amfAR AIDS RESEARCH The Foundation for AIDS Research

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ISSUE BRIEF

FY 2012 Global Health Funding Proposals: Projecting the Human Impact

Congress is considering several FY 2012 funding proposals, including the President's FY 2012 Budget Request and the House Budget Committee's FY 2012 Budget Resolution passed in April 2011. These two proposals take very different approaches to supporting U.S. global health initiatives, with the President's Request calling for targeted increases in several areas and the House Resolution recommending significant cuts to international aid overall.

This issue brief estimates the human impact of these proposals using FY 2011 operating levels as a baseline and projects changes in service provision and health outcomes under each budget scenario. It examines the impact on health programming that addresses global AIDS, malaria, tuberculosis, and childhood diseases.

Lives at Stake

The Potential Impact of the House Budget Committee's FY 2012 Budget

(Bilateral Funding Only)

- 47,410 more infants globally could be infected with HIV due to reductions in services to combat vertical transmission (from a pregnant woman to her newborn).
- 551,918 orphans and vulnerable children could lose their food, education, and livelihood assistance.
- Funding for AIDS treatment for 654,254 people would be eliminated, resulting in a halt to treatment expansion and deeper cuts in HIV prevention and other areas in an effort to avoid removing current patients from lifesaving treatment.
- 7.4 million fewer people would be treated for malaria and 3.2 million fewer insecticide-treated nets would be available, with increased loss of life from malaria felt overwhelmingly among children under five years.
- 73,442 fewer people with tuberculosis (TB) and 738 fewer people with multidrug-resistant TB would receive lifesaving treatment, seriously endangering their lives as well as others due to the highly contagious nature of this illness.

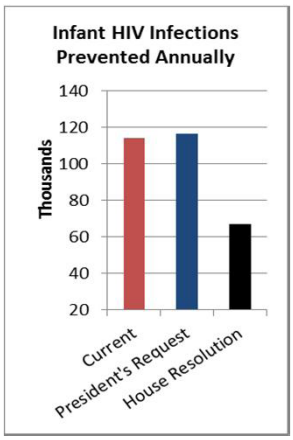
Bilateral Investments

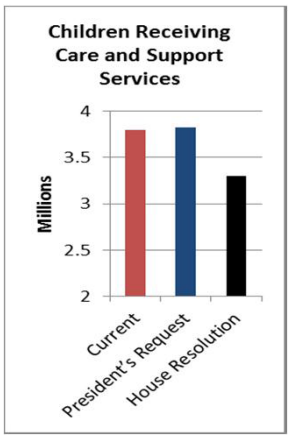
The Impact on Fighting the Global HIV/AIDS Epidemic

The President's Emergency Plan for AIDS Relief (PEPFAR) has been one of the most successful international aid programs in history, saving millions of lives, preventing thousands of new HIV infections, and providing desperately needed care for orphans and other vulnerable children affected by the AIDS epidemic. Given the near flat funding levels of PEPFAR over the past three years, the program's ability to continue expanding access to services has depended on finding cost savings and efficiencies (including broadening use of generic drugs and improving the efficiency and effectiveness of the medical supply chain).[1] These efficiency savings are not expected to grow at the same rate indefinitely, meaning that flat funding will have a significant impact on HIV/AIDS service delivery.

Preventing Infant HIV Infection: Today, nearly half of all women who need services to prevent vertical transmission of HIV (from a pregnant woman to her newborn, also known as PMTCT) do not have access to these highly effective services.[2] In FY 2010, 9.9 percent of PEPFAR's funding for services was allocated to PMTCT programs. As of September 2010, PEPFAR had directly supported PMTCT services that enabled more than 450,000 babies to be born without HIV. If the FY 2012 funding proposals passed and PMTCT services changed proportionally with other programs, the following could occur:

- *President's Request:* $4.0 million increase; 2,544 more infants born HIV-free
- *House Resolution:* $75.1 million reduction; 47,410 more infants could be infected with HIV





Children's Care and Support Services: UNAIDS estimates that as of 2009, 16.6 million children had been orphaned because of HIV/AIDS.[3] In FY 2010, 10.3 percent of PEPFAR services funding was allocated to the care and support of orphans and vulnerable children. In FY 2010, PEPFAR supported 3.8 million children.[4] If the FY 2012 funding proposals passed and these services changed proportionally with other programs, the following could occur:

- *President's Request:* $4.2 million increase; 29,618 more children receiving food, education, and livelihood assistance
- *House Resolution:* $78.2 million reduction; funding for this assistance would not be available for 551,918 children.

AIDS Treatment: Results of an NIH trial released in May 2011 provided conclusive evidence that AIDS treatment not only saves the lives of those being treated but can prevent new infections,[5] meaning that expanded access to AIDS treatment has become an essential strategy for reducing HIV incidence. Today, 10 million people in low- and middle-income countries, including nearly one million children, do not have access to the HIV/AIDS treatments they urgently need.[3] In FY 2010, 37.6 percent of PEPFAR services funding was allocated to treatment, and in FY 2010, 3.2 million men, women and children depended on PEPFAR for their AIDS treatments.[4] According to PEPFAR estimates, the annual cost of AIDS treatment to PEPFAR is approximately $436 per individual (including antiretroviral drugs, non-antiretroviral recurrent costs, and health system strengthening costs).[6] If treatment funding were changed proportionally with other programs and PEPFAR costs remained stable, the following could occur:

- *President's Request:* $15.3 million increase; treatment funding for an additional 35,109 people would be available.
- *House Resolution:* $285.3 million decrease; treatment funding for 654,254 people would not be available.

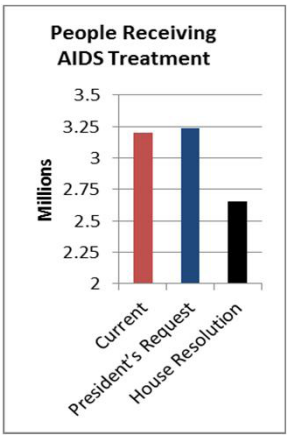
Research: Funding for AIDS research at the National Institutes of Health (NIH) has led to the development of lifesaving treatments for AIDS and recent breakthroughs in HIV prevention. AIDS research has also led to important advances in the treatment and prevention of a variety of other diseases, including cancer, heart attack, stroke, and Alzheimer's. If the FY 2012 funding proposals passed, the following could occur:

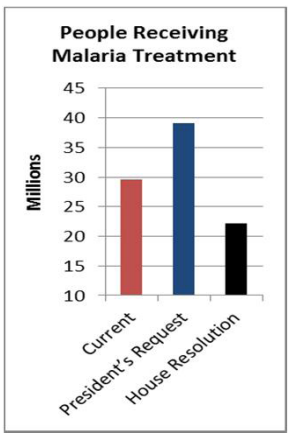
- *President's Request:* $101 million increase in AIDS research
- *House Resolution:* $413 million decrease in AIDS research. A cut of this magnitude would halt investment in new research and force NIH to make reductions in existing research projects. Such a reduction in research funding would significantly set back American leadership in scientific research and innovation.

The Impact on Addressing the Malaria and Tuberculosis Threats

Malaria: Malaria claims 781,000 lives each year, 90 percent of them children under the age of five.[7] Launched in 2005, the President's Malaria Initiative (PMI) has played a significant role in scaling up malaria prevention and treatment across the world. Around 70 percent of bilateral commitments for malaria are through the PMI. These programs have contributed to a substantial decrease in mortality for children under the age of five.[8] If the FY 2012 funding proposals passed and PMI support for artemisinin-based combination therapy and insecticide-treated mosquito nets changed proportionally with other programs, the following could occur:

- *President's Request:* $119.6 million increase; 9.5 million more people on treatment and 4.1 million more nets available
- *House Resolution:* $92.8 million reduction; 7.4 million fewer people treated and 3.2 million fewer nets available. Such





crippling cuts would erase the significant progress that has been made and deepen the social and economic burden of malaria in Africa.

Tuberculosis: Tuberculosis (TB) claims 1.3 million lives[9] each year, and 9.4 million people[10] were newly diagnosed with TB in 2009. Further complicating the epidemic is its treacherous interaction with HIV/AIDS. Among people with HIV/AIDS, TB is the leading cause of death. A major goal of U.S. government bilateral TB programming through USAID is to halve the number of TB deaths by 2014. In FY 2009, 57 percent of the TB budget was allocated to the treatment of TB patients and an additional 18 percent was allocated to treating multidrug-resistant TB.[11] The estimated annual cost per person of regular TB treatment is $350 and $11,000 for multidrug-resistant TB.[11] If the FY 2012 funding proposals passed and TB funding changed proportionally with other foreign assistance programs, the following could occur:

- *President's Request:* $2.0 million increase for TB and $600,000 increase for multidrug-resistant TB; 5,646 more people with TB and 57 more people with multidrug-resistant TB could receive treatment.
- *House Resolution:* $25.7 million reduction for TB and $8.1 million reduction for multidrug-resistant TB; 73,442 fewer people with TB and 738 fewer people with multidrug-resistant TB could receive treatment. With an average of 12 new infections resulting from every untreated TB case, cuts in TB treatment could have severe consequences.

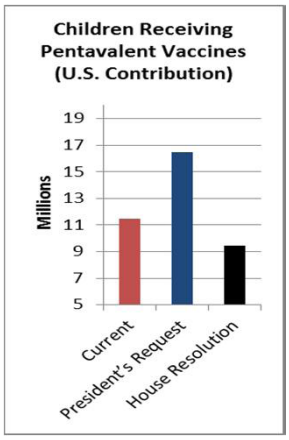
The potential to begin to end AIDS with strategic additional funding

NIH-supported research from the HPTN 052 trial[12], released in May 2011, found conclusively that providing individuals with quality AIDS treatment greatly reduces the likelihood that HIV will be transmitted to others. With this evidence that AIDS treatment is also HIV prevention, there is increasing confidence that wider treatment access can play an important role in reducing HIV incidence.

At the same time, an analysis published in *The Lancet* in June 2011[13] outlined a more strategic approach to global AIDS investments. The analysis suggested that funding interventions that have been tested and are known to be effective could dramatically reduce global HIV incidence over the next five years.

Taken together, the 052 results and new modeling on the impact of strategic approaches, means that prudent new investments — beyond those proposed in the President's FY12 PEPFAR request — could lead to rapid progress against the global AIDS epidemic.

Multilateral Investments



The Impact on Fighting Childhood Diseases

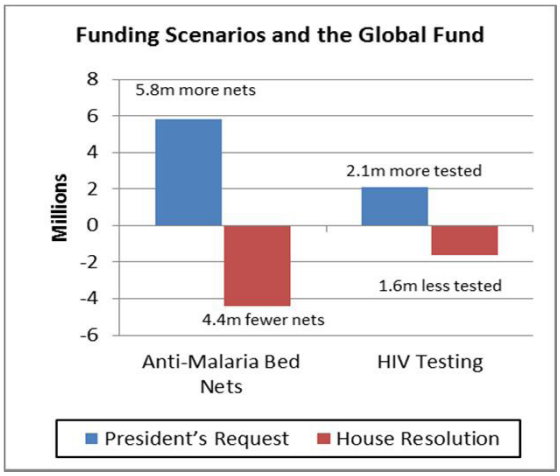
The GAVI Alliance is a public-private partnership dedicated to saving the lives of children and improving people's health by increasing access to immunization in low-income countries. Since its launch in 2000, GAVI has helped to prevent more than five million premature deaths and contributed to the immunization of 288 million children. U.S. contributions to GAVI help supply the pentavalent vaccine (among others) to the world's poorest children. The use of this vaccine, which protects against diphtheria, tetanus, pertussis, *Haemophilus influenzae* type B (Hib), and hepatitis B, is cost-efficient and highly effective. In 2011, 37 percent of the GAVI budget is allocated to procuring pentavalent vaccines.[14] GAVI estimates that its average weighted price is $2.58.[14] If the FY 2012 funding proposals passed and vaccine funding changed proportionally with other programs, the following could occur:

- *President's Request:* $34.6 million increase; 4.95 million more pentavalent vaccines available for children across the world
- *House Resolution:* $14.5 million reduction; 2.07 million fewer pentavalent vaccines available for children across the world

The Impact on the Multilateral Effort to Combat AIDS, Tuberculosis and Malaria

The Global Fund to Fight AIDS, Tuberculosis and Malaria is a collaborative and highly successful effort to combat these three major sources of human mortality. Since it was founded in 2002, the Global Fund has financed programs that have saved 6.5 million lives by providing 3 million AIDS patients with antiretrovirals, treating 7.7 million cases of tuberculosis, and administering treatments for 170 million cases of malaria.[15] The U.S. is a leading contributor to the Global Fund. Implementing the FY 2012 funding proposals could result in the following:

- *President's Request:* $252 million increase; 5.8 million more bed nets to fight malaria, 3.4 million more malaria treatments, 2.1 million more people tested for HIV, 232,000 more people on antiretroviral medications, and 208,000 more treatments for tuberculosis
- *House Resolution:* $189 million reduction; 4.4 million fewer bed nets to fight malaria, 2.5 million fewer malaria treatments, 1.6 million people not tested for HIV, 174,000 people losing their antiretroviral medications, and 156,000 fewer treatments for tuberculosis. Because U.S. law stipulates that the international community must contribute at least two dollars for every U.S. dollar contributed to the Global Fund, significantly decreasing U.S. contributions would reduce the Global Fund's ability to leverage other countries' investments, resulting in a total loss that could be three times greater than the original U.S. investment.[15]



Methodology and Assumptions

The estimates in this issue brief are based on publicly available information on unit costs of services, federal spending, and the impact of various health interventions. The analysis compares current operating budget levels (FY 2011) with projected funding under the President's FY 2012 Request and the House Budget Committee's FY 2012 Budget Resolution. Where specific allocations are not known for programs under the International Affairs (Function 150) Budget, it is assumed that all programs under the budget line would be altered proportionately. This analysis uses publicly available unit-cost data to calculate the number of people who could be affected by proposed funding cuts. Where unit-cost data was not available, total program funding was divided by the most recent reported units of service to estimate the impact on HIV/AIDS and other global health programs. The figures here are intended only to illustrate the possible human impact and costs of implementing various FY 2012 funding levels. It is understood that Congress and/or U.S. governmental agencies will have a range of budgetary options at their disposal and may choose to fund particular global health programs at higher or lower levels than those assumed in this brief.

References and Notes

1 Lubinski, C. "Goosby Gives PEPFAR Update to ID Docs in Vancouver." *Science Speaks: HIV & TB News*, October 22, 2010.
2 WHO, UNAIDS, UNICEF. Towards Universal Access: Scaling up Priority HIV/AIDS Interventions in the Health Sector, September 2010.
3 UNAIDS. Global Report: UNAIDS Report on the Global AIDS Epidemic 2010, November 2010.
4 PEPFAR. Fact sheet: Saving Lives Through Smart Investments: Latest PEPFAR Results, December 2010.
5 NIH. Treating HIV-infected People with Antiretrovirals Protects Partners from Infection: Findings Result from NIH-funded International Study, May 2011.
6 PEPFAR. Report to Congress on Costs of Treatment in the President's Emergency Plan for AIDS Relief, July 2010.
7 The President's Malaria Initiative. Sustaining Momentum Against Malaria: Saving Lives in Africa, Fourth Annual Report, April 2010.
8 USAID. Fast Facts: The President's Malaria Initiative (PMI), April 2010.
9 USAID. Report to Congress: Building Partnerships to Control Tuberculosis, October 2010.
10 WHO. Fact sheet: 2010/2011 Tuberculosis Global Facts, November 2010.
11 USAID. Personal communication, February 2011.
12 HIV Prevention Trials Network, Initiation of Antiretroviral Treatment Protects Uninfected Partners from HIV Infection (HPTN Study 052). Press Release. May 12, 2011.
13 Schwartlander B et al. Towards an improved investment approach for an effective response to HIV/AIDS. *Lancet* 377:2031-2041.
14 GAVI Alliance. Personal communication, June 2011.
15 Friends of the Global Fight Against AIDS, Tuberculosis, and Malaria; The Global Fund to Fight AIDS, Tuberculosis, and Malaria. Personal communication, July 2011.

Data Sources

Data sources: Kaiser Family Foundation's Fiscal Year 2012 Budget Tracker, May 2011; Kaiser Family Foundation's Summary of the FY11 Full-Year Continuing Appropriations Act (H.R. 1473), April 2011; PEPFAR's Making a Difference: Funding, October 2010; PEPFAR's Sixth Annual Report to Congress on PEPFAR Program Results, March 2010; USAID's The President's Malaria Initiative: Sustaining Momentum Against Malaria: Saving Lives in Africa, Fourth Annual Report, April 2010; USAID's Fast Facts: The President's Malaria Initiative (PMI), April 2011; USAID's Fiscal Year 2009 Report to Congress: Building Partnerships to Control Tuberculosis, October 2010; Friends of the Global Fight Against AIDS, Tuberculosis, and Malaria's The Negative Impact of Reducing U.S. Contributions to the Global Fund, February 2011.