

# Differentiated service delivery for HIV treatment: Updated WHO recommendations and implementation in Africa **ICASA 2021**



# **Speakers**

















## Today's agenda

**WELCOME/INTRODUCTION (5 mins)** - Baker Bakashaba, The AIDS Support Organization (TASO), Uganda

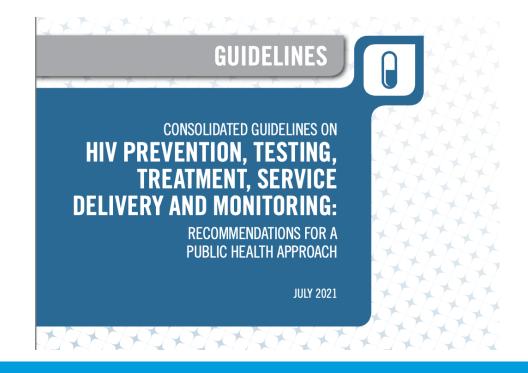
#### **PRESENTATIONS (40 mins)**

- **The updated WHO criteria for established on ART**, Billy Doroux Aristide Charles, World Health Organization (WHO), Switzerland
- Supporting choice for women living with HIV in DSD models during their pregnancy and postpartum, Anna Grimsrud, IAS International AIDS Society, South Africa
- How South Africa is supporting re-engagement and accelerating access back to DSD models Musa Manganye, National Department of Health, South Africa and Lynne Wilkinson, International AIDS Society, South Africa
- **DSD for HIV treatment opportunities for integration** Helen Bygrave, International AIDS Society, UK
- **Updating Ghana's national HIV service delivery guidance** Nyonuku Akosua Baddoo, National AIDS Control Program, Ghana

# Service Delivery and Differentiated Service Delivery for HIV treatment recommendations

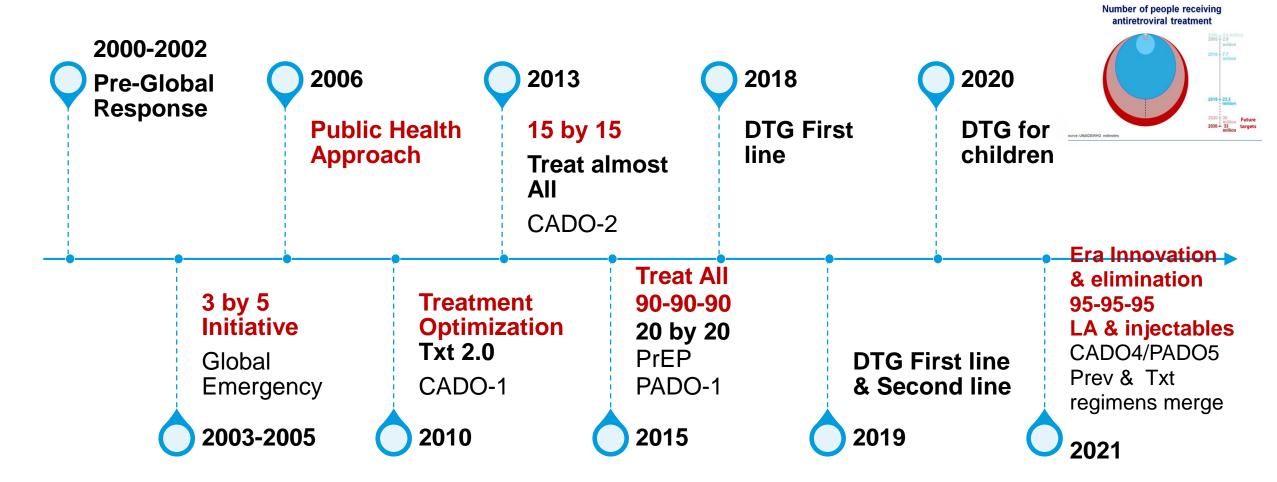






The updated WHO criteria for established on ART

# From 200,000 to 27.5m PLHIV on ART in 20 years? Evolution of WHO Global ARV Treatment Recommendations



# In 2016, WHO recommended treat all and "differentiated care" for people <u>"stable"</u> on ART



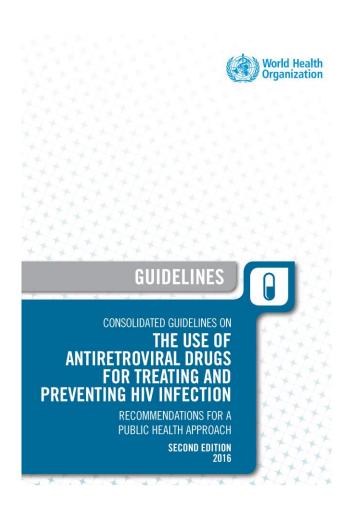
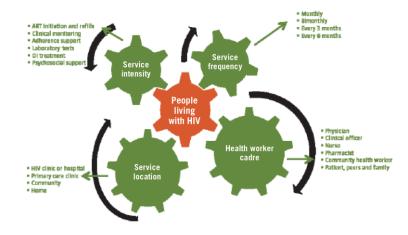




Figure 6.1. Key factors in differentiated approaches to HIV care (5)



### Definition of "stable on ART" in 2016



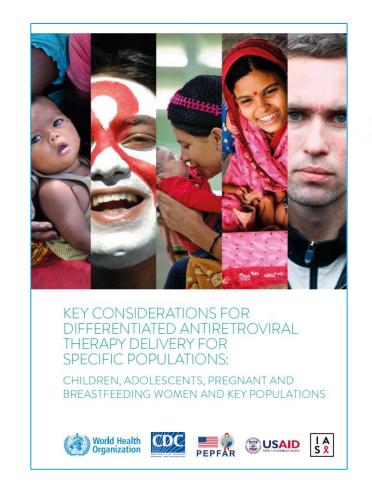
People were defined as stable on ART according to the following criteria:

- on ART for at least 1 year,
- no current illnesses or pregnancy,
- good understanding of lifelong adherence and
- evidence of treatment success (two consecutive viral load measurements) below 1000 copies/mL).
- In absence of VL, rising CD4 cell counts or CD4 above 200 could be used to indicate treatment success

# 2017 key considerations – DSD for children, adolescents and key populations



- Guidance for DSD for children and adolescence was not clear in WHO 2016 guidance resulting in poor uptake in national programmes
- Key considerations 2017 stated:
  - Clinically stable ART delivery is suitable for children who are at least two years old
  - The criteria that define a clinically stale adult are also appropriate for adolescents

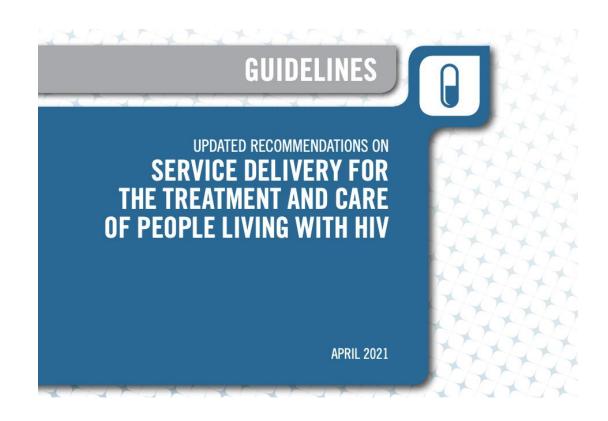


### **Latest Service Delivery Recommendations**



March 2021, Updated recommendations on service delivery for the treatment and care of people living with HIV

**Included in July 2021 Consolidated Guideline** 



### Criteria for determining whether a person is "established on ART" (1)

To support the implementation of these recommendations, WHO has developed using a Delphi process criteria for determining whether a person has been successfully **established on ART**:

- receiving ART for at least six months;
- no current illness, which does not include well-controlled chronic health conditions;
- good understanding of lifelong adherence: adequate adherence counselling provided; and
- evidence of treatment success: at least one suppressed viral load result within the past six months (if viral load is not available: CD4 count >200 cells/mm3 or CD4 count >350 for children 3-5 years or weight gain, absence of symptoms and concurrent infections).



### Criteria for determining whether a person is "established on ART" (2)



### **⚠□ INCLUDES** all populations established on ART:

- Individuals receiving second- and third-line regimens
- People living with HIV and controlled comorbidities
- Children and adolescents
- Pregnant and breastfeeding women
- Key populations



### Specific criteria for pregnant and breastfeeding women

# Box 7.4 Additional eligibility criteria specific to pregnant and breastfeeding women for accessing differentiated ART delivery models outside clinic care

- Women clinically established on ART when conceiving: already accessing the differentiated ART delivery model plus at least one viral load test of <1000 copies/mL in the past three months and accessing antenatal care.
- Women initiating ART during pregnancy: since a woman initiating treatment during pregnancy will only become eligible to enter a differentiated ART delivery model in the postpartum period, an HIV-negative result for her infant with a NAT at six weeks and evidence of accessing infant follow-up care are additional requirements.





### **Summary – change in eligibility**

	2016	2021
Term	Stable	Established on ART
Time on ART	12 months on ART	6 month on ART
Inclusion of pregnant women	Pregnant women excluded	Pregnant women included
Inclusion of children and adolescents	Children and adolescents included	Children and adolescents included
Regimen	Second and third line not explicitly stated	Any ART line included
Viral load / evidence of treatment success	Two consecutive viral loads <1000 copies/ml	At least one viral load <1000 copies/ml in last 6 months



#### **WHO**

20, Avenue Appia 1211 Geneva

Switzerland



# Supporting choice for women living with HIV in DSD models during their pregnancy and postpartum

### **XIAS**

# Thank you to WHO

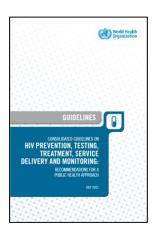




2013



2016





### **CHOICE**

- With improved access to HIV testing and ART, more women living with HIV will be established on ART at conception
  - For example, in a study using SmartCare data from Zambia, increase in those on ART at first antenatal care (ANC) visit from 9% in 2011 to 74% in 2015 [Gumede-Moyo, Front. Public Health, 2019]

# Box 7.4 Additional eligibility criteria specific to pregnant and breastfeeding women for accessing differentiated ART delivery models outside clinic care

- Women clinically established on ART when conceiving: already accessing the
  differentiated ART delivery model plus at least one viral load test of <1000 copies/mL
  in the past three months and accessing antenatal care.</li>
- Women initiating ART during pregnancy: since a woman initiating treatment during pregnancy will only become eligible to enter a differentiated ART delivery model in the postpartum period, an HIV-negative result for her infant with a NAT at six weeks and evidence of accessing infant follow-up care are additional requirements.

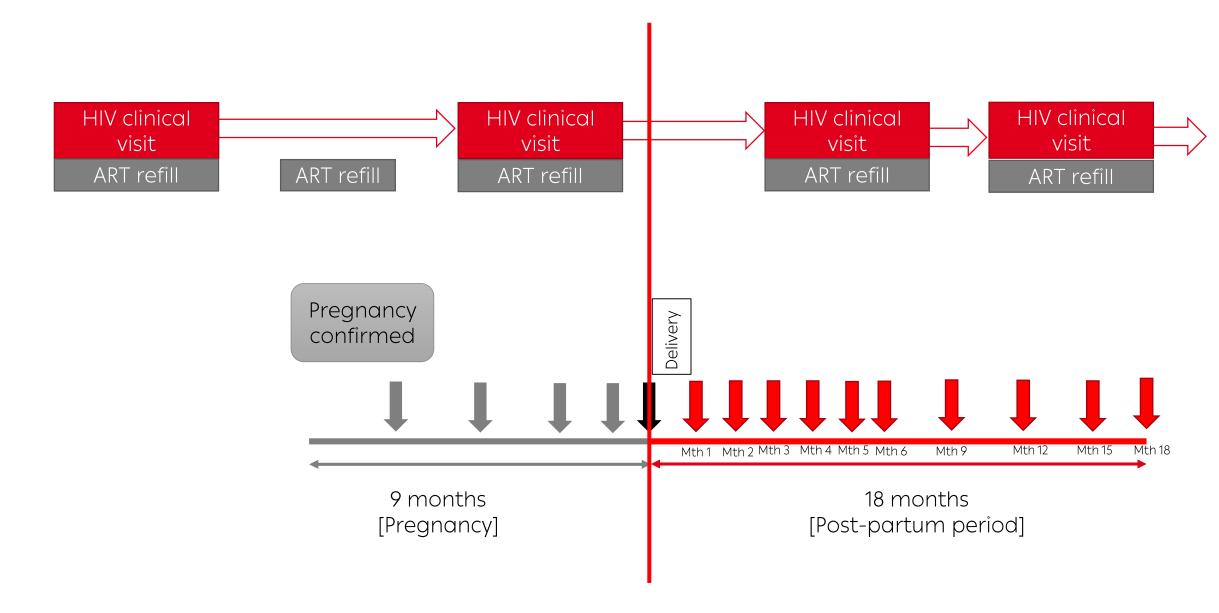
"They should have the choice to continue receiving their ART through the differentiated ART delivery model or to have their ART delivery integrated within their maternal, newborn and child health care"

- WHO 2021 Consolidated guidelines

### **XIAS**

In brief, there are most likely three scenarios for women who are accessing their HIV care and treatment in a DSD model at the time of their pregnancy



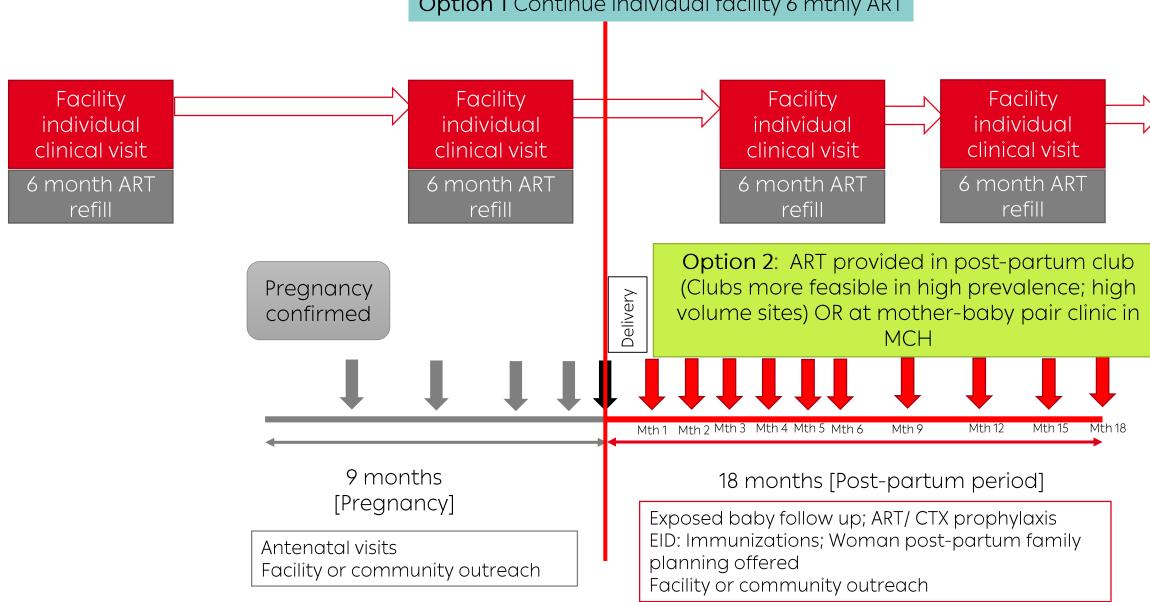




#### Scenario 1: Woman receiving 6-month ART supply

Woman on ART, viral load suppressed

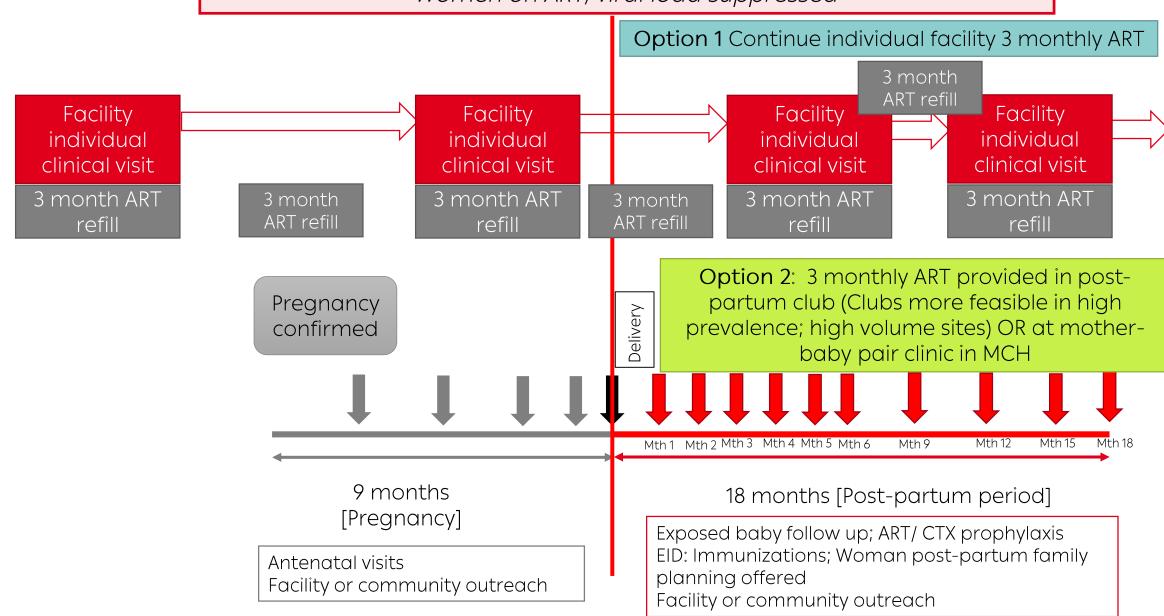






## Scenario 2: Woman receiving 3-month ART supply (could be through facility or community-based model) + 6 monthly clinical visit

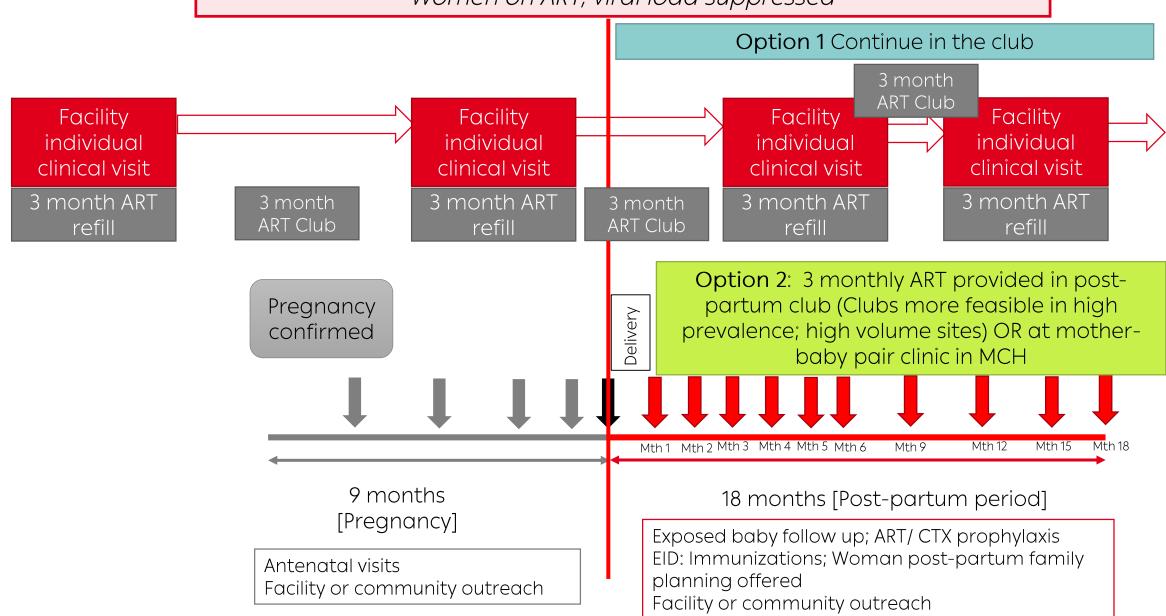
Women on ART, viral load suppressed





**Scenario 3**: Woman in Adherence Club (receiving 3 monthly ART refills in the Club and 6 monthly clinical visits)

Women on ART, viral load suppressed





# At entry into DSD is the person:

- Receiving ART for at least six months
- No current illness (does not include well controlled chronic health conditions)
- Good understanding of lifelong adherence;
   adequate adherence counselling provided
- Evidence treatment success:
  - o at least one suppressed viral load result within the past six months
  - o If VL is not available: CD4 count>200 cells/mm3 or weight gain, absence of symptoms and concurrent infections

#### **XIAS**

# At entry into DSD, and at each clinical visit:

- Has TPT been complete:
  - o On TPT
  - Eligible for TPT but not yet started
- For women living with HIV, have contraception needs been addressed:
  - o Does contraception need to be started
  - Does the woman want to change to long acting method as moving to less frequent clinical visits
- Are there other chronic conditions that could be provided for via DSD model
  - Clients already diagnosed with hypertension or diabetes
  - New diagnosis at entry to DSD or at clinical visit





# Re-engagement policy in South Africa





# National Adherence Guidelines for HIV, TB and NCDs

- Not just HIV but also TB, diabetes and hypertension
- Updated SOPs in March 2020
- DSD in South Africa for HIV treatment
   "RPCs" repeat prescription collection strategies - referred to as

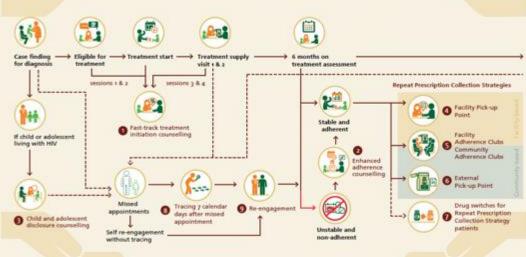
Differentiated Model of Care in South Africa

"to encourage linkage to care, adherence to treatment and retention in care of patients with chronic conditions"

#### STANDARD OPERATING PROCEDURES

# MINIMUM PACKAGE OF INTERVENTIONS TO SUPPORT LINKAGE TO CARE, ADHERENCE AND RETENTION IN CARE

### INTEGRATED CARE OF PATIENTS WITH CHRONIC CONDITIONS



### Adherence Guidelines for HIV, TB and NCDs Updated March 2020







### What's new in the 2020 SOPs

- 1. Two new SOPs
  - SOP 7 Drug switching within DSD models (repeat prescription collection strategies, RPCs)
  - SOP 9 Re-engagement
  - Alignment of SOP 9 to Welcome Back Strategy
- 2. All RPCs models set up for 3MMD
- 3. Expanded eligibility for RPCs including for children and adolescents





### Criteria for re-engagement

"Any patient who returns to the facility either of their own accord or after tracing more than 7 calendar days after their missed appointment date or for those in Repeat Prescription Collection strategies (RPCs), more than 7 calendar days after the last day the patient could collect their treatment supply from their RPCs."

# RE-ENGAGEMENT IN CARE SOP 9





# Guiding principles reflected in reengagement SOP

- All staff in the facility are welcoming, acknowledge it is normal to miss appointments and/or have treatment interruptions, support and empower patients to improve retention after re-engagement.
- If a patient comes from a different facility (transfers in) DO NOT require the patient to provide transfer documents or delay restarting treatment as per procedure in 2019 ART Clinical Guideline.
- Adherence counselling should NOT be mandated for all patients who re-engage in care.
- Patients who have missed appointments may have missed visits because of time constraints.
   Retention may be best supported for such patients by reducing their required frequency of attendance and identifying more convenient locations or service hours for collection of treatment supply. Increasing the intensity of service provision may NOT be supportive.
- For patients with a previous documented suppressed viral load, consider whether the patient would benefit from either multi-month treatment supply or enrolling or re-enrolling into a RPCs.
- All processes must be documented.

#### **XIAS**

# Priorities for re-engagement approach

### DIFFERENTIATION IS NECESSARY on re-engagement

- People disengage for different reasons
- What people need to successfully re-engage differs
- Service delivery approaches/models therefore need to differentiate

STOP using a blanket approach to missed appointments



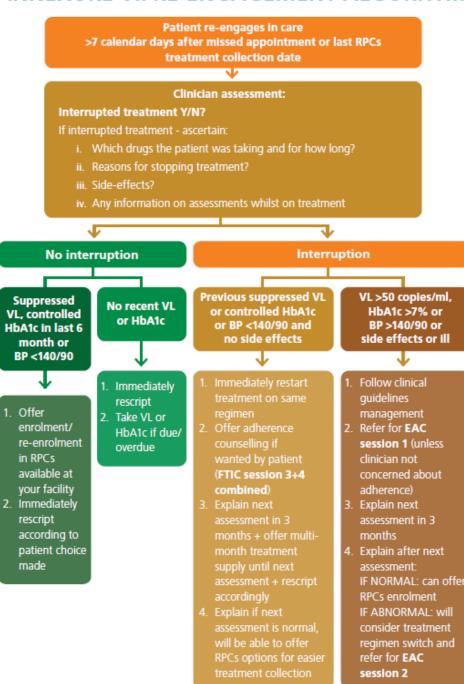
CASE BY CASE ASSESSMENT REQUIRED BY CLINICIAN POSSIBLY SUPPORTED BY A LINKAGE OFFICER GUIDED BY AN ENDORSED RE-ENGAGEMENT ALGORITHM



# Re-engagement algorithm

- Provide MMD immediately
- Accelerate access to/back into RPCS models
- Offer Enhanced Adherence
   Counselling BUT NOT OBLIGATORY
- Accelerate repeat and actioned VL/HBA1c
- Accelerate treatment regimen switch when indicated

#### ANNEXURE VI: RE-ENGAGEMENT ALGORITHM



### **ANNEXURE VI: RE-ENGAGEMENT ALGORITHM**

>7 calendar days after missed appointment or last RPCs treatment collection date



#### Clinician assessment:

#### Interrupted treatment Y/N?

If interrupted treatment - ascertain:

- i. Which drugs the patient was taking and for how long?
- ii. Reasons for stopping treatment?
- iii. Side-effects?
- iv. Any information on assessments whilst on treatment







#### No interruption

Interruption

Suppressed VL, controlled HbA1c in last 6 month or BP <140/90

No recent VL or HbA1c Previous suppressed VL or controlled HbA1c or BP <140/90 and no side effects VL >50 copies/ml, HbA1c >7% or BP >140/90 or side effects or ill

- 1. Offer enrolment/ re-enrolment in RPCs available at your facility
- 2. Immediately rescript according to patient choice made

- 1. Immediately rescript
- Take VL or HbA1c if due/ overdue
- Immediately restart treatment on same regimen
- Offer adherence counselling if wanted by patient (FTIC session 3+4 combined)
- 3. Explain next
   assessment in 3
   months + offer multi month treatment
   supply until next
   assessment + rescript
   accordingly
- Explain if next assessment is normal, will be able to offer RPCs options for easier treatment collection

- Follow clinical guidelines management
- 2. Refer for **EAC**session 1 (unless clinician not concerned about adherence)
- Explain next assessment in 3 months
- Explain after next
  assessment:
  IF NORMAL: can offer
  RPCs enrolment
  IF ABNORMAL: will
  consider treatment
  regimen switch and
  refer for EAC
  session 2



#### No interruption Suppressed No recent VL VL, controlled or HbA1c HbA1c in last 6 month or BP < 140/90 1. Immediately rescript 1. Offer 2. Take VL or enrolment/ HbA1c if due/ re-enrolment overdue in RPCs available at your facility 2. Immediately rescript

according to

made

patient choice

If the patient i) DID NOT interrupt treatment and ii) does have recent suppressed viral load (VL) and iii) meets the eligibility criteria for RPCs

- offer immediate enrolment/reenrolment in RPCs
- Immediately rescript according to choice made

If the patient i) DID NOT interrupt treatment and ii) does not have a recent VL or HbA1c

- o immediately rescript
- conduct the necessary investigations (tests).

### **XIAS**

#### Interruption

Previous suppressed VL or controlled HbA1c or BP <140/90 and no side effects

- Immediately restart treatment on same regimen
- Offer adherence counselling if wanted by patient (FTIC session 3+4 combined)
- Explain next
   assessment in 3
   months + offer multimonth treatment
   supply until next
   assessment + rescript
   accordingly
- Explain if next
   assessment is normal,
   will be able to offer
   RPCs options for easier
   treatment collection

If the patient

- i) DID interrupt treatment
- ii) is well on their first line regimen and
- iii) has a recorded previous suppressed VL <50 copies/ml or HbA1c ≤7% or BP <140/90 today
- iv) no side effects that caused them to interrupt treatment:
  - Immediately restart same regimen
  - Ask the client whether they would benefit from additional adherence counselling? Only refer for enhanced adherence counselling session 1 if YES
  - Offer MMD until next VL/HBA1c (3m later)
  - If VL/HBA1c NORMAL offer immediate enrolment/re-enrolment in RPCs





### If the patient

- i) DID interrupt treatment
- ii) a) experienced side effects b) abnormal assessment (A VL >50 copies/ml, HbA1c >7% or BP >140/90) and c) is ill
- AND Clinician concerned about adherence
  - o Refer for enhanced adherence counselling 1 session
  - Explain assessment again in 3 months
  - If VL/HBA1c NORMAL offer immediate enrolment/re-enrolment in RPCs
  - If VL/HBA1x ABNORMAL consider switching the patient's treatment regimen and refer patient for enhanced adherence counselling 2 session

VL >50 copies/ml, HbA1c >7% or BP >140/90 or side effects or ill

- Follow clinical guidelines management
- 2. Refer for EAC
  session 1 (unless
  clinician not
  concerned about
  adherence)
- 3. Explain next assessment in 3 months
- Explain after next
   assessment:
   IF NORMAL: can offer
   RPCs enrolment
   IF ABNORMAL: will
   consider treatment
   regimen switch and
   refer for EAC
   session 2

#### **XIAS**

### Implementation examples

The following innovations are implemented in various provinces to enhance re-engagement in care:

- "Karabo model" (Meaning an answer), Limpopo province
- "Operation Vuyo Model", KwaZulu Natal province
- "I am Mpilo" (Meaning Health), Mpumalanga province
- "I am Thuso" (Meaning Help), Free State province

#### Critically, all utilize:

- Community Health Workers (CHWs) tracing & recalling clients
- Linkage Officers (LOs) meeting clients on arrival and connecting clients to clinicians upon return
- Project Ritshidze ("Saving Our Lives") Community-led monitoring of implementation with fidelity





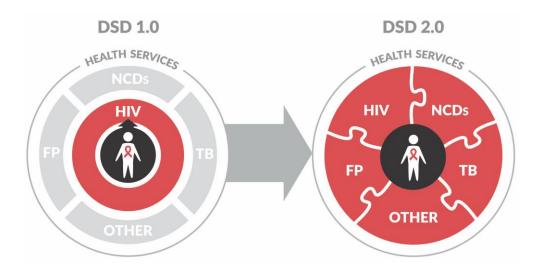


### Where to next?

- Consider developing re-engagement policy/SOPS for your context
- Implement across contexts
  - Create case examples to learn from
- Evaluate outcomes of case examples of re-engaging clients in care
- Leverage population focused approach
- Optimize differentiated service delivery interventions to ensure clients retention
- Strengthen community-led monitoring
- Share our experiences
  - Leverage the CQUIN network



# DSD for HIV treatment - opportunities for integration







### Opportunity 1: Integrate TB prevention into DSD for HIV

**WHEN** 

**X** WHERE

treatment models



#### **SCENARIO 1**

TPT is started at ART initiation, and completion is required to be eligible for enrolment into a clinically stable differentiated ART delivery model

#### **SCENARIO 2**

Clients are eligible for enrolment in clinically stable differentiated ART delivery models while TPT is ongoing, and TPT must be integrated within the differentiated ART delivery model

#### SCENAR

Clients alr delivery m clients are initiated o complete Peer, lay worker, nurse, clinical officer, doctor

Verbal TB screen and TB tests according to local TB diagnostic algorithm

Screening for TB

clinical visit

Facility

TPT eligibility assessment (incl. contraindications for TPT); treatment literacy for TPT side-effects; and TB symptoms
Script for TPT refills and align with ART refills
Register TPT start

Initiation of TPT

Clinical visit

Facility

Community

Nurse, clinical officer, doctor

Provision of TPT and ART refills TPT follow up TPT side-effects/TB symptoms) Register TPT follow up

TPT refill

Aligned with ART refill

Community

Home

Peer, lay worker, nurse,

pharmacist, clinical

officer, doctor

TB symptom assessment Register TPT completion documentation

**Completion of TPT** 

Facility

Community

Nurse, clinical

officer, doctor



## WHO 2013: TB HIV integration

7.9.2 Delivering ART in TB treatment settings and TB treatment in HIV care settings

#### Recommendation (2013)

In settings with a high burden of HIV and TB, ART should be initiated in TB treatment settings, with linkage to ongoing HIV care and ART (strong recommendation, very-low-certainty evidence).

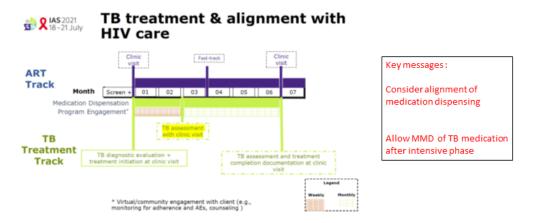
In settings with a high burden of HIV and TB, TB treatment may be provided for people living with HIV in HIV care settings if they have also been diagnosed with TB (strong recommendation, very-low-certainty evidence).

Source: Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: summary of key features and recommendations, June 2013 (190)



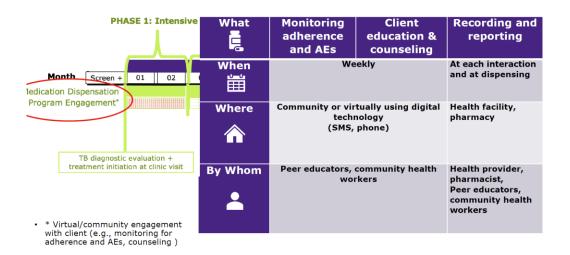
#### Integrating TB treatment into DSD: Experience from PEPFAR programmes

International AIDS Society





#### Phase 1: Intensive Phase -Program engagement







# WHEN – TB screening and TPT within differentiated ART delivery models

#### TPT refill = ART refill

Wherever possible, the duration of TPT refills should be aligned with the duration of ART refills

In group models, alignment of group members to receive TPT together may support adherence and completion through peer support







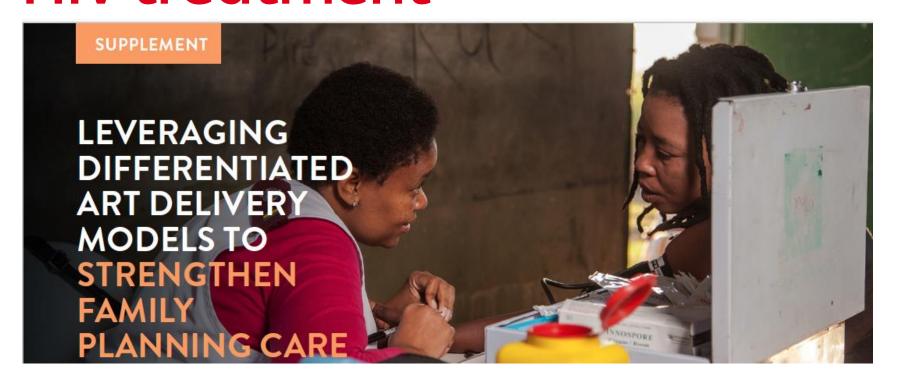
### Zisamale na TPT: Integration of TPT into fast track

	Screening for TB	Initiation of TPT	TPT refill	Completion of TPT
₩HEN	At enrolment , 2 weeks and then monthly during follow ups	At a clinical visit	6 months' supply at clinical visit Follow-up monthly	Next clinical visit after 6 months
<b>X</b> WHERE	Facility and via a phone call during follow ups	Primary care clinic or hospital	Follow-up phone to client at at 2 weeks and months 1, 2, 3, 4 and 5	Primary care clinic or hospital
• WHO	Clinician during enrolment Peer via phone	Nurse, clinical officer, doctor	Peer educator, Pharmacist, pharmacy technologist, doctor if clinical issues raised	Doctor, clinical officer, nurse, pharmacist, pharmacy technologist
<b>WHAT</b>	Verbal symptom screen Referral to facility if required	TPT eligibility assessment, Scripting INH and ART for 6 months, Provision of TPT and ART refill, Register TPT start, TPT treatment literacy	TPT refill, TPT adherence check, TPT follow-up assessment (side-effects and/or TB symptoms)	TB symptom assessment, completion of documentation





# Opportunity 2: Integrate contraceptive services into DSD for HIV treatment







# In March 2021, WHO revised HIV service delivery guidance, including a new recommendation on integration of SRH services

7.9.3 Integrating sexual and reproductive health services, including contraception, within HIV services

#### **Recommendation (2016)**

Sexually transmitted infection and family planning services can be integrated within HIV care settings (conditional recommendation, very-low-certainty evidence).

Source: Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach – second edition (3)

#### Recommendation (2021)

Sexual and reproductive health services, including contraception, may be integrated within HIV services (conditional recommendation, very-low-certainty evidence).

Source: Updated recommendations on service delivery for the treatment and care of people living with HIV (63)

#### **GUIDELINES**

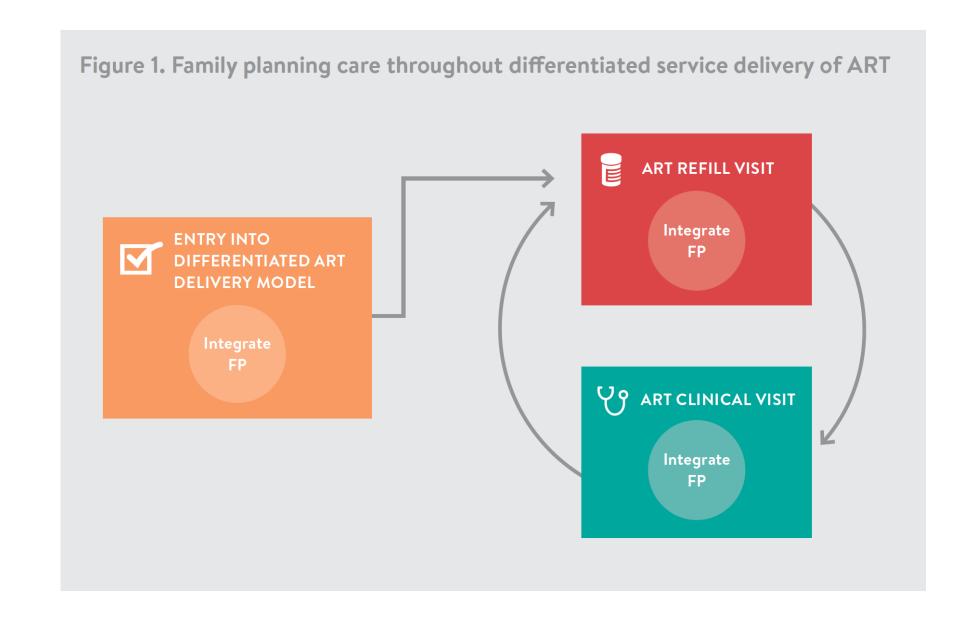


CONSOLIDATED GUIDELINES ON HIV PREVENTION, TESTING, TREATMENT, SERVICE DELIVERY AND MONITORING:

RECOMMENDATIONS FOR A PUBLIC HEALTH APPROACH

IUIY 2021









#### Integration of family planning care within Community ART Groups, Kenya

	IUDs	Implants	Oral pills	Injectables*
₩HEN	Available but not taken up	At DSD entry, at DSD clinical visits, at facility walk in services in between visits if contraceptive need identified	Every 3 months, aligned	Every 3 months, aligned
<b>№</b> WHERE	Available but not taken up	At same facility as ART where transition to DSD initiated/ ART collected for CAG	Collect ART and FP script from same clinic room and collect from the same pharmacy	Injection given in same room as ART assessment; group member in need nominated to collect ART for others
• WHO	Available but not taken up	Implant- trained doctor, clinical officer, midwife or nurse	FP-trained clinical officer, midwife or nurse provides script	FP-trained clinical officer, midwife or nurse
<b>₩HAT</b>	Available but not taken up	Implant information, counselling, insertion/ removal, management of side effects	Combined and progestin- only pills, information, counselling, script for pills, management of side effects	Injectable information, counselling, giving of injection, management of side effects *Self-injectable not yet available



# Copportunity 3: Leverage new WHO guidance and integrate NCD refills into DSD for HIV treatment

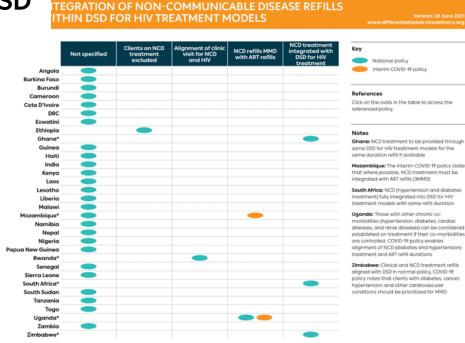
Without doing this, loss of efficiency provided by DSD for both the client and the health system

7.9.4 Integrating diabetes and hypertension care with HIV care

#### **Recommendation (2021)**

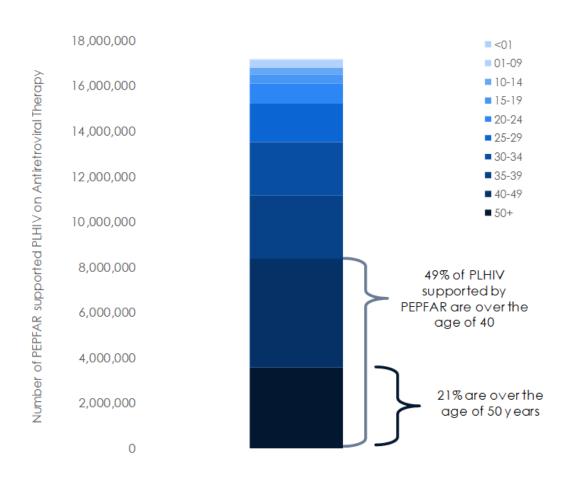
Diabetes and hypertension care may be integrated with HIV services (conditional recommendation, very-low-certainty evidence).

Source: Updated recommendations on service delivery for the treatment and care of people living with HIV (63)





## Integration of NCDs- an aging cohort



49% of ART cohort supported by PEPFAR are 40 years and older, 21% are > 50 years



## New WHO guidelines for hypertension support integration into DSD for HIV

treatment 7. RECOMMENDATIONS ON FREQUENCY OF ASSESSMENT

Guideline for the pharmacological treatment of hypertension in adults



WHO suggests a monthly follow up after initiation or a change in antihypertensive medications until patients reach target.

Conditional recommendation, low-certainty evidence

WHO suggests a follow up every 3–6 months for patients whose blood pressure is under control.

Conditional recommendation, low-certainty evidence



3-6 monthly follow-up once controlled



Task sharing to pharmacist and nurses

#### 8. RECOMMENDATION ON TREATMENT BY NONPHYSICIAN PROFESSIONALS

WHO suggests that pharmacological treatment of hypertension can be provided by nonphysician professionals such as pharmacists and nurses, as long as the following conditions are met: proper training, prescribing authority, specific management protocols and physician oversight.

Conditional recommendation, low-certainty evidence

### **XIAS**

# In South Africa – integration of HIV, TB and NCDs

Criteria for DSD models >

- Above 18 years
- On treatment for at least 6 months
- Most recent assessment results normal:
  - Most recent viral load (VL) taken in past 6 months
     <50 copies/ml for HIV</li>
  - Most recent HbA1c taken in past 6 months ≤7% for Diabetes
  - 2 consecutive BP <140/90 for Hypertension</li>
- Clinician confirms the patient's eligibility for RPCs option
- Patient voluntarily opts for the RPCs option
- No current TB or medical condition requiring regular clinical consultations

# ADHERENCE GUIDELINES for HIV, TB and NCDs

Policy and service delivery guidelines for linkage to care, adherence to treatment and retention in care



February 2016



www.differentiatedservicedelivery.org



# Unit 1.1 Differentiated service delivery explained

START

OVERVIEW V

# Coming soon...



Welcome to the first unit of Module 1.

In this module, we're exploring the basics of differentiated service delivery (DSD) of HIV treatment.

In this unit, we will explore some of the challenges of the healthcare system and clients, define DSD and discuss why it's important to deliver differently.

Click on **Start** or **Introduction** to begin.





# Updating Ghana's national HIV service delivery guidance



# New definition of 'established on ART'

- 'Stable client on ART' now 'Established on ART' receiving
  - ART for at least six months;
  - evidence of treatment success: at least one suppressed viral load result within the past six months (if viral load is not available: CD4 count >200 cells/mm3 or CD4 count >350 for children 3-5 years or weight gain, absence of symptoms and concurrent infections).

- This definition is applicable to all populations of PLHIV including:
- Individuals receiving secondand third-line regimens
- PLHIV with controlled comorbidities
- Children and adolescents
- Pregnant and breastfeeding women
- Key populations



## Summary of new updates (dART)

- Models for Follow Up and Refill
  - Group model manage by clients
  - Individual model not based at facilities

- Previous Operational Manual
  - NEW! Not adopted in the previous operational manual
  - Individual community-based refill (HC/CHPS/DIC/Community Pharmacy)



## Differentiated ART Delivery for clients with high vireamia, low vireamia and viral suppression

#### **XIAS**

Differentiated ART Delivery for clients with co-infections, comorbidities and advanced disease



# Thank you



www.differentiatedservicedelivery.org