

Averting Deaths, Lowering Costs and Beginning to End the HIV/AIDS Epidemic

The Investment Case for Maintaining PEPFAR Funding in FY13

April 2012

At this critical moment of opportunity – when for the first time it is clear that the tools exist to begin to *end* the HIV/AIDS pandemic¹ – it would be a mistake to reduce resources for the President's Emergency Plan for AIDS Relief (PEPFAR) program. Continuing to invest in PEPFAR will slow the epidemic, lower the future HIV/AIDS cost curve, and honor a decade of U.S. leadership in the global fight against HIV.

The President's FY13 budget proposes a cut to PEPFAR of \$562.9 million, or 12.3%.² This memorandum outlines the investment case for continued PEPFAR funding at least at current (FY12) levels. It argues that the rapid reductions in PEPFAR funding proposed in the President's budget are inconsistent with a strategic and measured approach that builds on years of successful U.S. investment. Given the extraordinary track record of results through PEPFAR and the potential to accelerate progress in the fight against HIV/AIDS, a significant cut to the program at this time would be ill advised.

Strategic investments to drive down future costs

As PEPFAR has built national and local capacity in high-prevalence countries, the efficiency of programming has increased. From 2005 to 2011, PEPFAR's annual per-patient cost of providing HIV treatment has fallen from more than \$1000 to less than \$400 per year.⁵

Building on this history of prudent management of taxpayer funds, PEPFAR has launched a new strategy for an AIDS-Free Generation, which aims to significantly reduce the rate of new HIV infections while lowering the future cost curve for the HIV response.³ The new strategy relies on three high-value, high-impact approaches:

- ***Accelerated Scale-Up of Antiretroviral Treatment:*** In addition to enhancing the health, longevity and quality of life of people living with HIV, treatment also reduces by 96% the odds that an HIV-positive person will transmit the virus to a sexual partner.⁴ A recent study in South Africa found that every percentage increase in HIV treatment coverage lowers the risk of HIV acquisition by 1.7%.⁵ Treatment not only saves lives, but it also reduces the long-term cost of the HIV response. According to modeling exercises undertaken by an international team of experts, costs associated with antiretroviral treatment programs in developing countries result in economic returns of 87% to 287% in the form of increased

¹ Fauci AS (2011). AIDS: Let Science Inform Policy. *Science* 333:13.

² The estimated cut of \$562.9 million is based on adding the proposed reductions to bilateral HIV/AIDS programming through the State Department and USAID. See lines 27 and 37 of the Kaiser Family Foundation global health Budget Tracker available at http://www.kff.org/globalhealth/upload/8045_FY2013.pdf

³ Remarks of Secretary of State Hillary Rodham Clinton on "Creating an AIDS-Free Generation," National Institutes of Health, November 8, 2011. Accessed on March 27, 2012 at <http://www.state.gov/secretary/rm/2011/11/176810.htm>.

⁴ Cohen MS et al (2011). Prevention of HIV-1 Infection with Early Antiretroviral Therapy. *New Eng J Med* 365:493-505.

⁵ Tanser F et al. (2012). Effect of ART Coverage on Rate of New HIV Infections in a Hyper-Endemic, Rural Population: South Africa. Conference on Retroviruses and Opportunistic Infections, March 5-8, Seattle, Washington. Paper #136LB.

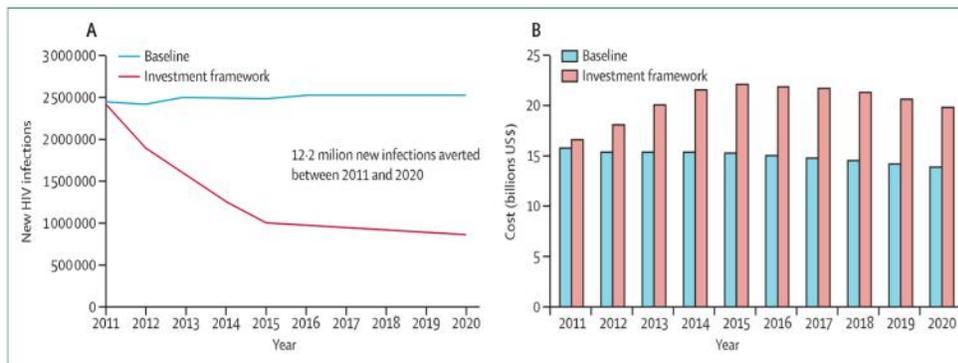
labor productivity, averted orphan care, and averted or deferred medical care.⁶ In other words, it will ultimately cost more *not* to provide treatment than to continue scaling up treatment programs. An analysis by the Division of Global HIV/AIDS at the Centers for Disease Control and Prevention (CDC) estimated that for every 1000 people placed on ART in a year, 228 HIV patients avert death and 449 children avert orphanhood.⁷

- *Adult Medical Male Circumcision*: Achieving 80% coverage of adult male circumcision by 2015 would avert more than 20% of new HIV infections in high-prevalence countries by 2025 and save an estimated \$16.6 billion in future medical costs.⁸ PEPFAR is critical to achieving this coverage target, as the program is responsible for financing the large majority of circumcisions performed in Africa.
- *Prevention of Vertical Transmission (from mother to child)*: As a relatively simple and inexpensive intervention that averts new HIV infections, prevention of mother-to-child transmission has consistently been found to be highly cost-effective.^{9 10} According to a recent analysis, prevention of mother-to-child transmission results in actual *cost savings*.¹¹

Potential for accelerated gains in the next few years

By focusing on these and other high-value, high-impact strategies, PEPFAR helps minimize the long-term economic burden posed by the epidemic. According to modeling commissioned by UNAIDS, strategic allocation of resources along the lines of the new PEPFAR strategy would enable annual HIV-related costs to begin to decline by 2016.¹² (See Figure 1) This modeling exercise determined that this result would only be achieved through *expedited*, rather than slower, expansion of high-value, high-impact interventions.

Figure 1



Source: Schwartlander et al, *Lancet*, 2011

⁶ Resch S et al. (2011). Economic Returns to Investment in AIDS Treatment in Low and Middle Income Countries. *PLoS ONE* 6:e25310.

⁷ Blandford, J, Presentation to PEPFAR Scientific Advisory Board, September 14, 2011

⁸ Hankins C , Forsythe S , Njeuhmeli E (2011) Voluntary Medical Male Circumcision: An Introduction to the Cost, Impact, and Challenges of Accelerated Scaling Up. *PLoS Med* 8(11): e1001127. doi:10.1371/journal.pmed.1001127

⁹ Johri M, Ako-Arrey D (2011). The cost-effectiveness of preventing mother-to-child transmission of HIV in low- and middle-income countries: systematic review. *Cost Effectiveness and Resource Allocation* 9:3.

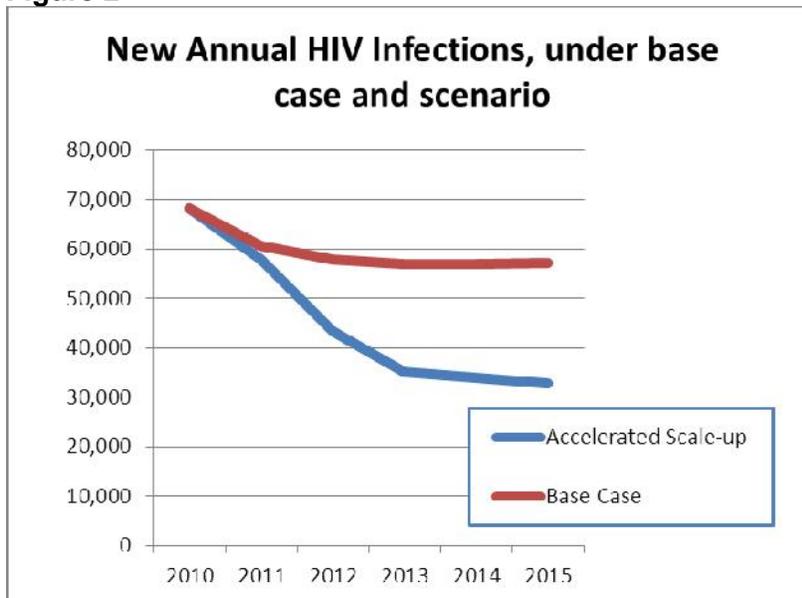
¹⁰ Shah M et al. (2011). Cost-effectiveness of new WHO recommendations for prevention of mother-to-child transmission of HIV in a resource-limited setting. *AIDS* 25:1093-1102.

¹¹ Ciaranello A et al. (2011). Clinical and economic impact of scaling-up World Health Organization (WHO) 2010 PMTCT guidelines in Zimbabwe. 6th IAS Conference on HIV Pathogenesis, Treatment and Prevention, July 17-20, Rome. Abstract No. TUPE284.

¹² Schwartlander B et al. (2011). Towards an improved investment approach for an effective response to HIV/AIDS. *New Eng J Med* 377:2031-2041.

The above-noted CDC analysis determined that, “With further realistic gains in program efficiency and strategic allocation of resources continued...scale up of ART together with other high impact prevention (especially prevention of mother-to-child transmission services and voluntary medical male circumcision) can alter the course of the epidemic.”¹³ Figure 2 shows the CDC’s estimates of new annual HIV infections assuming the current pace of service scale up and accelerated scale up in Zambia, one of the countries most heavily affected by HIV/AIDS.

Figure 2



Source: Blandford, J, CDC, The Impact of Treatment as Prevention: Models to Guide Ending the Epidemic, 2012

The evidence is clear. Without continued support for PEPFAR, the epidemic’s long-term human and economic burdens will be substantially greater. As Congress confronts the choice between maintaining support for PEPFAR or enacting sharp cuts, the question is really one of paying now or paying substantially more in future years.

The potential impact of proposed cuts in FY13

Cutting resources for PEPFAR now – at the very moment of greatest promise – is inconsistent with the Administration’s stated goal of achieving an AIDS-Free Generation. Though the White House insists the U.S. can still achieve its treatment and prevention targets set by the President in December 2011, it is inevitable that PEPFAR program managers, faced with seriously diminished resources and ambitious targets in a few specific areas, will reduce services for which there are no specific goals. That might include, for example, PEPFAR’s provision of life-preserving food and education to millions of children orphaned by AIDS. Substantial cuts to PEPFAR would also undercut the Global Fund to Fight AIDS, Tuberculosis and Malaria, which has worked in recent years to coordinate its own programs with PEPFAR initiatives.

There is evidence that countries that have suffered funding cuts are experiencing severe challenges, including a slowdown in treatment scale-up and the imposition of waiting lists for

¹³ Blandford, J, The Impact of Treatment as Prevention: Models to Guide Ending the Epidemic [webinar] (January 26, 2012). Retrieved from <http://www.avac.org/meetingreports>

treatment in many clinics.¹⁴ Without continued follow-through on earlier PEPFAR investments, future costs will increase and, in the worst-case scenario, national epidemics that are currently declining could rebound. Such a tragic result, after years of investment by U.S. taxpayers, would not only cause intense human suffering, worsen health indicators, and undermine productivity in Africa, but it could also potentially pose risks to regional security.¹⁵

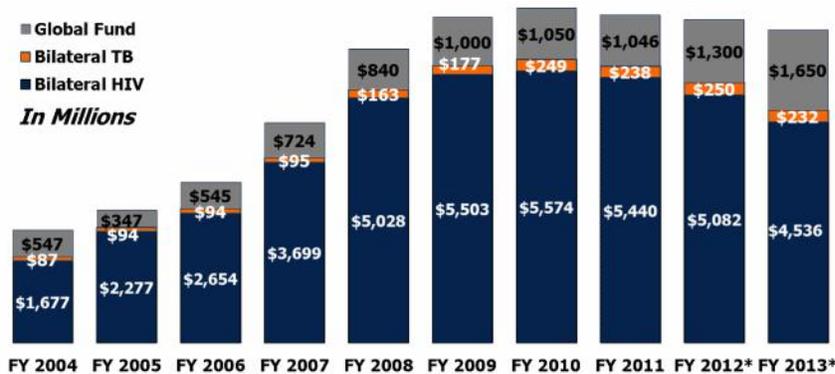
Based on an analysis by amfAR, the steep, proposed cut to PEPFAR in FY13 could result in a significant net loss of HIV services that would otherwise have been delivered. The President's FY13 budget proposes, 1) increased funding to the Global Fund to Fight AIDS, TB and Malaria, and, 2) decreased funding for PEPFAR. *The increase for the Global Fund would result in expanded services in a range of areas and deserves strong support.* But the proposed Global Fund increase would not make up for the serious proposed cut to PEPFAR.

When the proposed funding levels for the Global Fund and PEPFAR are considered together, the combined impact could be significant reductions in lifesaving AIDS treatment delivery, services to orphans and other vulnerable children, prevention of vertical HIV transmission (from mother-to-child) services, and HIV testing services that could otherwise have been delivered with flat funding for PEPFAR. (For estimates of specific impacts on services see the full amfAR analysis [here](#).)

A sharp cut to PEPFAR in FY13 would worsen a discouraging trend, in which appropriations have fallen behind authorized levels. Figure 3 charts the decline in PEPFAR investments since FY2010. The top box represents Global Fund funding, the second box represents bilateral tuberculosis funding, and the *bottom box represents bilateral HIV/AIDS funding.*

Figure 3

**U.S. Global Health Initiative (GHI) Funding:
President's Emergency Plan for AIDS Relief
(PEPFAR), FY 2004-FY 2013***



Source: Kaiser Family Foundation, 2012

¹⁴ MSF (2012). Losing Ground: How Global Fund shortages and PEPFAR cuts are jeopardizing the fight against HIV and TB. Accessed on March 28, 2012 at <http://www.msf.org.za/publication/losing-ground-impact-of-global-fund-cuts>.

¹⁵ Felbaum H et al. (2006). The National Security Implications of HIV/AIDS. *PLoS Med* 3:e171.

A strategic trajectory for the PEPFAR program

Future years will provide numerous opportunities for PEPFAR to enhance efficiency and share the burden of financing HIV services more broadly, even as it continues to support programs that save lives and lower long-term costs.

Especially as international HIV assistance has flattened, a growing push has emerged in the HIV field to focus financing on countries with the most limited resources and the most severe epidemics. An economic analysis of projected fiscal space in developing countries suggests that certain middle-income countries – such as Russia, Ukraine and Vietnam – have the capacity in the coming years to begin to approach self-financing of their HIV responses. By contrast, low-income countries with substantial or severe epidemics – such as Cameroon, Ethiopia, Nigeria, and the heavily affected countries in Eastern and Southern Africa – will continue to need extensive external support if they are to continue scaling up essential prevention and treatment programs.¹⁶

PEPFAR is already partially implementing this strategic funding approach. In South Africa, for example, where the national government has drawn from its considerable national resources to significantly increase domestic outlays for HIV programs,¹⁷ PEPFAR has begun a gradual reduction in support.

PEPFAR should use the next 5-10 years to focus on sustainability and prepare countries to assume greater ownership of their national response, recognizing that certain low-income countries with especially severe epidemics are likely to continue to need external support for the long term. This is consistent with PEPFAR's current five-year strategy, which identifies supporting national ownership of the HIV response as a central goal.¹⁸

Already, PEPFAR support has been leveraged to substantially increase domestic HIV outlays¹⁹ and to buttress national systems and the health workforce.¹¹ The tragic reality, however, is that few of the countries most heavily affected by HIV are prepared to assume responsibility for the life-saving services currently provided by PEPFAR. Sub-Saharan Africa remains the poorest region in the world, and the per capita concentration of physicians in Africa remains the lowest in the world, representing only 7% of the per-capita physician supply of Europe.²⁰

At the same time that PEPFAR builds strong institutional capacity, it should also encourage countries, where feasible, to gradually assume greater responsibility for financing their national response. Building on the program infrastructure created or strengthened by PEPFAR, several African countries – such as Kenya and South Africa – have increased their domestic outlays for HIV services. Due to the importance of leveraging infrastructure development to make additional domestic funding feasible, cuts of the magnitude proposed in the President's FY13 budget

¹⁶ Hecht R et al. (2009). Critical Choices in Financing the Response to the Global HIV/AIDS Pandemic. *Health Affairs* 28:1591-1605.

¹⁷ Health Systems Trust (2011). South African Health Review 2011 (Padareth A, English R, eds.). Accessed on March 29, 2012 at <http://www.hst.org.za/publications/south-african-health-review-2011>.

¹⁸ PEPFAR (2009). PEPFAR's Five-Year Strategy. Accessed on March 28, 2012 at <http://www.pepfar.gov/strategy/document/133251.htm>.

¹⁹ UNAIDS (2008). Global report on the AIDS epidemic. Accessed on March 28, 2012 at <http://www.unaids.org/en/dataanalysis/epidemiology/2008reportontheglobalaidsepidemic/>.

²⁰ WHO (2011). *World Health Statistics 2011*.

would imperil the ability of countries to make meaningful domestic contributions to their national HIV response.

As a result of impressive rates of economic growth in Africa, new opportunities exist to diversify the funding base for HIV programs in sub-Saharan Africa, but success will take time. If African governments increased health spending to match commitments made in the 2001 Abuja Declaration (e.g., devote at least 15% of national budget to health) and devoted amounts to HIV programs commensurate with the epidemic's relative health burden, an additional \$4.7 billion would be available for HIV programs by 2015.²¹ These changes will not occur overnight, and a rapid withdrawal of PEPFAR funding— before countries have been prepared to stand on their own – risks undermining progress in the global HIV/AIDS response.

Leveraging the historic generosity of U.S. taxpayers

PEPFAR is one of the most successful development initiatives in history, representing the largest program ever established to address a specific disease. Authorized by Congress at the request of President George W. Bush, PEPFAR has garnered broad bipartisan support, in part as a result of robust public approval of strong U.S. leadership in the global HIV fight.²² PEPFAR has galvanized unprecedented international support for the HIV response²³ and burnished the global reputation of the U.S.²⁴

While some development initiatives have been criticized for failing to demonstrate real results, this is hardly the case for PEPFAR. *In 2011 alone*, PEPFAR:

- Averted more than 800,000 HIV-related deaths;
- Prevented more than 93,000 peri-natal infections
- Prevented 1.6 million children from being orphaned; and
- Saved over 7.7 million life-years.²⁵

While no program of assistance should necessarily be regarded as permanent, now is clearly not the time to withdraw funding from this extraordinarily successful initiative. Not only is continued PEPFAR support critical to following through on U.S. leadership in the HIV response, but it is also vital to lowering the long-range cost trajectory associated with the epidemic.

Cutting PEPFAR now would be an historic mistake. Maintaining PEPFAR is essential to efforts to end HIV and to lower HIV-related funding needs for the long term.

²¹ UNAIDS (2012). AIDS Dependency Crisis: Sourcing African Solutions. Accessed on March 28, 2012 at http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2012/JC2286_Sourcing-African-Solutions_en.pdf.

²² Henry J. Kaiser Family Foundation (2010). US Global Health Policy: 2010 survey of Americans on the US role in global health.

²³ Interview with United Nations Secretary-General Kofi Annan (2006). Frontline: The Age of AIDS. Public Broadcasting System. Accessed on February 15, 2012 at <http://www.pbs.org/wgbh/pages/frontline/aids/interviews/annan.html>.

²⁴ Frist WH (2007). Medicine as a currency for peace through global health diplomacy. *Yale Law Policy Rev* 26:209–228.

²⁵ Blandford J (2012). The Impact of Treatment as Prevention: Models to Guide Ending the Epidemic. Accessed on March 27, 2012 at <http://www.avac.org/ht/a/GetDocumentAction/i/41810>.

This report was prepared by

- ACT V: The End of AIDS
- amfAR, the Foundation for AIDS Research
- Center for Global Health Policy, Infectious Diseases Society of America (IDSA)
- Health GAP (Global Access Project)
- POZ
- Treatment Action Group (TAG)

Please contact Chris Collins of amfAR with any questions: chris.collins@amfar.org