IAS EDUCATIONAL FUND MEETING

Adeeba Kamarulzaman
Immediate Past President IAS

Andrew Grulich, Kirby Institute, UNSW Sydney

Towards Elimination

The prospect of elimination of HIV transmission through prevention programs

23 – 26 July · Brisbane and virtual

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Elimination of HIV transmission

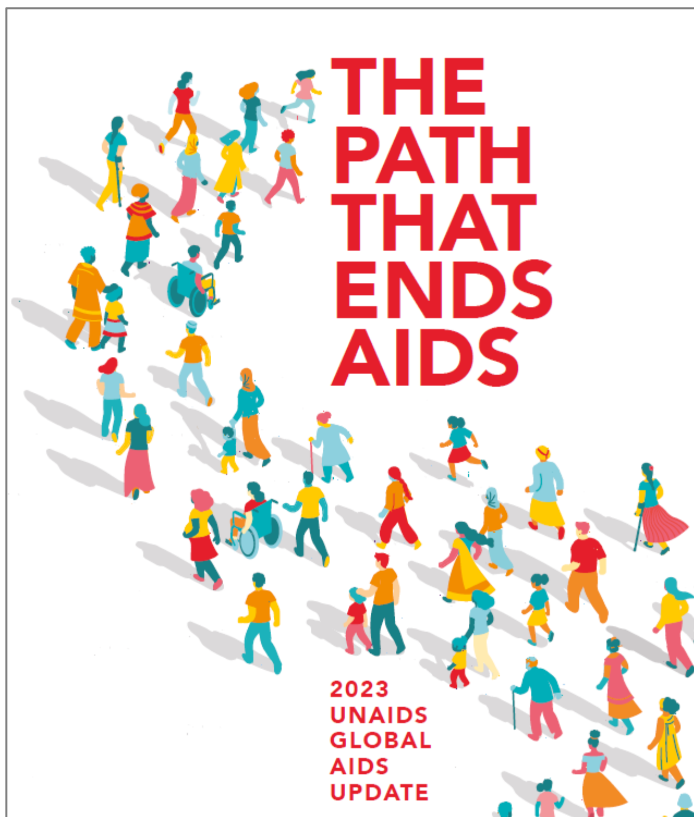
- Epidemiological definition
  - *the reduction of HIV incidence to zero in a defined geographical area*

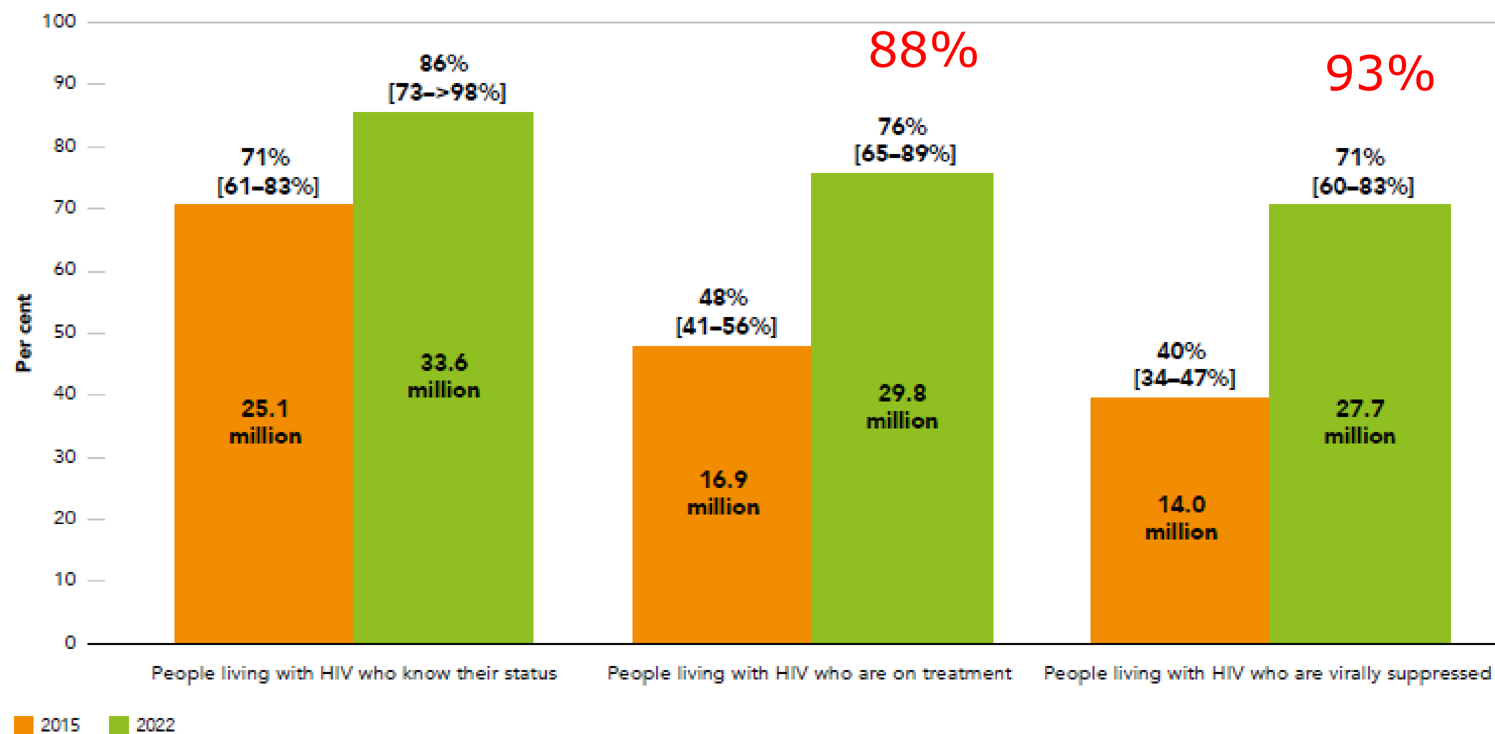
- Unlikely to be feasible because of
  - the very long period when HIV has few symptoms
  - lack of a highly effective vaccine
  - lack of a cure which would render PLWHIV non-infectious

- However, we have two very effective preventive strategies
  - U=U (100% effective)
  - PrEP (near 100% effective)
  - These require life-long adherence

- How close to zero transmission can we get?

The 95-95-95 Targets Update: Global, 2015-2022





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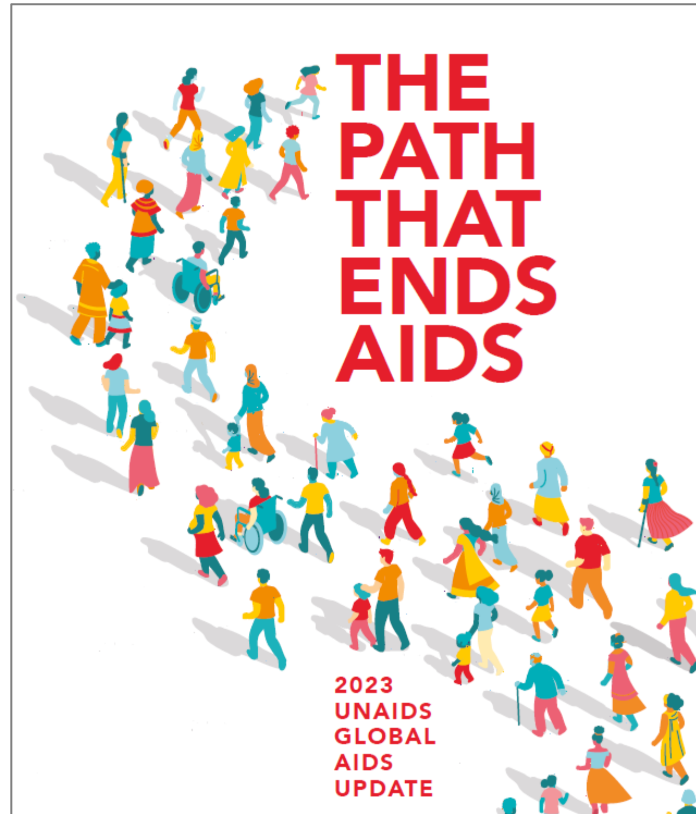
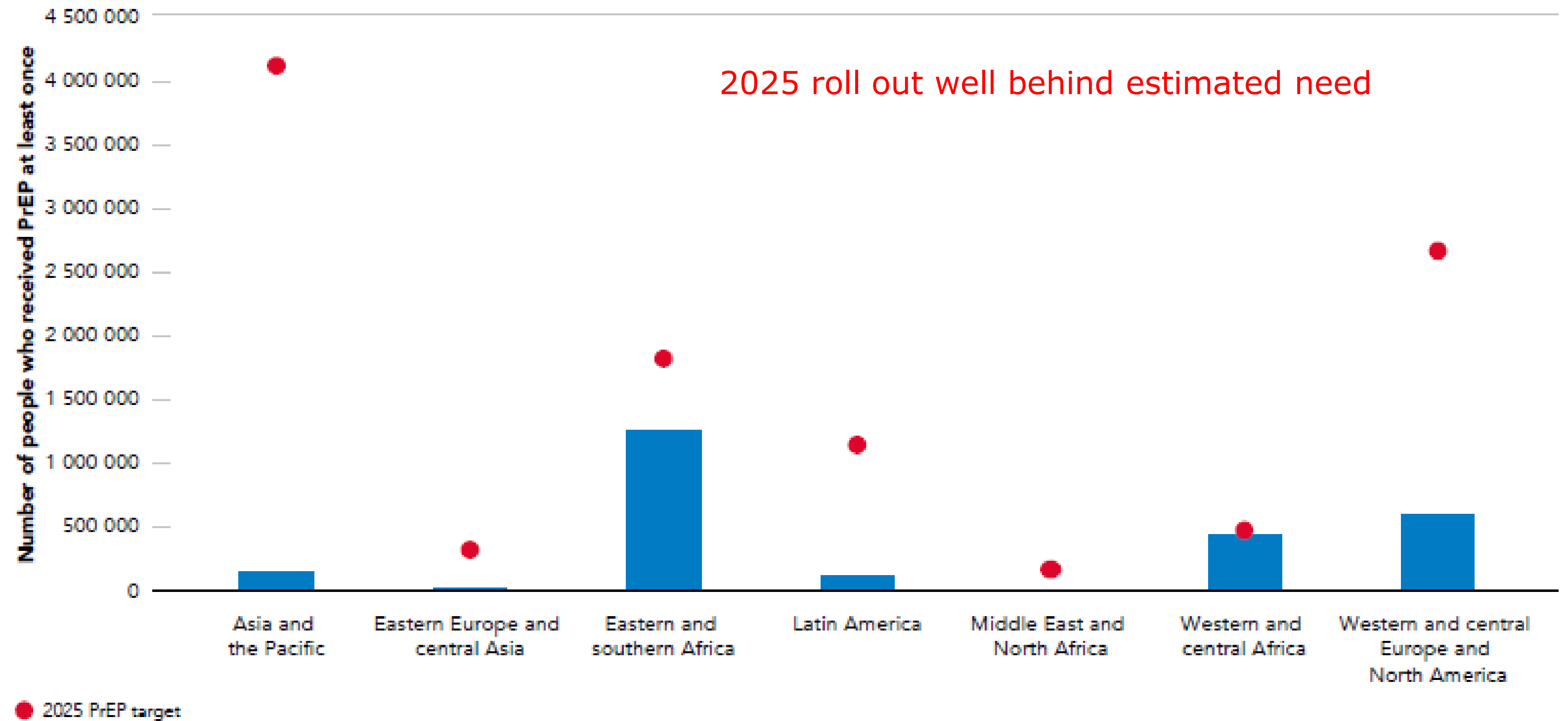
The full potential of PrEP is not being realised

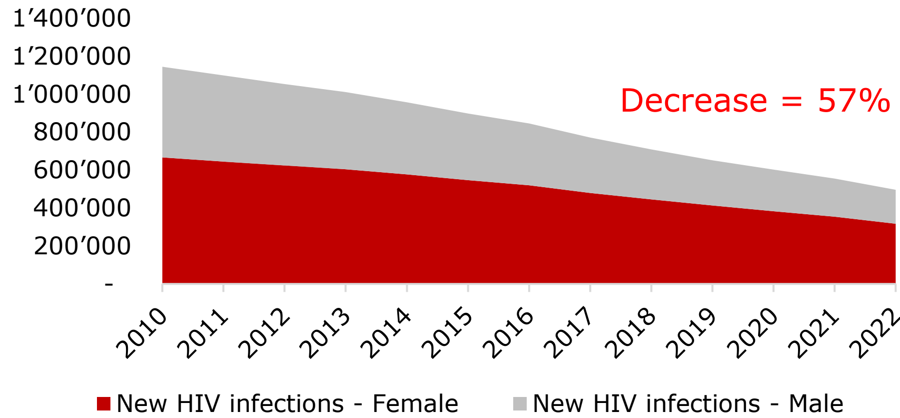


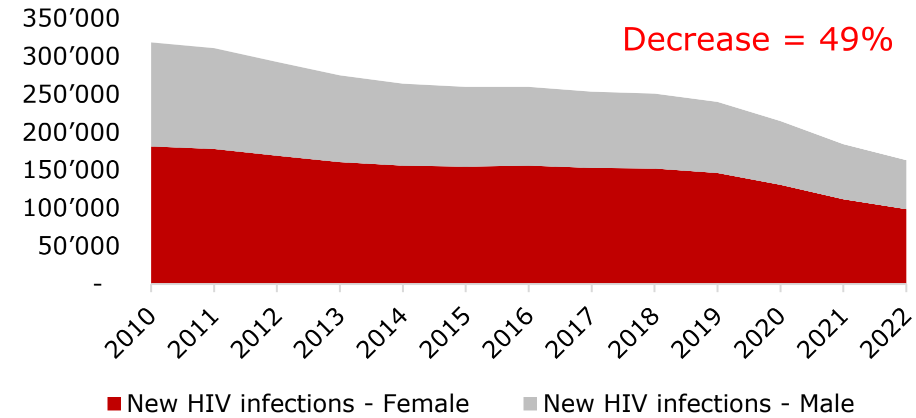
Except for one region, PrEP use trails very far behind the estimated need

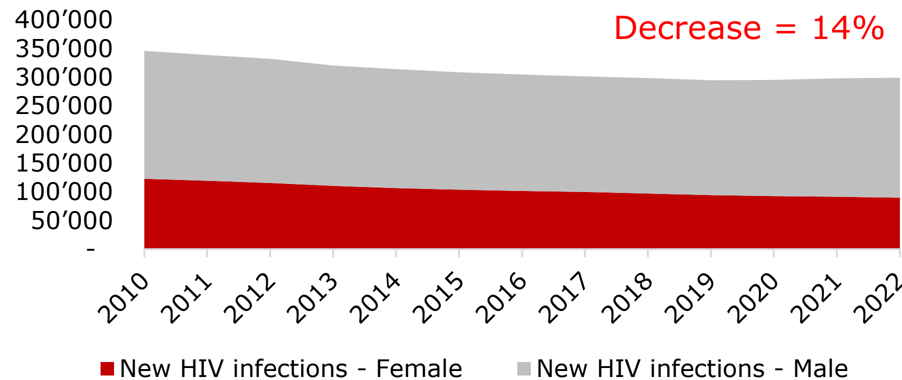
Figure 2.6 Number of people who received pre-exposure prophylaxis (PrEP) at least once during the reporting period, by region, 2022, and 2025 target

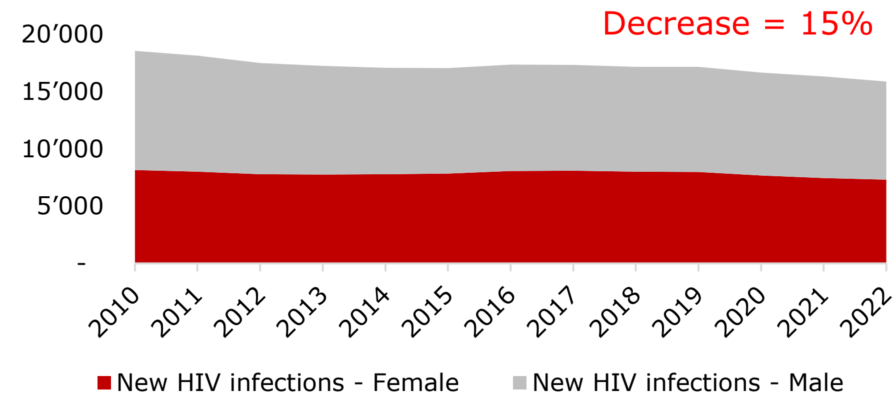


New infections: By region, by sex, 2010-2022









Source: UNAIDS epidemiological estimates, 2023 (https://aidsinfo.unaids.org/)

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How will we get there: an example of a successful prevention program from the field

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Decline in HIV diagnoses from 2008-2012 baseline

Number of new diagnoses

300
250
200
150
100
50
0

2008-2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

Decrease = 56%

Decrease = 37%

MSM Other

Source: Notifiable Conditions Information Management System, Health Protection NSW, 2023

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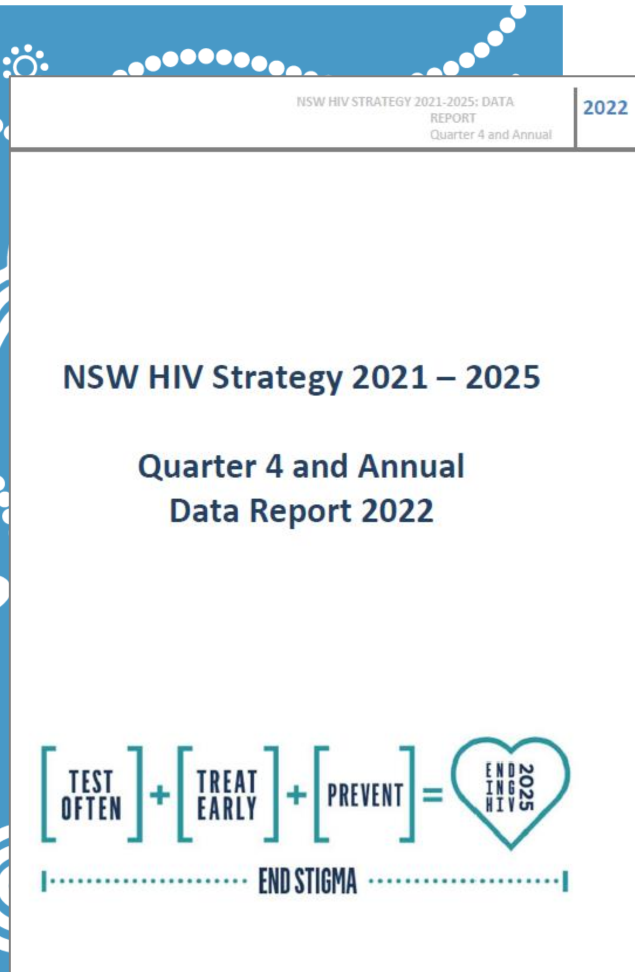
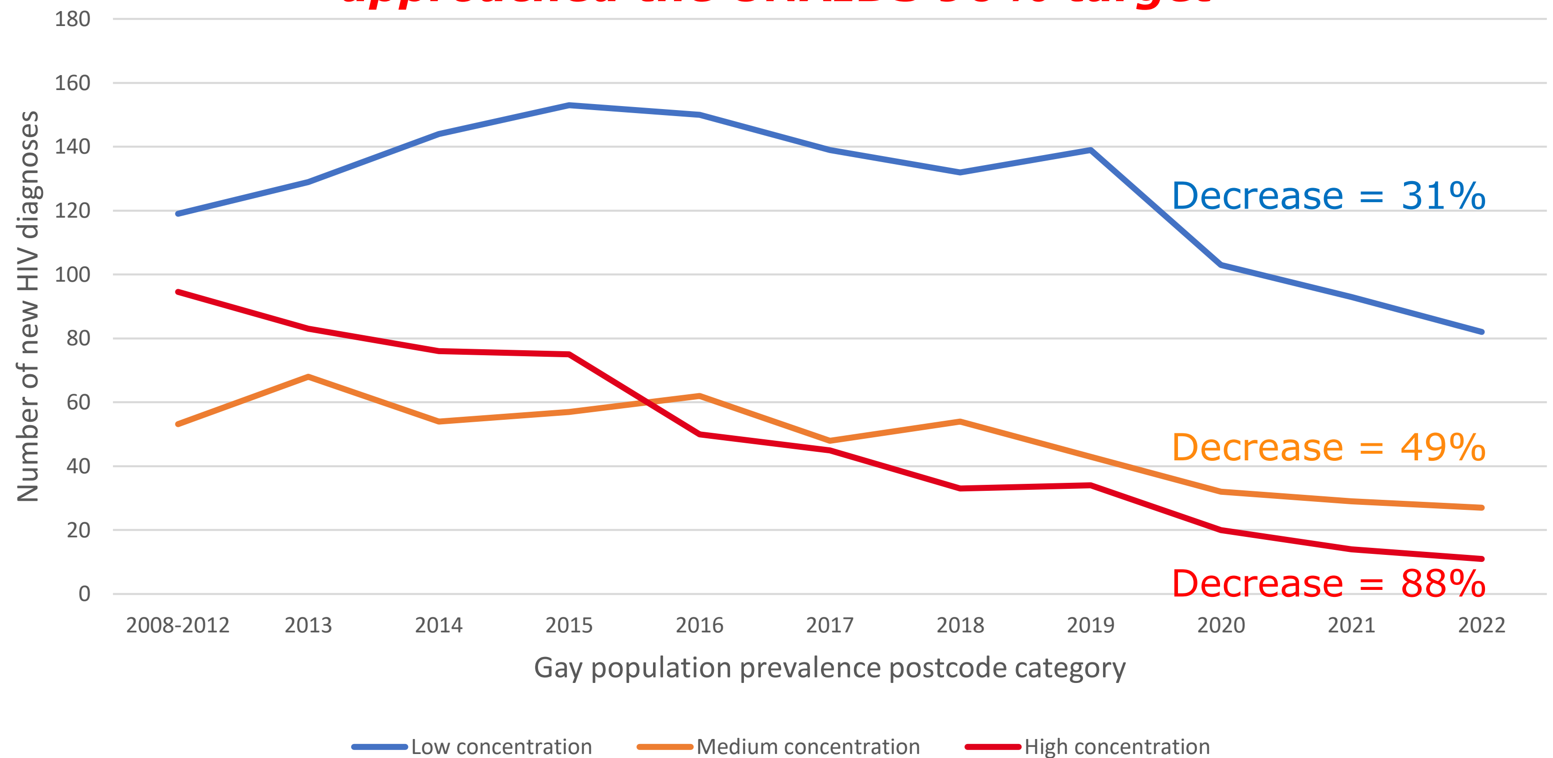
Geographic patterns in the decline in HIV diagnoses in gay and bisexual men



In central Sydney, in 2022, the decline in HIV diagnoses approached the UNAIDS 90% target



Source: Notifiable Conditions Information Management System, Health Protection NSW, 2023

New antiretrovirals and HIV treatment strategies

Claudia Cortes M.D.
Associate professor
Universidad de Chile

Approved long –acting & extended-release ARV

LA- Cabotegravir + Rilpivirine

IM, every 4 or 8 weeks
with/with out OLI

FDA/EMA Approved
Jan 2021; ART /4 weeks
Feb 1, 2022: ART /8 weeks
Switch with undetectable VL

Lenacapavir

SC every 6 months
Combined with oral ARV

FDA/EMA Approved
Dec 2022: Twice-yearly treatment for PLH multi-drug resistant HIV

Table 1: Select agents in development for HIV-1 Therapy (non-comprehensive)

DRUG	MANUFACTURER	DRUG CLASS	INDICATION	REGIMEN	ADMINISTRATION	DEVELOPMENT PHASE
ISL/DOR	Merck	NRTTI/NNRTI	VS	STR	QD, Oral	Phase III
ISL/LEN	Merck/Gilead	NRTTI/CA	VS	STR	QW, LA Oral	Phase II
LEN/BIC	Gilead	CA/InSTI	VS	STR	QD, Oral	Phase II
VH3810109	ViiV/GSK	bNAb	TBD	TBD	TBD, LA Injectable	Phase II
GS-6212	Gilead	InSTI	TBD	TBD	Q3M, LA Injectable	Phase I
GS-5894	Gilead	NNRTI	TBD	TBD	QW, LA Oral	Phase I
GS-1720	Gilead	InSTI	TBD	TBD	QW, LA Oral	Phase I
VH3739937	ViiV/GSK	MI	TBD	TBD	TBD, LA Injectable	Phase I
VH4524184	ViiV/GSK	InSTI	TBD	TBD	Q3M+, LA Injectable	Phase I

ARV, antiretroviral drug; BIC, bictegravir; bNAb, broadly-neutralizing antibody; CA, capsid inhibitor; DOR, doravirine; InSTI, integrase strand transfer inhibitor; LA, long acting; LEN, lenacapavir; MI, maturation inhibitor; NNRTI, non-nucleoside reverse transcriptase inhibitor; NRTI, nucleoside reverse transcriptase inhibitor; NRTTI, nucleoside reverse transcriptase translocation inhibitor; PrEP, pre-exposure prophylaxis; QD, once daily; QW, once weekly; Q3M, once every 3 months; Q3M+, once every 3 months or more; STR, single-tablet regimen; TBD, to be determined; VS, virologically suppressed.

www.iqvia.com/-/media/iqvia/pdfs/library/white-papers/evolution-of-hiv-treatment_white-paper_final_april-2023.pdf

Innovations and implementation of long-acting antiretroviral therapy

Implementation of LA-ART in low-middle-income countries: possibilities and expectations

Carolyn Bolton Moore

Chief Medical Officer, Centre for Infectious Disease Research in Zambia (CIDRZ), Zambia

Associate Professor Infectious Diseases, University of Alabama in Birmingham (UAB), USA

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Background

- LA extended-release preparations have recently become more widely available
- However the practicalities of implementation and scale up are relatively unknown
- Particularly in LMIC where issues of cost of drugs, access to VL and VR testing and HR shortages need to be considered
- Whilst there are several LA's available or under study, this presentation will mainly focus on LA CAB and RPV

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Why switch to LA-ART?

- More affordable ? ↔
- More Robust ✅
- Easier to take/ administer ✅
- Better tolerated ✅
- Fewer Side effects ✅
- More Acceptable ✅
- Feasible ✅
- Accessible ↔
- Sustainable ↔

VIRAL SUPPRESSION

Simpler/ standardized/ algorithmic: across populations: gender, age, comorbidities, risk factors etc

Implementation considerations of LA ART

Patient provider communication

Joint decision making

Individual
- Hesitancy
- Attitudes
- Acceptance
- Social support
- Adherence

Infrastructure
- Privacy
- Space
- Cold chain
- Correct dosages/ vials
- Refrigeration and storage

Clinic/ Community
- Training of staff
- Community and family engagement and awareness
- Patient flow
- Provider resistance

Health systems/ Policy
- Drug registration
- Approval for use in younger populations
- Regulatory approval
- Costs

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Modelled data: treatment

Lancet Glob Health. 2021 May; 9(5): e620–e627. PMCID: PMC8050198
Published online 2021 Mar 23. doi: 10.1016/S2214-109X(21)00025-5 PMID: 33770513

The potential role of long-acting injectable cabotegravir–rilpivirine in the treatment of HIV in sub-Saharan Africa: a modelling analysis

Andrew N Phillips, Prof, PhD,[a,*] Loveleen Bansi-Matharu, PhD,[a] Valentina Cambiano, PhD,[a] Peter Ehrenkranz, MD,[c] Celicia Serenata, MBA,[d] Francois Venter, Prof, FCP,[d] Sarah Pett, Prof, PhD,[a,b] Charles Flexner, Prof, MD,[e] Andreas Jahn, PhD,[f,g] Paul Revill, Prof, MSc,[h] and Geoff P Garnett, Prof, PhD[c]

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- Aimed to model the effects of IM LA CAB and RPV to help inform potential effectiveness and cost-effectiveness under different possible policies in SSA
- All policies involving the introduction of IM CAB and RPV were predicted to lead to an increased proportion of people living with HIV on ART, increased viral load suppression, and decreased AIDS-related mortality, with lesser benefits in people with a recently measured viral load of less than 1000 copies per mL
- Model suggested that IM LA CAB and LA RPV offer potential benefits; however, to be a cost-effective option, introduction should be targeted to individuals who might otherwise have suboptimal adherence to ART

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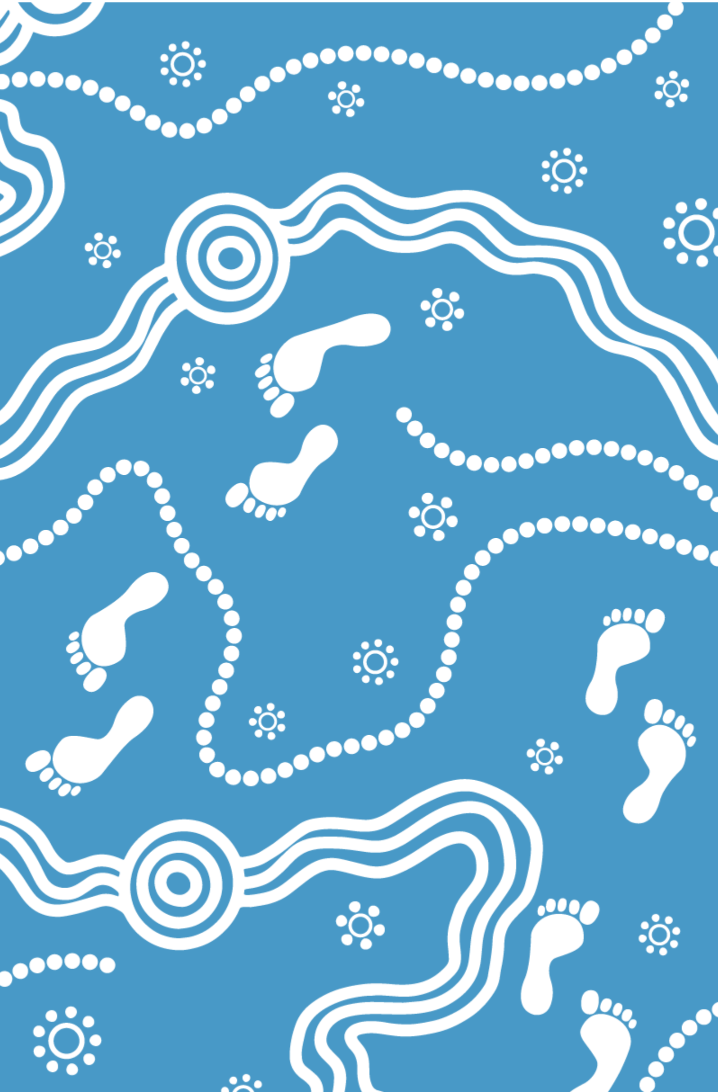

LA ART:
First line?
Newly initiated?
Those struggling with adherence?
Those doing well?
Only those suppressed?

IDEALLY ALL OF THE ABOVE BUT....

Francois Venter, Ezintsha, Johannesburg, South Africa

Track-B late-breaker session

Risks of hypertension with first-line dolutegravir and tenofovir alafenamide in the NAMSAL and ADVANCE trials

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Background

- Hypertension is a leading cause of death in sub-Saharan Africa, with a high background prevalence in the general population [1].
- First-line use of TAF and DTG lead to higher risks of clinical obesity than tenofovir disoproxil fumarate (TDF) or efavirenz (EFV).
- Clinical obesity increases the risks of hypertension and other non-communicable diseases (NCDs).
- Hypertension is not consistently monitored and treated in sub-Saharan Africa

Ref 1: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8032170/

Hypertension and DTG: randomised studies

Trial (n)	Hypertension
1st line studies	
ADVANCE (192 wks)	Higher risk DTG vs EFV
NAMSAL (192 wks)	Higher risk DTG vs EFV
SPRING-1 (96 wks)	No difference DTG vs EFV
SINGLE (96 wks)	No difference DTG vs EFV
GEMINI	no results
FLAMINGO (96 wks)	Higher risk DTG vs DRV/r
ARIA	no results
SPRING 2 (96 wks)	DTG and RAL similar
INSPIRING	no results
ODYSSEY-A	no results
Gilead 1489/90	DTG and BIC similar

Trial	n	Hypertension
Switch / second-line studies		
SWORD		no results
STRIIVING		no results
TANGO		no results
SALSA		no results
2SD (48 weeks)		Higher risk DTG vs PI/r
VISEND (192 weeks)		Higher risk DTG vs PI/r
SAILING		no results
DAWNING		no results
NEAT 022 (48 weeks)		No difference DTG vs PI/r
D2EFT (48 weeks)		Higher risk DTG vs DRV/r
ODYSSEY-B		no results

Hypertension and DTG: observational trials

Study	Hypertension outcomes
RESPOND	Higher risk of HTN for INSTI and TAF
Johannesburg 2023	Higher risk of HTN: DTG versus EFV
TSEPAMO	Higher risk of HTN: DTG versus EFV
REPRIEVE	Higher risk of HTN: DTG versus NNRTI
Zimbabwe	Higher risk of HTN: DTG versus EFV
US women	Higher risk of HTN: DTG versus PI
Pregnant women	Higher risk of HTN: DTG versus NNRTI

Conclusions

- In the NAMSAL and ADVANCE trials, first-line use of DTG was associated with significantly higher risks of treatment-emergent hypertension, especially when combined with TAF.
- In NAMSAL, where hypertension was not consistently treated, risks of hypertension remained higher for TDF/3TC/DTG versus TDF/3TC/EFV through Week 192.
- In ADVANCE, most cases of hypertension were successfully treated, and there was no significant difference between treatment arms by Week 192.

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Implications

- Hypertension can be diagnosed and treated with low-cost generic drugs.
- Mass HIV treatment programmes need to include support and funding for diagnosis and treatment for hypertension and other NCDs.

The REPRIEVE trial: Developing a cardiovascular disease prevention strategy for people living with HIV

Study Rationale

- PWH demonstrate increased cardiovascular disease (CVD) (50-100%) and excess plaque controlling for traditional risk, even at a young age
- ART reduces comorbidities (SMART) but residual immune activation persists, even with good viral suppression - ART alone is not sufficient to prevent CVD
- Statins lower LDL cholesterol, a main driver of CVD in PWH, but also residual immune activation and inflammation, including among PWH
- Pitavastatin is a moderate intensity statin, unaffected by ART, with good LDL and anti-inflammatory properties
- We hypothesized pitavastatin would prevent MACE through these effects in PWH, at low to moderate risk, for whom statins not typically prescribed under current guidelines

MACE = major adverse cardiovascular events

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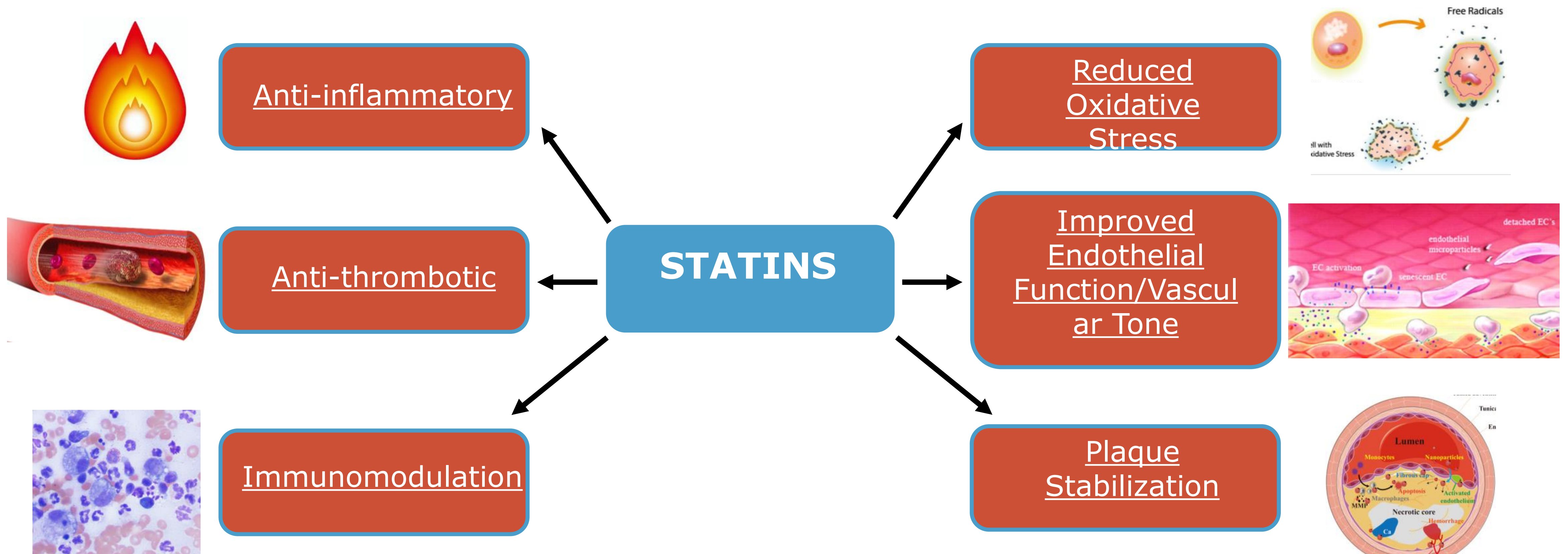
Beyond LDL: Pleiotropic Effects of Statins

- Statins primary effect is to inhibit HMG-CoA reductase to lower LDL cholesterol
- Statins have many other beneficial effects to reduce vascular disease



Arch Toxicol 2023 97:1529

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REPRIEVE Trial Schema

Time

Stage	Content
Screening and Consent	Asymptomatic PWH on ART, with low-moderate ASCVD risk
Randomization	Ⓡ N=7769
Intervention	Placebo; Pitavastatin
	Mechanistic SubStudy — N=805, 2 yrs
Mechanistic Primary Endpoint	Coronary plaque, vascular Inflammation, immune activation
Clinical Primary Endpoint	CVD Death; MI; Unstable Angina; TIA & Stroke; Arterial Revasc; PAD
Secondary Endpoints	Individual components of primary endpoint and all cause mortality; Predictors of statin effects; Inflammatory, immunological, metabolic biomarkers; Statin safety and non AIDS comorbidities, DM, infections, cancer

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Pitavastatin

35% reduction in major cardiovascular events (MACE)
21% reduction in the incidence of MACE or death
LDL was lowered by 30%
Higher incidence of diabetes mellitus
Higher muscle related adverse events

The reduction in cardiovascular events was similar for people with high or low LDL cholesterol at baseline, indicating that the benefits associated with statin treatment go beyond lowering LDL cholesterol.

The risk reduction was consistent across major sub-groups and regions, and especially large among participants in the South Asia region and people aged 60 years and over.

■ Pitavastatin ■ Placebo

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Statin Interactions with ART in PWH

- Protease inhibitors downregulate CYP3A4 activity and can increase concentrations of CYP3A4 metabolized drugs, e.g. statins
- Cobicistat inhibits CYP3A and can increase levels of statins
- Exceptions are pitavastatin and pravastatin which are not metabolized through CYP3A4
- Atorvastatin and rosuvastatin may be used in those on a PI but should be initiated at low doses and titrated carefully
- Efavirenz can induce statin metabolism, resulting in lower statin levels
- Recommended statins in HIV: pravastatin, atorvastatin, rosuvastatin, pitavastatin

Univ of Liverpool interaction checker: http://www.hiv-druginteractions.org/

Slide Courtesy of Dr. Janet Lo

Conclusions

Despite HIV being considered a risk equivalent, no prior trial has assessed a primary prevention strategy for this group, who would not typically be recommended for statin therapy

Among PWH 40-75, on ART, with low to moderate risk and normal range LDL, treatment with pitavastatin is effective and prevents MACE

Considerations should be given to expanding treatment guidelines in this regard

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Will Pitavastatin be Available After REPRIEVE?

- The data from REPRIEVE are specific to pitavastatin, chosen because:
  - ✓little interaction with ART
  - ✓potent lipid lowering and anti-inflammatory effects
- Pitavastatin is available in many countries, but if it is not available, other statins that do not interact with ART may be effective

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U=U

WHO policy brief on viral load monitoring

Three key categories for HIV viral load measurements:

unsuppressed (>1,000 copies/mL);
suppressed (detected but ≤1,000 copies/mL); **almost zero risk of transmission**
undetectable (viral load not detected by test used). **zero risk of transmission**

Systematic review of eight studies of sexual transmission of HIV in 7,762 serodifferent couples.

The review identified two possible cases of transmission associated with VL below 1,000 copies/ml

Concluded that the likelihood of sexual HIV transmission at VL above 50 copies/ml but below 1,000 copies/ml was almost zero

Pitavastatin Placebo

Enhanced linkage to care following home-based HIV testing improves linkage, ART initiation and retention, and 12-month viral suppression—the Ekkubo study: a cluster randomized trial in Uganda

Susan M. Kiene

San Diego State University School of Public Health, USA

Makerere University School of Public Health, Uganda

R. Naigino, K. Schmarje Crockett, M. Ediau, A. Anecho, C. D. Lin, N.A. Menzies, M. Bateganya,
S. Sekamatte, S. C. Kalichman, & R. K. Wanyenze

Achieving HIV Prevention and Treatment at Scale, 25 July, 2023, IAS Brisbane

Supported by NIH grant number R01MH106391. Trial registration: NCT02545673

Providing Access to Health Care (PATH)/Ekkubo Study 2015-2022

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Design: Matched-pair two arm cluster randomized intervention trial in 56 villages across 4 predominately rural districts in Uganda

Procedures: Village-wide home-based HIV testing across the study villages: **33,353 individuals**

Trial Eligibility: individuals newly diagnosed as living with HIV or previously diagnosed but never linked to care

- aged 18-59, emancipated minors, spoke Luganda or English, resided in the household; enrollment limited to one (randomly selected) eligible member per household

Data collection: structured interviews at baseline (prior to HIV testing), and 6- and 12-months follow-up. Blood draws at baseline and 12 months for viral load.

Outcomes

- Viral suppression (VL<20, primary)
- Linkage to care
- ART initiation/ time to ART
- ART adherence
- Retention on ART

Funded by the National Institute of Mental Health (R01MH106391); NCT02545673

Protocol: Kiene et al. 2017 *BMC Infectious Diseases*

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Linkage to care Intervention vs Control

PATH/Ekkubo Intervention

- Sessions at diagnosis, return home visits at 2 weeks & 6 weeks; booster navigation session at clinic during first visit
- Additional phone sessions at 8 and 10 weeks for those not linked to care

Sessions focused on identifying barriers to care, ways to overcome barriers, orientation to the care system, eliciting a specific intention/plan to link to care, assessing stigma, social support to address stigma, other needs.

Standard-of-care

- Paper-based referral to care at diagnosis
- 2 week return home visit with CD4 results and to reinforce referral to care

**For additional details about intervention content see our protocol paper: Kiene et al., *BMC Infectious Diseases*, 2017: https://doi.org/10.1186/s12879-017-2537-z

Retention and LTFU

	Intervention	Control
Completed 12-month follow-up with VL sample (**primary outcome**)	247 (**87.0%**)	240 (**84.8%**)
LTFU (no 6- or 12-month data)	23 (8.1%)	15 (5.3%)
• Deaths (3 have 6 FU month data) • Participant-initiated withdrawals (1 has 6-month data) • Investigator-initiated withdrawals	5 3 1	3 3 0

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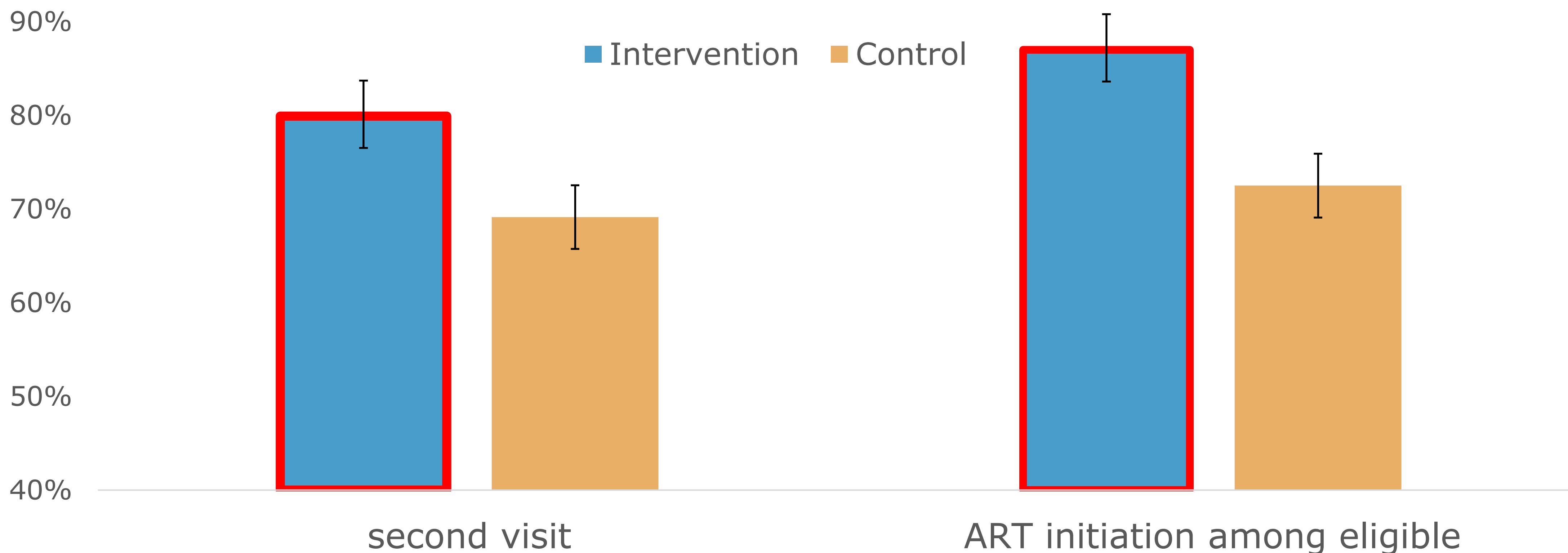
Linkage and ART Initiation

(linkage: n=266 intervention, 269 control)



GEE models. Linkage: adjOR, 1.65, 95%CI 1.09-2.49, p=0.017; ART initiation: adjOR, 1.97, 95%CI 1.33-2.90, p<0.001
Model-based estimates from cluster-level analysis. Controlling for district, age, gender, marital status, religion, income, time to clinic, CD4.

Retention on ART at 12 months

(n=201 intervention, n=176 control)

100%
95%
90%
85%
80%
75%
70%
65%
60%

Intervention
Control

12-months

GEE model. adjOR 4.16, 95%CI 1.14-13.87, p=0.015
Model-based estimates from cluster-level analysis. Controlling for district, age, gender, marital status, religion, education, income, occupation, time to clinic, disclosure, enacted stigma, baseline VL, CD4.

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Primary outcome: VL<20 at 12 months post-diagnosis

(n=247 intervention, 240 control)

65%
60%
55%
50%
45%
40%
35%
30%

Intervention
Control

VL<20

GEE, adjOR 1.60, 95%CI 1.13-2.26, p=0.008

Model-based estimates from cluster-level analysis. Controlling for age, gender, marital status, religion, income, time to clinic, time since last HIV test, baseline VL, CD4.

Summary and Implications

- Post-test support to navigate linkage challenges improved linkage to care, ART uptake, retention and viral suppression compared to standard-of-care
- Intervention can help to enhance treatment outcomes for non-facility-based testing
- As we focus on closing the gap in people living with HIV who don't know their status, ensuring we having adequate interventions to support treatment engagement and viral suppression is essential

Prepared by the DSD team at IAS – the International AIDS Society

A summary of the differentiated service delivery (DSD) science at IAS 2023

23 – 26 July · Brisbane and virtual

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I. DSD for testing

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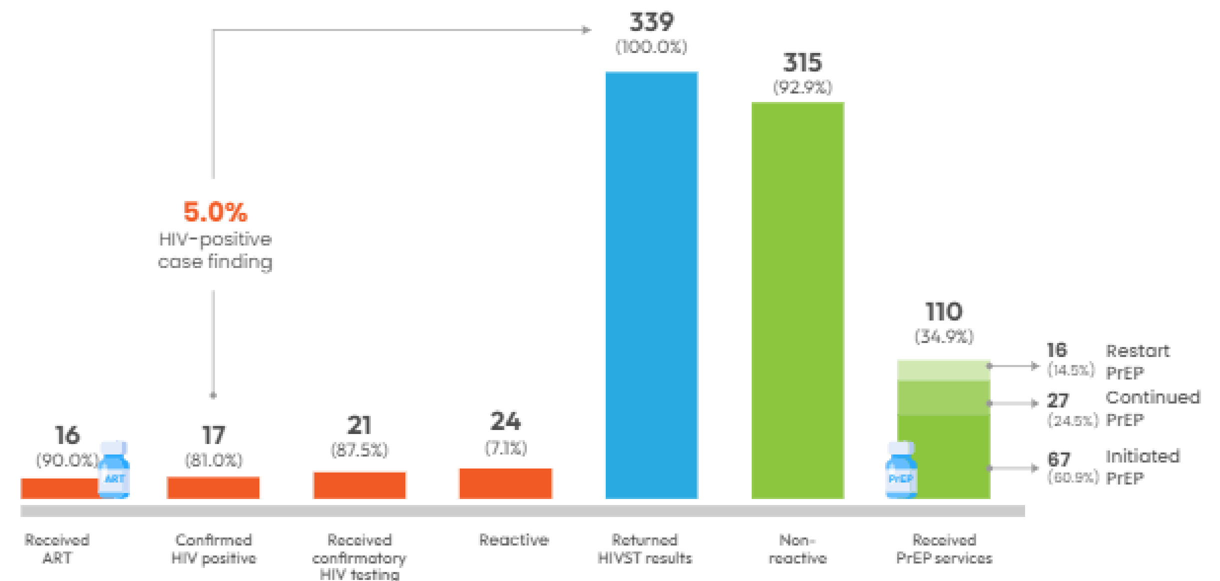
HIV self-testing in real-world use, a tool to end HIV in Thailand

- Aimed to investigate the uptake, reactive testing yield, and linkages to antiretroviral treatment (ART) and PrEP of a real-world online HIVST service in Bangkok.
- Online demand creation, Clients received an HIVST via mail, and were able to submit their result to the clinic electronically



HIVST delivered through telehealth successfully engaged clients with HIV in treatment, including those who never had an HIV-test before

Abstract here

Poster here

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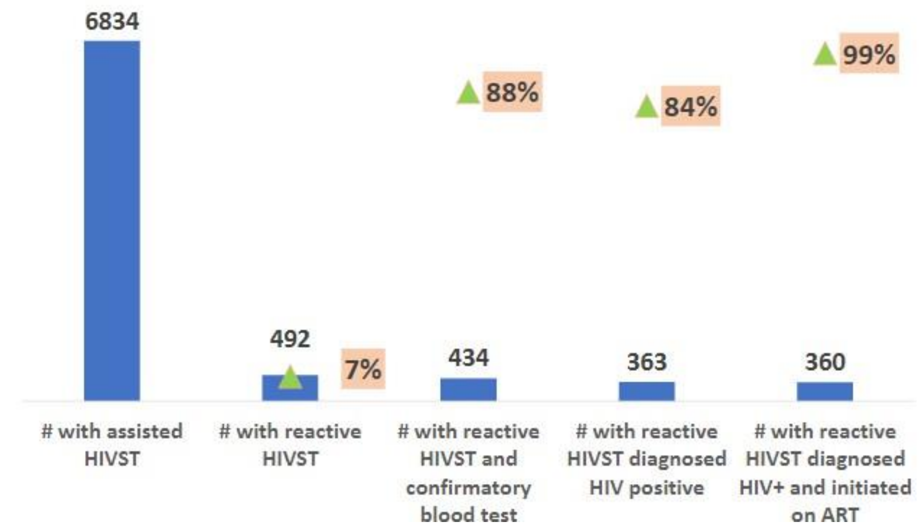
Implementation of community-based HIV-Self-Testing (CB-HIVST) to improve awareness on HIV exposure: lessons learned and implications for the National AIDS Control Program of the Haitian Ministry of Health

- Targeted community-based HIVST to faith-based networks
- Partnered with faith-based youth associations for peer to peer sensitization
- Offered HIVST at Voodoo temples, churches and religious festival

Figure 7. Performance Cascade from HIVST to Linkage to Care in FY 2022



Targeting community distribution of HIVST to faith-based social networks increased case finding and ART initiation

Abstract here

Poster here

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Promoting uptake of HIV self-testing (HIVST) in the private sector through conceptual bundling: a practice of advertising HIVST along with Sexual and Reproductive Health products in Abuja, Nigeria

- Piloted conceptual bundling of HIVST with SRH products at private pharmacies
- 60% of providers unwilling to bundle
- Poor sales outcomes (3 HIVST kits with condoms and 4 HIVST kits with emergency contraception) compared with individual products (HIVST = 1,974). Price reductions of bundled products may be needed.

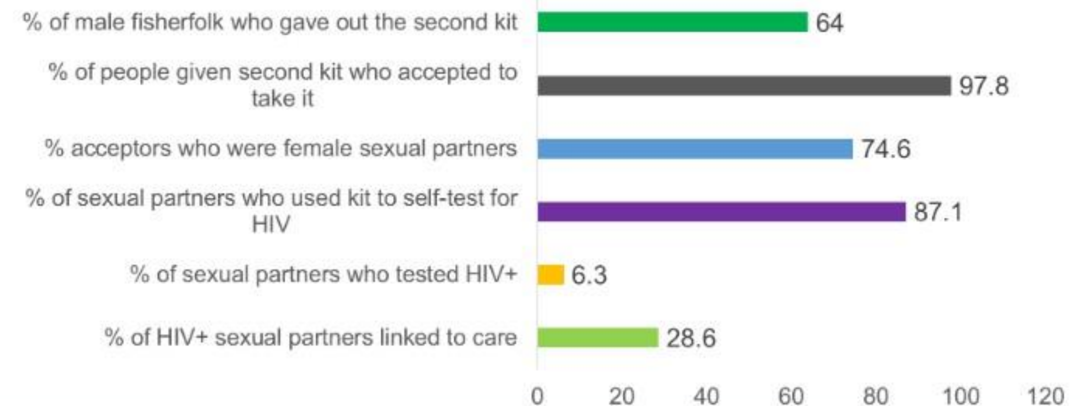
Bundling HIVST with SRH products may not increase uptake especially where there is no price reduction

Abstract here

Poster here

Secondary distribution of HIV self-test kits from males to their female sexual partners in two fishing communities in rural Uganda: results from the PEST4MEN pilot study

- Assessed acceptability of secondary HIVST distribution FROM male fisherfolk TO female sexual partners (n=283 men who were provided with 2 HIVST each by peer leaders)



Targeting men in high burden settings for secondary distribution of HIVST effectively increased testing among female partners but had poor ART linkage outcomes

Abstract here
Poster here

"Give us the HIV self-test kits and we will distribute them immediately" – a qualitative study exploring community-led HIV self-test distribution in rural Zimbabwean communities

- Promoted community-led HIVST distribution as a strategy for U=U
- Supported each community to design and implement a suitable/preferred HIVST distribution model
- Evaluated the intervention through: i) observations of model development meetings and distribution processes, ii) in-depth interviews with kit distributors (20), community members (20) health workers (20), iii) 12 community focus group discussions, and iv) a participatory learning workshop with 10 communities
- Greater community involvement, including greater planning/development meeting attendance, active participation and equitable gender and age representation led to more kit distribution
- Across evaluation methods, it was evident that although most communities were eager to implement community-led HIVST, support would enhance success (e.g., distributor incentives and transport)

Communities can design and implement their own HIVST models, and most felt community-led HIVST was a priority

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Uptake of clinic-based HIV treatment and prevention services following HIV testing at and referral from private pharmacies in Kenya

- Trained providers at 20 private pharmacies to offer clients purchasing SRH products (e.g., emergency contraception) testing for HIV
- HIV rapid testing at provided at pharmacies
- Referred to free ART, PEP, or PrEP services at nearby public clinics
- One month following referral, called participants to assess initiation at the recommended service

Abstract here

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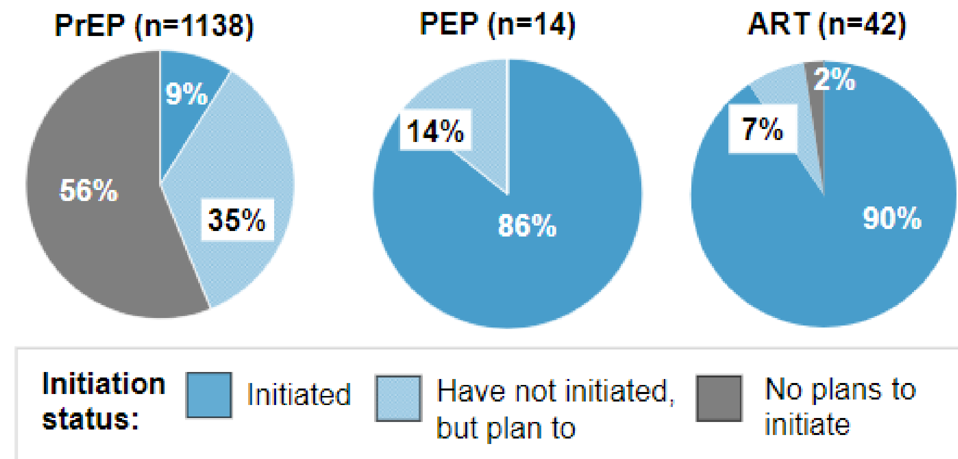

Pharmacy provision of RDTs to clients achieved high overall ART and PEP linkage and some PrEP linkage, especially for people with casual partners or who previously used PrEP

Differentiated online-to-offline (O2O) interventions for HIV services: impacts on HIV testing and case finding among key populations in Thailand, Nepal and the Philippines

DESCRIPTION: Social influencers, targeted ads, and online outreach engaged sexual, drug-use, and chemsex networks to promote HIV testing on social media and chat apps, e.g., Facebook, Twitter, LINE, TikTok, Grinder, Hornet, and Blued. A unique online reservation web application permitted in-depth analysis of client flow from the source of client online exposure to messaging through clinic attendance and service utilization, e.g., HIV testing.

	Thailand	Nepal	Phillipines
Estimated contribution to all HIV testing	11%	10,3%	37% hospital HTS (19% of HIV+ diagnosis)
Main contributing platform	Facebook	Facebook	Not reported
Highest positivity rate platform	Blued/Twitter	WhatsApp	

Online-to-offline interventions focused on key populations demonstrated their added value in HIV testing and case finding across three countries

Abstract here

IAS 2023

Increasing access to SelfCare: Employing a online-based demand generation strategy to increase uptake of peer-led unassisted HIV self-testing among key populations in the Philippines

- Demand creation for unassisted HIVST was developed to raise HIV testing awareness among key populations in SelfCare (LoveYourself's unassisted HIV self-testing program).
- A communications plan was designed by members of key populations to determine the campaign architecture and started Oct 2020.
- These campaigns are promoted on various social platforms.
- Lessons learnt:
  - Increased uptake by 1,012% compared to data from July-September 2020.
  - Reached a total of 513,024 clients (by Dec 2022).
  - Generated 20,043 clients accessing SelfCare, with a positivity rate of 6% among those who reported results.
  - 39.13% of the clients tested for HIV for the first time.
  - Among those reactive, 75.33% of clients have been enrolled in treatment.

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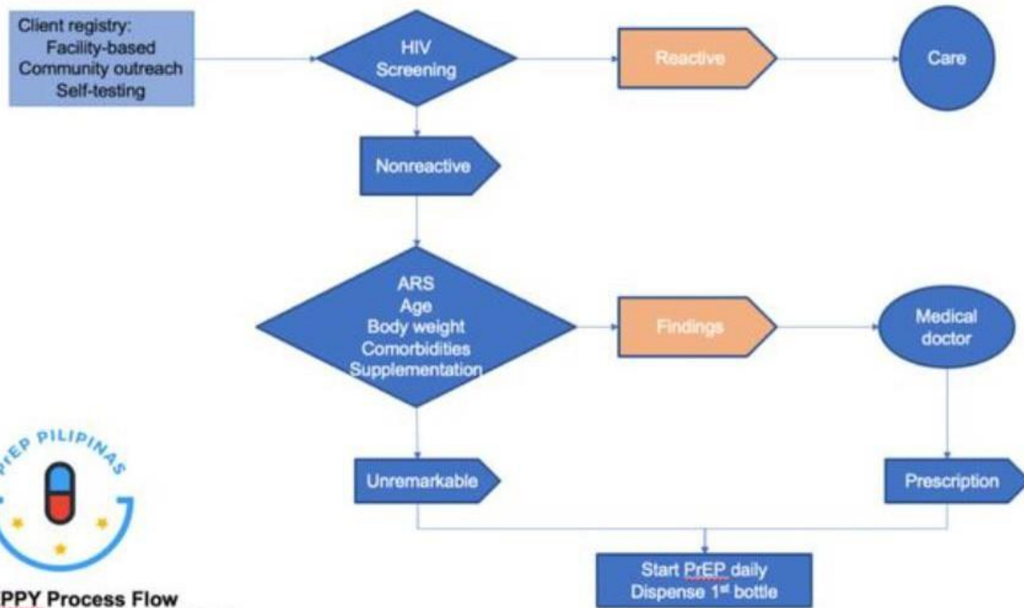
II. DSD for PrEP

IAS 2023

e-PrEPPY: Enabling an all-virtual, community-led and demedicalized PrEP service for men who have sex with men (MSM) in the Philippines

- **Fully virtual managed** HIVST and PrEP initiation **by community peers**
- 230/2203 (10,4%) clients who reported testing HIV negative initiated PrEP

Fully virtual, community-led by peers and demedicalized unassisted HIVST and PrEP is feasible



PrEPPY Process Flow
Enrollment visit - UPDATED 04/01/2022

e-PrEPPY: an **all-virtual** service to access PrEP

* Telemedicine done as needed

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Oral presentation here

IAS 2023

Evidence of peer-led demedicalized delivery of same-day PrEP in various community centers in the Philippines

- **Community peer** PrEP initiation **(not virtual)**

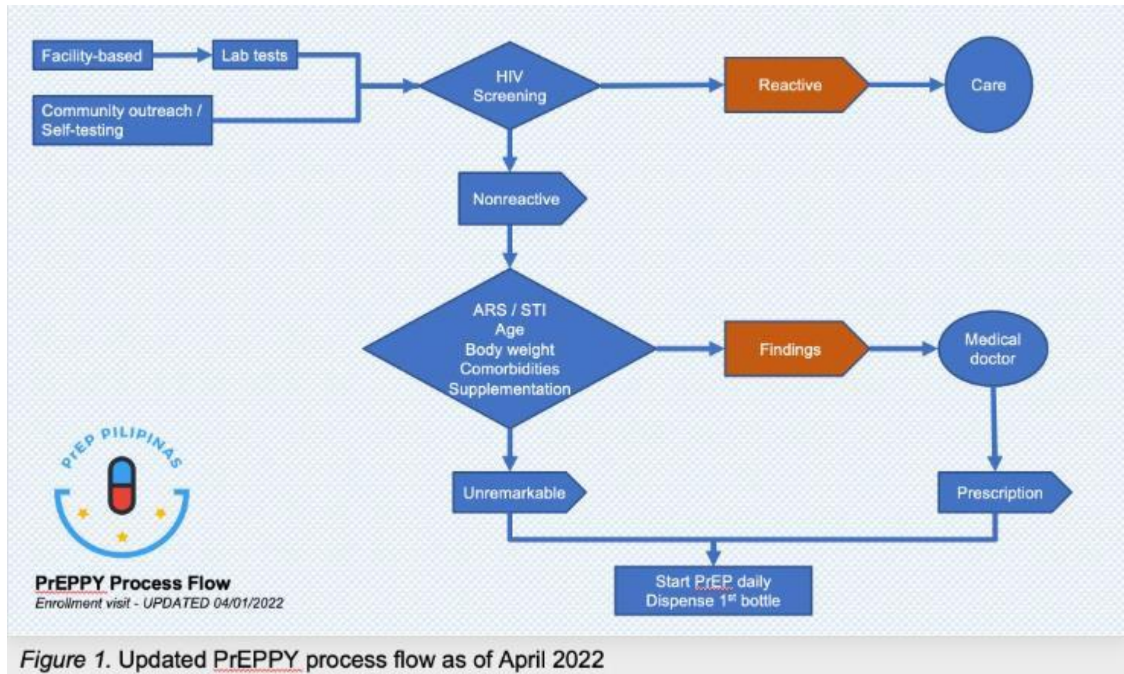

Figure 1. Updated PrEPPY process flow as of April 2022

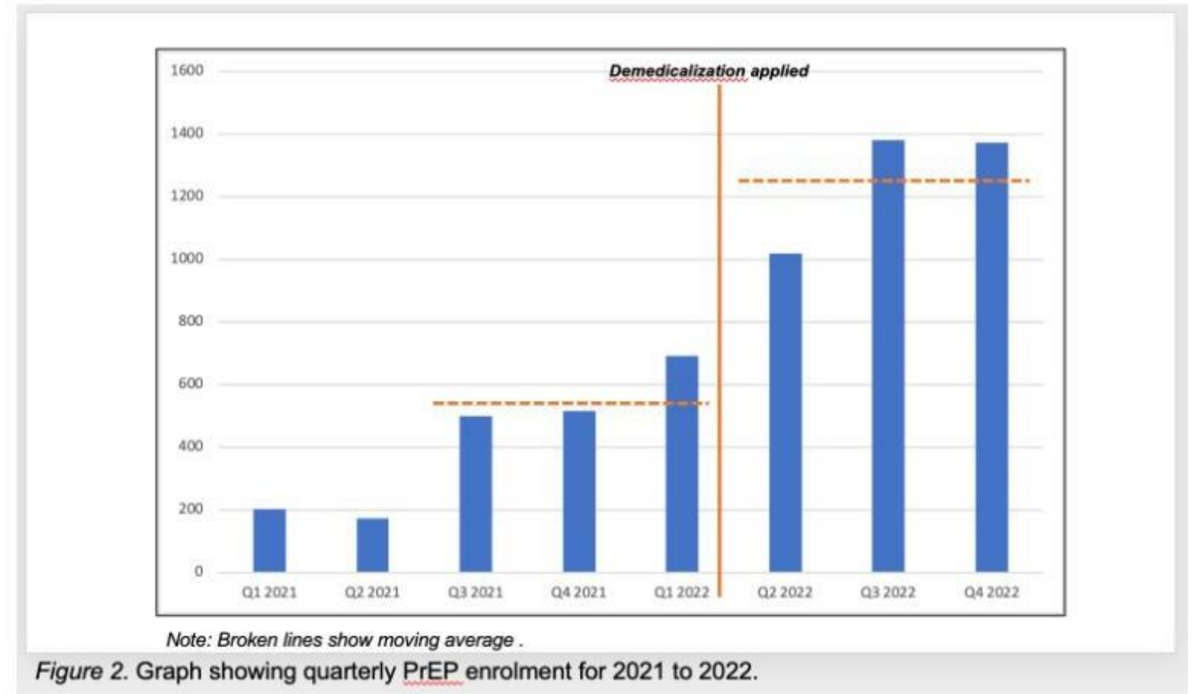

Figure 2. Graph showing quarterly PrEP enrolment for 2021 to 2022.

Community-led (by peers) demedicalized PrEP initiation increased PrEP initiation

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Poster here

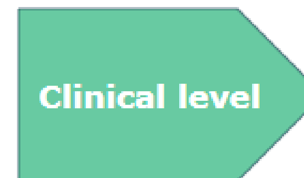
Healthcare worker perspectives on anticipated barriers and facilitators to implementing long-acting injectable PrEP for HIV prevention in Vietnam

- Describe anticipated barriers and facilitators of implementing CAB-LA in Vietnam among healthcare workers and public health managers
- In-depth semi-structured interviews with 15 healthcare providers and provincial (n=6) and national (n=6) public health managers

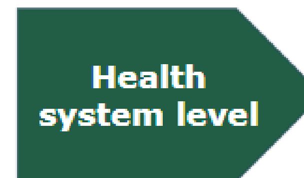
Healthcare providers consider provision of long-acting injectable feasible but have concerns regarding supply chain to and at facilities

Barriers -

- Increase in frequency of medical appointments compared to current 90-day refill visit schedule for oral medication
- Fear of pain and side effects
- High cost.



- Clinics lack adequate infrastructure and equipment to administer injections (e.g., beds/space, anaphylaxis response kits)
- Medication transport and storage
- Increase staff workload, which may require hiring additional nurses
- Clear guidelines on the administration, monitoring, and follow-up of CAB-LA are needed.



- Long process to obtain regulatory approval for new medications in Vietnam
- A separate reporting system for injection management would be needed
- Concerns about supply chain disruptions that may interrupt patient care.

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Poster here

HIV PrEP continuation among clients formerly engaged in PrEP services at private pharmacies participating in a pilot study in Kenya

- Discontinuation rates for PrEP users who initiated and refilled PrEP at 16 pharmacies after transfer to clinic-based PrEP services

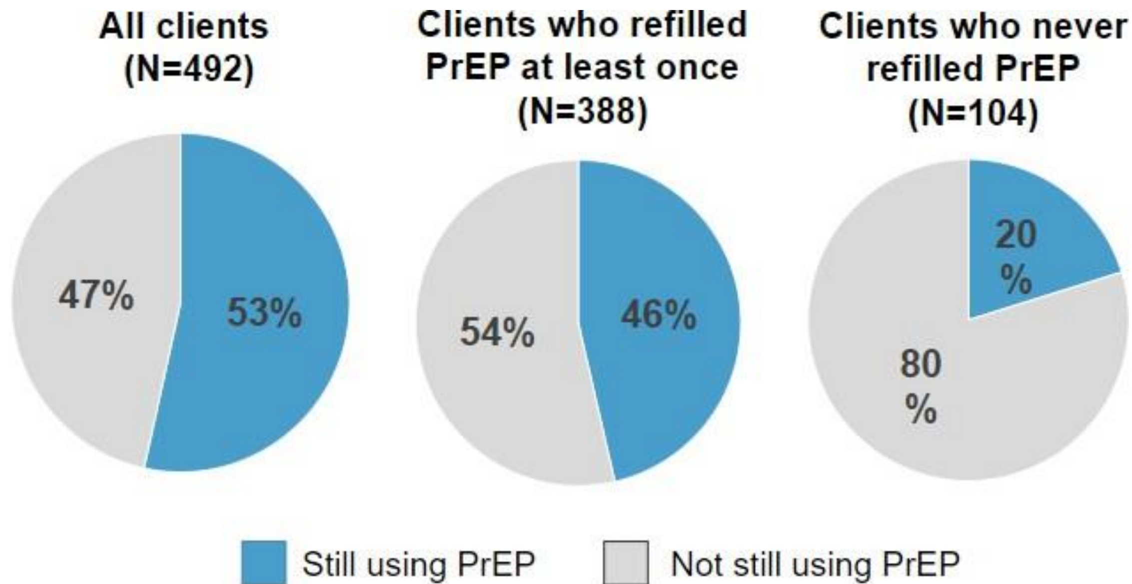

Figure 1. PrEP use among pharmacy PrEP clients three months following pilot completion

The majority of individuals who initiate and refill PrEP at a private pharmacy do not want to continue PrEP at health facilities

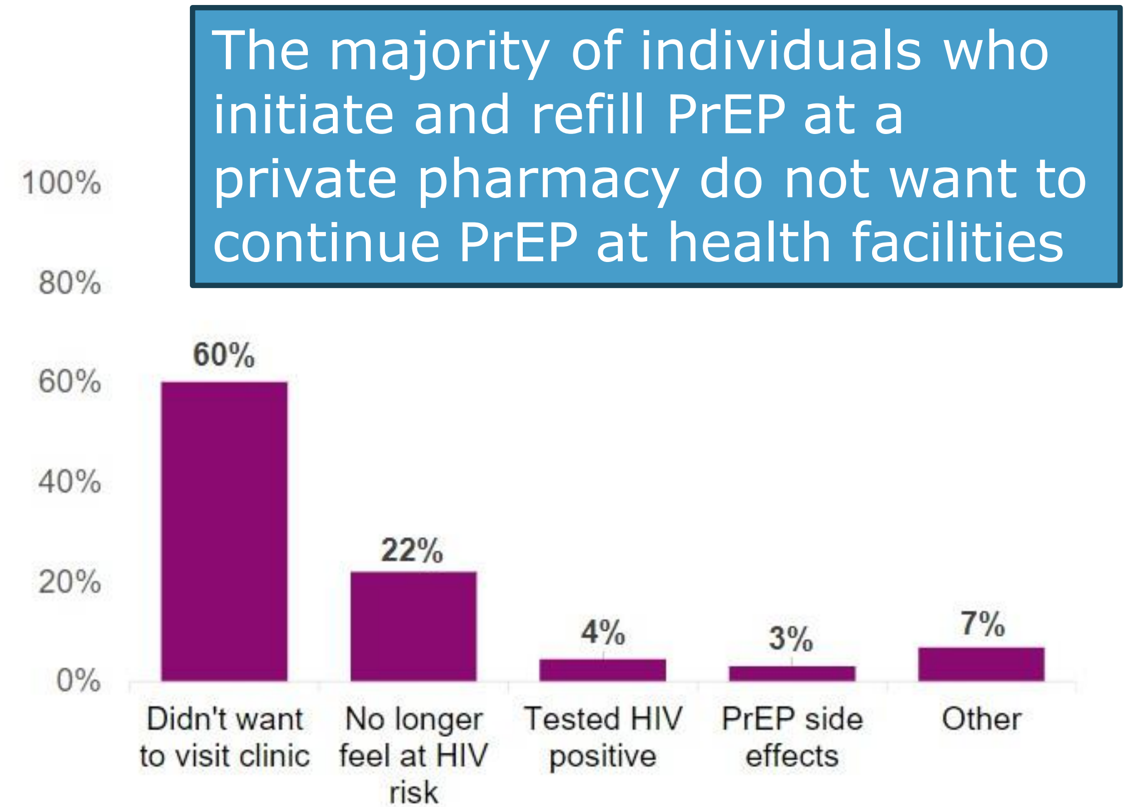

Figure 2. Reasons for PrEP discontinuation following engagement in pharmacy PrEP services

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Poster here

Same-day initiation in a demedicalized model of oral pre-exposure prophylaxis (PrEP) in Mexico: a real-world data analysis

- Evaluate the feasibility of PrEP initiation at the first visit under a demedicalized delivery model implemented by Mexico City HIV Program as a strategy to expand PrEP access
- Data from n=2,980 people who started PrEP, with 98.8% receiving their assessment and follow-up by "non-medical health workers" (counsellors)

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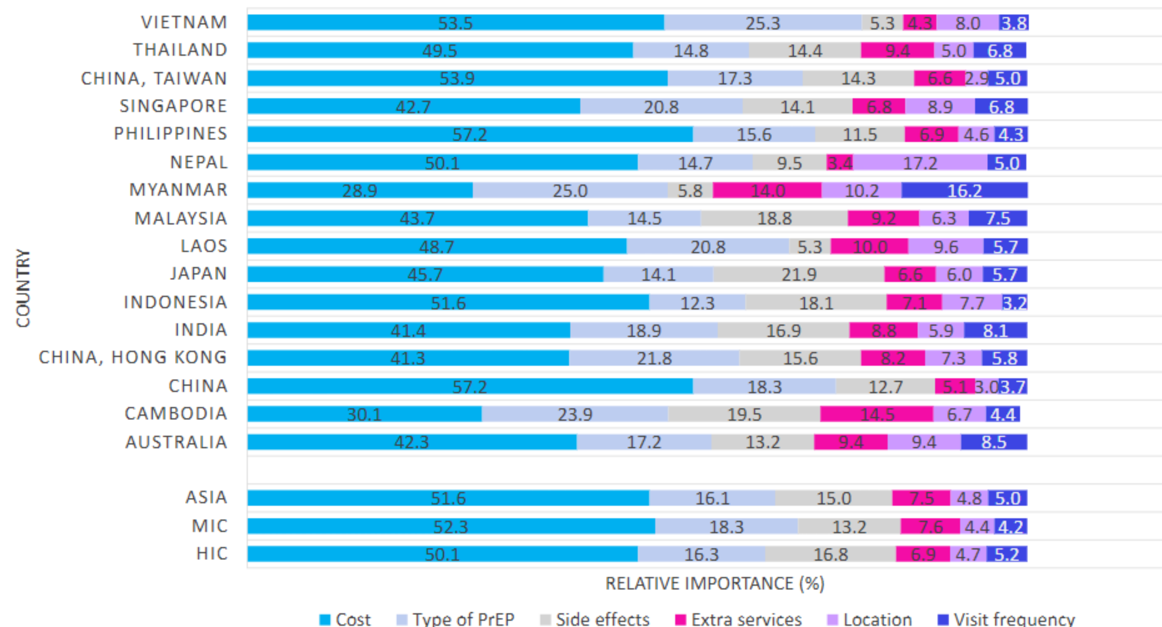
- Delayed start was associated with assessment by physicians, being cisgender female, and referral at the end of PEP or STI care.
- Loss to follow-up at month 1 (10.7% vs. 18.8%) and month 4 (15.3% vs. 20.4%) was higher in the delayed start vs. same-day start group

Same-day PrEP initiation by counsellors in a large-scale delivery models was feasible

IAS 2023

What men want: preferences for pre-exposure prophylaxis for HIV among men who have sex with men in 16 countries in the Asia-Pacific: a discrete choice experiment

- Evaluate drivers of choice for PrEP among men who have sex with men in 16 Asia-Pacific countries (n=21,722)



- Despite variation in the relative importance of attributes across countries, cost was the biggest driver for using PrEP
- PrEP update improved from 42-95% and 47-89% in high- and middle-income countries where PrEP service configuration shifted from least preferred to optimal

Optimal PrEP service configurations were similar – free cost, peer-led community clinic, no side effects, inclusive of STI testing and annual visits.

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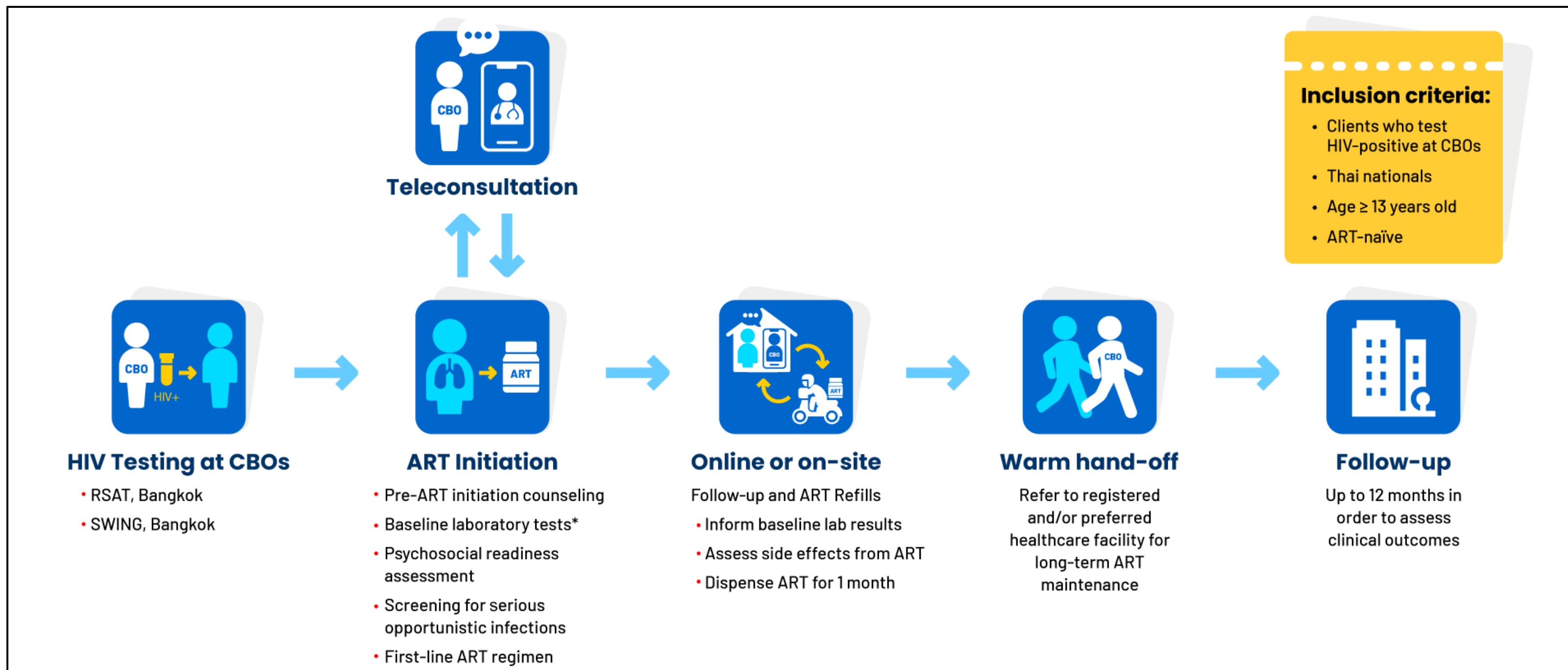
IAS 2023

III. DSD for treatment

IAS 2023

Key population-led same-day antiretroviral therapy initiation hubs in Bangkok, Thailand: an evaluation of HIV cascade outcomes from a hybrid type 3 implementation-effectiveness trial

- Evaluate key population-led same-day ART initiation hubs at community-based organizations in Thailand



- N=587
- 99.7% accepted KP-led SDART (n=585), 97.9% (n=573) started ART of which 52.0% (n=298) started at the CBO
- Among these, 6-month retention was 87.0% (349/401) and 120month retention was 84.6% (115/136)
- Of the n=210 with a viral load, 94.2% were suppressed

Abstract

Oral abstract in Track E late-breaker

Community Retail Pharmacy Drug Distribution Points (CRPDDPs) to provide a convenient, cost-saving, client-preferred model for pick-up of antiretrovirals in Uganda

- **Eligibility**: >15 years old (younger than 15 qualify if caregiver receives medicine at retail pharmacy), not pregnant, on ARVs for at least 6 months with suppressed viral load
- **Scheduling**: receive 3 or 6 month ARV supplies, must visit health facility for checkup and viral load testing once per year
- **Financing**: All services free to the ART client. PEPFAR implementing partners pay pharmacies $0.53 per dispensing given.

Pharmacy dispensing models successfully scaled in Uganda

Abstract

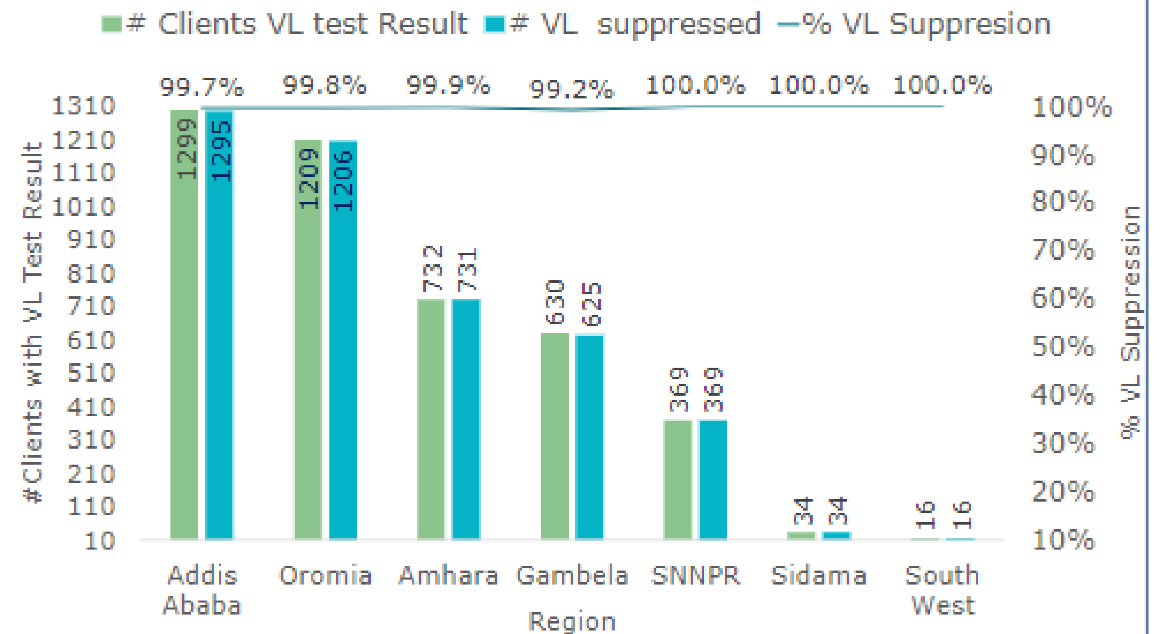
Community models

ias2023.org

IAS 2023

Client preference and viral suppression rate among PLHIVs enrolled to community based differentiated ART refill group models in Ethiopia

- Client preference and viral suppression status among clients enrolled in peer lead ART distribution (PCAD) and Health extension professional managed ART refill group (HEP_CAG)
- Results from the community-based DSD model in Ethiopia showed that out of the 15,321 clients enrolled, most (59%) preferred PCAD to HEP_CAG.
- The levels of VL suppression were very high in both models: 99.8 % for PCAD and 99.5% for HEP_CAG clients.



Abstract
Poster

IAS 2023

Mobile units improve HIV testing, ART initiation and treatment continuation among men who have sex with men in Nampula Province, Mozambique

To improve access and outcomes among KP in Nampula, particularly men who have sex with men (MSM), ICAP worked closely with provincial health authorities KP-led community partners to implement community-based HIV prevention and care and treatment services

Figure 1: ***Relative difference in HIV testing, HIV case identification, ART initiation and treatment continuation among MSM between April-September 2021 and April-September 2022 in Nampula Province (13 HF)***

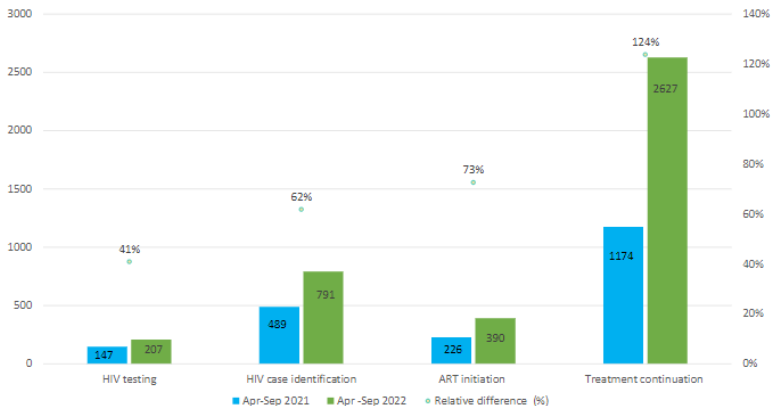
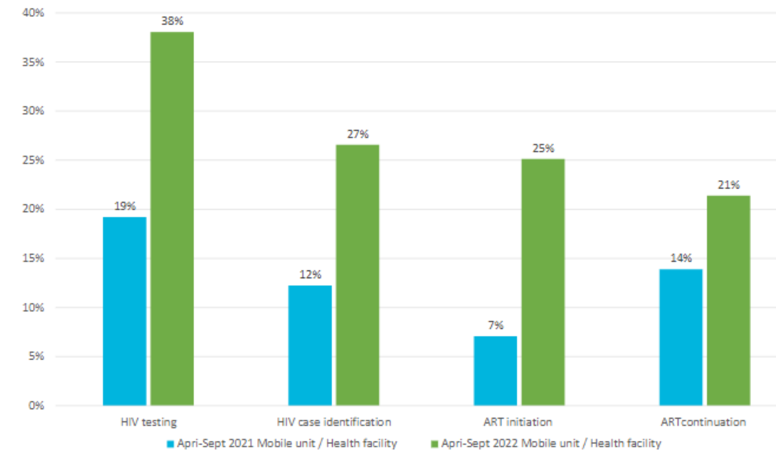


Figure 2: ***Mobile unit contribution in HIV testing, HIV case identification, ART initiation and treatment continuation among MSM during the periods April-September 2021 and April-September 2022***



Adapting service delivery models to respond to clients' needs and bring services closer to them is essential to reach key populations

Abstract

Poster

IAS 2023

Peer-led differentiated support services and HIV treatment outcomes among people living with HIV in China: a propensity-score matched study between 2006-2021

- Evaluation of associations between receipt of peer-led differentiated support services and HIV treatment outcomes and survival among people living with HIV in China
- Propensity score matched retrospective cohort study
- N=860, 430 in exposure (local CBO group) and 430 in control (routine clinic-based HIV care)

- CBO group more likely to adhere to antiretroviral therapy (ART) (92.1% vs. 83.7%), remain retained in care 12 months after ART initiation (93.5% vs. 76.1%) and achieve viral suppression 9-24 months after ART initiation (93.7% vs. 89.3%) compared to control group.

Peer-led differentiated support services correlated with significantly improved HIV treatment outcomes and survival among people living with HIV in China

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DSD and integration

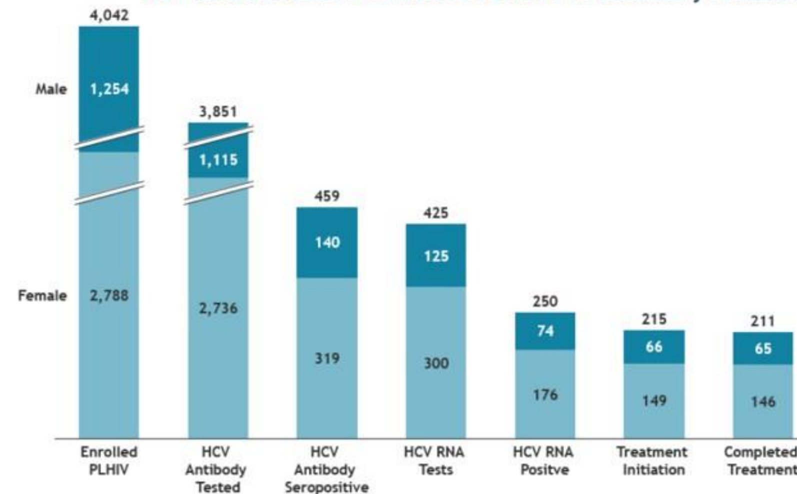
IAS 2023

Integrating hepatitis C services into ART clinics in low and middle income countries (LMICs) as an approach toward hepatitis C micro-elimination: pilot experience in Nigeria

- Baseline assessment conducted at ART facilities and community ART engagements including home visits to identify critical points for service integration including HCV screening, viral load (VL) confirmatory testing, and treatment without disruption to existing services.
- Pilot intervention: PLHIV coming for ART visits received HCV screening , patient navigators and ART defaulter trackers identified unscreened people living with HIV using facility HCV screening and enrolment data and prompted their return to the facility for HCV services through texts/calls or provided these services in community settings. Positive patients were linked to VL testing and treatment in either the facility or community.

Results: Over 90% of enrolled PLHIV were screened and 60% of HCV exposed patients were confirmed HCV/HIV coinfected. 98% have completed treatment

HCV Care Cascade of coinfected PLHIVs in 4 Secondary Facilities



Key Takeaways

- 11% HCV seropositive rates in enrolled PLHIV in 4 sites
- 60% of HCV exposed PHIV were confirmed infected
- An average of 70% PLHIV were linked to care across the treatment cascade
- An estimated of 70% of enrolled PLHIV were female
- 98% of treatment initiations have completed treatment with Sofosbuvir/Daclatasvir (HCV curative treatment)

IAS 2023

HIV/HCV service integration at ART clinics and community settings has been a successful strategy to dramatically expand HCV screening and treatment among HIV clients and a critical step to achieving HCV micro-elimination in PLHIVs in LMICs.

Abstract

Presentation in this session

IAS 2023

Randomized trial of "fresh start" SMS text messaging to improve return to care among people living with HIV who have missed scheduled clinic appointments in South Africa

- Randomized trial using a text message at time of public holidays to harness the "fresh start" effect- the tendency of people to take action after temporal landmarks (e.g., new year), which signify a new time period and a clean slate going forward.
- People receiving a text message were more likely to return to care within 45 days.

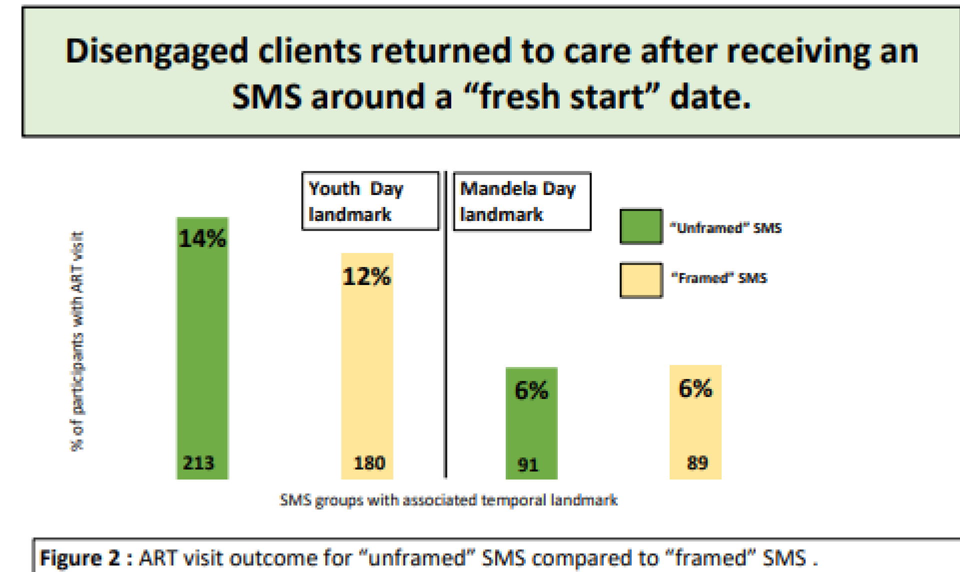


Figure 2 : ART visit outcome for "unframed" SMS compared to "framed" SMS .

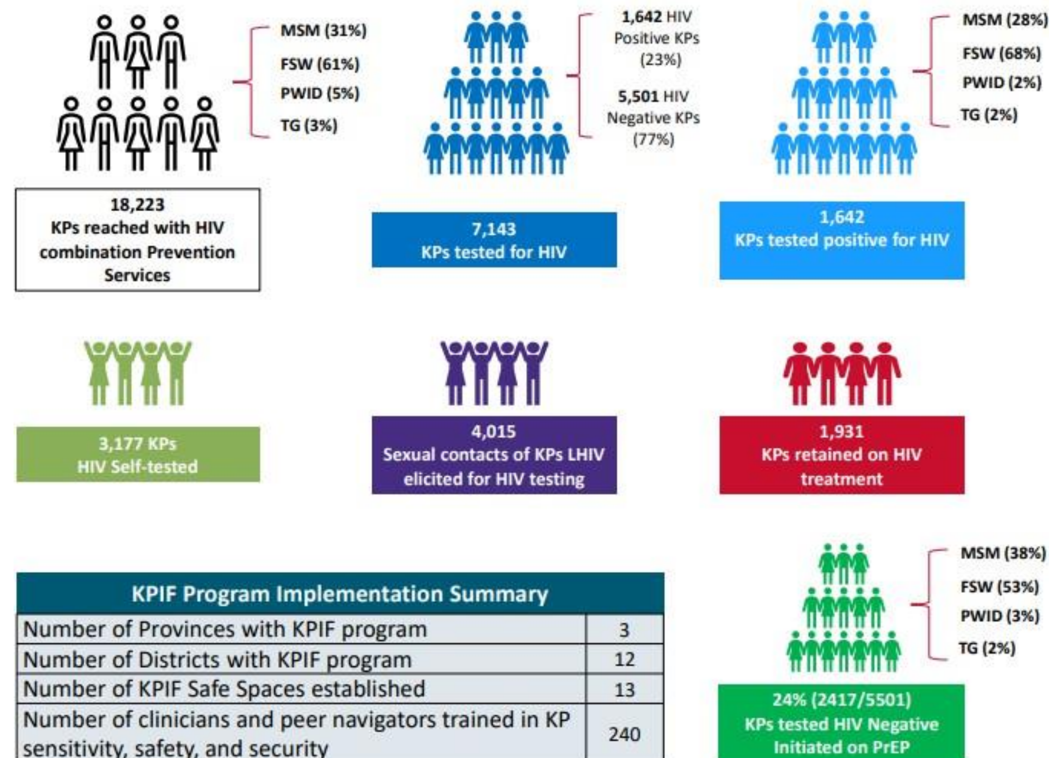
Abstract

Poster

IAS 2023

Reaching the last mile of HIV epidemic control in Zambia by engaging key populations with innovative service delivery approaches

- Key population Civil Society Organizations to
- implement an integrated differentiated services delivery (iDSD) model by establishing 13 safe spaces across three provinces.
- To provide non-discriminatory services, 240 clinicians and peer navigators were trained in KP sensitivity, safety, and security.
- Safe spaces were equipped to provide HIV testing, prevention, and treatment; and screening and treatment for STIs and TB.
- KP peer navigators trained as lay psychosocial counselors identified KP in communities, offered HIV educational messages, prevention, and testing, and linked them to safe spaces for prevention and care services.



KPIF Program Implementation Summary	
Number of Provinces with KPIF program	3
Number of Districts with KPIF program	12
Number of KPIF Safe Spaces established	13
Number of clinicians and peer navigators trained in KP sensitivity, safety, and security	240

Abstract

Poster