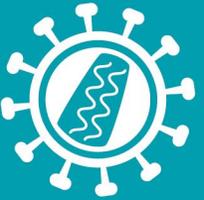
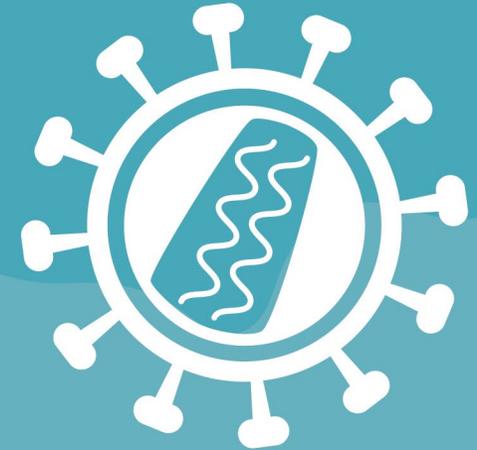


**BHIVA** 

British HIV Association

# 2022 Spring Conference

**Wed 20<sup>th</sup> - Fri 22<sup>nd</sup> April**  
Manchester Central, Manchester



# AUDIT Session

Chair: Dr David Chadwick

Co-chair: : Dr Emily Cheserem

*This educational event is supported by an unrestricted medical education grants from*



# A national audit of the management of HIV-2 in adults in the UK

Dr Maya Tickell-Painter

Manchester Foundation Trust, UK

*This educational event is supported by an unrestricted medical education grants from*





# National audit of the management of HIV-2 in adults in the UK

Maya Tickell-Painter SpR Infectious diseases  
Manchester University Hospitals NHS Foundation Trust

On behalf of all authors: Chadwick D, Deayton J, Reeves I, van Halsema C



## **Conflict of Interest**

In relation to this presentation I declare that I have no conflict of interest

# Background

- National audit of management of HIV-2
- Designed to establish current practice in the UK
- Coincided with update of 2010 BHIVA guidelines in 2021
  
- Not part of the formal BHIVA audit work plan

# Methods

- UK centres contacted via the “members matters” newsletter
- Registered with Northern Care Alliance NHS Group Clinical Audit Department
- Collected anonymised, retrospective data
- Audit standards from the BHIVA 2010 HIV-2 guideline
- Data collected between March 2019 and February 2020 (with one exception!)

## Audit standards

### When to start ART

- 1 What proportion of individuals living with HIV-2 have ever started ART?
- 2 Where individuals have initiated ART, what were the CD4 count and viral load at the time of treatment initiation?

### Which ART to start

- 3 For individuals living with HIV-2 who were treatment-naïve at the time of the 2010 guideline publication, which ART regimen was initiated, and was a recommended regimen chosen?
- 4 For treatment-experienced individuals living with HIV-2 who changed their ART regimen subsequent to the publication of the 2010 guideline, which ART regimens have been used, and were these regimens consistent with the guideline?

### Managing virological failure

- 6 For individuals living with HIV-2 who experienced virological failure, which ART regimen were they taking at the time that this occurred, and was a recommended regimen chosen?
- 7 For individuals living with HIV-2 who experienced virological failure, which ART regimen were they changed to, and was a recommended regimen chosen?
- 8 Was baseline drug resistance testing performed for all individuals living with HIV-2 who had a detectable viral load
- 9 Was drug resistance testing performed for all individuals living with HIV-2 who experienced virological failure

### Managing HIV1/2 dual infection

- 10 For individuals living with both HIV-1 and HIV-2, was baseline drug resistance testing performed for both viruses?
- 11 For individuals living with both HIV-1 and HIV-2, were ART regimens including drugs known to be active against both viruses chosen?

### Pregnancy

- 12 For pregnant women living with HIV-2 who had a detectable viral load, how many were initiated on an appropriate ART regimen?

Abbreviations: PI= Protease inhibitor, INSTI= integrase inhibitor, ART= antiretroviral therapy, DRV/r= ritonavir boosted darunavir, RAL= raltegravir, DTG= dolutegravir

# Results

- Thirty-five sites responded
- 167 individuals included
- Nearly half access care at one of four large London centres (46%, n=77).
- 26 of the 35 other centres provide care <5 individuals
- Most people living with HIV-2 in the UK are:
  - Female (identified on medical records) (68%, n=114)
  - Black African (88%, n=147)
  - Aged over 45 years (82%, n=134)

# When to start ART

**What proportion of individuals living with HIV-2 have ever started ART?**

- 132/167, 79%
- Commonest indications clinical disease and pregnancy

**Where individuals have initiated ART, what were the CD4 count and viral load at the time of treatment initiation?**

- Median CD4 count: **336 cells/mm<sup>3</sup>** (21% (IQR 97-535))
- Median HIV-2 viral load: **190 copies/mL** (IQR 0-5508)
- n=89

# Which ART to start

**For individuals living with HIV-2 who were treatment-naïve at the time of the 2010 guideline publication, which ART regimen was initiated, and was a recommended regimen chosen?**

- Protease inhibitor (PI) based regimen 70/89, 79%
  - DRV/r 48/70, 69%
- Integrase inhibitor (INSTI) based regimen 20/89, 22%
  - RAL 10/20, 50%
  - DTG 10/20, 50%
- 4/89 (4%) received a regimen not recommended by national guidance

# Managing virological failure

- 21/132 (16%) individuals experienced virological failure on treatment between 2010 and the time of data submission
- 26 episodes of virological failure, on the following regimens:
  - 13 PI based
  - 5 INSTI based
  - 4 both PI and INSTI (darunavir/r and raltegravir)
  - 4 non-recommended regimen
- Most common ART change was the addition of an INSTI

# Drug resistance testing

**Was baseline drug resistance testing performed for all individuals living with HIV-2 who had a detectable viral load?**

- Performed in 37/52 (71%) individuals

**Was drug resistance testing performed for all individuals living with HIV-2 who experienced virological failure?**

- Performed in 18/21 (86%) of individuals

# Managing HIV-1/2 dual infection

**For individuals living with both HIV-1 and HIV-2, was baseline drug resistance testing performed for both viruses?**

- Performed 15/21 (71%) individuals

**For individuals living with both HIV-1 and HIV-2, did ART regimens include drugs known to be active against both viruses?**

- 1/10 (10%) treatment naïve individuals started a non-recommended regimen
- 3/21 (14%) treatment experienced individuals switched to a non-recommended regimen

# Pregnancy

**For pregnant people living with HIV-2 who had a detectable viral load, how many were initiated on a recommended ART regimen?**

- 7/7 (100%) of pregnant people with a detectable viral load during pregnancy initiated a recommended ART regimen

# Discussion

- Most individuals managed according to national guidance
- Key areas for discussion:
  - choice of ART
  - drug resistance testing
  - management of virological failure
- Good coverage (approx 180 individuals in the UK)
- Limitations: lack of data de-duplication; likely omission of some small centres; broad timescale included

# Discussion- guideline update 2021

- Universal ART is now recommended
  - 79% of individuals already taking
- Recommended third agent now either boosted darunavir or dolutegravir
  - 65% of individuals already taking
  - New dosing recommendations may require a change for some

# Summary

- HIV-2 management is complex with limited evidence base
- Most centres manage 5 or fewer individuals- limited opportunities to develop expertise
- Guidelines designed to support practice
- Establishment of a national advisory service may be warranted
- Submitted for publication and under review

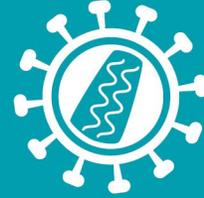
# Acknowledgements

- Dr Sophie Forsyth (Great Western Hospitals NHS Foundation Trust)
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- Dr Celia Jackson (NHS Greater Glasgow and Clyde)
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- Dr Duncan Churchill (Consultant in HIV/GU medicine, The Lawson Unit, Brighton & Sussex University Hospitals NHS Trust)
- Dr Rageshri Dhairyawan (Consultant in HIV/GU medicine, Barts Health NHS Trust)
- Professor Satyajit Das (Consultant in HIV/GU medicine, Integrated Sexual Health Service and Clinical Assessment Service, Coventry & Warwickshire Partnership Trust)
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- Dr Siobhan Murphy (Consultant in HIV/GU medicine, Central Middlesex Hospital)
- Ms Amy Moore (Pharmacist in HIV/GUM, The Wolverton Centre for Sexual Health, Kingston Hospital NHS Foundation Trust)
- Ms Helen Webb (Clinical Nurse Specialist, Courtyard Clinic, St George's Hospital, London)
- Dr Liam Sutcliffe (Homerton Sexual Health Services)
- Dr Andrea Ng (Consultant in HIV/ Sexual Health medicine, Midlands Partnership NHS Foundation Trust)
- Dr Melanie Rosenvinge (Consultant in GU medicine, Lewisham Hospital)
- Dr Nicola Mackie (Consultant in GU/HIV medicine, Imperial College Healthcare NHS Trust)
- Dr Benjamin Canning (Specialist registrar in infectious diseases/virology, Heartlands Hospital Birmingham)
- Dr Christopher Wood (Consultant HIV Physician, North Middlesex University Hospital)
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- Dr Padmasayee Papineni (Consultant in Infectious Diseases and Acute Medicine, Ealing Hospital, Uxbridge Road, London)
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- Dr Sinna Jebakumar (King's Chambers, ICaSH, Peterborough)
- Dr Paul Hine (Registrar in Infectious Diseases and General Medicine, Liverpool Royal Hospital)
- Dr Simon Limb (Consultant Physician, Newham General Hospital (Barts Health))

# Managing virological failure

Change	Number of times this change was made	Any additional changes also made	Did further virological failure occur?
<b>Changed or added INSTI</b>			
<b>Added dolutegravir to existing regimen</b>	7	1 person also switched LPV/r to DRV/c  1 also switched EVG/c to DTG	Yes, in 1/6 on TDF/FTC/DRV/r (600/100mg BD) DTG 50mg BD
<b>Added raltegravir to existing regimen</b>	5	1 person also switched LPV/r to DRV/r	Yes, in 1/5 cases on TDF/FTC/RAL DRV/r 800/100mg OD
<b>Changed raltegravir to dolutegravir</b>	4	-	No
<b>Changed elvitegravir to dolutegravir</b>	1	-	No
<b>Changed or added PI</b>			
<b>Changed raltegravir to boosted darunavir</b>	1	-	No
<b>Stopped boosted darunavir, started dolutegravir</b>	1	-	No
<b>Change boosted lopinavir to boosted darunavir</b>	1	-	No
<b>Added boosted darunavir to existing regimen</b>	1	Also added etravirine	Yes on TDF/ETV/DRV/r 800/100mg OD
<b>Other</b>			
<b>Changed NRTI backbone</b>	1	-	Yes on ABC/3TC/RAL (dosing information not provided)

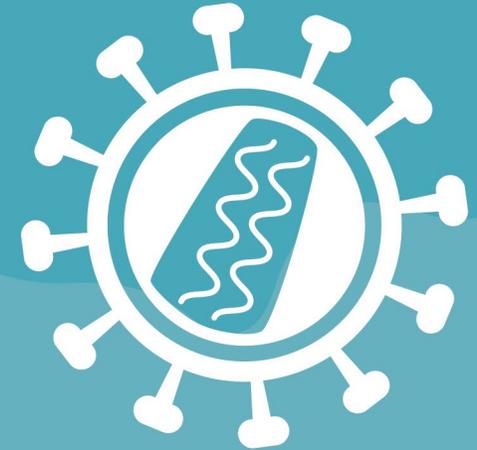
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# Multi-drug resistant HIV 2: let's think outside the box

Dr Athavan Umaipalan

Barking, Havering & Redbridge NHS Trust, UK

*This educational event is supported by an unrestricted medical education grants from*





# Multi-drug resistant HIV 2: let's think outside the box

Dr Athavan Umaipalan

HIV Consultant

Barking, Havering & Redbridge NHS Trust, UK



## Conflict of Interest

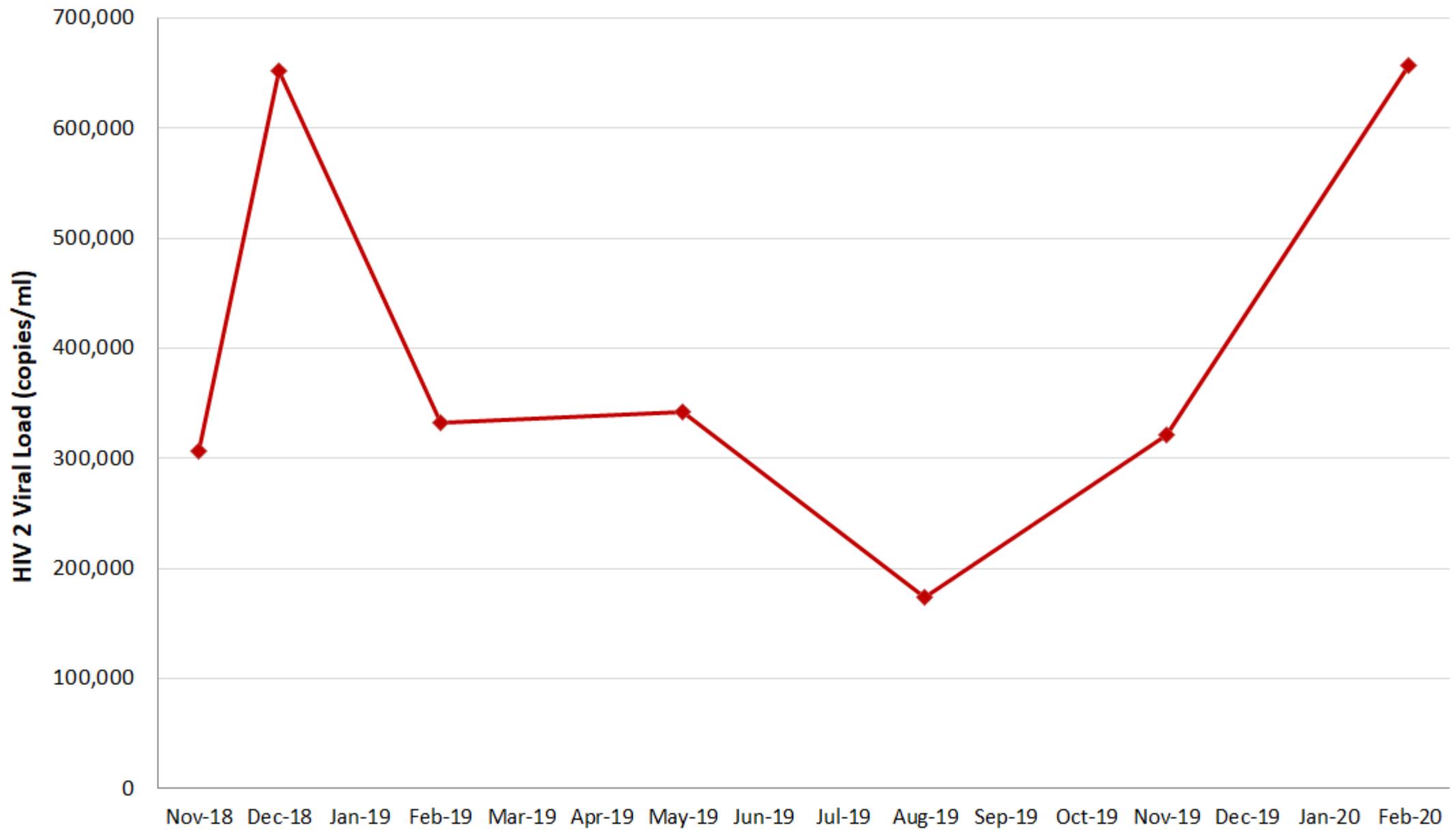
- Honoraria received from Gilead as a guest speaker
- Sponsorship received from Gilead for educational training
- Sponsorship received from ViiV for conference fees

# The Patient: Background

- 57 year old Black- African woman from Portugal
- Diagnosed 2016
- Transferred care November 2018: unknown treatment in Portugal
- Admits to poor adherence in past
- Been off ARVs for one year
- No other PMH or history of OIs
- HIV 1 negative
- Hep B cAb positive sAg negative
- Nov 18: CD4 33(8%) HIV 2 VL 306,596 No GART available

# Starting ARV regime

- TAF+FTC+ DRV/r (OD)



	Nov-18	Dec-18	Feb-19	May-19	Aug-19	Nov-19	Feb-20
VL	306,596	652,465	332,418	342,470	173,745	321,145	657,047

# Resistance Test

- February 2020: CD4 71(9%) HIV 2 Viral load 657,047
- NRTI mutations: **K65R**  
**M184V**  
N69S  
V11I
- PI mutations: **I50V**  
V47A

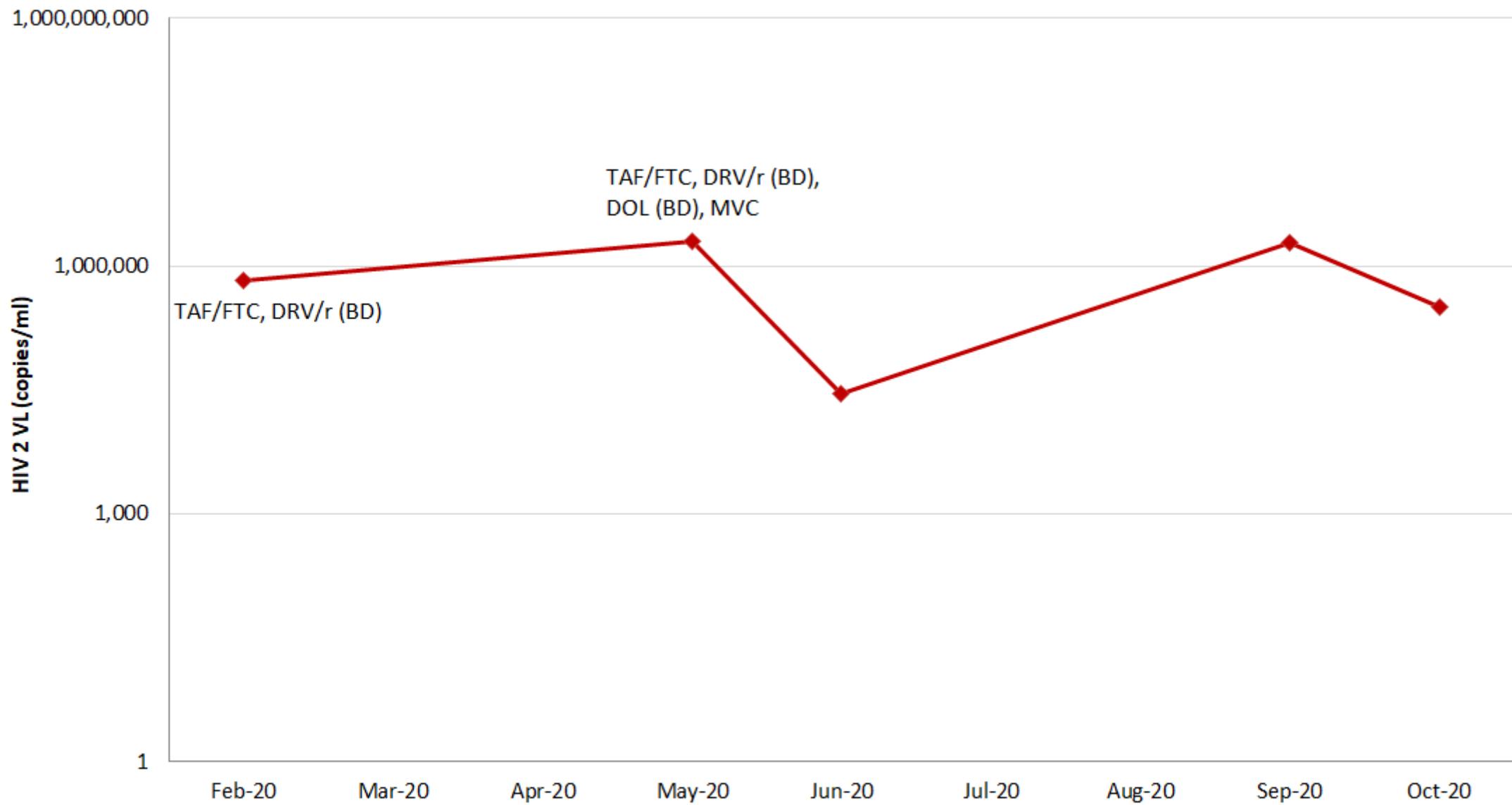
# Mutation Analysis

NRTI	HIV2EU 3.0		
	Mutation List	Algorithm Result	SIR
<b>3TC</b>	M184V	Resistant	<b>R</b>
<b>ABC</b>	K65R	Resistant	<b>R</b>
<b>AZT</b>		Susceptible	<b>S</b>
<b>D4T</b>	K65R	intermediate Resistance	<b>I</b>
<b>DDI</b>	K65R	Resistant	<b>R</b>
<b>FTC</b>	M184V	Resistant	<b>R</b>
<b>TDF/TAF</b>	K65R	Resistant	<b>R</b>

PI	HIV2EU 3.0		
	Mutation List	Algorithm Result	SIR
<b>ATV/r</b>		Susceptible	<b>S</b>
<b>DRV/r</b>	I50V	Resistant	<b>R</b>
<b>IDV/r</b>		Susceptible	<b>S</b>
<b>LPV/r</b>	V47A	Resistant	<b>R</b>
<b>SQV/r</b>		Susceptible	<b>S</b>
<b>TPV/r</b>		Natural Resistance	<b>R</b>
<b>fAPV/r</b>		Natural Resistance	<b>R</b>

# What regime would you try next?

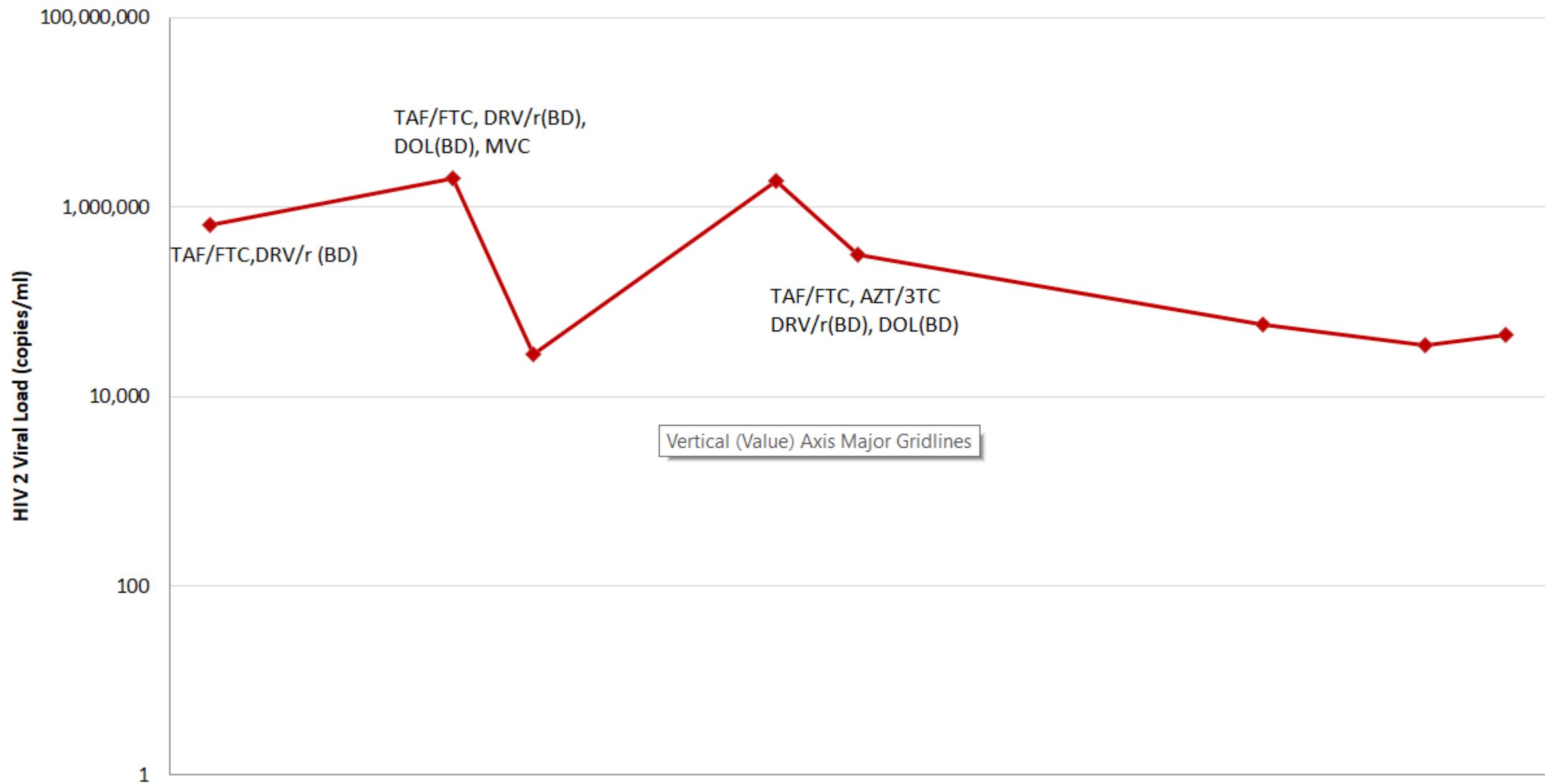
- DoI (BD)
- Maraviroc (sample sent for tropism)
- DRV/r (BD)
- TAF/FTC
- ?AZT



	Feb-20	May-20	Jun-20	Sep-20	Oct-20
◆ HIV 2 VL	657,047	2,000,000	28,013	1,918,138	311,277

# What regime would you try next?

- Maraviroc: unable to perform tropism  
does not appear to be active: removed
- AZT: combivir added
- New regime: AZT/3TC, TAF/FTC, DOL (BD), DRV/r (BD)



Feb-20 Mar-20 Apr-20 May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21

	Feb-20	May-20	Jun-20	Sep-20	Oct-20	Mar-21	May-21	Jun-21
◆ HIV 2 VL	657,047	2,000,000	28,013	1,918,138	311,277	58,465	35,113	44,868

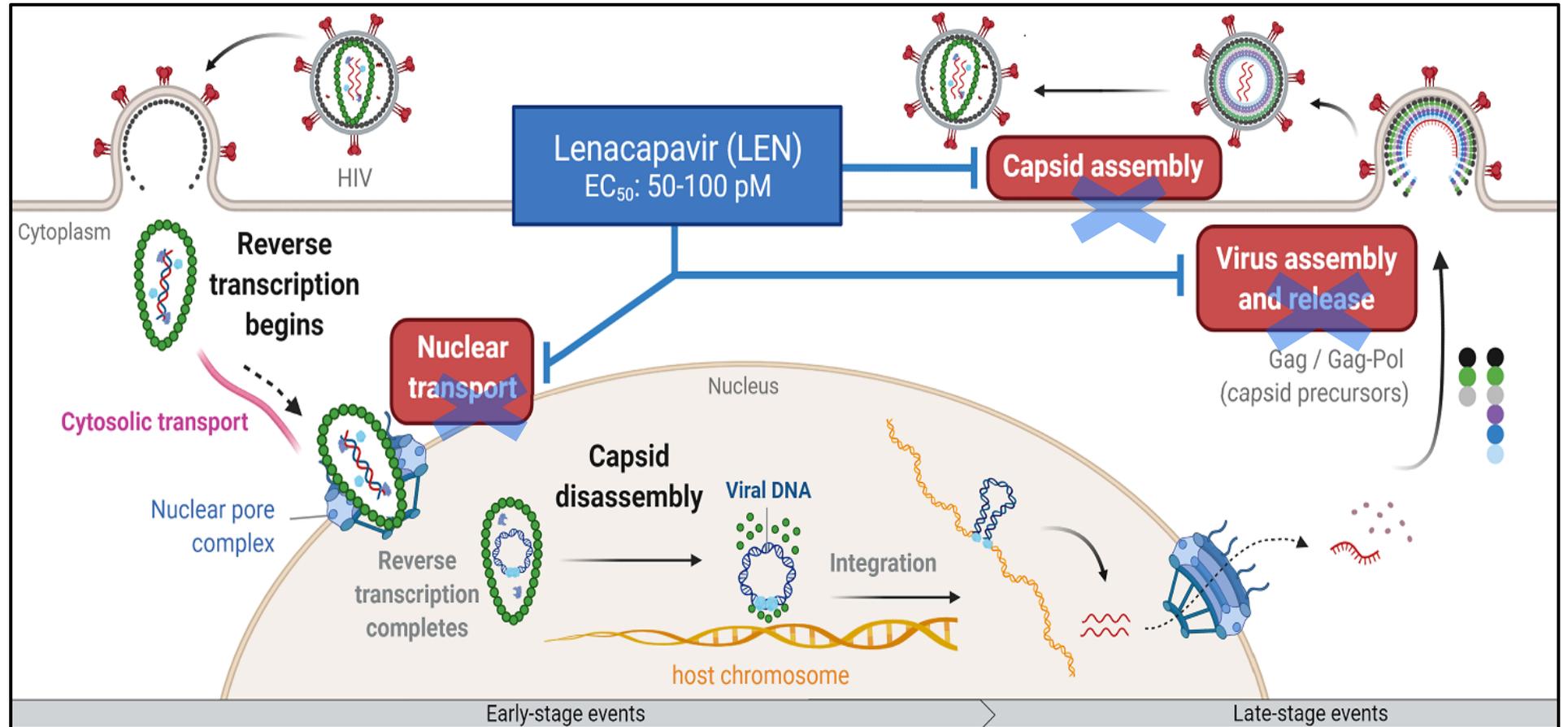
# Next option?

- Increasing the dolutegravir to tds
- Adding foscarnet (requiring an inpatient admission) – may only give 0.5 log drop in VL
- Fostemsavir: HIV entry inhibitor by blocking GP120 receptor. No HIV 2 activity
- Ibalizumab: monoclonal antibody binds to CD4 receptor. In vitro data for HIV 2, but 2 weekly infusions
- Lenacapavir: In vitro data that it inhibits HIV 2 replication

# Lenacapavir (LEN): Novel Capsid Inhibitor

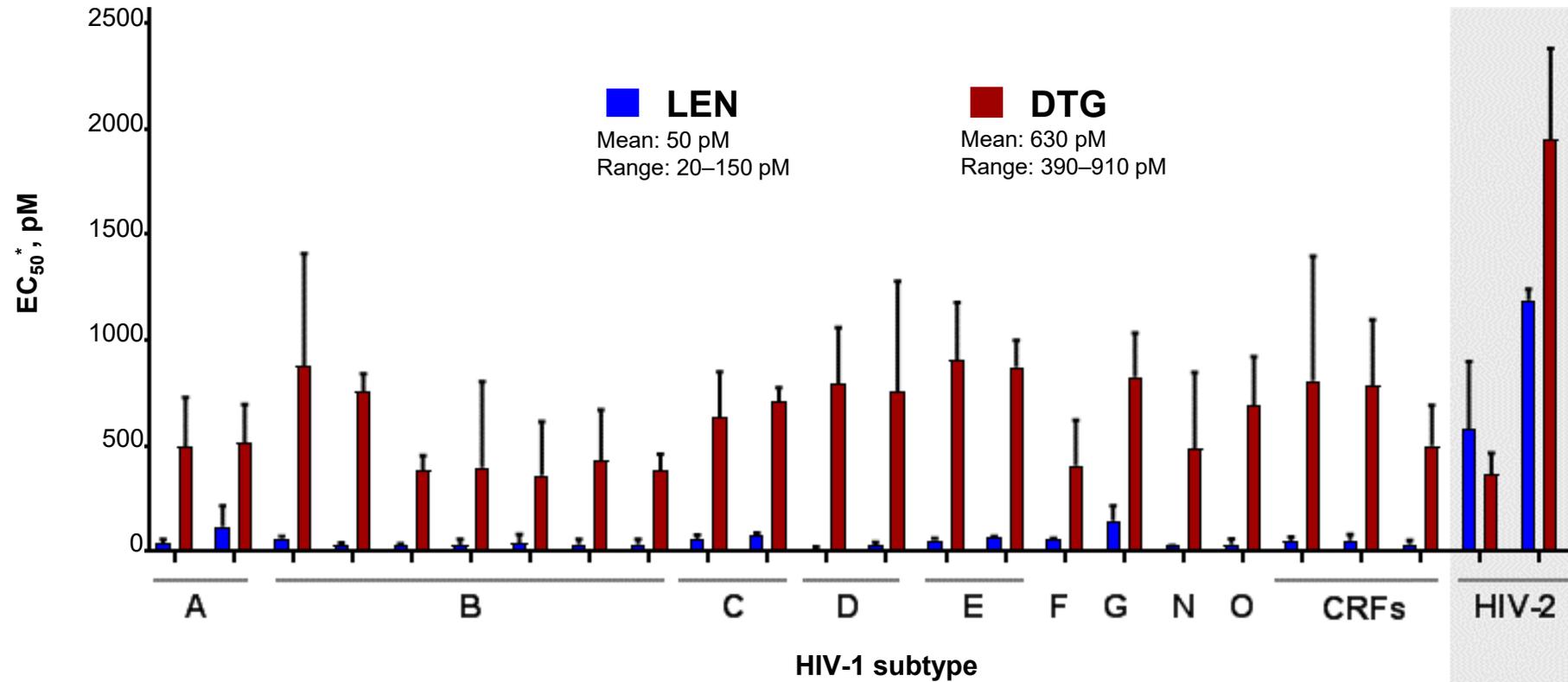
LEN binding directly between capsid protein subunits and inhibits 3 essential steps of the viral lifecycle:

1. Capsid-mediated nuclear uptake of HIV proviral DNA
2. Virus assembly and release
3. Capsid core formation



**LEN modulates the stability and/or transport of capsid complexes, leading to inhibition of multiple processes in the HIV lifecycle**

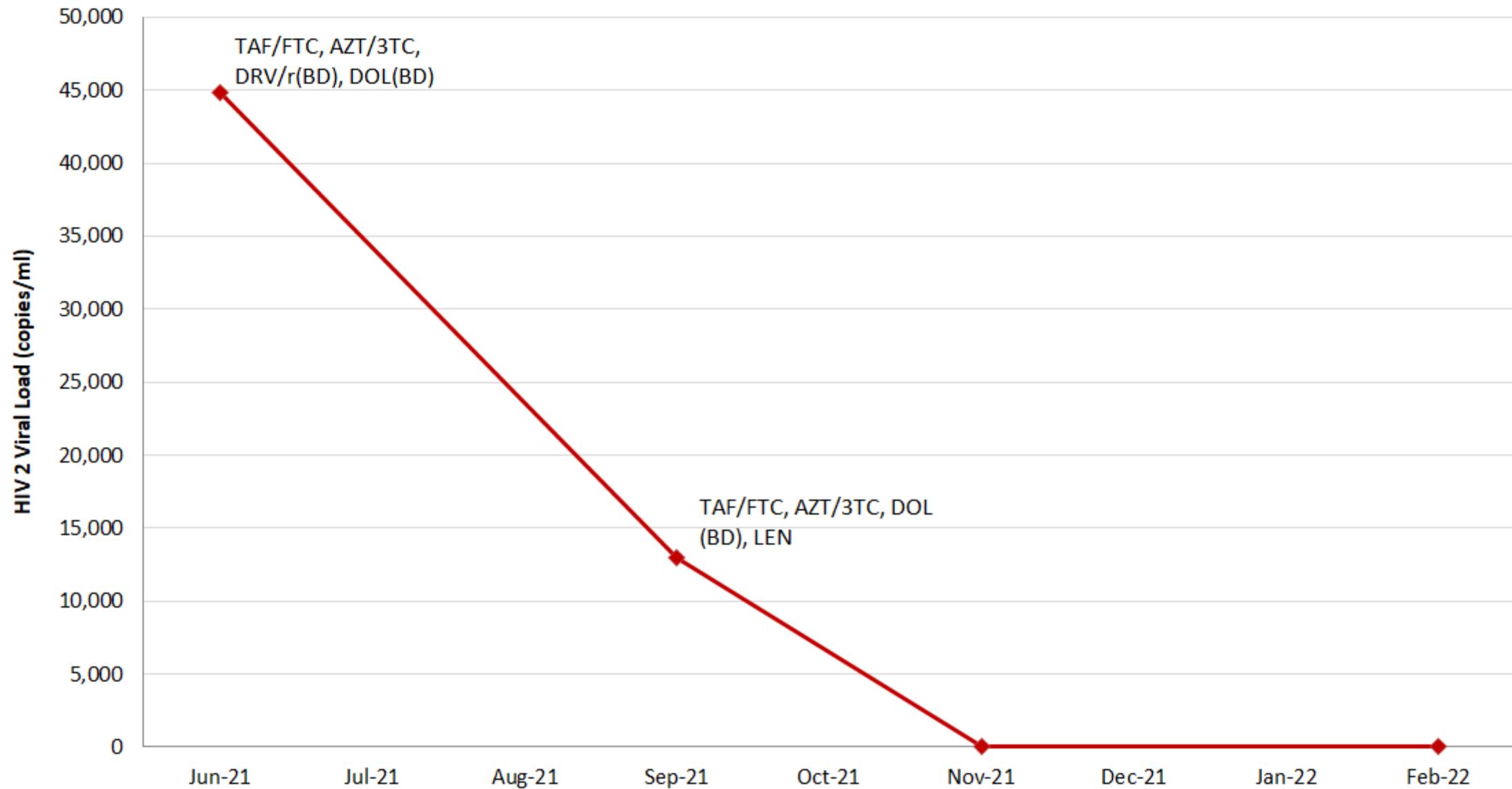
# *In vitro* LEN Antiviral Activity: Potency Against HIV-1 and HIV-2 in Human PBMCs



\*In PBMC against clinical isolates. CRF, circulating recombinant forms; EC<sub>50</sub>, half maximal effective concentration; PBMC, peripheral blood mononuclear cell.

# Proposed new regime

- Combivir (zidovudine **active agent**), descovy, dolutegravir 50mg BD (**active agent**), Lenacapavir (**potentially active agent**)
- DRV/r removed



	Jun-21	Sep-21	Nov-21	Feb-22
◆ HIV 2 VL	44,868	13,009	0	0

# Conclusion/ Learning points

- Limited treatment options
- Lack of data to support clinical decisions
- HIV 2 resistance test at baseline and when virological failure
- Mutation tools [EU HIV-2 Internet Tool \(hiv-grade.de\)](http://hiv-grade.de)
- Adherence
- Longer acting agents from new classes- new hope?

# Questions?

- [a.umaipalan1@nhs.net](mailto:a.umaipalan1@nhs.net)

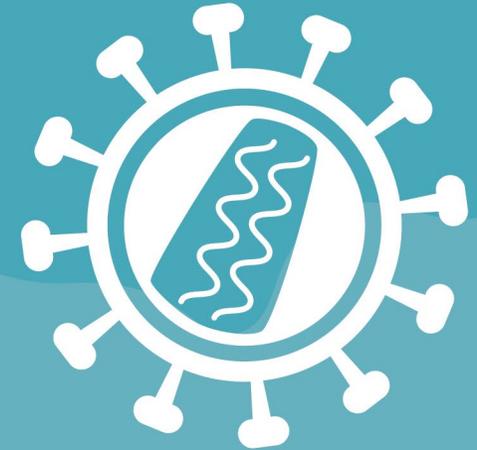
Thank you to Dr Iain Reeves, Prof Chloe Orkin & Gilead

**BHIVA** 

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Manchester Central, Manchester



# European perspective on BHIVA Audit/Standards

Professor. Dr Jürgen Rockstroh  
University Hospital Bonn, Germany

*This educational event is supported by an unrestricted medical education grants from*





# European perspective on BHIVA Audit/Standards

Jürgen Rockstroh, University Hospital Bonn, Germany

Past-president EACS



## **Conflict of Interest**

Honoraria for lectures and/or consultancies from Abivax, Galapagos, Gilead, Janssen, Merck, Theratechnologies and ViiV.

Research grants from Dt. Leberstiftung, DZIF, Hectorstiftung, NEAT ID.

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Clinical Standards

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HIV Medicine journal

International Partnerships

Latest BHIVA HIV and Coronavirus (COVID-19) advice

[Clinical Standards](#) > [British HIV Association Standards of care for people living with HIV 2018](#)

## British HIV Association Standards of care for people living with HIV 2018

### Introduction

The Standards are designed to provide a reference point against which to benchmark the quality of HIV care in the context of the changing needs of patients and the current financial pressures. They provide information to support top quality care and to inform commissioning decisions to meet the growing need for more efficient and cost-effective services. These Standards update earlier versions published in 2007 and 2013.

The new Standards are evidence based, and have been developed in partnership with care providers, professional associations, commissioners and people living with HIV. They cover the range of care needed from testing and diagnosis to the end of life, taking a holistic view of an integrated approach embracing overall health and well-being, as well as clinical care.

There are eight quality Standards, covering the care that any adult living with HIV in the UK should expect to receive. Each one presents a rationale, quality statements and measurable and auditable outcomes. Three new sections have been introduced looking at HIV prevention, stigma and well-being, and HIV across the life course.

Following the recent launch of the 2018 BHIVA Standards of Care for People living with HIV, it became





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## National Audit Reports

### Findings from Audit Projects

- 2021: Audit of HIV and hepatitis C (HCV) virus co-infection (pdf)
- 2021: Survey of HIV clinical services: lessons from the pandemic (pdf)
- 2019: Management pathways for new HIV diagnoses: timelines to assessment and treatment (pdf)
- 2018: Audit of monitoring and assessment of older adults with HIV
- 2017: Audit of alcohol, substance misuse and psychological support (pdf, also available as video)
- 2016: Review of late diagnoses
- 2016: Survey of access to seasonal influenza vaccine
- 2015: Routine monitoring and assessment of adults with HIV (presented Autumn 2015, PDF). Technical report of further analyses by S Michael, M May, M Gompels.
- 2014: Management of pregnancy in HIV: survey results (presented Autumn 2014, pdf), survey participants (pdf) and case review audit using data submitted to National Study of HIV in Pregnancy in Childhood (presented Spring 2015, pdf)
- 2013 joint BHIVA/BASHH audit of partner notification for patients with newly diagnosed HIV infection
- 2012-13 audit of patients with diagnosed HIV infection apparently not in care
- 2011-12 audit of outcomes in established HIV infection (also available as .pdf)
- 2010-11 survey of HIV testing policy and practice and audit of new patients when first seen post-diagnosis
- 2010-11 audit participation list (pdf)
- 2009-10 survey of testing of children of adult patients, and adolescent transition from paediatric care (nb participating sites may request an individual report of this survey from Hilary Curtis)

# Why do we need Standards/Audits beyond 2022?

- **Clinical demands in HIV care are changing in an aging population**
- **First generation of HIV nurses and physicians is retiring; start of new medical staff without history of HIV disease development**
- **Increasing migration and refugee flow**
- **Management of new treatment strategies based on long-acting treatment regimens**
- **Help impact reimbursement strategies and national health guidance**
- **Create evidence for what is needed in times of unforeseen events such as COVID-19 pandemic**
- .....

# EACS: SOC meetings

First Standard of care meeting  
25-26 November 2014, Rome



Increasing HIV awareness and testing, improving training for health care providers, ensuring equitable patient access to treatments and diagnostics for HIV and comorbidities, and implementing best practices in infection control and treatment of HIV-infected patients coinfecting with tuberculosis and hepatitis C virus, for whom direct acting antiviral treatment should be considered.

Second Standard of Care meeting  
November 16-17, 2016  
Brussels



Adherence to guidelines for treatment initiation, treatment monitoring and outcomes, Retention in care and HIV and tuberculosis co-infection.

# STANDARD of Care

Prof. Jürgen Rockstroh  
Standard of Care Chair

The mission of the Standard of Care project is to promote better and more equal standards of HIV testing and care throughout Europe, a region characterised by gross disparities.

Because an overview of standards of care in different countries does not exist, a long-term goal for the group has been to deploy a European audit of services and care in different countries. A pilot audit project on the standards of care in viral hepatitis co-infection has been completed and a red thread running through the five sessions was discussion around how to scale up audits in other clinical areas to a larger exercise.

The scheduled meeting for EACS Standard of Care for HIV and Co-infections was repackaged from a physical event in Tbilisi, Georgia into a series of five mostly virtual sessions between October 2020 and February 2021. The sessions were designed to build on the work done since the 2014 launch of the Standard of Care project in Rome

The opening session was co-chaired by Prof. Jürgen Rockstroh and Prof. Tengiz Tsertsvadze. It discussed the data from standard of care initiatives and how the data might impact other patient populations and explored the impact of the COVID-19 pandemic on HIV, hepatitis and TB services.

The hepatitis pilot audit was presented by Dr Ann Sullivan (see separate section in this article). Prof. Chloe Orkin, former chair of BHIVA, spoke of her extensive experience with audits and gave practical advice on how to manage them. Feedback from a scoping exercise to identify existing national and local standards of care in Europe mandated by ECDC and carried out by EACS in cooperation with CHIP was shared by Dr Kamilla Laut. Seven countries and several pan-European agencies participated in the exercise which concluded that one common set of standards of care should be feasible.

The first of three themed workshops looked at HIV and COVID-19 co-infection and at the impact of COVID-19 on HIV, hepatitis and TB services. It revealed multiple impacts of the COVID-19 lockdown on people living with HIV with particular attention paid to the situation in Central and Eastern Europe. Impacts included services being restricted, HIV patients observing lockdown impositions very strictly and, therefore, not seeking medical help, and HIV medical staff, hospital beds and laboratory resources being reallocated to COVID-19.



# Audit

Topic selected and audit proforma developed following multi-stakeholder involvement at the SoC meeting in Bucharest Jan/Feb 2019

Topic: Hepatitis screening, prevention and management in people living with HIV

Guidelines: EACS Standards 9.1

Structure: Policy survey and case note review

Patients: those recently diagnosed with HIV; those with HBV or HCV co-infection



## EACS Guidelines 9.1 (pages 6, 58, 81-85)

### Initial visit following HIV diagnosis:

Screen for Hepatitis A, B and C.

Vaccinate (A/B) if non-immune

If insufficient response (anti-HBs < 10 IU/L), re-vaccination should be considered, including double dose

Use TDF/TAF containing ART in HepB vaccine non-responders

### HBV co-infected

Hepatitis Delta antibodies should be screened for in all HBsAg positive persons

All persons with HBV/HIV co-infection should receive ART that includes TDF or TAF unless history of tenofovir intolerance

### HCV co-infected

Perform HCV RNA if HCV Ab detected

Harm reduction for those identified with specific risk (e.g. PWID, chemsex) – advise harm reduction interventions e.g. OST NEP, safer sex advice

Every person should receive IFN-free DAA therapy to eradicate HCV

## EACS Guidelines 9.1 (pages 6, 58, 81-85)

### Patients with cirrhotic liver disease

HCC screening is indicated in all cirrhotic HBV or HCV co-infected persons in a setting where treatment for HCC is available

Ultrasound every 6 months

Alpha-fetoprotein is a suboptimal surveillance tool because of low sensitivity and specificity

# Methodology

5 countries selected – lead for each country identified and asked to invite 5 services to take part; lead co-ordinated involvement at a country level

Georgia (4) Romania (6) Poland (4) Germany (5) Spain (4) = 23

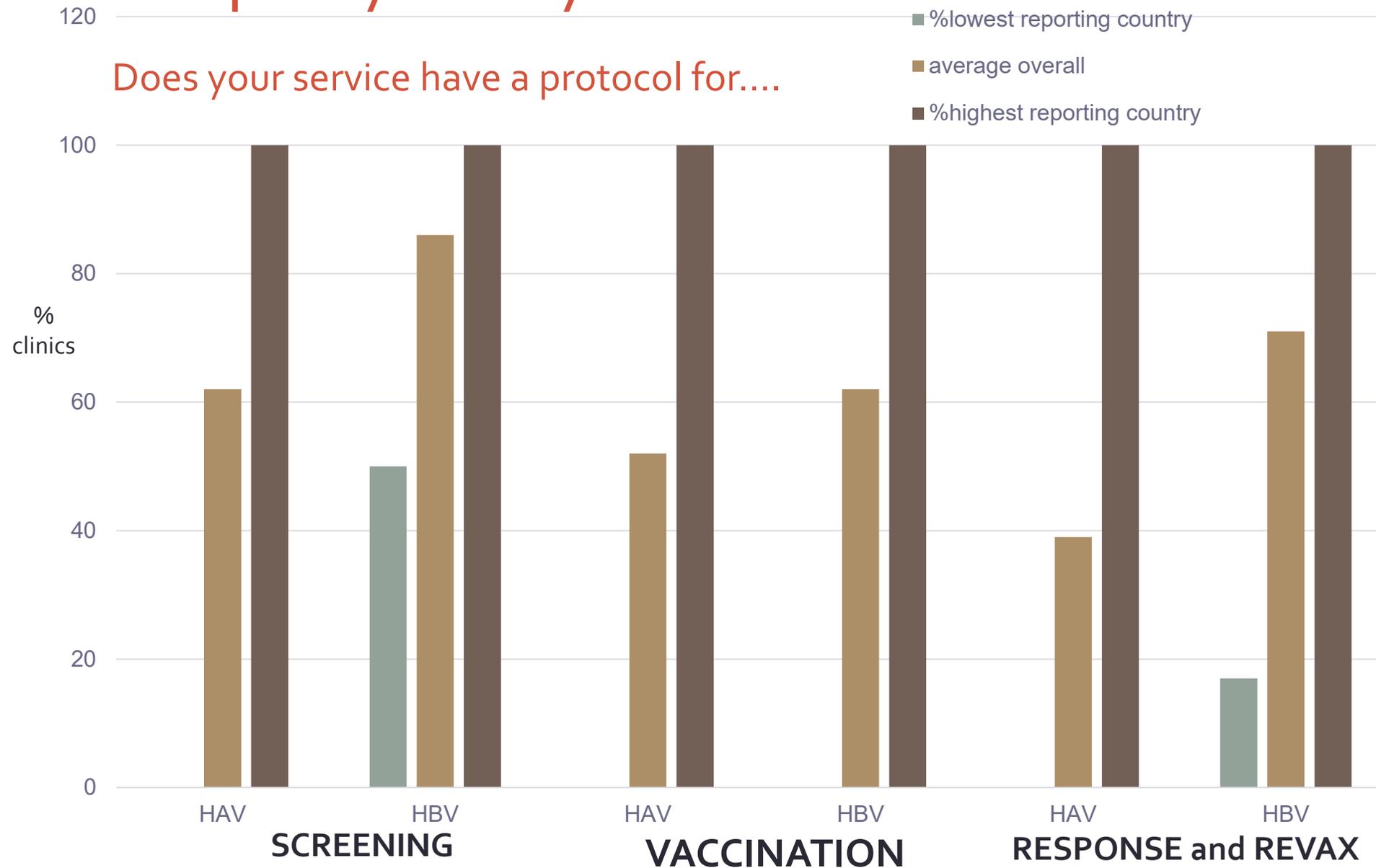
**Policy survey:** each service asked to complete once

**Case note review:** total of 40 or 20 patients' notes reviewed

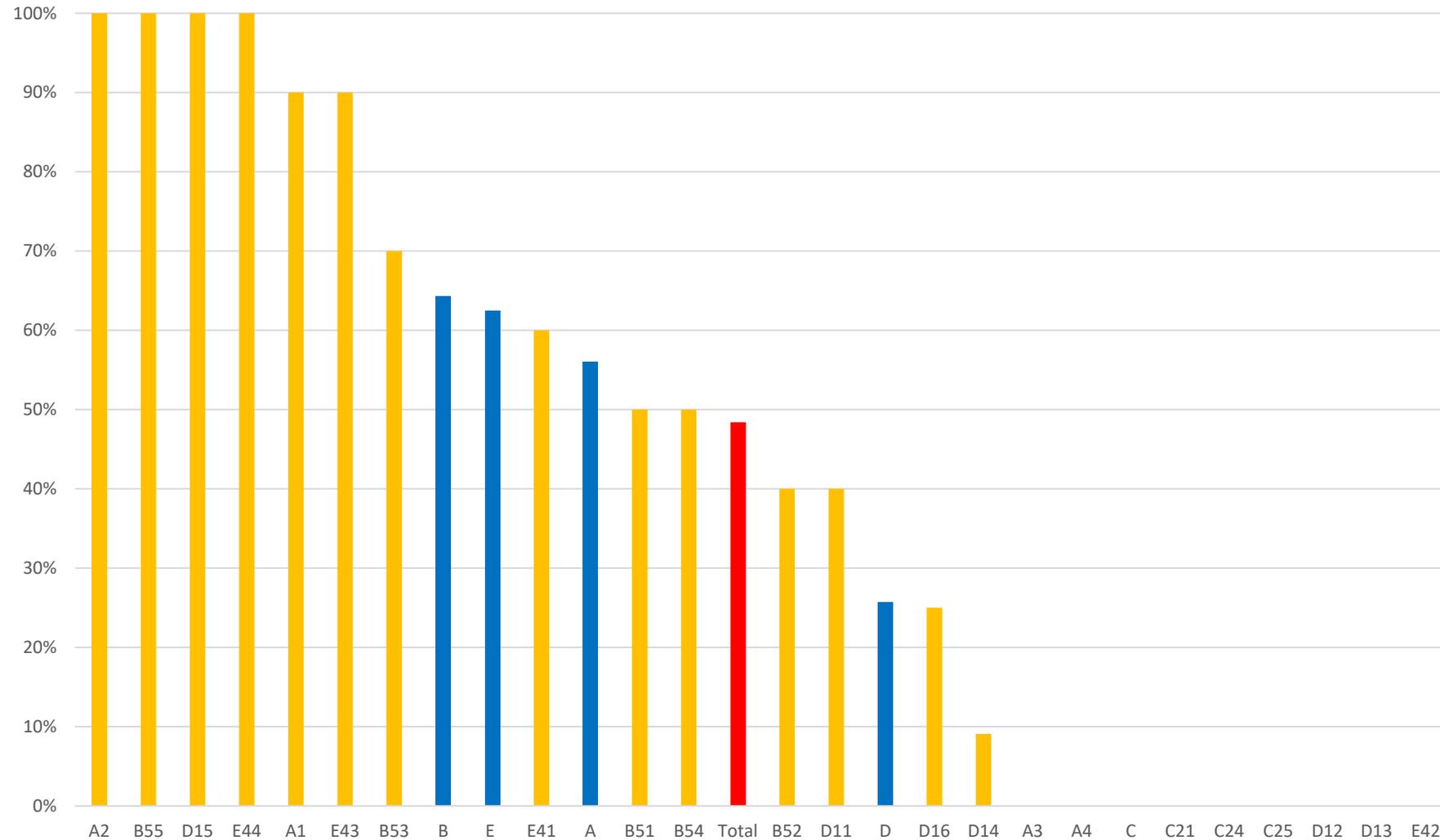
- 20 or 10 recently diagnosed with HIV
- 10 or 5 co-infected with HBV and HCV

No patient identifiable information was submitted; audit number assigned and decoding list retained at clinic

# Results: policy survey



# HBV coinfectd: delta performed



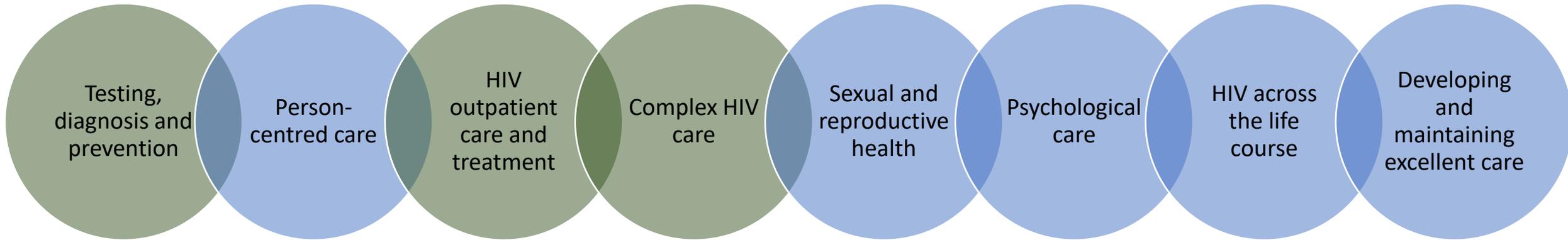
# Aims of the scoping exercise

- To identify and analyse useful sources of background information
- To draft a discussion paper with key areas for possible inclusion in a European Standards of Care including a draft sample chapter on one Standard of Care
- To support the consultation of an expert advisory group to receive input on the perceived usefulness and scope of such a project

# What we did

- Document review:
  - Standards of Care (BHIVA, ECDC/ERS)
  - Policy documents (ECDC, WHO)
  - Clinical guidelines (EACS, GESIDA)
  - Cohorts (Danish, Swedish, Swiss, Dutch)
  - Guidance and SoC meeting reports (ECDC, EACS)
  - Not a comprehensive review
- National and local examples of quality of care
  - Survey sent to EACS Governing Board and Regional Representatives
  - Telephone interviews with 2 representatives (Romania, Switzerland)

# What we did



- Data extracted from the reviewed documents was grouped in 8 thematic tables inspired by the BHIVA standards
- Each table lists the identified quality statements and indicators
- Most consensus in green: \*  $\geq 3$  reviewed documents with similar quality statements and/or indicators

# Themes

## Services and structure



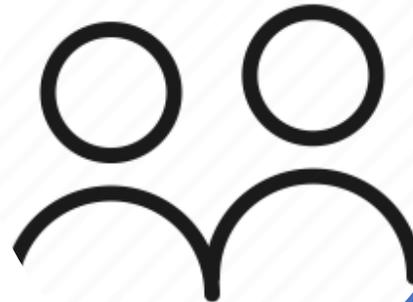
- Availability
- Access
- Specialists
- Integrated care
- Agreed pathways

## Treatment and care

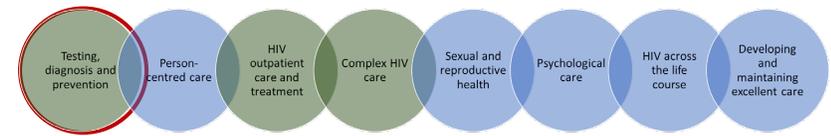


- Specific investigations
- Treatment and care according to guidelines

## Information, support and counselling



- Information
- Counselling
- Peer and professional support
- Confidentiality
- Information sharing
- Rights



# Prevention, testing and diagnosis



Settings and scenarios for offering tests  
Testing facilities for high-risk groups  
Availability of innovative testing technology  
Agreed pathways into care

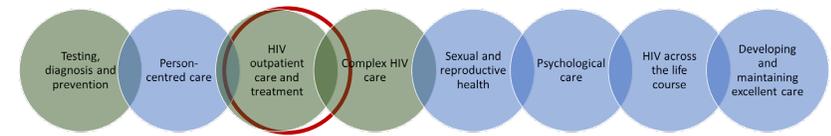
Provision of, and legal access to, free, clean drug injection equipment  
Comprehensive package of HIV/STI prevention incl. PrEP



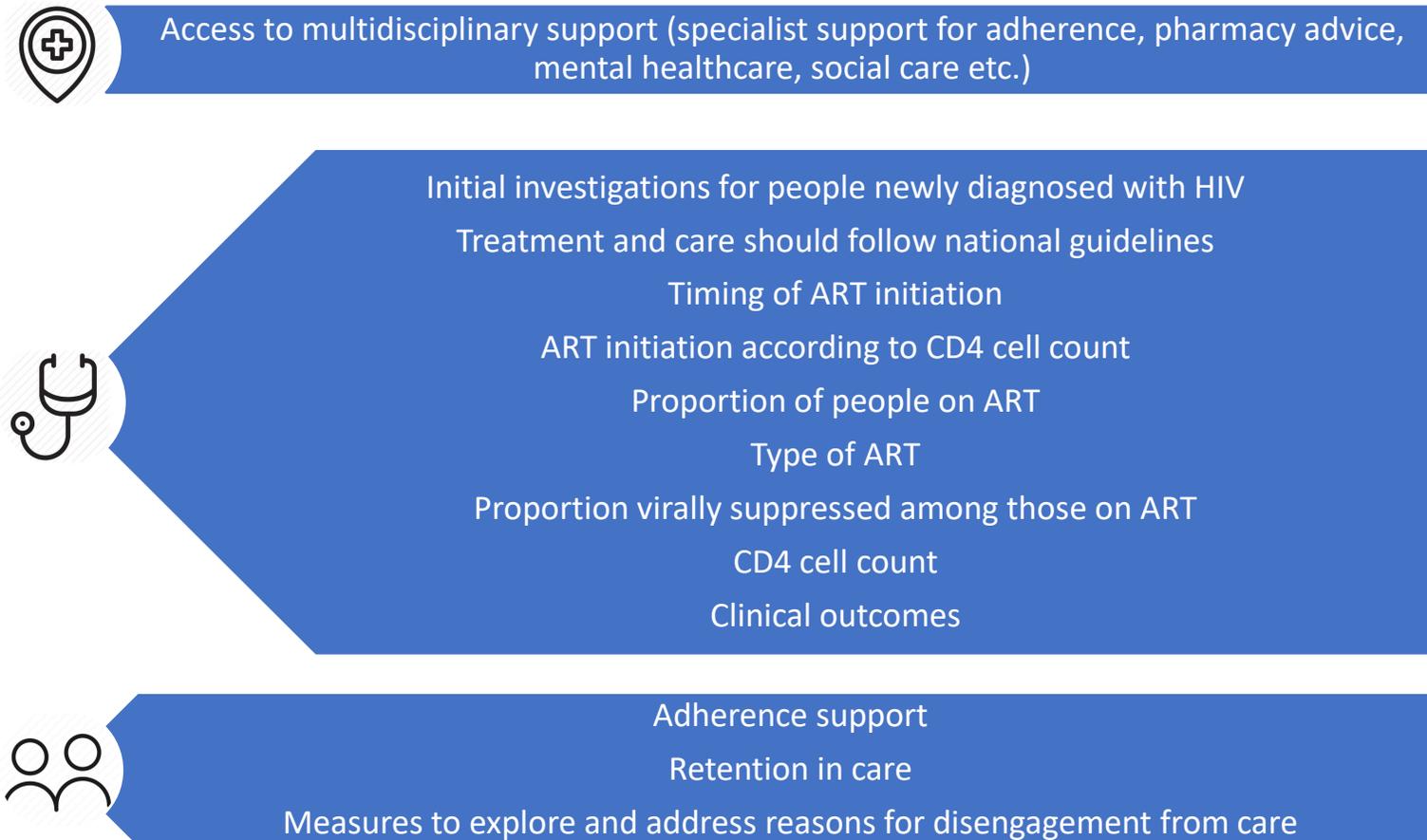
Provider-initiated testing in people with identifiable risk factors

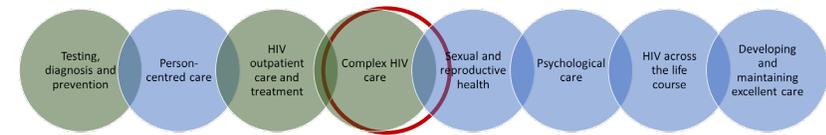


Testing of partners  
Partner notification procedures  
Voluntary and confidential testing  
Information on interventions to reduce risk of HIV transmission  
Promotion of condom use  
Counselling about the risk of transmission, preventive measures and partner notification

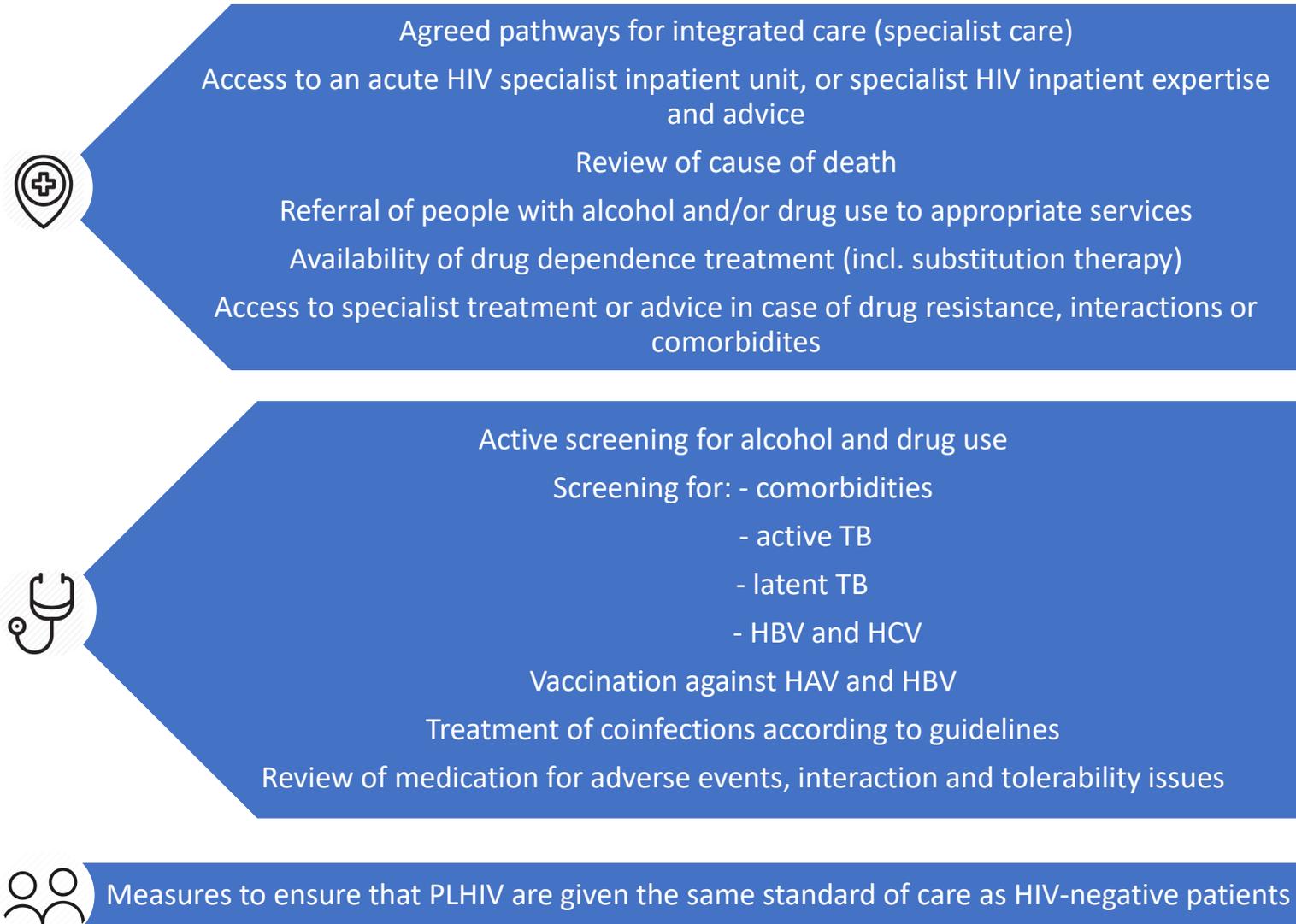


# Outpatient care and management



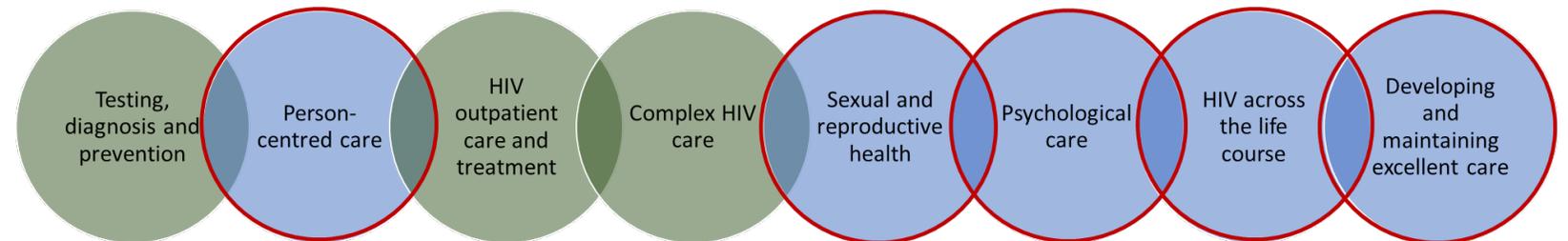


# Complex HIV care



# Summary

- Some consensus across documents on quality statements and indicators traditionally covered by clinical treatment guidelines
- High number of, but less consensus about, quality statements related to
  - Services and structure
  - Information, support and counselling



# Topics covered in BHIVA standards, but without consensus in reviewed documents



Involvement of PLHIV in design, planning, delivery and review of services  
Transition of care from paediatric to adult services  
Access to young-person friendly care and support  
Care provided by an HIV specialist  
Mortality and morbidity reviews



Care and treatment according to age (care across the life course)  
Early to middle adulthood (key elements of health and well-being, accessibility of care etc.)



Self-management and peer-support  
Supporting healthy sexual lives  
Support for partner notification  
Supporting and promoting emotional, mental and cognitive well-being  
Opportunities to participate in research  
Information-sharing with other clinicians involved in care (e.g. GP)  
Confidentiality of health information

# Summary

- Few countries with standards of care
- Most countries have some sort of performance monitoring, but few have systematic monitoring against guidelines
- Feedback to clinics vary by country. Often self-monitoring driven by clinicians

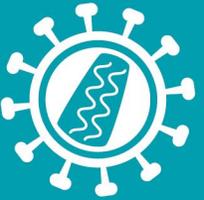
# Conclusions

- We know from literature that there is great variation in the quality of care across clinics and countries
- Consensus on standard of care does not cover the whole spectrum of HIV care, prevention and control
- Few surveyed countries have standards of care and levels of performance monitoring vary
- There may be a basis for a common set of European standards of care to improve overall HIV care, prevention and control
- BHIVA standards and audit track record are very advanced and well developed and should encourage further efforts throughout Europe to learn from this great experience



# Thank you for listening!!!

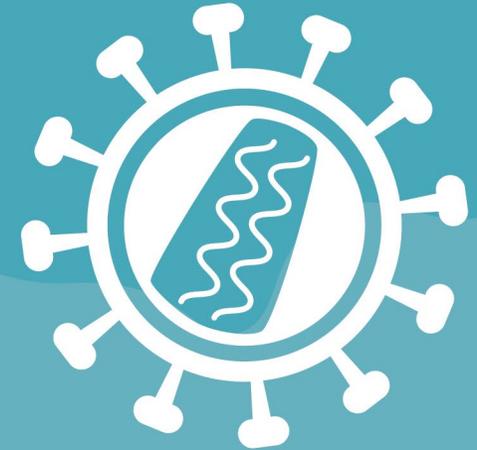
Thanks to all the members of the EACS SOC group as well as all colleagues from the scoping exercise with EACS/ECDC in particular Ann Sullivan and Joelle Verluyten, Teymur Noori, Kamilla Laut and Dorthe Raben.

**BHIVA** 

British HIV Association

# 2022 Spring Conference

**Wed 20<sup>th</sup> - Fri 22<sup>nd</sup> April**  
Manchester Central, Manchester



# Audit reflections

Dr Hilary Curtis  
Clinical Audit Co-ordinator BHIVA, UK

*This educational event is supported by an unrestricted medical education grants from*







# National Audit Reports

## Findings from Audit Projects

- 2021: Audit of HIV and hepatitis C (HCV) virus co-infection (pdf)
- 2021: Survey of HIV clinical services: lessons from the pandemic (pdf)
- 2019: Management pathways for new HIV diagnoses: timelines to assessment and treatment (pdf)
- 2018: Audit of monitoring and assessment of older adults with HIV
- 2017: Audit of alcohol, substance misuse and psychological support (pdf, also available as vi
- 2016: Review of late diagnoses
- 2016: Survey of access to seasonal influenza vaccine
- 2015: Routine monitoring and assessment of adults with HIV (presented Autumn 2015, PDF) Michael, M May, M Gompels.
- 2014: Management of pregnancy in HIV: survey results (presented Autumn 2014, pdf), survey using data submitted to National Study of HIV in Pregnancy in Childhood (presented Spring
- 2013 joint BHIVA/BASHH audit of partner notification for patients with newly diagnosed HIV
- 2012-13 audit of patients with diagnosed HIV infection apparently not in care
- 2011-12 audit of outcomes in established HIV infection (also available as .pdf)
- 2010-11 survey of HIV testing policy and practice and audit of new patients when first seen f
- 2010-11 audit participation list (pdf)
- 2009-10 survey of testing of children of adult patients, and adolescent transition from paediatric request an individual report of this survey from Hilary Curtis)
- 2009-10 survey - more detailed aspects of adolescent transition from paediatric care
- 2009-10 hepatitis B/C and HIV co-infection
- 2008-9 Survey of ART failure management (PDF)
- 2007-8 Survey of clinical networks for HIV care
- 2007-8 Snapshot audit of inpatients with HIV
- 2006-7 survey of patient assessment and monitoring and set-up phase of cohort i
- 2006-7 survey of patient assessment and monitoring and set-up phase of cohort i
- 2006-7 follow-up of cohort of patients starting ART from naive
- 2005-6 survey of cardiovascular risk management and initial results of mortality a
- 2005-6 Full results of mortality audit
- 2004-5 survey of management of TB and HIV co-infection
- 2004-5 survey of management of TB and HIV co-infection (PDF)
- 2004-5 audit of switching therapy and re-audit of start therapy
- 2004-5 audit of switching therapy and re-audit of start therapy (PDF)
- 2004-5 audit of switching therapy and re-audit of start therapy (abridged)
- 2003-4 survey of hepatitis B or C co-infection
- 2003-4 survey of hepatitis B or C co-infection (PDF)
- 2003-4 audit of maternity and HIV
- 2003-4 audit of maternity and HIV (PDF)
- 2003 audit of new HIV diagnoses
- 2003 audit of new HIV diagnoses (PDF)
- 2003 audit of new diagnoses: BMJ report
- 2002-3 audit of patients initiating treatment
- 2002-3 audit of patients initiating treatment (PDF)
- 2001-2 audit of unselected adults with HIV



# HIV partner notification f definitions, outcomes an

Authors: AK Sullivan, M Rayment, Y Azad, G Bell, H McC  
H Curtis, M Murchie, C Estcourt

# Standards of Care *for People Living with HIV* 2018





Clin Med (Lond)  
doi: [10.7861/clin](https://doi.org/10.7861/clin)

BMC Infectious Diseases



British HIV with tuberc

[BMC Infect Dis.](https://doi.org/10.1186/s12875-017-0709-4) 2017; 17: 619.

[Matthijs Backx](#),<sup>1</sup> Published online 2017 Sep 12 | doi: [10.1186/s12875-017-0709-4](https://doi.org/10.1186/s12875-017-0709-4)  
coordinator,<sup>2</sup> An

[Margaret Johns](#)  
and BHIVA Clinical

Routine monitoring  
HIV Association (BH

HIV MEDICINE



[A. Molloy](#),<sup>1</sup> [H. Curtis](#),<sup>2</sup> [E. Bu](#)

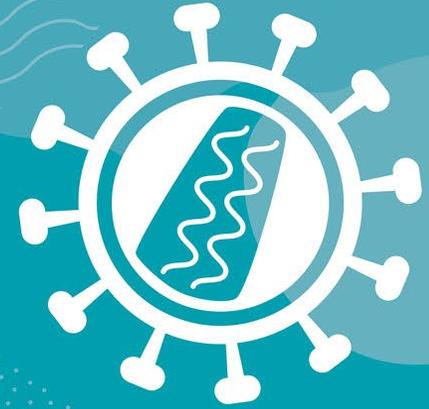
Short Communication | [Free Access](#)

PMCID: PMC5598005

PMID: [28002720](https://pubmed.ncbi.nlm.nih.gov/28002720/)

## Psychological wellbeing and use of alcohol and recreational drugs: results of the British HIV Association (BHIVA) national audit 2017

S Parry , H Curtis, D Chadwick, on behalf of the British HIV Association Audit and Standards Sub-Committee



# 21 years on: audit reflections

Hilary Curtis, BHIVA



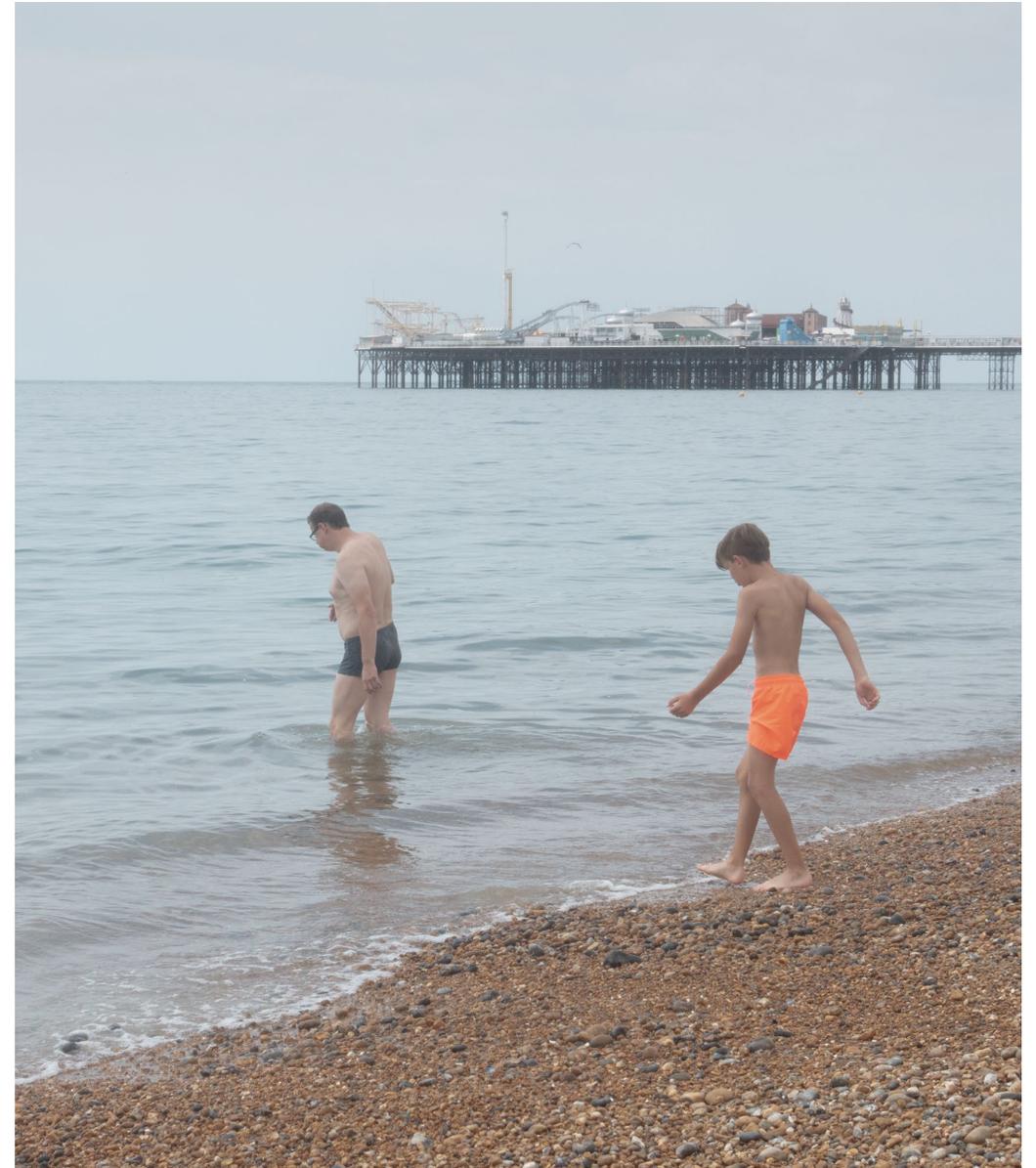
## **Conflict of Interest**

In relation to this presentation I declare that I have no conflict of interest

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# Audit is boring

- Audit means checking what you should already know/suspect
- But audit provides evidence, and quantifies
- Enables comparison between services
- This can be leverage for change, improvement

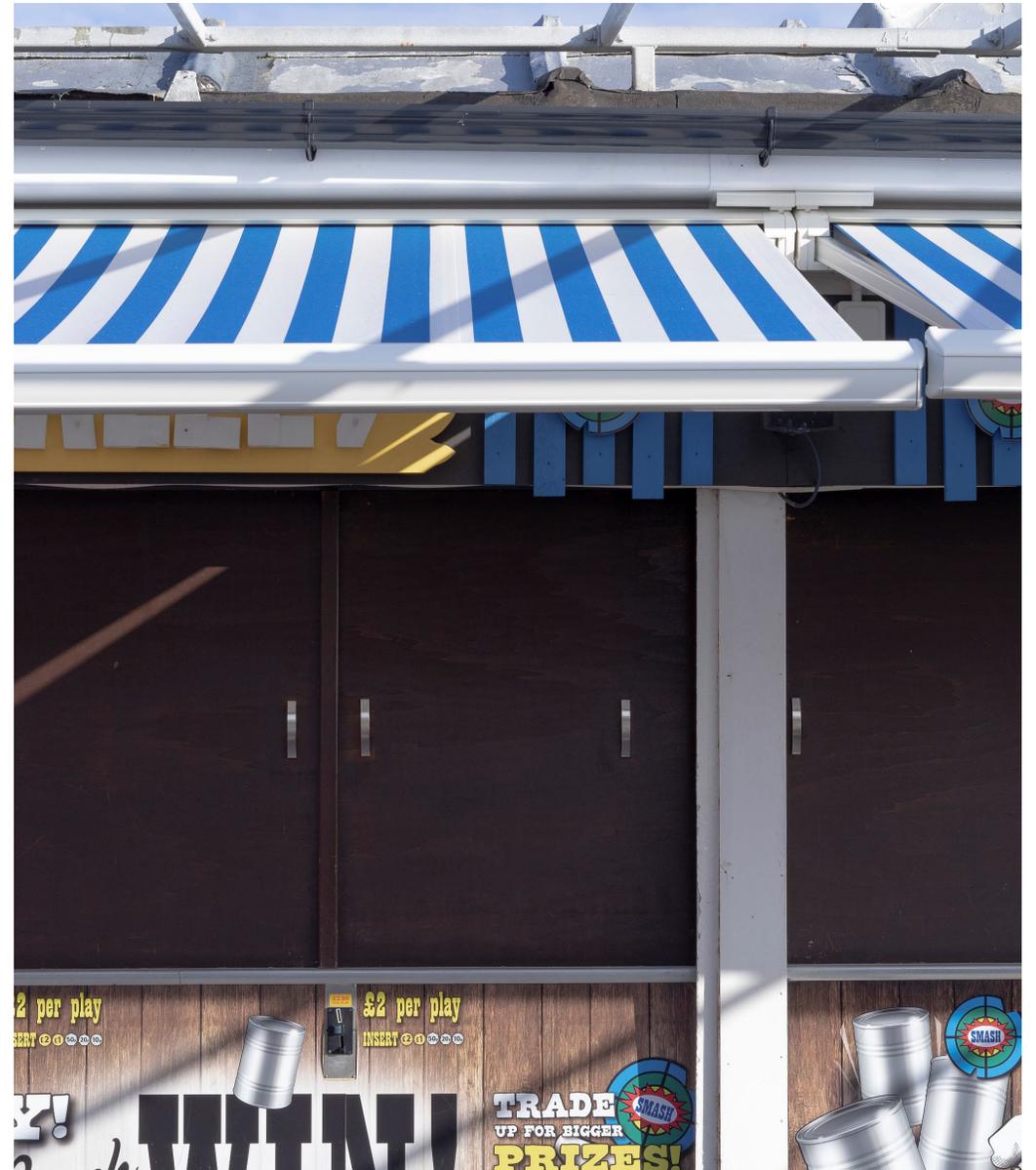


# Process or outcome?

Outcomes matter but:

- Can be delayed, less timely
- Poor outcomes likely to be rarer than process failures
- Can only be improved by improving process
- Process audit identifies *where* change is needed

If process/outcome relationship is validated, audit process



# Standards are often ambiguous



- Patients on ART aged >40 with CVD risk calculated within last 3 years (90%)
- Some people already have CVD

(Risk calculated plus have CVD) ÷  
All >40

OR

Risk calculated ÷ (All >40 minus  
have CVD)

# Decisions, decisions

- Inclusion criteria
- Patient choice, eg to decline or defer intervention
- Non-attenders
- Missing data

In national/multi-site audit, apply consistent approach

Comparing local audits may be apples and oranges



# QI approaches: audit or critical case review?



## Audit:

- Quantitative
- Systematic, enables comparisons

## Case review, eg deaths, late diagnoses:

- Individual
- Focus on poor outcomes/near misses
- Deeper learning?

Complementary – need both approaches

# Acknowledgements

- Everyone who has taken part
- Audit and Standards Sub-Committee
- Chairs: Margaret Johnson, Ed Ong, Andrew Freedman, David Chadwick
- Caroline Sabin
- Brian Gazzard
- HIV community

- Photos © Joel Goldstein

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# Coming soon:

BHIVA National Audit 2022

Routine Monitoring through the Pandemic