unicef
for every child

Halima Mfaume, a 16-year old girl living with HIV, and her grandmother at their home in Dar es Salaam, United Republic of Tanzania.

IMPROVING HIV SERVICE DELIVERY FOR INFANTS, CHILDREN AND ADOLESCENTS:

A framework for country programming

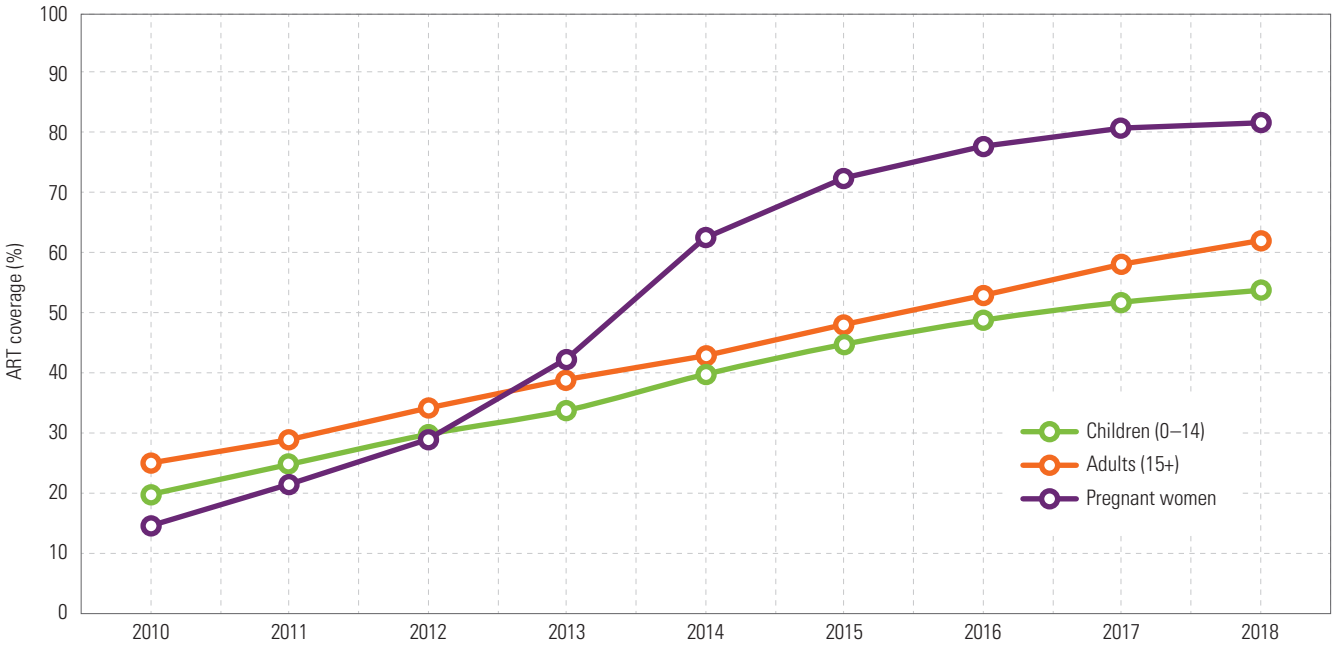
HIV IS AS SERIOUS AND DEADLY A THREAT to infants, children and adolescents today as it was a decade ago. Consistent efforts to improve services and outcomes for them have had some success, but we are nowhere near the ultimate goal of eliminating AIDS as a public health problem among children and adolescents. It is already evident that the global 'super-fast-track' targets will be missed, including those of providing 1.4 million children (aged 0–14 years) and 1 million adolescents (aged 15–19 years) with lifelong HIV treatment by 2020. Continued failure to make substantial progress will seriously jeopardize the overall goal of putting HIV on an irreversible downward trajectory in every country and region.

Recent trends and current figures show that there have certainly been some successes. Yet, the testing, treatment and retention gaps for infants, children and adolescents remain – and they are not closing fast enough. Worldwide, about 940,000 children under the age of 15 were receiving antiretroviral therapy (ART) in 2018, more than double the number in 2010. But they still accounted for only slightly more than half (54 per cent) of all children living with HIV in that age group. The net increase of just 4,000 new children aged 0–14 on ART from 2017 to 2018 is a worrying sign that ART access and uptake is essentially stagnant. Without improvements, coverage levels among children will continue to lag behind adults (63 per cent globally in 2018) and pregnant women (82 per cent) (*see Figure 1*).

The poor results in HIV treatment coverage are matched by – and are partly a result of – insufficient progress in diagnosing infections and preventing new ones. In 2018, two in five of all infants exposed to HIV were not tested for HIV by 2 months of age, and the total number of annual new HIV infections among those aged 10–19 years in 2017 was only about 25 per cent lower than it was in 2010.

The world can and must do better. For this reason, UNICEF, in collaboration with partners, has developed a framework to help countries around the world improve service delivery for children and adolescents. The framework focuses on service delivery as one of three pillars of an effective HIV response, along with diagnostics and drugs. It is based on the recognition that commodities alone cannot produce the results we need. Good service delivery is necessary to get the right diagnostics and drugs to children and provide them with the care and support they will need to survive and thrive over what could be a lifetime of living with HIV.

Figure 1. ART coverage among children aged 0–14 and adults aged 15+ years, and lifelong ART coverage among pregnant women, 2010–2018



Source: UNAIDS 2019 estimates; Global AIDS Monitoring 2019.

A health worker holds a bottle of antiretroviral medicine at the Princess Christian Maternity Hospital in Freetown, Sierra Leone. The medicine is being dispensed to a 15-year-old mother living with HIV as part of services to prevent mother-to-child transmission of HIV.

Overview of the service delivery framework for infants, children and adolescents living with HIV

How the framework was developed. Nearly 400 people contributed to the development of the paediatric service delivery framework, including some 320 frontline service providers within the African Network for the Care of Children Affected by HIV/AIDS (ANECCA), Le Réseau Enfants et VIH en Afrique (EVA) and the Paediatric-Adolescent Treatment Africa (PATA) network who responded to a values and preferences survey. Participants highlighted numerous barriers to their work, in areas of targeting, planning, training and supply chain logistics, but also several opportunities and 'best practices' they believe deserve greater attention and support.

These observations were the basis of discussions by a group of 40 global experts representing 24 stakeholder organizations that provide or support HIV programming for infants, children and adolescents. The service delivery framework they helped design was augmented by a literature review to identify additional interventions and assess the quality of evidence in support of them. Over 360 papers reporting on service delivery innovations were identified. Each paper was scored for quality using a simple semi-quantitative approach with four criteria: (1) number of clients who received the intervention (<100='0', ≥100='1'); (2) number of facilities or sites where the intervention was implemented (1='0', ≥1='1'); (3) whether the study was published in a peer-reviewed, high-impact journal (impact factor <2='0', ≥2='1'); and (4) whether the study reported significant positive outcomes (no='0', yes='1').

Studies were then clustered by intervention, which resulted in 37 separate interventions each containing from 1 to 23 papers. Interventions were divided across the continuum of care (locate, link, treat and retain) and classified into 'should do' (multiple high-scoring papers in support of the intervention, implying that countries should strongly consider it) or 'could do' (few low-scoring papers, implying that programme managers could consider the intervention, depending on context). Validating the framework with key stakeholders and potential users was the final step in developing the framework.

How the framework is intended to work. Overall, the service delivery framework aims to help programme managers better define context-specific priority interventions at national and subnational level to improve services for children and adolescents living with HIV. The framework can help create a dialogue around what is needed and how progress should be tracked to create a continuous quality improvement cycle.

To help partners identify the questions most useful to ask and the solutions most likely to have the greatest impact, the framework outlines three basic steps: (1) assessing the situation, including by using assessment tools provided in the framework; (2) identifying, planning for and implementing the optimal interventions using the solution matrix; and (3) tracking and monitoring progress towards improved service delivery with a view to quality improvement of programmes.

Figure 2 shows how the framework can be used for continuous quality improvement. Programme managers (at national or district level) in consultation with experts in the paediatric technical working group assess programme gaps, interrogate the framework and identify and prioritize the best practices.

For the assessment phase, worksheets are provided to help users understand *what* the state of their epidemic is and *where* gaps lie in the continuum of care for different age groups. Based on the findings of the assessment, the solution matrix then defines *which* evidence-based interventions might be best suited for a particular country's context (*see Table 1*). These best practices in turn link to tools (where available) that can help programme managers and stakeholders better understand how to implement interventions. The framework emphasizes consultation and consensus building among stakeholders to ensure that programmes are implemented in a coordinated fashion.

The framework also seeks to firmly position HIV responses for infants, children and adolescents within the larger health, social and economic environments that influence HIV programming. Therefore, in addition to the specific interventions defined in the solution matrix to address programming gaps, the framework offers recommendations for several cross-cutting elements

Figure 2. How the service delivery framework can be used to support country programmes

that need to be in place in all programmes, settings and contexts. These cross-cutting elements are in essence the enablers that are the bedrock of better health systems in general and child and adolescent HIV care and treatment services in particular.

Flexibility and adaptability are key features of the framework, which takes a data-informed, differentiated approach to programming, recognizing that different solutions may be needed for different countries, different subnational regions, different subpopulations of children and at different points along the continuum of care. For example, services to locate and test adolescents aged 15–19 differ from services needed to identify younger children living with HIV, so depending on the epidemiological context in a country and the performance of the programme, the national programme may choose to prioritize investment in a targeted way.

Regardless of the country or context, the framework was not developed to replace the tools and approaches that currently guide HIV programming for infants, children and adolescents. Instead, it is intended to complement and fortify existing initiatives. For example, World Health Organization (WHO) recommendations already call for differentiated service delivery and task

Table 1. Solution Matrix

CONTINUUM OF CARE					
AGE		LOCATE	LINK	TREAT	RETAIN
0–3 YEARS	SHOULD DO	• Family-based index testing (including in adult ART services) • Task shifting for testing • Mentor mothers • Mobile and electronic tracking platforms (linked to early infant diagnosis [EID] testing) • Mother-infant paired services • Point-of-care technologies for EID	• Mentor mothers • Mobile and electronic tracking platforms (linked to EID testing) • Mother-infant paired services • Economic incentives and social protection	• Decentralized treatment • Task shifting for treatment • Mentor mothers • Mobile phone case management • Optimized treatment regimens	• Appointment systems • Mentor mothers • Mobile SMS reminders • Point-of-care technologies for viral load • Viral load monitoring • Home-based adherence and psychosocial support • Economic incentives and social protection
	COULD DO	• Campaign-based testing • Birth EID and treatment • Testing at immunization/ growth monitoring • Congregation-based testing		• Telemedicine	
4–9 YEARS	SHOULD DO	• Family-based index testing (including in adult ART services) • Testing sick children (tuberculosis, malnutrition, out- and in-patient) • Risk screening for provider-initiated treatment and counselling • Task shifting for testing • Home-based and mobile testing • School-based testing	• Economic incentives and social protection	• Decentralized treatment • Task shifting for treatment • Assisted disclosure • Mobile phone case management • Optimized treatment regimens	• Appointment systems • Assisted disclosure • Differentiated service delivery (DSD) for stable children and adolescents • Mobile SMS reminders • Point-of-care technologies for viral load • Viral load monitoring • Home-based adherence and psychosocial support • Economic incentives and social protection
	COULD DO	• Campaign-based testing • Congregation-based testing		• Telemedicine	
10–18 YEARS	SHOULD DO	• Adolescent-friendly health services • Family-based index testing (including in adult ART services) • Task shifting for testing • HIV self-testing • Home-based and mobile testing • School-based testing	• Adolescent- friendly health services • Adolescent peer support • Economic incentives and social protection	• Decentralized treatment • Task shifting for treatment • Adolescent-friendly health services • Assisted disclosure • Adolescent peer support • Mobile phone case management • Community-based treatment • Optimized treatment regimens	• Adolescent-friendly health services • Adolescent peer support • Appointment systems • Adolescent transition • Assisted disclosure • DSD for stable children and adolescents • Mobile SMS reminders • Risk assessment for poor adherence • Teen clubs • Point-of-care technologies for viral load • Viral load monitoring • Economic incentives and social protection • Mobile phone case management • Home-based adherence and psychosocial support
	COULD DO	• Campaign-based testing • Congregation-based testing • Online social network support • Risk screening for community testing	• Online social network support	• Integrating care for mental health and substance abuse disorders • Online social network support • Telemedicine	• Integrating care for mental health and substance abuse disorders • Online social network support

Note: *Text in orange colour indicates a community/community facility solution.*

shifting for children and adolescents. As countries work to achieve the global targets for ending AIDS in children, adolescents and women, the framework reinforces, highlights and expands on best practices.

Who the framework is for. The service delivery framework is intended to be used by programme managers and implementers tasked with providing services to children and adolescents living with HIV. Depending on the country and context, this is likely to include relevant government ministries, the faith-based and private sectors, community-based groups and other non-governmental organizations (NGOs), and networks and support groups run by and directly supporting people living with and affected by HIV.

Since most of the evidence that underpins the framework is derived from countries with a high prevalence of HIV, it is likely to be most useful in countries or regions where there is a generalized HIV epidemic with high rates of HIV among women, children and adolescents.

Conclusion

THE FRAMEWORK IS ACTION-ORIENTED and structured to deliver results. At its centre, the solution matrix is a concise menu of programming interventions that are considered to be best practices for specific points along the continuum of care and for specific populations. Having assessed the national or subnational programme, managers and implementers can interrogate the solution matrix and pull out specific ideas for stakeholders to consider and implement.

The four main categories under which solutions are grouped are 'locate', 'link', 'treat' and 'retain'. Each recommended intervention is accompanied by a brief description of its potential value and benefits, along with links to the evidence and examples of tools that have been used to implement it.

The interventions included in the solution matrix are also categorized into 'should do' and 'could do' interventions based on the wealth of published evidence supporting them and the values and preferences of service providers who participated in the consultation process. This consensus among local and national stakeholders from a wide range of settings and contexts underscores the likely benefits of the framework for programmers everywhere.

Longezo, a three-year-old living with HIV in Nkhuloawe Village, Malawi, takes his antiretroviral medicine. Just over half of all children living with HIV globally received life-saving ART in 2018.

UNICEF plans to further validate the solution matrix and roll out the service delivery framework in 2020 with the support of the local partners involved in the consultation process. It is not a coincidence that this framework is being introduced in the same year in which UNAIDS and partners assessed progress against the 'super-fast-track' targets, most of which will not be achieved in most countries. More intensified efforts are needed everywhere to advocate for better programming for infants, children and adolescents and to prioritize interventions for them. This new framework is an opportunity to make continuous and faster progress in that direction.

FOR MORE INFORMATION, PLEASE CONTACT:

United Nations Children's Fund
3 United Nations Plaza
New York, NY 10017
Attn.: sessajee@unicef.org or nputta@unicef.org

To access the framework online, please see: http://www.childrenandaids.org/paediatric-service-delivery-framework