# HIV testing and treatment

UBRAF 2016-2021 Strategy Result Area 1



## Contents

Achievements	2
Innovative HIV testing and counselling programmes	2
Access to treatment cascade	5
Testing for children and adolescents	6
Fast-track HIV services in high-burden cities	8
HIV services in humanitarian emergencies	9
Access to medicines and commodities	12
Challenges	14
Key future actions	16

## Achievements

Strategy Result Area 1: Children, adolescents and adults living with HIV access testing, know their status and are immediately offered and sustained on affordable quality treatment.

The Joint Programme has been pivotal to global efforts to rapidly accelerate testing and treatment access. The UNAIDS report *Ending AIDS – progress towards the 90 90 90 targets* shows that in 2017, for the first time, more than half of all people living with HIV (53%) were accessing HIV treatment, putting the world on track to reach 30 million people on treatment by 2020. While antiretroviral therapy (ART) coverage exceeds 50%, more effort is needed to scale up treatment, particularly for children and adolescents, in certain regions, including west and central Africa (WCA), and eastern Europe and central Asia EECA), and for certain populations, including men who have sex with men, sex workers, transgender people, people who inject drugs, prisoners and other incarcerated people. Efforts to expand HIV treatment and care.

#### Innovative HIV testing and counselling programmes

In 2017, WHO launched Guidelines on HIV self-testing and partner notification. Supplement to consolidated guidelines on HIV testing services. HIV self-testing (HIVST) and partner notification are two key strategies to increase access to testing for populations at increased risk of HIV who are not currently accessing testing. A range of tools and standard operating procedures were collected, reviewed and collated to support countries in implementing these approaches, which have the potential to increase the rate of new HIV diagnoses. A major achievement in 2017 was to prequalify the first rapid diagnostic test for self-testing, using oral fluid. Several blood-based HIVST kits are moving through the WHO prequalification process. WHO support enabled a rapid adoption of HIVST, with increasing numbers in all regions developing policies to start implementation

WHO's HIVST website, www.hivst.org provides a frequently updated repository of all HIVST programmes, national policies and research. WHO is a key partner in the Unitaid-funded STAR consortium in Malawi, Zambia and Zimbabwe, which has distributed more than one million HIV self-testing kits. High acceptability and rates of first-time testing have been found among populations not accessing testing through existing services (overlooked men, adolescents and key populations). This project will expand to Lesotho, South Africa and Swaziland. WHO held a major HIV testing services meeting for 18 countries in Kenya, which focused on equitable and acceptable testing for key populations. WHO organized a series of

community consultations on HIV self-testing to explore community concerns and address these so that communities understand and support self-testing as it is introduced in their countries.

WHO provided technical support to more than 45 countries to help them increase the effectiveness of their mix of HIV testing services in improving access and achieving greater positivity rates, linkage, quality of testing and impact. WHO supported countries in improving the quality of testing through a number of tools, including WHO recommended testing strategies and nationally validated testing algorithms, quality assessment/quality improvement systems and re-testing before ART initiation. WHO also hosted webinars on a range of HIV testing issues, including HIV self-testing, partner notification, testing quality and misdiagnosis. WHO co-convened, with the UNAIDS Secretariat and the Global Fund, a major meeting in Senegal on HIV testing services in WCA where testing coverage and quality, particularly for key populations, lags.

UNHCR worked to ensure that refugees and other populations affected by humanitarian emergencies have improved access to HIV testing and counselling services. During 2017 in South Sudan, UNHCR provided support for the scale-up of HIV testing services in six camps and two referral hospitals where more than 15 600 people were tested throughout the year. In Rwanda 13 388 Burundian refugees aged 15-plus were tested for HIV with support from the Global Fund, with 100% receiving their results.

UNFPA supported testing and counselling in Benin and Togo for adolescents and young people. The initiative resulted in more than 75 000 HIV tests. In Indonesia, under the female sex worker strategy, technical assistance in seven districts increased testing coverage from 62% to 90%, and helped surpass testing targets (61 910 tested with a target of 58 779).

ILO continued to intensify action on HIV testing in the workplace, focusing on workers more vulnerable to HIV. In partnership with national AIDS authorities, labour ministries, employer, worker and civil society organizations, the UNAIDS Secretariat, WHO, UNICEF, UNDP and UNESCO, the ILO mobilized 1 316 755 workers (30% women, 69% men) to test for HIV; 19 439 tested HIV-positive and were referred to treatment and care services for follow-up. Since the launch of the VCT@WORK Initiative by ILO, UNAIDS Secretariat, the International Organisation of Employers and the International Trade Union Confederation, 4 310 432 workers have tested for HIV, 106 592 have tested positive and 104 887 were referred to treatment and care. Workers vulnerable to HIV from sectors such as transport, mining, construction, entertainment, hospitality, health and the informal economy were targeted. To increase the likelihood of identifying workers living with HIV, the focus was also on

communities with a relatively higher burden of HIV in the following countries: Botswana, Cambodia, Cameroon, China, the Democratic Republic of the Congo, Egypt, Guatemala, Haiti, Honduras, India, Indonesia, Kenya, Mozambique, Nigeria, Russian Federation, South Africa, Ukraine, United Republic of Tanzania, Zambia and Zimbabwe. In Mozambique, HIV testing was undertaken for young workers, particularly in the informal economy, sex workers, clients of sex workers, cross-border traders and migrant workers; 25 415 workers undertook HIV tests ,1784 tested positive and 1781 were referred to treatment and care services.

In Cambodia, HIV testing focused on key populations in the entertainment and garment industry in partnership with the National Centre for HIV/AIDS, Cambodia Business Coalition on AIDS and Khmer HIV/AIDS NGOs Alliance (KHANA). A total of 40 577 workers comprising women (63%) and men (36%) tested for HIV.

In the Russian Federation, the ILO forged partnerships to promote the VCT@WORK Initiative with the Russian Railway, the Irkutsk Oil Company, the Tuapse Oil Refinery Factory and five mines of the Siberian Coal Energy Company. The ILO, UNAIDS Secretariat, national AIDS control programmes and civil society partners made efforts to institutionalize HIV testing in India, Nigeria, South Africa, Ukraine and Zambia.

In eastern Europe UNESCO continued to support the UNAIDS-led testing campaign, which provides young people with information and counselling on HIV prevention, testing and treatment and sexual and reproductive health (SRH) issues from reliable sources, such as the UNESCO-supported social media platform TEENSLIVE.INFO and OK.RU\TEST, developed in cooperation with the UNAIDS Regional Support Team.

In Botswana, Kenya, Lesotho, Namibia, Swaziland and Uganda, UNESCO worked with SAfAIDS to develop and roll out the Adolescent Treatment Literacy Toolkit to support young people, teachers and the community share information and strategies on HIV prevention, care and treatment in a simple, entertaining way, and promote awareness of the rights and dignity of young people living with HIV. UNESCO developed a monitoring and evaluation tool to accompany the toolkit and support countries in generating information and evidence on adolescent HIV prevention and treatment literacy.

In Uganda, UNESCO supported the Protect the Goal campaign to mobilize young people in the Karamoja region through sports and games. Adolescent SRH service providers were mobilized to provide HIV counselling and testing.

#### Access to treatment cascade

Building on a voluntary licence negotiated by UNITAID-Medicines Patent Pool, a breakthrough pricing agreement was announced in September 2017. This will accelerate the availability of the first affordable, generic, single-pill HIV treatment regimen containing dolutegravir (DTG) to public-sector purchasers in LMICs for about US\$ 75 per person, per year. The agreement is expected to accelerate treatment roll-out as part of global efforts to reach all 36.7 million people living with HIV with high-quality ART. This agreement, announced by the governments of Kenya and South Africa, together with UNAIDS, the Clinton Health Access Initiative, the Bill & Melinda Gates Foundation, UNITAID, the United Kingdom's Department for International Development, the United States President's Emergency Plan for AIDS Relief (PEPFAR), USAID, and the Global Fund, with Mylan Laboratories Limited and Aurobindo Pharma, takes an important step towards ensuring the worldwide availability of high-quality HIV treatment.

UNDP supported the development of the African Union Model Law on Medical Product Regulation adopted in January 2016. The model law aims to harmonize medicines regulations and share work among countries in the Africa region to ensure faster, more predictable and transparent approval of medical products. To date, at least five countries have adapted the model law into national legislation.

UNDP co-organised a three-day high-level meeting with the Government of Malawi that aimed to strengthen policy coherence to promote innovation in health technologies and access to them within the African Regional Intellectual Property Organization (ARIPO) region. The meeting was opened by the President of Malawi and attended by senior representatives of 18 Member States and other authorities and stakeholders. It resulted in an outcome document that proposed reforms of the national and ARIPO legal instruments and policies to align Member States' public health and industrial policy objectives. As a result, in November 2017 the ARIPO Council of Ministers created a new mandate for its Secretariat to address policy and legal incoherencies that hinder access to health technologies. In December 2017, UNDP co-organized with Fiocruz, the Union of South American Nations (UNASUR) and the South American Institute of Government in Health a regional meeting for the 12 UNASUR member countries on the use of competition law to promote affordable access to health technologies. Key outcomes included enhanced national capacity to use competition law and policy to promote access to medicines and other health technologies.

UN Women invested in researching women's experiences of treatment availability and their decision-making around uptake. Key barriers to women's access to HIV treatment: a global

review, commissioned by UN Women and undertaken by the AIDS Vaccine Advocacy Coalition, the ATHENA Network and Salamander Trust, highlighted gender-related barriers and facilitators for women's access to treatment and adherence. This community-based, participatory review was designed, led, governed and validated by and for women living with HIV. A global reference group of 14 women living with HIV from 17 countries guided the review through all its phases: a literature review, data collection and analysis via community dialogues; and case studies from Kenya, Uganda and Zimbabwe, with 200-plus women living with HIV from 17 countries participating. The findings of this global review have been presented in an article published in the <u>December 2017 volume of the Health and Human</u> <u>Rights Journal</u>.

WFP's work on addressing HIV is gender-responsive and focuses on linking food and health systems through the provision of food assistance for better health outcomes, such as nutritional recovery for people living with HIV and/or TB, retention in care programmes, and successful completion of treatment. WFP contributes through advocacy and communications; partnerships; the inclusion of food security and nutrition in comprehensive national plans for addressing HIV/AIDS in order to meet the needs of vulnerable people living with HIV; and technical support, capacity building and assistance for implementation. WFP provides direct support, including food and cash-based transfers, to individuals and households in order to facilitate improved access and adherence to treatment.

In 2017, WFP provided technical assistance to governments with a view to integrating food and nutrition services into HIV responses through the development of national guidelines on nutrition assessment, counselling and support for adolescents and adults living with HIV, including in Kenya, Lesotho, Rwanda, Somalia and Swaziland.

In the past two fiscal years, 310.8 million people received essential health, nutrition and population services supported by World Bank operations; it manages a health, nutrition and population portfolio of US\$ 11.5 billion. Through this lending portfolio, the World Bank funds major health system strengthening operations that aim to improve the access and quality of services, including HIV testing and treatment; for example, the East Africa Public Health Laboratory Networking project served four million beneficiaries through a network of 32 upgraded laboratories in Burundi, Kenya, Rwanda, Tanzania, and Uganda.

#### Testing for children and adolescents

UNESCO's work contributes to the 90-90-90 targets by supporting health literacy and healthpromoting schools, which encourages positive health-seeking behaviour, including HIV/STI testing and treatment adherence, and by supporting measures that help young people living with HIV stay in school, such as safe spaces and referrals to youth-friendly health services.

Emerging data from provider-initiated testing in paediatric wards, malnutrition units and tuberculosis clinics, supported by UNICEF, suggest a high yield from routine HIV testing, identifying children living with HIV whose mothers were never tested or did not receive prevention of mother-to-child interventions, or children who acquired HIV during breastfeeding. Increasing the number of children identified and tested requires expanding postnatal testing in maternal, newborn and child health services, adding routine testing at points of health services, such as nutrition clinics and in-patient settings, expanding community testing of HIV, and piloting family-centred approaches where children are followed up from an adult index case.

WFP has carried out several formative studies in LAC on the Food and Nutrition Security of people living with HIV. In 2017, Guatemala implemented this study in 7 Comprehensive Care Units, which included 120 children and 272 adults living with HIV, who are assisted by the Ministry of Public Health. WFP provided the technical expertise as well as the financial commitments in collaboration with several partners like the Association for the Prevention and Study of HIV / AIDS -APEVIHS, a local NGO, the National Program for the Prevention and Control of STIs, HIV and AIDS, UNAIDS Secretariat, UNICEF and HIVOS. The findings of these studies have provided a framework for advocacy actions for the food security and nutrition of PLHIV, also generating the evidence has become a key aspect needed to strength the HIV response, to improve adherence to treatment (90-90-90 cascade), to target interventions to improve nutrition and food security and to reduce vulnerability.

Despite access to lifelong ART for pregnant women living with HIV rising globally in 2016, less than half the 1.4 million infants born to mothers living with HIV were tested within two months of birth. Among the 2.1 million children (aged 0–14) living with HIV, less than half were on treatment. Given the high mortality rate related to infant HIV in infancy and early childhood, UNICEF and WHO continued to find ways to decentralize and improve access to HIV testing to link more children to ART early.

WHO established a Paediatric Technical Working Group, which met to discuss HIV treatment optimization for children, including data and research plans on new ARVs and formulations and the potential role of emerging options in the HIV drug pipeline (tenofovir alfenamide, long-acting formulations) from a public health perspective.

Declining new HIV infections among children presents a disincentive for pharmaceutical companies to invest resources in developing suitable ARVs for children. In this context, several consultations, led by WHO, have advanced the discussion on drug and formulation development for children, resulting in a more collaborative and coordinated response among stakeholders. WHO convened a third meeting on Paediatric ARV Drug Optimization (PADO 3) in December 2016 to take stock of progress and to advance the paediatric treatment optimization agenda. As with previous PADO meetings, PADO 3 brought together regulators, researchers, clinicians, programme managers and other stakeholders. It provided a forum to foster coordination across the continuum of drug development – from discovery to uptake – that is required to scale up ART for children.

WHO is supporting the introduction of the AA-HA! Framework to promote a stronger focus on improving service delivery for adolescents, and ensure their specific needs are addressed via differentiated care models.

UNICEF provided technical assistance to countries to scale up targeted HIV testing for children and adolescents and made quality testing and treatment data available at national and subnational level. UNICEF expanded support for the introduction of point-of-care (POC) diagnostic technologies from seven countries in eastern and southern Africa (ESA) to three in western and central Africa (WCA) to improve the access of infants to HIV testing. The POCs efficiently deliver tests results 'while you wait' and improve timely linkage to ART.

UNICEF supported integrated HIV and tuberculosis care in children through the development of improved guidance and tools for community management of childhood illnesses. UNICEF's support ranged from developing innovative models to promote HIV self-testing for adolescents, to community outreach through UNICEF's U-report platform. UNICEF revised national testing and treatment guidelines in ESA.

#### Fast-track HIV services in high-burden cities

The rapidly expanding global commitment to fast-track targets in key cities and major urban areas was reiterated and endorsed through the 2016 Political Declaration adopted by the UN General Assembly at the conclusion of the high-level meeting. The Cities ending the AIDS epidemic report, with evidence from more than 30 cities on their progress towards the 2020 targets, highlighted the commitment and leadership role of cities and the strategies, actions and achievements in implementing the Paris Declaration. Continued advocacy and mobilization of political commitment in 2017 resulted in more than 250 cities and municipalities signing the Paris Declaration since its launch in 2014. Fast-Track Cities

sessions were organized at various conferences, including International AIDS Society Conferences in Durban (2016) and Paris (July 2017).

As part of the joint Secretariat, USAID and World Bank programme in west Africa, the World Bank conducted several size estimation and programmatic mapping studies. The studies, such as the one conducted in Côte d'Ivoire for the cities of Abidjan, Bouake and San Pedro, provided programme managers, planners and implementers with the granular level of information needed to fast-track services at city level.

In partnership with the Secretariat and other Cosponsors, the World Bank's allocative efficiency study in Johannesburg provided epidemic and programmatic projections to 2020 and 2030. The analysis responded to the city fast-track initiative by assessing past HIV care cascade achievements and future needs to reach 2020 and 2030 targets.

UNDP, together with the Joint Team on HIV, supported 19 municipalities in South Africa to identify gaps in local HIV responses and revise plans to include strategies to accelerate reaching the 90-90-90 targets for HIV and TB. In Zambia, the Joint Team supported five municipalities to develop HIV and AIDS investment cases; In the Democratic Republic of Congo, following UNDP-supported advocacy for the creation of key population-friendly centres to increase their access to health services, five centres were operationalized in Matadi, Bukavu, Goma, Kisangani and Bunia, and two more in Kinshasa, manned by 45 trained nurses and doctors. UNDP support to municipalities in Afghanistan and Pakistan under the Multi-Country South Asia Global Fund HIV Programme resulted in more than 35 000 people being tested for HIV and 23 000 cases of STIs being treated since the programme started in 2014.

#### HIV services in humanitarian emergencies

UNHCR and WFP lead the way in addressing HIV in humanitarian contexts, including through the Inter-Agency Task Team (IATT) on HIV in Emergencies, with participation from partners including UNFPA, UNODC, the AIDS Alliance, the UNAIDS Secretariat, World Vision, the International Federation of Red Cross and Red Crescent Societies, the Global Fund and the International Rescue Committee. In 2016 and 2017, this platform provided leadership and technical guidance, advocated for funding and policy outcomes, helped coordinate actions and facilitated country-level partnerships. Joint initiatives included: updating the Inter-agency field manual on reproductive health in humanitarian settings as well as the SPHERE guidance on universal minimum standards for the humanitarian response; creating advocacy briefs on the HIV response in South Sudan; working with the Global Fund and UNDP to improve supply chains to prevent stock-outs in emergencies; and engaging with the cluster system to integrate HIV into emergency responses.

During the 2016–2017 EI Niño- induced drought in Southern Africa, WFP secured over US \$25 million grant from PEPFAR/USAID to mitigate the effects of the drought on people living with and affected by HIV in Lesotho, Malawi, Mozambique, Swaziland and Zimbabwe where high levels of food insecurity were recorded due to two years of consecutive drought. The grant allowed WFP to reach 349,099 beneficiaries in these countries by supporting malnourished PLHIV through treatment of moderate acute malnutrition (MAM) and severe acute malnutrition (SAM) (in Lesotho, Malawi, Swaziland and Zimbabwe), provide household food support to food insecure families hosting PLHIV and OVC (in Lesotho and Swaziland), prevent acute malnutrition amongst children (in Swaziland) and strengthen supply chain of specialized nutritious foods for PLHIV/TB & PMTCT clients (in Mozambique).

In 2016–2017, WFP's worked with the All Ukrainian Network of People Living with HIV to provide food assistance, using conditional e-vouchers and targeting 17.6 household members affected by HIV. This resulted in improved food security for two thirds of beneficiaries while 34% adhered to treatment for longer periods. This intervention also increased viral suppression and achieved the third 90 in the target group.

WFP provided food and/or cash-based transfers to vulnerable people, including people living with HIV and/or TB in emergency and refugee settings in Central African Republic, Haiti, Myanmar, South Sudan, Uganda, the Horn of Africa, the Lake Chad basin and countries affected by El Niño. It supported the Global Fund, UNFPA and UNDP with supply chain and last-mile delivery services in challenging environments and emergencies to prevent stock-outs of critical health commodities.

During the biennium, UNHCR support ensured continued HIV services for refugees and other displaced populations affected by humanitarian emergencies in more than 50 UNHCR operations. The number of persons UNHCR supported to access ART following the implementation of the test and treat guidelines tripled. In the second half of 2016, UNHCR worked with the national HIV programme and field partners to restart ART for nearly 2000 South Sudanese refugees in an area of north-eastern Democratic Republic of the Congo difficult to access and where no HIV services previously existed. After the influx from South Sudan to Uganda, the Ministry of Health, UNHCR and other partners provided treatment through UNHCR-supported clinics to 12 019 people (3967 refugees, 8052 host population) in 2017. Of these, 2616 newly arrived South Sudan refugees were linked to treatment in refugee settlement facilities in the West Nile area.

In 2017, UNHCR was sub-grantee of a US\$ 2.8 million grant with the Intergovernmental Authority for Development (IGAD) on HIV and TB in Djibouti, Sudan, South Sudan and Uganda. This grant is focused on scaling up HIV and TB services in 13 refugee camps and improving availability and utilization of HIV and TB services by complementing existing UNHCR-funded programmes. In Rwanda, UNHCR mobilized a US\$ 2.09 million grant from the Global Fund that enabled continued access to HIV/TB screening, care and treatment, and malaria prevention for Burundian refugees in Mahama camp, reception centres and urban settings; 953 people living with HIV were identified, with 924 (97%) on treatment at the end of 2017.

UNHCR strengthened programmes to improve adherence to ART in populations affected by humanitarian emergencies. It supports peer-led community interventions to improve adherence in several countries, including Egypt, Ethiopia, Kenya, Malawi, Rwanda, South Sudan, Uganda and Zambia. Through these interventions, facility-based ART registers or drug supply management systems are confidentially handled and work in collaboration with adherence supporters, who look for lost patients in the community to ensure continuity of therapy and reduce follow-up losses.

In the EECA region, UNFPA provided humanitarian support for affected populations, including life-skills education, voluntary counselling and testing, prevention and treatment of STIs through the provision of condoms, drugs and other supplies, and creating safe spaces where adolescents can freely access information, services and peer support networks.

UNICEF's HIV programming during emergencies in ESA led to cross-sectoral programming in other areas, resulting in increased access to HIV testing through malnutrition treatment services, better tracing of lost-to-follow-up cases in ART clinics, HIV education in communities and institutionalization of HIV testing and linkage to treatment in community nutrition rehabilitation centres. In Ukraine, UNICEF's efforts averted treatment disruption for people living with HIV in non-government controlled areas, and optimized treatment approaches to align them with WHO standards by introducing fixed-dose combination as the main treatment regimen; a change that also supports adherence. In Nigeria UNICEF helped procure HIV test kits for pregnant women and returnees in camps and link them to care and treatment.

The World Bank has a US\$ 2 billion portfolio of active lending operations in fragile, conflict and violent contexts in all six regions of the world. These projects apply innovative health service delivery and financing tools, such as performance-based contracting and results-based financing to fragile, conflict and violent contexts. They respond to the unique health

needs in fragile, conflict and violent contexts, including for HIV services, maternal and child health, gender-based violence and mental health.

With UNAIDS cosponsors collaboration, support was provided by the Secretariat to a strategic response in the crisis in Indonesia, Tanzania, Nigeria, South Sudan. Technical assistance was provided for preparedness and response to humanitarian crises in several countries, including China, Côte d'Ivoire, Czech Republic, DR Congo, CAR, South Sudan, Sierra Leonne, Togo, Zambia, Lesotho, Indonesia, Palau, Papua New Guinea, Philippines, Malawi, Myanmar, Republic of Korea, Russian Federation and United Republic of Tanzania.

Through the organization of a joint DPKO and UNAIDS side event "HIV and security: past, present and future" at the 2016 AIDS HLM, the Secretariat strongly advocated for strengthening the inclusion of HIV into the humanitarian response architecture and the Political Declaration. In that same year, a joint report noting progress on the implementation of the UN Security Council Resolution (SCR) 1983 from the Secretary General was presented to the UN Security Council.

The Secretariat also assisted PLHIV and their families following the disaster in Sierra Leone in August 2017 through the provision of technical assistance, strengthening the collaboration with local networks of PLHIV, UN interagency task team, national AIDS secretariat and the wider national disaster response coordination unit leading to the scale up of antiretroviral therapy, livelihood restoration, shelter and psychosocial services as well as mobilizing resources to support PLHIV capacity resilience programmes in disasters.

### Access to medicines and commodities

In 2016, WHO launched the consolidated guidelines on the use of ARV drugs for treating and preventing HIV. In these guidelines, WHO recommends to treat all persons with HIV at any CD4 count and rapidly move new science to policy and practice. The document included 52 new treatment and care recommendations covering adults, paediatrics, adolescents and pregnant women, as well as 10 new service delivery recommendations in support of differentiated models of care. These recommendations promote rapid initiation of antiretroviral medicines (ARVs) and the use of innovative testing and diagnostic platforms via a public health approach.

Data from November 2017 demonstrated that the proportion of LMICs adopting treat all policies increased from 33% in 2016 to 70% during 2017. Data from the WHO HIV Country Intelligence Tool are based on reports from 139 LMICs, including 35 fast-track countries.

Countries are now putting the newly adopted policies into practice, with 69 (50% of all LMICs) already starting implementation.

A key challenge to reducing AIDS-related mortality is the burden of HIV disease, with more than one third of people starting ART having advanced immunosuppression (defined as CD4 cell count <200 cells/mm3). In response, in July 2017 WHO released guidelines for responding to advanced HIV disease within a public health approach.

Most countries are following WHO advice to shift to newer, better treatment regimens: 72% of LMICs adopted TDF + 3TC (or FTC) + EFV as preferred first-line therapy and another 40% are making shifts to dolutegravir (DTG) regimens. In 2017, generic versions of DTG were put on the market and will soon be available at a lower price point, also combined in fixed-dose combination with TDF and 3TC. Many countries are adopting DTG as part of their first-line treatment. WHO recommended adopting drug regimens with high potency, lower toxicity, high genetic barriers to resistance, usefulness across different populations and lower cost.

94WHO co-convened a third Conference ARV Drug Optimization (CADO 3) in November 2017 to define the critical research necessary to optimize second- and third-line ART regimens for adults in the next five years. In July 2017 WHO launched a technical update, Transition to new ARVs in HIV programmes: clinical and programmatic considerations, and an access policy brief, Transition to new antiretrovirals in HIV programmes.

## Challenges

Progress in testing and treatment and towards the 90-90-90 targets has been impressive but challenges remain. Viral-load testing is WHO's preferred monitoring approach to diagnose and confirm treatment is working, yet it is not routinely available; only 38% of people living with HIV who receive ART have access to tests. Routine viral-load monitoring has been progressively implemented in LMICs, though this does not always translate to effective access, particularly for lower-level health facilities. Turnaround times for results, loss of samples and quality management also remain challenges.

WHO's HIV drug resistance report 2017 shows that in 6 of the 11 countries surveyed in Africa, Asia and Latin America, more than 10% of people starting ART had a strain of HIV resistant to some widely used HIV medicines. Once the 10% threshold is reached, WHO recommends countries urgently review HIV treatment programmes. Increasing HIV drug resistance could lead to more infections and deaths. Modelling shows an additional 135 000 deaths and 105 000 infections could follow in the next five years if no action is taken, and HIV treatment costs could increase by an additional US\$ 650 million.

There is continued slow adoption and implementation of critical policies and poor systems capacity in critical regions, such as WCA and EECA. "Step Up the Pace: Towards an AIDS Free Generation in West and Central Africa", a UNICEF/UNAIDS report describes how 25 countries that make up the WCA region are home to 26% of children aged 0–14 years living with HIV worldwide. The region lags on nearly every measure of HIV treatment and care programmes for children and adolescents. To further reduce AIDS-related mortality, countries must improve earlier HIV testing and linkage to care and ensure essential interventions to reduce leading causes of morbidity and mortality.

Addressing HIV infections among key populations at higher risk remains a major challenge in all contexts. Similarly, progress towards 90-90-90 for children and adolescents is lagging compared with that for adults. Inadequate access to and uptake of timely early infant diagnosis results in half of HIV-infected children dying by age 2 years. Age of consent hinders young people's access to HIV testing and SRH services, and stigma and discrimination experienced in the health sector is a barrier to key populations and youth.

Efforts to enhance treatment access and demand by women living with HIV need to factor in their specific social and structural barriers. Women and girls face multiple forms of exclusion and discrimination, which obstruct access to HIV services and treatment retention. Targeted research is needed on women's experiences of treatment availability and how treatment programmes impact on women and girls living with HIV.

Stock-outs of HIV medicines and commodities remain a challenge in some areas, including in humanitarian contexts and hard-to-reach rural settings. UNHCR and WFP work with partners, including the Global Fund and UNDP, to ensure treatment remains available in challenging operating environments.

As more LMICs graduate out of eligibility for donor support, political barriers stop them from taking full advantage of the policy space available under trade and intellectual property legislation to promote access to health technologies.

UNAIDS released a report showing men are less likely to take an HIV test and access ART and more likely to die of AIDS-related illnesses than women. Globally, less than half of men living with HIV are on treatment, compared with 60% of women. Studies show men are more likely to start treatment late, interrupt treatment and be lost to follow-up.

Lack of adequate, predictable funding remains the highest risk to Joint Programme work. All Cosponsors have been affected, in all regions. WHO lost 50% of flexible UBRAF funding, more than US\$ 10 million per year, necessitating a focus on mobilizing resources from within and across the organization and through donors and funding partners. In 2016–2017, WFP was forced to reduce or discontinue food and nutrition assistance programmes for people living with HIV (including refugees) in several non-Fast-Track countries. UNDP has reorganized its global and regional structures to deal with the decreased UBRAF allocations and clustered its regional HIV and health teams for Africa, the Arab States and Eastern Europe and Central Asia in the UNDP Regional Hub in Istanbul.

## Key future actions

WHO plans a renewed focus on country support, improved programme efficiencies and quality, and consolidated, streamlined normative products for HIV prevention, testing and treatment. WHO's future work on HIV will be delivered in the context of implementation of the 13th General Programme of Work 2019–2023 (GPW 13), which is structured around three interconnected strategic priorities: advancing universal health coverage (UHC); addressing health emergencies; and promoting healthier populations.

UNICEF will continue to sharpen programming approaches in countries to support differentiated service delivery models and strengthen continuum of care (locate-test-link-treat-retain) for all children and adolescents living with HIV. It will focus on programme innovations, health system improvements and working with communities, with an emphasis on low HIV-burden settings and pockets of underserved populations. In countries that have made substantial progress in adolescent access to HIV testing, the focus will be on HIV self-testing. UNICEF will leverage its work across multiple sectors to develop approaches that note the multiple needs of HIV-affected children and adolescents for healthy development, including social protection and nutrition.

The World Bank HIV team will continue to build evidence and provide technical assistance in support of its lending operations that provide funding for HIV testing and treatment. However, resource constraints will mean more limited capacities for broader health system strengthening operations that include an HIV-specific component.

UNDP will continue to provide LMICs with technical skills and expertise to develop the systems required to deliver new health technologies for HIV and coinfections.

UNHCR will work to strengthen ART treatment adherence for displaced populations by scaling up monitoring and community-based programming in and out of camps. It will scale up HIV work with the health and protection cluster to ensure HIV is effectively integrated into the emergency response, including policies, guidance and training programmes.

WFP will maintain efforts to integrate food, nutrition and social protection into the HIV response. It will link food and health systems through the provision of food and nutrition assistance for better testing and treatment outcomes, such as nutritional recovery for malnourished people living with HIV and TB, retention in care programmes and treatment success, including during emergencies. In 2018, WFP will continue to support partners deliver HIV and TB commodities to the last mile in challenging and humanitarian contexts, including in Central African Republic.

UNFPA is to coordinate a US\$ 45 million Joint UN Programme on SRHR/HIV Integration 2018–2021, with funding from SIDA. The programme will combine the efforts of UNAIDS, UNFPA, UNICEF and WHO to ensure all people can exercise their SRH rights and access quality integrated SRHR/HIV and SGBV services. The project will directly support five countries. Integrated SRHR is central to UNFPA's Strategic Plan 2018-2021.

UN Women will disseminate the findings of its Key barriers to women's access to HIV treatment: a global review for further policy and programmatic actions and interventions to address gender-specific and other social determinants of health.

The VCT@WORK Initiative will remain one of the ILO's prioritized interventions. Despite limited resources, this is one area where the ILO can demonstrate concrete and tangible contributions to the 90-90-90 targets.

UNESCO will continue to collaborate with the UNAIDS RST in EECA for the next phase of the regional cooperation programme, including through further promotion of the regional HIV testing campaign, and development and promotion of educational videos from young people on HIV prevention, testing and treatment.

UNESCO and WHO's Health Promotion Team will collaborate on school health services guidelines, standards for health-promoting schools and an e-platform for their monitoring

UNAIDS

20 Avenue Appia CH-1211 Geneva 27 Switzerland

+41 22 791 3666

unaids.org