



WE HAVE BENT THE

TROJECTORY

OF THE AIDS EPIDEMIC



OR WE RISK THE EPIDEMIC

SPR GING

BACK EVEN STRONGER



by 2020

90-90-90

Treatment

500 000 New infections among adults

ZERO Discrimination by 2030

95-95-95

Treatment

200 000 New infections among adults

ZERO Discrimination

The world is embarking on a Fast-Track strategy to end the AIDS epidemic by 2030.

To reach this visionary goal after three decades of the most serious epidemic in living memory, countries will need to use the powerful tools available, hold one another accountable for results and make sure that no one is left behind.

The Fast-Track

NO SCALE-UP-maintain 2013 coverage levels







20

RAPID SCALE-UP—achieve ambitious targets

New HIV infections in low- and middle-income countries (millions)

AIDS-related deaths in low- and middle-income countries (millions)

MAJOR BENEFITS:

21 MILLION AIDS-related deaths averted by 2030

28 MILLION HIV infections averted by 2030



infections among children averted by 2030





New HIV infections in different population groups, low- and middle-income countries, 2030



15

WE CAN END THE AIDS EPIDEMIC BY 2030

There is a strong global consensus that the tools now exist to end the AIDS epidemic. This confidence is based on a combination of major scientific breakthroughs and accumulated lessons learned over more than a decade of scaling up the AIDS response worldwide. The achievement of targets built on these tools now needs to be fast-tracked.

HIV treatment can dramatically extend the lifespan of people living with HIV and effectively prevent HIV transmission. There are also many proven opportunities for HIV prevention beyond medicines, including condom programming, behaviour change, voluntary medical male circumcision and programmes with key populations. These have clearly demonstrated their capacity to sharply lower rates of new HIV infections. HIV programmes are dramatically strengthened when they are combined with social and structural approaches—for example, a recent analysis concluded this could reduce new HIV infections among sex workers by a third or more (1).

HIV infections may not disappear in the foreseeable future, but the AIDS epidemic can be ended as a global health threat. To achieve this by 2030, the number of new HIV infections and AIDS-related deaths will need to decline by 90% compared to 2010.

There are major benefits of fast-tracking the AIDS response in low- and middleincome countries:

- 28 million HIV infections will be averted between 2015 and 2030.
- 21 million AIDS-related deaths will be averted between 2015 and 2030.
- The economic return on fast-tracked investment is expected to be 15 times.
- US\$ 24 billion of additional costs for HIV treatment will be averted.

BUILDING ON PAST ACHIEVEMENTS

Investments in the AIDS response continue to generate concrete results, fuelling optimism about ending the epidemic once and for all. By the end of 2013, 35 million [33.2 million–37.2 million] people were living with HIV worldwide. New HIV infections in 2013 were estimated at 2.1 million [1.9 million–2.4 million], which was 38% lower than in 2001. The number of AIDS-related deaths also continues to decline, with 1.5 million [1.4 million–1.7 million] people dying of AIDS-related causes in 2013, down 35% from the peak in 2005.

Countries further expanded access to priority HIV programmes in the first six months of 2014. With 13.6 million people receiving antiretroviral therapy as of June 2014 (Fig. 1), the world is on track to deliver HIV treatment to at least

Fig. 1 People receiving antiretroviral therapy, 2005 to June 2014, all countries





15 million people by 2015, although progress for children is lagging behind. Antiretroviral therapy coverage at the end of 2013 was 38% for adults but only 24% for children (see Fig. 2 and the country scorecards). The increase in the number of children on antiretroviral therapy during the first half of 2014 was only 3%, compared to a 6% increase for adults (Fig. 3).

In the first half of 2014, the number of pregnant women receiving antiretroviral medicines rose by 13%, compared to the first half of 2013, as the world progressed towards the targets of the *Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive* (for country-specific data, see AIDSinfo at www.unaids.org).

In 2013, around 1 million men in priority countries in sub-Saharan Africa were newly circumcised, bringing to 6 million the number of men circumcised since 2007, when UNAIDS and the World Health Organization (WHO) first recommended rolling out this powerful HIV prevention tool.

Recent household surveys in sub-Saharan Africa also reveal positive trends. Surveys in 2007–2013 show an increase in young people's HIV-related knowledge and more condom use among adults, compared to surveys in 2001–2006, as well as declines in the proportion of young people initiating sex before age 15 and the number of adults reporting multiple sex partners.





Fig. 3 Numbers of children receiving antiretroviral therapy, 2013–2014



Yet key populations at higher risk of acquiring HIV are not benefiting equally from these gains, underscoring the need to strengthen HIV prevention and treatment efforts with these groups. Only about three fifths of countries have risk reduction programmes for sex workers, while access to HIV prevention services remains low among men who have sex with men; 88 countries report that fewer than half of men who have sex with men know their HIV status from a recent test result, while 50 countries report more than half know their status. Most countries fail to provide opioid substitution therapy or access to sterile needles and syringes for people who inject drugs.

Resources mobilized for AIDS programmes continue to rise (Fig. 4). In 2013, US\$ 19.1 billion was invested in the AIDS response in low- and middle-income countries—an increase of about US\$ 250 million over the amounts invested

in 2012. Countries themselves have largely driven recent increases in AIDS investments, as international HIV assistance has flattened in recent years. As they increase domestic AIDS investments, more countries are adopting an investment approach, focusing resources on the most effective programmes and on the populations and geographical settings where need is greatest. With the dramatic increase in HIV resources over the past decade, the world is closing in on the target of mobilizing US\$ 22–24 billion annually by 2015, although even more funding will be required to end the AIDS epidemic by 2030.

Fig. 4 Building on past achievements: funds invested in AIDS programmes in low- and middle-income countries, 1986–2013



PEPFAR: the United States President's Emergency Plan for AIDS Relief

Source: UNAIDS estimates, UNAIDS-Kaiser Family Foundation reports on financing the response to HIV in low- and middle-income countries, GARPR 2014, philanthropic resource tracking reports from Funders Concerned About AIDS, reports from the Global Fund and UNITAID.

AMBITIOUS TARGETS ARE ENTIRELY ACHIEVABLE

As previous experience in the AIDS response has demonstrated, time-bound targets drive progress, promote accountability and unite diverse stakeholders in pushing towards common goals. To accelerate progress towards ending the epidemic, new Fast-Track Targets have been established for the post-2015 era (Fig. 5). These targets aim to transform the vision of zero new HIV infections, zero discrimination and zero AIDS-related deaths into concrete milestones and end-points.

For the first time, there is a global consensus to aim for 90% of people living with HIV knowing their HIV status, 90% of people who know their status receiving treatment and 90% of people on HIV treatment having a suppressed viral load so their immune system remains strong and they are no longer infectious. These 90–90–90 targets apply to children and to adults, men and women, poor and rich, in all populations— and even higher levels need to be achieved among pregnant women.

Achieving the 90–90–90 by 2020 targets would still leave 27% of people living with HIV with unsuppressed viral loads in 2020, so expanded investments in proven HIV prevention strategies will be critical to hopes for ending the AIDS epidemic. The Fast-Track Targets for recommended prevention programmes (e.g. under the investment approach) are even higher than previously recommended. Very high levels of coverage for programmes that promote correct and consistent condom use will be needed in all types of epidemics. In high-prevalence settings, more people will need to be reached by mass media and face-to-face meetings that encourage sexual risk reduction. In settings with very high HIV prevalence, new evidence suggests that programming cash transfers for girls will need to be introduced and substantially scaled up.

Many members of key populations report having no contact with HIV prevention programmes in the past 12 months. Therefore, much higher coverage—close to saturation—will be required for outreach programmes with sex workers, men who have sex with men, transgender people and people who inject drugs. Coverage for opioid substitution therapy for people who inject drugs and for prevention programmes in prisons must also significantly increase. The target for elimination of new HIV infections among children requires saturation coverage.

Access to biomedical prevention tools must also be expanded. In priority settings in sub-Saharan Africa where HIV prevalence is high and male circumcision rates are low, the 80% coverage target for voluntary medical male circumcision will need to be achieved by 2020. Building on recent evidence about the effectiveness of preexposure prophylaxis and anticipating further developments in their formulation and effectiveness, access to pre-exposure antiretroviral prophylaxis will need to be ensured for sex workers and men who have sex with men, serodiscordant couples in highprevalence settings and adolescents in settings where HIV prevalence is extremely high.

Together, these priority HIV treatment and prevention tools can reduce new adult HIV infections in low- and middle-income countries from 2.1 million in 2010 to nearly 200 000 in 2030. Antiretroviral therapy is projected to account for 60% of infections prevented through scale-up of these priority strategies.

Fig. 5 Targets for ending the AIDS epidemic



The elimination of new HIV infections among children will also require very high levels of coverage of antiretroviral therapy among pregnant women, exceeding the overall 90–90–90 targets for treatment.

Critical enablers must also be scaled up to end the AIDS epidemic. For HIV programmes to be more effective, they must reach more people on a sustainable basis, including by addressing social and structural issues that deter people from accessing services. Community mobilization will improve access to HIV testing, prevention and treatment services, and will also promote adherence to treatment. In addition, synergies with other development sectors—including education, health, social protection and gender equality—will help improve HIV outcomes.

The bedrock of the AIDS response is an absolute commitment to protecting human rights. Nothing other than zero discrimination is acceptable.

RAPID PROGRESS IS CRUCIAL

If the world is to end the AIDS epidemic by 2030, rapid progress must be made by 2020. Quickening the pace for essential HIV prevention and treatment approaches will limit the epidemic to more manageable levels and enable countries to move towards the elimination phase. If the response is too slow, the AIDS epidemic will continue to grow, with a heavy human and financial toll of increasing demand for antiretroviral therapy and expanding costs for HIV prevention and treatment.

UNAIDS-commissioned modelling has confirmed this finding (2). Quickening the pace over the next six years is pivotal to global prospects for bringing the AIDS epidemic to an end. If the world reaches the 2020 targets only by 2030, there would be 3 million more new HIV infections and 3 million additional AIDS-related deaths between 2020 and 2030.

REACHING THE FAST-TRACK TARGETS WILL EFFECTIVELY END THE AIDS EPIDEMIC

Quickening the pace to achieve the Fast-Track Targets would reverse the AIDS epidemic by 2020. With achievement of these new targets, by 2030 the epidemic would be dwindling. In contrast, with business as usual (keeping service coverage at 2013 levels), the epidemic will have rebounded by 2030, representing an even more serious threat to the world's future health and well-being and requiring substantial resources for what would then be an uncontrolled epidemic.

By accelerating the pace for available HIV prevention and treatment tools, the number of new HIV infections would be 89% lower in 2030 than in 2010, and the number of AIDS-related deaths in 2030 would be 81% lower. Rapid scaleup would avert 28 million new infections by 2030 in low- and middle-income countries, compared with continuation of current (2013) coverage trends (Fig. 6).

Meeting the ambitious Fast-Track Targets will also avert 21 million AIDS-related deaths by 2030 in comparison with continuation of current coverage (Fig. 7).

Each region will see a reduction in new infections and AIDS-related deaths as a result of achieving the targets (Fig. 8).

Fig. 6a New HIV infections in low- and middle-income countries, 2010–2030, with achievement of ambitious Fast-Track Targets, compared to maintaining 2013 coverage



Fig. 6b AIDS-related deaths in low- and middle-income countries, 2010–2030, with achievement of ambitious Fast-Track Targets, compared to maintaining 2013 coverage



Fig. 7 Cumulative HIV infections and AIDS-related deaths averted by achieving ambitious Fast-Track Targets compared to maintaining 2013 coverage levels, low- and middle-income countries, 2015–2030



Fig. 8 Estimated annual number of new HIV infections and AIDS-related deaths in low- and middle-income countries, by region, comparing achieving ambitious Fast-Track Targets and maintaining 2013 coverage levels, and percentage reduction under ambitious targets, 2010–2030



- Ambitious targets
- Constant coverage
- Ambitious targets
- Constant coverage
- Reduction in new HIV infections
- Reduction in AIDS-related deaths

EASTERN AND SOUTHERN AFRICA



ASIA AND THE PACIFIC



AIDS-related deaths



Patterns in the number of HIV infections averted in different population groups by achieving the ambitious Fast-Track Targets will vary by region.

In Africa and the Middle East, quickening the pace for HIV treatment and prevention programmes will avert approximately 13 million new HIV infections through heterosexual transmission excluding sex work (Fig. 9). In particular, young women, who continue to be disproportionately affected by the epidemic in the region, will be protected from HIV. Rapid progress towards the goal of eliminating new HIV infections among children will prevent nearly 5.6 million children from becoming infected. For every population, the number of new HIV infections averted is substantially greater with achievement of the new targets than with continuation of current coverage levels. In 2030, Africa and the Middle East is expected to have almost 2 million new HIV infections if coverage is constant at 2013 levels, compared to 173 000 infections under the Fast-Track response.

In Asia and the Pacific, quickening the pace will close the HIV prevention gap for men who have sex with men, and sex workers and their clients, averting similar numbers of new infections among these populations (Fig. 9). Fasttracked progress towards the goal of eliminating new HIV infections among children will prevent nearly 250 000 children from becoming infected. Rapidly expanding access to proven prevention and treatment strategies will also prevent substantial numbers of new heterosexually acquired HIV infections unrelated to sex work. Asia and the Pacific is expected to experience almost 480 000 new HIV infections in 2030 if coverage remains at 2013 levels, compared to fewer than 97 000 infections under the Fast-Track response.

In eastern Europe and central Asia, quickening the pace would close the prevention gap for people who inject drugs. Given the rapid increases in sexual transmission in what was once a regional epidemic primarily driven by injecting drug use, the largest share of new infections averted will occur among people who inject drugs and their sexual partners (Fig. 9). Rapid progress towards the goal of eliminating new HIV infections among children will prevent nearly 13 000 children from becoming infected. Total HIV infections in eastern Europe and central Asia are forecast to exceed 36 000 in 2030 under constant 2013 coverage, while the Fast-track response would reduce that to 21 000 new infections.

In Latin America and the Caribbean, the gap will be closed for men who have sex with men, with 672 000 new HIV infections averted by 2030. Almost 250 000 heterosexually acquired cases of HIV infection unrelated to sex work will also be averted in the region through achievement of the Fast-Track Targets (Fig. 9). Rapid progress towards the goal of eliminating new HIV infections among children will prevent nearly 41 000 children from becoming infected. Latin America and the Caribbean is expected to have more than 93 000 new HIV infections in 2030 if coverage remains at 2013 levels, compared to fewer than 28 000 new infections under the Fast-Track response.

Fig. 9 Estimated new HIV infections in 2030 in low- and middle-income countries, with achievement of Fast-Track Targets compared to continuation of 2013 coverage



Ambitious coverage targets
 Constant coverage

COUNTRIES ARE ALIGNING WITH FAST-TRACK TARGETS

Epidemics vary considerably within and between countries and regions, and this is reflected in national responses. Success relies on focusing on the locations and populations where risk is greatest. National targets supported by robust systems for performance monitoring enable country-level stakeholders to continually assess national efforts, address problems or bottlenecks as they arise, and hold people accountable for results.

Many recent national AIDS targets are aligned with the new global targets for the post-2015 era. For example, many national programmes for HIV treatment are being revised to implement the WHO 2013 consolidated antiretroviral guidelines (Fig. 10), while programmes for the prevention of mother-to-child transmission are also being revised.

However, important gaps are also evident. In Mozambique, national targets for programming for men who have sex with men fall substantially below the global target (Fig. 11). Other countries, such as the Sudan, also fall short of global targets for key populations at higher risk, such as sex workers. Reasons for these low coverage targets for key populations vary, including the perception that few members of these groups exist in these countries or that they are too difficult to reach. The very low scale-up aspirations for certain key populations in these countries underscores the need to improve critical enablers to address policy frameworks and other factors that impede effective responses for these groups.

While quickening the pace is a necessity in all countries, particular efforts are needed in the 30 countries listed below, which together represent each



Fig. 10 Antiretroviral therapy coverage targets for 2015–2020 in selected countries

region of the world and account for 89% of all new HIV infections worldwide, as results in these countries will have a large effect on prospects for ending the epidemic. To fast-track national responses, extensive mobilization of human, institutional and financial resources will be needed. By collaborating with national stakeholders and strategic international partners, UNAIDS will intensify its support for national target setting, investment planning and critical analysis of national approaches to fast-track progress towards interim 2020 targets in these priority countries.

Countries that account for 89% of all new HIV infections

LOW- AND MIDDLE-INCOME COUNTRIES

- Angola
- Brazil
- Cameroon
- Chad
- China
- Côte d'Ivoire
- Democratic Republic of South Sudan the Congo
- Ethiopia
- Haiti
- India
- Indonesia
- Iran (Islamic Republic of) Viet Nam
- Jamaica
- Kenya

- - Lesotho
 - Malawi
 - Mozambique
 - Nigeria
 - Pakistan
 - South Africa

 - Swaziland
 - Uganda
 - United Republic of Tanzania
 - Ukraine
- Zambia
 - Zimbabwe

HIGH-INCOME COUTRIES

- Russian Federation
- United States of America

Fig. 11 Coverage targets for outreach to men who have sex with men, Mozambique



WHAT IT WILL COST

To fast-track the end of the AIDS epidemic, low-income countries will require US\$ 9.7 billion in funding in 2020 and lower-middle-income countries US\$ 8.7 billion. Due to their income status and the scale of their HIV epidemics, these countries will continue to need international support to fund their AIDS response.

Under the Fast-Track strategy, upper-middle-income countries will require AIDS funding of US\$ 17.2 billion in 2020, after which their needs will decline to US\$ 14.2 billion in 2030 (Fig. 12). Upper-middle-income countries are already financing most of their AIDS responses from domestic public sources (80% in 2013), compared to 22% in lower-middle-income countries and 10% in low-income countries. Upper-middle-income countries will need roughly half of all AIDS investments worldwide.

Of the regions, sub-Saharan Africa will require the largest share of global AIDS financing, with US\$ 19.4 billion in 2020.

These resources will provide antiretroviral therapy to twice as many people in low- and middle-income countries in 2020 than in 2015, including for pregnant women; significantly higher coverage of prevention services for the key affected populations; cash transfers for girls in countries with very high HIV prevalence; voluntary medical male circumcision in priority countries; and pre-exposure prophylaxis for selected populations.

> sources, 2013
> Domestic public sources, 2013

20 Low-income Lower-middle-income Upper-middle-income 17.2

2030

2013

2030

Fig. 12 Resources available in 2013 and resources required 2015–2030, by level of income in low- and middle-income countries

2013

2030

2013

The resources required and the allocations among programmes will vary among regions and countries and will evolve as targets are achieved. For example, the number of AIDS orphans will decline as HIV prevention and treatment expands, so that the funding required to support children orphaned or made vulnerable by AIDS should decline from US\$ 204 million in 2013 to US\$ 91 million by 2030.

Community services will become a larger part of the AIDS response and UNAIDS estimates that resources for community mobilization will increase from 1% of global resource needs in 2014 (US\$ 216 million) to 3.6% in 2020 and 4% in 2030. This includes antiretroviral therapy and HIV testing and counselling. Community system strengthening aims to bolster the role of key populations, communities and community-based organizations in the design, delivery, monitoring and evaluation of services, activities and programmes.

MOBILIZING THE RESOURCES NEEDED

To end the AIDS epidemic by 2030, the global community will need again to defy expectations. Achieving the funding required to end the AIDS epidemic will demand renewed commitment, innovative financing and an intensified strategic focus. The decision to mobilize these resources is in reality straightforward, as spending on accelerated scale-up will generate historic health benefits and vastly greater economic returns.

Drawing on principles of global solidarity and shared responsibility, a strategic approach to mobilizing the resources needed to end the AIDS epidemic will be essential:

- All low- and middle-income countries will need to bring domestic funding into line with their national wealth and HIV burden. In nearly all cases, this will demand increases in the amount of domestic funding for the response. As national economies grow, domestic outlays for the response should also increase.
- Low-income countries, especially those with a heavy HIV burden, will need substantial international support to ensure rapid scale-up to end the epidemic.
- Lower-middle-income countries will need to move towards greater self-financing of the response, although those with a heavy HIV burden will continue to require considerable donor support.
- Upper-middle-income countries should take immediate steps to transition to self-financing of the response, with country compacts clarifying the transition from donor dependency to self-financing.
- Increased funding from the donor community will be needed over the next several years. Donors should orient funding towards low-income countries

and lower-middle-income countries, drawing down funding for uppermiddle-income countries in a planned transition period governed by country compacts. However, special provisions may be needed where the draw-down of donor funding might result in de-funding of essential programmes for key populations in upper-middle-income countries.

• While collaborating to mobilize essential new resources, all stakeholders should prioritize efforts to increase value for money in the response.

Low- and middle-income countries will need to fast-track their investments if the world is to mobilize the resources needed to end the epidemic by 2030. Countries have several options to expand fiscal space for AIDS, including mobilizing new funding from regular domestic public funding, introducing new and innovative financing mechanisms and improving the efficiency and effectiveness of AIDS programmes.

Recognizing that health is central to national prosperity and development, African countries committed in the 2001 Abuja Declaration to allocate 15% of their national budgets to health, although by 2013 only six countries had met this benchmark (*3*). Fulfilling the commitment of the Abuja Declaration would generate substantially increased resources for health in sub-Saharan and North Africa, providing space for increased allocations for AIDS programmes. It should be accompanied by the allocation of health resources to the AIDS response corresponding to the share of disability-adjusted life-years (DALYs) lost as a result of AIDS.

Were countries in sub-Saharan Africa to adhere to these principles—meeting the Abuja target for health spending and allocating those resources according to their health burden—substantial new resources would become available for the AIDS response.

Innovations will also be required. There is an urgent need for new, sustainable sources of financing for the AIDS response and many countries are actively exploring and adopting innovative mechanisms. Some countries have implemented special tax levies, with the proceeds earmarked for AIDS activities. Examples include levies on air passenger travel, mobile phone usage, alcohol purchases and corporate and personal income. Taxes on remittances and tourism can also generate new funding for the AIDS response. A few countries have explored lotteries to fund AIDS activities and mechanisms to capture the returns on investment from dormant funds (unclaimed assets). AIDS bonds, or public debt for AIDS expenditure, are yet another possible mechanism, although these are often regarded as an option of last resort that should be considered only by countries with sustainable debt levels.

Ideally, innovative financing mechanisms would be:

- Sustainable: generating renewable funding that does not decline over time.
- Additional: mobilizing new resources and not replacing the existing funds.

- Stable: producing funds that are reliable from one year to the next.
- **Progressive:** placing the burden on those most able to pay.
- Efficient: avoiding substantial administrative costs.
- Free of major side-effects: not having consequences for economic, political or social development.

Another innovative way to generate new funding for AIDS is to integrate HIV in broader national health financing systems, such as through social health insurance. This approach can generate new funding for AIDS and yield more broad-based health benefits. Nearly all health insurance schemes enable the sharing of risk and resources among members, typically involving redistribution from the richer to the poorer members of society.

For countries to mobilize additional resources for AIDS programmes, whether through budgetary allocations or the introduction of innovative financing mechanisms, they must have sufficient fiscal space to do so. Fiscal space is the budgetary leeway that permits a government to increase resources for a particular purpose without undermining the government's financial position. There are multiple factors to consider, including national wealth, budget allocations, the potential for new funding through innovative mechanisms and the availability of broader health financing schemes in which HIV might be integrated. Fiscal space for increased domestic AIDS spending therefore varies from country to country.

Depending on national circumstances, fiscal space may also be achieved through borrowing from the World Bank or regional development banks. In all cases, loans should be highly concessional and consistent with national development strategies. Borrowing may not be available for countries with high levels of debt.

As economies grow, domestic financing for the AIDS response should also increase. The World Bank projects 5.2% economic growth for sub-Saharan Africa in 2014 *(4)*. This robust rate of economic growth will enable national tax revenues to increase, providing space for countries to augment domestic AIDS spending for a Fast-Track response.

Some countries with heavy HIV burdens have already taken steps to increase domestic responsibility for their response. As countries scale-up their domestic funding and reduce their dependence on donor assistance, they will need systems and processes to ensure smooth and sustainable transitions, including monitoring and ensuring transparency and accountability for commitments made by countries and donors. The establishment of country compacts could provide a workable mechanism for effective coordination between the donor community and governments. To reach ambitious new targets for the post-2015 era, countries will need to maximize their capacity for service delivery, using all funds as efficiently as possible. Most countries will need to scale-up to the limit of their capacity for service delivery and this will demand special efforts to reduce costs. Multiple strategies will be needed, including price reductions, increased scale or expanding (and shifting to) community-based service delivery.

While domestic funding will play a pivotal role in mobilizing the resources needed to achieve ambitious new targets in the post-2015 era, it will be impossible to end the AIDS epidemic without continued international assistance. The ongoing engagement of the international community in the AIDS response recognizes that ending the AIDS epidemic is a global obligation that will benefit the entire world.

Even using available fiscal space to increase their domestic financing for AIDS, many countries will face a persistent need for international funding. Studies of fiscal space have concluded that low-income countries with high HIV prevalence have the ability to allocate up to 2% of their gross domestic product (GDP) to the AIDS response without compromising other sectors (5). However, resource needs for the response exceed 2% of GDP in several countries, underscoring the urgency of continued donor engagement. Moreover, as the transition towards greater country funding will take time, even for the most highly motivated countries, continued engagement of international donors will be essential.

There are several ways that the donor community can build on current funding levels to help close the resource gap for ending the AIDS epidemic. First, donor countries should ensure that their financial share of the AIDS response matches or exceeds their share of the global economy. Among high-income countries, the share of the global response exceeds the share of world GDP only in four countries: Denmark, Norway, the United States of America and the United Kingdom of Great Britain and Northern Ireland. A more ambitious, yet still feasible, approach would be to ensure that all donor countries contribute an amount per capita at least equal to the per capita contributions of leading donors. There is an enormous gap in per capita contributions among donor countries—providing a significant opportunity for many donors to increase their contributions.

FAST-TRACK TARGETS WILL GENERATE EXTRAORDINARY RETURNS

Access to HIV prevention and treatment enhances countries' economic potential by extending the life expectancy and improving the health of people living with HIV; averting future HIV-related productivity losses and health-care expenditure on people who will never become infected; and reducing the number of children who are orphaned by AIDS and the associated social resources required. This minimizes outlays needed to address the needs of vulnerable children. Preliminary UNAIDS estimates indicate that fast-tracking the AIDS response between 2015 and 2030 would yield economic returns of US\$ 15 per dollar invested, based on the total economic benefits of improved health from increased access to life-saving treatment and from infections averted, using a full-income approach (6).

Every region would experience substantial economic benefits from ending the AIDS epidemic as a public health threat. Sub-Saharan Africa would reap the most substantial benefits.

SERVICE DELIVERY WILL NEED TO IMPROVE

Innovations will be needed in how services are delivered if the world is to reach the Fast-Track Targets. Testing initiatives will need to be more strategically focused to effectively reach those at greatest risk, and countries will need to use multiple strategies (such as community-based testing campaigns, providerinitiated testing and counselling and self-testing) to reach the goal of ensuring that 90% of all people living with HIV know their HIV status.

The number of people living with HIV in 2030 could rise to 41.5 million if treatment and prevention services are kept constant at the 2013 level (current coverage). Conversely, if ambitious targets are met by 2020, the number of people living with HIV in 2030 would decline to 29.3 million.

Much greater emphasis will be needed on community service delivery. According to consultations with countries and experts, 95% of HIV service delivery is currently facility based. To optimize efficiencies, UNAIDS projects that community-based service delivery will need to be ramped up to cover at least 30% of total service delivery. Not only will community service delivery reduce costs, but by bringing services closer to the people who need them, community service delivery will also improve service uptake.

Continued investments will be needed to build the capacity of health and community systems to reach the ambitious goal of ending the AIDS epidemic by 2030. Importantly, quickening the pace of scaling up essential HIV treatment and prevention services will, in and of itself, result in substantial benefits to broader health systems. In addition to helping sustain the AIDS response, investments in HIV programmes will have the potential to transform national capacity to address other health priorities, such as noncommunicable diseases, maternal and child health, emerging diseases and outbreaks of infectious diseases.

The role of the AIDS response as a catalyst for health systems strengthening is evident in Rwanda, where life expectancy has doubled since the mid-1990s (7). Rwanda's early decision to scale up HIV treatment, combined with robust HIV-related financial support from external donors, substantially strengthened the country's primary care system, which in turn enabled Rwanda to provide a growing array of health services. As a result, childhood vaccination rates have reached 97%, and 69% of births are now attended by clinicians in health facilities. Similarly, experience in Kenya confirms that investments in HIV programmes generate broad benefits to the health system. Even as investments by the United States President's Emergency Plan for AIDS Relief led to sharp improvements in HIV-related outcomes in Kenya—with more than two thirds of pregnant women living with HIV receiving antiretroviral medicines by 2009—critical investments were also made in broader health systems strengthening, including health worker training, refurbishment of health facilities, expansion of laboratory capacity, and innovations to improve management of commodity procurement and supply chains (8).

AIDS investments will also dramatically reduce future burdens on health systems associated with HIV. Investments to achieve ambitious new global AIDS targets in the post-2015 era will further enable health systems to focus on other health priorities. The recent Ebola outbreaks occurred in countries in West Africa that had less HIV-related investment than countries with higher HIV prevalence. The severity and spread of the Ebola outbreak is, at least in part, related to weaker health systems.

While the end of the AIDS epidemic can be achieved with the tools currently available, more investment in research and development is needed. In particular, innovation is required to produce more potent and long-lasting formulations of antiretroviral medicines for treatment and prophylaxis, a prophylactic or curative vaccine, and a cure, in order to accelerate the end of the AIDS epidemic.

HARVEST THE BENEFITS

The world needs to harvest the benefits of investments in the AIDS response over the past decades.

By extending the upward trend observed in the past 10 years of domestic and international support for HIV, it will be possible to decrease the annual number of HIV infections and AIDS-related deaths by 90% by 2030. In addition to effectively ending the AIDS epidemic as a public health threat, preliminary estimates show that achieving these targets could generate economic benefits of 15 times the investment needed (6). It will also substantially strengthen health systems by building critical infrastructure and enabling health systems to focus on increasing services for other priorities, such as emerging or chronic diseases and outbreaks of highly infectious diseases.

The cost of inaction will be huge—if countries do not scale up HIV prevention and treatment services rapidly by 2020, but instead continue with the existing coverage levels of services, they will lose the opportunity to save 21 million lives, and an additional 28 million people would be living with HIV by 2030. Instead of averting these deaths and new infections, continuation of current coverage levels will mean that the world will have to pay an additional US\$ 24 billion every year for antiretroviral therapy by 2030.

CLOSING THE GAP:

SCORECARDS OF COUNTRIES' AIDS RESPONSE

Country scorecards

Legend

1	2	3	4	5a	5b	5c	6
● <30%	● <30%	● <30%	● <50%	● <30%	● <50%	● <50%	• Yes
 30–50% 	 30–50% 	 30–50% 	 50–80% 	 30–50% 	 50–80% 	 50–80% 	 Yes, but with conditions
● >50%	>50%	● >50%	● >80%	>50%	● >80%	● >80%	No

1. Estimated percentage of adults (15 years and older) living with HIV who are receiving antiretroviral therapy, 2013

2. Estimated percentage of children (0–14 years) living with HIV who are receiving antiretroviral therapy, 2013

3. Percentage of estimated HIV-positive incident tuberculosis cases that received treatment for both tuberculosis and HIV, 2013

4. Estimated percentage of pregnant women living with HIV who received antiretroviral medicines for preventing mother-to-child transmission, 2013

5. Condom use (most recent data reported, as of 2014)
 5a = Condom use at last sex among people with multiple sexual partners

5b = Condom use: sex workers

5c = Condom use: men who have sex with men

6. HIV-specific restrictions on entry, stay or residence, 2014

 H. Antiretroviral therapy: adults Antiretroviral therapy: adults Antiretroviral therapy: children Tuberculosis and HIV A. Frevention of mother-to-child transmission of HIV A. Frevention of mother-to-child transmission of HIV Gondom use: sex workers Sc. Condom use: men who have sex with men 	6. Travel restrictions based on HIV status
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REFERENCES

1. Shannon K, Strathedee SA, Godenberg SM, Duff P, Mwangi P, Rusakova M et al, Global epidemiology of HIV among female sex workers: influence of structural determinants, Lancet, 2014, doi:10.1016/S0140-6736(14)60931-4.

2. Modelling was performed by the Futures Institute, using Goals and the Resource Needs Model, and results confirmed by the Kirby Institute using Optima. Initial ambitious targets were derived from an experts meeting on 7–8 April, 2014.

3. African Union, Accountability Report on Africa – G8 partnership commitments: Delivering results toward ending AIDS, Tuberculosis and Malaria in Africa, 2013, UNAIDS: Geneva.

4. World Bank., Africa's pulse. Volume 9., April 2014: Accessed on November 12, 2014: http://www.worldbank.org/content/dam/Worldbank/document/Africa/ Report/Africas-Pulse-brochure_Vol9.pdf.

5. Haacker M, Lule E, The fiscal dimensions of HIV/AIDS in Botswana, South Africa, Swaziland and Uganda, 2012, Washington DC: World Bank.

6. Jamison DT, Summers LH, Alleyne G, Arrow KJ, Berkley S, Binagwaho A et al, Global health 2035: a world converging within a generation. The Lancet 2013; 382: 1898–955.

7. Binagwaho A, Farmer PE, Nsanzimana S, Karema C, Gasana M, Ngirabega J et al. Rwanda 20 years on: investing in life. Lancet. 2014;384:371–5.

8. Dutta A, Wallace N, Savosnick P, Adungosi J, Kioko UM, Stewart S et al. Investing in HIV services while building Kenya's health system: PEPFAR's support to prevent mother-to-child HIV transmission. Health Affairs. 2012;31:1498–1507.

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