

DSD guidance for integration of HTN and DM for people living with HIV

The Operational & Service Delivery Manual

-For Prevention, Care and Treatment of HIV (2022)

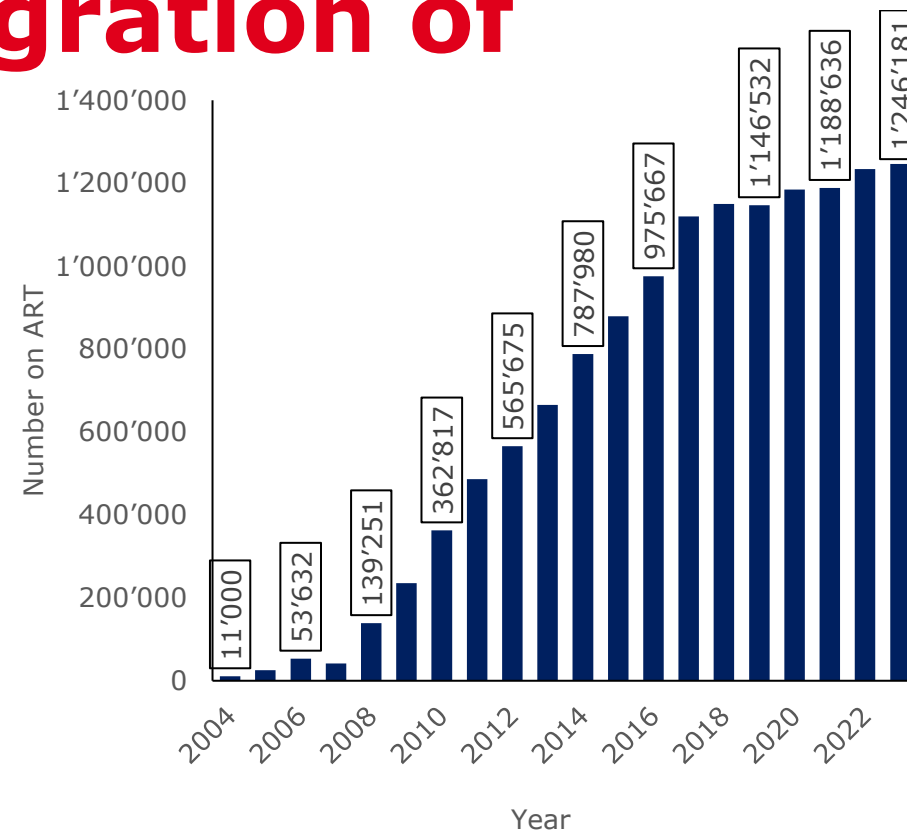
Dr Ronald Nyabereka

Differentiated service delivery for other chronic diseases

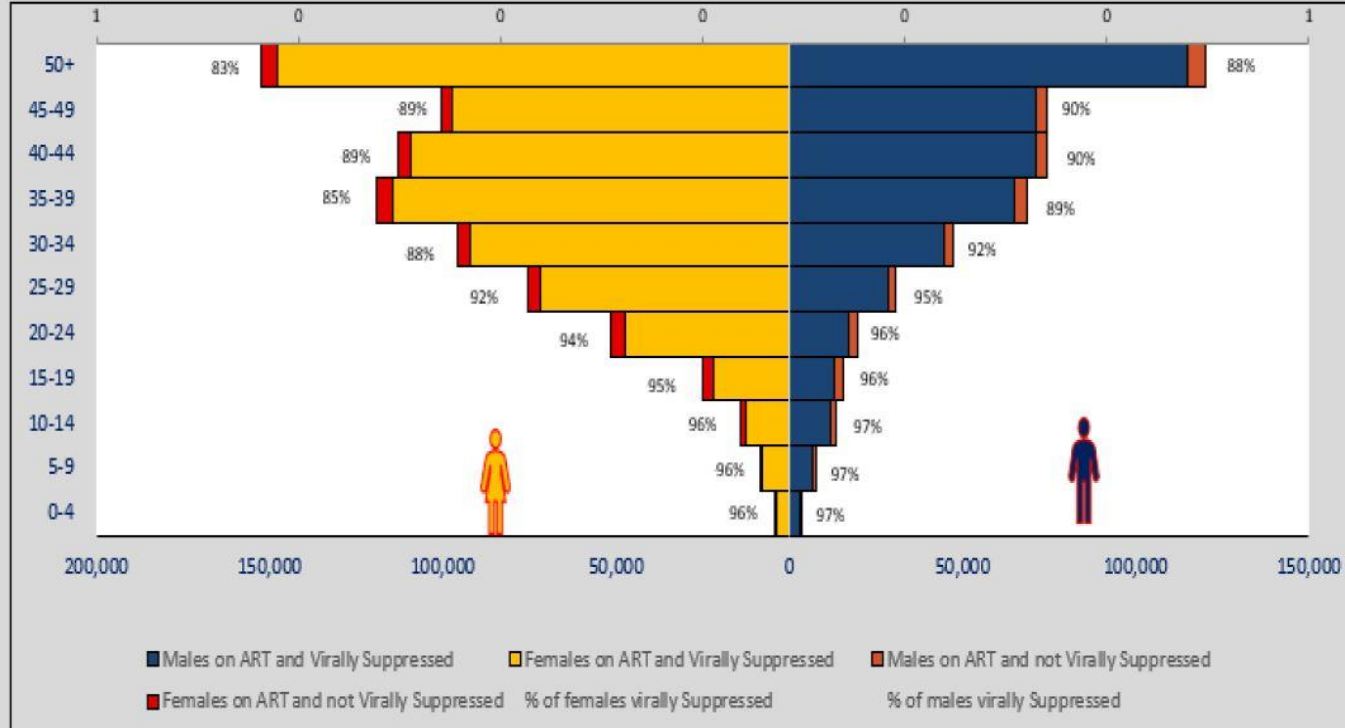
Harare, 5 December 2023

Why DSD guidance for integration of HTN & DM?

- An ageing HIV population faces increased risk of age-related comorbidities (HTN/DM) Roomaney RA, (2022)
- There is a growing burden of NCDs among PLHIV in Zimbabwe with background of staff attrition
 - NCDs projected to increase by 26% in PLHIV by 2035 - Smit et al (2018).
 - Zimbabwe conducted a nation-wide recount of RoCs receiving ART in 2018, revealing longer lifespans and a transition to older age groups
- Integration provides a one-stop service for RoCs.
- Ministry of Health and Childcare Zimbabwe developed guidance for integration of HTN & DM into DSD for HIV care.
 - DSD models provide simplified and adapted HIV services for screening, diagnosis, treatment, and monitoring for NCDs & help reduce clinic visits.
- Continued investment in DSD models for integrated HIV-NCD care is needed to improve health outcomes of PLHIV in Zimbabwe.



- Total PLHIV on ART- 1,246,181; Females= 774,319(62%)
- PLHIV ≥ 40 years on ART – 666,330 [53%]
- WLHIV ≥ 25 years on ART – 676,115 [87%]
- Children 0-14 Years on ART – 47,664 [4%]



Source: DHIS 2, 2022

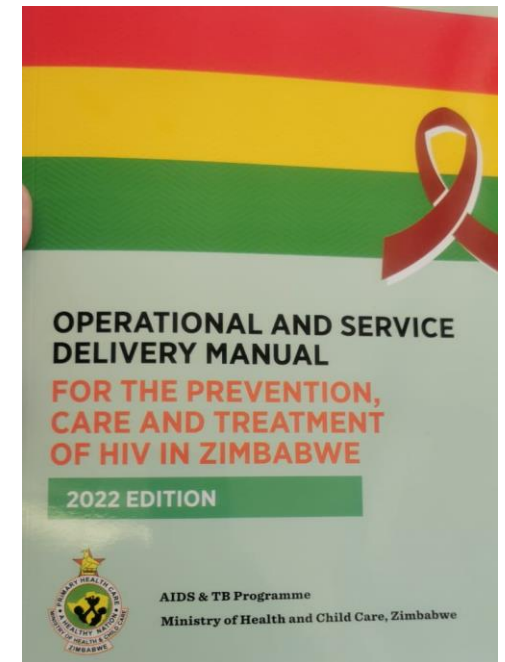
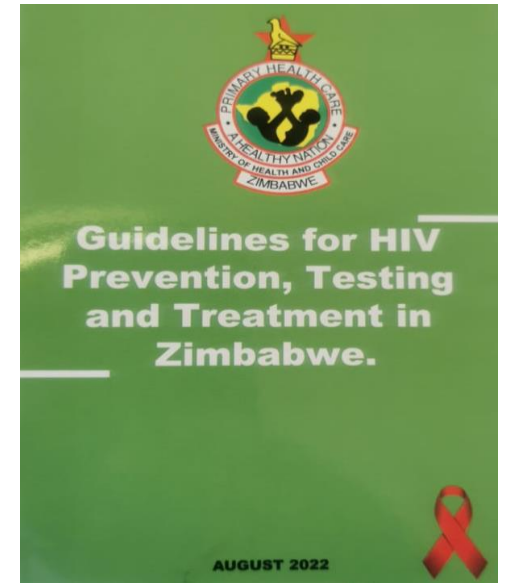
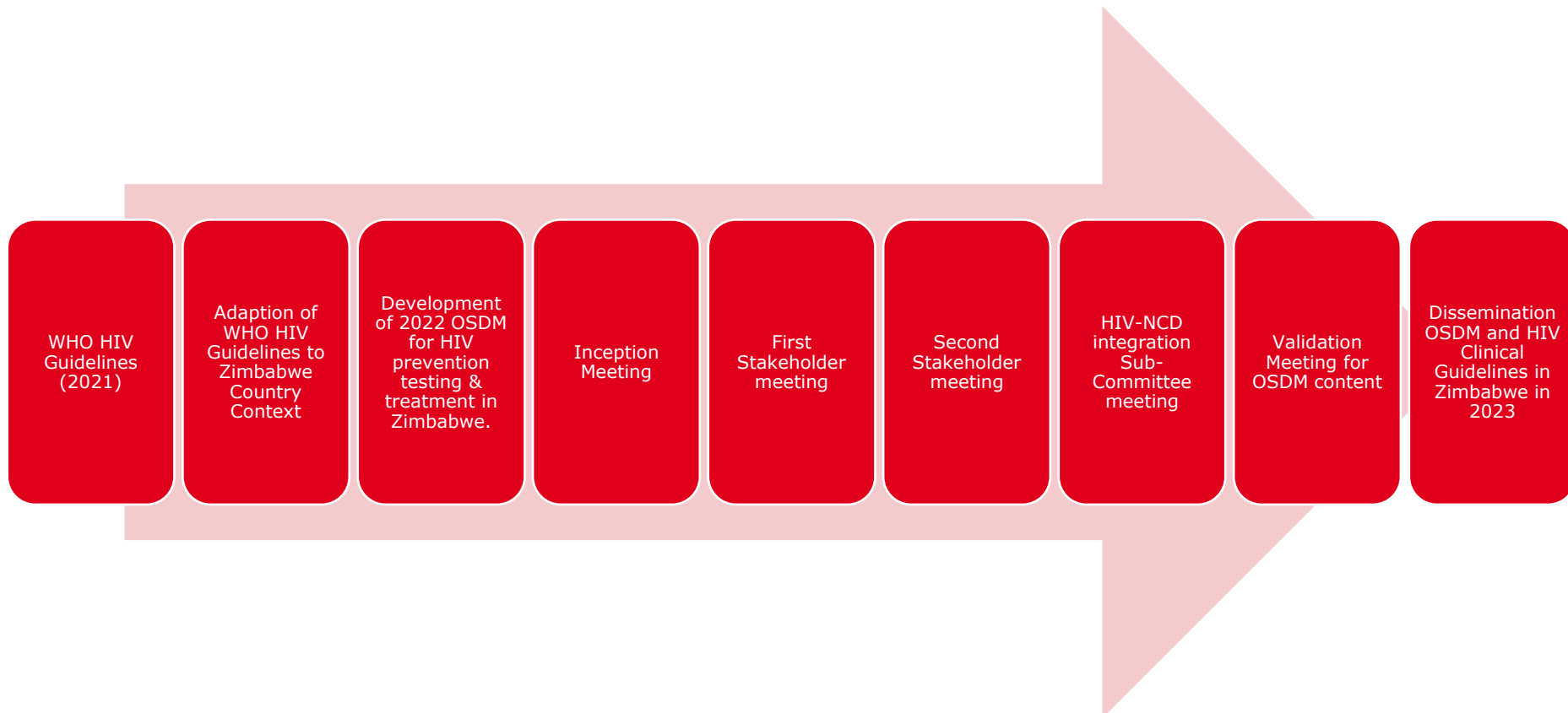
Total PLHIV on ART= 1,233,619; Females=61.5%, Aged 50+ Years=272,240=22%

Year	Total	50+ Years	Proportion
2015	879,271	124,497	14%
2016	975,667	148,425	15%
2017	1,119,909	171,305	15%
2018	1,150,079	200,853	17%
2019	1,146,532	220,512	19%
2020	1,184,901	234,906	20%
2021	1,188,636	252,426	21%
2022	1,233,619	272,240	22%

- Current DHIS 2.0 program data reflecting PLHIV are transitioning to older age groups.
- The National District Health Information System 2 showed that the proportion of aged HIV population (50+ years) on ART increased from **14%** (124,4497) in 2015 to **22%** (272,240) in 2022.

IAS Guideline development process

- The Clinical guidelines & OSDM are intended to
 - provide guidance to healthcare providers on integrating hypertension and Diabetes into DSD models for HIV
 - Have evidence-based recommendations and standardized practices.
- A Multi-stakeholder approach:
 - Involving the MoHCC departments (Aids & TB; NCD); HIV Technical experts, MoHCC healthcare providers from Subnational units and implementing partners



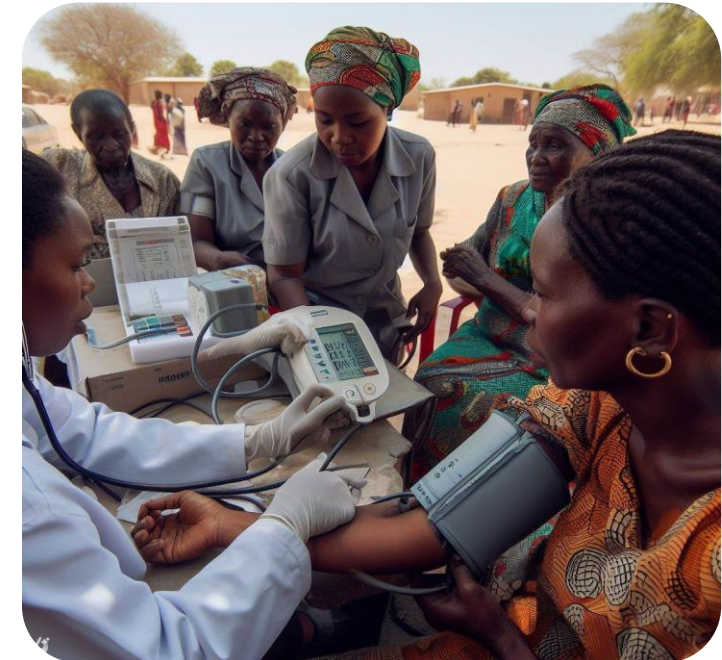
IAS How are clients defined as established on treatment?

Criteria for established on treatment	HIV	HTN	T2DM
Control target	A viral load of less <50 copies/mL in the last 6 months.	<140/90 measured on two occasions at least one month apart	HbA1C <7% recorded in the last 3 months Or Fasting blood sugar (FBS) < 7 mmol/L recorded in the last 3 months
Adherence		Good understanding of lifelong adherence: adequate adherence counselling provided	Good understanding of lifelong adherence: adequate adherence counselling provided
Duration on current regimen	On ART for at least 6 months	At least three months on current regimen	At least three months on current oral regimen
Other co-morbidities	Absence of concurrent OI or other co-morbidity requiring more intensive follow-up	No other uncontrolled co-morbidities requiring more frequent clinical interventions	No other uncontrolled co-morbidities requiring more frequent clinical interventions



IAS Building blocks for HTN/DM screening and diagnosis

- **WHEN** - All PLHIV should be screened for HTN and DM at least once a year - **at ART initiation/re-initiation; Entry into DSD; Clinical visits**. If normal, repeat BP annually
- **WHERE** -HTN and DM screening and diagnosis can be done at HIV clinics, other healthcare facilities, or community-based settings - **Same location as ART**
- **WHO** - Clinicians, nurses, and community cadres can perform HTN and DM screening and diagnosis.
- **WHAT**- HTN and DM screening should include BP measurement and blood sugar testing (fasting glucose; HBA1C). Diagnosis should be based on clinical criteria & tests.



IAS Building blocks for HTN/DM treatment initiation

- **WHEN** - HTN and DM treatment should be initiated At ART initiation/re-initiation; Entry into DSD; Clinical visits.
- **WHERE** - HTN and DM treatment can be initiated at HIV clinics, other healthcare facilities, or community-based settings - **Same location as ART**
- **WHO** - Clinicians (nurses; Doctors) - Same healthcare worker as ART.
- **WHAT** - Correct selection of initial BP or DM medication according to algorithm (should include lifestyle modifications and medication)



IAS Building blocks for HTN/DM treatment titration

WHEN	WHERE	WHO	WHAT
<p>HTN and DM treatment should be titrated as needed to achieve blood pressure and blood sugar control.</p> <p>Should be Booked monthly visits until hypertension is controlled</p>	<p>HTN and DM treatment titration can be done at HIV clinics, other healthcare facilities, or community-based settings –</p> <p>- Same locations as ART</p>	<p>Clinicians, (nurses, doctors) can titrate HTN and DM treatment.</p> <p>- Same healthcare worker as ART Doctor Nurse</p>	<p>HTN and DM treatment titration should be based on regular blood pressure and blood sugar monitoring.</p> <p>- Correct measurement of BP/ testing of FBG or HBA1C and titration of HTN/DM medication according to algorithm</p>



IAS Building blocks for HTN/DM treatment maintenance clinical visit

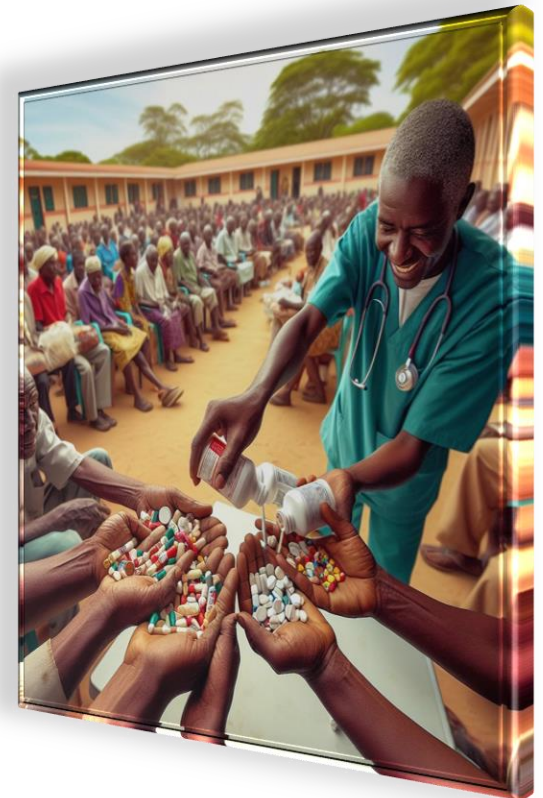
WHEN	RoCs with HTN and DM should have a clinical visit at least every 3 months. When controlled, repeat 3monthly clinical visits (checks for fasting blood sugar / HbA1c, BP & BMI).
WHERE	HTN and DM treatment maintenance clinical visits can be done at HIV clinics, other healthcare facilities, or community-based settings - Same location as ART
WHO	Same healthcare worker as ART – Nurse; VHW; [key population peer supporter for distribution]
WHAT	HTN and DM treatment maintenance clinical visits should include: Blood pressure and blood sugar monitoring Medication review and adjustment Assessment of adherence to treatment Counseling on lifestyle modifications



IAS Building blocks for HTN/DM treatment maintenance refill visit



<p>WHEN</p>	<p>As needed for PLHIV with established HTN or DM who require refills of their antihypertensive or antidiabetic medication. Annual clinical visit and three-monthly clinical visits. <i>Align HTN/DM/ART clinical and refill appointments</i></p>
<p>WHERE</p>	<p>At HIV clinics, outreach sites, and community-based organizations: Same location as ART</p>
<p>WHO</p>	<p>Trained healthcare providers, including nurses, lay counselors, and peer educators. Same healthcare worker as ART – Nurse; VHW; [key population peer supporter for distribution]</p>
<p>WHAT</p>	<p>Provision of medication refills [Hypertension, DM and ART] Refills and patient education.</p>



IAS Which DSD models for established on treatment are included in the guideline & therefore could be used for HTN & DM?

Model	Description
Facility-based individual models	
3-MMD	Involves dispensing three months of ARV medication at a time.
Fast Track	This model has shorter waiting times and fewer clinical visits. This model is preferred by RoCs in urban facilities.
Facility-based group models	
Facility Club Refill Model	Involves dispensing ARVs to groups of RoCs at the same time. This model is efficient and saves time for both RoC and healthcare workers.
Community-based individual models	
Outreach Model	Involves dispensing ARVs to clients at outreach points in their communities. This model is useful for clients who have difficulty accessing healthcare facilities.
Community-based group models	
Community ART Refill Groups (CARGs)	This model involves dispensing ARVs to groups of RoC in their communities through a selected leader - efficient and saves time for both RoCs & HCWs
Family ART Refill Groups	This model involves dispensing ARVs to families of clients in their communities. This model is useful for families who want to support each other in managing their HIV treatment.



Thank you



IAS References

1. Roomaney, R. A. (2022). The ageing HIV population faces increased risk of age-related comorbidities (HTN, DM, and CVD). *Current HIV/AIDS Reports*, 22(12), 133-140.
2. Smit, J. A., Bassett, I. V., Ngwenya, J. N., Chigwedere, P., & Sanders, E. J. (2018). Non-communicable diseases among people living with HIV in Zimbabwe: A systematic review and meta-analysis. *PLoS One*, 13(9), e0204523.
3. Ministry of Health District Health Information 2.0. (2022).
4. *The Operational and Service Delivery Manual for The Prevention, Care and Treatment Of HIV In Zimbabwe; 2022 Edition*. AIDS & TB Programme; Ministry of Health and Child-Care, Zimbabwe.
<https://www.differentiatedservicedelivery.org/resources/zimbabwe-operational-and-service-delivery-manual-job-aide/>
5. World Health Organization. (2021). *Consolidated Guidelines on HIV Prevention, Testing, Treatment, Service Delivery And Monitoring: Recommendations for a Public Health Approach July 2021*.
<https://www.who.int/publications/i/item/9789240031593>





WHO 2020 Consolidated HIV Guidelines: Recommendations for HTN and DM Management in people living with HIV

Condition	Recommendations
Hypertension	Screen for hypertension at least once a year. If diagnosed, treat according to national guidelines.
Diabetes Mellitus	Screen for diabetes mellitus at least once a year. If diagnosed, treat according to national guidelines.
Frequency of treatment maintenance refill visits	Stable patients on ART should have clinical visits every 3-6 months. However, the frequency of visits may vary depending on the patient's clinical status and the availability of resources.

