# Providing differentiated delivery to children and adolescents

Anna Grimsrud<sup>1</sup>, Damiliola Walker<sup>2</sup>, Wole Ameyan<sup>3</sup> and Serena Brusamento<sup>3</sup>

<sup>1</sup>International AIDS Society; <sup>2</sup>United Nations Children's Fund; <sup>3</sup>World Health Organization

## 01

## Rationale

Children and adolescents living with HIV (CALHIV) have a lifetime of antiretroviral therapy (ART) ahead of them. An estimated 95% of HIV service delivery is currently facility-based, largely undifferentiated for individual need.<sup>1</sup> Differentiated service delivery (DSD) is a client-centered approach, simplifying and adapting services to better meet the needs of people living with HIV and reducing unnecessary burdens on the health care system.<sup>1</sup> Differentiated ART delivery for clinically stable children and adolescents is supported by global agencies, and a growing body of evidence highlights how differentiated ART provides a significant opportunity to improve treatment adherence among children and adolescents living with HIV.<sup>2-7</sup> However, CALHIV are still often not prioritized when scaling up differentiated ART delivery.

## 02

### **Barriers and facilitators of implementation**

#### **Barriers**

Health care providers may be reluctant to reduce visit frequency for children and adolescents, but the best interests of the client should be a guiding principle.<sup>7</sup> A further barrier is lack of access to routine viral load monitoring as this objective measure of adherence provides reassurance that clients are doing well on treatment.

#### **Facilitators**

A facilitator of differentiated ART delivery implementation is strong engagement with peer providers and community platforms. For children, it is critical that parents and caregivers support age-appropriate child disclosure. Caregiver support groups can facilitate this. Adolescents value youth-friendly spaces and clinic times that do not conflict with school hours. Where extending clinic times is not feasible, designating a specific room within the facility, even for certain periods, can support confidentiality. Pellet or tablet formulations, with longer refills, are preferable to syrups as they have longer shelf lives and are easier to transport. It is also essential to consider children and adolescents within a family context and align family visits. Any potential benefits of differentiated ART delivery offered to parents or caregivers are mitigated if children or adolescents are required to return to the facility more frequently. Consideration of school holidays, particularly for those in boarding schools, can facilitate a supportive environment.

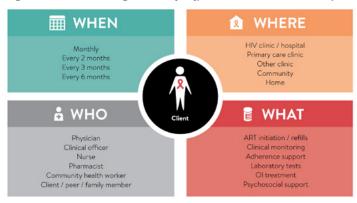




## Policy and legal considerations

Children and adolescents must not be excluded from accessing differentiated ART delivery models based on age.<sup>3</sup> Policies should be revised to support each of the building blocks of differentiated ART delivery (Figure 1):

- **"When":** Clinically stable older children (5-10 years) and adolescents (10-19 years) should have access to longer ART refills (3-6 months) and less frequent (6-monthly) clinical consultations.
- **"Where":** Policies should support decentralization of ART refills through group models and community venues.
- **"Who":** Lay providers, including caregivers and peers, should be enabled to provide ART refills and psychosocial support.
- **"What":** It is particularly important that for CALHIV, appropriate psychological and adherence support is provided.



*Figure 1: The building blocks of differentiated ART delivery*<sup>8</sup>

## 04

## **Steps for scale-up**

A five-step approach to differentiating ART delivery has been previously described and can be adapted for children and adolescents.<sup>8</sup> This approach also considers the context – such as HIV prevalence and epidemic type – in scaling up differentiated ART delivery.

#### Step 1 – Conduct a situation analysis

- (a) Assess the data: Assessing routine data on retention and viral suppression can identify challenges at site level.
- (b) Assess the policies: A comparison of national-level policies against current WHO service delivery recommendations<sup>10</sup> and Key considerations<sup>2</sup> should be undertaken. Policies should be in alignment with the building blocks.
- (c) Assess the current models of ART delivery: An initial broad mapping of differentiated ART delivery is recommended to determine what services are being implemented and coverage rates. This mapping should assess the elements (clinical characteristics, specific population/s and context) and building blocks at each ART site for clinical consultations, ART refills and psychosocial support.
- (d) Assess the perspectives of children, adolescents, their parents or caregivers and health care workers: Fundamental to DSD is that it is client-centered. Speaking with people living with HIV and their families about needs and expectations is critical, as is consulting both lay and professional providers.
- (e) Assess available support interventions and human resources: There may be programs for children and adolescents operating within community organizations that could support differentiated ART delivery. Because these models often depend on community health workers (CHWs), it is important to assess the availability of CHWs, as well as their training.

#### Step 2 – Define challenges

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 consultation and engage key stakeholders from both the health system and networks of people living with HIV, including parents, children and adolescents, to agree on a way forward.

#### Step 3 – Define population(s)

Consider the clinical characteristics, specific populations (children, adolescents, key populations, etc.) and context of the clients for whom ART delivery will be differentiated. In contexts where routine viral load monitoring is not available, clinical stability should be based upon clinical immunological criteria.

#### Step 4 – Consider adapting an existing model

Before building a new model, assess if there is a differentiated ART delivery model for adults that can be adapted for children and adolescents or if there are psychosocial support interventions that can be leveraged to support differentiated ART delivery for these age groups.

#### Step 5 – Adapt or build a model

Adapt or build a model considering each of the building blocks for clinical consultations, ART refills and psychosocial support based on the situation analysis (Step 1) and the defined challenges (Step 2).

## 05

### Case example of successful implementation

In Zimbabwe, the family member ART refill model was developed from the community ART refill group model that was already being implemented. Clinically stable children over two years old can now join their family group. Every three months, one family representative collects ART refills for all ART-stable family members and distributes these at home. Children between two and five years old are required to attend every time with their family representative for a clinical consultation. When the child is at least five and on adult dosing, s/he can attend every second visit (6-monthly) for clinical consultation.<sup>9</sup>

## 06

### **Tools to support implementation**

Visit www.differentiatedservicedelivery.org to access guidance, tools and resources, including:

- Key considerations for differentiated antiretroviral therapy for specific populations: children, adolescents, pregnant and breastfeeding women and key populations. WHO, CDC, PEPFAR, USAID & IAS 2017
- Differentiated Care for HIV: A Decision Framework for differentiated ART delivery for children, adolescents and pregnant and breastfeeding women. IAS 2017
- Youth linkage and retention interventions from HIV diagnosis to adult care transition: Report and toolkit. MSF 2017
- Teen club model mechanics and resources. Various 2017

07

Child Survival

### Monitoring

Differentiated ART delivery does not require specialized monitoring, but existing WHO global HIV treatment indicators for ART retention and viral suppression should be augmented with two aggregate indicators (frequency of clinical and refill visits) to ensure the desired impact of differentiated ART delivery on quality and efficiency.<sup>10</sup> Analyzing these indicators by age group will enable tracking of differentiated ART delivery among children and adolescents.

### Conclusion

- CALHIV should not be excluded from differentiated ART delivery because of age.
- Clinically stable CALHIV can benefit from access to differentiated ART delivery models.
- Services should be designed to keep families together as much as possible to simplify access and reduce cost.
- After the age of two years, less intensive clinical follow-up is required for CALHIV and ART refills and clinical consultations can be extended to 3-monthly for younger children (ages 2-5 years) and 6-monthly for older children and adolescents.
- In addition to less frequent clinical consultations and longer ART refills, adolescents living with HIV benefit from peer psychosocial support interventions. Where possible, these interventions should be developed and leveraged to include ART distribution.

#### References

- 1. UNAIDS. Fast-track: Ending the AIDS epidemic by 2030. Geneva: UNAIDS; 2014.
- MacKenzie RK, van Lettow M, Gondwe C, et al. Greater retention in care among adolescents on antiretroviral treatment accessing "Teen Club" an adolescent-centred differentiated care model compared with standard of care: a nested case-control study at a tertiary referral hospital in Malawi. *J Int AIDS Soc.* 2017; 20(3).
- 3. WHO, CDC, USAID, PEPFAR, IAS. *Key considerations for differentiated service delivery for specific populations: Children, adolescents, pregnant and breastfeeding women and key populations.* Geneva: World Health Organization; 2017.
- 4. Tsondai P, Wilkinson L, Henwood R, et al. *Retention and viral suppression outcomes of patients enrolled in family ART adherence clubs in Cape Town, South Africa.* 9th IAS Conference on HIV Science (IAS 2017); 23-26 July 2017; Paris, France.
- Wilkinson L, Moyo F, Henwood R, et al. Youth ART adherence clubs: Outcomes from an innovative model for HIV positive youth in Khayelitsha, South Africa. 21st International AIDS Conference, 18-22 July 2016; Durban, South Africa.
- 6. Kim M, Wanless RS, Ahmed S, et al. *Multi-month prescription of antiretroviral therapy and its feasibility: experiences from the Baylor International Pediatric AIDS initiative (BIPAI) in six southern African countries.*9th IAS Conference on HIV Science (IAS 2017); 23-26 July 2017; Paris, France.
- 7. Mirkovic KR, Rivadeneira ED, Broyles LN. Children and alternative service delivery models: a case for inclusion. *AIDS*. 2016;30(16):2569-2570.
- 8. International AIDS Society (IAS). *Differentiated Care for HIV: A decision framework for differentiated antiretroviral therapy delivery for children, adolescents and pregnant and breastfeeding women.* Paris, France; 2017.
- 9. Ministry of Health and Child Care. *Operational and service delivery manual for prevention, care and treatment of HIV in Zimbabwe*. Zimbabwe; 2017.
- 10.Ehrenkranz PD, Calleja JM, El-Sadr W, et al. A pragmatic approach to monitor and evaluate implementation and impact of differentiated ART delivery for global and national stakeholders. *J Int AIDS Soc.* 2018;21(3).

#### For more information:



daniella@teampata.org or nputta@unicef.org

#### **E-versions available at:**

www.teampata.org/pata-research/ or www.childrenandaids.org/learning-center-page