

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

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



 **IAS 2023**

23 – 26 July · Brisbane and virtual

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# I. DSD for testing

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# Adoption of the Malkia Klabu prevention intervention in Tanzania for young women: Distribution of HIV self-test kits and contraceptives at girl-friendly drug shops

## RCT intervention

*Malkia Klabu* or “Queen Club,” is loyalty programme where adolescent girls and young women (AGYW) could earn small-value prizes (250–1500 TSh; \$0.11–\$0.67 USD), discreetly use card symbols to request free sexual and reproductive health (SRH) products including HIV self-tests (HIVST), and access hands-on informational SRH displays at “girl-friendly” drug shops

## Results

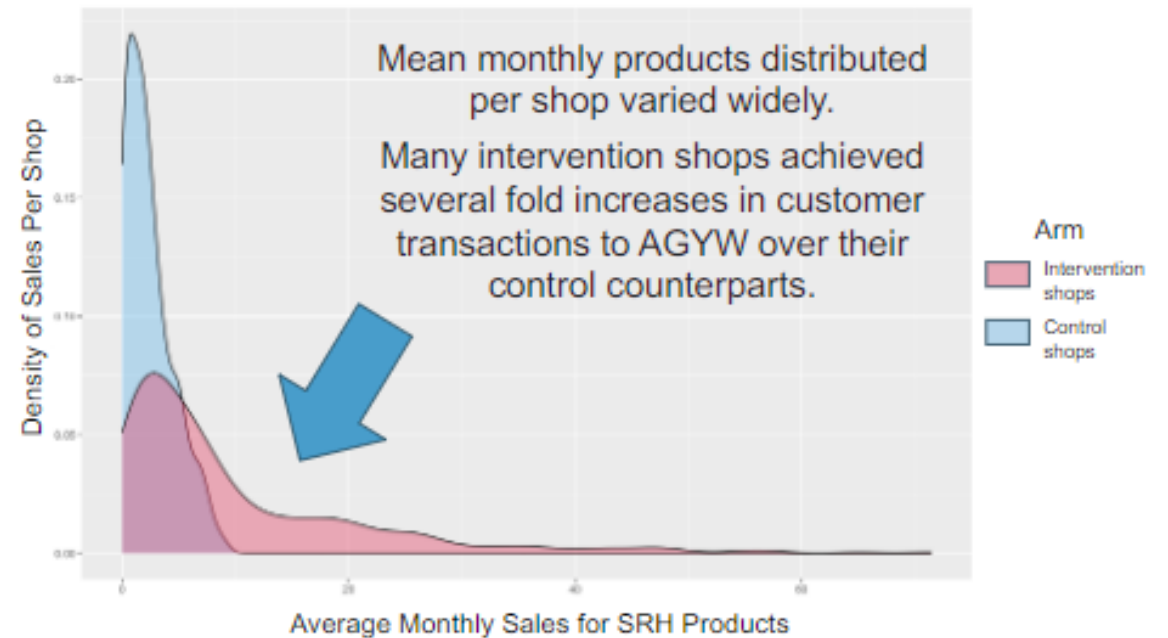
July 2022-May 2023 Intervention shops distributed 123% more SRH products including HIVST kits to AGYW compared to control shops (17,351 vs. 4,107).

- 185% more condoms (3,424 vs. 135),
- 199% more emergency contraception (2,081 vs. 5),
- 194% more oral contraceptive pills (4,246 vs. 61),
- 164% more pregnancy tests (3,177 vs. 308).

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**FIGURE 3:** Mean cumulative SRH products distributed to AGYW per shop, by arm (July 2022– May 2023)



HIVST kit (provided for free in both arms) distribution rapidly increased among shops in both arms, and distribution was consistently elevated after 11 months among shops delivering Malkia Klabu





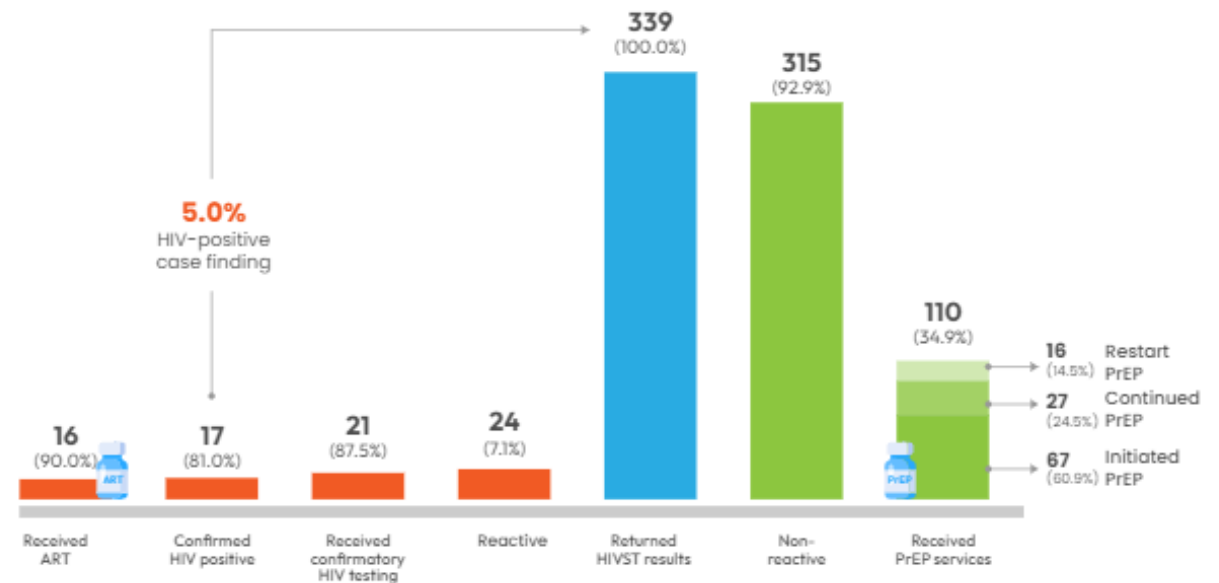
# HIV self-testing in real-world use, a tool to end HIV in Thailand

- 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

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Figure 3 HIVST double cascade



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



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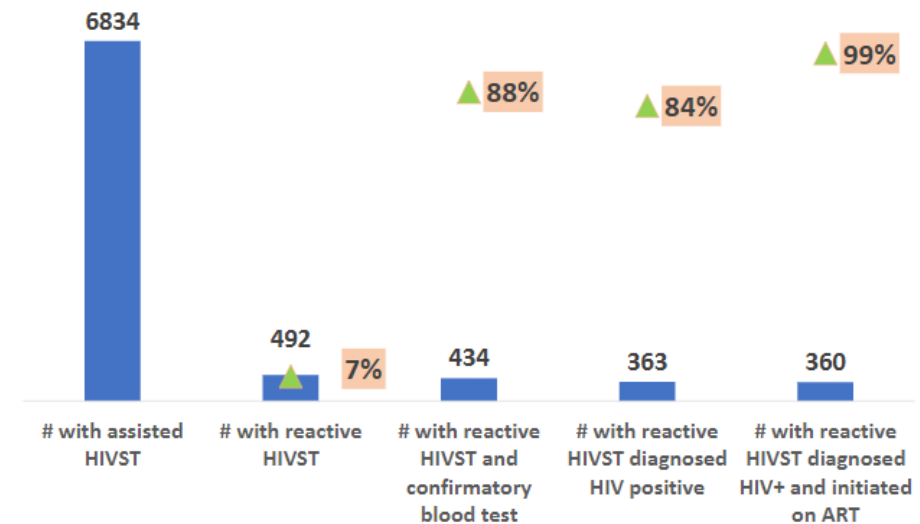
## Implementation of community-based HIV-Self-Testing (CB-HIVST) to improve awareness on HIV exposure: lessons learned and implications for the National AIDS Control Program of the Haitian Ministry of Health

- 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

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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



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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

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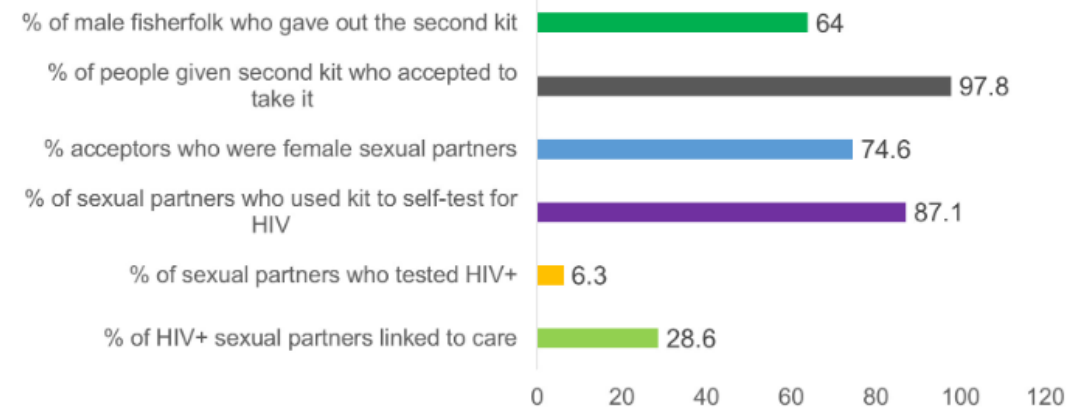
## Secondary distribution of HIV self-test kits from males to their female sexual partners in two fishing communities in rural Uganda: results from the PEST4MEN pilot study

- 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)

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### Acceptability of the second kit and how it was used to self-test for HIV among acceptors



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



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## “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

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

- 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)



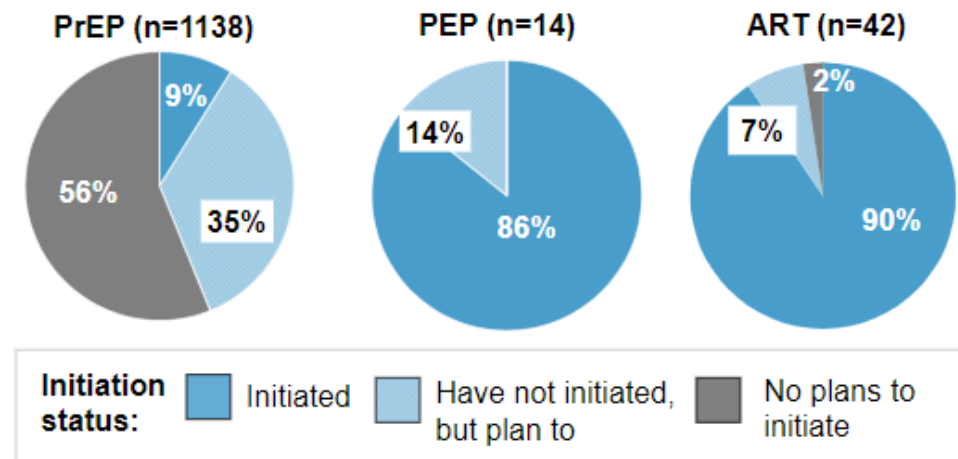
## Uptake of clinic-based HIV treatment and prevention services following HIV testing at and referral from private pharmacies in Kenya

- 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

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Figure 1. Uptake of clinic-based HIV services following pharmacy-based HIV testing and referral



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



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## 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

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## Increasing access to SelfCare: Employing an 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.

### AIDA Model



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## II. DSD for PrEP

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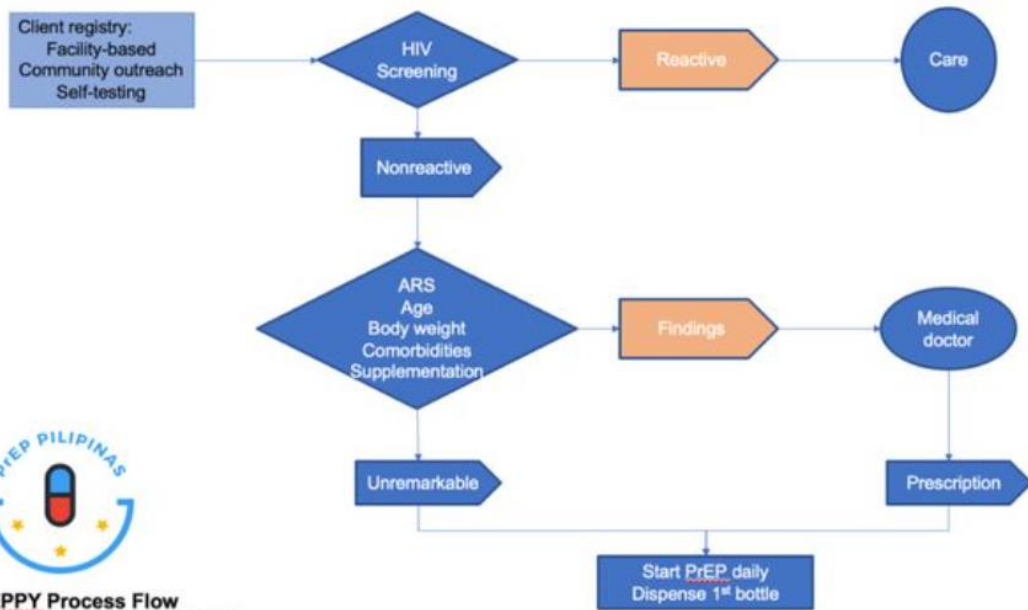


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# e-PrEP: Enabling an all-virtual, community-led and demedicalized PrEP service for men who have sex with men (MSM) in the Philippines

- **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



PrEP Philippines  
Enrollment visit - UPDATED 04/01/2022

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



\* Telemedicine done as needed

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

- Community peer PrEP initiation (not virtual)

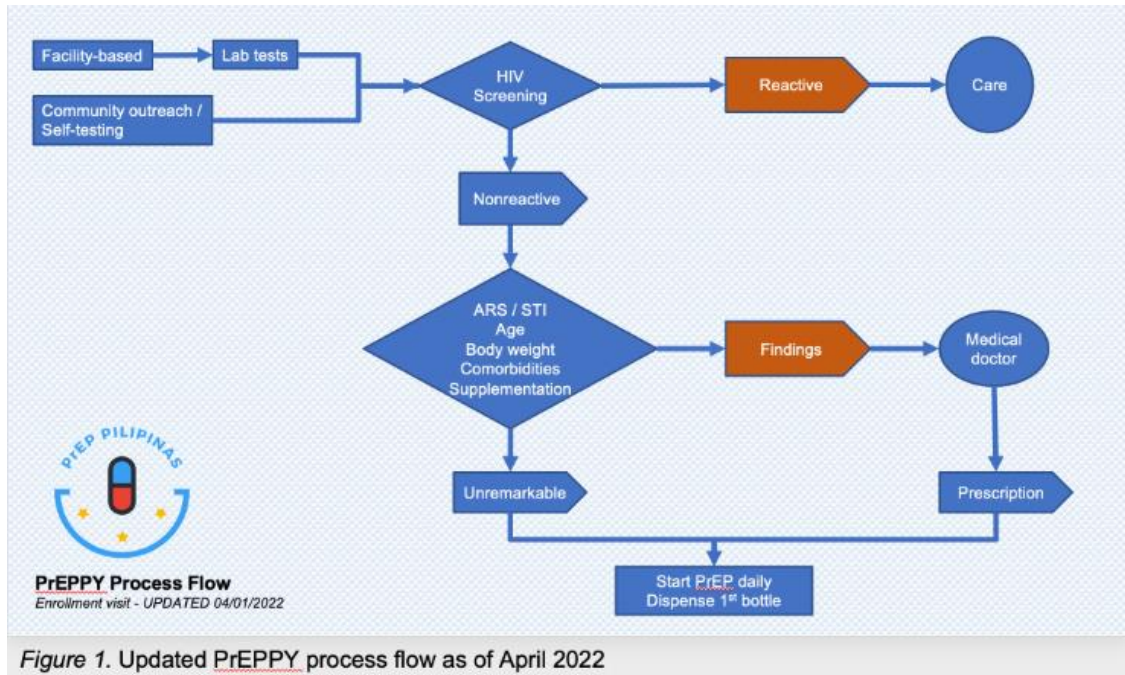
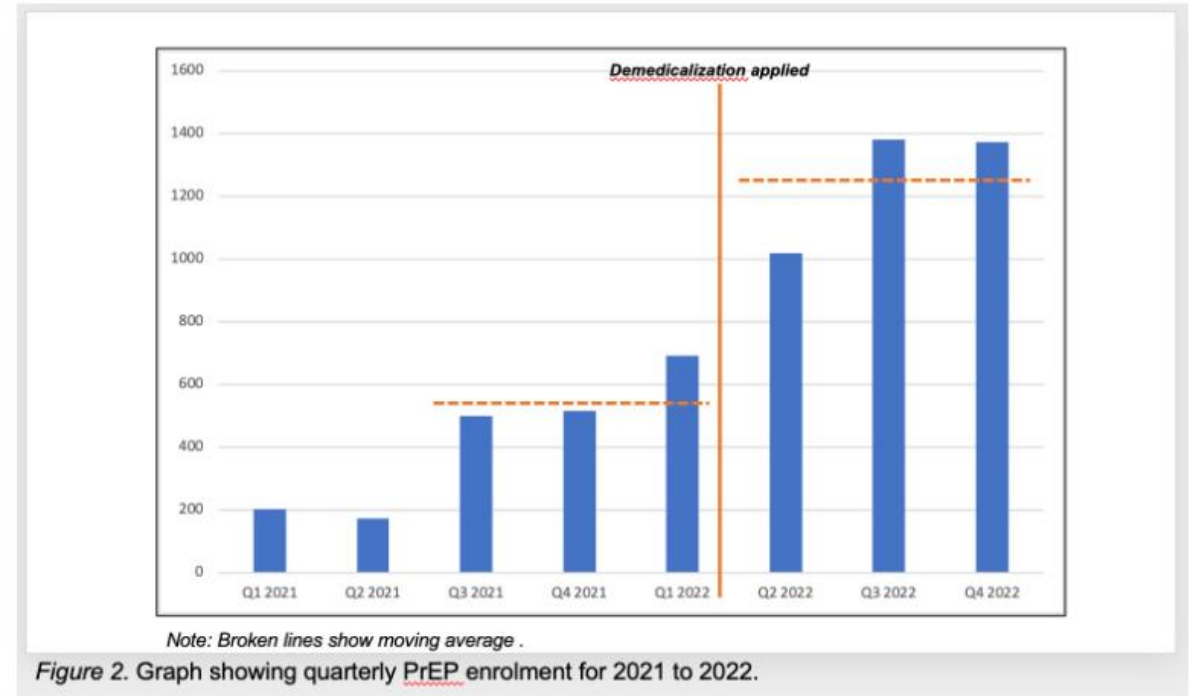


Figure 1. Updated PrEP process flow as of April 2022



Note: Broken lines show moving average .  
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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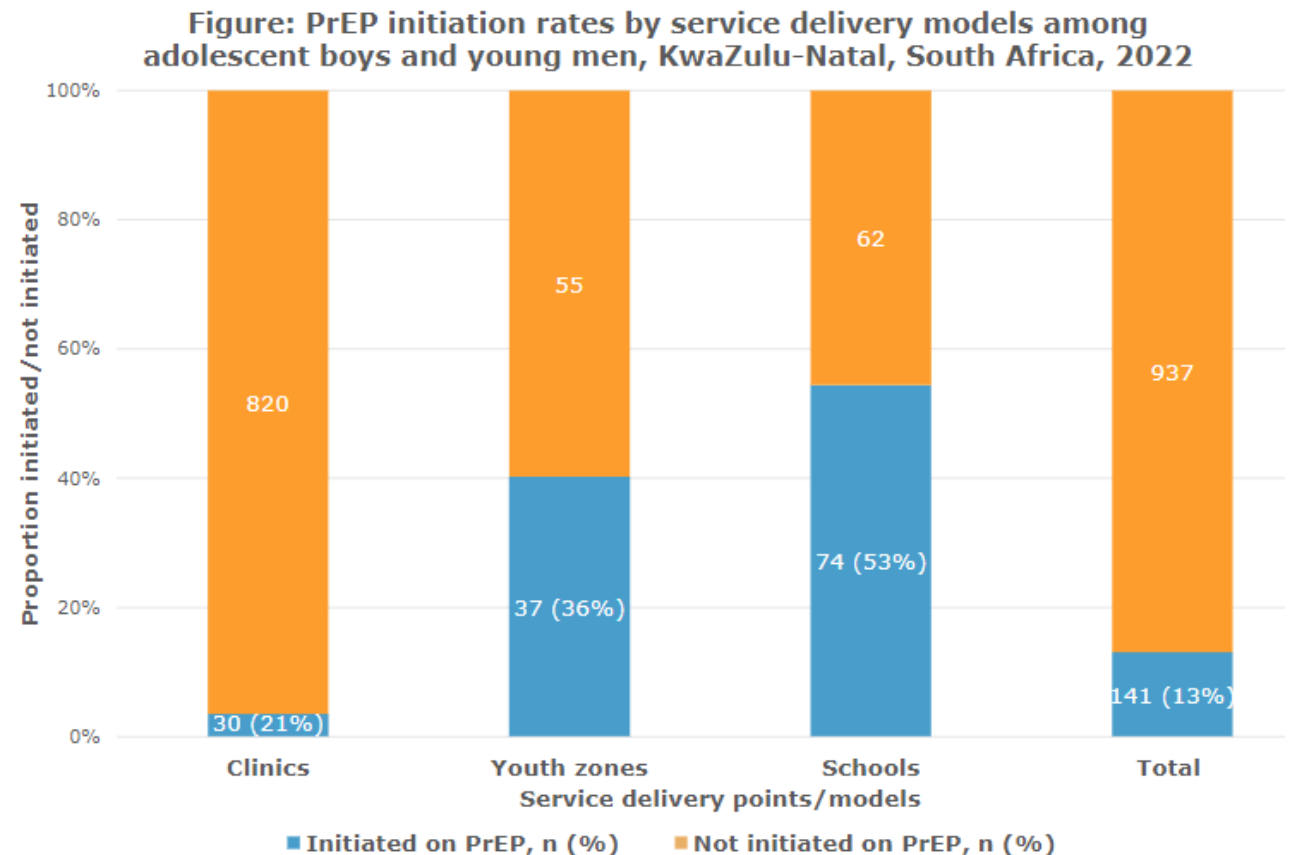
## Comparing PrEP initiation rates by service delivery models among adolescent boys and young men in KwaZulu-Natal, South Africa: preliminary findings from a population-based prospective study

- Compared PrEP initiation rates by service delivery points
- Median age = 24 yrs
- 141/1078 (13%) started PrEP

Low uptake of PrEP overall among adolescent boys and young men with highest uptake from schools/ Technical Vocational Education and Training colleges

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## “Door to door would be the best way”: a qualitative analysis of peer delivered combination prevention for transgender women in Uganda

- Conduct formative research for a randomized trial of peer delivered HIVST, STI self-sampling and oral PrEP for transgender women in Uganda
- 20 in-depth interviews with transgender peers
- Four key themes:
  - Peer training
  - Confidentiality
  - Trans-friendly care
  - Stigma reduction

Peer delivery and trans-friendly care may help overcome barriers to HIV/STI testing and PrEP use among transgender women

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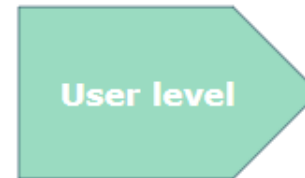


# Healthcare worker perspectives on anticipated barriers and facilitators to implementing long-acting injectable PrEP for HIV prevention in Vietnam

- 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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# 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

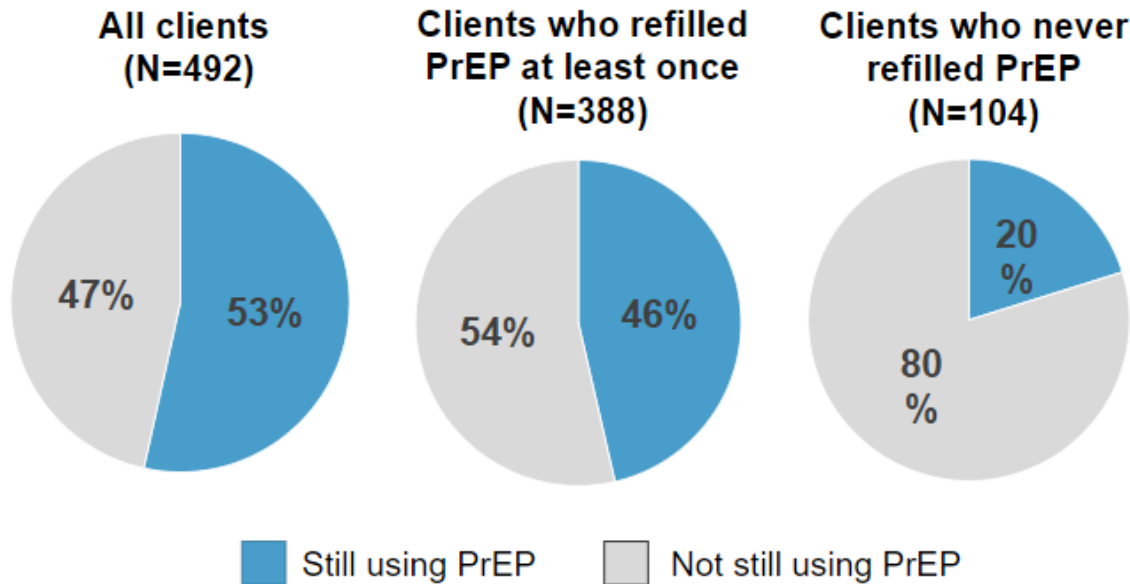


Figure 1. PrEP use among pharmacy PrEP clients three months following pilot completion

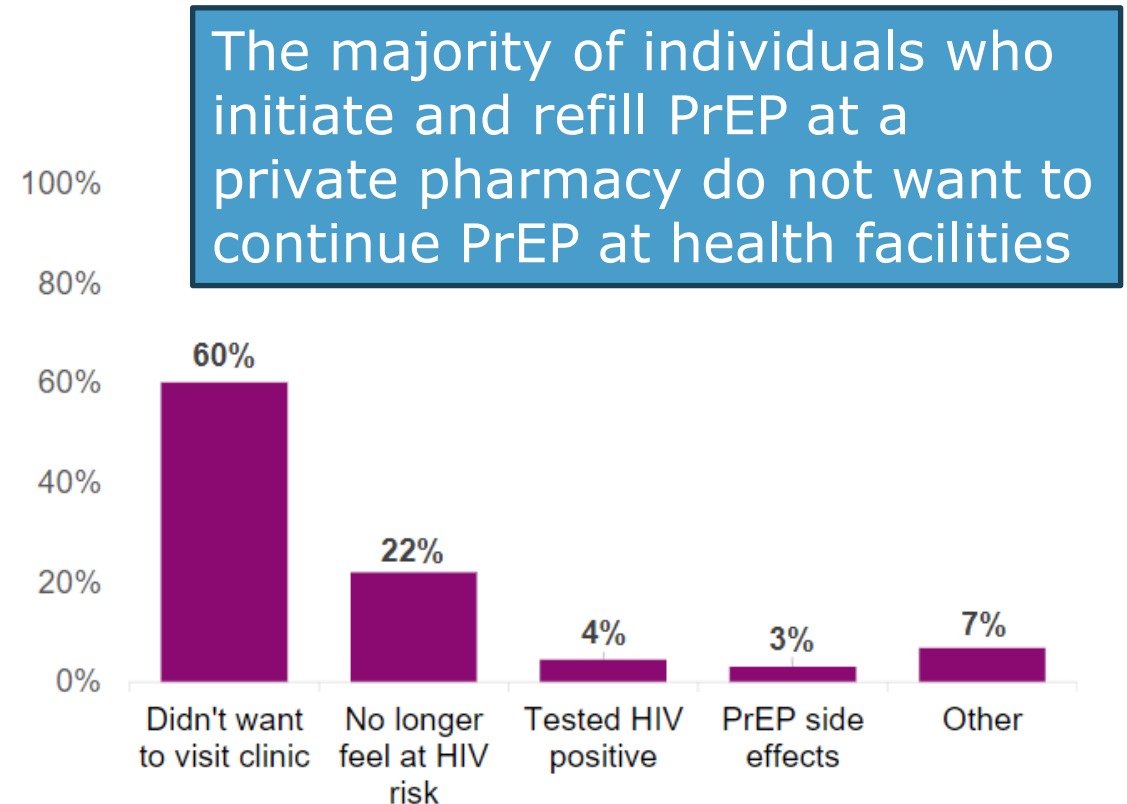


Figure 2. Reasons for PrEP discontinuation following engagement in pharmacy PrEP services

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## 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)
- 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

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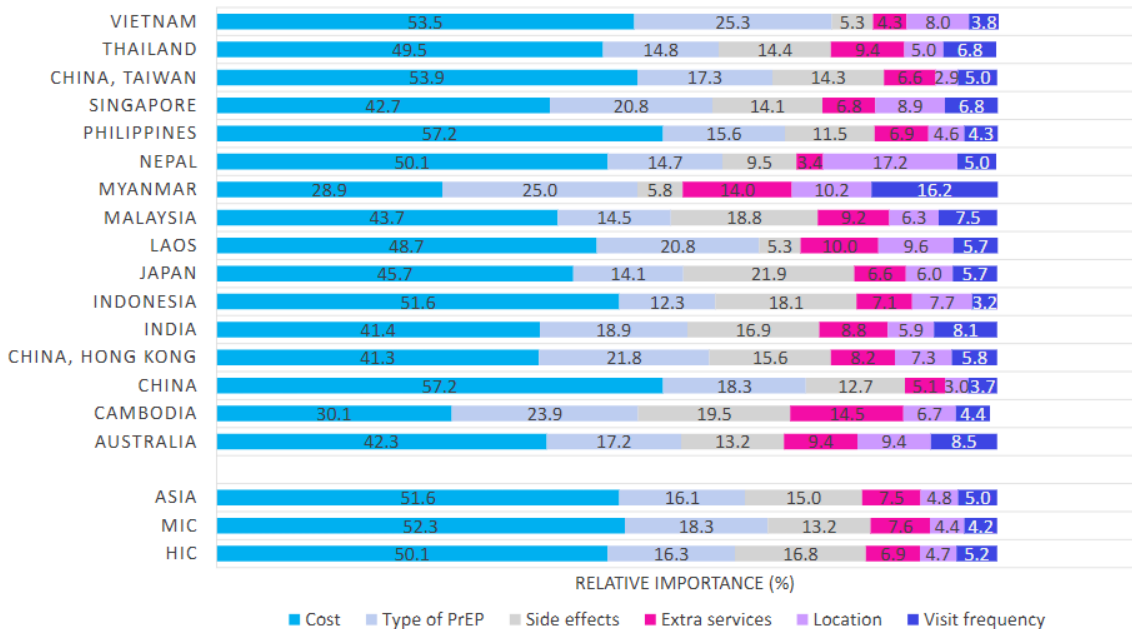
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Same-day PrEP initiation by counsellors in a large-scale delivery models was feasible



# 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 uptake 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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## Accelerating PrEP services uptake through a mobile application among key populations: learnings from a pilot project in Uganda

- Share insights on how a mobile phone application was integrated in PrEP services delivery among KPs for information dissemination, access support and medication adherence
- Designed a mobile application to support key populations accessing PrEP services in Uganda. The App provides information on PrEP, facilitates linkage to care, sends reminders on PrEP adherence, and allows direct user interaction with a doctor through a chat feature

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### LESSONS LEARNED



With a total of **426 downloads**, the app was well received

#### Number of users



Male

**47.4%**



Female

**17.6%**

Users downloaded the App as a **convenient way to access information on PrEP.**

#### Through the chat feature,

+ **695 health inquiries** were responded to by a doctor from **139 (32.6%) users** resulting in **99% linkage to PrEP centres.**

+ The majority (**22%**) of users were **24–28 years** of age, **29–33 (12%)**, with only 6 individuals over **49 years** of age (**1.4%**).

+ **80%** sought information on the closest PrEP centre, with **7%** seeking knowledge on PrEP.

Mobile applications can increase demand for and uptake of PrEP services among key populations especially when supporting chat feature with clinician.





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## Pharmacy provider perceptions of pharmacy-delivered injectable prep in Kenya

- Structured questionnaire to providers at 20 pharmacies (4 questionnaires completed)
- Perceptions nurse stationed at pharmacy to provide PrEP

- 100% liked idea of delivering injectable PrEP at pharmacy
- 92% would be comfortable with nurse stationed at pharmacy
- 92% considered injectable PrEP at private pharmacy feasible

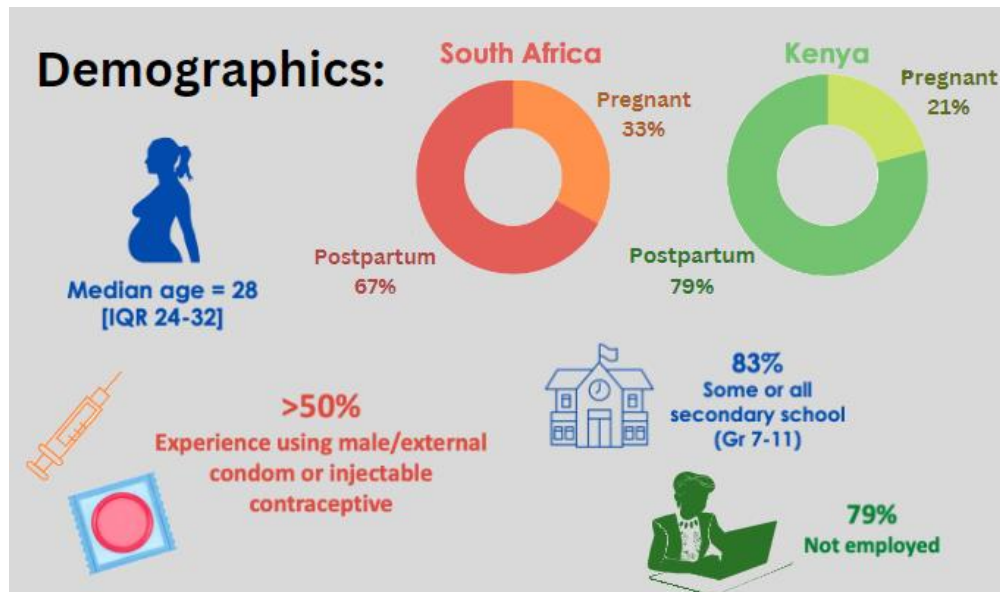
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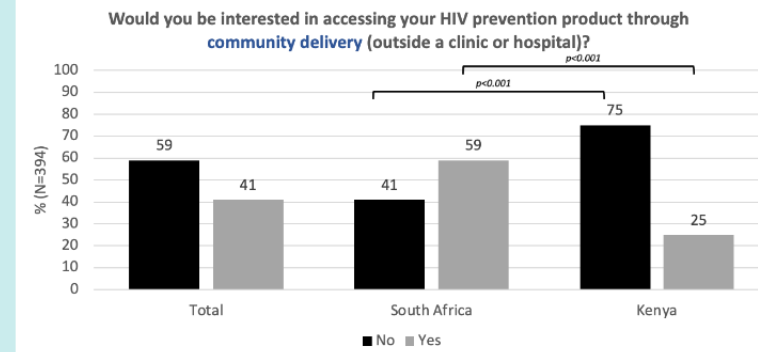
# Predictors of preference for community-based PrEP delivery among pregnant and postpartum women with experience using daily oral PrEP in South Africa and Kenya

- Evaluated preferences and acceptability of differentiated service delivery for PrEP among pregnant and lactating people with experience taking oral PrEP in South Africa and Kenya.



## Differentiated PrEP Delivery Preferences

South African respondents significantly more interested in differentiated PrEP delivery than Kenyan respondents



Most frequent reason for preferring differentiated PrEP delivery:

- convenience (49%)



Most frequent reasons for preferring clinic pick-up:

- privacy in clinic (75%)
- want to see a clinic provider (36%)



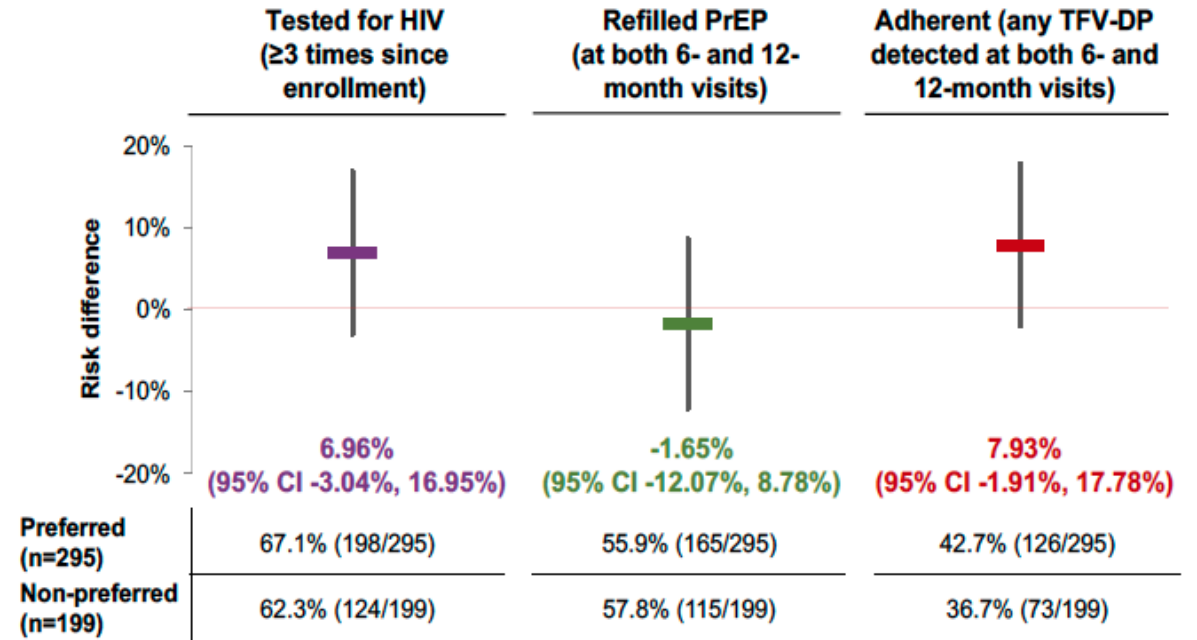
Varied differentiated PrEP delivery preferences highlights importance of choice and differences by context

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# The effect of receiving an oral PrEP delivery model supported with a preferred HIV testing modality on PrEP continuation outcomes: findings from a randomized implementation trial in Kenya

- Explore the association of receiving a preferred HIV testing modality with PrEP continuation outcomes
- Participants stated their preferred HIV testing modality (clinic-based or HIVST) then were randomized 2:1 to six-monthly PrEP dispensing supported with interim HIVST or three-monthly dispensing with clinic-based HIV testing (standard-of-care)
- Categorized participants as 'exposed' if the HIV testing modality supporting their assigned PrEP delivery model matched their preference and 'unexposed' if it did not



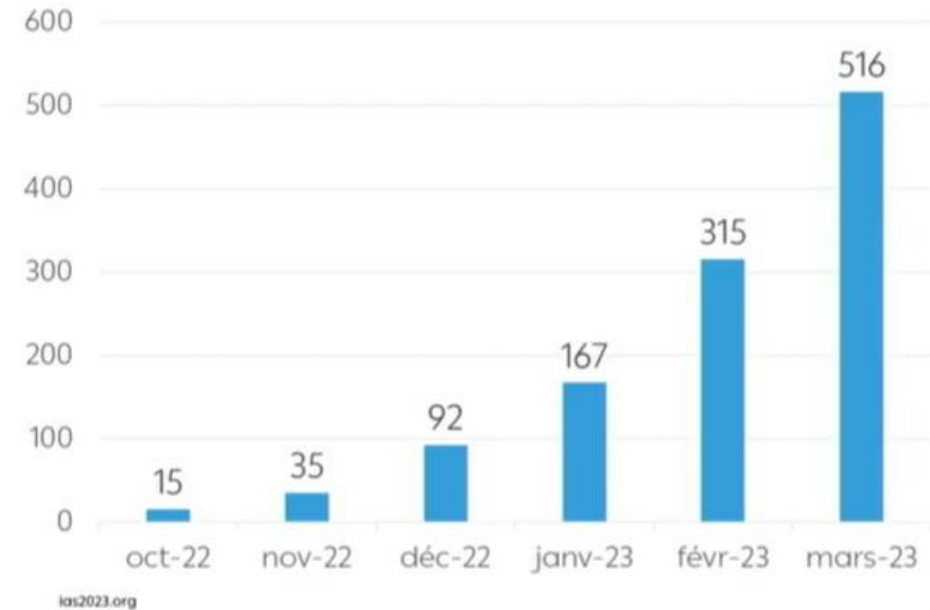
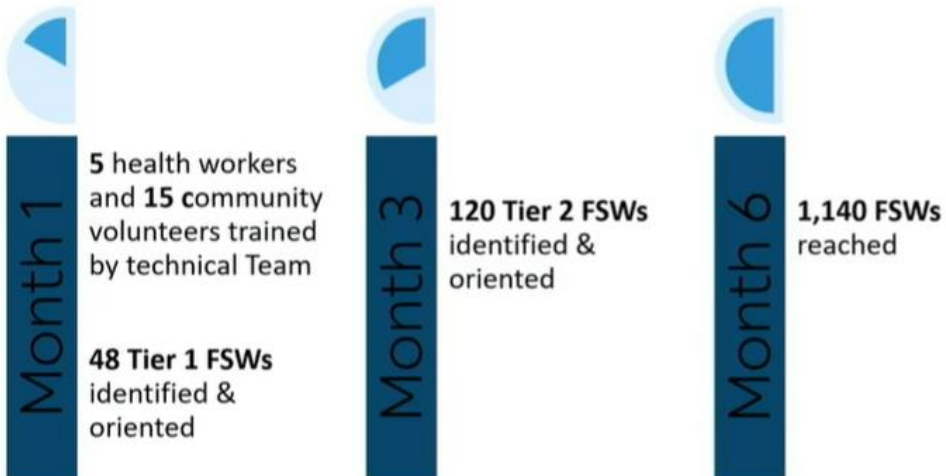
Receiving an initially preferred HIV testing modality was not associated with PrEP outcomes

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## Snowballing peer to peer mModel - a silver bullet for improved PrEP uptake among female sex workers in Zambia's border town of Chirundu

- Describe an initiative to orient and then engage female sex workers already accessing PrEP to identify peers in their network, provide PrEP messaging and facilitate their PrEP uptake



Snowballing peer-to-peer approach increased uptake of PrEP among female sex workers in town with high concentration of female sex workers

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# Integration of PrEP services and assisted partner notification into an STI Clinic in Lilongwe, Malawi



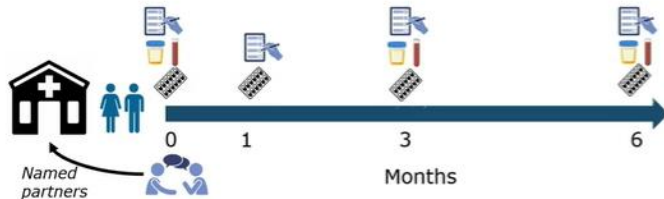
## Study Overview

**Prospective cohort study:**  
Enrolled March 2022-January 2023

**Eligibility:**  
≥15 years old, presenting for care at STI clinic,  
PrEP eligible per Malawi guidelines

### Enrollment Groups:

- STI patients initiating PrEP (**Index participants**)
- Referred Partners initiating PrEP (**Partner participants**)
- STI patients declining PrEP (data not shown)



- Legend:**
- Daily oral PrEP\*
  - STI Testing
    - Chlamydia trachomatis*
    - Neisseria gonorrhoea*
    - Treponema pallidum*
  - Behavioral survey
  - Partner elicitation

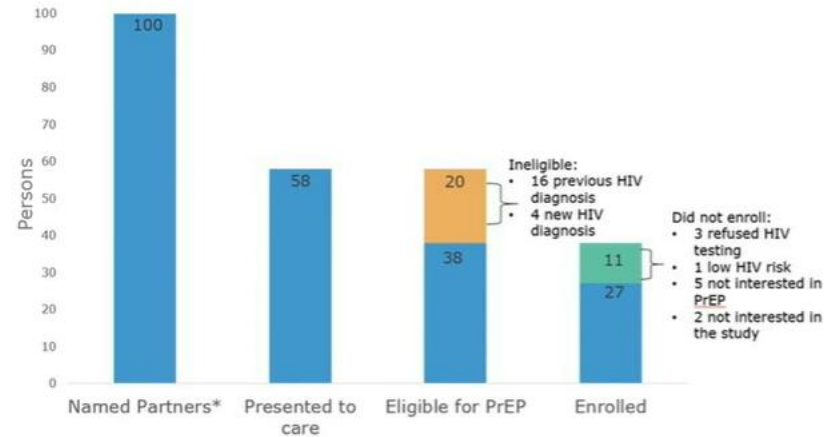
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\*all PrEP services provided by Malawi Ministry of Health



## Sexual Partner Referral Cascade



- Integrating PrEP services and aPN within an STI clinic reached persons in traditional priority populations (>50%) and those with evidence of recent risk not defined as a priority population
- aPN may work for case finding among PrEP initiators within STI clinic





# A pharmacist-led oral PrEP refill visit with client HIV self-testing significantly improved continuation in Kenya

## PrEP continuation at months 1,3 & 6

	Month 1	Month 3	Month 6
<b>Intervention</b>			
<b>Direct to pharmacy</b>	45% (118/264)	35% (91/264)	23% (61/264)
<b>Control clinics</b>	33% (95/290)	25% (73/290)	16% (47/290)

## Time spent in the clinic and on specific services (minutes) by the intervention group

Characteristic	N	Direct-to-pharmacy with client HIVST, n = 58 <sup>1</sup>	Usual clinic flow, n = 22 <sup>1</sup>	p-value <sup>2</sup>
Total clinic time	80	33.5 (29, 45)	50.5 (39, 104)	<0.001
Total time at the pharmacy	78	8 (6, 12)	8 (4, 15)	0.8
Direct contact time with pharmacy staff	78	7 (6, 8)	4 (3, 7)	0.001

Direct-to-pharmacy PrEP refill visits (using HIVST) reduced visit time and improved continuation without reducing adherence

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# III. DSD for treatment

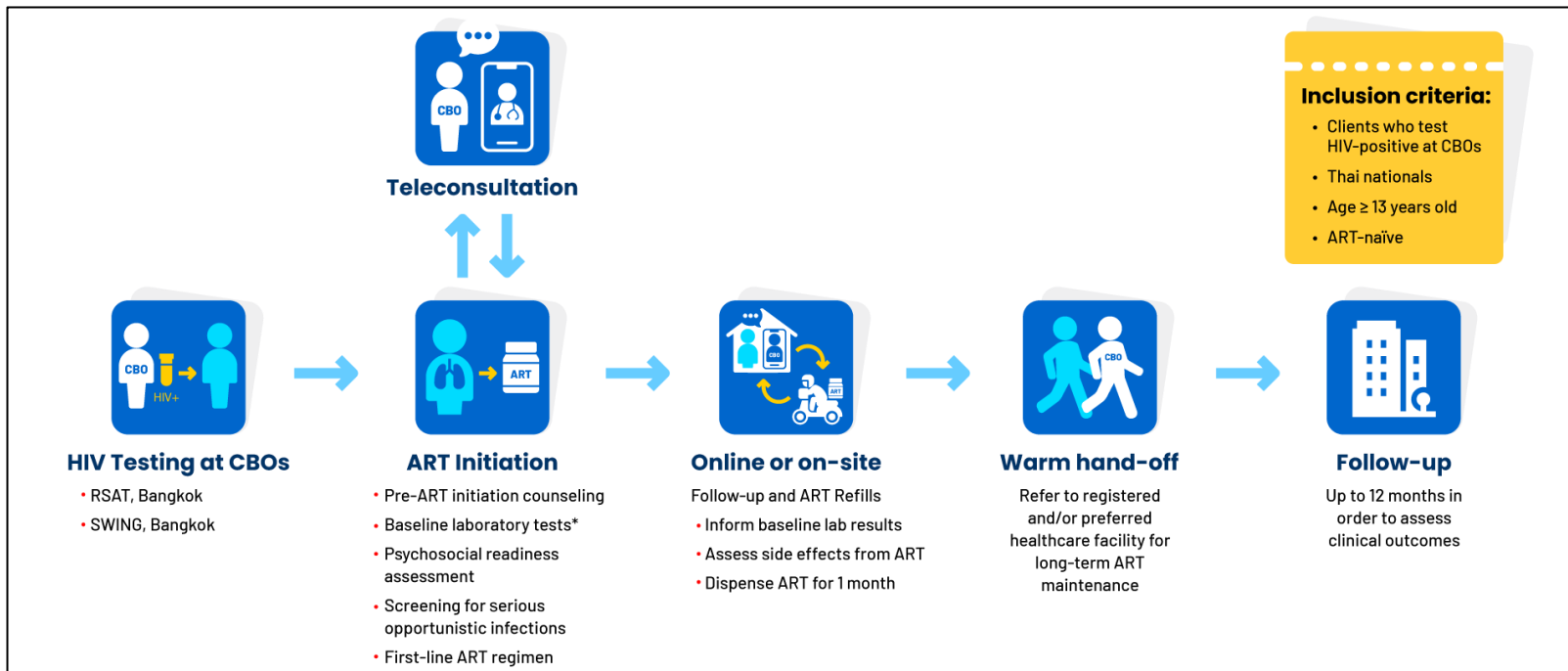
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# Key population-led same-day antiretroviral therapy initiation hubs in Bangkok, Thailand: an evaluation of HIV cascade outcomes from a hybrid type 3 implementation-effectiveness trial

- 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

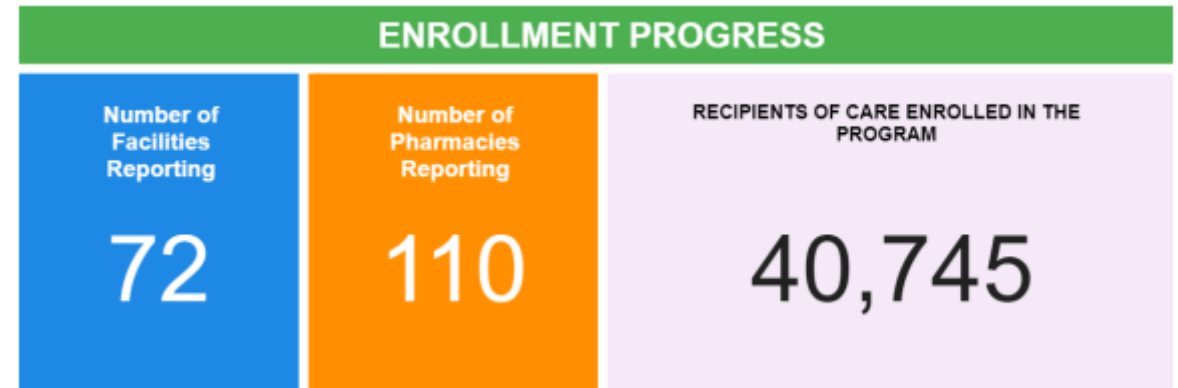
Oral abstract in Track E late-breaker



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## 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](#)



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## Integrated chronic medicine pick-up points enabled by Amazon Smart Lockers, destigmatizes the collection of antiretroviral medication and promotes adherence to treatment

- Collect & Go Smart Lockers have been implemented in South Africa, Botswana, Eswatini and Lesotho to create convenient pick-up points for chronic medication in rural and remote regions in Sub-Saharan Africa.
- National Department of Health and health innovation provider Right ePharmacy created a facility for chronic stable clients to collect their medication, including ART and other chronic disease medication.
- Integrated chronic disease programmes can help improve adherence by providing convenient and discreet access to medication
- Effective treatment of HIV requires collaboration between National Health and Innovation partners

[Abstract](#)

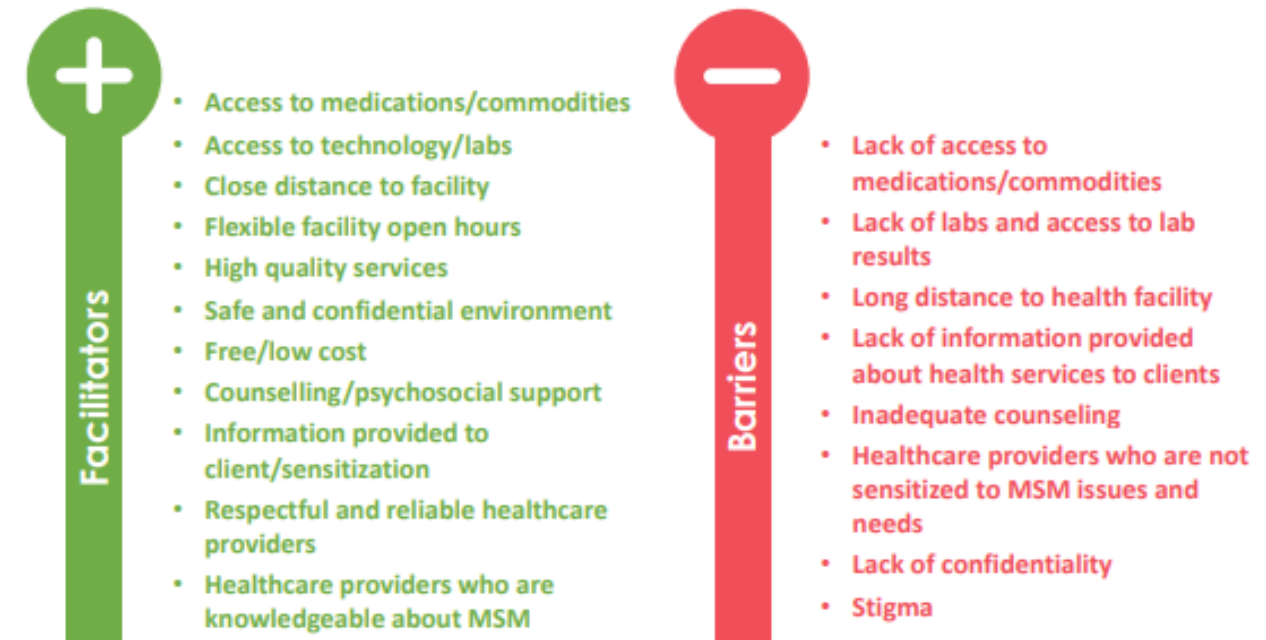




# Applicability and acceptability of differentiated HIV service delivery among men who have sex with men in Kenya: a qualitative study

- A cross-sectional qualitative study to explore perspectives on differentiated HIV service delivery for men who have sex with men in Kenya;
- In-depth interviews conducted with 49 people including clients (MSM) receiving ART (n=15) or PrEP (n=15) through community-led organizations, and healthcare providers (n=8), programmers (n=5) and county policy makers (n=6).

Figure 1: Facilitators and barriers to receiving HIV services





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## Beyond the rhetoric: Introducing a community engagement tracking tool for improved HIV differentiated service delivery

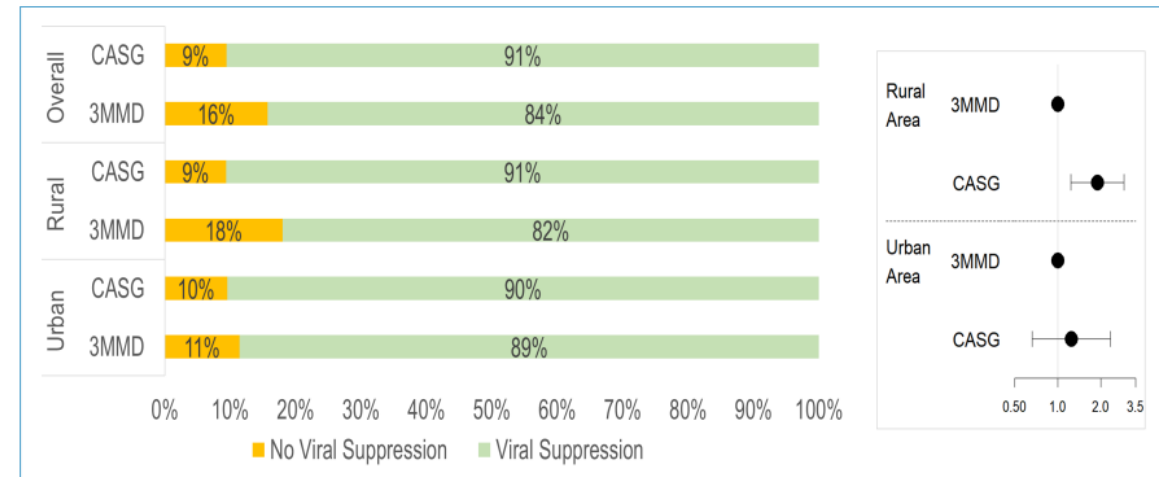
- The Community Advocacy Network, coordinated by the International Treatment Preparedness Coalition, developed a conceptual framework and tracking tool for community engagement, rolled out in Cameroon, Democratic Republic of Congo, Eswatini, Ghana, Kenya, Rwanda and Senegal during a 3-month pilot
- Community groups were engaged in DSD policy and programming at all levels and level engagement ranged by areas: 65% at design, 51% at implementation and 45% at M&E.
- Community engagement was highest in DSD policy validation exercises (79%) and service provision at health facilities (77%).
- Average Recipient of Care involvement in DSD impact assessments was low (5%) as was involvement in DSD M&E activities (38%).

There is a need for continued national multi-stakeholder consultations and community advocacy for greater community engagement within national DSD programming.



## Favorable effect of differentiated models of care on retention in care and viral suppression among adults on antiretroviral treatment: retrospective cohort study in Zambézia Province, Mozambique (2016-2021)

- Evaluation of effects of two frequently used DSD models community adherence support groups (CAG) and 3-month multi-month dispensing (3MMD) on retention in care and viral suppression, between October 2016 – December 2019.
- Overall 12-month retention was 93% and 94% in the 3MMD and CAG groups, respectively. In rural areas, the odds of being retained at 12 months was 1.5 times higher for clients in CAG compared to 3MMD. Viral suppression was 86% overall, 83% for 3MMD and 89% for CAG
- PLHIV in CAG in rural areas also had higher odds of being virally suppressed (OR 2.03)



**Figure 2.** Viral Suppression among individuals receiving care for each DSD model compared to those not receiving care in a DSD model (but eligible to do so), per area (left); associated forest plot with the adjusted OR (right).

Retention in care and viral suppression was high for both models, and advantages were seen for CAG attended in rural areas.



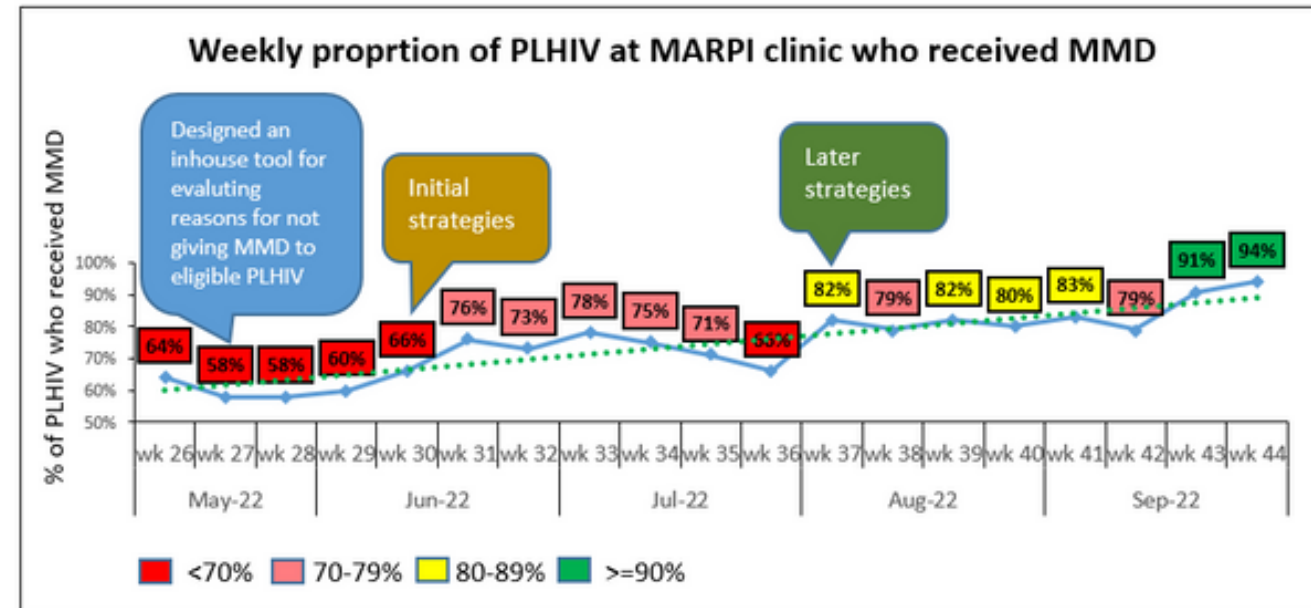
# Improving multi-month dispensing of antiretroviral therapy at the Mulago most at risk populations initiative clinic, Uganda

## Implemented initial strategies (from week 30):

1. Weekly reminders to provide MMD to eligible people living with HIV
2. Provide MMD while awaiting VL test results
3. Offer MMD to those returning in care after interrupting treatment along with completing VL test >3 months

## Implemented Additional Strategies (from week 37):

1. Pharmacy dispensers double-check reason for denied, MMD before client exits the facility
2. MMD for clients with concurrent illnesses or non-communicable diseases on case-by-case basis



• MMD improved from 58% to 94%  
Continuous supportive supervision was vital for quality of implementation



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## Viral suppression and retention in care of clients on multi-month dispensing

- Review of clinical charts to assess viral suppression and retention for children and adolescents living with HIV registered on 3MMD between August 2018 and June 2021, at Baylor in Mwanza, Tanzania.
- Most clients were on Dolutegravir-based while 6% on Protease Inhibitors-based regimen. Almost half of clients live within 10 km from facility, 42% within 11-30km and 3% more than 100km away.
- On commencing 3MMD, 99% clients had VL below 50 copies/mL and 1% had VL of 55 copies/ml.
- Majority of clients (94%) maintained VL below 50 copies/mL and remained on 3MMD while 6% clients with an average age of 15 years old and on Dolutegravir-based regimen had VL above 50 copies/mL and exited 3MMD.

Majority of clients on 3MMD were able to maintain viral suppression and retained in care despite minimal follow-up and living far away.

[Abstract](#)





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# *Community models*

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## Central Dispensing Unit (BonoloMeds) as a differentiated model of medicine distribution in Lesotho: improving adherence to anti-retroviral treatment (ART) during COVID-19

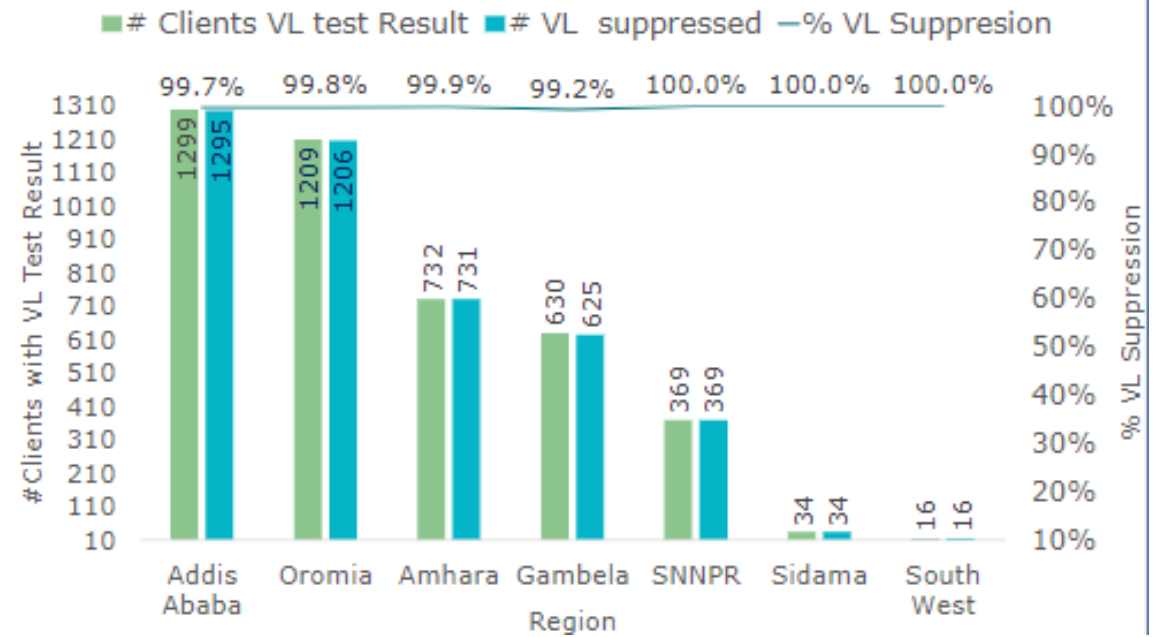
- Right ePharmacy implemented external packaging of chronic repeat medicines and dispatching to alternative pick-up points (PuPs) outside of facilities (alternative counters at facilities, private pharmacies, and Collect & Go Smart Lockers).
- 21 PuPs established in Maseru, Lesotho serving eight health facilities





# 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.





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## Community based HIV testing and treatment is feasible and yields high level of viral load suppression

- A cluster randomized trial (CHIEDZA) was conducted across 3 provinces in Zimbabwe, each randomized 4:4 to control (existing, largely facility-based, services) or to intervention clusters (total 24 clusters).
- 36,991 youths accessed CHIEDZA of whom 84% had  $\geq 1$  HIV test.
- 377 YLWH (89% female) were newly diagnosed with HIV
- 88% of those newly diagnosed were linked to care at CHIEDZA and 96% of them started ART.
- Viral load suppression among newly diagnosed YLWH accessing care at CHIEDZA was 90%.

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[Poster](#)

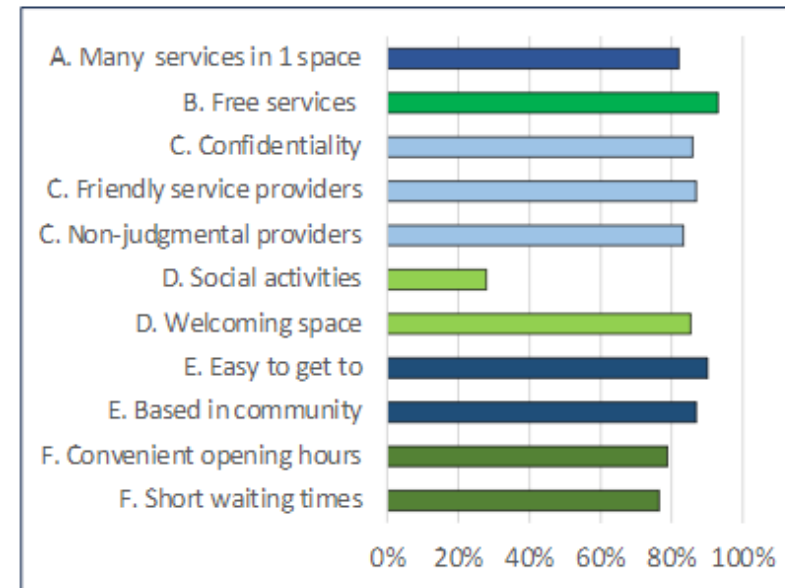


## 'I was afraid to test, but the providers and the space made me feel comfortable': Acceptability of community-based integrated HIV and sexual and reproductive health services in Zimbabwe

- Acceptability of CHIEDZA, a community-based HIV and integrated sexual and reproductive health (SRH) service for youth (16-24 years) in Zimbabwe, through an endline population-based cross-sectional survey.

- 96.1% rated their overall experience as excellent/very good

Figure 1. Features of CHIEDZA that were most often valued by youth attendees (n=2,135)

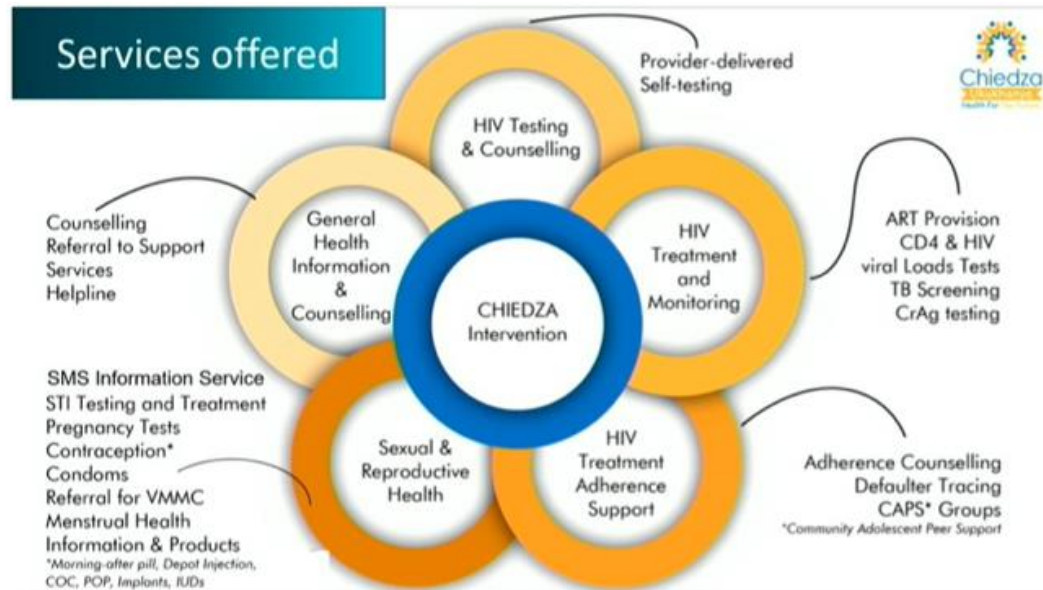






## Uptake of integrated HIV and sexual and reproductive health services for youth at community centres in Zimbabwe

- CHIEDZA is a cluster-randomised trial of a community-based integrated HIV and sexual and reproductive health (SRH) service (CHIEDZA) for youth in 3 provinces in Zimbabwe



- Most clients took multiple services per visit. HIV testing was commonly used together with other services offered.
- The most popular services for women were menstrual hygiene products (taken up by 96.5% of those eligible), HIV testing (83.7%) and period pain management (59.9%); for men the most popular were condoms (93.9%), HIV testing (85.6%) and text messages on SRH (67.1%).



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## Evaluating a pharmacy-based HIV service delivery program in South Africa: a qualitative assessment of implementation using the Consolidated Framework for Implementation Research (CFIR)

- Sought to increase access to HIV services via select independent pharmacies across South Africa, guided by the Consolidated Framework for Implementation Research (CFIR), the feasibility, acceptability, and appropriateness of EPIC were assessed
- Ran from August 2019-December 2020 and included 776 pharmacy healthcare workers, 62 in-depth interviews
- Overall, acceptability of EPIC was high across stakeholders.
- Importance of self-efficacy of pharmacy staff to deliver services was emphasized, with telehealth consults increasing self-efficacy
- Adequate staffing, space, and technological capacity varied by pharmacy and were critical to program success.
- Inability to obtain prescribing permits hindered service delivery.
- Client out-of-pocket costs were seen as a key barrier to engaging vulnerable populations in the EPIC program and maximizing program impact.



# Implementation of Automated Medication Dispensing Systems to increase access to ARVs for PLHIV – Early lessons from a multi-cohort study in Eswatini

- Early lessons from the implementation of an automated medication dispensing system (AMDS) in Eswatini, called LulaMeds™, as an approach to reduce barriers to accessing anti-retroviral medication for people living with HIV and medication for non-communicable diseases
- 95% of the 12,271 parcels were collected

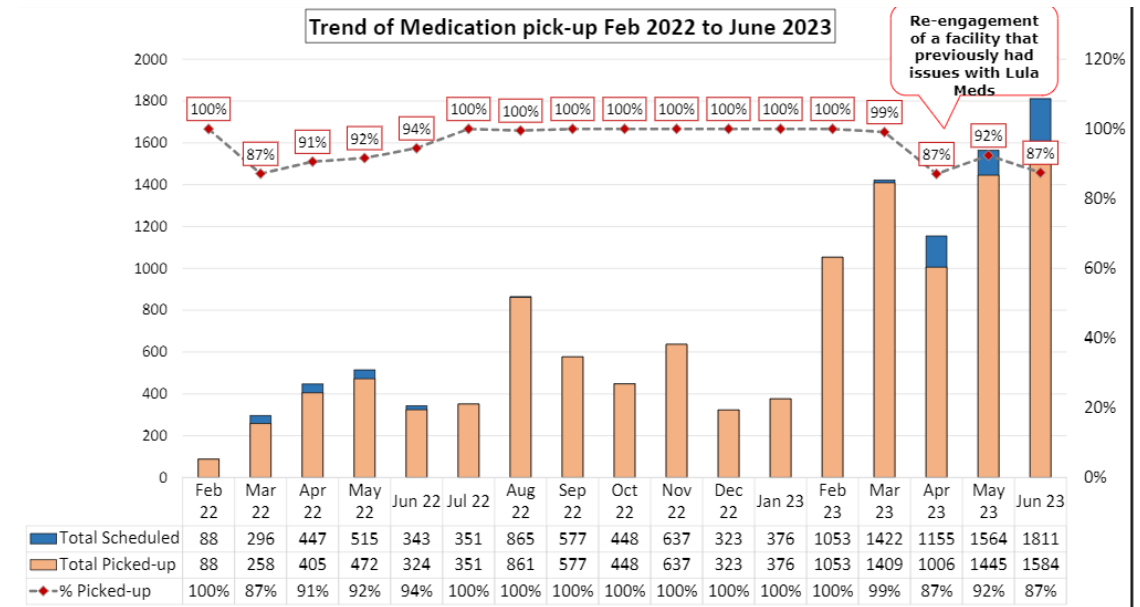


Figure 4: Clients retrieving parcel from the AMDS.

Convenient alternative for medicine pick-up



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## Improving HIV service delivery for young men in Eswatini - a community leadership engagement model

- Assess the effectiveness of community leadership in improving health service uptake for Eswatini young men through routine programme data
- 203 community leaders reached with HIV prevention and resource mobilization skills.
- 2617 men who were then reached with HIV prevention services. As a result, 1502 (57%) of men were referred for clinical service uptake where 1399 (93%) accessed clinical services.

[Abstract](#)



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## Mobile phone text reminders and voice call follow-ups to improve community retail antiretroviral pharmacy refills; lessons from Lango Sub-region in Northern Uganda

- Learnings from implementing mobile text reminders and voice call follow-ups among ART patients enrolled in the Community retail Pharmacy drug distribution points (CRPDDP) program in northern Uganda
- Retrospective data review of electronic medical records from four pharmacies
- 1,354 clients from four pharmacies were reached.
  - 972 clients received SMS appointment reminders
  - 382 were followed up through voice calls.
- The majority (75%) of the clients returned for refills on the appointed date, 20% returned within four days after the appointment date, and the remaining 5% needed follow-up





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# 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)

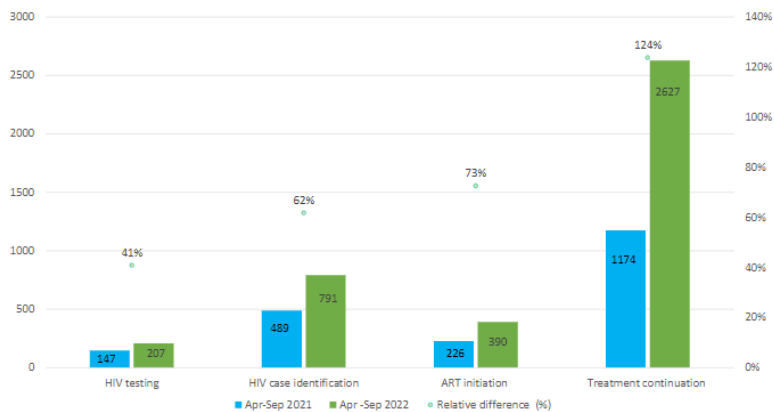
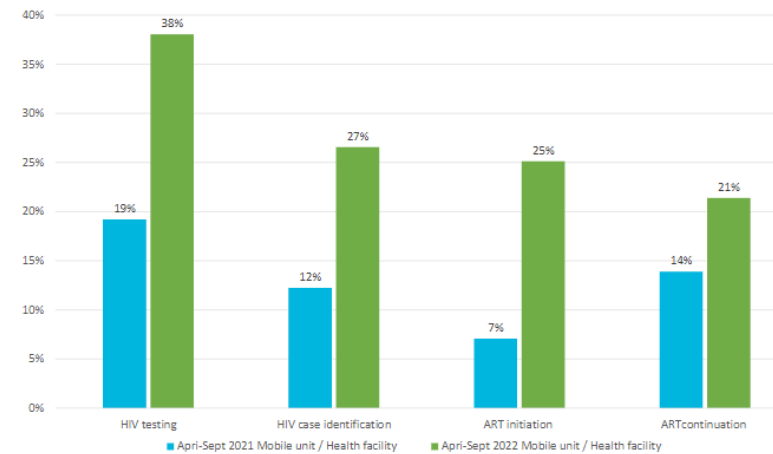


Figure 2: Mobile unit contribution in HIV testing, HIV case identification, ART initiation and treatment continuation among MSM during the periods April-September 2021 and April-September 2022



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



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## 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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# ***Pregnant and breastfeeding women***

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## A client-centered approach to eliminate mother-to-child transmission of HIV: outcomes from a large ART program in Kisumu County, Kenya

- Examine the impact of a series of interventions (FACES program) on MTCT and care engagement
- The interventions included:
  - 1) High risk clinic and package of services,
  - 2) Case management
  - 3) Ushauri mobile app
- PMTCT outcomes improved between 2018 and 2021 (MTCT, loss to follow-up, maternal viral suppression, infant HIV positivity, infant mortality)

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[Poster](#)



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## Differentiated service delivery for pregnant and breastfeeding young mothers living with HIV to prevent mother to child transmission: lessons learned from an ART clinic in Malawi

- DSD for pregnant and breastfeeding adolescents
- “Teen moms” is for adolescent girls and young women 13-24 years who are pregnant or have a children under two years of age
- Meet monthly on a Saturday for ARV refills, VL management, SRH services, and psychosocial support
- Enrollment of 16, 19 and 9 in 2018, 2019 and 202 with all retained and no infections in exposed infants.
- Track viral load suppression, disclosure and return to school with promising signs.

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# *Children and adolescents*

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## Factors of age-appropriate services that influence virological suppression in children and adolescents with HIV

- Identify key case management services that contribute to viral re-suppression of children and adolescents living with who are receiving treatment but have a high viral load
- Followed 180 children and adolescents living with HIV for at least 6 months between October 2020 and August 2022
- Viral re-suppression at 12 months was 85.6%
- Participating in peer support groups (OR=2.62;  $p=0.037$ ), enhanced adherence counseling (OR=1.56;  $p=0.05$ ), receiving economic strengthening interventions (OR = 1.35;  $P = 0.050$ ), and being linked to age-appropriate sexual and reproductive health services (OR = 1.51;  $P = 0.042$ ) were all associated with an increased risk of viral load re-suppression among children and adolescents living with HIV

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## Consistency of multi-month antiretroviral therapy dispensing and association with viral load coverage and suppression among pediatric clients in Mozambique

- Assess the association of multi-month dispensing (MMD) with virological outcomes
- Secondary analysis of data from 16 high-volume HIV facilities in two provinces in Mozambique
- Analyzed the proportion of children ever receiving 3MMD, the proportion receiving consistent MMD (3 month supply at all pickups the following year), and VL coverage and suppression ( $<1,000$  copies/mL) after transition to MMD
- Of 4,383 children, 82% ever received MMD
- Older children more likely to have received MMD, and consistency of MMD also associated with age
- Adjusting for age and sex, consistent MMD was associated with lower odds of having a viral load

While most children received MMD, fewer than half received MMD consistently. Those who received consistent MMD were significantly less likely to have a VL.



# Impact of a teen club model on improving HIV outcomes among adolescents in rural Neno district, Malawi: a retrospective cohort study

**Table 1:** Summary of univariable and multivariable Cox proportional hazards regression analyses of predictors of attrition\* from HIV care.

	Univariable analysis		Multivariable analysis	
	HR (95% CI)	p-value	aHR (95% CI)	p-value
<b>Enrollment in teen club</b>				
Yes (ref)	1.00		1.00	
No	2.80 (1.47, 5.34)	0.002	2.39 (1.24, 4.63)	0.009
<b>Age at ART initiation</b>				
<10 years	0.02 (0.01, 0.05)	<0.001	0.04 (0.01, 0.14)	<0.001
10-14 years	0.25 (0.12, 0.54)	<0.001	0.37 (0.17, 0.82)	0.015
15-19 years (ref)	1.00		1.00	
<b>Sex</b>				
Female (ref)	1.00		1.00	
Male	0.63 (0.36, 1.12)	0.14	0.98 (0.52, 1.84)	0.955
<b>WHO clinical stage at initiation</b>				
Stage I (ref)	1.00		1.00	
Stage II	0.17 (0.02, 1.26)	0.083	0.59 (0.07, 4.71)	0.614
Stage III	0.14 (0.04, 0.46)	0.001	0.74 (0.20, 2.80)	0.660
Stage IV	0.15 (0.02, 1.10)	0.062	0.67 (0.08, 5.70)	0.714
<b>Recent BMI (within six months of last visit date)</b>				
Underweight	1.64 (0.91, 2.97)	0.100	3.18 (1.71, 5.92)	<0.001
Normal (ref)	1.00		1.00	
Overweight	0.35 (0.12, 1.03)	0.057	0.34 (0.11, 0.99)	0.050

\* Attrition from HIV care is defined as a combination of treatment outcomes 'died', 'defaulted' and 'transferred out'.

- Retrospective cohort study to compare the impact of the teen club model to the standard care on HIV treatment outcomes among adolescents living with HIV in Neno District.
- Primary outcome was attrition defined as a combination of treatment outcomes 'died', 'defaulted' and 'transferred out'.
- Results: After four years, clients in the teen club had a significantly higher likelihood of remaining in care than those who did not
- Teen clubs also increased the probability of measuring viral load and body mass index but did not change the probability of viral load suppression.

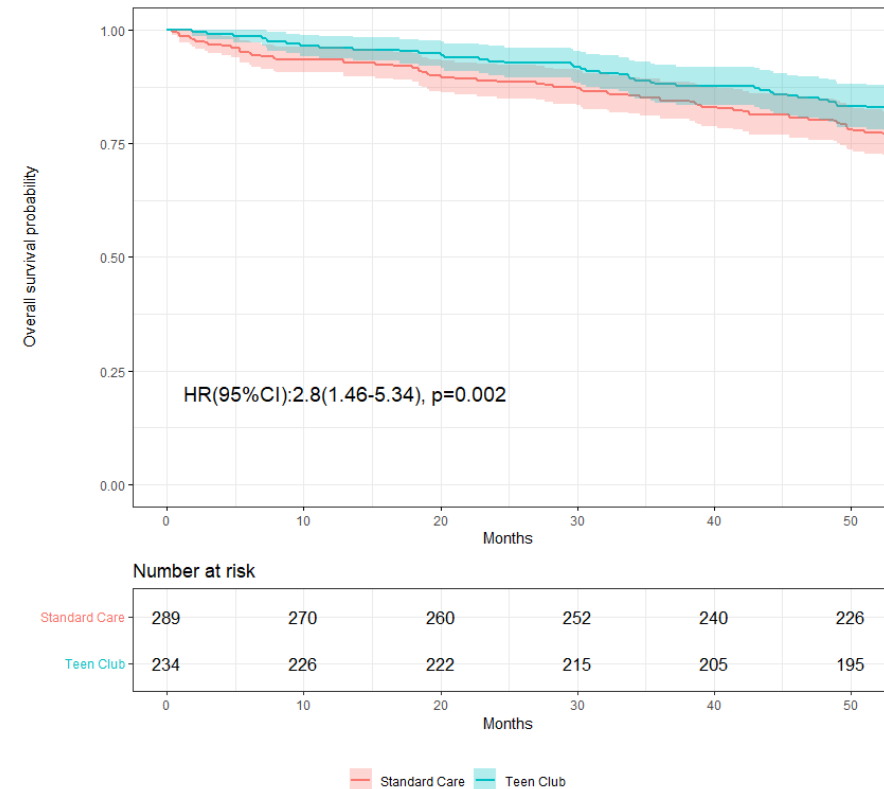
The teen club model has the potential to improve treatment outcomes among adolescents in rural Neno district. Further understanding of the contextual factors and barriers that adolescents in rural areas face could improve the model.



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## Impact of a teen club model on improving HIV outcomes among adolescents in rural Neno district, Malawi: a retrospective cohort study

- Retrospective cohort study to compare the impact of the teen club model to the standard care Primary outcome was attrition defined as a combination of treatment outcomes 'died', 'defaulted' and 'transferred out'.
- Results: After four years, clients in the teen club had a significantly higher likelihood of remaining in care than those who did not
- Teen clubs also increased the probability of measuring viral load and body mass index but did not change the probability of viral load suppression.



Those in Teen Clubs had better outcomes – but more is needed to support adherence and suppression





## Improving access to HIV prevention and care and treatment for adolescent and youth through community-based service delivery models in Nampula, Mozambique

- Implementation of a community service delivery model to reach adolescents and young people and link them to health services.
- Mobile services included comprehensive HIV prevention, care and treatment (C&T) at the community level, integrated into general health services (e.g. maternal and child health services, outpatient consultation)

Table 1: HIV prevention and C&T cascade among AYP at mobile brigades, June 2022/June 2023, Nampula, Mozambique

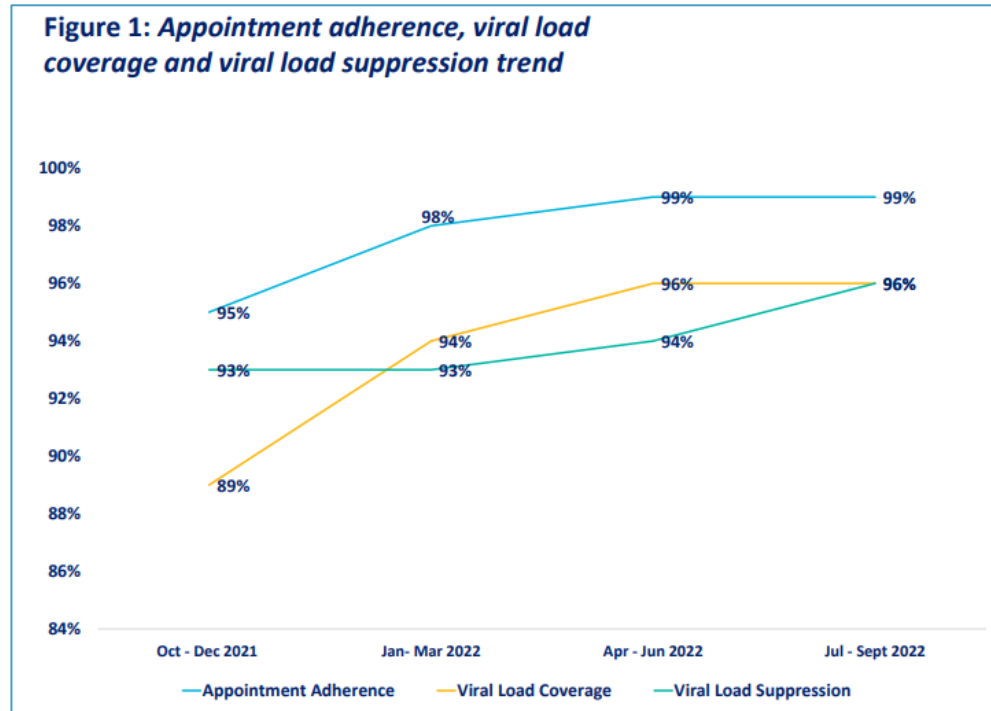
Number AYP attending mobile brigade services	F	1,015
	M	657
	<b>Total</b>	<b>1,672</b>
Number tested for HIV	F	713
	M	477
	<b>Total</b>	<b>1,190</b>
Number tested positive for HIV	F	18
	M	12
	<b>Total</b>	<b>30</b>
Yield (%)		<b>2.5%</b>
Number linked to HIV treatment services	F	18
	M	12
	<b>Total</b>	<b>30</b>
Number eligible for PrEP	F	222
	M	161
	<b>Total</b>	<b>383</b>
Initiated PrEP (%)	F	216 (97%)
	M	151 (94%)
	<b>Total</b>	<b>367 (96%)</b>



# Optimized differentiated service delivery model for children living with HIV: experience from Mwanza, Tanzania

- Describe appointment adherence, viral load coverage and viral load suppression among children living with HIV following the implementation of a paediatric Saturday clinic in Mwanza, Tanzania
- CLHIV adherence to clinic appointments was already high and further increased from 95% (3,202/3,377) to 99% (3,335/3,376). The proportion of CLHIV with documented viral load test increased from 89% (2,834/3,194) to 96% (3,038/3,153). Viral load suppression among CLHIV increased from 93% (2,680/2,870) to 96% (2,862/2,989) by the end of the last quarter.

Figure 1: Appointment adherence, viral load coverage and viral load suppression trend





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# Cost and cost-effectiveness

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# Cost-effectiveness and budget impact analysis of the implementation of differentiated service delivery models for HIV treatment in Mozambique – a modelling study

- Cost-effectiveness analysis and budget impact analysis comparing the eight DSD models implemented in Mozambique to conventional services.
- Fast-track and 3MMD was the least expensive model in both perspectives, one-stop shop models (health system) and conventional care (societal perspective) were the most expensive
- DSD models dominated conventional care by being less expensive and more effective in retaining clients on ART
- DSD models were estimated to generate 14 million USD cost savings for the health system from 2022 to 2024

Model of care	Cost per US\$ per perspective	
	Health System	Societal
Conventional care	174	<b>251</b>
One-stop shop maternal and child health	<b>187</b>	245
One-stop shop tuberculosis	<b>187</b>	245
Family approach	179	218
Community adherence group	144	165
Fast-track	134	162
Adherence club	129	153
Fast-track plus three months dispensing of ARVs	<b>120</b>	<b>138</b>

**Table:** Cost per client per year per model of care

Findings support the continued implementation of DSD models to optimize HIV service delivery in Mozambique and the ministry of health’s decision to broaden the range of DSD models in the country.



# Understanding the cost of pharmacy-delivered HIV pre- and post-exposure prophylaxis services in Kenya: findings from a pilot study

- Microcosting and provider surveys to estimate the resources that pharmacies used for PrEP/PEP service delivery and estimated the financial and economic costs of PrEP and PEP delivery in Kenya.
- Financial cost of pharmacy-delivered oral PrEP services was \$1.52 USD per initiation and \$1.38 USD per continuation visit, with higher economic costs
- Most survey clients reported being willing to pay a median fee of \$3.30 for pharmacy-delivered PrEP services.

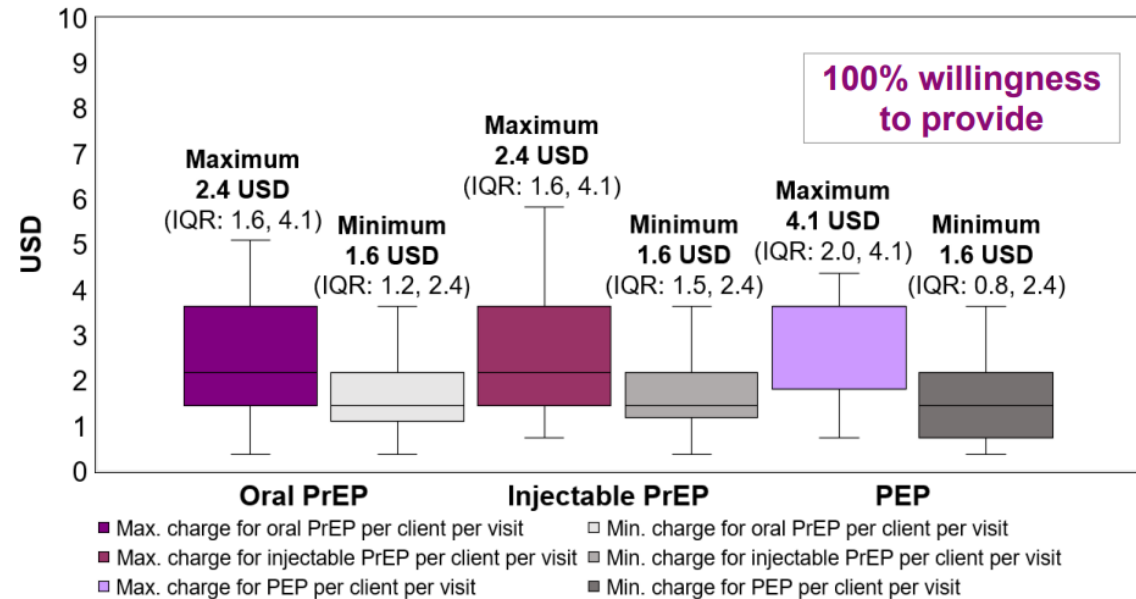


Fig. 1. Amount providers are willing to charge each client per visit to provide PrEP & PEP services (n=40)

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Pharmacy-based delivery of PrEP and PEP services may be low-cost, especially when utilizing public-sector commodities. Estimated costs are lower than the amounts clients are willing to pay and providers willing to charge.





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# DSD and integration

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## High rates of uncontrolled hypertension among adults receiving integrated HIV and hypertension care with aligned multi-month dispensing in Malawi

- To determine actual alignment of dispensing and impact on blood pressure (BP) control, exploring associations with uncontrolled hypertension
- Survey of adults (n=464) on ART and antihypertensives receiving integrated care for both conditions; random subset of participants with uncontrolled hypertension selected for collection and analysis of medical chart data on antihypertensive medication adjustments over the prior year.
- Most clients received 3MMD (63%), 31% had 4MMD or 6MMD.
- Among the individuals with =2 BP readings in the prior year, 77% had uncontrolled hypertension, and this was associated with shorter refill intervals: 81% of those with 3MMD or shorter had uncontrolled hypertension, versus 67% of those with 4MMD or longer.

Uncontrolled hypertension was common among Malawian adults receiving integrated HIV and hypertension care with aligned MMD, and was associated with shorter refill intervals, but very few medication changes.

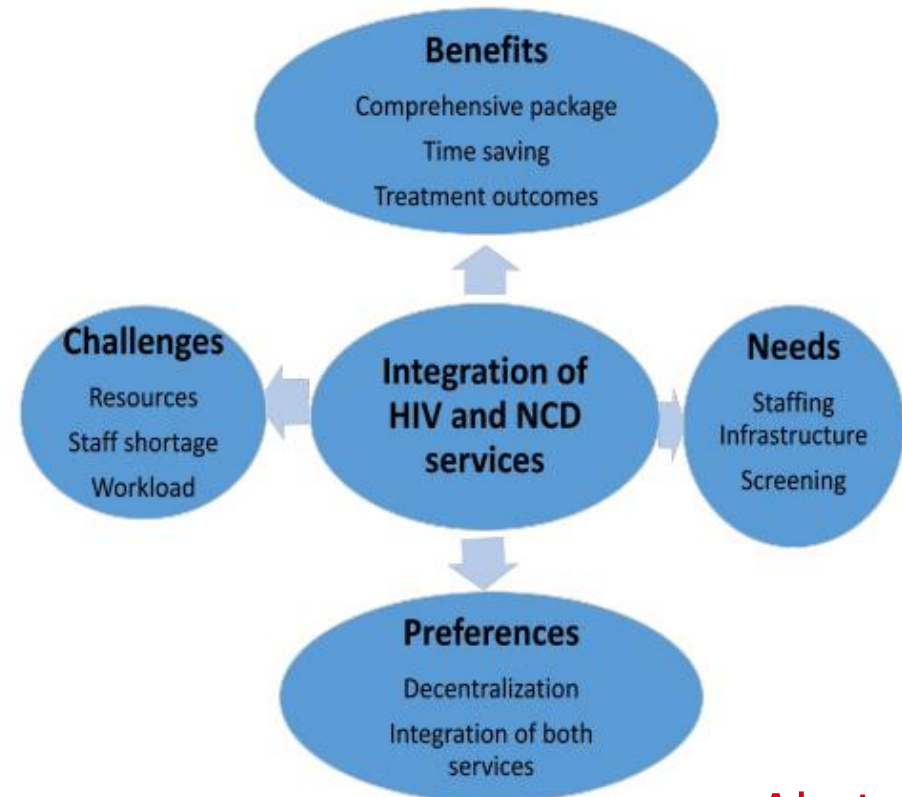


# Provider's perception, perceived needs, preferences, benefits, and challenges on the integration of NCDs services delivery with HIV services Rwanda

- Identified the provider's and stakeholders' perceptions on benefits, perceived challenges, and needs on the integration of NCDs services delivery with HIV services
- 48 in-depth interviews

Need to increase NCDs awareness and invest in healthcare providers' capacity building, infrastructure, and care to facilitate smooth provision of NCDs prevention and care for people living with HIV.

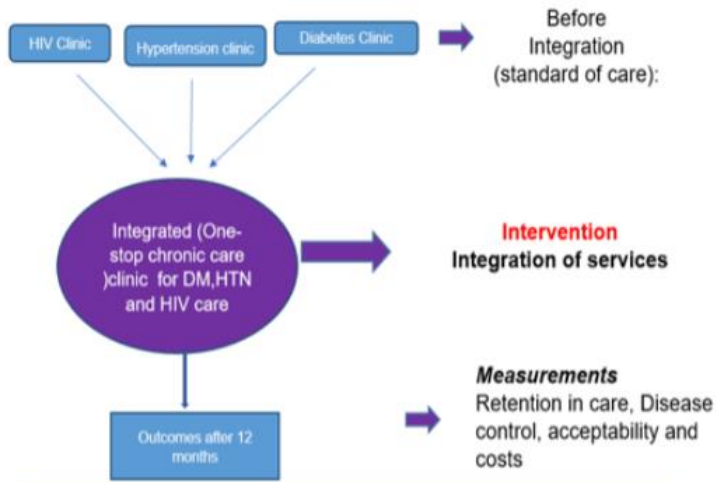
## Themes from interviews



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#### INTEGRATION COMPRISED OF:

- ❖ Consultation by same clinician for all conditions
- ❖ Same waiting area, triage, dispensing, lab and records storage, clinic appointment
- ❖ Services provided by government health care worker

## Blood pressure control among patients receiving Integrated care for HIV, diabetes and hypertension in primary health care facilities in Tanzania and Uganda

- Cluster-randomized control trial to determine if integrated care improves blood pressure control among clients with HIV, Diabetes and hypertension in sub-Saharan Africa
- Results: 49.2% participants in integrated care compared to 38.4% participants in standard of care arm had blood pressure controlled at the end of the study. Difference in blood pressure control among patients with hypertension only, 54.8% in the integrated care arm compared with 41.8% in the standard of care arm. Among patients with diabetes and hypertension there was a statistically significant difference between the two arms.

Only half of those with HTN reached target levels of BP less than 140/90mmHg. In low-resource settings, retaining people in care but not controlling their BP adequately will not be sustainable.



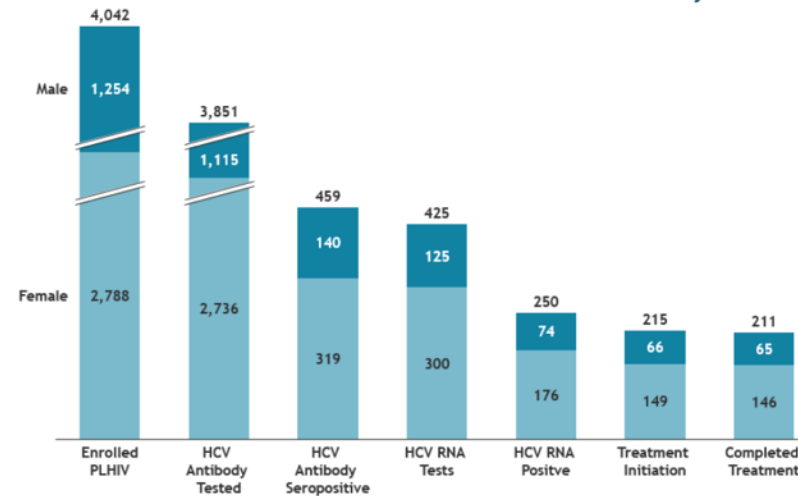
# Integrating hepatitis C services into ART clinics in low and middle income countries (LMICs) as an approach toward hepatitis C micro-elimination: pilot experience in Nigeria

- 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 coinfectd. 98% have completed treatment



HCV Care Cascade of coinfectd 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)



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.





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# Re-engagement

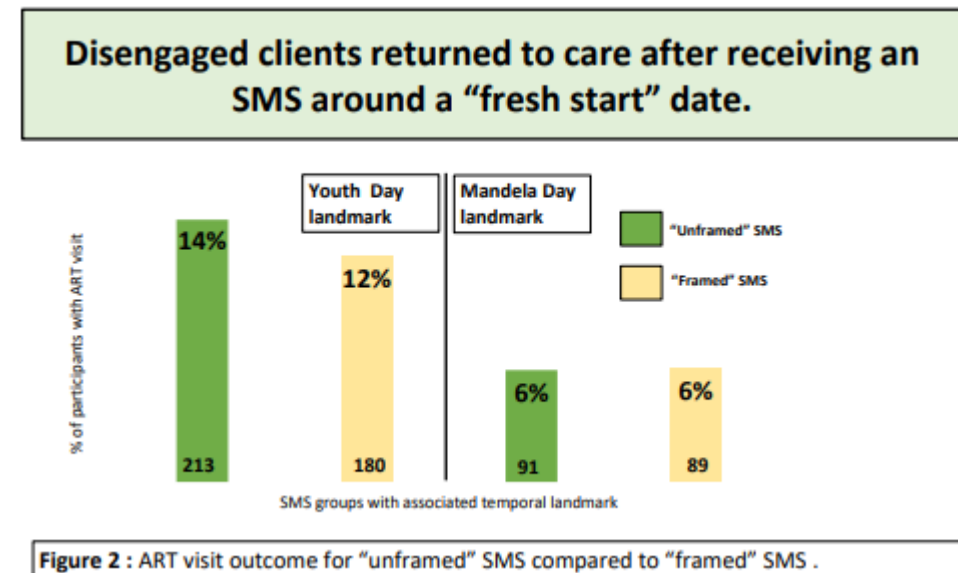
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## Randomized trial of "fresh start" SMS text messaging to improve return to care among people living with HIV who have missed scheduled clinic appointments in South Africa

- 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.





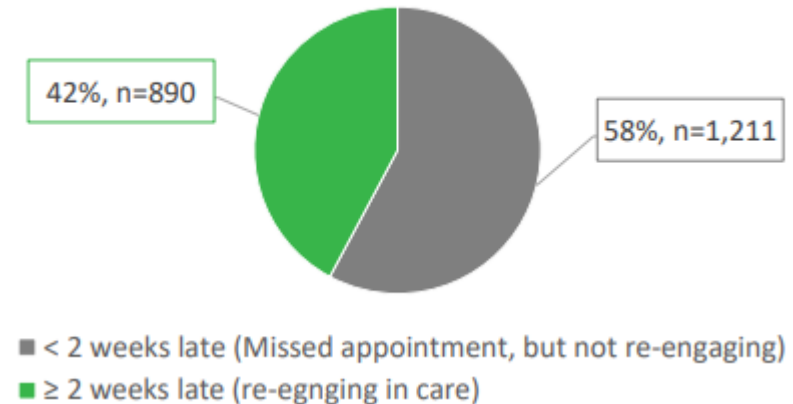
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## Heterogeneity among people re-engaging in antiretroviral therapy highlights the need for a differentiated approach: results from a cohort study in Johannesburg, South Africa

- Study aim was to implement the National Adherence Guidelines SOP on re-engagement (SOP9), in Johannesburg, to better understand and describe the characteristics of people re-engaging in HIV care and the duration of interruptions.
- Key findings: More than half of people who had missed their appointment had missed by less than two weeks. Among those re-engaging, less than a third have been out of care for more than three months. Not all clients who re-engage or are late for clinic visits interrupt treatment.

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Figure 1: Time since scheduled ART appointment (n=2,111)



A differentiated approach at re-engagement, based on clinical needs and time since the last visit, is required to support clients' differing needs and preferences. Adjusting the definition of re-engagement - by increasing the time since missed appointment - should be considered to reduce client and health system burden.



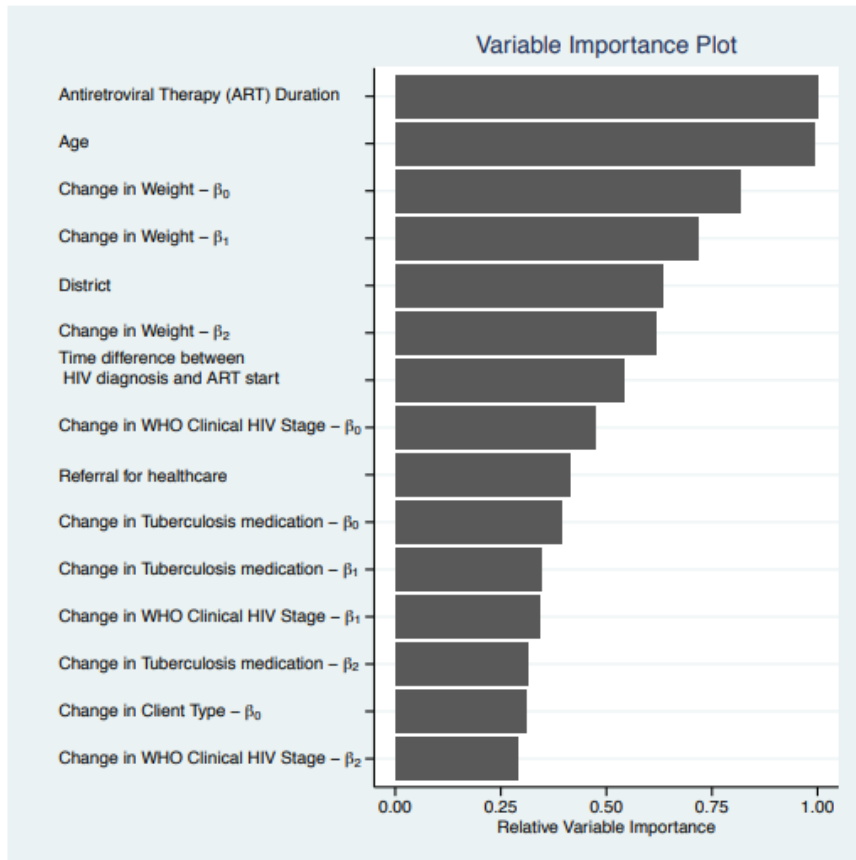
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## Abstract Poster

**FIGURE.** Estimates of relative variable importance for top 10 variables, compared to the top performing variable (ART duration). Functional data from dynamic features, were captured with quadratic regression for each individual's trajectory. For instance, "Change in Weight -  $\beta_0$ " represents the estimated intercept coefficient.

# Prediction of disengagement from HIV care using routinely collected medical record data and machine learning

Utilizing routinely collected electronic medical record (EMR) data from two regions in Lake Zone, Tanzania, a predictive machine learning algorithm was developed to identify in-care people living with HIV who may be at future risk for poor treatment outcome



Demonstrated feasibility of proactively utilizing routinely collected EMR data from Tanzania to identify in-care people living with HIV at risk for future poor outcomes. Could serve as a promising solution to harness routine data to reasonably target constrained resources towards people living with HIV with potential higher disengagement.



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# Miscellaneous

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## Bringing it closer to the recipients of care: the effectiveness of point of care hospital inpatient services at Queen Elizabeth Central Hospital, Malawi

- Queen Elizabeth Central Hospital (QECH) in Blantyre, Malawi, allocated a room in the medical ward to inpatient care for clients with AHD and of those newly diagnosed with HIV. Nurse, expert client, HIV diagnostic assistants and a part-time clinician are allocated to the room providing diagnostic tests (HIV testing, CD4 count, urine LAM and serum CrAg tests), ART services (ART initiation, emergency drug refills) and HIV prevention services
- 60,698 admissions with 21% HIV tests done in 2022.
- 3% inpatient clients tested HIV positive and 84% were linked to care. Of CD4 tests conducted, 42% had CD4 <200 while 58% above >200.
- Cryptococcal Antigen in serum positive in 5% of clients tested and urine LAM was positive in 19% tested.

Inpatient clients admitted in the hospital have a very high proportion of AHD, and point of care testing services are urgently needed to support immediate diagnostic and therapeutic decisions



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## Establishment of key populations-led facility monitoring committees for strengthening uptake of comprehensive HIV prevention services at public health facilities in Harare, Zimbabwe

Pangaea Zimbabwe AIDS Trust (PZAT) established Key Populations Health Facility Monitoring Committees (KPFMCs) integrated into existing Ministry of Health and Child Care Health Center Committees at 17 supported facilities between July-August 2021.

### Performance on Key Program Indicators Before and After Setting KPFMCs

Indicator	Performance before KPFMC	Performance after KPFMC	Relative increase
Time Period	Oct'20 – Sep'21	Oct'21 – Sep'22	
Number of KPs reached with HIV prevention messages	2,670	6,462	142%
Number of KPs initiated on PrEP	1,622	2,272	42%
Overall client satisfaction with quality of prevention services	94%	98%	4%



KP-led facility monitoring groups increase the utilization of HIV prevention services and satisfaction among KPs. They give communities ownership of primary health care service delivery points and that may have high impact if this model is scaled up to all public health care facilities in Zimbabwe.

[Abstract](#)

[Poster](#)



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[Abstract](#)

[Poster](#)

# Quality of care for key populations at public health facilities in South Africa: findings from Ritshidze’s Community-Led Monitoring

Analysis using data from the Ritshidze Community-Led Monitoring (CLM) Programme in South Africa to better understand the extent to which key populations experience high-quality, safe, comfortable and accessible care at public health facilities. The Ritshidze CLM model consists of community members gathering evidence on health service delivery, analysing the data, generating solutions, engaging with duty bearers, monitoring for changes, and undertaking advocacy where changes are not made.

Table 3. Provincial variation in service experiences (All KP groups).

Province	% who feel very safe at facilities	% who feel very comfortable at facilities	% who have been denied services because of KP status	% who are very satisfied with health services
Eastern Cape	7.97	6.82	15.07	4.84
Free State	11.43	11.28	5.34	5.79
Gauteng	22.81	22.69	16.22	14.07
KwaZulu-Natal	8.8	7.84	15.04	4.96
Limpopo	11.55	11.93	12.12	7.39
Mpumalanga	19.32	17.93	16.93	15.14
North West	14.01	11.38	9.24	5.74



### Key Takeaways

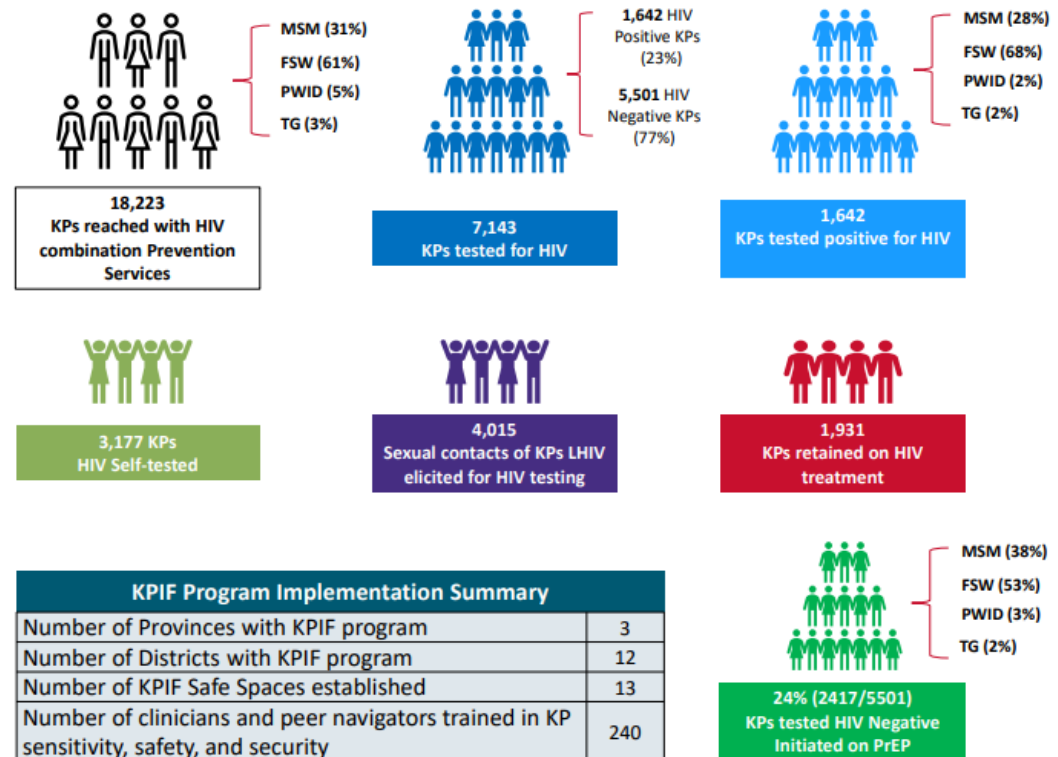
- Key populations are being refused services at public health facilities at alarming rates – nearly 1 in 5 surveyed people who use drugs have been refused services at a public health facility in the last year.
- Provincial variation in key populations services experiences exists, though few key populations respondents across provinces are very satisfied with the delivery of health services.
- Urgent investments in improving key populations service delivery are needed, along with ongoing monitoring and remediation of service denials based on key populations status.



# 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.

Figure 2: Infograph of KPs reached by iDSD between Oct-21 to Sept-22





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# Transitions

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# DSD model transitions: Supporting the evolving care needs of people living with HIV



## Session co-chairs



Baker  
Bakashaba  
TASO, Uganda



Dorlim Moiana  
Uetela,  
INS,  
Mozambique

## Session presenters



Aleny Couto  
MoH,  
Mozambique



Thato  
Chidarikire  
NDoH,  
South Africa



Tsitsi Apollo  
MoHCC,  
Zimbabwe



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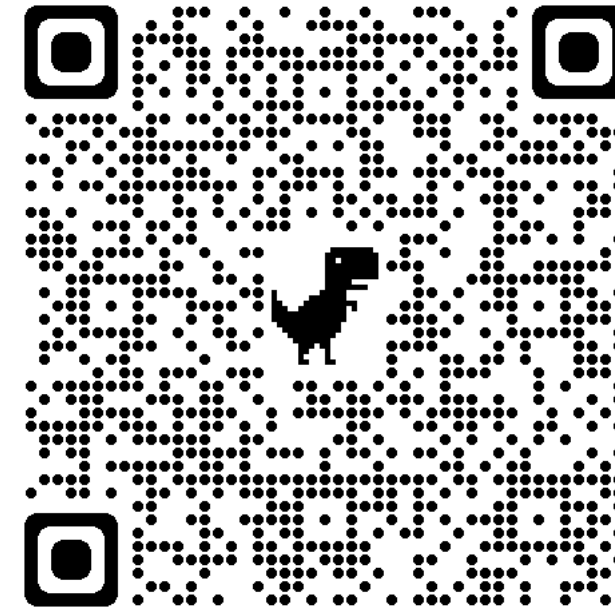
# **\*NEW\*** Scan the QR code to download: “Facilitating effective transitions between DSD models for HIV treatment”

Facilitating effective  
transitions between  
differentiated service  
delivery models for  
HIV treatment

*A supplement to A Decision Framework for  
antiretroviral therapy delivery*



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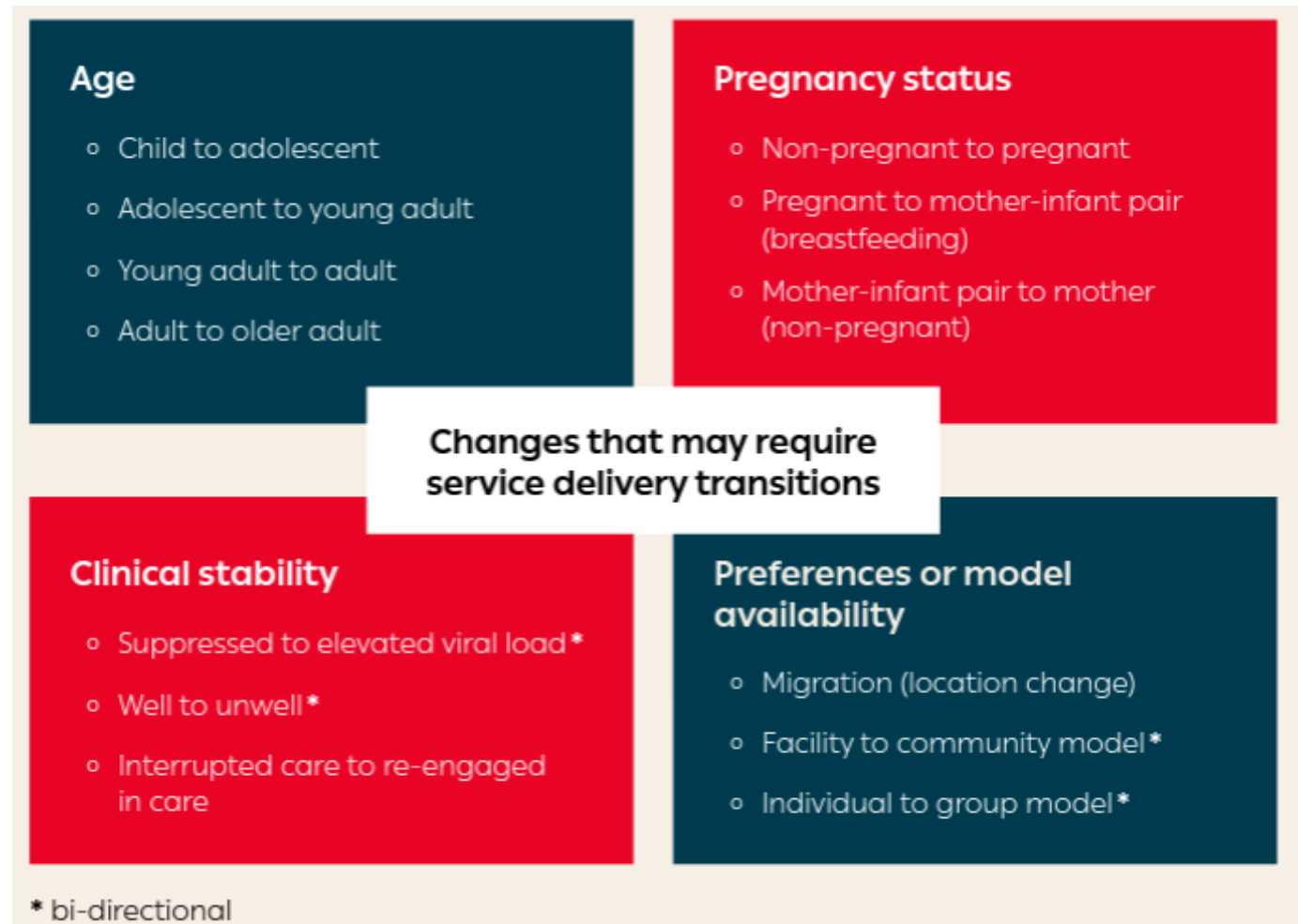


# Why are the DSD model's transitions important?



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- DSD models are expected to be client-centred
- Clients' needs and preferences change over time
- Ensuring effective transitions is important for treatment continuity and long-term retention and adherence
- Suboptimal transition may lead to poor client satisfaction and treatment interruption







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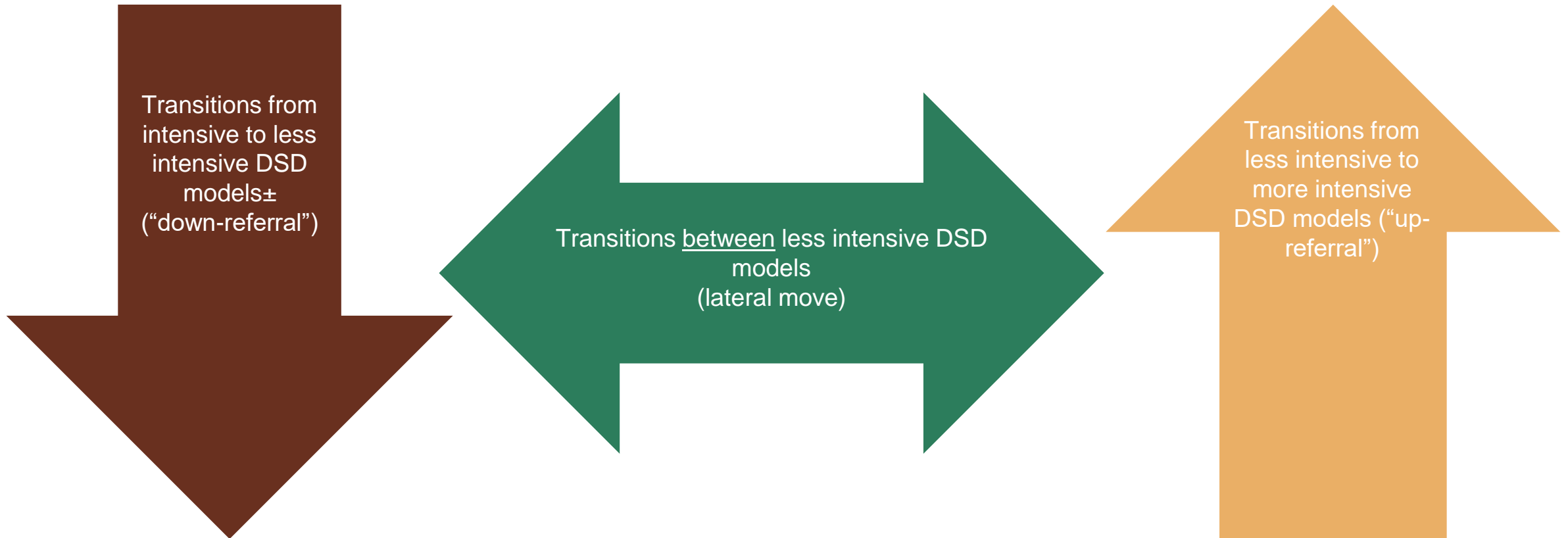
# What are the challenges with the transitions?

- The health system and clients may not be ready for the transition
- The health system challenges
  - Poor planning
  - Providers' illiteracy on DSD models
- Client challenges
  - May not understand/accept
  - May lose, or perceive to lose, a valued component of care
  - Risk of poor satisfaction, leading to treatment interruption and disengagement

# Types of service delivery transitions



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±Includes first time and transition back following a period of increased intensity





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# Evidence on “down-referral”

- The most known and evidenced supported transition
- Rigorous eligibility criteria
- Socially advantageous:
  - Family-centred and adolescent models
- Economically advantageous to the health systems and clients:
  - Fast track and multi-month dispensing of ARVs
- Perspectives on re-engagement:
  - Flexibility for clinical consultations and drug refills
  - Removing health systems barriers that led to disengagement
  - *You’ll hear from countries later on accelerated access to DSD for those re-engaging*



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# Evidence on “lateral moves”



- Voluntary moves have better outcomes
  - Importance of continuous assessment and transition discussion (Uganda example)
- Poor outcomes for adolescents when transitioning into models for adults
- The value of transition preparation for “compulsory transitions”
  - Group and progressive transitions (Eswatini example)
- Additional support is needed for transitions between facilities



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# Evidence on “up-referral”



- Commonly misunderstood as punishment
  - Poor communication around eligibility
  - Importance of treatment literacy, continuous assessment, and transition timeline discussion
- Enablers of a successful transition
  - Ensure that service delivery change has added value.
  - More frequent clinical support while retaining group support values
  - Continue to provide longer treatment refills and consider minimum necessary clinical and consul sessions (Mozambique example)





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# Priority actions to facilitate DSD transition

- Minimize unnecessary transitions between DSD models to reduce disruption and complexity.
- Increase DSD literacy and service delivery-related communication among and between healthcare workers and clients.
- Identify and include approaches to enable effective DSD transitions in national DSD guidance.
- Identify DSD transitions that make the largest contributions to treatment interruptions, implement transition support strategies, and evaluate quality of implementation.

Aleny Couto, Ministry of Health Mozambique

DSD model transitions: Supporting the evolving care needs of people living with HIV

# Country example I: Ensuring quality support to clients moving between DSD models in Mozambique



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# Example 1 from previous DSD guidelines: Multi-month dispensing (MMD) to One-stop shop (MCH)



**Mulheres grávidas e mulheres que estão a amamentar têm direito ao atendimento num único gabinete de consulta.**

Se estás grávida ou tens um bebé a mamar, procura saber onde fica o sector de Saúde da Mulher e da Criança para receber o teu tratamento.

Em caso de dúvida: 

<b>Category of transition</b>	Up-referral (Less intensive to more intensive)
<b>Impacted population</b>	Pregnant women already on ART
<b>What causes dissatisfaction</b>	<ul style="list-style-type: none"> <li>• Up-referred from less intensive DSD model of choice during pregnancy (including if community and/or group model)</li> <li>• Increased the frequency of visits (drug refill)</li> <li>• Could only return to less intensive DSD model after child &gt;5 years</li> </ul>





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# Example 2: One stop teen to adult care



**Se és adolescente ou jovem (dos 10 aos 24 anos de idade),**  
 procura saber onde fica o SAAJ. Lá irás receber de forma privada todos os serviços de saúde desenhados para ti num único gabinete.

Em caso de dúvida:

<b>Category of transition</b>	Down-referral (More intensive to less intensive)
<b>Impacted population</b>	Adolescents and Young People (10-24 years)
<b>What causes dissatisfaction</b>	<ul style="list-style-type: none"> <li>• Long queues at pharmacy for drug refill, previously no need for that since they receive all service at one stop shop</li> <li>• No satisfaction when comes to deliver services in terms of SRH, life skills, alcohol/drugs</li> <li>• Staff at adult not ready and rude for adolescents</li> <li>• Stigma and discrimination (feeling of judgment from adults)</li> </ul>



# Example 3: Return to standard of care (late to appointment, high viral load)

Se tomar os medicamentos e for às consultas como recomendado pelos profissionais de saúde, poderá ser elegível para consultas clínicas a cada 3 ou 6 meses. Consulte a sua unidade sanitária para saber se é elegível.



<b>Category of transition</b>	Up-referral (Less intensive to more intensive)
<b>Impacted population</b>	Children > 2 yrs, Adolescent and Young People, Adults
<b>What causes dissatisfaction</b>	<ul style="list-style-type: none"><li>• Increase the frequency of the visits (Clinical, Drug Refill)</li><li>• Being referred for more intense counselling (Enhance counselling)</li><li>• Feeling of being punished and not comprehended in terms of the motives</li></ul>





Dr Thato Chidarikire, National Department of Health, South Africa

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# Country example II: Ensuring quality support to clients moving between DSD models in South Africa



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## Example 1: Transitions from intensive to less intensive DMoC models (“down-referrals”) Mpumalanga & Eastern Cape Provinces DMoC Performance Reviews 2023: Appropriateness of RPCs enrolment

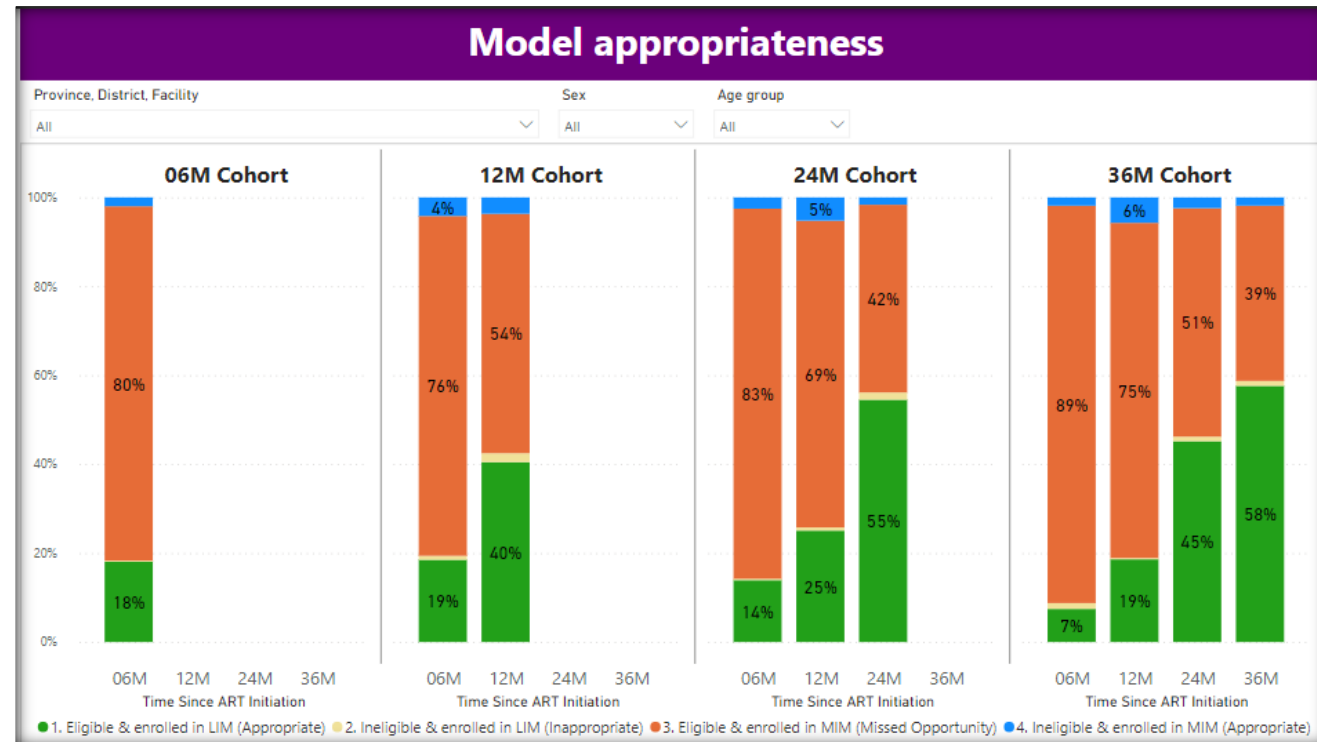
**Description:** Transition from intensive to less intensive DMoC models

**Category:** Down referrals

**Population impacted:** Children, Adolescents, Adults, Pregnant Women

**Interruptions/Disengagement risks identified:**

- Significant (50 -89%) missed opportunity for down-referral for stable clients eligible especially at 6- and 12-months cohort
- Increased health facilities congestion
- 2% unstable clients inappropriately transitioned into less intensive model possibly due to difficulties getting to facility







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## Example 2: Transitions from less intensive to more intensive models (“up-referrals”) Mpumalanga & Eastern Cape Provinces DMoC Performance Reviews 2023: Management of RPCs clients’ elevated viral load

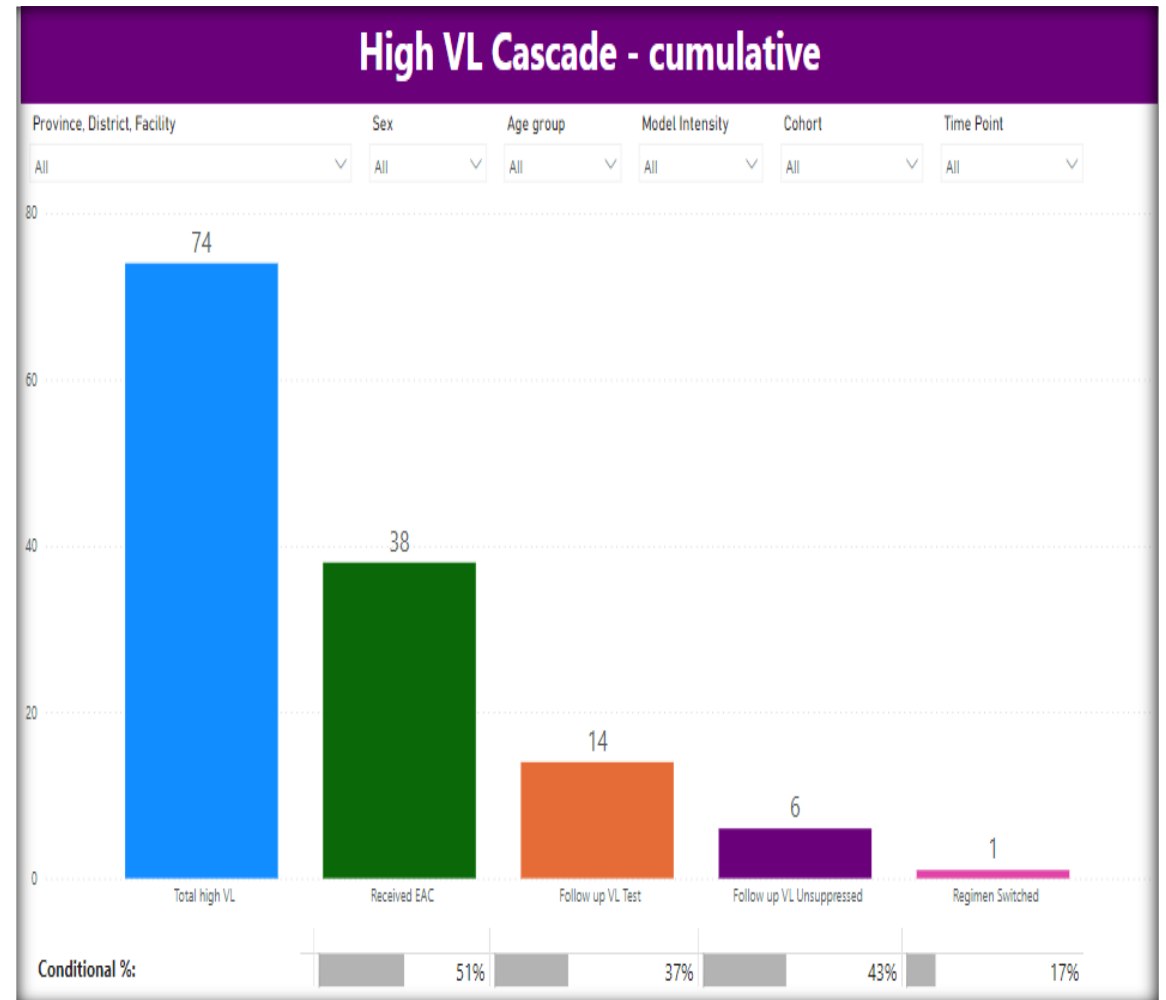
**Description:** Transition from less intensive to more intensive models

**Category:** Up referrals

**Population impacted:** Children, Adolescents, Adults, Pregnant Women

**Interruptions/Disengagement risks identified:**

- 49% missed opportunity to receive Enhanced Adherence Counseling (EAC).
- 65% didn’t receive repeat viral load test after 3 months.
- Missed opportunity for switching regimen.
- Clients deregistered from less intensive to more intensive model



Tsitsi Apollo, Ministry of Health & Child Care, Zimbabwe

**DSD model transitions: Supporting the evolving care needs of people living with HIV**

# Country example III: Ensuring quality support to clients moving between DSD models in Zimbabwe



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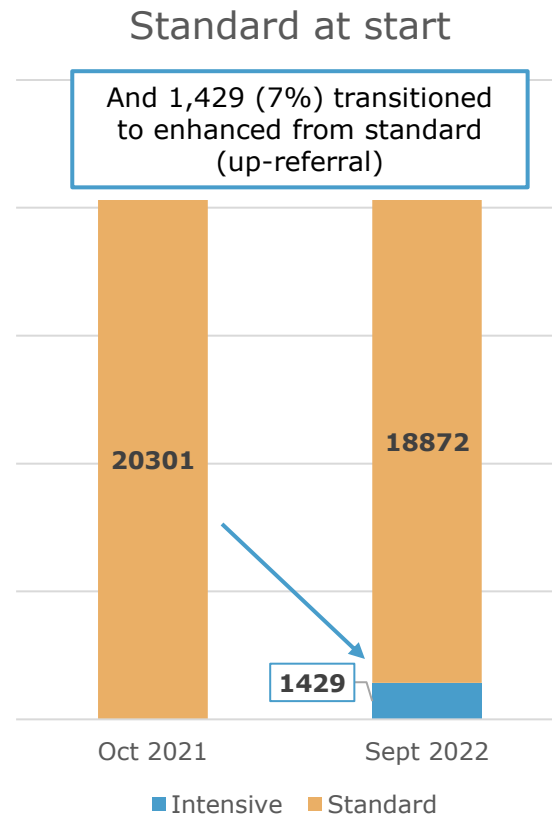
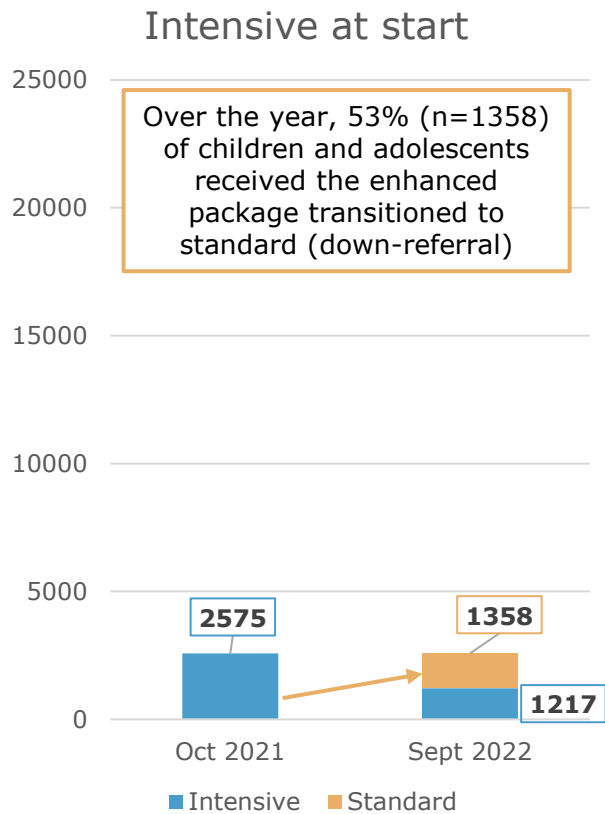
# 1 – From adolescent to adult care

- Adolescents living with HIV have unique challenges associated with their rapid growth and development
- The treatment cohort is aging
  - 2015 – 7.2% 10-19 years, 74.6% 20-49 years, 14.2% 50+ years
  - 2022 – 5.5% 10-19 years, 70.5% 20-49 years, 22.1% 50+ years)
- Designed a checklist to support children and adolescents with age-appropriate knowledge and self-care milestones for successful transitions in HIV care
  - The tool is administered by health workers during clinical and counselling sessions
- Duration of ART refills (4-monthly for adolescents – to align with school holidays- versus 3- or 6-monthly for adults) changes such as adequate preparation for the transition is required
- Adolescent to adult care is a lateral move from one DSD model to another



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# Community Adolescent Treatment Supporters (CATS) provide a standard and an intensive package of care (1)



Adolescent Community Adolescent Treatment (CATS) support – provision of standard and intensive-package of care

- MoHCC is providing differentiated services to adolescents at community level through the CATS programme
  - Monthly vs bimonthly home visits
  - Weekly vs daily SMS contact
  - Engagement of other cadres as per need
- The intensive package is for those with a high viral load, mental health condition, TB, who are pregnant or breastfeeding, etc.



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# Community Adolescent Treatment Supporters (CATS) provide a standard and an intensive package of care (2)

## Characteristics of the children and adolescents in the enhanced CATS programme

	October 2021 # (%)	September 2022 # (%)
High viral load	1,156 (45%)	807 (30%)
Mental Health Condition	401 (16%)	380 (14%)
Identified with TB	25 (1%)	23 (1%)
Pregnant/ Breastfeeding	934 (36%)	1,385 (52%)
Other (e.g., social protection, illness)	59 (2%)	51 (2%)
<b>Total</b>	<b>2,575 (100%)</b>	<b>2,646 (100%)</b>

- Around 2,500 children and adolescents received the intensive package of care
- Between Oct 2021 and Sept 2022:
  - The number and proportion with high viral load decreased from 1,156 to 807
  - There was an increase in the number and proportion pregnant or breastfeeding from 934 to 1,385





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## 2 – Model of care during pregnancy and breastfeeding

- HIV service delivery model during pregnancy
  - Previously, women who became pregnant whilst enrolled in CARGs, Fast Track or Outreach were up-referred to receive their HIV care and treatment through ante-natal care (up-referral)
- In the updated OSDM Guidance, there is choice: Women who are in a DSD for HIV treatment model and become pregnant can:
  - **Stay in their DSD for HIV treatment model** receiving their clinical visits at the OI/ART clinic and the refill through her chosen refill model. They will also attend ANC for their pregnancy needs
  - OR
  - **Transfer their HIV care to ANC.** ANC should continue to provide the woman with MMD refills at the maximum duration available.



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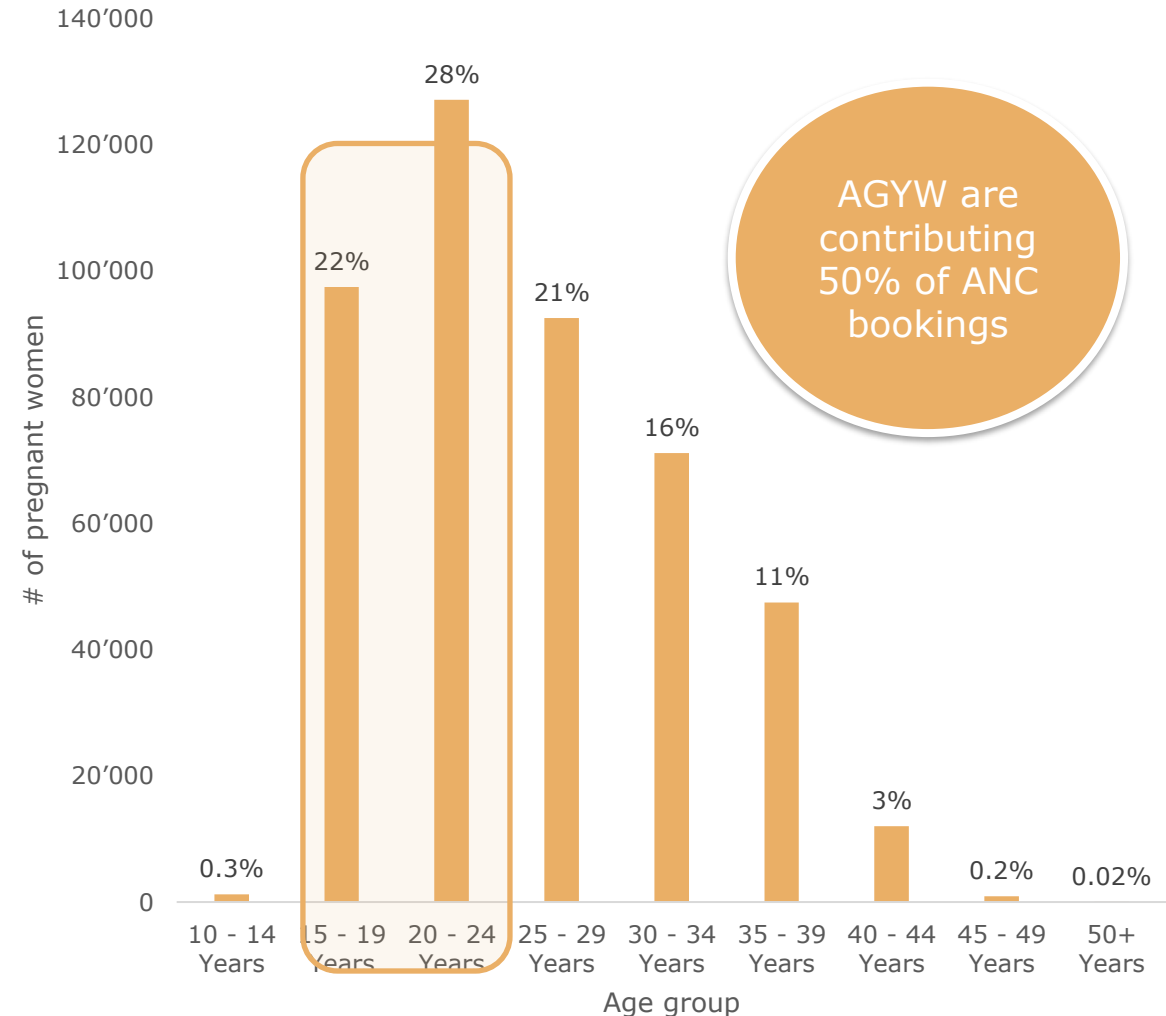
# Providing support for adolescents and young women during pregnancy

## Formation of Adolescent and Young Mothers Clubs – Young Mentor Mother (YMM) intervention

- Adolescent and young mothers (15-24 years old) are vulnerable to poor outcomes from the primarily adult-oriented maternal care
- Adolescent and young mothers require targeted services and support to prevent maternal and newborn illness and mortality and enjoy good health and well-being.

## Updated OSDM Guidance

**“Adolescent and young mothers should be booked on the same day and form a young mothers club that is assisted by the young mentor mothers”**





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# Providing support for post-partum women and their families

## Adoption of Mbereko + Men postpartum groups

### Updated OSDM Guidance:

The Mbereko club will continue to provide the woman with multi-month refills (6MMD) while she attends with her baby exposed to HIV for monthly follow-up and receives integrated postpartum care for herself (including FP) and her baby (testing, prophylaxis and infant monitoring).

The club approach provides additional peer support.

- Inclusion of men “curbs feminization of MNCH services” and increases services uptake – Mbereko + Men Program evaluation report.



Nurse from St. Barbara's Mission addresses Mbereko men and women in Kanyanga Village

Baker Bakashaba, TASO, Uganda

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# Client perspectives and the need for flexible health systems



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# DSD is for the People



- The demand for DSD continues to grow as it puts PLHIV at the centre of their care
- BUT **differentiated** service delivery means that very few people will require the same model of care for their lifelong ART journey
- Needs and preferences will change along the way
- This means having to **MOVE – TRANSITION** between models of care
- Transitioning involves risks for the person moving and the health system managing the move





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# 1. Remove unnecessary transitions

## Means add more flexibility!

- When is it in a person's best interest to be removed from their less intensive DSD model?
- When does requiring a transition INCREASE rather than DECREASE risk for a person's short and long-term outcomes?
- When is the health system requiring a transition only because it is not set up to manage a person's change in circumstances without a transition?
- How often should a person be assessed for possible transition?



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## ii. Recognise the importance of DSD literacy

- **What is DSD literacy?**
  - What is DSD
  - How DSD models work – building blocks
  - When a model works for you and when it may no longer work for you
- **Improve communication** between healthcare workers and clients
  - Open feedback channels
  - Measure and track satisfaction
- **Invest** in DSD literacy and quality of healthcare worker-client communication



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## iii. Provide value when burden on people living with HIV is increased

- Is the reason for up-referral being actively addressed at each required additional visit?
  - Providing an increased level of care?
  - Providing quality clinical care?
  - Providing integrated care?
  - Attaining better satisfaction?







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## iv. Enable the power of peers

1. **Changes don't only happen to me** – many people are simultaneously experiencing the same aging, pregnancy, motherhood, struggles with treatment adherence, illness
2. Remember the **mutual support lessons** HIV has taught us over the years
3. How can we better **leverage peer support mechanisms**:
  - a. Orientation by peers  
e.g. from post-natal back into general adult services
  - b. Group DSD models with peers  
e.g. from family to adolescent DSD models
  - c. Group transitions  
e.g. young people transitioning to same adult model
  - d. Future social networks to lean on during and after the life/circumstance change  
minimise disruption of social networks



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# Where to from here....



→ **Engage with us**



→ **Invest in DSD literacy**



→ **Provide quality care**



→ **Leverage peer support mechanisms**

- **Be more flexible** – don't lose us while a change occurs in our lives. *Keep all the doors to care open for us during challenging times.*
- Identify the most **critical transitions** in the specific context that need to be better facilitated **with us**
- We now live in a DSD world – transitions are an integral part of that world.
- We need:
  - **Patient-level enablers**  
*How can my healthcare workers and clinic support me during a necessary transition?*
  - **Broader health system enablers**  
*How can the health system support me to continue in my less intensive DSD model when I move?*