Updated South African Differentiated Service Delivery Guidance Improves HIV Services

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Background

South Africa has the world's largest HIV burden with an estimated 7.8 million people living with HIV and 5,9 million on antiretroviral treatment (ART) by March 2024. The overwhelming demand on the health system, characterized by congested clinics and frequent visits, contributes to treatment interruptions and disengagement.

In 2016, South Africa introduced integrated differentiated service delivery (DSD) for HIV, tuberculosis, and non communicable diseases (NCDs), including hypertension and diabetes, to support treatment adherence and alleviate the burden for recipients of care (ROC) and the health system. In May 2023, the guidance was comprehensively updated to further optimize client-centredness. It was fully integrated into the country's ART clinical guidelines, accompanied by supporting standard operating procedures.

Description

Notable changes to service delivery components of South Africa's ART guidance are summarized in Table 1 together with the rationale for these changes.

Table 1: Updates to differentiated service delivery guidance

Topic	Change	Rationale
1. Viral load (VL) timing		
Earlier first VL	3 months on ART (previously 6 months on ART)	Earlier intervention to support adherence, including actioning challenges and access to less-intensive DSD models
2. Post-initiation support		
Increased focus on adherence counselling session post-initiation	Restructuring treatment initiation counselling to facilitate adherence steps review with ROC one month after ART initiation	Revisit treatment literacy and adherence support steps once ROC has experienced taking treatment to improve understanding and revisit the adherence plan developed at treatment initiation
3. Visit schedule first year on ART		
Reduced total number of facility-based visits in the first year on ART	5 facility visits for clinical review and scripting (previously 8 visits) See Guideline Figure 1	Retention support is required earlier in the treatment journey
4. Less-intensive differentiated service delivery (DSD) model eligibility		
More inclusive enrolment criteria for repeat prescription collection strategies (RPCs)	Removed time on ART only requiring a single viral load<50 copies/ml enabling DSD enrolment from 4 months on ART	Shift focus away from time on ART to demonstrating adherence thereby enabling earlier eligibility for less-intensive DSD
	ROC with diabetes considered stable and eligible if HbA1c≤8% (previously HbA1c≤7%)	Improve adherence and retention of ROC living with HIV and diabetes by increasing access to less-intensive DSD models
5. Less-intensive DSD management		
6-monthly scripting using the recall mechanism to action abnormal results	Rescripting for less-intensive DSD is done when VL is taken. Results are reviewed with abnormal results recalled.	Reduce burden for the majority of ROC with normal results - VL<50 copies/ml; CD4 count>200 cells/mm^3; GeneXpert negative at annual TB screening
Introduced a maximum number of refills per RPCs 6-month script	2 refills (previously 3 refills with no maximum specified)	Reducing burden on stable ROC to support adherence and retention
Increased ART refill length	3-;4-*;6-monthly** (up to 3-monthly) **where facility limited stock (1x2months+1x4months)* ***awaiting operational capacity go ahead at national level*	Reducing burden on stable ROC support adherence and retention and future proof guidelines
6. Multi-month dispensing (MMD) beyond less-intensive DSD models		
Provided access to MMD for ROC not eligible for less-intensive DSD models	Children from 6 months to 5 years of age; post-natal women aligned with EP schedule; concomitant TB; elevated viral loads but clinically stable; re-engaging in care	Burden should also be reduced even when clinical management is required more frequently than 6-monthly to support adherence and retention.
7. Re-engagement		
Increased service flexibilities for ROC missing scheduled appointments by <90 days	Re-engagement algorithm includes: <28 days late remain in RPCs <90 days late assess for RPCs and provide 3 months of ART See Poster 7541 Track E3	Effective management at re-engagement necessitates a differentiated, client-centered approach that considers both clinical and service delivery needs.
8. Service delivery alignment/integration		
Introducing management approach for ROC co-infected with TB or post-natal	1. TB/ART 2. EPI/infant HIV testing/PrEP/ family planning 3. EPI/infant testing/mother ART/family planning 4. EPI/infant and mother ART/family planning	Simplified guidance required on how to optimally integrate visit schedules: 1. For TB co-infected: ART management is integrated into the TB management schedule 2. For post-natal women and their infants, HIV testing and ART/PrEP management is integrated into the EPI schedule

Less-intensive DSD models = Repeat prescription collection strategies (RPCs):
1. Facility pick-up points (FAC-PUP): *individual facility-based fast track model*
2. Adherence clubs (ACs): *group model at facility or in the community*
3. External pick-up points (EX-PUP): *individual out-of-facility model*

Lessons learnt

The integrated review of clinical and service delivery components of 2023 updated ART guidance and inclusion in the short-form version of clinical guidelines, has increased training, dissemination and prioritization of service delivery aspects. This integrated approach may improve healthcare worker uptake and implementation including but not limited to increased use of longer refills between clinical reviews and assessment for and enrolment into South Africa's less intensive DSD models known as repeat prescription collection strategies (RPCs).

Figure 1 shows the diagrammatic representation of an integrated approach to the first year on treatment visit schedule.

Figure 1: Diagrammatic first year visit schedule in 2023 ART guidelines

Visit Schedule for Adults, Adolescents and Children 5 Years and Older on ART

DC/ Months* on ART	Routine monitoring tests	Overview of Management
0	**Baseline clinical and lab assessment as outlined on pages 4 to 6 ART initiation and session 1 of fast track initiation counselling**	
1	Review test results	• Session 2 of fast track initiation counselling including planning for travel and VL education • Clinical assessment and routine monitoring as outlined on page 19 • Integrated services for family planning and NCDs • **2 months ART dispensed (2MMD) - DMOC SOP 4**
3	3-month* VL sCR and eGFR	• Clinical assessment including VL and any other routine monitoring bloods as outlined on page 19 • Integrated services for family planning and NCDs

4	Review test results	• Clinical assessment and review of VL and any other monitoring results
		• Integrated services for family planning and NCDs
		• Assess eligibility for Repeat Prescription Collection strategies (RPCs) (South Africa's differentiated models of care for stable patients)
		  • VL < 50 c/mL
		  • Clinically well
		  • No OIs, including TB
		  • Not pregnant
		Repeat Prescription Collection strategies (DMOC for stable patients)
		Facility Pick-up Point (FAC-PUP) (DMOC SOP 5.1) | Adherence Clubs (AC) Facility or community-based support groups (DMOC SOP 5.2) | External Pick-up point (EX-PUP) (DMOC SOP 5.3)
		• Renew prescription for next 6 months, with first 3 month's supply issued today from the facility
		• If not eligible for RPCs or refused RPCs: Assess eligibility for facility provided multi-month dispensing (MMD) – DMOC SOP 4

7		• Collect medication from preferred RPCs
10	10-month* VL sCR and eGFR CD4 count	• Clinical assessment including VL and any other monitoring bloods as per "Monitoring on ART" on page 17 • Integrated services for family planning and NCDs • Check TPT eligibility • Renew prescription for next 6 months • Do not require clients to return to the facility in 1 month to review the VL results, unless other clinical indications exist that require review. Rather, recall to the facility only those clients with elevated VLs
11+		• 12-monthly clinical assessment and family planning review as per "Monitoring on ART' on page 17 • 12-monthly routine monitoring of VL, sCR and eGFR • Check that chosen RPCs option is still suitable • Collect medication from preferred RPCs

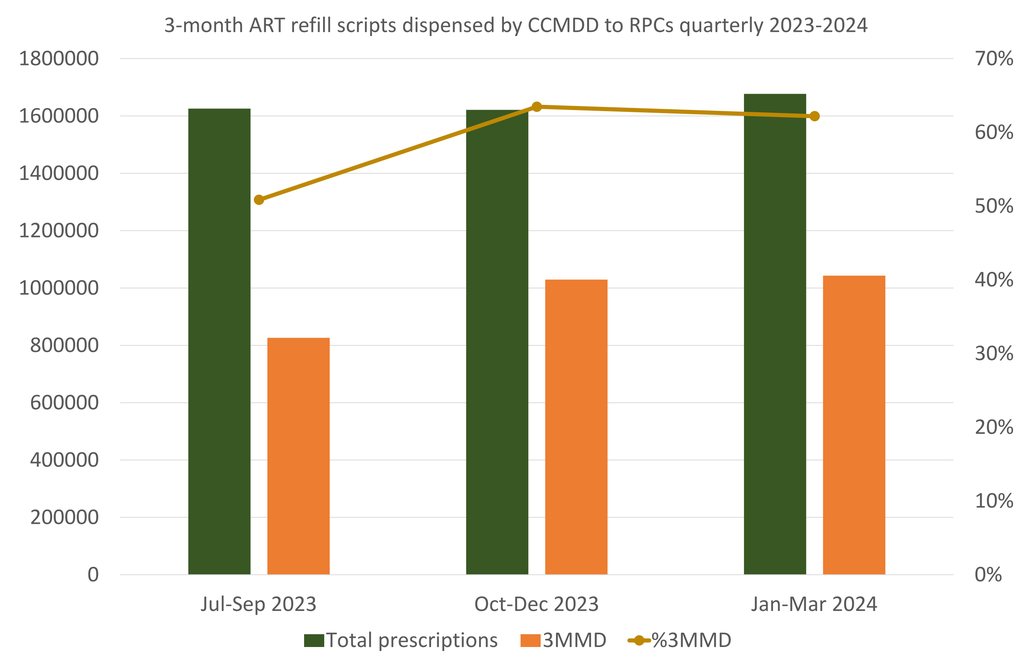
Non-stable clients

If at any stage the client becomes clinically non-stable and /or non-adherent i.e. a client who has:
- missed a scheduled appointment by more than 28 days (including in an RPCs) (see also re-engagement algorithm on page 12)
- a VL ≥ 50 c/ml
- possible signs or symptoms of clinical failure, e.g. if the client is acutely unwell, or develops a new OI such as TB

A clinician should:
- If in an RPCs, return the client to regular care to ensure more frequent clinical follow-up until they are stable again.
- Provide appropriate clinical management
- If clinically well and struggling with visit frequency: provide multi-month dispensing (DMOC SOP 4)
- If experiencing side effects or the child cannot tolerate their medication: switch drugs/formulation
- If struggling to take ART as prescribed: enhanced adherence counselling (See Annexure 3)

South Africa has a total of 2,921,273 ROC enrolled RPCs: 862,027 in FAC-PUPs, 230,984 in Adherence Clubs and 1,828,262 in EX-PUPs, across all nine provinces and including those dispensed and supplied by the Central Chronic Medicines Dispensing and Distribution (CCMDD), the Central Dispensing Unit (CDU) and directly from facilities. An estimated 82% of ROC with a completed and suppressed viral load. Graph 1 shows CCMDD specific scripts for 3-month ART refills increasing from 51% (Jun-Sep 2023) to 62% (Jan-Mar 2024).

Graph 1: Proportion 3-month refill scripts dispensed by CCMDD to RPCs*



* CCMDD Data reported at Operation Phuthuma

Conclusion and next steps

Provincial and district training on the clinical and service delivery integrated revised ART guidelines, has been completed, with online modules developed and available at **https://knowledgehub.health.gov.za/**. Ongoing efforts focus on nationwide implementation of the updated DSD package, emphasizing fidelity to counselling sessions, earlier viral load assessment, earlier and increased enrolment into RPCs, longer refills and differentiation at re-engagement.

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