CRS Report for Congress

PEPFAR: From Emergency to Sustainability

September 28, 2007

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PEPFAR: From Emergency to Sustainability

Summary

The Joint United Nations Program on HIV/AIDS (UNAIDS) estimates that HIV/AIDS, tuberculosis (TB), and malaria kill more than 6 million people each year. At the end of 2006, about 39.5 million people were living with HIV/AIDS, 2.3 million (6%) of whom were children under 15 years. Nearly 90% of all children infected with HIV are African. On each day of 2005, some 1,500 children around the world contracted HIV, due in large part to inadequate access to drugs that prevent mother-to-child HIV transmission (PMTCT). In that year, 8% of pregnant women in low- and middle-income countries had access to PMTCT services.

In January 2003, President George Bush proposed that the United States spend $15 billion over five years to combat the three diseases and established the President’s Emergency Plan for AIDS Relief (PEPFAR). The President proposed concentrating most of the resources ($9 billion) in 15 Focus Countries, where the Administration estimated 50% of all HIV-positive people lived. The proposal allotted $5 billion of the funds to research and other bilateral HIV/AIDS, TB, and malaria programs, and $1 billion for contributions to the Global Fund to Fight AIDS, Tuberculosis, and Malaria (Global Fund). The President estimated that from FY2004 to FY2008, PEPFAR would support the provision of anti-retroviral treatment (ARV) to 2 million HIV-infected people; prevent 7 million new HIV infections; and care for 10 million people affected by HIV/AIDS, including children orphaned by AIDS.

In May 2003, Congress passed the U.S. Leadership Against HIV/AIDS, Tuberculosis, and Malaria Act of 2003 (P.L.108-25) to authorize funds for PEPFAR and create the Office of the Global AIDS Coordinator (OGAC). The newly created office was responsible for managing the flow of U.S. funds aimed at addressing the three diseases in 15 Focus Countries. As of March 31, 2007, PEPFAR has supported the treatment of 1.1 billion people; and as of September 30, 2006, supported the prevention of mother-to-child HIV transmission during more than 6 million pregnancies and facilitated care for nearly 4.5 million people, including more than 2 million orphans and vulnerable children. From FY2004 to FY2007, Congress provided nearly $13.5 billion for U.S. global HIV/AIDS, TB, and malaria programs. In FY2008, the President requested $5.8 billion for global HIV/AIDS, TB, and malaria efforts; the House proposed spending almost $6.2 billion; and the Senate proposed nearly $6.1 billion.

On May 30, 2007, President Bush requested that Congress authorize $30 billion to extend PEPFAR an additional five years. The President anticipates that from FY2009 to FY2013, the plan would support treatment for 2.5 million people, prevent more than 12 million new infections, and care for more than 12 million people, including 5 million orphans and vulnerable children. Supporters of the Administration’s plan applauded the President and congratulated him for leading global efforts to address HIV/AIDS. Critics asserted that the target of treating 2.5 million HIV-infected people was not ambitious enough and that the next five years of PEPFAR should build on the progress already made. This report focuses on some of the key issues that Congress might consider as it faces the issue of whether, and at what level, to reauthorize PEPFAR.
## Glossary of Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ARV</td>
<td>Anti-Retroviral medication</td>
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<tr>
<td>DFID</td>
<td>Department for International Development</td>
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<td>FAO</td>
<td>United Nations Food and Agriculture Organization</td>
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<td>FDA</td>
<td>U.S. Food and Drug Administration</td>
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<tr>
<td>GAO</td>
<td>Government Accountability Office</td>
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<tr>
<td>GHAI</td>
<td>Global HIV/AIDS Initiative</td>
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<td>HIPC</td>
<td>Highly Indebted Poor Countries</td>
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<tr>
<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome</td>
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<tr>
<td>IHP</td>
<td>International Health Partnership</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>IOM</td>
<td>Institute of Medicine</td>
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<td>JLI</td>
<td>Joint Learning Institute</td>
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<td>MTCT</td>
<td>Mother-to-Child Transmission</td>
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<td>NIH</td>
<td>National Institutes of Health</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>OAR</td>
<td>Office of AIDS Research</td>
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<td>OGAC</td>
<td>Office of Global AIDS Coordinator</td>
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<td>PEPFAR</td>
<td>President’s Emergency Plan For AIDS Relief</td>
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<td>PMI</td>
<td>President’s Malaria Initiative</td>
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<tr>
<td>PMTCT</td>
<td>Prevention of Mother-to-Child Transmission</td>
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<td>TB</td>
<td>Tuberculosis</td>
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<td>UNAIDS</td>
<td>Joint United Nations Program on HIV/AIDS</td>
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<td>USAID</td>
<td>U.S. Agency for International Development</td>
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<td>WFP</td>
<td>World Food Program</td>
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PEPFAR: From Emergency to Sustainability

Background

In 2003, Congress authorized $3 billion for each fiscal year from 2004 through 2008 to support the $15 billion five year President’s Emergency Plan for AIDS Relief (PEFAR); aimed at responding to the rapid spread of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) and two other key diseases: malaria and tuberculosis (TB). Some estimate that since HIV/AIDS was first identified in 1981, 65 million people have contracted the virus and it has killed more than 25 million.¹

The World Health Organization (WHO) estimates that by the end of 2004, more than 14 million people were infected with TB,² almost 9 million of whom were newly infected.³ More than 80% of those were in southeast Asia and sub-Saharan Africa, with the greatest per capita rate found in Africa. Although most forms of TB are curable, WHO estimates that the disease killed 2 million people that year. According to WHO, each year there are about 300 million acute malaria cases,⁴ which cause more than 1 million deaths annually. Health experts believe that between 85% and 90% of malaria deaths occur in Africa, mostly among children.⁵

¹ Avert, an international HIV/AIDS charity, used UNAIDS data to reach its estimate. See world AIDS statistics at [http://www.avert.org/worldstats.htm].

² TB is a contagious disease that spreads through the air like the common cold. Only people who are sick with TB in their lungs are infectious. When infectious people cough, sneeze, talk, or spit, they propel TB germs, known as bacilli, into the air. Minimal exposure is enough to contract the disease. Left untreated, each person with active TB will infect an average of between 10 and 15 people every year. The TB bacilli will not necessarily sicken people whose immune systems are intact; however, the disease can lie dormant for years. When someone’s immune system is weakened, as it can be with HIV infection, the chances of becoming sick rise. See [http://www.who.int/mediacentre/factsheets/fs104/en/].


⁴ There are four types of malaria: Plasmodium (P.) vivax, P. malaria, P. ovale, and P. falciparum. P. falciparum, the deadliest kind, is most common in sub-Saharan Africa and is a significant factor in the region’s high malarial mortality rate. People contract malaria from infected mosquitoes; and mosquitoes can get malaria if they ingest blood from an infected person. [http://malaria.who.int/cmc_upload/0/000/015/372/RBMInfosheet_1.htm]

⁵ WHO estimates that 300 million malaria cases result in 1 million annual deaths, 90% of which occur in sub-Saharan Africa. The World Bank estimates that there are more than 500 million malaria cases each year and that about 85% of the resulting deaths occur in sub-Saharan Africa, 8% in southeast Asia, 5% in the Middle East, 1% in the Western Pacific, (continued...
killing an African child every 30 seconds. While HIV/AIDS, TB, and malaria are preventable diseases, their impacts have been catastrophic, particularly in sub-Saharan Africa. Researchers have found that people infected with one of the three illnesses are more likely to contract either of the other two, and the symptoms are more severe in people with two or more of the diseases.

UNAIDS asserts that an effective fight against the global spread of HIV/AIDS would cost $15 billion in 2006, $18 billion in 2007, and $22 billion in 2008. In FY2006, Congress provided $3.4 billion for global HIV/AIDS, tuberculosis (TB), and malaria programs, which included U.S. contributions to international partnerships, such as the Global Fund to Fight AIDS, TB, and Malaria (Table1). Most recent statistics indicate that in 2006, some $8.9 billion was spent on HIV/AIDS globally ($5.3 billion of which was provided by donors), $6 billion less than UNAIDS advocated.

Policy Options for Congress

PEPFAR provided an unprecedented amount of assistance for global HIV/AIDS efforts. The United States remains the largest single donor for global HIV/AIDS efforts in the world, providing nearly 50% of all donor funds. As Congress prepares to consider whether, and at what level, to reauthorize PEPFAR, there has been considerable debate about the effectiveness of PEPFAR. Some health experts contend that the life-saving intention of PEPFAR is weakened by the single-disease approach. Other critics contend that ideological factors lessen the effectiveness of the plan. A number of HIV/AIDS advocates urge the United States to harmonize its anti-HIV/AIDS efforts with other donors to boost the impact of PEPFAR. Some of the key policy prescriptions are discussed below.

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5 (...continued)
and 0.1% in the Americas. The World Bank maintains that the actual number of malaria infections and deaths is uncertain as data collection and reporting systems are weak and diagnoses may be over- or under-reported.

6 WHO’s Roll Back Malaria website, [http://malaria.who.int/cmc_upload/0/000/015/372/RBMInfosheet_1.htm], accessed on August 31, 2006.


10 Ibid.
Define Focus of PEPFAR

As Congress considers reauthorizing PEPFAR, there may be some debate on how many diseases the initiative should address. The U.S. Leadership Against HIV/AIDS, Tuberculosis, and Malaria Act of 2003 (P.L. 108-25), requires the President to submit annual reports to appropriation committees that describe how U.S. funds support efforts to prevent HIV/AIDS, TB, and malaria and provide care and treatment for those affected by the three diseases. However, since President Bush launched the President’s Malaria Initiative (PMI) in June 2005, the Office of the Global AIDS Coordinator (OGAC) determined that it would no longer include malaria spending in its annual reports to Congress and that budgetary requests for the disease would be made separately from HIV/AIDS and TB requests.\(^\text{11}\) The Administration requests support for PMI through the U.S. Agency for International Development (USAID) as the coordinating agency. For comparability, and because P.L. 108-25 considers efforts to combat malaria as a critical part of PEPFAR, Table 1, at the end of this report, includes appropriations to malaria programs. As Congress considers whether to authorize funds to extend PEPFAR, Members might decide whether to define it as solely an HIV/AIDS initiative or one that includes the three diseases.

Revisit Prevention Efforts

As Congress considers reauthorizing PEPFAR, there is likely to be considerable debate on how much funding to allocate to prevention. Consensus is growing among health experts that greater emphasis needs to be placed on HIV prevention in global HIV/AIDS programs. The international community has supported a tremendous increase in the number of people receiving HIV/AIDS treatment. In 2001, about 240,000 people had access to ARVs; in 2006, more than 2 million were treated.\(^\text{12}\) Nonetheless, WHO estimated that in 2006, an additional 5.1 million people who needed treatment received none. In sub-Saharan Africa, more than 1.3 million people received treatment, reaching some 28% of those in need; three years prior, 100,000 were treated and coverage amounted to 2%. In spite of these advances, the rate at which individuals become infected with HIV far outpaces the rate at which they are treated. In 2006, 4.3 million people contracted HIV, 2.8 million of whom were African (65%), and 2.9 million people died of AIDS, 2.1 million of whom were African (72%).

Increase Prevention of Mother to Child HIV Transmission (PMTCT) Initiatives. Many health experts advocate greater spending on PMTCT

\(^{11}\) PMI aims to increase U.S. support for global malaria programs by more than $1.2 billion between FY2006 and FY2010 in 15 countries. For more information on PMI see [http://www.pmi.gov/]

Most children living with HIV acquire the disease through mother-to-child transmission (MTCT), which can occur during pregnancy, labor and delivery, or breastfeeding. In the absence of any intervention, the risk of such transmission is 15%-30% in non-breastfeeding populations. Breastfeeding by an infected mother can increase the risk to 45%. The risk of MTCT can be reduced to under 2% by interventions that include the provision of ARV treatments. Elective caesarean delivery and complete avoidance of breastfeeding can also reduce the risk of HIV transmission. In many resource-constrained settings, elective caesarean delivery is seldom feasible, and mothers often lack access to enough clean water or formula to refrain from breastfeeding. Research is ongoing to evaluate several new approaches to preventing HIV transmission during breastfeeding.


Ibid, p. 133.

Data from countries in sub-Saharan Africa indicate that the proportion of HIV-infected pregnant women receiving ARVs in 2005 varied from under 1% to 54% and that the average regional coverage rate was 11%. In East, South, and Southeast Asia, the average regional coverage rate was 5%, with individual country rates ranging from 3% to 10%. On average, in Latin America and the Caribbean, 24% of HIV-infected mothers had access to ARVs; the coverage rate ranged from 13% to 46%. It is estimated that overall coverage amounted to 75% in Eastern Europe and Central Asia with coverage rates ranging from 38% to 95%. ARV coverage for HIV-infected pregnant women in North Africa and the Middle East averaged less than 1%.
unsafe abortion, promote universal access to safe and reliable family planning, and assist women, children, and men in developing countries live better lives.

**Address Gender Inequalities.** Women’s rights advocates also assert that the lower status of women in many of the most affected countries must be better addressed in order to prevent new HIV infections. In many countries, legal and social structures leave women feeling as though they have little control over their own bodies and do not have the option to reject their husbands’ sexual advances; even when they are aware of their husbands’ extramarital relationships. Research has shown that in Africa, married girls and women are more likely to contract HIV than their single counterparts. For example, 30% of married adolescents’ spouses were HIV-positive in Kenya, while 11.5% of the partners of their unmarried counterparts were infected with HIV. Similarly, in Zambia, 31.6% of married girls’ partners were found to carry HIV, while 16.8% of unmarried girls’ boyfriends were HIV-positive. Societal forces also weaken women’s options, rights advocates contend, because in many countries, health workers require women to obtain their husbands’ permission before providing them contraception.

**Expand Access to Condoms.** Global health activists also insist that OGAC’s policy of limiting condom distribution to “high risk groups” ignores gender inequities and limits the effectiveness of prevention programs. U.S. condom distribution strategies do not include married women, unless their husbands test positive for HIV. Supporters of U.S. condom distribution guidelines counter that the definition of “high risk” individuals is broad enough to include the most vulnerable groups. Some HIV/AIDS proponents advocate that Congress expand the definition of “high risk” individuals to include married young people. Advocates hope that an expanded definition might enable young married people to access condoms through U.S.-supported programs.

**Explore the Potential Impact of Circumcision.** Health experts have begun to debate the role that circumcision could play in HIV prevention efforts. Three randomized trials conducted in South Africa, Kenya, and Uganda demonstrated that male circumcision reduced the risk of acquiring HIV by more than half. Some

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21 High risk groups are defined as sex workers and their clients; sexually active discordant couples (when one partner is HIV-positive and the other is not infected) or couples with unknown HIV status; substance abusers; mobile male populations; men who have sex with men; and people living with HIV/AIDS.
believe that if mass circumcision was to be conducted in areas of high transmission, the procedure could avert about 5.7 million new HIV infections and 3 million deaths over 20 years among both men and women.\textsuperscript{22} WHO and UNAIDS have endorsed the practice to be added to HIV prevention initiatives.\textsuperscript{23} The organizations warn, however, that the practice should not be seen as a “magic bullet,” as it does not prevent men from acquiring the virus, it only reduces the risk of infection. As a result, health experts urge those who perform the surgeries to counsel the men and explain that they must maintain other protective practices, such as abstaining from sex, reducing their number of sexual partners, and using condoms.

Some observers argue that the studies should not yet be widely embraced, particularly since only a few trials have been conducted. A number of scientists question the validity of the studies since they were terminated early; a practice, critics contend, that skews the results.\textsuperscript{24} Dissenters argue that there may be other explanations for the drop in transmission. Skeptics contend that circumcision reduces the incidence of genital symptoms, allowing men to receive fewer unsafe injections and other blood exposures during treatment. Also, in sub-Saharan Africa, circumcised virgins and adolescents are reportedly more likely to be HIV-infected than their uncircumcised counterparts. Researchers suspect that unhygienic circumcision procedures might be a large factor in this phenomenon.\textsuperscript{25}

Critics and advocates of the practice agree that additional studies need to be conducted and a number of precautions must be taken should the practice be implemented on a larger scale.\textsuperscript{26} Additional research is needed to determine how the procedure might impact HIV transmission to women, the most affected population in Africa. There is consensus that male circumcision must be considered part of a comprehensive HIV prevention package, which includes treatment for sexually transmitted infections; the promotion of safer sex practices; and the provision of male and female condoms and promotion of their correct and consistent use. HIV/AIDS advocates maintain that men and their sexual partners must also be counseled to prevent them from developing a false sense of security and engaging in high-risk behaviors that could undermine the partial protection provided by male circumcision. Health experts agree that African health systems need to be strengthened in order to ensure safe and clean operations. Circumcision must be done under hygienic conditions by trained personnel with access to sterile surgical instruments and anaesthesia. Many facilities on the continent, however, lack sufficient supplies, such


as gloves, clean needles, and antiseptics. Some health experts fear that greater investment in circumcision might disrupt other health care programs. Global health advocates urge Congress to ensure that male circumcision services are integrated with other services, particularly in areas with severe shortages of skilled health workers, should it include support for the practice in PEPFAR.

Reconsider Spending Restrictions and Requirements

**Evaluate the Impact of the Prostitution Pledge.** A number of global health experts contend that some current U.S. AIDS-related spending restrictions and requirements are ideologically based, negatively impact the effectiveness of PEPFAR programs, and complicate implementing partners’ efforts. The U.S. Leadership Against HIV/AIDS, TB, and Malaria Act (P.L. 108-25) mandates that no funds made available to carry out the act may be used to assist any group or organization that does not have a policy explicitly opposing prostitution and sex trafficking. This policy has become widely known as “the prostitution pledge.” Critics of the pledge contend that the restriction should be eliminated, because it limits implementing partners’ HIV/AIDS prevention efforts. Opponents argue that groups serving sex workers fear that by signing the pledge and openly opposing prostitution, they may isolate the very group that they are attempting to help.

**Evaluate the Impact of the Mexico City Policy.** The “Mexico City Policy” has also come under considerable scrutiny. The policy prohibits reproductive health organizations from providing information about abortion. Critics contend that, in some countries, this policy has had devastating effects, because reproductive health services is the only form of health care that many women...
receive. The House and Senate included language in their reports (H. Rept.110-197 and S. Rept.110-128) for FY2008 Foreign Operations appropriations (H.R. 2764) that prevented the “Mexico City Policy” from being the sole reason that U.S. funds could not be used to provide contraceptives. A conference is pending. Opposing Members expect the President to veto any bill that repeals the “Mexico City Policy.”

**Evaluate the Impact of the Abstinence-Until-Marriage Stipulation.**

Some health experts assert that congressional HIV prevention stipulations are not well-balanced, place too much emphasis on abstinence until marriage, and limit countries’ ability to use prevention funds in a manner that is most relevant to local conditions. P.L. 108-25, which delineates how PEPFAR funds should be allocated, stipulates that between FY2006 and FY2008, 20% of global HIV/AIDS funds are to be used for prevention efforts, of which at least 33% should be expended for abstinence-until-marriage programs. In 2006, the Government Accountability Office (GAO) found that PEPFAR’s spending requirements limited the flexibility with which prevention funds could be spent. GAO estimated that in order to meet the 33% proviso, between FY2004 and FY2006, OGAC increased spending on prevention by almost 55% and mandated that country teams spend half of prevention funds on sexual transmission prevention and two-thirds of those funds on abstinence/faithfulness (AB) activities. In its congressionally mandated report, the Institute of Medicine (IOM) reached similar conclusions.

Some health specialists argue that these policies consume limited resources and time, as they place additional reporting requirements on implementing partners. Britain’s Department for International Development (DFID) reports that from 2003 to 2004 and 2006 to 2007, the Ugandan government was reporting on 684 different aid instruments and associated agreements. Critics suggest that if Congress reauthorizes PEPFAR, it should eliminate these spending restrictions, coordinate reporting requirements and funding processes with other donors, and urge the United States to sign on to the International Health Partnership. Some in Congress have supported legislation that was introduced to remove the spending provisions. The HIV Prevention Act (S. 1553) and the Protection Against Transmission of HIV for Women and Youth Act (H.R. 1713) would strike the 33% abstinence-until-marriage spending requirement from P.L.108-25. The FY2008 House Foreign Operations Appropriations would allow the Administration to determine whether to apply the 33% abstinence-until-marriage provision to global HIV/AIDS programs.

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30 Section 101 (c)(1) of P.L.108-25 mandated that not later than three years after its enactment, the Institute of Medicine (IOM) would “publish findings comparing the success rates of the various programs and methods used under the [PEPFAR] strategy.” In March 2007, IOM released, *PEPFAR Implementation: Progress and Promise*. IOM concluded that “PEPFAR has made a promising start, but the need for U.S. leadership in the effort to control the HIV/AIDS pandemic continues.”

Expand Access to Generic Anti-Retroviral Medication

Access to generic HIV/AIDS treatments is another possible issue to arise in reauthorization debates. Shortly after PEPFAR was launched, the Bush Administration expressed skepticism about broad-based use of generic ARV medication. The Administration asserted that WHO’s prequalification process was inadequate, and that generic drugs purchased with PEPFAR funds had to be first inspected by the U.S. Food and Drug Administration (FDA).32 The Administration argued that since WHO is not a regulatory body, its adherence to stringent FDA standards could not be ensured.33 This policy sparked a debate with critics contending that the process was unnecessary and delayed the distribution of ARVs.34 In January 2005, GAO reported that the policy limited the selection of ARV products available, did not fully support the treatment strategies of the focus countries, and was not optimally coordinated with other multinational initiatives. GAO indicated that “better coordination with the Focus Countries and with other treatment initiatives could facilitate more rapid implementation of the Emergency Plan. Moreover, given the intended scale of the plan, lower prices for ARVs could result in savings of hundreds of millions of dollars, which could be used to treat additional patients or to support other aspects of the program.”35

In March 2007, IOM found that in many of the Focus Countries, a number of those implementing HIV/AIDS programs complained that the U.S. treatment policy complicated national treatment efforts.36 The Institute recommended that OGAC work to support WHO prequalification as the accepted global standard for assuring the quality of generic medications and work with other donors to support strengthening the process. According to OGAC’s third annual report to Congress, OGAC has strengthened its coordination with WHO, by sharing information on the WHO-approved generics. OGAC estimates that in FY2006, 27% of all ARVs purchased under PEPFAR were generic.37 Since FDA began reviewing generic drug

32 The WHO prequalifying process includes an assessment of product files (lasting approximately two to four months); site inspections; and the procurement of data on all active pharmaceutical ingredients, specifications, product formulas, and manufacturing methods. After the products and manufacturing sites meet the required standards, the medicine is added to the list of prequalified products. For more information, see [http://www.who.int/3by5/publications/briefs/amds/en/].
33 Interviews with staff at the Office of the AIDS Coordinator, April 1, 2004.
36 [http://www.iom.edu/CMS/3783/24770/41804.aspx]
37 OGAC, The Power of Partnerships: The President’s Emergency Plan for AIDS Relief, (continued...
applications, more than 50 generic versions of patented ARVs have been approved or tentatively approved for use in PEPFAR treatment plans.\textsuperscript{38}

**Improve Integration of Health Programs**

In considering whether to extend PEPFAR, HIV/AIDS experts encourage Congress to stipulate stronger integration of PEPFAR-supported programs with other health programs that save lives. Many health experts contend that PEPFAR’s disease-specific approach threatens to supplant support by the United States and recipient countries for other health areas, including nutrition, maternal and child health, and other infectious diseases.

**Improve Food Security.** Malnutrition and lack of food may heighten exposure to HIV, raise the likelihood of engaging in risky behavior (e.g., transactional sex), increase susceptibility to infection, and complicate efforts to provide anti-retroviral (ARV) medication. Furthermore, those sickened by HIV/AIDS are often too ill to till the land, lessening agricultural productivity. The United Nations’ Food and Agriculture Organization (FAO) estimates that food consumption drops by 40\% in homes affected by HIV/AIDS, due in large part to diminished capacity to farm.\textsuperscript{39}

In communities struggling with food security, decreased food production can complicate efforts to maintain treatment regiments. If patients do not consume adequate amounts of nutritious food, they can suffer significant side effects while taking ARVs and the drugs can be less effective. At the 2006 International AIDS Conference, one AIDS advocate cited a study that showed that patients who were malnourished when they started ARV therapy were six times more likely to die than well-nourished patients, and were more likely to suffer side-effects, which often caused them to stop taking the treatments.\textsuperscript{40} These issues are particularly acute in rural communities, where AIDS incidence is rapidly increasing and access to care is usually more limited than in urban areas. In the 25 most AIDS-affected countries in Africa, more than 2/3 of the population live in rural areas and rely on agriculture for their livelihoods.\textsuperscript{41}

\textsuperscript{37} (...continued)


In April 2007, the House Foreign Affairs Committee held a hearing on the progress of PEPFAR. At the hearing, Global AIDS Coordinator Mark Dybul testified that PEPFAR funds provided “limited food assistance for specific, highly vulnerable populations,” and cited support for a pilot program that enables a local food manufacturer to distribute nutrient-dense food to orphans and vulnerable children, clinically malnourished HIV-positive people, and HIV-positive pregnant and lactating women enrolled in PMTCT programs. He also indicated that in FY2006, OGAC had contributed $2.45 million contribution to the World Food Program (WFP) and would contribute an additional $4.27 million in FY2007. Ambassador Dybul conceded that PEPFAR’s engagement in food insecurity is limited. He contended, however, that efforts are intentionally limited, because OGAC prefers to remain focused on HIV/AIDS. At the hearing, Ambassador Dybul testified that PEPFAR supports other “wrap around” programs that support HIV-affected populations, such as clean water programs, education initiatives, and gender projects.

**Support Maternal and Child Health.** According to the United Nations, maternal and neonatal mortality rates could be significantly reduced if more women, particularly in Africa, had sufficient access to skilled health personnel who are trained to detect problems early and can effectively provide or refer women to emergency obstetric care. The United Nations has found that regions with the lowest proportions of skilled health attendants at birth also have the highest number of maternal deaths. In sub-Saharan Africa, 1 of every 16 women who becomes pregnant will die from complications arising during her pregnancy or childbirth. For comparison, the rate in industrialized countries is one in 3,800. Experts have also found that child survival rates are higher in areas with ample numbers of health workers to administer immunizations, clean water, controlled mosquito populations, and sufficient access to nutritious food.

**Address Other Diseases That Kill.** Those who support integrating PEPFAR into other health programs contend that disease-specific programs like

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42 Neonatal refers to the first four weeks of life.

43 United Nations, The Millennium Development Goals Report: 2007, [http://www.un.org/millenniumgoals/pdf/mdg2007.pdf]. While the greatest shortage of health care workers in absolute terms are in southeast Asia (mostly in Bangladesh, India, and Indonesia), sub-Saharan Africa suffers from the greatest proportional shortage of health care workers in the world. WHO estimates that there are 57 countries with critical shortages of health care workers, 36 of which are in Africa and none of which are in industrialized nations. Globally, WHO estimates that an additional 4.3 million health workers are needed, and that Africa would need to increase its number of health workers by about 140% in order to meet the minimum threshold of 2.5 health care professionals per 1,000 people. WHO, 2006 World Health Report, [http://www.who.int/whr/2006/en/].


PEPFAR fail to address adequately the intersection of diseases. Research has demonstrated that since HIV weakens the immune systems of those infected, they are more susceptible to a range of illness, including malaria. HIV-positive people are more likely to be hospitalized and sickened by malaria than those not carrying the virus. According to WHO, Africa is the only region in the world where incidence of new TB infections continues to rise, due in large part to HIV/AIDS co-infection. In 2004, more than 740,000 people who contracted TB were co-infected with HIV/AIDS. Some 600,000 of those co-infected with TB and HIV/AIDS were found in sub-Saharan Africa, representing more than 80% of all co-infected cases. About 205,000 of the more than 248,000 co-infected patients who died from TB were African, representing 83% of those deaths. Most poorly equipped health systems in Africa are unable to contain TB, as they have limited case detection capacity; meager financing; too few health workers in numbers and who are sufficiently trained; inconsistent drug supplies; and little means to monitor and evaluate TB control programs.

**Strengthen Health Systems**

PEPFAR critics urge Congress to consider not only the degree to which resources are skewed towards HIV/AIDS initiatives, but also what impact such unbalanced spending has on health systems overall. Many global health experts maintain that the generous salaries and other incentives (such as housing stipends) offered by donor-supported HIV/AIDS programs draw health workers from public health facilities and threaten other life-saving interventions offered at those clinics, such as maternal and child survival health initiatives.

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47 WHO, 2006 Global Tuberculosis Control Report, [http://www.who.int/tb/publications/global_report/2006/en/]. People living with HIV/AIDS are at greater risk of becoming infected with TB because of their weakened immunity. Each disease speeds up the progress of the other, and TB considerably shortens the survival of people with HIV/AIDS. HIV/AIDS is the most potent risk factor for converting latent TB into active TB, while TB bacteria accelerate the progress of AIDS. Many people affected by HIV/AIDS in developing countries develop TB as the first manifestation of AIDS. In HIV/AIDS-positive people, TB is harder to diagnose, progresses faster, is almost always fatal if undiagnosed or left untreated, and kills up to half of all AIDS patients worldwide. People with HIV/AIDS are up to 50 times more likely to develop TB in a given year than HIV/AIDS-negative people. About 90% of people living with AIDS die within four to twelve months of contracting TB if not treated.


(continued...)
Address Health Worker Shortages. According to WHO, the global shortage of health care workers is the single most important health issue facing countries today.\(^50\) While the greatest shortages of health care workers in absolute terms are in southeast Asia (mostly in Bangladesh, India, and Indonesia), sub-Saharan Africa suffers from the greatest proportional shortage of health care workers in the world (Table 2). WHO estimates that there are 57 countries with critical shortages of health care workers; 36 are in Africa and none are in industrialized nations. Globally, WHO estimates that an additional 4.3 million health workers are needed, and that Africa would need to increase its number of health workers by about 140% in order to meet the minimum threshold. None of the countries in Table 3 have enough doctors to meet the most basic health care needs; though when nurses and midwives are included, some do meet the minimum standard. The amount and quality of health worker numbers are positively associated with immunization coverage, outreach of primary care, as well as infant, child, and maternal survival.

After the release of the World Bank’s report, *International Migration, Remittances, and the Brain Drain*, a number of articles in the press featured the issue, and highlighted some of the data provided in the work.\(^51\) It is estimated that 20,000 skilled professionals leave Africa each year.\(^52\) Erik Schouten, the HIV Coordinator for the Malawi Ministry of Health announced that over the last five years, the government had lost 53% of its health administrators, 64% of its nurses, and 85% of its physicians — mostly to foreign NGOs, largely funded by Britain, the United States, and the Gates Foundation.\(^53\) According to Mr. Schouten, the Ministry is now implementing a program, supported by PEPFAR, to attract Malawi health workers back to the country. Their tasks, however, will be to distribute antiretroviral medication. There is reportedly no support for programs to attract health workers to treat malaria, diarrhea, and other common killers, such as dysentery and respiratory infections.

Consider the Impact of Disease-Specific Approach on Health Systems. Ambassador Dybul asserted at the April 2007 House hearing that PEPFAR strengthens health systems and expands the health workforce. This assertion counters the findings that the Institute of Medicine published in its March

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\(^{49}\) (...continued)

\(^{50}\) WHO, 2006 *World Health Report: Working Together for Health*, [http://www.who.int/whr/2006/en/]. The Joint Learning Initiative (JLI), a network of global health leaders, defines a shortage as less than 2.5 health care professionals per 1,000 people; the minimum proportion it deemed necessary to provide 80% of a country’s population with basic health care (e.g., deliveries by skilled birth attendants and immunizations).

\(^{51}\) [http://www.worldbank.org]

\(^{52}\) “Brain drain deprives Africa of vital talent.” *Reuters*, April 24, 2006, [http://www.alertnet.org]


Though IOM concluded that “PEPFAR has made a promising start,” it found PEPFAR might further limit health care options for those not suffering from HIV/AIDS.

PEPFAR’s HIV/AIDS activities have sometimes negatively affected other aspects of public health systems and exacerbated resource constraints, particularly those related to national human resource settings. If Focus Countries’ national plans for expanding their health workforce are not supported, PEPFAR might worsen national shortages by shifting a disproportionate share of the workforce to HIV/AIDS activities, which might cause other health areas to be neglected.... PEPFAR’s initial emergency approach to meeting personnel needs has been to focus on HIV-specific training of existing clinicians and other health care workers. Support for expansion of the professional clinical workforce has been limited, even when such expansion is an explicit part of the country’s HIV/AIDS plan, and the effort is endorsed and supported by other donors... PEPFAR Country Teams often expressed concern that they were not allowed to fund activities unless those activities were specifically part of the HIV/AIDS effort and so could not support, for example, the training of new clinical officers, who in some countries are the mainstay of the treatment efforts.

IOM recommended that OGAC work more closely with governments to analyze the impact that PEPFAR-supported programs might have on public health systems, particularly in areas related to maternal and child health and immunizations. IOM suggested that the analysis consider whether PEPFAR’s incentives and salaries draw workers out of public systems and shift a disproportionate share of the workforce to HIV/AIDS efforts. The report also asserted that PEPFAR should increase support to the education of new health professionals.

**Support Global Health Efforts to Strengthen Health Systems.**

There is a growing consensus that health systems, including those that address HIV/AIDS, must be strengthened in order for health interventions to be effective. On August 22, 2007, British Prime Minister Gordon Brown and German Chancellor Angela Merkel announced their intention to launch an International Health Partnership (IHP) aimed at accelerating progress towards reducing child and maternal mortality, combating infectious diseases, including HIV/AIDS, TB, and malaria, and strengthening health systems. The leaders acknowledged in their statement that the fragmented method of applying global health aid has reduced the effectiveness of aid, in large part because donors compete for limited trained staff and implement the projects without considering the countries’ priorities and structures. According to DFID, there are more than 40 bilateral donors and 90 global health initiatives each maintaining their own reporting requirements and most focusing on specific health

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54 [http://www.iom.edu/CMS/3783/24770/41804.aspx]

55 Ibid.


57 Ibid.
issues, such as HIV/AIDS. DFID asserts that few global health efforts focus on activities that would strengthen struggling health systems, such as training doctors and nurses, building clinics, or supporting basic health services. Parties of the IHP commit to improving donor coordination, focusing on health systems rather than specific diseases or health issues, and supporting the health plans of recipient countries. The leaders did not indicate how much would be allocated towards this initiative or how it would be implemented, though seven countries were identified as “first wave” partner countries.

Provide Support for Health Systems Research. Some health experts would like Congress to boost support for health systems research if it were to extend PEPFAR. The Global Health Council estimates that less than 1% of research dollars are spent on health systems research, though it could identify where health systems failures exist, make health interventions more effective and affordable, and improve the accessibility of health care. In HIV/AIDS programs, health systems research could help administrators develop effective forecasting and distribution systems for drugs and other commodities and make stock-outs and shortages of contraceptives, ARVs, and other commodities less frequent. Advocates assert that health systems research could improve retention of health personnel, because they would have sufficient tools to perform their jobs. Data from health systems research would reveal which sort of care, prevention, and treatment programs are needed for the target population, and which would make the programs more effective and efficient, proponents contend.

Consider Role of International Financial Institutions. Some have argued that structural adjustment programs mandated by international financial institutions have led to a decline in public sector employment and limited investment in health worker education. In many of the countries with health worker shortages,


60 The seven countries are Burundi, Cambodia, Ethiopia, Kenya, Mozambique, Nepal, and Zambia.

61 “Health systems” encompasses the personnel, institutions, commodities, information, and the financing of health care delivery.


63 For debate on this issue, see “A Critical Analysis of the Brazilian Response to HIV/AIDS: Lessons Learned for Controlling and Mitigating the Epidemic in Developing Countries,” *American Journal of Public Health*, July 2005, Vol. 95, No. 7, (continued...
there are thousands of unemployed health workers. While Kenya has a shortage of some 10,000 nurses in the public sector, for example, thousands of unemployed nurses are leaving for Britain to find jobs, as the Kenyan government is under a recruitment freeze due to World Bank and International Monetary Fund (IMF) stipulations. Health sector reform, critics argue, has led to a decline in the quality of education and training opportunities for medical students, a perpetual shortage of health supplies and equipment (e.g., sanitation gloves and hypodermic needles), insufficient medicine and vaccine stocks, and “brain drain” of African health workers. According to WHO, on average each year, the 57 countries with severe shortages of health workers spend an average of about $33 per person on health (Table 4). The entire continent of Africa spends about 1% of the world’s expenditure on health, the WHO contends. Comparatively, each year the United States spends approximately $5,711 per capita on health.

Some analysts have expressed concern about the extent to which countries rely on the World Bank to fund their health programs. The Bank estimates that it has lent $15 billion in health, nutrition, and population funds from 1997 to 2006; an average of about $1.5 billion per year. Observers worry that the loans add to significant debt loads that many countries already face and to which they commit considerable portions of their annual gross national products. In some countries, governments are reportedly paying more on debt service than public health programs. Oxfam estimates that of the 26 countries participating in the Highly Indebted Poor Countries (HIPC) Initiative, half are still spending 15% or more of government revenues on debt payments. Some health advocates urge Congress to use its vote to encourage the IMF to maintain its debt relief commitments and accelerate its plans.

In the 110th Congress, legislation has been introduced in the House and Senate that authorizes additional funds to voluntary family planning activities, improves coordination of HIV/AIDS and other health initiatives, and strengthens supply chain logistics. The Focus on Family Health Worldwide Act (H.R. 1225) would provide

63 (...continued)


funds to expand access to voluntary family planning programs in developing countries. The U.S. Commitment to Child Survival Act (S. 1418) would provide assistance to improve the health of newborns, children, and mothers in developing countries. The African Health Capacity Investment Act (S. 805) would amend the Foreign Assistance Act of 1961 to assist countries in sub-Saharan Africa achieve internationally recognized goals in the treatment and prevention of HIV/AIDS and other major diseases, reduce maternal and child mortality, improve human health care capacity, and improve the retention of medical health professionals.

Reconsider Emphasis on Focus Countries

HIV/AIDS analysts are beginning to advocate that other countries where the virus is rapidly spreading be included in GHAI. In Eastern Europe and Central Asia, HIV has become more entrenched. According to UNAIDS, the number of people living with HIV in those regions has increased by more than 35% since 2003, when about 1.1 million people were living with the virus. At the end of 2006, about 1.7 million people were living with HIV in the two regions, 90% of whom were in Ukraine and Russia. Ukraine has the highest HIV rate in all of Europe (1.5%), with some 377,000 people living with the virus. Some 80% of the estimated 940,000 people living with HIV in Russia are believed to be between 15 and 30 years old. In February 2007, Representative Luis Fortuño introduced H.R. 848, To Amend the State Department Basic Authorities Act of 1956 to Authorize Assistance to Combat HIV/AIDS in Certain Countries of the Caribbean Region.

Some caution that before Members consider expanding the number of Focus Countries, Congress might first need to determine the extent of its commitment to supporting global HIV/AIDS efforts. A number of HIV/AIDS advocates point out that HIV/AIDS is a chronic disease that requires long-term care. In order for countries to assume ownership of HIV/AIDS initiatives and expand them, this view holds, they must first know how much support to expect from the United States and for how long that support might last.
Table 1. U.S. Global HIV/AIDS, TB, and Malaria Appropriations ($ current, millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. USAID HIV/AIDS (excluding Global Fund)</td>
<td>549.2</td>
<td>382.8</td>
<td>373.8</td>
<td>464.5</td>
<td>346.3</td>
<td>382.0</td>
<td>350.0</td>
</tr>
<tr>
<td>2. USAID Tuberculosis</td>
<td>100.4</td>
<td>87.8</td>
<td>91.5</td>
<td></td>
<td>89.9</td>
<td>313.5</td>
<td>200.0</td>
</tr>
<tr>
<td>3. USAID Malaria</td>
<td>100.9</td>
<td>98.2</td>
<td>102.0</td>
<td>248.0</td>
<td>387.5</td>
<td>352.5</td>
<td>357.5</td>
</tr>
<tr>
<td>4. USAID Global Fund Contribution</td>
<td>397.6</td>
<td>247.9</td>
<td>247.5</td>
<td>247.5</td>
<td>0.0</td>
<td>250.0</td>
<td>250.0</td>
</tr>
<tr>
<td>5. FY2004 Global Fund Carryover</td>
<td>-87.8</td>
<td>87.8</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>6. State Department GHAI</td>
<td>488.1</td>
<td>1,373.5</td>
<td>1775.1</td>
<td>2,869.0</td>
<td>4,150.0</td>
<td>4,150.0</td>
<td>4,150.0</td>
</tr>
<tr>
<td>7. GHAI Global Fund Contribution</td>
<td>0.0</td>
<td>0.0</td>
<td>198.0</td>
<td>377.5</td>
<td>0.0</td>
<td>300.0</td>
<td>340.0</td>
</tr>
<tr>
<td>8. Foreign Military Financing</td>
<td>1.5</td>
<td>1.9</td>
<td>1.9</td>
<td></td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>9. Subtotal, Foreign Operations Appropriations</td>
<td>1549.9</td>
<td>2279.9</td>
<td>2,789.8</td>
<td>4,206.5</td>
<td>4,973.7</td>
<td>5,748.0</td>
<td>5,647.5</td>
</tr>
<tr>
<td>10. CDC Global AIDS Program</td>
<td>291.8</td>
<td>123.8</td>
<td>122.7</td>
<td>120.8</td>
<td>121.2</td>
<td>122.7</td>
<td>122.7</td>
</tr>
<tr>
<td>11. NIH International Research</td>
<td>317.2</td>
<td>370.0</td>
<td>373.0</td>
<td>372.0</td>
<td>373.0</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>12. NIH Global Fund contribution</td>
<td>149.1</td>
<td>99.2</td>
<td>99.0</td>
<td>99.0</td>
<td>300.0</td>
<td>300.0</td>
<td>300.0</td>
</tr>
<tr>
<td>13. DOL AIDS in the Workplace Initiative</td>
<td>9.9</td>
<td>1.9</td>
<td>0.0</td>
<td></td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>14. Subtotal, Labor/HHS Appropriations</td>
<td>768.0</td>
<td>594.9</td>
<td>594.7</td>
<td>591.8</td>
<td>794.2</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>15. DOD HIV/AIDS prevention education</td>
<td>4.2</td>
<td>7.5</td>
<td>5.2</td>
<td></td>
<td>0.0</td>
<td>10.0</td>
<td>—</td>
</tr>
<tr>
<td>16. Section 416(b) Food Aid</td>
<td>24.8</td>
<td>24.8</td>
<td>24.8</td>
<td></td>
<td>0.0</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>17. TOTAL</td>
<td>2346.9</td>
<td>2907.1</td>
<td>3,414.5</td>
<td>4,798.3</td>
<td>5,767.9</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Sources: Prepared by CRS from appropriations legislation figures and interviews with Administration staff.

Note: Participating U.S. agencies and departments might spend additional funds on international HIV/AIDS, TB, and malaria assistance not included in this chart. For example, CDC engages in international HIV prevention research and global TB and malaria initiatives, though Congress does not earmark funds for these efforts. “—” indicates that the funds were not earmarked, but could be provided at the Administration’s discretion.

a. Includes $150.0 million provided to the Global HIV/AIDS Initiative and $50.0 million for global TB efforts provided by H.Amdt. 359 of H.R. 2764.

b. After President Bush launched the President’s Malaria Initiative (PMI) in June 2005, House and Senate appropriations committees reported out funds supporting global malaria efforts separately from those supporting HIV/AIDS and TB initiatives. Although the President announced the operations for the initiative began in FY2006, Congress did not appropriate funds to the initiative until FY2007. That fiscal year, it provided $248.0 million for international malaria programs, including $149.0 million to expand PMI.

c. In FY2004, $87.8 million of the amount provided to the Global Fund was withheld per legislative provisions limiting U.S. contributions to the Global Fund to 33% of the amount contributed by all donors. The FY2005 Consolidated Appropriations act provided these withheld funds to the Global Fund, subject to the 33% proviso.

d. Appropriations for Foreign Military Financing are used to purchase equipment for DOD HIV/AIDS programs. DOD HIV/AIDS initiatives are referred to in Line 15.

e. Lower spending levels in FY2005 and FY2006 reflect the shift of funds initially reserved for the International Mother and Child HIV Prevention Initiative to the Global HIV/AIDS Initiative account. When the initiative expired in FY2004, these changes were made permanent and were applied to subsequent fiscal years.

f. Although appropriations legislation does not specify funding for NIH’s international HIV research initiatives, sufficient funds are provided to Office of AIDS Research (OAR) to support those efforts. The figures used in Line 11 reflect those amounts reported by OAR.
Table 2.  Number and Shortage of Doctors, Nurses, and Midwives

<table>
<thead>
<tr>
<th>WHO REGION</th>
<th>Number of Countries</th>
<th>In Countries with Shortages</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>With Shortages</td>
<td>Total Workforce</td>
<td>Estimated Shortage</td>
<td>Increase Required</td>
</tr>
<tr>
<td>Africa</td>
<td>46</td>
<td>36</td>
<td>590,198</td>
<td>817,992</td>
<td>139%</td>
</tr>
<tr>
<td>Americas</td>
<td>35</td>
<td>5</td>
<td>93,603</td>
<td>37,886</td>
<td>40%</td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>11</td>
<td>6</td>
<td>2,332,054</td>
<td>1,164,001</td>
<td>50%</td>
</tr>
<tr>
<td>Europe</td>
<td>52</td>
<td>0</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>21</td>
<td>7</td>
<td>312,613</td>
<td>306,031</td>
<td>98%</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>27</td>
<td>3</td>
<td>27,260</td>
<td>32,560</td>
<td>119%</td>
</tr>
<tr>
<td>World</td>
<td>192</td>
<td>57</td>
<td>3,355,728</td>
<td>2,358,470</td>
<td>70%</td>
</tr>
</tbody>
</table>


Table 3. Distribution of Health Workers in Africa and the United States

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Population (2005)</th>
<th>Physicians</th>
<th>Nurses</th>
<th>Midwives</th>
<th>Year Data Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number</td>
<td>Number per 1,000</td>
<td>Number</td>
<td>Number per 1,000</td>
</tr>
<tr>
<td>Angola</td>
<td>15,941,000</td>
<td>881</td>
<td>0.08</td>
<td>13,135</td>
<td>1.15</td>
</tr>
<tr>
<td>Cameroon</td>
<td>16,322,000</td>
<td>3124</td>
<td>0.19</td>
<td>26,042</td>
<td>1.60</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>77,431,000</td>
<td>1936</td>
<td>0.03</td>
<td>14,893</td>
<td>0.21</td>
</tr>
<tr>
<td>Ghana</td>
<td>22,113,000</td>
<td>3240</td>
<td>0.15</td>
<td>19,707</td>
<td>0.92</td>
</tr>
<tr>
<td>Mozambique</td>
<td>19,792,000</td>
<td>514</td>
<td>0.03</td>
<td>3,954</td>
<td>0.21</td>
</tr>
<tr>
<td>Nigeria</td>
<td>131,530,000</td>
<td>34,923</td>
<td>0.28</td>
<td>210,306</td>
<td>1.70</td>
</tr>
<tr>
<td>South Africa</td>
<td>47,432,000</td>
<td>34,829</td>
<td>0.77</td>
<td>184,459</td>
<td>4.08</td>
</tr>
<tr>
<td>Uganda</td>
<td>28,816,000</td>
<td>2,209</td>
<td>0.08</td>
<td>16,221</td>
<td>0.61</td>
</tr>
<tr>
<td>Tanzania</td>
<td>38,329,000</td>
<td>822</td>
<td>0.02</td>
<td>13,292</td>
<td>0.37</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>13,010,000</td>
<td>2,086</td>
<td>0.16</td>
<td>9,357</td>
<td>0.72</td>
</tr>
<tr>
<td>AFRICA TOTAL</td>
<td>738,086,000</td>
<td>150,561</td>
<td>0.22</td>
<td>663,572</td>
<td>0.96</td>
</tr>
<tr>
<td>United States</td>
<td>295,410,000</td>
<td>730,801</td>
<td>2.56</td>
<td>2,669,603</td>
<td>9.37</td>
</tr>
</tbody>
</table>

Table 4. Spending on Health in Africa and the United States

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Population (000)</th>
<th>Per Capita Expenditure on Health</th>
<th>Per Capita Government Expenditure on Health</th>
<th>Total Expenditure on Health as % of GDP</th>
<th>General Government Expenditure as % of Total Government Expenditure</th>
<th>External Resources for Health as % of Total Expenditure on Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>15,490</td>
<td>$26.0</td>
<td>$41.0</td>
<td>2.8%</td>
<td>5.3%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Cameroon</td>
<td>16,038</td>
<td>$37.0</td>
<td>$19.0</td>
<td>4.2%</td>
<td>8.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>75,600</td>
<td>$5.0</td>
<td>$12.0</td>
<td>5.9%</td>
<td>9.6%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Ghana</td>
<td>21,664</td>
<td>$16.0</td>
<td>$31.0</td>
<td>4.5%</td>
<td>5.0%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>19,424</td>
<td>$12.0</td>
<td>$28.0</td>
<td>4.7%</td>
<td>10.9%</td>
<td>40.8%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>128,709</td>
<td>$22.0</td>
<td>$13.0</td>
<td>5.0%</td>
<td>3.2%</td>
<td>5.3%</td>
</tr>
<tr>
<td>South Africa</td>
<td>47,208</td>
<td>$295.0</td>
<td>$258.0</td>
<td>8.4%</td>
<td>10.2%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Uganda</td>
<td>27,821</td>
<td>$18.0</td>
<td>$23.0</td>
<td>7.3%</td>
<td>10.7%</td>
<td>28.5%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>37,627</td>
<td>$12.0</td>
<td>$16.0</td>
<td>4.3%</td>
<td>12.7%</td>
<td>21.9%</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>12,936</td>
<td>$40.0</td>
<td>$47.0</td>
<td>7.9%</td>
<td>9.2%</td>
<td>6.8%</td>
</tr>
<tr>
<td>United States</td>
<td>295,410</td>
<td>$5,711.0</td>
<td>$2,548.0</td>
<td>15.2%</td>
<td>18.5%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>


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68 All figures reflect data collected in 2003, except population, which was collected in 2004.