KINGDOM of ESWATINI
Ministry of Health

Guidelines
For Differentiated Service Delivery

January 2022

PEPFAR
U.S. President's Emergency Plan for AIDS Relief

World Health Organization

MOH HIV/AIDS SNAP

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Abbreviations and Acronyms

6MMD	**6 Multi-month Dispensing**
ADRs	Adverse drug reactions
AGYW	Adolescent girls and young women
AHD	Advanced HIV disease
AIDS	Acquired Immune-deficiency Syndrome
ALHIV	Adolescents living with HIV
ANC	Antenatal care
ART	Antiretroviral therapy
ARV	Antiretroviral a.k.a ART
C&ALHIV	Children and adolescents living with HIV
CAGs	Community ART groups
CCD	Community commodity distribution
CCF	Chronic care file
CD4	Cluster of Differentiation 4
CEC	Community expert client
CHIV	Children living with HIV
CIHTS	Client initiated HIV testing service
CM2M	Community mother to mother
CMIS	Client Management information system
CMM	Community mentor mother
CMS	Central medical stores
CommART	Community ART
COVID-19	Corona virus disease of 2019
CPT	Cotrimoxazole preventive therapy
CrAG	Cryptococcal antigen
CTX	Cotrimoxazole
CWF	Child welfare
DBS	Dry blood spot
DSD	Differentiated service delivery

EC	Expert client
ECD	Early Childhood Development
EHLS	Eswatini Health Laboratory Services
EID	Early infant diagnosis
ENAP	Eswatini National AIDS Program
FBC	Full blood count
FCCM	Facility centred care model
FP	Family planning
FTCS	Facility based treatment clubs
HB	Haemoglobin
HCW	Health care worker
HIVST	HIV self-testing
HMIS	Health management information system
HTS	HIV testing service
HVL	High viral load
IPV	Intimate partner violence
IRIS	Immune reconstitution inflammatory syndrome
KP	Key populations
LAM	Lipoaribomannan
LCM	Linkage case management
LFTs	Liver function tests
LTFU	Lost to follow up
M&E	Monitoring and evaluation
MBP	Mother baby pair
MDT	Multidisciplinary team
MM	Mentor mother
MMS	Multi-month scripting
MNCH	Maternal Newborn and child health
MSM	Men who have sex with men
MTCT	Mother to child transmission
MUAC	Mid upper arm circumference

NARTIS	Nurse-led ART initiation in Swaziland
NCDs	Noncommunicable diseases
NGO	Non governmental organization
NRL	National reference laboratory
OIs	Opportunistic infections
PBFW	Pregnant and breast feeding women
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PIHTS	Provider initiated HIV testing service
PJP	Pneumocystis jirovecii pneumonia
PLHIV	People living with HIV
PLTCs	Pregnant and lactating teen clubs
PMTCT	Prevention of mother to child transmission
PNC	Post natal care
PNOC	Post natal outreach club
POC	Point of care
PrEP	Pre exposure prophylaxis
PWID	People who inject drugs
RDT	Rapid diagnostic test
RFT	Renal function test
RHM	Rural health motivator
RHMT	Regional health management team
RLC	Regional linkage coordinator
ROC	Recipients of care
SHIC	Swaziland HIV Investment Case
SHIMS	Swaziland HIV Incidence Measurement Survey
SI	Strategic information
SNAP	Swaziland National AIDS Program
SOP	Standard operating procedure
SRH	Sexual and reproductive health
STI	Sexually transmitted infection
SUAC	Stepped up adherence counselling

SW	Sex worker
TB	Tuberculosis
TPT	Tuberculosis preventive therapy
UNAIDS	The Joint United Nations Programme on HIV/AIDS
VL	Viral load
VLS	Viral load suppression
VMMC	Voluntary medical male circumcision
WHO	World Health Organisation

Foreword

Antiretroviral Therapy (ART) provision to people living with HIV (PLHIV) and Pre-exposure prophylaxis (PrEP) to HIV negative individuals with substantial exposure to HIV remains a key priority for Eswatini Ministry of Health (MoH). The national goal is to achieve and maintain HIV epidemic control by decreasing HIV-related illnesses and deaths, and decreasing new HIV infections.

Continued decentralization of the delivery of HIV care and treatment services has helped increase access to ART at decreased cost to the client. However, with increased ART coverage and good retention, it is becoming imperative that the MoH designs and adapt innovative ways to deliver quality HIV services to clients in a manner that is acceptable, clinically sound and efficient.

The MoH acknowledges the need to minimize the client-related costs and opportunity costs incurred by ART clients as a result of frequent visits to facilities and extended waiting time within the facilities as ART client volumes increase. This document provides a national policy guide to support the implementation of different models of ART delivery in Eswatini.

Implementation of this guidance will strengthen the capacity of health facilities and communities to monitor quality of care and use care data for decision-making and promoting accountable leadership for achievement of results.

This policy guide draws on an extensive review of local experience and shared experiences from other country programs and consultations with health care workers, communities and ART clients. This document is primarily intended for policy makers, health managers and implementing partners of HIV services at both facility and community level, as well as other national programs including TB, non-communicable diseases (NCDs) or MNCH-SRHU, clinicians and other health service providers, PLHIV organizations and donors.

The Ministry of Health expresses its sincere gratitude to all those involved in the development and finalization of this very important document.

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Acknowledgements

The development of the national guidelines for the differentiated service delivery has drawn on a highly participatory process that included lessons learnt from the previous implementation of DSD, international recommendations, literature review, consultations and stakeholder engagements led by the Ministry of Health Eswatini National AIDS Control Program (ENAP).

The Ministry of Health thanks all the stakeholders who participated in the guideline's review. The efforts and commitments demonstrated by different multidisciplinary technical working groups through an extended collaborative process under the leadership of the ministry of health towards accomplishment of this important task is greatly appreciated.

A special appreciation goes to the following persons and their organizations for their time, dedication and contribution to develop these guidelines:

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Our sincere gratitude goes to the external review team below for their contribution during the finalization process of this document.

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Finally, we express our sincere thanks to SNAP, URC, ICAP, EGPAF, and GU for the technical and editorial assistance in developing these guidelines. A special note of gratitude goes to the editorial team: Sigudla Sifiso, Dr. Normusa Musarapasi, Dr. Lydia Mpango and Victoria Masuku. Last but not least, we thank Dr Nicholas Kisyeri, the DSD coordinator for Eswatini National AIDS Program, MOH and his predecessor, Dr Herve Kambale for their work to facilitate the preparation, reviews, editing and formatting of this guideline.

Chapter 1: Introduction

Differentiated service delivery, previously referred to as differentiated care, is a person-centered approach that simplifies and adapts HIV services across the cascade in ways that both serve the needs of people living with and vulnerable to HIV and optimize available resources in health systems. (WHO 2021)

1.1 Background

Eswatini has made significant progress in addressing the HIV epidemic through the years, engaging national and international stakeholders. The number of PLHIV receiving ART continues to rise each year. In 2020, it was estimated that 215,527 people were living with HIV, of whom 204,286(95%) were on ART as per the Eswatini HIV Annual Programs Report 2020 [1]. Between 2016 and 2020, a 16% increase on the number of PLHIV receiving ART has been noted, for 2019 to 2020 alone, this increased by 12,504(7%) [1]. This is partly due to the test and start strategy – referred to as "treat all" by the World Health Organization as stipulated in the Eswatini Integrated HIV Management Guidelines of 2018 [2].

The annual incidence rate among 15-49-year olds was estimated to have declined from 2.9% in 2011 to 1.9% in 2015 and to 1.4% in 2017 [3]. New infections among children at 18 months of age were estimated to be 11% of all exposed children in 2012, down from 19.6% in 2009 [4]. This dropped further down to 2% in 2019 [5]. This remarkable success can be attributed to many factors, including successful decentralization of HIV services to the primary health care level, and development and implementation of the Nurse-led ART Initiation strategy in Eswatini (NARTIS) in 2011 [6].

As highlighted in the 2018 HIV guideline [2], deeper analysis of data, however, shows that there are sub-population differences with regards to service coverage and clinical outcomes. There are certain sub-populations exhibiting disparities in HIV testing, treatment, viral suppression and prevention interventions. For example, young people aged 15-24 years demonstrated lower rates of ART uptake (81%) and lower levels of viral load suppression (VLS) (76%) compared to adults [7]. This calls for

targeted interventions to address these gaps in testing, treatment and VLS by sub-populations, geographies and modalities. Results also show that it is also essential to integrate HIV services with prevention and mainstream health service delivery such as non-communicable diseases, mental health, and Family Planning.

As services expand, attention should be given to specific interventions responding to client's needs and quality of services provided. This is partly addressed by implementation of differentiated service delivery (DSD) models of care and the National HIV Services Standards.

As Eswatini approaches epidemic control, there is a greater emphasis on the need to sustain the success of the national HIV response. This requires a clear understanding of donor funded program and intervention components that are critical for the country to achieve and sustain epidemic control and how these components can be transitioned to government if not already within government structures. Additionally, healthcare workers across all cadres should be up to date on these innovated approaches, incorporating them into daily practice.

In an effort to align with the UNAIDS 90-90-90 ambitious strategy which was announced by UNAIDS in 2014 to control HIV [8], Eswatini rolled out the HIV integrated management guidelines recommending the "Test and Start" (Treat all) approach to provide treatment to all PLHIV as recommended by the World Health Organisation (WHO).

The total number of PLHIV was 205,700 in 2018 and projected to increase to 221,600 in 2024. Between 2017 and 2024, the estimated number of females living with HIV is higher than of males [9]. Hence, there is a need to design and implement innovative strategies to provide HIV testing, and ART to all eligible populations responding to their unique needs, decongest health facilities, decrease client-waiting time, and improve quality of services provided at both health facilities and communities.

There must be delivery of differentiated HIV testing services to ensure timely of HIV case detection and linkages to ART service delivery models. Eswatini has added the component of differentiated testing in the HIV services delivery models to promote test and start as part of epidemic control strategies.

There must be a systematic process of increasing the number of treatment delivery points with ensured good clinical practice and treatment outcomes as we further expand decentralized ART services to communities. Decentralizing ART services to the community will address the existing barriers to linkage to HIV care and poor retention rates over time. The community systems must be well-resourced, scaled up, linked and integrated with health systems. Programmes should provide community support for people living with HIV to improve retention in HIV care [10].

Most community-based ART delivery models have been able to demonstrate reduced burden for clients and the health system, increased adherence and retention in care and lower provider costs [10].

For ART service delivery, there is no single best approach that addresses the health needs of PLHIV, as well as the need to retain them in ART care. Eswatini piloted differentiated ART delivery models at both facility and community levels that have generated lessons and best practices to inform the implementation of these models. The Eswatini differentiated service delivery models are, categorized as follows:

- **More Intensive Models**: Newly initiated on ART until 12 months including 3 Months refill, Challenge Clinics, Advance HIV Disease Clinic, Patients with uncontrolled Comorbidities.
- **Less Intensive Models**: Fast Track + appointment spacing, Family Centered Care Model including children above 2 years of age with consistent knowledgeable and committed caregivers, pregnant and lactating women, patients with controlled co-morbidities, Treatment Clubs, Teen Clubs, Community ART Groups, Outreach model, and community ART Distribution model. Dispensing lockers and community pharmacy dispensing are part of this model.

  NB: In Eswatini, patients who are considered to be eligible for less intensive DSD models are: those who have received ART for at least one year, no current illness, which does not include well-controlled chronic health conditions, good understanding of lifelong adherence and undetectable viral load.

This document serves as a toolkit that explains key operational guidelines. A complimentary document titled "Standard Operating Procedures for Implementing

Differentiated Service Delivery Models in Eswatini" provides details on standard operating procedures (SOPs) to implement the different ART delivery models.

The implementation of these models is aligned with the National Health Sector Strategic Plan III (2019-2023), which aims for universal reach to best quality care using a client-centred approach. DSD models seek to ensure efficient management of clients, paying particular attention to:

- Client needs
- Client's responsibilities
- Client waiting time
- Equity in allocation of services to sick clients and well clients
- Quality of provided services.

The National AIDS Programme emphasizes client empowerment. This means clients need to be better informed and able to negotiate their health care needs and take ownership for their health. Health care workers should adjust to this paradigm shift and allow clients to participate in decision making for their health care. The success of the different ART delivery models outlined in this guideline is dependent on client empowerment and participatory decision making between the health care worker and the client.

With the right investment and commitment at all levels of the health care delivery system, we are confident that Eswatini will achieve the Government´s vision of ending HIV-related sickness and deaths by 2030. These guidelines for client-centred ART delivery will contribute to the achievement of this goal. This document provides guidance to policy makers, donors, implementing partners, health facilities, communities, civil society and supporting partners on the implementation of different models of ART delivery for PLHIV.

1.2 Rationale for Differentiated HIV Delivery Models

At the end of 2016, 171,266 people (84% of the eligible population) were on ART and the number increased to 204,286 at the end of 2020 [1]. With the anticipated rise in the number of clients who will need to be on treatment with the change in the

eligibility criteria for initiation of ART, various models of treatment delivery have to be implemented. This is to ensure that treatment is available for those who need it, that it is accessible and that it is provided with the standard of quality as prescribed in the Integrated HIV Management Guidelines.

The aims of differentiated service delivery models are to:

1. Reduce client-related costs, for accessing care.
2. Allow equitable allocation of service time between stable clients who are well established in care and those who are not well established in care.
3. Reduce the health service burden at facilities by ensuring efficient management of stable / established clients.
4. Empower clients to be actively involved in their care for improved clinical outcomes.
5. Offer care that addresses unique needs of clients using a client / patient centred approach.

Children, pregnant and breastfeeding women (PBFW), as well as their infants, and clients with comorbidities stand to benefit from access to differentiated ART delivery models. While the first Eswatini DSD guidelines considered populations other than adolescent and adults, its main focus was clinically stable, or "stable", adults, the largest population for which to guide the development and implementation of differentiated ART delivery (Differentiated Care for HIV: A Decision Framework for Differentiated Antiretroviral Therapy Delivery). At the time, the majority of evidence for differentiated ART delivery was for clinically stable adults, reflecting the largest possible gains for both clients and the health system.

During the time DSD was implemented in Eswatini, there has been a louder call for guidance on whether children, PBFW, and clients with comorbidities should also have access to differentiated service delivery and how to build models for these populations. While specific populations extend beyond children, PBFW, and clients with comorbidities, the Decision Framework for Specific Populations focuses on the aforementioned populations.

According to WHO, stable clients considered to be well established in care qualify for differentiated services delivery. The definition of being established on ART (stable clients) should be applied to all populations, including those receiving second-line regimens, those with controlled comorbidities, children, adolescents, pregnant and breastfeeding women and key populations. These populations often represent specific cohorts in which retention and suppression of viral loads has been challenging and hence may benefit more from differentiated service delivery for HIV treatment models adapted to their needs. [10]. However according to the Eswatini Integrated HIV Management Guidelines, stable and established in care clients will be enrolled in less intensive DSD models that include 6MMD after one year on ART. Differentiated care offers opportunity both to simplify care for those doing well on treatment and provide better care for those for whom barriers prevent them from attaining or maintaining viral suppression. Even if most of the models described in the guidelines are targeting clients who are considered as stable, it is also worth to acknowledge that clinically unstable clients may be the least able to access services easily or frequently and may also stand to benefit from access to differentiated care models to support viral suppression

ART retention in Eswatini has not improved from 2013 to 2019; it has also not improved in the trajectory from six months to 60 months, as shown in the cohorts from 2013 to 2019 in Table 1. There is however still more work to be done to ensure all patients are followed up when they miss appointments and returned to care. There is need to develop mechanisms to ensure retention of patients in care and prompt follow-up of those missing appointment including patients transferring to other facilities without seeking proper transfer out [1].

Year	6 months		12 months		24 months		36 months		48 months		60 months	
	<15 yrs	15+ yrs	<15 yrs	15+ yrs	<15 yrs	15+ yrs	<15 yrs	15+ yrs	<15 yrs	15+ yrs	<15 yrs	15+ yrs
2013	96%	95%	92%	93%	89%	89%	87%	85%	85%	85%	83%	82%
2014	94%	95%	92%	93%	90%	89%	87%	84%	85%	83%	80%	73%
2015	91%	91%	89%	88%	85%	84%	80%	78%	74%	70%		
2016	89%	90%	85%	86%	81%	81%	73%	67%				
2017	90%	90%	86%	86%	79%	75%						
2018	85%	84%	81%	78%								
2019	88%	89%										

Table1: Retention of ART clients from 2013 to 2019

(source: HMIS)

DSD provides an opportunity to provide client-centred care and relieve the burden of client's multiple visits to a health facility which has been found to be one of the barriers to long-term retention to care. Long-term care and adherence should be promoted by allowing clients with undetectable VL to choose models of care that best suit their needs when accessing ART services.

Differentiated models of HIV service delivery simplify how HIV Testing, ARV treatment, care and support is delivered to address the unique client needs. The models reflect the preferences and expectations of PLHIV while reducing the unnecessary burdens on the health system. Given the size of the HIV epidemic in Eswatini, good retention rates and adoption of Test and Start, the health care services have to develop and implement new models of ART delivery. DSD models of ART delivery seek to tailor services to the different needs and priorities of the following group of clients:

(i) Stable clients (established in care): - who needs less attention for medical care, adherence and treatment support

(ii) Unstable clients: - who require individualized clinical reviews for medical care, adherence and treatment support.

(iii) New clients: - who require ART initiation and close attention for medical care, adherence and treatment support including assessment of side effects.

The differentiated care approach is adapted from the WHO consolidated guidelines on the use of antiretroviral medicines for treating and preventing HIV infection: Recommendations for a Public Health approach 2021 [10]. The WHO elaborates four-service delivery building blocks components in the differentiated approach to HIV care centred on the client (i.e. PLHIV) and these are: **service frequency, service intensity, service location as well as the nature of the healthcare worker providing the service**. Figure 1 shows the different factors for each component that form the framework for the differentiated HIV care approach.

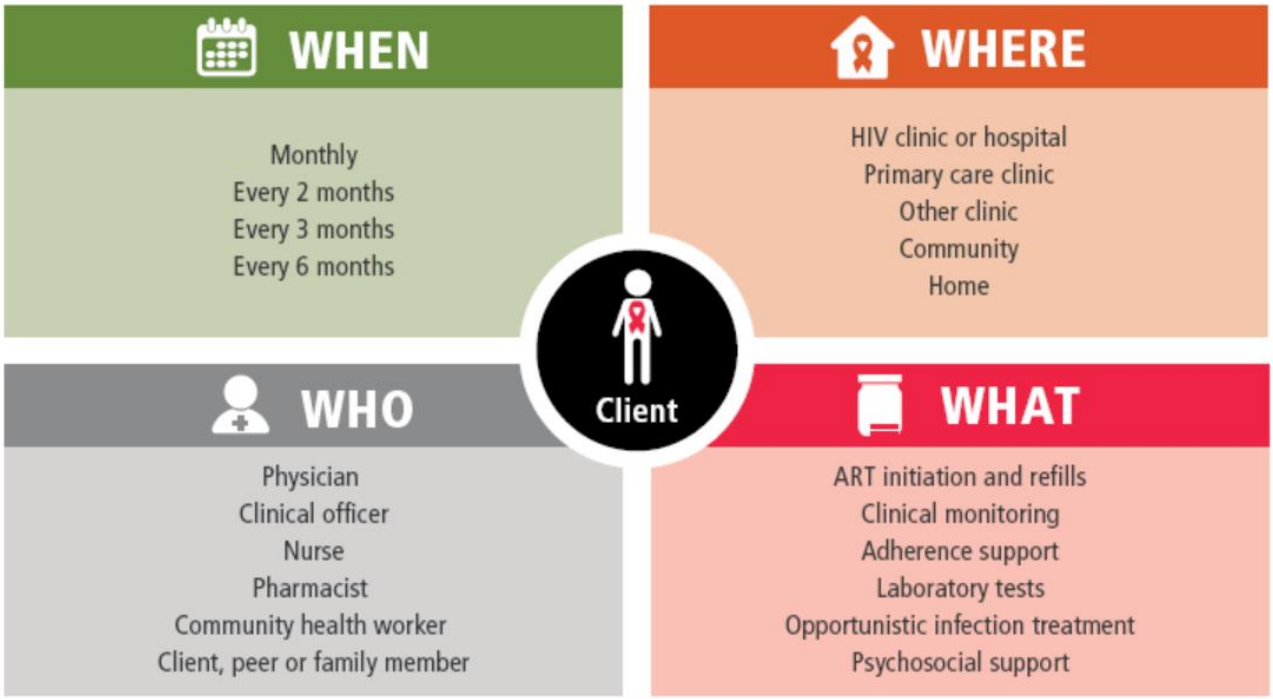

Figure 1: The building blocks of differentiated service delivery for HIV treatment

(Courtesy of WHO, 2021)

These novel models of care require that the health facilities lead and broadly engage with PLHIVs, community-based organizations, community structures and individuals on ART. All the models are aimed at tailoring chronic ART care to the specific preference of a client with maximum engagement of clients in the continuum of care.

In implementing the ART delivery models, the National AIDS Programme will ensure coordination of all the key health systems and stakeholders Involved in ART service delivery at all levels of care. Table 2 highlights the stakeholders that have to be

engaged and health system areas that have to be strengthened for successful implementation of these guidelines.

ART Service Delivery: Capacitating health care workers	**Laboratory System:** Ensuring laboratory standards within models	**M&E Systems:** Review of existing tools	**Pharmacy System:** Supply chain and security of ART medicines	**Community Systems:** Active participation of community structures	**ART Clients:** Meaningful Engagement in chronic ART care
National Level: SNAP, SI Unit, CMS, NRL, Networks of PLHIV, Supporting Partners **Regional Level:** RHMTs, Implementing Partners. **Health Facility Level:** Facility Management, Health care workers (multidisciplinary teams), ART clients. **Community Level:** Community organizations, ART clients, PLHIV support groups.					

Table 2: Systems to support the implementation of the models

Chapter 2: Guiding Principles for Delivery of HIV Services

Roll out of new ART service delivery models must not negatively impact on the quality of care. DSD seeks to empower clients and ensure that they come less frequently and whenever they come, they should spend less time at health facilities. Along the same line, DSD seeks to create additional time that should be afforded to clients, who may require longer consultation time with providers for thorough history taking and clinical examination. The following principles will guide the implementation of DSD in Eswatini:

1. Informed consent: All HIV-positive clients should be educated on the benefits of ART and the DSD models to make an informed choice and verbally consent to a preferred model. All clients without HIV should be educated on the different HIV prevention options and DSD model to make an informed choice and verbally consent to a preferred model.

2. Human rights and dignity: Privacy and confidentiality should be maintained in the delivery of ART in all these models to increase the level of comfort and trust by clients.

3. Quality of care and good clinical practice: ART standards of care should be maintained in all the service delivery models.

4. Integration: ART service delivery should be integrated with other care services e.g. TPT, FP, NCDs, HMIS, M&E and stock supply management.

5. Client-centred: Services should be provided in a manner that addresses primarily the needs of the client and empower clients to play an active role in their care.

6. Flexibility: ART clients are allowed to switch to any of the models as they see fit without interrupting their treatment.

7. PLHIV engagement: Support groups of PLHIV should be engaged and involved in the implementation of ART service delivery models.

Note: A patient centred service provision is the standard

Chapter 3: Differentiated HIV Testing

3.1 Introduction

HIV Testing Services (HTS) in Eswatini has made significant progress in scaling up targeted case-finding strategies to all parts of the country and population groups. However, the PLHIV estimates (2019) show treatment coverage gaps amongst Females (15-24 and 35-49) and males 25-29, hence these populations still lag in HTS uptake, know their HIV status and initiate treatment towards filling the gap on the gains of the epidemic control.

Since July 2019, Eswatini has been experiencing a declining trend of HIV positive cases identified for both males and females. The decline in HIV positive cases is expected as the country reaches epidemic control. However, Eswatini will continue to implement a strategic mix of testing strategies, such as index testing with fidelity and use recency data for case identification including deciding which testing models to adapt, build or drop in addressing a balance between access and efficiency.

To reach the remaining people living with HIV who do not yet know their status the principles of differentiated service delivery will help identify service gaps and adapt HTS services to client needs. The aim is to provide a systematic approach that will consider the core components of the first 95: mobilizing, testing and linking to prevention and/or treatment.

It simplifies and adapts HIV services across the HTS cascade, to reflect the preferences and expectations of various groups of PLHIV, while reducing unnecessary burdens on the health system. DSD supports shifting resources to clients; who are most in need and hence, in the context of HIV testing, is aimed at developing HIV testing strategies, targeted at identifying those PLHIV who do not yet know their status, with the aim of linking them to HIV care and identifying people who need and want HIV prevention services, including PrEP, with the aim of linking them to these services.

3.2 Framework for HTS DSD Model:

Eswatini adopted the six-step approach to differentiated HIV testing services as shown below in Figure 2:

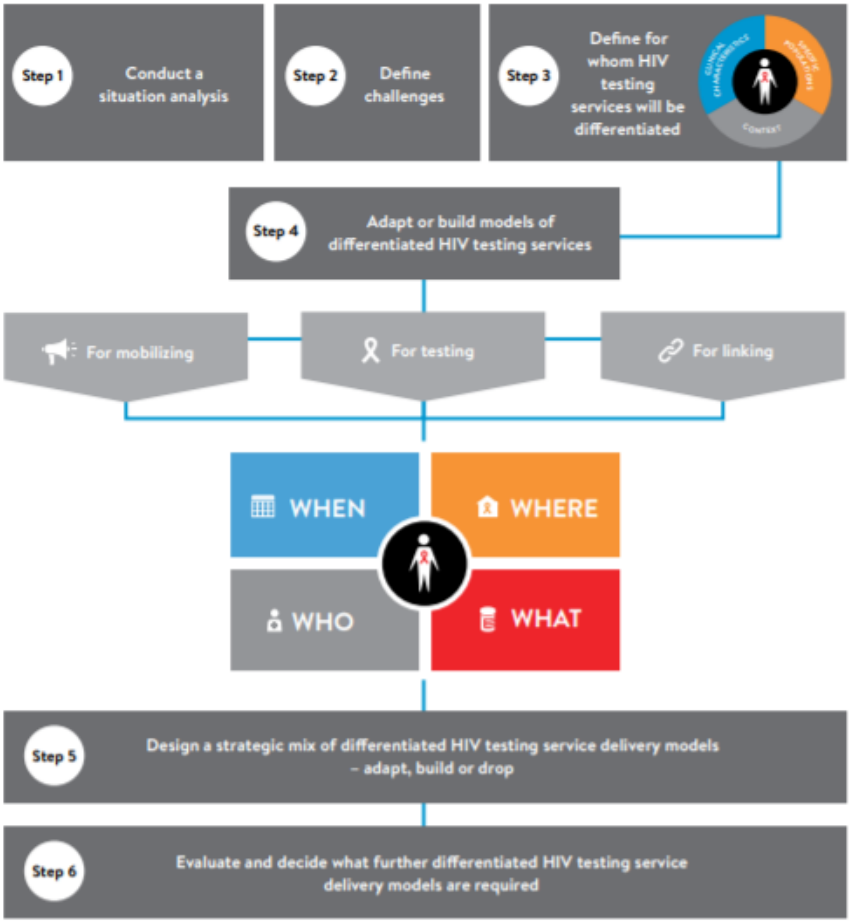

Figure 2: Framework for HTS DSD Model.

Source: ***http://www.differentiatedservicedelivery.org***

In Eswatini, HTS is differentiated because gaps have been identified thus highlighting missed opportunities for HIV testing, particularly among specific populations:

i) Opportunities to test and uptake of HTS for men continues to be lower than for women.

ii) Fewer adolescents are aware of their HIV status.

iii) HIV disproportionately affects key populations – men who have sex with men (MSM), people who inject drugs (PWID), sex workers (SW), but uptake of HIV testing services is limited.

iv) Sexual partners of PLHIV and children of PLHIV are not accessing services systematically.

When described as a service delivery model for HTS, these three components are necessary and should be included in the design of the model. Figure 3 below illustrates how mobilizing, testing and linking should be used in designing an HIV testing service delivery model.

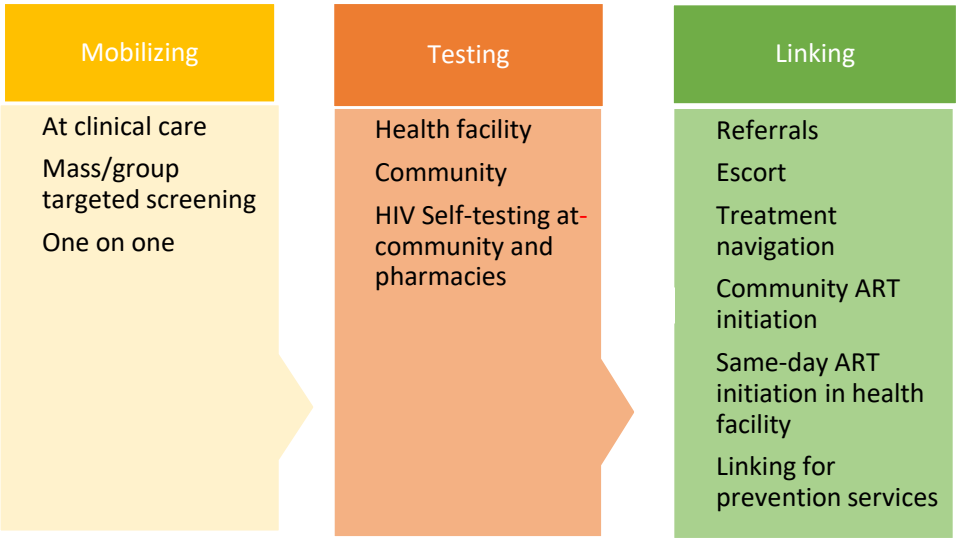

Figure 3: Core Components of HTS DSD

Alongside the core components, the DSD model shall use building blocks as a foundation of HTS DSD. These are:

i) ***What*** services are provided (the package of services)?

ii) ***Where*** are HIV testing services delivered (location of mobilizing, testing and linking)?

iii) ***When*** are HIV testing services delivered (time of day and frequency of mobilizing, testing and linking)?

iv) ***Who*** is providing HIV testing services (the cadres performing the mobilizing, testing and linking)?

	MOBILIZING	TESTING	LINKING
WHAT	For HTS alone or with other services	Methods	For prevention and treatment services
WHERE	Location of mobilization activities	Location of testing activities	Location of linkage activities
WHEN	Time of day or frequency	Time of day or frequency	Time for linking and frequency for tracing
WHO	Who mobilises	Tester	Who support and conducts linkages

Figure 4: Building blocks for HTS DSD

Goal:

To address HIV testing gaps by population in Eswatini.

Objectives:

1. Reach and identify PLHIV who are unaware of their HIV positive status
2. Reach and identify HIV negative persons at substantial risk for HIV acquisition
3. Reach and engage groups that lag behind and facilitate HTS
4. Use most suitable tools and strategies, tailored to specific populations
5. Ensure linkage of HIV positive individuals to prompt treatment initiation and of HIV negative persons at substantial risk to prevention services

3.3 HIV Testing and Prevention Services DSD Approaches:

a. Health facility-based testing

Health facility-based testing is typically provided in the context of provider-initiated HTS (PIHTS). In PIHTS, the healthcare worker (HCW) takes the initiative to offer HTS to clients with an unknown HIV status at all entry points.

As the country nears epidemic control, targeted HIV testing is being implemented in facility and community settings through the use of a screening and HIV risk assessment tool. This approach is designed to reduce unnecessary testing and prioritize groups at high risk of acquiring HIV. Routine testing is being implemented in clients with STIs, TB, pregnant and breastfeeding women and children with malnutrition.

Routine testing maximizes the number of individuals who know their HIV status and is important in removing the stigma associated with taking an HIV test. Routine testing, or opt-out HIV testing, should be conducted for clients presenting at the facility or in the community, prioritizing those with unknown HIV status.

Targeted testing should direct HIV testing services to persons who are unaware of their HIV status and at higher risk of HIV acquisition.

	MOBILIZING	TESTING	LINKING
WHAT	With other services and as standalone	HIV screening and risk assessment to identify eligible people; Testing conducted using Eswatini HIV Testing algorithm	For prevention and treatment services
WHERE	All facility entry points; Mobile outreaches	All facility entry points; Mobile outreaches	ART site; VMMC site; PrEP site
WHEN	As part of clinical care; Group HIV information sessions	For clients at risk; for diagnostic purposes	After receiving negative/positive result
WHO	HTS counselor; Expert client; GBV navigator; VMMC navigator; TB screening officer; nurse; doctor	HTS counselor; nurse; doctor	HTS counselor; Expert client; nurse; doctor

Figure 5: Building blocks for health facility based HTS

b. Community based testing

This model is typically offered in the context of client-initiated HTS. In client-initiated HTS (CIHTS), a client voluntarily seeks HTS. This approach emphasizes individual risk assessment and management by counsellors, and the development of an individualized risk reduction plan. CIHTS is available in the settings such as VCTs, mobile outreaches, campaigns and testing in workplaces and other community venues.

	MOBILIZING	TESTING	LINKING
WHAT	Engage missing population to increase testing coverage	HIV screening and risk assessment to identify eligible people; Testing conducted using Eswatini HIV testing algorithm	For prevention and treatment services
WHERE	Radio/TV ads; print media; client contact centers (social media, toll-free call center, community gatherings; places of employment	Places of employment; community	ART site; VMMC site; PrEP site
WHEN	Where gaps are identified	For clients at risk	After a negative/positive HIV result
WHO	HTS counselor; IPC agents; VMMC mobilisers; TB case finder; community mobiliser; employer	HTS counselor; nurse	HTS counselor; Expert client; nurse; IPC agents; VMMC mobiliser; community mobiliser; TB active case finders

Figure 6: Building blocks for community based HTS

c. Index testing

Index testing is a focused approach to HIV testing in which the household, family members (including biological children and adolescents) and sexual partners of people diagnosed with HIV (including those on ART) are offered and receive HIV testing services. Index testing services, active contact tracing and linkages to treatment services is an efficient means towards epidemic control. A social network-based approach to HIV testing is recommended for key populations and is an approach in which HIV testing services are offered to sexual partners as well as peers within the social network of key populations that have tested HIV-positive due to their

increased probability of also being HIV-positive. Safe and ethical index testing that respect human rights shall be practiced at all times to prevent coercion and intimate partner violence.

Active follow-up of contacts, trainings, and mentorship visits to facilities and communities is keen. Index testing services safety assessment including intimate partner violence and reporting is important.

	MOBILIZING	TESTING	LINKING
WHAT	Elicite contacts from HIV positive clients; Ensure confidentiality; Conduct IPV screening	Contact tracing; HIV testing (RDT); HIV self-testing (secondary distribution)	Escort services; Conduct telephonic follow-up for HIVST
WHERE	Facility testing settings; Community testing settings	Community testing settings; As arranged with contact; At home, at workplace, at school, health facility, at church	ART site; VMMC; PrEP; HTS site (HIV self-testing)
WHEN	Pre-test; Post-test; A few days after HIV diagnosis	After HIV screening and risk assessment; during the day or at night when there is adequte lighting	After a positive/negative result; After a positive/negative self-screen (HIV self-testing)
WHO	HTS Counselor; Expert Client; Nurse; Doctor	HTS Counselor; Client (HIV self-testing); Parent (HIV self-testing); Care giver (HIV self-testing)	HTS Counselor; Expert Client; Nurse, Doctor; Trained HIV self-testing distributor; VMMC mobilisers

Figure 7:Building blocks for index HTS

d. HIV self-testing

HIV self-testing (HIVST) is a process in which the client collects his or her own specimen (e.g. Saliva or blood) and then performs an HIV test and interprets the result by

him/herself, either alone or with someone he or she trusts. HIVST is a convenient and discreet approach, which has many possible advantages for users who may prefer additional ways to test for HIV.

HIVST has proven to be highly acceptable among various groups of users in diverse settings, particularly: key populations, men, young people, health workers, the general population, pregnant women and their male partners, and other couples and partners. Any positive HIV result must be confirmed by a HCW in accordance with the national testing algorithms. HIVST can be initiated by an individual or delivered by a provider in a community or facility-based setting.

HIVST can be client-initiated or provider-initiated. The provider for HIVST can be a trained pharmacist, an expert client or an HTS provider. Advances have been made to increase access to HIVST access by extending access in selected pharmacies. The age of consent for HIVST in Eswatini is 16 years.

	MOBILIZING	TESTING	LINKING
WHAT	Campaigns; engage clients wishing to test using alternative methods	Self-screening; screening under parental/care giver guidance	Conduct telephonic follow-ups; Positive screens for confirmatory testing; negative screen for referral to prevention
WHERE	Community structures; facility settings; pharmacy	At home; at workplace; at school; health facility; at church	HTS site; VMMC site
WHEN	During clinical care; during campaigns; church services	during the day and night as long as there is adequate lighting	After HIVST screen result
WHO	Trained HIVST distributors	Client; HCW; parent; care giver	Trained distributor; self with pharmacy distribution

Figure 8:Building blocks for HIV self-testing

e. Linkages

The HIV care continuum outlines the series of steps that people living with HIV go through, from initial diagnosis through treatment with medication. To achieve the full continuum of care, HIV programs require strong linkages between testing, prevention, clinical care, and social support services, which are often delivered by different providers working in diverse locations that range from community to Health facilities.

Following an HIV positive result, the client should be linked for ART initiation, preferably on the same day (Test and Start); however, some clients might have barriers to linkage that can be individual, interpersonal, community or related to the

health system that might hinder the client from initiating on ART. In order to alleviate these barriers, there is need to develop different linkages approaches to strengthen ART initiation such as implementing linkages case management at both facility and community level. For Linkages and retention to ART services refer to the LCM SOP, Integrated HIV Management of 2018 and DSD SOP for KP.

Following an HIV negative result, the client should receive information about HIV prevention strategies, including PrEP, and if the client desires, linked to PrEP services, preferably at the same location and/or on the same day.

DSD models SHOULD be discussed at every visit check which model they might be interested in. share IEC material on DSD models with the client.

f. Facility and Community PrEP provision.

PrEP is the use of ARVs by HIV-negative people who are at increased risk for acquiring HIV to prevent acquisition of HIV during periods of high risk. PrEP should be offered as an additional prevention choice for people at substantial risk of HIV infection, as part of a combination of prevention approaches that include HTS services, risk reduction counselling, diagnosis and treatment of STIs, male and female condoms, lubricants, ART for all HIV-positive people, and VMMC.

PrEP, including all current and introduced methods, can be offered in and outside of healthcare facilities to meet the needs of HIV negative clients who need and want HIV biomedical prevention.

Where	PrEP will be phased in across the country, and it should be offered from all facilities. Where there is provision of ART refills through mobile outreach, PrEP may also be provided through this service delivery model. PrEP specific models may also be valuable and can be implemented with support from the National PrEP Task Team.
When	PrEP should be offered during routine clinic opening hours. However, where the time for ART service delivery has been adapted for specific sub-populations, similar strategies should be applied for PrEP. Examples are providing PrEP after school hours for adolescents or

	during specific afternoon or evening hours for sex workers, depending on an assessment of the key population's preferences.
Who	Any health care worker who is trained to provide ARTcan also provide PrEP.
What	After initiating PrEP, the client should be reviewed after one month to identify a missed acute HIV infection upon initiation, monitor adherence and side effects, as well as for resupply of medicines; thereafter, the client should be reviewed every three months. HIV testing should be performed at every follow-up visit. The client should also be linked with other combination prevention strategies, such as VMMC and condom use.

Table 3: Building blocks for PrEP

3.4 Conclusion:

HIV testing is the critical foundation for treatment and prevention cascade towards achieving epidemic control. Various settings and approaches can be used to expand HIV testing and counselling and reach missing population. Availability of HIV self-testing offers new opportunities to reach populations that shy away from health facilities or seek privacy and confidentiality. Index testing is an evidence-based model that has been used to identify newly diagnosed PLHIV who may not have gone for testing especially men.

New methodologies may enable more focused HIV testing to include mapping of hotspots by recent infections using recency testing. A prioritization exercise should be performed at local level to determine which HTS service delivery models should be adapted or newly implemented in the immediate, medium and long term. Factors determining this prioritization include:

I. Coverage of testing in specific high-risk populations (benefits of linking to both treatment and prevention)
II. Absolute number of diagnoses by testing model
III. Cost of specific models (cost per person diagnosed)

IV. Yield of specific models. High-yield strategies may be more cost effective, but must also ensure sufficient coverage of testing. In settings where many existing approaches have declining yields and numbers of clients initiated on ART, alternative models should be prioritized.

V. Feasibility of implementation linked to available human and financial resources.

Chapter 4: Models of HIV Service Delivery in Eswatini

A standard package of care for all clients on ART should include:

- Initial clinical evaluation and categorization of clients.
- Clinical monitoring of care, which includes taking a history, physical examination, monitoring for side effects, Opportunistic infection screening and management, including provision of prophylactic treatment (cotrimoxazole [CTX], TB preventative therapy [TPT], fluconazole).
- Adherence and psychosocial support services.
- HIV index testing.
- Laboratory tests.
- Integration of HIV services with other health services such as
    - TB
    - Sexual and reproductive health i.e., family planning and cervical cancer screening and management
    - HIV prevention services including provision of condoms, STI screening and management.
    - Hepatitis B screening and management
    - Non-communicable disease screening and management
    - Mental health screening and management
    - Palliative care
- Routine and structured clinical follow-up visits.

For stable clients, Eswatini recommends a defined package of care, adapted from the WHO recommendations, to include the following:

- Less frequent clinic visits and less frequent medication pick-up (depending on stock availability).
    - 6 Months clinical visit and 6 months pharmacy visit for adults on 1st line with 12 months on ART, two recent consecutive undetectable VL, good adherence, willingness to be part of the 6MMD and have storage capacity.
    - 6 months clinical visit and 3 months pharmacy visit for eligible stable clients as above but not willing to take 6MMD or clients without storage capacity.

- 3 months clinical visit and 3 months pharmacy visit for Children 2 – 5 years, adolescents, KPs, HIV co-infected (TB, Hepatitis B &C, HIV and controlled NCDs, pregnant women.

- Community-based care
- Cessation of CD4 cell count monitoring if viral load testing is available and viral load is undetectable.

Stable adult client: In Eswatini, an adult client is regarded as stable (established in care) and qualifying for less intensive DSD that may include 6MMD if the following are fulfilled: • aged 18 years or older • on ART for 12 months or longer • **undetectable** viral load (two consecutive viral load measurements are undetectable with the latest one taken within 6 months of eligibility date) • no concurrent severe OIs or any adverse drug effects • no other uncontrolled medical condition requiring more frequent clinical consultations, and • Has at least two ART visits at the facility
Clinicians confirm the clients' eligibility and ensure enrolment is voluntary.

Table 4: Definition of stable adult client in DSD

The ART Delivery Models

Eleven models of ART service delivery are described in this document. These models are:

Facility based	**Community based**
More intensive	
Mainstream care (Standard of care / conventional model)	
Viremia clinics (high VL clinic / Challenge clinic)	
AHD	

Less intensive	
Fast track	Outreach
Facility based treatment clubs	Community-based ART groups (CAGs)
Teen clubs	Community commodity distribution (CCD)
Family based treatment clubs	
Dispensing lockers	

Table 5: ART delivery models by location and intensity

NB: The program will continue to learn and may adapt new evidence based DSD models to ensure diversity and coverage of different groups and sub-populations. This may include models such as ART vending machines and private pharmacies dispensing which are in implementation stage in other countries.

These models should be offered to all eligible clients. Clients should make their choices or appointed as illustrated below.

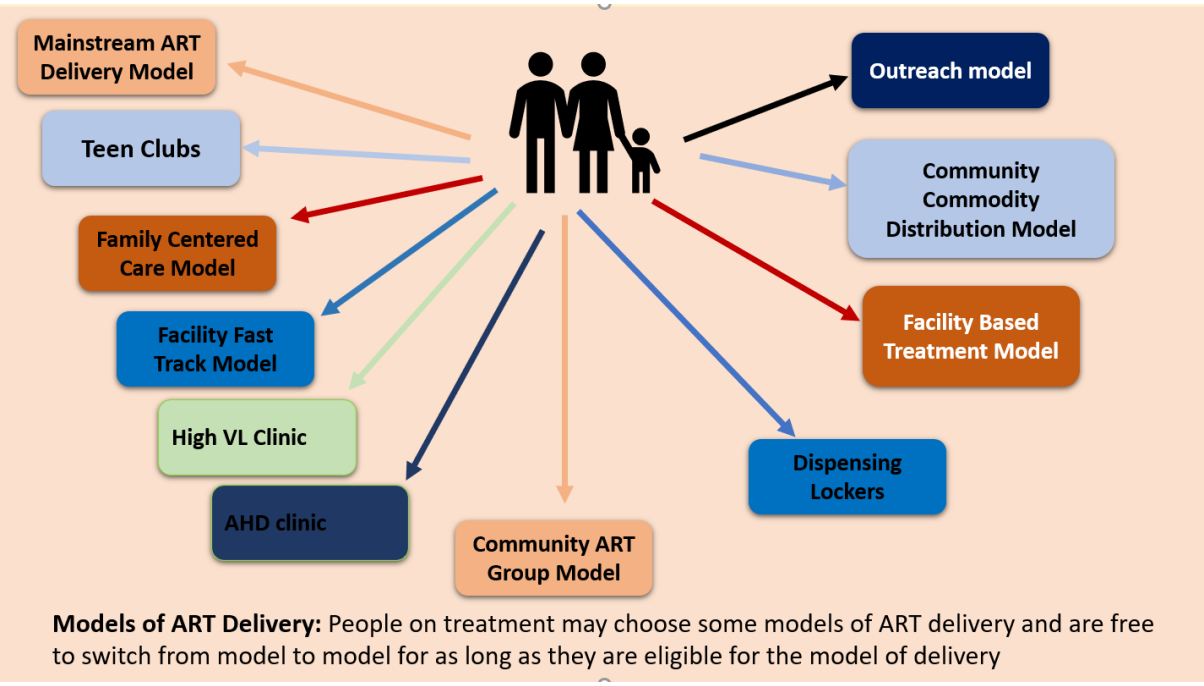

Figure 9: Available ART delivery models

4.1 Differentiated Service Delivery for ART Initiation

Facility and Community ART initiation

Community ART initiation will be implemented after which a client has to present to their nearest health facility for follow up. The following prerequisites have to be followed:

1. The community team should have a trained clinician to offer the ART readiness assessment, pre-ART counseling and ART initiation
2. The client should be willing to be linked to a health facility of their choice and must be able to attend a clinical visit at the health facility within the agreed period
3. The client is WHO clinical stage 1 and 2, and has no signs and symptoms of severe OIs or any comorbidities that may require further assessment or investigations
4. For clients returning to care, the client must have no previous history of treatment failure at time of disengaging from care.

In the event that these principles are not met the client should be referred to the facility for initiation and not be initiated within the community.

g. Differentiated Service delivery for ART initiation

1. With mild and moderate disease (CD4>200)

When	At HIV diagnosis	At initiation	2 weeks post initiation	Monthly	At 6 months	At 12 months
Where	Facility HTS room / Community	Facility clinician room / Community place	Facility clinician room	Facility clinician room	Facility clinician room	Facility clinician room
Who	HTS counsellor	Clinician	Clinician Expert client	Clinician Expert client	Clinician Expert client	Clinician Expert client

What	Referral for same day ART initiation	ART initiation	Adherence monitoring Clinical monitoring Laboratory monitoring	Adherence, Clinical and Laboratory monitoring as needed and monthly ART refill	Adherence, Clinical and Laboratory monitoring. Viral load assessment. 3 monthly refills if clinically stable and 6-month VL result undetectable. Patients with detectable and High VL results to be followed up according to the national ART guideline.	Adherence monitoring Clinician monitoring Laboratory monitoring, VL assessment. If clinically unstable and with detectable or high VL manage according to the national ART guideline. Move to annual VL assessment if 6-and 12- months VL result is undetectable If not yet on any DSD model, enroll on a DSD model provided patient clinically stable and 6- and 12 months VL result undetectable.

Table 6: DSD for clients with mild and moderate disease

Note: *During the first 6 months of treatment, clients should be reviewed monthly. ART refills should follow the clinical review schedule.*

2. With advanced disease (CD4<200 or WHO stage 3 and 4)

When	**At HIV diagnosis**	**At initiation**	**2 weeks post initiation**	**4 weeks post initiation**	**monthly**	**At 6 months**	**At 12 months**
Where	Facility HTS room Clinician room / Community	Facility clinician room	Facility clinician room	Facility clinician room	Facility clinician room	Facility clinician room	Facility clinician room
Who	HTS counsellor Clinician	Clinician Expert client	Clinician Expert client	Clinician Expert client	Clinician Expert client	Clinician Expert client	Clinician Expert client
What	Referral for management of HIV advanced disease TB LAM CRAG Rx of opportunistic conditions Appointment for initiation	ART initiation	Adherence monitoring Clinical monitoring Laboratory monitoring	Adherence monitoring Clinical monitoring Laboratory monitoring	Adherence monitoring Clinical monitoring Laboratory monitoring 1 month ART refill	Adherence, Clinical and Laboratory monitoring. Viral load assessment. 3 monthly refills if clinically stable and 6-month VL result undetectable. Patients with detectable and	Adherence monitoring Clinician monitoring Laboratory monitoring, VL assessment. If clinically unstable and with detectable or high VL manage according to the national ART guideline. Move to annual VL assessment if 6-and 12-

	with date aligned with management plan of opportunistic conditions					High VL results to be followed up according to the national ART guideline.	months VL result is undetectable If not yet on any DSD model, enroll on a DSD model provided patient clinically stable and 6- and 12 months VL result undetectable.

Table 7: DSD for clients with advanced disease

Note: *All clients with advanced immunodeficiency should be monitored closely (monthly or more frequently if indicated) until they are clinically stable.*

4.2 More intensive Differentiated models

4.2.1. Mainstream (Standard of care / conventional model)

This model mainly provides HIV care to clients who require close clinical attention and/or monitoring from nurses and doctors. All facilities have mainstream care to provide clinical services to clients who are/have:

- Clinical complaints
- Moderate to severe side-effects
- Suspected treatment failure (clinical, immunological and/or virological lack of response to ART) and recent regimen switch (less than six months)
- Adherence issues including missed appointments; provided other models do not provide unique solutions to the adherence problem
- Newly initiated on ART (less than 12 months on ART)
- Detectable viral load
- Pregnant and breastfeeding women (Note: Pregnant women should receive ART refills during their focused ANC visits, breastfeeding women can be eligible for clubs under special considerations)
- Co-morbidities: TB disease, mental illness and substance abuse, or other conditions as justified by the clinician
- Transfer-in clients with less than two ART visits at the new facility.

Note: The inclusion into mainstream care is not limited to the above list. The door for mainstream care is always open for those who may want to transition from other

models, as well as those who will no longer be eligible for the other models for various reasons.

4.2.2. Viremia Clinic (High VL clinic)

For people on ART who are not eligible for less-intensive DSDM due to high viral load, advanced HIV disease, or other health characteristics that require frequent contact with the health system.

4.2.3. Advanced HIV Disease clinic

For people on ART with high viral load, advanced HIV disease, or other health characteristics that require frequent contact with the health system. This is a healthcare worker-led model.

Clients seen under the Advanced HIV Disease clinic are the following:

1. Adults, adolescents and children over 5 years of age who have a CD4 count < 200 cells/mm3 (or CD4 count of less than 25% for children) or a WHO clinical stage 3 or 4.
2. All children who are less than 5 years and are HIV positive are considered to be having Advanced HIV disease

	Advanced Immunodeficiency	High Risk Groups
Children	Children 5 years and older: - CD4 count <200 cells/mm3 or CD4 less than 25% - WHO clinical stage3 or 4	Children 5 years and older: - CD4 count< 100 cell/mm3 or less than 25% Children under 5 years: - CD4 count < 100mm3 or CD4 less than 25%
Adults	CD4 count <200 cell/mm3 or WHO clinical stage 3 and 4	CD4 count <100 cells/mm3

Table 8: Definition of Advanced HIV Disease and High-Risk Groups

All clients presenting to the AHD clinic with advanced HIV (AHD) are at high risk for opportunistic infections including TB, cryptococcal meningitis, toxoplasmosis, PJP and other bacterial infections. HIV positive clients may also progress to advanced disease

while on treatment especially during the first year of treatment. The WHO prescribes a package of care for AHD patients. After one year on ART, children above 2 years who are stable and established in care can be transitioned to the less intensive DSD model.

Package of care for Clients with AHD:

1. Cryptococcus antigen (CrAg screening) and Fluconazole pre-emptive therapy: CD4 ≤ 100
2. Gene Xpert and Urine Lam for TB diagnosis.
3. TB preventive therapy: for ALL after Active TB is ruled out.
4. CTX: CD4 ≤ 350 or WHO stage 3 or 4.
5. Rapid ART initiation if no TB or /crypto meningitis (same day if possible).
    - ART should be deferred for 6 weeks if client is diagnosed with cryptococcal meningitis.
    - ART should be started within 2 weeks of starting TB treatment
6. Enhanced counselling and adherence support

Monitor client for the following after ART initiation

- Clinical Response
- Development of IRIS
- Non-adherence to ART.

TPT in AHD patients

- Stable AHD patients eligible for TPT should be started on TPT 4 weeks after starting ART.
- At TPT initiation, patients can be refilled for one month, then refills are aligned with ART refills.

Patients are kept in mainstream model until CD4>200 or virally suppressed.

4.3 Less Intensive Differentiated Models

4.3.1 Multi-Month Scripting and Dispensing- cutting across all less intensive models.

❖ **Introduction**

The Eswatini National AIDS Programme (ENAP) has been informed on the increase in numbers of clients requesting for refills beyond the current 3 months due to individual circumstances and preferences. Most of these clients are mobile populations working in the transport industry or they are working /studying beyond the country's borders. In the 2016 edition of the HIV treatment guidelines, the WHO strongly recommends less frequent clinical visits (3–6 months) for people stable on ART. Findings from different studies in Southern Africa have backed up this recommendation. A study on the effect of six-monthly medication dispensing of ART in Lesotho found an average retention of 96%; with 98% of the clients having undetectable viral load [11]. In Malawi, a qualitative assessment of provider and client experiences found that both clients and providers perceived 6-month ART dispensing as highly feasible and acceptable [12].

Based on this and more scientific evidence, the Eswatini Ministry of Health and PEPFAR agreed to adopt the 6-month prescriptions and refills (6MMS/D) strategy for Eswatini. The Ministry of Health has therefore led efforts to develop standard operating procedures (SOP's) to guide implementation of the Multi-Month (MM) prescriptions and refills in public health facilities, in line with the National differentiated service delivery (DSD) guidelines.

❖ **Inclusion Criteria**

Generally, clients who have received ART for at least one year, and have no adverse drug reactions that require regular monitoring, and have good understanding of lifelong adherence and evidence of treatment success are eligible to be enrolled in this DSD model. Specific criteria guiding the enrollment into this model include the following:

- On ART for at least 12 months

- Two consecutive Undetectable Viral Load with the latest result from a sample taken not later than 6 months
- Not pregnant or planning to get pregnant in the next 12 months
- Clinically stable clients
- No Opportunistic Infections or Uncontrolled NCDs
- Meets proper medicine storage and safety requirements
- Mentally stable with no history of alcohol or substance abuse
- Willingness to enroll onto this model.

❖ **Exclusion Criteria (6MMD)**

- Recently transitioned to an optimized regimen within a period of 6 month
- ART Clients on second and third line regimen.
- Not willing to receive 6 months' refills
- Not disclosed
- Does not meet proper medicine storage requirements.

❖ **For Eligible Clients**

Minimum care package/services (what)	• Comprehensive clinical review and medication refill • Adherence assessment and support • Enhanced adherence counselling to re-enforce the adherence practice • Lab monitoring as per the Guidelines
Location of Service delivery (where)	• Health Facilities / Community based outreach

Provider of Services (who)	• Experienced Nurse / Doctor / Pharmacy personnel
Frequency of Service Delivery (when)	• Every six months for a comprehensive clinical review and medicine refill.
Additional Support required	• Additional adherence counselling and support by case managers (at the facility) and community adherence groups • Encourage disclosure • Involve treatment/adherence supporters at home.

Table 9: Multi-Month Scripting and Dispensing Characteristics

❖ **Roles and Responsibilities in Multi-Month Prescription and Dispensing**

Expert Clients • Introduce what is Multi-month prescription and dispensing • Education on the benefits of Multi-Month prescriptions and inclusion Criteria • Conduct assessment, recruit eligible clients and link to clinician for enrolment in MMD • Client follow up and adherence assessment • Send SMS or call clients to remind them of next clinical visit • Follow up on Client reports in case of lost medicines
HTS Counsellors Education on the benefits of Multi-month prescriptions and inclusion Criteria
ART Nurses • Assess Client's eligibility for Multi-Month Prescriptions • Assess for Multi-Month Medicines storage and security, and document

• Education on the benefits of Multi-month prescriptions and inclusion Criteria • Enrol Clients for Multi-Month Prescriptions • Provide Multi-Month Prescription form and document in register and CMIS • Schedule and communicate next clinical visit • Communicate viral load results to the client
ART Clients • Discloses HIV Status to a close relative for support • Provide information on readiness to receive Multi-month Prescriptions • Reports any medicines loss or threat to medicines security • Attends clinical reviews every 6 months • Presents to the facility if experiencing any undesired symptoms
Treatment supporter • Supports Client with treatment adherence • Assess any challenges with the treatment including side effects
Community Health Worker/Community Expert Client/Champions • Conducts community wide education on the benefits of Multi-month Prescriptions • Conducts home visits to check on client as needed • Support Household based ART deliveries for Clients having challenges presenting to the facility for refills or those ART Clients reporting medicines loss
Pharmacy • Review medicines storage and security assessment findings • Dispense the 6 months' prescriptions • Document in the electronic systems and in the 6 months' multi-month refill log book

Laboratory • Improve turnaround times for availability of VL results for all ART Clients to facilitate MM eligibility screening.

Table 10: Roles and Responsibilities in Multi-Month Prescription and Dispensing

❖ **Checklist for clinical visits**

Clinicians / nurses should ensure that clients all clients on less intense DSD models are taken through the checklist for client ART clinical visits, which should happen every 6 months.

Checklist for client ART clinical visits conducted every 6 months
• Take Clinical history, do physical examination and WHO staging or WHO T-staging • Review Medicine storage security and document any medicine losses • Assess for and manage opportunistic infections (OIs) and investigate all presumptive cases for TB • Check and review if there are any available test results that are still to be communicated to the client • Ensure blood collection for VL and communicate results through SMS platform, and ensure that clients with un-suppressed VL are called back to the facility for further management. The VL results must be documented in the chronic care file and CMIS. • Assess any changes in the psychosocial well-being of the client that may influence chronic ART care • Ensure that all necessary fields are completed in the chronic care file, appointment registers, client booklet and the client management information system (CMIS). Prescription forms should be fully completed • Screen the client for continued eligibility on the preferred model and find any relevant feedback from the client

- Assure integration of other components of Care: FP, TPT, NCDs, cervical cancer screening
- Document significant incidents in the client's file

Table 11: Checklist for client ART clinical visits conducted every 6 months

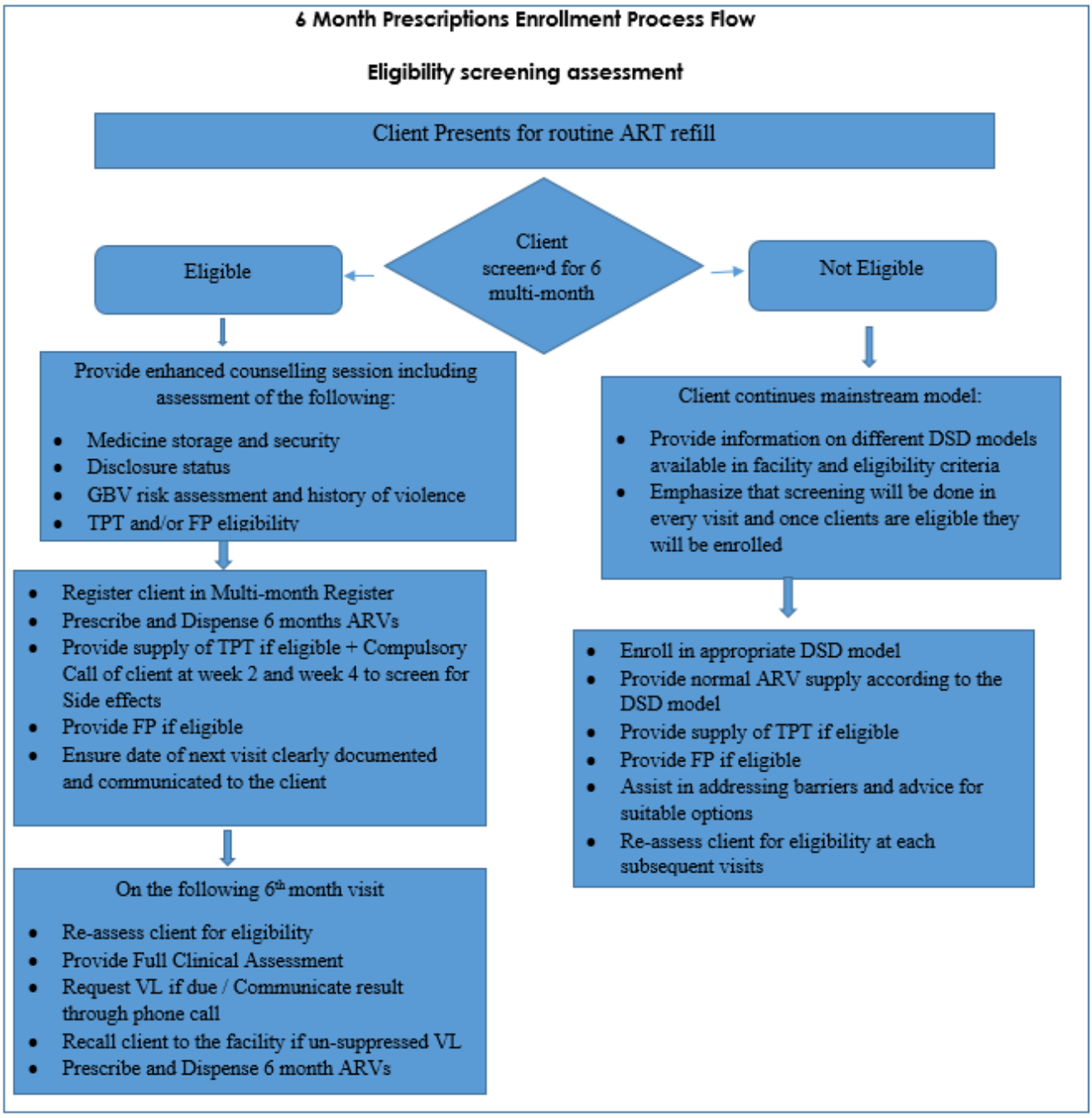

Table 12: 6 Month Prescriptions Enrollment Process Flow

4.3.2 Facility Based Individual Differentiated Model

4.3.2.1 Appointment spacing without fast track

For recipients of care who meet specified eligibility requirements, clinical visits are less frequent than in the undifferentiated model and recipients of care receive 3-6 months of ART at a time (multi-month scripting, MMS; multi-month dispensing, MMD). Unlike the fast track model, all appointments include a full clinical consultation.

4.3.2.2 Fast track + appointment spacing

The trademark of the less intense models including fast-track model is the significantly shortened amount of time that stable clients spend waiting for ART refills in the health facility. To do this, ART refill visits must be considered separate to clinical visits. In the fast-track model, stable clients receive ART refills through a quick pick up of their pharmaceutical package at their health facility. They are not expected to undergo the regular clinic processes of vital signs, weight measurement, but have to do at least the pill count. Clients on this model should be screened for TB and other infectious diseases (e.g., COVID-19). Therefore, it is important for comprehensive clinical review to be conducted during clinical visits to ensure that clients are well enough to be fast-tracked at the next visit.

It is also important to empower fast-tracked clients to be able to recognize and report signs and symptoms that require the attention of a health care worker even if this happens before their next scheduled visit... Further, if a health care worker notices that a fast-track client may require clinical assessment due to changes in clinical conditions or other reasons such as defaulting treatment, they should be referred back for mainstream care.

Clients in fast-track model can have routine laboratory tests strategically requested to allow results to be fully communicated during the clinical visits.

In the majority of facilities, significant waiting times occur at two points:

i) While waiting for clinical consultation by a doctor or nurse

ii) At integrated dispensing points (time inefficiencies are often due to the mix of those requiring additional time for medicine explanation and those experienced with their treatment requiring less time for medicine and dosing information).

Where possible health facilities should have chronic dispensing windows to cater for clients on this model to ensure that clients spend little time at the Pharmacy. In preparation for clients coming in to refill their medicines, facilities should make efforts to have patients-ready-packs on the day of the refill to shorten clients waiting time. For M&E attention: Pharmacy staffs should be able to dispense ARVs during this visit, the previous system was not able to show clinician prescription.

Note: Thorough considerations of client flows at facility level are required to address such possible bottlenecks. The components of services provided at fast track are summarised in Table 2.

Summary of the Fast-Track Model considerations		
	ART Refill visits	**Clinical Consultations**
WHAT services	• ART refill • TB or other infectious diseases (e.g., COVID-19) screening • TPT refill • CPT refill FP refill NCD refill Adherence assessment	• ART prescription and/or refill • TPT initiation or refill • CPT refill • TB or other infectious diseases (e.g., COVID-19) Screening • Cervical Cancer screening* • Adherence Support • Comprehensive clinical reviews • NCD Screening • Mental Health • Family Planning • Laboratory Monitoring (VL, CD4 count, HB, Creatinine and LFTs) • ART Prescription • Cervical Screening* • NCD Screening and management • Mental Health

		• Family Planning
WHERE	• ART clinic - nurses collect refills at pharmacy on behalf of clients and prepare patients-ready-packs, then distributes at ART clinic OR • Dispensary - clients go straight to pharmacy for medicine pick up (If available, Chronic dispensing window)	• Health facility / ART clinic • Laboratory
WHEN / Frequency	• Every 3-6 months	• Every 6 months
WHO	• Pharmacist/ Pharmacy Personnel (if ART is dispensed); or • Nurse/Expert client (if ART is distributed)	• Clinician (doctor or nurse) • Pharmacist/ Pharmacy Personnel • Laboratory Personnel
Indications for referral to mainstream care	• Presence of signs and symptoms of diseases that need frequent reviews or close follow-up. • Presumptive for TB • Missed appointment/ defaulting treatment • Detectable VL • Pregnancy (to MNCH DSD)	
*Cervical screening should be done annually for female clients		

Table 13: Summary of the Fast-Track Model considerations

Note: Routine data should be provided by the ARV refill encounter prescription triplicate filled during the previous clinical visit. However, ensure that the actual visit date of refill of the client is recorded as outlined in the standard operating procedures (SOPs).

❖ **Before/afterhours Refill**

In this model, clients come in for their comprehensive clinical consultations and refill outside normal working hours. This model is important to accommodate clients who are not able to come to the health facility during normal working hours due to work commitments and other considerations. Where possible, facilities should arrange to have medicines ready and available for these clients, this arrangement should be considered if the pharmacy personnel will not be available during the consultation/refill time.

4.3.3 Facility Based Group Differentiated Models

4.3.3.1 Facility-based Treatment Clubs (FTCS)

❖ **General Clubs**

Facility-based treatment clubs can either be general groups, i.e., treatment clubs (FTCs) or for specific sub-populations (e.g., teen clubs). To maximize efficiencies in the delivery of ART care, a group of stable clients is enrolled in a treatment club where they receive their ART refills, symptom screening, psychosocial and adherence support. FTCs meet four times per year as a club and receive their treatment refill within the club. Following every other club visit, i.e., every six months, each member of the club will have a clinical consultation following their club's meeting. Clients will be enrolled into an FTC by an expert client (EC) or nurse.

Facility-based treatment groups serve the interest of a group. Through the group care model, generic clinical services are provided at group level, resulting in shared general review time, as well as shared dispensing time. Clinically significant matters (e.g., an illness) should, however, be addressed at individual level through referral back to the mainstream care.

Note: The treatment clubs must create a forum for the group members to get to know each other and to comfortably discuss any matter that promote adherence to ART care. Group discussion topics should be varied and must be aimed at addressing the psychosocial needs, as well as knowledge gaps of the group. Table 14 summarizes the services provided for facility-based treatment clubs.

Summary of services provided in facility-based treatment club		
	ART Refill visit	**Clinical Consultation**
WHAT Services	• ART refill • TB or other infectious disease (e.g., COVID-19) screening • Group counselling • Adherence support • TPT refill • CPT refill NCD & FP refills	• ART prescription and/or refill • TPT initiation or refill • CPT refill • TB or other infectious disease (e.g.COVID-19) Screening • Adherence Support • Clinical Reviews • Laboratory Monitoring (VL, CD4 count, HB, Creatinine and LFTs) • Cervical Screening* • NCD Screening • Mental Health • Family Planning
WHERE	• ART clinic	• Health facility / ART clinic • Laboratory
WHEN / Frequency	• Every 3 months	• Every 6 months
WHO	• Nurse • Expert client/Adherence counsellor • Pharmacy Personnel	• Clinician (doctor or nurse) • Pharmacy Personnel • Laboratory Personnel
Indications for referral to mainstream care	• Presence of signs and symptoms of diseases that need frequent reviews or close follow-up. • Presumptive TB • Missed appointment/ defaulting treatment • Detectable VL	

	• Pregnancy
*Cervical screening should be done annually for female clients	

Table 14: Summary of services provided in facility-based treatment club

There are several adaptations or flexibilities that can be utilized within the FTC model. The recommendation is for the group to have a maximum of 20 clients. The club can be facilitated by a clinician, nurse, pharmacy personnel, or expert client with appropriate training and support. Further, club members who develop a strong support network may consider becoming a community ART group, as described below.

Where appropriate, specific adaptations can also be made for sub-populations that require additional considerations. For example, clients with stable, non-communicable diseases may be eligible or "men's-only clubs" offered during convenient times for men (e.g., after hours) may be offered.

Note: Clubs sessions are health care worker led and efforts should be made to have medicines brought to the club session/meeting room.

4.3.3.2 Facility-based teen clubs

Teen clubs are a specific adaptation of the club model designed to support adolescents. The eligibility criteria for teen clubs is flexible to support adolescents, including those with detectable viral loads. Teen clubs providing ART refills should have a clinician to support this service. Teen clubs should be divided by age and development level, and the size of the club should be adjusted based on the capacity of the facility.

❖ **Goal**

- To have virally suppressed ALHIV and CLHIV

❖ **Objectives of Teen clubs**

- Supporting ALHIV to understand that living with HIV is not the end of life but one can still live life to the fullest and be great with their positive status.
- To capacitate ALHIV with information that strengthens self-acceptance messages instead of blaming someone for their HIV status and do away with

anger but take responsibility for their lives following the general life cycle of life (birth, test, be influential, die).

- This defines the general expectations of life as a woman gives birth, children are tested and they are expected to grow to be influential individuals in society, making a difference irrespective of their HIV status before they die as everyone is expected to.
- To remind them that they will not die because of their status but because we will have to die (Hope) and to help them focus in the future.

❖ **How the teen club meetings are conducted?**

- The facility has the main teen club which is subdivided into four teen cells using the age bands <10, 10-14, 15-19 and >19.

❖ **Teen Cells:** C&ALHIV on ART who know that they living with HIV (with full disclosure)

- 5-9 years (siblings of adolescents in teen club
- 10-14 years
- 15-19 years
- 20-24 years

All teen cell members come on the same days and then go into their specific teen cell-meeting place.

❖ **Teen club focal person:**

- The facility has a teen club focal person who ensures that teen clubs are organised according to the teen club SOPs guided by the national teen club curriculum.

❖ **Teen leaders/peer champions (Older adolescents and youths):**

- Share knowledge they have gained in the past as some have been in the club for more than 7 years. Teen leaders run teen cells allocated amongst themselves in rotational fashion; each teen cell will have two teen leaders at a time.

❖ **Why teen cells**

To cope with the increasing number of teen club members and the diversity of age related needs, the facility sub-divides the large teen group of over 100 members to 'teen cells' based on the ages of the teen club members.

Key considerations are:

- Age of the child or adolescent
- Grade at school
- Level of Maturity and related health care needs
- Other consideration could include gender, stable on ART or not (Adherence, viral suppression, psychosocial issues, sexual reproductive issues and clinical conditions)
- Disclosure status

Teen cells also allow for the selection of appropriate health education topics during the teen cell meetings

Adolescents who started in their early ages and have been on treatment for quite some time (over 7 years for some) might need more focus on adherence, nutrition, positive living while some topics may be relevant to new members or newly diagnosed ALHIV and may be less interesting to older experienced ALHIV. In addition, the older group are at a stage of dating with some being sexually active but might not be able to discuss deeper on such issues as FP, relationships due the presence of younger members.

Freedom: The younger group has from our small talks revealed that it is difficult for them to learn in the mixed group because they feel like every question posed is answered by the older teens thus, they are not free to learn or participate.

Teen cells give members opportunities to freely discuss what they go through on their daily lives without the fear of being mocked at by the older group.

A teen club curriculum is available for session preparation and information

The building blocks of the teen clubs they may vary because of resources but generally, they should follow the example given below:

Building blocks	Clinical visits	Medication refill visits	Psychosocial visits

When	▪ 2–4 years old: every 3 months ▪ 5–9 years old: every 6 months ▪ Older children and adolescents: every 6 months *Select times and dates that do not compromise school attendance*	Every 3-6 months *No need for more frequent than every 3 months*	Every 1-6 months *The frequency and duration of psychosocial support depends on the child's and/or caregiver's needs. It could be part of the package of support at ART refill visits*
Where	▪ Facility closer to home if feasible ▪ At bigger ART sites if primary health care is not available ▪ Outreach services that provide care for adults	▪ Clinic ▪ Outreach services ▪ Home-based ART refills ▪ Community-based organizations	▪ Clinic ▪ Outside facility (included in the refilling package or community group supports) ▪ Virtual: if low numbers of children make support groups unfeasible/ COVID -19 restrictions
Who	▪ Nurses ▪ Doctors	▪ Nurses ▪ Doctors ▪ Lay providers	▪ Clinicians-Nurses/Doctors ▪ Lay providers (Expert clients, mentor mothers, Peers) ▪ Social workers Psychologists
What	Clinical care package: ▪ Physical examination ▪ TB screening, ▪ Nutritional assessment, immunization ▪ Dosage and formulation checks and adjustment ▪ Lab tests: viral load test every 6–12 months	▪ ART refill ▪ Prophylaxis CTX+/-TPT ▪ Adherence assessment ▪ Disclosure process assessment Referral to clinicians/ other services ▪ Condoms / FP for 15years and above.	▪ Peer support groups ▪ Psychosocial support for caregivers and preadolescence children ▪ Individual peer support for caregivers ▪ Adherence assessment ▪ Disclosure process assessment ▪ Referral check

Table 15: Teen club building blocks

Guardian/Caregiver Model

Orientation of caregiver in caring for the child living with HIV

Having a child with HIV is difficult for parents and caregivers an assessment and counselling for the parent is important to accept the status so she can be able to be committed in caring for the child. ART has helped a lot but there is still need for continuous monitoring of adherence, and disclosure of the condition to the child still needs to be done before 10 years of age.

A common difficulty faced by caregivers is economy towards the transport fees to the facility and lack of food and other needs of the child. Father involvement and other relatives is essential. A plan for income generation should be discussed to support the treatment plan of the child.

	Meetings	
When (frequency of offer of the service)	Quarterly	
Where the service is provided	Facility	
Who (Target population and who is providing the service)	Targeted population: Guardians of children and adolescents living with HIV Providers: Nurses and Support Staff	
What services are provided	Health education Supporting adolescent living with HIV	

Table16: Guardians and Caregivers

Transitioning Clubs

The goal of transition is to ensure the provision of uninterrupted, coordinated, developmentally and age-appropriate and comprehensive care before, during and after the transition to ensure optimized treatment, virological suppression and retention in care

The process of transition involves the engagement of multiple supporters, including the children, adolescents, and youth themselves and their treatment supporters, such as caregivers, various providers, partners, peers, and others. There is no one-size-fits-all approach to implementing the process of transition for children, adolescents, and youth. Each person has their own specific needs and scenarios, and thus, while general approaches can be shared, individual transition plans need to be tailored to each person. In recognizing that the process of transition needs to be individualized, it is important to ensure the inclusion of important components in planning and supporting transition.

Among clients, several key factors may vary, such as their mode of HIV infection, their system of treatment support at home and within the community, their relationship with care providers, and their experience with the health sector leading up to the beginning of the transition, including care models, time on treatment, and treatment regimen. These factors have implications for planning the transition of care and treatment and for identifying barriers to and facilitators of transition to make it a success.

It is important to note that transition of care is not the same as referrals (sending a client to another service), transfers (requiring the movement of a client from one service department to another), or simple appointment blocking by age (age cohorts wait together for their care and treatment).

- **Key components of support for adolescents living with HIV during the transition process**
  - Provision of adolescent-friendly services.
  - Understanding the goal of ART and clear understanding of VL results
  - Identification of developmental changes/ delays.

- Fostering peer-to-peer and providing psychosocial support to enable the adolescent to cope with the typical changes, feelings and worries of adolescence (which may include relationships, employment and education).
- Supporting self-management of medication, appointments and referrals
- Supporting disclosure to enable sharing of their HIV status to other healthcare workers, peers and family.
- Fostering the understanding, that transition is inevitable.

❖ **Eligibility criteria**

1. Adolescent ≥16 - 24 years
2. HIV-positive and receiving HIV care/treatment the facility
3. Is willing to disclose HIV status to his/her peers

	Clinical consultation	Refill
When (frequency of offer of the service)	6monthly	3 – 6 months
Where the service is provided	Facility	Facility
Who (target population)	Adolescent ≥16 - 24 years	Adolescent ≥16 - 24 years
Who (Who is providing the service)	Clinician, expert client	Clinician, Pharmacist, Expert client/Peer supporter
What services are provided	ART refill TPT/ CPT initiation or refill TB Screening Adherence Support Clinical Reviews Laboratory Monitoring (VL, CD4 count, HB, Creatinine and LFTs) ART Prescription Index testing Cervical cancer Screening Family Planning	Psychosocial support ART refill TPT /CPT initiation or refill TB Screening Index testing

Table 17: Transitioning clubs

Roles and responsibilities in strengthening support for ALHIV transitioning to adult care:

Health care workers	Peer leaders	Individual client
• Refer patients to 16+ year peer –peer meetings • Ongoing counselling (Positive living, Adherence, Nutrition, Family planning, PMTCT etc.) • Assess, plan, develop and evaluate individual plans for all patients • Screen for opportunistic infections • Clinical review, investigation, diagnosis and management all conditions, illness and injuries • Patient monitoring and management including stepped up adherence counselling (SUAC) and management/referral of high viral loads • Provision of Sexual and reproductive health (SRH) education and other services • Prioritize health problems and intervenes appropriately to assist patients in complex situations	▪ Attend and actively participate in trainings and meetings. ▪ Actively protect confidentially of all participants. ▪ Understand and be familiar enough with the session materials to lead Peer education sessions on various topics ▪ Work closely with the facility staff (Nurse and ECs) in preparation and conduct of adolescent peer-peer meetings ▪ Provide peer psychosocial support and one-on-one sessions based on their own lived experiences ▪ Work with the facility to identify and bring the LTFU back to care ▪ Follow up on referrals e.g., nurses and social workers ▪ Work with the team to ensure completion attendance forms and compilation of progress reports	▪ Adhere to medications and psychosocial support sessions ▪ Attend appointments with their caregiver/treatment supporter and eventually independently ▪ Increase ART, general health literacy, sexual and reproductive health literacy ▪ Identify a treatment buddy or school based supporter ▪ Communicate with their provider or counsellor (regarding challenges, concerns, questions etc. ▪ Work to build self-esteem and capacity for self –management ▪ Discuss any changes in their caregiver, social support or relationships with partner (for older clients) ▪ Navigate disclosure to HCWs, Peers and other support.

• Provide ART refills +/- Prophylaxis (CPT, TPT) for all patients • Coordinate referrals e.g., doctors, social workers, community services • Review outcomes in monthly MDT meetings • Assist adolescents to set and achieve goals for independence and self-management of care as a way of recognizing their increasing maturation, capacity to make choices, and independence		

Table18: Roles and responsibilities in strengthening support for ALHIV transitioning to adult care:

❖ **Checklist for successful transitioning adolescents to adult care**

- Acceptance of his/her chronic illness and orientation towards future goals and hopes, including long-term survival.
- Establishment of a good working relationship with healthcare workers at the paediatric/adolescent site
- The client has learned the skills needed to negotiate appointments and multiple providers in an adult practice setting.
- The client has achieved personal and medical independence and is able to assume responsibility for his/her treatment and participate in decision-making
  - Identify symptoms and describe them.
- Arrives to appointments on time and receives uninterrupted comprehensive medical care.

- Request prescription refills correctly and allow enough time for refills to be processed before medications run out (not *missing visits*)
- The client is receiving psychosocial support (peer, family, facility) and entitlements are in place (home care/ housing, transportation).
- Sexual reproductive health and family planning including condom use skills

❖ **Monitoring and evaluation**

Facility staff will be responsible for ensuring and maintaining proper and accurate record of all documentation regarding implementation of the treatment clubs including tracking indicators to monitor the success of the program. Indicators include (but not limited to);

1. Number of teens enrolled for the treatment club
2. Proportion of enrolled teens attending a club meeting as per appointment register
3. Proportion of enrolled teens who are virally suppressed

4.3.3.3 Family Centred Care Model (FCCM)

The family centred care model (FCCM) is a model where an HIV positive child is provided HIV care and treatment services together with at least one other HIV infected family member. The main objective of the FCCM is to improve paediatric retention and ART adherence. The model will also promote family HIV testing through actively offering HIV testing services to all family members of the index HIV positive individual.

A **"family unit"** in the context of this FCCM is defined as at least one HIV positive child receiving care and treatment services **PLUS** at least one other family member staying together with the child.

A **child** is defined as an individual who is less than 10 years of age.

A **family member** is defined as someone who is related to the child either by blood or by adoption; or someone residing in the same household as the index child.

❖ **Eligibility criteria for enrolment into FCCM**

An index child will be eligible for the family centred care model if:

- Less than 10 years
- HIV-positive and receiving HIV care/treatment the facility
- He/she has at least one family member (whether HIV negative or positive) who is willing to attend and support the child during clinic visits and at home.
- If caregiver is HIV positive, they will be invited to receive HIV care and treatment services at the same facility with the index child (if they already receiving service elsewhere)
- There is willingness by members in the FCCM to disclose HIV status to each other.

	Clinical consultation	**Refill**
When (frequency of offer of the service)	1 - 6monthly (to align with child welfare & MBP visits	1-3 months
Where the service is provided	Facility	Facility
Who (Target population and who is providing the service)	Index child and family members enrolled	Index child and family members enrolled
What services are provided	ART refill TPT/ CPT initiation or refill TB Screening Adherence Support Clinical Reviews Laboratory Monitoring (VL, CD4 count, HB, Creatinine and LFTs) ART Prescription Cervical Screening NCD Screening + management Family Planning	ART refill TPT initiation or refill CPT refill TB Screening

Table19: Family Centred Care Model

❖ **Summary of the FCCM Standard operating procedures**

Enrolling clients into the FCCM	**Handling/Preparation of family folders and family appointments**	**Family follow up visits- when family arrives at facility**
Expert clients are primarily responsible for: 1. Identifying eligible index children already receiving care or treatment services 2. Invite eligible family members for enrolment into the FCCM using the FCCM invitation letter or through a phone call 3. Creating a family folder (family name and family unit number) for all eligible family units who agree to be enrolled into FCCM 4. Completing a family unit enrolment form (*attached*) to be inserted into the family folder 5. Placing all individual chronic care files for the members into the family folder	**Expert clients/ Data Clerk** will: 1. Enter the family appointment date into the Appointment Register 2. File the family folder according to the family unit number in a designated filing cabinet 3. Retrieve the family folders in preparation for the visit **Nurses** are primarily responsible for: 1. Scheduling the same appointments for all individuals in the family unit enrolled in the FCCM 2. Review the individual chronic care files to ensure members are not due for any particular lab tests, results etc. 3. Ensure the results for bloods drawn (CD4 ±VL, FBC, LFT, RFT, Hb etc.) at the last clinical visit are available	**Expert client** will: **1.** Document the family's attendance in the appointment register 2. Screen the individual family members for TB and document all presumptive cases in the presumptive TB register and manage according to the Eswatini guidelines 3. Take the individual family members' weight, MUAC, +/- height and document these on the client's appointment booklet 4. Conduct pill counts and re-assessment of adherence and document this in the individual chronic care files **Nurses** are primarily responsible to: **1.** Provide education/counselling's to caregivers on how to take care of an HIV positive child 2. Take a history, do physical examination, assess nutritional status as per the standard procedures 3. Manage any opportunistic infections and ailments 4. Review each family member's adherence and address any

6. Sensitizing caregivers regarding testing of other family members who are HIV negative or have unknown HIV status 7. Send reminder SMS to the family 3 days before their appointment visit	4. Submit the files/ prescriptions the pharmacist The **pharmacist** (hospital/health centre) or **nurse** (clinic) will: 1. Prepare the medication for scheduled FCCM clients	barriers to adherence with the family 5. Ensure baseline/ follow up blood assessments are done according to the Eswatini national guidelines for all family members on the same day. 6. Re appoint the family unit for HIV care and treatment services on the same day The Pharmacist/ Nurse will: 1. Dispense prepared medication for the family (and any other needed based on the history and examination) The HTS counsellor will: 1. Provide testing services to family members with unknown sero status an ensure LCM.

Table 20: Summary of the FCCM Standard operating procedures

4.3.4 Community-based group model

4.3.4.1 Community ART groups (CAGs)

Community-based ART groups (CAGs) are a community-initiated strategy to reduce adherence barriers related to difficult access to care. CAGs have been commonly implemented with hard-to-reach groups and in rural settings. They rely on pre-existing social networks such as support groups. In urban settings, it is recommended that CAGs be promoted for groups of family members and workmates.

A CAG is a self-forming group and must have a minimum of two clients (referred to as "treatment buddies") and a maximum of six clients. The efficiency (time and monetary) of this model is through cost sharing achieved by the rotation of clients

(group representatives) in visiting the facility to collect ART treatment for group members.

The group members must meet at least 24 hours prior to the members' scheduled refill date. During this initial meeting, the booklets for group members are handed over to the group representative. The representative, with support by the group leader, will also ask general screening questions as elaborated in the standard operating procedures. Unwell group members should accompany the representative to the clinic so that their condition is reviewed.

Since every member must have at least one clinical review in six months with a nurse or a doctor, the length of period refill is dependent upon the size of the group. The smaller the group, the less frequent the refills, and the bigger the group, the more frequent are the refills, e.g., "treatment buddies" receive three-monthly refills while a larger group of six will receive monthly refills. Figure 10 provides an illustration on how the group size determines the refill appointment periods.

Number of members in group	Individual member clinical visit					
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
2	√	X	x	√	x	x
3	√	X	√	x	√	x
4**	√	X	√	x	√	√
5**	√	X	√	√	√	√
6	√	√	√	√	√	√

Key

√	Group member scheduled to visit
X	No member scheduled to visit
**	The month(s) without scheduled member may differ but all members must be reviewed within six months

Figure 10: Timing of refill appointments depending on group size

After the visit to the facility, the group representative should meet with the group members within 24 hours preferably on the same day of collection to distribute and return the members' medicines and booklets. The facility-based HCWs must conduct random follow-up checks on group members to confirm timely receipt of medicines.

Summary of community ART group service provision

What services	• Peer support in group meetings • Medicine pick up by a group representative Medicine distribution • TPT refill • CPT refill • TB screening by peers	• ART refill TPT initiation or refill CPT refill • TB Screening • Adherence Support • Clinical Reviews • Laboratory Monitoring (VL, CD4 count, HB, Creatinine and LFTs) • ART Prescription • Cervical Screening* NCD Screening Mental Health Family Planning
Where	Agreed community distribution point	• ART clinic • Laboratory
When/ Frequency	• Every 1-3 months refill prescription depending on group size	• Every 3-6 months depending on group size
Who	• Medicine distribution: group representative • Peer support: all, group leader provides leadership role	• Clinician (doctor or nurse) Pharmacy personnel Laboratory personnel

Indications for referral to mainstream care	• Presence of signs and symptoms of disease Presumptive TB Detectable viral load Missed appointment at facility • Missed appointment for group meeting • Pregnancy	

Table21: Summary of community ART group service provision

*Cervical screening should be done annually for female clients

Note: A member of a CAG (representative) must have a clinical and adherence review at each appointment visit. Facility HCWs can cross check with at least one other group member to verify that medicines were timeously distributed to the other group members.

4.3.5 Community Based Individual Differentiated Model

4.3.5.1 ART Outreach Models

❖ **Mobile ART DSD Outreach**

Description of the Model: The outreach model involves the movement of a clinical team from an accredited ART-providing health facility, public health unit or NGO clinic to a location in the community that is convenient for both the health care system and clients. The purpose of the ART mobile/outreach model is to provide HIV care to identified ART clients in Urban, rural and peri-urban areas including formal and informal workplaces with the aim of taking services closer to the recipients of care (ROC). In this model, clinical services are taken to the community, and delivered by qualified health care providers. The community-based ART Mobile Outreach can be provided by health facilities or an NGO linked to a facility to ensure successful referrals for clients who need mainstream care.

Community establishments that are acceptable for outreach services include but are not limited to: School grounds, Work places, Churches, Dip tanks, Market places or grocery shops, KaGogo Centers/ Health posts, Big trees' and Hot spots (FSW's, MSM's) and Mobile Vans. When conducting outreach services, outreach teams are encouraged to move out with as many health care services as feasible, as well as adequate capacity to deliver such services.

ART outreach services should be integrated within a comprehensive care package. To achieve this, facilities are encouraged to appropriately provide as many services as possible which including: ART initiation, Management of non-communicable diseases (NCDs) for stable clients during outreach visits, quality-assured point-of-care (POC) laboratory investigations should be provided and for those tests that are not POC, samples/specimens should be collected, labelled, logged and stored as per national sample transportation guidance until specimens are delivered to the laboratory.

❖ **Model Objectives and benefits to ART clients**

1. Decentralise ART services and other essential medicines to the community
2. Reduce linkages barrier to HIV care
3. Decrease financial costs to patients in access care
4. Improve psychosocial support and adherence
5. Reducing stigma and discrimination through community participation of PLHIV's

❖ **Guiding Principles**

- Quality: High-quality, people-centered and or Family centered care HIV care
- Integration: Integrated services, where HIV testing, HIV prevention, treatment and care, TB and sexually transmitted infection (STI) screening and other relevant services are provided together at a single outreach/mobile site
- Innovation and creativity in implementing ART DSD models to include private sector in ART DSD

- Community Participation: Support and involvement of trained community lay providers who are peers and act as peer navigators, expert patients/clients and community outreach workers to provide support, and identify and reach people lost to follow-up
- Stakeholder Participation: Involvement of stakeholders, including networks of people with HIV, communities and health-care workers, for building a common understanding on strengthening quality HIV care services and efficient use of resources.
- Open communication: A monthly schedule visit for outreach should be known by both the facility and the community.

❖ **Eligibility Criteria**

All clients are eligible to access care from this model except acutely ill clients who require more frequent or intense clinical follow up and laboratory testing; This will include all ART clients who have been on treatment for more than 6 months.

❖ **Inclusion Criteria**

- Willing to refill their medicines from an outreach service point closest to their residence
- Willingness to be linked to a community expert client servicing the community outreach point with follow up monitoring and adherence support services
- Have a functioning mobile phone to facilitate SMS reminder for outreach service
- Comorbid conditions whose drugs can be dispensed by outreach teams
- Adolescents and Children above 12 years if accompanied by caregiver or with parental consent to refill in the community.

❖ **Exclusion criteria**

- All clinically unstable clients
- ART clients with HVL after 6 months of initiating treatment
- All clients on ART for less than 6 months
- All clients on third-line ART

- All clients unwilling to receive ARVs in a community setting
- Unwell clients limiting mobility/ambulation to reach the Outreach point.

***Unstable clients**: Current VL > 1000 copies/ml, Adverse drug reactions (ADRs), Presence of Advanced disease (OIs), Non-adherence to treatment, Substance abuse, Mental illness, Comorbid conditions requiring frequent monitoring.

❖ Roles and Responsibilities in Community ART Outreach

Clients	Doctors/Nurses	Expert clients/counselors	Pharmacist	Data Officer/M&E
Drug pick up every 3 - 6 months for all outreach patients Clinical review in community or facility- nurse every 3 - 6 months	Blood collection for CD4, Chemistry, viral load ART for newly testing HIV positive clients or clients reengaging in care after LFTU Comorbid disease screening and clinical reviews TPT, TB, NCD, FP refills Clinical monitoring CMIS update Completion of MOH standard working tools Referral of sick patients/unstable/not eligible	TB screening/COVID Screening Drug pick up and dispensing Adherence counselling Call send reminders to clients about outreach visit	Prepack drugs Dispensing prepacked drugs Medicines security and storage	Prepare all working and reporting tools Data capture CMIS reviews Documentation of DSD Registers and reporting tools DSD DQA

Table 22: Roles and Responsibilities in Community ART Outreach

❖ ART Outreach DSD Framework

Summary of the outreach DSD Framework		
	ART and other medicines refills	Clinical Consultation

What services	• ART refill • TB/COVID, BP, Glucose, weight screening • Group counselling • Adherence support • ART prescription • TPT refill • CPT refill • NCD Refills • TB Treatment refills • Family Planning refills	• ART initiation • TPT initiation or refill • Clinical Reviews • Laboratory Monitoring (CD4 count, HB, Creatinine and LFTs) • Cervical Screening* • NCD Screening • Mental Health • Family Planning
Where	• Community setting; School grounds, Work places, Churches, Dip tanks, Market places or grocery shops, KaGogo centers/ Health posts, Big trees' and Hot spots (FSW's, MSM's), Mobile Van	• Community setting: School grounds, Work places, Churches, Dip tanks, Market places or grocery shops, KaGogo centers/ Health posts, Big trees' and Hot spots (FSW's, MSM's), Mobile Van
When/ frequency	• Variable of 3-6 monthly Consider flexible hours for outreach services	• Maximum of 6 monthly Consider flexible hours for outreach services
Who	• Team of health care workers including clinical staff (doctors, nurses, pharmacy personnel, expert clients, adherence RHM, and HTS counselors)	• Clinician (doctor or nurse) • Pharmacy personnel • Laboratory personnel
Indications for up-referral to mainstream care	• Newly diagnosed with tuberculosis or any other serious active opportunistic infection or other co-morbidity. • Patients with unsuppressed viral load. • Women falling pregnant and subsequent follow-up of the 'HIV-exposed' baby. • Patients missing 2 outreach refills	

Table23: Summary of the outreach DSD Framework

❖ Engagement and empowerment of recipients of care

The models of ART service delivery heavily rely on the education and engagement of the ART clients to play an active role in their care for many years. Issues like stigma, confidentiality, and trust in their peers and the health system, as well as concepts related to individual and collective responsibility or transition between models of care, are critical for ensuring successful long term ART outcomes. It is key that community ART Mobile Outreach models of care pay special attention to sustained activities for better treatment outcomes for PLHIV's in these models of care.

Summary of the outreach Engagement of ROC

	PLHIV's Engagement	Role in DSD
What services	• Community ART Outreach • CAG's • Community Commodity Distribution • KP's DSD • ALHIV DSD Models	• Design • Planning • Demand creation • Implementation • Monitoring • Evaluation
Where	• Community • Facility • Schools • Churches • KP hot spots	• Mapping • Outreach workers recruitment • Teachers engagement
When/ frequency	• Weekly • Monthly • Quarterly and semi-annual reviews • Annual reviews	• Report writing • Customer surveys • Adherence club meetings
Who	• PLHIV's Champions (Adolescents, Men, KP's, etc) • PLHIV's Network organizations • PLHIV's support Groups • PLHIV's couples	• Advocacy • Community Mobilization • Feedback and policy recommendations
Indications for successful Engagement of PLHIV's	• Number of PLHIV's participating in design, planning, implementation and evaluation • Number of PLHIVs' trained as champions of DSD • Number of advocacy forums convened by PLHIV's (By sub population) • Evidence of policy change from PLHIV's recommendations	

Table24: Summary of the outreach engagement of ROC

4.3.5.2. Community Commodity Distribution

❖ **Description of the Model**

The Community Commodity Distribution (CCD) Plan, is built upon a hybrid of current differentiated service delivery models to ensure sustainability and ongoing access to a variety of medicines without unnecessary client exposure to risk of COVID-19 infection in the short-term and decongest facility-level service delivery burden, crowding and queuing in the long-term.

The facility distribution/outreach model are introduced and/or scaled up across facilities nationally, with multiple, well-chosen distribution points per facility and distribution of a full spectrum of tools such as ART, TB medicines, NCD medicines (anti-diabetic, anti-hypertension), family planning, PrEP, HIV prevention commodities and the ability to add more as the program is strengthened, the clinical review will be limited to a quick screening of COVID-19 and other illnesses symptoms.

Front-end communication between client and facilities and follow-up will ensure patients are aware of how they can collect their medications regularly and safely, keep adequate stocks at home and ensure patient confidentiality through pre-packaging and discreet pick-up.

❖ **Model Objectives and benefits to ART clients**

1. Establish continuous and reliable community access to a standardized list of essential medicines and selected health commodities
2. In the short-term; reduce risk of COVID-19 acquisition in at-risk populations by reducing the need to take public transport, queuing for services at health facilities, and traveling significant distances from their homesteads
3. Decongest facility-level service delivery burden, crowding and queuing
4. Reduce silo programs and associated stigma through integrated commodity delivery

❖ **Guiding Principles**

- **Risk minimization**: minimize exposure to infection risk for the most at-risk populations during the emergency situation.
- **Access**: improve access to medicines and assist with chronic medicine and commodity pick-up from a community health access point
- **Retention:** reduce LTFUs during emergency situation such as COVID-19 pandemic period and ensure continuity of essential healthcare services beyond such periods.
- **Quality**: provision of high-quality client-oriented care
- **Integration**: offering integrated services including HIV self-testing, HIV prevention (condoms, PrEP), ARVs, TB medicines, family planning commodities, diabetes and hypertension screening and refills.

❖ **Eligibility Criteria**

HIV will be used as the entry point for this model, although other services may be added as needed. Other services may include PrEP, TB, NCDs medication, FP commodities, and others to be determined during the implementation. Clients will be identified through a two-pronged approach: at facility level through ART records and at community level through utilization of existing support groups. All stable clients who have been on treatment for more than 6 months.

❖ **Inclusion Criteria**

- All clients, including adolescents, who opt to refill their medicines through a community commodity distribution point
- All clients who call the national toll-free CCD line requesting to refill medicines at a community commodity distribution point
- Children above 2 years if accompanied by a parent or a caregiver

❖ **Exclusion criteria**

- All clinically unstable clients
- All clients with a current unsuppressed VL

- All clients on ART for less than 3 months
- All clients on third-line ART
- All clients unwilling to receive ARVs in a community setting

*__Unstable clients:__ Current VL > 1000 copies/ml, Adverse drug reactions (ADRs), Presence of Advanced disease (OIs), Non-adherence to treatment, Substance abuse, Mental illness, Comorbid conditions requiring frequent monitoring.

Roles and Responsibilities in Community Commodity Distribution

Clients	Doctors/Nurses	Expert clients/counsellors	Pharmacist	Data Officer/M&E
Pick up medicines according to pre-determined appointment Undergo clinical review at the commodity distribution point during each pick-up appointment Undergo clinical review at the health facility after 6 months, as directed	Blood collection for CD4, Chemistry, viral load Comorbid disease screening and clinical reviews TPT, TB, NCD, FP refills Clinical monitoring Completion of CMIS downtime form at community distribution point Ensure client information is updated in CMIS Referral of sick patients/unstable/not eligible	TB screening COVID Screening Adherence counselling Call or send SMS or WhatsApp reminders to clients about CCD appointment	Prepack medicines Dispense medicines Assure medicines quality Ensure proper security and storage of medicines	Ensure CMIS downtime forms are available for (and collected from) team conducting CCD visit Capture data from CMIS downtime forms into CMIS Documentation of CCD data in DSD reporting tools

Table 25: Roles and Responsibilities in Community Commodity Distribution

❖ **Community Commodity Distribution DSD Framework**

There are two strategies to reach clients:

a. **Push strategy**

b. **Pull strategy**

(a)Push strategy - clients will be called by health facilities to pick up drugs from the community distribution points. Appointments will be made for clients and reminder SMSes will be sent a day or 2 prior to their visit. This shall be implemented in all four regions of the country.

Process:

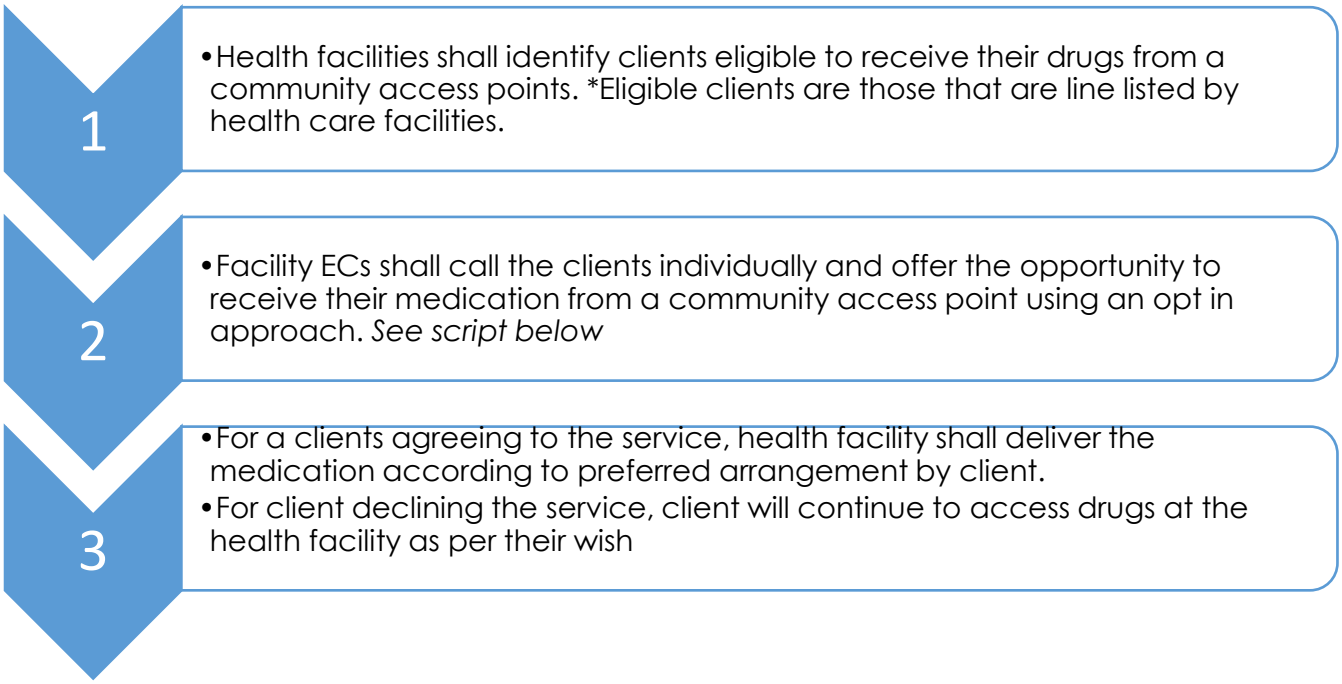

Figure 11: Push strategy process

Additional data will be collected by facility focal person to include client residence, closest facility (if known), normal facility, medication to be refilled, pertinent medical history, phone number, patient ID number.

Additional analysis will be conducted by facilities to include:

- A closer look at areas that have the highest uptake/acceptance of community distribution

- Analysis of areas that have a greater need of community distribution points
- An analysis of areas requiring demand creation activities for uptake of community distribution services.

(b) Pull strategy –In the pull strategy, a community health partner supports the ministry of health to promote the toll-free line (currently 1212) for clients who would like to access their routine medication to call in and be assisted. Based on location, agent gives client information to Regional Linkage Coordinator (RLC).

Regional Linkages Coordinators are placed in four regions of the country and their main role will be to ensure that clients are eventually assisted to access medication and commodities regardless of where they normally take these. RLC will come handy in inter-regional linkages to community health access points and will also link facilities i.e usual facility of client and visiting facility. There are recommendations for the strategy to continue beyond the COVID 19 pandemic period.

Summary of the outreach model services		
	Services Offered	**Clinical Consultation**
What services	• ARV refill • Adherence support • OI medicines refills; TB preventative therapy, cotrimoxazole, fluconazole • Anti-hypertension and anti-diabetic medicine refills • Drug-susceptible TB treatment refills • Family Planning refills	• Screening services for; TB, COVID-19, blood pressure, blood glucose level • Weight measurement • Family Planning
Where	**Community Distribution Points** • Schools, KaGogo Centres, Tinkhundla Centres, Market Places, Town Board Offices, Open Space, Umphakatsi, Shopping Complex, Bus Rank, Church, Retail Pharmacies, Police Post • Home deliveries	
Frequency	Every 3 or 6 months	
Who	Team of health care workers including clinical staff (doctors, nurses, pharmacy personnel, expert clients, adherence RHM, and HTS counselors)	

Indications for up-referral to mainstream care	• Newly diagnosed with tuberculosis • Newly diagnosed or suspected other serious opportunistic infection or co-morbidity • Patients with a viral load above 1,000 copies/ml • Women falling pregnant and subsequent follow-up of the 'HIV-exposed' baby

Table 26: Summary of the outreach model services

❖ **Special Considerations**

Home deliveries can be arranged for clients who are unable to travel to distribution points.

If feasible, to explore and consider to adapt other evidence-based innovations that may involve the private sector in delivering ART and other commodities to stable clients. This may include private pharmacy model, dispensing lockers, etc.

4.3.6 Differentiated Service delivery for specific populations

4.3.6.1. Men

According to Plazy M, Perriat D, Gumede D, et al. Implementing universal HIV treatment in a high HIV prevalence and rural South Africa showed that linkage to treatment is challenging in the period of test and start because PLHIV are asymptomatic hence they do not see the need to be initiated on ART thus causing them to have high viral load and this will result in fueling HIV epidemic at population level [13].

Strengthening of linkages amongst all the age categories and gender is important if the epidemic is to be controlled. Data has shown that men are lagging behind in terms of ART initiations as indicated; Eswatini HIV Incidence Measurement Survey (SHIMS) 2016-17 showed that only 77.7% of newly diagnosed PLHIV were initiated on ART [7].

Due to the lower uptake of ART there is need to provide male friendly services which include Provision of broader package of services at once to all men that come to the health facility or community HIV services, this will attract men and reduce stigma attached to HIV services thus leading to an increase in ART initiations amongst men.

To scale up ART initiation amongst men the following strategies must be implemented.

Men should choose DSD model of their preference for their care and efforts should be made to ensure service provision should be flexible, friendly and comprehensive to

their way of life. Timing of services should be tailored to specific needs e.g., during working hours, after hours, weekends etc.

Men Friendly DSD Services

When	At HIV diagnosis	At ART initiation		At follow up ART visits
Where	Facility HTS room/consultation room, workplace, male community forums	Facility consultation room, ART initiation site (can be in the community, place of work etc)	Expert client's room	Facility consultation room, ART refill site in the community
Who	HTS counsellor	Clinician	Expert client	Clinician
What	○ Health education. ○ Routine TB screening. ○ HTS: conventional rapid test. ○ Counselling and supporting discordant couples ○ Index testing ○ Self-test ○ Provision of Condoms.	○ Same day ART initiation ○ ART initiation and referral. ○ STI screening at every visit. ○ STI treatment if needed ○ VMMC if client is eligible. ○ Routine NCD screening ○ Assessment of risk factors for erectile dysfunction and premature ejaculation. ○ Diabetes and anti-hypertensive drug refills ○ Provision of curative services	○ Adherence monitoring ○ TB screening ○ Enrol client into LCM ○ Follow up calls	○ ART refill. ○ STI screening at every visit. ○ STI treatment if needed ○ VMMC if client is eligible. ○ Routine NCD screening ○ Assessment of risk factors for erectile dysfunction and premature ejaculation. ○ Diabetes and anti-hypertensive drug refills ○ Provision of curative services ○ Offer DSD models if not already enrolled

Table 27: Men Friendly DSD Services

4.3.6.2 Key Populations (KPs) and AGYW

Clients that have tested in the community can be initiated on ART at community level by community partners in collaboration with health facilities or client can be escorted

to nearby facilities by expert client or peer navigator if the community partner do not offer ART initiation services. The client should be 15 years and above, in WHO stage 1 or 2.

The following specific populations can be initiated at community level by HIV community testing partners in collaboration with nearby health facilities. In the community KP clinic or AGYW outreach site, clients that are stable should be transitioned to less intense DSD model such as fast track and Family centred acre model (FCCM) according to the national guidelines.

❖ **Key populations**

When	During working hours, after hours and most convenient time for the KPs and weekends		
Where	Fixed community centres, mobile outreach services, office /home based and hotspots		
Who	HTS counsellor and nurse.	Clinician	Outreach workers/ Peers
What	○ Health education. ○ HTS: conventional rapid test. ○ Provision of index and self-testing ○ Provision of Condoms.	○ Conduct routine baseline test ○ Same day ART initiation (mild and moderate disease) ○ Clients with advance disease are referred to health facility for ART initiation. ○ Provision of ongoing treatment literacy ○ STI screening at every visit. ○ STI treatment if needed	○ Health education on condom usage, VIA screening, ART, STIs and Retention to HIV care ○ Follow up calls ○ Home visits ○ TB screening ○ Reinforce adherence ○ Enrol clients into LCM

		○ Provision family planning ○ Provision of TPT therapy for those screening negative	○ Distribute and assist with HIVST for index testing

Table 28: Key populations DSD Services

❖ Adolescents Girls and Young Women

When	Extended hours (afternoon and weekends), special days in health facilities	Extended hours (afternoon and weekends), special days in health facilities	Extended hours (afternoon and weekends), special days in health facilities
Where	Friendly clinics, ART clinics, OPD, mobile outreach services,	Friendly clinics, ART clinics, OPD, mobile outreach services,	Friendly clinics, ART clinics, OPD, mobile outreach services,
Who	HTS counsellor	Clinician	Peers expert client
What	○ Health education. ○ HTS: conventional rapid test. ○ Provision of index testing ○ Provision of Condoms.	○ Conduct routine laboratory baseline test ○ Same day ART initiation (mild and moderate disease) ○ Clients with advance disease are referred to health facility for ART initiation. ○ STI screening ○ STI treatment if needed ○ Provision family planning ○ Provision of TPT therapy for those screening negative	○ Provide treatment literacy ○ Create awareness on STI services ○ Enroll clients on LCM ○ Follow up calls ○ TB screening ○ Educate clients on family and condoms

Table29: Adolescent Girls and Young Women DSD Services

Chapter 5: Integration of other Health Services

Client-centered care is important and the health care system should try to meet all of a client's needs, not just the HIV care needs. Long standing successful HIV systems should be used to leverage the additional longitudinal needs like TB preventive therapy, Non-Communicable Diseases and Family Planning.

5.1 TPT Integration into DSD Models

Compared to the general population, people living with HIV have a significantly higher risk of tuberculosis even if they are stable on treatment and have high CD4+ T-lymphocyte counts. TB preventive treatment (TPT) is a critical component of HIV care and should be provided to all eligible PLHIV following national guidelines. Adults and adolescents enrolled in DSD models should be screened for TPT eligibility and receive TPT within their chosen model. At every encounter, patients should be screened for TB by the designated health care worker, or a peer leader (for CAGs) using the TB screening tool in accordance with the clinical algorithm for screening for TB.

Patients who do not report cough, fever, weight loss or night sweats are less likely to have active TB and should be screened for TPT eligibility. In contrast, patients who report any of these four symptoms should be evaluated for active TB and other diseases that cause such symptoms (see national TB screening tool below). All eligible patients are to receive TPT once in a lifetime and repeat TPT cycles will only be considered among PLHIV who have a new exposure (household contact to a bacteriologically confirmed patient).

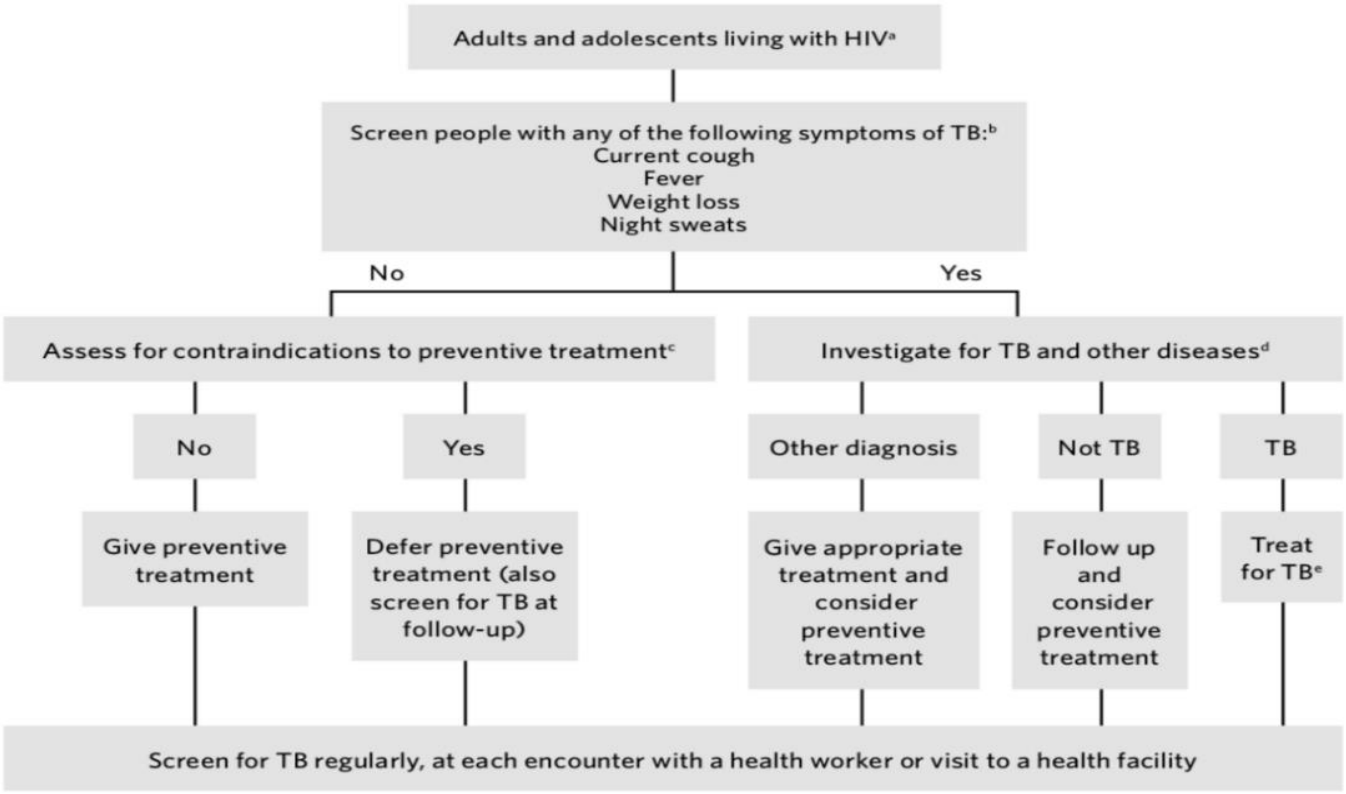

Figure 12: Algorithm for TB screening in adults and adolescents living with HIV

a) Every adult and adolescent should be evaluated for eligibility to receive ART. Infection control measures should be prioritized to reduce *M. tuberculosis* transmission in all settings in which care is provided.

b) Chest radiography can be done if available, particularly for people living with HIV on ART, but is not required to classify patients into TB and non-TB groups. In settings with a high HIV prevalence and a high TB prevalence among people living with HIV (e.g. > 10%), strong consideration should be given to adding other, sensitive investigations.

c) Contraindications include: active hepatitis (acute or chronic), regular and heavy alcohol consumption and symptoms of peripheral neuropathy. History of TB and current pregnancy should not be contraindications for starting preventive treatment. Although LTBI testing is not a requirement for initiating preventive treatment, it may be done as a part of eligibility screening where feasible.

d) Xpert MTB/RIF should be used as the initial diagnostic test for TB. Detailed algorithms for people living with HIV suspected of having TB are available in the

WHO consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection (http://apps.who.int/iris/bitstream/10665/208825/1/9789241549684_eng.pdf).

e) Resume regular screening for TB after completion of treatment for active disease. TPT regimens of any duration can be dispersed via any DSD model. However, patients should be educated on identification and reporting of adverse reactions.

Key elements to integrating TPT into DSD Models:

1. Uninterrupted supply of TPT medicine
2. Convenience for patients when TPT refills are aligned with ART refills
3. Positive provider messaging, in-depth motivational counselling on TPT (what it is, benefits, adverse effects) and treatment support to be done at enrolment follow-up and at all contacts.
4. Open communication between health system and the client
5. Capacity building, Mentorship support and supportive supervision
6. Specimen collection and transport mechanism for the community based DSD models
7. Recording and reporting.

❖ **TPT delivery in DSD models**

- **Facility based DSD models**
    - TB screening, TPT initiation, follow up and documentation to continue as standard of care according to national guidelines.
    - TPT refills should be aligned with ART refills.
- **Community based DSD models (Including MMS)**
    - All patients in the community DSD models should be screened by the designated health care worker or peer leader at all contacts using the national TB screening tool

- CAG members should also be screened, evaluated for TPT eligibility and initiated on TPT when they visit the ART facility
- CAG members should be trained on TB screening, which should be provided for all members at every meeting. Patients who screen positive for TB symptoms or clients on TPT who appear to be experiencing side effects should be referred to the facility immediately. All TB screening data should be reported to the facility monthly, along with data for those on TPT
- CAG members should be trained to support TPT adherence and monitoring for their peers.
- Clients should report any side effects promptly and report to the facility

5.2 HIV and NCDs Integration Models of Care

❖ **Introduction**

Chronic care requires integrating and linking related services to ensure that comprehensive and consistent care is provided over time, including providing related services in the same settings, systems to share information and effective referrals across settings and providers. Integrating and linking services are likely to reduce missed opportunities for initiating ART, enhance adherence support and optimize retention in care [10].

As PLHIV age on treatment, they are increasingly likely to have other health issues, including chronic non-communicable diseases (NCDs). Cardiovascular risk factors are also more common in PLHIV than in their HIV-negative peers, both because of direct effects from HIV and because some ARVs can increase the risk of dyslipidemia and diabetes. Given the rising numbers of people with HIV and NCDs, the integration of prevention and management for multiple chronic conditions is more efficient and more person-centered than "vertically" organized disease services. Experience has shown that integrated management of HIV and NCD services is feasible and acceptable; this includes co-management of chronic diseases within DSD models.

The feasibility of integrating diabetes and hypertension care with HIV services may vary based on the setting and health system factors and should be supported at the planning and policy levels. Involving the community may promote increased uptake of diagnostic, preventive, treatment and referral services for HIV and noncommunicable diseases [10]

❖ **NCDs integration into DSD Models**

The existence of well-developed facility and community-based delivery systems for HIV provides a unique opportunity for the integration of NCD prevention, treatment and care, based on the context as well as HIV and NCD burden, types of NCDs, resources and existing systems.

To date, Eswatini has experience integrating HIV and NCD services within two DSD treatment models: Facility-based Treatment Clubs and Community ART Groups (CAGs).

HIV/NCD Treatment Clubs have been established in a number of facilities to address HCW workload and client wait time by streamlining clinical evaluations and medication dispensing for people with HIV, hypertension, diabetes and/or mental health disorders. Clients with controlled NCDs and HIV can collect their chronic medication every three months through a club, rather than through individual clinic appointments.

Self-formed Community-based ART groups (CAGs) can also provide an environment for NCDs screening, follow-up and treatment refills for clients with controlled NCDs and HIV. CAGs rely on pre-existing social networks, such as support groups, workmates and family relations. NCD disease services can be integrated into this model to harmonize clinical reviews and refills of both HIV and NCDs treatments. This saves both money and time for CAG members, who rotate in visiting the facility to collect ART and NCD treatments.

❖ **Description of the models**

For the integration of NCDs into an existing DSD model for ART the building blocks define how chronic NCD care will be delivered to people living with HIV. The goal should be that both ART and NCD medication are provided on the same day, in the

same clinic room by the same healthcare worker (Table 30). Provision of chronic disease care for both HIV and NCDs should be a team-based approach where different members of the health care team may provide different tasks needed in the patient journey. For example, expert clients may be trained to take blood pressure and blood sugar in the waiting room, nurses trained to initiate, titrate and maintain uncomplicated hypertension and Diabetes Mellitus (DM), whilst those with resistant hypertension, DM or complex comorbidities are referred to doctors.

	NCD Diagnosis	Initiation NCD medication	Titration of NCD medication	Maintenance (refill) NCD medication
WHEN	At ART initiation Entry into DSD Clinical visits	At ART initiation Entry into DSD Clinical visits	Booked monthly visits until NCD is controlled	Same time as ART Refill duration of NCD and ART should be aligned Aim 3 monthly
WHERE	Same room as ART	Same room as ART	Same room as ART	Same room as ART
WHO	Same healthcare worker as ART	Same healthcare worker as ART	Same healthcare worker as ART	Same healthcare worker as ART
WHAT	Correct measurement of NCD parameters	Correct selection of initial NCD medication according to algorithm	Correct titration of initial NCD medication according to algorithm	NCD and ART refills

Table 30: The building blocks of integrated differentiated NCDs and ART care

As experience of DSD for ART has grown, the common models of differentiated service delivery for stable clients on ART have been developed. Each of them aims to address different challenges faced both from the health system and client perspective. In all models, clinical visits are separated from medication refill visits

- Facility based individual: Clients attending for a medication refill, bypass any clinical consultation and present directly to collect their medication from an arranged pick-up point in the facility
- Facility based group: These groups may be healthcare worker or peer led. Clients receive their medication refills in a group at the facility at a fixed time

- Community based individual: Clients collect medication refills through either a community outreach point or at a fixed community distribution point, workplace site or community pharmacy
- Community based group: These groups may be healthcare worker or peer led. In peer led groups they meet in the community and nominate one member to collect medication from the facility for the other group members.

❖ **Eligibility for DSD & NCDs Integration Models**

Membership in DSD models is always voluntary and opt-in. Clients are eligible to join an integrated HIV/NCD DSD model if they meet the following criteria:

- Adult (18 years or older)
- Stable on HIV treatment, e.g.,
    - At least 12 months on ART
    - Most recent consecutive viral loads undetectable; the most recent of these taken within the past six months.
    - At least two ART visits at the facility in case of transfer in clients
- Stable on NCD treatment, e.g.,
    - Controlled and stable in NCDs medication for the past 12 months
    - At least two ART visits at the facility
- Not currently pregnant or breastfeeding
- No current TB
- Clinicians confirm the client's eligibility for membership
- The client chooses to join the model

More details on the NCD integration in HIV services are available in the separate SOP document.

Chapter 6: Differentiated Maternal, New-born & Child Health Services Delivery

6.1 Pregnant and Lactating Teen clubs (PLTCs)

The adolescent fertility rate for Eswatini is 87 per 1 000 women and is slightly higher for adolescents in the poor quintile (121) than the richer quintile (47) areas [14]. In 2019 18% of teenagers 15-19 years of age were recorded pregnant and which grows to 28% among those 20-24 years of age. Teenagers are faced with several challenges both internally and externally from the society which they must deal with while accessing care and treatment.

This therefore necessitate specific tailored support to be given to teenagers to improve their access to care and retention. This facility-based initiative can help to deal with the societal stigma that teenagers face while coping with their pregnancy. To maximize efficiencies in the delivery of ART care, a group of stable pregnant teenagers is enrolled into a treatment club where they receive their ART refills, Clinical monitoring, psychosocial and adherence support. PLTCs meet every two months a club as they come for their ANC and PNC services and receive their treatment refill. Clients will be enrolled into a PLTC by a Mentor Mother or an expert client (EC) or nurse.

This group serves the interest and needs of the group members. During their facility visit, the pregnant teens will be convened by the Mentor Mother or Expert client after receiving their ANC and PNC, and they will be provided with adherence support and education on key tailored topics. Through the group care model, generic clinical services are provided at group level, resulting in shared general review time, as well as shared dispensing time. Clinically significant matters (e.g., an illness) should, however, be addressed at individual level as they go through ANC and PNC. Summary of services provided in facility based PLTCs are outlined in the Table below.

Building Blocks of Pregnant and Lactating Teen clubs (PLTCs)

WHO	**Nurse** **Mentor Mother/ Expert Client, Social worker**	
WHEN	Every 2 months	
WHERE	Health facility	
WHAT	Adherence support Psychosocial support Lab Tests Clinical monitoring ART refills ECD	Expanded program of immunizations. Family Planning EID VL monitoring Cervical cancer screening

Table 31: Building Blocks of Pregnant and Lactating Teen clubs (PLTCs)

6.2 Adult Mother- Baby Pair Club

One of the greatest challenges observed among lactating mothers who have delivered is the low retention in care which tends to decline monthly at a rate of 2%. This therefore is also coupled with low VL coverage among the lactating mothers making it hard to know the suppression rates. Another observation is that mother baby pairs stop coming to the clinic after the 6 weeks' check-up and are missing important health services which are key for PMTCT.

Retaining mothers in care strengthens PMTCT interventions as the MTCT largely has to do with the mother. The mother baby pair club meetings will be aligned to the MBP visits outlined in the MBP schedule to receive specific tailored care and support to improve their retention in care. This facility-based initiative can help mothers to deal with the societal stigma that mothers face after testing positive to HIV and starting ART. A group of stable Mother baby pairs will be enrolled into the club where they receive their ART refills, Clinical monitoring, psychosocial and adherence support, among others. Clients will be enrolled into the MBP club by a Mentor Mother or an expert client (EC) or nurse at 6 weeks, but recruitment will commence during pregnancy.

This group serves the interest and needs of the group members. During their facility visit, the MBPs will be convened by the Mentor Mother or Expert client after receiving

their PNC, and they will be provided with adherence support and education on key tailored topics. Through the group care model, generic clinical services are provided at group level, resulting in shared general review time, as well as shared dispensing time. Clinically significant matters (e.g., an illness) should, however, be addressed at individual level as they go through PNC. Summary of services provided in facility-based PLTCs are outlined in the Table below

Building Blocks of Adult Mother- Baby Pair Club

WHO	**Nurse** **Mentor Mother/ Expert Client**	
WHEN	As per MBP schedule	
WHERE	Health facility	
WHAT	Growth monitoring Immunizations HIV testing / retesting HIV care and treatment (if HIV-positive)	Family planning Cervical cancer screening HIV care and treatment (if HIV-positive) Other treatment/medications as needed including EIP Infant feeding and nutrition counseling

Table 32: Building Blocks of Adult Mother- Baby Pair Club

6.3 Post-natal Outreach club

The Post Natal Outreach club will provide individualized care to meet the needs of a mother and her baby in the postnatal period (birth to 24months) which is critical for health and survival. The PNC outreach club will be implemented to improve retention in care among women initiated on ART during pregnancy, virological outcomes and to strengthen early infant diagnosis of HIV.

All stable HIV-positive women on ART who have successfully delivered, and their exposed infants will be eligible to join. Client recruitment will happen at the facility during ANC care and at the 7day PNC visit so that the mother baby pair starts the club at 6weeks PNC visit. **This outreach model will be aligned to the ongoing clinical outreaches conducted by the PHUs**. However, the mother baby pair may have access

to clinical services at the facility outside of their differentiated care schedule if they need to seek clinical care.

The clinical visits for mothers and their infants will be aligned and maternal, new-born and child health (MNCH) care, will be integrated with ART delivery services. At each session, services shall include mother baby pair clinical consultations (**Infant:** TB screening, infant growth monitoring, infant immunization, enhanced infant prophylaxis, Cotrimoxazole preventive therapy (CPT), early infant diagnosis, ART refills for positive infants, **Mother:** TB screening, viral load monitoring at 6weeks and 6months thereafter, STI screening, family planning, services for male partners, ART refills, caregiver sessions and adherence counselling).

The frequency of visits will be monthly until infant is 6 months old and thereafter every 3months until infant is 24months. Newly diagnosed HIV positive infants, mothers presenting with a high viral load and mother/infant diagnosed with active TB will be contacted as soon as possible and referred out of the postnatal club to the facility for further support until considered stable. When the infant reaches 24months, the mother baby pair is transitioned out of the PNC club and may join a community DSD model suitable to them.

A team including a nurse working with support staff (i.e. CM2M/CECs, RHMs) shall run the outreach club and this club shall ride onto the currently existing PHU outreach model.

Documentation will be done using paper-based registers similar to those used at facility level and information should be updated regularly in facility electronic systems (i.e. CMIS).

Building Blocks of Post-natal Outreach club

WHO	Outreach team including nurse and support staff (CM2M/CECs, RHMs)
WHEN	As per MBP schedule
WHERE	Outreach, community

WHAT	**Infant:** TB screening, early infant diagnosis, ART refills for positive infants, infant immunization, infant growth monitoring, enhanced infant prophylaxis, Cotrimoxazole preventive therapy (CPT),	**Mother:** TB screening, viral load monitoring at 6weeks and 6months thereafter, STI screening and treatment, family planning services, services for male partners, ART refills, caregiver sessions and adherence counselling

Table 33: Building Blocks of Post-natal Outreach club

6.4 Pregnant and Lactating women High VL club

The pregnant and lactating women High VL club is a facility based MNCH DSD model that will be implemented to improve VL suppression among women on ART identified with high Viral load during pregnancy and lactation.

Enrolment

Client recruitment will happen at the facility during ANC, PNC/CWF/MBP visits based on the patients' baseline and 3 months VL results. All women identified with high VL during pregnancy and lactation will be enrolled in the model and documented both in the high VL club logbook or (2quire logbook) and in the high VL register. The recommendation for the club is to have a maximum of 20 members.

Implementation

The PL HVL club is managed by an EC or Mentor Mother (MM) who is responsible for enrolment of all eligible patients referred by nurses in the HVL club register. However, a Multidisciplinary team including a doctor, a nurse, a psychologist, a social worker working with support staff (ECs, MMs, and CMMs/CECs) shall be involved in running the HVL club.

The clinical visits for women with high viral load are scheduled monthly until the patients re-suppress even in the event she is moved to 2nd or third line. The clinical visits for mothers and their infants will be aligned and maternal, new-born and child health (MNCH) care, will be integrated with ART delivery services.

At each visit the following services that will be provided are outlined in the below table.

Facilities should arrange that the club members are seen on a designated day and that a designated room and nurse is assigned to them to ensure that they are fast tracked. Facilities may either opt for monthly SUACs synchronized with monthly ANC visits or for monthly SUACs with ANC visits as per the ANC guidelines.

A standard patient flow will be looking like the following:

1. CMIS registration at reception
2. TB screening, weighing, pill count and adherence assessment at the EC room.
3. Individual SUAC
4. ANC/PNC/CWF at designated room for patients due for visits
5. Laboratory for blood draw including VL as scheduled.
6. Group discussions
7. Group counselling
8. ART refill using prepacked drugs.

Documentation

All services provided will be captured on CMIS, CCF, HVL register, DSD register.

Building Blocks of Pregnant and Lactating women High VL club

WHO	**MDT team including nurse, psychologist, and support staff (MMs, CMMs/CECs)**	
WHEN	Monthly until women re-suppress	
WHERE	Facility	
WHAT	• TB screening • Pill count and adherence assessment • Group discussions and counselling • Individual SUAC • Psychosocial support action steps • Assisted disclosure. • Index testing and partner notification services • Family Planning	• Caregiver sessions • ART Refill? • Referral to psychologist **Infant services** • Infant growth monitoring • Infant immunization • Enhanced infant prophylaxis • Cotrimoxazole preventive therapy (CPT) • Early infant diagnosis • ART refills for positive infants • Treatment optimization

Table 34: Building Blocks of Pregnant and Lactating women High VL club

6.5 FP integration in DSD outreach

Community distribution points are offering an opportunity to integrate family planning services for women on ART with the anticipated outcome of preventing pregnancy among HIV positive women on ART, as per the PMTCT prong 2. This model will ride on the **Mobile ART DSD Outreach** as described under section 4.3.5.1 and introduce family planning commodities initiation and refills:

1. Combined oral contraceptives
2. Injectable contraceptives
3. Implants

Building Blocks of FP Integration in DSD outreach

WHO	Outreach team including nurse and support staff (CM2M/CECs, RHMs)
WHEN	As per ART refill schedule
WHERE	Outreach, community
WHAT	Family planning commodities 1. Combined oral contraceptives 2. Injectable contraceptives 3. Implants

Table 35: Building Blocks of FP Integration in DSD outreach

Chapter 7: Demand Creation

7.1. At Health Facilities

Health education is the development of individual, group, institutional, community and systemic strategies to improve health knowledge, attitudes, skills and behavior. Facility health care workers (HCWs) shall create demand for the utilization of the services through client health education. Clients should be empowered to choose their preferred model for accessing the ART services and the HCW must conduct a clinical and psychosocial assessment to determine if the client is eligible according to the standard operating procedures.

Passive enrolment involves clients asking to be enrolled in care models. Active enrolment involves health care workers actively assessing client eligibility and offering them the service model options. Both passive and active recruitment are recommended. The Differentiated Service Delivery Models flipchart have been distributed across facilities in the country. It contains the package of information needed for clients and health care workers.

Figure 13 summarizes the enrolment process for the ART service delivery models and Table 36 provides a summary of the models to which clients can be enrolled.

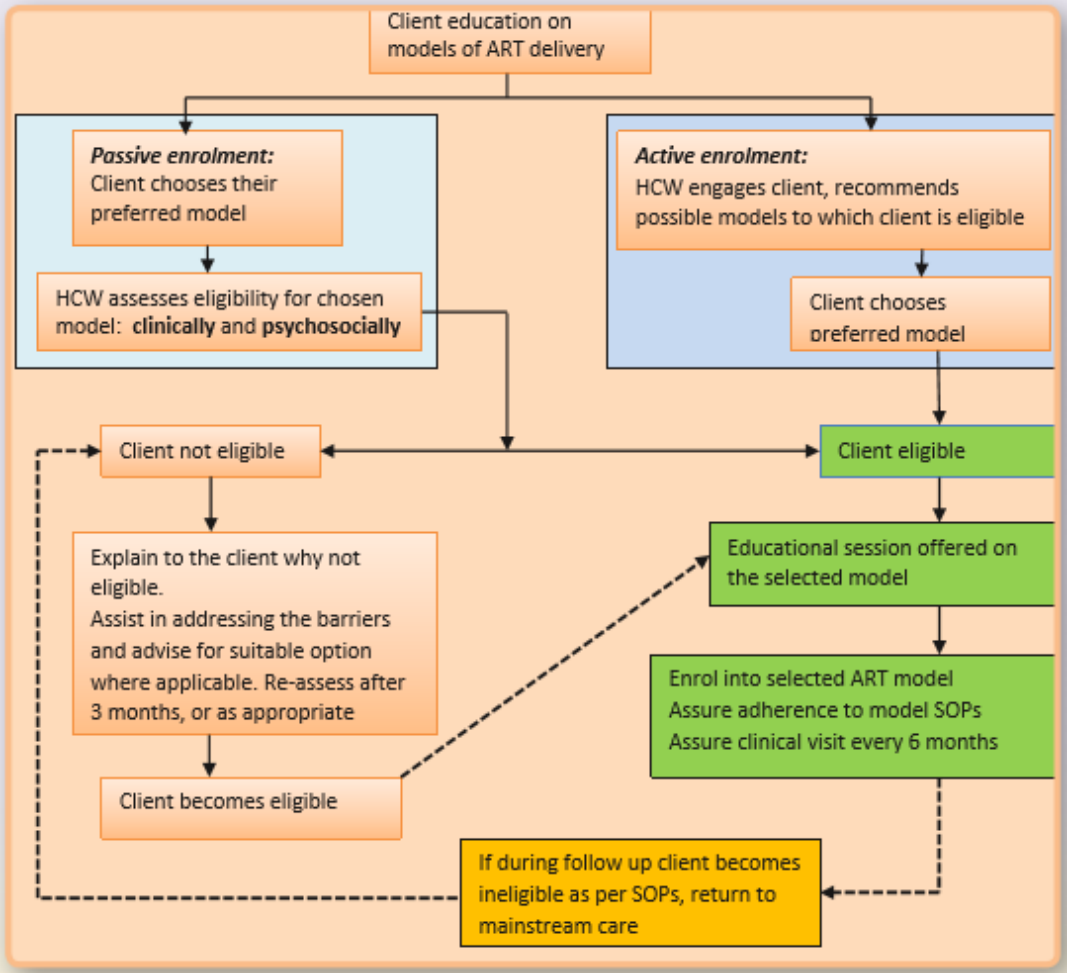

Figure 13: Process for assessing eligibility and enrolment to ART delivery models

7.2. At Communities

Existing networks, especially support groups of PLHIV, at the workplace and key populations should be sensitized to create demand in the community.

Models of ART delivery in Eswatini	**Overview**	**Number of patient visits/year**	**Priority implementation site**	**Benefits**
Mainstream Care	For clients who require close clinical attention and/or monitoring	Variable	All ART sites	Intense clinical services available

Outreach	Mobile teams from facilities take ART services to the community	1-12, dependent on number of outreach visits facility can afford	Hard-to-reach areas	Increasing access, reduced time and cost to clients
Fast-track	Clients skip the consultation and directly collect their ART refill	4 (2 ART refill visits + 2 clinical consultations)	High-volume sites, crowded facilities, where clients have constrained working hours & need early morning refills	Reduced waiting time, decreased congestion
Facility Based Treatment Clubs	Up to 20 clients meet for group counselling and ART collection	4 (2 ART refill visits and group + 2 clinical consultations and group)	High-volume sites, crowded facility, where clients have constrained working hours & need early morning refills, special groups/ populations	Reduced waiting time, decreased congestion, peer support
Teen Clubs	Groups of adolescents clients meet for group counselling, psychosocial support and, if stable, ART collection	Monthly teen club meetings, ART dispensed every 3 months for stable adolescents	All sites	Increased peer support, psychosocial support
Community ART Groups (CAGs)	Groups of 2-6 clients who take	Variable – 2-4 clinical visits	Where there are pre-existing	Increased peer support,

	turns to visit the facility to get refills on behalf of the other group members	consultations at the facility (4-12 CAG meetings at community)	networks, where clients stay in hard-to-reach areas, families	decreased visits to the facility, reduced cost
**Clients who are acutely ill, develop an OI, miss outreach appointments, or who have detectable VL should be referred to mainstream care.*				

Table 36: Summary of models of care in Eswatini

Community delivery points do not require any specialized infrastructure. The delivery point should be convenient for the health care worker and the client, as well as the community in which such service is delivered. Figure 14 shows the models of care under the two settings.

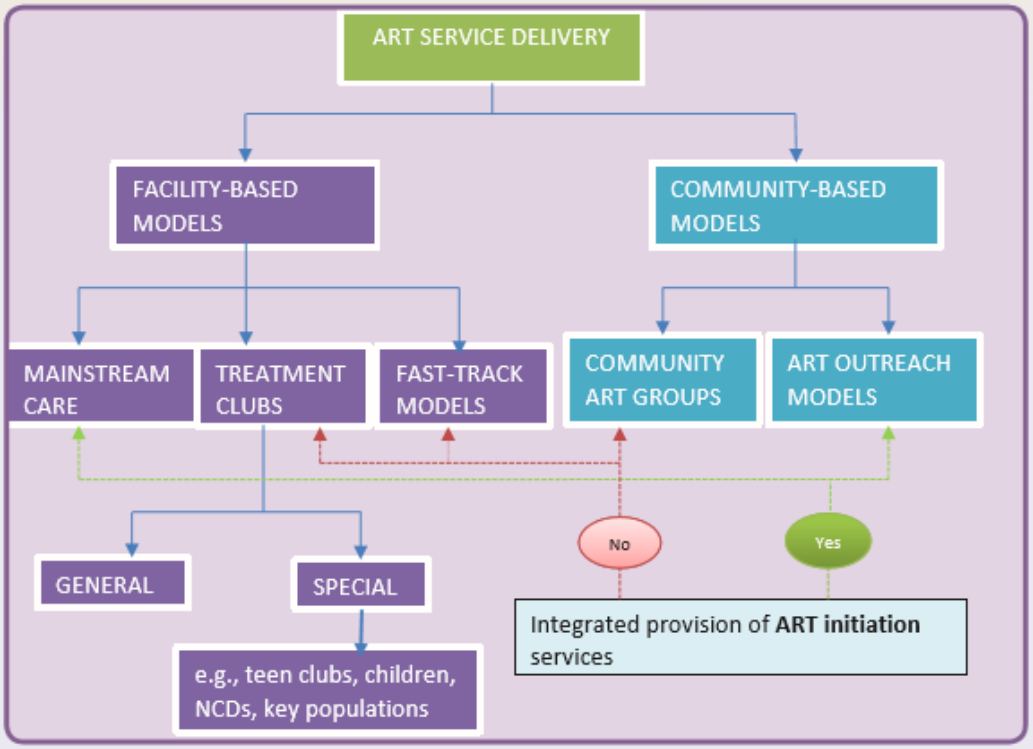

Figure 14: Summary of ART delivery models

Chapter 8: Scale up of Differentiated Service Delivery Activities

8.1 Strengthening Health Systems to Support DSD Scale Up

According to the Eswatini HIV Investment Case (SHIC)[15], scaling up ART will improve the health of PLHIV and avert new HIV infections through suppressed viral load in PLHIV. An estimated average 10,000 deaths per year were averted since the introduction of ART in 2003. The prevention gains of using ART in HIV positive clients are high considering that 97% of PLHIV on ART are virally suppressed. The SHIC proposes the adoption of Universal Access to HIV Treatment ("test and start") and intensified HIV diagnosis and retention in care.

Modelling exercises show that this will avert 81% new infections in children aged 0 to 14 years and 43% in people over 15 years during 2014-2030. AIDS-related deaths among children will also reduce by 91%, but deaths among those older than 15 years will not be greatly affected since a majority of adults are already on lifelong treatment. This will require micro-targeted HTS strategies including index case testing in combination with recency testing to design appropriate prevention interventions including PrEP and VMMC. Strengthening innovative ART service delivery models including 6MMD and community-based service delivery models will be central to the success in sustaining the 95-95-95 UNAIDS targets through improving access to care, as well as retention in care using client-centered models.

It will be essential that as the Eswatini program increases access to these models of care, routine viral load monitoring is offered to these ART clients, to ensure viral suppression. Viral load monitoring in CommART offers outstanding opportunities to engage in operational research that are in line with the national research agenda as well global HIV priorities.

Maintaining high ART coverage also offers long-term cost savings in would-be spending on those infections averted and real economic returns in the form of increased labour productivity, subdued costs of orphan care and deferred medical care for opportunistic infections for those on early treatment.

Eswatini, in scaling up the ART service delivery models, requires greater focus on community service delivery points, with leadership and coordination at all the levels of health service delivery. National-level coordination will ensure establishment of a function to coordinate community HIV service delivery points. Systems strengthening at the regional level will ensure RHMT capacity building for coordination in the implementation of diverse models of ART delivery. Facility support will ensure investments in capacity building of health care providers to improve collaboration within facilities and interdepartmental collaborations.

The clinical, laboratory, pharmacy and monitoring and evaluation units will have to create systems for supporting scale up of these models. Community systems will be supported to ensure greater involvement of PLHIV and community structures to create an enabling environment for successful implementation of community-based ART models.

8.2 Pharmacy and Medicine Supply Chain Systems

An efficient and secure process for storage, distribution and appropriate utilization of antiretroviral (ARV) medications is critical to ensure a reliable medication supply at all levels. The four new ART delivery models of care can add pressure to the existing ART supply chain by introducing need for pooled distribution of medicines to clients if not properly planned.

ARV medicines will be managed at health facilities to enable effective distributions for the different ART delivery models. Successful management of the stock and supply chain is necessary for successful implementation of these models.

- As a general rule, compliance with the established national and health facility pharmaceutical standard operating procedure manual at all levels, while adapting and finding specific solutions to bottlenecks in the implementation of these practices, is essential. For example, **preparing medicines for ART clubs or ART outreach and/or designated fast-track distribution points all facilitate the implementation of the models and partly ensures that the aim of the new models is realized**. Additional requirements include:
    - Correct and secure packaging

- Transport of medicines at peripheral health facilities/communities to support proper inventory control
- Implementation of inventory management practices
- Maintaining of an up-to-date register for all prescriptions and dispensaries
- For all models, it is important that clients only receive a 6-month supply of ARVs. This decreases pressure on the ARVs supply chain. For community ART groups the quantity dispensed depends on the size of the group and should allow each member of the group to have at least one clinical review every 6 months.
- It is critical that reports about ART consumption are kept up to standard to inform stock management at the facilities and eventually at national levels.

- ART safety is also a concern: education on storing ART correctly, collecting ART for others, etc., must be provided and any irregularity should be managed accordingly. Regional and national structures can be of help in these cases. In different settings, the pharmacy procedures should be managed by the facility-based multidisciplinary teams (inclusive of pharmacy and laboratory personnel) to assure adequate attention to the supply chain issues.

Each model may have specific needs and procedures for ART management that have to be adapted to the implementation site. However, some general guidelines are provided here:

Pharmacy procedures for ART delivery models
• In different settings, the pharmacy procedures should be managed by the facility based multidisciplinary teams (with stewardship of pharmacy personnel) to assure adequate attention to the supply chain issues. • Pay attention to long-term ART side-effects, co-treatments, etc. If any concern arises, the client can be referred to mainstream care. • Ensure that the **Right** ARVs are given to the **Right** client at the **Right** time at the **Right** dose in good condition

Table 37: Pharmacy procedures for ART delivery models

8.3 Laboratory Procedures

Laboratory monitoring of HIV infection, staging of disease progression, monitoring of therapies, including management of antiretroviral toxicities, and the response to therapy are essential components of ART management. General laboratory monitoring for chronic ART care will follow requirements described in the Eswatini Integrated HIV Management Guidelines [2].

The Eswatini Health Laboratory Services will provide the laboratory services for the ART program within the existing laboratory network, consisting of main laboratories located in hospitals and health centres and mini-laboratories located in clinics and outreach sites.

The existing national sample transport system will facilitate the transportation of specimens from lower-level facilities to higher-level testing laboratories, including the return of client results. Laboratory specimen collection, handling, storage and transport will follow the established facility specific or generic laboratory handbook.

General laboratory procedures for chronic ART care for stable adult clients are described in the Eswatini Integrated HIV Management Guidelines 2018 [2] and include CD4 cell count, and viral load tests. CD4 cell count and viral load monitoring timing are summarized in Figure 15.

VL should be measured 6 months after ART initiation to confirm virological response to ART. After 2 consecutive undetectable VL results 6 months apart, VL monitoring can be done annually. A detectable viral load may indicate non-adherence, drug-drug interaction and/or possible treatment failure.

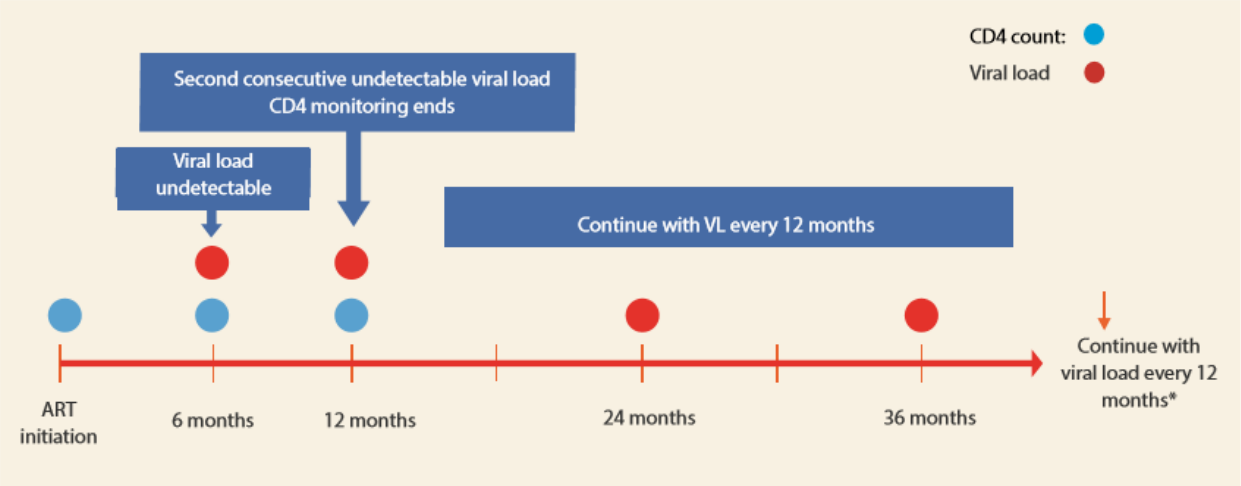

Figure 15: Timing of viral load and CD4 monitoring of stable adult clients

*For women clients, cervical cancer screening should also be done at the time of VL testing every 12 months.

If VL ≥1000 copies/mL, start Stepped up Adherence Counselling. Resume CD4 count monitoring if treatment failure is suspected. For clients with VL≥ 1000 copies/mL provide index HIV testing to their partners if they have a negative or unknown HIV status.

Targeted viral load monitoring can be done in clients presenting with new WHO treatment stage 3 or 4 opportunistic infections or whose treatment is suspected to be failing.

❖ **Communicating the Laboratory Results**

All laboratory results and other client information should be communicated directly with the client to maintain client confidentiality. In the case of groups or clubs whose members receive routine laboratory tests at the same time, results can be disseminated to the group as "normal" to all if they are within normal ranges for the group members. Abnormal results can only be communicated to the specific individual. Clients will still have the opportunity to have their results discussed in detail during the individual counselling sessions. Clients are free to share their own results with their peers during club or group meetings.

8.4 Monitoring and Evaluation (M&E) Systems

8.4.1 Data Tools Use

Existing tools should be used to monitor client care. These include the chronic care file, the ART patient booklets, ARV refill encounters (prescription forms) and the appointment registers. Data tools will be revised to accommodate the new models of ART, as well as grouping of clients. Existing tools will be used in patient/client tracking and the roll out of client management information system (CMIS) will facilitate the monitoring of the models of ART service delivery.

To ensure proper registration and efficient handling of treatment clubs and community ART groups, specific registers will be designed, and this will improve management of clubs and groups within a facility as well as reporting. Furthermore, there is a need to expedite and adapt CMIS Lite to facilitate capturing outreach and CCD data.

8.4.2 Monitoring & Evaluation Procedures

The general procedures for M&E must be followed. These procedures in relation to CommART are summarized here:

Monitoring & Evaluation Procedures
• **Document in the chronic care file the willingness of the client** to be part of the chosen model. • **Complete ART prescription and request laboratory investigation when due**. • **Ensure appointment dates** are given appropriately and follow missed appointments in all the models as done in the mainstream care utilizing available client tracking tools. • Ensure clients' visits are recorded in appropriate tools and systems to avoid false defaulters.

Table 38: Monitoring & Evaluation Procedures

8.4.3 Indicators under ART delivery models

Current national HIV care and treatment indicators will not significantly change due to roll out of ART delivery models. Additional indicators will be adopted to monitor

implementation progress of ART delivery models. Through incorporating the model of care as one of the variables for data collection, existing indicators will be disaggregated by the model of care and outcomes can also be analysed according to the model of care.

To facilitate management of community ART groups and facility-based treatment clubs, registration books will be developed. These registers will facilitate the monitoring and evaluation of the number of groups a facility has formed as well as that of group and club members themselves.

The following will be monitored:

- Retention in care
- Viral suppression
- Number of CAGs and FTCs in a facility
- Compliance to medicine pick up time
- Dynamic of changing models by clients

For CCD, we need additional parameters to capture the following:

- Number of community distribution points
- Mapping of appointments among PLHIV on ART offered CCD
- Number of clients accepted CCD
- Number of clients refilled under CCD and number refilled in the facility
- Number of missed Appointments
- Outcomes of interventions following missed appointments

Table 39 summarizes specific indicators to monitor the utilization of models of ART service delivery. Note that data on other integrated services such as PrEP, TB treatment, TPT, NCDs, etc. will also be captured in CCD. This will also include the laboratory tests done in CCD such as DBS VL, TB screening / sputum collection, HIVST, HIV rapid test to confirm HIVST screening, etc.

Indicator	Numerator	Denominator	Frequency	Data source

Number of clients enrolled in a specific model in a reporting period	Number of clients enrolled in a specific model	Total number of clients seen in the reporting period	Quarterly	- Clubs / CAGs registers - CMIS, APMR
Number of registered FTCs in a facility at the end of reporting period	Number of registered FTCs at the end of reporting period	Not applicable	Quarterly	Clubs / CAGs registers
Number of registered CAGs in a facility at the end of reporting period	Number of registered CAGs at the end of reporting period	Not applicable	Quarterly	Clubs / CAGs registers
Proportion retained in a specific model at (i) 6 months (ii) 12 months (iii) 36 months	Number of clients in care at (i) 6 and, (ii) 12 months (iii) 36 months from the beginning of the cohort	Number of clients enrolled in the model at the starts of the reporting period (i.e. the beginning cohort)	(i) Semi-annually (ii) Annually	CMIS, APMR
Number of clients due for VL who receive VL testing (disaggregated by models: Mainstream, FTC, CAG, and Outreach)	Number of clients due for VL with VL test done	Number of clients due for VL testing	Annually	CMIS, APMR
Proportion of clients tested for VL who are virally	Number of clients tested for VL who are	Number of clients who had VL test done	Annually	CMIS, APMR

suppressed (disaggregated by ART models: Mainstream, FTC, CAG, and Outreach)	virally suppressed during the reporting period			
Proportion of clients changing ART models at least once during the reporting period	*Number of clients who changed models at least once during the reporting period*	*Number of clients enrolled into ART models during the reporting period*	*Annually*	- *Clubs / CAGs registers* - *CMIS, APMR*
Proportion referred back to mainstream care due to becoming ineligible with specific model	Number of clients referred back to mainstream care due to ineligibility during the reporting period	Number of clients reviewed at least once in the model during a reporting period	Annually	- Clubs / CAGs registers - CMIS, APMR
*Indicators in italics are to be, monitored at facilities.				

Table 39: Indicators for models of ART service delivery

8.5 Engagement and Empowerment of Recipients of Care

The models of ART service delivery heavily rely on the education and engagement of the ART clients to play an active role in their care for many years. Issues like stigma, confidentiality, and trust in their peers and the health system, as well as concepts related to individual and collective responsibility or transition between models of care, are critical for ensuring successful long term ART outcomes. It is key that programs implementing these models of care pay special attention to sustained activities that contribute to this component.

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