

## Families matter: differentiated service delivery for HIV



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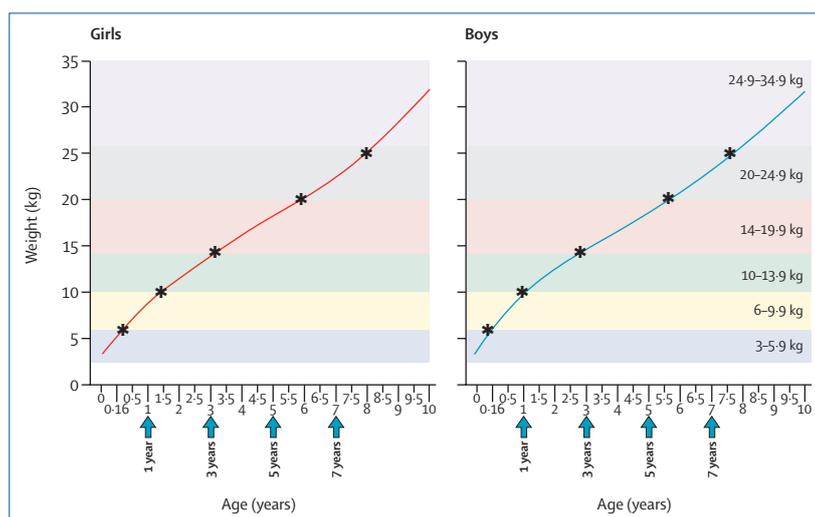
From 2012 to 2018, global antiretroviral therapy (ART) coverage for children younger than 15 years of age increased from 32% to 54%, but it is still far from reaching the UNAIDS 95-95-95 targets.<sup>1</sup> Although there is hope for continued progress and achieving HIV epidemic control, HIV burden remains greatest in regions where health-care systems are weakest and clients are the most underserved. Therefore, efforts to expand treatment must minimise the infrastructural burden while simplifying client access. As emphasised in the *Lancet* Commission report,<sup>2</sup> programmes must move beyond health-care silos and better integrate HIV and global health for all populations.<sup>3</sup> Sustainable development goal (SDG) 3.3 is a call to “end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases” by 2030. Although ambitious, this goal is hardly an exhaustive list of threats facing fragile health systems. In the context of heavy disease burden, protecting such systems is as crucial as ensuring the availability of effective service delivery models to improve access to treatment and achieve the SDGs’ broader global health goals.

In 2015, WHO released ART guidelines that began the treat-all era. This normative guidance simultaneously emphasised differentiated service delivery (DSD) to boost client satisfaction, improve health outcomes, decrease the burden on strained health systems, reduce costs incurred by clients and health facilities, and sustain HIV programmes.<sup>4</sup> Although these guidelines support the use of DSD in non-pregnant adults, they do not explicitly address inclusion of children or pregnant and breastfeeding women. At the time the guidance was released, data on the safety and efficacy of DSD in these populations were limited. This evidence base has since grown, illustrating that clinically stable pregnant and breastfeeding women and children benefit from DSD. As a result, key considerations were subsequently released.<sup>5-7</sup>

At present the guidance recognises both that entire family units stable on ART benefit from simplified care, and that we lose efficiencies if clinically stable parents and caregivers are eligible for reduced clinical visits and medication refills whereas other members of the same family are excluded on the basis of

pregnancy or age.<sup>8</sup> The family unit is the focus when building a sustainable response to addressing HIV in all populations, regardless of age or sex, and family-based care can be integrated within service delivery models already reaching adults, key populations, and orphans and vulnerable children. However, despite growing support for the inclusion of clinically stable pregnant and breastfeeding women and younger populations in less intense models of care,<sup>5,6</sup> governments and policy implementers remain hesitant, often citing the need for frequent monitoring in these groups. Several countries include family-based DSD in their national guidelines, but very few are tracking enrolment and coverage by population.

Parents and caregivers are more likely to participate in services that also meet their family needs. Children often depend on caregivers for transport to the facility, thus without synchronised appointments, increased costs result in challenges for all family members to remain in care.<sup>10</sup> Additionally, ART dose adjustments for children do not require increased frequency of clinic visits (figure); only three dose changes are anticipated between 1 year and 7 years of age and adult ART dose can be reached before the child reaches 10 years of age.<sup>5,9</sup> Providing comprehensive DSD therefore improves retention and viral suppression outcomes



**Figure:** Dose changes to antiretroviral therapy based on WHO growth curve  
Coloured bands delineate different antiretroviral therapy weight bands. Red and blue lines are the WHO 50th percentile growth curves for girls and boys. Each time the line crosses a weight band, a dose change is anticipated.  
\*Expected dose changes are expected before 10 years of age.<sup>5</sup>

for all family members and has the potential to boost efficiency and reach SDGs while protecting the health-care system and maintaining service quality.<sup>11</sup>

In several countries, facility-based models, such as appointment spacing and same-day visits for clinically stable caregivers and their children, have reduced the number of individual appointments to health facilities while improving retention.<sup>12-15</sup> In Mozambique, implementation of a family-based intervention, including same-day appointments and ART pick-up, resulted in improved overall retention from about 60% to 85% for adults and 45% to 80% for children.<sup>16</sup>

The ART adherence club model, originally scaled up for non-pregnant, clinically stable adults in South Africa, was adapted to meet the needs of family units stable on ART. Family clubs include stable children and their caregivers on ART and all clients receive their care and ART refills together. Retention remained high after club enrolment for children (93.7% at 12 months, 91.8% at 24 months, and 86.1% at 36 months) and for caregivers (93.9%, 91.3% and 89.7%). After 36 months, 86% of children and 95% of caregivers were virally suppressed, with viral load test done in 98% of children and 89% of caregivers.<sup>17</sup>

Family community adherence groups have also shown promising outcomes for children in Mozambique. From 2008 to 2012, 4925 clients formed 1164 community adherence groups including 312 (6%) children younger than 15 years of age. Retention among children in community adherence groups was 94%, showing that including children in adult-centred DSD models is feasible, enables family case management, and improves retention for children.<sup>18</sup> Because of improved outcomes, family-based community adherence groups eventually became a part of the national DSD strategy and policy in Mozambique.

To provide DSD that is client-centred and family-friendly, the design and implementation DSD models must optimise provision of quality services, facilitate retention in care and viral suppression, and improve client satisfaction for caregivers and their children. Each country context and setting varies, and multiple models might be needed to address families on the basis of their needs. The SDGs are wide-ranging and represent an agreed upon path to a more equitable and healthier planet. They demand a reconfiguration in how countries, sectors, and disease-specific programmes work together

and this collaborative approach should equally be reflected in HIV service delivery. The journey to epidemic control is too important to leave anyone behind; we must go there together while we try to go faster. More experience and data, including tracking coverage, is needed for effective family-based service delivery models. Given the evidence that is already available, the time to include entire family units in sustainable, high-quality DSD models is now, thereby achieving HIV epidemic control and the SDGs for all populations.

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