

ACCESS TO ANTIRETROVIRAL THERAPY IN AFRICA

STATUS REPORT ON PROGRESS TOWARDS THE 2015 TARGETS

EARLY INITIATION OF ANTIRETROVIRAL THERAPY IS CRUCIAL TO THE AIDS RESPONSE

Achieving the vision of zero new HIV infections, zero discrimination and zero AIDS-related deaths requires that everyone needing HIV treatment has access to life-saving medication and access to HIV prevention services. Antiretroviral therapy is one of the most effective tools available and it is an essential part of an efficient, sustainable AIDS response.

Antiretroviral therapy:

- **Saves lives.** Antiretroviral therapy averted 5.5 million deaths in low- and middle-income countries from the peak in 1995 until 2012. Sub-Saharan Africa accounted for most of those lives saved.ⁱ
- **Prevents new HIV infections.** Antiretroviral therapy reduces the risk of HIV transmission by up to 96%.ⁱⁱ
- **Prevents illness.** Antiretroviral therapy reduces the risk of tuberculosis infection among people living with HIV by 65%.ⁱⁱⁱ
- **Saves money and promotes development.** HIV treatment can generate economic savings within five years.^{iv} Spending on antiretroviral therapy also generates economic returns of double or more than the initial investment.^v
- **Keeps people productive.** Working-age adults living with HIV can return to work earlier when they receive treatment, boosting labour productivity and reducing hardship among affected households.

The 2013 WHO HIV treatment guidelines greatly expanded the number of people eligible for antiretroviral therapy. To meet this challenge, UNAIDS in July 2013 joined with the World Health Organization (WHO), the US President's Emergency Plan For AIDS Relief (PEPFAR), the Global Fund to Fight AIDS, tuberculosis and Malaria and other partners to launch the *Treatment 2015 initiative*. *Treatment 2015* aims to ensure that the world reaches its 2015 HIV treatment target of 15 million as a critical stepping-stone towards universal access to antiretroviral therapy.

21.2 million
[20.2 - 22.7 million]

People eligible for antiretroviral therapy in Africa in December 2013, under the 2013 WHO guidelines.

WHO 2013 consolidated guidelines on use of antiretroviral drugs, recommend:

- Antiretroviral therapy (ART) should be initiated for all adult patients with a CD4 count equal or less than 500 cells per mm³. Symptomatic patients with WHO clinical stage 3 (advanced) and 4 (severe) disease, and symptomatic individuals with a CD4 count equal or less than 350 cells/mm³, should be treated as a priority.
- ART should be initiated as soon as it is tolerated in all HIV positive adults with active TB irrespective of CD4 count. Patients should not wait until TB treatment is completed to initiate ART.
- ART should be given to HIV positive adult patients with active hepatitis B co-infection with evidence of severe liver disease, irrespective of CD4 cell count or WHO clinical stage. Liver disease is emerging as a leading cause of death in HIV-hepatitis B co-infected patients and some antiretroviral drugs used on HIV treatment also are active against hepatitis B virus (HBV), emphasizing the benefit of treatment of dual infection.
- ART should be initiated for all HIV-infected pregnant and breastfeeding women irrespective of CD4 cell count or WHO clinical stage. It brings benefits to mother's health, prevents the exposed child from becoming infected, and may offer additional benefits for prevention of the sexual transmission of HIV.
- ART should be offered to all HIV-infected partners in a serodiscordant relationship irrespective of CD4 cell count. Results of HPTN052 trials and other observational studies strongly support the use of ART to prevent HIV transmission among serodiscordant couples.

See: Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: Recommendations for a public health approach WHO (2013): <http://www.who.int/hiv/pub/guidelines/arv2013/en/>

CONTINUED PROGRESS IN 2012

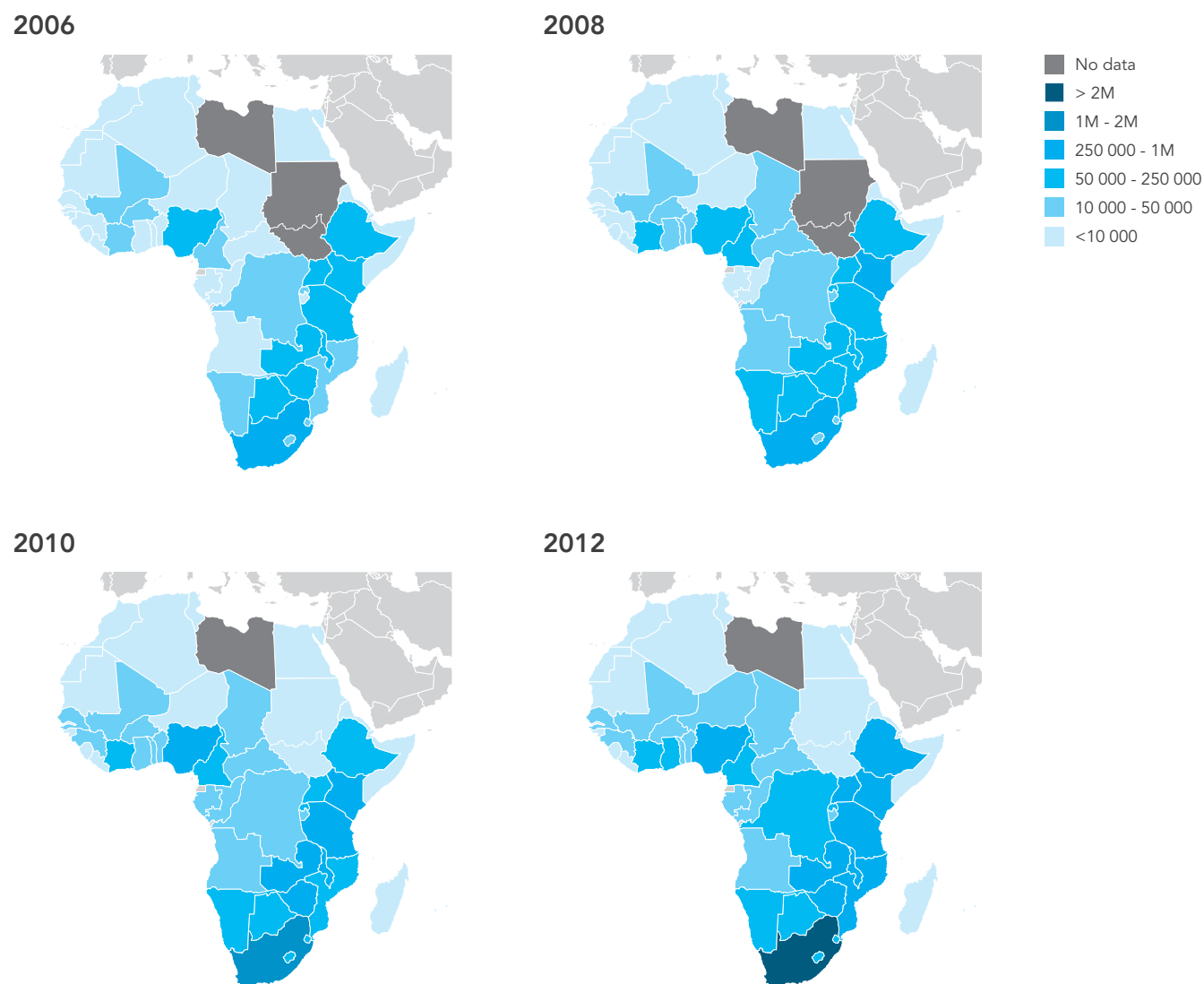
Africa is leading the world in expanding access to antiretroviral therapy, with 7.6 million people across the continent receiving antiretroviral therapy as of December 2012, including 7.5 million people in sub-Saharan Africa. Eastern and Southern Africa is scaling up faster, by more than doubling the number of people on treatment between 2006 and 2012 (see Fig. 1). Countries in Western and Central Africa also increased the number of people receiving treatment, although at a slower pace.

At least 10 countries (Botswana, Cape Verde, Eritrea, Kenya, Namibia, Rwanda, South Africa, Swaziland, Zambia and Zimbabwe) reported reaching 80% or more of adults eligible for antiretroviral therapy, under the 2010 WHO guidelines. However, new WHO guidelines on HIV treatment in 2013 have since made many more people eligible for treatment.

7.6 million

People receiving antiretroviral therapy in Africa in December 2012.

FIG. 1
Number of people receiving antiretroviral therapy, 2006–2012



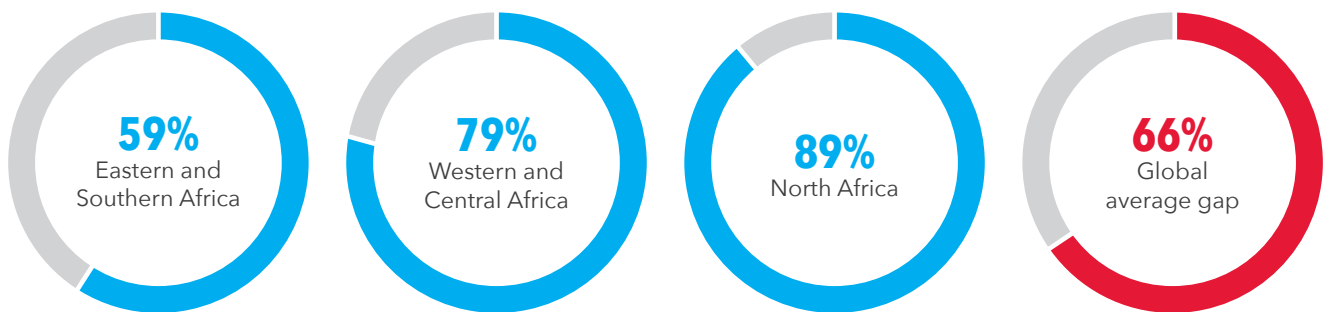
Sources: GARPR 2006, 2008, 2010, Spectrum 2012

PERSISTENT GAPS IN TREATMENT

The trend towards increased antiretroviral therapy coverage across Africa masks significant national gaps. In at least 14 countries in Africa, 80% or more of people who were estimated to be eligible for treatment under the 2013 WHO guidelines were not receiving antiretroviral therapy as of December 2012. People living with HIV in Eastern and Southern Africa are more likely to obtain treatment services than people in Western and Central Africa (see Fig. 2). The largest gap in treatment in Africa is in North Africa, where only 11% of people living with HIV currently receive antiretroviral therapy.

Considerable work remains to reach all people eligible for HIV treatment, with antiretroviral therapy reaching only about one in three eligible according to the 2013 guidelines. Of the 21.2 million people in Africa eligible for antiretroviral therapy in 2013 under the 2013 WHO guidelines, only 7.6 million people were receiving HIV treatment as of December 2012.

FIG. 2
Regional gaps in access to antiretroviral therapy, Africa, 2012 - 2013



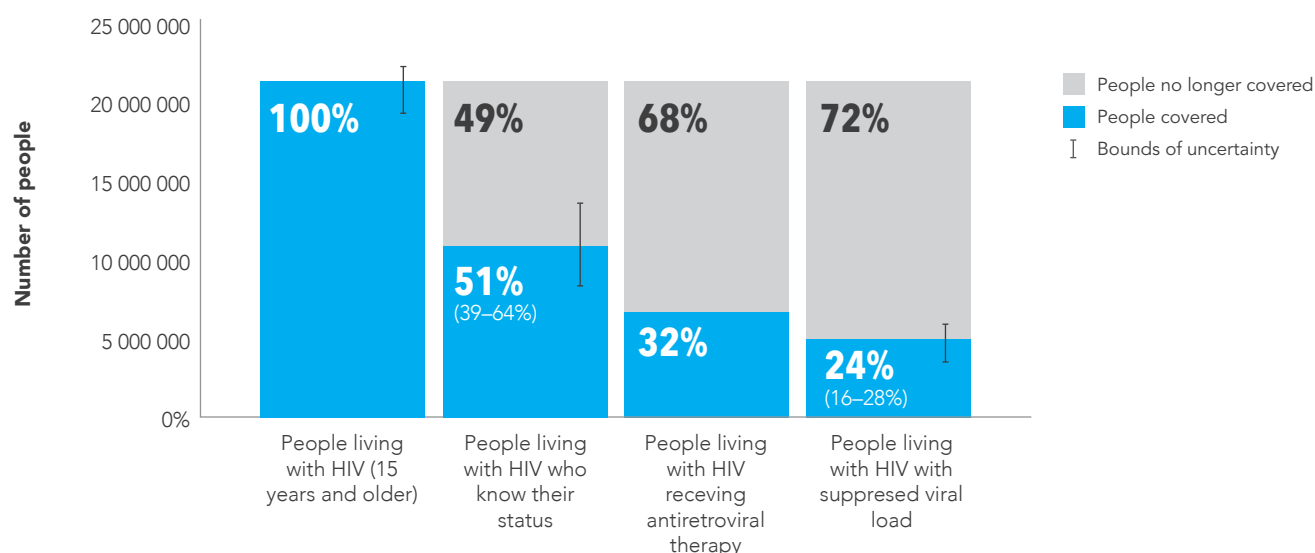
Source: UNAIDS 2012 estimates

Note: Based on numbers receiving treatment as of December 2012 and estimated numbers of people eligible as of December 2013 under the 2013 WHO HIV treatment guidelines

Although the number of people receiving antiretroviral therapy continues to rise in Africa, it is estimated that approximately three-quarters of adults living with HIV in sub-Saharan Africa have not achieved viral suppression. Service gaps and shortfalls appear to be responsible for this (see Fig. 3). Estimates of the proportion of people living with HIV in North Africa who are virally suppressed are not available, although it is believed to be extremely small, as only a relatively few treatment-eligible people in the sub-region are currently receiving antiretroviral therapy.

Unchecked viral replication increases the risk of further HIV transmission and the risk of death among people living with HIV. Antiretroviral therapy is highly effective at reducing viral loads in people living with HIV. It slows the spread of infection across communities and reduces the social costs of the HIV epidemic.^{vi}

FIG. 3
Estimated HIV treatment cascade for sub-Saharan Africa, 2012



Sources:

- UNAIDS 2012 estimates.
- Demographic and Health Surveys, 2007–2011 (www.measuredhs.com) and one community based survey in South Africa (Kranzer, K., van Schaik, N., et al. (2011). High prevalence of self-reported undiagnosed HIV despite high coverage of HIV testing: a cross-sectional population based sero-survey in South Africa. *PLoS ONE* 6(9): e25244.) 51% is the mid-point between the low and high bounds. The low bound (39%) is the percentage of people living with HIV who are very likely to know their status – they tested positive in the survey and report receiving the results of an HIV test in the previous twelve months. The high bound (64%) is calculated as the percentage who tested positive in the survey and who self-report ever being tested for HIV (the test conducted in the survey is not disclosed to the recipients). Those persons who report never having been tested for HIV do not know their HIV status and make up the remaining 36%.
- GARPR 2012.
- Barth R E, van der Loeff MR, et al. (2010). "Virological follow-up of adult patients in antiretroviral treatment programmes in sub-Saharan Africa: a systematic review." *Lancet Infect Disease* 10(3): 155-166.

Notes: No systematic data are available for the proportion of people living with HIV who are linked to care, although this is a vital step to ensuring viral suppression in the community.

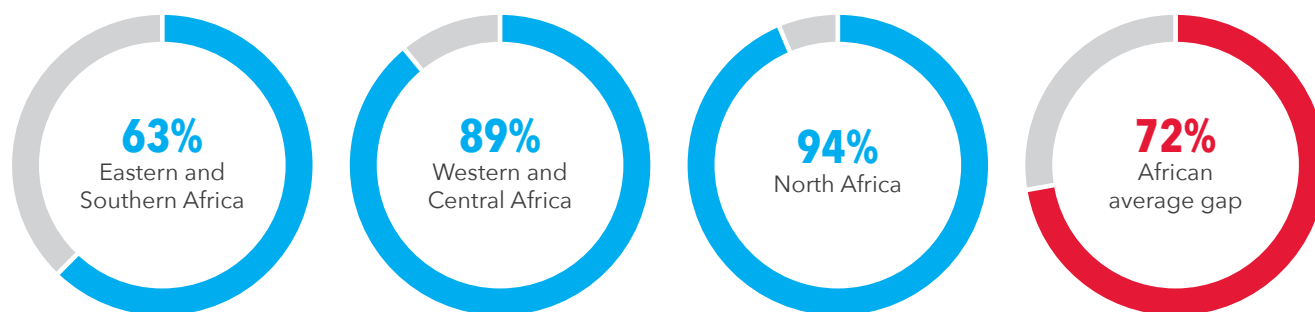
REACHING PEOPLE IN GREATER NEED

Shortfalls in access to antiretroviral therapy are particularly acute for specific populations and in certain locations.

CHILDREN AND ADOLESCENTS

Treatment-eligible children living with HIV in sub-Saharan Africa are only about half as likely to receive antiretroviral therapy as HIV-positive adults. In nine of the 21 sub-Saharan African countries prioritized by the *Global Plan towards the Elimination of New HIV Infections among Children and Keeping Their Mothers Alive*, 25% or fewer children eligible under the 2010 WHO guidelines actually received antiretroviral therapy in 2012. When comparing the number of children receiving antiretroviral therapy in 2012 to the potential eligible under the new WHO guidelines in 2013, it is evident that paediatric coverage is exceptionally low (see Fig. 4).

FIG. 4
Regional gaps in antiretroviral therapy for children (0-14 years), 2012 - 2013



Source: UNAIDS 2012 estimates

Note: Based on numbers receiving treatment as of December 2012, under the 2010 WHO HIV treatment guidelines.

Adolescents (10–19 years) are the only age group in which AIDS-related deaths increased from 2001 to 2012. From 2005 to 2012, the annual number of AIDS-related deaths among adolescents almost doubled.^{viii} The inability of adolescents to benefit equally from treatment underscores the need for more HIV testing and counselling among this age group and for adolescent-friendly health services.

KEY POPULATIONS

Reliable estimates of antiretroviral therapy coverage are not available for men who have sex with men, people who inject drugs, sex workers or transgender individuals. However, there are strong indications that key populations face substantial barriers to access essential health services and have extremely low access to antiretroviral therapy.

MEN

Men account for 40% of all people eligible for treatment in Africa under the 2013 WHO guidelines, yet they represented only 36% of antiretroviral therapy recipients in the continent as of December 2012. There is an opportunity to use antenatal settings to reach the male partners of pregnant women. However, pregnant women are currently receiving less HIV treatment than other women.

COMMUNITIES UNDER PRESSURE

People affected by humanitarian crises also confront unique barriers to health care access and treatment including concerns regarding confidentiality, denial of access to asylum procedures, fears regarding refoulement and restrictions on freedom of movement. The many internally displaced people, refugees and

migrants within Africa therefore merit particular attention in the provision of HIV treatment services. Enhanced efforts to increase treatment access are also needed for such groups as migrant workers, truckers, miners and others whose occupations and mobility increase their vulnerability to HIV infection or impede delivery of essential HIV treatment and prevention services.

PRIORITIZING TREATMENT SERVICES WHERE THEY ARE MOST NEEDED

Within and between countries in the region, there are substantial variations both in HIV burden and the reach of antiretroviral therapy programmes. HIV prevalence in Africa ranges from a low of less than 0.1% in Egypt and Morocco to 26.5% [24.6-28.3%] in Swaziland. In 13 of 33 countries in sub-Saharan Africa, there is at least a five-fold variance in HIV prevalence among states or provinces.^{viii}

Although HIV affects virtually every corner of Africa, the concentration of people living with HIV varies within countries, provinces and cities. In Kenya, for example, according to its new HIV investment case, nine of the country's 47 counties account for 54% of new HIV infections. In Nigeria, the HIV investment case notes that 12 of 36 states, along with the Federal Capital Territory, represent 70% of new HIV infections.

All people eligible for antiretroviral therapy, regardless of where they live, have the right to effective and accessible care and treatment services. However, to maximize the impact and efficiency of treatment programmes, particular efforts are required to strengthen and expand HIV treatment services in settings where they are most needed.

CLOSING GAPS TO MAXIMISE THE PUBLIC HEALTH BENEFITS

HIV is fully suppressed in only one in four people living with HIV in sub-Saharan Africa, so urgent attention is needed to address service gaps that prevent communities achieving the full health benefits of antiretroviral therapy. Closing the gaps in treatment demands concerted efforts at each step of the process – starting with HIV testing. The number of people tested for HIV has steadily increased in sub-Saharan Africa – by more than 9% in 2012 alone – yet most men and women in the region living with HIV have never been tested and thus do not know their current status.^{ix}

Multiple strategies are needed to close the HIV testing and counselling gap in sub-Saharan Africa, including the full implementation of HIV testing and counselling in diverse settings. Kenya, Malawi, South Africa, Uganda, the United Republic of Tanzania and Zambia have integrated the promotion of HIV testing and counselling in community campaigns that provide screening and prevention services for multiple diseases. Political and community leadership and community-based measures all play a key role in increasing access to antiretroviral therapy and improving people's knowledge of their HIV status, while respecting their right to confidentiality. This allows people living with HIV to be reached at an early stage of infection and to receive appropriate care, treatment and prevention services.

25.2 MILLION
[23.6 - 26.8 million]

People living with HIV
in Africa in 2012.

Helping people get and stay on antiretroviral therapy

Many people who are diagnosed with HIV do not ultimately receive the services they need, while many who initially access services are not retained in care. Proven strategies can help retain people in HIV treatment and care:

- Design health care services for the people they are meant to serve – everything from the cleanliness of the clinic and the friendliness and non-judgmental attitude of the staff to a regular supply of medicines can help people be motivated to access and stay in care.
- Accelerate the decentralization of HIV services, to bring them closer to people who need them and integrate community-centered approaches that promote treatment adherence and retention.
- Build the capacity of health and community systems, including taking steps to ensure the availability of needed HIV testing, antiretroviral medicines and laboratory services such as early infant HIV diagnosis and CD4 and viral load testing.
- Bolster human resources by implementing task-shifting policies, leverage the critical role of community workers and invest in training programmes for health workers.
- Ground the HIV response in human rights, enforce strong anti-discrimination provisions, ensure that people living with HIV and members of key populations have access to legal services and implement robust anti-stigma efforts.
- Strengthen commodity procurement and supply management in order to prevent recurrent stock-outs and overstocking, implement emergency commodity-sharing contingency plans and prioritize local drug production as per the Regional AIDS Plan 2013–2016 of the Economic Community Of West African States (ECOWAS).

NATIONAL LEADERSHIP IN MOBILIZING RESOURCES FOR TREATMENT SCALE-UP

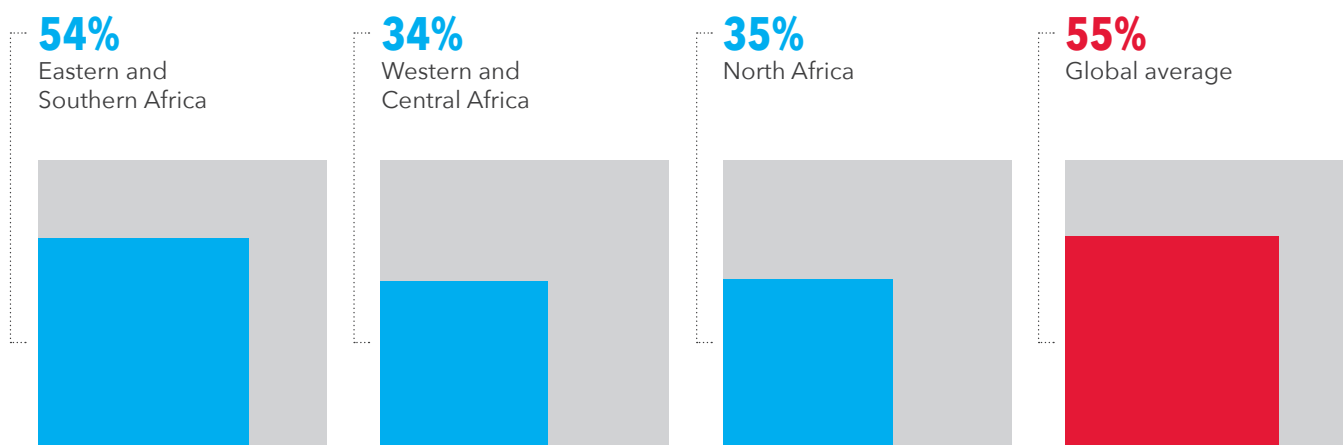
African governments are among the leaders in global efforts to mobilize resources for antiretroviral therapy. Domestic contributions account for roughly half of all spending on HIV treatment and care across sub-Saharan Africa. In Angola, Botswana and South Africa for example, domestic spending (including public and private sources) represents more than 80% of financing for antiretroviral therapy.

Several countries are exploring innovative strategies to diversify funding sources and generate renewable sources of funding for HIV programmes. For example, Cape Verde and Côte d'Ivoire are taxing tobacco and alcohol to generate funds for their AIDS response. Nigeria has committed to increase domestic HIV spending and is currently exploring the creation of a special HIV fund, while Kenya's Cabinet has authorized a trust fund for HIV and priority non-communicable diseases.

Treatment and care accounts for an estimated 55% of all HIV spending worldwide but the allocation is lower across much of Africa (see Fig. 5). National priorities for HIV spending allocations are crucially important to the effectiveness of the HIV response. While the sheer magnitude of costs is a serious challenge for many countries, the proportion of officially reported domestic financing for care and treatment is already high in Southern Africa (83%). This is largely due to South Africa which represents almost half (48%) of total HIV spending on care and treatment across the African continent. Northern African countries finance most of their HIV care and treatment from domestic resources, although the magnitude of costs is far lower. Domestic HIV funding in Western and Central Africa and the Eastern Africa sub-region ranges from 15% to 29% and remains a concern for the sustainability of their funding for care and treatment.

FIG. 5

Allocation of total HIV spending to care and treatment, most recent data available



Source: GARPR, 2013

Other options exist to improve resource allocations and to reduce costs. African countries have an important opportunity to build their capacity to import and manufacture essential medicines to ensure a reliable, continuous supply of life-saving medicines. The African Union's *Roadmap on Shared Responsibility and Global Solidarity for the AIDS, Tuberculosis and Malaria Response in Africa* calls for investment in establishing regional pharmaceutical manufacturing hubs, greater efforts to ensure that knowledge and technology are transferred to the region, the harmonization of regulatory systems and the maximum use of flexibilities permitted under the TRIPS (Trade-Related Aspects of Intellectual Property Rights) Agreement.

A CALL TO ACTION ON ANTIRETROVIRAL THERAPY

In the face of historic opportunities and continuing challenges, *Treatment 2015* provides a clear way forward to expedite progress towards universal treatment access. *Treatment 2015* emphasises speed in bringing antiretroviral therapy to scale, focus on geographic areas and specific populations with the greatest needs, and using innovation to overcome bottlenecks. *Treatment 2015* calls for HIV testing and counselling to be re-thought, including replacing passive approaches with more proactive strategies and expanding our understanding of HIV treatment with a particular focus on early initiation.

To make *Treatment 2015* a reality, countries should establish and adhere to clear and ambitious national testing, counselling and treatment targets that encourage earlier access to services. Service systems should be reviewed to identify and address bottlenecks, and countries should take steps to align legal and policy frameworks with human rights principles. Progress towards national targets should be regularly reviewed and national strategies adapted to expedite scaling-up and improve treatment outcomes.

UNAIDS and WHO have committed to broker or mobilize technical support to accelerate the pace of treatment scale-up. *Treatment 2015* calls for action in all countries and prioritizes the countries that are home to 9 out of every 10 people who

have an unmet need for antiretroviral therapy. Twenty of these countries are in sub-Saharan Africa: Angola, Cameroon, Central African Republic, Chad, Cote d'Ivoire, Democratic Republic of the Congo, Ethiopia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Nigeria, South Africa, South Sudan, Togo, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

Treatment 2015 priority actions

- **Increase the demand for antiretroviral therapy.** Countries should energetically pursue multiple strategies to expand knowledge of HIV status, scale up couples counselling and testing, support community leadership on HIV testing and explore self-testing. Strong national leadership is needed to minimize the deterrent effects of stigma and discrimination and to increase community treatment literacy so that all people understand the importance of early HIV diagnosis and treatment. Marketing of antiretroviral therapy should emphasize the new science about the direct health benefits to the person living with HIV and the effectiveness of HIV treatment in preventing new infections.
- **Invest in antiretroviral therapy programmes.** Recognising the shared responsibility for the AIDS response, international partners must maintain assistance for scaling-up antiretroviral therapy and prevention. Countries should develop national HIV investment cases to plan for sustainability and take steps to improve the efficiency and effectiveness of services. Prioritizing HIV testing and counselling as well as expanding access to treatment services in local epidemic areas is essential. Countries should undertake concerted actions to strengthen health and community systems.
- **Effectively deliver antiretroviral therapy services.** Services must be decentralized and communities empowered to own their own HIV treatment programmes. Countries should actively encourage innovation (such as nurse-provided care) to reduce gaps across the treatment continuum and take steps to strengthen transparency and accountability in the push to achieve universal access.

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^vResch S et al. Economic returns to investment in AIDS treatment in low and middle income countries. *PLoS ONE*, 2011, 6:e25310.

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20 Avenue Appia
CH-1211 Geneva 27
Switzerland

+41 22 791 3666
distribution@unaids.org

unaids.org