



DIFFERENTIATED CARE FOR HIV:

A DECISION FRAMEWORK FOR DIFFERENTIATED ANTIRETROVIRAL THERAPY DELIVERY

For children, adolescents and pregnant and breastfeeding women

It's time to *deliver* differently.

A woman with dark hair tied back, wearing a white patterned top, is holding a young child. The child is smiling and looking towards the right. The background is a solid blue color. The woman is looking at the child with a gentle expression. The child is wearing a light blue shirt. The woman has a gold watch on her left wrist and a yellow bracelet on her right wrist. The child has a red string on their right wrist.

**Differentiated care:
Relevant for all people
living with HIV, including
children, adolescents
and pregnant and
breastfeeding women.**

**It's time to *deliver*
differently.**



A Decision Framework for differentiated antiretroviral therapy delivery for children, adolescents and pregnant and breastfeeding women draws purposeful attention to these specific populations. The concepts presented here are applicable to a global audience.

This is the second of the Decision Framework series. Further iterations will be developed to support other specific populations, including men and key populations (men who have sex with men, people who inject drugs, sex workers and transgender people), other parts of the HIV care cascade and different contexts. **This is the second step.**

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ABBREVIATIONS

AC	Adherence clubs	M&E	Monitoring and evaluation
AIDS	Acquired immune deficiency syndrome	MNCH	Maternal, newborn and child health
ANC	Antenatal care	PBFW	Pregnant and breastfeeding women
ART	Antiretroviral therapy	TB	Tuberculosis
ARV	Antiretroviral	PCR	Polymerase chain reaction
CAGs	Community ART groups	PCC	Primary care clinic
CATS	Community Adolescent Treatment Supporters	PEPFAR	The United States President's Emergency Plan for AIDS Relief
C-BART	Community-based ART	PNC	Postnatal care
CBO	Community-based organizations	PHC	Primary health care
CD4	Cluster of differentiation 4	PLHIV	People living with HIV
CDC	Centers for Disease Control and Prevention	SPEEDI	Standardized Paediatric Expedited Encounters for ART Drugs Initiative
DSD	Differentiated service delivery	SRH	Sexual and reproductive health
EID	Early infant diagnosis	VL	Viral load
FP	Family planning	WHO	World Health Organization
HIV	Human immunodeficiency virus	UNAIDS	Joint United Nations Programme on HIV/AIDS
HRMIP	High-risk mother-infant pair	USAID	United States Agency for International Development
LRMIP	Low-risk mother-infant pair		
MIPs	Mother-infant pairs		

EXECUTIVE SUMMARY



I still miss one day of school a month to go to the clinic and collect my ART even though I feel well.

Learn more about **Sophia**, an adolescent client, on page 20



We need to reach 90-90-90 and scale up treat all. How are we going to get there with the resources we have?

Learn more about **Andrew**, a district ART manager, on page 20

These concerns from an adolescent client and district ART manager highlight the challenges being faced as we continue to scale up antiretroviral therapy (ART) services. Reaching more than 18 million people with ART is a considerable feat [1]. However, with nearly 37 million people living with HIV (PLHIV) worldwide [1], much work remains in order to fully realize “treat all” and expand access to ART. Children, adolescents and pregnant and breastfeeding women (PBFW) and their infants have unique needs and expectations. When these are considered by the health care system, both the clients and the health care system stand to benefit.

Differentiated care, or differentiated service delivery, provides a framework for innovating service delivery. “Differentiated care is a client-centred approach that simplifies and adapts HIV services across the cascade, in ways that both serve the needs of PLHIV better and reduce unnecessary burdens on the health system” [2]. It applies to all populations, including children, adolescents and pregnant and breastfeeding women.

To date, many of the well-known differentiated care models have adapted service delivery for clinically stable non-pregnant adults in high-burden epidemic settings. However, the largest potential gains of differentiated care may be for client groups that currently have poor outcomes. Data from children, adolescents and PBFW suggest that there are substantial opportunities to improve their outcomes and quality of care.

The 2017 Key Considerations for Differentiated ART Delivery for Specific Populations: Children, Adolescents, Pregnant and Breastfeeding Women and Key Populations or Key Considerations [3], advocates for providing access to differentiated ART delivery for specific populations. *A Decision Framework for ART Delivery for children,*

adolescents and pregnant and breastfeeding women or the *Decision Framework for Specific Populations* as it is referred to throughout this document for ease, focuses on how to implement these recommendations. The framework is aimed at supporting HIV programme managers at the national and district level to adapt or build differentiated models of ART delivery. The document guides the reader through how to assess the data and identify priorities to address specific and local challenges. The *Decision Framework for Specific Populations* is supported by an online compendium of tools and best practices, available at www.differentiatedcare.org.

In Part 1, an overview of differentiated care and differentiated ART delivery is provided, and the core principles for the specific populations are defined. Part 2 describes a 5-step plan to guide ART programme managers to prioritize which interventions to implement in response to the specific context. In Part 3, the key “elements” of a client, including their clinical characteristics, specific population(s) group(s) and context in which they live, are outlined. Part 4 presents two key questions to consider before proceeding with building a new differentiated ART delivery model: (i) whether to adapt differentiated ART delivery models for adults; or (ii) whether to adapt current psychosocial support interventions for specific populations. The “building blocks” of service delivery are presented in Part 5 with illustrative examples.

To respond to the needs of specific populations and improve ART delivery within a public health approach, the HIV response must now *deliver* differently. Coordinated support from donors, implementing agencies and networks of PLHIV is needed to take on this challenge. The *Decision Framework for Specific Populations* is a practical tool to guide how to *consider* specific populations differently with the aim of providing children, adolescents and PBFW with quality HIV services when, where and how they want it.

COMMON CHALLENGES: WHY IT'S TIME TO DELIVER DIFFERENTLY

CLIENT PERSPECTIVE

HEALTH CARE WORKER PERSPECTIVE



Why do I have to miss a day of school every month to go to the clinic when I feel healthy?

How will I manage to spend time with teenagers who have depression and are not taking their treatment?

My mother collects her antiretrovirals (ARVs) in our village so why do I have to travel to the clinic for my ARVs?

Why do I need to see this child every month to weigh him when his drug dosages are not going to change again for at least 2 years?



How will I manage to fit in visits to the clinic for my new baby and my visits to get my ARVs?

I start my clients on treatment while they are pregnant, but how will they stay on treatment if they're scared to go to the HIV clinic after delivery?



Why do I have to spend the whole day at the clinic every month to collect my ARVs now that I am pregnant when I used to get my treatment at a pick-up point in my community?

Why can't a good club member stay in the group now that she's pregnant?



PREFACE

Background

The first *Decision Framework for ART delivery* was released in July 2016 at the 21st International AIDS conference in Durban, South Africa [4]. It sets out the background and principles of differentiated care with a menu of examples of differentiated ART delivery focusing on clinically stable adults. It also provides guidance on how to prioritize which elements of differentiated care should be implemented in a given setting and how to build a differentiated ART delivery model/s for clinically stable adults.

An online knowledge repository, www.differentiatedcare.org, supports both the first *Decision Framework* and the *Decision Framework for Specific Populations*. It is the “go-to” resource for differentiated care and includes global and national guidance, best-practice service delivery models with their associated implementation tools, and related resources.

Moving beyond “stable” adults

Children, adolescents and pregnant and breastfeeding women (PBFW), as well as their infants, stand to benefit from access to differentiated ART delivery models. While the first *Decision Framework* considered populations other than 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 [4]. 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.

As countries have formulated differentiated care policies, there has been a louder call for guidance on whether children, adolescents and PBFW should also have access to differentiated ART delivery and how to build models for these populations. While specific populations extend beyond children, adolescents and PBFW, the *Decision Framework for Specific Populations* focuses on the aforementioned populations.

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. The *Decision Framework for Specific Populations* is focused on clinically stable clients. While acknowledging 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, there are no global recommendations and limited evidence on appropriate

building blocks or models. However, there are Key Considerations and increasing evidence for specific clinically stable populations. It is for these reasons that this document focuses on how to operationalize differentiated ART delivery for specific clinically stable populations.

How to read the *Decision Framework for Specific Populations*

The *Decision Framework for Specific Populations* can be read as a stand-alone document without reference to the first *Decision Framework on ART delivery*. It sets out a comprehensive understanding of differentiated ART delivery and a step-by-step approach to building differentiated ART delivery models. The examples and case studies provided specifically focus on children, adolescents and pregnant and breastfeeding women.

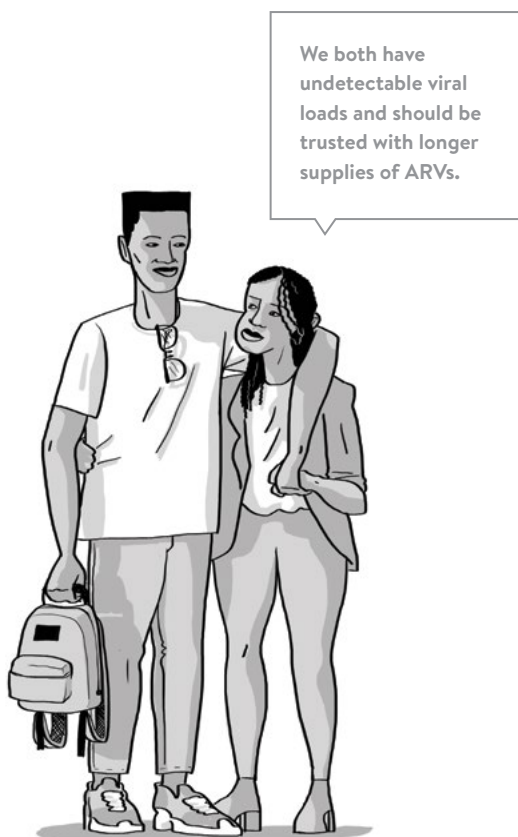
The *Decision Framework for Specific Populations* complements another new publication, the “Key Considerations for Differentiated Antiretroviral Therapy Delivery for Specific Populations: Children, Adolescents, Pregnant and Breastfeeding Women and Key Populations”, or Key Considerations. The Key Considerations outlines “what” should be implemented and the *Decision Framework for Specific Populations* operationalizes “how” to implement them. An additional decision framework, which reflects the Key Considerations for key populations, will be released in 2018.

If you are new to differentiated care or the *Decision Framework*:

Read from Part 1 (page viii)

If you have experience in differentiated care or have read the first *Decision Framework*:

- Skip pages i–1
- Start on page 2, Part 1: Why do we need to differentiate ART delivery for specific populations?
- Read Part 2, which revises the 5-step approach to adapt or build differentiated ART delivery models for a new population
- Skip pages 12–13
- Read Part 3 from page 14: How do we differentiate based on the specific population?
- Read Part 4 & Part 5



Use of the term, “specific populations”

The *Decision Framework for Specific Populations* purposefully focuses on children, adolescents and pregnant and breastfeeding women and their infants. There is no one ideal word for collectively referring to these specific populations. However, for ease of use in this document, the term, “specific populations”, will be used.

In the *Decision Framework for Specific Populations*, clients not addressed in detail include:

- those who are both an adolescent and pregnant
- key populations (men who have sex with men, people who inject drugs, sex workers and transgender people)
- those who are both an adolescent and members of key populations
- men in their role as fathers within the family unit as well as men more generally outside of this role
- children of key populations.

Further iterations of the Decision Framework series will be developed to support some of the above mentioned populations, other parts of the HIV care cascade and different contexts.

Objectives of the Decision Framework for Specific Populations

The objectives of the *Decision Framework for Specific Populations* are to provide:

- A **background** to the principles of differentiated care and ART delivery
- A **menu of examples** of differentiated ART delivery for the specific populations
- **Guidance** on how to adapt or build a differentiated ART delivery model for children, adolescents and/or PBFW.

The *Decision Framework for Specific Populations* is aimed at both national and district ART programme managers and, where appropriate, implementing partners, donors and others supporting or working with the national ART programme. The online knowledge repository (www.differentiatedcare.org) has been updated to include best-practice ART delivery models for children, adolescents and PBFW.





PART 1

INTRODUCTION

WHAT IS DIFFERENTIATED CARE AND DIFFERENTIATED ART DELIVERY?

What is differentiated care?

“Differentiated care is a client-centred approach that simplifies and adapts HIV services across the cascade to reflect the preferences and expectations of various groups of PLHIV while reducing unnecessary burdens on the health system” [2]. By providing differentiated care, barriers to clients’ HIV service access are reduced and the health system can refocus resources to those most in need.

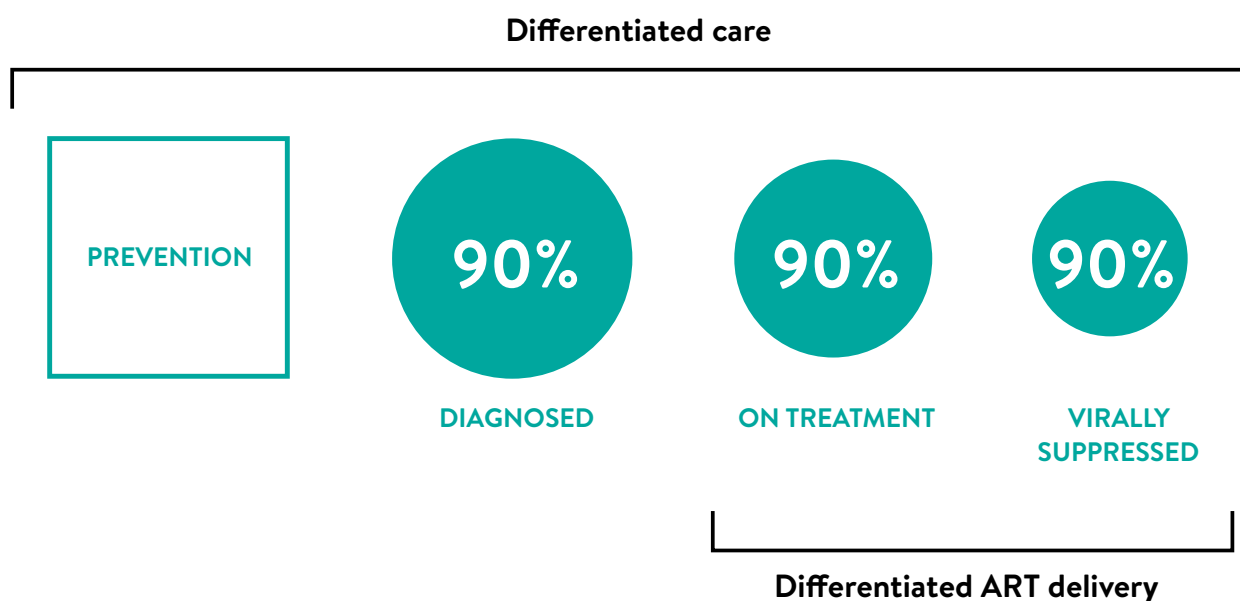
Differentiated care is aimed at enhancing the quality of the client experience, putting the client at the centre of service delivery, while ensuring the health system is functioning in both a medically accountable and efficient manner. The central driver to adapting service provision is the client’s needs. Recognizing a public health approach, one must consider the needs of a group including the specific client population (e.g., children, adolescents, PBFW) and the context in which he/she lives and seeks care (e.g., urban or rural, low- or high-burden setting). These elements are further described in Part 3 (page 12).

Differentiated care is also referred to as differentiated service delivery (DSD). To meet the diversity of needs for PLHIV, the World Health Organization (WHO) recommends a differentiated care approach to service delivery [5].

Differentiated ART delivery is a component of differentiated HIV care

Differentiated care applies across the HIV continuum, from prevention to viral suppression, and across all three of the 90-90-90 targets (90% of PLHIV should know their status; 90% who know their status should be on ART; 90% of those on ART should be virologically suppressed) [6]. Differentiated ART delivery is a component of differentiated care (Figure 1). The principles of differentiated care are presented within the *Decision Framework for Specific Populations* in the context of ART delivery.

Figure 1: Differentiated care is applicable across the HIV care continuum



A FOCUS ON SPECIFIC POPULATIONS

The *Decision Framework for Specific Populations* is focused on children, adolescents and PBFW who are clinically stable on treatment, and presents models of ART delivery adapted to their needs. While the principles of differentiated care apply across the HIV cascade and indeed extend to other diseases (Figure 1), there is significant momentum, policy guidance and evidence for scaled-up implementation of differentiated ART delivery for clinically stable clients. As ART cohorts have matured, a growing number of children, adolescents and PBFW in treatment programmes are virally suppressed and do not require frequent clinical and laboratory monitoring.

Aligning the service delivery model for parents or caregivers and their children will reduce the burden of, for example, the mother having to come separately for her own care and that of her child. By revising models of ART delivery for specific clinically stable populations, their retention and suppression can be improved. As outlined in the preface, the *Decision Framework for Specific Populations* builds on and expands from the 2016 *Decision Framework* [4] that was focused on adults. Further iterations will be developed to support other parts of the treatment cascade (e.g., testing and linkage) and expand to other specific populations (e.g., key populations).

WHY DO WE NEED TO DIFFERENTIATE ART DELIVERY FOR SPECIFIC POPULATIONS?

1. To improve clients' quality of lives

Most importantly, differentiated ART delivery can improve the quality of care and access to treatment for children, adolescents and PBFW living with HIV. It can better reach these underserved populations and address issues surrounding stigma and discrimination that many face when accessing HIV services. Differentiated ART delivery is responsive to the needs of PLHIV and often results in increased levels of adherence, client satisfaction and client empowerment [12].

2. To increase health system efficiencies and outcomes

Supporting clients to initiate ART is critical, but long-term retention in care and adherence to effective treatments is required to achieve viral suppression. Retention data from many countries demonstrates that ART programmes globally face substantial challenges in maintaining clients on ART [13] with viral suppression [14], especially children, adolescents and breastfeeding women [15-17]. Data from sites where differentiated ART delivery has been adopted highlight the reality that such interventions can be part of improving retention and adherence and achieving the second and third "90" outlined in the Joint United Nations Programme on HIV/AIDS (UNAIDS) global targets (Figure 1).

3. To realize the benefits of a family-based approach

HIV-related care frequently includes multiple family members; benefits provided by differentiated ART delivery

access are optimized when applied to all family members. This means allowing access to the same or aligned differentiated ART delivery models. For example, it will only be through providing clinically stable children with their ART refill through the same model of care as their caregiver that we will realize the efficiency potential of differentiated ART delivery.

4. To continue to support "treat all"

Worldwide, nearly 37 million people are living with HIV and 18.2 million people are receiving ART; of these, 1.8 million are estimated to be children (<15 years) [1, 18]. With the implementation of the WHO 2015 recommendation to "treat all" HIV-positive individuals with ART [19], health systems, often already under extreme pressure due to lack of human and financial resources, will have to re-examine how ART care is delivered.

5. To reach 90-90-90

Although there are 18.2 million people on treatment, coverage is still below 50%, with 46% of adults and 49% of children with HIV accessing ART [1, 20]. Clients who are not currently on treatment need to access ART within a service delivery model that meets their needs and expectations, and the health care system must find ways to support doubling the number of ART clients. As highlighted within the most recent WHO Guidelines [5] and the Key Considerations [3], different packages of care are essential to address these diverse needs.

WHAT ARE THE CORE PRINCIPLES OF DIFFERENTIATED CARE?

Client-centred care

A core principle for differentiating care is to provide ART in a way that acknowledges specific barriers identified by clients and empowers them to manage their disease with the support of the health system. WHO highlights the need for client-centred care to improve the quality of HIV care services (Box 1) [5].

To date, most ART services have been provided as stand-alone vertical services. However, with a growing and maturing cohort of clients, a service delivery approach that responds to the needs of various groups of PLHIV is required to enable clients to have sustained viral suppression. For example, breastfeeding women may prefer to access integrated infant follow up and maternal HIV care services while adolescents may prefer to access integrated sexual and reproductive health (SRH) and HIV care services.

Health system efficiency

With the population of PLHIV having increasingly diverse needs, it is acknowledged that health systems will need

to move away from a “one-size-fits-all” approach [2].

Differentiated care supports shifting resources to clients who are the most in need by supporting clinically stable HIV clients to have fewer and less intense interactions with the health system.

WHO Guidelines

Box 1: Recommendations on client-centred care [5]

“HIV programmes should: provide people-centred care that is focused and organized around the health needs, preferences and expectations of people and communities, upholding individual dignity and respect, especially for vulnerable populations, and engage and support people and families to play an active role in their own care by informed decision-making.”

WHAT ARE THE CORE PRINCIPLES OF DIFFERENTIATED CARE FOR SPECIFIC POPULATIONS?

A family-based approach

The *Decision Framework for Specific Populations* seeks to highlight how ART delivery models can take a family approach when considering care for children and their parents or caregivers [7]. Increasingly, there are calls to align policies and service provision models for children and their parents or caregivers [8]; doing this can improve the entire family clinical cascade [9]. It is recognized that there are many other members of a family and different types of families. The *Decision Framework for Specific Populations* profiles best-practice examples where the needs of family members are considered in aiming to consolidate care, resulting in fewer burdens for both the clients and the health care system. Family members are interdependent and therefore a change to one member’s care can create either challenges or opportunities for another member [10, 11].

Integration of services

Integration of services is a core principle of differentiated HIV care, particularly for specific populations. Alongside task sharing and decentralization, integration of HIV care with other health services is a WHO recommendation to strengthen the continuum of treatment and care [5]. Integration is highlighted as key to providing benefits to mothers and their infants, and combining adolescent HIV

services with “comprehensive services to address [their] multiple needs, including psychosocial support and sexual and reproductive health” is suggested.

Leveraging and encouraging psychosocial support

The importance of psychosocial support for all PLHIV, including support from communities and peers, is of particular significance to these specific populations [3]. Many facilities and communities have caregiver, adolescent or PBFW support groups provided through community-based organizations (CBOs), or programming for orphans and vulnerable children. These provide a unique opportunity to be leveraged and include the distribution of ART refills (see page 21).

While one-on-one adherence counselling is an important part of both ART initiation and the package of care for clinically unstable clients, ongoing adherence counselling may not be necessary for clinically stable clients and may place an undue burden on the clients, providers and the health care system. Therefore, the type and frequency of psychosocial support should be appropriate to the needs of the client. Just as PLHIV in differentiated ART delivery models can access services outside of scheduled visits, psychosocial support can similarly be accessed and should be available at the frequency desired by the client.

CRITERIA OF A CLINICALLY STABLE CLIENT

Criteria for defining “stable”

Providing access to differentiated ART delivery for clinically stable clients requires establishing criteria to identify those who can be considered “stable”. Most definitions of “stable” include a minimum duration on ART and a measure of adherence or treatment success. Below, Box 2 outlines the criteria for clinically stable clients from the Key Considerations. Importantly, the Key Considerations suggest that the criteria should strive to match the adult criteria. This will enable simplified implementation for specific populations.

Referral for intensified clinical support

In the same way that criteria are required for accessing differentiated ART delivery for stable clients, criteria are needed for referring a client from the differentiated ART delivery model for intensified care. The Key Considerations recommend the same criteria for all specific populations (Box 3) [3]. When differentiated ART delivery models started, it was common to refer the clients with poor adherence out of their differentiated ART delivery model back to routine facility-based, clinician-led care. As models have evolved to cater for specific populations, such as adolescents, **clients who experience “instability” (such as**

viral rebound) may be able to remain in their differentiated ART delivery model but have additional clinical consultations and/or one-on-one adherence counselling added for a specified period to support re-suppression.

Key Considerations

Box 3: Referral criteria for intensive services [3]

- An acute intercurrent illness requiring more frequent clinical management, including but not limited to developing comorbidity or infection, mental illness, an adverse drug reaction or malnutrition in children;
- Viral load >1000 copies/mL;
- Psychosocial issues or mental health disorders requiring more intense support or management; and
- Harmful drug or alcohol use or dependence as defined by ICD-10 or other diagnostic criteria and that affect adherence to ART.

Key Considerations

Box 2: Criteria for clinically stable clients [3]

The same criteria as for adults: received ART for at least one year, no adverse drug reactions that require regular monitoring, no current illnesses (including conditions such as malnutrition in children, mental health conditions or postpartum depression), a good understanding of lifelong adherence and evidence of treatment success (two consecutive viral load measurements below 1000 copies/mL, rising CD4 cell counts or CD4 counts above 200 cells/mm³).

Additional criteria for specific populations:

Children: should be at least two years old, taking the same regimen for more than three months and caregivers counselled and oriented on the disclosure process.

Adolescents: should have access to psychosocial support.

Pregnant women:

Clinically stable on ART when conceiving: already accessing differentiated ART delivery model plus at least 1 VL < 1000 copies/ml in last 3 months and accessing antenatal care.

Initiated on ART during pregnancy: since a woman initiating treatment during pregnancy would only become eligible to enter differentiated ART delivery in the postpartum period, an HIV-negative result in her infant with a nucleic acid test (NAT) at six-weeks and evidence of accessing infant follow-up care are additional requirements.

“As a single mother with four children who depend on me as the breadwinner, it costs me dearly to come for ARV refilling.”

– Female PLHIV, Tanzania

FOUR GENERAL MODELS OF DIFFERENTIATED ART DELIVERY

As HIV programmes in resource-limited settings have grown, the number of facilities providing care has increased dramatically. In addition to this decentralization, ART delivery has increasingly utilized task shifting. More recent innovations in ART delivery, or differentiated models of ART delivery for clinically stable clients, can be categorized into four models:

- **Health care worker-managed group models** describe those where clients receive their ART refills in a group that is managed by either a professional or a lay provider (e.g. Family, youth and post-natal clubs in South Africa, page 40). Health care worker-managed groups meet within and/or outside of health care facilities.
- **Client-managed group models** describe those where clients receive their ART refills in a group that is managed and run by clients themselves (e.g., community ART groups, or CAGs, integrating adolescents over 15 years in Mozambique or family member ART refill in Zimbabwe, page 31). Generally, client-managed groups meet outside of health care facilities.
- **Facility-based individual models** describe those where ART refill and/or psychosocial visits, and sometimes visits for routine blood work, have been separated from clinical consultations. Ideally clients have an ART refill visit, they bypass any clinical staff or adherence support and proceed directly to collect their medication (e.g. Standardized Pediatric Expedited Encounters for ART Drugs Initiative (SPEEDI) in Tanzania, page 17). Services can be provided to a specific population at an appropriate time and place (e.g. Teen Clubs in Malawi, page 25).
- **Out-of-facility individual models** describe those where ART refills and, in some cases, clinical consultations are provided to individuals outside of health care facilities (e.g., community-based ART, or C-BART, mobile outreach, which includes children, adolescents and PBFW in remote areas of Namibia, page 17). These models are inclusive of community pharmacies, outreach models and home delivery.

Both of us have been on treatment for a long time but have to come on separate days to receive our HIV care and treatment.



Learn more about **Miriam and her son, Joe**, on page 20

I don't know how we manage to fit in visits to the clinic for our new baby and visits to get our ARVs.



Learn more about **John, Nadia and their son, Noah**, on page 20

A photograph of a woman with dark hair tied back, wearing a purple short-sleeved top and a bright pink shawl with yellow floral patterns. She is holding a baby in a green and yellow outfit. The woman is looking down at the baby with a gentle expression. The background is dark and out of focus.

PART 2

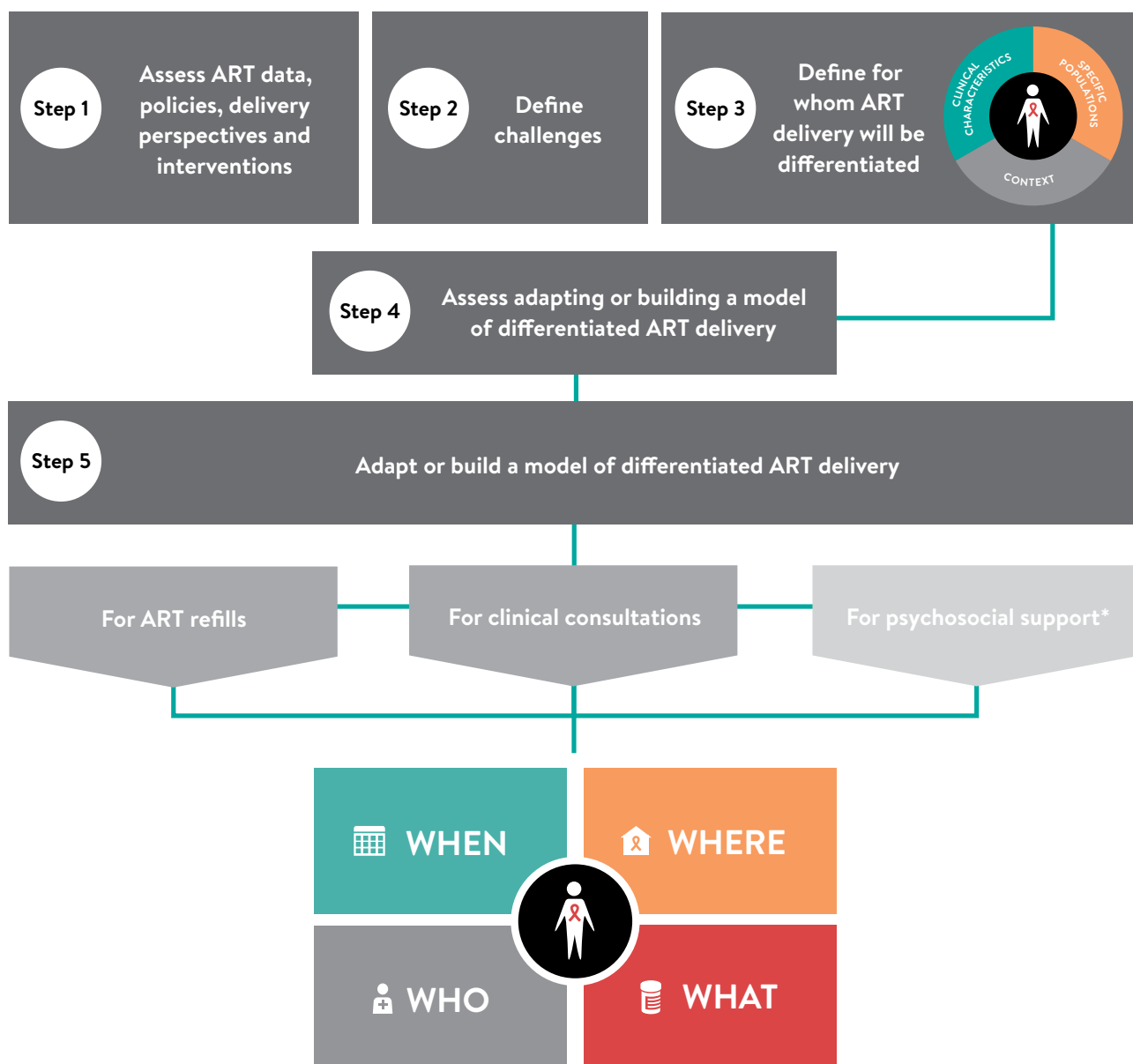
THE 5-STEP APPROACH TO DIFFERENTIATED ART DELIVERY FOR SPECIFIC POPULATIONS

THE 5-STEP APPROACH TO DIFFERENTIATED ART DELIVERY

To develop differentiated ART delivery model(s) for children, adolescents and PBFW and their infants, decisions at the national and local level may be necessary. For example, what works in an urban setting may not be suitable in a rural setting. Policy guidance should be developed at the national level and adopted at the sub-national level. Decisions regarding the most appropriate model(s) should be based on context and selected at the facility level to ensure ownership by both clients and health care workers.

The 5-step approach guides ministries of health in planning how to differentiate ART delivery for specific populations (Figure 2). While this outlines the approach for these specific populations, the 5-step process can also be done simultaneously for all populations (e.g., adults, key populations). To support this process, a number of annexes are available for download at www.differentiatedcare.org/Resources/DecisionFrameworkOnlineAnnexes or <http://bit.ly/2sVehV5>. See Annex 1 (page 39) for a full list of the annexes available online.

Figure 2: 5-step approach to differentiated ART delivery for specific populations



*A new set of "psychosocial building blocks" is included in the *Decision Framework for Specific Populations*. Psychosocial support, such as peer environments, can improve stable clients' long-term adherence but should not impede implementation of differentiated ART delivery.

STEP 1 – ASSESS ART DATA, POLICIES, DELIVERY, PERSPECTIVES AND INTERVENTIONS

It is important to have an understanding of the client outcomes for children, adolescent and PBFW, as well as existing policies that support or obstruct differentiating ART delivery to these specific populations and how ART services are currently being provided. An example of a survey performed to map the examples of differentiated care at the national level (Online Annex 1), along with the survey tools used, can be found online at <http://bit.ly/2sVehV5>.

(a) Assess the data

Routine monitoring and evaluation (M&E) data on retention and viral suppression help to determine what the challenges are at the site level. This checklist (Online Annex 2) can be found online at <http://bit.ly/2sVehV5>. Relevant data include the number of children, adolescents and PBFW on ART at each site, available viral suppression data, and retention data for these specific populations. It is also important to know whether facilities have an appointment and tracing system, whether specific days are allocated to managing children, adolescents or PBFW, and which service is providing management (e.g., antenatal service, maternal and child health service, HIV service).

There are challenges with ensuring data quality and sufficient data to disaggregate outcomes by specific population. Quality routine data is important beyond assessment for differentiated ART. Where data is available, distribution to national departments and sharing findings with broader stakeholders is encouraged.

(b) Assess the policies

A comparison of national-level policies with current WHO service delivery recommendations [5] and Key Considerations [3] should be undertaken. Policies should be reviewed in alignment with the building blocks (Part 5, page 23 for more details) and to support differentiated ART delivery in general. A template for assessing the relevant policies, Online Annex 3, to differentiating ART delivery for specific populations can be found online at <http://bit.ly/2sVehV5>.

(c) Assess the current models of ART delivery

An initial broad mapping of differentiated ART delivery is recommended to determine what is being implemented in-country and the coverage of the models (what proportion of health facilities are offering that model). This mapping should be undertaken not only for specific populations, but also for stable adult populations to enable adaptation for specific populations. At the district level, for each site, data should be collated describing service provision based on the elements (Part 3, page 13) and the building blocks (Part 5, page 23). Examples of differentiated ART delivery are described in the literature and are outlined in Parts 3 and 5. The mapping may be carried out through a combination of a desk review of published literature and local country and partner activity reports, a survey of district ART coordinators and implementing partners, and selected site visits.

Using the elements and building blocks, assess how ART is currently being delivered at each ART site for the clinical and refill appointment and psychosocial intervention. An example of a checklist that you can use to perform this assessment be found as Online Annex 2 at <http://bit.ly/2sVehV5>.

(d) Assess the perspective of PLHIV and health care workers

Differentiated care is fundamentally client centred. Speaking with PLHIV about their needs and expectations is critical to ensuring that service delivery models are designed appropriately. Data on the perspectives of PLHIV can be obtained through clinic exit surveys, focus group discussion and/or interviews. It is important to ensure meaningful participation of clients. As such, this includes actively involving them in the planning, delivery and monitoring of differentiated ART delivery (see Case study 1). Health care workers, including both lay providers and clinical staff, should also be consulted. Online Annex 4 is a sample questionnaire that can be used to assess the perspectives of PLHIV and health care workers be found online at <http://bit.ly/2sVehV5>.

“I would like to receive care and treatment from a person who has the same HIV status like me because, being in my shoes, they would not mistreat me in any way.”

– Young PLHIV, Tanzania

(e) Assess the current peer support interventions and human resources available to children, adolescents or PBFW

Commonly, these specific populations have psychosocial support interventions in place, such as community-based or facility-based support groups. Mapping of these interventions is important as they may be adapted to include ART delivery (see page 21). For example, many clinics have mentor mother programmes for new mothers that can be leveraged to include the distribution of ART refills. Other programmes that focus on maternal and child health (e.g., nutrition support, orphans and vulnerable children programmes) could also be adapted to include provision of services for PLHIV. Many differentiated ART delivery models are enabled by lay providers who, for specific population models, may already be engaged in activities such as disclosure counselling. Assessing the availability and training of lay providers, including community health workers, is important.

Case study 1:

Empowering young key populations with advocacy and communication training, Asia-Pacific

To promote the meaningful engagement of youth key populations in the HIV response, YouthLEAD, a network of and for young key populations most affected by HIV, developed the NewGen Asia leadership course. Following piloting and training of trainers, NewGen has been adapted and included in national trainings in Myanmar, the Philippines and Indonesia. Through capacitating young key populations with increased advocacy and community skills, their ability to engage in the HIV response has been enhanced [21].



I could collect the treatment for my clients from the clinic and take it to them at the support group I run at the church on a Saturday.



Clients who go to the HIV clinic just quickly collect their pre-packed ART from the counsellor. I want this at the baby clinic too.



My mom has explained to me that we both have HIV and why I go to the hospital to see the special children nurse. I am not scared because I am healthy and strong. I am very good at reminding her each day that we need to take our pills.

STEP 2 – DEFINE CHALLENGES FOR CHILDREN, ADOLESCENTS AND PBFW

Based on Step 1, the challenges that can be addressed through differentiated ART delivery should be identified. At this stage, it is important to host a workshop and engage key stakeholders from both the health system and networks of PLHIV to achieve the following objectives:

- a. Sensitize ART coordinators and implementing partners on the background and core principles of differentiated ART delivery and relevance for specific populations.
- b. Provide an opportunity for stakeholders to present existing examples of differentiated care implemented for adults and specific populations (if any) in their settings, including psychosocial interventions provided and utilized by specific populations.
- c. Present the outcomes of the national-level desk review relating to specific populations.
- d. Summarize the findings from consultations with caregivers of children, adolescents and PBFW living with HIV, and health care workers.
- e. Engage stakeholders in a plan for local/district situation analysis.

As noted on page 7, this workshop could be limited to specific populations or be part of a larger workshop on differentiated care for all populations.

“For boarding students, it is difficult to leave school for ART clinics on a monthly basis and we suffer stigma from fellow students once they find out we are HIV positive.”

– Young PLHIV, Tanzania

STEP 3 – DEFINE THE POPULATION(S) FOR WHOM ART DELIVERY WILL BE DIFFERENTIATED

With a clear understanding of the current delivery programme and policies in place, you are ready to proceed with prioritizing differentiated ART delivery for one or more of the specific populations. Using the programme data inputs from PLHIV, and understanding the policies in place, you can determine the challenges faced by clients and the health system. Based on the challenges, you can work out which specific population/s should be prioritized to receive differentiated ART delivery. Using the three elements described in Part 3 (page 13), consider the clinical characteristics, specific population (children, adolescents or PBFW) and context. This is also when you will define both who is eligible for the differentiated ART delivery model and the referral criteria for when a client should be referred by the service provider within the differentiated ART delivery model for intensified care (page 4).



“To avoid being [identified], I am forced to go and get services at distant centres, and sometimes I don't have enough money for bus fare.”

– An adolescent MSM client

STEP 4 – ASSESS ADAPTING EXISTING DIFFERENTIATED ART DELIVERY MODEL OR BUILD A NEW MODEL

Your district may already have implemented a differentiated ART delivery model/s for stable adult clients. If so, before building a new ART delivery model for children or adolescents or PBFW, assess whether an already implemented model could be adapted to meet the needs of the specific population. **Where a model is already understood, implemented and functioning within the health system, minor adaptations are easier to undertake than implementing a new model.** For example, the adherence club (AC) model in the Western Cape, South Africa, has been adapted for specific populations (see page 40 and Annex 2).

Your district or some of your facilities may already be providing peer support interventions, such as support

groups for children and their caregivers, adolescents or PBFW. With the understanding that peer environments provide important long-term psychosocial support and adherence benefits [22], consider whether the interventions that are already in place could be adapted into a differentiated ART delivery model and include ART distribution. For example, the Community Adolescent Treatment Supporters (CATS) intervention in Zimbabwe has been adapted to utilize peer support for adolescents within their group ART refills (see page 21 and Annex 3).

Part 4 (page 18) will guide you through assessing whether to adapt or build.

“I want to come to the clinic each month to see my progress, how I am doing, to talk to the nurse.”

– Young PLHIV, South Africa

STEP 5 – ADAPT OR BUILD A MODEL OF DIFFERENTIATED ART DELIVERY

Adapting or building a model of differentiated ART delivery based on your data and policies can be done using a building block approach considering the “when” (service frequency), “where” (service location), “who” (service provider) and “what” (package of care) for ART refills, clinical consultation and psychosocial support.

After this 5-step process has been completed, it will be necessary to discuss at a district and/or facility level the specific model mechanics (e.g., drug supply, human resource allocation, relevant adaptations to M&E materials). Visit <http://bit.ly/2sVehV5> and download Online Annex 6 which outlines the “how” or model mechanics after selecting a model of differentiated ART delivery. A clear plan for implementation and to assess the impact of the model will be required. The outcomes should be integrated into quality improvement activities for the site.



My little girl is healthy, growing and talking so much. We have had to increase her dosage only once in the past year. Why does the nurse need to see her so often?



PART 3

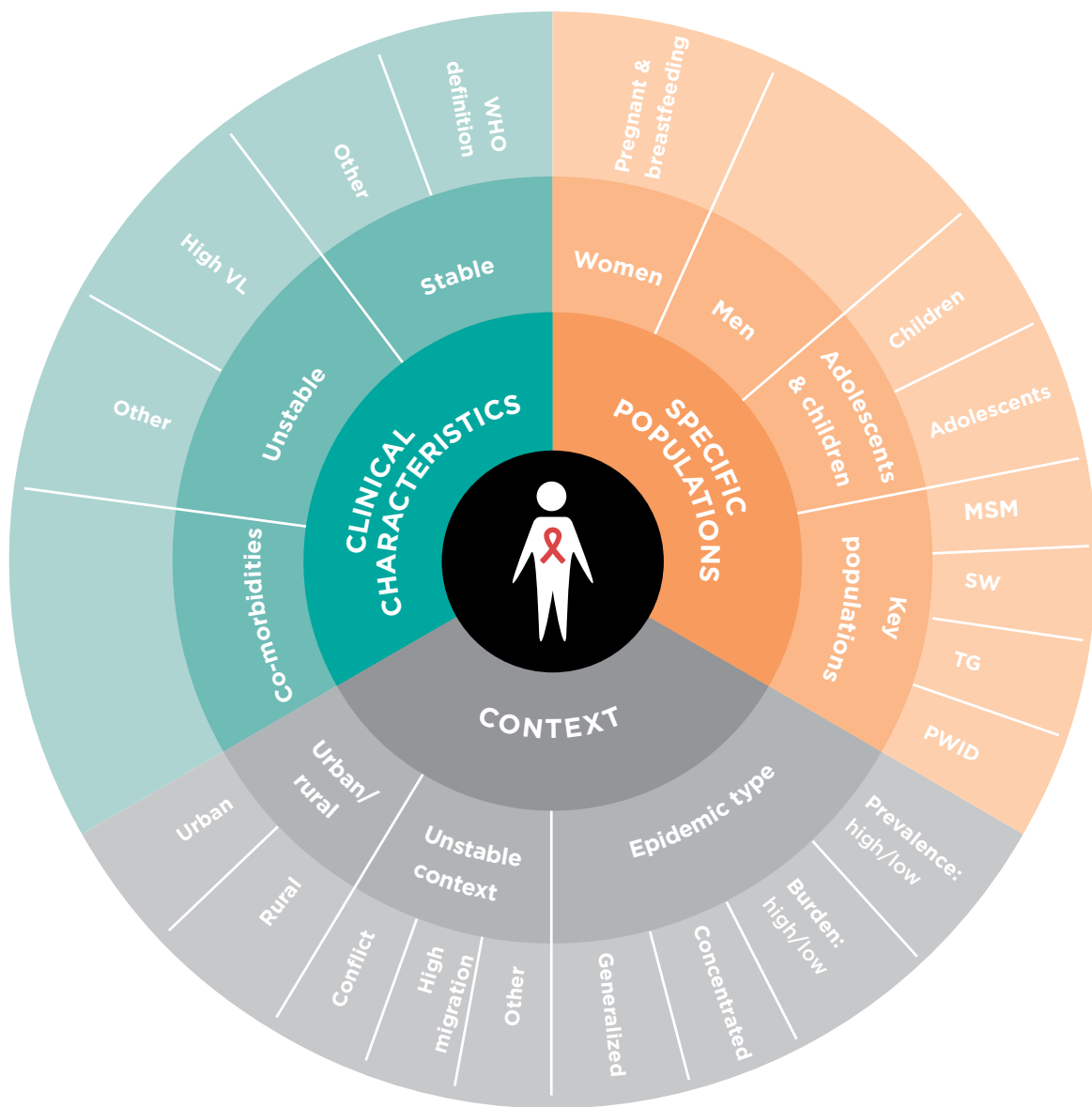
WHAT ARE THE THREE ELEMENTS TO CONSIDER?

THE THREE ELEMENTS

In order to provide client-centred care, you need to consider the clinical characteristics, specific population(s) and context of your clients (Figure 3). This will allow you to adapt or build appropriate models of ART delivery using the building blocks described in Part 5. In this part, we consider

each of these specific population groups (i.e., children or adolescents or PBFW), as well as their clinical characteristics and their context as presented in Figure 3. Each of the three elements is outlined and relevant case studies are presented in this section.

Figure 3: The three elements



HOW DO WE DIFFERENTIATE BASED ON CLINICAL CHARACTERISTICS?

As outlined in Part 1, a differentiated care approach provides care that is responsive to the needs of PLHIV. As a result, if a client is clinically unstable, they may require an intensified level of follow up and support. The *Decision Framework for Specific Populations* focuses on adapting or building models for clinically stable children, adolescents or PBFW. See page 4 for further details on the criteria for clinically stable clients.

Based on clinical characteristics, clients can be defined as stable, unstable, and/or with co-morbidities or co-infections (Figure 3). A client can be determined as clinically stable if well and on ART for a specified period of time with a suppressed viral load. Unstable clients may have a high viral load or another characteristic, such as malnutrition in a child or depression in an adolescent.

Some specific populations should be considered for inclusion in models normally reserved for stable clients, even if they do not yet meet all criteria for stability. For example, adolescents may benefit from participating in a health care worker-managed group from the time of treatment initiation. By joining the group, they will have immediate access to a peer environment where they can observe and discuss their concerns with adolescents who have been on ART for a longer time, have achieved a suppressed viral load, and already qualify for longer ART refills. To meet their clinical needs, they may require more frequent clinical consultations in addition to participating in the group. There are examples of adolescent service delivery models that include adolescents from diagnosis or treatment initiation or

that retain them during a period of viral rebound (see Case study 2, teen clubs in Example 1, page 25, and youth clubs in Annex 2, page 40).

Case study 2:

Teen clubs, Swaziland, including unstable adolescents [23]

In Swaziland, adolescent retention outcomes were declining with increasing numbers of clients on ART. In previous efforts to improve adolescent outcomes, some facilities had implemented teen support groups, which were valued by adolescents and health care workers, and were associated with improved outcomes. All adolescents aware of their HIV status and on ART were encouraged to join. Building on this success, teen clubs were developed, where ART refills were provided to clinically stable clients within these existing support groups. Teen clubs run monthly at the facility. Stable adolescents receive 3-monthly ART refills in the group, but can attend the group more frequently if they want to. Adolescents who are have not suppressed or who experience viral rebound are also part of these groups but receive their ART refill monthly when they see the clinician after the teen club meeting.

HOW DO WE DIFFERENTIATE BASED ON THE SPECIFIC POPULATION?

ART delivery should be differentiated by considering the challenges of each specific population. As differentiated ART delivery is being designed and implemented, special attention should be given to finding possible solutions addressing the challenges outlined in Table 1 rather than seeing these challenges as barriers to implementation.

Each of these specific populations (children, adolescents and pregnant and breastfeeding women) will require a unique and comprehensive package of health care services to overcome their particular needs and challenges.

Since I have been providing integrated HIV and antenatal care, many more of my clients are virally suppressed at delivery, minimizing the risk of transmission to their infants.



Table 1: Challenges and potential solutions through differentiated ART delivery

Challenges	Potential solutions through differentiated ART delivery
Children	
<ul style="list-style-type: none"> • Period of physical growth and rapid cognitive development • Require dosage adjustments • Dependent on caregiver/s • Attending crèche/school/boarding school • Transitioning into adolescence 	<ul style="list-style-type: none"> • Opportunity for caregiver mentoring and introducing peer support in group models • Less frequent clinical visits and longer ART refills after 2 years of age when dosage adjustments become infrequent • Aligning visits with school holidays and caregiver appointments • Transitioning from paediatric to adolescent care as part of an ART delivery and psychosocial support group
Adolescents	
<ul style="list-style-type: none"> • Period of rapid cognitive, social and sexual development • Attending school • Pushing for independence while still requiring caregiver support • New and changing SRH needs • Increased prevalence of mental health challenges • Transitioning to early adulthood 	<ul style="list-style-type: none"> • Opportunity for peer mentoring in group models • Visits outside of school time to support both school and clinic attendance • Additional services related to mental health and SRH needs can be incorporated • Transitioning adolescent to adult care as part of an ART delivery and psychosocial support group
PBFW and their infants	
<ul style="list-style-type: none"> • Adapting to additional clinical needs of pregnancy or postnatal period • Demands of exposed young infant, including clinical infant follow up • Increased frequency of health visits during pregnancy and postnatally • Many women diagnosed with HIV during pregnancy but also increasing numbers of women already stable on ART when conceiving 	<ul style="list-style-type: none"> • Alignment of clinical visits for mothers and their children • Integration of maternal, newborn and child health (MNCH) care, including testing of exposed infants and maternal ART delivery services within model • Access to differentiated ART delivery models post-delivery if stable • Opportunity for women stable on ART at conception to remain within their differentiated ART delivery model

Family unit needs

Importantly, children, adolescents and PBFW often belong to interdependent family units. Differentiated ART delivery model planning should consider how family members’ care will be impacted and whether attempting to address the needs of a particular family member/s may create challenges for another member. For example, a father may be part of a quick ART refill pick-up service on a Monday at his clinic pharmacy and also be required to attend the Wednesday paediatric day to access his child’s ART refill.

Different needs of pregnant women already stable on ART and newly started on ART

Women already stable on ART and receiving care through a differentiated ART delivery model when conceiving may experience different challenges from women newly diagnosed and started on ART during their pregnancy. These distinctions may warrant further differentiation between these two groups. For example, women already stable on ART may risk losing their access to a valued differentiated ART delivery model during pregnancy and breastfeeding if the criteria excludes PBFW, as is the case in many settings. This situation may result in a woman hiding her pregnancy and negatively impacting her maternal health needs. Conversely, women started on ART during pregnancy may value a “one-stop-shop” approach of having their HIV care provided by the MNCH service.

Case study 3:

Community drop-in centres, including adolescent key populations, Pakistan

The Naz Male Health Alliance in Pakistan operates six centres in key “hot spots” for men who have sex with men and close to areas with large dwellings of transgender people, including adolescents from these populations. Each centre offers both clinical services and a drop-in centre with outreach activities. Sites are set up for each key population to more effectively meet the different needs of each specific population. The multidisciplinary staff at each site includes clinicians, as well as members of the community and key populations [21].

Case study 4:

Family-centred care for orphans living with HIV, Haiti

The non-profit group, Caring for Haitian Orphans with AIDS (CHOAIDS), designed a comprehensive, family-centred model to improve the lives of orphans living with HIV in Haiti. HIV-positive caregivers for the orphans were recruited through word of mouth. They live together with the children in housing that is provided and the model includes access to good nutrition and safe drinking water. Both children and the caregivers receive their HIV treatment and care at the same health facility [24].



“I like getting my medication though the Youth Care Clubs. Before I had to wait a long time in a queue just to get my medication.”

– Young person living with HIV, South Africa

HOW DO WE DIFFERENTIATE BASED ON CONTEXT?

The prevalence of HIV in a specific population in a given geographical setting (e.g., rural or urban) determines the concentration of clients and should influence the choice of differentiated ART delivery model. It is important to remember that even where a country or district has a relatively high HIV prevalence, the concentration of children or adolescents may be fairly low (especially in rural areas), making the implementation of children-specific or adolescent-specific models impractical. For example, there may not be a large enough number of adolescents to form a group close to home or to justify a specific paediatric day at the local clinic. In such contexts, it may be more appropriate to ensure that children and/or adolescents have access to stable adult ART delivery models, perhaps within their family units. Case studies 5 and 6 demonstrate ART delivery models that are appropriate for different population concentrations of children on ART.



Groups for breastfeeding mothers at the clinic are very nice but I live a 2-hour bus ride away. It is too difficult for me to get there. I need to collect my treatment near my home.

Case study 5:

Paediatric day at ART clinic with stable family member appointment spacing, Kenya

High concentration of children living close to facility

In a number of urban centres in Kenya, ART clinics have implemented a weekly paediatric HIV-focused service day due to high numbers of children on ART. All children and their family members on ART are provided with the same appointment dates on these paediatric days. Stable children and their family members attend 3-6-month clinical reviews and receive 3-monthly ART refills.

Case study 6:

Community-based ART (C-BART), Namibia

Low concentration of children in hard-to-reach rural area

In a rural district of Namibia, primary care facilities provide mobile outreach to fixed points in hard-to-reach rural communities 4-6 times per year. Family units are managed together at this service. Children, adolescents and their adult family members are seen for clinical review 3-6 monthly (depending on “stability” status) with ART refills covering the same period.

Case study 7:

Standardized Paediatric Expedited Encounters for ART Drugs Initiative (SPEEDI), Tanzania, separating ART refill and clinical consultation visits [30]

In Tanzania, the congestion of the paediatric referral service was leading to increased waiting times for clients. To decongest the facility and reduce waiting times, the facility introduced ART refill visits. Children and adolescent clients who were stable on ART were enrolled in the SPEEDI programme. These clients were no longer required to see a clinician at each health care visit. During a SPEEDI visit, the client has their vital signs and anthropometrics taken, a pill count is conducted, and they are asked if they wish to see a clinician. If they do not, the client goes directly to the pharmacy to collect a 2-3-months ART refill. Clients alternate fast-track SPEEDI visits with routine clinical review visits and are required to see the clinician 2-3 times a year. Clients have their viral load taken once a year at the ART refill visit prior to their clinical review allowing for assessment as part of the clinical review.



PART 4

ASSESS ADAPTING AN EXISTING MODEL OR BUILDING A NEW MODEL

ADAPT OR BUILD

As HIV service delivery becomes increasingly differentiated, ART delivery models for specific populations may already have been planned and implemented. When later considering a new population (such as children, adolescents and PBFW), different clinical characteristics or a new context, an important first step is to assess whether one or more of the existing models could be adapted to meet the needs of that population before building a new model.

Where a model is already understood, implemented and functioning within the health system, minor adaptations are easier to undertake than implementing a new model.

There may also be existing peer support or psychosocial interventions that could be adapted to include ART delivery. Both of these opportunities for adaptation should be considered first.

Question 1: Is there an existing differentiated ART delivery model?

Obtaining buy-in for and implementing new service delivery models is challenging and can take time. It will frequently require changes to health system processes, such as the supply chain and M&E. Where a differentiated ART delivery model has already been implemented, many of these health system changes will already have taken place. Model adaptation, taking care to ensure no or minimal changes to cross-cutting processes, will be much easier and quicker to

implement. For example, in Cape Town, South Africa, adherence clubs were adapted to meet the needs of specific populations (see Annex 2, page 40).

Where an appropriate model exists for adaptation, it is still necessary to consider any changes to the stable criteria and referral criteria and, importantly, the model building blocks – when, where and by whom the service will be provided, and any changes to the package of care (the “what”) (See Part 5).

Case study 8:

Adaptation of ART adherence club (AC) model, South Africa [25]

In Cape Town, South Africa, ART ACs for stable adults have been adopted as policy and implemented, with 63,000 clients (41% of the ART cohort) receiving their care through this model by December 2016. Clients are eligible to join an AC after six months on ART if they had a viral load of <400 copies/mL (the nationally defined threshold for viral suppression). ACs are groups of 25-30 stable clients who receive their ART refills, support and care in the group. A lay provider facilitates them. At the ART refill visit before the annual clinical consultation, blood is drawn for routine monitoring, including viral load. The AC model has been adopted as one of South Africa’s differentiated ART delivery models for stable adults. ACs are an example of a health care worker-managed group model (page 5).

ACs were adapted into family clubs, youth clubs and postnatal clubs with adaptations made to the criteria and each of the building blocks (see Part 5 and Annex 2). Family clubs include children and their caregivers. If the caregiver meets the criteria for being a stable client, they also receive their ART refills within the model [26]. Youth clubs include adolescents between 12 and 25 years of age, and foster peer support among newly diagnosed and initiated youth and those who have been on treatment for a long time. The facilitator of the youth club has been trained to provide adolescent-friendly services, and there are structured, interactive group activities [27]. Postnatal clubs take place at the MNCH clinic and are available to all post-partum HIV-positive women. Visits are aligned with infant follow up, and support includes guidance on infant care and development (see Annex 2, page 40 for details).



Learn more about Andrew

Andrew is a district ART manager. He has just attended a national review meeting where concerns were raised about poor ART retention among adolescents in his district. His health care workers are also complaining that they are consulting with too many ART clients each day to provide focused attention to their adolescent clients and they are feeling overburdened. Andrew is going to follow the 5-step plan to see if differentiated ART delivery can assist in improving outcomes for adolescents in his district.

Learn more about Sofia

Sofia is in high school and is a diligent student. She has been on ART for two years and attends her clinic every month to collect her ARVs. Sofia goes to a support group one Saturday a month. She also cares for her younger brother after school as her mother works long hours. She attends her clinic on weekdays and often misses school because of the long queue of 40-60 other clients in the reception area. These clients are mostly much older, similar in age to her mother. After waiting, she typically has a five-minute check-in with a nurse and then has to stand in an even longer queue to collect her treatment at the pharmacy. The nurse writes Sofia a sick note for school and then Sofia spends the night worrying about handing in the sick note, as she doesn't feel ill.



Learn more about Mariam and her 7-year-old son, Joe

Mariam and her son have been on ART since Joe was a year old. Mariam gets her ARVs and clinical care at her local clinic every three months, but has to go the paediatric service at the hospital every second month for Joe's care and treatment. Joe's clinic is only for children so Mariam cannot also collect her ARVs there. It takes Mariam and Joe an entire day to go to the hospital and costs half Mariam's monthly earnings. Joe knows that both he and his mother are HIV positive and they help each other to remember to take their treatment each day.

Learn more about John, Nadia and their son, Noah

John and Nadia were diagnosed with HIV when Nadia was pregnant. They have both been on treatment for just over a year. Their baby boy, Noah, is six months old and his HIV test at 6 weeks was negative. John and Nadia go to the HIV clinic every month for their treatment and Nadia takes Noah to the baby clinic for his immunizations and check-ups. John works far away from home and it is very difficult for him to take a day off work to come back to get his treatment. Nadia is struggling at home with the new baby. She is finding it difficult to go to all of her clinic appointments at the HIV clinic and the baby clinic.



Question 2: Is there an existing peer support or psychosocial intervention that could be adapted?

There may be peer support or psychosocial interventions already in place providing benefits to specific populations. These could be peer support groups or other programmes focused on children and adolescents, such as orphan and vulnerable children programming. Leveraging these existing programmes to include distribution of ART refills could support less frequent visits at the health facility. See case study 9 and for more details, see Annex 3, page 42.

“The Zvandiri programme has helped me to realize how I should live as I am. I am now ready to go into the community in order to help other children, adolescents and young people to adhere well to antiretroviral treatment and fight all forms of stigma and discrimination.”

– Female PLHIV, 22 years old, Zimbabwe

Case study 9:

Adaptation of Community Adolescent Treatment Supporters (CATS) programme, Zimbabwe

In Zimbabwe, the CBO Africaid has been working for more than a decade to provide community-based services to children, adolescents and young PLHIV through the Zvandiri programme [28]. Their CATS are HIV-positive adolescents who are trained and mentored to provide psychosocial support to children and adolescents living with HIV in their communities. Their work is done in collaboration with the Ministry of Health and Child Care. In the 2017 *Zimbabwean Operational and Service Delivery Manual* [29], the CATS model was adapted to include supporting the provision of ART refills. In addition to the community support, the role of CATS has been expanded to facility-based adolescent ART refill groups and distribute ART refills within these groups.

WHEN IS IT APPROPRIATE TO BUILD A NEW ART DELIVERY MODEL?

Priority must always be placed on ensuring that the ART delivery model achieves its aim: meeting the challenges of the specific population of interest while maintaining a public health approach. Part 5 will guide you through this building process.



A mobile clinic comes to my village every month. I take my baby there for weighing and immunizations. I often wonder why they can't bring me my ARVs.

A photograph of two women wearing headscarves sitting at a table. The woman in the foreground is wearing a colorful patterned headscarf and a pink sweater. The woman in the background is wearing a blue patterned headscarf and a light blue cardigan. They are both looking towards the right side of the frame. The background is slightly blurred, showing what appears to be a wall with some artwork.

PART 5

ADAPTING OR BUILDING DIFFERENTIATED ART DELIVERY FOR SPECIFIC POPULATIONS

THE BUILDING BLOCKS

This section presents the four building blocks and highlights relevant WHO Guidelines and Key Considerations [3, 5]. An example from a real-world differentiated model of ART delivery for a specific population is also described. Key take-home messages are presented by specific population. We also see our characters, Sofia, Miriam and John, dreaming about how their lives could improve if the building blocks of their ART delivery were differentiated.

The building blocks are the key components of a differentiated model of service delivery. When is care provided (visit frequency)? Where is care provided (location)? Who is providing care (service provider)? What care is provided (service package)? See Figure 4.

Separate building blocks are needed for clinical consultations, ART refills and psychosocial support

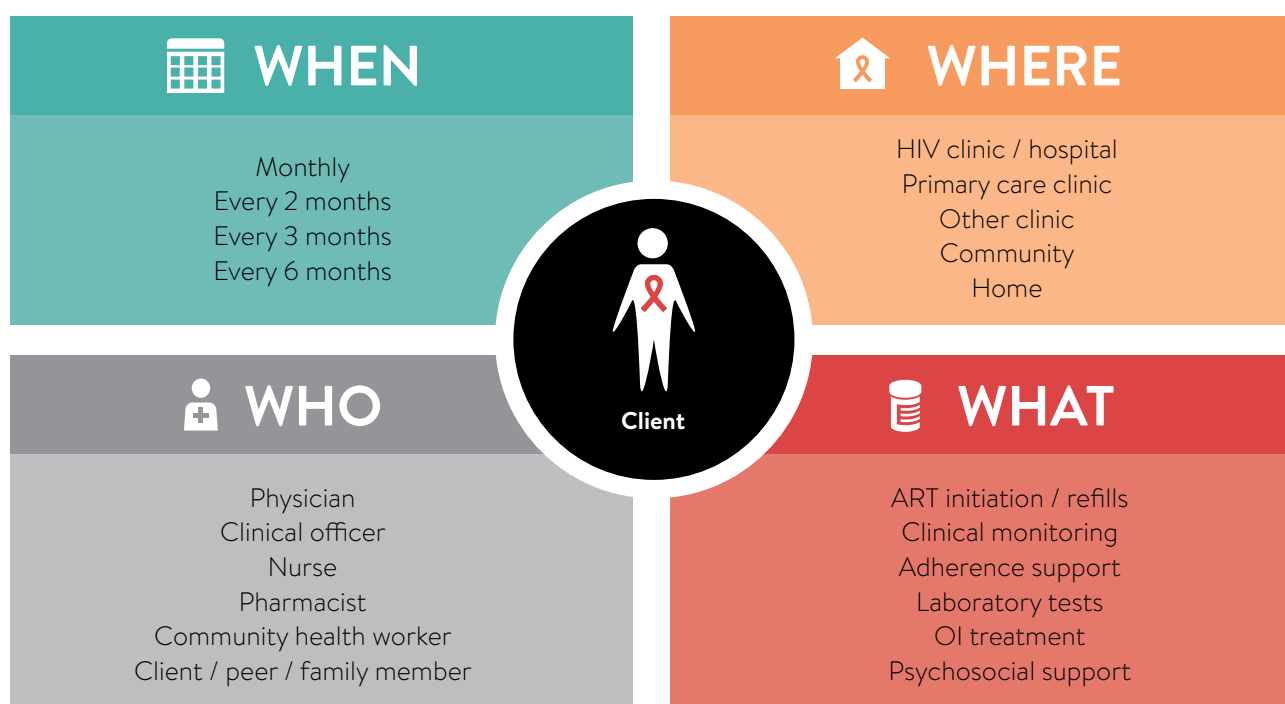
All models of ART care provide clinical consultations and ART refills. Many also provide access to psychosocial support services, such as support groups or networks (including virtual platforms), one-on-one adherence counselling with health care workers or lay providers, or in some cases home visits by lay providers. The “when, where, who and what” should be considered separately for each of these components. Clinical consultations and ART refills are

both critical. Yet they do not need to take place at the same frequency, and do not require the same cadre of provider.

Psychosocial support is important, especially for specific populations, but may not be appropriate or necessary for all clients. Separate consideration from clinical consultations and ART refill visits is required regarding what type of psychosocial support is valued by clinically stable clients, where it can be made available, by whom and at what frequency for uptake. Specific populations, despite being clinically stable, may benefit from additional psychosocial support. The building blocks of differentiated service delivery may also be applied to define the when, where, who and what of psychosocial support. This support may be time bound, e.g., during a specific period of pregnancy or breastfeeding, or to ensure that disclosure is achieved in children and young adolescents, or continuous through ongoing peer support groups.

As discussed in Part 1, in all models of differentiated ART delivery, the client is at the centre. It is up to the district health manager to work with health care workers and clients to determine the “when, where, who and what” building blocks of the differentiated model of care that respond to the community’s most urgent needs. The stakeholders must balance the goal of improving client outcomes with the ability to make the most efficient use of the available health system and community resources.

Figure 4: The building blocks





“WHEN” IS ART DELIVERED?

Alignment of ART delivery among family members on ART

Aligning both ART refill and clinical consultation visit return dates for family members optimizes the benefits of differentiated ART delivery. If both a caregiver and child receive 3-monthly refills but are required to collect refills on different dates (or in different places), the advantages of a longer refill are reduced. Also, if a parent or caregiver receives 3-monthly clinical appointments and their child is required to be seen monthly, the advantages of the longer refill for the adult will not be realized. While this is relevant to children who are heavily dependent on caregivers, it can also apply to adolescents, especially younger adolescents and those living in rural, hard-to-reach communities. Family member visit alignment should apply to female and male caregivers, siblings and others in their support network.

Reducing the frequency of ART refills and clinical visits

Reducing the frequency of visits is an efficient way of alleviating the burden on the client and health care system. A key principle, linking all models of differentiated ART delivery, is separating “refill-only” visits from visits that require clinical and/or laboratory assessment. If a clinician prescribes ART for a 6-month period, then for the intervening period, the client should be able to limit his/her interactions with the health system to only those needed to obtain his/her resupply of medication and access desired psychosocial support. If a sufficient refill can be provided at the clinical visit, the client would not have to see a clinician until his/her next clinical appointment. There are examples of paediatric service delivery models that separate ART refill-only visits from clinical consultation visits (see Case study 7, page 17).

The period of the ART prescription should align with the frequency of clinical consultations. When this happens, clinicians will not be required to take part in ART refill visits; this facilitates ART refills without the involvement of clinical staff. For example, where clinical consultations are required 12 monthly, the period of the prescription should also be 12 monthly (i.e., no new script is required in the intervening period).

Utilizing the maximum duration of ART refills

Depending on local regulations, the appropriate authority (e.g., national, district or facility) should inform health care workers on the maximum duration of an ART refill that can be given – 1 month, 3 months, 6 months, etc. – and whether there are any special circumstances that are recognized. Special circumstances may include December holidays, boarding school attendance away from home or extended work-related travel. This guidance will determine the frequency of a client’s visits to collect refills. For support with extending ART refills, refer to the United States Agency for International Development (USAID) multi-month scripting calculator available at www.differentiatedcare.org.

Extending or adapting service hours

In most resource-limited settings, ART is only available to be collected during clinic hours. Adapting the timing of services is a simple way to address access issues for specific clients. For example, providing refills for children and adolescents after school closing hours or on Saturdays can decrease absence from school, enable a child or adolescent to follow a more routine schedule, and enable parents to miss less work. See Example 1, Malawi teen clubs (page 25), which are held on Saturdays or Sundays.

Frequency of psychosocial support in peer support environments

The frequency of psychosocial support should be appropriate to the client’s needs. While one-on-one adherence counselling is an important part of both ART initiation and unstable clients’ package of care, ongoing adherence counselling may not be necessary for stable clients and may place an undue burden on clients, lay providers and the health care system. Evidence shows that adherence and retention improves when clients have access to peer support environments, most commonly support groups specific to the population [22]. There are examples of successful differentiated ART delivery models where ART refills are combined with psychosocial support provided in peer-led groups (e.g., CATS, page 21) and others where it is not (e.g., facility-based individual fast track [31] and see Case Study 8, page 19, and Annex 2, page 40).

WHEN: Key Considerations

Box 4: Frequency of visits [3]

	ART REFILLS	CLINICAL CONSULTATIONS	PSYCHOSOCIAL SUPPORT
WHEN	3-6 monthly	6 monthly (Children 2-5 years old: 3 monthly)	1-6 monthly

Example 1:

Teen clubs, Malawi

Overview

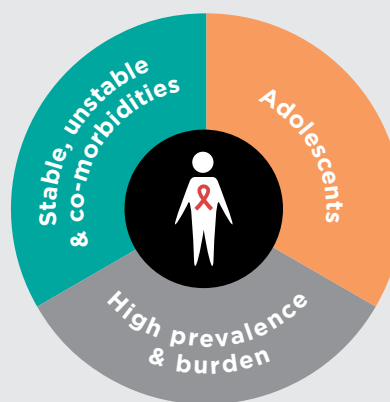
In Malawi, teen clubs were developed to address poor retention outcomes for adolescents and young adults. Clients aged 10-19 years who are aware of their HIV status (fully disclosed) are able to join a teen club. These are run monthly on a Saturday or Sunday outside of normal clinic hours and are only for adolescents. Teen clubs range in size from 15 to 200 clients.

The teen club is facilitated by a club mentor who is trained and mentored in the Baylor teen club curriculum. In larger clubs, younger and older adolescents are split to tailor psychosocial support with older teens also receiving SRH literacy. During the club activities, a nurse sees each adolescent individually for their ART refill and clinical review. Viral loads are taken according to national guidelines at six months, two years and then two yearly thereafter.

Some facilities with high numbers enrolled in the model continue to see the adolescents monthly for psychosocial support but 2 monthly for clinical review and provide 2-month ART refills. Others have moved fully onto a

2-monthly visit schedule. Attending adolescents receive reimbursement for transport and a snack. Teen clubs are an example of a facility-based individual model (page 5) and are a psychosocial intervention (pre-existing adolescent support group run on a Saturday) that was adapted to provide differentiated ART delivery (page 21). More information on this model is available at www.differentiatedcare.org.

The three elements of teen clubs



The building blocks of the Baylor teen club

	ART REFILLS	CLINICAL CONSULTATIONS	PSYCHOSOCIAL SUPPORT
WHEN	1-2 monthly*	1-2 monthly*	1-2 monthly*
WHERE	Saturday/Sunday – adolescent-only hours at primary care clinics and hospitals providing ART	Saturday/Sunday – adolescent-only hours at primary care clinics and hospitals providing ART	Saturday/Sunday – adolescent-only hours at primary care clinics and hospitals providing ART
WHO	Nurse or pharmacist	Nurse	Lay provider
WHAT	ART refill	Clinical consultation Rescript Blood draw	Structured adolescent-focused adherence, nutritional and psychosocial support SRH literacy Peer group environment Peer activities

* Variation between facilities, with most seeing each adolescent monthly for all three services. A few facilities with higher client loads either see adolescents monthly for psychosocial support but only 2 monthly for ART refill and clinical review or have moved fully onto a 2-monthly visit schedule.

Similar teen clubs exist in Botswana, Lesotho, Swaziland, Uganda and Tanzania.



“WHERE” is ART provided?

Decentralizing services closer to home

For many clients, physical access to ART remains a challenge. The time and travel costs of getting to the clinic, as well as persistent issues of stigma, remain barriers to retention and sustained viral suppression. Decentralizing HIV care, including for children, adolescents and PBFW – taking the services closer to the client’s home, either to a facility closer to home or ideally to some place within the client’s community – is a strategy that can reduce both the burden on the clients and congestion at centralized sites.

How far to decentralize varies according to context

In high-burden areas, peer support should be provided within communities either linked to ART refill collection or in addition to these visits. Thoughtful planning of the location of clinical visits versus ART refill visits is especially relevant to children in low-burden areas where it may not make sense to enable all primary care staff to manage paediatric HIV. However, centralizing clinical paediatric services increases the rationale for reducing clinical consultation frequency and/or providing ART refills closer to home. Providing peer support in low-burden areas can be difficult if too few of a

specific population live close to each other. In such cases, providing access to virtual peer support groups, such as adolescent chat rooms via a platform like WhatsApp, could be considered.

When integrated service provision supports client needs and when it may not

Integrated services, also known as the “one-stop-shop” approach, almost always better serve clients’ needs as they enable them to attend the same location, with the same provider, at the same visit for all their care. The postnatal clubs on page 41 are an example of how this approach can work for breastfeeding women. However, there are instances where integration may not be best for the client. For example, a client may prefer to maintain their current service delivery model. For women already receiving their ART delivery through a group prior to conception, integrating HIV and MNCH services into one facility-based programme may or may not be taken as a positive change. Consistent with the principles of differentiated care, clients should be given the choice to remain where their services are provided.



Miriam thinks: What if I only had to go to the hospital twice a year for the specialist nurse to see my son and I could collect his ART refills at my local clinic at the same time that I collect mine?

WHERE: Key Considerations

Box 5: Location of visits [3]

	ART REFILLS	CLINICAL CONSULTATIONS	PSYCHOSOCIAL SUPPORT
WHERE	Primary care clinic (PCC), outreach, out-of-facility For PBFW – also MNCH service at PHC	PCC, outreach from a facility For PBFW – MNCH in PCC	PHC, out-of-facility, virtual

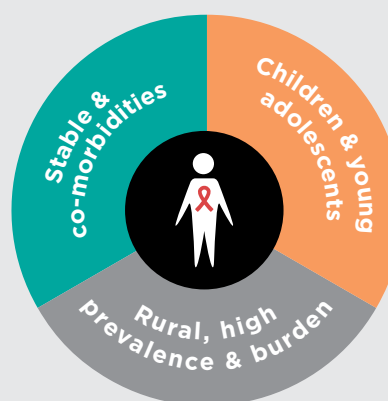
Example 2:

Paediatric outreach supported down-referral with appointment spacing for children, Zambia

Overview

In Zambia, HIV-positive children were travelling long distances to receive care at the central paediatric referral hospital. The paediatric services developed a primary care outreach service. Children younger than 16 years of age who had demonstrated good adherence, were clinically stable with no opportunistic infections and who wanted care closer to home were offered this ART delivery model. The children were referred to their closest primary care clinic and a team, including a clinician from the referral hospital's paediatric service, provided outreach support. Children were seen 3 monthly at the primary care clinic for clinical consultations and ART refill by the outreach team. Viral loads were taken every second visit. This paediatric outreach model is an example of out-of-facility (paediatric referral hospital service) individual model (page 5) and of a new-build differentiated ART delivery model (page 21). More information on this model is available at www.differentiatedcare.org.

The three elements of paediatric outreach



The building blocks of paediatric outreach

	ART REFILLS*	CLINICAL CONSULTATIONS*	PSYCHOSOCIAL SUPPORT*
WHEN	3 monthly	3 monthly	3 monthly
WHERE	Primary care clinics	Primary care clinics	Primary care clinics
WHO	Outreach team, including clinician and counsellor	Outreach team, including clinician and counsellor	Outreach team
WHAT	ART refill	Clinical consultation Rescript Blood draw (VL 6 monthly)	One-on-one adherence counselling

* ART refills, clinical consultation and psychosocial support were all provided simultaneously.



“WHO” is providing differentiated ART delivery?

Importance of task shifting

Assigning tasks to less-skilled cadres enabled the scale up of ART in resource-limited settings. Provision of routine HIV care and ART delivery is no longer the sole responsibility of doctors. In the past decade, nurses and lay providers have become increasingly involved in the provision of ART care. This shift is not limited to nurses and lay providers working in HIV clinics; it also occurred in other settings like the PHC and MNCH services. To implement task shifting and sharing, a review of regulatory frameworks in the country is often required and, in some settings, remains a major barrier to scaling up of ART.

Lay providers can distribute ART refills

WHO recommends lay providers distribute ART refills at visits between clinical consultations to adults, children and adolescents [5] (see Box 6). There is an important distinction between distributing and dispensing: dispensing is the role of a pharmacist whereas distributing means that the refill has already been dispensed and the lay provider can bring the refill to the client. Utilizing lay providers to distribute ART refills can save time for clients and the nurse and/or pharmacist at a facility. ART refills can then be collected outside of health facilities, either at collection points or in support groups.

“Who” can collect ART refills

It is also important to consider who can collect ART on behalf of the client. Clients should be informed if others are allowed to collect ART on their behalf and, if so, who is eligible. Evidence shows that clients who allowed a friend or family member to collect on their behalf had a reduced risk of viral rebound compared with those who did not [32]. This may be because clients likely had disclosed their condition to family or friends, and it is clear that clients appreciate having this option for ART delivery [33]. In the family clubs in South Africa (see Annex 2, page 40), a client or caregiver can send a family member or trusted friend to collect her and her child’s ART [26].



WHO Guidelines

Box 6: Recommendations on task shifting and task sharing [5]

- Trained and supervised lay providers can distribute ART to adults, adolescents and children living with HIV (strong recommendation, low-quality evidence).
- Trained non-physician clinicians, midwives and nurses can initiate first-line ART (strong recommendation, moderate-quality evidence).
- Trained non-physician clinicians, midwives and nurses can maintain ART (strong recommendation, moderate-quality evidence).
- Trained and supervised community health workers can dispense ART between regular clinical visits (strong recommendation, moderate-quality evidence).


These recommendations apply to all adults, adolescents and children living with HIV.

“Who” can provide psychosocial support

It has long been recognized that lay providers should be utilized to provide psychosocial support. The term, “lay provider”, is broad and includes a range of persons without professional certificates or tertiary degrees, but who have been trained to provide specific services, such as adherence support and/or facilitating peer support groups. These lay providers can be PLHIV themselves or not, and can be from the same or similar population group as the client. These factors often facilitate good provider-client relationships, which can support long-term adherence. Lay providers can form part of facility health staff, outreach teams from health facilities or CBOs.

WHO: Key Considerations

Box 7: Service provider [3]

	ART REFILLS	CLINICAL CONSULTATIONS	PSYCHOSOCIAL SUPPORT
 WHO	Lay provider, caregiver, peer, outreach worker	Nurse, midwife, clinical officer, doctor	Lay provider, caregiver, peer, outreach worker

Example 3: Postnatal clubs, South Africa

Overview

In Cape Town, South Africa, postnatal clubs were developed in response to the low rates of post-delivery retention of women initiated on ART in pregnancy and to strengthen early infant diagnosis of HIV. All HIV-positive women on ART who give birth at the facility are able to join. Women do not need to be stable, but are assessed to be part of a low-risk mother-infant pair (LRMIP) or a high-risk mother-infant pair (HRMIP), with differences in visit frequency and package of care. Each club includes 6-12 mother-infant pairs (MIPs) grouped by month of delivery. It is facilitated by a lay provider stationed within the MNCH service at a local primary health clinic.

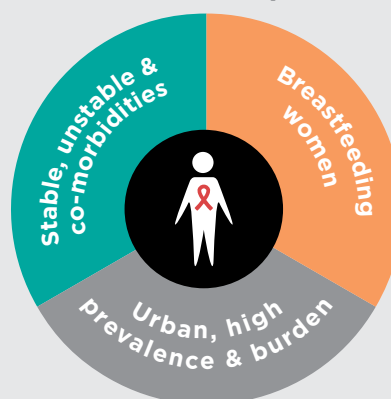
Group meetings occur within the clinic setting and the support provided focuses on infant care and maintenance of maternal adherence to ART. At each session, the lay provider dispenses maternal ART and infant cotrimoxazole refills in the group for the period until the next club visit (monthly from when the infants are 10 weeks old until they are 6 months old due to provincial guidelines mandating monthly baby check-ups, and 3 monthly thereafter until the infant is 18 months old). Each MIP receives a single integrated clinical consultation.

The clinical package of care provided changes at each visit. In general, it follows the immunization and infant follow-up schedule with HIV testing of the HIV-exposed infant at 9 and 18 months and additional HIV care for mothers who

receive 6-monthly viral loads and HIV clinical consultations. HRMIP receives extra support with a weekly home visit by a lay provider and continued monthly clinical consultations until reassessed as LRMIP. Any newly diagnosed HIV-positive infant and their mothers are referred out of the postnatal club to the HIV clinic. When the uninfected infants reach 18 months, the group of mothers without their infants becomes a community adult adherence club.

Postnatal clubs are an example of a health care worker-managed group model (page 5). It shows how a stable adult differentiated ART delivery model that was already part of South African national guidelines and widely implemented was adapted for postnatal women (page 19). More information on this model is available at www.differentiatedcare.org.

The three elements of postnatal clubs



The building blocks of postnatal clubs

	ART REFILLS	CLINICAL CONSULTATIONS*	PSYCHOSOCIAL SUPPORT
WHEN	Monthly until infant is 6 months old, then 3 monthly	6 monthly	Monthly until infant is 6 months old, then 3 monthly
WHERE	MNCH service at PHC	MNCH service at PHC	MNCH service at PHC
WHO	MNCH nurse	MNCH nurse	Lay provider
WHAT	Maternal ART refill Infant cotrimoxazole refills	Maternal HIV clinical consultation Blood draw (6 monthly)	Infant care and development literacy Maternal adherence support Peer group environment

* Only describes maternal HIV clinical building blocks. Infants receive immunizations, infant follow-up and repeat HIV testing as per guidelines at their clinical consultations which take place after each group ART refill.



“WHAT” services should be offered?

If clinically stable clients have separate visits for ART refills and clinical consultations with different cadres of providers, a standard package of services for each type of visit should be defined. The medical needs of a client on ART will be different across a client’s life, especially as they transition from childhood to adolescence and adulthood. Female clients may have periods of pregnancy and breastfeeding and care for children of increasing ages. Many clients will experience periods of economic, clinical, social or other instability.

ART refill visits can be combined with peer support or provided separately

ART refill visits can be combined with psychosocial support through providing ART refills within a peer support group environment. This is most common in differentiated ART delivery models for adolescents (see teen clubs on page 25, youth clubs on pages 19 and 41). However, this may not be feasible or adds barriers to building differentiated ART delivery models. In such contexts, the specific population could be linked with community-provided peer support. Therefore, differentiated ART delivery planning should include CBO stakeholders who may provide this care (see page 3).

Stable clients still need clinical consultations

Stable children, adolescents and PBFW should still receive regular HIV-related clinical consultations as part of their package of care. This should include comprehensive clinical management in terms of applicable guidelines, e.g., paediatric, adolescent or PMTCT clinical guidelines, plus management of other co-morbidities. With reduced clinical visit frequency, the clinician will have fewer opportunities to see the client and ensuring quality of the clinical consultation is important. Tuberculosis (TB) screening should be provided at all clinical consultations irrespective of whether the client is “stable”. All clients should have

access to clinical services outside of their differentiated care schedule if they need to seek clinical care.

The importance of effective referral systems from ART refill and psychosocial service providers

Where ART refill visits and/or peer support is provided separately, a referral system between the lay provider managing the ART refill or psychosocial support visit to clinical care is essential. With less frequent clinical contact, lay providers have more responsibility for providing screening and referral. Screening can be informal, based either on the lay provider or client’s own assessment of wellbeing, or more formal utilizing a structured symptom and/or adherence tool.

Consider how to incorporate reviewing viral load or CD4 results into clinical consultations

Differentiated ART delivery models require effective identification and timeous management of high viral loads. Laboratory investigations (i.e., viral load or if not available, CD4) can be taken at or prior to the clinical consultation allowing review of the results as part of the clinical consultation.

Where the blood is drawn at the clinical consultation, clients with “red flag” results should be recalled. As clients are already stable, the recall should be necessary for few clients. Alternatively, the client’s blood can be drawn at the ART refill visit preceding the clinical consultation if the visit takes place at a health facility or the client can be given a period of time when they should drop in – either at the facility or other health point – for their blood draw before their clinical consultation. The results could then be reviewed as part of the clinical consultation, providing the clinician with a full clinical picture.

WHAT: Key Considerations

Box 8: Packages of care [4]

	ART REFILLS	CLINICAL CONSULTATIONS	PSYCHOSOCIALSUPPORT
	ART refill Adherence check Referral check Children: Cotrimoxazole refill Disclosure process check-in PBFW: MNCH attendance check	Clinical review per appropriate clinical guidelines Labs (6 monthly) Re-scripting Children: Dosage check and possible adjustment Adolescents: Mental health assessment (annual) PBFW: MNCH attendance check (if not integrated service)	Peer support and referral check Adherence check Child/onward disclosure support

Example 4:

Family member ART refill, Zimbabwe [29]

Overview

In Zimbabwe, children on ART were required to attend monthly clinical visits, despite differentiated ART delivery being offered to adults. Recognizing a family-centred approach, the family member ART refill model was developed from the community ART refill group model that was already being implemented.

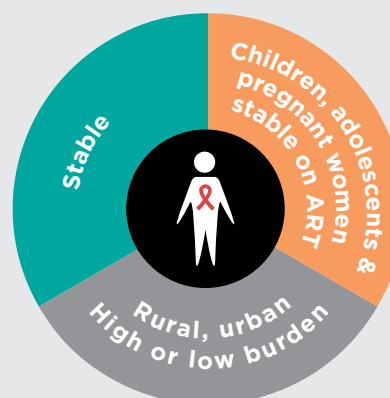
Children older than 2 years with no opportunistic infections, a viral load of less than 1,000 copies/ml and on the same ART regimen for at least 6 months can now join their family group. Every 3 months, one family representative collects ART refills for all ART-stable family members and distributes these at home. Children between 2 and 5 years are required to attend every time with their family representative for a clinical consultation. When the child is at least 5 years and on adult dosages, he/she can attend only every second visit (i.e., 6 monthly) for clinical consultation.

This continues through adolescence until 19 years of age, when the family member is required to attend only an annual clinical consultation. Viral loads are taken annually for all family members. Where a family member is already part of this model and becomes pregnant, she can remain a

member of the family ART refill group provided she attends MNCH care separately.

The family member ART refill model is an example of a stable adult differentiated ART delivery model already endorsed by national guidelines adapted for specific populations. More information on this model is available at www.differentiatedcare.org.

The three elements of family ART refill







The building blocks of family ART refill in Zimbabwe

	ART REFILLS		CLINICAL CONSULTATIONS*		PSYCHOSOCIAL SUPPORT
	All family members	Children 2-5 years	Children >5 yrs + adolescents on adult doses	Adult family members	Accessible for adolescents
WHEN	3 monthly	3 monthly	6 monthly	Annual	1-3 monthly*
WHERE	At home	Primary care clinics			In community
WHO	Family member	Nurse			Lay provider
WHAT	ART and cotrimoxazole refill	Clinical consultation Blood draw (VL annual)			Peer support group





* Adolescents have access to CATS providing psychosocial support in the community.

BUILDING BLOCK CONSIDERATIONS BY SPECIFIC POPULATION





CHILDREN

 WHEN	<p>Frequency of drug dosage adjustments Reducing visit frequency can seem complicated because of drug dosage adjustments required as children grow, but these happen infrequently after 2 years of age (see Annex 2 in the Key Considerations [3]). A clinician seeing a child every 6 months would be sufficient frequency to detect changes to weight that require dosage adjustments.</p> <p>Paediatric drug formulations For stable children to receive longer supplies of drugs, they should ideally be taking pellets or tablets rather than syrups, which often have shorter shelf lives and are more bulky for transporting to and from collection points by health care workers and clients. However, clinical visit infrequency could still be maximized, even if the limitations of liquid formulations mean that more frequent but expedited drug pick-ups are still necessary.</p>
 WHERE	<p>With no dosage adjustments, ART refills can be distributed outside health facilities every 3-6 months with clinical visits at a health facility.</p>
 WHO	<p>With no dosage adjustments required, lay providers can distribute ART refills.</p>
 WHAT	<p>ART and cotrimoxazole dosage check and adjustment Clinicians should assess current weight and expected weight gain over the following 6 months and if required, adjust ART dosages accordingly.</p> <p>Disclosure support and check-ins Supporting caregivers to undertake age-appropriate child disclosure is important for sustained long-term adherence. Caregiver peer support groups can facilitate this process through discussion. ART refill visits and clinical consultations should be used to check in with the caregiver regarding progress.</p>

ADOLESCENTS

 WHEN	<p>Fluctuating mental health and SRH needs Adolescence is a period of fluctuating mental and SRH needs. A clinician seeing an adolescent every 6 months would provide sufficient opportunity to identify these needs. Adolescents can also choose to see a clinician in between, if required.</p> <p>Aligning visit schedule to school calendar Reducing visit frequency enables visits to be scheduled during school holidays. Malawi and Zimbabwe specifically allow longer ART supplies (6-12 months) for clients who attend school or university far from home. Rwanda provides 3-month refills, but aligns adolescent appointments with the school breaks.</p>
 WHERE	<p>Youth-friendly spaces Adolescents value adolescent-designated space. Offering extended or weekend hours specifically for adolescents automatically creates adolescent-designated space. Where extending hours is not possible, consider designating a specific room in the facility for adolescent clinical consultations and/ART refill distribution (even if only operational as such for specific periods). Where ART refills are provided at community collection points, adolescent-specific collection times should be considered.</p> <p>Alternative peer support environments Where there are too few adolescent clients on ART to make forming support groups close to the clients' home feasible, alternatives to face-to-face peer support groups, including access to virtual support groups or chat rooms, could be considered.</p>
 WHO	<p>Possibility of adding ART refills within peer support environments There may be peer support environments either within the clinic or run by CBOs or as part of other adolescent programming that can provide ART refills. The CBO group facilitator could be considered for distributing pre-packed ART refills.</p>
 WHAT	<p>SRH needs assessment SRH assessment and family planning (FP) provision remains essential and should not be placed at risk. Where possible, FP return dates should be aligned with ART refills dates. Oral contraceptives can be provided with ART refills.</p>

PREGNANT AND BREASTFEEDING WOMEN

 WHEN	<p>Integrated MNCH and HIV care does not mean restricting ART refill period</p> <p>WHO 2016 guidelines recommend integration of MNCH with maternal HIV care provided by the MNCH service [5]. However, this does not mean that ART refills should only be provided for the period until the next MNCH visit. The maximum ART refill period could still be utilized. The fewer ART refills and maternal HIV clinical consultations that need to be provided by the MNCH service, the more efficient and manageable for the health system, and more focus can be given to optimal general antenatal care (ANC), postnatal care (PNC) and HIV-exposed infant follow up.</p>
 WHERE	<p>Provision of maternal ART care at MNCH service location</p> <p>Maternal HIV clinical care should be integrated within HIV-exposed infant care follow-up visits provided by MNCH service, especially for women started on ART during pregnancy who have not interacted with HIV clinic services before. See example of postnatal club (page 29).</p>
 WHO	<p>Integrated care means MNCH nurse provides clinical consultations</p> <p>Differentiated ART delivery models for stable breastfeeding women should ideally be integrated within MNCH care with MNCH nurses carrying out maternal HIV clinical consultations. ART refills could also be provided at the MNCH service preferably by lay providers, if possible.</p>
 WHAT	<p>Integrated MNCH care or MNCH check</p> <p>Where MNCH care and maternal HIV clinical consultation are not integrated, checks at both clinical consultations and ART refills visits should be carried out to ensure that PBFW are attending MNCH care.</p>

John thinks: What if my wife could collect our ART refills from the community health worker in our area at the same place they use for HIV testing? The nurse who checks and immunizes our baby could also see my wife for her HIV when it is needed. And I could go to clinic once a year so that I don't have to miss so much work.



Sofia thinks: What if I could collect my ART refill every third month on a Saturday at my support group and only see my nurse every second visit? I could get my treatment from the group facilitator in between. I could still join the support group run on any other Saturday when I feel I need the extra support.

CONCLUSION



CONCLUSION

The principles of differentiated care and differentiated ART delivery should be expanded to improve outcomes of specific populations while reducing unnecessary burdens on health care workers and the health system. Differentiated care, or differentiated service delivery, should be based on the local context and sensitive to the needs of children, adolescents and pregnant and breastfeeding women.

The *Decision Framework for Specific Populations* uses the 5-step approach to guide ART programme managers to examine changes that can be made to differentiate the delivery of ART care. This approach recognizes that for children, adolescents and PBFW in particular, the delivery of ART should consider including psychosocial support, especially peer support. By following the 5 steps, a quality, client-centred approach to ART delivery can be achieved for specific populations.

Differentiated ART delivery for specific populations should not be limited to clients who are clinically stable. Increasingly, differentiated care may benefit clients who are newly initiated on treatment and who are not virally suppressed. A differentiated care approach should also be applied across the care continuum – with differentiated approaches to prevention (e.g., delivery of PrEP), testing, linkage and ART initiation.

This framework is best used in parallel with the Key Considerations [3] and the tools and best practices available on www.differentiatedcare.org. We welcome your feedback.

Please email us at decisionframework@iasociety.org and visit www.differentiatedcare.org for more details.

With differentiated ART delivery...



... Sofia can concentrate on her schoolwork and receives support from her peers.



... Miriam can collect both her and her son's treatment quickly at her local clinic every three months.



... Andrew has seen improvements in client satisfaction and outcomes among children, adolescents and PBFW.



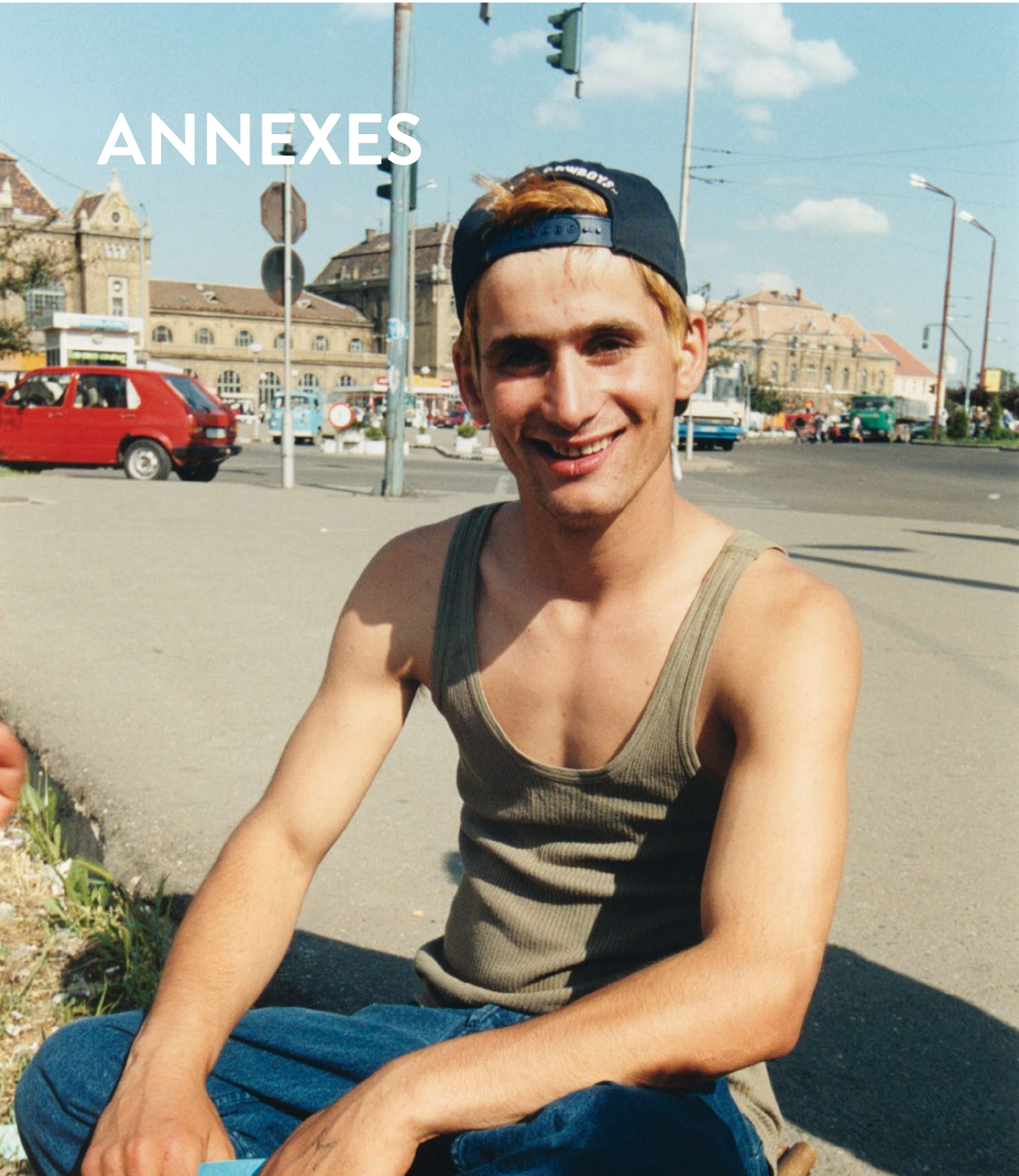
... Nadia collects her and her husband's treatment at a community pharmacy. She receives HIV clinical care from her MNCH nurse and her husband goes to the clinic once a year for a clinical check-up.

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ANNEXES



ANNEX 1:

Online annexes available to support implementation

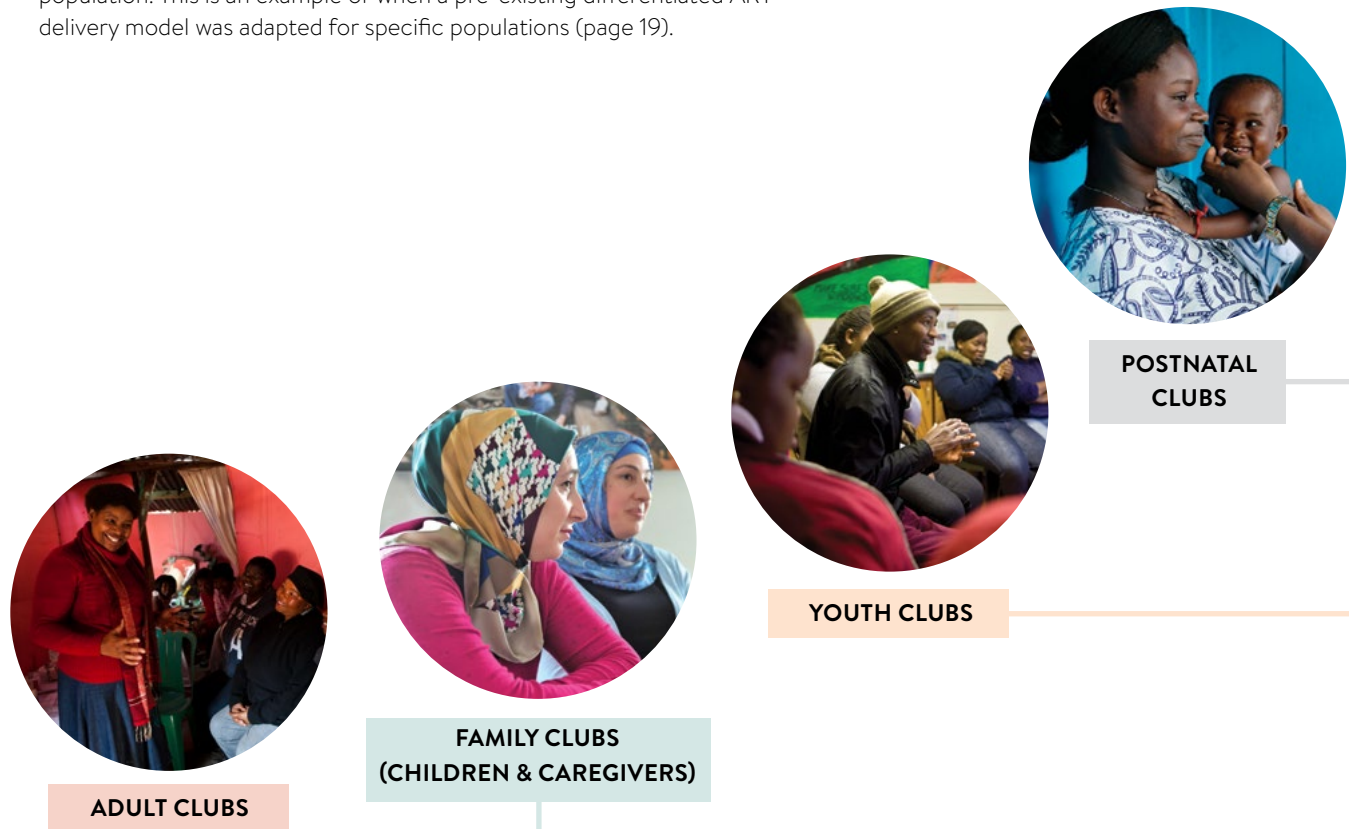
Available at www.differentiatedcare.org/Resources/DecisionFrameworkOnlineAnnexes (<http://bit.ly/2sVehV5>)

- Online Annex 1: Template for mapping common examples of differentiated ART delivery at a national level
- Online Annex 2: Facility-level questionnaire for baseline assessment of differentiated ART delivery
- Online Annex 3: Template for assessing relevant policies related to differentiated ART delivery
- Online Annex 4 (word): ARASA/ITPC Questionnaire to assess perspectives of people living with HIV and health care workers on differentiated ART delivery
- Online Annex 4 (PDF): ARASA/ITPC Questionnaire to assess perspectives of people living with HIV and health care workers on differentiated ART delivery
- Online Annex 5: Considerations for other client groups
- Online Annex 6: Outline of model mechanics – the “how”

ANNEX 2:

Adaptations made to the ART adherence club model for specific populations

In the Western Cape province of South Africa, adherence clubs for adults were adapted for families, youth and postnatal women. Each of the building blocks (Part 5) was reviewed to meet the needs of the specific population. This is an example of when a pre-existing differentiated ART delivery model was adapted for specific populations (page 19).



Building blocks of adherence clubs for adults

Criteria for adherence clubs: 6m on ART + 1 VL <400 copies/ml + no clinical condition requiring closer follow up

	ART REFILLS*	CLINICAL CONSULTATIONS	PSYCHOSOCIAL SUPPORT*
WHEN	2-4 monthly	Annual	2-4 monthly
WHERE	Primary care clinics or community venues	Primary care clinics	Primary care clinics or community venues
WHO	Lay providers	Nurse	Lay providers
WHAT	Pre-packed ART Brief symptom screen	Clinical consultation Blood draw (VL)**	Facilitated peer support (group of 25-30 clients)

* In the adherence club model, ART refills and psychosocial support happen at the same visit and the clinical consultation takes place immediately after one of the ART refills visits.

** Blood is drawn by nurse at previous ART refill visit.

Building blocks for adherence clubs for post-partum women

Criteria for postnatal clubs: All HIV-positive post-partum women on ART

	ART REFILLS	CLINICAL CONSULTATIONS	PSYCHOSOCIAL SUPPORT
WHEN	Monthly for first 6 months; then 3 monthly	Monthly for first 6 months; then 3 monthly	Monthly for first 6 months; then 3 monthly
WHERE	MNCH service at primary care clinic	MNCH service at primary care clinic	MNCH service at primary care clinic
WHO	Lay provider	MNCH nurse	Lay provider
WHAT	Pre-packed ART Brief symptom screen Cotrimoxazole refill for infant	MNCH clinical consultation Infant HIV testing Maternal HIV clinical consultation (6 monthly) Blood draw (VL - 6 monthly)	Facilitated peer support (group of 6-12 MIPs) Structured counselling session Infant care and development guidance

Building blocks for adherence clubs for adolescents

Criteria for youth clubs: 12-25 years + pre-ART ineligible/newly ART initiated/stable on ART (12m on ART + 2 VL <400 copies/ml + no clinical condition requiring closer follow up).

	ART REFILLS*	CLINICAL CONSULTATIONS	PSYCHOSOCIAL SUPPORT*
WHEN	Monthly for first 6 months; then same as adults	Same schedule as ART refill for clients new on treatment (not stable yet)	Monthly for first 6 months; then same as adults
WHERE	Primary care clinics	Primary care clinics	Primary care clinics
WHO	Lay provider with youth-friendly training	Nurse	Lay provider with youth-friendly training
WHAT	Pre-packed ART Brief symptom screen FP provided after group by nurse at facility Blood draw (VL - annual)	Clinical consultation Blood draw (VL)	Facilitated peer support (group 18-22 clients) Structured counselling session Interactive activity

Building blocks for adherence clubs for families

Criteria for family clubs: Child (>5 years) + 12m on ART + 2 VL <400 copies/ml + no clinical condition requiring closer follow up. If caregiver on ART = meet adult stable criteria.

	ART REFILLS	CLINICAL CONSULTATIONS	PSYCHOSOCIAL SUPPORT
WHEN	2-4 monthly	Annual	2-4 monthly
WHERE	Primary care clinics	Primary care clinics	Primary care clinics
WHO	Lay providers	Nurse	Lay providers
WHAT	Pre-packed ART Brief symptom screen Dosage check Blood draw (VL annual)	Clinical consultation Blood draw (VL)	Facilitated peer support (group of 25-30 clients) Child disclosure support





ANNEX 3:

Adaptations made to the Community Adolescent Treatment Supporters model to include ART refill





In Zimbabwe, the Africaid Community Adolescent Treatment Supporters (CATS) model had been providing psychosocial support to children and adolescents living with HIV. To support the needs of adolescents, the 2017 service delivery manual recommends facility-based adolescent group refills for ART, including CATS within the ART refills visit. This is an example of leveraging an existing psychosocial support intervention within a model of differentiated ART delivery (page 21).

Before differentiated ART delivery, there was no direct link between the clinical services and psychosocial support.

The building blocks of adolescent HIV care in Zimbabwe before 2017

	ART REFILLS & CLINICAL CONSULTATIONS	PSYCHOSOCIAL SUPPORT
 WHEN	Every 1-3 months	As required
 WHERE	PHC	Community, outside of the health facility
 WHO	Nurse and primary counsellor	Community Adolescent Treatment Supporters
 WHAT	ART and cotrimozazole refills SRH education and services for adolescents	Peer support

The building blocks of facility-based adolescent groups refills incorporating CATS after 2017

	ART REFILLS	CLINICAL CONSULTATIONS	PSYCHOSOCIAL SUPPORT
 WHEN	3 monthly	6 monthly	3 monthly*
 WHERE	PHC	PHC	PHC with additional visits in the community, outside the health facility
 WHO	Primary counsellor/CATS	Nurse	CATS
 WHAT	ART and Cotrimoxazole refills Referral check	Clinical consultation SRH services Blood draw (annual if VL)	Peer support SRH education Adherence check Referral check

* More frequently outside of model as required.

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A photograph of a woman with dark skin and hair, wearing a light-colored t-shirt and a patterned skirt, holding a baby wrapped in a red and white checkered cloth. She is looking off to the side with a serious expression. The background is dark and out of focus.

DIFFERENTIATED CARE FOR HIV: A DECISION FRAMEWORK FOR DIFFERENTIATED ANTIRETROVIRAL THERAPY DELIVERY

For children, adolescents and pregnant and breastfeeding women

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Further iterations of the Decision Framework series will be developed to support other specific populations, including men and key populations, other parts of the HIV care cascade and different contexts.

Follow these characters as they find solutions to common challenges in HIV care

I need to go to school and have to walk a long way to get to the clinic.



Sofia, an adolescent

I need to improve the retention outcomes in my district.



Andrew, a district ART manager

I have to go to different places for mine and my son's treatment.



Miriam & Joe, mother and child

I feel healthy and need to work and my wife is very busy with our new baby.



John, Nadia & Noah, parents and baby