The Power of Partnerships:
The U.S. President's Emergency Plan for AIDS Relief

2008 Annual Report to Congress

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This report was prepared by the Office of the United States Global AIDS Coordinator in collaboration with the United States Departments of State (including the United States Agency for International Development), Defense, Commerce, Labor, Health and Human Services (including the Centers for Disease Control and Prevention, the Food and Drug Administration, the Health Resources and Services Administration, the National Institutes of Health, the Substance Abuse and Mental Health Services Administration, and the Office of Global Health Affairs), and the Peace Corps.

Cover photo by Daniel Cima, www.danielcima.com

Contents

Acronyms and Abbreviations

ABC	Abstain, Be faithful, correct and consistent use of Condoms
ACSM	Advocacy, Communication and Social Mobilization
AEI	African Education Initiative
ANC	Antenatal Clinic
ART	Antiretroviral Treatment
ARV	Antiretroviral Drug
BMI	Body Mass Index
CBO	Community-Based Organization
CCM	Country Coordinating Mechanism
CDC	Centers for Disease Control and Prevention (U.S.)
COP	Country Operational Plan
CY	Calendar Year
DHS	Demographic and Health Survey
EOC	Emergency Obstetrics Care
FBO	Faith-Based Organization
FDA	Food and Drug Administration (U.S.)
FFP	Food for Peace (USAID)
FY	Fiscal Year
ITN	Insecticide-Treated Net
HHS	Department of Health and Human Services (U.S.)
IDU	Injecting Drug User
MAT	Medication-Assisted Therapy
MCC	Millennium Challenge Corporation
MDR-TB	Multi-Drug-Resistant Tuberculosis
MOU	Memoranda of Understanding
NGO	Non-Governmental Organization
NIH	National Institutes of Health
NPI	New Partners Initiative
OI	Opportunistic Infection
OVC	Orphans and Vulnerable Children
PCB	Programme Coordinating Board (UNAIDS)
PCR	Polymerase Chain Reaction

PEP	Post-Exposure Prophylaxis
PEPFAR	U.S. President's Emergency Plan for AIDS Relief (Emergency Plan)
PHE	Public Health Evaluation
PLWHA	People Living with HIV/AIDS
PMI	President's Malaria Initiative
PMTCT	Prevention of mother-to-child HIV transmission
PPP	Public-Private Partnership
PRH	Office of Population and Reproductive Health (USAID)
SCMS	Supply Chain Management System
STI	Sexually Transmitted Infection
TASO	The AIDS Support Organization
TB	Tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USDA	Department of Agriculture (U.S.)
USG	United States Government
WFP	World Food Program
WHO	World Health Organization
WJEI	Women's Justice and Empowerment Initiative
XDR-TB	Extensively Drug-Resistant Tuberculosis

White House photo by Eric Draper

President George W. Bush holds Baron Mosima Loyiso Tantoh in the Rose Garden of the White House Wednesday, May 30, 2007, after announcing his plan to reauthorize PEPFAR. With them are the boy's mother, Kunene Tantoh, representing Mothers2Mothers (m2m), which provides treatment and support services for HIV-positive mothers in South Africa, and Bishop Paules Yowakim of the Coptic Orthodox Church in Africa.

"The money that you have spent is being spent wisely and saving lives. Some call this a remarkable success. I call it a good start."

President George W. Bush
World AIDS Day Observance
November 30, 2007

I. Overview: The Role of America's Partnerships in the Worldwide Fight Against HIV/AIDS

Partnerships Create Hope

Just five years ago, many wondered whether prevention, treatment and care could ever successfully be provided in resource-limited settings where HIV was a death sentence. Only 50,000 people living with HIV in all of sub-Saharan Africa were receiving antiretroviral treatment.

President George W. Bush and a bipartisan, bicameral Congress reflected the compassion and generosity of the American people as together they led our nation to lead the world in restoring hope. They recognized that HIV/AIDS was and is a global health emergency requiring emergency action.

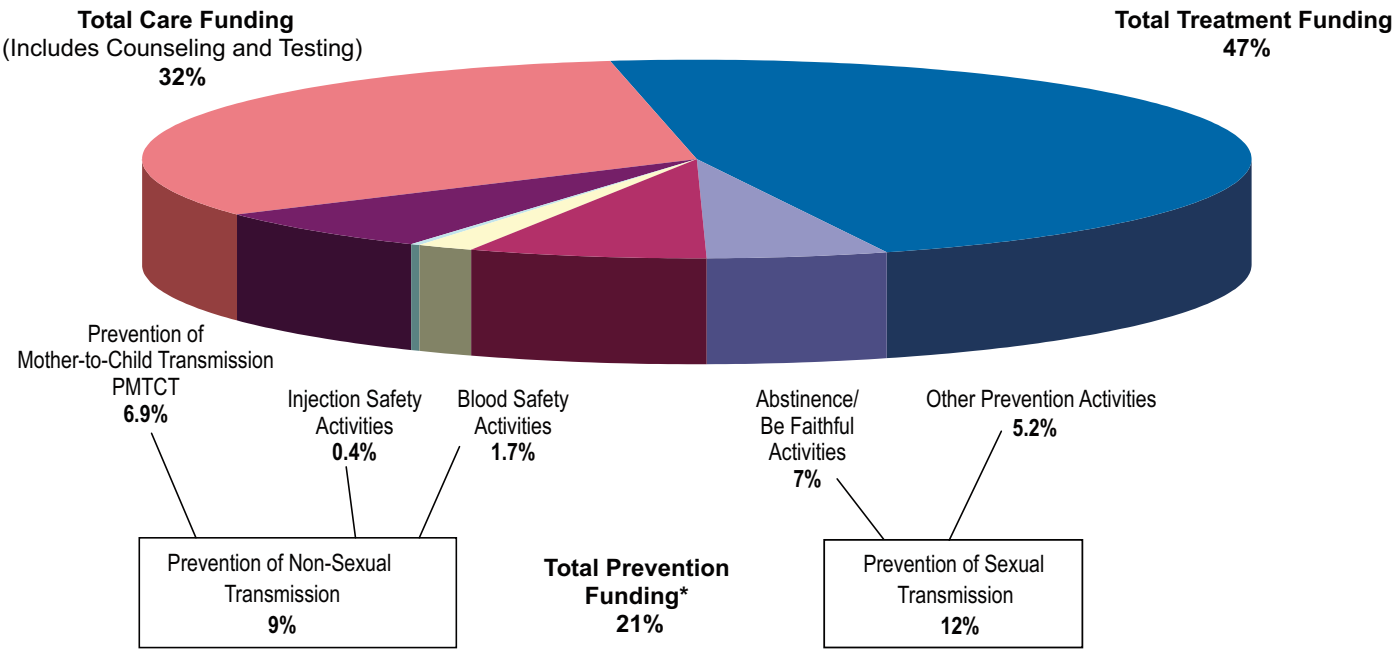
Their creation, the U.S. President's Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR), holds a unique place in the history of public health for its ***size and scope***:

In size, with an original commitment of $15 billion across 5 years, and a final funding level of $18.8 billion, it is the largest international health initiative in history dedicated to a single disease. PEPFAR also went beyond a commitment to allocating resources to a commitment to achieving results, with ambitious goals to support prevention of 7 million new infections, treatment of 2 million and care for 10 million, including orphans and vulnerable children;

In scope, it is the first large-scale effort to tackle a chronic disease in the developing world. And it moves beyond isolated efforts and pendulum swings that had led programs to focus on prevention or treatment or care for HIV/AIDS to sound public health — integrated prevention, treatment ***and*** care.

The success of the Emergency Plan is firmly rooted in partnerships between the American people and the people of the countries in which we are privileged to serve — governments, non-governmental organizations including faith- and community-based organizations,

Figure 1: All Focus Countries: The U.S. President's Emergency Plan for AIDS Relief
FY2007 Planned Funding for Prevention, Treatment and Care



* Excludes counseling and testing

Note: Numbers may be adjusted as attribution criteria and reporting systems are refined

Abstinence/Be Faithful activities represent 33% of funding for prevention activities.

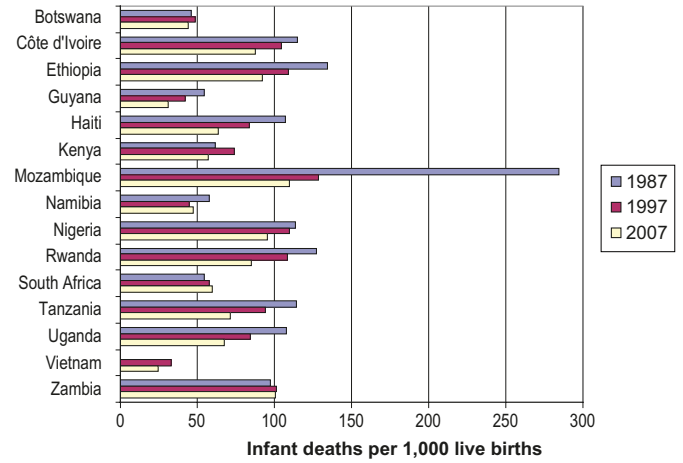
and the private sector. Together, we are building systems and empowering individuals, communities and nations to tackle HIV/AIDS. And in just four years, it is working.

We have acted quickly. We have ***obligated 94 percent of the funds*** appropriated to PEPFAR so far, and ***expended or outlayed 59 percent*** of them. Figure 1 depicts the allocation of program resources in the 15 PEPFAR focus countries in Fiscal Year (FY) 2007. But success in not measured in dollars spent: it is measured in services provided and lives saved.

PEPFAR is on its way to achieve its aggressive goals. On many fronts, the progress to date has been remarkable, and, as the Institute of Medicine noted, the Emergency Plan has already achieved what many thought was impossible. In FY2007, PEPFAR-supported programs reached 57.6 million people with support for prevention of sexual transmission using the ABC approach (Abstain, Be faithful, correct and consistent use of Condoms). The U.S. Government (USG) has supplied nearly 1.9 billion condoms worldwide from 2004 through 2007 — as Dr. Peter Piot of UNAIDS has said, more than all other developed countries combined. From FY2004 through FY2007, PEPFAR has supported prevention of mother-to-child transmission (PMTCT) for women during more than 10 million pregnancies. For PMTCT clients who have been found to be HIV-positive, antiretroviral prophylaxis has been provided in over 827,000 pregnancies, preventing an estimated 157,000 infant HIV infections. With Emergency Plan support, focus countries have scaled up their safe blood programs, and 11 of them can now meet more than half of their annual demand for safe blood — up from just four when PEPFAR started.

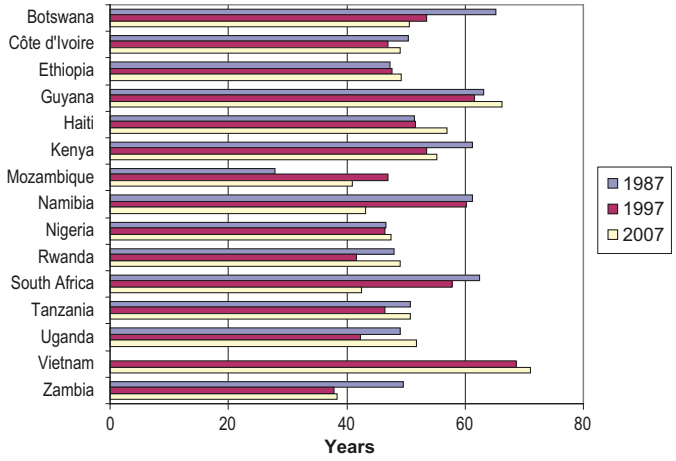
PEPFAR has supported HIV counseling and testing for over 33 million people to date, and supported care for more than 6.6 million people infected or affected by HIV/AIDS, including 2.7 million orphans and vulnerable children. Through September 2007, PEPFAR partnerships have supported antiretroviral treatment (ART) for approximately 1.45 million men, women, and children — approximately 1.36 million of whom live in 15 PEPFAR focus countries, and over 1.33 million of whom are in sub-Saharan Africa. Illustrating the broader effect of treatment, PEPFAR treatment support is estimated to save nearly 3.2 million adult years of life through September 2009, and many more beyond that time frame. These additional years of life are ones in which people can play their vital roles as parents, teachers, or caregivers.

Figure 2: Infant Mortality Rates for PEPFAR Focus Countries: 1987-2007



U.S. Census Bureau, 2007

Figure 3: Life Expectancy at Birth for PEPFAR Focus Countries: 1987-2007



U.S. Census Bureau, 2007

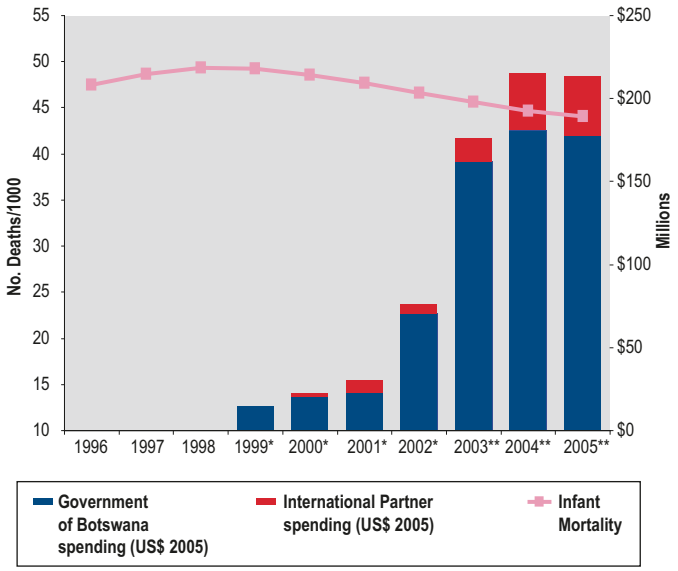
Trends in Health

The developing world faces a wide range of health and development issues, and some have questioned whether HIV/AIDS merits the intensive focus that the Emergency Plan has brought to it.

In the 15 PEPFAR focus countries, home to approximately half of the world's HIV-infected persons, valuable perspective is gained by examining changes in infant mortality over the past two decades. As seen in Figure 2, infant mortality has declined in 12 of the 15 focus countries since 1987; in most of them, the decline has been very substantial. This is a major achievement for these nations and one that should be expected to reflect an overall improvement in health.

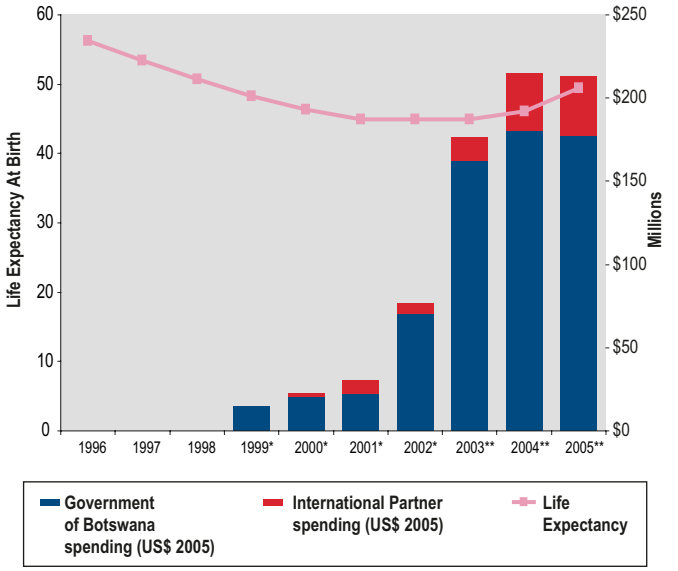
Yet Figure 3 shows that strikingly few of these countries have experienced significant improvements in life expectancy. Tragically, seven of the 15 have actually seen life expectancy drop, and those declines have been especially dramatic in Botswana, Mozambique, Namibia, and South

Figure 4: Infant Mortality and HIV Spending in Botswana



Infant mortality data provided by U.S. Census Bureau. Funding data is estimated based on data provided by the Government of Botswana and CDC; may not include all funding sources.

Figure 5: Life Expectancy and Spending in Botswana



Life expectancy data provided by U.S. Census Bureau. Funding data is estimated based on data provided by the Government of Botswana and CDC; may not include all funding sources.

Africa — the four focus countries in southern Africa, where HIV prevalence is the highest in the world. Even if nations are having success in improving some health indicators for their people — and many are — the impact of HIV/AIDS is offsetting, or far more than offsetting, those improvements.

In many regions, 50 percent or more of hospitalizations are due to HIV/AIDS. In the hardest-hit countries, 50 years of public health gains have been wiped out. In Botswana, HIV/AIDS drove an increase in infant mortality despite significant increases in health resources committed by the Government (as shown in Figure 4). Similarly, life expectancy dropped by 30 percent during the 1990s and early 2000s (as shown in Figure 5).

In recent years, however, the Government of Botswana reports that those trends have turned around at the same time as it led a major assault on HIV/AIDS — primarily with its own resources, but also as HIV/AIDS program spending from international partners rose.

It is clear that an effective response to the unique challenge of HIV/AIDS is a necessity for real progress on health in the developing world. The data are increasingly compelling that as countries scale up their HIV/AIDS prevention, treatment and care programs, they are making progress toward reversing the course of the epidemic. Their efforts are paying off as life expectancy once again begins to rise and infant mortality continues to fall. The good news is that aggressively confronting HIV/AIDS can have a broad impact.

Trends in HIV/AIDS

UNAIDS recently revised its estimate of the number of people living with HIV/AIDS worldwide downward to 33.2 million from a previous estimate of 39.5 million. For the most part, the revision reflects the strengthening of surveillance and monitoring and evaluation capacity over the past few years, as countries have implemented population-based surveys (in many cases with PEPFAR support) to supplement the antenatal clinic surveillance they have used to estimate prevalence in the past. Even with the new prevalence estimates, however, the number of people living with HIV/AIDS worldwide in 2007 was roughly 4.2 million more than in 2001. Prevention remains the central challenge.

Prevention

Sexual transmission

Of the countless developments taking place in the global fight against the pandemic, perhaps the most important in recent years is the growing number of nations in which there is clear evidence of declining HIV prevalence as a result of changes in sexual behavior. According to UNAIDS' *2007 AIDS Epidemic Update*, "In most of sub-Saharan Africa, national HIV prevalence has either stabilized or is showing signs of a decline. Côte d'Ivoire, Kenya and Zimbabwe have all seen declines in national prevalence, continuing earlier trends." The report continues: "Global HIV incidence likely peaked in the late 1990s at over 3 million new infections per year, and was estimated to be 2.5 million new infections in 2007... This reduction in HIV incidence likely reflects natural trends in the epidemic as well as the result of prevention programmes resulting in behavioural change in different contexts." In Kenya, for example, prevalence declined from roughly 14 percent in the mid-1990s to 5 percent in 2006, corresponding to significant reductions in sexual risk-taking behavior — increased age at sexual debut, decreased numbers of sexual partners, and increased condom use in higher-risk sex (as shown in Figure 6).

In Zambia, the PEPFAR-supported "Real Man, Real Woman" campaign targets youth, promoting positive gender roles and rejects practices such as coerced sex, transgenerational sex, and exchanging sex for gifts and favors. The campaign attempts to change the way in which youth define what it means to be a "real" man or woman by urging them to practice responsibility, self-respect and gender sensitivity. Community volunteers, educators and youth groups guide young people on how to deal with pressures to engage in sex and help parents talk about sensitive issues with their children.

Figure 6: Kenya: Changes in "ABC" Indicators Between 1998 and 2003 Demographic and Health Surveys (DHS)

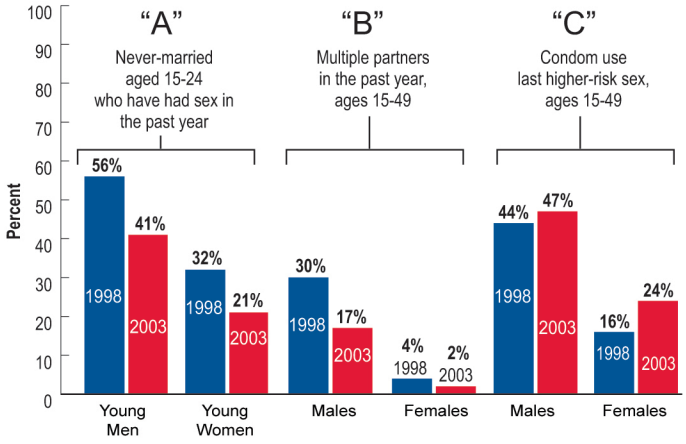
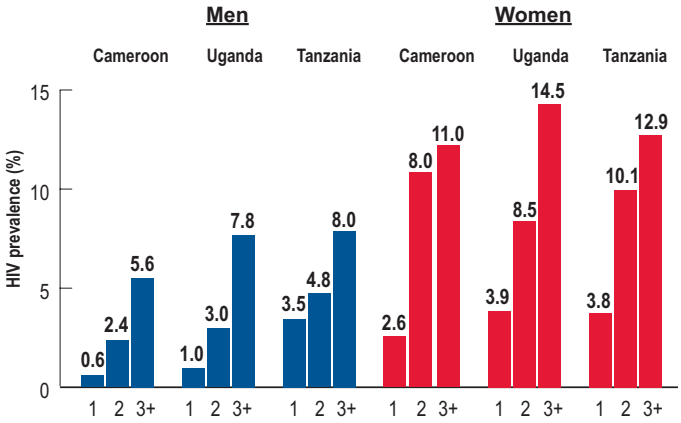


Figure 7: HIV Prevalence by Number of Lifetime Sex Partners Sub-Saharan Africa



Another key trend in HIV/AIDS is the growing importance of HIV-discordant regular partnerships, in which one partner is living with HIV and the other is not, as a means of transmission. According to Uganda's 2005 National HIV Survey, approximately 50 percent of new infections there occurred within discordant regular partnerships. Many HIV-discordant couples do not know their HIV status. Several studies in Africa have shown that provision of voluntary counseling and testing for couples reduces HIV transmission by 56 percent and that consistent condom use in discordant couples is associated with an 80 percent reduction in HIV transmission. However, the rate of condom usage in regular partnerships is very low — in Uganda, it rose from 0 percent in the early 1990s to 1.9 percent in the late 1990s. Despite massive provision of condoms by the USG and others, increasing usage has proven difficult, even when couples know their HIV status. A promising new prevention approach is safe male circumcision, which lowers transmission rates where the man is the HIV-negative partner. Discordant couples represent an extremely important opportunity for prevention, so further innovation is needed to address this vulnerable population. This could include the use of antiretroviral treatment — as pre-exposure prophylaxis for the HIV-negative partner, or to reduce the level of HIV, and therefore the transmission rate, in the HIV-positive partner.

For all populations, multiple concurrent partnerships remain a significant challenge. While, on average, Africans have numbers of life-time partners comparable to Americans or Europeans, in certain areas multiple concurrent partnerships are common, and this practice promotes more rapid spread of HIV. The challenges of multiple concurrent partnerships parallel those of discordant couples. Data show that decreases in partnerships could have a significant impact on HIV transmission, and this issue will continue to be a key focus for PEPFAR in the coming year.

As the epidemic changes, the global community must constantly adapt and improve its programs to keep up. One of the central themes of PEPFAR programming over the past year has been "Knowing Your Epidemic" — understanding where, why and in whom infections are occurring, both in terms of geography and in terms of vulnerable populations, and tailoring programs accordingly. An HIV prevention program in Vietnam, where the epidemic is largely concentrated among injecting drug users and people in prostitution and their clients, must have a very different approach from a prevention program in Uganda, where most infections occur through sexual partnerships in the general population (and, increasingly, within discordant couples).

But regardless of the key factors in transmission, in the absence of an effective vaccine and microbicide — and in 2007 the global community experienced setbacks in identifying either — behavior change will remain the keystone of success. Even with the new advances in prevention related to male circumcision, behavior change — and maintenance of behavior change — is essential. Armed with data from UNAIDS and others showing encouraging trends, PEPFAR is promoting lifeskills and HIV preven-

tion programs beginning with the very young, because it is easier to influence the behavior of a 25 year old if educational programs begin at age 10. Life skills and HIV prevention programs teach youth to respect themselves, to respect others — including the opposite sex — and to practice personal responsibility. Such programs are being scaled up nationally, both in- and out-of-school, in several focus countries. In many countries, adults continue to face elevated risk of HIV infection, and PEPFAR is supporting the expansion of programs for them as well. PEPFAR prevention programs target different age groups with interventions tailored to the risks they face, recognizing that effective prevention is a life-long matter.

Prevention of mother-to-child transmission

Mother-to-child transmission remains the leading source of child HIV infections, and prevention of mother-to-child transmission (PMTCT) remains an essential challenge. According to UNAIDS, the global number of children who became infected with HIV has dropped slightly, from 460,000 in 2001 to 420,000 in 2007.

PEPFAR supports host nations' efforts to provide PMTCT programs, including HIV counseling and testing, for all women who attend antenatal clinics (ANCs), and sharply increased its PMTCT resources in FY2007. PEPFAR has supported PMTCT interventions for women during approximately 10 million pregnancies to date, providing antiretroviral prophylaxis for over 827,000 women who were determined to be HIV-positive, preventing an estimated 157,000 infections of newborns.

Despite significant resources from PEPFAR, levels of PMTCT coverage continue to vary dramatically from country to country. While all PEPFAR focus countries have scaled up services significantly in recent years, the results in some countries remain disappointing. A central obstacle in many nations is failure to fully implement policies allowing "opt-out," provider-initiated counseling and testing, under which all women who visit ANCs routinely receive voluntary HIV testing unless they decline. Nations that have adopted and implemented opt-out testing have dramatically increased the rate of uptake among pregnant women, from low levels to around 90 percent at many sites. Under the highly successful national program in Botswana, where approximately 13,000 HIV-infected women give birth annually, the country has increased the proportion of pregnant women being tested for HIV from 49 percent in 2002 to 92 percent in 2007. The percentage of infants born infected has declined to approximately four percent, compared to about 35 percent without PMTCT interventions. This type of change can be seen in other countries as well. It reflects a combination of political leadership, and implementation of opt-out and rapid testing. Without these changes of policy — and effective implementation of the policies — success similar to that achieved by Botswana is unlikely to occur.

Treatment

AIDS is still among the most deadly infectious diseases in the world. In sub-Saharan Africa, the epicenter of the pandemic, it is the leading cause of death. More than 22 million of those infected — more than two-thirds of all people living with HIV/AIDS — live in the region, and approximately 1.6 million people die of AIDS there each year — more than three-quarters of the global total.

However, there is new reason for hope. On a global basis, UNAIDS also estimates that the number of people dying of AIDS-related causes has declined over the past two years, from 2.2 million in 2005 to 2.1 million in 2007. This is the first time such a decline has occurred, and

Table 1: National Treatment Coverage Supported by All Sources

Country	% Coverage 2003[1]	% Coverage 2007[2]	% Change in Coverage (2003-2007)
Botswana	15.2%	90%	494%
Côte d'Ivoire	4.1%	30%	634%
Ethiopia	1.0%	45%	4514%
Guyana	12.6%	79%	526%
Haiti	2.9%	31%	966%
Kenya	1.5%	58%	3663%
Mozambique	1.0%	21%	2140%
Namibia	1.3%	75%	5713%
Nigeria	2.3%	22%	858%
Rwanda	4.4%	92%	1960%
South Africa	0.2%	31%	15560%
Tanzania	0.1%	34%	26616%
Uganda	6.5%	45%	593%
Vietnam	14.0%	25%	75%
Zambia	0.6%	51%	7965%
Total	**1.9%**	**37%**	**1881%**

Note:
National treatment coverage includes individuals on treatment as reported by WHO and other multilateral agencies and includes all sources of support.

Footnotes:
[1] "Coverage of selected services for HIV/AIDS prevention, care and support in low end and middle-income countries in 2003," USAID, UNAIDS, WHO, CDC and the POLICY Project, June 2004.
[2] Coverage rates were calculated by dividing PEPFAR program (upstream and downstream) results by the estimated number of people eligible for treatment in 2007. Estimated number of people eligible for treatment was determined using Spectrum 2.42 and country supplied data used by UNAIDS in the *Report on the Global AIDS Epidemic* (2006).

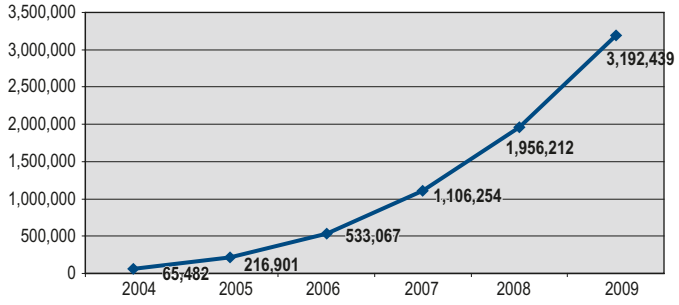
the change is due largely to the increased availability of antiretroviral treatment — though improved prevention and care programs have contributed as well. Although the World Health Organization (WHO) has not yet released updated numbers on global treatment coverage, PEPFAR and the Global Fund to Fight AIDS, Tuberculosis and Malaria are supporting treatment for nearly 2 million persons as of September 2007.

Because of the commitment of resources and talented people in-country, many of the focus countries have achieved massive improvements in their national levels of ART coverage in recent years as shown in Table 1, and the Emergency Plan has supported their leadership.

Data on morbidity and mortality naturally lag behind expansions of treatment. However, in Botswana, where President Festus Mogae was an early leader, with both resources and national treatment scale-up beginning in 1999, a treatment-driven decline in adult mortality has already begun to occur.

Prolonged lives through treatment do not affect only those on treatment, but also those for whom they are parents, teachers, or caregivers. The ultimate measurement of treatment is not simply the number people receiving treatment, but the daily impact on individual lives — and therefore on families, communities and nations. Perhaps the best way to assess the impact of treatment is to estimate its effect on peoples' life spans. In 2007, PEPFAR, working with the UNAIDS Reference Group on Modeling and Projections, improved its methodology for calculating the impact over time of antiretroviral treatment programs. Unlike treatment for malaria or tuberculosis

Figure 8: Estimated Cumulative Years of Life Gained through FY2009 Due to PEPFAR Support for ART in Focus Countries



Note: Estimates were obtained using preliminary country Spectrum files from UNAIDS and Spectrum version 3.14, incorporating modeling changes recommended by the UNAIDS/WHO Reference Group on Estimates, Modeling and Projections in 2006 and by new data identified in the 2007 UNAIDS regional workshops on HIV estimates. Country preliminary estimates are under review and subject to revision, to be published in July 2008 by UNAIDS. Total person-years-of life added are based on the actual number of persons on ART as of September 30, 2007 and projected numbers of people to be on treatment for FY2008 and FY2009.

Figure 9: People Receiving Treatment with Support from the President's Emergency Plan for AIDS Relief Globally through FY2007

EMERGENCY PLAN COUNTRY RESULTS = 1,445,500 (1,358,500 in PEPFAR Focus Countries)

Includes
Those receiving support from U.S, bilateral programs — 100% funded by the President's Emergency Plan

PEPFAR and GLOBAL FUND Joint Support = 909,000

and
Those receiving support from the Global Fund to Fight AIDS, Tuberculosis and Malaria approximately 33% funded by the President's Emergency Plan

GLOBAL FUND GLOBAL RESULTS = 1,448,000 (864,000 in PEPFAR Focus Countries)

COMBINED TOTAL = 1,992,000

Notes: Emergency Plan numbers are rounded off to the nearest hundred. Treatment numbers include upstream and downstream results for the Emergency Plan bilateral programs. Individuals outside of the focus countries receiving treatment as a result of the USG's contribution to systems strengthening beyond those counted as receiving direct USG support are not included in this total. Treatment results for the Global Fund programs are provided by the Global Fund to Fight AIDS, Tuberculosis and Malaria, and are rounded off to the nearest thousand. Overlap estimate based on review of country data with Global Fund and the WHO.

(TB), treatment for HIV/AIDS cannot cure people, but only extend their lives. To reflect this, PEPFAR measures the impact of its treatment programs through "life-years saved" rather than "lives saved" — a small but important distinction. As Figure 8 shows, PEPFAR support for treatment in the focus countries is estimated to save nearly 3.2 million adult years of life through the end of September 2009 (as many as were saved by treatment in the United States from 1989 through 2006) — and undoubtedly will have much greater effects beyond that time frame. Those are additional years in which people can play their vital roles for their loved ones.

Along with its bilateral support for treatment programs, the Emergency Plan is also the largest contributor to the Global Fund, providing approximately 30 percent of all resources to date. The Global Fund has reported support for treatment for approximately 1.45 million people globally as of the end of 2007, of whom 864,000 were in PEPFAR focus countries.

Care

As the pendulum of debate on HIV/AIDS interventions swings between prevention and treatment, it is often care that is lost. Yet care is a critical element of a truly comprehensive approach. There are three key dimensions to care: care for orphans and vulnerable children (OVCs); care (other than antiretroviral treatment) for people living with HIV/AIDS; and HIV counseling and testing. All are essential to a comprehensive global response to HIV/AIDS. Despite significant progress by PEPFAR in all three areas, much more needs to be done.

Orphans and vulnerable children (OVC)

Even the best OVC program cannot replace parents. Because HIV/AIDS predominantly affects people of childbearing age, its impact on children, extended families, and communities is devastating. If a child's parent dies of AIDS, the child is three times more likely to die, even if he or she is HIV-negative. Besides increased risk of death, children whose parents have died of AIDS face stigmatization and rejection, and often suffer from emotional distress, malnutrition, inadequate health care, poor or no access to education, and a lack of love and care. They may also be at high risk for labor exploitation, sex trafficking, homelessness, and exposure to HIV. Extended families and communities in highly affected areas are often hard-pressed to care for all the children.

In Mozambique, a PEPFAR-supported program to support orphans and vulnerable children emphasizes interventions related to early childhood development. A rapid assessment of twelve community based child care centers in the Gaza Province identified inadequate recreation facilities for the 1,256 children at the centers. In order to address this gap, a partnership was established with the Mozambique School of Arts for construction of playgrounds at the centers. This activity also involved building capacity of community members in the use of local materials to create recreation equipment.

In communities hard-hit by both HIV/AIDS and poverty, there are many children who are not orphans, but who have been made more vulnerable by HIV/AIDS. For example, children whose parents are chronically ill with HIV/AIDS might not receive the care and support they require, and may instead become caregivers for parents and younger siblings, dropping out of school and assuming the responsibilities of the head of the household. Research indicates that these children, caring for sick and dying parents, are among the most vulnerable.

The best way to support children is to keep parents alive and healthy, through effective HIV prevention and treatment. In order to capture the role that treatment programs can play in protecting children from orphanhood, PEPFAR has developed a methodology to estimate the number of orphans averted through treatment programs. Through FY2007, the number is nearly 1.7 million, and many more have been saved from orphanhood due to prevention and care programs.

Through FY2007, PEPFAR supported care for approximately 2.7 million OVCs — a major commitment, particularly relative to the 630,000 supported in FY2004. Yet the number reached still falls far short of the need.

Although there is uncertainty around OVC estimates in light of UNAIDS' recent HIV prevalence reestimates, by 2010, the number of children orphaned by AIDS globally may exceed 20 million, and the number of other children made vulnerable because of HIV/AIDS may be more than double that number.

In addition to scaling up HIV/AIDS programs for OVCs on a larger scale than has been attempted previously, PEPFAR has also sought to strengthen the quality of OVC programs. OVC programs must now report on how many of seven key services they provide and strive to ensure that these services are making a difference in the lives of the children they serve. Among the areas of support for OVCs in PEPFAR programs are support for food and nutrition and for education. PEPFAR's investments in these areas, and its linkages with other USG programs addressing these needs, are discussed below.

Care for people living with HIV/AIDS (PLWHA)

An often-overlooked reality of HIV/AIDS care is that many people infected with HIV at a given time do not meet the clinical criteria for antiretroviral treatment. Therefore it is critical to establish programs and services for HIV-positive people that address the needs of those not yet on treatment. A key aspect of caring for PLWHA who are not yet on treatment is ensuring that they receive treatment soon after they are eligible. Studies and program reports show that patients who start treatment late, often when their immune systems are already severely compromised and they have serious opportunistic illnesses, do not fare as well as those who start on treatment soon after becoming eligible. PEPFAR programs seek to enroll PLWHA in care programs that include regular evaluations for treatment eligibility — programs that do so experience fewer early illnesses and deaths than other programs.

Care efforts support HIV-positive people — many of whom are in HIV-discordant partnerships — through "prevention with positives" programs, providing them with information and condoms so they can take appropriate steps to avoid infecting others. Care programs also provide a platform for a range of services to allow PLWHA to stay healthy and delay the need for treatment. These care services can include pain and symptom management; treatment and prevention of opportunistic infections (OIs) and other diseases; social, spiritual and emotional support; and compassionate end-of-life care. With PEPFAR support, some countries are standardizing their approach and working to ensure that all HIV-positive people who receive care, even if they are not eligible for treatment, receive a "basic preventive care package" that provides an array of lifesaving interventions.

PEPFAR has scaled up its support for national efforts to provide high-quality care for OIs related to HIV/AIDS. HIV/TB co-infection is a leading cause of death among HIV-positive people in the developing world, and multi-drug-resistant (MDR) and extensively drug-resistant (XDR) tuberculosis are growing threats. PEPFAR increased its funding for HIV/TB five-fold, from $26 million to $131 million, from FY2005 to FY2007.

Counseling and testing

Knowing one's status provides a gateway for critical prevention, treatment, and care. Since inception, PEPFAR programs supported testing for over 33 million people, including over 10 million pregnant women at antenatal clinics, a key population to target. Impressive as these results are, millions more must be tested in order for PEPFAR to meet its ambitious prevention, treatment, and care goals.

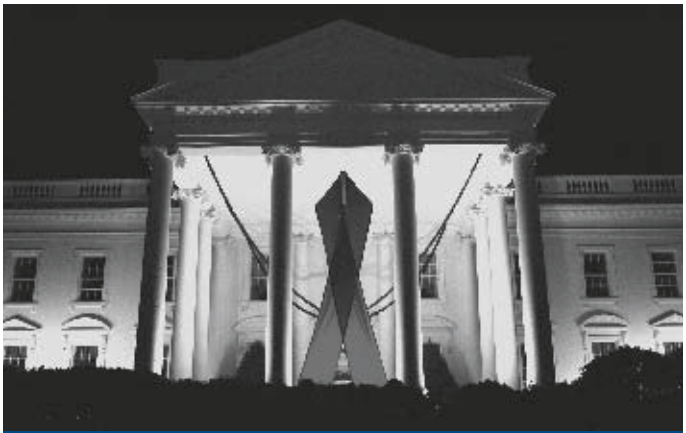
The *Zebras 4 Life — Test 4 Life* campaign uses the popularity of athletes from the Botswana national soccer team to encourage people to learn their HIV status. Players travel to villages across the country to encourage men and out-of-school youth to receive voluntary HIV counseling and testing. When visiting rural villages, players are accompanied by mobile counseling and testing caravans. People who test during the campaign are given blue wristbands to show their personal commitment to living a long, healthy and productive life. Since the beginning of 2007, the PEPFAR-supported campaign has mobilized more than 4,000 people in 33 villages to get tested.

Success depends on widespread testing in medical settings, including TB and sexually transmitted infection (STI) clinics, ANCs, and hospitals. People in these settings are far more likely than the general population to be HIV-positive and in need of care and treatment. PEPFAR has worked with host nations to build support for the "opt-out" model of provider-initiated testing for patients in these settings. Another key policy is use of rapid HIV tests, which improve the likelihood that those who are tested will actually receive their results. Even as PEPFAR scales up confidential counseling and testing programs, addressing these policy and implementation constraints around testing is essential for success in prevention, treatment, and care.

Social Impact of HIV/AIDS

HIV/AIDS is more than an issue of health alone. It is among the most serious economic development and security threats of our time — one reason why the United States and PEPFAR host nations have made addressing it such a priority. As President Bush said at the World AIDS Day 2007 observance, "When we support nations seeking to replace chaos and despair with progress and hope, we reduce the appeal of extremism. When we replace despair with progress, when we replace hopelessness with hope, we add to the security of our country. As well, we make friends who will always remember that America stood with them in their hour of need."

Unlike many diseases, HIV/AIDS predominantly hits people who are 15 to 49 years, the most productive and reproductive years. In the hardest-hit countries, the epidemic is taking a generation of parents, teachers, health care workers, bread-winners and peacekeepers and is rending the social fabric of communities, nations and even a continent. This is a dangerous mix that promotes hopelessness and despair — and can breed extremism.



White House photo by Chris Greenberg

A red ribbon adorns the North Portico of the White House in recognition of World AIDS Day 2007 and the nation's commitment to fighting and preventing HIV/AIDS in America and the world.

Economic impact

Businesses in the developing world are faced with absenteeism, declines in skilled workers, high rates of turnover, expenses to train new workers, reduced revenue, and increased health care costs due to HIV/AIDS. The International Labor Organization has estimated that 41 percent of worldwide labor force participants (and 43 percent in sub-Saharan Africa) living with HIV are women. Forty-three countries heavily affected by HIV/AIDS lost a yearly average of 0.5 percent in their rate of economic growth between 1992 and 2004 due to the pandemic, and as a result forfeited 0.3 percent per year in employment growth. Among them, 31 countries in sub-Saharan Africa lost 0.7 percentage points of their average annual rate of economic growth and forfeited 0.5 percentage points in employment growth. The pandemic is not only affecting current growth; it also threatens the future economic prosperity of countries that are particularly hard-hit by the disease because of its devastating impact on teachers. A study in the late 1990s, for example, reported that in Zambia the equivalent of two-thirds of each year's newly trained teachers were being lost to HIV/AIDS.

Impact on peacekeepers

In addition, many nations suffer from high HIV prevalence among defense forces, losing their soldiers — and their leadership — to AIDS. Militaries, fundamental to peacekeeping and protecting civilian populations, are often unable to keep their own personnel alive and healthy. A study done by a Commandant of the Nigerian Army Medical Command in the late 1990s showed that HIV infection rates among peacekeeping troops deployed in Sierra Leone increased from seven percent for those deployed for one year to 10 percent for those deployed for two years and more than 15 percent for those deployed for more than three years. Deaths due to HIV/AIDS are estimated to have reduced the size of Malawi's armed forces by 40 percent. In South Africa, HIV/AIDS accounts for 70 percent of military deaths, and prevalence in the armed forces is estimated at between 17 and 23 percent, with some battalions tested in 2004 showing prevalence rates near 80 percent. In Uganda, more soldiers are believed

to have died from AIDS than from the nation's 20-year insurgency.

These realities are discouraging. Yet against this background, PEPFAR reflects the recognition of hard-hit nations and the United States that, in this era, confronting HIV/AIDS is fundamental to development and security.

PEPFAR: One Element of a New Era in Development

PEPFAR is the largest international public health initiative aimed at a single disease that any nation has ever undertaken. It represents a bold change from traditional thinking about HIV/AIDS and development, and is part of a new era of partnerships for international development.

Under the leadership of President Bush, and with the bipartisan support of Congress, this new era — with a particular focus on Africa — represents both a massive commitment of treasure and a change of heart. The United States is changing the paradigm for development, rejecting the flawed "donor-recipient" mentality and replacing it with an ethic of partnership.

Partnership is rooted in hope for and faith in people. Partnership means honest relationships between equals based on mutual respect, understanding and trust, with obligations and responsibilities for each partner. Partnership is the foundation of PEPFAR's success and of what Secretary of State Condoleezza Rice has called "transformational diplomacy."

State Department photo by Michael Gross

Secretary of State Condoleezza Rice greets His Excellency Umaru Musa Yar'adua President of the Federal Republic of Nigeria at the start of their bilateral meeting in New York City on September 27, 2007 during the 62nd United Nations General Assembly.

All told, the President has presided over a doubling of support for development, a quadrupling of resources for Africa, the creation of innovative programs like the Millennium Challenge Corporation (MCC), the President's Malaria Initiative (PMI), the Women's Justice and Empowerment Initiative (WJEI) and the African Education Initiative (AEI), as well as more than doubling trade with Africa and supporting 100 percent debt relief to the poorest countries.

The Emergency Plan is central to U.S. efforts to "connect the dots" of international development. PEPFAR programs are increasingly linked to other important programs — including those of other USG agencies and other international partners — that meet the needs of people infected or affected by HIV/AIDS in such areas as nutrition, education and gender.

But while PEPFAR is an important part of connecting the development dots, it does not — and could not — replace USAID, MCC, PMI, or any of its sister initiatives or agencies. Nearly every person affected by HIV/AIDS can benefit from additional food support, greater access to education, economic opportunities and clean water, but so could the broader communities in which they live. In order to respond effectively to the many interrelated causes and effects of the epidemic, PEPFAR must integrate with other development programs as part of a larger whole.

Linking PEPFAR with food and nutrition

In FY2007, PEPFAR advanced the integration of food and nutrition services, as well as longer-term food security interventions, into its programs. A conceptual framework to guide integration of PEPFAR programs with USAID's Food for Peace (FFP) program was developed and disseminated. PEPFAR significantly changed its policy guidance regarding parameters for food support to HIV-positive adult patients, and adapted its data system to enable reporting on beneficiaries as well as include an accounting of dollars planned for actual food purchases with PEPFAR resources.

PEPFAR has convened an interagency, multisectoral technical working group on food and nutrition to guide incorporation of key components into HIV programs. In addition to the primary PEPFAR implementing agencies, the group includes other agencies and offices that work directly with issues of food security and nutri-

tion, including USAID's FFP program and Bureau for Economic Growth, Agriculture, and Trade, as well as the U.S. Department of Agriculture (USDA). The group's first task was to develop a food and nutrition strategy through a consultative process, described in the report to Congress entitled "Food and Nutrition for People Living with HIV/AIDS." The group also provides guidance to PEPFAR country teams on integrating food and nutrition activities into HIV/AIDS programs.

In terms of its own targeted nutritional support to people infected and affected by HIV/AIDS, PEPFAR guidance designates three priority populations for food support using PEPFAR resources: 1) orphans and vulnerable children born to an HIV-infected parent, regardless of the child's HIV or nutritional status; 2) HIV-positive pregnant and lactating women, regardless of nutritional status; and 3) HIV-positive adult patients in treatment and care programs who have evidence of malnutrition, which is defined by WHO as a Body Mass Index (BMI) at or below 18.5 (this cutoff point is new this year — in previous years, only those adult patients with a BMI under 16 were eligible for nutritional support under PEPFAR). PEPFAR also supports nutrition counseling and multivitamin supplementation as part of a preventive care package for adult PLWHA.

FY2007 marked the first year that PEPFAR requested specific information regarding food and nutrition programming through the country reporting process. According to this data, in FY2007, PEPFAR supported food and nutritional supplementation in the 15 focus countries for approximately:

- 50,000 HIV-positive pregnant or lactating women;
- 332,000 OVCs; and
- 20,000 people receiving ART (with evidence of severe malnutrition as defined by the guidance at the time).

This likely underestimates the actual number of beneficiaries in each country, and further refinements will be undertaken for reporting in FY2008.

There are numerous examples of integration of food and nutrition and PEPFAR. In partnership with the World Food Program (WFP) in Ethiopia, PEPFAR partners ensured that more than 3,400 OVCs and 4,000 PLWHA along the transport corridor received nutritional assistance in addition to home-based care services. In Haiti, PEPFAR worked with USAID/FFP and WFP to determine food rations, geographical coverage, and eligibility criteria for PEPFAR beneficiaries. Because of this, future food coverage needs for PLWHA were included in the new USAID/FFP plans as well as WFP's 2008 plan. Through its partners, USAID/FFP provided 1,492 metric tons of food support to PLWHA and OVCs in 12 food-insecure districts in Rwanda. PEPFAR partners leveraged this support to provide food and nutrition to 3,787 OVCs and 1,926 HIV-positive pregnant or lactating women. This support also improved food security for 19,750 people affected by HIV — 3,950 of whom are PLWHA. In Uganda, a new USAID/FFP program awarded in FY2007 will focus on food security issues in conflict-affected Northern, Central, and Eastern Uganda. This five-year program will work with PEPFAR partners in these areas to link services and increase access for PLWHA. In Kenya, the Emergency Plan supports a "food-by-prescription" approach and is working with the government, WFP and others to ensure that broader communities, as well as individuals who may fall outside of PEPFAR guidelines for support, are reached.

In FY2008, further expansion of these programs is anticipated, and the Emergency Plan will collect information on PEPFAR dollars spent and leveraged for food in addition to the number of people served.

Linking PEPFAR and education

PEPFAR is working with the State Department's Office of the Director of Foreign Assistance, which is developing an action plan for interagency work on education issues. This effort is expected to lead to a unified USG strategy in 2008, in which PEPFAR will play a role.

PEPFAR has developed a strong partnership with the President's AEI, implemented through USAID. One example of this partnership in action is in Zambia, where PEPFAR and AEI fund a scholarship program that helps to keep in school nearly 4,000 orphans in grades 10 to 12 who have lost one or both parents to AIDS or who are HIV-positive, in addition to support for pre-school programs and orphans in primary school. Similar partnerships exist in Uganda, where PEPFAR and AEI are working together to strengthen life-skills and prevention curricula in schools. This program, with $2 million in

With PEPFAR support, a Peace Corps volunteer in Guyana established an HIV/AIDS education program at the Essequibo Islands Secondary School that uses information technology to teach students about HIV prevention and stigma reduction. A community program also is being offered to teach youth marketable computer skills that will make them more competitive in Guyana's job market. These valuable life skills empower youth to protect themselves from HIV and take control of their future.

funding in FY2007, targeted four million children and 5,000 teachers.

Approximately $180 million in PEPFAR funding supported education activities in FY2007, and this figure is expected to rise to over $300 million in FY2008. PEPFAR works through OVC programs to ensure children's attendance at school. Barriers to school attendance that are addressed by OVC programs include the provision of school fees and scholarships, materials and supplies, uniforms, meals, mentoring and even child care programs to free up older siblings to attend school. At the primary and secondary school level, PEPFAR supports life skills training and HIV prevention messages, as well as programs to teach older students vocational skills, enabling them to provide economically for their families — especially important given the proliferation of child-headed households brought about by the HIV/AIDS epidemic. In Zambia and Namibia, scholarship programs help girls continue their education beyond primary into secondary school. Also in Zambia, PEFPAR has provided 53 schools with small grants to assist OVCs. In Uganda, through The AIDS Support Organization (TASO), PEPFAR reaches almost 1,000 children with school fees for both primary and secondary school, boarding fees for those in secondary schools, uniforms, and school supplies. Support of school feeding for OVCs is also a common intervention. In Nigeria, where an estimated one-third of all children are not in primary school, PEPFAR's support of non-formal schools, focusing on literacy and numeracy for vulnerable children, plays an important role not only in providing basic education but in assisting children to transition to formal schools when ready.

Along with its efforts in primary and secondary school settings, PEPFAR also supports pre-service and in-service training for health care workers provided through institutes of higher learning in host countries.

PEPFAR support of education is a good example of "diagonal" impact — so-called vertical programs that have a substantial impact in a horizontal way. One example is where block grants are given to schools for specific purposes, such as desks, books, lab equipment or school refurbishment, in exchange for the schools admitting an agreed number of OVCs to attend school without fees or with reduced fees for a certain period of time. Such block grants are a way of enabling thousands of OVCs to attend school while benefiting the broader school population.

Linking PEPFAR with the President's Malaria Initiative and the Millennium Challenge Corporation

PEPFAR and the PMI have worked together to identify countries with joint opportunities for leveraging. Currently, seven PEPFAR focus countries are also PMI focus countries: Ethiopia, Kenya, Mozambique, Rwanda, Tanzania, Uganda, and Zambia. PMI and PEPFAR efforts currently overlap in three major areas: insecticide-treated net (ITN) distribution and education to pregnant women through ANCs; ITN distribution and education to PLWHA; and coordination of lab services. Together, PMI and PEPFAR are now working with Malaria No More to add a private sector component to this cooperation. In Zambia, by using the PEPFAR-supported distribution infrastructure, the RAPIDS consortium led by World Vision, PMI, PEPFAR and the private sector delivered more than 485,000 bed nets before this malaria season at a 75 percent savings — and the USG saved half the remaining cost of nets through a public-private partnership led by the Global Business Coalition on HIV/AIDS, TB and Malaria. The two programs are also coordinating on surveys and surveillance to reduce the cost of monitoring program results. Other examples include:

White House photo by Lynden Steele

Mrs. Laura Bush delivers remarks during her visit to the Mututa Memorial Center Thursday, June 28, 2007, in Lusaka, Zambia. "Here at Mututa, patients benefit from insecticide-treated bed nets supplied through the Zambia Partnership," said Mrs. Bush. "It's an unprecedented partnership between governments, businesses, and religious groups to reduce the suffering caused by malaria." Through the President's Malaria Initiative and the President's Emergency Plan for AIDS Relief, the American people have joined with the GBC and the Zambian Government to distribute more than 500,000 long-lasting insecticide-treated nets to some of the most vulnerable households in Zambia. This partnership addresses critical linkages between malaria and HIV/AIDS in Zambia, which has among the highest prevalence in the world for both diseases.

- In Uganda, PEPFAR and PMI are providing joint funding of a nationwide health facility survey. Several PEPFAR partners have gained access to free ITNs through PMI support, and PEPFAR and PMI are providing joint support for ANC interventions for malaria and HIV/AIDS (e.g., distribution of ITNs through ANCs, and integrated training linking PMTCT and malaria prevention to maternal and child health curriculums).

- In Kenya, in addition to PEPFAR-PMI support for ANC interventions, PEPFAR is also supporting partners in the distribution of ITNs to PLWHA as part of a basic care package in Nyanza Province.

- In Tanzania, PEPFAR and PMI are working together to support the inclusion of a malaria indicator module in the HIV/AIDS indicator survey, and PMI is providing vouchers for ITNs to PLWHA.

MCC is another key USG partner with which PEPFAR is seeking opportunities for coordinated effort. In Lesotho, PEPFAR is co-locating staff with those of MCC to ensure joint support for expansion of health and HIV/AIDS services, and the two programs are also contributing to the cost of Lesotho's Demographic Health Survey.

Promoting Sustainability and Accountability

A central issue for sustainability is the capacity of host nations to finance HIV/AIDS and other health efforts. At present, their ability to do so on the scale required varies widely. Many deeply-impoverished nations are years from being able to mount comprehensive programs with their own resources alone, yet it is essential that these countries appropriately prioritize HIV/AIDS and do what they can to fight the disease with locally-available resources, including financial resources. A growing number are doing so. Many other nations do have significant resources, and are in a position to finance much of their own HIV/AIDS responses. Some countries are making progress, and a growing number of nations are investing in fighting HIV/AIDS on a scale commensurate with their financial capacity. In some cases, for example, host nations are procuring all or a portion of their own antiretroviral drugs (ARVs), while PEPFAR provides support for other aspects of quality treatment. These developments within hard-hit nations build sustainability in each country's fight against HIV/AIDS.

With support from PEPFAR, host countries are developing and expanding a culture of accountability that is rooted in country, community, and individual ownership of and participation in the response to HIV/AIDS. PEPFAR is collaborating with host nations, UNAIDS and the World Bank to estimate the cost of national HIV/AIDS plans, a key step toward accountability. Businesses are increasingly eager to collaborate with the Emergency Plan, and public-private partnerships are fostering joint prevention, treatment, and care programs.

This culture of accountability bodes well not only for sustainable HIV/AIDS programs, but also for an ever-expanding sphere of transparency and accountability that represents transformational diplomacy in action. While HIV/AIDS is unmistakably the focus of PEPFAR, the initiative's support for technical and organizational capacity-building for local organizations has important spillover effects that support nations' broader efforts for sustainable development. Organizations whose capacity is expanded in order to meet fiduciary accountability requirements are also in an improved position to apply for funding for other activities or from other sources. Expanded health system capacity improves responses for

diseases other than HIV/AIDS. Capacity-building in supply chain management improves procurement for general health commodities. Improving the capacity to report on results fosters quality and systems improvement, and the resulting accountability helps to develop good governance and democracy.

As the name of the Emergency Plan frankly acknowledges, HIV/AIDS is a global emergency, and PEPFAR has sought to save as many lives as rapidly as possible. At the same time, it is essential to look to the future and sustain an effective response. HIV/AIDS is a chronic disease requiring lifelong prevention, treatment, and care, and so PEPFAR supports not one-time interventions but enduring contributions that build health systems as part of a broader development approach. PEPFAR is working to ensure a sustainable response by building the capacity of public and private institutions in host nations to respond to HIV/AIDS.

Building health systems

Discussions of global HIV/AIDS efforts have sometimes pitted "vertical," disease-specific programs against "horizontal" programs to build health systems. This is a false dichotomy. Disease-specific programs, if appropriately designed, can strengthen overall health systems — as PEPFAR and host nations are demonstrating. Preliminary analysis by a health expert from Rwanda estimates that 60 percent of PEPFAR resources had an impact beyond HIV/AIDS. According to Dr. Jaime Sepulveda, Chairman of the U.S. Institute of Medicine Committee that recently completed a congressionally-mandated study of the Emergency Plan, "PEPFAR is contributing to make health systems stronger… doing good to the health systems overall." As noted previously, the data from Botswana suggest that HIV/AIDS resources contributed to a decline in infant mortality and increase in life expectancy — significant gains in general health indicators. While much evaluation remains to be done, the only data available clearly indicate that HIV/AIDS resources are having a positive impact on general health care. For this reason, health experts are now talking about "diagonal" programs that have broad effects on the health system even as they focus on a specific disease. PEPFAR is such a program.

PEPFAR estimates that approximately $638 million in FY2007 resources were investments in capacity-building in the public and private health sectors in support of service delivery sites for prevention, treatment and care. A recent study of PEPFAR-supported treatment sites in four countries found that PEPFAR supported a median of 92 percent of the investments in health infrastructure to provide comprehensive HIV treatment and associated care, including building construction and renovation, lab and other equipment, and training (see Figure 10). PEPFAR also supported a median of 57 percent of personnel costs (salaries and retention bonuses) at those sites.

Discussions of health systems are often bogged down not only in the "vertical" versus "horizontal" debate, but also

In Ethiopia, the PEPFAR-supported Health Center Renovation Project has renovated twenty-three maternal health centers to date. At the request of the local community, the project team designed, tendered and supervised construction of a model Emergency Obstetrics Care (EOC) unit at the Dangla Health Center in Amhara Region. The facility now has a successfully functioning Obstetrics Fistula Rehabilitation Center. This is the first health center in the Amhara region to have a model EOC capable of treating pregnant women with obstetric emergencies, as well as performing emergency surgery, including Cesarean sections.

Figure 10: Leveraging HIV Improvements for General Health

In a study of 33 PEPFAR-supported sites providing antiretroviral treatment and associated care in 4 countries, PEPFAR supported 92% of the systems strengthening investments at a typical facility.

Median USG funding for health system investments, by investment type and facility type, for all study sites and time periods (expressed as a percentage of contributions from all sources):

	No. Sites	Buildings & Renovation	Lab Equipment	Other Equipment	Training	All Investments
		% of All	% of All	% of All	% of All	% of All
All Four Countries						
- Public	28	100.0%	100.0%	100.0%	100.0%	93.3%
- Private	5	50.0%	99.8%	86.9%	93.0%	75.1%
- All	33	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**92.3%**

Note: All investment types are not listed individually but are reflected in the total.

Source: John Blanford et al, CDC

a sense that the public sector is the only valid "horizontal" system. This is not true for two significant reasons: much of the health care in the developing world is not provided through the public sector, and non-governmental partners can strengthen the public health system. WHO has estimated that faith-based organizations alone provide 30-70 percent of health care in sub-Saharan Africa. For example, in Kenya, it is estimated that half of health care is provided by faith-based institutions. However, the public sector is an essential component of health care, and data from four countries showed that PEPFAR support as a percentage of total resources was higher in public sector facilities than it was in private sector ones (Figure 10). This reflects PEPFAR's commitment to supporting nations' efforts to expand public sector health infrastructure.

In addition, for a variety of reasons, it is often more cost-effective to use non-governmental partners to strengthen the public sector. In South Africa, a snapshot of non-governmental PEPFAR partners demonstrated that 19 of 22 were supporting services in the public sector across a range of program areas (Figure 11).

Impact of HIV/AIDS investment on non-HIV/AIDS health — "diagonal programs"

Perhaps the most striking data on the false dichotomy of the "vertical/horizontal" debate come from a recent Family Health International study in Rwanda showing that the addition of basic HIV services to primary health centers contributed to an increase in the use of maternal

Figure 11: Examples from South Africa of PEPFAR Partner Support by Sector

Partner	Private-Public	Government	Private	NGO
Africa Centre		X		
Africare	X			
American Internal Health Alliance (AIHA)		X		
Absolute Return for Kids (ARK)		X		
Aurum Health Institute	X	X	X	X
BroadReach HealthCare		X	X	X
CAPRISA (University of KwaZulu Natal)		X		
Columbia University		X		X
Catholic Relief Services (CRS)		X		X
Eastern Cape Regional Training Centre (ECRTC)		X		
Elizabeth Glaser Pediatric AIDS Foundation (EGPAF)	X	X		X
Foundation for Professional Development (FPD)		X		
HIVCare	X			
Medical Research Council (MRC)		X		
Phidisa/SA Military Health Services		X		
Perinatal HIV Research Unit (PHRU)		X		
Reproductive Health Research Unit (RHRU)		X		X
Right to Care		X		X
Rational Pharmaceutical Management (RPM Plus)		X		
Solidarity Center				
Quality Assurance Project (QAP)		X		
Integrated Primary Healthcare Project (IPHC)		X		

Source: PEPFAR South Africa

and reproductive health, prenatal, pediatric, and general health care (see Figure 12). The study collected data from 30 primary health centers that had at least six months of experience providing basic HIV care interventions and controlled for possible influences from other health initiatives. It found statistically significant increases in delivery of 17 non-HIV interventions, including a 24 percent increase in outpatient consultations, and a rise in syphilis screenings of pregnant women, from one test in the six months prior to the introduction of HIV care to 79 tests after HIV programs began. Large jumps were also seen in non-HIV related lab testing and provision of family planning.

Improving the health sector by reducing burdens on it

In the hardest-hit regions, 50 percent or more of hospital admissions are due to HIV/AIDS. As effective HIV

Figure 12: Leveraging HIV Improvements for General Health				
A study by Family Health International (FHI) at 30 primary health centers in Rwanda examined 22 non-HIV health indicators before and after the introduction of basic HIV care. Only 1 indicator declined, while 17 showed statistically significant improvement.				
Non-HIV Health Indicators	**Before intro of basic HIV care (Average # per site per month)**	**After intro of basic HIV care (Average # per site per month)**	**p value**	**Independent effects**
New family planning users	9	13	0.012	HIV exp (p <.001)
Returning family planning users	91	141	0.002	HIV exp (p <.001)
Total family planning users	100	155	0.001	HIV exp (p <.001)
1st trimester ANC visit	5	10	0.001	HIV exp (p=.010)
2nd trimester ANC visit	36	52	<.001	HIV exp (p=.004)
ANC Coverage rate (all 4 visits)	3.00%	4.70%	0.016	HIV exp (p=.020)
Syphilis screening	1	79	<.001	HIV (<.001)

Figure 13: Leveraging HIV Improvements for General Health				
In the 7 sites included in the FHI Rwanda study that had been offering ART for more than 2 months, the average number of new hospitalizations decreased by 20.9 percent.				
ART Site	**Avg. monthly # new hospitalizations prior to HIV services**	**Average monthly # new hospitalizations since HIV services**	**Percent decrease after introduction of HIV services**	**# of months experience offering ART**
1	53.3	73.2	-37.2%	5
2	63.3	82.3	-30.0%	9
3	231.8	171.5	26.0%	6
4	92.7	79.0	14.8%	15
5	221.3	140.3	36.6%	6
6	90.7	88.2	2.8%	5
7	199.0	118.3	40.5%	7
Mean	**136.0**	**107.5**	**20.9%**	**7.6**

programs are implemented, hospital admissions plummet, easing the burden on health care staff throughout the system. In the Rwanda study cited above, the average number of new hospitalizations at 7 sites that had been offering antiretroviral therapy for more than two months dropped by 21 percent (see Figure 13).

Building human resources for health

Functioning health systems depend upon a workforce that can carry out the many tasks and build the systems that are needed. The lack of sufficient health workforce in many of the countries where PEPFAR is working presents a serious challenge not only to HIV/AIDS programs, but to every area of health. PEPFAR cannot solve the overall health workforce crisis, but it contributes by making large capacity-building investments that, while focused on HIV/AIDS, have a broader impact. From FY2004 through FY2007, PEPFAR supported nearly 2.6 million training and retraining encounters for health care workers. In FYs 2006 and 2007, PEPFAR provided approximately $281 million to support training activities.

Photo by Still Life Projects

A nurse at the Mwananyamla Hospital Care and Treatment Center in Dar es Salaam, Tanzania tours the new HIV/AIDS facility made possible through the support of PEPFAR. The new treatment center is bigger, better organized, and better equipped. It will increase the volume, sustainability and quality of the HIV/AIDS services provided. Building health systems and workforce is fundamental to PEPFAR's work.

PEPFAR focuses on areas that most directly impact HIV/AIDS programs: HIV/AIDS training for existing clinical staff such as physicians, nurses, pharmacists, lab technicians; management and leadership development for health care workers; and building new cadres of health workers. This effort to support local efforts to build a trained and effective workforce has provided the foundation for the rapid scale-up of prevention, treatment, and care that national programs are achieving, and provides a solid platform on which other health programs can build.

A workforce pyramid

Recognizing the continued importance of human capacity development, for FY2008 PEPFAR country teams were asked to estimate the amount of training they planned to support. They reported that they plan to support nearly 2.7 million training and retraining encounters in FY2008 alone, more than the cumulative total in the preceding four years.

Pre-service training: The expansion of care and treatment requires an expansion in the workforce to provide these services. In FY2008 the amount of funds each PEPFAR country program could use to support long-term pre-service training was increased threefold, to $3 million. Unfortunately, few PEPFAR programs took advantage of this opportunity, and long-term pre-service training will be a focus for the coming year. Namibia is one country that took advantage of this new allowance. There are no schools of medicine and pharmacy in Namibia, so in FY2008, there are plans to scale up an existing scholarship program for students in these disciplines to attend training institutions in South Africa, with a requirement to return. In Kenya, an HIV fellowship program has been developed to train senior HIV program managers. In Vietnam, PEPFAR is working with the Hanoi School of Public Health to increase the number of health professionals receiving advanced degrees in public health and management. There has also been a significant increase in support for expanding HIV curricula in pre-service training programs. These efforts reflect the increase in resources dedicated to training of new doctors, nurses, clinical officers, laboratory technicians and pharmacists in HIV/AIDS.

Task-shifting: While building cadres of new highly trained professionals is a long-term objective of PEPFAR and other development initiatives, that takes years and we do not have years to wait. As experts from PEPFAR and the WHO argued in an article published in the *New England Journal of Medicine*, policy change to allow task-shifting from more specialized to less-specialized health workers is the one strategy that will have the most significant and immediate effect on increasing the pool of health workers in resource-limited settings. Changing national and local policies to support task-shifting can foster dramatic progress in expanding access to HIV prevention, treatment, and care, as well as other health programs. The Emergency Plan supported WHO's efforts to develop the first-ever set of task-shifting guidelines, released in January 2008. This continues and expands PEPFAR's support for the leadership of its host country partners in broadening national policies to allow trained members of the community — including PLWHA — to become part of clinical teams as community health workers.

Support for salaries: Along with support for training, supporting new highly-trained health professionals and task-shifting, PEPFAR supports the growing number of personnel necessary to provide HIV/AIDS services. To capture this support more comprehensively, in the FY2008 Country Operational Plans (COPs), PEPFAR

Table 2: Emergency Plan Support for Capacity-Building FY2004-FY2007

	Number of individuals trained or retrained FY2004-2007[1]	Number of USG-supported service outlets FY2007
Prevention of Sexual Transmission[3]	1,260,100	-
Prevention of Mother-to-Child Transmission	109,826	6,411
Prevention of Medical Transmission[4]	159,665	4,589
Provision of Antiretroviral Treatment	154,000	2,959
Provision of Care for Orphans and Vulnerable Children[3]	455,600	-
Provision of Palliative Care for HIV-Positive People	322,300	8,855
Provision of Counseling and Testing	112,800	7,456
Total	**2,574,291**	-[2]

Notes:
Among individuals trained, individual country results are rounded to the nearest 100 and then added to get totals. Numbers of sites are not rounded.
Numbers may be adjusted as attribution criteria and reporting systems are refined.

Footnotes:
[1] Total number for individuals trained or retrained is cumulative from FY2004 through FY2007.
[2] Because a service outlet may provide more than one service, it is not possible to sum across program areas the number of USG-supported service outlets.
[3] These services are provided in a variety of settings and are often not facility-based.
[4] Service outlets counted under prevention of medical transmission include only outlets that carry out blood safety activities.

country teams estimated the number of health care workers whose salaries PEPFAR is supporting. They reported support for over 111,000 workers (see Table 3), illustrating PEPFAR's commitment. PEPFAR has worked to ensure that these positions are sustainable for the long term. In Kenya, for example, PEPFAR has reached an agreement with the Ministry of Health to incrementally absorb these personnel into the public health system, providing long-term sustainability while also allowing for rapid hiring and deployment.

Table 3: Number of Health Care Workers Receiving Salary Support Through PEPFAR FY2008 COP[1]

Focus Countries	104,800
India, Malawi, Cambodia[2]	6,500
Total	111,300

Note:
Individual country numbers are rounded off to the nearest 100 and then added to get the total.

Footnotes:
[1] Health Care Workers include Clinical Staff, Community Services Staff, Managerial Staff with salaries partially- or fully-supported by PEPFAR.
[2] Of the bilateral country programs supported by PEPFAR, only Cambodia, India, and Malawi were required to submit full COPs including information about salary support for FY2008.

Examples of support for salaries in the focus countries include the following:

Government sector:

- Namibia: PEPFAR supports the salaries of nearly all clinical staff doing treatment work and counseling and testing in the public sector.
- Kenya: PEPFAR supports the Government's hiring plan to train and deploy retired physicians, nurses and other health care workers for the public sector; 800 were deployed in 2007.
- Ethiopia: PEPFAR supports the Government's program to train 30,000 health extension workers in order to place two of these community health workers in every rural village; 16,000 have already been trained.
- Côte d'Ivoire: PEPFAR supported the development of the Government's plan to redeploy health workers from the south back to the north and west following the peace agreement.

Non-government sector:

- Uganda: One of the largest HIV/AIDS service providers, TASO, has increased staff from 16 in the early 1980s to several thousand today, and PEPFAR supports salaries for nearly all of them.

Building supply systems

Procurement capacity is another key element of national health systems. PEPFAR's Supply Chain Management System (SCMS) project strengthens the capacity of local systems to deliver an uninterrupted supply of high-quality, low-cost products that flow through a transparent and accountable system. SCMS's activities include supporting the purchase of lifesaving ARVs, including low-cost generic ARVs; capacity-building for quantification of needs, safer storage and distribution systems, and effective stock and inventory control systems to avoid "stock outs"; drugs for care for PLWHA, including drugs for opportunistic infections such as TB; laboratory materials, such as rapid test kits; and supplies, including gowns, gloves, injection equipment, and cleaning and sterilization items. By pooling procurement across countries, SCMS is able to stabilize supply, plan for capacity expansion, and achieve economies of scale. In FY2007, 73 percent of antiretroviral drugs delivered through PEPFAR, and 93 percent delivered through SCMS, were generic formulations (See Table 4 and 5). By using generics, PEPFAR partners were able to save an estimated $64 million — a 46 percent reduction in cost if they had purchased only innovator drugs.

Table 4: Percentage of Antiretroviral Drugs Delivered by All PEPFAR Partners in 2007 That Were Generic

Quarter Delivered	Branded (# of Packs)	Generic (# of Packs)	Grand Total (# of Packs)	Percentage Generic
1	800,283	1,321,381	2,121,664	62%
2	830,515	2,583,924	3,414,439	76%
3	700,654	2,892,753	3,593,407	81%
4	554,131	1,236,508	1,790,639	69%
Not Specified*	159,933	365,182	525,115	70%
Totals:	**3,045,516**	**8,399,748**	**11,445,264**	**73%**

* Not all programs reported delivery dates, meaning that those deliveries could not be designated into a specific quarter

Source: 2007 Annual ARV Procurement Survey

Table 5: Percentage of Antiretroviral Drugs Delivered by SCMS in 2007 That Were Generic

Quarter Delivered	Branded (# of Packs)	Generic (# of Packs)	Grand Total (# of Packs)	Percentage Generic
1	15,961	237,463	253,424	94%
2	51,434	532,142	583,576	91%
3	75,359	1,079,808	1,155,167	93%
4	108,392	1,714,457	1,822,849	94%
Total	**251,146**	**3,563,870**	**3,815,016**	**93%**

Source: 2007 Annual ARV Procurement Survey

Figure 14: SCMS Regional Distribution Centers Help Pool Procurement

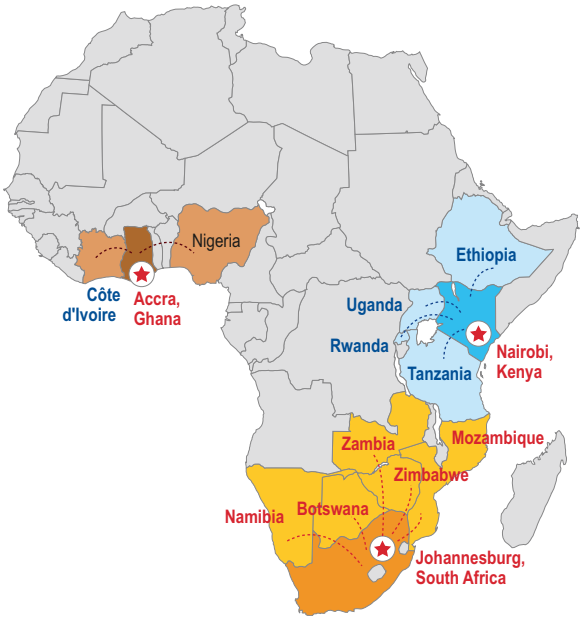
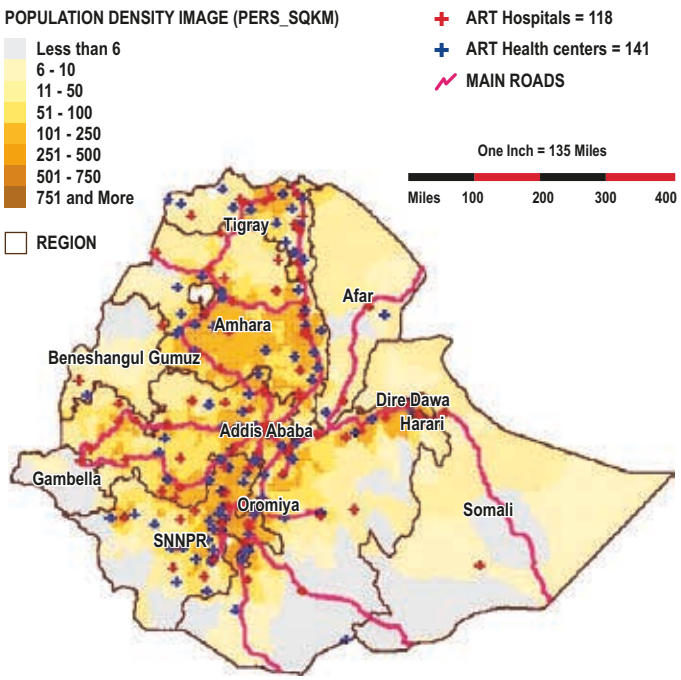


Figure 15: Treatment Delivery Sites in Ethiopia



Additionally, by augmenting and improving country supply chains, rather than replacing functioning systems, SCMS strengthens the capacity of health systems to deal with other health and development issues. These country supply chains are strengthened through the use of regional distribution centers, which distribute commodities in quantities that existing infrastructure can handle reliably and safely. Figure 14 shows the locations of these regional distribution centers in sub-Saharan Africa.

Building data systems to improve programs

Evidence-based programming depends on strong data. PEPFAR is addressing this need from many directions; the results will benefit not only PEPFAR programs but all programs.

Surveillance and mapping

PEPFAR support has enabled countries to better understand the dynamics of their epidemics. PEPFAR has supported Demographic and Health Surveys and AIDS Indicator Surveys in 30 countries, including Botswana, Côte d'Ivoire, Ethiopia, and Vietnam, helping to improve not only prevalence estimates — as demonstrated by the recent revision of UNAIDS global estimates mentioned previously — but also incidence data. Markers for incidence have been validated and are now being calibrated, and will be available for the field soon. These markers will improve evaluation of prevention programs and overall impact, creating tools that can strengthen not only PEPFAR programs but also those of others.

PEPFAR is also supporting countries as they map the locations of treatment and care sites in order to identify regional gaps in service provision. Figure 15 shows a sample map that depicts treatment delivery sites in Ethiopia.

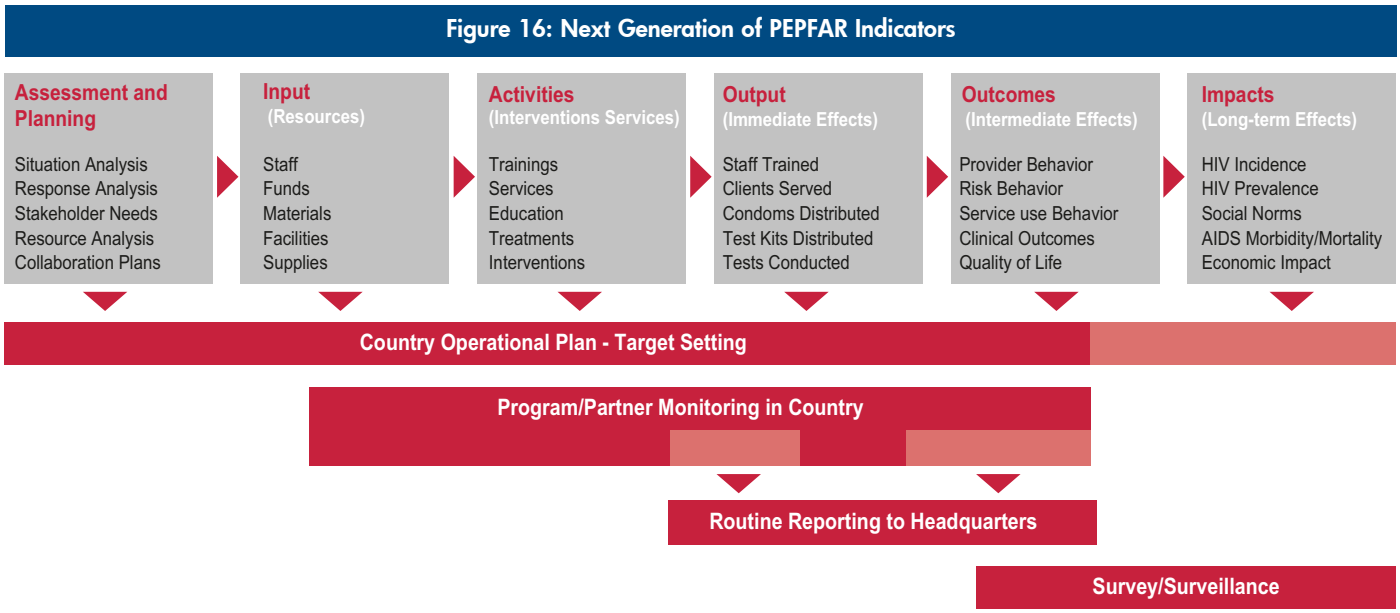
Next generation of indicators

Constant evaluation to improve programs must characterize all HIV/AIDS efforts, including those of PEPFAR. PEPFAR is thus working with a wide variety of stakeholders to update the performance measures used to evaluate programmatic progress. The new measures will move PEPFAR toward the challenging goal of measuring program outcomes and impacts. The continuum of indicators is depicted in Figure 16.

Sharing lessons learned

Public health evaluation and operations research

Through Public Health Evaluations (PHE) — also called "implementation research" or "operations research" — PEPFAR is supporting research on strategic priority questions that can inform and change how PEPFAR and others deliver prevention, treatment and care programs. Because of its size and scope, PEPFAR offers unique opportunities to address and resolve issues related to the



implementation of scientifically sound, cost-effective programs. PEPFAR is thus heightening its emphasis on these "big picture" questions. PEPFAR believes it can do better in this area than it has to date, and a process is under way to prioritize research questions, focus PHE resources and coordinate research activities across countries.

In FY2007, approximately $46 million was directed toward PHE and operations research. Guidance to teams in PEPFAR focus countries suggests one to four percent as a reasonable spending range to support operations research in the COP planning process. This level is comparable to those of USG domestic HIV/AIDS service delivery programs. While there is much to learn, we also know how to save lives today. Spending more on research is thus not well justified in an implementation program. However, as noted above, we can do better at asking the important questions that will change how we — and others — implement programs to save more lives.

International HIV/AIDS Implementers' Meeting

The Emergency Plan seeks to build the capacity of local people and organizations to evaluate their work and present their findings to their colleagues from around the world. In June 2007, the Emergency Plan convened an HIV/AIDS Implementers' Meeting in Kigali, Rwanda. The meeting was the first to be co-sponsored by PEPFAR, the World Bank, the Global Fund, UNAIDS, UNICEF, and WHO, and was hosted by the Government of Rwanda. The Global Network of People Living with HIV/AIDS served as the official advisory group, helping to ensure representation of PLWHA as expert implementers. Nearly 1,600 implementers from 83 countries gave more than 540 scientific presentations on their programs, and the vast majority of the presenters were from severely affected nations in Africa, Asia, Eastern Europe, and Latin America. The presenters included representatives from governments and non-governmental organizations, including faith- and community-based groups, and the private sector.

The 2007 HIV/AIDS Implementers' Meeting took place in Kigali, Rwanda from June 16-19, 2007. From Left: Michel Sidibe, UNAIDS Director of Country and Regional Support; Dr. Michel Kazatchkine, Executive Director of The Global Fund to Fight AIDS, TB and Malaria; Dr. Innocent Nyaruhirira, Rwanda Minister of State in Charge of HIV/AIDS; Ambassador Mark Dybul, U.S. Global AIDS Coordinator; Dr. Kevin De Cock, WHO HIV/AIDS Director; Francoise Welter, Global Network of People Living with HIV/AIDS (GNP+).

Building partnerships

Expanding the circle of local partners

An important part of systems-strengthening is PEPFAR's support for local organizations, including host government institutions, organizations of PLWHA and faith- and community-based organizations. Review of annual COPs includes evaluation of efforts to increase the number of indigenous organizations partnering with the Emergency Plan. In FY2007, PEPFAR partnered with 2,217 local organizations — up from 1,588 in FY2004 — and 87 percent of partners were local. Reliance on such local organizations, while sometimes challenging, is essential for PEPFAR to fulfill its promise to partner with host nations to develop sustainable responses.

As another step in the direction of sustainability, PEPFAR country programs may devote a maximum of eight percent of funding to a single partner (with exceptions made for host government partners, commodity procurement, and "umbrella contractors" for smaller organizations). This requirement is helping to expand and diversify PEPFAR's base of partners, and to facilitate efforts to reach out to new partners, particularly local partners — a key to sustainability. The exception for umbrella contracts is based on a desire to support large organizations in mentoring smaller local organizations, supporting capacity-building in challenging areas such as management and reporting. PEPFAR has also worked with its international implementing partners to ensure that they have strategies to hand over programs to local organizations as those groups develop the capacity to work directly with the USG.

New Partners Initiative

On World AIDS Day 2005, President Bush launched the New Partners Initiative (NPI), part of PEPFAR's broader effort to increase the number of local organizations, including faith- and community-based organizations (FBOs and CBOs), that work with the Emergency Plan. The first 23 NPI grants were awarded on World AIDS Day 2006, and a second round of 14 grants were awarded on World AIDS Day 2007. A third round will follow in 2008.

Through NPI, PEPFAR is enhancing the technical and organizational capacity of local partners, and is working to ensure sustainable, high-quality HIV/AIDS programs by building community ownership. NPI supports organizations that have previously worked as PEPFAR sub-partners—receiving PEPFAR funds through larger organizations — in graduating to prime partner status. *Nearly half of NPI grantees to date had previously been PEPFAR sub-partners.* Each grantee receives comprehensive technical and organizational support through NPI, including support for financial and reporting capacity, enabling them to compete not only for PEPFAR resources but also for grants and contracts from other sources of funding.

Public-private partnerships

Public-private partnerships (PPPs) are collaborative endeavors that combine public- and- private sector resources to accomplish HIV/AIDS prevention, care, and treatment goals. PPPs help ensure sustainability of PEPFAR programs, facilitate scale-up of interventions, and leverage private sector resources to multiply impact. In addition to an array of country-level PPPs and workplace programs with local private-sector entities, PEPFAR supported seven large-scale, multi-country PPPs in 2007. These include the "Phones for Health" partnerships with cell-phone manufacturers and technology-based companies to develop health-management and information systems for HIV/AIDS; the "PlayPumps" partnership with the Case Foundation to bring clean water to schools and clinics in HIV-affected areas; and a new partnership with Becton Dickinson and Company to deploy experts to train technicians and build laboratory capacity.

Through the "Phones for Health" public-private partnership, PEPFAR is working with cell-phone manufacturers and technology-based companies to develop health management and information systems for HIV/AIDS.

Photo by PlayPumps International

In a groundbreaking public-private partnership with PlayPumps International, the U.S. Government and private sector partners, the PlayPump Alliance will work with 10 sub-Saharan African countries to provide the benefits of clean drinking water. In June 2007, Mrs. Laura Bush christened a PlayPump at the Regiment Basic School in Lusaka, Zambia. Mrs. Bush explained, "PlayPumps are children's merry-go-rounds attached to a water pump and a storage tank. When children play on the merry-go-round and the wheel turns — clean drinking water is produced. PlayPumps are fueled by the great limitless source of energy: children at play. And they're a great example of how governments, foundations, businesses, and religious groups have joined to address the lack of clean water across Africa, which is a major obstacle to defeating malaria and AIDS."

Goals for future PPPs include advancing innovative HIV-prevention efforts; developing new gender-focused partnerships; supporting OVCs; and strengthening health systems, including improving human resource capacity. PEPFAR also remains dedicated to expanding workplace programs that provide HIV/AIDS prevention, treatment and care.

Working with international partners

It is important to note that the United States is not the only international partner of host nations. Other key international partners include: The Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund); the World Bank; United Nations agencies, led by the Joint United Nations Programme on HIV/AIDS (UNAIDS); the World Health Organization (WHO); other national governments; and — with growing commitment — the businesses and foundations of the private sector. All have vital contributions to make to the work of saving lives in the field.

The Global Fund: The USG is the largest contributor to the Global Fund, having given over $2.5 billion since 2001, or about 30 percent of total contributions. USG representatives chair the Global Fund Board's Finance and Audit Committee, and represent the USG on the Board's Policy and Strategy Committee. Recent Board achievements that the USG had strongly supported include the hiring of a new Inspector General and the adoption of a disclosure policy for Inspector General documents; a requirement that grants track budgets and expenditures by program area; implementation of the new "Rolling Continuation Channel" for extended funding of high-performing grants; and re-tendering of the Local Fund Agent contracts with expanded requirements for oversight and accountability.

The USG also provides direct technical assistance to Global Fund grants that are experiencing implementation bottlenecks, using U.S. legislative authority to withhold up to five percent of contributions for this purpose. Such funds are used to improve institutional and program management; strengthen governance and transparency; strengthen procurement and supply-chain management; and improve monitoring and evaluation systems. In view of the close link between TB and HIV/AIDS, the USG also provides technical assistance funding to improve treatment for multi-drug resistant TB (MDR-TB), and to enhance the Advocacy, Communication and Social Mobilization (ACSM) components of country TB programs. The USG also provides funds for Global Fund technical assistance through the Roll Back Malaria international partnership, and through the three UNAIDS Technical Support Facilities in sub-Saharan Africa.

PEPFAR country teams work closely with the Global Fund grant programs in-country. Embassy representatives sit on Global Fund Country Coordinating Mechanisms (CCMs) in 87 percent of PEPFAR countries that submit COPs or mini-COPs, and PEPFAR country programs have allocated about $10 million annually to technical assistance for Global Fund grants. To promote deeper coordination, the USG has entered into Memoranda of Understanding (MOUs) in several countries. These documents bring together Ministries of Health, PEPFAR, and the Global Fund to clarify collaboration and partnership activities, particularly in the area of drug procurement for antiretroviral treatment.

UNAIDS: The United States was a driving force behind the creation of UNAIDS' "Three Ones" principles for support of national HIV/AIDS leadership, and continues to support UNAIDS' work in a variety of ways. The USG is one of the largest contributors to UNAIDS' all-

voluntary budget each year, having provided over $30 million in FY2007. The USG was elected Vice Chair of the UNAIDS Programme Coordinating Board (PCB) in 2007, and will assume the Chair in 2008. This will give the USG the opportunity to work with UNAIDS to highlight critical priorities for the international community's response, such as TB/HIV co-infection, reforms to maximize UNAIDS' effectiveness at the country level, and guidance for leaders as they convene in June 2008 at the U.N. General Assembly for a High-Level Meeting on HIV/AIDS.

WHO: WHO provides evidence-based technical leadership, sound management, and as norms and standards within the international public health response to HIV/AIDS. As a WHO Member State with considerable expertise in HIV/AIDS, the USG has been intimately involved in formulating HIV/AIDS-related policy and guidelines, and partnering with WHO and host countries to adapt and implement such policies. The USG provides not only technical expertise but also financial support to WHO in multiple areas including OVCs, male circumcision, laboratory research, PMTCT, and counseling and testing. Such support in FY2007 totaled more than $14 million, including the USG portion of funds provided to WHO from UNAIDS' Unified Budget and Workplan.

Photo by www.danielcima.com

In Haiti, PEPFAR supports FOSREF, an indigenous organization working to change behavior that leads to HIV infection. FOSREF trains young people to go into the community and deliver messages about HIV prevention. With U.S. support, FOSREF has expanded to 26 sites across Haiti, teaching students to prevent HIV by respecting themselves and others.

II. Accountability: Report on PEPFAR Partnerships for Prevention, Treatment and Care

Partnerships for Comprehensive Programming

As was discussed above, the vision for PEPFAR was remarkable not only for its size, but also for its scope — combining prevention, treatment and care in a comprehensive response. The President and a bipartisan Congress integrated prevention, treatment and care in a comprehensive program, in order to reflect basic public health realities:

Without treatment, people are not motivated to be tested and learn their HIV status.

Without testing, we cannot identify HIV-positive persons and so we cannot teach them safe behavior, and they cannot protect others.

Without care and treatment programs, we do not have regular access to HIV-positive persons to constantly reinforce safe behaviors — a key component of prevention.

Without testing and treatment, we have no hope of identifying discordant couples, and women have no possibility of getting their partners tested so they can protect themselves.

Without testing and treatment, we cannot "medicalize" the disease, which is essential to reducing stigma and discrimination—which, in turn, is essential for effective prevention and compassionate care for those infected and affected by HIV.

Without care for HIV-positive persons who do not yet require treatment, we cannot follow them to determine when it is optimal to initiate therapy and thereby increase the chance of a successful outcome.

Without compassionate care for children orphaned or made vulnerable by AIDS, the social fabric of entire communities is being torn and we fail in our humanitarian duty.

And, of course, without prevention, we cannot keep up with the ever-growing pool of people who need care and treatment.

As we scale up comprehensive programs, it is essential to remember that PEPFAR is one piece — albeit a very large piece—of a complex puzzle of partners engaged in combating HIV/AIDS. The other pieces include: the contribu-

tions of the countries themselves, including remarkable efforts by PLWHA, families, communities, and national leaders, and which can include substantial financial contributions in countries such as South Africa, Botswana, Namibia and others; the Global Fund — for which the American people provide roughly 30 percent of the budget and which is an important piece of our overall global strategy — and other multilateral organizations; other nations' bilateral programs; private foundations; and many others. PEPFAR constantly adapts the shape of our bilateral programming piece to fill its place in this puzzle, and to ensure that at the country level, the needs for prevention, treatment and care are being addressed in a comprehensive way.

Partnerships for Prevention

The world cannot defeat this pandemic through treatment and care alone. The most recent UNAIDS report estimates that there were approximately 2.5 million new HIV infections in 2007, down from 2.7 million in 2006. This is a welcome trend, but at this level, new infections still far outpace the world's ability to add people to treatment.

The best approach to treatment, care and all the other challenges posed by HIV/AIDS is to prevent infection in the first place so that people do not need HIV treatment or care. Without effective prevention, the growing number of people in need of treatment and care — and the growing number of OVCs — will overwhelm the world's ability to respond and to sustain its response.

Two years ago Samalie and Samson came to the PEPFAR-supported Bbaale Health Center IV in Kayunga district, Uganda for voluntary counseling and testing. After deciding to test their HIV status together, the couple learned that they were both HIV-positive. Today, the couple returns to the health center every month for check-ups and medication, and are active in their local treatment group. Recently, Samalie and Samson became spokespersons for an HIV/AIDS awareness campaign on disclosure and HIV stigma.

Recognizing this, the Emergency Plan supports the most comprehensive, evidence-based prevention program in the world, targeting interventions based on the epidemiology of HIV infection in each country. In the focus countries in FY2007, PEPFAR provided $601 million to support prevention activities that focus on sexual transmission, mother-to-child transmission, the transmission of HIV through unsafe blood and medical injections, and male circumcision. This investment represented 21 percent of program funding in the focus countries; if counseling and testing counted as prevention, this share increases to 29 percent. PEPFAR also integrates new prevention methods and technologies as evidence is accumulated and normative guidance provided.

As noted above, in recent years the evidence of declining HIV prevalence and incidence as a result of changes in sexual behavior has grown significantly. UNAIDS' has stated that "this reduction in HIV incidence likely reflects natural trends in the epidemic as well as the result of prevention programmes resulting in behavioral change in different contexts." This finding reinforces the importance of comprehensive support for sexual behavior change, and provides much-needed hope for HIV prevention. But while this is undeniably good news, it cannot be allowed to produce complacency. In many cases, programs are still using prevention techniques developed 20 years ago. It is important for prevention activities to enter the 21st century, to use techniques and modalities that have been developed to change human behavior, especially those developed in the private sector for commercial marketing.

Combination prevention

There is also a clear need for focused and concentrated prevention efforts that mirror progress in treatment. Just as combination therapy revolutionized treatment, combination prevention is needed to revolutionize behavior change programs. Combination prevention includes using many different modalities to affect behavior, along with geographic concentration of those different modalities to match the epidemiological, social and cultural drivers of transmission.

In Côte d'Ivoire, the PEPFAR-supported Sports for Life program uses the popularity of soccer to reach 10- to 15-year-old boys and girls with information and skills to stay healthy and to educate others. In the Yopougon quarter of Abidjan, Sports for Life peer educators conducted a community-outreach campaign in a local marketplace targeting women after learning that in Côte d'Ivoire two out of three people with HIV are female. Given the success of the young peer educators' foray into the marketplace, the Sports for Life program intends to conduct similar community-outreach activities at all of its sites.

Wherever people are, prevention programs must be there to meet and empower them at every turn with appropriate knowledge and skills. For example, many youth listen to faith leaders, while others don't. Many youth hear prevention messages in church or in school, but then hang out with their friends and hear conflicting messages. Many have no access to either school or church. Prevention programs need to blanket geographic areas with varied prevention modalities, so that all the youth hear the messages and can change their behavior accordingly.

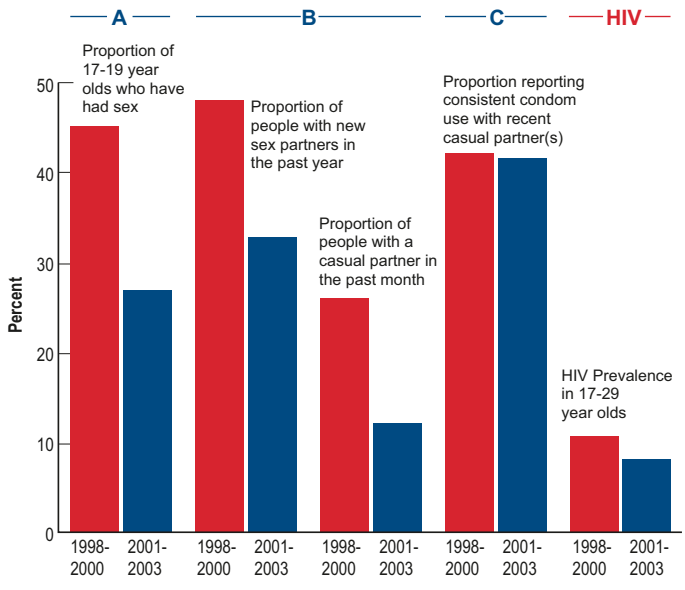
As part of this effort to implement innovative prevention programs, while evaluating their impact, we are developing future-leaning public-private partnerships for combination prevention. Part of this effort includes "modularizing" successful prevention programs so that the components found to be most effective and easy to transfer to other geographic areas can be rapidly replicated, adapted, and scaled up.

As another component of combination prevention, we are identifying populations for which safe male circumcision is especially promising and prioritizing service delivery to them within a comprehensive prevention package. We are creating effective approaches for older populations, including discordant couples, and implementing them in the same geographic locales as the youth programs. Effectively reaching these populations demands not only the use of sexual behavior change messages and biomedical interventions such as male circumcision, but also work that is outside the traditional realm of public health, such as gender, education and income-generation programs. We have made great strides to provide both linkages and direct interventions in these areas, but we also need to evaluate these combination programs to know how best to do them. Some things might be good for general development, but if they do not prevent infections in a significant way, they are the purview of other health and development programs, not those of PEPFAR.

Prevention of Sexual Transmission

Most of the focus countries have generalized epidemics, meaning that HIV infection is not concentrated in specific and identifiable groups. Long before PEPFAR was initiated, many nations with generalized epidemics had already developed their own national HIV prevention strategies that included the "ABC" approach to behavior change (Abstain, Be faithful, correct and consistent use of Condoms where appropriate). The new data — from time periods that pre-date PEPFAR scale-up — link adoption of all three of the ABC behaviors to reductions in prevalence. Figure 17 shows the changes in HIV prevalence and sexual risk behavior that took place in Zimbabwe during the late 1990s and earlier part of this decade. Learning from the evidence, PEPFAR will continue to support all three elements of the evidence-based ABC strategy in

Figure 17: Behavior Change Among Males in Manicaland, Zimbabwe



Source: Gregson et al, *Science*; 311:2006

Table 6: Prevention: FY2007 Prevention of Sexual Transmission Results						
Country	**Number of individuals reached with community outreach HIV/AIDS prevention activities that promote abstinence and/or being faithful[1]**	**Number of individuals reached with community outreach HIV/AIDS prevention activities that promote correct and consistent use of condoms and related interventions[2]**	**FY2007 Total**	**Cumulative number of behavior change community outreach encounters, FY2004-FY2007**	**Planned Funding FY2007[3, 4] in USD millions**	**Planned Funding FY2004-FY2007[3, 4] in USD millions**
Botswana[5]	213,700	24,000	237,700	1,030,400	$9.7	$30.7
Côte d'Ivoire	566,300	651,500	1,217,800	1,692,900	$9.0	$21.0
Ethiopia	13,101,400	2,343,800	15,445,200	33,621,100	$25.6	$57.1
Guyana	81,200	59,100	140,300	625,100	$3.5	$11.3
Haiti	773,100	895,000	1,668,100	3,331,000	$6.7	$23.2
Kenya[6]	3,739,600	3,084,600	6,824,200	22,635,100	$40.5	$95.0
Mozambique	1,982,000	721,200	2,703,200	7,458,400	$19.3	$44.8
Namibia[7]	186,800	239,000	425,800	1,328,100	$13.7	$28.7
Nigeria[8]	3,310,100	534,800	3,844,900	16,985,900	$26.9	$54.4
Rwanda	723,200	149,500	872,700	2,367,000	$8.6	$25.1
South Africa[9]	5,173,800	2,263,000	7,436,800	27,175,200	$31.9	$87.7
Tanzania[9]	2,698,400	3,059,600	5,758,000	29,582,400	$20.6	$57.9
Uganda[9]	7,165,400	1,001,100	8,166,500	41,372,100	$24.7	$72.2
Vietnam	201,700	332,700	534,400	1,786,900	$11.3	$26.9
Zambia	1,625,200	683,200	2,308,400	6,787,800	$23.9	$65.4
Total	**41,541,900**	**16,042,100**	**57,584,000**	**197,779,300**	**$275.8**	**$701.5**
			Total funding including additional attributions[10]:		**$344.9**	**$929.2**

Note:
Numbers may be adjusted as attribution criteria and reporting systems are refined.
Numbers above 100 are rounded to nearest 100.

Footnotes:

[1] AB programs promote as their primary behavioral objectives that: (1) unmarried individuals abstain from sexual activity as the best and only certain way to protect themselves from exposure to HIV and other sexually transmitted infections, and (2) individuals practice fidelity in marriage and other sexual relationships as a critical way to reduce risk of exposure to HIV. Programs may focus on individual behavior change or may address relevant social and community norms.

[2] Correct and consistent use of condoms and related HIV/AIDS prevention includes behavior change activities, outside of those promoting abstinence and being faithful, that are aimed at preventing HIV transmission. Examples include community outreach programs to promote avoidance of or reduction of HIV risk behavior, and the social marketing or promotion of condoms, including work with high-risk groups such as injecting drug users, men who have sex with men, people in prostitution and their clients, and people living with HIV or AIDS. FY2004 and FY2005 results include activities with mass media and community mobilization for HIV testing. Indicators were refined in FY2006 resulting in small changes in the numbers reached.

[3] All funding figures are in millions of U.S. dollars and reflect regularly-updated planned program funding.

[4] Some or all of the individuals reached by PEPFAR may also be supported by other funding sources such as host governments and other international partners. This amount varies by country.

[5] Botswana results are attributed to the National HIV Program. Beginning FY2005, USG downstream contributions in Botswana are embedded in the upstream numbers, following a consensus reached between the USG and the Government of Botswana to report single upstream figures for each relevant indicator.

[6] Kenya's results in FY2007 are lower than FY2006. The decrease is due to a reduction in the number of males reached with condom messages as the number of condom outlets decreased from FY2006 to FY2007. These distribution sites are the main avenue for message dissemination.

[7] Namibia's results in FY2007 are lower than FY2006 due to postponed implementation and improvement of data quality control measures to reduce double-counting.

[8] The number of people reached through community outreach AB programs declined in Nigeria due to refined reporting.

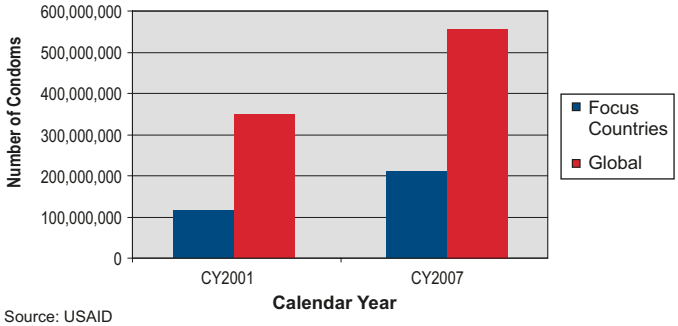
[9] The number of people reached in Uganda declined between FY 2006-FY2007. This was due to the clarification of the definition for "community outreach" and the improvement of data quality control measures to reduce double-counting. For Uganda, this affected the number of people reached through condoms and other related service programs.

[10] Total funding for each prevention, treatment and care programmatic area includes attribution of field and central dollars from the following categories: central procurements, supply chain, technical leadership and support, New Partners Initiative, strategic information, management and staffing, policy analysis, and systems strengthening activities. These attributions are made at the aggregate level and then added to the programmatic funding levels to get the total amount of support for each programmatic area.

ways appropriate to the epidemiology, social and cultural context, and national strategy of each host nation.

Funding for sexual transmission prevention in the focus countries in FY2007 was $345 million, or 12 percent of all program funding. In focus countries during FY2007, approximately 57.6 million people were reached by community outreach programs promoting ABC and related prevention strategies. This is a slight decrease from FY2006 results. In part, this may reflect increased emphasis on behavior change counseling, which is more time-intensive than other forms of community outreach, but is key to ensuring sustained behavior change and helps make other forms of outreach more effective. Improved data quality to reduce the risk of double-counting, a change in the way that PEPFAR programs count people reached through large group settings, a reduction in the number of condom delivery outlets in Kenya, and delayed implementation in Namibia also contributed to the decline.

Figure 18: USG Total Condoms Shipped, 2001 & 2007



Source: USAID

Table 7: USG Total Condoms Shipped, Calendar Year 2007 & Calendar Years 2004-2007

Country	CY2007 SHIPPED[1]	CY2004-CY2007 SHIPPED[1]
Botswana	6,000,000	11,367,000
Côte d'Ivoire	3,000,000	4,848,000
Ethiopia	15,603,000	144,399,000
Guyana	990,000	990,000
Haiti	17,825,000	41,267,000
Kenya	40,002,000	40,002,000
Mozambique	40,701,000	84,720,000
Namibia[2]	0	0
Nigeria	1,500,000	4,704,000
Rwanda	22,629,000	39,756,000
South Africa[3]	0	330,000
Tanzania	549,000	57,337,000
Uganda	22,002,000	115,416,000
Vietnam	20,000	23,073,000
Zambia	48,410,000	59,708,000
Total FOCUS	**209,229,000**	**617,915,000**
Total GLOBAL	**551,227,000**	**1,857,437,000**

Notes:

[1] Condom totals as of January 14, 2008.

[2] The Government of Namibia procures its own condoms, receives donations from other development partners, and also supports a condom social marketing program.

[3] The South African Government is committed to providing free condoms and does not require USG support for condom procurement. Through the Emergency Plan, the USG continues to provide technical assistance in support of the condom procurement and distribution programs in order to have a greater effect on behavior change.

Along with its programs that teach correct and consistent condom use for those who are sexually active, the USG seeks to ensure an adequate supply of condoms. The USG has supplied nearly 1.9 billion condoms worldwide from 2004 through 2007, lending support to comprehensive ABC approaches based on the epidemiology of each country.

It is important to note that prevention of sexual transmission is chronic disease management — just as treatment and care are. An individual must be reached at an early age to have maximum impact on behavior as the person grows older, and prevention messages must change in an age-appropriate way as risk behavior changes. Prevention programs span from at least 10 years of age to when a person is beyond risk, i.e. when they are no longer sexually active. Until that time, efforts must continue unabated to reinforce and maintain safe and personally responsible behavior. For this reason, data on the reach of behavior-change messages and condom supply are provided both for FY2007 and cumulatively from FY2004 through FY2007.

Elements of ABC interventions

ABC programs are more complex than the simple acronym suggests, because changing human behavior is a uniquely difficult undertaking. Achieving ABC requires significant cultural changes. Reaching children at an early age is key if they are to delay sexual debut and limit their number of partners. It is essential to rapidly expand life skills programs for youth because of the generational impact they can have — influencing a 10 year old's future behavior is far easier than changing a 25 year old's settled behavior. Behavioral impact from programs for children may not immediately be apparent, because programs must work to influence future behavior rather than immediate behavior. Yet we must be patient and persistent — we are only four years into PEPFAR's partnerships for a generational approach to prevention.

ABC also includes changing gender norms. Partnering with children's parents and caregivers, supporting their efforts to teach children to respect themselves and each other, is the best way to promote gender equality. In order for the ABC approach to be effective it must address the gender dynamics that affect sexual decision-making and strive to reduce sexual coercion, violence and rape. Through support for delayed sexual debut, secondary abstinence, fidelity to a single partner, partner reduction and correct and consistent condom use, ABC contributes to changing unhealthy cultural gender norms.

It is essential to reduce stigma against PLWHA — and *also* reduce stigma against those who choose healthy lifestyles. On the other hand, we must identify — and even stigmatize — cross-generational sex, including the phenomenon of older men preying on young girls, and sexual violence. We must also intensify our efforts to reduce stigma against women and girls who are victims of sexual violence and strengthen services for them, ensuring that HIV post-exposure prophylaxis (PEP), related medical care and psycho-social support are accessible to all survivors.

Recent PEPFAR-supported efforts include a growing number of interventions with PLWHA. The adoption of healthy living and reduction in risk behaviors among HIV-positive people leads to a substantial improvement in quality of life and a reduction in HIV transmission rates. These prevention efforts aim to mitigate the spread of HIV to sex partners, injecting drug use partners, and infants born to HIV-infected mothers, as well as protect the health of infected individuals. For example, in Uganda, a collaborative provider training initiative involving non-governmental organizations, community groups, and the Uganda Ministry of Health was developed to build capacity of service providers to deliver effective HIV counseling for PLWHA. Organizations and networks of PLWHA worked together to create prevention messages on a variety of topics, including: partner testing, status disclosure, socio-cultural barriers to prevention, HIV discordance, condom use, and managing the "new lease on life" challenges after antiretroviral treatment, including relationships, marriage and child-bearing.

At Cosmos High School in Windhoek, Namibia, five hundred students and their principal are stunned by the beautiful voices of VM6, a male a capella group, as they kickoff the "Living Positive Tour" — a dramatic and musical event focused on sending HIV/AIDS prevention and anti-stigma messages to Namibia's youth. The Tour combines performances by Vocal Motion 6 with the personal story of Ms. Herlyn Uiras, a young woman infected with HIV. Vocal Motion 6 and Ms. Uiras employ their vocal talents, dramatic skills, and personal experiences to deliver prevention, anti-stigma, and living positive messages. Since its inception on July 7, 2007, the Tour has reached 10,500 Namibians — 9500 children, at-risk youth, young adults, and 1000 adults — at primary and secondary schools, college campuses, teachers' colleges, sport clubs, youth centers, and churches in cities and towns throughout Namibia.

Knowing your epidemic

While ABC programs must be comprehensive to be effective, they also must be tailored to the contours of the epidemic in its specific time and place. ABC behavior change must undeniably be at the core of prevention programs, but one size does *not* fit all. This is why PEPFAR takes different approaches, depending on whether a country has a generalized and/or a concentrated epidemic. The existing directive that 33 percent of prevention funding be spent on abstinence and faithfulness programs is applied across the focus countries collectively, not on a country-by-country basis — and certainly not to countries with concentrated epidemics.

In countries with concentrated epidemics where, for example, 90 percent of infections are among persons in prostitution and their clients, the epidemiology dictates a response more heavily focused on B and C interventions. For this reason, PEPFAR changed its FY2008 guidance to release countries with concentrated epidemics — defined as a prevalence rate below one percent — from the directive that abstinence and faithfulness programs receive at least one-third of prevention resources. (It was possible to do this because compliance with the directive is assessed for PEPFAR as a whole.) In countries with prevalence above one percent where PEPFAR teams believe meeting the abstinence and faithfulness directive would not make epidemiological sense, programs may also submit a justification explaining why they have chosen not to meet the requirement. PEPFAR has never rejected such a justification, and the number submitted by the focus countries has grown from 8 in FY2006 to 11 each in FYs 2007 and 2008.

Illustrating the importance of knowing one's epidemic and responding accordingly, a story on PBS' "NewsHour with Jim Lehrer" depicted the varied challenges facing PEPFAR in Tanzania in tailoring prevention interventions to address that country's situation. The complete story can be found at *http://www.pbs.org/newshour/bb/africa/july-dec07/aids_11-30.html.*

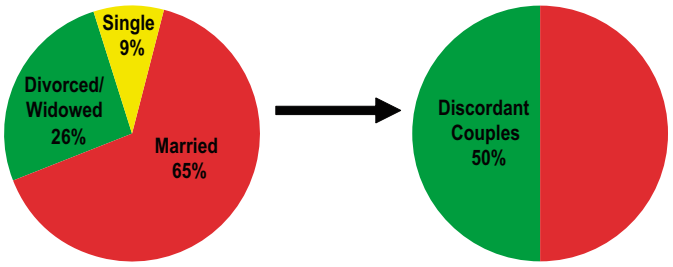
Addressing multiple concurrent partnerships and discordant couples

For older adolescents and adults who are sexually active, ABC includes reducing casual and multiple concurrent partnerships, which can rapidly spread HIV infection through broad networks of people. Multiple concurrent partnerships are common in many countries hardest-hit

by HIV, and PEPFAR supports programs that emphasize the importance of partner reduction toward the goal of faithfulness to a single HIV-negative partner.

Discordant couples are another important focus for intensive HIV prevention interventions. Figure 19 contains data presented at the 2007 HIV/AIDS Implementers Meeting. In this sample (in which the overall percentage of infections occurring among married people is comparable to the percentage of the population that is married), half of new HIV infections among married people occurred within HIV-discordant marriages. Given the large number of infections occurring through these discordant partnerships, PEPFAR supports efforts to reach discordant couples through a range of interventions that include: couples HIV testing; behavior change counseling, including on the importance of being faithful and using condoms correctly and consistently; and ensuring that the HIV-infected partner is linked to appropriate care and treatment services, which can lower the likelihood of transmission.

Figure 19: Uganda's 2005 National HIV Survey: Uganda's Last 175 Infections



Source: Uganda 2005 National HIV Survey

Adopting new prevention interventions

The Emergency Plan is also ready to support nations that adopt new prevention technologies once clinical trials are complete and guidance from a normative agency, such as WHO or UNAIDS, is available. In 2006, studies showed that medical male circumcision can significantly reduce the risk of HIV transmission for men. Once WHO issued normative guidance on the use of circumcision for HIV prevention in 2007, PEPFAR, working closely with partner countries, has aggressively pursued implementation. In FY2007, PEPFAR allocated approximately $16 million for activities related to male circumcision, up from approximately $600,000 in FY2006. As of December 2007, PEPFAR is supporting male circumcision activities in 11 countries. PEPFAR country teams have supported host country governments in the establishment of training facilities in Zambia and Kenya, where PEPFAR is also partnering with the Gates Foundation. Situational assessments are underway in South Africa, Malawi, and Lesotho; male circumcision service delivery has started or will start shortly in Swaziland, Kenya, Zambia, and Uganda; and planning for service delivery is under way in Mozambique, Rwanda, Namibia and Botswana. Total investments are expected to rise to at least $30 million in FY2008.

Roll-out presents significant challenges, including the need for human resources and appropriate counseling as well as the danger of risk compensation (in which men engage in more risky behavior because they believe they are completely protected by circumcision). PEPFAR partners are making it clear that male circumcision is not a silver bullet, but rather one part of a broad prevention arsenal. The USG is initiating male circumcision programs only at the written request of host country governments and incorporating ABC behavior change education into the counseling that men receive along with circumcision. PEPFAR is rolling programs out as rapidly as possible, beginning in areas of high HIV prevalence and with those at greatest risk of becoming infected, such as discordant couples in which the woman is HIV-positive, for largest impact. There is also a need to develop training and quality-assurance programs to ensure that activities are achieving maximum effectiveness.

As other new prevention strategies, such as microbicides or pre-exposure prophylaxis, are identified by normative agencies as effective prevention interventions, PEPFAR will support them as part of a comprehensive prevention strategy. Thanks to PEPFAR's wide network of care and treatment sites, PEPFAR country teams will be able to implement these methods rapidly whenever they become available — demonstrating again the value of integrated programs.

Addressing gender issues

PEPFAR fully integrates gender into its prevention, care, and treatment programs, recognizing the critical need to address the inequalities between women and men that influence sexual behavior and put women at higher risk of infection — as well as those that create barriers to men's and women's access to HIV/AIDS services.

Additionally, the Emergency Plan supports five key cross-cutting gender strategies that are critical to curbing the HIV/AIDS epidemic, ensuring access to quality services, and mitigating the consequences of the epidemic. These strategic focus areas are given below in Table 8. Activities in support of these focus areas are monitored annually during the Country Operational Plan (COP) review process. In FY2007, a total of $906 million was dedicated to 1,091 activities that included interventions to address one or more of these gender focus areas; in FY2008, the total is expected to rise to approximately $1.03 billion.

Table 8: Number of Activities per Gender Strategic Focus Area in FY2007

Gender Strategic Focus Area	Number of Activities that include this Strategic Focus Area
Increasing Gender Equity	620
Addressing Male Norms and Behaviors	494
Reducing Violence and Coercion	325
Increasing Women's and Girls' Access to Income and Productive Resources	163
Increasing Women's Legal Protection	83

Note:
Each activity may include multiple focus areas.

In 2007, three special gender initiatives were launched in nine countries to intensify program efforts in three of these focus areas: scaling up evidence-based programs to address male norms and behaviors; strengthening interventions for victims of sexual violence, including PEP; and reducing inequities that fuel girls' vulnerability to HIV/AIDS.

Gender issues are central to many HIV prevention programs, particularly those focused on youth. As young people are taught through the ABC approach to respect themselves and respect others, they learn about gender equality. While gender equity does not directly reduce HIV transmission, the ABC approach is particularly important for the protection of women and girls. By teaching delayed sexual debut, secondary abstinence, fidelity to a single partner, partner reduction, and correct and consistent condom use, ABC interventions can address unhealthy cultural gender norms among boys, girls, men, and women.

A paper published in *Science* in 2006, for example, showed that the proportion of men reporting a casual sexual partner over the past month dropped by 49 percent between 1998 and 2003 in eastern Zimbabwe. In Kenya, the percentage of men aged 15-49 reporting multiple partners in the last year dropped from 30 percent in 1998 to 17 percent in 2003. These changes are positive developments in the fight against HIV/AIDS, and they also represent increased empowerment of women in controlling their sexual encounters.

PEPFAR-supported prevention, treatment and care programs address gender issues in other ways as well. They provide information on the harmful effects of violence against women, cross-generational sex, and transactional sex, as well as the importance of inheritance rights and women's access to productive resources. For example, PEPFAR supports the Kenya Federation of Women Lawyers, which provides legal advice to PLWHA concerning rape, sexual assault, and property and inheritance rights. In South Africa, PEPFAR supports the Men as Partners project, which tailors behavior change interventions to redefine masculinity and strength in terms of men taking responsible actions to prevent HIV infection and gender-based violence. In Namibia, PEPFAR supports the Village Health Fund Project, a microenterprise program that provides vulnerable populations, such as widows and grandmothers who care for orphaned grandchildren, with start-up capital for income-generating projects. Such

A PEPFAR-supported clinic focusing on male outreach was opened within the maternal-child health clinic at the Kericho District Hospital, in Kenya's Rift Valley Province. The goal of this clinic is to reach out to men and more directly involve them in PMTCT and HIV treatment and care services. Strategies used to invite male clients include verbal and written invitations delivered through all mothers attending the local antenatal clinic. Mothers invite their male partners to accompany them to the clinic or, to visit the clinic alone if they prefer. Operating hours at the male clinic are strategically scheduled for Saturday to ensure that employed men can attend, and all services are administered by a trained nurse counselor. Through the Saturday clinic alone, over 1,700 men have received HIV/AIDS counseling and testing.

gender approaches are not in conflict with ABC — they are integral to it.

PEPFAR also supports linkages between HIV/AIDS and voluntary family planning programs, including those supported through USAID's Office of Population and Reproductive Health (PRH). Along with providing linkages to family planning programs for women in HIV/AIDS treatment and care programs, PEPFAR also works to link family planning clients with HIV prevention, particularly in areas with high HIV prevalence and strong voluntary family planning systems. Voluntary family planning programs provide a key venue in which to reach women who may be at high risk for HIV infection. PEPFAR supports the provision of confidential HIV counseling and testing within family planning sites, as well as linkages with HIV care and treatment for women who test HIV-positive. Ensuring that family planning clients have an opportunity to learn their HIV status also facilitates early up-take and access to PMTCT services for those women who test HIV-positive. PEPFAR's efforts remain focused on HIV/AIDS prevention, treatment and care, complementing the efforts of USAID/PRH programs and other partners.

Injecting Drug Users

Substance use, including injection drugs, is a major means of spreading HIV in many parts of the world. According to UNAIDS, outside of sub-Saharan Africa injecting drug use comprises just under one-third of global HIV transmission. Injecting drug users (IDUs) everywhere are at great risk for infection with HIV, through contaminated needles and syringes, risky sexual practices, and higher rates of sexually transmitted infections (STIs).

In PEPFAR focus countries, all of which but Vietnam have generalized epidemics, substance use plays a much smaller role in HIV transmission. PEPFAR therefore invests the most resources in the primary drivers of the epidemic, which in focus countries other than Vietnam are sexual and mother-to-child transmission.

At the same time, PEPFAR has invested in focus country and other bilateral programs to establish the political support, policy frameworks, and programmatic experience to scale up HIV/AIDS prevention, treatment and care for IDUs. In Vietnam, PEPFAR resources — approximately $66 million in FY2007 — are focused primarily on addressing the IDU-driven HIV epidemic. Additional efforts are under way to map IDU communities in other PEPFAR focus countries, such as Mozambique, Kenya, and South Africa, and to explore their role in the HIV epidemics of these countries.

PEPFAR supports three primary approaches to HIV prevention among IDUs: 1) tailoring HIV prevention programs to substance abusers; 2) supporting substance abuse therapy programs for HIV-positive individuals — and in certain cases in pilots for HIV-negative individuals — as an HIV prevention measure; and 3) offering HIV-positive drug users a comprehensive HIV/AIDS treatment program to reduce the risk of transmission.

An important emerging strategy that PEPFAR supports for HIV prevention is medication-assisted therapy (MAT), also known as substitution therapy, for IDUs. PEPFAR supports the use of MAT for HIV-positive and HIV-negative IDUs, focusing on HIV-positive IDUs because they represent an especially high-risk population. They pose risk for transmission of HIV to HIV-negative individuals — including other IDUs — and for fostering drug resistance if they are not adherent to their antiretroviral treatment. Regardless of their serostatus, capacity for MAT interventions for IDUs is extremely limited in PEPFAR countries, so prioritizing interventions for HIV-positive individuals is critical. However, where capacity allows it, PEPFAR has begun to pilot HIV prevention programs that include preventing and treating injecting drug use in HIV-negative individuals.

PEPFAR has supported MAT globally by working first with governments to develop the political acceptance and national policies to permit MAT interventions to take place. However, because the IDU population is heavily stigmatized globally, MAT interventions are controversial, and not all countries have passed enabling legislation. A significant breakthrough occurred in 2006; with strong PEPFAR support, Vietnam changed its five-year national HIV/AIDS strategy and passed HIV legislation to legalize MAT for IDUs. PEPFAR responded by supporting the development of plans for launching pilot MAT centers in rural and urban sites in several provinces, to serve HIV-positive and -negative clients.

Prevention of Mother-to-Child Transmission

UNAIDS estimates that 420,000 children under the age of 15 became infected with HIV/AIDS in 2007, down from 460,000 in 2001. Approximately 90 percent of these infections were due to mother-to-child transmission.

Prevention of mother-to-child transmission (PMTCT) is a key element of the prevention strategies of host nations, and PEPFAR is supporting their efforts. The Emergency Plan has provided support for host nations' PMTCT interventions for women during approximately 10 million pregnancies to date. Of these, over 827,000 women were determined to be HIV-positive and received preventive antiretroviral drugs (ARVs), preventing an estimated 157,000 infections of newborns to date. As shown in Table 9, PEPFAR provided $195 million in support of PMTCT programs in FY2007, or 6.9 percent of the total program funding in the focus countries.

As Table 10 indicates, access to vital ANC interventions varies across the focus countries. As a key element of its support for comprehensive programs, the Emergency Plan supports host governments' and other partners' efforts to provide PMTCT interventions, including HIV counseling and testing, for all women who attend ANCs. Key obstacles to successful scale-up of PMTCT programs that PEPFAR is working to address include: 1) failure to adopt and fully implement "opt-out" provider-initiated counseling and testing; 2) lack of integration as a basic part of maternal and child health care; 3) difficulties extending coverage to peripheral and rural sites; and 4) challenges in developing effective linkages with HIV care and treatment services.

Table 9: Prevention: FY2007 Prevention of Mother-to-Child Transmission Program[1] Results

Country	Pregnant women receiving HIV counseling and testing services[2]			Number of HIV+ pregnant women receiving ARV prophylaxis			Total estimated infant infections averted[5]	Planned Funding FY2007[6, 7] in USD millions	Planned Funding FY2004-FY2007[6, 7] in USD millions
	Number receiving upstream system strengthening support[3]	Number receiving downstream site-specific support[4]	Total	Number receiving upstream system strengthening support[3]	Number receiving downstream site-specific support[4]	Total			
Botswana[8]	38,800	0	38,800	12,400	0	12,400	2,400	$4.5	$13.1
Côte d'Ivoire	2,000	78,800	80,800	200	4,800	5,000	900	$4.3	$9.2
Ethiopia	0	111,500	111,500	0	3,100	3,100	600	$9.0	$20.2
Guyana	0	11,400	11,400	0	200	200	40	$1.1	$5.2
Haiti	0	106,500	106,500	0	1,100	1,100	200	$3.0	$8.9
Kenya	0	785,800	785,800	0	50,700	50,700	9,600	$23.8	$53.7
Mozambique	0	223,600	223,600	0	23,600	23,600	4,500	$15.8	$31.1
Namibia	3,300	33,100	36,400	600	6,400	7,000	1,300	$3.9	$9.5
Nigeria	18,500	207,900	226,400	1,000	11,800	12,800	2,400	$18.9	$35.0
Rwanda	150,700	92,900	243,600	4,600	4,200	8,800	1,700	$6.1	$14.2
South Africa	447,500	179,300	626,800	42,100	39,600	81,700	15,500	$20.1	$39.9
Tanzania	51,500	484,300	535,800	3,100	22,400	25,500	4,800	$11.5	$27.4
Uganda	154,400	410,700	565,100	4,300	25,500	29,800	5,700	$13.4	$29.7
Vietnam	0	159,600	159,600	0	700	700	100	$2.3	$3.6
Zambia	0	259,500	259,500	0	31,600	31,600	6,000	$15.8	$33.2
Total	**866,700**	**3,144,900**	**4,011,600**	**68,300**	**225,700**	**294,000**	**55,740**	**$153.7**	**$333.8**
				Total funding including additional attributions[9]:				**$195.0**	**$453.6**

Note:
Numbers may be adjusted as attribution criteria and reporting systems are refined.
Upstream and downstream numbers above 100 are rounded to the nearest 100 and then added to get totals.

Footnotes:
[1] PMTCT includes activities aimed at providing the minimum package of services for preventing mother-to-child transmission including: HIV counseling and testing for pregnant women, ARV prophylaxis to prevent MTCT, counseling and support for safe infant feeding practices, and voluntary family planning counseling referrals.
[2] The number of pregnant women receiving PMTCT services includes only women who have been counseled and tested, and received their test result.
[3] Number of individuals reached through upstream systems strengthening includes those supported through contributions to national, regional and local activities such as training, laboratory support, monitoring and evaluation, logistics and distribution systems, or protocol and curriculum development.
[4] Number of individuals reached through downstream site-specific support includes those receiving services at USG-funded service delivery sites.
[5] The number of infant infections averted was calculated by multiplying the total number of HIV+ pregnant women who received ARV prophylaxis (upstream and downstream) by 19%, reflecting a consensus estimate that current interventions (which vary by country and site) are reducing transmission, on average, from a background of 35% to 16%. Countries with more effective interventions (eg. Botswana) are likely averting more infant infections than shown here.
[6] All funding figures are in millions of U.S. dollars and reflect regularly-updated planned program funding.
[7] Some or all of the individuals reached by PEPFAR may also be supported by other funding sources such as host governments and other international partners. This amount varies by country.
[8] Botswana results are attributed to the National HIV Program. Beginning FY2005, USG downstream contributions in Botswana are embedded in the upstream numbers, following a consensus reached between the USG and the Government of Botswana to report single upstream figures for each relevant indicator.
[9] Total funding for each prevention, treatment and care programmatic area includes attribution of field and central dollars from the following categories: central procurements, supply chain, technical leadership and support, New Partners Initiative, strategic information, management and staffing, policy analysis, and systems strengthening activities. These attributions are made at the aggregate level and then added to the programmatic funding levels to get the total amount of support for each programmatic area.

As shown in Table 10, many nations have made significant progress in reaching pregnant women with PMTCT interventions with PEPFAR support in the last four years, often building on programs that pre-dated PEPFAR. In other countries, progress has been slower, and the Emergency Plan is supporting these nations in redoubling efforts to close the gap. When comparing results from the first year of PEPFAR in FY2004 to FY2007, all countries have scaled up, and most have dramatically improved availability of PMTCT interventions to pregnant women.

Nations have sought to ensure that all women receive the option of an HIV test through pre-test counseling during pregnancy (or at or after delivery, if they do not seek care before delivery). By promoting the routine, voluntary offer of HIV testing — so that women receive testing unless they opt out — host nations have increased the rate of uptake among pregnant women from low levels to around 90 percent at many sites. Adoption and effective implementation of opt-out testing, rapid testing, and other essential policy changes, is essential for success. For further information on policies relating to HIV testing, please see the section on Counseling and Testing.

Table 10: Prevention: Prevention of Mother-to-Child Transmission Program[1] with USG Support in FY2004 and FY2007

Country	Estimated Coverage of Pregnant Women Receiving HIV Counseling and Testing	
	Percent Coverage	
	FY2004	FY2007
Botswana[2]	58%	92%
Côte d'Ivoire	3%	13%
Ethiopia	0.2%	4%
Guyana	32%	82%
Haiti	8%	34%
Kenya	19%	55%
Mozambique	4%	28%
Namibia	12%	75%
Nigeria	0.4%	4%
Rwanda	11%	61%
South Africa	46%	79%
Tanzania	2%	38%
Uganda	8%	39%
Vietnam[3]	0.1%	11%
Zambia[3]	11%	55%
Totals	**6%**	**23%**

Notes:

Numbers may be adjusted as attribution criteria and reporting systems are refined.

This indicator was revised beginning in FY2005. FY2004 results include an adjustment accounting for pregnant women who were counseled, tested, and received their test results.

Coverage rates were calculated by dividing PEPFAR program (upstream and downstream) results by the estimated population eligible for the service. Eligible populations were based on the estimated number of births for each year provided by the International Database of the U.S. Census Bureau. Coverage estimates for FY2004 were revised from estimates provided in the PEPFAR Third Annual Report to Congress, using eligible populations from the U.S. Census Bureau.

Footnote:

[1] PMTCT includes activities aimed at providing the minimum package of services for preventing mother-to-child transmission. This indicator is based on pregnant women who received HIV counseling and testing and received their test results.

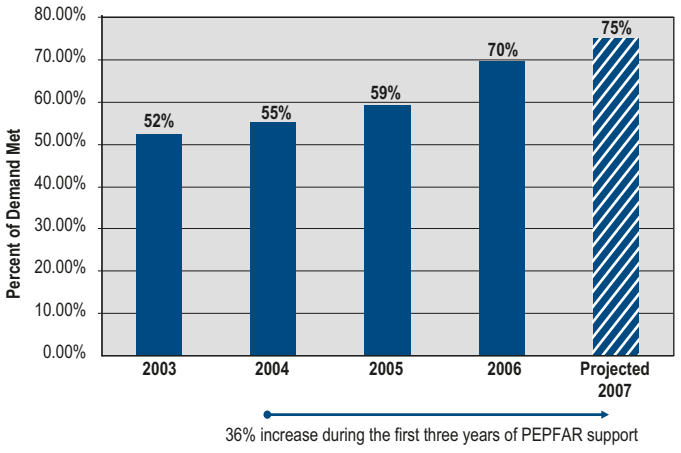
[2] Botswana results are attributed to the National HIV Program. Beginning FY2005, USG downstream contributions in Botswana are embedded in the upstream numbers, following a consensus reached between the USG and the Government of Botswana to report single upstream figures for each relevant indicator.

[3] An error occurred in reporting coverage rates in the PEPFAR Third Annual Report to Congress. FY2004 results for Vietnam and Zambia were revised. The correct estimates are now reported in this table.

Prevention of Medical Transmission

In FY2007, PEPFAR provided approximately $61 million for medical transmission prevention activities in the focus countries, or 2.1 percent of program funds. This included direct support for 4,589 blood-safety service outlets or programs, as well as broader efforts to strengthen blood service management, commodity procurement, infrastructure, and national policies. With Emergency Plan support, 11 of the PEPFAR focus countries can now meet 50 percent of their annual demand for safe blood — up from just four of the focus countries when PEPFAR started. Seven of these 11 countries are now meeting two-thirds of their annual demand. In order to build capacity for a sustainable response into the future, PEPFAR also supported training or retraining for 7,558 people in blood safety and 78,000 in medical injection safety in 31 countries worldwide, as well as providing commodities for safe medical injections.

Figure 20: Percent of Blood Demand Met in 13 PEPFAR-supported Focus Countries*



* Excludes Vietnam, which does not have a Track 1.0. Blood Safety program, and Nigeria, where most of the blood collection occurs outside the National Blood Service, which was created after the introduction of PEPFAR support.

Figure 21: Treatment: Number of Individuals Receiving Antiretroviral Treatment in the 15 Focus Countries (Total of both upstream and downstream USG-supported interventions)

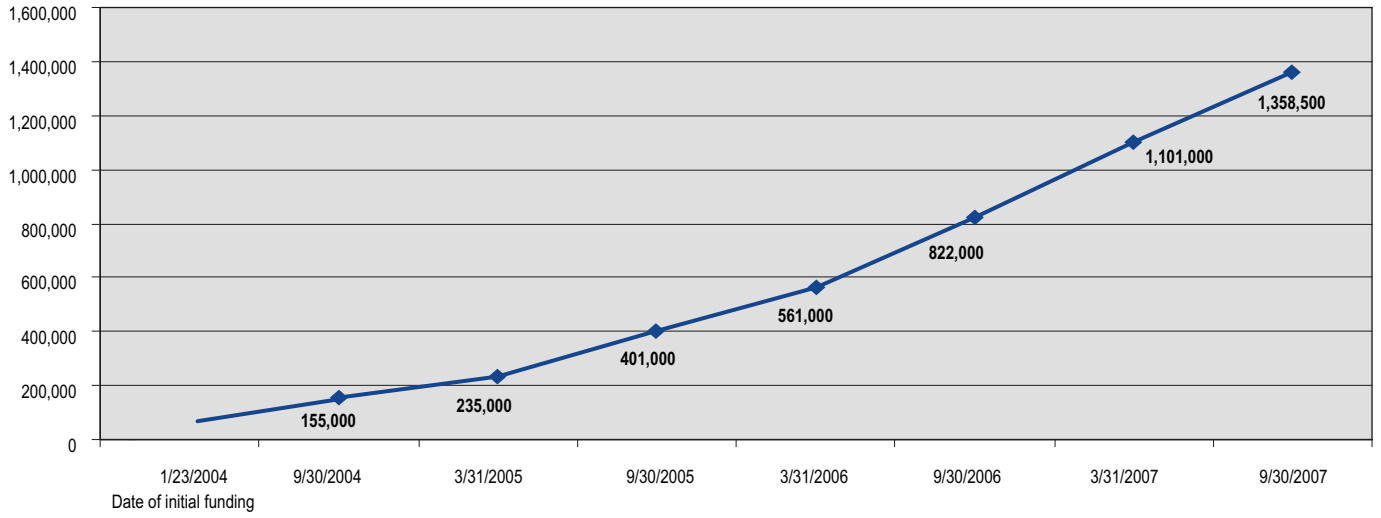


Table 11: Treatment[1]: FY2007 Overall Results

Country	Number of individuals receiving upstream system strengthening support for treatment[2]	Number of individuals receiving downstream system site-specific support for treatment[3]	Total number of individuals reached	Planned Funding FY 2007[4, 5] in USD millions	Planned Funding FY 2004-07[4, 5] in USD millions
Botswana[6]	90,500	0	90,500	$25.5	$61.0
Côte d'Ivoire	11,100	34,900	46,000	$32.9	$79.1
Ethiopia	0	81,800	81,800	$112.1	$219.3
Guyana	0	2,100	2,100	$10.6	$24.6
Haiti	0	12,900	12,900	$34.1	$84.9
Kenya	11,500	154,900	166,400	$167.1	$348.1
Mozambique	34,000	44,200	78,200	$62.0	$118.8
Namibia	4,000	39,700	43,700	$28.8	$62.2
Nigeria	20,300	106,100	126,400	$138.9	$301.6
Rwanda	19,600	24,800	44,400	$42.2	$100.0
South Africa	124,300	204,700	329,000	$184.7	$377.2
Tanzania	13,300	83,400	96,700	$91.3	$223.0
Uganda	22,500	83,500	106,000	$92.1	$233.4
Vietnam	2,700	9,000	11,700	$21.1	$41.3
Zambia	0	122,700	122,700	$83.5	$234.5
All countries	**353,800**	**1,004,700**	**1,358,500**	**$1,127.1**	**$2,508.8**
		Total funding including additional attributions[7]:		**$1,337.6**	**$3,095.5**

Note:
Numbers may be adjusted as attribution criteria and reporting systems are refined.
Upstream and downstream numbers above 100 are rounded to the nearest 100 and then added to get totals.

Footnotes:
[1] Treatment includes the provision of antiretroviral drugs and clinical monitoring of ART among those with advanced HIV infection.
[2] Number of individuals reached through upstream systems strengthening includes those supported through contributions to national, regional and local activities such as training, laboratory support, monitoring and evaluation, logistics and distribution systems, protocol and curriculum development.
[3] Number of individuals reached through downstream site-specific support includes those receiving services at USG-funded service delivery sites.
[4] All funding figures are in millions of U.S. dollars and reflect regularly-updated planned program funding.
[5] Some or all of the individuals reached by PEPFAR may also be supported by other funding sources such as host governments and other international partners. This amount varies by country.
[6] Botswana results are attributed to the National HIV Program. Beginning FY2005, USG downstream contributions in Botswana are embedded in the upstream numbers, following a consensus reached between the USG and the Government of Botswana to report single upstream figures for each relevant indicator. This decision mostly affected reporting in the areas of care and treatment.
[7] Total funding for each prevention, treatment and care programmatic area includes attribution of field and central dollars from the following categories: central procurements, supply chain, technical leadership and support, New Partners Initiative, strategic information, management and staffing, policy analysis, and systems strengthening activities. These attributions are made at the aggregate level and then added to the programmatic funding levels to get the total amount of support for each programmatic area.

Partnerships for Treatment

It was just a few years ago that many doubted that large-scale antiretroviral treatment programs could work in the world's poorest nations. Now we know such programs can work. Hundreds of thousands of people are proving it.

Approximately 1.45 million people — including nearly 1.36 million in the 15 focus countries — received treatment with support from rapidly scaled-up bilateral PEPFAR partnerships with host nations. In FY2007, PEPFAR provided $1.34 billion in support of treatment programs, including treatment for pediatric patients, or 48 percent of program funding in the focus countries. The striking growth of PEPFAR support for treatment in the focus countries is shown in Figure 21 and Table 11.

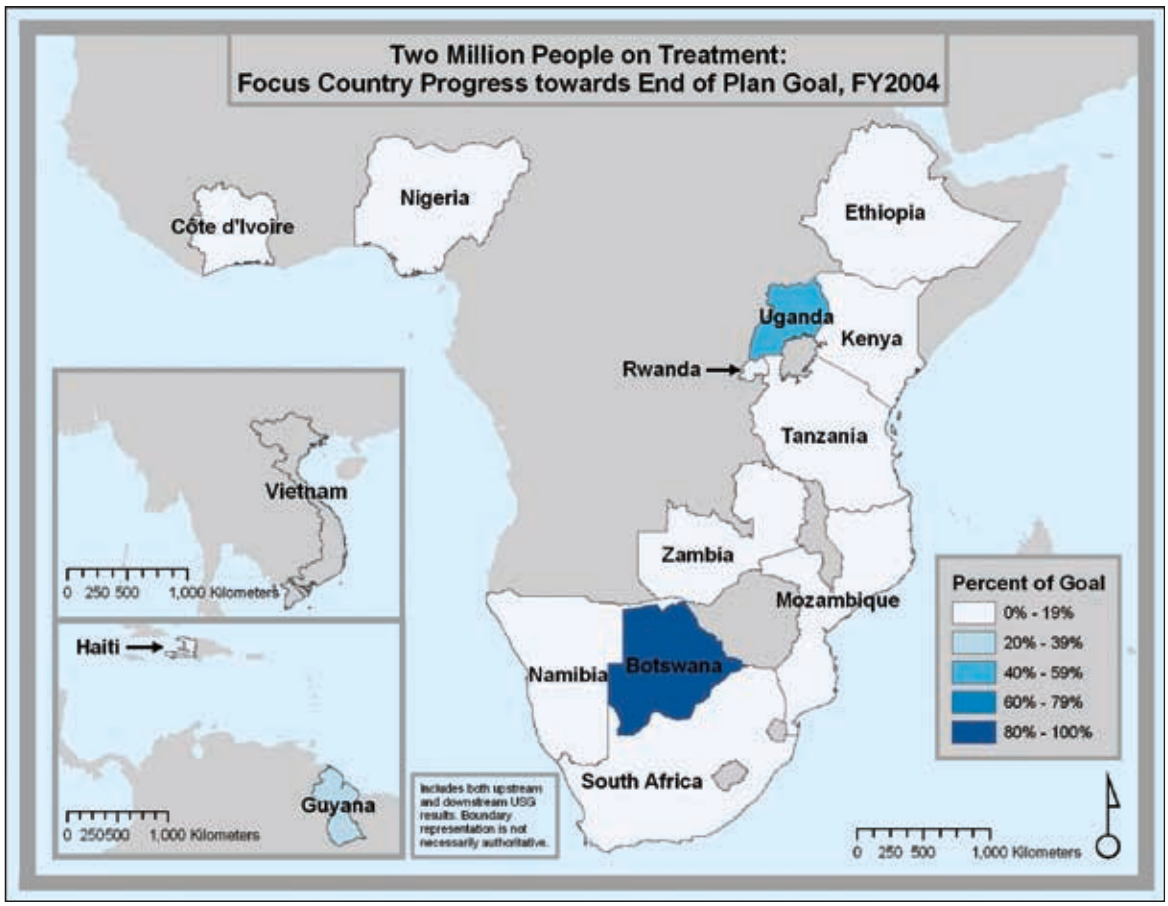
By September 2007 in the focus countries, approximately 45,000 individuals were being added to the number of people benefiting from PEPFAR support for life-extending treatment every month. The number of sites providing treatment increased by 55 percent from FY2006 to FY2007, and each month an average of about 87 new treatment sites came on line.

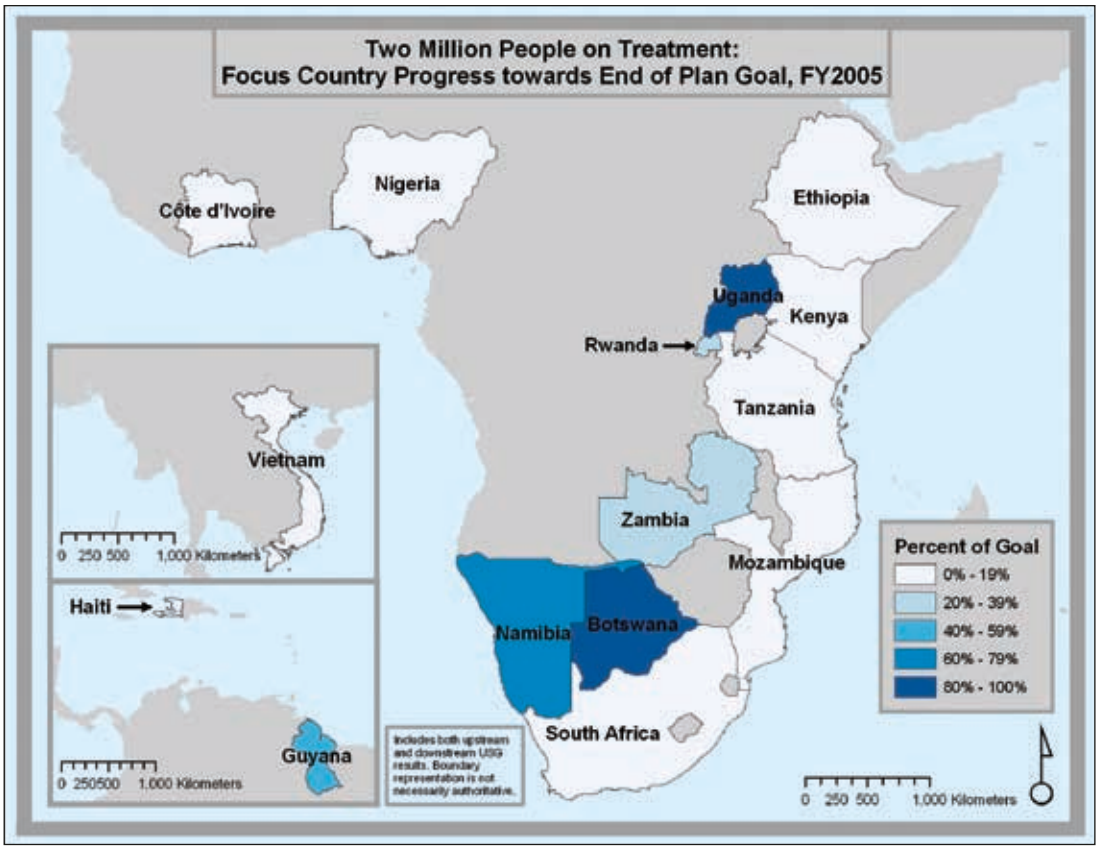
Progress in national scale-up

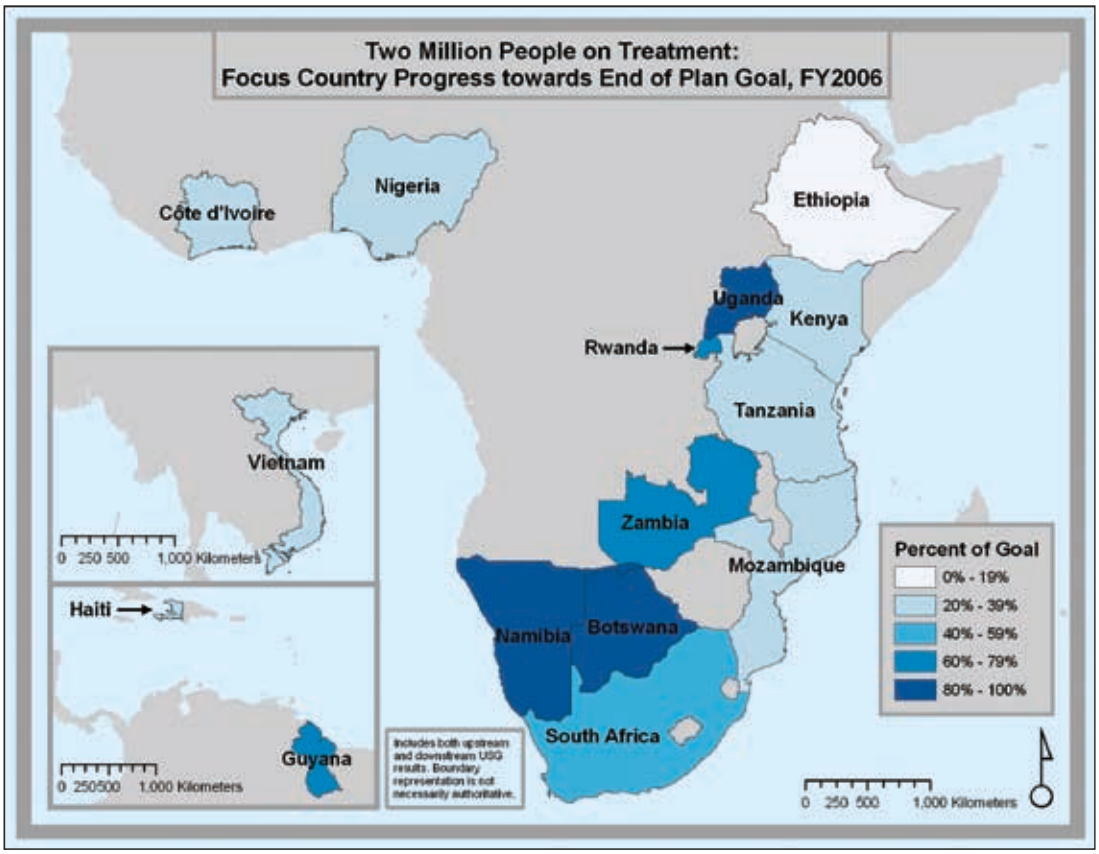
The series of maps in Figure 22 depicts the steady increase in Emergency Plan support for treatment coverage as programs scale up toward the five-year target of treatment support for two million people.

Beyond the focus countries, other bilateral PEPFAR treatment programs supported an additional 87,000 people (unlike previous years, this number includes only those reached with downstream PEPFAR support), for a total of 1.45 million receiving treatment with PEPFAR support worldwide.

Figure 22: PEPFAR Treatment Programs Supported




Two Million People on Treatment:
Focus Country Progress towards End of Plan Goal, FY2005
Côte d'Ivoire
Nigeria
Ethiopia
Uganda
Kenya
Rwanda
Tanzania
Vietnam
Zambia
Mozambique
Haiti
Namibia
Botswana
Guyana
South Africa
Includes both upstream and downstream USG results. Boundary representation is not necessarily authoritative.
0 250 500 1,000 Kilometers
Percent of Goal
0% - 19%
20% - 39%
40% - 59%
60% - 79%
80% - 100%


Two Million People on Treatment:
Focus Country Progress towards End of Plan Goal, FY2006
Côte d'Ivoire
Nigeria
Ethiopia
Uganda
Kenya
Rwanda
Tanzania
Vietnam
Zambia
Mozambique
Haiti
Namibia
Botswana
Guyana
South Africa
Includes both upstream and downstream USG results. Boundary representation is not necessarily authoritative.
0 250 500 1,000 Kilometers
Percent of Goal
0% - 19%
20% - 39%
40% - 59%
60% - 79%
80% - 100%

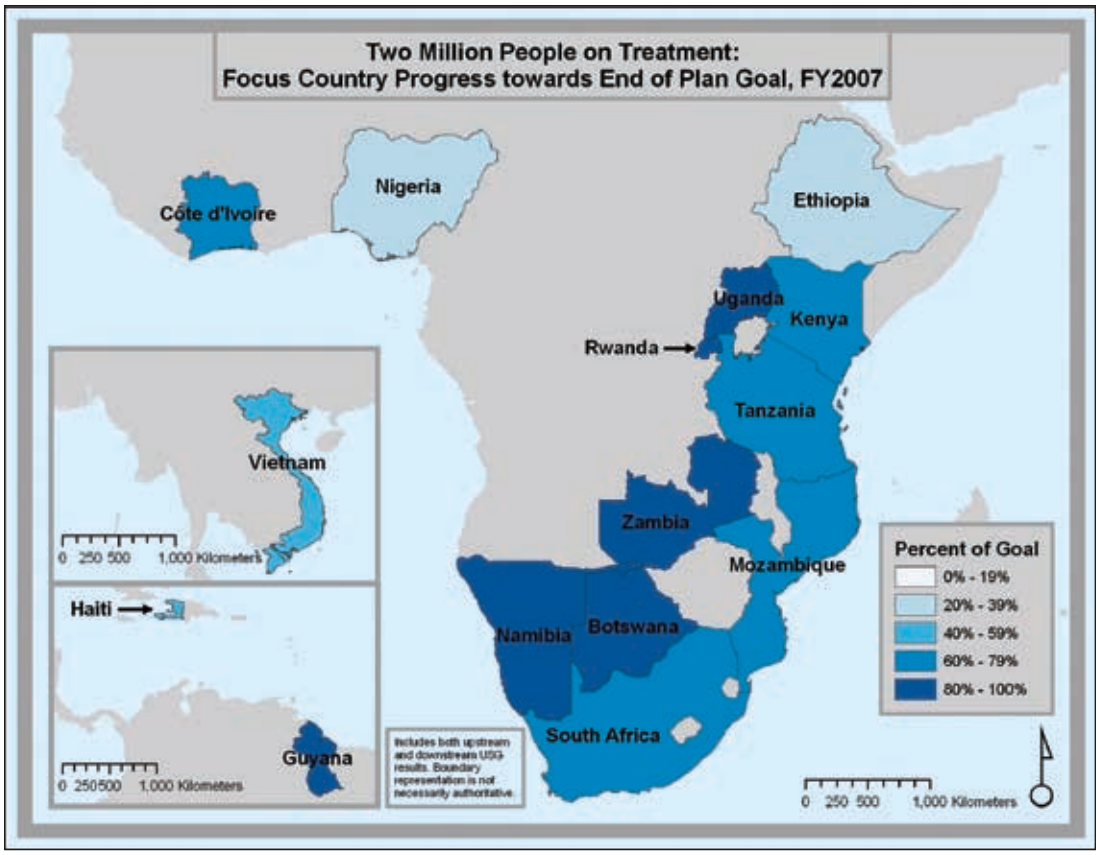


Table 12: Treatment[1]: FY2007 Progress Toward Emergency Plan Target of 2 Million Individuals Receiving Treatment			
Country	**Emergency Plan 5 Year Target**	**Total number of individuals reached**	**Percentage of 5 Year target met**
Botswana[2]	33,000	90,500	274%
Côte d'Ivoire	77,000	46,000	60%
Ethiopia	210,000	81,800	39%
Guyana	2,000	2,100	105%
Haiti	25,000	12,900	52%
Kenya	250,000	166,400	67%
Mozambique	110,000	78,200	71%
Namibia	23,000	43,700	190%
Nigeria	350,000	126,400	36%
Rwanda	50,000	44,400	89%
South Africa	500,000	329,000	66%
Tanzania	150,000	96,700	64%
Uganda	60,000	106,000	177%
Vietnam	22,000	11,700	53%
Zambia	120,000	122,700	102%
All countries	**2,000,000**	**1,358,500**	**68%**

Note:

Numbers may be adjusted as attribution criteria and reporting systems are refined.

Upstream and downstream numbers above 100 are rounded to the nearest 100 and then added to get totals.

Total includes the number of individuals reached through upstream contributions to national, regional and local activities such as training, laboratory support, monitoring and evaluation, logistics and distribution systems, or protocol and curriculum development, as well as those receiving services at USG-funded service delivery sites.

Footnotes:

[1] Treatment includes the provision of antiretroviral drugs and clinical monitoring of ART among those with advanced HIV infection.

[2] Botswana results are attributed to the National HIV Program. Beginning FY2005, USG downstream contributions in Botswana are embedded in the upstream numbers, following a consensus reached between the USG and the Government of Botswana to report single upstream figures for each relevant indicator. This decision mostly affected reporting in the areas of care and treatment.

Reaching women and children

As part of its commitment to ensure treatment availability for children and women, PEPFAR bilateral programs have led international partners in supporting host nations in tracking clients by age and gender. Of those for whom PEPFAR provided downstream support for treatment in the focus countries, approximately 62 percent were women, which is higher than the estimated percentage of adults living with HIV in sub-Saharan Africa who are women.

Table 13: Number of Children and Women Among Those Receiving Treatment with Downstream Emergency Plan Support for Focus Countries

	FY2006		FY2007	
	Children (ages 0-14)	Women (all ages)	Children (ages 0-14)	Women (all ages)
Total	45,000	301,100	85,900	575,300

Notes:
Numbers may be adjusted as attribution criteria and reporting systems are refined.
Numbers above 100 are rounded to the nearest 100 and added to get totals.
Numbers shown reflect only those receiving downstream support. Results for those who benefit from upstream support cannot be disaggregated by age or sex.
Number of individuals reached through downstream site-specific support includes those receiving services at USG-funded service delivery sites.

PEPFAR has also expanded access to treatment for children, with the number of children receiving antiretroviral treatment through downstream PEPFAR support increasing 77 percent from FY2006 levels (see Table 13). PEPFAR dedicated nearly $191.5 million to pediatric treatment in FY2006 and 2007 combined, reaching approximately 85,900 children with downstream support in FY2007, compared with only 4,800 in FY2004.

Pediatric treatment has made steady progress, increasing the share of those receiving PEPFAR-supported treatment who are children from three percent in FY2004 to nine percent in FY2007. This percentage is above UNAIDS' new estimate of the global share of HIV-positive people who are children (7.5 percent).

Improving infant diagnosis

Increasing the availability of pediatric treatment requires more than increased resources. Standard HIV tests, which test for HIV antibodies, cannot reliably identify children as being HIV-infected until after 18 months of age because of the presence of maternal antibodies. Thus, it is difficult to determine which young infants and children are truly infected and need treatment — and 50 percent of HIV-positive children will die by age two if they are not treated. In order to accurately diagnose HIV infection in young infants and children so they can access treatment, PEPFAR supports nations in expanding polymerase chain reaction (PCR) testing to identify the presence of HIV itself, and not just antibodies. To expand access to accurate diagnosis, PEPFAR-supported programs are performing these tests using dried blood spots on filter paper, which require less blood per test than older methods and easily can be transported to central laboratories for testing.

PEPFAR has supported country-level policy change to allow PCR-based dried blood spot testing in order to reduce the cost and burden of infant diagnosis. Most focus countries have now adopted such policies, making accurate diagnosis and management of pediatric treatment a growing reality.

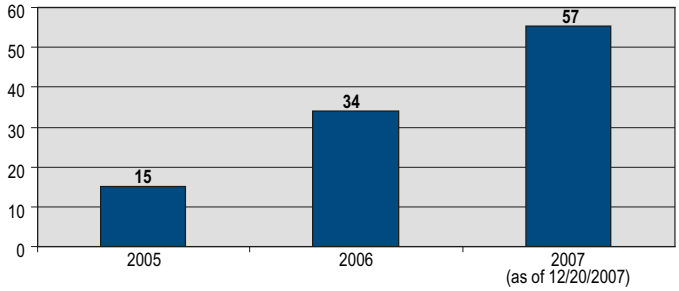
Addressing ongoing barriers to pediatric treatment

Other barriers currently limiting the scale-up of pediatric treatment and care services include a lack of providers equipped with the necessary skills to address the special needs of HIV-positive children, the relatively high cost of pediatric ARV formulations, regulatory barriers to registering pediatric ARV formulations, weak linkages between PMTCT and treatment services, and limited information about pediatric doses of medicines at different ages and weights. To address these barriers, PEPFAR supports training programs that teach health care workers how to treat pediatric patients, and the development of dosing guides for children of various ages and sizes. PEPFAR also continues to work with pharmaceutical companies, implementing organizations, and multinational organizations such as UNICEF and WHO through a public-private partnership (announced by First Lady Laura Bush in 2006) to address these barriers.

Increasing the availability of safe, effective, low-cost generic medications

The Emergency Plan's impact on treatment access extends beyond PEPFAR-supported programs to increased availability of safe, effective, low-cost, generic ARVs in the developing world. To meet the need for such ARVs, the Food and Drug Administration within the U.S. Department of Health and Human Services (HHS/FDA) introduced an expedited "tentative approval" process whereby ARVs from anywhere in the world, produced by any manufacturer, could be rapidly reviewed to assess

Figure 23: Treatment: Cumulative HHS/FDA Approvals/ Tentative Approvals of Generic ARVs, Calendar Years 2005, 2006, and 2007



quality standards and subsequently cleared for purchase under PEPFAR. As of December 20, 2007, 57 generic ARV formulations have been approved or tentatively approved by HHS/FDA under the expedited review, including eight fixed-dose combination products that contain two drugs in the same tablet or capsule, and four fixed-dose combination products that contain three drugs in the same tablet or capsule. Fourteen products are intended primarily for pediatric use. The steady increase in approvals is shown in Figure 23. As a side benefit, the process has also expedited the availability in the United States of seven generic versions of ARVs whose U.S. patent protection has expired.

Table 14 is drawn from the work of SCMS, and shows that SCMS has been able to achieve the lowest price on nearly 70 percent of antiretroviral regimens for which interna-

Table 14: SCMS Prices Compared to Prices Reported by Other International Programs

ARV	SCMS discount relative to next lowest price (parentheses indicate ARVs for which another purchaser obtains lower price)
Abacavir (as sulphate) 20mg/ml, oral solution, bottle of 240ml	5.82%
Abacavir (as sulphate) 300mg, tablets, 60 tablets	0.43%
Didanosine 100mg, tablets, 60 tablets	0.64%
Didanosine 25mg [Videx], tablets, 60 tablets	(0.57%)
Didanosine 50mg [Videx], tablets, 60 tablets	(0.21%)
Efavirenz 30mg/ml [Stocrin/Sustiva], oral solution, bottle of 180ml	(0.26%)
Efavirenz 50mg, capsule, 30 capsules	10.04%
Efavirenz 600mg, tablets, 30 tablets	5.42%
Indinavir 400mg [Crixivan], capsules, 180 capsules	(1.22%)
Lamivudine 10mg/ml, oral solution, bottle of 240 ml	1.04%
Lamivudine 150mg, tablets, 60 tablets	1.73%
Lamivudine/Stavudine 150mg/30mg, tablets, 30 tablets	21.61%
Lamivudine/Stavudine/Nevirapine 150mg/30mg/200mg, tablets, 60 tablets	5.81%
Lamivudine/Zidovudine 150mg/300mg, tablets, 60 tablets	2.66%
Lamivudine/Zidovudine/Abacavir 150mg/300mg/300mg [Trizivir], tablets, 60 tablets	0.03%
Lamivudine/Zidovudine/Nevirapine 150/300/200mg, tablets, 60 tablets	5.54%
Lopinavir/Ritonavir 200mg/50mg [Aluvia], tablets, 120 tablets	(8.37%)
Nevirapine 10mg/ml, oral suspension, bottle of 240 ml	0.00%
Nevirapine 200mg [Viramune], tablets, 60 tablets	0.00%
Nevirapine 200mg, tablets, 60 tablets	3.58%
Ritonavir 100mg [Norvir], capsules, 4x84 capsules (cool)	(0.15%)
Saquinavir 200mg [Invirase], capsules, 270 capsules	(22.73%)
Stavudine 1mg/ml, powder for oral solution, bottle of 200 ml	0.00%
Stavudine 20mg [Zerit], capsules, 60 capsules	(5.62%)
Stavudine 20mg, capsules, 60 capsules	2.78%
Stavudine 30mg, capsules, 60 capsules	27.59%
Tenofovir disoproxil fumarate/Emtricitabine 300mg/200mg [Truvada], tablets, 30 tablets	5.00%
Zidovudine 10mg/ml, oral solution, bottle of 240 ml	2.78%
Zidovudine 300mg, tablets, 60 tablets	(2.41%)

Notes:

*Displayed discount represents the discount achieved by SCMS as compared to the nearest internationally published price.

For this analysis, SCMS weighted average prices were calculated using purchase history from July 1 - September 30, 2007. The calculated unit price was then compared to published prices from the WHO Global Price Reporting Mechanism (purchases from July 1 - September 30, 2007), Medecins Sans Frontieres (July 2007 report), and the Clinton HIV/AIDS initiative (May 2007 Price List).

tionally published prices were available (17 of 20 first-line regimens and three of nine second-line regimens).

While this level of savings is a considerable achievement, the use of generics within and between countries varies, and significant challenges remain:

- Prices for pediatric ARV formulations and second-line ARVs remain higher than first-line regimens.
- In countries where approval and registration of generic ARVs is slow, partners may still have to use innovator drugs.
- Some buyers continue to purchase branded ARVs, due to unfounded concerns that even HHS/FDA-approved generics are not as effective.

In addition, the U.S. dollar's decline against other currencies and the increasing cost of raw materials for ARVs could slow or stop the decline of ARV prices.

Partnerships for Care

PEPFAR supports host nations' wide-ranging programs to meet the needs of OVCs affected by the pandemic, as well as PLWHA. Figure 24 shows that, as of September 30, 2007, PEPFAR supported care for 6.6 million people, including approximately 2.7 million OVCs and nearly four million PLWHA. In FY2007, PEPFAR provided 30.9 percent of focus country program resources, or $906.5 million, in support of care (including $223 million for counseling and testing programs).

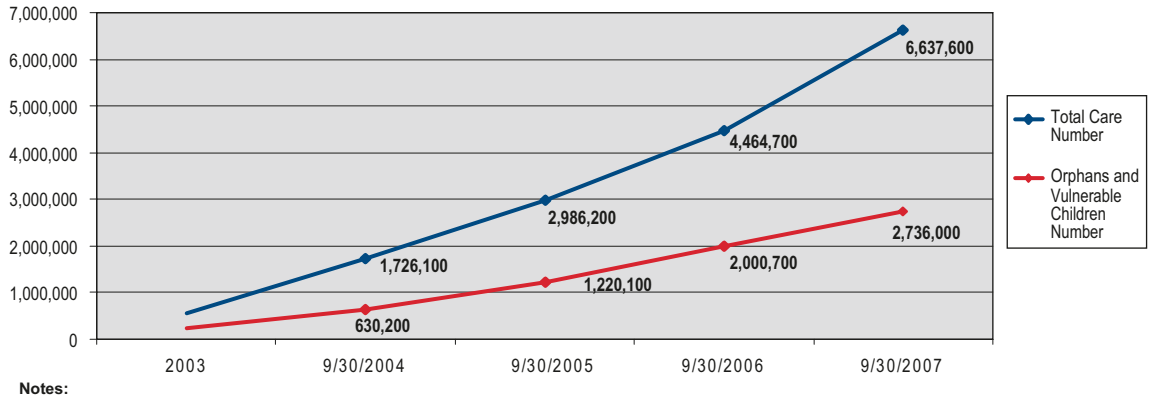
Orphans and Vulnerable Children (OVCs)

Along with the tragedies individual children can experience, the increasing needs of millions of OVCs are severely straining the economic and social resources of families, communities, and entire societies. Inadequate care and protection of children can result in increased social disorder, with profound implications for future political stability. Orphans are especially vulnerable to recruitment by gangs and armed groups, and to exploitation as victims of child labor or human trafficking.

Without education and vocational training, the skills young people need for economic independence can be lost, potentially condemning them — and ultimately their whole society — to continued poverty. One World Bank simulation of the economy of South Africa — a nation with a relatively well-developed economy — found that, without effective intervention to meet the needs of OVCs, by 2020 the average household income will be less than it was in 1960, and will continue to decline thereafter.

OVCs themselves face elevated risk of HIV infection, and PEPFAR supports efforts to expand prevention and HIV counseling and testing, which are an entry point to care and treatment. In addition, meeting the needs of children with HIV also can serve as a way to build relationships with their caregivers, who may themselves be in need of care. Female orphans and vulnerable children face a disproportionate level of risk for exploitation, abuse, and HIV infection. This is especially true for pre-adolescent and adolescent girls who have become heads of households. In economically hard-pressed families, girls are

Figure 24: Care: Number of Individuals Receiving Care in the 15 Focus Countries (Orphans and Vulnerable Children + Care for People Living with HIV/AIDS)



Notes:
2003 OVC estimate includes all OVCs in focus countries; whether or not affected by AIDS.
FY2004 results have been revised from 1,727,100 to 1,726,100.

Table 15: Care[1]: FY2007 Progress Toward Emergency Plan Target of 10 Million Individuals Receiving Care			
Country	**Emergency Plan 5 Year Target**	**Total number receiving care services**	**Percentage of 5 Year Target Met**
Botswana[2]	165,000	224,300	136%
Côte d'Ivoire	385,000	115,500	30%
Ethiopia	1,050,000	726,600	69%
Guyana	9,000	5,300	59%
Haiti	125,000	113,100	90%
Kenya	1,250,000	743,600	59%
Mozambique	550,000	669,000	122%
Namibia	115,000	163,900	143%
Nigeria	1,750,000	282,000	16%
Rwanda	250,000	102,700	41%
South Africa	2,500,000	1,349,500	54%
Tanzania	750,000	745,400	99%
Uganda	300,000	722,300	241%
Vietnam	110,000	47,400	43%
Zambia	600,000	627,000	105%
All countries	**10,000,000**	**6,637,600**	**66%**

Note:

Numbers may be adjusted as attribution criteria and reporting systems are refined.

Upstream and downstream numbers above 100 are rounded to the nearest 100 and then added to get totals.

Total number receiving care includes individuals reached through upstream contributions to national, regional and local activities such as training, laboratory support, monitoring and evaluation, logistics and distribution systems, or protocol and curriculum development, as well as those receiving services at USG-funded service delivery sites.

Footnotes:

[1] Care includes the areas of Orphans and Vulnerable Children and Care & Support for PLWHA (including TB/HIV).

[2] Botswana results are attributed to the National HIV Program. Beginning FY2005, USG downstream contributions in Botswana are embedded in the upstream numbers, following a consensus reached between the USG and the Government of Botswana to report single upstream figures for each relevant indicator. This decision mostly affected reporting in the areas of care and treatment.

often first to leave school to provide child care, assume extra domestic chores, take on the difficult care of ill parents or relatives, and enter the informal work sector to contribute to family income.

In FY2007, the Emergency Plan provided more than $289.2 million in funding for OVC activities in the focus countries. This represented 10.2 percent of program funding, and supported care for more than 2.7 million OVCs.

As noted, the best way to care for children in countries with a high HIV burden is to provide prevention and treatment to their parents to keep them alive in the first place. Even the best OVC program can never substitute for a parent. Recognizing the central importance of preserving families, PEPFAR focuses on strengthening the capacity of families to protect and care for OVCs by prolonging the lives of parents and caregivers.

PEPFAR supports efforts — many by community- and faith-based organizations — to provide both immediate and long-term therapeutic and socio-economic assistance to vulnerable households. Children are often deeply affected by their HIV-infected parents and community members through loss of care, income, nutritional food, and schooling. For those who are orphaned or made vulnerable, care activities emphasize strengthening communities to meet the needs of OVCs, supporting community-based responses, helping children and adolescents meet their own needs, and creating a supportive social environment to ensure a sustainable response. PEPFAR recognizes the urgency of addressing these growing needs by supporting children's and adolescents' growth and development, so they become healthy, stable, and productive members of society. Community and faith-based peer support can be crucial for growing children and adolescents who are faced with both the normal challenges of growing up and heavy economic, psychosocial, and stigma burdens.

The Emergency Plan supported training or retraining for approximately 214,900 individuals in caring for OVCs, promoting the use of time- and labor-saving technologies, supporting income-generating activities, and connecting children and families to essential health care and other basic social services, where available.

In Tanzania, Joctan Sewando, a 14 year old member of PEPFAR-supported Upendo Community-Based Orphan Care Protection and Empowerment (COPE), had the idea of starting a fish pond based on one he had seen in a nearby village. Club members took their idea to the village council who provided them with a piece of land. With instruction from the district veterinary officer and continuing technical support from the ward livestock officer, the club harvested about 20 kilograms of fish in March 2007. The fish were distributed to group members for home consumption and sold to villagers. In June 2007, the group harvested an additional 12 kilograms which they donated to the local school where the fish were prepared for lunch for all children.

PEPFAR has partnered with host countries to scale up programs for children affected by HIV/AIDS more significantly than has ever been attempted previously, yet ensuring the quality of these rapidly growing programs is also essential. For the first time in FY2007, PEPFAR sought to improve OVC program quality by requiring partners to track and report on how many of seven key interventions they provide; of those OVCs receiving direct support, nearly half received three or more of the following services:

1. ***Food and Nutritional Support:*** Besides directly providing needed food and nutrition, programs leverage support from other international or host country partners and work for more sustainable solutions, such as gardens.

2. ***Shelter and Care:*** The HIV/AIDS epidemic overloads impoverished communities to the point where many children are left without suitable shelter or care. Children who find themselves without a caregiver become highly vulnerable to abuse and stunted development. Given the number of OVCs, particularly in sub-Saharan Africa, and their complex needs, the most effective responses place families, households and communities at the center of interventions.

3. ***Protection:*** Programs confront the reality of stigma and social neglect faced by OVCs, as well as abuse and exploitation, including trafficking, the taking of inherited property, and land tenure.

4. ***Health Care:*** There are three areas related to health that are addressed by OVC programs: meeting general health needs of OVCs by providing access to primary health care; health care for HIV-positive children; and guidance for the prevention of HIV.

5. ***Psychosocial Support:*** Children affected by HIV/AIDS generally suffer anxiety and fear during the years of parental illness, then grief and trauma with the death of a parent. Cultural taboos surrounding the discussion of HIV/AIDS and death often compound these problems. Programs provide children with support that is appropriate for their age and situation, and recognize that children and adults often respond differently to trauma and loss.

6. ***Education and Vocational Training:*** Research demonstrates that education can leverage significant improvements in the lives of OVCs. In addition to learning, schools can provide children with a safe, structured environment; the emotional support and supervision of adults; and the opportunity to learn how to interact with other children and develop social networks. Education and vocational training are keys to employability and can also foster a child's developmentally important sense of competence.

7. ***Economic Opportunity/Strengthening:*** OVCs and caretakers often experience diminished productive capacity and cash resources necessary for household purchases. Economic strengthening is often needed for the family/caregivers to meet expanding responsibilities for ill family members or to welcome OVCs into the household.

PEPFAR has also worked with its partners to develop a Child Status Index to help the programs ensure that these services result in the improved well-being of the children served.

PEPFAR activities seek to provide OVCs access to other core interventions, beyond traditional health partners and networks, by reaching out to new partners to ensure a coordinated, multi-sectoral approach. Because of the complex array of needs of OVCs, only some of which are directly addressed by prevention, treatment, and care programs, it is essential to coordinate with providers of resources that address the full range of issues. This coordination must take place among international partners and other providers of resources at both the national and community levels. For this reason, as described above, PEPFAR augments its own OVC programs by "wrapping around" those of others that address critical vulnerabilities in the areas of food and nutrition and education. For information on PEPFAR's activities in the areas of education and nutrition for OVCs, please see the sections on "Linking PEPFAR and Education" and "Linking PEPFAR and Food and Nutrition" above.

Care and Support for People Living With HIV/AIDS

In FY2007, the Emergency Plan committed approximately $702 million for care and support for PLWHA in the focus countries, nearly half the PEPFAR total to date of $1.484 billion. These resources represented 13.9 percent

Table 16: Care 2007: Orphans and Vulnerable Children[1] Results					
Country	**Number of OVCs receiving upstream strengthening support[2]**	**Number of OVCs receiving downstream site-specific support[3]**	**Total**	**Planned funding FY 2007[4,5]** in USD millions	**Planned funding FY 2004-2007[4,5]** in USD millions
Botswana	120,900	0	120,900	$6.5	$16.8
Côte d'Ivoire	5,900	35,300	41,200	$9.8	$15.8
Ethiopia	0	273,400	273,400	$21.4	$48.4
Guyana	0	900	900	$1.0	$3.0
Haiti	5,000	34,900	39,900	$8.9	$16.4
Kenya	9,000	281,800	290,800	$32.1	$71.8
Mozambique	91,200	188,800	280,000	$14.9	$40.2
Namibia	14,600	56,500	71,100	$7.4	$18.7
Nigeria	1,200	36,200	37,400	$29.8	$48.6
Rwanda	0	35,000	35,000	$9.6	$26.1
South Africa	92,900	272,100	365,000	$36.3	$77.4
Tanzania	250,000	221,300	471,300	$19.5	$39.5
Uganda	65,000	242,800	307,800	$20.5	$56.0
Vietnam	0	4,000	4,000	$1.8	$3.8
Zambia	0	397,300	397,300	$20.1	$51.6
Totals	**655,700**	**2,080,300**	**2,736,000**	**$239.4**	**$534.2**
	Total funding including additional attributions[7]			**$289.2**	**$650.6**

Note:
Numbers may be adjusted as attribution criteria and reporting systems are refined.
Upstream and downstream above 100 are rounded to the nearest 100 and then added to get totals.

Footnotes:
[1] Orphans and vulnerable children activities are aimed at improving the lives of children and families directly affected by AIDS-related morbidity and/or mortality.
[2] Number of individuals reached through upstream systems strengthening includes those supported contributed to national, regional and local activities, such as training, laboratory support, monitoring and evaluation, logistics and distributions systems, protocol and curriculum development.
[3] Number of individuals reached though downstream site-specific support includes those receiving services at USG-funded service delivery sites.
[4] Total number for each prevention, treatment and care programmatic are includes attribution and central dollars from the following categories: central procurements, supply chain, technical leadership and support, New Partners Initiative, strategic information, management and staffing, policy analysis, and systems strengthening activities.
[5] Some or all of the individuals reached by PEPFAR may also be supported by other funding source such as host governments and other international players.
[6] This amount varies by country. Botswana results are attributed to the National HIV Program. Beginning FY2005, USG downstream contributions in Botswana are embedded in the upstream numbers following a consensus reached between the USG and the Government of Botswana to report single upstream figures for each relevant indicator. This decision mostly affected reporting in the areas of care and treatment.
[7] Total funding for each prevention, treatment and care programmatic area includes attribution of field and central dollars from the following categories: central procurements, supply chain, technical leadership and support, New Partners Initiative, strategic information, management and staffing, policy analysis, and systems strengthening activities. These are made at the aggregate level and then added to the programmatic funding levels to get the total amount of support for each programmatic area.

of program funding, supporting care for nearly 4 million people.

Within the network model of care, PEPFAR supports a variety of interventions at different levels (including home-based care programs, as well as health care sites that deliver services). In addition, support is provided to fill specific gaps in national training, laboratory systems, and strategic information systems (e.g., monitoring and evaluation, logistics, and distribution systems) that are essential to the effective roll-out and sustained delivery of quality care.

Care and support for PLWHA helps ensure that they receive treatment at the optimal time, as soon as possible after they become eligible and before serious opportunistic illnesses set in. Regular evaluation for treatment eligibility is thus an important element of success once treatment starts.

Second, care programs are a platform for "prevention with positives," providing PLWHA with information, condoms and other needed support for prevention.

Finally, care helps keep PLWHA healthy and free of OIs, delaying the need for treatment. Care can include pain and symptom management, treatment and prevention of TB and other OIs, social, spiritual and emotional support, and compassionate end-of-life care. PEPFAR supports the development and dissemination of "preventive care packages," adapted to local circumstances, for children and adults living with HIV. These packages may include a number of interventions, such as cotrimoxazole prophylaxis, water purification systems, and insecticide-treated nets, to keep HIV-positive persons healthy and delay the need for treatment. Like many best practices developed by the Emergency Plan, these advances in the area of care for OVCs and PLWHA have the potential to have a wide

impact beyond PEPFAR-supported programs. PEPFAR is working to disseminate them broadly.

Tuberculosis and other opportunistic infections

PEPFAR has scaled up its support for national efforts to provide high-quality care for OIs related to HIV/AIDS. Especially important in this area is care for HIV/TB co-infection, the leading cause of death among HIV-positive people in the developing world. From FY2005 to FY2007, PEPFAR increased funding for HIV/TB from $26 million to $131 million, supporting TB treatment for over 367,000 HIV-infected patients in FY2007. Through its FY2007 contributions and support to the Global Fund, PEPFAR provided an estimated $123 million in additional funding for TB programs around the world.

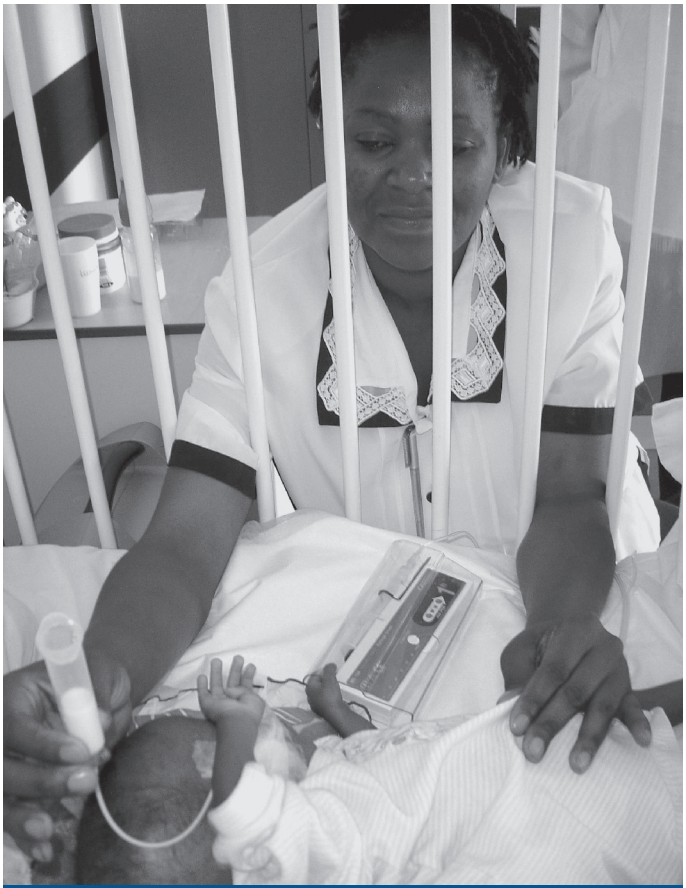


Photo by Reverie Zurba/USAID South Africa

In South Africa, the PEPFAR-supported Soweto Hospice has developed the country's first pediatric palliative care ward. Caregivers provide children with homecare, preschool, hospital admissions and rehabilitation. Soweto also assists with returning children to society, linking nearly 100 youngsters to a nearby nursery school. At least 25 percent of the children treated at Soweto are likely to be HIV-positive with high tuberculosis (TB) co-infection. Children receive food to eat with their medication and, along with families, learn about TB and AIDS prevention and treatment.

PEPFAR-supported HIV care and treatment programs are a platform to further HIV/TB collaborative activities. Important interventions supported by PEPFAR include screening for TB among clients in care and treatment, TB infection control and promoting a safe environment in which services are delivered, access to antiretroviral treatment for co-infected clients, and monitoring and evaluation. PEPFAR supports a variety of efforts to co-locate TB and HIV services as an important strategy to increase access to services for co-infected persons.

In collaboration with WHO, PEPFAR supported a program in Rwanda through which more than 88 percent of TB patients are now tested for HIV, 61 percent of co-infected patients receive cotrimoxazole preventive therapy, and 36 percent of TB/HIV patients have accessed antiretroviral treatment. In Kenya, approximately 30,000 TB patients benefited from joint PEPFAR-WHO support, HIV testing increased from 41 percent to 78 percent, uptake of cotrimoxazole increased from 39 percent to 85 percent, and antiretroviral treatment uptake from 19 percent to 33 percent.

The Emergency Plan supports governments and non-governmental organizations, including community- and faith-based organizations, to conduct intensified TB case-finding among PLWHA at each encounter to ensure early diagnosis and treatment of tuberculosis. PEPFAR also supports host country governments to strengthen their TB lab capacity by implementing an external quality assurance system for sputum smear microscopy and establishing liquid-culture capacity to promote rapid diagnosis of TB, including smear-negative disease among HIV-infected patients.

In 2007, PEPFAR accelerated programming to combat the emerging threat of Extensively Drug-Resistant TB (XDR-TB). Activities include systems-strengthening, improving laboratory infrastructure for culture and drug susceptibility testing, TB infection control, and, perhaps most importantly, ongoing efforts to strengthen national TB programs' capacity to carry out basic DOTS programs to reduce the spread of new drug-resistant TB.

Linkages with care programs

The section above on "Linking PEPFAR and Food and Nutrition" includes a discussion of PEPFAR's efforts in this area. As noted, in FY2007 PEPFAR supported food and nutritional supplementation for 332,000 through

Table 17: Care: FY2007 Care & Support[1] Results								
Country	Number of HIV-infected individuals who received care & support (including TB/HIV)			Number of HIV-infected clients receiving HIV care & support that are also receiving treatment for TB disease (subset of all care & support)			Planned Funding FY2007[4, 5] in USD millions	Planned Funding FY2004-FY2007[4, 5] in USD millions
	Number receiving upstream system strengthening support[2]	Number receiving downstream site-specific support[3]	Total	Number receiving upstream system strengthening support[2]	Number receiving downstream site-specific support[3]	Total		
Botswana[6]	103,400	0	103,400	6,300	0	6,300	$9.0	15.4
Côte d'Ivoire	800	73,500	74,300	0	2,700	2,700	$7.8	13.6
Ethiopia	0	453,200	453,200	0	11,600	11,600	$26.4	43.4
Guyana	0	4,400	4,400	0	200	200	$2.4	5.6
Haiti	0	73,200	73,200	0	1,600	1,600	$13.9	28.0
Kenya	23,700	429,100	452,800	0	57,900	57,900	$39.7	82.6
Mozambique	159,500	229,500	389,000	0	5,900	5,900	$16.6	34.8
Namibia	8,400	84,400	92,800	1,100	10,900	12,000	$10.0	20.6
Nigeria	31,400	213,200	244,600	600	18,500	19,100	$33.3	67.8
Rwanda	900	66,800	67,700	900	1,600	2,500	$13.7	27.5
South Africa	260,000	724,500	984,500	154,200	54,600	208,800	$57.3	102.7
Tanzania	75,000	199,100	274,100	0	8,100	8,100	$19.9	43.5
Uganda	86,700	327,800	414,500	4,800	11,600	16,400	$32.8	92.1
Vietnam	0	43,400	43,400	0	2,500	2,500	$12.1	26.9
Zambia	0	229,700	229,700	0	12,000	12,000	$20.9	50.2
Totals	**749,800**	**3,151,800**	**3,901,600**	**167,900**	**199,700**	**367,600**	**$315.8**	**$654.6**
				Total funding including additional attributions[7]:			**$394.1**	**$866.4**

Note:
Numbers may be adjusted as attribution criteria and reporting systems are refined.
Upstream and downstream numbers above 100 are rounded to the nearest 100 and then added to get totals.

Footnotes:
[1] Care & support includes all clinic-based and home/community-based activities aimed at optimizing quality of life of HIV-infected (diagnosed or presumed) clients and their families throughout the continuum of illness by means of symptom diagnosis and relief; psychological and spiritual support; clinical monitoring and management of opportunistic infections including TB and malaria and other HIV/AIDS-related complications; culturally-appropriate end-of-life care; social and material support such as nutrition support, legal aid, and housing; and training and support for caregivers.
[2] Number of individuals reached through upstream systems strengthening includes those supported through contributions to national, regional and local activities such as training, laboratory support, monitoring and evaluation, logistics and distribution systems, protocol and curriculum development.
[3] Number of individuals reached through downstream site-specific support includes those receiving services at USG-funded service delivery sites.
[4] All funding figures are in millions of U.S. dollars and reflect regularly-updated planned program funding.
[5] Some or all of the individuals reached by PEPFAR may also be supported by other funding sources such as host governments and other international partners. This amount varies by country.
[6] Botswana results are attributed to the National HIV Program. Beginning FY2005, USG downstream contributions in Botswana are embedded in the upstream numbers, following a consensus reached between the USG and the Government of Botswana to report single upstream figures for each relevant indicator. This decision mostly affected reporting in the areas of care and treatment. Botswana experienced expansion of services to the community through strengthening of civil society participation leading to increased coverage and linkages to the National TB program, resulting in significant increases over last year.
[7] Total funding for each prevention, treatment and care programmatic area includes attribution of field and central dollars from the following categories: central procurements, supply chain, technical leadership and support, New Partners Initiative, strategic information, management and staffing, policy analysis, and systems strengthening activities. These attributions are made at the aggregate level and then added to the programmatic funding levels to get the total amount of support for each programmatic area.

OVC programs, 50,000 through PMTCT programs, and 20,000 through care and treatment. The sections on "Linking PEPFAR and Education" and "Linking PEPFAR with the President's Malaria Initiative and the Millennium Challenge Corporation" address extensive efforts in those areas.

PEPFAR also supports a variety of economic-strengthening programs to address the prevention, treatment and care needs of PLWHA and OVCs. These programs enable people infected and affected by HIV/AIDS to provide for themselves and their families with dignity; strengthen the ability of communities and families to look after OVCs; give adolescent OVCs the opportunity to support themselves and, in many cases, their younger siblings; and empower women and girls to avoid risky behavior that can lead to HIV infection.

Counseling and Testing

Knowing one's status provides a gateway for critical prevention, treatment, and care. Millions of people must be tested in order for PEPFAR to meet its ambitious prevention, treatment, and care goals. As noted above, PEPFAR programs have worked to ensure that counseling and test-

Photo by Still Life Projects

Secretary of Health and Human Services Michael Leavitt receives a rapid HIV test at a mobile voluntary counseling and testing unit at the ES Kicukiro Secondary School in Kigali, Rwanda during his August 2007 trip to Africa. "The program officials told me they will ultimately test over 80% of the students. Only one half of one percent will test positive. The Minister of Health told me he aspires to have it expanded to all schools," stated Secretary Leavitt.

In October 2007, a new PEPFAR-supported Community Counseling and Support Center opened in the Go Vap District of Ho Chi Minh City, Vietnam. At the dedication ceremony, U.S. Deputy Principal Officer to Ho Chi Minh City Angela Dickey stated, "Over the past three years, the United States has increased its support for the work of the Ho Chi Minh City Provincial AIDS Committee under the President's Emergency Plan for AIDS Relief, or PEPFAR, investing approximately $4.5 million this year. During this year, these programs will provide HIV counseling and testing across the city to more than 17,000 people — free of charge."

ing is targeted to those at increased risk of HIV infection — such as TB patients and women seeking PMTCT services. PEPFAR has estimated that if countries appropriately target counseling and testing and if health care providers offer counseling and testing in routine encounters, at least 30 million people will need to be tested in order for PEPFAR to meet its 2-7-10 goals. To the extent counseling and testing is not well-targeted, the number who must be tested in order for PEPFAR to meet its goals will be correspondingly higher. Table 18 shows achievements in FY2007. PEPFAR invested approximately $223 million in counseling and testing in settings other than PMTCT in FY2007, or about 7.8 percent of program funding in the focus countries.

Table 19 shows cumulative progress achieved to date by PEPFAR-supported programs. These programs have already exceeded the target of 30 million, supporting more than 33 million counseling and testing encounters through FY2007. Among these, nearly 10.1 million encounters were with women seeking PMTCT interventions, a key population to target.

A key barrier to the universal knowledge of serostatus is the lack of routine testing in medical settings, including TB and STI clinics, ANCs, and hospitals. In many focus countries, studies have found that 50 to 80 percent of hospital and TB patients are infected with HIV; many of these patients are in urgent need of treatment. PEPFAR has worked with host nations to build support for the model of routine "opt-out" provider-initiated testing, where, in selected health care settings, all patients are tested for HIV unless they refuse. Most PEPFAR focus countries have now adopted opt-out testing policies, but without successful implementation of opt-out testing, it will be impossible to achieve success in prevention, treatment and care. PEPFAR has also contributed to WHO's development of guidelines for counseling and testing in health care settings.

Another key policy trend in many nations that PEPFAR has supported is in favor of the use of rapid HIV tests; use of rapid testing improves the likelihood that those who are tested will actually receive their results. All of the focus countries now have policies supporting the use of rapid tests, though opportunities for improvement of implementation remain.

Table 18: Care: FY2007 Counseling & Testing Services Results[1] (in settings other than PMTCT)					
Country	**Number of counseling and testing encounters receiving upstream system-strengthening support[3]**	**Number of counseling and testing encounters receiving downstream site-specific support[3]**	**Total number of counseling and testing encounters**	**Planned Funding FY2007[4, 5]** in USD millions	**Planned Funding FY2004-FY2007[4, 5]** in USD millions
Botswana[6]	175,200	0	175,200	$6.6	$23.7
Côte d'Ivoire	0	90,900	90,900	$3.9	$11.0
Ethiopia	0	1,709,900	1,709,900	$14.9	$27.6
Guyana	0	29,900	29,900	$1.4	$5.4
Haiti	0	310,900	310,900	$5.1	$10.6
Kenya	0	917,100	917,100	$19.0	$44.5
Mozambique	0	422,200	422,200	$8.1	$18.8
Namibia	12,100	121,400	133,500	$8.4	$21.7
Nigeria	80,800	885,300	966,100	$16.9	$34.4
Rwanda	311,500	317,800	629,300	$4.3	$16.6
South Africa	1,194,400	547,900	1,742,300	$30.9	$63.5
Tanzania	605,100	744,100	1,349,200	$13.1	$29.6
Uganda	431,300	1,059,600	1,490,900	$17.4	$51.5
Vietnam	76,700	79,300	156,000	$4.3	$9.1
Zambia	0	457,400	457,400	$20.4	$47.8
All countries	**2,887,100**	**7,693,700**	**10,580,800**	**$174.7**	**$415.8**
		Total funding including additional attributions[7]:		**$223.3**	**$561.3**

Note:

Numbers may be adjusted as attribution criteria and reporting systems are refined.

Upstream and downstream numbers above 100 are rounded to the nearest 100 and then added to get totals.

Footnotes:

[1] Counseling and testing results include only those individuals who received their test results.

[2] Number of individuals reached through upstream systems strengthening includes those supported through contributions to national, regional and local activities such as training, laboratory support, monitoring and evaluation, logistics and distribution systems, or protocol and curriculum development.

[3] Number of individuals reached through downstream site-specific support includes those receiving services at USG-funded service delivery sites.

[4] All funding figures are in millions of U.S. dollars and reflect regularly-updated planned program funding.

[5] Some or all of the individuals reached by PEPFAR may also be supported by other funding sources such as host governments and other international partners. This amount varies by country.

[6] Botswana results are attributed to the National HIV Program. Beginning FY2005, USG downstream contributions in Botswana are embedded in the upstream numbers, following a consensus reached between the USG and the Government of Botswana to report single upstream figures for each relevant indicator. This decision mostly affected reporting in the areas of care and treatment.

[7] Total funding for each prevention, treatment and care programmatic area includes attribution of field and central dollars from the following categories: central procurements, supply chain, technical leadership and support, New Partners Initiative, strategic information, management and staffing, policy analysis, and systems strengthening activities. These attributions are made at the aggregate level and then added to the programmatic funding levels to get the total amount of support for each programmatic area.

Table 19: Care: Cumulative Counseling and Testing Results, FY2004-FY2007					
	FY2004	**FY2005**	**FY2006**	**FY2007**	**Cumulative C&T to date**
Number counseling and testing encounters through PMTCT[1]	1,017,000	1,957,900	2,809,500	4,011,600	9,796,000
Number of counseling and testing encounters in other settings	1,791,900	4,653,200	6,426,500	10,580,800	23,452,400
Total	**2,808,900**	**6,611,100**	**9,236,000**	**14,592,400**	**33,248,400**

Note:

Numbers may be adjusted as attribution criteria and reporting systems are refined.

Upstream and downstream numbers above 100 are rounded to the nearest 100 and then added to get totals.

Values include the number of individuals reached through upstream contributions to national, regional and local activities such as training, laboratory support, monitoring and evaluation, logistics and distribution systems, protocol and curriculum development as well as those receiving services at USG-funded service delivery sites.

The same individual may receive counseling and testing on multiple occasions, and the same individual may receive PMTCT services for multiple pregnancies.

Footnotes:

[1] This indicator was revised beginning in FY2005. FY2004 results include an adjustment accounting for pregnant women who were counseled, tested, and received their test results.

The Future of Partnerships

In order to build on the success the American people's partnerships have achieved to date, on May 30, 2007, President Bush proposed to work with Congress to provide an additional $30 billion to fight HIV/AIDS globally over the next five years — doubling the initial $15 billion USG commitment. The President also proposed new goals — supporting nations in providing treatment to 2.5 million people, preventing 12 million new infections, and caring for 12 million people, including five million OVCs.

White House photo by Eric Draper

President George W. Bush pauses with fellow heads of state following a Roundtable on Democracy Tuesday, Sept. 25, 2007, at the United Nations in New York. From left are: President Festus Gontebanye Mogae of the Republic of Botswana; President Bush; President Leonel Fernandez of the Dominican Republic; Secretary of State for Foreign Relations Carlos Morales Troncoso of the Dominican Republic, and President Jakaya Kikwete of the United Republic of Tanzania.

Challenged by the U.S. commitment, in June the G-8 nations committed $60 billion collectively to support HIV/AIDS, tuberculosis and malaria programs in the coming years. The other leaders also agreed to join the U.S. in supporting country-owned, national programs to meet specific, numerical HIV/AIDS goals, which are exactly twice those proposed by the President.

The people of severely affected nations have accomplished so much in their fight against HIV/AIDS, and the American people are privileged to partner with them as we work to change the world. This partnership between peoples is founded in a profound sense of the dignity and worth of every human life, creating a relationship of mutual respect and trust — in other words, friendship.

Through this partnership, people of distant lands have a new window into the hearts of Americans. They know what we stand *for*, when we stand *with* them.

We too have a new window into the hearts, cultures and abilities of our global brothers and sisters. While poor in resources, these distant lands are rich in some of the most talented, dedicated and compassionate people in the world. Those whom we think have nothing, give everything they have and everything of themselves for others. We are partnering with many thousands of heroes, and even a few saints.

Finally, as President Bush has said, the new era of development is good for our national character, our national soul. When we base our policies and politics in the dignity and worth of every human life and dedicate ourselves to the service of others, we are dignified and have a great dignity of purpose.

This noble — and ennobling — work has only just begun. Working together through the power of partnerships, everything is possible.


UNITED STATES PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF