched in August 2020 and supports patient access to our large HIV clinic. It involves a smartphone app for patients to book/reschedule appointments, view routine results, request medication, submit a pre-visit questionnaire (PVQ) and receive care updates from the clinical team. The pathway is underpinned by nurse delivered care that offers stable patients virtual/face-to-face routine consultations and a comprehensive annual review. We present the outcomes of a patient survey evaluating Klick.

Method: On 8/10/2022 Klick registered patients who consented to receiving push notifications were invited by SMS to complete a Survey Monkey questionnaire capturing experience relating to app performance and nurse delivered care.

Results: Of 5046 Klick registered patients to date (11/01/2023), 2943/5046 (58%) actively use it each month. 1661/5046 (33%) patients were invited to complete the survey, and 362/1661 responded (22%). Responders were 95% 340/358 male, 2.8% 10/358 female, 2.2% 8/358 gender minorities; median age range 41-60 years; 53% 189/354 White British ethnicity; 73% 261/358 reported English as their first language.

Survey responses are tabulated. The five most frequently used words to describe the app by patients were efficient, easy, good, excellent and professional.

Table 1. Patient evaluation responses

Felt involved in decisions about care	88%
Info provided in understandable format	82%
Felt able to ask questions	94%
Felt listened to	92%
Need for a clinic-specific app	92%
Importance of e-booking	92%
Positive experience of e-booking	93%
Found PVQ helpful to guide nurse consultation	72%
Would complete PVQ routinely/regularly	98%
Importance of receiving results on app	94%
Results presented understandable format	91%
App is easy to use	80%
Klick meets functional requirements	83%
Recommend Klick to friends	93%

Conclusion: Patients feel a clinic-specific app is important and demonstrated a willingness to engage with it. They found nurse-delivered care to be highly acceptable and rated the app's overall performance as well as its individual features well. Klick is now embedded within our outpatient services. Other services could benefit from adopting similar digital solutions to enhance patient care/experience.

TP04 | An innovative, patient-centred approach to delivery of long-acting injectable antiretroviral therapy to people living with HIV using pre-existing outpatient parenteral antimicrobial therapy (OPAT) services

Bazga Ali[1,2], Clemency Nye[1], Rhys Oakley[2], Fiona Clark[2], Tom George[2], Jonathan Underwood[2]
[1]Public Health Wales, Cardiff, UK. [2]Cardiff and Vale, Cardiff, UK

Background: Following BHIVA's interim guidance supporting long acting cabotegrevir/rilpivirine (LA-CAB/RPV) in February 2022, implementation strategies were discussed. Logistical constraints of space and staffing in current HIV clinics placed limitations on access to LA-CAB/RPV. We proposed a novel, patient focused way to deliver LA-CAB/RPV to people living with HIV (PLWH) using outpatient parenteral antibiotic therapy (OPAT)

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13477 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

services; a non-traditional setting for delivering HIV care, supporting destigmatisation of PLWH.

OPAT, an internationally recognised system of care facilitates early hospital discharge or prevents admission. At the last review of UK OPAT services in 2017, 102 were identified. Cardiff has an established, city centre sited OPAT service, with excellent transport links. It operates 365 days of the year and is delivered by nurse colleagues with clinical oversight from Infectious Diseases.

Method: We initiated a pilot study utilising OPAT to deliver LA-CAB/RPV. Our aim, to demonstrate it as a feasible way to deliver HIV therapies.

Each case is electronically referred and discussed at a regional HIV MDT against BHIVA defined eligibility criteria. On approval, a HIV pharmacist initiates oral lead in and prescribes LA-CAB/RPV. Finally OPAT deliver therapy in consultation with the patient. We have collated patient/clinician opinion on experiences to date.

Results: We care for approximately 1000 PLWH. Between April 22 and November 22, 25 of the 28 patients (89%) discussed were approved for LA-CAB/RPV. 18 have initiated at least the oral lead in. 13 have had at least one injection and all remain virally suppressed (longest follow-up 39 weeks). All doses have been administered within the 7 day therapeutic window.

9 of 15 surveyed patients responded, all strongly agreed or agreed they were satisfied with treatment (88.9%, 11.1% respectively), attending appointments was convenient (55.6%, 44.4% respectively) and felt that OPAT were flexible (77.8%, 22.2% respectively).

Conclusion: We have shown that delivery of long acting injectables is feasible and successful in this novel setting. It allows patients convenience and flexibility. As the future of HIV care moves towards longer acting therapies we must embrace and reframe current NHS resources. This model is scalable to 100s of HIV services worldwide.

TP05 | Addressing the workforce challenge: role of the advanced pharmacist practitioner (APP)

Hasan Mohammed, Nadia Naous, Ellen Dwyer, Marta Boffito, Rachael Jones
Chelsea and Westminster Hospital NHS Foundation Trust, London, UK

Background: Despite the evolution of HIV services, the role of the HIV specialist pharmacist has remained more traditional. Pharmacists are recognised medicines experts with national drivers for enhanced clinical roles. However, delivery of pharmacist-led care within HIV varies and usually occurs in addition to the routine physician appointment. To preserve continuity of our services, a pharmacist was recruited to a vacant nurse practitioner role. The APP worked independently to provide clinics and holistic care for PLWH.

Method: Prospective data collection of consultations conducted by the APP between January to December 2022. Online surveys were distributed to capture MDT opinion of the APP role. In order to assess feasibility of this model in other centres, a separate survey was distributed to HIV pharmacists via national networks to understand drivers, barriers and appetite for the role.

Results: The APP conducted 500 consultations during the 12 month period: 93% in-person. Overall, 435 PLWH were seen: 28% female; median age 53 (26-91); mean number of co-morbidities two (0-14); mean number of co-medications three (0-24); 90% virologically suppressed (VL <50c/ml). Of those with viraemia (VL >200), 13/25 demonstrated a one $\log_{10}$ VL drop at subsequent attendance.

Senior advice was sought for 5% of consultations. Figure 1 illustrates breakdown of interventions made.

A total of 30/55 HCPs responded to the survey: 97% strongly agreed that APPs should be included in future business planning. Of the pharmacists surveyed, 78% (21/27) expressed interest in working in an APP role.

Figure 1: Interventions made by the APP

Intervention	n (PLWH)
Imaging requested	116 (93)
Referral to other specialities	99 (90)
Initiate or switch ARVs	83 (82)
Medicines optimisation (e.g. initiate/titrate non-ARVs, deprescribing)	58 (56)
Vaccine prescribed	55 (45)

Conclusion: We demonstrate the successful utilisation of a novel role within HIV services. The APP delivered cost-effective holistic care, encompassing medically complex PLWH and those with viraemia. The unique skillset of HIV specialist pharmacists should be harnessed to address workforce challenges within the NHS. With rising polypharmacy and increasing difficulty accessing GP services, APPs are well positioned to deliver medicines optimisation and co-morbidity management to an ageing cohort of PLWH.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13477 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

TP06 | Integrating peer support within NHS clinics: a London Fast-Track Cities Initiative (FTCI) project

Garry Brough[1], Chris Williams[2], David King[1], Anthony Hunte[3], James Hardie[4], Billie Squire[4], Stephen Cole[4], Rachael Jones[4], Ruth Byrne[4], David Groom[5], Marta Boffito[4]

[1]Positively UK, London, UK. [2]Plushealth, London, UK. [3]NAZ Project, London, UK. [4]Chelsea and Westminster Hospital Foundation Trust, London, UK. [5]Fast Track Cities London, UK

Background: BHIVA Standards of Care for people living with HIV (PLWH) include quality statements and auditable outcomes for peer-support pathways to improve self-management and engagement in care. FTCI London convened 3-year 'improvement collaborative' projects between HIV charities and NHS clinics. Chelsea and Westminster Hospital (CWHFT) supported the implementation of this initiative to 4 London HIV clinics with a cohort of >10,000 PLWH. We here illustrate the results of this initiative to date.

Method: Positively UK, NAZ Project, Plus Health and CWHFT trialled approaches to integrating in-clinic peer-support pathways, with the aim of having >90% of those accessing peer-support retained in care, with a VL<50. 3 peer-supporters (2 FTE posts) received NHS honorary contracts, emails and the ability to log interventions within the Trust's EPR. Data on peer-support attendance and outcomes were collected from the EPR into an encrypted NHS database.

Results: Although planned as an in-person initiative, the COVID-19 pandemic led to a shift to fully remote support and delayed project initiation to 7/2020, when email referrals commenced for newly diagnosed and those identified as being at risk of lost to follow up (LTFU).

Referrals reached 4.4/month within the first 3 months. Initiatives such as MDT, focus group participation, staff teaching, and physical presence in clinics increased referrals to 7/month by 4/2021 and 12/month by 11/2021.

Median patient age was 45 years (range 16-74), 13% were female, and 47% from BAME background (vs 34.5% in the CWHFT HIV cohort). Median diagnosis length was 2 years (<1-31).

Moving from opt-in to opt-out support for newly diagnosed increased uptake of support from 33% in 4/2021 to 67% by 12/2021.

Overall, 287 people (66% of referrals) engaged with peer-support between 7/2020 and 11/2022, with 164 (57%) receiving ongoing support.

Virtual appointments moved from 100% to 54% over time.

Rates of having a VL<50 increased from 71% at referral to 90% following peer-support, including new diagnoses.

Conclusion: Implementing in-clinic peer-support pathways significantly increased referrals and uptake of support for new HIV diagnosis and those at risk of LTFU, showing the potential of improving clinical outcomes and quality of life of PLWH.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13477 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Check for updates

DOI: 10.1111/hiv.13478

ABSTRACT

Poster Abstracts

P001 | Efficacy, safety and tolerability of Biktarvy in HIV-1 infection: a scoping review

Ellen Peters[1], Collins Iwuji[1,2]
[1]Brighton and Sussex Medical School, Brighton, UK. [2]Africa Health Research Institute, KwaZulu-Natal, South Africa

Background: Biktarvy use is currently approved for HIV-1 infection in treatment-naïve and treatment-experienced individuals after a series of successful investigator-sponsored phase III trials. However, studies on real-world evidence of its efficacy, safety, and tolerability are limited.
Method: This review used the PRISMA extension for scoping reviews checklist as a framework. The final search strategy used was: (Bictegravir* OR biktarvy) AND (efficac* OR safe* OR effect* OR tolerab* OR "side effect*" OR "adverse effect*"). The last search was performed on the 12th of August 2021. We included results from PubMed, EMBASE, EMCARE, Medline, CINAHL and BNL.
Studies were eligible if they reported on the Efficacy, effectiveness, safety, or tolerability of bictegravir-based ART. Relevant conference abstracts under 24 months old were included in addition to full-text articles. Studies were excluded if Gilead Sciences sponsored them, if the total population taking B/F/TAF was <20, or if B/F/TAF was used off-label for other conditions. Review articles, meta-analyses, case reports, preclinical studies, and non-English publications were excluded.
Results: After de-duplication, 333 studies were selected from peer-reviewed articles, and 27 were selected for full-text assessment after reviewing their title and abstract. Seventeen studies fulfilled the inclusion criteria after a full-text review.
We found that the efficacy of Biktarvy in clinical practice was comparable to phase III trials. However, adverse effects and discontinuation rates were found to be higher in the included real-world studies. Overall treatment discontinuation rates due to adverse effects ranged between 1.9 to 12%. Notably, discontinuation due to rash and weight gain was found to be higher than in approval trials.
Conclusion: We conclude that further investigation of adverse effects and discontinuation rates is required, through large-scale prospective cohort studies. Further studies are needed on biktarvy-associated rash and weight gain specifically. Although the cohorts in the included real-world studies showed more demographic diversity when compared to the drug approval trials, further studies are still required on underrepresented groups such as women, pregnant people, ethnic minorities, and older adults.

P002 | Outcomes after switching from 144 weeks of blinded dolutegravir/abacavir/lamivudine or dolutegravir plus emtricitabine/tenofovir alafenamide to 96 weeks of open-label bictegravir/emtricitabine/tenofovir alafenamide

Chloe Orkin[1], Andrea Antinori[2], Jürgen Rockstroh[3], Santiago Moreno Guillén[4], Claudia Martorell[5], Jean-Michel Molina[6], Adriano Lazzarin[7], Franco Maggiolo[8], Yazdan Yazdanpanah[9], Kristen Andreatta[10], Hailin Huang[10], Jason Hindman[10], Hal Martin[10], Jared Baeten[10], Anton Pozniak[11]
[1]Queen Mary University of London, UK. [2]National Institute for Infectious Diseases, Lazzaro Spallanzani, Rome, Italy. [3]University Hospital Bonn, Germany. [4]Hospital Ramón y Cajal, Madrid, Spain. [5]Research Institute Springfield, USA. [6]University of Paris, France. [7]San Raffaele Hospital Milan, Italy. [8]Azienda Ospedaliera Papa Giovanni XXIII, Bergamo, Italy. [9]AP-HP Hôpital Bichat, Paris, France. [10]Gilead Sciences, Inc, Foster City, USA. [11]Chelsea and Westminster Hospital, London, UK

Background: HIV guidelines offer switch strategies for virologically suppressed people with HIV-1 (PWH), but long-term follow-up after switch is often lacking. Here we assess 96-week (W) outcomes on bictegravir/emtricitabine/tenofovir alafenamide (B-F-TAF) in an open-label extension (OLE) that followed 144W of blinded dolutegravir-based treatment in two phase 3 studies of PWH initiating treatment.
Method: Two randomised, double-blind, phase 3 studies of B-F-TAF were conducted in adults initiating first-line therapy – Study 1489: B-F-TAF vs dolutegravir/abacavir/lamivudine (DTG-ABC-3TC) and Study 1490: B-F-TAF vs DTG+F-TAF. We examined cumulative results for

 © 2023 The Authors. HIV Medicine © 2023 British HIV Association

participants who were originally randomised with either DTG-ABC-3TC or DTG+F-TAF for 144W and then switched to 96W of B-F-TAF in an OLE (total of 240W follow-up). Efficacy was assessed as the proportion with HIV-1 RNA <50 copies/mL at each visit after starting B-F-TAF (missing=excluded [M=E]); safety assessed by adverse events (AEs) and laboratory results.

Results: In Study 1489, 315 participants randomised to DTG-ABC-3TC; 254 (81%) entered the OLE. In Study 1490, 325 randomised to DTG+F-TAF; 265 (82%) entered the OLE. After switch to B-F-TAF, efficacy was >96% at every visit through W240 (M=E). Eleven participants had HIV-1 RNA ≥50 copies/mL at time of switch, two of whom were later found to have M184V while on blinded DTG-ABC-3TC and resuppressed on B-F-TAF. No resistance to any components of B-F-TAF occurred in any group of the final resistance analysis population. Across both studies, 2/519 (0.4%) switch participants experienced an AE that led to drug discontinuation during the OLE. There were no discontinuations due to renal AEs. Grade 3 drug-related AE occurred in one participant, no Grade 4 AEs. Median fasting lipid changes following switch to OLE B-F-TAF were small. Participants switching from DTG-ABC-3TC had numerically greater weight increases than those switching from DTG +F-TAF.

Conclusion: Over 5 years of follow-up, adults initially taking DTG-ABC-3TC or DTG+F-TAF who then switched to B-F-TAF and were followed for 96W maintained high virologic suppression and few discontinuations. These results provide additional long-term evidence of the safety profile and efficacy of B-F-TAF in those who switch from a DTG-containing regimen.

P003 | Week 52 subgroup efficacy of lenacapavir in heavily treatment-experienced people with HIV

Onyema Ogbuagu[1], Sorana Segal-Maurer[2], Antonella Castagna[3], Edwin DeJesus[4], Anchalee Avihingsanon[5], Christine Zurawski[6], Olayemi Osiyemi[7], Theo Hodge[8], Gordon E Crofoot[9], Hui Wang[10], Hadas Dvory-Sobol[10], Martin Rhee[10], Cindy Elliott[11], Jared Baeten[10], Jean-Michel Molina[12]

[1]Yale University School of Medicine, New Haven, USA. [2]New York Presbyterian, Queens, USA. [3]Università Vita-Salute San Raffaele, Milano, Italy. [4]Orlando Immunology Center, Orlando, USA. [5]HIV-NAT, Thai Red Cross AIDS Research Centre, Krung Thep Maha Nakhon, Thailand. [6]Atlanta ID Group, Atlanta, USA. [7]Triple O Research Institute, West Palm Beach, USA. [8]Washington Health Institute, Washington DC, USA. [9]The Crofoot Research Center, Houston, USA. [10]Gilead Sciences Inc, Foster City, USA. [11]Gilead Sciences Ltd, London, UK. [12]University of Paris Cité Department: Infectious Diseases, Paris, France

Background: Lenacapavir (LEN), a potent first-in-class long-acting inhibitor of HIV-1 capsid function. CAPELLA is an ongoing Phase 2/3 study in people with HIV-1 who are heavily treatment-experienced (HTE) and who are viraemic on their current regimen with multidrug resistance (MDR). We report subgroup analyses of Week 52 efficacy by baseline HIV-1 RNA, CD4, INSTI resistance, and optimised background regimen (OBR) in both cohorts.

Method: The study included randomised and non-randomised cohorts. In the randomised cohort, participants were randomised (2:1) to add oral LEN (600 mg on Days 1 and 2, 300 mg on Day 8) or placebo to their failing regimen. At Day 15 (D15), those on oral LEN received subcutaneous (SC) LEN 927 mg every 6 months (Q6M); those on placebo started the oral lead-in, followed by SC Q6M. Randomised participants discontinued the failing regimen and initiated an investigator-selected OBR at D15. In the non-randomised cohort, participants initiated OBR concurrent with LEN (OBR concurrent with LEN oral lead-in). Week 52 efficacy was assessed in both cohorts using FDA snapshot algorithm.

Results: 72 participants enrolled (36 in each cohort). 46% (33/72) had 4-class resistance (NRTI, NNRTI, PI, and INSTI); 17% (12/72) had no fully active agents in the OBR. High rates of virologic suppression achieved among participants regardless of subgroup (Table).

Table: HIV-1 RNA<50 copies/ml at week 52 (snapshot algorithm) by subgroup

Subgroups	Randomised and nonrandomised cohorts (n=72)
Overall	78% (56/72)
Baseline CD4 <200 cells/uL	72% (33/46)
Baseline CD4 ≥200 cells/uL	88% (23/26)
Baseline HIV-1 RNA ≤100,000 copies/ml	81% (47/58)
Baseline HIV-1 RNA >100,000 copies/ml	64% (9/14)
With INSTI resistance	78% (39/50)
Without INSTI resistance	75% (15/20)
0 fully active agents in OBR	75% (9/12)
1 fully active agent in OBR	77% (20/26)
≥2 fully active agents in OBR	79% (27/34)
With dolutegravir	67% (24/36)
Without dolutegravir	89% (32/36)

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Conclusion: In this population of people with HIV who were heavily treatment-experienced with limited treatment options due to MDR HIV, LEN in combination with OBR led to high rates of viral suppression, regardless of baseline HIV-1 RNA, CD4 count, INSTI resistance, and number of fully active OBR agents.

P004 | 24-Month (24M) effectiveness and safety of bictegravir/emtricitabine/tenofovir alafenamide (B/F/TAF) in treatment-naïve (TN) and treatment-experienced (TE) people living with HIV in the BICSTaR study

Miguel Garcia-Deltoro[1], Michael Waizmann[2], Olivier Robineau[3], Alexander Wong[4], Eduardo Shahar[5], John S Lambert[6,7], Berend van Welzen[8], Marta Boffito[9], Yoshiyuki Yokomaku[10], Tali Cassidy[11], Andrea Marongiu[11], David Thorpe[11], Marion Heinzkill[12], Carla Lluis-Ganella[13], Giovanni Di Perri[14]

[1]Infectious Disease Service, Consorcio Hospital General Universitario de Valencia, Spain. [2]Praxis Waizmann, Leipzig, Germany. [3]University of Lille, Infectious Disease Department, Gustave Dron Hospital, Tourcoing, France. [4]University of Saskatchewan, Regina, Canada. [5]Rambam Health Care Campus, Institute of Allergy, Clinical Immunology & AIDS, Haifa, Israel. [6]Mater Misericordiae University Hospital, Dublin, Ireland. [7]University College Dublin School of Medicine, Ireland. [8]University Medical Centre Utrecht, Netherlands. [9]Chelsea and Westminster Hospital, London, UK. [10]National Hospital Organization Nagoya Medical Center, Japan. [11]Gilead Sciences Ltd, Stockley Park, UK. [12]Gilead Sciences GmbH, Munich, Germany. [13]Gilead Sciences, Madrid, Spain. [14]University of Turin, Italy

Background: BICSTaR is an ongoing, multi-country, observational cohort study evaluating real-world effectiveness/safety of B/F/TAF in TN/TE people with HIV.

Method: Data were pooled from BICSTaR Europe/Canada/Israel/Japan (Feb-2022). Outcomes included HIV-1 RNA <50 copies/mL, safety, and patient-reported outcomes: physical/mental health (Short Form-36 questionnaire: Physical/Mental Component Summary [PCS/MCS] scores) and HIV-Symptom Index.

Results: Among 1145 enrolled individuals there was a high overall prevalence of concomitant medication (57%)/comorbidities (69% overall; neuropsychiatric disorders 24%/hyperlipidemia 19%/hypertension 17%). TE: 66%/18%/16% switched from INSTI/NNRTI/PI-based regimens; prior TDF/TAF/ABC use: 35%/46%/14%. At 24M, 98% (139/142) TN and 96% (713/745) TE individuals had HIV-1 RNA <50 copies/mL (M=E). Table shows additional outcomes/weight changes. Drug-related adverse events occurred in 15% of participants, leading to B/F/TAF withdrawal in 7% (TN, 4%; TE, 7%); weight increase (2%), depression (<1%), and fatigue (<1%) were most common reasons for B/F/TAF withdrawal. There were 2 (TN) and 9 (TE) deaths, considered unrelated to B/F/TAF. PCS/MCS scores improved in TN individuals at 24M (versus baseline) (median change [Q1,Q3]: +2.2 [−2.3,9.4]; P<0.001/+2.5 [−3.9,13.6]; P<0.01) and were stable in TE individuals (−0.2 [−3.5,3.6]; P=0.618/+0.4 [−4.3,5.7]; P=0.074). Bothersome symptom counts decreased at 24M (versus baseline) in TN (median change[Q1,Q3]: −2.0 [−5.0,0.0]; P<0.001) but were unchanged in TE.

Conclusion: These longer-term data continue to demonstrate B/F/TAF effectiveness and tolerability in a real-life, international cohort of people with HIV in routine clinical care.

		Treatment-naive (TN)		Treatment-experienced (TE)	
HIV-1 RNA <50 copies/mL at 24M, % (n/N)	**Missing=excluded Discontinuation=failure**	**Male 98 (123/126) 90 (139/154)**	**Female 100 (16/16)**	**Male 96 (594/620) 84 (713/850)**	**Female 95 (119/125)**
Median changes (Q1,Q3; baseline to 24M)					
CD4 count, cells/μL		+237 (133, 404)*; n=126		+49 (−63, 156)*; n=593	
CD4/CD8 ratio		+0.4 (0.2, 0.6)*; n=107		+0.1 (−0.1, 0.2)*; n=505	
Weight, kg		+4.7 (0.0, 9.0)*; n=98		+1.1 (−1.0, 4.1)*; n=527	
BMI, kg/m^2		+1.4 (0.0, 2.8)*; n=92		+0.4 (−0.4, 1.4)*; n=514	
*P<0.001					

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P005 | Switching to high genetic-barrier integrase inhibitors reduces drug–drug interactions in people living with HIV

Chhavi Nashier[1], Ara Askari[2], Rahul Ghelani[2], Adrian Vargas Zhang[1], Megan Ng[1], Zekiye Karagozlu[1], Margherita Bracchi[2], Graeme Moyle[2], David Asboe[2], Marta Boffito[2]
[1]*Imperial College London, UK.* [2]*Chelsea and Westminster Hospital Foundation Trust, London, UK*

Background: Boosted protease inhibitors (PI/b) have decreased mortality in people living with HIV (PLWH). Co-administration with cytochrome P4503A4 (CYP3A4) inhibitors increases toxicity risk and harmful drug-drug interactions (DDI), especially in ageing populations with polypharmacy. Second generation integrase strand inhibitors, such as Bictegravir (BIC) and Dolutegravir (DTG), proven to be efficacious replacements for PI/bs, reduce DDI potential and polypharmacy risks. This analysis aimed to assess benefits of proactively switching PLWH from PI/b to INSTIs. The primary aim was assessing the number of PLWH referred to a treatment optimization multidisciplinary team who could switch successfully to INSTI-based combinations between March 2021 and 2022. Secondary aims were analysing how many PLWH switched due to DDIs and effects of switching on DDI risk.
Method: Data were normality tested and subjected to univariate and multivariate analysis regarding age, gender, ethnicity, diagnosis year, viral load, CD4, resistance, comedications/comorbidities, as independent variables impacting likelihood of a successful switch. $p<0.05$ was deemed statistically significant. Frequency distributions identified the most common drug interactions before and after changes in medication. The University of Liverpool HIV Drug interactions website helped analyse effectiveness of switching to assess the number and significance of interactions. Data collection was approved as a service evaluation by Chelsea and Westminster Hospital NHS Foundation Trust.
Results: 155 individuals were referred to the treatment optimization MDT; 148 (95)% successfully switched to two NRTIs (TDF or TAF plus FTC) and either BIC or DTG. 7 (5%) were assessed to exemplify excessive resistance, requiring continuation of the PI/b regimen. Independent variables listed above were not significant predictors of a successful switch. A total 205 red and amber DDIs were identified before and 52 after the switch, illustrating a statistically significant decrease (-1.135 ± 1.45, $p<0.0001$) in mean DDIs. The most prevalent interactions were observed between PI/bs and atorvastatin (n=48), citalopram (n=13) and amlodipine (n=9).
Conclusion: PLWH on PI/b can switch to INSTI regimens despite harbouring NRTI resistance. HIV is a known independent cardiovascular risk factor, therefore, switching PLWH to INSTI-regimens represents potential to optimise long-term health, by reducing burden of drug-related adverse effects and long-term DDI-associated morbidity and mortality.

P006 | Successful implementation of a novel treatment strategy: challenges, outcomes and patient perspectives

Kate Holland, Radeyah Anjum, Gaynor Quinn, Joseph Arumainayagam, Sashi Acharya
Walsall Healthcare NHS Trust, Walsall, UK

Background: The results of recent clinical trials and subsequent publication of NICE guidance on injectable antiretroviral therapy (ART) have led to a growing number of patient requests to switch to these. We decided to offer this choice despite limited resources and evaluate the outcomes and patient perspectives eight months after implementation.
Method: Following discussions within our multidisciplinary team we decided on a nurse-led model with consultant supervision and established a nurse-led weekly clinic for those who met the criteria for injectable ART. A Standard Operating Procedure (SOP) was designed, relevant training completed and patient enrollment commenced in April 2022. Although oral lead-in was prescribed to the first 12 patients, this is now optional. Retrospective analysis of outcomes and patient perspective was performed using a questionnaire.
Results: There are 15 patients currently on injectable ART. There are no discontinuations to date, and all remain undetectable, despite one having had a viral blip after the oral lead in. Of these, 8 are non-white, 5 are heterosexuals of whom 3 are women, 2 bisexuals with the remaining being gay men. Age ranged between 32 and 60 years with average time on ART being 12.5 years (3 – 29 years). The common reasons for switching were: disclosure issues, lack of freedom and fear of non-compliance. All patients reported that they were counselled appropriately and 86% remembered being told of the risk of failure despite good adherence. Pain score at initial injection was scored at 7/10 by 50% but 72% said pain/injection site reactions improved after each subsequent dose. No-one reported difficulties attending appointments and 93% rated the treatment 'good' or 'excellent'. All agreed it helped with the associated stigma and all would recommend it to their peers.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Conclusion: Despite limited staffing resources and clinic capacity the service was established to improve patient choice and the questionnaire confirms very high patient satisfaction with injectable ART. Pain has also not been a limiting factor as initially thought. With further funding secured from the 'HIV Invest To Save Scheme', injectable ART can now be offered to more patients under our care.

P007 | Outcome of national ARV procurement, University Hospitals of Leicester

Joshua Nazareth[1,2], Joanne Dey[1], Sadiya Ghumra[1], Iain Stephenson[1]
[1]*University Hospitals of Leicester NHS Trust, UK.* [2]*University of Leicester, UK*

Background: In Feb 2022, NHSE introduced a national approach to procuring ARV to secure drug supply, ensure equal access to treatments and encourage generic use to replace equivalent branded products. Four ARV products (Evotaz, Symtuza, Rezolsta, Eviplera) were no longer routinely commissioned as their active components are generically available. If MDT approved, these products can continue to be prescribed via Blueteq. The Leicester HIV service manages 1400 PLHIV on treatment with a planned ARV budget of £4,038,811 in 2022/23. We aimed to evaluate the impact of procurement on patients and service costs.

Method: We conducted a review at University Hospitals of Leicester NHS trust to determine outcomes of patients receiving Evotaz, Symtuza, Rezolsta or Eviplera following introduction of the procurement policy in Feb 2022. Patients receiving specific regimens were identified from the local Pharmacy ARV tracker and case notes/future prescriptions reviewed.

Results: At the time of writing, interim analysis is underway (switching and follow up remains in progress). We identified 142 patients who were prescribed any of the 4 Blueteq regimens during Jan- Dec 2021, representing 10% treated Leicester PLHIV. Two patients moved out of area and 1 patient died before MDT decision, leaving 139 PLHIV to review with 55 receiving Rezolsta, 41 Symtuza, 15 Evotaz and 28 Eviplera, respectively.

Overall, the number/% PLHIV who were switched to generic components, an alternative branded agent, or remained on same regimen was 42 (30%), 82 (59%) and 15 (11%) respectively. Of 124/139 (89%) patients switching treatment, 12 (9.7%) had to switch again due to loss of virologic control (6, 4.8%), intolerance (3, 2.4%) or pill burden (3, 2.4%). 64/111 (57.7%) on Evotaz, Symtuza or Rezolsta were switched away from boosted PI-containing regimen.

Of the 139 PLHIV, 100 (72%), 21 (15%) or 18 (13%) were switched to cheaper, more expensive or same cost regimens, respectively. Overall, annual cost savings of £302,136 (7.5% planned budget) are predicted with £25,668, £103,140 and £180,132 savings from Evotaz, Rezolsta and Symtuza groups respectively. There was a net increase cost of £6,804 in the Eviplera group.

Conclusion: National procurement has resulted in significant savings, except in those switched from Eviplera

P008 | A retrospective review to identify acceptability of doravirine-containing regimens in our single-centre cohort of people with HIV (PWH)

Gavin Marshall[1], Fiona Burns[1,2], Jane Akodu[1], Alan Hunter[1], Tristan Barber[1,2]
[1]*Royal Free London NHS Foundation Trust, UK.* [2]*Institute for Global Health, UCL, London, UK*

Background: Doravirine is a relatively new non-nucleoside reverse transcriptase inhibitor (NNRTI) approved by NHS England in November 2019 for the treatment of HIV-1. Doravirine can be used as a standalone agent with other antiretrovirals, or as a coformulated single tablet with lamivudine and tenofovir DF (DOR/3TC/TDF; Delstrigo). In early local use we observed adverse event reporting such as insomnia, abnormal dreams, and headaches, with some requesting to switch away from doravirine. This retrospective review was conducted to monitor the acceptability and tolerability of doravirine containing regimens.

Method: People who commenced doravirine or DOR/3TC/TDF between February 2020 and October 2021 were identified using our local HIV database. Those who switched from a doravirine containing regimen were identified using a database filter tool and the reasons for switch were identified from clinic notes, treating clinicians, or individuals with HIV attending our service.

Results: In total 136 individuals commenced or switched to a doravirine containing regimen. At the time of audit 113/136 (83%) people were identified as still taking DOR/3TC/TDF (n=89) or doravirine (n=24), with 16/136 (12%) people switching from DOR/3TC/TDF and 7/136(5%) switching off doravirine to another regimen.

Of the 16 people switching off DOR/3TC/TDF the reasons for discontinuation included: CNS side effects including insomnia and nightmares (6), rash (1), nausea (2), fatigue (1), joint pain (1), individual preference (3), unspecified intolerance (2).

A similar pattern was seen in the seven people switching off doravirine as a standalone agent: CNS (4), rash (1), paraesthesia (1). In addition to intolerance 1 person was switched due to persistent viraemia.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Conclusion: Doravirine containing treatment had a higher discontinuation rate than expected with 83% of patients continuing treatment. The main reasons for switching were CNS side effects such as insomnia and nightmares. This contrasts to the summary of product characteristics which suggests nausea and headache as the most common side effects. We plan to extend this data collection, noting that the introduction of national ART procurement may affect prescribing of DOR/3TC/TDF, and collection of tolerability data will be even more important.

P009 | Switching to Biktarvy: real-world single-centre outcomes over 3 years

Lisa King, Nicola Mackie, Caroline Foster
Faculty of Medicine, Imperial College Healthcare Trust, London, UK

Background: *Biktarvy*®, a fixed dose combination of bictegravir, emtricitabine, and tenofovir alafenamide (B/F/TAF), has been prescribed in our centre since 2019. It provides a single tablet option for people living with HIV (PLWH), including those struggling with adherence to multi-tablet regimens, or on boosted regimens which interact with concomitant medications. This review aimed to describe the clinical outcomes of those switching to B/F/TAF in its first 3 years of use.

Method: All PLWH prescribed B/F/TAF at our centre before 01/03/2022 were identified; those given B/F/TAF first-line were excluded. Clinical data were collected from medical e-records including baseline demographics and viral load at switch; suppressed-at-switch (SS) versus non-suppressed-at-switch (NSS). Viral load (VL) data identified virological failure (VF; VL >200 c/ml on 2 occasions) and low-level viraemia (LLV; VL 50-199 c/ml). Virological suppression at time of switch was defined as VL <50 c/ml.

Results: 163 PLWH switched to B/F/TAF: median age 46 (IQR 32-58), 66.3% male, 53.4% suppressed at switch. Median time on B/F/TAF was 20 months (IQR 14-30). Of the 87 SS, LLV occurred in 9 (10.3%) and VF in 2 individuals (2.3%), both reporting 100% adherence. Of the 76 NSS, median VL at switch 7405 c/ml (IQR 321-84,525), 28 (36.8%) achieved viral suppression on B/F/TAF. 19/163 (11.6%) individuals, 9 SS, discontinued B/F/TAF after a median of 178 days (IQR 92-272). 16/19 reported poor tolerability, most commonly sleep and gastrointestinal disturbance, with one drug rash. The remaining 3, all NSS, discontinued due to ongoing viraemia, 2 with new integrase resistance mutations, one also acquiring new mutations in reverse transcriptase (H51HY, S230SR, D67DN, K70KE [case1] and E138K, R263K [case 2]).

Conclusion: B/F/TAF was reasonably well tolerated in this cohort. In those suppressed at switch >97% sustained a VL <200 c/ml, although 1 in 10 had documented LLV. For those unsuppressed at switch, one third achieved viral suppression. However two of this group with ongoing viraemia acquired integrase resistance, highlighting the complex risk benefit decision making supporting PLWH struggling with adherence to antiretroviral therapy.

P010 | Total lymphocyte and CD4+ T-cell count changes in participants receiving islatravir (0.25mg, 0.75mg, and 2.25mg once daily) and doravirine ±lamivudine: post hoc analysis from a phase 2b dose-ranging study (P011)

Todd Correll[1], Jean-Michel Molina[2], Stephanie Klopfer[1], Ryan Vargo[1], Anjana Grandhi[1], Rima Lahoulou[3], Yun-Ping Zhou[1], Karen Eves[1], Kathleen Squires[1]
[1]Merck & Co, Inc, Rahway, USA. [2]University of Paris St-Louis and Lariboisière Hospitals, France. [3]MSD France, Puteaux, France

Background: Islatravir (ISL) is a nucleoside reverse transcriptase translocation inhibitor being studied for HIV-1 treatment and prevention. Exposure-related decreases in total lymphocyte and CD4+ T-cell counts were observed across ISL trials, especially at higher doses. Pharmacokinetic/pharmacodynamic modeling and simulation predict ISL 0.25mg will increase lymphocyte and CD4+ T-cell counts similar to standard antiretroviral therapy. Post hoc analyses of changes in total lymphocyte and lymphocyte subset counts were conducted in a dose-ranging phase 2b study (P011; NCT03272347) of ISL+doravirine (DOR)±lamivudine (3TC).

Method: Randomized participants received ISL (0.25mg, 0.75mg, or 2.25mg)+DOR+3TC (100mg/300mg) or fixed-dose combination DOR/3TC/tenofovir disoproxil fumarate (TDF) once daily (part 1). Participants receiving ISL who achieved HIV-1 RNA <50 copies/mL at ≥week 20 (W20) stopped 3TC and continued ISL+DOR (blinded; part 2). Participants randomized to ISL switched to 0.75mg between W60-W84 and continued through W144, participants in the comparator arm continued DOR/3TC/TDF through W144. Post hoc analyses evaluated ISL effects on lymphocytes in parts 1-2 through W72 (predose conversion). Participants who switched to ISL 0.75mg before W72 were censored from the W72 analysis but included in all preswitch time points. Incidence of infections and hematology parameters were examined.

Results: Mean percentage changes from baseline [95% CI] in total lymphocytes were comparable for ISL 0.25mg (20.5% [4.3-36.6%]; n=19) and DOR/3TC/TDF (15.9% [2.0-29.9%]; n=22) and more favorable than ISL 0.75mg (−0.4% [−14.9 to 14.1%]; n=19) and 2.25mg (−15.9%

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

[−31.9 to 0.1%]; n=16) groups. Percentage increases in CD4+ T-cell counts [95%CI] were similar for ISL 0.25mg (79.8% [50.0-109.6%]; n=19) and DOR/3TC/TDF (60.1% [40.2-80.0%]; n=22) versus ISL 0.75mg (47.1% [26.1-68.2%]; n=18) and 2.25mg (24.0% [4.7-43.4%]; n=16) groups. Percentage increases in B-cells were similar for ISL 0.25mg (89.8%; n=19) and DOR/3TC/TDF (108.3%; n=22). Incidence of infections was comparable across groups through W72. No changes were observed for other hematology parameters.

Conclusion: Results support further evaluation of ISL 0.25mg+DOR in treatment-naive and virologically suppressed people living with HIV.

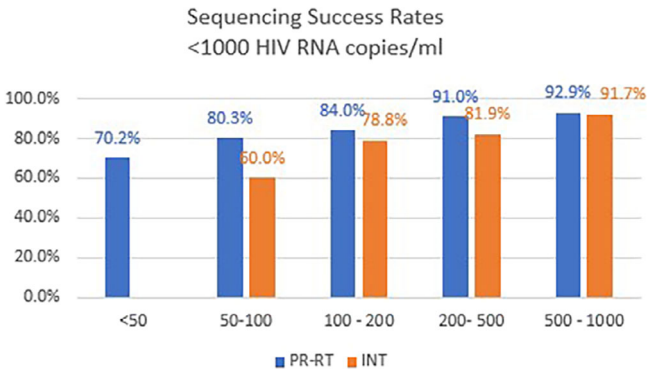
P011 | Sequencing of low viral load HIV for drug resistance-associated mutations

Simon Dustan, Anjna Badhan, Graham Taylor
Imperial College London, UK

Background: Sequencing of HIV RNA for drug resistance associated mutations (DRAMs) when the viral load is greater than 1000 HIV RNA copies per millilitre (cpm) is widely utilised prior to the initiation of combination antiretroviral therapy (cART)and during cART when HIV suppression is not complete, to inform management. We reviewed the outcomes of sequencing samples with <1000 cpm, hereafter termed low viral load (LVL) samples, submitted to the Molecular Diagnostic Unit.

Method: The results of all plasma samples (1ml minimum) with a stated viral load <1000 cpm, received for protease/reverse transcriptase 2009 – 2021 inclusive and integrase (2014 – 2021 inclusive) were reviewed. Sanger sequencing was performed until end of 2017, Next Generation Sequencing thereafter. Viral loads were determined at the referring clinics.

Results: For protease/reverse transcriptase - of the 2169 samples that met the inclusion criteria a sequence was reported for 1888 (87%). Success increased from 70.2% for samples with a viral load <50 HIV RNA cpm to 92.9% if 500 – 1000 cpm. For Integrase the overall success rate was 80.9% ranging from 60% (50 – 100 cpm) to 91.7% for 500 – 1000 cpm (Figure). Sequencing success for samples >1000 cpm is 92.3%. LVL samples comprised 22.5% of all samples.



Of the 146 LVL sequences reported during 2020 2.7% had DRAMs in protease and 30.1% had RT associated mutations – the most common being at M184 (48% of all samples with an RT DRAM), T215 (23%) mostly revertant, K70 (16%), M41 (14%) and E138 (14%). Two samples had triple class resistance. Of the nine clades detected the most common were B (36%), C (20%), AG (16%) and A (14%), with F, D, AE, CRF06 and G also identified.

Conclusion: The success rate of sequencing LVL plasma samples was high overall, no different from the overall success rate when >200 cpm were present and even at 20 – 50 cpm exceeded 70% for protease/RT. Viruses with a broad range of clades were sequenced. DRAMs in protease were uncommon but were a marker for triple class resistance (2/4 cases). 30% of LVL sequences had DRAMs in RT most commonly conferring resistance to XTC, zidovudine and rilpivirine.

P012 | Has switching off efavirenz-based antiretroviral therapy positively affected our patient cohort, with a focus on lipids and mental health outcome?

Pegah Soltanpoor[1], Alison Grant[2]
[1]Kings College London, UK. [2]Guy's and St Thomas' NHS Foundation Trust, London, UK

Background: Efavirenz has been used as a treatment for people living with HIV since 1996; however, the latest BHIVA 2022 guidelines recommends starting efavirenz only in specific patient cohorts due, in part, to its potential negative effects on mental health and serum lipids. This study aimed to determine whether there was an improvement in mental health and serum lipids in patients switching from efavirenz to another antiretroviral therapy (ART) regimen between 2018 and 2022.

Method: Pharmacy software was used to identify patients prescribed efavirenz between 2018 and 2022 and whether these patients switched to alternative ART within this time frame. Electronic patient notes and blood results were reviewed to describe patients' clinical characteristics and subjective mental health assessment before and after switching.

Results: 94 patients switched from efavirenz to alternate ART between 2018 and 2022; 67 of whom switched prior to 2022 and were included for analysis allowing 1-year follow up data. 36 (54%) patients switched due to central nervous system disturbance with 78% reporting an improvement in mood and/or sleep. 25 (37%) patients switched secondary

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

to raised lipids with these reducing in 95% of patients. The remaining patients switched for other reasons including simplicity and drug-drug interactions. 36 (54%) patients gained weight following their ART switch with 32 (89%) of these patients switched to integrase inhibitor-based ART.

Conclusion: In this study, we evaluated the mental and physical health of patients switching off efavirenz-based ART between 2018-2022. Although we don't routinely utilise formal mental health questionnaires, we observed an improvement in mental health symptoms following this switch, as reported by patients subjectively. Similarly, lipids improved in the majority of patients switching secondary to raised levels.

In patients continuing on efavirenz, especially in those with a raised cardiovascular risk or a history of mental ill health, we suggest considering switching off efavirenz; while considering weight with ART choice.

We note the limitations of this retrospective, observational study as having no formal assessment of patients' mental health as well as inability to qualify all factors that may influence outcome data, such as change in diet/lifestyle and co-medication with psychotropic and/or lipid drugs.

P013 | A multi-centre audit of changes to renal function and weight following a switch from tenofovir disoproxil fumarate to tenofovir alafenamide

Emily Boardman, Linda Owens, Asangi Gamage, Gabriel Schembri, Ashish Sukthankar
The Northern Contraception, Sexual Health and HIV Service, Manchester, UK

Background: Switching from tenofovir disoproxil fumarate (TDF) to tenofovir alafenamide (TAF) is recommended by BHIVA 2022 antiretroviral treatment guidelines for adults living with HIV and an eGFR approaching or less than 60 mL/min/1.73m. Emerging data has associated TAF to increases in weight. The aim of our multi-centre retrospective data analysis was to determine whether our cohort of patients had an improvement in renal function following a switch from TDF to TAF and whether there was weight gain.

Method: Records were accessed for four HIV services in Greater Manchester from 2016 to 2022. In total, 213 patients were included if they had been switched from a TDF to TAF backbone and had creatinine measurements at time of switch and at 350-450 days. Pre- and post- weight data was available for only 114 patients.

Results:

	Number of patients
Gender:	
Male	173 (81.2%)
Female	40 (18.8%)
Ethnicity:	
White British	134 (62.9%)
Black/Black British	44 (20.7%)
Other	23 (10.8%)
Asian/Asian British	7 (3.3%)
Not stated	5 (2.3%)
Reason for switch:	
Decline in renal function	111 (52.1%)
To protect future bone health	28 (13.1%)
Incidental – simplification	25 (11.7%)
Osteoporosis/osteopenia	18 (8.5%)
Side-effects	15 (7.0%)
Renal protective	13 (6.1%)
Incidental - more robust regimen	11 (5.2%)
Incidental - cost saving	10 (4.7%)
Not stated	4 (1.9%)
Co-morbidities:	
Smoker	54 (25.4%)
Nephrotoxic drug use	53 (24.9%)
Hypertension	44 (20.7%)
Recreational drug use	33 (15.5%)
Diabetes mellitus	13 (6.1%)

The mean change in creatinine from time of switch to 350-450 days was a decrease of 4.23 umol/L (SD 13.31, $p<0.05$). The mean change in weight for this time frame was an increase of 3.44 kg (SD 7.31, $p<0.05$).

P014 | Review of protease inhibitor use in our single-site clinic for people living with HIV (PLWH)

Pedro Simoes[1], Sarah Mahmoud[1], Alissa Ambrose[1], Conor Bowman[1], Jane Akodu[1], Isidora Staikidou[1], Zoe Anorson[1], Eleanor Hamlyn[1], Sanjay Bhagani[1], Fiona Burns[1,2], Tristan J Barber[1,2]
[1]Department of HIV Medicine, Royal Free London NHS Foundation Trust, UK. [2]Institute for Global Health, University College London, UK

Background: Protease Inhibitor (PI) containing antiretroviral therapy (ART) combinations have been a mainstay of HIV treatment for almost 20 years due to their high efficacy and genetic barrier. This comes with a trade-off of increased potential of drug-drug interactions (DDI) and deleterious metabolic side effects. In the

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

current setting of an ageing population and life-long ART, DDIs are practically unavoidable, but some warrant special attention as they pose a serious health. In the recent years, more metabolically forgiving ART options have been made available, also with good genetic barriers, and these may be preferred, in older people and in those with multiple comorbidities. We identified all PLWH at our service currently on a PI over a period of 5 years and reviewed their characteristics, identifying in addition PLWH at risk for harmful DDIs or with multiple comorbidities.

Method: All PLWH prescribed a PI from January 2016 to December 2020 were included in this analysis, and their respective records were consulted to assess existent comorbidities and prescribed comedications, most recent CD4 count and VL as well, documented mutations.

Results: We identified 483 people prescribed a PI in window; average age of 53y; 146/483 (30%) were women, 313/483(65%) were prescribed non-HIV related medications, of which 224/313 (71%) were prescribed more than one medication. We found 23 PLWH prescribed contraindicated drugs. Of these, all were eligible for an ART switch, of which 12 have been switched already and 4 were lost to follow up. A total of 146/483 (30%) had one or more comorbidity associated with cardiovascular risk (hypertension, diabetes, hypercholesterolaemia, previous coronary or other arterial disease), of which 34 had already been switch from a PI at the time of this analysis.

Conclusion: DDI monitoring and ART simplification, when possible, are paramount and should continue to be on the forefront of medical care. Regular clinical review, specialist pharmacy input, empowerment of PLWH, and good communication channels with colleagues in primary care can help support this. Whilst some individuals will need a BPI for adherence or virologic reasons, others should be considered for a switch to an alternative regimen.

P015 | Effectiveness of dolutegravir + lamivudine in real-world studies in people with HIV-1 with M184V/I mutations: a systematic review and meta-analysis

Madhusudan Kabra[1], Tristan Barber[2,3], Clotilde Allavena[4], Anne-Geneviève Marcelin[5], Simona Di Giambenedetto[6], Juan Pasquau[7], Nicola Gianotti[8], Matthew Turner[9], Cale Harrison[9], Tammy Wynne[9], Gustavo Verdier[10], Chris Parry[1], Bryn Jones[1], Chinyere Okoli[1], Julie Priest[11], Emilio Letang[12]
[1]ViiV Healthcare, Brentford, UK. [2]Ian Charleson Day Centre, Royal Free London NHS Foundation Trust, UK. [3]Institute for Global Health, University College London, UK. [4]CHU Hôtel-Dieu, Nantes, France. [5]Hôpital Pitié-Salpétrière, Paris, France. [6]Fondazione Policlinico Universitario Agostino Gemelli IRCCS and Università Cattolica del Sacro Cuore, Rome, Italy. [7]Virgen de las Nieves University Hospital, Granada, Spain. [8]IRCCS Ospedale San Raffaele, Milan, Italy. [9]HEOR Ltd, Cardiff, UK. [10]ViiV Healthcare, Montréal, Canada. [11]ViiV Healthcare, Durham, UK. [12]ViiV Healthcare, Madrid, Spain

Background: Historical drug resistance results are not always available when considering treatment options. In the phase 3 TANGO and SALSA trials evaluating switch to dolutegravir/lamivudine (DTG/3TC), absence of historical resistance results or presence of archived M184V/I mutations did not impact efficacy. This meta-analysis describes virologic failure (VF) using real-world data from people with HIV-1 (PWH) receiving DTG+3TC in suppressed-switch settings, with historical RNA- or archived proviral DNA-detected M184V/I mutation.

Method: A systematic literature review was performed following Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. Embase®, Ovid MEDLINE®, MEDLINE® In-Process, and Cochrane library (January 2013-March 2022) and relevant conference archives (2016-2021) were searched for real-world studies reporting virologic outcomes for PWH receiving DTG+3TC. A targeted literature review was performed to identify interventional trials assessing M184V/I impact on DTG+3TC efficacy. Studies were screened for populations reporting historical M184V/I mutations before DTG +3TC initiation. Common- and random-effects model analyses were conducted from real-world studies (primary objective). Sensitivity analyses were performed using interventional trial data (secondary objective).

Results: Of 3492 publications and 198 conference abstracts identified via systematic literature review, 5 real-world studies met all search criteria and were

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Table. Summary of VF Definitions and Outcomes for PWH With M184V/I RAMs Receiving DTG+3TC in Real-world Studies and Interventional Trials

Study (cohort)	PWH with pre-switch M184V/I, n/N (%)	M184V/I identification method	VF time point, week	VF outcomes, n/N (%)	VF definition
Real-world studies					
Hocqueloux 2021 (Dat'AIDS)	105/695 (15.11)	RNA and proviral DNA genotypes (pooling both)	24 48 96	1/105 (0.95) 2/105 (1.90) 2/105 (1.90)	2 consecutive confirmed VL >50 c/mL or 1 VL >200 c/mL
Santoro 2021 (LAMRES)	36/533 (6.75)	RNA and proviral DNA genotypes	24 48 96	2/36 (5.56) 2/36 (5.56) 3/36 (8.33)	2 consecutive confirmed VL >50 c/mL or 1 VL ≥200 c/mL
Borghetti 2021 (ODOACRE)	48/669 (7.17)[a]	Historical genotypes; does not specify RNA or proviral DNA	24 48 96	0/45 1/45 (2.22) 2/45 (4.44)	2 consecutive VL ≥50 c/mL or 1 VL ≥200 c/mL
Galizzi 2020 (NR)	47/174 (27.01)[b]	Either RNA or proviral DNA genotypes at baseline (before switch)	24 48 96	— 1/47 (2.13) —	2 consecutive confirmed VL >50 c/mL or 1 VL >50 c/mL followed by ART modification or 1 VL >1000 c/mL
Hidalgo-Tenorio 2019 (DOLAMA)	4/178 (2.25)	Baseline RNA genotype	24 48 96	— 1/4 (25.00) —	2 consecutive VL >50 c/mL
Interventional trials					
ART PRO	21/41 (51.22)[c]	Historical DNA genotype	24 48 96	0/21[d] 0/21 0/21	VL ≥50 c/mL
SOLAR 3D	50/100 (50.00)	Historical genotypes; does not specify RNA or proviral DNA	24 48 96	— 0/50 —	VL ≥50 c/mL followed by consecutive VL >200 c/mL
TANGO	4/322 (1.24)	Proviral DNA genotype	24 48 96	0/4[e] 0/4[e] —	VL ≥50 c/mL followed by consecutive VL ≥200 c/mL
DOLULAM	17/27 (62.96)	RNA and proviral DNA genotypes	24 48 96	0/17 0/17 0/17	VL >50 c/mL
SALSA	5/192 (2.60)	Proviral DNA genotype	24 48 96	— 0/5 —	VL ≥40 c/mL

ART, antiretroviral therapy; DTG, dolutegravir; VL, viral load; NR, not reported; PWH, people with HIV-1; RAM, resistance-associated mutation; 3TC, lamivudine; VF, virologic failure. [a]Cohort reference reporting the proportion with VF for individuals with M184V/I was used for analysis (n=45 individuals with M184V/I). [b]Assumption: n=60 PWH with M184V/I were reported out of N=220 total PWH with available pre-switch genotype resistance data across 2 groups but not reported for DTG+3TC specifically. Table n with M184V/I was calculated according to the proportion of PWH in the DTG+3TC (n=174) vs other group (n=46). [c]Of the 20 PWH without known M184V/I at baseline, next-generation sequencing identified n=7, n=3, and n=1 with M184I at 1%, 5%, and 20% thresholds, respectively. [d]Refers to the number of PWH with historical 3TC resistance (M184V/I and/or K65R/E/N); 3 PWH with historical 3TC resistance discontinued before Week 24 but had VL <50 c/mL at time of discontinuation (2 protocol violations and 1 adverse event–related discontinuation). [e]Assumption: Week 24 was not reported, but reports described no VF to Week 48.

analyzed; the targeted literature review also identified 5 interventional trials. Few VFs and no treatment-emergent resistance mutations were reported at each time point (Table). Random-effects model–estimated proportions (95% confidence interval) of PWH with historical M184V/I with VF at Weeks 24, 48, and 96 were low in real-world studies (0.01 [0.00-0.14], 0.03 [0.01-0.08], and 0.04 [0.01-0.17], respectively) and interventional studies (0.00 [0.00-0.02], 0.00 [0.00-0.01], and 0.00 [0.00-0.03], respectively). Including all studies increased sample sizes without significantly impacting estimates.

Conclusion: Although overall M184V/I incidence was low, real-world studies of PWH with historical M184V/I receiving DTG+3TC identified low incidence of VF through 96 weeks, as did sensitivity analyses from interventional trials. Though not indicated in PWH with known resistance mutations, this meta-analysis provides reassuring data on outcomes with DTG+3TC in PWH with incomplete history or in cases where archived M184V/I was inadvertently missed.

P016 | Characteristics and reasons for switch to Biktarvy in a large clinical cohort

Hao Gao[1], Mike Youle[2], Sara Madge[2], Pedro Simoes[2], Eleanor Hamlyn[2], Alan Hunter[2], Jennifer Hart[2], Jane Akodu[2], Margaret Johnson[2], Fiona Burns[2,3], Tristan Barber[2,3], Sabine Kinloch[2]

[1]University College London Medical School, UK. [2]Royal Free London NHS Foundation Trust, UK. [3]Institue for Global Health, UCL, London, UK

Background: Second-generation integrase inhibitor containing regimens such as B/F/TAF (Biktarvy) are now a preferred choice of antiretroviral therapy (ART) in all international guidelines. B/F/TAF was approved by

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

NHSE in July 2019; National Procurement for ART in NHSE started 1st April 2022 and may have impacted on prescribing choices subsequently. We aimed to determine characteristics and reasons for switching to B/F/TAF in our London-based cohort of people living with HIV (PLWH).

Method: We used electronic patient records to review all people on ART who had switched from existing suppressive regimens to B/F/TAF. Sociodemographic characteristics, viral load, CD4 T cell count and previous ART were collected. Data was censored 20th November 2022.

Results: 386 individuals switched to B/F/TAF. The majority were male (n=286;74%), 216 (55%) white and 105 (27%) black; median age 56y (IQR 50-60.5y). Median CD4 at switch 541 (IQR 380-701.5). Half acquired HIV via sex between men (n=194). Median follow-up from date of B/F/TAF switch to censor was 9 months (5-18.5 months); median duration of diagnosed HIV infection and ART exposure prior to switch: 20 years (13-26 years). Prior to B/F/TAF switch 42.7% (165/386) were on a protease inhibitor based regimen; 32.6% on integrase inhibitors (126/386); 12.7% (49/386) on NNRTI (49), INSTI+PI:21, PI+NNRTI:10, INSTI+NNRTI:7, INSTI+PI+NNRTI:1, unknown:7. Reasons for B/F/TAF switch: Simplification/Rationalisation/Pill burden (183), toxicity (115), virological failure (38), non-adherence to previous regimen (16), other (32), unknown (2). Number of switches between April/November 2021 vs 2022 (74 vs 168). Virological outcome data according to prior regimen and reason for switch is under analysis.

Conclusion: The majority of people switched to B/F/TAF to simplify their regimen; however, toxicity and adherence were also key reasons. The sociodemographic profile of people switching aligned with that of the clinic cohort. National procurement of ART appears to have increased B/F/TAF switches.

P017 | What influences acceptability of long-acting injectable ART and treatment setting: preliminary qualitative findings from the ILANA trial

Rosalie Hayes[1,2], Chikondi Mwendera[1], Vanessa Apea[1,3,4], Sara Paparini[1,2], Chloe Orkin[1,3,4]

[1]Share Collaborative, Queen Mary University of London, UK. [2]Wolfson Institute of Population Health, Queen Mary University of London, UK. [3]Blizard Institute, Queen Mary University of London, UK. [4]Department of Infection and Immunity, Barts Health NHS Trust, London, UK

Background: This study explores the prospective acceptability of long-acting injectable ART (LA-ART) and treatment setting among people living with HIV and healthcare providers (HCPs) participating in the ILANA implementation study of injectable Cabotegravir and Rilpivirine.

Method: From August to November 2022, semi-structured baseline interviews were conducted with patients and HCPs. Participants were recruited from six HIV clinics across Brighton, Liverpool, and London. The interviews took place prior to the first dosing of the injection. The interviews were analysed using reflexive thematic analysis.

Results: Fourteen patients and 13 HCPs were interviewed. Patient participants were 57% female, 57% from racially minoritised groups, and the median age was 49 (IQR 40-54). HCPs included doctors, nurses, and pharmacists.

Both patients and HCPs anticipated that LA-ART could reduce pill fatigue and increase privacy of medication use. Some HCPs were concerned that the current eligibility criteria for LA-ART would exclude patients who might benefit most. HCPs were positive about the long-term benefits of LA-ART, but some were concerned about the potential for drug resistance in the event of treatment failure.

Most patients were confident they could manage appointments within their schedules. Some patients expressed concerns about injection pain, but most felt this was outweighed by the treatment's benefits, including reduced medication burden and improved mental health.

Most patients at this initial stage preferred to receive injections at their clinic rather than a community setting. They cited supportive relationships with clinical staff as a key factor, built upon trust and confidentiality. Most did not perceive the injection appointment schedule as onerous, seeing it as a lesser burden than daily pill-taking. Those who preferred community settings cited proximity as their main advantage. However, several patients

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

expressed concerns about HIV stigma and confidentiality breaches in non-HIV-specialist settings.

Conclusion: LA-ART is highly acceptable among patients and HCPs in this study. Despite good adherence, daily oral medication was still a challenge, and participants saw LA-ART as a solution to pill fatigue. Patients generally expressed a preference for treatment in clinic, highlighting the importance of enabling patient choice. Further research is needed to understand whether participants' experience of injectable treatment matches their expectations.

P018 | Single-centre review of rapid antiretroviral therapy initiation during the COVID-19 pandemic

Michael Ewens, Mon-Myat Aung, Emma Wrench, Sarah Schoeman, Emma Page
Leeds Teaching Hospitals NHS Trust, UK

Background: BHIVA released interim guidance on first line anti-retroviral therapy (ART) initiation during the COVID-19 pandemic, when investigations/follow-up was restricted. Our HIV service didn't restrict follow-up but suspended in-house resistance testing (RT) due to laboratory capacity. Having prescribed 'rapid ART' based on the Northern Algorithm 01/08/2020-01/01/2022 we wanted to evaluate our prescribing during the pandemic.

Method: All new HIV diagnoses 01/08/2020-31/12/2021 were identified via our HARS dataset. Retrospective case-note review identified ART prescribed, and switches that occurred upon baseline RT availability, to more suitable and/or cost-effective regimes.

Results: 32 new diagnoses: 11 female, 21 male, median age 41 years (17-81), 10 MSM, 22 Heterosexuals, White British 14, African 9, other 7. Median time to ART initiation 10 days (0-210). Median CD4 count 359 (2-1251), 8 had CD4<200.

7/32 had Primary HIV infection, 5 initiating ART at 1st visit. 30/32 started ART within our service, 1 relocated, 1 initiated abroad. 28/30 started algorithm compliant rapid ART. Of the 2 that delayed, 1 had significant resistance, the other patient choice. 8/30 (27%) 'rapid ART' initiations switched post RT availability.

Conclusion: All patients initiating ART in our service during the pandemic were algorithm compliant and fulfilled BHIVA recommendations. 7/10 starting Darunavir/r-based therapy switched to Delstrigo post RT, a more cost-effective STR. Zero patients on Biktarvy switched post RT; implying it's difficult to switch patients from small INSTI-based-STRs. Future work includes comparing our results with other centres and reviewing ART switches post HIV National Prescribing Guide implementation.

ART initiated	Number	Algorithm compliant?	Virology MDT referral post RT result		ART switch?
			Yes	No	
F/TDF & Darunavir/r	10	Yes	4	6	4/4 referred switched to Delstrigo. 3 non-referred switched to Delstrigo, 3 no change.
F/TDF & Dolutegravir	8	Yes	1	7	Referred patient didn't switch. 1/7 non-referred switched to Delstrigo.
Biktarvy	7	Yes	0	7	No
Symtuza	3	Yes	2	1	No - High barrier single tablet regime (STR) required or research participant
Genovya	1	No	1	0	F/TAF & Dar/r (initiated in The Netherlands)
Symtuza & Dolutegravir	1	Yes	1	0	No, multi-class resistance
Delstrigo	1	Yes	1	0	No, initiated post RT

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P135 | 5-year outcomes of bictegravir–emtricitabine–tenofovir alafenamide (B-F-TAF) as initial treatment of HIV-1 in adults with high baseline HIV-1 RNA and/or low CD4 cell count in two Phase 3 randomised clinical trials

Moti Ramgopal[1], Anson Warupa[2], Axel Baumgarten[3], Mezgebe Berhe[4], Anton Pozniak[5], Chloe Orkin[6], Juan Manuel Tiraboschi[7], Debbie Hagins[8], Hailin Huang[9], Kristen Andreatta[9], Nathan Unger[9], Jason Hindman[9], Hal Martin[9], Jared Baeten[9], Olayemi Osiyemi[10]
[1]Midway Research and Specialty Care, Florida, USA. [2]Infectious Disease Specialists of Atlanta, USA. [3]Centers for Infectious Diseases, Berlin, Germany. [4]North Texas Infectious Diseases Consultants, Dallas, USA. [5]Chelsea and Westminster Hospital, London, UK. [6]Queen Mary University of London, UK. [7]Bellvitge University Hospital, Barcelona, Spain. [8]Coastal CARE Centers, Savannah, USA. [9]Gilead Sciences Inc, Foster City, USA. [10]Triple O Research Institute, West Palm Beach, USA

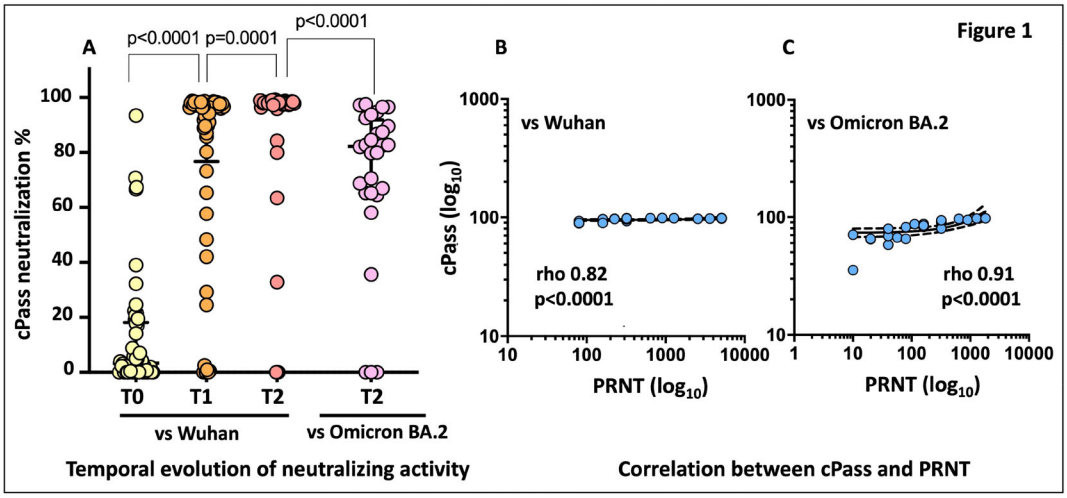
Background: First-line INSTI-based antiretroviral therapy routinely achieve rapid virologic suppression; however, those with a high baseline (BL) HIV-1 RNA and/or low CD4 count may be more challenging to manage. To further characterise long-term outcomes over 5 years, we analysed results from two studies examining B-F-TAF as initial treatment stratified by BL HIV-1 RNA and/or CD4 count.
Method: Adults with HIV were randomised to receive blinded initial treatment with B-F-TAF versus dolutegravir [DTG]-abacavir-lamivudine (Study 1489) or DTG+F-TAF (1490) for 144 weeks (W) of blinded treatment followed by an optional switch to open-label B-F-TAF for 96W. We present virologic response (HIV-1 RNA <50 c/mL, missing=excluded and missing=failure) and study drug-related adverse events (DRAE) from a pooled analysis of participants originally randomised to B-F-TAF who had BL HIV-1 RNA 100,00-400,000 c/mL, HIV-1 RNA >400,000 c/mL and/or CD4 count <200 cells/μL through W240.
Results: 634 adults (median age 32 years, 89% men, 33% Black/African descent) originally randomised to B-F-TAF were included for analysis. At BL, 80 participants had a BL CD4 count <200 cells/μL and 119 participants had HIV-1 RNA >100,000 c/mL, of whom, 20 had HIV-1 RNA >400,000 c/mL. At W240, virologic suppression was high for the low CD4 count (98%, [49/50] M=E; 61% [49/80] M=F) and those with low CD4 count and VL>100,000c/ml (95% [20/21] M=E; 51% [20/39], M=F). No participant in the final resistance analysis developed virologic resistance to any component of B-F-TAF. Across the subgroups, the most common DRAEs were nausea, headache and diarrhoea and there were no serious DRAEs. There was only one discontinuation due to a DRAE in the low CD4 count subgroup, and none in the high HIV-1 RNA subgroup.
Conclusion: Initial treatment with B-F-TAF was well-tolerated and efficacious over 5 years of follow-up in people with a high BL HIV-1 RNA and/or low CD4 count. These outcomes provide additional evidence that B/F/TAF is an effective and durable regimen for a broad range of people with HIV, including those with advanced disease.

P019 | Neutralising antibodies (NAbs) against SARS-CoV-2 in BNT162b2 vaccine recipients with a history of advanced HIV infection: cPass as a simpler alternative to gold-standard tests

Alessandra Ruggiero[1], Chiara Stefani[1], Ludovica Ferrari[2], Lorenzo Piermatteo[2], Francesco Bonfante[3], Matteo Pagliari[3], Marco Iannetta[2], Francesca Ceccherini-Silberstein[2], Massimo Andreoni[2], Loredana Sarmati[2], Anna Maria Geretti[1,2,4]
[1]University of Verona, Italy. [2]University of Rome Tor Vergata, Rome, Italy. [3]Istituto Zooprofilattico Sperimentale delle Venezie, Legnaro, Italy. [4]King's College London, UK

Background: Established SARS-CoV-2 NAb tests are labor-intensive. We prospectively measured NAbs vs Wuhan-1 and Omicron BA.2 using the novel GenScript cPass assay and examined correlations with responses measured by gold-standard plaque reduction neutralisation test (PRNT) (*Cotugno, Ruggiero et al. Cell Rep 2021*) and with anti-Spike IgG quantified by Roche Elecsys. Given the paucity of data, we selected BNT162b2 vaccine recipients with a history of advanced HIV infection (prior AIDS-defining conditions and/or nadir CD4 <200 cells).
Method: In Mar 2021-Apr 2022, 55 PWH received 2 vaccine doses median 3 weeks apart [IQR 3-3] and a 3rd dose 27 weeks later [23-31]. Plasma samples (n=147) were stored immediately before dose-1 (T0), median 4 weeks [3-5] after dose-2 (T1) and median 13 weeks [9-19] after dose-3 (T2) for batch testing.
Results: Participants' characteristics: 74% male, 85% white, all on ART, 82% HIV-RNA <50 cps/ml; median age 55 years, ART duration 7 years, nadir CD4 83 cells [36-211], current CD4 440 cells [270-710], CD4:CD8 ratio 0.6 [0.4-1.0]; 73% had a history of advanced HIV infection; 15% received a COVID-19 diagnosis during the study. At T0, T1 and T2, proportions with quantifiable anti-S IgG (>0.8 U/ml) were 11/49 (22%), 50/54 (93%) and 43/43 (100%), respectively; their median anti-S IgG titres were 30 [15-124], 15949 [596-3389] and 8527 [3146-17190] U/ml. Proportions showing Wuhan-1 neutralisation by cPass were 6/50 (12%), 45/53 (85%) and 40/43 (93%), with median neutralisations of 67% [47-70], 97%

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License



[91-98] and 98% [98-98] and corresponding NAb titres of 1332 [792-1436], 5354 [3529-6187] and 6242 [5765-6766] U/ml. At T2, 25/28 (89%) showed BA.2 neutralisation by cPass (median 83% [68-93]; NAb titre 7836 [3172-12173] U/ml) (Fig 1A). Two participants lacking NAbs at T2 had a history of advanced HIV infection. cPass data were highly correlated with anti-S IgG titres (*rho 0.82; p<0.0001*) and with PRNT data for both Wuhan-1 (n=27, Fig 1B) and Omicron BA.2 (n=28, Fig 1C).

Conclusion: cPAss offers a simple methodology for measuring SARS-CoV-2 NAbs. Despite prior advanced HIV infection, neutralising activity improved with successive vaccinations and most participants showed NAbs against both Wuhan-1 and Omicron BA.2 after 3 vaccine doses.

P020 | Rapid HIV progression in patients with increased prevalence of unstable HLA-C variants

Alessandra Ruggiero[1], Chiara Stefani[1], Antonella Sangalli[1], Elena Locatelli[1], Tania Federico[1], Giovanni Malerba[1], Maria Grazia Romanelli[1], Gustavo Adolfo Argañaraz[2], Bosco Christiano Maciel Da Silva[3], Alberto Jose Duarte Da Silva[3], Jorge Casseb[3], Enrique Roberto Argañaraz[3], Donato Zipeto[1]
[1]*University of Verona, Italy.* [2]*University of Brasília, Brazil.* [3]*Universidade de São Paulo, Brazil.*

Background: In vitro studies suggested that unstable HLA-C variants are associated with poor HIV-1 control and increased HIV-1 infectivity. In this work, we investigated the correlation between different stages of HIV-1 progression and HLA-C allotypes in a multicentric cohort (USA, Canada, and Brazil) of treatment-naïve patients with different disease progression status.

Method: Ninety-six HIV-1-infected patients were followed-up for about 8 years and classified as progressors (Ps, n = 48), long-term non-progressors (LTNPs, n = 37), and elite controllers (ECs, n = 11). HLA-C genotyping was performed using allele-specific PCR, when the HLA-C genotype could not be uniquely determined samples underwent Sanger sequencing. HLA-C variants were classified as stable or unstable according to their binding stability to β2-microglobulin/peptide complex. Nonparametric Mann-Withney T-test, Kruskal-Wallis tests and chi-square were used to compare data between the 3 groups. Logistic regression model was run taking age and sex as covariates.

Results: Ps were coming from Brazil (28/48, 58%), Canada (14/48, 38%) and USA (6/37, 13%) similarly to LNTPs, whilst ECs were all coming from Canada. Ps were median 41 years old (IQR 30-53) and overall younger than LNTPs and older than ECs. As reflection of their disease progression, their CD4 count was 324 cell/mm3 (220-431) and lower than LNTPs (p<0.0001) and ECs (p=0.002) and the HIV VL was median 17,698 copies/mm3 (3688 – 100,000) and higher than LTNPs (p=0.0773) and ECs (p<0.0001). When looking at the presence of HLA-C alleles, Ps showed a higher frequency of Unstable alleles (65%), compared to LTNPs (43%) and ECs (54%). The analysis of the correlation between HLA-C alleles and HIV-1 progression showed a significant association (p-value 0.0143) in the whole cohort. After stratification by population origin, the same trend was observed in Canadian (p-value 0.0128) and USA (p-value 0.0171) patients, whereas a statistically significant association was not observed in Brazilian patients (p-value 0.6538). Age and sex were not confounders, by logistic regression.

Conclusion: Our findings suggest a link between unstable HLA-C variants and rapid progression to AIDS. In

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

ECs, the HLA-C stability may not be a factor associated with disease progression. The impact of the origin of the patients deserves further investigations.

P021 | Analysis of broadly neutralising antibody resistance in adolescents and young people living with HIV

Panagiota Zacharopoulou[1], Merle Henderson[2], Caroline Foster[3], Sarah Fidler[2], John Frater[1]
[1]*University of Oxford, UK.* [2]*Imperial College London, UK.* [3]*Imperial College NHS Trust, London, UK*

Background: For people living with HIV, taking lifelong daily medication can be challenging, stigmatising, and associated with side effects. Treatment with the two broadly neutralising antibodies (bNAbs), 10-1074 and 3BNC117, may provide viral suppression for many months after a single injection. However, pre-existing resistance to these bNAbs, especially in non-B HIV subtypes, might lead to treatment failure. Screening for bNAb sensitivity prior to treatment could help make informed decisions for the treatment of young people with HIV.
Method: Samples from 32 young people attending the Imperial College Healthcare NHS Trust "900 youth clinic" were analysed. DNA was extracted from peripheral blood mononuclear cells and the proviral HIV Env gene was amplified using a limited dilution PCR assay using Single Genome Amplification (SGA). The Env amplicons were sequenced, with a minimum of 20 individual sequences per participant needed to confirm bNAb sensitivity. BNAb sensitivity predictions were made using an end-to-end customised pipeline and were reported along with mutational signatures, for each Env sequence.
Results: Env genes from samples from 22/32 participants could be amplified and sequenced. All but 2 participants were aviremic at the time of sampling. The median time from seroconversion to sampling was 22 years (range: 18-32). Most participants had either clade C or A1 HIV (42.8% and 38.1%, respectively) while others had B (14,29%), D (9.52%) or a recombinant circulating form (9.6%). Evidence for some degree of 10-1074 resistance was detected in 61% of participant samples, although only 38% showed full resistance. The most common 10-1074 resistance-conferring mutations impacted the 332 PNG site with co-existing mutations at 332 and 334 observed in at least 27% of these samples. Resistance to 3BNC117 was predicted to be associated with residue variants in Env positions 279 and 456-459 and was less common in this cohort.
Conclusion: Although 10-1074 treatment shows excellent potential for long-term remission, our findings show that this and potentially other V3-targeting bNAbs may have higher levels of pre-therapy resistance in some young people with vertically-acquired HIV. However, for bNAbs targeting the CD4 binding site, such as 3BNC117, predicted resistance was not as frequent which may impact choices around bNAb regimes.

Zacharopoulou, P
BHIVA Research Awards winner 2020

P022 | Do we need to further improve quality of care for those on pre-exposure prophylaxis (PrEP) against acquiring HIV infection: findings from a PrEP clinic

Ambika Puri, Ian Morrall, Joseph Arumainayagam, Sashi Acharya, Rosie Jones
Walsall Manor Hospital, UK

Background: There have been concerns that increased PrEP use may lead to a rise in the incidence of sexually transmitted infections (STIs) among men who have sex with men (MSM). Although an earlier meta-analysis showed that those taking PrEP were more likely to acquire bacterial STIs compared to those not taking PrEP, a recent systematic review did not show this trend. We decided to compare the prevalence of bacterial STIs in our cohort of PrEP users with those not taking PrEP to see if any further measures to improve care are needed.
Method: A retrospective case note analysis of PrEP users who attended this clinic from 1st October 2020 till 30th September 2022 was undertaken. Similar analysis was undertaken on an age-matched control group of MSM not taking PrEP, who attended in the same period. Data collected in both groups included age, ethnicity, bacterial STIs, frequency of STIs, asymptomatic STIs, the time of acquisition of STIs, number of partners and condomless anal sex (CAS).
Results: There were 165 MSM who were on PrEP and their age ranged from 16 to 72 years. Majority were white British, 74% and 10% were Asian. Bisexuals comprised 18%. Daily PrEP was taken by 75%. Of those on PrEP 59% tested positive for an STI, as opposed to 49% in the group not on PrEP which was significant. The PrEP group tested positive for gonorrhoea in 26%, chlamydia in 20% , syphilis in 12% and lymphogranuloma venereum (LGV) in 1%. Those not taking PrEP were tested positive for gonorrhoea in 24%, chlamydia in 13%, syphilis in 9% and LGV in 2%. More asymptomatic infections were detected

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

in the PrEP group. There was no relationship between the duration of PrEP and the diagnosis of STIs.

Conclusion: We did find an increase in the incidence of STIs amongst PrEP users compared to those not on PrEP. Furthermore, more asymptomatic infections were detected in the PrEP users because they were screened each time they attended for PrEP prescriptions. Our data has shown the importance of providing regular screening for STIs and behavioural interventions in PrEP users because of increased CAS.

P023 | Self-sourcing of HIV pre-exposure prophylaxis (PrEP) amongst service users of Sexual Health London (SHL), a large, regional online postal sexually transmitted infection (STI) testing service

Sara Day[1], Jonathan Spate[2], Efejiro Ashano[2], Will Nutland[3], Laura Stewart[1], Sophie Jones[1]
[1]Chelsea and Westminster Hospital, London, UK. [2]Preventx Ltd, Sheffield, UK. [3]The Love Tank CIC/ PrEPster, London, UK

Background: PrEP was commissioned in England in the Autumn of 2020. Prior to this (outside of research studies) individuals needed to self-pay/self-source PrEP. We identified the number and characteristics of individuals accessing SHL who self-source PrEP despite its availability on the National Health Service (NHS).

Method: When ordering a SHL postal STI testing kit individuals complete an e-questionnaire which captures current PrEP use and where PrEP is obtained. Demographics, PrEP source, prior attendance to sexual health clinic (SHC) and STI rates were collected from e-notes of individuals disclosing PrEP use between 1/2/21-1/10/22.

Results: 353173 unique service users ordered one or more STI test kits between 1/2/21-1/10/22. 20365/353173 (5.8%) reported taking PrEP. 18086/20365 (88.8%) sourced PrEP from a SHC, 1615 (7.9%) self-sourced PrEP and 664 (3.3%) didn't provide source details.

18015/20365 (88.5%) users reported SHC attendance <12m, 1912 (9.4%) attended SHC ≥12m ago and 438 (2.2%) had never attended SHC.

The self-sourcing population comprised a significantly lower proportion of MSM, a higher proportion of White British ethnicity and lower STI rates compared with the clinic-sourcing population.

Table. Demographics and STI rates of SHL service users according to PrEP source.

PrEP source	Self-sourced/ self-pay (N=1615)		Clinic-sourced (N=18086)	
Gender				
Female	26	1.6%	110	0.6%
Male	1559	96.5%	17594	97.3%
Trans/Non-binary/ Other	30	1.9%	382	2.1%
Sexuality				
MSM	1414	87.6%*	16648	92%*
MSW	36	2.2%	58	0.3%
Bisexual men	102	6.3%	891	5.0%
WSM	21	1.3%	83	0.5%
WSW	0	0%	4	0.0%
Bisexual women	3	0.2%	43	0.2%
Other	39	2.4%	359	2.0%
Ethnicity				
White British	745	46.1%*	7478	41.3%*
White Irish/Other white	497	30.9%	6069	33.5%
Other	373	23.0%	4539	25.2%
STI rate				
Chlamydia	180 /1349	13%*	2733 /15661	17%*
Gonorrhoea	183 /1349	14%*	2967 /15684	19%*

* P<0.05 (significant)

Conclusion: Reassuringly 98% PrEP recipients attend clinic, and could potentially access important interventions e.g vaccinations and renal testing. 8% individuals self-source PrEP despite its availability on the NHS. Improved public awareness of NHS PrEP, enabling online access to NHS PrEP and removing the barriers to accessing clinic/PrEP services, especially in underrepresented (non-MSM) groups, may better support individuals requiring PrEP.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P024 | The impact of policy support for HIV pre-exposure prophylaxis use on the number of new HIV diagnoses among men who have sex with men: an interrupted time series analysis

Yiting Huang[1], Runmeng Tian[1], Ziwei Zhou[1], Jiyao Xu[1], Zhishan Sun[1], Qingguang Zhong[1], Bruce Agins[2], Huachun Zou[3,4], Qiaosen Chen[5], Ziyan Ma[5], Hongbo Jiang[1,6]

[1]School of Public Health, Guangdong Pharmaceutical University, Guangzhou, China. [2]Institute for Global Health Sciences, University of California, San Francisco, USA. [3]School of Public Health (Shenzhen), Sun Yat-sen University, Shenzhen, China. [4]Kirby Institute, University of New South Wales, Sydney, Australia. [5]Department of Global Public Health, Karolinska Institutet, Stockholm, Sweden. [6]Institute for Global Health, University College London, UK

Background: Pre-Exposure Prophylaxis (PrEP) has been shown to effectively reduce the risk of HIV transmission among men who have sex with men (MSM) at an individual level in randomized controlled trials. However, few studies have investigated the impact of policy support for PrEP use on the number of new HIV diagnoses among MSM at a popilation level as more contries and regions approve the use of PrEP.

Method: The official suveillance data on the number of new HIV diagnoses among MSM by year were collected from the national Centre for Disease Prevention and Control among countries and regions which had approved the use of PrEP by April 2022. Interrupted time series (ITS) analyses were performed to evaluate the effects of approval of PrEP use on the number of new HIV diagnoses among MSM per year, with the model coefficient representing the difference in the number of new diagnoses between "Before approval" and "After approval" periods, and a p-value <0.05 representing a significant reduction in the number. The Durbin-Watson test was used to examine the presence of first order autocorrelation.

Results: The ITS analyses were conducted using data from ten eligible countries (Figure 1), which provided sufficient data on the number of new HIV diagnoses among MSM each year. Significant decreasing trends for the number of new HIV diagnoses among MSM per year were observed after the approval of PrEP use in the United States (β=-388.78, P=0.045), United Kingdom (β=-442.54, P<0.001), Australia (β=-90.43, P=0.004), Canada (β=-87.08, P<0.001), Germany (β=-223.34, P<0.001), Switzerland (β=-22.36, P=0.005), Portugal (β=-111.94, P=0.002), Belgium (β=-29.30, P=0.016), Slovenia (β=-8.56, P=0.002). Although Israel showed a decreasing trend after PrEP use approval, the change in trend was not statistically significant (β=-5.04, P=0.27).

Conclusion: Our findings spported the positive effect of policy support for PrEP use on reducing the number of new HIV diagnoses among MSM, underscoring the importance for all countries and regions to approve the use of PrEP.

P025 | HIV pre-exposure prophylaxis use on a global scale among men who have sex with men: a systematic review and meta-analysis

Yiting Huang[1], Runmeng Tian[1], Ziwei Zhou[1], Jiyao Xu[1], Bruce Agins[2], Huachun Zou[3,4], Qiaosen Chen[5], Zhishan Sun[1], Qiangguang Zhong[1], Ziyan Ma[5], Hongbo Jiang[1,6]

[1]School of Public Health, Guangdong Pharmaceutical University, Guangzhou, China. [2]Institute for Global Health Sciences, University of California, San Francisco, USA. [3]School of Public Health (Shenzhen), Sun Yat-sen University, Shenzhe, China. [4]Kirby Institute, University of New South Wales, Sydney, Australia. [5]Department of Global Public Health, Karolinska Institutet, Stockholm, Sweden. [6]Institute for Global Health, University College London, UK

Background: Knowledge about the proportion of men who have sex with men (MSM) using pre-exposure prophylaxis (PrEP) and specific gaps in PrEP use can stimulate discussion around improvements to HIV prevention policies. This systematic review summarizes the proportion of MSM using PrEP globally and explores temporal trends and factors associated with PrEP use in this group.

Method: We searched PubMed, Embase, Web of Science Core Collection, and APA PsycINFO for studies reporting on the use of HIV PrEP among MSM before April 2022. Freeman-Tukey double arc-sine transformation and random-effects models were used to pool estimates. Beta-regression (logit link) was conducted to investigate trends in the proportion of MSM using PrEP, and a random-effects model was used to generate pooled odds ratios (OR) with 95% confidence intervals (CI) for factors associated with PrEP use.

Results: A total of 147 articles involving 395,218 MSM were included after 9082 papers were initially reviewed. The pooled proportion of MSM using PrEP was 11.23% (95% CI: 9.71-12.84) varying among countries and regions (Figure 1A), with a significant increase in this proportion over time from 10.6% in 2016 to 26.4% in 2020 (Figure 1B, β=0.29, p<0.01). The main factors associated with increased PrEP use include condomless anal sex (OR=1.83, 95%CI: 1.36-2.45), having group sex (OR=2.53,

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

95%CI: 1.48-4.31), having more male sexual partners (OR=2.67, 95%CI: 1.89-3.77), having sex with a HIV-positive partner (OR=3.44, 95%CI: 2.69-4.40), prior sexually transmitted infections (OR=2.52, 95%CI: 1.85-3.42), having health insurance (OR=1.76, 95%CI: 1.06-2.91), having a regular medical provider (OR=3.06, 95%CI: 1.32-7.11), prior HIV testing (OR=4.23, 95%CI: 3.19-5.62), proir use of Post-Exposure Prophylaxis (OR=20.58, 95%CI: 13.79-30.72), and engagement in a relationship (OR=1.47, 95%CI: 1.06-2.05). In contrast, the main factors associated with decreased PrEP use include stigma (OR=0.90, 95%CI: 0.76-0.98), having a male partner of unknown HIV status (OR=0.33, 95% CI: 0.19-0.56), umemplyment or part-time jobs (OR=0.42, 95%CI: 0.24-0.74), and being in a longer relationship (OR=0.35, 95%CI: 0.17-0.70).

Conclusion: The proportion of MSM using PrEP globally has increased but remains below 30%. Relieving the financial burden and stigma of PrEP, providing health education and consultation before use will likely be beneficial to promote PrEP use.

P026 | Missed opportunities for pre-exposure prophylaxis (PrEP) and outcomes of people acquiring HIV with previous or recent PrEP use

Stephanie Tyler, Harry Coleman, Alison Grant, Will Barchi, Mattia Zollo, Khobir Wiseman-Goldstein, Hannah Peters, Ella Radford, Heather Macpherson, Thain-Michel Kleinhentz, Achyuta Nori, Golaleh Haidari
Guy's and St Thomas' NHS Foundation Trust, London, UK

Background: With NHS PrEP now available for those at risk, we aimed to identify missed opportunities for people newly diagnosed with HIV who attended sexual and reproductive health (SRH) services, and to determine the HIV outcomes associated with people acquiring HIV with previous or recent PrEP use.

Method: A retrospective observational study reviewed all new HIV diagnoses from the last 2 years to see if they were eligible for PrEP and offered in SRH services. Data was collected using electronic medical records on HIV outcomes - virological suppression, resistance and antiretroviral choice.

Results: There were 74 new HIV diagnoses. 41 people were eligible but only 10 were known to have accessed PrEP at our services. 21% were heterosexual and of black ethnicity - it was not possible to ascertain whether they were eligible for PrEP from the notes.

Of the 10 people with recent PrEP use, 2 stopped due to side effects; headaches, vomiting, fatigue and renal toxicity concerns. For the remaining adherence concerns were reported - taking event based dosing (EBD) incorrectly and difficulty accessing services. 80% of people achieved virological suppression. 90% were put on a second generation integrase or protease inhibitor. No one developed nucleoside reverse transcriptase inhibitor (NRTI) resistance.

6 people eligible for PrEP had attended SRH services but not given PrEP. 2 attended during the IMPACT trial being full and referred to IwantPrEPnow. 2 attended during COVID where baseline bloods were done with follow up but subsequently tested positive. 2 people refused PrEP with 1 deeming themselves to be low risk.

Conclusion: Our data highlights several missed opportunities for starting same-day PrEP which potentially may have prevented HIV acquisition. If PrEP is not issued on the day, adequate follow up must be ensured. Reassuringly those who acquired HIV with recent PrEP use have achieved good virological control without NRTI mutations. Counselling on potential side effects, EBD dosing and ongoing HIV risk are essential. Despite NHS PrEP available over 2 years, our data shows we are still failing to meet the demand of PrEP not only in men who have sex with men but also in other key at risk groups.

P027 | Using survey data to estimate the number of gay, bisexual and other men who have sex with men living with HIV at higher risk of mpox infection in England

Veronique Martin, Amber Newbigging-Lister, Hamish Mohammed, Meaghan Kall, Alison Brown
UK Health Security Agency, London, UK

Background: To control the mpox outbreak in 2022, the Joint Committee on Vaccination and Immunisation proposed that targeted pre-exposure vaccination should be offered to gay, bisexual or other men who have sex with men (GBMSM) at high risk of exposure to mpox. UKHSA then recommended eligibility criteria for vaccination of GBMSM, irrespective of HIV status, including a recent history of multiple sexual partners or a proxy measure of increased risk such as a sexually transmitted infection (STI) in the past year. We estimated the number of GBMSM living with HIV who may be eligible for mpox vaccination and whether those who were eligible also recently attended a sexual health service (SHS).

Method: Data were obtained from the Positive Voices cross-sectional survey, a probability sample of 4,422 people living with HIV attending 73 HIV clinics in England and Wales in 2017. We assumed eligibility for vaccination using the following criteria: >=10 male partners or a

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

bacterial STI diagnosis; we then determined how many eligible respondents recently attended an SHS. Weights were applied to estimate the total population size of GBMSM living with HIV meeting eligibility.

Results: An estimated 4,100 (95% confidence interval [CI] 3,500–4,700) GBMSM had >=10 male sexual partners and 7,200 (95% CI 6,500–7,900) had a bacterial STI in the past 3 months. In total, an estimated 9,800 (95% CI 8,900–10,700) GBMSM living with HIV were assumed to be at high risk of mpox exposure and potentially eligible for vaccination; of these, 80% recently attended an SHS.

Conclusion: Using data from a national probability survey of people living with HIV, we estimated that almost 10,000 GBMSM living with HIV were at high risk of mpox and that the majority had also recently attended an SHS. This highlights that SHSs remain an appropriate setting to offer mpox vaccination to all eligible GBMSM irrespective of HIV status. However, supplementary approaches are required to offer outreach vaccination to GBMSM at high risk of mpox who may not be in contact with SHS.

P028 | Current PrEP provision does not align with women's preferences: early results from a cross-sectional survey investigating PrEP awareness, interest, and preferences among women in England

Melissa Cabecinha, John Saunders, Greta Rait, Lorraine McDonagh
UCL, London, UK

Background: In England, HIV pre-exposure Prophylaxis (PrEP) has been routinely available from sexual health services (SHS) since October 2020 as a daily pill (daily PrEP) or event-based PrEP (EBP), although only daily PrEP is recommended for cisgender women. Despite accounting for 20% of new HIV diagnoses in 2021, <2% of PrEP users were women. The aim of this study was to describe PrEP awareness, interest, and preferences for PrEP provision among a sample of women in England.

Method: An online, self-completion, convenience survey was conducted with 988 cisgender women and gender diverse people assigned female at birth, aged 18-79. The survey ran over four-weeks (November/December 2022). Participants were recruited via paid-for advertisements on media and other platforms (e.g., Facebook, Google). Basic demographics (e.g., age, ethnicity) were collected. Participants were asked questions on PrEP awareness and interest in learning more about or using PrEP. Participants expressing an interest in learning more about PrEP were asked which formulations and service settings they preferred, and participants could select multiple preferences in responses.

Results: Seventy percent of participants were aware of PrEP (n =697), with the majority (55%, n=385) learning about PrEP from the news or internet. Less than 1% (n=7) reported ever using PrEP. Forty four percent (n=423) were interested in learning more about PrEP, however only 12% (n=114) expressed an interest in taking PrEP. Among the 445 participants expressing an interest in learning more about and/or taking PrEP, most participants selected >1 preferred formulation (54%, n=240) and >1 preferred setting (81%, n=362). Most indicated a preference for long-acting injectable PrEP (53%, n=235) or EBP (51%, n=225). Only 38% of respondents (n=170) preferred daily PrEP. The most preferred settings for PrEP provision were pharmacies (73%, n=327), SHS (73%, n=326), and GP surgeries (70%, n=311).

Conclusion: The majority of women in this study were aware of PrEP, although use was very low. Early results from the survey indicate that current PrEP provision services do not meet the preferences of women. Expanding availability of PrEP access and alternate PrEP formulations may improve use among women who could benefit from PrEP.

P029 | Provision to diagnose, treat and prevent HIV in secure facilities of incarceration across the United Kingdom

Katie Humphries[1], Natasha Bell[2], Sum-Yee Chan[3]
[1]NHS Lothian, Edinburgh, UK. [2]Imperial College Healthcare NHS Trust, London, UK. [3]Central and North West London NHS Foundation Trust, London, UK

Background: The UK has made excellent progress in terms of diagnosis, treatment, and prevention of HIV, exceeding the UNAIDS 959595 targets and is striving to eliminate HIV transmission by 2030.

There is limited national data assessing if these improvements have been achieved across the incarcerated population. Sexual healthcare provided in prisons should be at least equivalent to that in the community but there is no data evaluating this.

Additionally, the incarcerated population are not only potentially at higher risk of HIV acquisition but may experience barriers to accessing services that could reduce this risk.

As part of a wider sexual health survey, we aimed to make an assessment on what provision for diagnosis, treatment, and prevention of HIV was available in UK prisons.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Method: This cross-sectional study was conducted across 150 secure facilities of incarceration in the UK. Healthcare personnel were contacted and asked to complete a survey on sexual health provision.

Results: 83/150 facilities returned completed questionnaires. Of those, 100% reported offering HIV testing to prisoners on arrival and 94% had a pathway if positive result.

Considering prevention strategies, 90% of facilities reported access to condoms, 83% provided information on having safer sex, 53% assessed need for PrEP which 61% provided, PEP was provided if required in 87%.

Healthcare staff could give a positive HIV test in 53% and recognise an HIV indicator condition in 40%.

Regarding those known to be living with HIV; 96% of prisons had a pathway for ongoing management, medications were available urgently 94%; Prisoners were linked with services on discharge 96%.

Only 22% of prisons reported that third sector organisations offered support for their prisoners and less, 7% had HIV peer support available.

Conclusion: We felt the survey response was adequate, coming from a strained sector but note potential bias as the questionnaire was voluntary and self-reported. Testing rates reported are reassuring. However, there are concerning gaps in both PrEP and PEP provision, and in healthcare staff education.

Incarceration is an opportunity to redress health inequalities within that population. Targeted intervention to increase utilisation of established HIV prevention strategies would reduce risk of HIV transmission in UK prisons.

P030 | A systematic review of qualitative research on recently acquired HIV

Emily Jay Nicholls[1], Nicoletta Policek[2], Alain Volny-Anne[3], Bruno Spire[4], Fiona Burns[1], Elisa Ruiz-Burga[1], Shema Tariq[1]

[1]Institute for Global Health, University College London, UK. [2]University of Salford, Manchester, UK. [3]Independent, Paris, France. [4]Aix Marseille Univ, Inserm, IRD, SESSTIM, ISSPAM, Marseille, France

Background: Recently acquired HIV is characterised by a surge in viraemia for the first 12 months or so following acquisition. It is a critical time when some may experience debilitating symptoms and is also the period when they are most likely to pass HIV on. Qualitative research offers insights into lived experiences and a deeper understanding of the contextual factors underlying HIV acquisition. We aimed to understand the lived experience of people with recently acquired HIV by synthesising the qualitative evidence.

Method: We undertook a systematic review of qualitative literature on recently acquired HIV through searching the bibliographic databases: Medline, CINAHL Plus, PsychINFO and Sociology Database. Articles were screened, and two authors completed full text review and extraction of included articles. Quality appraisal was conducted using the Critical Appraisal Skills Programme Qualitative Studies Checklist. We undertook a textual narrative synthesis of articles, grouping studies with similar characteristics, and reporting characteristics in a standardised form.

Results: We reviewed 1890 articles, reduced to 1554 following de-duplication. We excluded 1539 during screening and full text review. The remaining 15 articles were included in this review. We identified 13 themes, structured in chronological time from pre-HIV acquisition, to HIV diagnosis, and through to post-HIV diagnosis.

Conclusion: The literature is primarily individual and behavioural in its focus, with the vast majority of studies describing circumstances of HIV acquisition. Despite the recency of some articles, we found no studies exploring sexual risk in the context of recently acquired HIV and use of either PrEP or treatment as prevention. The focus on HIV acquisition neglects other important aspects such as lived experiences including immediate ART, stigma, and impact on broader health and well-being.

P031 | Quantifying re-engagement of people in HIV care after 12 months of non-attendance in outpatient clinic

Christina Nigrelli, Anne Patterson, Kiera Adegbite, Clare Boggon, Helen Webb, Bernard Kelly, Lisa Hamzah

St George's University Hospitals NHS Foundation Trust, London, UK

Background: Effective antiretroviral therapy is associated with a normal life expectancy, reduced adverse clinical outcomes and decreased onward transmission among people living with HIV (PLWH) and is achieved through consistent engagement in care. Re-engaging those not in care (NIC) is a priority to achieve this. The aim of this study was to describe those NIC, re-engaged in care (RIC) and at risk of NIC in a single clinic cohort in the UK.

Method: All individuals discussed in the Did Not Attend Multidisciplinary Meeting (DNA MDT) and/or coded as NIC or RIC between 01/01/17 and 31/12/22 were reviewed. Outcomes were defined as NIC, RIC and at risk of NIC. NIC was defined as PLWH >18 years and not

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

attending for an appointment or routine blood tests for >12 months. Demographic and HIV data including age, sex, ethnicity, HIV risk, index multiple deprivation decile (IMDD), CD4, HIV viral load (VL) and time in HIV care were summarised and compared.

Results: Since 01/01/17, from a mean total cohort 1763 PLWH, 264 were discussed in the DNA MDT; mean (SD) age 43.2 (12.8) years, 61% male, 63% black ethnicity, 50% heterosexual, median IMDD (IQR) 4 (3-6), median (IQR) time since HIV diagnosis 6.7 (2.7-9.8) years, last reported median (IQR) CD4 464 (278-654) cells/uL, 72% with a VL<200 copies/ml. 172 (65%) had a period of NIC of whom 80 (47%) re-engaged. 6 (3%) never engaged from time of referral to clinic. 92 (35%) were identified at risk NIC but remain in care. Overall, 20 (8%) died. For individuals RIC, time to re-engagement was median (IQR) 1.2 (1.2-2.2) years. Demographics and HIV parameters did not differ significantly between those NIC and RIC ($p>0.05$ for all). Where documented, reasons for reduced engagement included mental health issues (20%) substance misuse (10%), transferring care (17%) and moving abroad (12%).

Conclusion: Almost half of PLWH and NIC were re-engaged in care over a 6-year period of whom 69% maintain an undetectable viral load at last follow up. Psychosocial issues were the most common reasons for NIC or at risk of NIC and mortality was high among this group of PLWH.

P032 | Barriers to and facilitators of hepatitis C virus testing and disclosure among gay, bisexual and other men who have sex with men: findings from online focus groups.

Nina Vora, Shema Tariq, Elizabeth Fearon, Nigel Field, Erica Pool, Manik Kohli, Richard Gilson
Institute for Global Health, University College London, UK

Background: UK STI testing guidelines advise annual hepatitis C virus (HCV) screening for men-who-have-sex-with-men (MSM) taking HIV pre-exposure prophylaxis (PrEP), those eligible for three-monthly HIV testing, and those living with HIV. However, multiple barriers to HCV testing and disclosure remain among this heterogenous group. We aimed to explore, qualitatively, barriers to and facilitators of HCV testing and disclosure among MSM in England, to inform design of a social network testing intervention.

Method: We conducted three pairs of online focus group discussions (FGDs), comprising 2-4 participants per group (total n=18) as follows: (i) MSM who had never tested for HCV, (ii) MSM with a history of HCV, (iii) MSM who had tested for HCV at sexual health services (SHS). We recruited via a London SHS and social media. Online FGDs allowed participation of MSM from across England, afforded greater anonymity, and facilitated participation from under-represented groups, including heterosexual- and bisexual- identifying MSM, MSM from minority ethnicities and MSM who had experienced homelessness. Rapid evaluation of data was followed by thematic analysis of transcribed data using the Framework approach.

Results: We identified five main themes as barriers/facilitators to HCV testing and disclosure:

a) Stigma: participants reported internalised and externalised stigma around HCV testing and infection.

b) Health knowledge: many participants had limited knowledge about HCV risk and testing, whereas knowledge about HIV was better.

c) Identity – sexual identity may not align with sexual behaviour, and this was highlighted as a barrier to HCV (but not HIV) testing, particularly among participants from minority ethnicities.

d) Universal testing and campaigning – participants expressed desire to widen testing beyond sexual identity and SHS, with HCV tests offered alongside other blood tests, and for advertising campaigns (on par with HIV).

e) Social support - many attributed poor mental health and feelings of isolation to a lack of support from peers and healthcare professionals.

Conclusion: We found persistent barriers to HCV testing and disclosure among MSM in England including limited awareness of HCV risk and testing, HCV-related stigma, and the negative psychological impact of HCV diagnosis. There is also a strong desire for widening access to testing beyond SHS settings.

P033 | Comparison between COVID-19 and monkeypox vaccine uptake in a diverse London HIV cohort

Emma Moore, Alison Barbour
Croydon Sexual Health Centre, London, UK

Background: The COVID-19 pandemic caused millions of deaths, its impact lessened with effective vaccines and treatments. The subsequent monkeypox outbreak posed another global threat, disproportionately affecting men who have sex with men (MSM), with concerns around increasing community stigma. Vaccinating at risk groups is vital in minimising COVID-19 and monkeypox transmissions and adverse sequalae.

Our HIV clinic serves a diverse population in a deprived area with a large immigrant population and high level of co-morbidities, associated with poorer outcomes. We

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

explored factors associated with COVID-19 and monkeypox vaccine uptake.

Method: We reviewed COVID-19 vaccine first, second and third/booster uptake and first smallpox vaccine among MSMs attending our HIV clinic. Monkeypox vaccination is a two-dose course. Initial limited vaccine availability meant first monkeypox vaccine was prioritised for all eligible patients; we therefore analysed first monkeypox vaccination uptake.

186 MSM PLWH were identified. 164 were included in our analysis; 22 were excluded due to insufficient vaccination information.

Data was recorded contemporaneously in patients' records. COVID-19 vaccine uptake was verified using NHS Summary Care Record and London Care Record. Data on age and ethnicity was collected.

Results: Demographics:

Age: mean 42.9 years, 49% ≤40 years, 51% >40 years

Ethnicity: 55% White, 26% Black, 5% Asian, 2% mixed, 7% other, 4% not stated

COVID-19 and monkeypox vaccination uptake

		COVID-19	Monkeypox
Age	≤ 40y	53%	26%
	> 40y	80%	29%
Ethnicity	White	73%	31%
	Black	50%	24%
	Asian	67%	33%
	Mixed	25%	25%
	Other	91%	27%

COVID-19 vaccination uptake reached statistical significance between age groups: ≤40y 53%, >40y 80% ($p = 0.001$) and ethnicities: White 73%, Black 50%, Asian 67% ($p = 0.026$). Monkeypox vaccination uptake did not reach significance: <40y 26%, >40y 29%; ethnicity: White 31%, Black 24%, Asian 33%.

Additionally, COVID-19 vaccinated patients were not statistically significantly more likely to accept monkeypox vaccination.

Conclusion: Monkeypox vaccination uptake was similar across ages and ethnicities. However, monkeypox vaccination uptake was considerably lower than COVID-19 vaccination. Further work is needed to identify and engage at risk groups and address obstacles affecting monkeypox vaccination in marginalised communities. Lessons from COVID vaccination campaigns should be employed to reach unvaccinated high-risk MSMs.

P034 | Urgent clinical need for reimbursed F/TAF PrEP in England: a single integrated sexual health service's (ISHS) experience of funding F/TAF PrEP post solid organ transplantation

Michael Ewens[1], Khine Phyu[1], Carolyn Nelson[2], Anna Hartley[1], Amy Evans[1]

[1]Leeds Teaching Hospitals NHS Trust, UK. [2]Leeds Community Healthcare NHS Trust, UK

Background: NHS commissioned emtricitabine/tenofovir disoproxil (F/TDF) for HIV Pre-exposure prophylaxis (PrEP) has been available from our ISHS since 2020. We await final commissioning guidance for those with renal impairment requiring emtricitabine/tenofovir alafenamide (F/TAF), compassionate access having been withdrawn due to licensing. F/TAF in England is only available to those who can privately fund it, with supply-lines problematic. Cabotegravir, unlicensed as PrEP in England, is available via compassionate access. National draft prescribing guidance was circulated August-2021 for second-line PrEP, however final reimbursement policy is awaited.

Method: Our service established a once weekly 'complex-PrEP' clinic (August 2021). Cases are prospectively

	P1	P2
Age	36	40
Ethnicity	White British	Indian
HIV risk factors	MSM CRAI Injecting chemsex	MSM CRAI
Transplanted organs	Liver Kidney	Kidney
Background	Eosinophilic granulomatosis with polyangiitis Autoimmune hepatitis Pericardial abscess Subclavian artery dissection Internal jugular thrombus	Dysplastic kidney Diabetes Mellitus
Baseline eGFR (ml/min)	83	45
Cessation eGFR	47	
Baseline urine PCR/ACR (mg/mmol)	42/2.1	11.9/0.7
Cessation urine PCR/ACR	133/2.8	

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

reviewed, with continued off-license prescribing of F/TDF, where HIV risk-reduction still outweighs clinical risk. Therein are patients awaiting second-line PrEP options for various indications. We report two cases, whereby our service funded F/TAF PrEP for MSM solid-organ transplant recipients at significant ongoing risk of HIV-acquisition, agreeing there was a clear distinction in clinical risk.

Results: Both cis-gender MSM report condomless receptive anal intercourse (CRAI), with proven bacterial STIs in the preceding 6 months.

Patient 1 (P1) developed proximal tubulopathy on daily F/TDF, requiring cessation, evidenced by proteinuria and declining eGFR. P2 has baseline eGFR 45ml/min, no proteinuria.

Both cases were discussed with Renal Physicians and in regional Virology MDT. P1 was supplied daily F/TAF December-2022, P2 starts January-2023. (We hope to report follow-up renal results on F/TAF PrEP in clinical practice).

Conclusion: At time of writing, we are unaware of any other service in England supplying F/TAF PrEP cost-free to patients. We continue working with patients and third-sector colleagues, advocating for F/TAF PrEP availability on the NHS and call for the expedited approval and funding of second-line PrEP within England.

P035 | Understanding barriers and facilitators to HIV care retention: a systematic review

Anne Janssen[1], Helena Grant[1], Kathryn Carroll[2], Deborah Flanagan[2], Samm Kabagambe[2], Breda Patterson[2]

[1]ZPB Associates, London, UK. [2]Gilead Sciences Ltd, London, UK

Background: Figures from UKHSA show that a lower-level estimate of 11,985 people in the UK live with transmissible HIV virus and 4,444 (37%) of those have disengaged from HIV care. The higher-level estimate of people living with transmissible virus is 32,829 including 18,226 people who were seen once between 2015-2019 but had not been seen in 15 months by the end of 2021. To reach the 2030 UNAIDS goal of eliminating new HIV diagnoses, it is crucial to understand why people are disengaging from care.

Method: We conducted a systematic literature review on PubMed looking at loss to follow-up, retention, need to find, engagement and adherence to HIV treatment and care. We reviewed literature from the last five years and included UK specific papers or global studies that are applicable to the UK. Additionally, we reviewed abstracts from previous BHIVA and BASHH conferences. We compared barriers to follow up and interventions from other disease areas and countries to identify learnings that can be applied to HIV care in the UK.

Results: 542 titles were included in the initial review and 23 were included in final analysis. Factors commonly associated with disengagement include stigma, poor mental health, and long waiting times in clinic. Drug and alcohol abuse were also correlated to poor adherence to care. Young age at diagnosis was a factor noted in multiple papers. Socioeconomic factors, such as affordability of travel, can impact engagement with care. We found possible interventions to mitigate against loss to follow up, such as mindfulness interventions to address poor mental health, financial reimbursements for travel and providing holistic youth-friendly services. Case studies from previous conferences revealed that dedicated follow-up pathways and collaboration with primary care can help identify and re-engage patients who are lost to follow-up.

Conclusion: Individual, community and system-related factors all contribute to disengagement from care in HIV. While some interventions were found to be effective, clinical resource can often present a barrier. In many cases, more research into the effectiveness of interventions is needed. It is key that service design considers the barriers identified and focuses on behaviour patterns, rather than solely considering demographic factors.

P036 | Setting the research agenda: involving mothers living with HIV in research on children born HIV-free in the UK

Laurette Bukasa[1], Angelina Namiba[2], Claire Thorne[1], Shema Tariq[3]

[1]UCL Great Ormond Street Institute of Child Health, London, UK. [2]4M Mentor Mothers Network, London, UK. [3]UCL Institute for Global Health, London, UK

Background: The evolving landscape of research on children born HIV-free has been determined mostly by researchers, funders, and policy makers, with little involvement from women and mothers living with HIV. Our ongoing research in the UK utilises population-level data on pregnancy exposures, birth outcomes and specific long-term outcomes in children born HIV-free. We sought to engage mothers to elicit their feedback on our research plans and communication strategies given their lived experiences of HIV treatment in pregnancy and their role as primary caregivers for this unique but growing population of children.

Method: In partnership with 4M Net, a national community-based peer-support network for mothers living with HIV, we co-designed and held two online

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

workshops in March 2022. Workshops were highly interactive, using a combination of online tools, and created a safe space for open discussion. Participants received a supplementary booklet in advance, comprising questions, activities, and space for reflections. We also prompted participants to discuss research priorities with peers and/or family members.

Results: Six mothers from Black ethnic backgrounds aged ≥30 years participated in the workshops. Overall, participants were positive about our programme of research and identified proposed research outcomes as important with particular interest in effects of antiretroviral drug exposure during pregnancy. Participants favoured a woman and pregnancy-first approach to research questions on children born HIV-free but highlighted knowledge gaps among healthcare providers. They supported use of linked data (e.g., hospital, primary care, mental health, health visiting and education) to explore health and developmental outcomes among children born HIV-free. Mothers recommended stigma-free language, proposing the term "children born HIV-free".

Conclusion: Mothers want involvement in research about their children born HIV-free and are key in identifying research priorities; they see the value of research in providing evidence for policy and practice but identify bottlenecks in how research can positively impact their children's lived experience. Meaningful involvement of mothers through trusted community partners is an effective mechanism by which to elicit views on potentially sensitive topics to produce more robust and relevant research.

P037 | HIV vertical transmission in England: current challenges

Helen Peters, Kate Francis, Laurette Bukasa, Rebecca Sconza, Claire Thorne
Integrated Screening Outcomes Surveillance Service (ISOSS) a part of the Infectious Diseases in Pregnancy Screening (IDPS) programme, commissioned by NHS England, and based at UCL Great Ormond Street Institute of Child Health, London, UK

Background: The UK has met 90-90-90 targets since 2017 and a major success is the low vertical HIV transmission (VT) rate. This reflects the high uptake of HIV antenatal testing (99.8% in 2019-2020) and the impact of the NHS Infectious Diseases in Pregnancy Screening programme (IDPS). Where vertical transmissions still occur in England, cases are increasingly complex and require ongoing monitoring to understand contributing factors.

Method: The Integrated Screening Outcomes Surveillance Service monitor, via NHS respondents, all pregnancies to diagnosed women living with HIV in England and their infants up to 18-24month antibody testing. Children diagnosed with vertically-acquired HIV aged <16yrs born in England since 2006 are also reported. A Clinical Expert Review Panel (CERP) reviews circumstances surrounding transmissions, establishing contributing factors. We describe 13 VTs reported to ISOSS 01/06/2020-31/12/2021, discussed by the CERP and present the latest VT rate for 1205 infants born to diagnosed women in 2018-2019.

Results: Among the 13 reported VT cases, child age at diagnosis ranged from birth-7years. Six children were born to women diagnosed pre-pregnancy, one to a woman diagnosed during pregnancy, and six to women diagnosed postnatally. Most (12/13) children were born to women born outside the UK (9 from sub-Saharan Africa, 3 from Eastern Europe). Median maternal age at delivery was 34 years (IQR: 31,39).

Reported complicating issues during pregnancy included safeguarding, mental health issues and insecure housing for over half of cases (7/13). Contributing factors identified by the CERP included seroconversion during pregnancy/breastfeeding, and among women aware of their diagnosis in pregnancy, poor adherence and undisclosed breastfeeding.

3 of the 13 infants were born to diagnosed women in 2018 and 2019, with a VT rate of 0.25% (3/1205), 95% CI 0.05%, 0.73%. Antenatal booking ≥20weeks gestation / presenting unbooked and maternal disengagement with healthcare services were identified as contributing factors by the CERP.

Conclusion: Themes identified by the CERP in VTs included importance of sexual health awareness in pregnancy ('negative now') and urgent screening in labour for women presenting unbooked. Ongoing monitoring and the insights provided by the CERP remain vital to support national guidelines and clinical management.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P038 | Current overview of paediatric follow-up of infants exposed to HIV in England

Kate Francis, Gabriela Toledo, Laurette Bukasa, Rebecca Sconza, Claire Thorne, Helen Peters
Integrated Screening Outcomes Surveillance Service (ISOSS) part of the Infectious Diseases in Pregnancy Screening (IDPS) programme, commissioned by NHS England, and based at UCL Great Ormond Street Institute of Child Health, London, UK

Background: The vertical transmission rate among diagnosed women living with HIV (WLWH) in England has remained <0.4% since 2012. BHIVA guidelines state that infant post-exposure prophylaxis (PEP) should be administered within 4hours of birth. Since 2018 'low-risk' infants are recommended to receive PEP (zidovudine) for 2 rather than 4 weeks. All infants should be tested at birth, 6weeks and 3months and followed up to 18-24months to confirm infection status with antibody testing ('18-24Ab').

Method: The Integrated Screening Outcomes Surveillance Service (ISOSS) conducts surveillance of all pregnancies to WLWH in England and their infants. We describe the follow-up status of 1,277 infants born in 2018-19 with a paediatric report submitted to ISOSS by December 2021.

Results: Information on PEP was provided 1277 infants, and 1271/1277 received PEP. Where duration was available, 24.7% of infants (184/744) received 2weeks, 73.9% (550/744) 4 weeks, and 10 infants 6 weeks of PEP.

Overall, 95.5% (1,229/1,277) of infants were reported as uninfected by clinicians, with 65.7% (808/1,229) having negative 18-24Ab. The remaining 34.3% (421/1,229) were reported to have a negative PCR ≥6weeks and/or negative antibody test aged <18months; of these, 83 (19.7%) were lost-to-follow-up before age 18months, 44 (10.5%) were discharged before 18months, 2 (0.5%) died and 292 (69.4%) had 18-24Ab results outstanding. Overall, 48/1,277 infants only had a negative birth PCR: 34 were still in follow-up, 2 died and 12 were lost-to-follow-up. Of the 4 infants who died, 3 died from complications arising from prematurity and 1 from congenital condition.

Three infants were known to have acquired HIV. Of these infants, two received 4weeks AZT and one (low-risk) received 2weeks AZT.

Conclusion: The sustained low vertical transmission rate reflects the success of the antenatal screening programme and established maternity and paediatric clinical pathways. However, there is still variation in practice with some infants prematurely discharged before 18-24Ab testing has taken place. Among reports to ISOSS, most infants received 4 weeks of PEP. Ongoing monitoring of clinical practice is required to support implementation of BHIVA guidelines and contribute to work being done by the NHSE on inequalities.

P039 | Infant postnatal prophylaxis (PNP) following maternal viraemia during breastfeeding

Emily Lees[1,2], Neil Tickner[3], Hermione Lyall[3], Paddy McMaster[4], Birgitte Smith[5], Lucy Cliffe[6], Caroline Foster[3]
[1]University of Oxford, Oxford Children's Hospital, UK. [2]Fitzwilliam College, University of Cambridge, UK. [3]Imperial College Healthcare NHS Trust, St Mary's Hospital, London, UK. [4]Manchester University NHS Foundation Trust, North Manchester General Hospital, UK. [5]Hvidovre Hospital, Copenhagen University Hospital, Denmark. [6]Nottingham University NHS Foundation Trust, Nottingham Children's Hospital, UK

Background: Increasingly, women living with HIV in resource-rich settings are choosing to breast feed but experience in managing maternal viraemia is limited.

Method: Case series from the Paediatric Virtual Clinic (PVC).

Results:

Case 1:

Term infant, mother suppressed on tenofovir disoproxil/emtricitabine, darunavir/ritonavir. Received 4 weeks zidovudine (AZT); maternal and infant viral load (VL) at 0 and 6 weeks undetectable. At 3 months, maternal VL 760 copies/mL. Breastfeeding discontinued, infant started neonatal dose PNP (AZT 4mg/kg/BD, Lamivudine (3TC) 2mg/kg/BD, Nevirapine 4mg/kg/OD). Following PVC discussion, changed to treatment doses: dolutegravir (DTG 5mg/OD dispersible), 3TC (5mg/kg/BD), AZT (12mg/kg/BD) for one month.

Case 2:

Term infant, mother suppressed on DTG, abacavir, 3TC. Received 2 weeks AZT; maternal and infant VL at 0 and 4 weeks undetectable. At 1 month, maternal VL 451 copies/mL. Breastfeeding discontinued and infant started PNP (dosing as above). Dispersible DTG unavailable; DTG half 10mg film-coated tablet administered. Following PVC discussion, increased to 10mg whilst dispersible DTG obtained.

Case 3:

Three-year old exclusively breastfed for 6 months, ongoing nocturnal breastfeeds. New maternal HIV diagnosis after prolonged febrile illness; VL 126,381 copies/mL. Antenatal serology negative, child VL undetectable and antibody negative. Breastfeeding discontinued with

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

difficulty, despite behavioural support and cabergoline provision (dosing for established lactation). PNP commenced: DTG, 3TC, AZT.
All children were confirmed HIV-uninfected 12 weeks post-PNP.
Conclusion: These cases highlight challenges surrounding PNP in infancy and early childhood following maternal viraemia during breastfeeding and the need for national guidelines. Case 1 shows the importance of establishing the correct drug regime. Neonatal PNP dosing is not appropriate after 4 weeks of age and dolutegravir is a more appropriate third agent from this time. Case 2 highlights the difference in bioavailability between dispersible and film-coated tablet DTG formulations; with dosing ratio of ~1:1.6 respectively. Although the barrier to resistance of DTG is high, treatment failure is reported with suboptimal drug levels. Maternal seroconversion during breastfeeding causes up to 50% of mother-to-infant transmissions worldwide; Case 3 highlights the difficulty of prompt cessation of established breastfeeding despite pharmacological and family support, and consideration of the risk of transmission in an older child.

P040 | Infant feeding choices in women living with HIV since 2019: reflections on real-world data from an inner city tertiary HIV antenatal service

Eleanor Hamlyn, Sally Bolger, Alison Wright
Royal Free Hospital, London, UK

Background: BHIVA guidelines for feeding of infants born to women/birthing parents living with HIV changed in 2019. The recommendation remains to formula feed, but women can also be supported in breast/chestfeeding if they fulfil certain criteria. We present data on the infant feeding choices of women living with HIV who were cared for by a dedicated HIV antenatal team at an inner city teaching hospital since 2019.
Method: To provide insight into how guideline changes affected women's choices for infant feeding and to assess adherence to viral load monitoring guidelines.
Results: 54 women presented to our service with 59 pregnancies from Jan 2019 to present. 45 out of 59 pregnancies were carried to term. 5 out of the 42 women who carried their pregnancy to term chose to breast/chestfeed, including 3 out of 9 (33%) in the 2022. Reasons include: having breast/chestfed before either in a different country or in the UK undisclosed, non-disclosure of status, and feeling the benefits of breastfeeding outweigh the risks.
Conclusion: Since guidance has changed to support women who choose to breast/chestfeed, more women are choosing to do so.

Viral load monitoring of mothers and infant from delivery date to present

	Delivery date		Weeks from delivery viral load has been taken				
1	Feb-23	Mother	4	8	16		
		Infant	4	8	16		
2	Aug 21		Mother moved prior to delivery				
3	Jul-22	Mother	None				
		Infant	2	6	10		
4	Jul-22	Mother	6	10	12	16	19
		Infant	1	3	7	17	
5	Oct-22	Mother	3	7	11		
		Infant	2	6	10		

Adherence to viral load monitoring guidelines has been generally poor. Merging the schedules for mother and infant may help to improve this.
Data has not been collected on the duration of breast/chestfeeding, weaning age, use of formula milk, episodes of mastitis, D&V or other complications. It is important to collect this information as following the guidelines may be difficult in practice.
We aim to collect the above data from breast/chestfeeding women via an anonymous survey and also to develop more robust postnatal procedures to ensure the monitoring is done correctly.

P041 | Population-level paediatric HIV surveillance in England: the current picture

Gabriela Toledo[1], Kate Francis[1], Sally Cavanagh[2], Anna Kafkalias[2], Claire Thorne[1], Helen Peters[1]
[1]*Children's HIV and AIDS Reporting System, UCL Great Ormond Street Institute of Child Health, London, UK.*
[2]*NHS England Specialised Commissioning, London, UK*

Background: Numbers of children and young people living with HIV (CYPLHIV) in England have declined substantially, reflecting the success of prevention of HIV vertical transmission domestically and globally. Between 2000-2020 this population was monitored by the Collaborative HIV Paediatric Study (CHIPS). Here we present the first overview of paediatric HIV in England since CHIPS ended using data from the Children's HIV and AIDS Reporting System (CHARS) newly launched in January 2022.
Method: CHARS collects data for NHS England on all CYPLHIV seen for paediatric HIV care in England. Descriptive statistics for all CYPLHIV were used to

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

describe the current characteristics and follow-up status at their most recent appointment with a CHARS report submitted by December 2022 based on their care since 2020.

Results: 469 CYPLHIV were followed up in CHARS, of whom 16 were newly reported in 2021-2022. Overall, 66.5% were in active follow-up in paediatric care (n=312), 31.8% transferred to adolescent (n=50) or adult care (n=99), and the remaining 8 were lost-to-follow-up (n=1) or left the country (n=7). 57.1% (268/469) were female and 46.7% (219/469) were born abroad, mostly in sub-Saharan Africa. Among all CYPLHIV, 92.5% were last seen for HIV care in 2021-2022 and the remainder in 2018-2020. Median age was 16 years [IQR: 14, 18] at most recent follow-up, and 30.3% (142/469) were aged ≥18 years. HIV viral load and/or CD4+ count were available for 86.4% (405/469) of CYPLHIV at most recent follow-up; 88.9% (354/398) were virologically suppressed (≤200 copies/ml) and 67.4% (262/389) had a CD4+ count >500 cells/mm^3. Regional distribution of CYPLHIV follow-up clinics was London (45.4%), Midlands (21.6%), North East and Yorkshire (12.2%), North West (10.0%), East of England (4.0%), South West (3.6%) South East (3.2%).

Conclusion: Clinical markers among CYPLHIV in England are reassuring with nearly 90% virologically suppressed. As most of this population will be transitioning to adult care in the coming years, ongoing work to understand the challenges this brings is warranted. For the increasingly small number of CYPLHIV, ongoing national surveillance remains vital to ensure the unique needs of this population are met.

P042 | A postnatal clinic for people living with HIV (PLWHIV), a specialist trainee-led initiative to improve outcomes

Joseph Heskin, Shreena Patel, Yasmin Walters, Anette Elbech, Waheed Khan, Ellen Dwyer, Marta Boffito
Chelsea and Westminster NHS Foundation Trust, London, UK

Background: The management of HIV during pregnancy has improved markedly over the past decade. As the UK cohort of PLWHIV ages, the number of pregnancies in this cohort is likely to fall. With fewer pregnancies, there is a risk of clinicians deskilling highlighting the importance of maintaining sub-specialist expertise to preserve the low level of perinatal acquisition of HIV in the UK. In 2021 a student led audit of postnatal HIV care at our centre found outcomes below the recommended BHIVA standard. Following this a new, trainee led, postnatal clinic for PLWHIV was established. We present the outcomes from the first year of this clinic here.

Method: All attendances at the clinic were recorded on the hospital electronic patient record system using a bespoke proforma to standardise care and support data collection. The interpretation of this data is presented here.

Results: Between August 2021 and September 2022, 12/14 PLWHIV who delivered at Chelsea and Westminster Hospital attended the clinic. The average age was 34 years old (26-50), with 67% (8/12) identifying as Black, and 33% (4/12) identifying as White. All individuals identified as cis-gender female. There were two cases of co-infection, one with chronic Hepatitis B, and one with Human T-cell lymphotropic virus. Over half (58%, 7/12) of women underwent a pregnancy related ART switch, and following delivery 58% (7/12) maintained their new regimen or further simplified their ART.

All women underwent assessments for mental health, contraceptive needs, cervical screening, housing and financial support, and partner disclosure and testing. Contraception was provided to 5/12 (42%) women in clinic, 50% (6/12) were linked into cervical screening, and 75% (9/12) received mental health support through the clinic. All women attending the clinic had follow-up appointments booked with their original clinic with 100% attendance following discharge. We utilised the clinic to survey how our cohort would improve the service, and we are now developing peer mentor pathways and access to formula feed as a result.

Conclusion: We believe our findings show how specialist postnatal clinics improve outcomes for PLWHIV and highlight the role that specialist trainees in HIV medicine can play in providing focused care.

P043 | Ethical considerations for non-disclosure of HIV status in pregnancy

Yasmin Walters, Joseph Heskin, Anette Elbech, Marta Boffito
Directorate of Sexual Health and HIV, Chelsea and Westminster NHS Foundation Trust, London, UK

Background: BHIVA recommends pregnant women living with HIV (WLWH) discuss their status with family, as evidence demonstrates reduced risk of postnatal depression. HIV-related stigma is a significant barrier to accessing care. However 14% of WLWH will experience intimate partner violence in their lifetime, with a well-known risk factor being pregnancy. It is therefore paramount that risks and benefits be assessed, and women supported in their decision to not disclose, especially when on appropriate treatment and HIV viral load is undetectable.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Method: We conducted a retrospective review of pregnancies in WLWH from 2017-22. Electronic patient records and paper midwifery notes were reviewed.

Results: There were 66 pregnancies, with an average age of 34.9 (21-51). 62 women had known HIV, 98.3% of whom were on treatment at booking. Of those not on treatment, one was a late presentation of pregnancy not know to services, two were not engaged with care and one a long-term non-progressor not on treatment. 80% of women were undetectable at booking, and 87.9% at delivery. 74.2% had no viral blips during pregnancy. 77.3% of partners were known to be HIV negative. 77.3% had disclosed status to their partner; fewer disclosed to family/friends (29.8%). 12% of women did not have a clearly documented disclosure statuses in relation to the partner, and 43.9% in relation to family/friends. All birth plans included a confidentiality statement. There was no documented non-consensual disclosure.

Conclusion: Non-disclosure of HIV status may raise ethical concerns, especially for clinicians not routinely managing patients living with HIV. Concerns include legal implications, transmission risk to partners and providing unlabelled medication for neonates. Women should be supported in their decision to disclose to their partners, and this should be recorded in the notes for all pregnant women. Education and support for obstetric teams should be provided to ensure confidence in patient management and reduction in stigma promoting behaviours. All healthcare professionals should be aware of U=U, as well as the absolute ethical and legal right to confidentiality unless required to prevent harm. Support should be offered to all women to disclose status, via healthcare professionals and peer mentors.

P044 | 'Don't forget the children' – even in a pandemic

Michael Ewens, Susan Moorehouse-Everett, Kate Baker, Maria Dowie, Sarah Schoeman
Leeds Teaching Hospitals NHS Trust, UK

Background: BHIVA's 'Don't Forget the Children' and Standards of Care (SoC) documents highlight the importance of routine HIV testing for children of people living with HIV (PLWH). Our HIV service audited child testing in 2008, 2009 and 2010 with 46%, 78% and 82% respectively of children requiring testing having a documented result. Having evolved a child testing pathway and MDT, with dedicated Health Advisor and Paediatric nurse support, we wanted to re-evaluate our child testing performance during the COVID-19 pandemic.

Method: Newly diagnosed PLWH, 01/08/2020 – 31/12/2021, were identified via our HARS dataset. All 32 identified individuals case notes were reviewed and the relevant auditable outcomes from BHIVA's SoC document used.

Results: 32/32 (100%) had documented evidence that child testing had been considered within 4 weeks of diagnosis (BHIVA target 95%). 13/32 had a total of 35 children, 29 of whom did not require testing. 20/29 had documented evidence their mother was not living with HIV post childbirth, 9/29 were >18 years and all but 1, not living in the UK, had either tested in sexual health or antenatal settings. 6/35 (17%) children required testing.

6/6 (100%) had a documented test result within 6 months of their parent's diagnosis, 1 of whom tested negative prior to parental diagnosis (BHIVA target 90%). 5/6 tested aged >18 months. 1 child <18 months, whose parent was diagnosed antenatally, awaits final 4th generation testing at 18 months.

Demographics of children requiring HIV testing

Parent	Age at testing	Gender assigned at birth	Parental ethnicity	HIV test result
1	4 years 5 months	Male	Romanian	Negative 4th generation
	4 years 5 months	Male	Romanian	Negative 4th generation
2	4 years 1 month	Male	Black African	Negative 4th generation
	Birth – 3 months	Male	Black African	Negative PCR x 3
3	17 years 9 months	Female	Black African	Negative 4th generation via sexual health services
4	15 years 6 months	Female	Black African	Negative point of care

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Conclusion: Our service has a robust mechanism in place for asking all newly diagnosed individuals, and those new to our service, about children during their first consultation. Where children without documented evidence of HIV testing are identified our child testing pathway ensures timely investigation and documentation - all child testing was completed within one month of parental diagnosis in this audit sample. Our service surpassed the BHIVA standards for child testing for all new diagnoses during the COVID-19 pandemic. Future planned work includes a re-audit of child testing for those already known to our HIV service. As neither parental status nor child location is static regular enquiry in relation to children needs embedding into routine HIV care.

P045 | Significant weight loss in people receiving metformin and dolutegravir

Ankush Dhariwal[1], Hannah Alexander[2]
[1]*Barts Health NHS Trust, London, UK.* [2]*North Middlesex University Hospital, London, UK*

Background: Levels of metformin are increased by dolutegravir, and the manufacturer advises that those co-administered metformin should have the metformin dose limited to 1 gram daily. There is a paucity of published data describing the real-world significance of this interaction. We conducted an audit to determine if this drug-drug interaction had led to any adverse outcomes for our clients.
Method: Our database was searched to identify all clients currently taking dolutegravir, and those also taking metformin were included. From the medical notes, we determined what dose of metformin was being given, and whether the HIV clinician had communicated with the client's General Practitioner to inform them of the interaction. Where clients were taking more than the recommended dose of metformin, any adverse effects within the past year were explored.
Results: We identified 21 clients who were taking dolutegravir and metformin. The General Practitioner was alerted of the interaction in 11 cases (52%.) 13 clients were taking the recommended metformin dose of 1 gram or less (62%), whilst 8 clients (38%) were taking 2 grams daily.
Of these 8 clients, 3 had noted significant weight loss, between 8-12kg, within a year, and one also attended the Emergency Department for recurrent abdominal pain. They all underwent CT scans of the chest, abdomen and pelvis, and blood tests, which did not identify any cause, and one client also underwent upper and lower gastrointestinal endoscopies, and lymph node biopsy, which were normal. A 4th client was identified who had lost 17kg in one year, however she had not sought medical attention.
Conclusion: Of 8 clients taking 2 grams of metformin daily alongside dolutegravir, we noted significant weight loss in 50% of cases, and severe abdominal pain in 1 case, necessitating multiple medical investigations which were negative. Communication with General Practitioners about the interaction was poor.
Our small data set suggests that if the recommended metformin dosage is exceeded, clients taking dolutegravir may suffer adverse effects. It is important for HIV clinicians to check their dose of metformin, and to communicate with clients and General Practitioners about this interaction.

P046 | Predictors of hepatitis B treatment response in people with HIV and HBV initiating treatment

Anchalee Avihingsanon[1], Chee Loon Leong[2], Chien-Ching Hung[3], Ellen Koenig[4], Man-Po Lee[5], Khuanchai Supparatpinyo[6], Fujie Zhang[7], Hongyuan Wang[8], Hal Martin[8], Jason Hindman[8], Samm Kabagambe[9], Jared Baeten[8], Sasisopin Kiertiburanakul[10]
[1]*HIV-NAT, Thai Red Cross AIDS Research Centre, Bangkok, Thailand.* [2]*Department of Medicine, Kuala Lumpur General Hospital, Malaysia.* [3]*National Taiwan University Hospital, Taipei, Taiwan.* [4]*Instituto Dominicano de Estudio Virologicos, Santiago, Dominican Republic.* [5]*Queen Elizabeth Hospital, Kowleen, Hong Kong.* [6]*Chiang Mai University, Thailand.* [7]*Beijing Ditan Hospital, Capital Medical University, China.* [8]*Gilead Sciences Inc, Foster City, USA.* [9]*Gilead Sciences Ltd, London, UK.* [10]*Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand*

Background: Response to hepatitis B treatment in people with HIV-1/HBV varies by baseline (BL) HBV DNA level and HBeAg status. We present a subanalysis of 48 week (W) outcomes from a phase 3 study (ALLIANCE) comparing bictegravir/emtricitabine/tenofovir alafenamide (B-F-TAF) vs dolutegravir + emtricitabine/tenofovir disoproxil fumarate (DTG+F-TDF) in participants initiating treatment for HIV-1 and HBV to examine HBV DNA suppression and predictors of HBs/eAg loss in this population.
Method: Adults with HIV-1/HBV were randomised 1:1 to initiate blinded treatment with B-F-TAF or DTG+ F-TDF. Coprimary endpoints were proportion with HIV-1 RNA <50 copies/mL (Snapshot) and HBV DNA <29 IU/mL (missing=failure) at W48 and previously reported. Subgroup analyses determined the proportion with HBV DNA <29 IU/mL stratified by BL HBV DNA levels and HBeAg status. A multivariate analysis (MVA) was

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

	Proportion with HBV DNA <29 IU/mL following treatment		
	B-F-TAF (%)	DTG+F-TDF (%)	P value
BL HBV DNA <8 log10 IU/mL (n=116/241)	87	68	0.008
BL HBV DNA ≥8 log10 IU/mL (n=125/241)	39	23	0.073
BL HBeAg+ (n=187/241)	51	31	0.0065
BL HBeAg- (n=54/241)	100	92	0.055

conducted to evaluate predictors of HBV DNA <29 IU/mL and HBs/eAg loss.

Results: 243 participants were randomised/treated (121 B-F-TAF, 122 DTG+F-TDF). HBV DNA <29 IU/mL was achieved by 53% (63% B-F-TAF, 43% DTG+F-TDF), HBsAg loss by 9% (13% B-F-TAF, 6% DTG+F-TDF) and HBeAg loss by 20% (26% B-F-TAF, 14% DTG+F-TDF). Subgroup analyses showed significantly more participants with BL HBV DNA <8 log10 IU/mL or BL HBeAg + achieved HBV DNA <29 IU/mL with B-F-TAF compared to DTG+F-TDF (Table). Baseline predictors of HBV DNA <29 IU/mL were: HBeAg-, HBV DNA <8 log10 IU/mL, ALT >ULN and treatment with B-F-TAF; BL predictors of HBs/eAg loss included BL ALT >ULN and BL CD4 ≥200 cells/μL.

Conclusion: In adults with HIV-1/HBV initiating therapy, B-F-TAF resulted in superior HBV DNA suppression compared to DTG+F-TDF. In MVA B-F-TAF treatment was an independent predictor of HBV DNA suppression.

P047 | Common adverse events in clinical studies of people using lenacapavir for HIV treatment

Andrea Antinori[1], Francesco Castelli[2], Sylvie Ronot-Bregigeon[3], Yazdan Yazdanpanah[4], Rachel Safran[5], Daniel S Berger[6], Paul Cook[7], Gary Ian Sinclair[8], Hui Wang[9], Gary Saunders[10], Terry Farrow[9], Hadas Dvory-Sobol[9], Martin Rhee[9], Ricky Tsang[11], Jared Baeten[9], Samir Gupta[12]

[1]National Institute for Infectious Diseases Lazzaro Spallanzani IRCCS, Roma, Italy. [2]Università degli Studi di Brescia, Italy. [3]Hôpital Sainte Marguerite, Marseille, France. [4]Hôpital Bichat-Claude Bernard, Paris, France. [5]MultiCare Rockwood Internal Medicine and HIV, Spokane, WA, USA. [6]Northstar Medical Center, Chicago, IL, USA. [7]East Carolina University, Greenville, NC, USA. [8]Prism Health North Texas, Dallas, TX, USA. [9]Gilead Sciences Inc, Foster City, CA, USA. [10]Gilead Sciences International, Cambridge, UK. [11]Gilead Sciences Ltd, London, UK. [12]Indiana University School of Medicine, Indianapolis, IN, USA

Background: Lenacapavir (LEN), a potent first-in-class inhibitor of HIV-1 capsid function, is in development as a long-acting agent for treatment and prevention of HIV-1. We previously characterised LEN-related injection site reactions (ISRs, AIDS 2022). Herein, we characterise adverse events (AEs) other than ISRs in participants who received at least one dose of oral or subcutaneous (SC) LEN in clinical studies in heavily treatment experienced (HTE) (CAPELLA) and in treatment naïve (TN) (CALIBRATE) people with HIV (PWH).

Method: In both studies, LEN was administered for oral loading (600 mg on Day 1 and 2 and 300 mg on Day 8), then subcutaneous (SC) LEN (927 mg Q6M) starting at Day 15. CALIBRATE included an additional group of oral daily LEN (50 mg) with emtricitabine/tenofovir alafenamide (F/TAF). For all, LEN was used in combination with other antiretrovirals.

Results: In CAPELLA, 72 participants enrolled; in CALIBRATE, 157 enrolled. The median duration of follow up was 54 and 66 weeks, respectively. There were no SAEs related to study drug. Most non-ISR AEs were Grade 1 or 2 and resolved during ongoing treatment with LEN. No participant discontinued LEN due to a non-ISR AE. The common AEs in the SC groups were nausea, diarrhoea, and headache: 13%, 13% and 8% in CAPELLA, and 14%, 7%, and 13% in CALIBRATE, respectively. Investigators considered AEs of nausea, diarrhoea, and headache related to LEN in 3 to 5% of participants. In both studies, the onset and duration of each AE showed no consistent temporal pattern. The AEs in CAPELLA occurred concurrent with co-administration of complex optimised

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

background regimens. In CALIBRATE, gastrointestinal AEs were similar in the SC LEN groups vs. oral LEN (nausea 14% vs 12%; diarrhoea 7% vs 10%; vomiting 4% vs 8%).

Conclusion: Among a range of people with HIV using oral and/or SC LEN, LEN was well tolerated with no non-ISRs AEs related to LEN leading to discontinuation.

P048 | Primary effusion lymphoma: a single-institution cohort study

Lara Ulrich, Amit Samani, Sanjay Khanna, Claudia Fulgenzi, Alessia Dalla Pria, Mark Bower
Centre for HIV Malignancy, London, UK

Background: Primary effusion lymphoma (PEL), first described in 1989, is a large B-cell neoplasm presenting as serous effusions without tumour masses in immunosuppressed individuals. PEL's universal association with KSHV/HHV8 was discovered in 1995 and a solid variant of PEL termed extracavitary PEL was defined in the 2000s. The world literature only includes 300-odd cases including 181 in PLWH, so knowledge of the clinicopathological features and outcomes in limited.

Method: At the National Centre for HIV Malignancy, we have prospectively collected clinical data on all patients diagnosed with HIV related cancers since 1986. For this analysis we included all patients diagnosed with PEL.

Results: We identified 24 HIV seropositive patients (23 cis-male, mean age 43 years) with PEL. At the time of PEL diagnosis, 50% had a prior AIDS diagnosis and 62% were established on cART, the mean CD4 cell count was 277/mm^3 (range: 8-1112). Eleven had concurrent KSHV related disease (10 Kaposi sarcoma, 5 Multicentric Castleman's disease). Only 8 had cavitary PEL and 16 solid PEL. A third had poor performance status (ECOG>2). Three were diagnosed in the pre-cART era. Four received only best supportive care (2 pre-cART era, 2 PS4 with severe co-morbidities). Twenty received chemotherapy with curative intent (11 CHOP, 6 EPOCH, 2 CDE, 1 PACE-BOM). Of the 20 who were treated with curative intent, 6 have died; 4 of refractory/relapsed PEL, 1 of treatment related infection, 1 of suicide after 10 years of remission. At a median follow-up of 7 years, the 5 year overall survival is 60% (95% Confidence Interval: 40-80%) and for the 20 treated with curative intent is 73% (95% CI: 55-91%).

Conclusion: Whilst a systematic literature review of published cases of PEL described a 5 year overall survival of just 18%, the outcomes in our cohort are more encouraging. Nevertheless, the outcomes are less favourable than for the more common HIV associated non-Hodgkin lymphoma subtypes (Diffuse Large B-Cell and Burkitt) and the optimal treatment schedule remains unknown.

P049 | Effect of low-dose oral vitamin D on bone mineral density changes in patients with HIV: longitudinal prospective study for 6 years

Shyamalie Bopitiya, Satyajit Das
Coventry and Warwickshire Partnership Trust, Coventry, UK.

Background: High prevalence of vitamin-D deficiency and abnormal bone mineral density (BMD) reported in HIV patients. We aimed to find out effect of low dose oral vitamin-D on vitamin-D level, parathyroid hormone (PTH) level and BMD of spine and hip in HIV patients who has vitamin-D deficiency.

Method: We collected information about demography, viral load, CD-4 count, risk factors for fracture, treatment history and measured vitamin-D (25-OH), PTH (intact PTH), inorganic phosphate, corrected calcium, Alkaline phosphatase (ALP) and BMD of spine and hip at baseline, annually for 6 years.

Results: Total 86 patients with mean age 48.8 (+/-8.7) years, 64 (74%) black African, 48 (55%) females, CD-4 count 540.7 (+/-180.8) cells/dL, plasma VL 1.6 log (+/-2.3) copies/mL, duration of illness 108.9 (+/-34.1), exposure to antiretroviral 96.2 (+/-27.9) months were included in the analysis. Patients on tenofovir had higher PTH (0.001), on efavirenz lower vitamin-D (0.03), but no difference in BMD of spine or hip.

After 6 years of follow up patients on vitamin D replacement (n=44) had significant increase in vitamin-D (20.6+/-9.7 vs 86.4+/- 42.2 p=0.0001), reduction in PTH (7.9+/-6.5 vs. 3.1+/- 1.9 p=0.02), alkaline phosphatase (108+/-73.71 vs. 95.9 + /-52.4 p=0.03) and increase in corrected calcium (2.1 + /-0.1 vs. 2.2 + /-0.08 p=0.01) levels, but no change in BMD of hip (0.961 + /-0.18 vs. 1.001 + /-0.11, p=0.07) and BMD of spine (0.981 + /-0.22 vs. 1.014 + /-0.12, p=0.08). In patients not on vitamin-D replacement (n=42), there was increase in vitamin-D (16.0 + /-8.9 vs. 36.3 + /-12.4, p=0.01), but PTH, ALP, corrected calcium and BMD of hip and spine did not change. In multivariate analysis that included all significant variables, vitamin-D replacement independently associated with increase in vitamin-D level (OR 2.08, CI 1.03, 4.12, p=0.005), decrease in PTH level (OR 0.53, CI

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

0.35, 0.82, p=0.04), but not with change in corrected calcium, alkaline phosphatase.

Conclusion: After 6 years of follow up, replacement of low dose once daily oral vitamin-D in treatment experienced HIV patients with vitamin-D deficiency can increase vitamin-D level, reduce PTH level with no changes in BMD of hip and spine.

P050 | Cerebrospinal fluid HIV RNA and viral nucleic acid detection in persons with HIV

Manraj Bawa[1], Merle Henderson[1,2], Nuala Pepper[1], David Muir[3], Alex Everitt[4], Nicola Mackie[2], Alan Winston[1,2]

[1]Department of Infectious Disease, Faculty of Medicine, St Mary's Campus, Imperial College London, UK. [2]Department of HIV and GU Medicine, St Mary's Hospital, Imperial College NHS Trust, London, UK. [3]North West London Pathology, Imperial College London NHS Trust, Charing Cross Hospital, UK. [4]Department of Neurology, Imperial College NHS Trust, St Mary's Hospital, London, UK

Background: Data on the prevalence of cerebrospinal fluid (CSF) HIV RNA escape and viral nucleic acid detection in the modern anti-retroviral therapy (ART) era are sparse. We determined the recent frequency, and associated clinical factors, of CSF HIV RNA escape and viral nucleic acid detection in persons with HIV (PWH) undergoing CSF examination for clinical indications.

Method: PWH with CSF virology results at a London centre were identified from pathology records between 2017-2022 and clinical data recorded. CSF HIV RNA escape was defined as CSF HIV RNA concentrations greater than plasma HIV RNA. CSF viral screen included herpes simplex virus types 1 (HSV-1) and 2 (HSV-2), varicella-zoster virus (VZV), Epstein-Barr virus (EBV), cytomegalovirus (CMV), human herpesvirus 6 (HHV-6) and JC virus. Where case detection was present in ≥5 individuals, associated factors were assessed using linear regression modelling.

Results: Of 114 individuals, 81 (71%) were male, 49 (43%) were white, mean age was 48.8 (SD ±13) years and median CD4 546 cells/μL (range 12-2390). Lumbar puncture indications included new-onset neurological (n=84) and psychiatric (n=6) symptoms, and investigation for neurosyphilis (n=24). CSF HIV RNA escape was present in 19 (17%) and was associated with low-level plasma viraemia (CSF escape n=8 (42%) vs non-CSF escape n=19 (20%), p=0.044) and HIV-drug-resistance mutations (n=4 (21%) vs n=6 (6%), p=0.038), and negatively associated with integrase strand-transfer inhibitor-based ART (n=3 (16%) vs n=36 (38%), p=0.019). CSF viral screen was performed in 98 individuals; positive findings included EBV (n=10), VZV (3), CMV (2), HHV-6 (2) and JCV (4). Detectable EBV in the CSF was not considered clinically significant in any individual, and was associated with CSF pleocytosis (median 26 cells/cmm (range 1-223) vs 1 cells/cmm (range 1-81), p<0.001), higher previous AIDS rates (n=6 (60%) vs n=15 (17%), p=0.005), and lower nadir and current CD4, when compared to those without detectable EBV.

Conclusion: In PWH with neurological symptoms undergoing CSF examination, the frequency of CSF HIV RNA escape remains similar to historical reports. Detectable EBV in the CSF in the absence of clinical manifestations may be a consequence of CSF pleocytosis and viral nucleic acid trafficking into the CSF compartment.

P051 | Resolution of neuropsychiatric adverse events after switching to a doravirine-based regimen in the open-label extensions of the DRIVE-AHEAD and DRIVE-FORWARD trials

Graeme Moyle[1], Hong Wan[2], Fanxia Meng[2], Rebeca M. Plank[2], Peter Sklar[2], Rima Lahoulou[3]

[1]Chelsea and Westminster Hospital, NHS Foundation Trust, London, UK. [2]Merck & Co, Inc, Rahway, USA. [3]MSD France, Puteaux, France

Background: Neuropsychiatric adverse events (NPAEs) occur with multiple antiretrovirals. Doravirine (DOR) does not significantly interact in vitro with known neurotransmitter receptors. In phase 3 studies, the fixed combination of DOR/lamivudine/tenofovir (DOR/3TC/TDF) as first-line therapy resulted in significantly lower NPAE rates than efavirenz/emtricitabine/tenofovir (EFV/FTC/TDF), whereas DOR+2 nucleos(t)ide reverse transcriptase inhibitors (NRTIs) resulted in similar rates to darunavir/ritonavir (DRV/r)+2 NRTIs. We examined NPAEs in participants who switched to DOR-based regimens in the open-label extensions of two phase 3 trials.

Method: In DRIVE-AHEAD (NCT02403674) and DRIVE-FORWARD (NCT02275780), participants were randomized to a DOR-based regimen (DOR/3TC/TDF or DOR+2NRTIs) or comparator regimen (EFV/FTC/TDF or DRV/r+2NRTIs) for the 96-week double-blind treatment. Eligible participants could continue or switch to a DOR-based regimen in the 96-week open-label extensions.

Results: At DRIVE-AHEAD study week 96 (W96), 155/269 participants (57.6%) who switched from EFV/FTC/TDF to DOR/3TC/TDF reported NPAEs compared with 96/364 participants (26.4%) originally

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

randomized to DOR/3TC/TDF. At W96, 26 participants taking EFV/FTC/TDF had ongoing NPAEs; after switching to DOR/3TC/TDF, 19/26 participants (73.1%) reported that NPAEs were resolved/resolving by week 192 (W192). At DRIVE-FORWARD W96, 41/233 participants (17.6%) who switched from DRV/r+2NRTIs to DOR+2NRTIs reported NPAEs compared with 60/383 participants (15.7%) originally randomized to receive DOR+2NRTIs. At W96, 15 participants taking DRV/r +2NRTIs had ongoing NPAEs; after switching to DOR +2NRTIs, 6/15 participants (40%) reported that NPAEs were resolved/resolving by W192. In the open-label extensions, new-onset NPAEs (most commonly sleep disorders and depression) were reported by 25/269 participants (9.3%) who switched from EFV/FTC/TDF to DOR/3TC/TDF in DRIVE-AHEAD and by 18/233 participants (7.7%) who switched from DRV/r+2 NRTIs to DOR +2NRTIs in DRIVE-FORWARD; by W192, these NPAEs were resolved/resolving in 15/25 participants (60.0%) and 11/18 participants (61.1%), respectively.

Conclusion: Among participants with ongoing NPAEs while receiving EFV/FTC/TDF, most (73.1%) experienced resolution after switching to DOR/3TC/TDF. Similar rates of NPAEs with DOR- and DRV/r-based regimens may represent the background rates for these events.

P052 | Factors associated with weight loss or stable weight after continuing or switching to a doravirine-based regimen

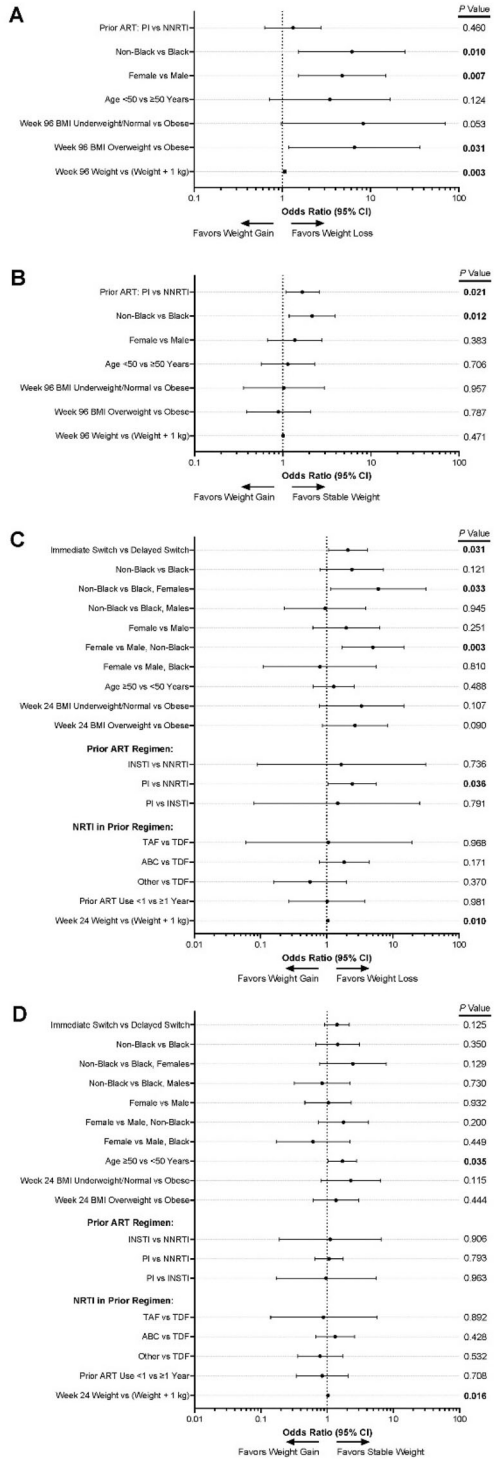
Chloe Orkin[1], John R. Koethe[2], Princy N. Kumar[3], Zhi Jin Xu[4], Rebeca M. Plank[4], Wayne Greaves[4], Peter Sklar[4], Rima Lahoulou[5]

[1]Queen Mary University of London, UK. [2]Vanderbilt University Medical Center, Nashville, USA. [3]Georgetown University, Washington DC, USA. [4]Merck & Co, Inc, Rahway, USA. [5]MSD France, Puteaux, France

Background: Minimal weight gain was observed with doravirine (DOR)-based regimens in first-line and switch clinical trials. Factors associated with weight loss/stable weight were examined in phase 3 trials for participants continuing or switching to a DOR-based regimen.

Method: In the initial 96-week double-blind base studies, adults were randomized to first-line treatment with DOR+2 nucleos(t)ide reverse transcriptase inhibitors (NRTIs) or darunavir/ritonavir+2 NRTIs in DRIVE-FORWARD (P018; NCT02275780) and DOR/lamivudine (3TC)/tenofovir disoproxil fumarate (TDF) or efavirenz (EFV)/emtricitabine (FTC)/TDF in DRIVE-AHEAD (P021; NCT02403674). Eligible participants could continue or switch to DOR in 96-week open-label extensions (P018+P021 continued or switch groups). In DRIVE-SHIFT (P024; NCT02397096), virologically suppressed adults on stable antiretroviral therapies were randomized to switch to DOR/3TC/TDF at day 1 or week 24 and continue through week 144. Weight loss was ≤−5%, stable weight >−5% to <5%, and weight gain ≥5%. Generalized

Figure. Analysis of factors impacting the probability of (A) weight loss or (B) stable weight versus weight gain from week 96 to week 192, P018+P021 switch group, and (C) weight loss or (D) stable weight versus weight gain from week 24 to week 144, P024



14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

logistic models were used to analyze factors associated with weight change.

Results: Most participants who continued or switched to DOR had weight loss or stable weight: 11.8% and 65.5% of the P018+P021 continued group, 9.5% and 57.4% of the P018+P021 switch group, and 13.7% and 65.8% of the P024 participants; weight gain occurred in 22.7%, 33.1%, and 20.5%, respectively. No clinical or demographic factors were associated with weight change during the extension for the P018+P021 continued group. Non-Black participants, particularly non-Black women, were more likely to have weight loss or stable weight after switching to DOR (Figure). In P024, participants who switched to DOR/3TC/TDF on day 1 were more likely to have weight loss than those who switched to DOR/3TC/TDF at week 24. Participants switching from protease inhibitors had weight loss in P024 and stable weight in P018+P021 versus those switching from non-nucleoside reverse transcriptase inhibitors.

Conclusion: Switching to DOR resulted in weight loss/stable weight in most participants in these trials, although weight change may differ by race, sex, and prior regimen. Further research will characterize the participant profile and mechanism for weight loss/stable weight with DOR.

P053 | Associations between inflammatory profiles and multimorbidity burden among people living with HIV

Luxsena Sukumaran[1], Ken M Kunisaki[2], Nicholas Bakewell[1], Alan Winston[3], Patrick WG Mallon[4], Nicki Doyle[3], Jane Anderson[5], Marta Boffito[6], Ian Williams[1], Frank A Post[7], Jaime Vera[8], Memory Sachikonye[9], Caroline A Sabin[1]

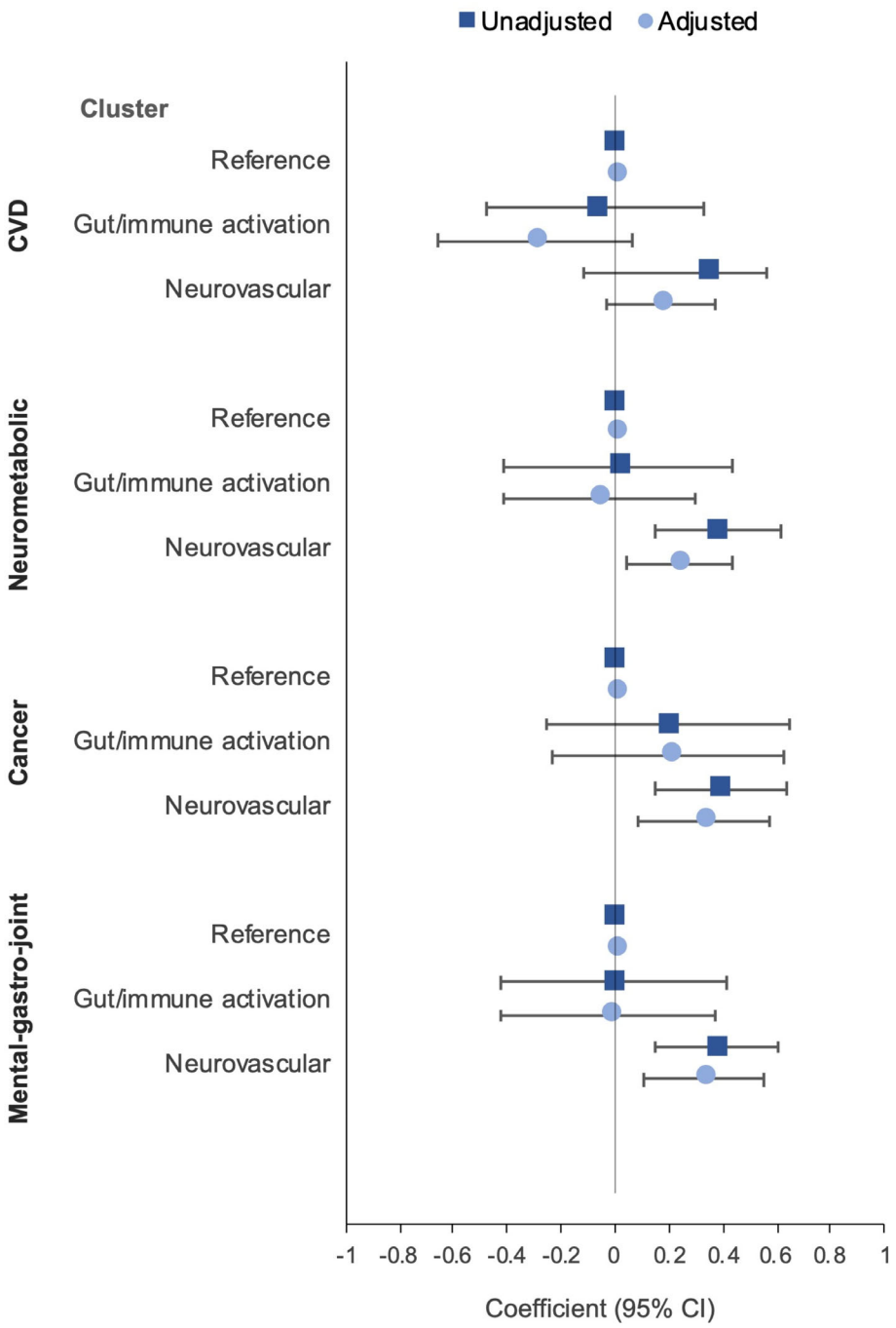
[1]Institute of Global Health, University College London, UK. [2]Minneapolis Veterans Affairs Health Care System, and University of Minnesota, Minneapolis, USA. [3]Imperial College London, UK. [4]HIV Molecular Research Group, School of Medicine, University College Dublin, UK. [5]Homerton University Hospital NHS Trust, London, UK. [6]Chelsea and Westminster Hospital, London, UK. [7]King's College London, UK. [8]Brighton and Sussex Medical School, Brighton and Hove, UK. [9]UK Community Advisory Board (UK-CAB), London, UK

Background: Multimorbidity is becoming increasingly prevalent in people with HIV, with HIV-mediated inflammatory processes potentially playing a role. We investigated associations between inflammatory profiles and multimorbidity burden in the Pharmacokinetic and clinical Observations in PeoPle over fiftY (POPPY) Study.

Method: Five multimorbidity patterns were identified among 1073 POPPY participants with HIV: *Cardiovascular diseases (CVDs)*, *Sexually transmitted diseases (STDs)*, *Neurometabolic*, *Cancer* and *Mental-gastro-joint*. A subset of 343 participants in the POPPY Sleep sub-study were categorised into one of three inflammatory profiles (based on 31 biomarkers): reference (n=141), gut/immune activation (n=25) and neurovascular (n=148). Multimorbidity burden z-scores were then calculated for each participant/pattern (excluding the *STD* pattern) at study entry, with scores >0 reflecting a greater number of comorbidities relative to the mean. Linear regression assessed associations between inflammatory profiles and multimorbidity burden z-scores adjusting for age, gender, ethnicity, body mass index (BMI), smoking status, alcohol consumption, nadir CD4+ T-cell count, years since HIV diagnosis and a prior AIDS event.

Results: The analysis included 314 people with HIV (median [interquartile range; IQR] age 52 [47 – 58] years; 86% male; 87% white). Median [IQR] *Neurometabolic* and *Cancer* z-scores were higher among those in the gut/immune activation (-0.33 [-0.76, 0.45] and -0.27 [-0.40, 0.13], respectively) and neurovascular (-0.06 [-0.60, 0.87] and -0.17 [-0.43, 0.47]) clusters compared to those in the reference cluster (-0.36 [-0.83, 0.32] and -0.32 [-0.64, 0.12]). In contrast, *CVD* and *Mental-gastro-*

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License



joint z-scores were only higher among those in the neurovascular (0.08 [-0.72, 0.72] and 0.02 [-0.76, 0.80]) cluster compared to the reference cluster (-0.53 [-0.82, 0.15] and -0.30 [0.85, 0.30]). After adjustment, *Neurometabolic, Cancer* and *Mental-gastro-joint* z-scores [95% confidence interval] were significantly higher among those in the neurovascular (*Neurometabolic*: 0.23 [0.04, 0.43]; *Cancer*: 0.33 [0.09, 0.57]; *Mental-gastro-joint*: 0.33 [0.11, 0.55]) than those in the reference cluster (Figure 1).

Conclusion: HIV-mediated inflammatory processes may play an important role in the burden of multimorbidity among people with HIV. The use of immunological biomarkers could inform the development of more targeted interventions to manage the rising burden of multimorbidity among this population.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P054 | Weight and body mass index changes in women receiving cabotegravir + rilpivirine long-acting or bictegravir in the SOLAR study

Parul Patel[1], Emilie Elliot[2], Feifan Zhang[3], Rimgaile Urbaityte[4], Denise Sutherland-Phillips[1], Kenneth Sutton[1], Sharon Walmsley[5], Ronald D'Amico[1], William Spreen[1], Bryan Baugh[6], Jean van Wyk[7]
[1]ViiV Healthcare, Durham, USA. [2]ViiV Healthcare, Barcelona, Spain. [3]GSK, Collegeville, USA. [4]GSK, London, UK. [5]Toronto General Hospital Research Institute, Toronto, Canada. [6]Janssen Research and Development, Beerse, Belgium. [7]ViiV Healthcare, Brentford, UK

Background: Weight gain and metabolic alterations have been reported with INSTIs and tenofovir alafenamide–based regimens. Cabotegravir (CAB), an INSTI, plus rilpivirine (RPV), an NNRTI, administered monthly or every 2 months (Q2M) is the first complete long-acting (LA) regimen recommended by HIV-1 treatment guidelines for the maintenance of virologic suppression. SOLAR (NCT04542070) is a Phase 3b noninferiority efficacy study, comparing CAB+RPV LA Q2M vs. continued daily oral bictegravir/emtricitabine/tenofovir alafenamide (BIC/FTC/TAF) at Month (M) 12. We present weight and metabolic changes for female sex at birth participants switching to CAB+RPV LA Q2M vs. continuing daily oral BIC/FTC/TAF.
Method: Data from 681 participants (intention-to-treat exposed) randomized (2:1) to switch to CAB+RPV LA Q2M (n=454) or to continue BIC/FTC/TAF (n=227) were stratified by sex at birth. Anthropometric parameters and the proportion of participants with metabolic syndrome were assessed at baseline and through M12.
Results: Overall, 79 female participants were randomized to receive CAB+RPV LA and 41 were randomized to continue BIC/FTC/TAF (18% [n=120/681]). At M12, median (IQR) change in body weight from baseline was –0.70 kg (–3.20, 0.70) in the LA arm and –0.30 kg (–4.25, 1.35) in the BIC/FTC/TAF arm. Median (IQR) change in BMI from baseline to M12 was –0.26 kg/m^2 (–1.20, 0.26) and –0.11 kg/m^2 (–1.45, 0.57) in the LA and BIC/FTC/TAF arms, respectively. Upward shifts in BMI at M12 were seen in one participant receiving CAB+RPV LA (moving from underweight at baseline to normal), and two participants receiving BIC/FTC/TAF (both moving from overweight at baseline to obese). Changes in anthropometric parameters and the number of female participants with metabolic syndrome and insulin resistance were similar between arms.
Conclusion: This is the first randomized Phase 3b study to measure and compare weight and metabolic changes in a standardized manner among female sex at birth participants living with HIV switching to CAB+RPV LA Q2M or continuing BIC/FTC/TAF. Changes in anthropometric parameters and the proportion of participants with metabolic syndrome and insulin resistance were similar through M12.

P055 | Risk factors for hepatic steatosis in people living with and without HIV: evidence from the POPPY cohort study

Alejandro Arenas-Pinto[1], Nicholas Bakewell[1], Ana Milinkovic[2], Jaime Vera[3], Frank Post[4], Jane Anderson[5], Michelle Beynon[1], Alastair O'Brien[1], Nicki Doyle[6], Richard Gilson[1], Sarah Pett[1], Alan Winston[6], Caroline Sabin[1]
[1]University College London, UK. [2]Chelsea and Westminster Hospital NHS Foundation Trust, London, UK. [3]Brighton and Sussex Medical School, UK. [4]King's College Hospital NHS Foundation Trust, London, UK. [5]Homerton University Hospital, London, UK. [6]Imperial College London, UK

Background: Hepatic steatosis is a major cause of chronic liver disease associated with several negative health outcomes. We describe prevalence of steatosis in POPPY study participants.
Method: People living with HIV older and younger than 50 years of age at study entry and HIV-negative controls older than 50 were recruited. Participants underwent liver transient elastography (FibroScan® CAP probe). Steatosis and moderate/severe steatosis defined as >238 dB/m and ≥280 dB/m respectively. Liver fibrosis was defined as ≥7.1 kPa. Data on relevant past medical history, anthropometric measurements, and alcohol consumption (AUDIT questionnaire) were collected. Biochemical scores for steatosis and fibrosis were calculated. We compared groups using logistic regression/Chi-squared/Fisher's exact/Kruskal-Wallis tests. Participants with AUDIT scores ≥8 and those with invalid elastography scores were not included in the main analysis.
Results: 317 participants (109 older people with HIV; 101 younger people with HIV; 107 controls) were predominantly white (86%) and male (76%), and 21% were living with obesity (BMI≥30Kg/m2). Most (97%) people with HIV had undetectable HIV-RNA. 72 participants were excluded from the main analysis (68 because high AUDIT score). The prevalence of fibrosis was 10.0%, 1.3% and 7.8% in the in the study groups, respectively (p=0.06) with fibrosis being predominately (>75%) mild. The prevalence of steatosis was similar between the older participants with HIV (63%) and controls (68%) but was higher than in younger participants with HIV (35%; p<0.001). Moderate/Severe steatosis was less prevalent in younger (19%) than older people with HIV (28%) and controls (30%). After adjustment, younger people with HIV were less likely to

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Table. Summary of univariable and adjusted logistic regression results for hepatic steatosis (excluding participants based on AUDIT score ≥8/invalid liver measurement), Odds ratio (OR) (95% confidence interval (CI))

Variable	Univariable		Adjusted Model	
	OR (95% CI)	p-value	OR (95% CI)	p-value
POPPY Cohort Group				
Older HIV-negative controls	REF	<0.001[LRT]	REF	<0.001[LRT]
Older PLWH	0.83 (0.44, 1.58)	0.57	0.56 (0.27, 1.18)	0.13
Younger PLWH	0.25 (0.13, 0.50)	<0.001	0.23 (0.10, 0.49)	<0.001
Sex at Birth				
Female	REF		REF	
Male	1.23 (0.68, 2.20)	0.49	2.53 (1.16, 5.52)	0.02
Race				
White	REF		REF	
Black African	0.77 (0.37, 1.60)	0.49	1.03 (0.40, 2.62)	0.95
Waist-Hip Ratio				
Low health risk	REF		REF	
Moderate/high health risk (>0.8 female; ≥0.95 male)	2.93 (1.68, 5.11)	<0.001	3.68 (1.94 6.97)	<0.001
Insulin Resistance Composite Binary Measure*				
No	REF		REF	
Yes	1.49 (0.88, 2.53)	0.14	1.21 (0.68, 2.17)	0.52
HIV-specific variables, considering only those with HIV				
HIV-RNA ≤50 copies/mL				
No	REF			
Yes	0.24 (0.03, 2.17)	0.20	--	
History of d-drug exposure**				
No	REF			
Yes	1.09 (0.48, 2.49)	0.83	--	
On any Integrase Inhibitor				
No	REF			
Yes	1.36 (0.73, 2.55)	0.34	--	
On any Protease Inhibitor				
No	REF			
Yes	0.94 (0.49, 1.84)	0.87	--	
On any Non-Nucleoside Reverse Transcriptase Inhibitor				
No	REF			
Yes	0.77 (0.40, 1.45)	0.42	--	

*Diabetes mellitus based on concomitant medications or medical history OR Insulin resistance (HOMA insulin resistance score >1.4) OR non-fasting blood glucose: 5.5 – 6.9 mmol/L (pre-diabetes range)
**Past medication use of Didanosine, Stavudine and/or Zalcitabine
[LRT]p-value from a Likelihood ratio test to jointly test that all coefficients of a categorical variable with >2 categories are all equal to 0, adjusting for all other variables in the model.

have steatosis (odds ratio [OR]:0.23;95% confidence interval [CI] 0.10-0.49); male sex (2.53 [1.16-5.52]) and high waist-hip ratio (3.68 [1.94-6.97]) were independently associated with increased odds of steatosis. We found no association between steatosis and HIV-related variables (Table). Including all participants and adjusting the model for AUDIT score did not modify the main findings.

Conclusion: The prevalence of steatosis and fibrosis was similar between older participants regardless of HIV status but was higher than in younger participants living with HIV. Age and abdominal obesity, but not HIV-related variables, were associated with steatosis.

P056 | Psychological wellbeing and sleep in human immunodeficiency virus (HIV): a retrospective analysis of assessment and interventions within HIV services in the UK and Ireland (UKI)

Alice Brown[1], Kathryn Carroll[2], Joel Paparello[2], Nicola Galbraith[2]
[1]*Business Analytics, Gilead Sciences Ltd, London, UK.*
[2]*HIV Standards Support Team, Gilead Sciences Ltd, London, UK*

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Background: People living with HIV are disproportionately affected by psychological wellbeing and sleep issues which can detrimentally impact their quality of life, adherence and health outcomes.

Despite monitoring and assessment being imperative to improve long-term health; evidence indicates a variation in incidence of this and absence in guidance for sleep issues.

To support generation of evidence in this field, a market research study was designed to gain insights into current interventions for psychological wellbeing and sleep assessment within HIV services in UKI.

Method: The study was managed by a market research agency where an online survey link was disseminated to healthcare professionals (HCPs) in multiple HIV centres across UKI.

To ensure accuracy of data, HCPs randomly selected a maximum 20 patient notes reviewed between 2020 to 2022. No identifiable patient information was recorded or shared with resulting data presented at an aggregate level.

Results: 39 clinics participated contributing 665 patient notes with demographics reflective of UKI population.

Since Covid- 19 77% of HCPs perceived an increasing demand for mental health support with 64% stating they routinely assess mental health; however, the majority express issues with capacity and resourcing to sufficiently support these patients.

33% of patients included were identified as experiencing a decline in psychological wellbeing, the majority of which self-reported during face to face (F2F) routine appointments; 14% of these patients had a PHQ9. 78% received support with the majority signposted to external resources. For those who did not receive support, the primary driver was patient request.

46% of services state they do not routinely assess for sleep issues. A lower proportion of patients (17%) were identified as having such issues; however, of those identified the primary method was self-reporting during F2F routine appointments. 6% of these patients had a PSQI. Of those who did not receive sleep support, a lack of guidance was the main cited reason.

Conclusion: This study indicates high variation between local management of psychological wellbeing and sleep in HIV, in addition to key gaps in clinical guidance, identifying, managing and ongoing monitoring which is required to ensure long term health.

P057 | COVID-19 vaccination rates in people living with HIV in north east England

Phoebe Hazenberg[1], Hatem Maamoun[1], Rayan Mahmoud[2], Tasneem Elkanzi[2], Ben Sayer[1], Brendan Payne[1], Ewan Hunter[1], David R Chadwick[2], David Ashley Price[1]

[1]Newcastle upon Tyne NHS Foundation Trust, UK. [2]South Tees Hospital NHS Foundation Trust, Middlesbrough, UK

Background: People living with HIV (PLWH) are at increased risk of severe COVID-19. The UK recommends vaccination against COVID-19 for PLWH with two primary doses, a booster dose, then seasonal boosters (i.e. four doses by Autumn 2022). Vaccination uptake in the UK has been lower among non-white minority ethnic groups than in the white British population, despite these groups having a higher risk of severe COVID-19.

Method: We evaluated vaccine uptake by PLWH attending treatment services at two NHS Trusts in North East England. To ensure representation of minorities, alternating PLWH from white and ethnic minorities (excluding white minorities) were purposively selected for review from the HIV and AIDS Reporting System; vaccination data were obtained from regional integrated care records.

Results: 200 PLWH were included. 103 (51.5%) were from ethnic minority groups, of whom 78 (75.7%) were of black African ethnicity. Vaccination rates in the total population and among ethnic groups are shown in the table below.

Similar proportions of white and minority ethnic background PLWH had received up to two vaccinations. These proportions among white PLWH were similar to those reported in the general English population, while fewer Black African PLWH were unvaccinated than in the general population (14.1% vs. 26%, data not shown). Vaccine uptake among PLWH diverged beyond 3 doses, with white people being almost three times as likely to

	Vaccine uptake by PLWH n (%)		
Vaccine doses received	White ethnicity (N=97)	Minority ethnic background (N=103)	Total (N=200)
Unvaccinated	10 (10.3)	13 (12.6)	23 (11.5)
1 dose	4 (4.1)	4 (3.9)	8 (4.0)
2 doses	10 (10.3)	13 (12.6)	23 (11.5)
3 doses	18 (18.6)	40 (38.8)	58 (29.0)
4 doses	55 (56.7)	32 (31.1)	87 (43.5)

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

have received four doses (OR 2.92; 95% CI 1.63 to 5.19; p-value for difference in distribution across all doses=0.005).
Conclusion: Although ethnic minority PLWH were less likely to be fully vaccinated than white ethnicity PLWH, the proportion of unvaccinated black African PLWH was lower than that reported from the general population. This could infer that regular contact with healthcare professionals coupled with consistent promotion of vaccination by HIV clinicians can improve uptake.

P058 | Comorbidities in people living with HIV in the north east who are unvaccinated against COVID-19: a descriptive study

Phoebe Hazenberg[1], Hatem Maamoun[1], Rayan Mahmoud[2], Tasneem Elkanzi[2], Ben Sayer[1], Brendan Payne[1], Ewan Hunter[1], David R Chadwick[2], David Ashley Price[1]
[1]Newcastle upon Tyne Hospitals NHS Foundation Trust, UK. [2]South Tees Hospitals NHS Foundation Trust, Middlesbrough, UK

Background: People living with HIV (PLWH) are at increased risk of severe or critical COVID-19. This is in addition to the increased risk associated with any co-existing conditions such as chronic pulmonary disease (CPD), chronic kidney disease and cardiovascular disease. Vaccination against COVID-19 is therefore strongly recommended for PLWH.
Method: We conducted a descriptive study to evaluate comorbidities among PLWH attending for HIV care at two NHS Trusts in North East England and who were under- or unvaccinated against COVID-19, defined as having received either zero or 1 doses of any COVID-19 vaccine by 01/10/2022.
PLWH under active care were identified using the HIV and AIDS Reporting System (HARS) dataset. Vaccination data were obtained from regional integrated care records (RICR) and cross-referenced with HARS. Information on comorbidities was collated for any patients who were under- or unvaccinated. To quantify risk and clinical vulnerability, we calculated the Charlson Comorbidity Index (CCI) for each of these patients. A CCI score ≥1 is associated with mortality/poor outcomes in patients with COVID-19.
Results: 141 under- or unvaccinated patients were identified out of a total cohort of 1492 patients who attended for HIV care (9.5%); of these, 96 (68.1%) and 45 (31.9%) had received zero and one vaccination respectively. The median age of this under-/unvaccinated cohort was 41 years and 91 (64.5%) were male.
62 patients (44.0%) had a CCI score of 1 or more; 13 patients (9.2%) had a diagnosis of AIDS during the time period evaluated; 11 (84.6%) of the patients with an AIDS diagnosis were completely unvaccinated. Non-HIV comorbidities included liver disease (10/141, 7.1%), solid organ cancer (5/141, 3.5%), CPD (4/141, 2.8%) and connective tissue disease (3/141, 2.1%). Six patients (4.3%) had ≥2 comorbidities.
Conclusion: Nearly half of the under-/unvaccinated PLWH attending our services were identified as being at an increased risk of having a poor outcome in the event of contracting COVID-19. Proactively identifying these individuals would allow services to offer tailored support in making informed decisions about vaccinations. Useful strategies may include the use of patient information leaflets and targeted discussion with patients explaining their individual risk from COVID-19.

P059 | Tackling hepatitis B co-infection in PLHIV after COVID: an audit and updated guidelines

Michael Blank[1], Hannah Alexander[2]
[1]Northwick Park Hospital, London, UK. [2]North Middlesex University Hospital, London, UK

Background: 5-20% of people living with HIV (PLWH) are co-infected with Hepatitis B (HBV) and coinfection is associated with an increased risk of cirrhosis and hepatocellular carcinoma (HCC), incidence of which is 5 to 6 times higher. COVID-19 led to a lapse in surveillance of this population, warranting a reassessment.
Method: BHIVA and EACS guidelines were combined to create a standard to audit against. All people under the care of the HIV team with co-infection were included, and analysed for the prior six months. Local ethics approval was granted. The results were then presented to clinicians, and local guidelines created to reflect the most recent research on co-infection which were shared with the department. A re-audit was then conducted against the modified guidelines.
Results: 42 people were living with co-infection of HBV and HIV, with a 50:50 gender split; 32 were of Black African ethnicity (76%). The median age was 50.5. Nobody had a HBV resistance profile done at baseline. 3 people did not have suppressed HIV viral load (VL), and 8 people did not have a suppressed HBV VL. In the previous 6 months only 26 (62%) had had a HBV VL, 20 (48%) had had an alfa-fetoprotein (AFP) check, and 21 (36%) had had an ultrasound liver. An US had been requested in 21 (50%) of patients. 100% were on a tenofovir-containing drug regimen. Following presentation and rewriting of

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

guidelines, performance of investigations improved. An US had been requested in 26 (62%) cases although only performed in 16 (38%) and an AFP had been measured in 25 (60%). Vaccination of partners had also improved.

Conclusion: The provision of care of those with co-infection was significantly impacted by the COVID pandemic, but reinforcement of information, and re-issuing of guidelines improved patient care. Attendance of appointments for blood tests and scans remains a major challenge for improving patient care. Literature aimed at our local population to reinforce the importance of HCC screening is being developed.

P060 | Clinical outcome of lopinavir/ritonavir as HIV second-line treatment in single tertiary hospital in Malaysia

Kok Soon Lee[1,2], Karin Lam[1], Sau Chyun Ng[1], Chee Hao Lee[1], Mahaletchumi Rajappan[1], Masliza Zaid[1], Edmund Liang Chai Ong[3]

[1]*Hospital Sultanah Aminah, Johor Bahru, Malaysia.* [2]*North Manchester General Hospital, UK.* [3]*Faculty of Medical Sciences, University of Newcastle Medical School, Newcastle upon Tyne, UK*

Background: Lopinavir/ritonavir is one of the recommended protease inhibitor for treatment failure from first line regimen in Malaysia. Among the reasons Lopinavir/ritonavir is a suggested option for treatment failure is believed due to its easy accessibility in compare to integrase inhibitor and lower cost. This study retrospectively investigated subjects on lopinavir/ritonavir in achieving viral suppression, metabolic side effects, and tolerability following treatment failure.

Method: Retrospective review and data collection from the case notes of adult person living with HIV on lopinavir/ritonavir regimen at least 6 months after failure of first-line treatment with viral load more than 1000 copies/ml. Subjects follow up at ID Clinic Hospital Sultanah Aminah in the period of 1st Jan 2015 to December 2020 were included. Eligible subjects were identified using the electronic database registered in the pharmacy department.

Results: A total of 265 subjects were screened and 79 subjects who fulfilled criteria were included for analysis. Majority of the subjects were male, ethnic Malay(64.5%) with the mean age 41. The most common mode of HIV transmission was unprotected sexual intercourse(35%) with majority heterosexual acquired. Seventy-two of subjects achieved viral suppression post 1 year after initiation of lopinavir/ritonavir. Seven subjects who did not achieve viral suppression cited non-adherent to lopinavir/ritonavir with most common reason due to pill burden. Subjects developed metabolic complications with more than half developed dyslipidemia. Sixty-one subjects recorded high TG with mean TG 3.6mmol/L(range:1.72-11.8mmol/L) and 74 subjects recorded high LDL with mean LDL 3.1mmol/L(range: 1.9-5.8mmol/L). A small number developed transaminitis, impaired glycaemia/diabetes, hypertension and clinical lipodystrophy.

Conclusion: Lopinavir/ritonavir leads to metabolic issues most notably dyslipidemia. The most common reason for non-adherent was pill burden and frequency of the twice daily pill intake. A regimen that is more patient friendly with less adverse effects should be considered to replace the current lopinavir/ritonavir regimen.

P061 | A collaborative approach to the management of neurological conditions in people living with HIV

Kimiya Asjadi, Amelia Oliveira, Kajann Kantha, Wenona Barnieh, Michael Newson, Julie Chandra, Larissa Mulka, Eli Silber, Elizabeth Hamlyn

Kings College Hospital, London, UK

Background: People living with HIV (PLWHIV) frequently present with neurological symptoms, often relating to late HIV diagnosis or suboptimal adherence. Age related co-morbidities including cognitive problems also present diagnostic challenges. A monthly joint clinic, with consultant input from HIV, neurology, neuroradiology and psychiatry, was developed at a South East London centre serving a diverse inner city population. We recorded the patient population presenting to this clinic and conditions managed.

Method: Retrospective review from January 2021-December 2022. Data collected included demographics, nadir CD4, current CD4, HIV RNA, antiretroviral therapy use, current and past neurological conditions and disability outcome. Neurological condition was classified by aetiology.

Results: 87 patients were reviewed: 65 virtually, 22 in person. 6 were external referrals. Median age 51 years (29-78), 44% Black African, 25% white British. Median nadir CD4 count 193 cells/μl (4-879), current CD4 385 cells/μl (range 9-1104), 75% undetectable HIV RNA at referral. 66 had MRI brain and 27 lumbar puncture. On modified Rankin scale, 33% of patients were at least moderately to severely disabled. Table 1 shows the most frequent presentations and diagnoses.

Conclusion: Neurological complications are frequently reported in PLWHIV, reflecting a variety of complex conditions which significantly affect quality of life and

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Table 1.

	No. of Patients (%)
Presenting Complaint*	
Cognitive impairment	35 (40)
Headache	11 (13)
Fall	3 (4)
Seizures	15 (17)
Focal weakness	12 (14)
Dizziness	11 (13)
Visual Disturbance	4 (5)
Other (including pain and mood changes)	16 (18)
Current Neurological Condition	
Current Opportunistic Infection (OI)	7 (8)
Past OI with chronic sequelae	16 (18)
Direct HIV related neurological condition (non OI)	10 (12)
Neurological condition not HIV related	31 (36)
Mixed aetiology (HIV and non-HIV)	23 (26)
Primary Diagnosis	
HIV Encephalopathy	26 (30)
Progressive Multifocal Leukoencephalopathy	7 (8)
Cryptococcal Meningitis	1 (1)
Toxoplasmosis	6 (7)
Tuberculosis Meningitis	2 (2)
Peripheral Neuropathy	6 (7)
Seizure Disorder	3 (3)
Non-HIV related Dementia	2 (2)
Migraines	5 (6)
Primary Mood Disorder	4 (5)

**** Patients may have more than one presenting complaint***

disability outcomes. Collaborative specialist input from Neurology, Psychiatry and HIV teams helps formulate an accurate diagnosis, ensuring appropriate investigation, management and follow up.

P062 | First description of efavirenz as a cause of drug-induced autoimmune hepatitis: compelling evidence from two cases

Amelia Oliveira, Chris Taylor, Kosh Agarwal, Kate Childs
King's College Hospital, London, UK

Background: Autoimmune hepatitis (AIH) is rarely seen in people living with HIV (PLWH). AIH can be precipitated by drugs including nitrofurantoin and minocycline but ART has never been implicated. We report two cases with compelling evidence of efavirenz (EFZ) induced AIH and review the published cases of AIH in PLWH.

Method: Clinical data were reviewed for two cases referred to a tertiary HIV/Liver service and scored using the International AIH group scoring system. A review of available literature on biopsy-confirmed AIH in PLWH was performed using PubMed.

Results: Two patients, diagnosed with AIH elsewhere, were referred with a plan to initiate high dose prednisolone then azathioprine. We recommended a switch from EFV prior to treatment. In both cases, EFV was switched to raltegravir. Liver function, autoantibodies and immunoglobulins normalised after 2 and 5 months.

Of 53 published cases of AIH in PLWH, ART data is available for 44. 33 (75%) were taking EFV at AIH diagnosis. AIH was managed with prednisolone followed by lifelong immunosuppression. All 6 patients in a case series of AIH in HIV from this centre were taking EFV.

Conclusion: We present two cases of AIH in PLWH where EFV is the potential cause. The majority of cases of PLWH and AIH in the literature were taking EFV, which supports EFV being the causal drug. In patients with a clinical picture of AIH taking EFV, it is important to switch from EFV prior to starting what may be unnecessary lifelong immunosuppressive treatment.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

	Case 1 (33F)	Case 2 (59M)
Date started EFZ	April/2020	2015
Date of first LFT derangement	August/2021	January/2022
Peak AST (date) [10-50 IU/L]	133 (May/2022)	113 (Sept/2022)
Auto-antibody	Anti-SMA 1:160	ANA 1:640
Immunoglobulin G [6.34-18.1 g/L]	21.8	19.1
Biopsy	AIH (Lymphoplasmacytic infiltrate, interface hepatitis)	AIH (Lymphoplasmacytic infiltrate, interface hepatitis)
Revised original score for autoimmune hepatitis[a]	18	16
Date EFV stopped	June/2022	September/2022
First normal range AST (date) [10-50 IU/L]	28 (November/2022)	41 (November/2022)
Negative auto-antibody screen	November/2022	November/2022

[a] 10-15 = probable AIH and >15 definite AIH.

P063 | Sight-threatening mpox in people living with well-controlled and advanced HIV: two case reports of mpox blepharokeratoconjunctivitis with prolonged viral shedding.

Tatiana Bovill Rose[1], Lottie Brown[2], Pippa Sargent[2], Catriona Downie[2], Alfonso Vasquez-Perez[3], Katie McFaul[1]

[1]St George's Hospital NHS Foundation Trust, London, UK. [2]Guy's and St Thomas' NHS Foundation Trust, London, UK. [3]Moorfields Eye Hospital NHS Foundation Trust, London, UK

Background: Since April 2022, >84400 cases of mpox have been reported globally. PLWH are disproportionately represented among cases and reports of severe disease, but there are limited data on HIV's impact on disease progression. Self-limiting conjunctival involvement is well-documented, but severe complications are increasingly recognised. We describe two PLWH who developed sight-threatening necrotic blepharokeratoconjunctivitis.

Method: Descriptive case report.

Results: Case 1: A 63-year-old man with well-controlled HIV (CD4 495/mL, VL <50 copies/ml) presented with 5-days of worsening left eye redness, discharge, lid swelling and fever and treated empirically for pre-septal cellulitis and keratoconjunctivitis. Visual acuity (VA) was reduced to hand movements. Mpox, suspected due to presence of characteristic rash and contact history, was confirmed by PCR of eye/skin swabs. Due to deteriorating VA, conjunctival necrosis and corneal epithelial defect, oral tecovirimat (21 days) and trifluridine 1% eye drops five times/day (5 days) were initiated alongside daily debridement and hourly topical dexamethasone. Amniotic membrane transplantation was performed to promote reepithelialisation. Four weeks later, VA improved to counting fingers and remains static.

Case 2: A 27-year-old man with advanced HIV (CD4 10/ml, VL 9004 copies/ml) and intermittent ARV compliance presented with 7-day history of fevers, left eyelid swelling, and grossly thickened, inflamed and ulcerated bulbar conjunctiva, limbitis and corneal ulceration with Snellen VA reduced to 6/18. He had restarted ART 6 weeks prior to presentation. A few days later he developed >100 skin lesions and skin/vesicle/eye swabs confirmed mpox. Topical antibiotics, oral tecovirimat (28 days), and trifluridine 1% eye drops were initiated. After initial improvement, he represented with eye pain, lacrimation and worsening VA 6/24. Oral tecovirimat was restarted and topical dexamethasone and trifluridine 1% drops continued. He was discharged one week later and continues an extended course of tecoviromat with VA improving; mpox viral load on eye swabs has decreased, though remained detectable four months after symptom onset.

Conclusion: Our cases highlight the risk of severe ophthalmic mpox. Pertinent issues include relapsing disease, very prolonged viral shedding in context of advanced HIV, the possible relevance of IRIS in advanced HIV, and role of antivirals, topical steroids, and debridement.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P064 | A review of dolutegravir use and weight gain in a diverse HIV cohort in outer north west London

Venkateshwaran Sivaraj[1], Rebecca Meade[2]
[1]*Ealing Hospital, London North West University Healthcare NHS Trust,* [2]*London North West University Hospital, London, UK*

Background: Dolutegravir (DTG) is an integrase inhibitor with a high genetic barrier to resistance, making it a common drug of choice for people living with HIV. However, clinical trials conducted in African countries, notably ADVANCE and NAMSAL, have shown DTG associated weight gain. Dolutegravir is now first-line Antiretroviral treatment (ART) in many guidelines including BHIVA. The aim of this review was to assess how many patients within our diverse cohort experienced significant weight increase when started or switched to DTG.

Method: The electronic patient records were searched to identify patients attending in 2022 whose antiretroviral therapy (ART) included dolutegravir. The first 40 patients who had been on dolutegravir for over one year were selected and the following data were collected: demographics, length of diagnosis, viral load, ART, time on dolutegravir, percentage weight change while on dolutegravir, side effects after starting dolutegravir, dietician involvement, annual check list completion.

Results: Of the 40 patients included, 19 were female and 21 were male. Ages ranged from 31-80 years. The most common ethnic origin was black African (18/40, 45%), followed by black Caribbean, white British and Indian. 55% patients had been living with HIV for over 10 years. The average time on dolutegravir was 36 months. The most common ART (17/40 patients, 43%) was abacavir, lamivudine and dolutegravir. 25/40 (63%) patients gained weight while on dolutegravir, 9/40 (23%) lost weight. 3/40(7.5%) patients experienced no change in weight and no calculation was possible in another 3/40(7.5%) patients due to a lack of data. The average percentage increase in weight was 9%, ranging from 1% to 36%. 6/40 (15%) patients saw the dietician after starting dolutegravir. 3 patients experienced neuropsychiatric adverse effects after starting dolutegravir, including headache and insomnia. None of the patients developed metabolic syndrome or other comorbidities due to the weight gained.

Conclusion: Overall, there was a 9% increase in weight when starting or switching our patients to DTG. There was no discontinuation of DTG as it was otherwise well tolerated. Weight gain was managed well by the dietician. This review highlighted the need for more rigorous recording and documentation of weight in all patients.

P065 | Re-framing how frailty is identified, diagnosed and managed among people living with HIV: exploratory perspectives from clinical practice

Tristan Barber[1,2], Tom Levett[3], Darren Brown[4], Philippa Pristerà[5], Nicola Galbraith[6], Breda Patterson[7], Jillian Williams[8], Marta Boffito[9]
[1]*Ian Charleson Day Centre, Royal Free London NHS Foundation Trust, UK.* [2]*Institute for Global Health, University College London, UK.* [3]*University Hospitals Sussex NHS Foundation Trust, Elderly Medicine, UK.* [4]*Therapies Department, Chelsea and Westminster NHS Foundation Trust, London, UK.* [5]*Cuttsy & Cuttsy, Cambridge, UK.* [6]*HIV Standards Support Team, Gilead Sciences Ltd, London, UK.* [7]*HIV, Gilead Sciences Ltd, London, UK.* [8]*Community Specialist HIV Nursing Service, Liverpool University Hospitals NHS Foundation Trust, UK.* [9]*HIV Medicine, Chelsea and Westminster NHS Foundation Trust, London, UK*

Background: Definitions and guidance traditionally position frailty as an "age-related" or "geriatric" construct associated heavily with functional or mobility impairment. People living with HIV can present with frailty at an earlier age and via less typical routes than the general public. Prevalence of disability in this population is also high.

Despite more than 50% of people living with HIV in the UK estimated to be aged ≥50 by 2028, there is still no consensus on how UK healthcare practitioners should identify, diagnose and manage frailty in this population. Frailty tools exist but are either not sufficiently validated or labelled as "inappropriate" in the context of HIV.

We explored the perspectives and experiences of senior practitioners to understand what works in practice and what else needs to happen to improve uptake and models of care across the field.

Method: Semi-structured interviews were conducted virtually with six healthcare professionals purposively selected for addressing frailty across HIV care in England. Interviews were audio-recorded, transcribed and thematically analysed to (A) explore current practice, (B) identify key barriers, and (C) curate suggestions to make identification, assessment and management of frailty easier in practice.

Results: The interviews highlighted three core barriers to identifying, diagnosing and managing frailty in HIV: (1) lack of awareness and understanding within the field, (2) lack of optimised tools and processes for frailty/pre-frailty in HIV, and (3) lack of care coordination, integration and resource. Approaches varied across centres but increasing and improving identification of those living

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

with HIV and at risk of frailty was seen as the greatest priority by all. Suggested actions were compiled and a new 'FRAIL in HIV' acronym co-developed to support staff in looking beyond a 'FRAIL' scale to consider implications in the wider context of HIV.

Conclusion: Addressing frailty in people living with HIV requires a more holistic approach than traditional models of care, and taking small actions now was seen as better than waiting for a unified approach. Our collated guidance hopes to reframe frailty in the context of HIV and address existing barriers to screening, diagnosis and management in clinical practice.

P066 | The impact of the COVID-19 pandemic on cervical screening and outcomes for women living with HIV

Dona Rimanishta[1], Harriet Mortimer[2], Yvonne Gilleece[1,2], Gladys Masvosva[2], Kim Fortescue-Talwar[2]
[1]Brighton and Sussex Medical School, UK. [2]University Hospitals Sussex NHS Trust, Brighton, UK

Background: Current published Faculty of Sexual and Reproductive Health (FSRH) guidelines recommend annual cervical screening for women living with HIV(WLHIV) but do not reflect current evidence.

Aims:

1. To assess the impact of the Covid-19 pandemic on frequency and interval of cervical screening in WLHIV
2. To report any changes in outcomes of cervical screening in WLHIV during Covid-19

Method: Data were collected retrospectively over 3 years defined as Pre-Covid (23/3/2019-22/3/2020), during Covid lockdowns (23/3/2020-22/3/2021) and Post-Covid lockdowns (23/3/2021-22/3/2022). Data was collated on demographics, HIV-related data, previous abnormal cervical screens/colposcopy, smoking and high-risk Human Papilloma Virus(hrHPV) vaccination.

Results: Data was available for 70 women. Mean age was 48 years, 44.3%(n=31) were of African ethnicity. Mean duration of HIV diagnosis was 19 years. 22.9% (n=16) had a previous ADI, median CD4 was 768(range 35-1891), median nadir-CD4 439(range 3-1472), 94.3% (n=66) were taking ARVs and 87.1%(n=61) had HIV-VL <40 copies/ml. 42.9%(n=30) had a previous abnormal cervical screen and 78.6%(n=55) had undergone colposcopy. 4.3%(n=3) were vaccinated against hrHPV. 18.6% (n=13) currently smoked.

60%(n=42) women underwent cervical screening Pre-Covid, 41.4%(n=29) during and 78.6%(n=55) Post-Covid. 19.6–37.2% fewer women were screened during Covid compared to Pre and Post-Covid.

9.5%(n=4) women screened Pre-Covid tested positive for hrHPV compared with 6.9%(n=2) during Covid and 12.7%(n=7) Post-Covid. No cytology changes were seen for the majority however cervical intraepithelial neoplasia(CIN) grade 1 was detected in 2.4%(n=1) Pre-Covid, compared with 3.4%(n=1) during covid and 5.4% (n=3) Post-covid. Post-Covid 1.82%(n=1) had CIN grade 2 detected, no women pre or during covid had CIN grade 2 detected. No women Pre, during or Post-covid had CIN grade 3 or cervical neoplasm detected on cytology.

Conclusion: Covid increased cervical screening intervals for WLHIV but did not result in delayed cervical cancer diagnosis. FSRH guidelines are currently under review regarding screening intervals. This data, although small in number, may support European AIDS Clinical Society and Department of Health and Human Services guidelines which have extended screening intervals for PWLH especially for those who tested negative for hrHPV.

P067 | HIV partner notification during the pandemic: an audit of new HIV diagnoses at a local clinic between January 2020 and February 2022

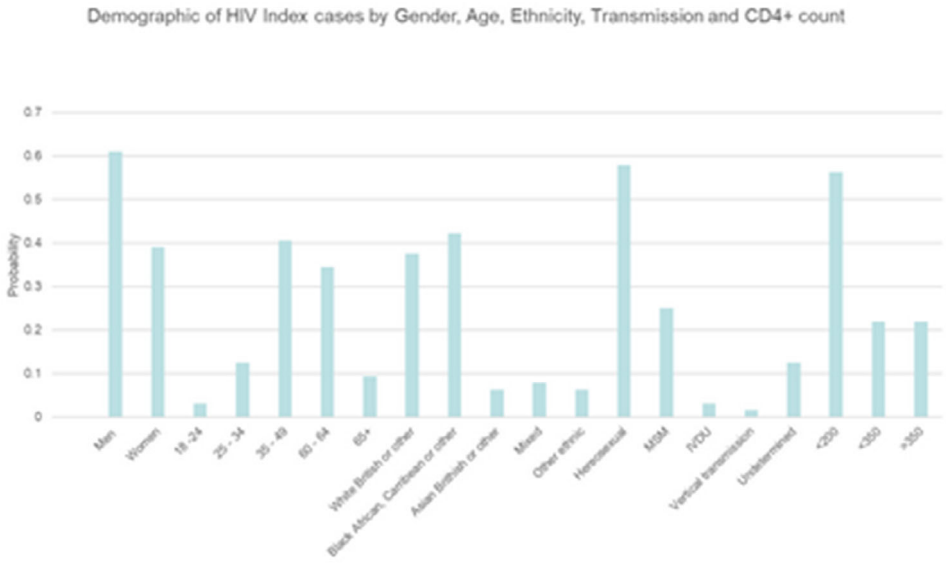
Vafie Sheriff
St George's University of London, UK

Background: HIV Partner notifications are an effective intervention for finding those with undiagnosed HIV. It allows the identification of those at the highest risk of HIV, to then reduce onward transmission and provide post and pre-exposure prophylaxis. HIV partner notification standards for adults were introduced in 2015 by BASHH and the BHIVA.

Method: A retrospective electronic notes review of all patients, to identify patients diagnosed with HIV between January 2020 and February 2022. Completed yellow notes and HARS data used to identify information on the number of PN per index case. Data collected included demographics plus HIV incidence test results and CD4 count. Data was then analysed and HIV PN for the clinic compared to the HIV Partner notification Standards Outcomes 1 and 2.

Results: Number of contacts tested per Index case at the clinic was above the national HIV PN standards of 0.6, at 0.7 for outcome 1. When looking at the numbers separated by gender and stage at presentation, women (0.56)

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License



and patient present with CD4+<200 (0.58) fell below this standard. Literature suggests this might be due to female index cases often listing fewer partners or the late-stage presentation. Some ethnicities such as mixed (0.4) and ethnic other (0.25) also fell below this standard but that could be attributed to the small sample size.

The proportion of contactable partners tested at the clinic was above the national HIV standard of 65%, at 71.1% for outcome 2. The only group assessed that fell below the standard were women (57%), with the second lowest group being black British or other (65%). Literature suggests that female index cases were less likely to convince a partner to come in for HIV testing.

Conclusion: The clinic appears to be in line with the HIV Partner notification standard Outcome 1 and 2, for specifically, HCP verified. However, seems to fall short of this when it comes to women and patients presenting late with a CD4+ < 200.

P068 | Audit of missed opportunities in people diagnosed late with HIV and establishment of a review and feedback process for new late diagnoses

Clemency Nye, Alice Maxwell, Nico Swetenham, Jonathan Underwood
Cardiff and Vale University Health Board, Cardiff, UK

Background: Currently, 40% of people diagnosed with HIV in the UK are diagnosed late, with a CD4 count below 350. Many patients have missed opportunities for earlier diagnosis, defined as a presentation to healthcare services with indicator conditions or AIDS-defining conditions which are not followed by HIV testing. Late diagnosis is associated with worse outcomes for the patient.

Method: An audit was conducted to examine patients diagnosed with HIV in Cardiff in 2019. Patients were identified from a Public Health Wales database. Information was then extracted from paper notes, computerised documents and the laboratory information system.

Results: 24 people were diagnosed with HIV in 2019, of which 14 were diagnosed late (CD4 count < 350), representing 58% of the total, and 11 were very late (CD4 < 200). 7 of the 14 patients had at least 1 missed opportunity, and many had presented with more than 1 indicator condition, with a total of 16 indicator conditions in the 7 patients. The mean number of months from the first indicator condition to testing was 24 months. 10 patients had experienced harm due to late diagnosis and 8 patients had AIDS-defining conditions at diagnosis.

Following the audit, written information was sent to primary care, all secondary care departments and the Emergency Department with reminders of the indications for HIV testing.

Subsequently, a review process has been implemented for new late diagnoses. People newly diagnosed late are reviewed for missed opportunities, and the results discussed at an HIV multi-disciplinary meeting. Harm to the patient is scored using a harm matrix. Depending on the level of harm and presence of missed opportunities, feedback is given to the clinical teams involved with the patient at the time of the missed opportunity. Between September 2021 and January 2023, 12 patients have been through the review process and feedback has been provided in 7 cases.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Conclusion: Many people living with HIV in Wales are continuing to be diagnosed late, and 50% of patients in 2019 had missed opportunities for earlier diagnosis. Our aim is that a continuing process of review and feedback will reduce the number of people diagnosed late in the future.

P069 | Implementing a late diagnosis review protocol for HIV across the southeast of England with a public health perspective: lessons for national roll-out

Lucy Lynch[1], David Chadwick[2], Kate Donohoe[1], Angeline Donohoe[3]
[1]UK Health Security Agency, Fareham, UK. [2]South Tees Hospitals NHS Foundation Trust, Middlesborough, UK. [3]NHS England, Horley, UK

Background: Delayed HIV diagnosis is associated with increased morbidity and mortality in people living with HIV (PLWH). A late diagnosis review protocol (LDRP) previously developed and piloted in 15 services across England and Wales identified missed opportunities (MO) for earlier testing. While BHIVA Standards of Care 2018 recommend reviewing all late diagnoses, currently services choose how to implement LDRP locally. We explored whether applying a public health perspective could support implementation.

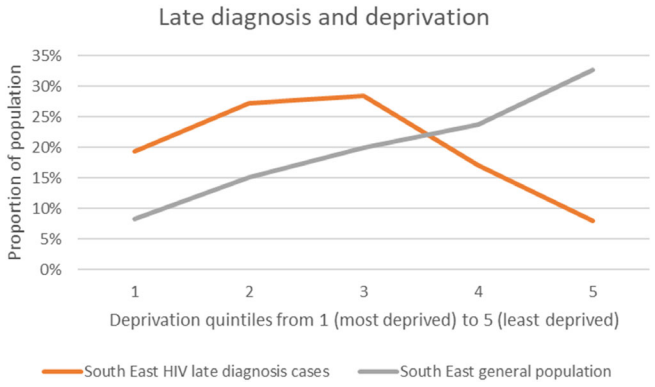
Method: 11 HIV services across the southeast region were invited to conduct the LDRP, submit results to Public Health England and evaluate the process. Results were analysed at a regional level and reported back to services and local commissioning teams. Evaluation was undertaken immediately and after 18 months.

Results: Reviews of 123 late diagnoses were submitted across 9 services. People diagnosed late were generally older compared to all new diagnoses: 32.5% aged 50+, compared to 21.4% of all new diagnoses. People with a late diagnosis were more likely to live in a deprived area compared to the general population ($p<0.01$).

Just under a third of late diagnoses were in females with variation between ethnic groups: 51.9% (African); 36.4% (Asian); 14.5% (White). A third presented with an AIDS-defining illness (35.8%) and 43.9% were considered to have been harmed by delayed diagnosis. Of 72 cases with healthcare episode reviews, almost three quarters (73.6%) had at least 1 MO to test. MO were most likely to occur in primary care (49.4%) and in response to indicator conditions (23.7%).

Feedback helped improve the survey and implementation approach. Evaluation after 18 months showed a number of services either implemented LDRP for the first time or systematised their approach, enabling effective dissemination of lessons learned. Routine testing in emergency departments has been introduced as a direct result of LDRP within 2 services, while others have increased indicator condition testing and introduced training for other specialties.

Conclusion: Bringing a public health perspective enhances implementation of LDRP within local areas and identifies new areas for public health and NHS services to act upon.



14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P070 | Factors associated with severe SARS-COV-2 infection in people of Black ethnicities living with HIV in the UK

Zoe Ottaway[1], Lucy Campbell[1,2], Julie Fox[2,3], Fiona Burns[4,5], Lisa Hamzah[6], Stephen Kegg[7], Melanie Rosenvinge[7], Sarah Schoeman[8], David Price[9], Rachael Jones[10], Amanda Clarke[11], Sarah Pett[12,5], Andrew Ustianowski[13], Denis Onyango[14], Shema Tariq[5,12], Robert Miller[5,12], Frank Post[1,2]

[1]King's College Hospital NHS Foundation Trust, London, UK. [2]King's College London, UK. [3]Guy's and St Thomas' NHS Foundation Trust, UK. [4]Royal Free London NHS Foundation Trust, UK. [5]University College London, UK. [6]St George's University Hospital NHS Foundation Trust, London, UK. [7]Lewisham and Greenwich NHS Trust, London, UK. [8]Leeds Teaching Hospitals NHS Trust, UK. [9]Newcastle Hospitals NHS Foundation Trust, UK. [10]Chelsea Westminster NHS Foundation Trust, London, UK. [11]University Hospitals Sussex NHS Foundation Trust, Brighton, UK. [12]Central and North West London Foundation Trust, UK. [13]North Manchester General Hospital, UK. [14]Africa Advocacy Foundation, London, UK

Background: The COVID-19 pandemic has disproportionally affected people of black ethnicities, who have been at greater risk of SARS-CoV-2 acquisition, morbidity and mortality than those of white ethnicity. We describe factors associated with severe COVID-19 infection in the GEN-AFRICA cohort of people of black ethnicities living with HIV in the U.K.

Method: First reported episodes of COVID-19 up to October 2022 were ascertained by direct questioning and/or medical records review. Pre-pandemic immune-virological and comorbidity status was based on measurements obtained prior to 01/2020 and used to identify risk factors for severe (requiring hospitalisation or resulting in death) COVID-19, using logistic regression

Results: COVID-19 status was available for 1806 (72%) of 2503 GEN-AFRICA participants (mean age 49.2 [SD 10.2] years; 56% female; 80% sub-Saharan African and 14% Caribbean ancestry, median CD4 count 555 [IQR 400-733] cells/mm3; 93% undetectable HIV RNA [<200 copies/mL]); 573 (32%) reported a clinical illness consistent with COVID-19; 63 (3.5%) experienced severe COVID-19 (hospitalisation 59; death 4). Those who experienced severe COVID-19 were older, more often male, had lower CD4 counts and fewer had undetectable HIV RNA; they more often had prior AIDS, hypertension, diabetes mellitus and chronic kidney disease. Region of ancestry, nadir CD4 count, and obesity were not associated with severe COVID-19. In multivariable analysis, CD4 count <350 cells/mm3, diabetes mellitus and chronic kidney disease were associated with increased odds of severe COVID-19 (Table). Sex and a pre-pandemic HIV RNA were associated with severe disease although this did not reach statistical significance. By October 2022, 1534 (88%) of this sample had received ≥1 dose of SARS-CoV-2 vaccine; those who experienced severe COVID-19 were less likely to report vaccination (77% vs. 89%, p=0.01).

Conclusion: By the end of October 2022, nearly one-third of people of Black ethnicities with HIV in this sample had experienced COVID-19; 3.5% had developed severe COVID-19 disease. Pre-pandemic immunovirological and comorbidity status were associated with severe COVID-19. Black populations with less favourable HIV control than

Table: Factors associated with severe COVID-19 using logistic regression analysis

		Univariable		Multivariable	
		OR	p value	OR	p value
Age	<50 years	1		1	
	50-59 years	1.72 (0.96-3.06)	0.07	1.25 (0.67-2.33)	0.47
	≥60 years	2.90 (1.48-5.68)	0.002	1.48 (0.69-3.20)	0.32
Sex	Female (vs. Male)	0.47 (0.28-0.80)	0.005	0.61 (0.35-1.04)	0.07
CD4+ Nadir (<350 cells/mm³)	Yes (vs. no)	0.85 (0.48-1.51)	0.59		
CD4+ Current (<350 cells/mm³)	Yes (vs. no)	2.52 (1.48-4.28)	0.001	1.87 (1.05-3.31)	0.03
HIV RNA pre-pandemic (<200 copies/mL)	Yes (vs. no)	0.42 (0.20-0.87)	0.02	0.48 (0.22-1.03)	0.06
AIDS	Yes (vs. no)	0.60 (0.2-1.83)	0.37		
Diabetes	Yes (vs. no)	3.41 (1.89-6.15)	<0.001	2.18 (1.13-4.22)	0.02
Hypertension	Yes (vs. no)	2.51 (1.51-4.16)	<0.001	1.34 (0.72-2.50)	0.92
Chronic kidney disease (eGFR <60 mL/min/1.73m²)	Yes (vs. no)	5.47 (3.03-9.86)	<0.001	2.91 (1.45-5.85)	0.003
Cardiovascular disease (IHD/CCF)	Yes (vs. no)	2.18 (0.85-5.62)	0.11		
Obesity (BMI ≥30 kg/m²)	Yes (vs. no)	1.25 (0.75-2.06)	0.39		

eGFR=estimated Glomerular Filtration Rate; IHD=ischaemic heart disease; CCF=congestive cardiac failure; BMI=Body Mass Index

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

observed for GEN-AFRICA participants may have suffered greater COVID-19 morbidity and mortality.

P071 | Previous HIV testing rates amongst heterosexuals diagnosed HIV positive through Sexual Health London (SHL), an online postal sexually transmitted infection testing (STI) service

Gemma McDonald, Gloria Odongo, Sophie Jones, Sara Day
Chelsea and Westminster Hospital, London, UK

Background: New HIV diagnoses in England are higher among heterosexuals (49%) than gay/bisexual men (GBMSM)(45%). 40% are late-stage diagnoses. BASHH recommend annual HIV testing for high-risk populations including people injecting drugs (PWID), sex workers and GBMSM. There is limited guidance around frequency of HIV testing among heterosexuals, with some data suggesting less than annual testing. We explored historical HIV testing activity among heterosexuals newly diagnosed with HIV via SHL.
Method: E-notes review of of heterosexuals newly diagnosed HIV+ by SHL between 8/1/18-19/11/22 . Demographics, prior sexual health clinic (SHC) attendance and HIV testing activity were collected from patient-completed e-questionnaires and verbal discussions with the SHL team.
Results: There were 53 new HIV+ diagnoses: median age 33.8yrs (range 18-62yrs); 26 (49%) female, 27 (51%) male; 29 (54.7%) UK born, 24 (45.3%) born overseas.
29 (54.7%) individuals reported a previous HIV test, 17 had never tested and in 7 it wasn't documented.
Of individuals with prior HIV tests:

Acquisition risks	Male	Female
Partner from high risk country	8	9
Same sex partner	5	2
HIV contact	4	3
STI contact	6	3
Sex+drugs/alcohol	6	2
PWID/Sex work	0	0
Risks/user		
One	15 (55.6%)	12 (46.1%)
≥Two	6 (22.2%)	2 (7.6%)
None	6 (22.2%)	12 (46.1%)

- 9 (16.9%) tested using SHL: range 2.4wks-80.5wks ago, median 32.5wks; 7 (77.7%) and 2 (22.2%) individuals had tested <12mths and ≥12mths ago.
- 21 (39.6%) tested elsewhere: range 2days–15yrs ago, median 15mths; 11 (52.4%) and 10 (47.6%) individuals had tested <12mths and ≥12mths ago.

28 (52.8%) reported prior SHC attendance, 5 (47.2%) had never attended SHC.
10 (18.9%) reported condomless sex, necessitating PEP.
Discrepant risk information, between e-questionnaire and SHL discussion, was reported in 24.5% (n=13).
Conclusion: Most heterosexuals reported historical HIV testing, with 32% (17/53) testing <12mths. 50% women and 20% men had no discernible risk. 25% provided inconsistent risk information. Had SHL limited HIV testing amongst heterosexuals to yearly/less or based on risks reported via e-questionnaire, HIV infection could have been missed/delayed in 11 (20.7%) individuals, also risking onward transmission. Further research is required to guide HIV testing intervals amongst heterosexuals.

P072 | Mortality among people with HIV in the UK in 2021: findings from the National HIV Mortality Review

Ammi Shah[1], Veronique Martin[1], Alison Brown[1], Cuong Chau[1], James Lester[1], David Chadwick[2,3], Robert Miller[4], Frank Post[5], Clare van Halsema[6], Richard Harding[7], Ann Sullivan[1,2,8]
[1]UK Health Security Agency, London, UK. [2]British HIV Association Audit and Outcomes Sub-committee, London, UK. [3]South Tees Hospitals NHS Foundation Trust, Middlesbrough, UK. [4]Central and North West London NHS Foundation Trust, Mortimer Market Centre, London, UK. [5]King's College Hospital NHS Foundation Trust, London, UK. [6]Manchester University NHS Foundation Trust, UK. [7]King's College London, UK. [8]Chelsea and Westminster Hospital NHS Foundation Trust, London, UK

Background: The National HIV Mortality Review (NHMR) was launched by UK Health Security Agency (UKHSA) and British HIV Association to better recognise causes of death and preventable death, and to describe end-of-life care, among people with HIV.
Method: UK HIV services submitted data on all known deaths among people with HIV under their care in 2021 through a secure online form. Cause of death was categorised by an epidemiologist and four clinicians using the Coding Causes of Death in HIV protocol.
Results: In 2021, 101 services reported 606 deaths among people with HIV to NHMR. In 2019, 74 services reported

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

to the NHMR while 121 reported in 2020. Median age at death was 58 [interquartile range (IQR): 56-59] and most (76%) were male. Death cause was ascertainable for 78% (n=475), with the most common being non-AIDS-related cancers (26%), followed by non-AIDS-defining infections (19%), cardiovascular disease (16%), AIDS (9%), substance misuse (8%), respiratory disease (4%), accident/suicide (3%), liver disease (2%) and other causes (11%). COVID-19 caused or contributed to 11% of all deaths. Thirty-three people (5%) died within a year of HIV diagnosis, 90% of these were diagnosed late (CD4<350 cells/mm3), 80% very late (CD4<200 cells/mm3), 54% diagnosed with AIDS and 33% had documented missed opportunities for earlier diagnosis. Viral suppression (<200 copies/mL) (87%) and treatment coverage (98%) was high with the median time on treatment 13 years [IQR: 8-20]. Common lifestyle risk factors in the preceding year included smoking (33%; n=179), excessive alcohol use (20%; n=103). Other factors included drug use (non-injecting and injecting) and opioid substitution therapy. Death had been expected for 298 (49%) individuals, of whom 230 had discussed end-of-life care and 108 had a documented advanced end-of-life care plan in place.

Conclusion: Over half of people living with diagnosed HIV are aged over 50. Most deaths were not AIDS related however, one in eleven people with diagnosed HIV in the UK died from AIDS. Of people that died within a year of diagnosis, one in three had documented missed opportunities for earlier HIV diagnosis.

P073 | Viral suppression, linkage to care and outcomes in those previously diagnosed abroad

James Lester, Cuong Chau, Ammi Shah, Alison Brown
UK Health Security Agency, London, UK

Background: One quarter of people diagnosed with HIV in England in 2021 were previously diagnosed. We characterise the demographic and clinical profile of those previously diagnosed abroad to assess their public health needs.

Method: Data were taken from the HIV and AIDS Reporting System (HARS). The national comprehensive surveillance system collects information on UK HIV diagnosis date, diagnosis abroad, CD4 and viral load. A CD4 count <350 was defined as late presentation and VL <200 copies/mL was defined as viral suppression (VS).

Results: The number of people diagnosed with HIV in England who were previously diagnosed abroad decreased from 1092 in 2015 to 669 in 2021, but increased in proportion from 19% (1092/5618) to 25% (669/2692) in 2021. Over half (58%, 391/669) of those previously diagnosed abroad in 2021 had evidence VS within 28 days of UK diagnosis, 10% (68/669) were not VS at diagnosis, and 31% (210/669) had no data available. Of those not VS at diagnosis, or without a VL, 76% (211/278) were VS within a year of diagnosis.

Among those not VS, 51% (34/67) presented late exceeding the rate of late diagnosis in those first diagnosed in England, 46% (754/1630).

Year of arrival was reported for 585 of those diagnosed abroad in 2021. The median number of years between arrival and diagnosis was 0 overall, 0 for those virally suppressed at diagnosis, and 1 for those not virally suppressed. Median time to UK diagnosis was 1 year among those presenting late and 0 among those presenting promptly.

Conclusion: More than half of people previously diagnosed abroad were VS at UK diagnosis in England, and over 75% are suppressed within a year of diagnosis in 2021. It is concerning that a subset of people diagnosed abroad do not present for HIV care for at least a year following UK arrival. Services must be accessible to those diagnosed abroad, who may be concerned about how their HIV infection may impact their migration status and use of the NHS.

P074 | Auditing BHIVA 2020 HIV testing guidelines in primary care in an area of extremely high HIV seroprevalence: a cross-sectional, regional questionnaire

Kevin Kuriakose[1], Catriona Boyd[1], Ella Davies[2], Simisola Agunbiade[3]
[1]*Manchester University NHS Foundation Trust, UK.*
[2]*Imperial College Healthcare NHS Trust, London, UK.*
[3]*Chelsea and Westminster Hospital NHS Foundation Trust, London, UK*

Background: In areas of extremely high HIV seroprevalence, British HIV Association (BHIVA) 2020 HIV testing guidelines ensure that primary care is part of the drive to diagnose those living with undiagnosed HIV. These guidelines advise screening individuals; with clinical indicator conditions, when they register at a practice, when they undergo venepuncture and at all face-to-face appointments.

Method: An anonymous, online questionnaire was distributed to primary care clinicians (PCCs) working within Manchester Care Commissioning Group (CCG)

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

between 11th May and 25th October 2022. PCC-specific and practice-wide data was collected regarding knowledge and adherence to BHIVA 2020 testing guidelines and perceived barriers to HIV testing locally.

Results: 93 responses were received from 66 (80%) Manchester practices: 69% of PCCs were aware of their practice's extremely high HIV prevalence area status, but only 50% were aware of BHIVA testing guidelines. When auditing practice-wide adherence to BHIVA guidance, only 17% and 8% of practices routinely offered HIV testing to new registrants and to those undergoing routine venepuncture, respectively. None of the practices offered HIV testing to all attending face-to-face appointments. Few PCCs (5%) reported routinely testing for all 13 clinical indicator conditions. The top four perceived barriers to HIV screening were: time constraints, lack of training and knowledge, patient acceptance and other clinical priorities. 90% of respondents agreed or strongly agreed that an HIV testing Quality and Outcomes Framework (QOF) would increase testing in primary care with free-text responses noting that a QOF would provide additional funding. Some expressed concern that new positive diagnoses may result in additional work without appropriate links to local specialist HIV services.

Conclusion: This survey demonstrates that there is both poor awareness of and adherence to HIV testing guidance amongst PCCs in Manchester CCG. We were unable to identify any practices fully adherent to BHIVA 2020 HIV testing guidelines. Multiple barriers limit the implementation of guidelines including time constraints, financial constraints and an unfounded perception that lengthy pre-test counselling is mandatory. Funding, education and integration of sexual health services and primary care are essential to adhere to BHIVA 2020 HIV testing guidelines in Manchester.

P075 | An audit of new diagnoses of HIV in a deprived local authority: are we detecting HIV too late?

Chevonne van Rhee[1,2], Maura Flynn[1], Valerie Unsworth[1]

[1]*Public Health Sandwell Metropolitan Borough Council, UK.* [2]*University Hospitals Birmingham, UK*

Background: People with HIV may live without symptoms for years before progression to late-stage HIV and development of AIDS. Detecting HIV early improves survival, reduces risk of serious illness and minimises onward transmission. Sandwell has a higher HIV prevalence compared to regional and national averages. To assess at what stage of disease health services are diagnosing people with HIV, an audit was performed examining new diagnoses of HIV in Sandwell from 2019-2021.

Method: Sexual health service databases were searched for patients whose files were coded for 'New HIV Diagnosis' from 1/1/2019 to 26/1/2022. People with new HIV diagnoses made in Sandwell were identified. Early diagnoses were defined as people with CD4 count $\geq$ 350. Late diagnoses were people with CD4 count <350 and $\geq$ 200. Very late diagnoses were people with CD4 count < 200 or AIDS-defining illness.

Results: 39 new HIV diagnoses were identified. 44% of the people with new HIV diagnoses were born in the UK, 41% were born in an African nation. The most common reported transmission route (79%) was sex between men and women. 74% of new HIV diagnoses were late or very late. The most common setting for new diagnosis was hospital inpatient at 46%, compared to 18% in sexual health clinics and 3% in general practice.

Conclusion: Most new HIV diagnoses were made at late or very late-stage disease and the most common setting for diagnosis was hospital inpatient. This suggests that primary care and sexual health services in Sandwell are failing to detect HIV early and patients are not started on treatment until late-stage disease when morbidity and mortality are higher. Sandwell is one of the most deprived boroughs in England; the findings of this study may be generalisable to other deprived areas within the UK. Public health recommended strategies to improve early detection of HIV include testing for all people registering in a general practice and for all general medical hospital admissions and Emergency Department attendees. Additionally, public education that accesses but is not targeted specifically toward underserved groups, can promote widespread testing and reduce stigma.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P076 | Progress towards ending HIV transmission in England by 2030

Veronique Martin[1], Neil Mackay[1], Cuong Chau[1], Ammi Shah[1], James Lester[1], Peter Kirwan[2], Anne Presanis[2], Daniela De Angelis[2,1], Alison Brown[1]
[1]UK Health Security Agency, London, UK. [2]University of Cambridge, UK

Background: England is committed to ending HIV transmission by 2030. The HIV Action Plan (2021) set an interim ambition to reduce HIV transmission by 80% to 600 new diagnoses first made in England by 2025. Here we present the progress between 2019 (baseline) and 2021, interpreted in the context of the COVID-19 pandemic.

Method: People newly diagnosed with HIV were reported to the HIV and AIDS Reporting Section (HARS). The annual number of people having an HIV test in all sexual health services (SHS) including online testing were reported using GUMCAD. HIV diagnoses among people previously diagnosed abroad were excluded (25%).

Results: New HIV diagnoses first made in England fell by 32% from 2,986 in 2019 to 1,987 in 2020, but plateaued in 2021 (2,023).

Among gay/bisexual men, HIV diagnoses plateaued in 2021 (721) after a fall of 45% between 2019 and 2020, from 1,262 to 699. After a fall in HIV testing in 2020 (from 156,631 in 2019 to 144,800 in 2020), the number of people tested in 2021 (178,466) exceeded pre-COVID-19 levels. This suggests a decline in HIV incidence supported by a CD4 back calculation model (80% probability of a decline for the period 2019–2021), but at a slowing rate.

Among heterosexual adults, new HIV diagnoses first made in England in 2021 also plateaued (798) following a 31% decrease (from 1,109 in 2019 to 761 in 2020). However, HIV testing coverage has not recovered to pre-COVID-19 levels (628,607 in 2019, 441,017 in 2020 and 489,727 in 2021). This provides no evidence of a fall in incidence in this population.

Conclusion: A reduction by 360 new diagnoses first made in England year on year from 2022 onwards is required to meet the HIV Action Plan ambition. Despite an estimated 4,500 people with undiagnosed HIV and extremely high levels of antiretroviral therapy and viral suppression, PrEP access remains unequal. HIV testing numbers, which were affected by COVID-19 pandemic, have recovered in gay/bisexual men, but not among heterosexual adults. While the interim ambition is within reach for gay/bisexual men, PrEP and testing levels must be scaled up in heterosexual adults.

P077 | Trends in the number of people living with transmissible HIV in England, 2019–2021

Veronique Martin[1], Lizzy Adamson[1], Ross Harris[1], Anne Presanis[2], Pr Daniela De Angelis[1,2], Cuong Chau[1], Ammi Shah[1], James Lester[1], Ann Sullivan[3], Alison Brown[1]
[1]UK Health Security Agency, London, UK. [2]University of Cambridge, UK. [3]Chelsea and Westminster Hospital NHS Foundation Trust, London, UK

Background: To achieve the ambition of ending HIV transmission by 2030 in England, the number of people living with detectable viral load (VL) must be reduced. Here we estimate the number of people living with transmissible VL in England between 2019 and 2021.

Method: The HIV and AIDS Reporting System (HARS) is the comprehensive surveillance system for adults (≥15 years) living with HIV in England. Patient records are linked using limited information to monitor HIV treatment and care over time.

Categories of transmissible VL were defined as: undiagnosed (estimated using the Multi-Parameter Evidence Synthesis (MPES) statistical model); not linked to care (diagnosed but not in HIV care); not retained in HIV care (more than 15 months); in care in 2021 but no evidence of treatment; treated and no VL reported; and treated with VL>200 copies/mL.

Results: In 2021, a lower estimate of 12,129 people had transmissible VL, equivalent to 13% of the estimated 95,900 people living with HIV in England (95% credible interval (CrI) 94,700–97,700), similar to 2019 and 2020 (13,516 [14%] and 13,252 [14%], respectively). The number of people living with transmissible levels could reach 14,750 (15% of people living with HIV), when including the 2,621 people on treatment but with no VL reported (17,017 [18%] and 16,881 [17%] in 2019 and 2020, respectively).

In 2021, using the lower estimate, 4,400 (95% CrI 3,500–6,100) were undiagnosed, 206 not linked to care, 4,528 not retained in care, 1,196 in HIV care but not treated, and 1,799 on treatment but not virally suppressed. This compares with 5,600 (95% CrI 4,100–7,900), 616, 3,559, 1,632, 2,109 in 2019, respectively.

Conclusion: All categories of transmissible VL reduced between 2019 and 2021 except for people not retained in care. Of those living with transmissible VL in England, one third were estimated to be undiagnosed in 2021 (versus 40% in 2019). To end HIV transmission, we must reduce the number of people with transmissible virus through prevention and prompt testing, and by ensuring those living with diagnosed HIV receive support to

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

remain in care, on treatment, and virally suppressed with a good quality of life.

P078 | HIV knowledge survey in a district hospital

Wai Lin Htun[1], Christopher Hodgson[1], Suzan Potts[1], Kathryn Carroll[2], John Sweeney[1]
[1]*Blackpool Teaching Hospital NHS Foundation Trust, UK.* [2]*Gilead, Blackpool, UK*

Background: The number of newly diagnosed HIV infections in England are decreasing in recent years but undiagnosed HIV infection and late diagnosis are challenging issues. To ensure early identification of HIV infection, we introduced opt-out HIV testing in our emergency department from 2021. This brief survey is conducted to assess the knowledge of HIV and the acceptability of opt-out HIV testing among the people attending our hospital.
Method: An anonymous survey containing 12 questionnaires were handed out to the people attending our hospital during the World AIDS Day activity on 01/12/22. We collected data from Microsoft Teams Form and analysed in SPSS version 25.
Results: 582 people participated in the survey via paper or online form. Among them 72.5% are female, the median age of participants is 39 (IQR 23) and 83.8% of participants are white. Only 21.3% of the participants correctly answer all the correct modes of transmission of HIV. Nearly 20% of participants thought that HIV could be transmitted by kissing. 92.8% of participants chose condom for prevention of transmission but more than half of them did not choose PEP or PrEP as the prevention methods.
Nearly 90% of participants were not aware of U=U message and about 50% of participants thought that HIV can transmit to the partner even on treatment. 2/3 of participants agreed that the life expectancy of people living with HIV was same or longer than normal population. Only 37% of participants were aware about opt-out HIV testing in our hospital and 84.7% agreed to have HIV testing if they attend to the emergency department.
Conclusion: The finding shows that there is some HIV knowledge gap among the participants especially on new information such as U=U message and PrEP. Most people will have HIV test via opt-out testing which is an important point to highlight to scale up HIV testing in our setting. A wider community survey covering the whole area will provide more useful information.

P079 | New diagnoses of HIV through multi-centre emergency department opt-out HIV testing

Farnaz Dave[1], Lily Edwards[2], Cristina Fernandes[3], Rachel Kirby[2], Dorcas Obeng[4], Gareth Roberths[5], Fiona Topham[6], Rachael Whiteley[7], Shazaad Ahmad[8], Giorgio Calisti[9], Clare van Halsema[3], Orla McQuillan[2,4]
[1]*Regional Infectious Diseases Unit, North Manchester General Hospital, Manchester Foundation Trust, UK.* [2]*Northern Sexual Health, Oxford Road Campus, Manchester University NHS Foundation Trust, UK.* [3]*Regional Infectious Diseases Unit, North Manchester General Hospital, Manchester University NHS Foundation Trust, UK.* [4]*Northern Sexual Health, Manchester South, Manchester University NHS Foundation Trust, UK.* [5]*Emergency Department, Oxford Road Campus, Manchester University NHS Foundation Trust, UK.* [6]*Emergency Department, Wythenshawe Hospital, Manchester University NHS Foundation Trust, UK.* [7]*Emergency Department, North Manchester General Hospital, Manchester University NHS Foundation Trust, UK.* [8]*Department of Virology, Manchester Medical Microbiology Partnership, Manchester University NHS Foundation Trust, UK.* [9]*Infectious Diseases Unit, Wythenshawe Hospital, Manchester University NHS Foundation Trust, UK*

Background: Emergency department (ED) opt-out human immunodeficiency virus (HIV) testing in high HIV prevalence areas in the United Kingdom is recommended in BHIVA and NICE guidance, with funds for extremely high prevalence areas from the National HIV Action Plan. It normalises testing, reduces preventable morbidity and mortality through early diagnosis and contributes to ending HIV transmission. Manchester has an extremely high HIV prevalence and opt-out testing for adults having bloods in ED has been rolled out stepwise across three hospitals since December 2021, with 12, 7.5, 3 months per site respectively.
Method: Electronic records of individuals diagnosed with HIV through opt-out ED testing were analysed for 22.5 site-months from December 2021. Demographics, clinical presentation, HIV parameters and engagement with care data were reviewed.
Results: 26 individuals with new HIV diagnoses were identified with a median age of 40 (range 24-60). 20 were men, of whom 10 were men who have sex with men. Ten were born or previously lived in a country of high HIV prevalence.
7 individuals presented with indicator conditions, including severe complications of advanced HIV (cryptococcal

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

meningitis, Pneumocystis jirovecii pneumonia and HIV encephalopathy). Other presentations included trauma and drug toxicity.
One individual was seroconverting when they presented with acute abdominal pain.11 individuals were discharged from the EDs.
21 individuals have been informed of their diagnosis, 5 are currently uncontactable. Of those informed, 16/21 individuals (76%) had a CD4 count below 350cells/mm^3 and 9/21 (42%) had a CD4 count below 200cells/mm^3. 18/21 (86%) are engaged in care and taking antiretroviral therapy.
Conclusion: ED opt-out testing reduces health inequalities by providing to many the opportunity to know their HIV status regardless of their presentation or demographics. Most individuals diagnosed through ED were diagnosed late, but 19 did not have indicator conditions and so would have been missed with previous testing practice. This programme results in earlier HIV diagnoses, prevention of HIV-associated morbidity and mortality and reduced HIV transmission to others. It also reinforces the value of expanding opt-out HIV testing to other clinical areas.
An ongoing challenge is ensuring sufficient accurate information is obtained in ED to enable contacting of patients following testing.

P080 | Higher late diagnosis among people diagnosed with HIV through emergency department opt-out testing programmes at Ealing, Brent and Harrow boroughs of London

Venkateshwaran Sivaraj, Luciana Rubinstein, Dawn Friday, Jason Salinas, Gabriel Wallis, Lauren Fraser, John McSorley
London North West University Healthcare NHS Trust, UK

Background: Opt-out blood-borne virus (BBV) screening for HIV, Hepatitis B, and Hepatitis C virus was rolled out in our trust emergency department at Ealing and Northwick Park hospitals in May 2022. Ealing, Brent, and Harrow have a very diverse population with a significant population of Asian ethnicity - 29.7%, 32.8%, and 45.2% respectively and Black ethnicity - 10.9%, 17.5%, and 10.2% respectively (Census 2021). We present our findings from our successfully running BBV screening program.
Method: Data from the emergency department BBV screening program was collected and all the new first diagnoses of HIV were analysed for demographics, CD4 count and co-infections.
Results: A total of 37,965 blood-borne virus panel test for HIV, Hepatitis B & Hepatitis C were conducted in the emergency department at Ealing and Northwick Park hospitals from May 2022 to November 2022.
182 positive HIV results, 283 Hepatitis B positive, and 276 Hepatitis C positive results were reported.
A total of 12 new first diagnoses of HIV (Male 7, Female 5; Heterosexual 12; Ethnicity: White 3, Black 1, Asian 7, and another ethnicity 1; Outpatient 7, Inpatient 5) were identified among those tested positive for HIV. The median age was 36.5 years (Range: 25 to 67 years). 7 out of 12 were born abroad (India 3, Sri Lanka 1, Brazil 1, Eritrea 1, Kenya 1, Romania 1). All had stable housing and were residents of the UK.
The median baseline CD4 count was 171 (Range: 12 to 718) cells/ul. Ten (83%) has CD4 count < 350 cells/ ul and eight (66%) had baseline CD4 count <200 cells/ul and. Seven (58%) had AIDS-defining conditions diagnosed after HIV-positive confirmation. None had active co-infection with Hepatitis B or Hepatitis C viruses. Nine (75%) were started on ART and Five (71%) achieved undetectable HIV viral load by the end of November 2022.
Conclusion: Opt-out BBV screening program for HIV testing in the emergency department was effective in identifying individuals living with HIV who were unaware of their diagnosis in our population where stigma due to HIV is the most common barrier to accessing sexual health services.

P081 | Nurse-led management of HIV results from emergency department opt-out testing

Jessica Pinto, Sarah Edwards, Tristan Barber, Fiona Burns
Royal Free London NHS Foundation Trust, UK

Background: As part of the HIV action plan for England 2022-2025, roll-out of Emergency Department (ED) opt-out testing for blood-borne viruses (BBV) in London started in April 2022. We present our local data regarding the management of people identified with a positive or indeterminate HIV test.
Method: HIV results generated by opt-out testing from two EDs at a London NHS Trust from April to November 2022 were reviewed. Management of these results was led by a nurse at our HIV centre who was provided with daily lists of BBV results from the laboratory. Weekly and monthly "failsafe" lists were also generated and passed on to ensure no missed results. As a final check, there was a Data Manager who independently produced

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

monthly lists of results for reassessment. People with positive results would be contacted to organise an appointment at our clinic for disclosure of result, repeat serology and assessment. With indeterminate results, patients were contacted and informed about result and follow-up.

Results: 47675 HIV tests were performed in both EDs at the Trust. There were 230/47675 (0.48%) positive results. Eighteen people with new HIV diagnoses (6 female and 12 male) were identified (mean average age 46); sixteen of whom are now engaged in care. We found 12 people known to have HIV but disengaged from care, six of whom are now re-engaged, and 200 known and under care of our or other centres.

There were 110 indeterminate HIV results, 98.2% had an initial RNA performed that was not detected (0.8% had insufficient sample). Virology guidance is that serology should be repeated – to date 37.3% have attended for repeat serology.

Conclusion: Nurse led management of HIV results has been successful at our clinic. Challenges have arisen with indeterminate results where getting people to attend has been harder to achieve, however the nursing team is monitoring this and escalates concerns. Nurses making the first contact and arranging follow-up has allowed the different teams within our department to communicate easily and organise services to improve management of new diagnoses, and those lost to care, hopefully facilitating better long-term outcomes.

P082 | Using implementation science to support the adoption of routine HIV testing in a suburban emergency department

Olubanke Davies[1], Sara Jane Gutierrez[1], Emily Tridimas[1], Tristan J. Barber[2]
[1]*Epsom and St Helier University Hospitals NHS Trust, London, UK.* [2]*Royal Free London NHS Foundation Trust, UK*

Background: Implementation science (IS) involves using techniques to promote implementation of evidence-based guidance to improve healthcare quality and outcomes. Sutton has an HIV prevalence rate of 2.5/1000 and a high late diagnosis rate. Testing in emergency departments (ED) has been shown to be effective and has been adopted in many UK metropolitan centres. Routine testing in EDs of high prevalence areas is recommended by NICE.

Method: Our project started in November 2019 and was designed to promote uptake of opt-out HIV testing into routine practice through education, training, and incentives. Strategies employed outlined in table 1. We assessed acceptability and adoption of the guidance.

Results: HIV testing increased from average 7.5 tests/month to 592 tests/month (17,165 tests in 28 months). Three previously undiagnosed people and 1 individual with a known diagnosis who had disengaged were identified. Testing numbers ranged from 191-1229/month. Numbers dropped during the following challenging periods:

1. Tendering of the sexual health service
2. IT and sample processing issues on implementation

Table 1. Implementation Science strategies employed

Domain:	Obtaining formal commitments	Designing training	Training
Actors:	Project lead, consent committee, laboratory lead, ED Matron	Project lead, Sexual health advisers	Project lead, Sexual health advisers, HIV testing champion
Actions:	Introductory meetings to provide overview of project.	Training designed outlining benefits of testing including reduction in late diagnoses, morbidity and mortality.	Power point presentations, Q&A sessions, briefings at ED handover.
Action targets:	ED management staff	Trust staff	Doctors trustwide, ED staff
Temporality:	Pre-implementation	Prior to and during implementation.	Prior to and during implementation, ad-hoc
Outcomes affected:	Adoption and Acceptability		
Justification:	Ensure support for testing at multiple levels, gaining approval to implement	Raise awareness and support	Raise awareness of guidance, educate and inform on operational aspects of the project

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

3. Emergence of SARS CoV-2
4. Blood bottle shortage in 2021

Conclusion: This project demonstrated that while implementation of routine opt out HIV testing in ED is feasible and acceptable, it took a long time for the practice to be embedded and it was easily de-railed by external circumstances.

Acknowledgements- This project was conducted with support from an Implementation Science grant by ViiV.

P083 | Risk factors for HIV outcomes among people newly diagnosed with HIV in England

Andres Felipe Mora-Salamanca[1,2], Alison Howarth[1], Alison Brown[3], Ammi Shah[3], Cuong Chau[3]
[1]*Institute for Global Health, UCL, London, UK.*
[2]*Epidemiología y Evaluación en Salud Pública, Universidad Nacional de Colombia, Bogotá, Colombia.*
[3]*UK Health Security Agency, London, UK*

Background: Late HIV diagnosis is related to poor prognosis, delayed ART initiation, and early death. We assessed the risk factors associated with late HIV diagnosis and other HIV health outcomes (AIDS at HIV diagnosis and mortality) among people newly diagnosed with HIV in England during the 2011-2020 period.

Method: Data on new HIV/AIDS diagnoses in England during the 2011-2020 period were obtained from the HIV and AIDS New Diagnoses and Deaths Database and the HIV and AIDS Reporting System. Only adults newly diagnosed with HIV (aged 15 years and over) were included in the analysis. Sociodemographic, epidemiological, and clinical characteristics related to HIV outcomes were analysed by multinomial and binary logistic regression. Those with evidence of recent seroconversion were excluded. A sensitivity analysis was performed due to the significant number of records with missing information (19.7%).

Results: From 2011 to 2020, 47,828 new HIV diagnoses were reported in England, with almost a third (29.2%) diagnosed late. Around half of new HIV diagnoses (52.0%) and over half of the late diagnoses (57.3%) were reported in migrants (those born outside the UK). A small proportion of newly diagnosed people were diagnosed with AIDS at HIV diagnosis (5.1%) and died during the ten-year follow-up (4.2%). Factors associated with a late diagnosis are as follows: male gender (aRRR: 1.28; 95%CI: 1.20–1.36), > 50 years (aRRR: 3.56; 95%CI: 3.24–3.91), being born in Africa (aRRR: 1.46; 95%CI: 1.37–1.56), Asia (aRRR: 1.57; 95%CI: 1.43–1.73), or the Caribbean (aRRR: 1.36; 95%CI: 1.13–1.63), and living outside of London (aRRR: 1.42; 95%CI: 1.35–1.49). Results were similar for AIDS at HIV diagnosis. In general, migrants were less likely to die over the ten-year period than UK-born residents. The number of new HIV diagnoses and late diagnoses diminished over this time among all residents (UK and non-UK born) except for Latin American migrants.

Conclusion: England is successfully reducing undiagnosed HIV, but greater efforts are necessary to accomplish the 2030 zero HIV transmission goal. The migrant community (particularly Latin American migrants) must be included in future public policies and categorised as an HIV key population in the UK.

P084 | HIV outcomes differences between gay and bisexual Latin American migrants and other gay and bisexual populations in England

Andres Felipe Mora-Salamanca[1,2], Alison Howarth[1], Alison Brown[3], Ammi Shah[3], Cuong Chau[3]
[1]*Institute for Global Health, UCL, London, UK.*
[2]*Epidemiología y Evaluación en Salud Pública, Universidad Nacional de Colombia, Bogotá, Colombia.*
[3]*UK Health Security Agency, London, UK*

Background: Although Latin American migrants (LAMs) are one of the fastest-growing migrant populations in England, they still face health barriers that make them unaware of their HIV status, leading to late HIV diagnosis, AIDS, and even death. LAMs living with HIV in the UK are disproportionately gay/bisexual men. We assessed the differences in HIV outcomes among newly HIV-diagnosed gay/bisexual LAMs compared to other populations in England.

Method: New HIV/AIDS diagnoses data were collected by the UK Health Security Agency from 2011 to 2020. Data for people aged 15 years and over were included in the analysis. A comparison between gay/bisexual LAMs and three other gay/bisexual populations in England (1. UK-born, 2. African migrants, 3. European/North American (NA) migrants) was performed through logistic regression. Additionally, a descriptive trend analysis was performed.

Results: Of 1,928 newly diagnosed gay/bisexual LAMs, 16.1% were late diagnosed, 1.1% were diagnosed with AIDS at HIV diagnosis, and 0.4% died by any cause (2011-2020). In general, newly diagnosed gay/bisexual LAMs were not more likely to be diagnosed late than UK-born residents (aRRR: 1.03; 95%CI: 0.89–1.19). However, some gay/bisexual LAMs subgroups (35-49 years, those living in London, those living less than a year in the UK, and those diagnosed in the UK) were more likely

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

to be diagnosed late than gay/bisexual Europe/NA migrants. Additionally, gay/bisexual LAMs were less likely to be diagnosed with AIDS (aOR: 0.47; 95%CI: 0.30–0.74) or die by any cause (aOR: 0.28; 95%CI: 0.14–0.58) than gay/bisexual UK-born residents. Unlike other gay/bisexual populations in England, the number of new HIV diagnoses among gay/bisexual LAMs increased and the number of late diagnoses remained nearly constant during that period.

Conclusion: Although the current HIV epidemiological situation of LAMs living in the UK is not troublesome, the expansion of the LAM population and their increasing number of new HIV diagnoses could become a public health challenge in the coming years. If England is to be successful in ending HIV transmission by 2030, it is necessary to prioritise the LAM community in HIV programmes and policies.

P085 | An assessment of a district general hospital's (DGH) compliance to HIV screening guidelines, and an analysis of barriers to routine testing. Implementation of interventions towards improving routine screening

Chidera Chukwufumnanya Aligbe, Daniel Ntuiabane
Northern Care Alliance, Manchester, UK.

Background: An estimated 103,800 people live with HIV in UK and 7% of them are undiagnosed. Complete elimination of new transmission of HIV infection in the UK is now considered to be achievable and targeted by 2030. To attain this and improve survival rates and quality of life, progress is needed in testing to identify those living with undiagnosed HIV, and commencing treatment early.

Aims: To assess DGH's compliance to guidelines on HIV screening, specifically in Community Accquired Pneumonia (CAP) as an indicator condition.

To evaluate staff awareness of local HIV prevalence rates, of screening recommendations based on this, and to analyse barriers to routine screening.

To reassess for improvement in testing compliance following interventions.

Method: Retrospective analysis of 237 patients diagnosed with CAP between May and June 2022. Records were checked for HIV testing during that admission episode.

Questionnaire responses from 83 doctors, structured to gauge awareness of HIV screening recommendations and knowledge of local prevalence rates.

Educational campaigns to promote HIV screening through a series of teaching sessions, an education board, induction booklet and posters.

Reanalysis of 237 patients discharged with diagnosis of CAP between September and November 2022

Results: Only 24% of patients diagnosed with CAP in May and June 2022 were screened for HIV. They all tested negative. Around 64% of questionnaire respondents were aware of guidelines to screen for HIV in CAP. Interestingly, over half of them (70%) did not screen patients very often. The most common reason for this being a lack of clinical justification.

For prevalence rates, approximately 66 out of 83 doctors did not know that local prevalence rate was 'High' HIV. 100% of Emergency Department (ED) Consultants did not favour screening all patients based on local prevalence rates due to issues around chasing up results.

Following interventions, 49 out of 322 patients diagnosed with CAP were screened for HIV between August and October 2022.

Conclusion: Local compliance to HIV screening guidelines remains persistently poor and lack of awareness is the most common reason. Formal pathways to follow up on results must be agreed on, if routine 'doorstep' ED screening is to be adopted.

P086 | Clinical epidemiology of COVID-19 in Black people with HIV in south London, UK

Lucy Campbell[1,2], Zoe Ottaway[1], Laura Cechin[1], Nisha Patel[1], Lisa Hamzah[3], Denis Onyango[4], Robert Miller[5,6], Shema Tariq[5,6], Frank Post[2,1]
[1]Kings College Hospital NHS Foundation Trust, London, UK. [2]Kings College London, UK. [3]St George's University Hospital NHS Foundation Trust, London, UK. [4]Africa Advocacy Foundation, London, UK. [5]University College London, UK. [6]Central and North West London Foundation Trust, UK

Background: The COVID-19 pandemic disproportionally affected Black communities who were at greater risk of SARS-CoV-2 acquisition, morbidity, and mortality than those of White ethnicity. We describe the clinical epidemiology of COVID-19 in the GEN-AFRICA cohort of Black people with HIV in two South London clinics.

Method: First reported episodes of COVID-19 up to 12/2021 were ascertained by direct questioning and/or medical records review. The cumulative incidence of COVID-19 and vaccination was determined by Nelson-Aalen methods. Pre-pandemic immunovirological and comorbidity status obtained prior to 01/2020 was used to identify risk factors for COVID-19 using Cox regression. We compared characteristics of participants with mild/moderate (not requiring hospitalization) and severe

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Table: Factors associated with COVID-19 (any severity) using Cox regression analysis

		Univariate		Multivariate	
		Hazard ratio	p-value	Hazard ratio	p-value
Age	Per year older	0.99 (0.98, 1.01)	0.31		
Sex	Female (vs. male)	1.27 (1.00, 1.61)	0.046	1.29 (1.01, 1.65)	0.03
Region of ancestry	West Africa	1		1	
	East Africa	1.73 (1.27, 2.35)	0.001	1.72 (1.26, 2.34)	0.001
	South/Central Africa	1.34 (0.97, 1.86)	0.08	1.31 (0.95, 1.82)	0.1
	Caribbean/other	1.27 (0.92, 1.75)	0.15	1.32 (0.96, 1.83)	0.09
AIDS	Yes (vs. no)	1.20 (0.82, 1.74)	0.35		
CD4 nadir	Per 50 cells/mm^3 increase	1.01 (0.99, 1.00)	0.24		
CD4 current	Per 50 cells/mm^3 increase	1.02 (0.99, 1.05)	0.17		
HIV RNA	≥200 (vs. <200) copies/mL	1.44 (0.99, 2.10)	0.06	1.53 (1.04, 2.23)	0.03

CD4 and HIV RNA are pre-pandemic measurements (prior to 01/01/2020)

(requiring hospitalization or resulting in death) COVID-19.

Results: COVID-19 status was available for 1184 (95%) of 1289 GEN-AFRICA participants (mean age 49.1 years; 55% female; median CD4 565; 93% HIV RNA <200), and SARS-CoV-2 vaccination status for 1160; 998 (86%) had received at least one vaccine dose (administered to 50% by 16/02/2021). A total of 310 participants (26.2%) reported a first episode of COVID-19 (any severity), with a cumulative incidence of 6%, 14%, 15% and 22% following the initial, alpha, delta, and omicron waves. Women, people of East African ancestry, and those with detectable HIV RNA were more likely to report COVID-19 (Table). CD4 (current/nadir), class of antiretroviral therapy (ART), and comorbidity status were not associated with COVID-19. Findings were similar when restricted to episodes in 2020 (prior to vaccine availability) or test-confirmed COVID-19. Severe COVID-19 cases (N=34) were more often male (p=0.002), of West-African ancestry (p=0.01), with lower CD4 cell counts (p=0.002), and they more often had a history of AIDS, diabetes mellitus, cardiovascular disease, and chronic kidney disease (all p=0.001) compared to mild/moderate cases; they were also more likely to be on protease inhibitor (PI)-containing ART (p=0.01).

Conclusion: By the end of the second year of the pandemic, 22% of black people with HIV in South London had experienced COVID-19. Immune and comorbidity status were not associated with COVID-19 when all cases were considered but strongly associated with severe COVID-19 disease, as were West-African ancestry and being on a PI.

P087 | HIV testing in community settings in England: results from the 2021 survey

Neil Mackay, James Lester, Suzy Sun, Nicky Connor, Alison Brown
UK Health Security Agency, London, UK

Background: The UK Health Security Agency carries out an annual survey which aims to monitor HIV testing in community settings as these data would otherwise go unreported. These testing services aim to engage populations who may not access traditional Sexual Health Services (SHS), particularly those with greater risk of HIV acquisition.

Method: Contributing community HIV testing services were identified through relevant external and internal stakeholders. The survey collects aggregate number of tests and reactive tests stratified by demographic group and service region.

Results: Overall, 13,555 tests were carried out in 2021 by 23 services, resulting in 56 reactive tests (0.41% reactivity). Most tests were conducted among gay, bisexual and other men who have sex with men (GBMSM) (47%, 6,195/13,127), with a reactivity of 0.4%; equivalent figures for heterosexuals were 38% (5,022/13,127) and 0.38%. This compares to 17% (178,466/1,053,169) taken by GBMSM and 70% (738,082/1,053,169) by heterosexuals attending SHS (specialist and non-specialist), where positivity was 0.25% and 0.06% respectively. Most tests were carried out among people of White ethnicity (56%, 7,329/13,122) with a reactivity of 0.3%; equivalent

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

numbers among those of Black ethnicity were 14% (1,799/13,122) and 0.61%. Reactivity was highest in those born in high HIV prevalence countries compared to those born in the UK (1.3% vs 0.23%). Where known, 25% were first-time testers and reactivity was comparable to those who had previously tested for HIV. Where geographical area of residence information was known, the testing rate in extremely high prevalence areas (≥ 5 diagnoses per 1,000) was more than twice that in low prevalence areas (< 2 diagnoses per 1,000) (52 v 23 tests per 100,000 population). Reactivity was higher in extremely high prevalence areas than in low prevalence areas (0.58% vs 0.24%).

Conclusion: Community testing provides opportunities to diagnose HIV in populations who may not access testing via traditional routes as 1 in 4 individuals were first-time testers. Moreover, community services are shown to reach individuals with high risk of HIV acquisition such as those of Black ethnicity, those born in high HIV prevalence countries and those residing in areas of high HIV prevalence.

P088 | UKHSA engagement data: a useful tool for HIV centres to identify patients not in care

Hannah Alexander[1], Melanie Rosenvinge[2], Lucy Wood[2], Gregory Muller[2], Jane Hazell[3], Cuong Chau[4], Veronique Martin[4], Kate Childs[5]
[1]North Middlesex University Hospital, London, UK. [2]Lewisham Hospital, London, UK. [3]Royal Free Hospital, London, UK. [4]UKHSA, London, UK. [5]King's College Hospital, London, UK

Background: UKHSA undertook an analysis of all people living with HIV (PLWH) who had attended an HIV unit after April 2017 but had not been seen from March 2021 to March 2022. The total was 11,660 potentially lost to follow up (LTFU) and the highest burden was seen in urban areas. The details of those patients were sent to what UKHSA judged was their most recent HIV unit.

Method: To determine the accuracy of the UKHSA data, four London units cross-checked the UKHSA data against clinic records.

Results: The four units serve a combined approximate cohort of 8450 PLWH and UKHSA estimated that 868 had not attended over 12 months (10%). Cross checking those patients with clinic records determined that 265 were LTFU (31%). 84 had been LTFU but had returned, either from abroad or after recall (10%). 185 (21%) were in care; the majority of these at a single clinic where an IT error had failed to submit this data.

21% patients had moved or likely moved abroad (n= 182). An additional 98 had TOC to another unit (11%) but this had not been detected by matching across the HARS database.

Cohort size/ number not in care according to UKHSA	Unit 1 (1400/ 132)	Unit 2 (3100/ 337)	Unit 3 (950/ 105)	Unit 4 (3000/294)
LTFU	35	157	11	62
Returned to care	26	41	13	4
Abroad	18	77	31	38
Suspected to be abroad	6	3		9
Transfer of care (TOC) to a different unit	26	22	20	30
Died	13	17	8	16
In care	8	20	22	135

Conclusion: Of the people classed as LTFU by UKHSA in this London cohort, 40% were LTFU at the point of analysis. This may be lower than at non urban units with less transient populations. Calculating the scale of the issue and correctly identifying who is LTFU is vital to achieve 0 transmissions by 2030. This underscores the need for accurate HARS reporting by clinics, including ensuring that regularly updated lists of those who have moved abroad, died and transferred care are submitted to UKHSA.

P089 | Prevalence and presentations of HIV in asylum seekers in the London borough of Hounslow

Alissa Amrose, Susannah Ramshaw, Ellen Dwyer, Lauren Bull
West Middlesex University Hospital, London, UK

Background: Early engagement in care and initiation of antiretrovirals in people living with HIV improves morbidity and mortality.

Public Health England data shows over 60% of all new HIV diagnoses in the UK were amongst people born overseas. 1/3 of migrants with a known diagnosis presented later than a year after arrival. Few studies have analysed outcomes for people seeking asylum in the UK, despite known health inequalities within this population. This case-note review describes HIV presentations and prevalence in asylum seekers in the London Borough of Hounslow in 2020-2022 .

Method: Review of electronic records of asylum seekers attending sexual health services or undergoing routine

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Diagnosis status	New	New	New	Known	Known	Known	Known
Country of Birth	Ukraine	Honduras	El Salvador	Unknown	DRC	Unknown	Romania
Presenting CD4	159	954	84	352	81	971	Unknown
HIV Viral Load at presentation	25300	966	39200	<20	68000	<20	<20
Days in UK prior to linkage with services	21	180	60	14	34	79	Unknown
Presentation	A&E testing: haematemesis	A&E testing: Menorrhagia	A&E testing: Overdose	Antenatal Services.	GP referral	Self-referral	Sexual Health Services: Gonorrhoea

blood borne virus screening in A&E from 2020 in the London Borough of Hounslow.

Patients included if addresses matched home office accommodations or they had documentation of asylum status.

Demographics, comorbidities, presentations to services and HIV-related parameters were recorded.

Results: 108 asylum seekers underwent HIV testing. 7 (6.48%) tested positive for HIV, 3 with a new diagnosis, and 4 with a previously known diagnosis. 5/7 were female, and 6/7 were heterosexual .

4/7 were registered with a GP. 5/7 required English translation services. 2/7 were coinfected with Hepatitis B. 1/7 presented with an AIDS defining illness (Non-Hodgkin Lymphoma).

Conclusion: HIV prevalence in asylum seekers was higher than the prevalence within the Hounslow borough (6.48% vs 0.38%). Presentations to services were late (50% CD4 count <200), with the majority requiring interpreter services. This highlights the need for proactive testing, including A&E screening, and outreach work in this vulnerable population.

P090 | Comparing short-term mortality between people with and without HIV admitted to the intensive care unit, 2000–2019

Nicholas Bakewell[1], Caroline A Sabin[1], Tanmay Kanitkar[2], Maggie Symonds[2], Oshani Dissanayake[2], Stephanie Rimmer[2], Amit Adlakha[3], Marc Lipman[2], Sanjay Bhagani[4], Banwari Agarwal[3], Robert F Miller[2]

[1]Institute for Global Health, University College London, UK. [2]HIV Services, Royal Free Hospital, London, UK. [3]Intensive Care Medicine Services, Royal Free Hospital, London, UK. [4]Research Department of Infection, University College London, UK

Background: With advances in both antiretroviral therapy (ART) and intensive care management, the survival of people with HIV admitted to intensive care units (ICUs) is approaching that of people without HIV. We conducted a matched-cohort study of people with and without HIV admitted to the ICU at a large hospital to compare short-term mortality over the period 2000-2019.

Method: People with HIV were matched to people without HIV using a 1-to-2 ratio on (calendar) year (of admission), age, Acute Physiology and Chronic Health Evaluation (APACHE)-II and sex. Logistic regression models fitted using independence estimating equations were used to describe the population-averaged effect of HIV on the odds of short-term (i.e., in-ICU and in-hospital) mortality (during a patient's first admission to our ICU). Predicted population-averaged probabilities of short-term mortality were plotted to visualise the estimated effects.

Results: 177 people with HIV were matched to 354 people without HIV (71.2% vs. 71.2% male; (mean) age: 47 vs. 48 years, APACHE-II: 18 vs. 17, year: 2013 vs. 2013). As a result of matching, few between-group differences were observed. Among people with HIV: 73.4% were on ART, 51.2% had plasma HIV-RNA$\leq$50 copies-per-mL and mean blood CD4 count 219 cells-per-μL. People with HIV had a mean ICU stay of 10 days vs. 7 for those without HIV, and higher in-ICU (24.3% vs. 15.3%) and in-hospital (31.6% vs. 20.1%) mortality.It was estimated that, on average, people with HIV had 1.69-fold higher odds (95% confidence interval: 1.03-2.76) of in-ICU mortality than people without HIV (adjusted: year, age, APACHE-II, sex); results were similar for in-hospital mortality (adjusted-population-averaged odds ratio: 1.86 (1.19-2.91)). There was no evidence that this effect varied by year for in-ICU (p-interaction=0.90) and in-hospital (p-interaction=0.46) mortality. Although predicted population-averaged probabilities of short-term mortality declined over the period 2000-2019 at similar rates for both groups, people with HIV had persistently higher probabilities of short-term mortality (**Figure**).

Conclusion: Despite improved survival of people with HIV, our findings suggest that people with HIV continue to have higher short-term mortality compared to matched people without HIV in our ICU cohort. Given

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

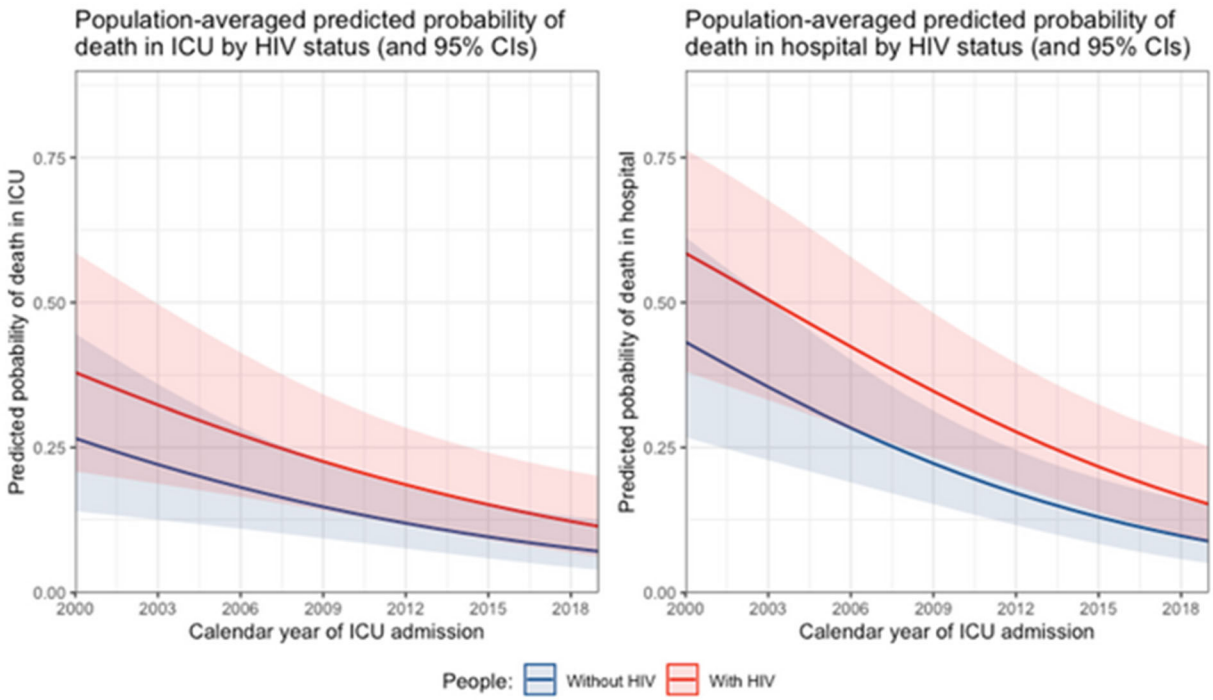


Figure. Predicted (models **without** an HIV-year interaction) population-averaged (i.e., an "average" patient in our ICU) probabilities of in-ICU (**left**) and in-hospital (**right**) mortality (95% confidence intervals (CIs)) by HIV status between 2000 and 2019

our small sample size, confirmation in other ICUs is needed.

P091 | How use of cut-off index (COI) helps clinicians manage reactive HIV test results that arise from service users accessing Sexual Health London (SHL), a regional STI/HIV postal testing service

Sophie Jones, Sara Day
Chelsea and Westminster NHS Trust, London, UK

Background: Online postal testing services now represent the largest provider of HIV tests in London. Since SHL launched in 2018 >10,000 reactive HIV test results have been provided. We describe how using the COI helps clinicians manage the expectations of service users receiving reactive HIV results.

Method: SHL use the Roche Elecys HIV Duo test on self-sampled capillary blood (sensitivity 100%, specificity 99.87%). Due to a limited volume of capillary blood available service users with non-negative results (low reactive (COI <10)) and reactive (COI ≥10)) are all encouraged to have confirmatory testing performed, preferably at a sexual health clinic (SHC).

Since the pandemic, recipients of low reactive results that do not report significant HIV risk are given the option to repeat the SHL HIV test kit instead of attending SHC for confirmatory testing. Those with a reactive HIV screening result are still encouraged to attend SHC.

The confirmatory outcomes of reactive results received 01/05/2019-01/09/2022 and low reactive results received 01/01/2021-01/01/2022, were identified from an e-note review.

Results: Of 534 reactive screening results the confirmatory tests comprised 297 (56%) positive, 169 (31%) negative, 68 (13%) not known. 466/534 (87%) received confirmatory testing. Where confirmation outcomes are known 64% confirmed positive.

Of 1314 low reactive screening results the confirmatory tests comprised 23 positive (1%), 1107 (84%) negative and 184 (14%) not known. 1130/ 1314 (86%) received confirmatory testing. Where confirmation outcomes are known 2% confirmed.

All service users confirmed with previously undiagnosed HIV infection were linked to HIV outpatient care.

Conclusion: With low and decreasing national positivity rates of undiagnosed HIV and increasing numbers of individuals testing using online services, more false reactive HIV results may be generated which can be

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

distressing to service users and challenging for clinic staff to manage. Offering repeat SHL test kits, has ensured high proportions of service users obtain confirmatory testing which has been found to be acceptable and mitigates unnecessary clinic visits.

P092 | Campaigning for HIV/AIDS prevention: a community-led approach to widen access and uptake of HIV testing.

Alessandro Ceccarelli[1], Lisa Power[1], Adam Williams[2], Zoe Couzens[3], David Gillespie[4], Jonathan Underwood[5], Darren Cousins[6,2]

[1]Fast Track Cardiff and Vale, Cardiff, UK. [2]Cardiff University, UK. [3]Public Health Wales NHS Trust, Cardiff, UK. [4]Centre for Trials Research, Cardiff University, Cardiff, UK. [5]Cardiff and Vale University Health Board, Cardiff, UK. [6]Cardiff Royal Infirmary, UK

Background: We present an evaluation of the impact of a volunteer-produced and community-led strategy to promote HIV testing as part of Wales HIV Testing Week 2022. This was delivered by Fast Track Cardiff & Vale - a collaboration of clinicians, local authorities, universities, and community organisations working to prevent late diagnoses.

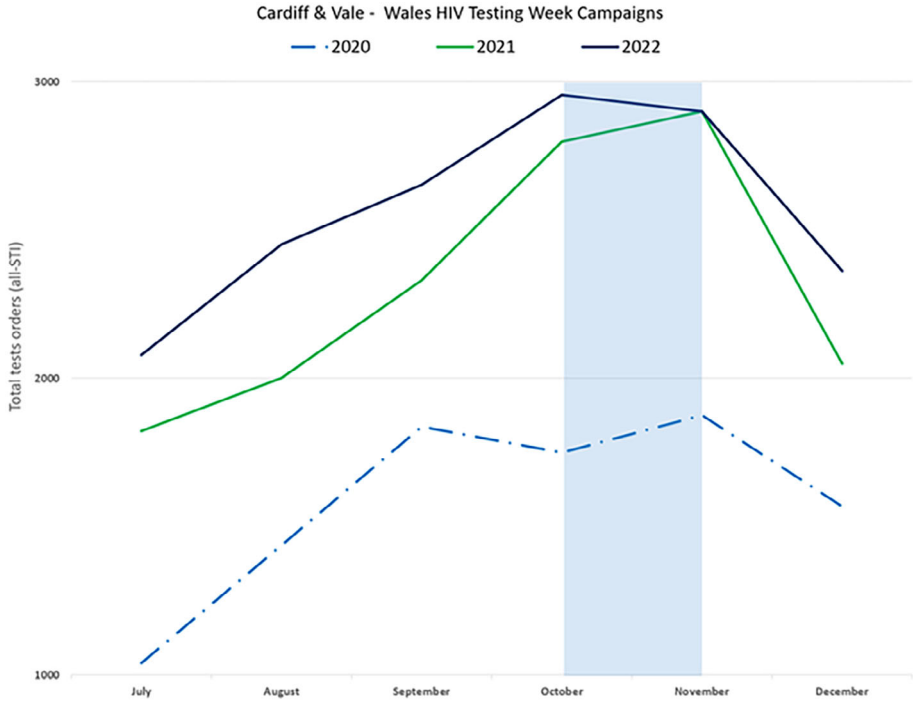
Method: The campaign runs in Wales in November, mostly online, asking people to order a postal test kit offered by Public Health Wales. The 2022 campaign involved Welsh community champions, instead of TV celebrities involved in the 2021 campaign, to produce advertising material. Data were collected from social media and "click-tracking". Pre-campaign advertising starts in October, with impact measurable until December; therefore, all-STI postal test order data include figures from October to December (2020 to 2022).

Results: Click-trackers identified an increase (+179%) in engagement with the campaign: from 558 clicks to the website to order test kits in November 2021; to 1,558 clicks in November 2022. Test orders increased in the Cardiff and Vale area from 5,195 in 2020 trimester; to 7,758 in 2021; and to **8,206** in 2022 (see Figure). Online reach increased during the 2022 campaign period on Facebook (+49%) and the website (+21%); however, the international engagement on Twitter (-17%) and Instagram decreased slightly.Welsh community champions had more impact compared to TV celebrities from previous years in generating engagement and clicks. Celebrities resulted in higher reach on certain platforms, but the community-based approach resulted in more clicks and tests ordered. Location data showed an impact in Welsh postcode areas – suggesting local take-up.

Conclusion: The campaign had a significant impact on social media engagement which translated into increased clicks and tests ordered on the online service, particularly where the statutory services struggle to engage.

Community-led and Welsh-specific content generated a much greater engagement, and we believe that a grassroots approach is more effective in Wales.

Further research is needed to explore and reduce digital exclusion. The challenge of using volunteers is



14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

maintaining long-term momentum: considering the lack of funding, the campaign was successful; however, there is a need for greater resources to empower the sector to continue health promotion.

P093 | Service evaluation of the clinical impact of the blood bottle shortage on opt-out HIV testing in sexual health services and the uptake of online HIV self-testing

Jasmine Limbu[1], Darren Cousins[1,2]
[1]*Cardiff University, UK.* [2]*Cardiff Royal Infirmary, UK*

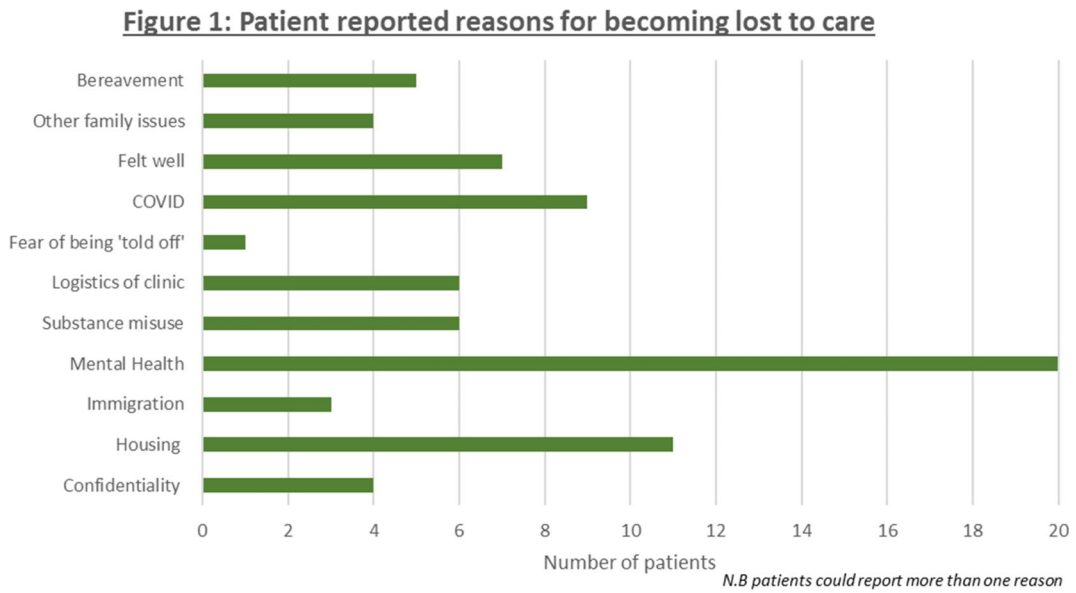
Background: BHIVA guidance recommends HIV testing in all UK sexual health clinic attendees. In late 2021, a national blood bottle shortage meant access to HIV testing in the sexual health service was severely restricted.
An informal protocol locally recommended all patients to be redirected for testing to the national postal online self-sampling service unless they fit the local criteria for HIV point-of-care testing (POCT) which included those on PrEP, GBMSM and people identified with vulnerabilities which may make online postal testing more challenging.
Aims: 1. To investigate the impact of the blood bottle shortage on HIV testing for sexual health clinic attendees in an inner city service where local HIV prevalence is estimated at around 2 per 1000 population.
2. To investigate differences in testing patterns between demographics groups
Method: Data were analysed of sexual health attendees between August - December 2021 who did not have a HIV test in clinic. Patient use of HIV online self-testing and demographics were examined to determine if they tested after their clinic appointment or should have been offered an in-clinic HIV test.
Results: 1009 patients were identified during the time period who did not test in clinic, of whom 92 (9.1%) used the self-sampling service. 90.9% of service users did not self-test for HIV. 42 patients did not have any HIV testing but met the criteria for in-clinic testing including patients identified with vulnerabilities. No HIV reactive tests were found in those who used the service.
Conclusion: The blood bottle shortage did have an impact on the HIV testing in sexual health clinic attendees and most service users did not self-sample for HIV as advised. Appropriate recall of patients that had missed HIV testing opportunities should be considered.
Use of a single pathology supplier to local laboratories may have delayed the return to usual testing practices. HIV awareness and HIV self-testing is an area of medicine that still requires promotion and education.

P094 | Patients living with HIV (PLWH) not in care: what are the barriers to accessing treatment?

Ayoma Ratnappuli, Zoe Ottaway, Noeleen Bennett, Julie Barker, Kate Childs
King's College Hospital, London, UK

Background: Across Southeast London, the Elton John Aid's Foundation funded a Zero HIV Social Impact Bond (SIB) to reengage PLWH lost to HIV care. As previously presented; across three NHS trusts, 153 PLWH were reengaged over two years.
Our hospital accounted for 45 of these; we report on the reasons why patients were lost to care and the clinical consequences.
Method: Qualitative data on SIB reengaged patients were collected through a set questionnaire or from electronic notes review. Quantitative data on viral load (VL) was collected from electronic patient records (EPR). Continuous variables are expressed as medians (IQR).
Results: Of the 45 patients reengaged into care, 32 (71%) were female, 25 (56%) Black African and 14 (31%) Black Caribbean. The median age was 49 years (43-57).
Average time out of care was 636 days (469-930). Prior to disengagement, 23 (51%) were virally suppressed with VL <200 copies/mL (22 VL <50) and median CD4 416 cells/uL (241-563).At the time of re-engagement we sought to investigate the barriers to accessing care. The most common patient reported reason was mental health difficulties, followed by 'competing needs' including housing/family issues (Figure 1).
At re-engagement all patients were off ART. Median VL was 35,452 copies/mL (12,150 – 101,703) and median CD4 264 cells/uL (175-411) with 32 (71%) patients with CD4 <300 cells/uL. Following re-engagement 7 patients (15%) experienced significant morbidity including 2 AIDs-defining malignancies, 2 Hepatitis B reactivations and 3 renal impairment.
One year later, 26 (65%) of the cohort have a VL <200 but 9 (23%) people have disengaged again despite enhanced follow up and communication.
Conclusion: The majority of reengaged patients were female, of black ethnicity. Half were virally suppressed prior to disengagement. Reported barriers to accessing care included mental health and competing social/family needs.
Following re-engagement, the majority became virologically suppressed but there was a morbidity cost including immunosuppression and AIDS-defining illnesses in a minority.
HIV clinics must focus on patients lost to care as they are at risk of serious avoidable illness. Work is needed to evaluation interventions which can ameliorate barriers to accessing HIV care.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License



P095 | Towards positive practice: people living with HIV and experiences of primary care

Joshua Wharton, Colin Armstead
George House Trust, Manchester, UK

Background: People living with HIV routinely report excellent standards of care in HIV designated clinical settings but experiences in primary care settings have not always been as positively reported.

George House Trust explored the experiences of people living with HIV within the primary care arena and used the information and intelligence gained to produce a report and make appropriate recommendations.

The focus of policy and decision makers is often on the provision of specialist HIV care. We believe it essential that the role of primary healthcare is acknowledged as significant when considering the health and wellbeing of people living with HIV.

Method: A research and engagement exercise was carried out, supported with funding from Manchester City Council Population Health, in late 2021.

Methods for gathering information and experiences were as follows:

- An online survey sent to people accessing George House Trust services with 149 responses received.
- Five separate focus groups – mostly held online – facilitated specifically for women, African people, people aged over 55 and people identifying as LGBTQ+ with a total of 22 attendees.
- A 'round table' discussion service users, a HIV clinician and lead HIV GP

Questions were designed to elicit information about whether participants:

- had told their GP that they were living with HIV
- felt confident about discussing HIV with their GP
- felt that their GP had adequate knowledge about HIV
- were happy with the way that healthcare information was shared

Results: Key findings were as follows:

- 97% of people had told their GP that they were living with HIV
- 78% of people felt confident discussing HIV with their GP
- 52% felt that their GP had adequate knowledge about HIV

Conclusion: A key theme in the survey narrative feedback was peoples' lack of confidence in GP's knowledge and understanding of contraindications when prescribing medication.

A report entitled 'Towards Positive Practice' was produced summarising the findings and making recommendations. Included amongst other recommendations was a GP survey to ascertain baseline HIV knowledge and identify gaps which might be addressed by targeted HIV awareness training.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P096 | *Fifty Over 50*: a collection of individual reflections on growing older with HIV

Mike Newman[1], Denis Onyango[2], Tristan J Barber[3–5], Nadi Gupta[6,7], Matthew Hodson[8], Cheryl Gowar[9], Parminder Sekhon[10], Garry Brough[11], Sophie Strachan[12], Jim Fielder[13], Alex Sparrowhawk[14], Jo Josh[15]
[1]Merck Sharp & Dohme UK, London, UK. [2]Africa Advocacy Foundation, London, UK. [3]British Association for Sexual Health and HIV (BASHH), Lichfield, UK. [4]Royal Free London NHS Foundation Trust, UK. [5]Institute for Global Health, University College London, UK. [6]British HIV Association (BHIVA), Letchworth, UK. [7]Rotherham NHS Foundation Trust, UK. [8]NAM aidsmap, London, UK. [9]National AIDS Trust, London, UK. [10]NAZ, London, UK. [11]Positively UK, London, UK. [12]Sophia Forum, London, UK. [13]Terrence Higgins Trust, London, UK. [14]UK Community Advisory Board, London, UK. [15]Unaffiliated, London, UK

Background: *Fifty Over 50* is a unique listening project focused on people who are growing older with HIV.
Fifty Over 50 sought meaningful, qualitative accounts of experience, to add to the body of evidence and insights on HIV and ageing, bringing to light the range of issues that exist for people living with HIV as they age.
Fifty Over 50 is organised and funded by MSD UK.
Method: The Whole Person Care (WPC) Partnership, a coalition between MSD UK and several HIV community and professional organisations, worked to form a discussion framework sympathetic to the diverse nature of those impacted by HIV.
Fifty Over 50 set out to speak with 50 people living with HIV aged 50+ willing to collaborate and share their first-hand accounts.
Contributors ranged from the age of 50 to 80, were diagnosed at a range of times, and as much as possible represented a balance of genders and racial and ethnic identities.
Results: Some of the key themes from the interviews included:

- Access to health care & management of comorbidities
- Social care
- Mental health & social isolation
- Stigma & self-stigma
- Impact on women

Conclusion: Resulting policy recommendations (abbreviated):

1. UK Governments must recognise that the success of any plan to sustainably eliminate new HIV transmissions is linked with enabling people living with HIV to live well throughout their life.
2. 'Living well with HIV' targets should be developed in coordination with the HIV community and be formally adopted into the fourth objective of the HIV Action Plan. Quality of life issues with measurable targets should also be included in the Action Plans of both Scotland and Wales.
3. Commissioning should be person-centred and ensure funding follows the person so that HIV-related healthcare professionals can provide joined-up, holistic care as people living with HIV age.
4. Tools to drive progress and measurements to monitor progress should be immediately implemented – and mandated through national policies.
5. Leadership and accountability for driving national improvements should be spearheaded by national HIV quality of life clinical and community champions.
6. Adequate investment is required to enable more research with a specific focus on HIV and ageing.

P097 | 'Attitudes hadn't changed as much as I'd thought': experiences of HIV stigma in the north east of England

Claire Borthwick[1], Chloe Dillon[2], Helen Anderson[3], Louise Fernandes[4], Kate Reilly[4], Naomi Gray[3], Ian Watson[3]
[1]South Tyneside and Sunderland NHS Foundation Trust, Sunderland, UK. [2]Newcastle University, Newcastle upon Tyne, UK. [3]Blue Sky Trust, Newcastle upon Tyne, UK. [4]Newcastle upon Tyne Hospitals NHS Foundation Trust, UK

Background: HIV stigma, defined as negative attitudes and beliefs held about people living with HIV, is one of the biggest current challenges in the response to HIV. We sought to gather examples of HIV stigma from members of the Blue Sky Trust, a charity supporting people living with HIV in the North East of England to understand the extent of the issue locally and collect ideas on how to tackle it.
Method: Surveys (N = 20) and interviews (N = 6) were used to collect demographic data and experiences of stigma. Thematic Analysis was used to analyse qualitative data. Most participants were White British (85%),

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

aged between 50-59 years (55%), male (65%), and had lived with HIV for more than 10 years (55%). Half identified as heterosexual.

Results: HIV stigma had been experienced by 85% of participants. Dating apps (53%), workplaces (47%), dating (41%) and healthcare (41%) were the most common sources. Stigma caused people to feel mentally (88%) and physically (77%) worse, embarrassed (48%) and socially isolated (47%). It was linked with worries about disclosing the diagnosis. Four main themes were identified from interviews with six participants. Themes: 1) diagnosis and disclosure, 2) source and type of stigma, 3) the impact of stigma, and 4) living well and responding to stigma.

Promotion in public places (28%), education (22%), training (17%), and sexual health education in schools (11%) were suggestions for tackling stigma. The general public, the LGBTQ+ community, healthcare professionals and police were suggested targets of interventions.

Conclusion: HIV stigma is negatively affecting people's quality of life. Routinely gathering experiences of stigma as they occur could be helpful for supporting people. This would have the additional benefit of providing ongoing data on the places where stigma occurs to inform interventions. Accessing peer support is important, ensuring people receive a balanced view, including both positive and stigmatised reactions to sharing a HIV diagnosis. Signposting to legal and practical sources of support is important for empowering people to take action against perpetrators of stigma.

P098 | Addressing internalised stigma in HIV clinics: a London Fast-Track Cities Initiative (FTCI) project

Garry Brough[1], Harun Tulunay[1], Hannah Alexander[2]
[1]Positively UK, London, UK. [2]North Middlesex University Hospital, London, UK

Background: Research shows that perceived and internalised stigma can negatively affect wellbeing and attendance in care. HIV peer support can help people adjust to diagnosis and improve engagement with care and treatment. FTCI London developed a framework to address internalised stigma and commissioned six 1-year Empowerment Programmes across the HIV voluntary sector.

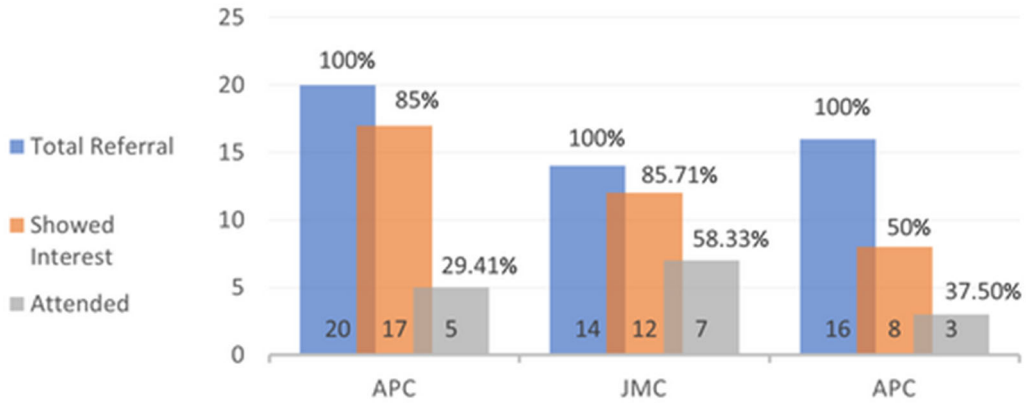
Method: Positively UK developed six peer-delivered workshops covering: external perceptions of HIV; understanding treatment and transmission; intersecting stigmas; building self-esteem, self-advocacy skills and resilience; talking to others about HIV; connecting with peers and support services.

We collaborated with Alexander Pringle Centre (APC) and Jonathan Mann Clinic (JMC) to deliver in-clinic evening workshops for 3 cohorts of patients identified as having past or current challenges in engaging in care and being unlikely to access external HIV support. APC recruited via the medical team, JMC via their peer support team. Our training coordinator contacted all those referred to explain the workshops and register people. We undertook pre- and post-training evaluations, using a 4-point Likert scale.

Results:

Shift work and childcare negatively impacted evening attendance.

Fig.1 Engagement Cascade



14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

None of APCs attendees had ever spoken to another person with HIV or accessed voluntary sector support. By the end of the workshops, all had registered with Positively UK for additional support and services.
JMC recruited via their Peer Support team, so all participants had accessed clinic-based peer support, but none had accessed external support. All bar one registered with Positively UK.
Demographics across clinics were varied for age, length of diagnosis, gender and sexuality. However, aside from one British-born male (of Black African heritage) all attendees were migrants, with a majority of Black African origin.
Participants reported an average full point increase in agreement to the statements:

- My HIV status does not limit my life on a day-to-day basis
- I have enough knowledge about U=U
- I have enough knowledge around living well with HIV

Conclusion: While the benefit to those who attended was clear, groupwork itself can be a barrier for those experiencing HIV stigma. Access to one-to-one in-clinic peer support provided a crucial foundation in reducing internalised and perceived stigma, resulting in significantly higher engagement.

P099 | Measuring what matters: how do we assess sleep in HIV care?

Michelle Croston[1], Kathryn Bourne[2], Emily Hurt[3], Nicola Galbraith[4], Mark Hayter[3]
[1]*Faculty of Medicine and Health Sciences, University of Nottingham, UK.* [2]*Infectious Diseases, Greater Manchester Mental Health NHS Foundation Trust, UK.* [3]*Department of Nursing, Manchester Metropolitan University, UK.* [4]*HIV Standards Support Team, Gilead Sciences Ltd, London, UK.*

Background: Despite medical advances, people living with HIV experience significant issues affecting health-related quality of life; one such issue is sleep. Although poor sleep quality is common in this population, there remains a lack of understanding of how to identify sleep issues within clinical practice to improve outcomes for people living with HIV.
Method: A scoping review was conducted searching Cinahl, Pubmed, Psychinfo and the grey literature. Inclusion and exclusion criteria were developed with data selection and charting undertaken by two reviewers using a qualitative content approach.
Results: Out of 2932 retrieved articles 60 met the inclusion criteria. Publication dates ranged from 1992 to 2021, a third of papers were published in 2020 and 2021 (n = 17). Over half the studies were conducted in the US (n = 35), and the majority were cross-sectional in design (n = 48). Across all studies there were 25,904 participants, of which 21,561 were people living with HIV. The following themes were identified when exploring how sleep was measured; range of methods available to assess, self-reported and objective.
The review found a number of different measures of sleep used, with the most favoured approach being the PSQI (N=48). Due to the variety of approaches used (n=18) there was a lack of consistency to what aspects of sleep were being explored, and in many cases why the measure was chosen.
Conclusion: Clinicians need more awareness of the different types of sleep difficulties and disorders there are, consider the aspect of sleep they are concerned about and choose a suitable assessment tool or tools. Future research should explore the effectiveness of different methods of assessing sleep to establish the best way to monitor sleep within clinical practice.
The results help healthcare professionals consider the multivariant nature of sleep to identify appropriate measures of sleep to be explored further, including potential alternatives to the PSQI such as the SATED questionnaire or a single question approach.
Despite all 60 studies highlighting sleep issues there was a lack of meaningful clinical recommendations on how findings could be used to improve outcomes for people living with HIV.

P100 | 'I'm sorry I didn't attend; I was getting on with my life.' A study of issues affecting people living with human immunodeficiency virus (HIV) from engaging in care

Julie-Anne Field
Outpatients East Barking Hospital, Barking, UK

Background: Staff spend considerable time each week trying to re-engage/ retain people in care - previously referred to as Lost to Follow Up or Need to Find (NTF). This study seeks to understand the challenges/ psychosocial issues people face that impact their engagement with treatment, to enable adaptations to improve patient-centered access and reduce clinic workload.
Method: We identified episodes of NTF (no attendance for 6 months or more) in our records between 30 September 2019 to 31 December 2022. Some people had several episodes. All people located or returned to

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

treatment were asked what factors kept them from attending. Clinical notes were examined, and the reasons analised.

Results: We examined 399 episodes of NTF amongst 304 individuals. 208 incidences (212 people) returned to care. The average CD4 count was 604.5 10^6/L For people with several episodes their lowest CD4 count was recorded.

19 factors were stated by people as contributing to non-attendance. Most stated more than one. Most cited were:

Reason	N= 212 (%)
Communication problems	121 (57.07%)
Visiting or living abroad	107 (50.47%)
Mental Health problems (including admission)	44 (27.75%)
Lockdown/COVID19	41 (19.33%)
Drug or alcohol use	36 (16.98%)
Difficulties accepting diagnosis	30 (14.15%)
Difficulties getting time off work	25 (11.79%)

92 (30%) people: 51 (55%) attending different treatment centre, 20 (21%) no longer United Kingdom residents, 11 deceased (11.9%) 10 (10.8%) untraceable.

Conclusion: We concluded that people who feel well but are distracted by other challenges in their lives are more inclined to miss appointments/ disengage. We endeavour to ensure all people understand the importance of attendance and adherence to ensure their virus remains undetectable. Assessment is needed to determine if a face-to-face appointment is the most appropriate method of contact, as use of video/ telephone calls can reduce the attendance burden for service users whilst maintaining engagement.

Communication and administration associated with NTF is time consuming in time poor clinics. Utilising data available from UK Health Security Agency (UKHSA) can help identify people accessing treatment elsewhere / other outcomes. Enabling staff to focus engagement work to those with additional support needs, e.g. related to mental health or drug use.

P101 | Social prescribing for people living with HIV

Emily Edwards[1], Bridie Howe[2]
[1]*University of Aberdeen, UK.* [2]*Highland Sexual Health, Inverness, UK*

Background: Research has shown individuals living with HIV have higher rates of mental health conditions and when these conditions are present, it is harder for individuals to engage with services.

In Scotland the 'UNAIDS 90-90-90 target' has been achieved. However, it is now understood a 'fourth 90' target needs to be added, which focuses on 'good health – related to quality of life'. Thus, treating a patient living with HIV must include psychological support. Social prescribing has the potential to improve an individual's mental well-being. It is where health professionals recommend (self-referral) or refer people to a range of local, clinical, third sector services. It is currently mainly used in primary care by GPs, practice nurses and link workers.

The aims of this investigation were to explore what mental health conditions needed support within this community, what current treatments were being prescribed, whether people living with HIV would engage with social prescribing and what are the barriers to accessing these services.

Method: To investigate a multiple-choice questionnaire (15 questions) was designed. The data collected was both qualitative and quantitative, depending on the question. The project aimed for a sample size of 10%. Participants answered the questionnaire during their biannual consultation with the HIV specialist nurse or annual consultation with the HIV consultant. The 'British HIV association (BIHVA) standards of care 2018 report was used to assist in composing the questions.

Results: 56.25% of participants had been diagnosed with a mental health condition/s. The main treatment was selective serotonin re-uptake inhibitors alone. 62.50% would consider participating in 'walking in nature', making it the most popular type of activity. With regard to barriers - 43.75% of participants expressed concern about not being able to keep their diagnosis confidential.

Conclusion: The data shows that those living with HIV in the highlands have higher rates of mental health conditions compared to the general Scottish population. Of those diagnosed with a mental health conditions none had been offered social prescribing as a conjunctive therapy. 93.75% of individuals would be willing to engage with social prescribing, or already had social prescribing style activities as part of their lifestyle.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P102 | 'Start Making Sense': a qualitative exploration of a trauma psychoeducation group for people living with HIV

Peigi Askew[1], Kate Reilly[2], Alex Fradera[3]
[1]NHS Greater Glasgow and Clyde, Glasgow, UK. [2]Newcastle upon Tyne Hospitals NHS Foundation Trust, UK. [3]University of Glasgow, UK

Background: People living with HIV experience high rates of mental health issues and are disproportionately impacted by psychological trauma. Exposure to trauma can play a role in acquiring HIV, contribute to negative health outcomes and impact transmission behaviours. This qualitative study explored participants' experiences of 'Start Making Sense', a new Phase 1 trauma psychoeducation group for people living with HIV.

Groups are increasingly valued as the foundation for subsequent therapeutic work in a phased model of trauma treatment and this format may have particular relevance to this population as, due to HIV-related stigma, social isolation is a common experience for people living with HIV.

Start Making Sense aims to connect, educate and empower individuals living with the dual stigma of HIV and trauma. The group is run in collaboration between an NHS trust and a third sector charity, Blue Sky Trust, supporting people living with HIV. The group includes five weekly two-hour sessions, with up to 10 participants and two facilitators. It aims to give people an understanding of how trauma affects their minds and bodies so they can learn to reframe their symptoms as survival strategies and develop new self management skills. Psychological models are shared and discussed as predicaments endemic to the human condition, maximising transparency and reducing hierarchy.

Method: Two focus groups were held with nine participants who had completed the group.

Results: A thematic analysis of the data identified five main themes: (1) connecting with others living with HIV and trauma; (2) gaining insight and control over trauma symptoms; (3) developing self-compassion; (4) practical challenges and emotional difficulties; and (5) 'Start Making Sense': a catalyst for change and hope.

Conclusion: The findings suggest that a Phase 1 psychoeducation group intervention has the potential to connect, educate and empower individuals living with HIV and trauma. Benefits included reducing isolation, gaining insight into the effects of trauma and control over symptoms, increased self-compassion and self-efficacy.

The findings also show the potential of siting groups in community settings that people can connect to beyond the timeframe of the intervention, making their relationships with each other and the setting more likely to be sustainable.

P103 | How did the COVID pandemic impact anxiety and health anxiety in women living with HIV?

Joanne McCarthy[1], Rinesa Lumi[2]
[1]Positive East, London, UK. [2]Queen Mary University of London, UK

Background: The Covid pandemic and subsequent lockdown had implications on the population's mental health, particularly amongst society's most vulnerable members. We looked at the impact of the Covid pandemic on both generalised anxiety and health anxiety in women living with HIV (WLHIV). This research aimed to examine any increases in anxiety, what caused these increases, and how WLHIV dealt with them.

Method: 12 WLHIV, aged 31-62 years old, completed recognised anxiety questionnaires (General Anxiety Disorder (GAD-7) and Health Assessment Questionnaire (HAQ)) to ascertain levels of anxiety and health anxiety respectively.

Participants also responded to two open-ended questions: what made you most anxious during Covid lockdown and how did you deal with it?

Results: Pre-covid GAD-7 scores averaged 6.3 indicating mild anxiety throughout the sample compared to post-covid scores of 12.9, which indicated moderate anxiety. Average HAQ scores were 21.3 indicating moderate health anxiety throughout the sample.

Lack of self-advocacy skills (in relation to health) and isolation were commonly reported as being causes of anxiety; additional reasons included pre-existing health issues and inability to access medical appointments and support. Participants reported using exercise, watching TV, sleep and prayer as coping mechanisms.

Conclusion: The results of this research demonstrated that the Covid pandemic played a major part in raising anxiety, health anxiety and health worries in our sample. This was largely caused by increased isolation and decreased self-advocacy skills. Participants used individualised tools to manage their anxiety.

Isolation: Isolation increased women's anxiety and health anxiety as they had no one to talk issues through with and social and organisational support was reduced due to lockdown.

Lack of self-advocacy: Many participants reported that during the lockdown they found it difficult to identify and communicate their health concerns, advocate for

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

themselves medically and subsequently negotiate help and support.
Recommendations include future programmes to assist WLHIV to improve their self-advocacy skills and increase their attendance at groups/be actively involved with peers to reduce isolation. Supporting and improving advocacy helps women to gain more knowledge about their rights in relation to health care and empowers them to seek answers and negotiate treatment for themselves.

P104 | Stitch Sisters: psychology outside the box

Joanne McCarthy
Positive East, London, UK

Background: Women living with HIV (WLHIV) commonly report mental health issues such as anxiety and depression, with associated levels of low self-esteem and self-confidence. This abstract therefore outlines a mindful and creative sewing group for WLHIV who have self-referred because of concerns about their mental health, social isolation and confidence. The aim of the group (6 x 3-hour weekly sessions) was to improve self-esteem levels and lower depression and anxiety scores. It also aimed to build creative skills that the women could take with them moving forward, build friendships to reduce isolation and improve mental health & increase confidence.
Method: Sessions provided the following:

- Practical skills: Sewing and fashion design
- Mindfulness: Teaching on the link between mindfulness and mental health
- Creativity: Establishing a creative sense of achievement which boosted mental health and increased self-confidence
- Social activity: Participation in social/group work and activities to bridge the gap between isolation and mental health

Participants

- N = 6 (Female)
- Age range: 30-52

Measures

- Rosenberg Self Esteem Scale, PHQ-9, GAD-7, Clinical interview
- Qualitative self-reports of self-esteem/confidence

Results:

- Self-esteem levels increased by an 8.5 average bringing women from a low to a normal score (measured by the Rosenberg Self Esteem Scale).
- Depression levels decreased by a 5-point average bringing women from a 14 to a 9-point score (measured by the PHQ-9).
- Anxiety levels decreased by a 4-point average bringing women from a 11 to a 7-point score (measured by the GAD-7).

Qualitative interviews corroborated these findings.
Conclusion:

- Reduced distress: This group had positive results and helped to increase self-esteem levels and lower both depression and anxiety scores. Participants also reported an increase in the use of creative and mindful strategies for managing low mood and anxiety.
- Increased creative skills: The group provided a creative sense of achievement and accomplishment, which boosted mental health, confidence and sense of well-being.
- Reduced isolation: Participation in the group helped WLHIV to meet others and provided encouragement to increase peer contact and support. Also evidenced by an increase in group participation and community engagement.
- This group meets a growing need for mindful, creative and social activity issues to be addressed for WLHIV.

P105 | Addressing loneliness and dietary needs during the COVID-19 pandemic: experiences of people living with HIV receiving support from a small HIV support organisation

Heather Leake Date[1,2], Tam Cane[3], Gary Pargeter[2], Jaime Vera[4,1]
[1]University Hospitals Sussex NHS Foundation Trust, Brighton and Hove, UK. [2]Lunch Positive, Brighton and Hove, UK. [3]University of Sussex, Brighton and Hove, UK. [4]Brighton and Sussex Medical School, Brighton and Hove, UK

Background: The Voluntary and Community Sector (VCS) is a vital partner in delivering care and support needs: enabling vulnerable people to live fulfilling, independent lives; helping them maintain good health and wellbeing. People living with HIV are disproportionately impacted by poverty, financial instability, stigma and

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

discrimination, all of which were exacerbated during the COVID-19 pandemic. Pre-pandemic, this small HIV support organisation (part of the VCS) provided community, food, friendship and peer-support for people living with or affected by HIV, primarily via a weekly lunch club and monthly supper. This qualitative impact study explored clients' experiences of the change in service provision (eg food collection, doorstep food delivery, and companionship telephone calls) as the organisation adapted to members' needs during lockdowns and as restrictions altered.

Method: Nineteen clients gave informed consent and participated in a facilitated in-person focus group. Two groups (n=10 and n=9) were held concurrently in June 2021 (after the second lockdown, but before all COVID restrictions were lifted). Focus groups lasted 60-90 minutes, with semi-structured interview question guides to structure discussions; they were recorded and transcribed verbatim. Deductive thematic analysis was conducted using a coding procedure to identify patterns between the groups and emerging themes.

Results: The following themes relating to clients' experiences of the pandemic and their engagement with the organisation emerged from the focus groups:

- Pre-lockdown services
- Loneliness
- Regular food parcels
- Telephone companionship calls
- Value of non-judgemental space

Pre-lockdown, participants valued peer support and sharing meals together. During the pandemic, some clients experienced food insecurities; some felt disconnected and socially isolated; some lost their jobs or retired. Clients trusted the organisation to keep them safe (eg social distancing), and the volunteers delivering food made them feel valued and connected to their peers. Telephone check-ins helped tackle loneliness and reassured those who were anxious or afraid.

Conclusion: During the pandemic this organisation helped address stigma, food insecurities and social isolation experienced by people living with HIV. Participants appreciated the organisation's mission and commitment to people living with HIV, and how welcoming and supportive the service is.

P106 | Interviews with healthcare professionals to understand the barriers and facilitators faced in promoting an active lifestyle to people living with HIV

Martin Lamb[1], Hilary Piercy[1], Helen Humphreys[1], Maddelynne Arden[1], Karen Rogstad[2]
[1]Sheffield Hallam University, UK. [2]Sheffield Teaching Hospitals, UK

Background: HIV care is increasingly concerned with managing HIV-associated co-morbidities. Physical activity (PA) offers substantial benefits for the physical and mental well-being of people with HIV (PWH) and contributes to preventing or managing the co-morbidities in PWH. Despite this, research has shown that PWH are significantly less active than the general population. The extent to which this is reflected in clinical practice, and the factors that influence whether and how PA is discussed within the context of HIV consultations is unknown. Using the Theoretical Domains Framework (TDF) as a theoretical frame to explore behaviour, this study aims to understand the barriers and facilitators faced by HIV healthcare professionals (HCPs) in promoting an active lifestyle in PWH.

Method: Semi-structured interviews were conducted with 13 HCPs from seven NHS Trusts in England. HCPs had a range of different roles in providing care for PWH. Based on the TDF, an interview guide was developed to explore the factors faced in promoting PA. Framework analysis was conducted to analysis the data using the TDF as a theoretical framework. Transcripts were coded by two reviewers and discrepancies discussed with a third reviewer who was a behavioural science expert.

Results: Thirteen of the 14 TDF domains were found to influence HCPs promotion to PWH. Prominent themes related to knowledge, physical and social opportunity, beliefs about capabilities, and reinforcement. Generally, HCPs believed that PA has a positive impact on well-being and that PA should be promoted, however most participants did not believe in their own capabilities to successfully promote PA to PWH. Participant's priority during consultations was to address the needs of the PWH that they raised, which may not necessarily lead to conversations about PA or well-being. The physical and social opportunities afforded to HCPs were both barriers and facilitators to promoting PA.

Conclusion: Although HCPs recognise the importance of an active lifestyle for PWH and had a broad understanding of PA, HCPs lacked the confidence and skills to be able to effectively support a PWH to be active.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Recommendations are made regarding appropriate behaviour change techniques to support HCPs in promoting PA.

Lamb, M
BHIVA Research Awards winner 2019

P107 | Audit outcomes of nurse-delivered care within Klick, a technology-enabled, outpatient pathway for people living with HIV (PLWH)

Sara Day, Rebecca Wilkins, Yodit Fissahaye-yimer, Caroline Rae
Chelsea and Westminster Hospital, London, UK

Background: HIV services experience resource and capacity pressures due to an expanding and ageing population of PLWH, many of whom have multiple co-morbidities. BHIVA standards of care encourage HIV care provision to be offered by a consultant-led multidisciplinary team.
Klick supports patient access and engagement with our HIV outpatient clinic. It comprises a smartphone app for patients to book/cancel/reschedule appointments, view routine results and receive care updates from the clinical team. In addition, designated Band 6/7 nurses offer stable Klick patients routine and/or annual review consultations virtually/face-to-face.
We audited care delivered by Klick nurses against BHIVA HIV monitoring guidelines and describe the complexity of their caseload.
Method: The e-notes of patients managed within Klick nurse clinics between 25/07/22-08/08/22, were reviewed. Klick nurses (n=5) are each allocated a supervisor, use NHIVNA training framework and work within a consultant-led multidisciplinary team.
Audit standards included: documentation <15m of: routine bloods, vitals, co-morbidities, co-medications, adherence, sexual and reproductive health history, mental health, cognition status, risk profiles and vaccine uptake; HIV viral load (VL) <9m. Results were compared to BHIVA HIV monitoring targets.
Results: 40 patient notes were audited: 34/40 had co-morbidities. 27/40 took polypharmacy (≥2 medications besides ARV). 8/40 patients switched antiretroviral treatment. No significant drug interactions were encountered. No patients required same-day escalation to a consultant. Audit outcomes are shown in Figure 1.
Conclusion: Klick nurses provided safe, comprehensive care to a HIV cohort, many of whom had complex co-morbidities and polypharmacy. Care achieved 100% compliance with 4/5 BHIVA targets and when compared to National audit (2018), Klick performed better on every outcome measured.

Co-morbidities	100%	CD4	98%
Co-medications	100%	Blood pressure and weight	100%
Adherence	100%	QRisk3	89%
Smoking	100%	FRAX	91%
Alcohol	98%	Renal and liver profile	100%
Recreational drugs	98%	FBC	95%
Mental health	100%	Diabetes	100%
Memory	100%	Lipids	100%
Contraception	100%	Syphilis	95%
STI offer	95%	Proteinuria	88%
Cytology	100%	Hepatitis A and B (serology)	100%
Menopause	100%	Hepatitis C (serology)	98%
Safeguarding	100%	Flu vaccination	100%
GP letter	89%	Pneumococcal vaccination	100%
VL <20	100%	COVID-19 vaccination	93%

Figure 1: Clinical documentation, bloods performed and vaccine coverage.

P108 | Latent TB screening in people living with HIV within Rochdale, Greater Manchester

Siew Yan Teo, Melissa Irving, Adeniyi Komolafe
HCRG Care Group - ORB, Rochdale, UK

Background: BHIVA guidelines for the management of tuberculosis (TB) in adults living with HIV recommend screening for latent tuberculosis infection (LTBI) in individuals from countries of high and medium TB incidence, or if additional risk factors are present, using symptom screen, chest X-ray and interferon-gamma release assay (IGRA).
Method: We designed an electronic template for clinicians to complete for each patient when they attend for HIV follow up, commencing 1st July 2022. If patients answered yes to any of the screening questions and had not received previous treatment for active or latent tuberculosis, they were offered an IGRA on the same day. If IGRA is positive, they were referred to the regional TB service.
Results: 85 people living with HIV were identified as eligible for screening. Data were collected for the period between 1st July and 15th December, with 77 electronic proformas completed. IGRA was not indicated in 35/77, in 42/77 IGRA was indicated and performed. Of the 42 IGRAs, 33 were negative, 3 were positive, 1 with

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

intermediate result and 5 were outstanding. 1 individual died of causes unrelated to HIV during this period. 1 individual with a positive IGRA had a negative screen years ago at a different GUM clinic. All 3 individuals with positive IGRAs were referred to the TB service.

Conclusion: The electronic template was easy to use and 90% of patients attending clinic were effectively screened during this period. Patient acceptability was high, and all patients with identified risk factors in this cohort consented to IGRA. Prevalence of latent tuberculosis infection was 3.9% in our screened cohort, with all 3 patients with positive IGRAs referred directly to the regional TB service for further investigations and ongoing management in a timely fashion. All 3 patients were from countries of high tuberculosis incidence. Of note one patient had a negative IGRA screen years ago at a different clinic but tested positive on this occasion which suggest more recent transmission.

P109 | An audit of uptake of flu, COVID-19 and pneumococcal vaccines in a cohort of people living with HIV

Nicoll Butter[1], Emma Gellatly[2], Laura Shepherd[2], Kirsteen Hill[2], Sarah Allstaff[2]
[1]University of Aberdeen, UK. [2]Ninewells, Dundee, UK

Background: People living with HIV are at greater risk of complications associated with influenza, SARS-CoV-2 and pneumococcus than the general population and BHIVA guidelines recommend vaccinating all patients against these infections. The purpose of this audit was to determine the uptake of these vaccines, and factors associated with uptake, to inform vaccine delivery models.

Method: All patients who received HIV care in our service at the end of November 2022 were included. Demographic data were collected from the service database, clinical data and pneumococcal vaccine (Prevenar-13) status were obtained from clinical records and COVID-19 and flu vaccine (2021) uptake was obtained from the Vaccine Management Tool (VMT). At the time of audit all patients were recommended to have received at least 3 doses of a SARS-CoV-2 vaccine. Caldicott approval was received for this work.

Results: There were 364 patients known to the service of which one was excluded as clinical information was not available. Sixty-seven percent had received flu vaccine, 88% ≥ one dose of COVID-19 vaccination, 76% at least 3 doses of COVID-19 vaccination and 88% had received Prevenar-13. Three percent had received no vaccines and 60% had completed all vaccines. Uptake of both flu and COVID-19 vaccines were lower in the following groups: <50 years old (51% and 62% respectively), urban residence (65%, 71%), higher deprivation scores (51-65%, 64-75%) less time in HIV care (57%, 70%), those not on ART (13%, 25%), CD4 <200 cells/mm3 (40%, 50%), detectable viral load (33%, 42%), those out of care (23%, 23%) and those known to the harm reduction service (33%, 33%). There was higher uptake of Prevenar-13 in all groups. Uptake of all vaccines was high in those with comorbidities.

Conclusion: The high uptake of Prevenar-13 in higher risk groups suggests that the model of vaccine delivery, opportunistic and pro-active recall for in-house vaccination, is more effective for protecting those at highest risk for poor outcomes and for those for whom access is challenging compared to the centralised national recall system at designated Vaccine hubs. Vaccination resourcing, planning and delivery should consider the needs of specific risk groups to ensure best outcomes.

P110 | Retaining patients in care: a multidisciplinary team (MDT) approach for patients who do not attend clinic (DNA) on the day

Goli Haidari, Rose Mower, Pippa Farrugia, Will Barchi, Alison Grant, Peter Richards, Tim Miles, Roddy Font, Nick Larbalestier
Guy's and St Thomas' NHS Foundation Trust, London, UK

Background: Patients who DNA 2 consecutive appointments are at high risk of becoming lost to follow up (LTFU). Our clinic identified a need for a standardized pathway to stratify the clinician approach with the objective of retaining patients in care.

Method: A pathway was designed involving clinicians calling/texting/emailing/contacting the GP (if consent)/checking local and summary care records within the appointment time, and rebooking patients after an initial DNA. After a second DNA they were referred into a monthly MDT. The MDT attempted to contact patients using a more structured approach, with a clear plan for intervention and follow up. Data analysis was conducted after 12 months.

Results: 104 patients were referred, with 22 exclusions (subsequently attended or referred twice). The median number of DNAs was 3 over a 12/12 period. 70% male (57/82), 30% female (25/82), median age 45, with the majority identifying as Black ethnicity (55%). Over 50% patients were from the most deprived areas of the UK using the index of multiple deprivation.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

42% (34/82) had CD4 counts <350 with 13 patients CD4 counts <200. 41% had viral loads (VL) >200 copies with a mean VL of 66,953 copies. 3 patients were ART naive. 72% had significant co-morbidities including mental health problems (32%), and 22% were already known to community teams.

6 months post referral and intervention from the MDT, 52% (43/82) had attended clinic and of these 35/43 were undetectable. 6 patients transitioned to our LTFU pathway having not been seen in over 12 months. There were 8 inpatient admissions, and 2 patients died.

We have 12 month outcomes for 37 patients; 65% are still in care with 83% of these achieving an undetectable VL.

Conclusion: Our data shows patients that DNA are mostly from ethnic minorities, have significant co-morbidities and may be immunosuppressed, highlighting important health inequalities. The DNA MDT offered additional support, links to community teams and visits outside of hospital settings if appropriate. The pathway is simple, effective and applicable to other specialities. Our DNA pathway represents an important multidisciplinary intervention for those who cannot attend clinic, and can prevent patients becoming LTFU.

P111 | The use and utility of toolkits in supporting cabotegravir + rilpivirine long-acting implementation in the CARISEL (Cabotegravir And Rilpivirine Implementation Study in European Locations) study

Rekha Trehan[1], Cassidy Gutner[2], Chinyere Okoli[1], Jade Ghosn[3], Francisco Vera[4], Eric Florence[5], Thomas Lutz[6], Marc van der Valk[7,8], Maggie Czarnogorski[2]

[1]ViiV Healthcare, Brentford, UK. [2]ViiV Healthcare, Durham, USA. [3]Université de Paris, France. [4]Hospital General Universitario de Santa Lucía, Murcia, Spain. [5]Instituut voor Tropische Geneeskunde, Antwerp, Belgium. [6]Infektio Research, Frankfurt, Germany. [7]University of Amsterdam, Netherlands. [8]Amsterdam Institute for Infection and Immunity, Netherlands

Background: Cabotegravir + rilpivirine long-acting (CAB+RPV LA) dosed every 2-months is recommended for virologically suppressed people living with HIV-1 without present or past viral resistance to NNRTIs and INIs. The CARISEL study provided patient study participants (PSPs) and staff study participants (SSPs) with toolkits to support implementation of CAB+RPV LA in European clinics. Analytic and self-reported data are reported on toolkit use and perceived utility.

Method: Overall, 437 PSPs and 70 SSPs were enrolled in the study. Quantitative questionnaires about toolkits were collected at Month (M) 1, M4/5, and M12; toolkit analytics (access and downloads) were collected monthly, and qualitative data on toolkits were collected at M12. Toolkit materials included digital tools to aid scheduling and capacity planning, educational materials for patients and providers, as well as appointment reminders and videos.

Results: The most used PSP material was the website that hosted educational materials. Analytics showed most used SSP material was the digital treatment planner used to support scheduling injections within the ±7-day window. At M12, of the 25 SSPs who used the treatment planner, 92% found it very to extremely helpful. Of the 41 SSPs who used the online injection training, 80% found it very to extremely helpful. PSPs reported they most frequently got information from their healthcare provider (M4: 64%; M12: 77%) or written materials (M4: 32%; M12: 24%), which they found very to extremely helpful (M12: 89%; M12: 49%, respectfully). Toolkit materials were most utilized and helpful at implementation start (1–3 months) and usage decreased over time. Qualitative data showed PSPs preferred not to have written material. At M12, 45% (n=28/62) of SSPs provided qualitative feedback on the toolkits; some specifically mentioned the training video, poster, website, and injection materials in their positive feedback.

Conclusion: CARISEL provided PSPs and SSPs with a range of tools to support implementation of CAB+RPV LA. Tools were largely perceived as helpful, and usage was highest during early implementation. The treatment planner was used throughout the study. While having implementation support materials may be helpful, most PSPs highly valued speaking to their healthcare provider about CAB+RPV LA.

P112 | 'More taboo than talking about drugs': a qualitative assessment of the sexual health needs of people who inject substances in Greater Glasgow and Clyde

Claire Kofman[1], Kristin Hay[1], Kirsty Kay[1], Scott McMurray[1], Thomas Petersen[1], Linda Robertson[1]

[1]Waverley Care, Glasgow, UK. [2]University of Aberdeen, UK

Background:

This research assessed sexual health awareness among two groups.

- People who inject substances (PWIS) living in Greater Glasgow and Clyde
- Health and Social Care Practitioners (HSCPs) who work directly with PWIS in Greater Glasgow and Clyde

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

In recent years, Glasgow has seen significant developments in the provision of sexual healthcare as part of harm reduction measures for PWIS. This has been in response to the ongoing HIV outbreak, where there have been over 189 new HIV diagnoses between 2014 and 2021. However, there remain notable gaps in understanding the sexual health needs of PWIS. This consequently impacts access to essential sexual healthcare, including HIV transmission prevention methods. Thus, our research explored these gaps with the purpose of creating practical recommendations and bespoke guidance to improve sexual healthcare provision.

Method: Our research included two data collection phases:

- Phase one used a participatory action research approach to assess sexual health awareness and needs of PWIS. This involved 30 semi-structured qualitative peer-led interviews conducted by Peer Researchers.
- Phase two assessed sexual health awareness among HSCPs. This involved 16 semi-structured qualitative interviews.

Results: Our research found:

- PWIS had some awareness of STIs, HIV and contraception, but almost no awareness of PrEP or PEP.
- HSCPs value sexual health as an important aspect of healthcare provision, and most had moderate sexual health awareness. However, a significant majority were unaware of key concepts related to HIV transmission prevention methods, such as how PrEP is used or what U=U means.
- Despite the notable gaps identified in basic sexual health awareness, both cohorts communicated openness to improving their sexual health literacy, as well as accessing or providing sexual healthcare.
- Overall, inconsistent access to, and provision of, essential sexual healthcare heightens HIV transmission risk among PWIS in Glasgow.

Conclusion: PWIS affected by Glasgow's HIV outbreak continue to face poor access to sexual healthcare, while HSCPs experience inconsistent access to training and resources. However, the Scottish Government aims to achieve zero HIV transmissions by 2030. In order to meet this goal, our research clarifies the steps the Scottish Government, services and HSCPs must take to establish a responsive system of sexual healthcare.

P113 | Knowledge of HIV and attitudes towards people living with HIV amongst hospital healthcare workers

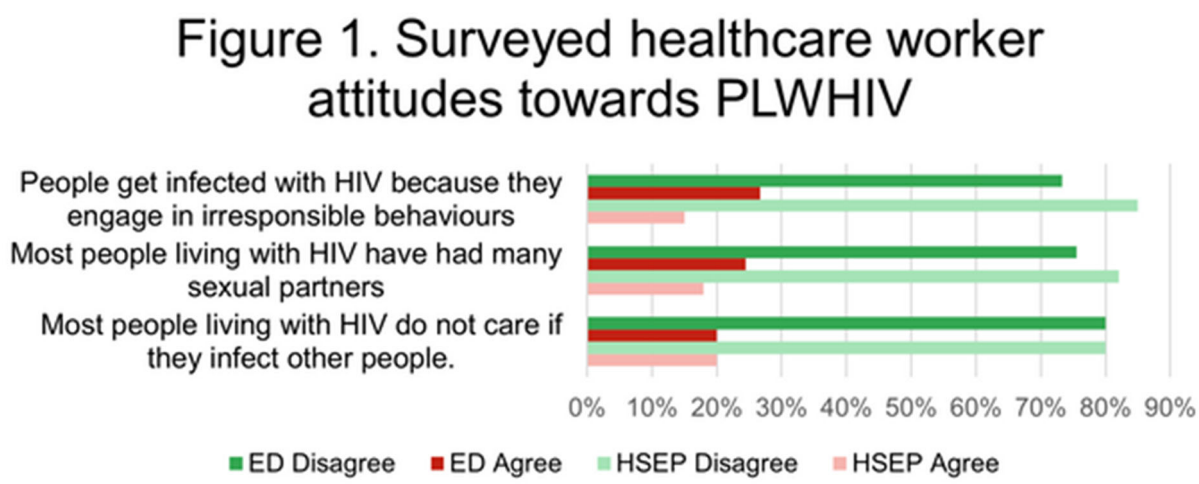
Linda Cheyenne Vaccari[1], Justin Healy[2], Freya Johnson[2], Dean Rigg[3], Alim Samji[4], Howell T Jones[4], Fiona Burns[5,6], Russell Durkin[7], Tristan J Barber[5,6]
[1]Infectious Diseases and Microbiology, Royal Free London NHS Foundation Trust, UK. [2]Royal Free London NHS Foundation Trust, London, UK. [3]LGBT+ Staff Network Co-Chair, Royal Free London NHS Foundation Trust, UK. [4]Geriatric Medicine, Royal Free London NHS Foundation Trust, UK. [5]Department of HIV Medicine, Royal Free London NHS Foundation Trust, UK. [6]Institute for Global Health, University College London, UK. [7]Emergency Department, Royal Free London NHS Foundation Trust, UK

Background: HIV stigma persists within healthcare. The Positive Voices 2017 survey showed 1 in 7 respondents experienced discrimination when accessing NHS care in the previous year, negatively affecting quality of care, compounding internalised stigma, and contributing to disengagement from care. We investigated HIV knowledge and attitudes towards people living with HIV amongst two subsets of healthcare workers in our hospital.

Method: We designed a self-directed questionnaire targeting key domains identified in prior HIV stigma studies including fear of acquisition and social judgement. Between May and June 2022, paper questionnaires were distributed to staff working in the Emergency Department (ED) and Geriatric Medicine (GM) wards over four random day shifts. Responses were anonymously received through collection boxes.

Results: Of 110 questionnaires distributed, 86 (78.2%) were completed. Half (50%) of respondents knew HIV is untransmittable by sustaining a needlestick injury from a person with an undetectable HIV viral load (U=U). The majority of respondents (69% in ED; 85% in GM) had not heard of U=U. Staff were more likely to have heard of U=U if they had cared for people living with HIV in the preceding 6 months, whereas respondents were more likely to fear HIV acquisition if they had not had exposure and if they had not attended HIV stigma training. When treating people living with HIV, 21% of respondents (25% in ED; 16% in GM) use infection control measures that they would not otherwise use for HIV negative people. Respondents who thought they would get HIV if they sustained a needlestick injury from people with

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License



undetectable HIV viral load were more likely to agree with stigmatising statements in Figure 1. The majority (86%) of respondents would like more education about HIV.

Conclusion: Overall, healthcare workers had limited knowledge surrounding HIV transmission and perpetuated some stigmatising attitudes. Findings support previous evidence suggesting that HIV knowledge is inversely related to level of stigmatised attitude and fear of HIV acquisition, and that improved HIV knowledge reduces stigma. These survey results support the need and demand for further HIV training for healthcare workers in our hospital and help identify priority areas for intervention.

P114 | Outpatient parenteral antimicrobial therapy (OPAT) service delivery of long-acting antiretrovirals: clinical staff and patient-reported outcome measures (PROMs)

Thomas George[1], Bazga Ali[2,1], Fiona Clark[1], Rhys Oakley[1]
[1]*Cardiff and Vale University Health Board, Cardiff, UK.*
[2]*Public Health Wales, Cardiff, UK*

Background: Following BHIVA guidance in February 2022 supporting the use of long-acting cabotegravir/rilpivirine (LA-CAB/RPV), we implemented a novel approach to HIV care by administering LA-CAB/RPV

Question	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Patients (n=11)					
I am satisfied with my current treatment	81.8%	18.2%	-	-	-
Attending administration appointments is convenient	45.5%	54.5%	-	-	-
The OPAT team have been flexible in arranging suitable appointments	63.6%	36.4%	-	-	-
OPAT nurses (n=4)					
I am making a difference to patients' quality of life	100%	-	-	-	-
Administering LA-CAB/RPV has improved my understanding of HIV	75%	25%	-	-	-
Administering LA-CAB/RPV has reduced my stigma surrounding HIV	75%	25%	-	-	-
HIV clinicians (n=18)					
I would recommend LA-CAB/RPV to suitable patients that ask about it	16.7%	66.7%	16.7%	-	-
I would recommend LA-CAB/RPV to suitable patients that don't ask about it	11.1%	22.2%	44.4%	22.2%	-

Additional positive qualitative data was collected.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

using the outpatient parenteral antibiotic therapy (OPAT) service. OPAT runs extended hours 365 days a year offering flexibility and accessibility which isn't logistically possible in traditional HIV clinic setups.

The suitability of LA-CAB/RPV is determined via an MDT discussion. A specialist HIV pharmacist initiates an oral lead-in, refers the patient to OPAT, and monitors their therapy. LA-CAB/RPV is administered by nursing staff that are not specialised in managing HIV.

As with any service, the experience of its users is paramount to its success. We sought to evaluate the experiences of patients, HIV clinicians, and OPAT nurses, in receiving, referring, and delivering LA-CAB/RPV.

Method: We developed and distributed three distinct questionnaires; for patients, HIV clinicians, and OPAT nurses. Relevant questionnaires were sent to all patients who received at least one dose of LA-CAB/RPV (n=15), OPAT nurses (n=7) and local HIV clinicians (n=21).

Conclusion: Delivering LA-CAB/RPV in this community, non-specialist, setting is acceptable, convenient, and flexible for patients. It has improved job satisfaction and understanding of HIV for the OPAT nurses, whilst reducing stigma surrounding HIV. Clinicians have varied views on recommending LA-CAB/RPV to all suitable patients. This novel approach is scalable given there are 107 OPAT services across the UK (2017).

P115 | Examining HPV-related cancer screening and vaccination rates amongst women in a large HIV service

Chloe White[1], Sheila Radhakrishnan[2], Alan Hunter[2], Jane Akodu[2], Fiona Burns[2,3], Tristan Barber[2,3]
[1]University College London Medical School, UK. [2]HIV Services, Royal Free Hospital, London, UK. [3]Institute for Global Health, University College London, UK

Background: Women with HIV (WWH) are known to be at increased risk of cervical intraepithelial neoplasia (CIN) compared to women without HIV. WWH are offered the HPV vaccine up to 25 years, as well as annual cervical swabs between 25-64 years. Current clinical guidance suggests that WWH who have cervical HPV infection should also attend anal intraepithelial neoplasia (AIN) screening clinics. We audited documentation of cervical screening and HPV vaccination in women attending our service who met age criteria for both. We also reviewed referrals from cervical HPV screening clinics to AIN services.

Method: Retrospective analysis was conducted of in-service electronic patient records, cross-referenced with the local database of WWH eligible for cervical screening between 2012 and 2022. Demographic and clinical data was extracted including:

1. Age and ethnicity
2. Attendance to cervical screening clinic in past 12 months, as per guidance
3. Attendees of AIN clinic
4. Referrals from cervical screening clinic to AIN clinic
5. Record of HPV vaccination

Results: A total of 803 WWH service users identified; median age 51y (range 25 - 64). The majority (68.4%) identified as of black ethnicity. Of the 113 (14.1%) women who had a documented annual cervical smear in the previous year; 88 (77.9%) were negative, 7 (6.2%) were negative with HPV detected, 13 (11.5%) had low or moderate grade dyskaryosis with HPV detected and 5 (4.4%) were either 'other' or 'insufficient' on the records. Of the 11 individuals (1.4%) who attended AIN clinic, one (n =1) was referred from the cervical screening clinic. One individual (n = 1) had a record of HPV vaccination over the defined period.

Conclusion: Electronic record review of HPV vaccination was poor. However, only in-service vaccinations and cervical smear results were documented, which WWH may be accessing externally, and no qualitative notes were reviewed. Few WWH had attended AIN clinic. In light of these findings, we plan to institute electronic prompts for all service clinics to record HPV vaccination and cervical smear history, to include those given externally and whether the HPV was high risk. We await national guidelines for anal cancer screening recommendations in all WWH.

P116 | Examining HPV-related cancer screening and vaccination rates amongst MSM in a large HIV service

Chloe White[1], Olagunju Ogunbiyi[2], Alan Hunter[2], Jane Akodu[2], Pedro Simões[2], Jessica Pinto[2], Filippo Ferro[2], Fiona Burns[2,3], Tristan Barber[2,3]
[1]University College London Medical School, UK. [2]Department of HIV Medicine, Royal Free Hospital, London, UK. [3]Institute for Global Health, University College London, UK

Background: MSM with HIV are known to be at increased risk of anal intraepithelial neoplasia (AIN). The recent ANCHOR Study showed active management of high-grade squamous intraepithelial lesions (HSIL) in PWHIV aged 35 years and over improved outcomes for anal cancer compared to watchful waiting. Current

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

guidelines suggest MSM should receive three doses of HPV vaccine up to 46 years of age and encourage attendance to AIN clinics. However, there remain no national recommendations for routine anal cancer screening. Our service offers two monthly AIN specific clinics. These are 'opt in' so need referral by an HIV clinician; no other standardised screening process is in place. This audit aimed to review record of HPV vaccination and current AIN screening practices.

Method: Retrospective analysis was conducted of in-service electronic patient records, cross-referenced with the local database of all MSM service users eligible for HPV vaccination and anal screening between 2012 - 2022. Demographic and clinical data were extracted including:

1. Age, ethnicity
2. Record of HPV vaccination
3. Total attendees of AIN clinic

Results: A total of 1555 MSM service users since 2012 identified; median age of 54y (range 21 - 88). The majority (77.4%) identified as of white ethnicity. Of 345 MSM who met age criteria for HPV vaccination, 270 (78.3%) have a vaccination record. The majority (65.6%) identified as of white ethnicity. Of the 506 MSM that had appointments at the AIN clinic over the ten-year period, 388 (76.7%) attended and 118 (23.3%) did not attend or cancelled.

Conclusion: Documentation of HPV vaccination in this group was good, but only included vaccinations administered within the service. In light of these findings, we plan to institute an electronic prompt for all service clinics to record HPV vaccination history, including any given externally. We await national guidelines for anal cancer screening recommendations in all eligible MSMWHIV and in the interim aim to prioritise those who are older and have not yet been seen in our AIN service.

P117 | Long-acting injectable antiretrovirals (LAI-ARVs): multidisciplinary team (MDT) outcomes from a large London HIV service

Bhavna Halai, Will Barchi, Stephanie Tyler, Daniella Chilton
Guy's and St Thomas' NHS Foundation Trust, London, UK

Background: With LAI-ARVs approved for use in 2021, injectable therapy has revolutionised HIV treatment. Cabotegravir with rilpivirine requires a month oral lead-in with a maintenance of 2 monthly intramuscular injections. Switching patients to LAI-ARVs requires MDT discussions to ensure appropriate use and service planning. This review investigates why MDT approval is not always granted and why patients approved chose not to start LAI-ARVs.

Method: Between June and December 2022, a database of patients referred for MDT discussion was created and updated using in-house referral forms. Patient notes were used to determine if approval was granted and/or if patients chose to switch following MDT approval.

Results: 93 patients were discussed in MDT, of which 67 (72%) were approved. 20 (30%) patients however did not switch: 6 (30%) attributing it to the injection schedule restricting travel plans, 3 (15%) finding the frequency of administration disruptive to their lives, 3 (15%) concerned of side effects, 3 (15%) did not attend (DNA) clinic post MDT, 1 (5%) requiring more time to consider switching and 4 (20%) for other reasons e.g., not wanting oral lead-in. Of the 26 (28%) patients not approved, 7 (27%) had known resistance mutations to non-nucleoside reverse transcriptase inhibitors (NNRTIs), 6 (23%) had suspected resistance due to previous treatment failure on NNRTIs regimens, 5 (19%) were transfer of care patients that lacked resistance and ARV history information, 3 (11%) had detectable viral loads, 2 (8%) had drug interactions and 3 (12%) had other reasons like chronic hepatitis B.

Conclusion: With 93 patients discussed for switches, the reasoning for not approving or starting LAI-ARVs can help drive service delivery, streamline treatment pathways, and manage patient expectations. Therefore, this data spotlights considerations to explore with patients during consultations, namely the impact of 2 monthly administration, side effects and risk of failure if patients DNA. These findings also call for clinicians to understand the importance of obtaining thorough ARV and resistance information prior to referral, given this was the most common reasons not to approve switches. Services must plan resource wisely to allow for MDT and clinic time to accommodate patients interested in and embarking upon LAI-ART.

P118 | Experiences of establishing a long-acting injectable (LAI) antiretroviral (ARV) clinic

Nasreen Moini, Bhavna Halai, Will Barchi, Imogen Paton, Rebecca Simons, Daniella Chilton
Guy's and St Thomas' NHS Trust, London, UK

Background: LAI-ARV (Cabotegravir and Rilpivirine) was approved for use in England in April 2022. It is important to understand patients' reasons for requesting to switch to LAI-ARVs to enable healthcare settings providing HIV care to reach the appropriate populations. We explored the demographic, social and medical history of the first cohort of patients commencing LAI-ARV within our clinic, which serves a population of 3,500 patients.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Method: 37 patients had successfully been started on LAI-ARV by January 2023. All patients were pre- approved at MDT. Data collected included reason for the switch, demographics, ARV history and any complications that may have arisen during the switch related to toxicity or process. Patients on LAI-ARV were also surveyed about their experiences with the injectable service so far.

Results: 23/37 (62%) were male and 14 (38%) were female. The average age was 47, with a range from 28 to 67 years. 17 (46%) patients identified as Black ethnicities; 11 (30%) of patients identified as white ethnicities. Reason for the switch varied; 18 (49%) expressed an interest in switching to LAI-ARVs; 6 (16%) stated stigma as their main motivation and 6 (16%) were experiencing pill fatigue. 4 (10%) had deranged liver function during the oral lead-in which normalised. 18 (47%) of patients responded to a survey regarding their experience of the LAI-ARV service. Of these 16 (89%) said they want to remain on LAI-ARV in the long term with 13 (72%) very likely to recommend LAI-ARV to others. 15 (83%) reported their appointment took 30 minutes or less.

Conclusion: The LAI-ARV service in our clinic is reaching a wide demographic range of patients who are largely satisfied. Many patients experience stigma or pill fatigue in day to day life and LAI-ARVs make a tangible difference to improving this. Despite a small number of process and toxicity related problems, LAI-ARV appear to be an acceptable and safe treatment pathway. Understanding patients' motivating factors can reduce inequities to accessing LAI-ARVs. Services must understand their capacity and time required to deliver LAI-ARV and plan accordingly.

P119 | The stable patient pathway (SPP) one year on: reduced monitoring and patient-initiated follow up (PIFU) for stable patients in a London HIV outpatient department

Zareena Mahomed, Alison Grant, Daniella Chilton
Guy's and St Thomas' NHS Foundation Trust, London, UK

Background: Informed by data collected following deferred appointments and implemented in 2021, the SPP offers annual review and reduced monitoring for patients identified as 'stable' according to defined criteria.

At clinical review, a joint decision to enter the SPP is reached between patient and clinician. A Patient Information Leaflet (PIL) provides contact details for PIFU between appointments. A telephone review with no prior blood tests and a dispensed prescription occurs at 6-months. At 11.5 months, there is an extended nurse appointment including venepuncture, followed by a 12-month doctor review.

We aimed to review the characteristics and outcome data for patients having completed 1year on the SPP; assessing safety, acceptability and opportunities for improvement.

Method: All patients identified as being on the SPP via coding were eligible. An anonymous digital survey was sent and a retrospective review using electronic patient records undertaken.

Results: 86 patients were identified, 19 (22.1%) were removed; of these 15 were because of incorrect booking. 65 patients completed 1year on the SPP. 55/65 (84.6%) were male; 36 (55%) were of white ethnicity and the average age was 49. NNRTI-based regimens were the most common (35/65; 49%).

At 1 year, 63/65 (96.9%) had a viral load <50 and 34 (52.3%) were continued on the SPP. Of the 31 (47.7%) discontinued; the most common reason was medication changes (12/31).

17/65 (26%) SPP patients responded to the survey; 10/17 felt explanations were clear, 15/17 knew how to access the service if required; 13/17 felt they had the contact needed. 15/17 were comfortable with reduced monitoring.

Conclusion: This cohort represents 1.6% (65/4006) of our total patient population, however we estimate that 10% meet the inclusion criteria. The demographics are not entirely representative of the wider patient population. Providing an equitable pathway is essential.

Clear inclusion criteria, careful explanations alongside PILs and robust administrative systems are key to ensuring appropriate booking onto the SPP.

We have demonstrated the SPP is acceptable and safe; the majority maintained virological suppression at 1 year. Nevertheless, retention at 1 year was lower than expected. This data will inform improvement of the SPP with the aim of increasing confidence and uptake.

P120 | User experience of an in-clinic pre-exposure prophylaxis (PrEP) service

Eliot Hurn, Emily Mabonga, Stephen Kegg
Lewisham and Greenwich NHS Foundation Trust, London, UK

Background: Our current PrEP offer largely consists of regular clinic visits for monitoring and medication collection with a smaller number of users accessing at-home sampling. We sought to elicit the views of current PrEP users on our current service offer and how we might adapt this to improve access and support persistence on PrEP.

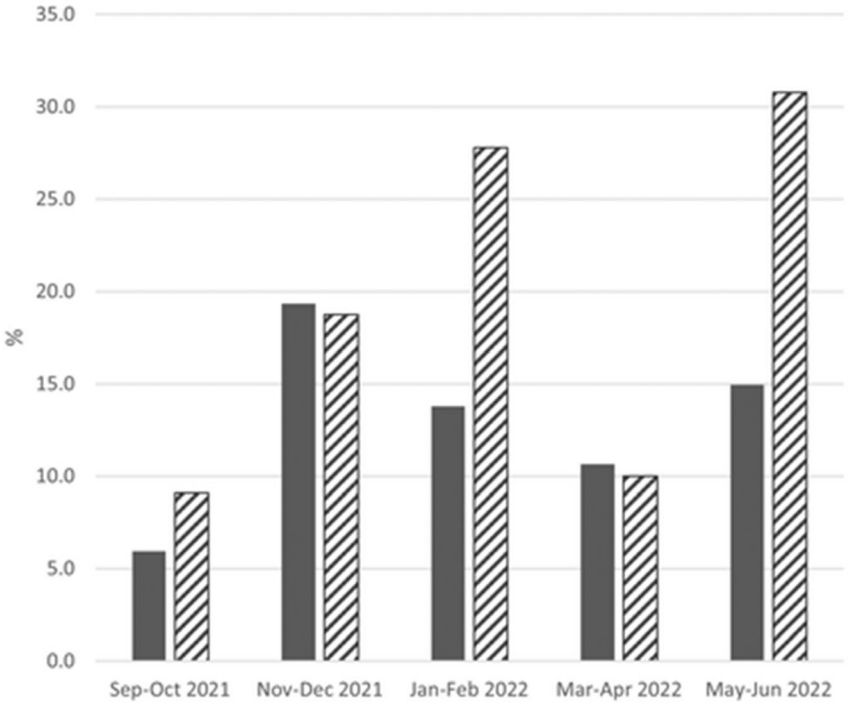
14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Method: We undertook a survey during or after appointments at our two Level 3 clinic locations in south-east London between January and September 2022.
The survey consisted of eight questions utilising a five answer Likert scale evaluating patient experience of the service, and patient views on potential changes to the service. There were demographic questions including gender identity, sexual orientation, ethnicity and age, and an option to enter free-text comments.
Results: There were 102 responses with 49 free text comments.
Most respondents identified as male (95%), white British/other White Background (68%), and gay (80%) with an age range of 16-64 years. 40% were aged 25-34 years and 40% reported a long-term health condition.
88% of respondents felt it was easy to access the service and 94% felt the service met their needs. 94% felt they knew how to access sexual health advice and 92% reported that they knew how to seek care if they developed a symptomatic STI.
79% felt their appointment frequency was appropriate. 53% were in favour of self-sampling at home instead of in-clinic testing whilst 28% felt this would make no difference and 19% were opposed. 77% preferred to be supplied with medication without attending the service.
Conclusion: In line with other services our PrEP cohort is largely GBMSM with over-representation of white males, suggesting underserved groups remain difficult to reach with the current offer. The majority of respondents reported a positive experience of their PrEP service. A small majority were keen to explore at-home testing to replace clinic visits, and a larger number would support out-of-clinic supply of medication. These findings will be considered as we develop our clinical service.

P121 | A three-cycle quality improvement project to improve HIV testing for patients presenting with indicator conditions to acute medicine in Gateshead, UK

Alexander Martin, Fazila Rasul, Sarah Appleby, Ruth Petch, Milo Cullinan
Gateshead Health NHS Foundation Trust, UK

Background: Individuals presenting to hospital with newly diagnosed HIV indicator conditions (IC) should be offered an HIV test. The prevalence of HIV in Gateshead is lower than the UK average, therefore doctors working in acute medicine may be unaware of when to offer testing for HIV.
Method: Adults aged 18-80 admitted via acute medicine at the Queen Elizabeth Hospital, Gateshead between September 2021 and June 2022 with a new diagnosis of an IC were identified from clinical coding data. These were divided into Community Acquired Pneumonia (CAP) and other ICs (herpes zoster, mononucleosis-like syndrome, candidiasis, tuberculosis, meningitis/encephalitis, lung cancer and lymphoma), which were grouped for analysis due to having a low incidence.



14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Laboratory data on HIV tests were collected at baseline (September-October 2021), following the first intervention (teaching for acute medicine junior doctors, November 2021), second intervention (introduction of departmental posters on HIV testing, February 2022) and third intervention (case-based teaching for junior doctors and senior and non-rotational staff, May 2022).

Results: 755 patients were diagnosed with an IC during the study period (666 CAP, 89 other ICs). In September-October 2021, 6.0% patients with CAP and 9.1% with other ICs were tested for HIV. This improved to 19.3% and 18.8% respectively in November-December 2021, following the first intervention. Testing reduced to 10.7% and 10% respectively by March-April 2022 despite the second intervention, following rotation of junior doctors. Testing improved to 15.0% for CAP and 30.7% for other ICs following the third intervention.

Image caption: Percentage (%) of patients diagnosed with an indicator condition (IC) who were tested for HIV, by two-month period. Solid = community acquired pneumonia, hatched = other indicator conditions. * = Intervention 1, ** = Intervention 2.

Conclusion: Teaching on HIV indicator conditions increased testing rates but the effect waned with time and as doctors rotated out of the department. Departmental posters were unable to prevent a reduction in testing with staff rotation. More consistent improvement may be seen with interventions which persist across rotating junior staff, for example implementation of a flag at admission for indicator conditions.

P122 | Is hepatitis C screening worthwhile? An investigation into hepatitis C screening in Cumbria's sexual health clinics

Jason Niblett[1], Matt Phillips[1,2]
[1]*North Cumbria Integrated Care NHS Trust, Carlisle, UK.* [2]*University of Central Lancashire, Lancaster, UK*

Background: The prevalence of Hepatitis C in the UK is thought to be around 0.5 to 1% and perhaps higher in patients who attend sexual health clinics due to various risk factors. Relevant national guidelines recommend the screening of hepatitis C in particular populations using sexual health clinics.

The aim of this project is to investigate the positive rate of hepatitis C screening in sexual health clinics in Cumbria and understand the guidance behind the decision to test patients

Method: Data was collected retrospectively from 100 patients who received a hepatitis C screen between January 2021 and January 2023. The data included test results, age, risk factors, presenting symptoms, and sexual orientation. The rationale for testing was compared to current BHIVA/BASHH PrEP guideline and BASHH interim guideline for Viral Hepatitides.

Results: The study found only 1 positive test out of 100 samples, with 94% of patients having at least one risk factor for blood-borne viruses and 82% of patients being asymptomatic at the time of testing. The PrEP guideline accounted for the rationale of 71% of tests carried out, while 18% were rationalised using the BASHH Viral Hepatitides interim guideline. 11% of tests carried out did not meet either guideline for the consideration of hepatitis C screening based on notes review

Conclusion: The study highlights the low positivity rate of hepatitis C screening in Cumbria, even in patients with multiple risk factors. The majority of tests were performed on asymptomatic individuals receiving PrEP as per the 2018 guideline, yet only 1 positive test was found among 100 patients. This positive result was also in a patient with prior hepatitis C infection. The majority of tests were carried out according to national guidelines, raising questions about the usefulness of hepatitis C screening in this area and whether current guidance reflects the reality of the caseload.

P123 | What happens after re-engagement? Outcomes of PLWH linked back into care through a dedicated SE London programme

Kate Childs[1], Goli Haidari[2], Hannah Alexander[3], Ayoma Ratnappuli[1], Zoe Ottaway[1], Rose Mower[2], Lucy Wood[4], David Breen[4], Melanie Rosenvinge[4]
[1]*King's College Hospital NHS Trust, London, UK.* [2]*Guy's and St Thomas' NHS Foundation Trust, London, UK.* [3]*North Middlesex Hospital, London, UK.* [4]*University Hospital Lewisham, London, UK*

Background: 154 PLWH were reengaged in HIV care through a dedicated program funded by the Elton John AIDS Foundation between July 2020 and Dec 2021. 1/3 had a CD4 of <200 at re-engagement. The majority were female and of black ethnicity.

Method: Three hospital trusts contributed. LTFU was defined as not attending clinic for > 12 months or being off treatment. Re-engagement was defined as attending a single clinic visit. All patients were recommended to start ART. Contact was attempted by phone, text, email, coordination with the GP or community teams. We offered intensive support including flexible appointments, text reminders, housing/immigration advice, food and travel vouchers, mental health, drug and alcohol and peer support. We report how many patients have remained in care, defined as regular contact with the clinic.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Results: 154 patients were reengaged over 18 months. At the point of analysis, of 154 patients, 107 are still in care and 10 have transferred care to other centres. Thus 117/154 (76%) have remained in care 12-18 months after reengagement. 37/154 (24%) have disengaged from care again, despite intensive efforts to offer support.

72/87 women (83%) and 45/67 (67%) (p=0.03) men have remained in care.

6 months after reengagement, of those 107 patients, 99 patients had an HIV viral load measured; 55/99 (55%) had VL <50 cp/ml.

1 year after reengagement, 97 had an HIV viral load measured; 63/97 (65%) had a VL of <50cp/ml, 72/97 (74%) had VL <200cp/ml.

14/154 (9%) patients were admitted to hospital since reengaging.

Conclusion: This reengagement project sought to reach the most vulnerable groups of PLWH affected by stigma, poverty, mental health and drug/ alcohol abuse. Intensive support is required to support the patients to both reengage and remain in HIV care.

The majority of patients are accessing care one year after re-engagement ; most of whom have suppressed HIV viraemia. We have demonstrated that this project is sustainable and effective. It has likely averted significant morbidity and onward HIV transmission.

Ongoing funding is needed to permit creation of similar initiative at other HIV centres and develop strategies to access those people who have disengaged again.

P124 | A collaborative approach to research study recruitment in PLWH during the SARS CoV-2 pandemic

Katherine Spears, Nargis Hemat, Sarah Edwards, Jonathan Edwards, Thomas Fernandez, Fiona Burns, Tristan Barber

Royal Free London NHS Foundation Trust, UK

Background: Since COVID there are fewer site investigator meetings for non-CTIMP studies to discuss recruitment barriers. Additionally, literature highlights various research trials that have successfully recruited do not report their strategies, consequently impacting ability to learn from success. The pandemic has had considerable impact on enrolment to clinical research, thus services have needed to revaluate their approach. Following the pandemic, patients report more likely to engage in research if offered remote or combined visits.

Method: We reviewed recruitment strategies at our clinic for two observational studies with large targets (SCAPE-HIV, Positive Voices). SCAPE-HIV, a prospective study exploring immune responses of PLWH to SARS CoV2 infection and vaccination. Positive Voices, a cross-sectional questionnaire study. Minimum recruitment targets, 600 and 262 respectively. SCAPE involves open-offer enrolment, Positive Voices from a defined pre-selected cohort. Initial approaches identified people opportunistically at clinic visits, with research staff offering information. However, reaching our targets through COVID became challenging and a move to virtual appointments condensed our opportunities to approach. To increase recruitment, engagement and training of NHS nursing and clinical staff was undertaken alongside remote patient contact.

Results: After implementing collaborative methods, Positive Voices recruitment increased to 170 in July/ August 2022 (73 in May/June). SCAPE recruitment also improved. Hybrid nurse practitioners dedicating time to approach people during clinic visits and clinic staff involvement attributed to this rise, representing over half of consents (Table A). The clinic team's substantial knowledge of our cohort, combined with their openness to research, leads to greater understanding of how likely individuals are to accept studies.

Conclusion: Positive Voices and SCAPE-HIV studies have been successful with recruitment due to a collaborative approach, resulting in our site being the highest current recruiting site involved in Positive Voices. This approach has helped motivate the NHS team to become more involved and has become an exemplar for clinical trial delivery within our Trust.

Table A – SCAPE recruitment

Month (2021)	Total consented	Clinic staff consent
May	60	32 (53.3%)
June	94	54 (57.4%)
July	138	97 (70.2%)
August	138	86 (62.3%)
September	74	59 (79.7%)

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P125 | How many patients will require tenofovir alafenamide (TAF)-based HIV pre-exposure prophylaxis?

Rebecca Coltart
University of Glasgow, UK

Background: In 2017, NHS Scotland introduced free HIV pre-exposure prophylaxis (PrEP). For years, only tenofovir disoproxil fumarate, with risks of reducing bone mineral density and renal function, was licenced as PrEP. A multicentre trial determined that tenofovir alafenamide (TAF) PrEP was as effective at preventing HIV infection with a superior safety profile and it became licenced in April 2022. Draft BASHH/BHIVA guidelines have been created to determine which patients may require TAF PrEP, based on reduced renal function and renal or bone comorbidities. TAF PrEP is only available as Descovy and is significantly more expensive than generic TDF PrEP. There were concerns that this higher cost and the high rate of comorbidities in Glasgow PrEP patients would put undue pressure on medication budgets, preventing Sandyford Sexual Health Service, Scotland's largest PrEP prescriber, from following current guidelines.

Method: The Scottish National Sexual Health electronic patient record system was used to review clinical notes and extract anonymised data for all Sandyford patients prescribed PrEP in April 2022. The following characteristics were extracted: age, daily or event-based PrEP, renal or bone comorbidities, nephrotoxic medication use and estimated glomerular filtration rate (eGFR) results from the past 2 years.

Patient results were compared against BASHH/BHIVA guidelines for TAF PrEP use with the number of patients fitting each criterion calculated. The results from the 200 cohort were then scaled to represent the 1800 patients prescribed PrEP by Sandyford in 2021.

Results: 200 patients were prescribed PrEP, 2 were Female and 2 were Trans Male and so they were removed from the study as they are ineligible for TAF PrEP. The median age was 33 (range 18-70). 14/196 (7.1%) used event-based PrEP. 18/196 (9.2%) had renal comorbidities, 1% had bone comorbidities and 2.6% used potentially nephrotoxic drugs. This study identified 1 patient (0.5%) that met high-risk criteria and 2 (1%) that met medium-risk criteria. All these patients met criteria based on reduced eGFR, were aged 60-69 and used daily PrEP.

Conclusion: This relatively low level of potential TAF PrEP prescriptions, 1.5% maximum, ensures that Sandyford can follow current guidelines without producing local guidelines to conform to budget constraints.

P126 | Quality of transfer letters for patients moving HIV providers in the UK

Emma Street, Michael Ward, Chin Heng, Lindsay Short
Calderdale and Huddersfield NHS Trust, Huddersfield, UK

Background: Patients who transfer care between providers are vulnerable to having poorer quality of care if the information provided is inadequate. After a serious case review within our clinic, where resistance test results were not forwarded resulting in development of multi-drug resistance, we wanted to assess the quality of information provided in transfer letters.

BHIVA standards of care only mention "a full clinical summary should be provided within 2 weeks of a request" but do not specify what information should be included.

The HIV population of the UK is highly mobile and many patients have had multiple previous care providers. Movement of patients between providers within the UK and internationally makes up a significant proportion of work.

Poor quality transfer documentation has the potential to result in future clinical errors and is potentially more costly with duplicate blood testing and vaccinations.

Method: 60 patient records were reviewed who transferred their care between 2015 and 2021. Only patients diagnosed in the UK had their letters assessed.

Results: 96% had a referral letter in the record.

76% had a referral letter either prior to the patient attending the new clinic or within 14 days of request.

1/3rd of referral letter did not have the month and year of diagnosis to enable HARS to be complete. Only 55% had documented where the patient had previously accessed care.

42% did not have a baseline CD4 count and 43% did not have a baseline viral load documented. In comparison 97% had the most recent viral load documented.

Only 70% mentioned resistance testing with results if applicable within the referral letter. 17% did not mention any relevant past ART use. 58% had the HLA B5701 status in the letter whilst only 65% mentioned hepatitis status and subsequent vaccinations.

Conclusion: A standard letter is essential for patients when transferring care. This needs to be incorporated in the BHIVA standards of care. Poor quality transfer information ,as seen in this audit, means the potential for future clinical errors, duplicate testing with the additional costs necessary and difficulty completing HARS submissions

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P127 | Cost-effectiveness of switching antiretroviral therapy to British HIV Association recommended regimens

Aidan Ireland, Christopher Lawrence
South Tees Hospitals NHS Foundation Trust, Middlesbrough, UK

Background: Optimal antiretroviral therapy (ART) for people living with human immunodeficiency virus (HIV) is complex, and balances individual preferences with factors including clinical suitability, medication availability and cost.

We modelled the potential cost implications of switching ART to British HIV Association (BHIVA)-recommended regimens using currently accessible data.

Method: ART prescriptions data from a large tertiary NHS centre were extracted and matched to HIV and AIDS reporting section (HARS) form data, completed at every HIV clinic visit, and anonymised for further analysis.

ART regimens were divided into those recommended by BHIVA for most patients, suggested as possibly suitable by BHIVA in certain circumstances and those no longer routinely commissioned by the National Health Service (NHS). Current patient ART regimens were costed and compared with suitable alternative regimens based on HARS data (including CD4 count, viral load, current pregnancy, or treatment for tuberculosis) on a per-patient basis. Savings were calculated based on the most cost-effective suitable alternative if this cost less than the current regimen, or if the current regimen was on the list of those not routinely commissioned by the NHS.

Results: 2,557 prescriptions from 1st December 2021 to 30th November 2022 were analysed, corresponding to 558 unique patients, and ART regimens extracted. The combined cost of these ART regimens was calculated at £99,482.95 per month. 72/558 (12.9%) were currently receiving ART regimens not routinely commissioned by the NHS.

When all ART regimens were compared on a per-patient basis to suitable alternatives from the list of BHIVA recommended regimens, potential savings of £17,661.39 per month (17.8% of current cost) were calculated. When compared to alternatives from the list of those judged suitable by BHIVA depending on circumstances, potential savings of £46,378.59 per month (46.6% of current cost) were calculated.

Conclusion: Significant savings may be achievable by switching ART to BHIVA-recommended regimens where this is cost-effective and suitable on an individual basis. While potential switches are unlikely to be universally advisable, decision aids which increase shared decision making between patients and clinicians, and incorporate cost-effectiveness as a factor, may be able to realise some of these cost savings in a patient-centred manner.

P128 | What is the new normal? Frequency of monitoring after COVID-19

Brendan Payne
Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle University, UK

Background: Recommended frequency of HIV plasma viral load (VL) monitoring is 6 monthly, but published data suggest a low risk of virological failure with longer monitoring intervals. National COVID-19 'lockdowns' necessitated much reduced VL monitoring. We hypothesised that many people living with HIV (PLWH) may have remained on extended monitoring intervals.

Method: We interrogated laboratory data for all HIV VL performed in our service for the period 1/1/2018 to 31/12/2022. As COVID-19 lockdowns principally affected face-to-face clinical care during Q2 and Q3 2020, we considered two 27-month periods of 1/1/2018 to 31/3/2020 (P1) and 1/10/2020 to 31/12/2022 (P2). Within each period, PLWH were eligible for inclusion if there were at least two VL results. The last two monitoring visits of the period were used for analyses. An extended monitoring interval was defined as 34 weeks or more.

Results: 1302 PLWH were monitored during P1 at a mean frequency of 1.97 VL per annum, and 1370 in P2 at 1.76 pa.

The proportion of PLWH with VL <200 copies/mL rose from 92.9% in P1 to 96.0% in P2 ($p<0.001$). The proportion suppressed to <50 copies/mL rose from 76.4% to 86.2% ($p<0.001$).

Of those PLWH with VL <200 copies/mL at initial visit, 9.9% had an extended monitoring interval to the subsequent visit in P1, and 23.0% in P2 ($p<0.001$). However, within P2, 4.7% of those with an extended monitoring interval had VL ≥200 copies/mL at subsequent visit compared with 0.8% of those with standard interval ($p<0.001$).

Conclusion: Virological monitoring intervals have become significantly longer in the period since the COVID-19 lockdowns. Viral suppression across all PLWH has improved. However, extended follow-up intervals were associated with increased risk of virological failure, even in the setting of prior suppression. This study was not able to determine the reasons for extended monitoring intervals (e.g. active shared decision vs. suboptimal attendance). Further research is required in order to develop criteria for safe extension of monitoring intervals.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

P129 | Post-exposure prophylaxis for sexual exposure (PEPSE) prescriptions in the era of pre-exposure prophylaxis (PrEP)

Harsha Moolchandani, Shingisai Ndoro
MPFT, Leicester, UK

Background: An individual living with HIV costs the National Health Services, on an average, £360,000 throughout their lifetime. Of those, around two-thirds (68%) were for anti-HIV medications. PrEP costs £5,000, and a year of HIV therapy costs roughly £11,000. The current literature shows that prep can reduce the risk of HIV transmission by at least 86%.

Method: In an effort to improve the prescription and supply of PrEP, we examined the cohort of patients who visited the clinic, determining if they met the criteria for PrEP, and then determining whether they received their prescription.

Results: Our attention was drawn to the fact that 90% of people presenting to the clinic met PEPSE requirements of which 83% went on to have a discussion on PrEP. Although a majority of these individuals had previously regularly attended for STI testing and several had shown up for repeat prescriptions of PEPSE, they had never had a PrEP consultation.

Conclusion: Our findings suggest that we may want to focus more on discussing PrEP with PEPSE patients. While PEPSE can help prevent HIV infection, it is more of an urgent measure than a regular approach to halt HIV transmission. Furthermore, with the provision of medication and excessive follow-up sessions at a sexual health service like many others that struggle to offer enough sexual health consultations, it seems to be less cost-effective and has a weaker clinical effectiveness evidence foundation.

The ideal strategy to ensure that patients getting PEPSE have better access to being rapidly put on PrEP after receiving a PEPSE prescription requires further study.

References-

- https://www.cdc.gov/hiv/basics/prep/prep-effectiveness.html
- https://www.tht.org.uk/sites/default/files/2018-02/Briefing%20PrEP%20-%20September%202016.pdf
- https://www.aidsmap.com/about-hiv/post-exposure-prophylaxis-pep

No of patients	130
PEPSE prescription indicated	117 (90%)
Documented PrEP discussion	88 (67%)

P130 | Is the switch worth it? How changing from non-commissioned antiretrovirals has affected cost and pill burden in a single centre

Theodora Voitcu, Matthew Lowery, Jonathan Foster, David Ashley Price
Newcastle upon Tyne Hospitals Foundation Trust, Royal Victoria Infirmary, UK

Background: The median lifetime cost of managing HIV is £296,022, antiretroviral drugs comprising two-thirds of this cost. Offering optimal treatment is a priority, but price remains an important consideration. Commissioning policies encourage the use of generic drugs which can cost up to 80% less while providing similar virological efficacy.

We explored whether shifting from non-commissioned branded HIV drugs has improved costs while also considering how daily tablet burden was influenced by the switch.

Method: Patients switched between 01.04.2022 and 11.01.2023 were included. 158 patients known to Newcastle-upon-Tyne HIV Services were switched from the non-commissioned branded drugs atazanavir/cobisistat (ATV/c), rilpivirine/emtricitabine/tenofovir disoproxil (RPV/FTC/TDF), darunavir/ritonavir (DRV/c) and darunavir/ritonavir/emtricitabine/tenofovir alafenamide (DRV/c/FTC/TAF) in the past 12 months. The average monthly cost and number of daily tablets of these regimens were determined before and after the switch.

Results: 69 (44%) patients in total were switched to another branded FDC, 89 (56%) were switched to generic component drugs.

41/75 (55%) patients switched from RPV/FTC/TDF to alternatives. 17 (41%) of these switched to another branded FDC and 24 (59%) to generic component drugs. The overall switch from RPV/FTC/TDF was not cost effective, with average monthly costs increasing by 36%.

16/19 (84%) of patients on ATV/c have been switched, 90/122 (74%) on DRV/c, 11/29 (40%) on DRV/c/FTC/TAF. The switch from ATV/c decreased costs by 31%, DRV/c decreased cost by 38% and DRV/c/FTC/TAF by 49%. Overall monthly costs decreased by 28%.

49 (31%) patients stayed on the same number of tablets; 24 (15%) experienced decreased pill burden while 85 (53%) had an increased tablet burden. 12 patients had Blueteq forms filled in.

Conclusion: Although the switches resulted in overall cost saving, this was reduced by the use of alternative branded FDCs. RPV/FTC/TDF switches were more expensive and resulted in more complex regimens, suggesting that policies are not always associated with increased savings. Pill burden increased for a significant

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

number of patients due to the switch and resulting changes to compliance remain to be assessed.

P131 | Review of the characteristics of syphilis cases over 10 years in an inner-city urban cohort

Wai Lin Htun[1], Martyn Wood[2]
[1]*Blackpool Teaching Hospital NHS Foundation Trust, UK.* [2]*Axess Sexual Health service, Liverpool, UK*

Background: Since 2010 the numbers of syphilis (Treponema pallidum) infections in the UK have increased significantly. Syphilis case numbers are also steadily increasing in the sexual health service in our metropolitan area. This retrospective review has been conducted to review the local demography of syphilis cases, presentations, characteristics of infectious syphilis and follow up status.

Method: An observational retrospective cross-sectional study reviewing the newly diagnosed syphilis patients from 2010 to 2020 in a large urban specialist sexual health clinic. We collected data from the clinic electronic patient record and analysed in SPSS version 25.

Results: 952 syphilis cases were presented by 819 patients during the review period and the numbers of cases increased every year, highest numbers were seen in 2018. The median age of the patients was 32 (IQR 16), 87.5% were male and 74.5% were white. 83% of males are men sex with men and nearly 2/3 of patients were from most deprived areas. Fifty Seven percent of patients were symptomatic, and the most common presentation was a genital ulcer.

Of the total case numbers, those with infectious Syphilis were in the range of 60-70%. Asymptomatic patients were less likely to present as infectious syphilis (OR 0.28 (95% CI 0.21-0.38)). 48.6% of patients attended their 3 month follow up and 37.7% of patients attended their 6 months follow up. Among them, 70% of patients had 4-fold drop in Rapid plasma reagin (RPR) at 3 month follow up and 75% had 4-fold drop at 6 months. Factors less likely to cause 4-fold drop of RPR are being infectious or baseline RPR more than 8. Asymptomatic patients are more likely to drop RPR at 6 months.

Conclusion: The numbers of syphilis cases including infectious syphilis cases are increasing in different populations in the community. It is important to diagnose early and to give appropriate treatment properly to prevent onward transmission and further complications of syphilis. Given the most common symptomatic presentation was with a genital ulcer, increased routine screening of genital ulcers with Treponema pallidum Polymerase chain reaction (PCR) tests is recommended.

P132 | Characteristics and outcomes of mpox infection in people living with human immunodeficiency virus (PLWHIV)

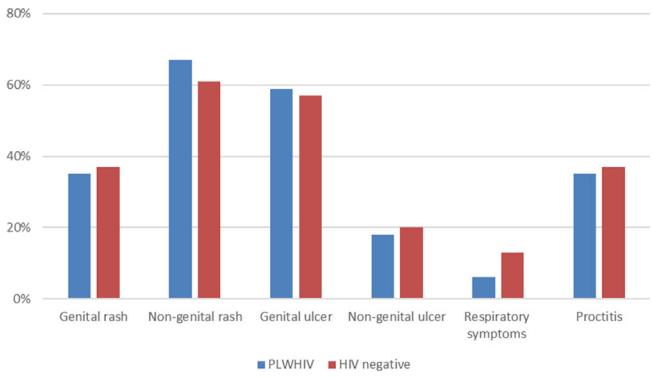
Lily Edwards[1,2], Rhys Knight[1,2], Emily Melon[1,2], Anna Gardner[1,2], Vincent Lee[1,2]
[1]*Northern Integrated Contraception, Sexual Health and HIV Service, Manchester, UK.* [2]*Manchester University NHS Foundation Trust, UK*

Background: Mpox infection is endemic to Central and West Africa. Cases of Mpox infection were confirmed in England from May 2022. The outbreak has mainly been in gay and bisexual men who have sex with men (GBMSM) without documented history of travel to endemic countries. As of December 2022, the UK has had 3,552 cases, 231 in the North West.

Method: Patients who attended our sexual health service between May – Sept 2022 and were diagnosed with Mpox infection were included. Electronic patient records were reviewed. Demographics and clinical presentation were analysed.

Results: 113 patients were identified, 30% (n=34) were PLWHIV. All were men. The median age was 41.5 years in PLWHIV (range 29 – 76) and 35.3 years (range 18 – 51) in HIV negative individuals. 98.7% (n=78) HIV negative individuals and 100% (n=34) PLWHIV were identified as GBMSM. In PLWHIV the median CD4 was 677 (range 52-1307), only 4 with CD4 < 250. One PLWHIV required hospitalisation for pain control.

Travel abroad within 21 days of symptom onset was reported in 31% HIV negative individuals and 38% PLWHIV. Over 70% of these people had visited Spain, no travel to an endemic country was reported. Contact with



14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

a known Mpox case was reported by 23.5% PLWHIV and 21.3% HIV negative individuals.Presenting symptoms were very similar in the two cohorts; non-genital rash was most common followed by genital ulcers.

Sexually transmitted infections (STI) were found in 29% PLWHIV and 28% HIV negative individuals, most commonly *Neisseria gonorrhoeae* and *Chlamydia trachomatis* respectively.

Conclusion: Our study shows no significant difference in demographics, presentation, or severity of Mpox infection in PLWHIV and HIV negative individuals. Presenting symptoms and rates of STI were comparable. HIV infection does not increase the risk of acquisition and severity of Mpox infection. Mpox vaccination should be offered according to risk factors other than HIV status.

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13478 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Check for updates

DOI: 10.1111/hiv.13479

Author Index

 © 2023 The Authors. HIV Medicine © 2023 British HIV Association

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13479 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

I

J

K

L

M

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13479 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13479 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13479 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

14681293, 2023, S3, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/hiv.13479 by Test, Wiley Online Library on [11/05/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License