SUPPLEMENT

PRIORITIZING DIFFERENTIATED ART DELIVERY FOR CLINICALLY STABLE CLIENTS IN WEST AND CENTRAL AFRICA

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

This supplement to *A Decision Framework for antiretroviral therapy delivery* outlines how the key principles of differentiated service delivery (DSD) can be applied to develop antiretroviral therapy (ART) delivery models for clinically stable clients living with HIV in West and Central Africa (WCA). The aim is to provide:

- **An overview of the principles of DSD** and how these can be applied to develop differentiated ART delivery models for clinically stable clients
- **Guidance on how to prioritize** differentiated ART delivery for clinically stable clients in WCA
- **Case studies from WCA** illustrating differentiated ART delivery in action.

This supplement is for WCA national and district ART programme managers, implementing partners, community partners and donors. It should be read in conjunction with the comprehensive *A Decision Framework for antiretroviral therapy delivery*.

HIV IN WEST AND CENTRAL AFRICA

Major progress has been made globally to move towards the UNAIDS 90-90-90 targets by 2020, with several countries in East and southern Africa close to epidemic control. Countries in WCA are lagging behind other regions. WCA accounts for 21% of the world's new HIV infections and 30% of global AIDS-related deaths. Within the region, ART coverage varies hugely, from 30% in the Democratic Republic of the Congo (DRC) to 82% in Burundi [1].

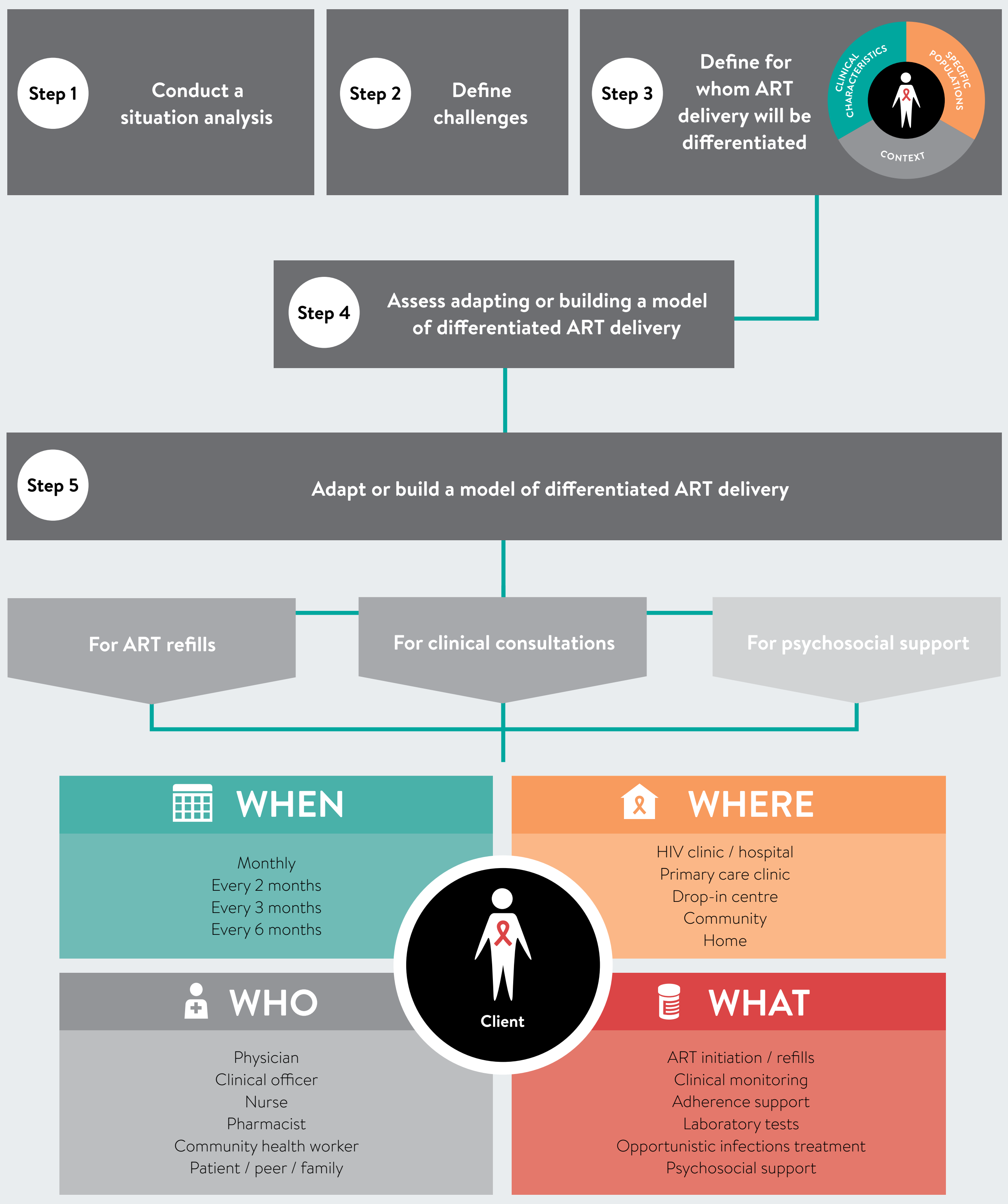
In 2016, UNAIDS launched a WCA catch-up plan to set the 25 countries in the region on the fast track to achieving the 90-90-90 targets by 2020 [2]. Barriers to scale up in this region remain complex. The lack of political commitment and funding, high levels of stigma, and health systems prioritizing services associated with user fees work together to deprioritize effective resource allocation and focused management of the HIV epidemic. Planning HIV service delivery in these contexts poses specific challenges. Within the WCA region, there are low- and high-prevalence settings and, within a country, prevalence can vary dramatically from region to region and by population. Providing HIV care within weak health systems that are often struggling in situations of post or active conflict or recovering from the devastating Ebola epidemic adds further complexity.

DIFFERENTIATED ART DELIVERY

DSD is centred on providing client-centred care that simplifies and adapts HIV services across the cascade to reflect the preferences and expectations of various groups of people living with and vulnerable to HIV while reducing the burden on health systems (Figure 1) [3]. DSD also applies beyond the treatment cascade to include prevention.

Differentiated ART delivery specifically focuses on differentiating service provision to clients already on ART. This approach is strategic for the HIV response in WCA where, due to lower prevalence, people living with HIV are widely and unevenly distributed, making it difficult and inefficient to provide comprehensive fully decentralized ART services.

Figure 1: Five-step approach to differentiated ART delivery, the three elements and the building blocks



Once a programme has started differentiated ART delivery, it can more readily be adapted to other populations, such as children, pregnant and breastfeeding women, key populations and clients with advanced HIV disease. See an example of scaled-up differentiated ART delivery in Box 1.

Box 1: Scaled differentiated ART delivery model examples from southern Africa

MOZAMBIQUE

What were the challenges?

- Lack of decentralization
- Inability to provide ART refills of longer than one month
- Long distances for clients to travel to health facilities.

What was the response?

Formation of community ART groups (CAGs) or Grupos de Adherencia e Apoio Comunitario (GAACs), a *client-managed group model*. These are self-formed groups of clients that meet in the community and who collect ART for each other on a rotating basis, visiting the facility once every six months for a clinical consultation.

In Mozambique, there are now more than 102,000 clients in GAACs – almost 10% of the national treatment cohort.

SOUTH AFRICA

What were the challenges?

- Large number of people living with HIV; very high prevalence
- High-volume overburdened clinics
- Limit of two month ART refills
- Long waiting times at health facilities.

What was the response?

Formation of adherence clubs, a *healthcare worker-managed group model*. These are groups of 25-30 clinically stable clients who meet at a set time in a facility or in the community. After a facilitated group discussion, clients receive pre-packed ART refills from lay providers.

In the Cape Metro District of the Western Cape province of South Africa, approximately 48% of the 210,000 clients who started ART in 2011-2016 had their HIV care managed in adherence clubs.

This supplement provides programme managers, implementing partners, community partners and donors working in WCA with a practical overview of priority differentiated ART delivery approaches for the region. By focusing on the opportunities that differentiated ART delivery can bring for clinically stable clients, it aims to show how both healthcare workers and clients in WCA can benefit. Starting with ART delivery is the first step.

In this supplement, an overview of planning for differentiated ART delivery in WCA is provided, followed by details of each of the four building blocks. Alongside the building blocks, case study examples from the region are described and questions for consideration are posed. Five priority actions for differentiated ART delivery in WCA are outlined to guide prioritization.

> **"ART centres are full of familiar faces. Sometimes you are close to the ART centre and yet you do not want to access the site and prefer a different centre because friends and relatives are close to the ART centre." – Client, Ghana**

PLANNING AND IMPLEMENTING DIFFERENTIATED ART DELIVERY IN WCA

Planning and implementing differentiated ART delivery requires a specification of when, where and what services should be delivered by whom and for which client group.

Who is a “stable” client?

Clinically stable clients are those people living with ART who are adherent to treatment and do not require frequent clinical consultations. The definition of “stable” varies across countries. The World Health Organization (WHO) defines clinically stable clients as those who have:

- Received ART for at least one year
- No adverse drug reactions that require regular monitoring
- No current illnesses, including malnutrition in children, mental health conditions or postpartum depression
- A good understanding of lifelong adherence
- Evidence of treatment success: two consecutive viral load measurements of <1,000 copies/mL, rising CD4 cell counts or CD4 counts >200 cells/mm^3 [4].

Case study: Country DSD policy example: Ghana [5]

Ghana’s 2017 DSD policy defines a “stable client” as one who has “been on current regimen (1st or 2nd line) for more than 12 months, no current opportunistic infections and stable laboratory indicators (if available), no adverse drug reactions, a good understanding of lifelong adherence to ART and evidence of attending appointments on time, viral load <1000 copies m/L OR where no viral load available no decreasing CD4 and no persistent CD4 measurement <100 cell/mm^3”.

PRIORITY ACTION 1

Endorse differentiated ART delivery for clinically stable clients.

PRIORITY ACTION 2

Engage people living with HIV in the design and delivery of ART services.

WHEN is ART delivered?

The “when” building block refers to the frequency of visits and the time of day the visits occur. Reducing the frequency of clinical and ART refill visits decreases the burden on the health system and both financial and time costs for the clients. Longer ART refills can enable a reduction in transport costs for clients and minimize the risk of accidental disclosure of their HIV status. WHO recommends 3-6-monthly clinical visits and 3-6-monthly ART refills for clinically stable clients [6].

It also reduces the necessity of ensuring that frequent ART refills are available at every health facility.

Case study: Providing longer ART refills in Nigeria [7]

To address increasing congestion in ART clinics after the introduction of the “treat all” strategy, 3-month ART scripts, referred to as multi-month scripts (MMS), were introduced in Nigeria by the Global Health Supply Chain Program-Procurement and Supply Management project on behalf of USAID. To enable longer ART refills, the supply chain and procurement systems were strengthened to ensure an uninterrupted ART supply. In addition, eligibility and inclusion criteria for sites were developed, quantification of ARV drug stocks was undertaken, healthcare workers were trained and performance indicators were agreed upon.

Impact: A total of 104 clinics were approved for MMS. Data from nine sites was used to assess the impact of the intervention. The cumulative number of clients seen in a day at the nine sites was reduced from 2,168 to 1,474 following introduction of MMS. Clinics were less crowded, workload decreased and there were shorter waiting times for clients. Healthcare workers felt that they could deliver a higher standard of care as more time was spent with each client and there was a decrease in human resource fatigue. The clients spent less money on travel, adherence remained stable and their satisfaction with the overall facility experience improved.

The WHO *Key considerations for differentiated antiretroviral therapy delivery for specific populations* provides guidance on the frequency of visits and ART refills for children, adolescents and pregnant and breastfeeding women [8]. Children are often brought to the clinic monthly because healthcare workers are concerned that dose adjustments will be needed because of weight changes. However, analysis of child growth data shows that between the ages of two and 10 years, only three dose adjustments are required. WHO's key considerations suggest that clinically stable children receive clinical visits every three months between the ages of two and four years, every three to six months for five to nine year olds and every six months for adolescents aged 10 to 19 years. Similarly, clinically stable pregnant and breastfeeding women require clinical visits only every 3-6 months, aligned as far as possible with maternal, infant and child health visits.

Case study: Providing 6-month ART refills in Guinea [9]

In Guinea, data from 2016 estimates HIV prevalence of 1.5%, ART coverage at 35% [10] and very high levels of HIV-related stigma. In 2014 during the Ebola outbreak, many clients faced restrictions in movement, resulting in a large proportion of the HIV cohort being lost to follow-up. A 6-month refill system, a *facility-based individual model*, was piloted and scaled up in response to this crisis. Clients were provided with 6-month ART refills (six bottles of 30 tablets each), known locally as "Rendez-vous à 6 mois" (R6M).

Impact: This approach was scaled up after the Ebola epidemic ended, reaching 1,166 adults, with 90% retained at 18 months.

ART REFILL & CLINICAL CONSULTATION [9]

WHEN	6 monthly
WHERE	Health facility
WHO	Doctor
WHAT	ART refill Clinical consultation Laboratory investigations (every 2nd visit) Psychosocial support Adherence check-up Rescripting

WHEN: Questions to consider

- **What is the duration of ART refills in your setting? Could it be extended to 3 or 6 months*?**
  **Note: Extending ART refills beyond 3 months must be supported by a strong supply chain.*
- **What is the frequency of clinical visits in your setting? Could it be extended to once every 6 months?**

PRIORITY ACTION 3

Extend ART refills for those who are adherent to treatment.

"I've been on ARVs for 10 years. I want to be responsible for my treatment."
– Client, Conakry, Guinea

"When I pick up my drugs at the community ART distribution point, I am supported and not stigmatised" – Client, Kinshasa, DRC

WHERE is ART delivered?

The "where" building block refers to the service location of clinical consultations and ART refills. WHO recommendations on decentralization include "maintenance at the community level" where "community level includes external outreach sites, health posts, home-based services or community based organizations" to support increased access and improved retention in care [11]. This recommendation applies to all adults, adolescents and children living with HIV, as well as all key populations.

Fast-track ART pickup from pharmacy

If the "when" building block has been addressed by extending ART refills and reducing the frequency of clinical visits and the clinic still remains congested with long waiting times, the next DSD model to consider introducing is a fast-track ART refill pickup model. Clients attend for a clinical visit once every six months, receiving a script for 3-month refills, and then pick up their ART refill directly from the pharmacy during a non-clinical visit.

Case study: Community-based distribution points in the Democratic Republic of the Congo [12, 13]

In 2016, DRC adopted "test and treat", leading to overwhelming clinic caseloads for healthcare workers, as well as extreme waiting times for patients at overburdened clinics. In two provinces in south-eastern DRC, three differentiated ART delivery models were introduced and offered to clients:

i) ART refills through support groups (*healthcare worker-managed group model – facility or community based*)

ii) Fast-track ART refill (*facility-based individual model*)

iii) Community-based points of ART distribution called PODI (points de distribution) (*out-of-facility individual model*).

Impact: Three PODI sites were established, supporting 1,848 stable clients on ART. High rates of retention have been observed (94.9% at six months, 89.3% at 12 months and 82.4% at 24 months) and transport costs have been reduced by two-thirds. The waiting time for a PODI ART refill is 12 minutes, compared with 85 minutes in the hospital.

	ART REFILL	CLINICAL CONSULTATION
WHEN	3 monthly	Annually
WHERE	PODI (community based)	Health facility
WHO	Expert client (person living with HIV)	Doctor
WHAT	ART refill TB screening Adherence check Peer support	Clinical assessment Laboratory investigations Rescripting

WHERE: Questions to consider

- **What proportion of health facilities in each district can initiate or maintain ART?**
- **Is distance a barrier for access in the setting?**
- **If yes, is it strategic to decentralize further (clinics congested despite reduced frequency clinical visits and extended refills)?**
- **Are more ART initiation or maintenance sites needed or would increasing ART refill collection sites be sufficient?**

PRIORITY ACTION 4

Emphasize that adherent clients can collect ART refills without seeing a clinician.

"By taking our ARVs within our community, we have become autonomous and empowered", say Stephane, Julienne, Chantale, David and Jean-Pierre from Kinshasa.

Decentralizing to bring ART closer to home

Decentralization of ART delivery for clinically stable clients has been demonstrated to improve retention where distance poses a major barrier to access. In low-prevalence settings where HIV-related stigma may be high, clients should always be given the choice of attending their local clinic or ART service of their preference not within their community. In low-prevalence contexts or in countries with large regional variation in prevalence, the decision to decentralize further is a strategic one, requiring an assessment of a number of factors. These may include:

- Regional variations in prevalence
- Analysis of the current HIV care continuum data to determine need
- The extent to which centralized clinics in high population-density urban areas are overburdened
- Human resource capacity to have trained workforces at multiple facilities, including at those with small numbers of clients
- Geographical and topological challenges that affect access
- Ability of the supply chain to effectively and efficiently reach more facilities.

Differentiation can also be considered between the option of establishing full ART sites that provide initiation and maintenance management and the option of decentralizing ART refills alone.

Importantly, countries or districts should consider partial decentralization where ART refills are available at decentralized sites with clinical assessments and laboratory services offered at centralized sites.

WHO is delivering ART?

The “who” building block refers to the service provider for clinical consultations and ART refills. In many WCA settings, the lack of human resources is a major barrier to scale up. Consider task shifting clinical consultations to non-physician clinicians or nurses and distribution of ART refills to lay cadres. Further, engaging peers in the provision of HIV care can improve client outcomes and support stigma reduction.

WHO recommendations for task shifting and task sharing include the following:

- Trained and supervised lay providers can distribute ART to adults, adolescents and children living with HIV.
- Trained non-physician clinicians, midwives and nurses can initiate first-line ART.
- Trained and supervised community health workers can dispense ART between regular clinical visits.

Case study: ART refills in patient support groups in Côte d'Ivoire [14]

In Côte d'Ivoire, stable clients attending health facilities can choose between two differentiated ART delivery models:

i) Facility fast track (*facility-based individual model*), which provides 3-monthly ART refills and 6-monthly clinical consultations with fast pickup of ART refill at visits with no clinical consultation

ii) ART refills through patient support groups (called adherence clubs) (*healthcare worker-managed group model – facility or community based*), run by community counsellors and social assistants at the facilities.

Impact: By June 2018, 49% of the country's facilities were implementing one of these models, with 30,518 (74%) of eligible patients receiving their ART through one of these two models.

	ART REFILL	CLINICAL CONSULTATION
WHEN	3 monthly	6 monthly
WHERE	Health facility	Health facility
WHO	Community counsellor and/or social assistant	Doctor
WHAT	ART refill Group counselling Peer support	Clinical assessment Laboratory investigations Rescripting

WHO: Questions to consider

- **Can nurses or non-physician clinicians conduct ART maintenance clinical consultations for stable clients?**
- **Can community workers or lay providers distribute ART refills within facilities and/or within community settings?**

PRIORITY ACTION 5

Enable the distribution of ART refills and psychosocial support by peers and lay providers, particularly for key populations.

WHAT services should be offered?

The "what" building block refers to the service package at each visit. As described previously, clinically stable clients do not require a clinical consultation at every ART refill visit. It is important to separately stipulate what services are provided at the ART refill visit and at the clinical consultation visit. For ART refill visits, options include a brief symptom screen, cotrimoxazole refill, family planning repeat, TB preventative therapy (TPT) refill, adherence checks and peer support. For clinical consultations, options include laboratory investigations, such as viral load monitoring, co-morbidities, TPT or family planning (FP) assessment and ART refill, as well as rescripting for ART, non-communicable disease, TPT and FP.

Case study: Community pharmacies for ART refills in Nigeria [15]

Community pharmacies in Nigeria are registered as private pharmaceutical premises. In 2014, there were 530 registered pharmacies in the capital city of Abuja. Clinically stable patients (defined as more than six months on ART with suppression of viral load <20 copies m/L on first-line ART regimens) were referred from public ART hospitals to community pharmacies to collect ART refills.

Clients took a referral document and prescription to their preferred community pharmacy, where the community pharmacy dispensed their ART refills bimonthly for free. Clients attend 6-monthly clinical consultations at the public hospital. Clients observed to be unwell are immediately referred back for medical assessment. The community pharmacies were also provided with leadership and management services on maintaining good relationships with patients.

Impact: In total, 375 clients were successfully decentralized from 14 public hospitals to 26 community pharmacies between February 2016 and May 2017. Prescription refill was 100% and almost all participants (99.7%) were retained in care. This model has now been scaled from Abuja to three more Nigerian states – Kano, Nasarawa and Katsina – with 64 registered pharmacies providing ART refills to 5,017 clients by mid-March 2019. There are plans for further expansion to the southern part of the country, starting with River State.

	ART REFILL	CLINICAL CONSULTATION
WHEN	2 monthly (3 monthly in cases of frequent travel)	6 monthly
WHERE	Community pharmacy	Health facility
WHO	Community pharmacist	Doctor
WHAT	ART and cotrimoxazole refills Brief symptom/adverse events screen Adherence check Ensure attendance for clinical consultation on due date	Clinical assessment Laboratory investigations (viral load) Rescripting

WHAT: Questions to consider

- **Can clients collect an ART refill without seeing a nurse or doctor?**
- **Are there other health or psychosocial services that can be integrated with either the ART refill or clinical consultation visits, such as family planning?**

ADAPTIONS FOR UNSTABLE CONTEXTS AND KEY POPULATIONS IN WEST AND CENTRAL AFRICA

Differentiated ART delivery in unstable or conflict settings

A number of countries in WCA face ongoing conflict. The principles of differentiated ART delivery have been used in such contexts to enable patients to continue treatment. Building strong community links, along with mechanisms to ensure basic ART supply, are essential to enable these models to succeed.

Case study: Spacing ART visits in the Central African Republic [16]

The Central African Republic (CAR) has had conflicts associated with political instability for many years. In 2017, HIV prevalence was estimated at 4%, one of the highest in the WCA region, and with significant regional variation within the country [17]. In the region of Zemio, prevalence was 12%, with only one ART site; many clients had to travel more than 250km to this site in difficult conditions due to both the rainy season and possible violence. Despite these challenges, in 2015, 960 people were on ART, 6.2% of them under 15 years of age. To support continuity of ART supply, ART was decentralized to identified peripheral clinics; the initiation of ART was task shifted to nurses and the maintenance of ART to lay cadres; and 6-month ART refills were implemented.

Once these three priority differentiated ART delivery interventions (decentralization; task shifting and task sharing; extended ART refills) were implemented, clinically stable clients were offered a choice between two differentiated ART delivery models:

i) Pharmacy fast track (PFT) (a *facility-based individual model*), where clients go straight to the pharmacy to collect ART refill at the visit where there is no clinical consultation

ii) Community adherence/ART groups (CAGs), (a *client-led group model) – community based* – where groups of clients identified from the same geographical area collect ART for each other on a rotating basis.

	ART REFILL	CLINICAL CONSULTATION
WHEN	3-6 monthly (adapted to assessment of risk to continuity of care)	Annually
WHERE	Community (CAGS) or peripheral clinics (PFT)	Peripheral clinics
WHO	Clients (CAGS) or lay providers (PFT)	Nurses
WHAT	ART and cotrimoxazole refills Adherence check Peer support (CAGS)	Clinical assessment Laboratory investigations Rescripting

"Today, we have all the necessary ingredients to end the AIDS epidemic as a public health threat and make it a thing of the past. Today, it is up to us to make the most of these tools, and one of these is to invest in the community-based approach for HIV services delivery." – Ali Bongo Obdimba, President of Gabon

Differentiated ART delivery for key populations

In low HIV-prevalence settings, key populations, including men who have sex with men, people who use drugs, transgender people and sex workers, may represent a greater proportion of those living with HIV compared with other settings. All members of key populations living with HIV who are clinically stable on ART should have access to the same differentiated ART delivery models that are being offered to other stable clients. In addition, specific adaptations to each of the building blocks may be considered to meet the needs of key populations. *A Decision Framework for differentiated antiretroviral therapy delivery for key populations* describes these adaptations in detail [18].

Case study: Providing ART to clinically stable men who have sex with men in Ghana

The Ghana national DSD operational manual has endorsed a model for primary health centres, community sites and key population drop-in centres to function as ART refill sites. Drop-in centre refill sites should have a defined agreement with a specific ART site where the client's care booklet is held, where ART is supplied and where clinical follow-up is provided. A nominated healthcare worker or client collects ART from the ART sites. The host ART site performs the 6-monthly clinical review and scripts two 3-month ART refills, which can be distributed by lay cadres, including peers. The International Healthcare Centre (IHCC) has utilized the policy to differentiate ART delivery for stable men who have sex with men. IHCC operates a private community clinic with outreach services to men who have sex with men. Stable men who have sex with men receive an abbreviated clinical check-up by a nurse and ART refills of 4-6 months (depending on drug supply availability) during extended hours. When men who have sex with men express concern at being seen by other community and network members, they are also given the option for lay healthcare workers (peers) to deliver their ART refills to an agreed community pickup point or for pickup from the mobile outreach service.

	ART REFILL	CLINICAL CONSULTATION
WHEN	4-6 monthly Extended hours (8am-8pm on weekdays and 8am-1pm on Saturdays)	4-6 monthly Extended hours (8am-8pm on weekdays and 8am-1pm on Saturdays)
WHERE	IHCC community clinic or delivered at home by peer or picked up from mobile outreach	IHCC community clinic
WHO	Peer/nurse	Nurse
WHAT	ART refill Referral check Adherence check Condom and lubricant distribution	Clinical consultation Laboratory tests Rescript

"Ever since we're aware of our status we have access to treatment. However, there are sites where there is lack of access, and there are times when people living with HIV don't have financial means to travel to health centres and therefore they abandon treatment." – Client, Senegal

CONCLUSION

Assessing how differentiated ART delivery can address access challenges for clients and demands on health systems is as relevant for WCA as it has been for East and southern Africa. This briefing document focuses on ART delivery for clinically stable clients, which is where DSD began and has had the most impact in high-prevalence settings to date. By providing longer ART refills, weak and overburdened health systems can provide more accessible ART care and treatment to clinically stable clients, supporting long-term adherence and retention. Increased time for healthcare workers may consequently be redirected to identify new cases of HIV, initiate those identified on ART, and manage clients with advanced HIV disease and those who are failing their treatment.

Differentiated ART delivery may also be a means to address barriers related to stigma in WCA through reducing the number and waiting time of visits to the clinic, allowing continued care further away from home if preferred and supporting more integrated and community-based services. The majority of people living with HIV can adhere to treatment if they are clinically stable and self-empowered to manage their own disease; demonstrating this can go a long way towards ensuring that living with HIV is like any other chronic disease, with people leading long and productive lives.

Prioritizing these five actions to enable differentiated ART delivery is the first step in a differentiated service delivery approach for HIV in WCA.

For more information on differentiated service delivery, including the latest best practices, normative and clinical guidelines and tools to support country implementation, visit www.differentiatedservicedelivery.org

FIVE PRIORITY ACTIONS FOR DIFFERENTIATED ART DELIVERY IN WEST AND CENTRAL AFRICA

1. **Endorse differentiated ART delivery for clinically stable clients.**
2. **Engage people living with HIV in the design and delivery of ART services.**
3. **Extend ART refills for those who are adherent to treatment.**
4. **Emphasize that adherent clients can collect ART refills without seeing a clinician.**
5. **Enable the distribution of ART refills and psychological support by peers and lay providers, particularly for key populations.**

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