

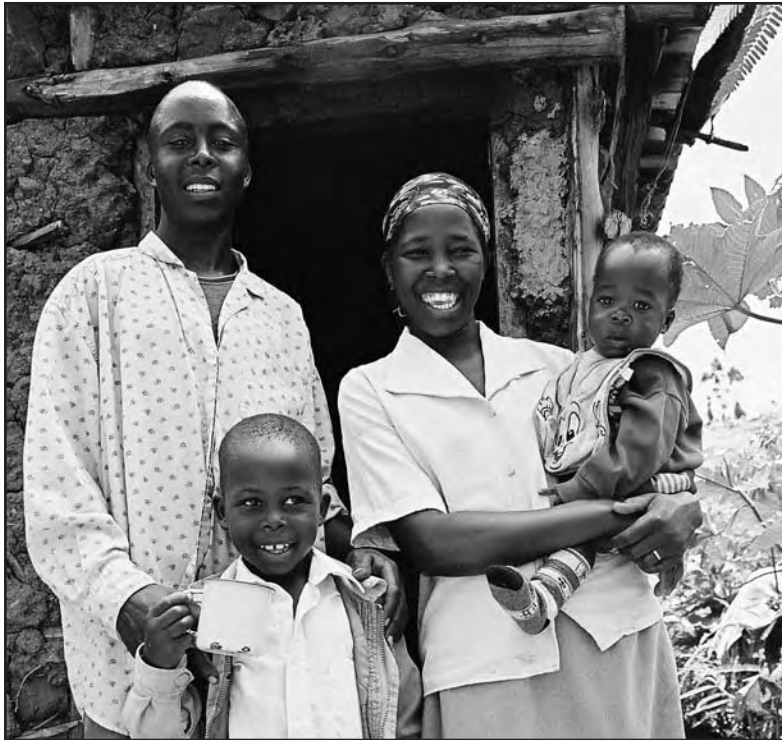


# The Power of Partnerships: The President's Emergency Plan for AIDS Relief

---

**Third Annual Report to Congress**





# The Power of Partnerships: The President's Emergency Plan for AIDS Relief

---

**Third Annual Report to Congress**



## Cover Photo

Through HIV counseling and testing for couples at the U.S.-supported Kericho District Hospital, Joyce and David found out they are infected with HIV. Joyce was four months pregnant with her second child at the time of diagnosis. Thanks to the clinic's program to prevent mother-to-child HIV transmission, Joyce delivered a baby boy who is HIV-negative. After a year of antiretroviral treatment, David has also gained weight and feels healthy – enabling him to provide for his family.

Photo by Doug Shaffer



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.

# CONTENTS

Acronyms and Abbreviations	5
Overview – The Power of Partnerships	9
Chapter 1 – Critical Intervention in the Focus Countries: Prevention	27
Chapter 2 – Critical Intervention in the Focus Countries: Treatment	55
Chapter 3 – Critical Intervention in the Focus Countries: Care	79
Chapter 4 – Building Capacity: Partnerships for Sustainability	107
Chapter 5 – Responding to Critical Issues: Gender and HIV/AIDS	129
Chapter 6 – Responding to Critical Issues: Children and HIV/AIDS	139
Chapter 7 – Improving Accountability and Programming	153
Chapter 8 – Implementation and Management	167
Chapter 9 – Strengthening Bilateral Programs Worldwide	177
Chapter 10 – Strengthening Multilateral Action	189
Chapter 11 – Engendering Bold Leadership	199
Appendices	207



# ACRONYMS AND ABBREVIATIONS

<b>AB</b>	Abstinence, Be faithful
<b>ABC</b>	Abstinence, Be faithful, and, as appropriate, correct and consistent use of Condoms
<b>ACT</b>	Artemisin-based combination therapy (for malaria)
<b>AEI</b>	African Education Initiative
<b>AIS</b>	AIDS Indicator Surveys
<b>ANC</b>	Antenatal clinic
<b>ART</b>	Antiretroviral treatment
<b>ARV</b>	Antiretroviral drug
<b>BMIST</b>	Battlefield Medical Information System-Tactical
<b>CBO</b>	Community-based organization
<b>CCM</b>	Country Coordinating Mechanism
<b>CDC</b>	Centers for Disease Control and Prevention (U.S.)
<b>COP</b>	Country Operational Plan
<b>COPRS</b>	Country Operational Plan and Reporting System
<b>COM</b>	Chief of Mission
<b>CPT</b>	Co-trimoxazole preventive therapy
<b>CY</b>	Calendar year
<b>DBS</b>	Dried blood spot
<b>DHAPP</b>	Department of Defense HIV/AIDS Prevention Program
<b>DHS</b>	Demographic and Health Survey
<b>DoC</b>	Department of Commerce (U.S.)
<b>DoD</b>	Department of Defense (U.S.)
<b>DoL</b>	Department of Labor (U.S.)
<b>DOTS</b>	Directly Observed Therapy, Short Course
<b>DRA</b>	Drug regulatory authority
<b>DTC</b>	Diagnostic testing and counseling
<b>FBO</b>	Faith-based organization
<b>FDA</b>	Food and Drug Administration
<b>FDC</b>	Fixed-dose combination (formulation)
<b>FY</b>	Fiscal year
<b>GAP</b>	Global AIDS Program (Centers for Disease Control and Prevention)
<b>GBV</b>	Gender-based violence

<b>GIS</b>	Geographic Information Systems
<b>GTT</b>	Global Task Team on Improving AIDS Coordination Among Multilateral Institutions and International Donors
<b>HAART</b>	Highly Active Antiretroviral Therapy
<b>HBC</b>	Home-based care
<b>HHS</b>	Department of Health and Human Services (U.S.)
<b>HMIS</b>	Health management information systems
<b>HRH</b>	Human resources for health
<b>HRSA</b>	Health Resource and Services Administration
<b>ICT</b>	Information and communications technology
<b>IDU</b>	Injecting drug user
<b>IT</b>	Information technology
<b>MAP</b>	Multi-Country AIDS Programme (World Bank)
<b>M&amp;E</b>	Monitoring and evaluation
<b>MoH</b>	Ministry of Health
<b>MSM</b>	Men who have sex with men
<b>NACP</b>	National AIDS Control Program
<b>NGO</b>	Non-governmental organization
<b>NIAID</b>	National Institute of Allergy and Infectious Diseases
<b>NIH</b>	National Institutes of Health
<b>NPI</b>	New Partners Initiative
<b>NRL</b>	National Resource Laboratory
<b>OGAC</b>	Office of the U.S. Global AIDS Coordinator
<b>OI</b>	Opportunistic infection
<b>OMB</b>	Office of Management and Budget
<b>OVC</b>	Orphans and vulnerable children
<b>PART</b>	Performance Assessment Rating Tool
<b>PCR</b>	Polymerase chain reaction
<b>PDA</b>	Personal digital assistant
<b>PEP</b>	Post-exposure prophylaxis
<b>PEPFAR</b>	President's Emergency Plan for AIDS Relief (Emergency Plan)
<b>PHE</b>	Public Health Evaluation
<b>PLWHA</b>	People living with HIV/AIDS
<b>PMI</b>	Presidential Malaria Initiative
<b>PMTCT</b>	Prevention of mother-to-child HIV transmission
<b>PPP</b>	Public-private partnership

<b>PR</b>	Principal recipient
<b>PSC</b>	Policy and Strategy Committee
<b>SAMHSA</b>	Substance Abuse and Mental Health Services Administration
<b>SCMS</b>	Supply Chain Management System
<b>SI</b>	Strategic information
<b>STI</b>	Sexually transmitted infection
<b>TB</b>	Tuberculosis
<b>UNAIDS</b>	Joint United Nations Programme on HIV/AIDS
<b>UNHCR</b>	United Nations High Commission for Refugees
<b>UNICEF</b>	United Nations Children’s Fund
<b>USAID</b>	United States Agency for International Development
<b>USAID/OIG</b>	U.S. Agency for International Development Office of the Inspector General
<b>USG</b>	United States Government
<b>VCT</b>	Voluntary counseling and testing
<b>WHO</b>	World Health Organization
<b>XDR-TB</b>	Extensively Drug-Resistant Tuberculosis
<b>ZDV</b>	Zidovudine







President George W. Bush and Mrs. Laura Bush tour the Pasteur Institute in Ho Chi Minh City, Vietnam November 20, 2006.

**“Our work in the world is also based on a timeless truth: To whom much is given, much is required. ... We must continue to fight HIV/AIDS.”**

**President George W. Bush  
State of the Union  
January 23, 2007**

## Overview - The Power of Partnerships:

The Impact of Partnerships Between Host Countries and the President’s Emergency Plan for AIDS Relief in Turning the Tide against HIV/AIDS

### **The Transformational Power of Partnerships**

The President’s Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR) is part of a broader renaissance in partnerships for international development. Under the leadership of President George W. Bush, and with the bipartisan support of Congress, this renaissance – with a particular focus on Africa – has represented 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 true “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.”

All told, the President has presided over a tripling of development support for Africa, and this has meant not only dollars but a new ethic of partnership. The \$15 billion PEPFAR commitment joins other key initiatives: a doubling of U.S.-Africa trade, the \$5 billion Millennium Challenge Account, the \$1.2 billion President’s Malaria

Initiative, the \$600 million Africa Education Initiative, and the \$55 million Women’s Empowerment and Justice Initiative.

The Emergency Plan is central to U.S. efforts to “connect the dots” of international development. Emergency Plan programs are increasingly linked to other important programs – including those of other U.S. Government 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.

It is important to note that PEPFAR 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); 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.

While impressive results are reported here, they are not fundamentally the work of Americans. They are the work of courageous people in nations devastated by HIV/AIDS who are saving the lives of their countrymen and women.

The American people, through the President's Emergency Plan, have provided resources and support for communities around the world to meet the challenge of this pandemic. These partnerships are having a global impact and transforming the face of our world today.

There is a growing consensus that the world's response to global HIV/AIDS has undergone a transformation in recent years – and that new U.S. partnerships with hard-hit nations have been the catalyst.

At the end of the 20th Century, there was scant basis for hope on global HIV/AIDS. The predominant reactions to the emergency were sadness and fatalism – a sense that this problem, in these places, was beyond our collective ability to address in more than a marginal way.

Given the reality at the time, this view was understandable – and it was wrong. The seeds of a transformation from despair to hope existed all along in hard-hit nations; what were lacking were genuine, effective partnerships with the developed world. The people of many developing nations, joined by the people of the United States, are making these

partnerships a reality. The history of this pandemic in the 21st Century has taken a course that was impossible to foresee just a few years ago.

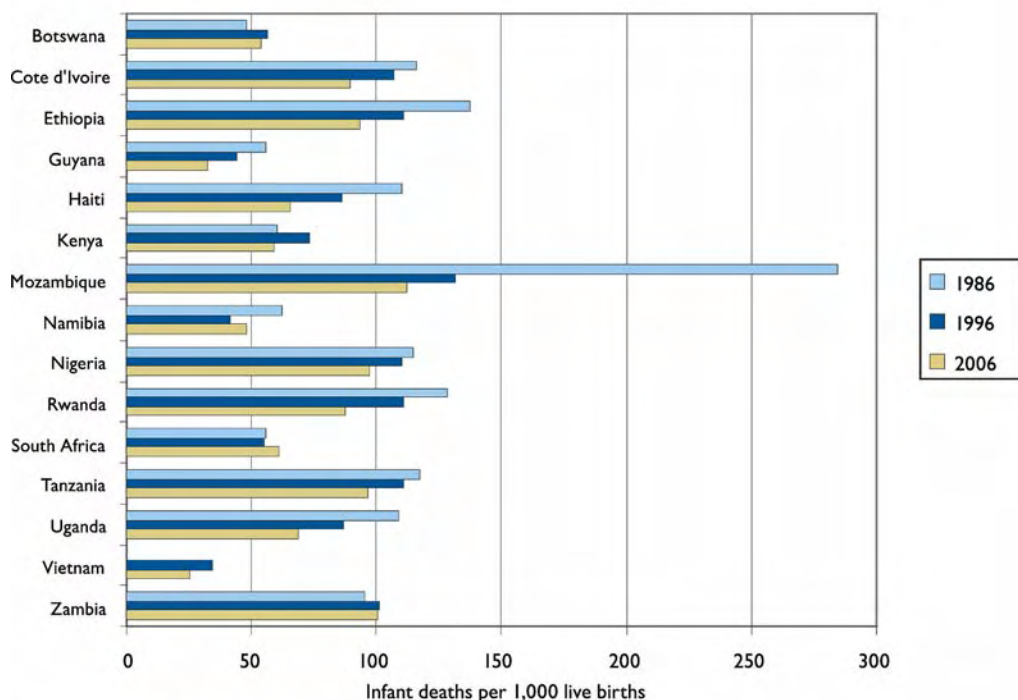
This transformation from despair to hope will be a project of a generation or more. While we are in its early days, many lives have already been saved, and the way forward to save many millions more is now clear.

### 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.

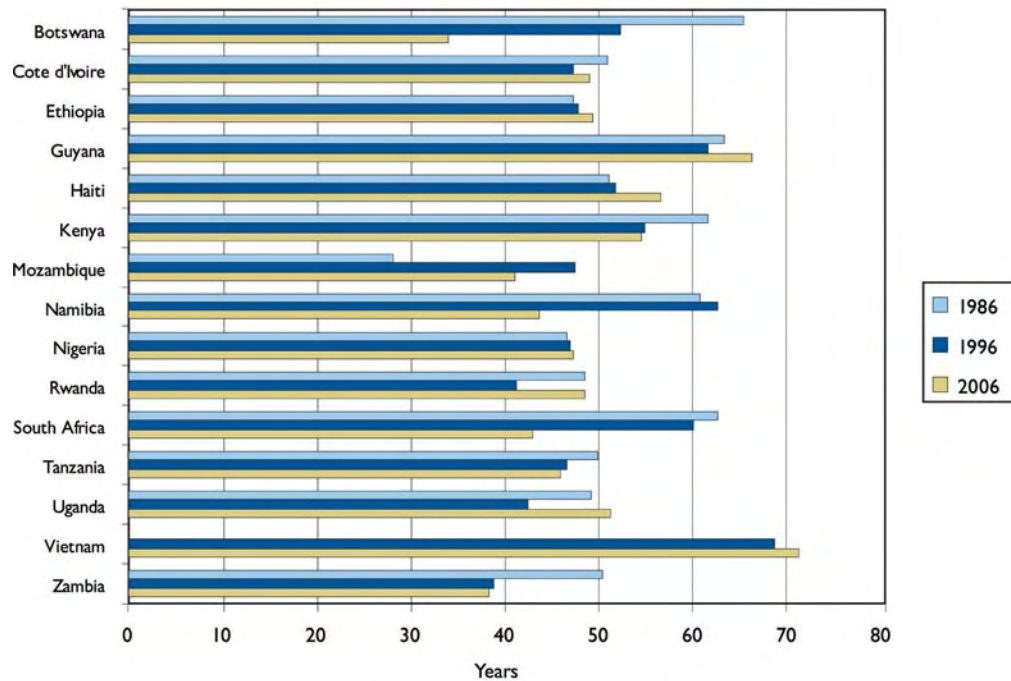
In the 15 PEPFAR focus countries, home to approximately half of the world's infected persons, valuable perspective is gained by examining changes in infant mortality over the past two decades. As seen in figure 1, infant mortality has declined in 12 of the 15 focus countries since 1986; in most of them, the decline has been very substantial. This is a major achievement for these nations and one that might be expected to reflect an overall improvement in health.

**Figure 1: Changes in Infant Mortality Rates for PEPFAR Focus Countries: 1986-2006**



Source: U.S. Census Bureau, 2006  
 Note: 1986 results for Vietnam were unavailable.

**Figure 2: Changes in Life Expectancy for PEPFAR Focus Countries: 1986-2006**



Source: U.S. Census Bureau, 2006  
 Note: 1986 results for Vietnam were unavailable.

Yet, figure 2 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 – a shocking state of affairs in the 21st Century. Those declines have been especially dramatic in Botswana, Mozambique, Namibia, and South 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. The message is clear: an effective response to the unique challenge of HIV/AIDS is an absolute necessity for real progress on health in the developing world.

### Trends in HIV/AIDS

By now, the statistics of the human cost of the HIV/AIDS pandemic are familiar: more than 39 million infected. Sub-Saharan Africa remains the epicenter of the pandemic: approximately 25 million of those infected – more than 60 percent – live in the region.

Even as some African nations are experiencing success in slowing the spread of the pandemic and expanding the

availability of treatment and care to prevent AIDS-related mortality, those successes are being offset by growing challenges elsewhere in Africa and in other regions.

According to UNAIDS estimates, the number of people living with HIV worldwide in 2006 was roughly 2.6 million more than in 2004. Approximately 400,000 more new infections occurred worldwide in 2006 than in 2004 (4.3 million compared to 3.9 million), and 200,000 more people died of AIDS (2.9 million compared to 2.7 million).

### Economic and Security Effects of HIV/AIDS

It is a mistake to think of HIV/AIDS in terms of health alone. It is among the most serious economic development and security threats of our time – one reason why the President and PEPFAR host nations have made addressing it such a priority.

With prevalence high among people in the most productive years of their life, HIV/AIDS presents a long-term adverse strain on the socio-economic structure of these nations by overtaxing the capacity of both the private and public sectors. 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.

An International Labor Organization report released on World AIDS Day 2006 provided new information on the economic damage HIV/AIDS is causing. Among those of working age, in addition to 24.6 million labor force participants living with HIV, 11.7 million more persons who are engaged in some form of productive activity, often women in the home, are now living with the virus. Forty-one percent of 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 epidemic, 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.

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.

### **The Power of Partnerships: Impact on Prevention**

The most recent UNAIDS report indicates that there were approximately 4.3 million new HIV infections in 2006. Effective prevention is a prerequisite to significant progress against HIV/AIDS; if the number of people newly infected continues to increase, the growing number of people in need of treatment and care – and the growing number of orphans and vulnerable children – will overwhelm the world's ability to respond and to sustain its response.

Of the countless developments taking place in the global fight against the pandemic, perhaps the single 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. In addition to earlier dramatic declines in HIV infection in Uganda, there is growing evidence of similar trends in other nations, including Botswana, Ethiopia, Haiti, Kenya, Tanzania, Zambia, and Zimbabwe. While the causes for decline of HIV prevalence are undoubtedly complex, these countries have demonstrated broad reductions in sexual risk behavior, suggesting that behavior change can play a key role in reversing the course of HIV/AIDS epidemics.

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. PEPFAR supports prevention activities that focus on sexual transmission, mother-to-child transmission, the transmission of HIV through unsafe blood and medical injections, and greater HIV awareness through counseling and testing. The Emergency Plan will integrate new prevention methods and technologies as evidence is accumulated and normative guidance is provided.

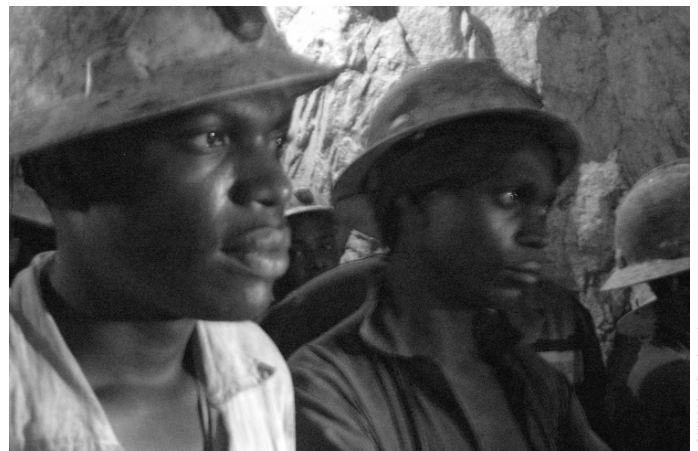


With PEPFAR support, Army Doctors conduct HIV/AIDS training for members of the Benin Defense Force.

### **Prevention of Sexual Transmission**

The vast majority of focus countries have generalized epidemics, meaning that HIV infection is not concentrated in specific and identifiable groups, but touches the general population. 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. Learning from the evidence, PEPFAR will continue to support all three elements of the evidence-based ABC strategy in ways appropriate to the epidemiology and national strategy of each host nation. In focus countries during fiscal year 2006, approximately 61.5 million people were reached by community outreach programs promoting ABC and other related prevention strategies. In countries with concentrated epidemics where, for example, 90 percent of infections are among persons who participate in prostitution, the epidemiology dictates a response more heavily focused on B and C interventions. The U.S. Government has supplied 1.3 billion condoms from 2004 to 2006, lending support to comprehensive ABC approaches based on the epidemiology of each country.

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 the World Health Organization (WHO) or UNAIDS, is



Still Life Projects

At Konkola Copper Mines in Zambia, peer educators reach miners with ABC-based prevention messages. This workplace program is part of a greater movement to reach 300,000 migrant workers with comprehensive information on HIV prevention.

available. When new prevention strategies, such as microbicides, are identified by normative agencies as effective prevention interventions, PEPFAR will support them as part of a comprehensive prevention strategy. With respect to male circumcision, in December 2006, two clinical trials of adult male circumcision were halted as interim data revealed that medically performed circumcision significantly reduces a man’s risk of acquiring HIV through heterosexual intercourse. PEPFAR is awaiting normative guidance from international organizations or other normative bodies, and thereafter will support implementation of safe medical male circumcision for HIV/AIDS prevention, based on requests from host governments and in keeping with their national policies and guidelines.

### **Prevention of 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. UNAIDS estimates that 12 percent of new infections globally in 2006 (530,000 infections) occurred among children, and that more than 90 percent of these were due to mother-to-child transmission. The Emergency Plan has provided support for host nations’ PMTCT interventions for women during approximately six million pregnancies to date. Of these, over 533,700 received preventive antiretroviral drugs (ARVs), preventing an estimated 101,500 infections of newborns to date.

Hard-hit nations have sought to ensure that all women who visit antenatal clinics (ANCs) receive the option of an HIV test through pre-test counseling. By promoting the routine,



Young adults in Vietnam participate in Dance4Life. In addition to dancing, the PEPFAR-supported program teaches young adults how to protect themselves against HIV.

voluntary offer of HIV testing – so that women receive testing unless they elect not to receive it – host nations have increased the rate of uptake among pregnant women from low levels to around 90 percent at many sites. A major PEPFAR focus in the past year was to support countries’ leadership in scaling up the voluntary “opt-out” approach at as many sites as possible, to reach many more women while improving the performance and efficiency of health workers.

As table 1 indicates, access to vital ANC services varies across the focus countries. For example, Botswana has been able to ensure at least one clinic visit for nearly 100 percent of pregnant women, whereas in Ethiopia less than 30 percent visit a clinic. As a key element of its support for comprehensive programs, the Emergency Plan supports host governments’ and other partners’ efforts to provide PMTCT services, including HIV counseling and testing, for all women who attend ANCs.

Some countries, such as Botswana and South Africa, had already started their PMTCT programs before the establishment of PEPFAR. Additional nations have made very significant progress in reaching pregnant women with PMTCT services with PEPFAR support in the last three years (please see table 1). 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 the Emergency Plan in fiscal year 2004 to fiscal year 2006, all countries have scaled up, and most have dramatically improved availability of PMTCT services to pregnant women.



A volunteer counselor discusses prevention of mother-to-child HIV transmission with a mother in Guyana.

**Table 1: Prevention: Estimated Coverage of Prevention of Mother-to-Child Transmission<sup>1</sup> with USG support in FY2004 and FY2006**

Country	Pregnant women receiving PMTCT services		HIV+ pregnant women receiving ARV prophylaxis	
	Percent Coverage		Percent Coverage	
	FY2004	FY2006	FY2004	FY2006
Botswana <sup>2</sup>	66%	95%	13%	91%
Côte d’Ivoire	4%	9%	3%	7%
Ethiopia	0%	2%	0%	2%
Guyana	36%	69%	17%	25%
Haiti	11%	30%	6%	11%
Kenya	25%	42%	18%	36%
Mozambique	5%	17%	2%	9%
Namibia	14%	57%	12%	55%
Nigeria	0%	2%	0%	6%
Rwanda	14%	61%	21%	59%
South Africa	45%	52%	22%	41%
Tanzania	3%	26%	1%	11%
Uganda	9%	21%	8%	17%
Vietnam	0%	28%	0%	8%
Zambia	4%	9%	14%	24%
<b>Total</b>	<b>7%</b>	<b>16%</b>	<b>9%</b>	<b>21%</b>

**Notes:**

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

Coverage based on Upstream and Downstream results from the first and third years of the Emergency Plan. In FY2004 only, it was assumed that 80% of women receiving PMTCT services were counseled and tested.

Percents were calculated by dividing PEPFAR program (upstream and downstream) results by the estimated population eligible for the service. Eligible populations include pregnant women and pregnant HIV+ women and were estimated using multiple sources, including UNAIDS, country surveillance, national surveys, DHS, etc. The same denominators were used for both 2004 and 2006 calculations.

**Footnotes:**

<sup>1</sup> 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, and counseling and support for safe infant feeding practices.

<sup>2</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

### Addressing Gender Issues

The Emergency Plan recognizes the critical need to address the inequalities between women and men that influence sexual behavior and put women at higher risk of infection. For this reason, many HIV prevention programs also address issues related to gender. While gender equity does not directly reduce HIV transmission, the ABC approach is particularly important for the protection of women and girls. PEPFAR-supported ABC programs address gender issues, including violence against women, cross-generational sex, and transactional sex. Such approaches are not in conflict with ABC – they are integral to it.

The five priority gender strategies of the Emergency Plan (please see table 2) are monitored annually during the Country Operational Plan (COP) review process. In fiscal year 2006, a total of \$442 million supported over 830 interventions that included one or more of these gender activities.



In Kenya, microeconomic activities, such as sewing, help women living with and affected by HIV/AIDS earn income.

Table 2: Number of Activities per Gender Strategic Focus Area in FY2006	
Gender Strategic Focus Area	Number of Activities That Include This Strategic Focus Area
Increasing Gender Equity	460
Addressing Male Norms and Behaviors	348
Reducing Violence and Coercion	243
Increasing Women's and Girls' Access to Income and Productive Resources	97
Increasing Women's Legal Protection	80
<b>Note:</b> Each activity may include multiple focus areas.	

### Prevention of Medical Transmission

In fiscal year 2006, PEPFAR provided approximately \$68 million for medical transmission prevention activities in the focus countries. This included direct support for 3,846 blood safety service outlets or programs, as well as broader efforts to improve management, commodity procurement, infrastructure, and national policies. In order to build capacity for a sustainable response into the future, PEPFAR

also supported training or retraining for 6,600 people in blood safety and 52,100 in medical injection safety.

### The Power of Partnerships: Impact on Treatment

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

Approximately 822,000 people received treatment in the 15 focus countries with support from rapidly scaled-up bilateral PEPFAR partnerships with host nations. The striking growth of PEPFAR support for treatment in the focus countries is shown in figure 3.

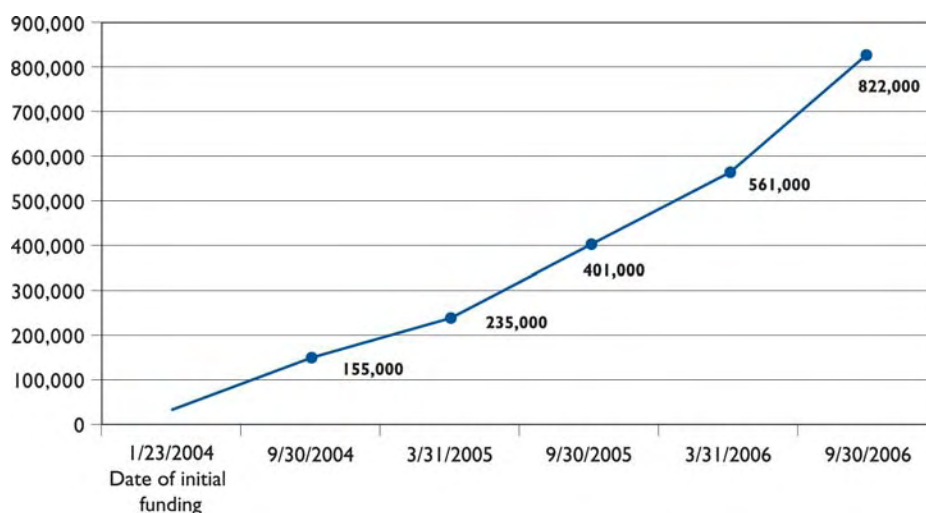
By September 2006 in the focus countries, approximately 50,000 individuals were being added to the number of people benefiting from PEPFAR support for life-extending therapy every month. The number of sites providing treatment increased by 139 percent from fiscal year 2005 to fiscal year 2006, and each month an average of about 93 new ART sites came on line.

Beyond the focus countries, other bilateral PEPFAR treatment programs supported an additional 165,100 people (more than double the approximately 70,000 a year earlier). Thus the number receiving treatment with support from PEPFAR bilateral partnerships at the end of



**Figure 3: Treatment: Number of Individuals Receiving Antiretroviral Treatment in the 15 Focus Countries**

(Total of both upstream and downstream USG-supported interventions)



fiscal year 2006 was 987,100 – approximately half of the estimated 2 million on treatment in low- and middle-income countries.

As part of its commitment to ensure treatment availability for children and women, PEPFAR bilateral programs have led all international partners in supporting host nations in tracking clients by age and gender. As shown in table 3, of

those for whom PEPFAR provided downstream support for treatment in the focus countries, almost nine percent were children, and approximately 61 percent were women.

Another way to assess the impact of PEPFAR’s partnerships with host nations is to estimate treatment’s effect on the life spans of individuals. The World Health Organization has recently developed a methodology for calculating the number of life-years added by ART; when applied to the number supported by PEPFAR, as shown in figure 4, this approach generates very significant results. The more than 822,000 persons who began treatment with support from PEPFAR in the focus countries during fiscal



With support from PEPFAR, Nompumelelo and Elihle receive antiretroviral treatment at McCord Hospital’s Sinikithemba Clinic in Durban, South Africa.

**Table 3: Percentages of Children and Women Among Those Receiving Treatment with Downstream Emergency Plan Support for Focus Countries in FY2006**

	Children (ages 0-14) <sup>1</sup>	Women (all ages) <sup>1</sup>
<b>Total</b>	<b>9%</b>	<b>61%</b>

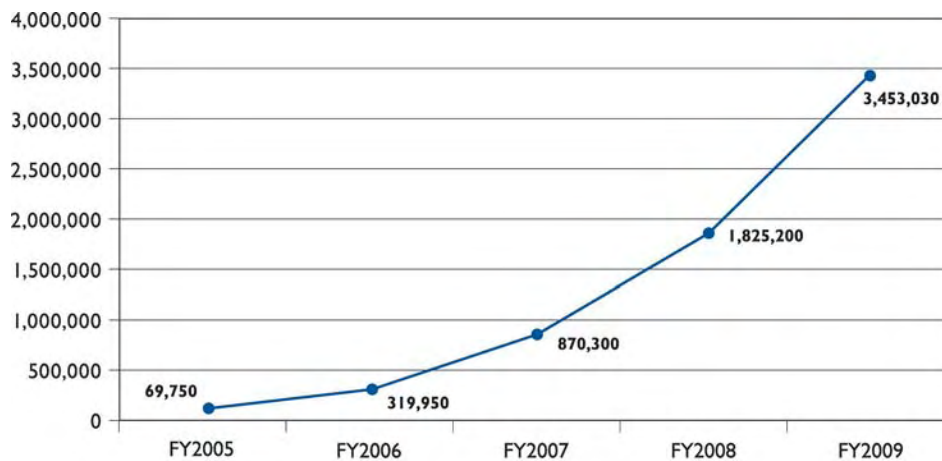
**Notes:**

Numbers may be adjusted as attribution criteria and reporting systems are refined.  
 Percentages shown reflect only those receiving downstream support. Data 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 U.S. Government-funded service delivery sites.

**Footnote:**

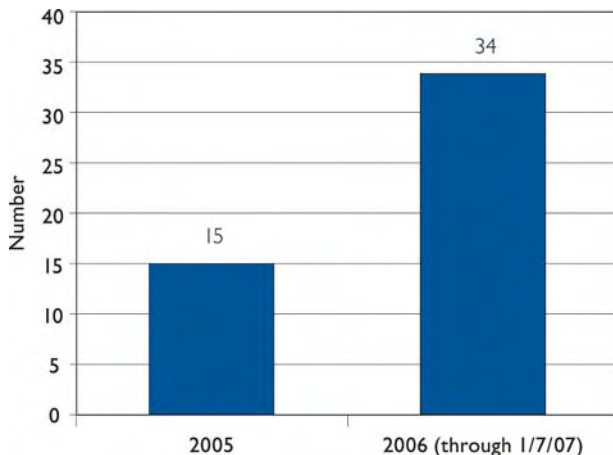
<sup>1</sup> According to the 2006 UNAIDS Epidemic Update, 45 percent of those infected with HIV worldwide in 2006 were women, and 13 percent were children.

**Figure 4: Estimated Cumulative Years of Life Added through FY2009, Based on Current and Projected Persons on ART, Due to PEPFAR Support for ART in Focus Countries**



**Note:** Calculations are based on methodology developed by the WHO, 2006. Total person-years-of-life added are based on the actual number of persons on ART in FY2004-FY2006 and projected numbers of people to be on treatment for FY2007 and FY2008.

**Figure 5: Cumulative HHS/FDA Approvals/Tentative Approvals of Generic ARVs, Calendar Years 2005 and 2006**



The Emergency Plan’s impact on treatment access extends beyond PEPFAR-supported programs to increased availability of safe, effective, low-cost generic antiretroviral drugs (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 quality standards and subsequently cleared for purchase under PEPFAR. As of January 4, 2007, 34 generic ARV formulations have been approved or tentatively approved by HHS/FDA under the expedited review, including eight fixed-dose combination (FDC) formulations (two of which are triple-drug combinations) and eight pediatric formulations. The steady increase in approvals is shown in figure 5. As a side benefit, the process has also expedited the availability in the United States of five generic versions of ARVs whose U.S. patent protection has expired.

years 2004 through 2006 represent approximately 2,200,000 person-years-of-life added through the end of fiscal year 2009 (September 30, 2009). Estimating the additional number of people projected to be placed on ART by the end of fiscal years 2007 and 2008 under current PEPFAR budget plans, an additional 1,250,000 person-years-of-life would be added by the end of fiscal year 2009. In all, PEPFAR support for treatment is projected to save around 3,450,000 person-years through September 30, 2009, alone – and undoubtedly will have much greater effects beyond that time frame.

In addition to supporting host nations’ programs that provide pediatric ART, PEPFAR also has been a leader in expanding a prerequisite to treatment – early infant diagnosis for children under 18 months. Without intervention, approximately half of HIV-positive newborns die before two years of age. PEPFAR supports nations in expanding polymerase chain reaction (PCR) testing of dried blood spots, which require less blood per test than older methods and easily can be transported to central laboratories for testing.

Country	Date of policy adoption on infant diagnosis <sup>1</sup>
Botswana	2006
Côte d'Ivoire	2006
Ethiopia	2005
Guyana	2006
Haiti <sup>2</sup>	-
Kenya <sup>3</sup>	-
Mozambique	2006
Namibia	2005
Nigeria <sup>3</sup>	-
Rwanda	2006
South Africa	2005
Tanzania <sup>2</sup>	-
Uganda	2005/2006 <sup>4</sup>
Vietnam	2006
Zambia <sup>2</sup>	-

**Footnotes:**  
<sup>1</sup> Unless otherwise noted, information obtained through correspondence with country teams.  
<sup>2</sup> Countries are implementing infant HIV counseling and testing without a policy.  
<sup>3</sup> Policy is pending.  
<sup>4</sup> Uganda's Counseling and Testing Policy (2005) has a section on Infant Diagnosis, and the Revised PMICT Guidelines (2006) has sections on Infant Diagnosis and treatment.

PEPFAR has supported country-level policy change to allow PCR-based testing in order to reduce the cost and burden of infant diagnosis. As table 4 shows, most focus countries have now adopted such policies. In some cases, national policy is behind actual implementation, with 14 focus countries reportedly using PCR testing - making accurate diagnosis and management of pediatric ART a growing reality.

The series of maps in figure 6 depicts the steady increase in Emergency Plan support for ART coverage as programs scale up toward the five-year target of treatment support for two million people.

The Emergency Plan is the largest contributor to the Global Fund, providing approximately thirty percent of all resources to date. The Global Fund has reported support for ART for 770,000 people globally as of the end of 2006; strikingly, 418,000 of those were reported in PEPFAR focus

Country	% Coverage 2003 <sup>1</sup>	% Coverage 2006 <sup>2</sup>	% Change in Coverage
Botswana	15.2%	80.4%	430%
Côte d'Ivoire	4.1%	24.9%	506%
Ethiopia	1.0%	14.4%	1369%
Guyana	12.6%	64.0%	410%
Haiti	2.9%	23.5%	707%
Kenya	1.5%	35.8%	2214%
Mozambique	1.0%	15.8%	1561%
Namibia	1.3%	64.1%	4871%
Nigeria	2.3%	10.6%	366%
Rwanda	4.4%	61.2%	1278%
South Africa	0.2%	21.4%	10773%
Tanzania	0.1%	14.1%	10905%
Uganda	6.5%	60.3%	834%
Vietnam	14.0%	26.4%	89%
Zambia	0.6%	39.1%	6139%
<b>Total</b>	<b>1.9%</b>	<b>24.3%</b>	<b>1212%</b>

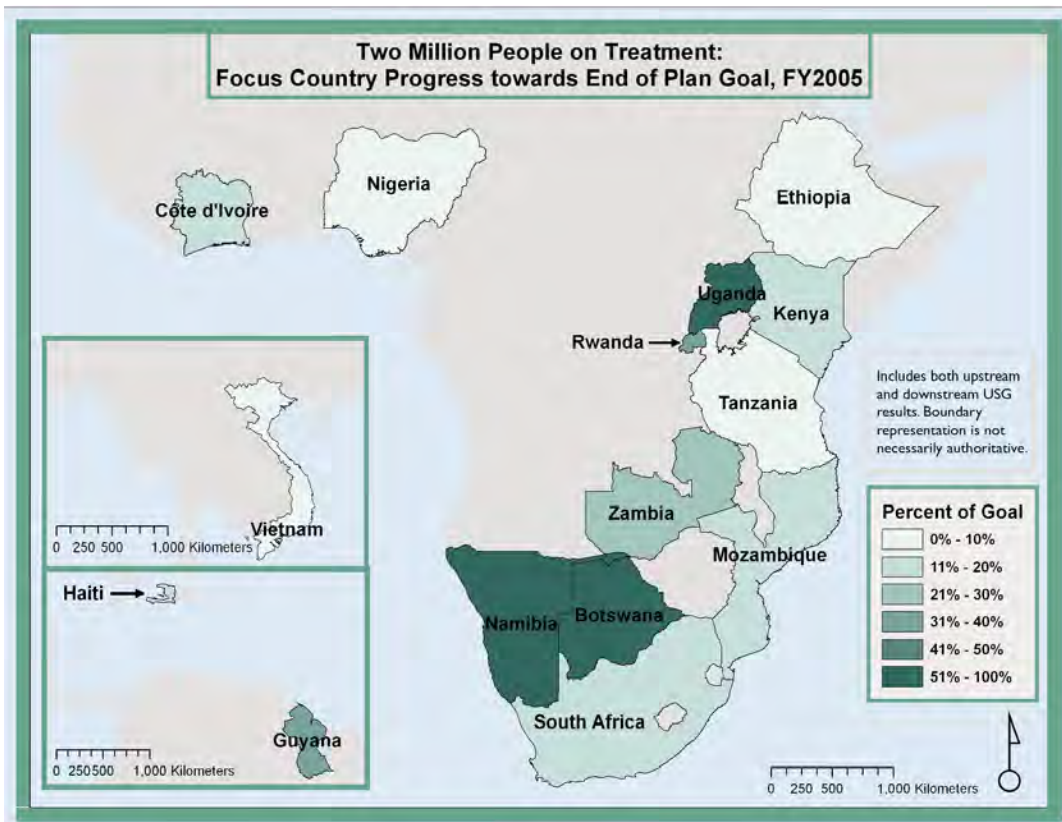
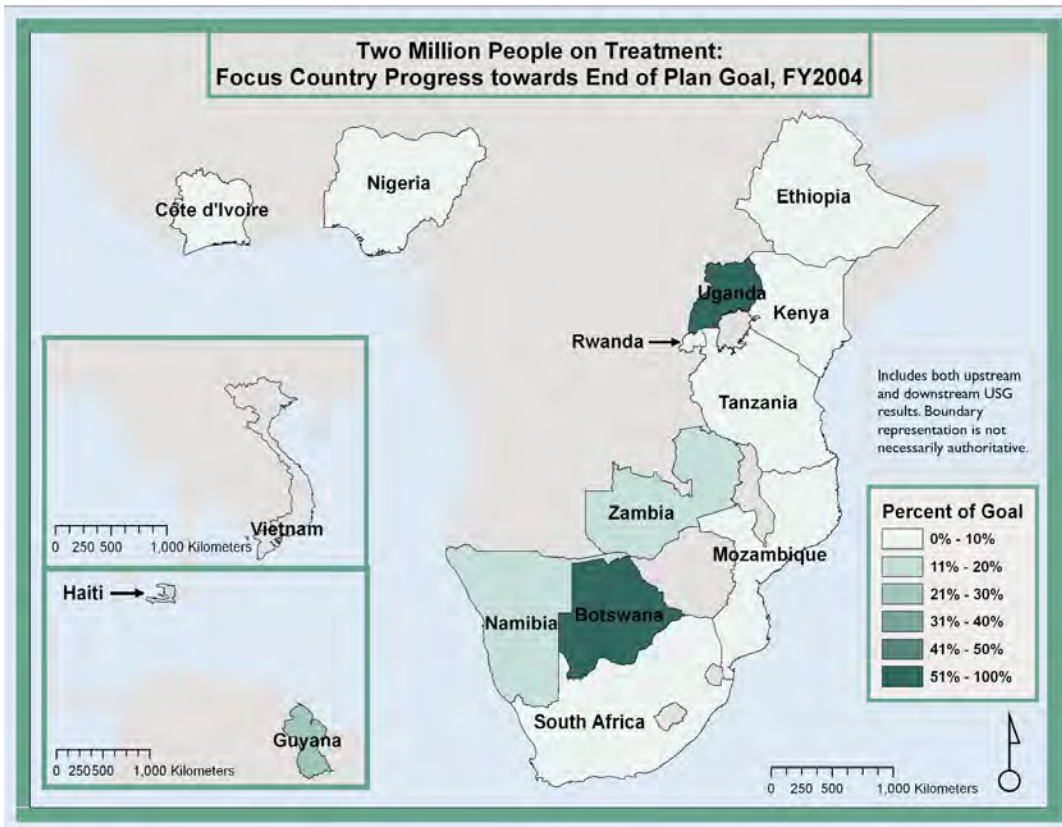
**Note:**  
National treatment coverage includes individuals on treatment as reported by WHO and other multi-lateral agencies and includes all sources of support.

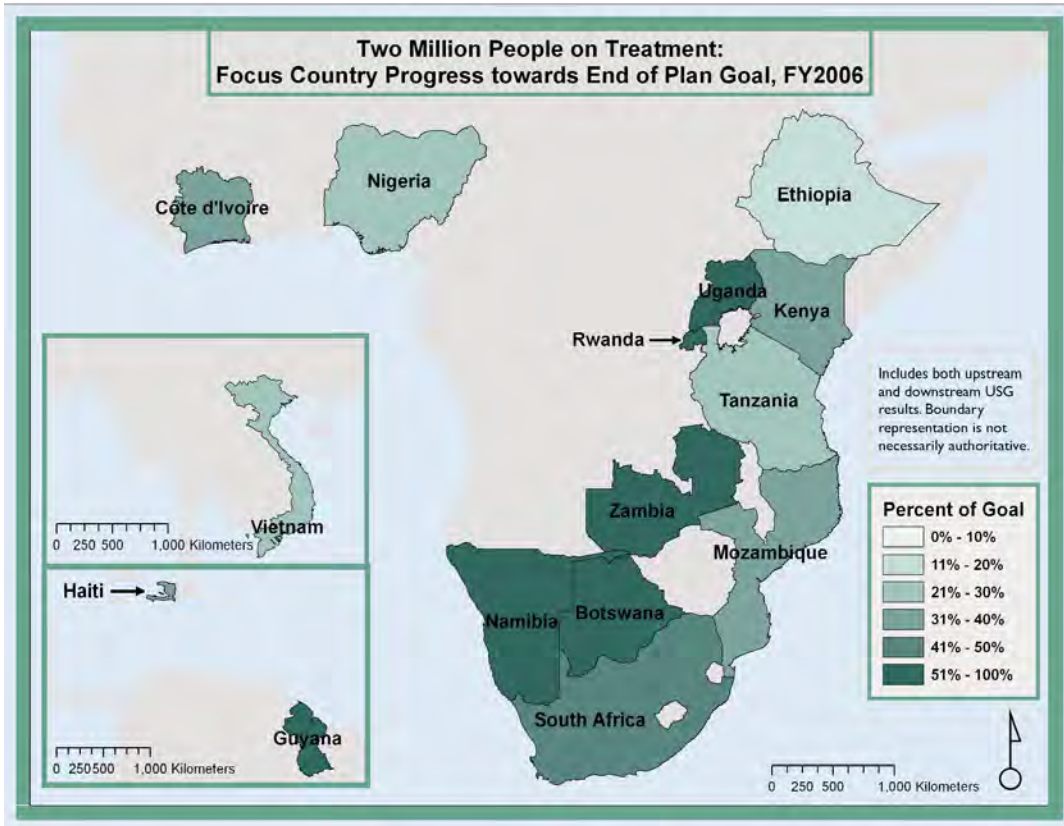
**Footnotes:**  
<sup>1</sup> "Coverage of selected services for HIV/AIDS prevention, care and support in low and middle income countries in 2003," USAID, UNAIDS, WHO, CDC and the POLICY Project, June 2004.  
<sup>2</sup> WHO, 2006.

countries. For 2005, it was estimated that 80 percent of those receiving Global Fund support in the focus countries also benefited from Emergency Plan bilateral support; this year, it is estimated that all of them do. This is a testament to close country-level coordination in support of national programs.

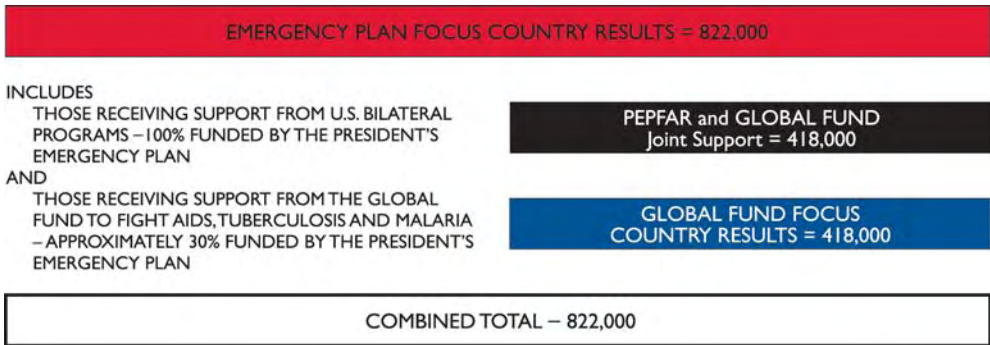
Because of the commitment of resources and talented people in-country, many of the focus countries have achieved massive improvements in their national levels of ART coverage in recent years as shown in table 5, and the Emergency Plan has supported their leadership.

Figure 6: Progress in PEPFAR Support for Treatment Coverage in Focus Countries, FY2004-FY2006



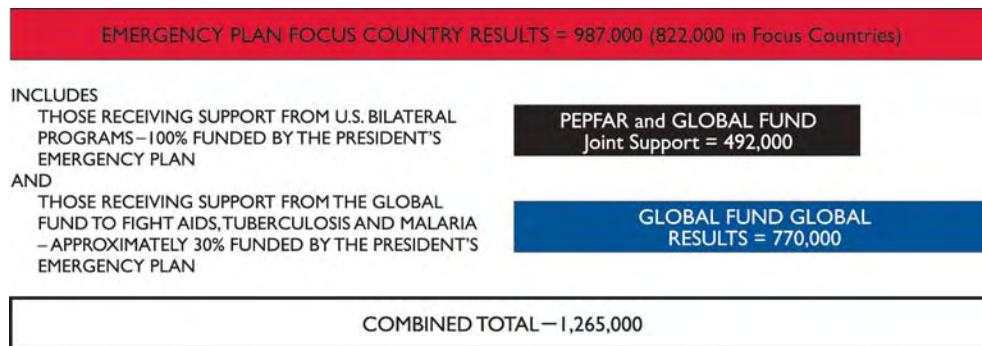


**Figure 7: People Receiving ARV Treatment with Support from the President's Emergency Plan for AIDS Relief in Focus Countries through FY2006**



**Notes:** Numbers are rounded off to the nearest thousand. Treatment numbers include upstream and downstream results for the Emergency Plan bilateral programs provided by the Office of the U.S. Global AIDS Coordinator. Treatment results for the Global Fund programs provided by the Global Fund to Fight AIDS, Tuberculosis and Malaria. Overlap estimate based on review of country data with Global Fund and the WHO. Overlap differs by country.

**Figure 8: People Receiving ARV Treatment with Support from the President's Emergency Plan for AIDS Relief Globally through FY2006**



**Notes:** Numbers are rounded off to the nearest thousand. Treatment numbers include upstream and downstream results for the Emergency Plan bilateral programs provided by the Office of the U.S. Global AIDS Coordinator. Treatment results for the Global Fund programs provided by the Global Fund to Fight AIDS, Tuberculosis and Malaria. Overlap estimate based on review of country data with Global Fund and the WHO. Overlap differs by country.

### The Power of Partnerships: Impact on Care

In addition to efforts to diagnose and treat children infected with HIV, PEPFAR supports host nations' wide-ranging programs to meet the needs of orphans and vulnerable children (OVCs) affected by the pandemic. The following graph shows that, as of September 30, 2006, PEPFAR supported care for approximately two million OVCs (in addition to care for nearly 2.5 million people living with HIV/AIDS).

In addition to scaling up HIV/AIDS programs for OVCs on a larger scale than has been attempted previously, in fiscal year 2006 PEPFAR took an important step forward in ensuring the quality of programs (please see figure 9). OVC programs now are being required to track how many of six key services they provide, and to report accordingly.

Along with its OVC programs, PEPFAR has scaled up its support for national efforts to provide high-quality care for opportunistic infections related to HIV/AIDS. Especially important in this area is care for HIV/tuberculosis (TB) coinfection, a leading cause of death among HIV-positive people in the developing world. From fiscal year 2005 to fiscal year 2006, PEPFAR nearly doubled funding for HIV/TB, supporting TB treatment for 301,600 HIV-infected patients in fiscal year 2006.

Another key improvement in fiscal year 2006 was the development and dissemination of "preventive care packages" for children and adults living with HIV. These packages can

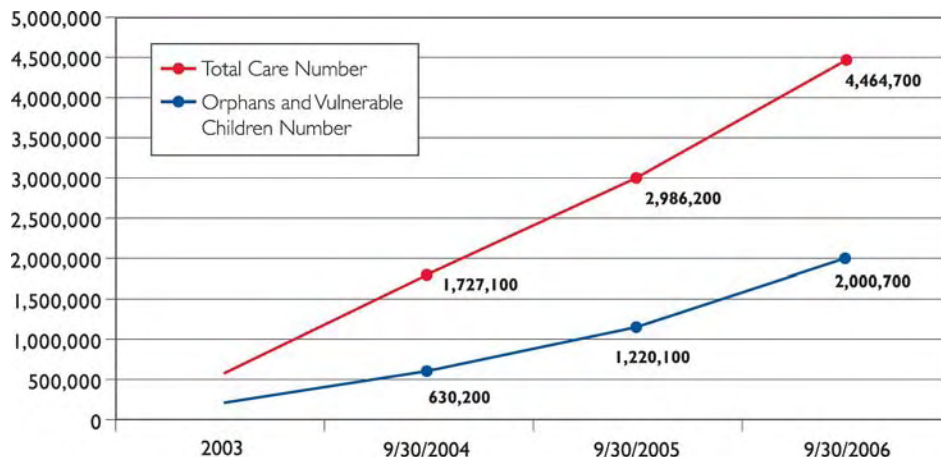
help to keep HIV-positive persons healthy and delay the need for treatment, and were crafted to be adapted to local circumstances. Like many best practices developed by the Emergency Plan, these advances in the area of care for OVCs and people living with HIV/AIDS have the potential to have a wide impact beyond PEPFAR-supported programs. PEPFAR is working to disseminate them broadly.

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. If countries appropriately target counseling and testing to populations at increased risk of HIV infection – such as TB patients and women seeking PMTCT services – and if health care providers offer coun-



Ambassador Dybul interacts with children at St. Bridget's Preschool in Tonota, Botswana.

**Figure 9: Care: Number of Individuals Receiving Care in the 15 Focus Countries**  
(Orphans and Vulnerable Children and Care for People Living with HIV/AIDS)



Note: 2003 OVC estimate includes all OVCs in focus countries whether or not affected by AIDS.

selling and testing in routine encounters, it is estimated that 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 6 shows that PEPFAR supported more than 18 million counseling and testing encounters through fiscal year 2006. Among these, more than 5.7 million encounters were with women seeking PMTCT services, a key population to target.



Malise Swila is breaking new ground in Tanzania, providing HIV counseling and testing to the deaf community.

A key barrier to the universal knowledge of serostatus is the lack of routine testing in medical settings, including TB and sexually transmitted infection (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. Several studies presented at the HIV/AIDS Implementers’ Meeting in Durban, South Africa (discussed later in this overview) demonstrated the impact this policy change can have. A pilot project in Zimbabwe showed a 54 percent increase in testing rates at urban ANCs after the introduction of routine testing and a 76 percent increase in rural areas. Another study conducted in the maternity ward of a 200-bed hospital in rural Uganda found that moving to routine testing more than doubled the proportion of women discharged from the ward with a known HIV status, from 39 percent to 88 percent.

**Table 6: Care: Cumulative Counseling and Testing (C&T) Results, FY2004-FY2006**

	FY2004 <sup>1</sup>	FY2005	FY2006	Cumulative C&T to date
Number of women receiving C&T through PMTCT	1,017,000	1,957,900	2,814,700	5,789,600
Number of individuals receiving C&T in other settings	1,791,900	4,653,200	6,426,500	12,871,600
<b>Total</b>	<b>2,809,900</b>	<b>6,611,100</b>	<b>9,241,200</b>	<b>18,661,200</b>
<b>Women as a percentage of all individuals receiving C&amp;T in PMTCT and other settings through downstream support</b>				
	<b>66%</b>	<b>69%</b>	<b>71%</b>	<b>70%</b>
<b>Notes:</b>				
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 and those receiving downstream services at U.S. Government-funded service delivery sites.				
The same individual may receive counseling and testing on multiple occasions.				
<b>Footnote:</b>				
<sup>1</sup> In FY2004 only, it was assumed that 80% of women receiving PMTCT services were counseled and tested.				

**Table 7: Key Policy Changes: Counseling and Testing**

Country	Date of policy adoption on provider-initiated testing <sup>1</sup>	Date of policy adoption on use of rapid test kits <sup>1</sup>
Botswana	2003	2006
Côte d'Ivoire	-	2001
Ethiopia	-	2006
Guyana	2006 <sup>2</sup>	2004
Haiti	-	-
Kenya	2004	2006
Mozambique	-	2006
Namibia	2004 <sup>4</sup>	2005
Nigeria	-	2006 <sup>5</sup>
Rwanda	2006	2006
South Africa	-	2006
Tanzania	2006	2006
Uganda	2005	2006
Vietnam	2006	-
Zambia	2005 <sup>6</sup>	2005
<b>Footnotes:</b>		
<sup>1</sup> Unless otherwise noted, information obtained through correspondence with country teams.		
<sup>2</sup> Guyana's provider-initiated testing policy is for labor and delivery wards only.		
<sup>3</sup> While Haiti has no official written policy on the use of rapid test kits, the use of rapid test kits is the de facto policy. Haiti's health system adopted rapid test kits early and use of rapid kits is considered routine practice.		
<sup>4</sup> Namibia's provider-initiated testing policy is for PMTCT, ANC, and TB only and includes provision for non-laboratory personnel including community counselors to perform rapid HIV testing.		
<sup>5</sup> Nigeria adopted an interim testing policy to support the use of rapid tests in 2006 and will draft its final policy after the results of the PEPFAR-supported rapid test assessment.		
<sup>6</sup> Zambia adopted a PMTCT-specific provider-initiated testing policy in 2004.		

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. Table 7 illustrates the encouraging recent trends on these issues.

### **The Power of Partnerships: Building Sustainability**

As the name of the President's 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 sustaining an effective response. From the beginning, PEPFAR has focused on achieving 2-7-10 in an accountable and sustainable way. Over time, PEPFAR has progressively deepened its activities to ensure a sustainable response by building the capacity of public and private institutions in host nations to lead their responses to HIV/AIDS.

Review of annual COPs includes an evaluation of efforts to increase the number of indigenous organizations partnering with the Emergency Plan. At least one-quarter of PEPFAR resources in fiscal year 2006 were devoted to capacity-building in the public and private health sectors – physical infrastructure, training, and support for workforce. And 83 percent of partners were local organizations, which support more than 15,000 project sites for prevention, treatment, and care.



Reliance on such local organizations, while 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, COPs for fiscal year 2007 are required to devote no more than 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 will help to expand and diversify PEPFAR’s base of partners and facilitate efforts to reach out to new partners, particularly local partners – a key to sustainability.

To increase the number of local organizations, including faith-based and community-based organizations (FBOs and CBOs), that will work under the Emergency Plan, the President launched the New Partners Initiative (NPI) – and the first 23 grants were awarded on World AIDS Day 2006.

Alongside efforts to support community capacity-building, other crucial activities for sustainability include: enhancing the capacity of health systems and health care workers; strengthening quality assurance; improving financial management and accounting systems; building health infrastructure; and improving commodity distribution and control. The Emergency Plan is intensively supporting national strategies to strengthen these critical systems.

For example, PEPFAR’s Supply Chain Management System (SCMS) project strengthens systems to deliver an uninterrupted supply of high-quality, low-cost products that will flow through a transparent and accountable system. SCMS’s activities include supporting the purchase of



Greg Roche

Participants in a stock management training conducted by the Supply Chain Management System (SCMS) in Port-au-Prince, Haiti.

lifesaving ARVs, including low-cost generic ARVs; drugs for care for people living with HIV/AIDS, 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.

### **The Power of Partnerships: Growing Health Workforce**

The building of local capacity depends upon a workforce that can carry out the many tasks and build the systems that are needed. In fiscal year 2006, PEPFAR devoted approximately \$350 million to partnerships for workforce and health-system development. This massive 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. Capacity-building results to date are summarized in table 8.

In addition to training existing health care workers, it is also essential to bring new workers into the health workforce. 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 to deliver HIV/AIDS services. Changing national and local policies to support task-shifting can foster dramatic progress in expanding access to prevention, treatment, and care services. The Emergency Plan supports the leadership of its host country partners in broadening national policies to allow trained members of the community – including people living with HIV/AIDS – to become part of clinical teams as community health workers.



White House photo by Eric Draper

President George W. Bush and Laura Bush meet with leaders of organizations fighting HIV/AIDS in the Roosevelt Room at the White House, on World AIDS Day, December 1, 2006.

**Table 8: Emergency Plan Support for Capacity-Building FY2004-FY2006**

	Number of individuals trained or retrained	Number of USG supported service outlets
Prevention of Sexual Transmission <sup>1</sup>	863,300	-
Prevention of Mother-to-Child Transmission	85,800	4,863
Prevention of Medical Transmission <sup>2</sup>	85,500	3,848
Provision of Antiretroviral Treatment	100,700	1,912
Provision of Care for Orphans and Vulnerable Children <sup>1</sup>	240,700	-
Provision of Palliative Care for HIV-positive People	216,900	8,019
Provision of Counseling and Testing	69,800	6,466
<b>Total</b>	<b>1,662,700</b>	<b>25,108</b>
<p><b>Notes:</b> Upstream and downstream numbers above 100 are rounded to the nearest 100 and then added to get totals. Numbers may be adjusted as attribution criteria and reporting systems are refined.</p> <p><b>Footnotes:</b> <sup>1</sup> These services are provided in a variety of settings and are often not facility-based. <sup>2</sup> Service outlets counted under prevention of medical transmission include only outlets that carry out blood safety activities.</p>		

### The Power of Partnerships: Improving Program Quality

With respect to sustainability, as in other areas, PEPFAR is generating best practices that are being used in the fight worldwide. The U.S. supports full national scale-up of multi-sectoral, results-based, accountable, country-led programs in the 15 focus nations, and the lessons learned from national scale-up are now being shared globally and having an impact far beyond PEPFAR programs.

The Emergency Plan is building the capacity of local people and organizations to evaluate what they are doing and present their findings to their colleagues from around the world. In June 2006, the Emergency Plan convened the first HIV/AIDS Implementers' Meeting in Durban, South Africa. Nearly 1,000 implementers from 50 countries gave

more than 500 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 FBOs and CBOs, and the private sector.

As the Durban meeting demonstrated, constant evaluation to improve programs can be a hallmark of all HIV/AIDS efforts, including those of PEPFAR. Fiscal year 2006 saw the launch of a new program of Public Health Evaluations, including efforts to monitor resistance and toxicities, the effectiveness of various prevention and OVC programs, and many more.

### The Power of Partnerships: Creating a Culture of Accountability

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. 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 U.S. diplomacy, as Secretary Rice has described it, in action. While HIV/AIDS is unmistakably the focus of PEPFAR, the initiative's support for capacity-building 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. Supply chain management capacity-building improves procurement for general health commodities. Improving the capacity to report on results fosters quality/systems improvement, and the resulting accountability helps to develop good governance and democracy.

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-impooverished 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. Progress is being made by some countries, 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 ARVs, while PEPFAR provides support for other aspects of quality treatment. Such developments within hard-hit nations build sustainability in each country's fight against HIV/AIDS.

### **The Power of Partnerships: The Road Ahead**

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 through PEPFAR. Yet, we are at the beginning of a long journey. The challenges of this pandemic remain immense, and there is so much more to be done. PEPFAR and its partners recognize the continuing challenges and are confronting them together. Fiscal year 2006 saw a number of critical adaptations, such as the new Public Health Evaluation initiative, enhanced gender programming, improved quality for OVC programs, and much more. In 2007 and beyond, the Emergency Plan will continue to work with its partners to evaluate lessons learned and disseminate best practices to save even more lives – through PEPFAR partnerships and beyond.

Despite the daunting challenges ahead, the United States will remain a partner with host nations in this fight. President Bush's Emergency Plan was the first quantum leap in America's leadership on global HIV/AIDS, and the American people must continue to stand with our global sisters and brothers as they take control of the pandemic and their lives and restore hope to individuals, families, communities, and nations.



A PEPFAR-supported Zambian Defense Force drama troupe performs a skit on HIV prevention.

**“On World AIDS Day and throughout the year, we stand with our friends and partners around the world in the urgent struggle to fight this virus, comfort those who are affected, and save lives.”**

**President George W. Bush  
World AIDS Day  
December 1, 2006**

## Chapter 1

# Critical Intervention in the Focus Countries: Prevention

### Introduction

The challenges facing the developing world in seeking long-term solutions to prevent the transmission of HIV are daunting. The latest Joint United Nations Programme on HIV/AIDS (UNAIDS) report estimates that there are 39.5 million people infected with HIV/AIDS worldwide, including approximately 4.3 million new infections in 2006. Approximately 50 percent of the world’s HIV-infected people live in the 15 focus nations of the President’s Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR). Many nations face rapidly growing epidemics of HIV/AIDS that are drastically diminishing populations and shortening average life spans.

These stark realities underscore the fact that preventing new infections represents the only long-term, sustainable way to turn the tide against HIV/AIDS. Treatment and care are necessary, vital, life-extending services that greatly mitigate the impact of HIV infection and AIDS. But unless the world can reduce the number of new infections, we will continue to face an expanding need for treatment and care, running a race we can neither sustain nor win.

Nevertheless, despite the alarming facts of the pandemic, there is also a growing basis for hope. Recent evidence from Africa, the Caribbean and other regions indicates that peo-

### Prevention Summary

#### Five-Year Goal in the 15 Focus Countries

Support prevention of 7 million infections by 2010.

#### Progress Achieved Through September 30, 2006

- Supported community outreach activities to nearly 61.5 million people to prevent sexual transmission.
- Supported prevention of mother-to-child HIV transmission services for women during more than 6 million pregnancies (cumulative for fiscal years 2004 through 2006).
- Supported antiretroviral prophylaxis for HIV-positive women during 533,700 pregnancies, averting an estimated 101,500 infant HIV infections (cumulative for fiscal years 2004 through 2006).
- Supported training or retraining of nearly 520,000 people in provision of prevention services.
- Supported approximately 4,863 service outlets for prevention of mother-to-child HIV transmission.
- Supported approximately 3,848 service outlets for blood safety.

#### Allocation of Resources in Fiscal Year 2006

\$396 million to support prevention in focus countries (22.6 percent of total focus country resources for prevention, treatment, and care).

ple have begun to change their behavior in ways that significantly reduce their risk of contracting the disease.

Successful strategies for fostering sustainable change require comprehensive, multi-sectoral, evidence-based, complex prevention activities that address prevailing norms that are associated with the spread of HIV, while still meeting the needs of people who face elevated risks. While expanding access to prevention services is a vital condition for success, improved access is not enough. A strategic approach must include targeting prevention initiatives to address the specific behaviors that contribute to new HIV infections in a manner that addresses the diversity and depth of local needs.

Effective prevention also must be sustainable, community-owned, inclusive of people living with HIV/AIDS (PLWHA), gender-sensitive, responsive to local culture, and tailored to local circumstances. These activities should link to programs that offer HIV treatment and care, as well as to other parts of the health care system, such as clinics that diagnose and treat tuberculosis (TB) and sites that provide voluntary family planning. No opportunity to provide access to high-quality prevention services for all those at risk of infection or those who are living with HIV/AIDS should be overlooked.

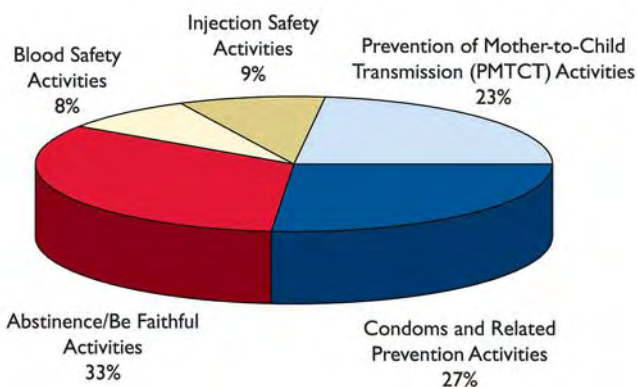
Efforts to prevent sexual transmission of HIV are crucial. More than 80 percent of infections worldwide are believed to be sexually transmitted. Primary prevention interventions are critical; even in the countries hardest-hit by HIV, the majority of youth and adults are uninfected, making support for the uptake and maintenance of prevention behaviors a critical priority. PEPFAR supports programs that work directly with people who are HIV-positive and their families to help reduce transmission and improve access to life-saving treatment and care services.

PEPFAR also focuses on prevention activities that address non-sexual modes of transmission. UNAIDS estimates that 12 percent of new infections globally in 2006 (530,000 infections) occurred among children, and that more than 90 percent of these were due to mother-to-child transmission. Scale-up of programs that effectively prevent mother-to-child HIV transmission (PMTCT) thus remains a particular priority. Quality and sustainability are the guiding principles in all PMTCT programs, as well as in all programs to ensure safe blood and medical injections.

Reflecting the Emergency Plan goal of ongoing program refinement, prevention activities are continually generating information on best practices. This information is rapidly put to use, guiding future programming decisions in order to ensure that PEPFAR-supported interventions are of high quality and are sustainable.

This chapter describes the prevention efforts of the Emergency Plan in the focus nations, where PEPFAR is working within national strategies to identify and scale up interventions that meet the challenges of quality and sustainability. Substantial progress was made during 2006, including new efforts to explore the application of biomedical prevention technologies.

**Figure 1.1: Prevention: All Focus Countries  
The President's Emergency Plan  
for AIDS Relief  
FY2006 Funding for HIV Prevention Activities as a  
Percentage of  
Total HIV Prevention Funding\***



\* As of August 2006. Numbers may be adjusted as attribution criteria and reporting systems are refined.

### Prevention of Sexual Transmission of HIV

Most PEPFAR focus countries have epidemics that are not heavily concentrated within traditionally recognized risk groups. While some subgroups have higher HIV prevalence than others, these nations' epidemics are generalized, affecting broad cross-sections of society, and the predominant mode of transmission is sexual activity. In other focus countries, such as Vietnam, Guyana and (according to recently emerging data) Ethiopia, more concentrated epidemics mean that focusing on specific risk groups is the most effective means of preventing new infections.



*Tsha Tsha* is a Nguni-language drama set in the Eastern Cape in South Africa. The program focuses on the lives of several young people exploring love and relationships in a world affected by the AIDS pandemic.

Most new infections in high-prevalence, generalized HIV epidemics result from chains of overlapping, concurrent sexual partnerships among adults in the general population. Many of these individuals do not consider themselves to be at risk. Therefore, in generalized epidemics, efforts to promote safer sexual behaviors among the general population, as well as among the more clearly identified high-risk groups, are crucial.

Generalized epidemics often are accompanied by increasing awareness of HIV, its effects, and its modes of transmission. Unfortunately, awareness of HIV by itself does not lead to changed behavior; HIV awareness in many of the hardest-hit nations has grown dramatically in recent years, yet infection rates have not necessarily fallen accordingly. Therefore, the Emergency Plan places a high priority upon ensuring that prevention programs not only provide information about how to prevent infection, but also encourage people to make positive and lasting changes in behavior.

Many countries have embarked upon this challenging new stage of the fight against HIV. They are moving to balance campaigns that promote HIV awareness with a broader public health approach that provides a comprehensive package of information, care, and support. Well-designed prevention programs aim to create an enabling environment that supports individuals in making safer choices and sustaining healthy behaviors. Empowering people with knowledge and skills to protect themselves is not merely good public health practice – it can help promote democratic values of personal responsibility and respect for human rights.

Long before PEPFAR was initiated, many nations 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). It was developed and successfully implemented in Uganda, and gained acceptance in a number of countries before PEPFAR’s launch.

In addition to earlier dramatic declines in HIV infection in Uganda, there is growing evidence of similar trends in other nations, including Botswana, Ethiopia, Haiti, Kenya, Tanzania, Zambia, and Zimbabwe. While the causes for decline of HIV prevalence are undoubtedly complex, these countries have demonstrated broad reductions in sexual risk behavior, suggesting that behavior change can play a key role in reversing the course of HIV/AIDS epidemics.

For example, UNAIDS reports that in Kenya recent HIV prevalence is 6.1 percent, which is a decline from earlier data demonstrating a peak of about 10 percent in adults in the mid-1990s. While there are significant geographical and sex disparities in prevalence rates, in general Kenya has demonstrated a downward trajectory in the epidemic that mirrors similar positive changes in sexual behavior. It is noteworthy that in Kenya between 1998 and 2003, the data indicate that:

- The percentage of 20-24 year old men with more than one sexual partner dropped from 35 percent to 18 percent.
- The median age of first sex among women increased from 16.7 to 17.8.
- High levels of previously sexually active people had been abstinent for at least one year at the time of the survey.
- Condom use increased among women who engaged in risky behavior.

In Zimbabwe, evidence from antenatal surveillance and other studies demonstrates that declines in HIV prevalence between 1997 and 2004 were associated with behavior change. The data in Zimbabwe indicate:

- Declines in the proportion of youth who had initiated sexual activity;

- Declines in the proportion of previously sexually active youth who had been sexually active in the preceding year;
- Declines in the proportion of individuals who report non-regular sexual partners; and
- Modest increases in reported condom use with casual partners.

Analysis of recent demographic and health surveys with linked HIV testing across several countries also found that HIV prevalence was considerably lower among both women and men who reported fewer sexual partners.

### Behavior Change: Learning from Mathematical Models

Mathematical models can help reveal how reported behavioral changes may affect the spread of HIV in a population. The epidemic in a country may reach a level of prevalence at which HIV infection is “saturated” in groups at highest risk of infection. At that point, whether HIV prevalence in the country stabilizes or declines will depend in large part on the risk behaviors of the broader population.

Since young people make up a substantial part of the population of most countries, the age of sexual debut and subsequent sexual behaviors of young people entering the sexually active population are important determinants of whether HIV prevalence stabilizes or declines. Interventions promoting abstinence (including secondary abstinence) may thus target these risk factors. Another important determinant of individual risk and national prevalence is the number of sexual partners. Evidence suggests that there is a higher risk of transmission in partnerships where the infectious partner has a high viral load. An increase in the number of partners increases the possibility that at least one partner has a high viral load, so the number of sexual partners is a more important determinant of risk of HIV transmission than the number of sexual acts. According to the models, rates of sexual partner change and overlap between partnerships are also crucial measures of risk. Data show that prostitution and non-cohabiting sexual partnerships are associated with high numbers of sex partners, so “be faithful” interventions can be tailored to reduce these behaviors. Additionally, models suggest that correct and consistent condom use is much more effective in preventing HIV transmission than occasional condom use. This highlights the importance of support for correct and consistent use of condoms for reducing individual risk and national prevalence.

PEPFAR supports an evidence-based public health approach that provides information, so people can decide how to protect themselves. While abstinence is the only 100 percent effective way of preventing sexual HIV transmission, being faithful to a single, HIV-negative partner and correct and consistent condom usage (80-90 percent prevention efficacy), especially among sexual partners when HIV sero-status is unknown, can also significantly reduce the risk of HIV transmission.

The Emergency Plan continues to support nations in developing and refining prevention approaches that are appropriate to the local epidemic. Different approaches are required for different types of epidemics, and various responses exist within the focus nations. For example, in Vietnam the epidemic is concentrated in urban populations and among people engaging in higher-risk activities, including injecting drug users, so prevention programs are appropriately targeted. In other focus nations with higher HIV prevalence, interventions must be targeted to both clearly defined high-risk populations and the general population. In both concentrated and generalized epidemics, behavior change is a key component to all prevention interventions.

To the extent that any controversy remains regarding the ABC approach to HIV prevention, it stems from a misunderstanding of the strategy. ABC is not a narrow, one-size-fits-all recipe. It encompasses a wide variety of approaches to the myriad factors that lead to sexual transmission. The interventions that support people in choosing to either reduce the risk of HIV infection or avoid it may vary, depending upon personal and societal circumstances.

For example, the Emergency Plan recognizes the critical need to address the inequalities between women and men that influence sexual behavior and put women at higher risk of infection. For this reason, many HIV prevention programs also address issues related to gender (for further information, see the chapter on Gender). While gender equity does not directly reduce HIV transmission, the ABC approach is particularly important for the protection of women and girls. PEPFAR-supported ABC programs address gender issues, including violence against women, cross-generational sex and transactional sex. Such approaches are not in conflict with ABC – they are integral to it.

Some of the most striking data presented at the 2006 HIV/AIDS Implementers’ Meeting in Durban, South

Africa (discussed further in the chapter on Implementation and Management) concerned behavior change by men in regard to the “B,” or “being faithful” element of the ABC strategy. In a number of countries, men have begun to reduce their number of sexual partners, and the populations doing so include even some of the men at highest risk, such as long-distance truck drivers. As we seek to empower women for HIV prevention, reaching men with effective interventions is one of the most important things we can do, and this, too, is part of the ABC strategy.

ABC programs also address the issue of “prevention for positives” – helping PLWHA to choose whether to abstain from further sexual activity, or to be faithful to a single partner whose status is known and use a condom with every sexual encounter. ABC programs link people to HIV counseling and testing, which is a critical element of any prevention campaign. Studies have shown that people who know their HIV status are more likely to protect themselves and others from infection.

The Emergency Plan is also ready to adapt new prevention technologies once clinical trials are complete and guidance

from a normative agency, such as the World Health Organization (WHO) or UNAIDS, is available. When new prevention strategies, such as microbicides, are identified by normative agencies as effective prevention interventions, they will be supported as part of a comprehensive prevention strategy.

In December 2006, the National Institute of Allergy and Infectious Diseases (NIAID) announced an early end to two clinical trials of adult male circumcision. This decision was due to an interim review of trial data that revealed medically performed circumcision significantly reduces a man’s risk of acquiring HIV through heterosexual intercourse. PEPFAR is awaiting normative guidance from international organizations or other normative bodies, and thereafter will support implementation of safe medical male circumcision for HIV/AIDS prevention, based on requests from host governments and in keeping with their national policies and guidelines. (See text box on male circumcision.)

## Male Circumcision

Two recent National Institute of Allergy and Infectious Diseases (NIAID) clinical trials in Kenya and Uganda provided encouraging evidence that safe medical circumcision of adult males can reduce the risk of HIV transmission. These data support the earlier findings of a clinical trial held in South Africa. On December 12, 2006, the NIAID Data and Safety Monitoring Board reviewed an interim data analysis of the trials and determined the following:

- Adult male circumcision performed by trained medical personnel, and with appropriate post-surgical follow-up to ensure management of any infections or other problems with wound healing, was shown to be safe.
- Among men in these trials, adult male circumcision reduced the risk of acquiring HIV infection by 48 percent in the Ugandan study and by 53 percent in the Kenyan study.
- Given these results, both trials will offer men in the control group circumcision. In order to understand the long-term impact of adult male circumcision, the studies will continue to measure HIV infection rates and to study the risk-taking behavior and attitudes of participants.

In anticipation of the potential role of safe male circumcision, the Emergency Plan has been a member of an international male circumcision steering committee led by UNAIDS and WHO, and has been funding formative and preparatory work within several countries, including assessments of clinical and community preparedness in partnership with host governments.

PEPFAR is awaiting normative guidance from international organizations or other normative bodies, and thereafter will support implementation of safe medical male circumcision for HIV/AIDS prevention, based on requests from host governments and in keeping with their national policies and guidelines. It is important that male circumcision be safely provided and that it be integrated into, and not substituted for, a comprehensive HIV/AIDS prevention program. Given the possible misperception that circumcision eliminates HIV transmission risk, PEPFAR-supported prevention efforts must reinforce the ABC approach – Abstain, Be faithful, and correct and consistent use of Condoms and must be linked to voluntary, confidential counseling and testing, and to screening and treatment of sexually transmitted infections.



## The ABC Guidance

In 2005, the Emergency Plan issued formal guidance to country teams and partners on implementation of ABC activities. The PEPFAR-supported ABC approach employs population-specific interventions that emphasize abstinence for youth and other unmarried persons, including delay of sexual debut; mutual faithfulness and partner reduction for sexually active adults; and correct and consistent use of condoms by those whose behavior places them at risk for transmitting or becoming infected with HIV. PEPFAR-supported programs may include all three of the ABC messages, or a subset of them, as appropriate.

The ABC approach is distinctive in its targeting of specific populations, the circumstances they face, and behaviors within those populations for change. This targeted approach results in a comprehensive and effective prevention strategy that helps individuals personalize risk and develop tools to avoid risky behaviors under their control.

The following material is drawn from PEPFAR's ABC Guidance. The guidance may be found online in its entirety at <http://www.PEPFAR.gov/guidance/>.

### Defining the ABC Approach

**Abstinence** programs encourage unmarried individuals to abstain from sexual activity as the best and only certain way to protect themselves from exposure to HIV and other sexually transmitted infections (STIs). Abstinence until marriage programs are particularly important for young people, as approximately half of all new infections occur in the 15- to 24-year-old age group. Delaying first sexual encounter can have a significant impact on the health and well-being of adolescents and on the progress of the epidemic in communities. In many of the countries hardest-hit by HIV/AIDS, sexual activity begins early and prior to marriage. Surveys show that, on average, slightly more than 40 percent of women in sub-Saharan Africa have had premarital sex before age 20; among young men, sex before marriage is even more common. A significant minority of youth experience first sex before age 15. Internationally, a number of programs have proven successful in increasing abstinence until marriage, delaying first sex, and achieving "secondary abstinence" – returning to abstinence – among sexually experienced youth.

These programs promote the following:

- Abstaining from sexual activity as the most effective and only certain way to avoid HIV infection;
- The development of skills for practicing abstinence;
- The importance of abstinence in eliminating the risk of HIV transmission among unmarried individuals;
- The decision of unmarried individuals to delay sexual debut until marriage; and
- The adoption of social and community norms that support delaying sex until marriage and that denounce cross-generational sex; transactional sex; and rape, incest, and other forced sexual activity.

**Be faithful** programs encourage individuals to practice fidelity in marriage and other sexual relationships as a critical way to reduce risk of exposure to HIV. Once a person begins to have sex, the fewer lifetime sexual partners he or she has, the lower the risk of contracting or spreading HIV or other STIs. Some of the most significant gains in Uganda's fight against HIV are a result of specific emphasis on, and funding of, programs to promote changes in behavior related to fidelity in marriage, monogamous relationships, and reducing the number of sexual partners among sexually active unmarried persons. Uganda's President Museveni, along with local religious groups and other non-governmental organizations (NGOs), promoted a consistent message of partner reduction and fidelity, which contributed to a significant decline in the number of sexual partners among both men and women in Uganda.

Be faithful programs promote the following:

- The elimination of casual sexual partnerships;
- The development of skills for sustaining marital fidelity;
- The importance of mutual faithfulness with an uninfected partner in reducing the transmission of HIV among individuals in long-term sexual partnerships;
- HIV counseling and testing with their partner for those couples that do not know their HIV status;

- The endorsement of social and community norms supportive of refraining from sex outside of marriage, partner reduction, and marital fidelity, by using strategies that respect and respond to local cultural customs and norms; and
- The adoption of social and community norms that denounce cross-generational sex; transactional sex; and rape, incest, and other forced sexual activity.

**Correct and consistent Condom use** programs support the provision of full and accurate information about correct and consistent condom use reducing, but not eliminating, the risk of HIV infection and support access to condoms for those most at risk for transmitting or becoming infected with HIV. Behaviors that increase risk for HIV transmission include engaging in casual sexual encounters, engaging in sex in exchange for money or favors, having sex with an HIV-positive partner or one whose status is unknown, using drugs or abusing alcohol in the context of sexual interactions, and using intravenous drugs.

Women, even if faithful themselves, can still be at risk of becoming infected by their spouse, regular male partner, or someone using force against them. Other high-risk persons or groups include men who have sex with men (MSM) and workers who are employed away from home. Existing research demonstrates that the correct and consistent use of condoms significantly reduces, but does not eliminate, risk of HIV infection. Studies of sexually active couples, for example, in which one partner is infected with HIV and the other partner is not, demonstrate that latex condoms provide approximately 80-90 percent protection, when used consistently. To achieve the protective effect of condoms, people must use them correctly and consistently at every sexual encounter. Failure to do so diminishes the protective effect and increases the risk of acquiring a sexually transmitted infection (STI) because transmission can occur with even a single sexual encounter. Latex condoms, when used consistently and correctly, are highly effective in preventing transmission of HIV. In addition, correct and consistent use of latex condoms can reduce the risk of other STIs, including gonorrhea, chlamydia, and genital ulcer diseases. While the effect of condoms in preventing human papillomavirus (HPV) infection is unknown, condom use has been associated with a lower rate of cervical cancer. Persistent infection with “high-risk” types of HPV is the main risk factor for cervical cancer.

Condom use programs promote the following:

- The understanding that abstaining from sexual activity is the most effective and only certain way to avoid HIV infection;
- The understanding of how different behaviors increase risk of HIV infections;
- The importance of risk reduction and a consistent risk-reduction strategy when risk elimination is not practiced;
- The importance of correctly and consistently using condoms during every sexual encounter with partners known to be HIV-positive (discordant couples), or partners whose status is unknown;
- The critical role of HIV counseling and testing as a risk-reduction strategy;
- The development of skills for obtaining and correctly and consistently using condoms, including skills for vulnerable persons; and
- The knowledge that condoms do not protect against all STIs.

## **Implementing the ABC Approach**

### **Overarching Considerations**

Effective implementation of the ABC approach requires careful evaluation of risk behaviors that fuel local epidemics. Although prevention interventions are most successful when locally driven and responsive to local cultural values, epidemiological evidence can identify risky behaviors within populations and guide specific behavioral messages. For example, in some communities, as many as 20 percent of girls aged 15 to 19 are infected, compared to five percent of boys the same age. Coupled with high prevalence among older men, such data can point to transmission that is fueled by cross-generational sex. Prevention approaches must then address the risks of cross-generational and transactional sex through abstinence programs for youth and be faithful programs for men that foster collective social norms that emphasize avoiding risky sexual behavior.

Every country’s prevention program must include all three elements of the “ABCs,” promoted strategically to appropriate populations and drivers of disease. Thus, the optimal balance of ABC activities will vary across countries according to the patterns of disease transmission, the identification of core transmitters (i.e., those at highest risk of transmitting HIV), cultural and social norms, and other contextual factors. In addition, prevention messages are most effective when they are accurate and consistent, and all

implementing partners must harmonize them at the community level. The A, B, and C components must not undermine or compete with each other, and therefore program partners must not disseminate incorrect information about any health intervention or device. Implementing partners must not promote condoms in a way that implies that it is acceptable to engage in risky sex. Whenever condoms are discussed, information about them must be accurate and not misleading, and must include both the public health benefits and failure rates of condoms as they apply to preventing HIV and other diseases. Likewise, abstinence and faithfulness programs and messages must be medically sound and based on best practices that indicate effectiveness.

Emergency Plan funds may be used for abstinence and/or be faithful programs that are implemented on a stand-alone basis. For programs that include a “C” component, information about the correct and consistent use of condoms must be coupled with information about abstinence as the only 100 percent effective method of eliminating risk of HIV infection; and the importance of HIV counseling and testing, partner reduction, and mutual faithfulness as methods of risk reduction. As stated above, ABC must be balanced at the portfolio level, i.e., all three components must be represented in the country’s prevention strategy, but individual programs must be appropriately designed to meet the needs of the target audience.

### ***Priority Interventions: Abstinence and Behavior Change for Youth***

Young people are the most important asset to any community or nation. Protecting them from contracting HIV is unquestionably one of the most important missions of the Emergency Plan. Young people who have not had their sexual debut must be encouraged to practice abstinence until they have established a lifetime monogamous relationship. For those youth who have initiated sexual activity, returning to abstinence must be a primary message of prevention programs. Implementing partners must take great care not to give a conflicting message with regard to abstinence by confusing abstinence messages with condom marketing campaigns that appear to encourage sexual activity or appear to present abstinence and condom use as equally viable, alternative choices. Thus, marketing campaigns that target youth and encourage condom use as the primary intervention are not appropriate for youth, and the Emergency Plan will not fund them. (For this same reason, Emergency Plan funds may not be used to actively promote or provide condoms in school settings, but may be used in schools to support programs that deliver age-appropriate “ABC” information for youth.) This means the following:

1. For 10-to-14-year-olds, the Emergency Plan will fund age-appropriate and culturally appropriate “AB” programs that include promoting 1) dignity and self-worth; 2) the importance of abstinence in reducing the transmission of HIV; 3) the importance of delaying sexual debut until marriage; and 4) the development of skills for practicing abstinence.
2. For older youth (above age 14) the Emergency Plan will fund ABC programs that promote 1) dignity and self worth; 2) the importance of abstinence in reducing the transmission of HIV; 3) the importance of delaying sexual activity until marriage; 4) the development of skills for practicing abstinence and, where appropriate, secondary abstinence; 5) the elimination of casual sexual partnerships; 6) the importance of marriage and mutual faithfulness in reducing the transmission of HIV among individuals in long-term relationships; 7) the importance of HIV counseling and testing; and 8) provide full and accurate information about correct and consistent condom use as a way to significantly reduce, but not eliminate, the risk of HIV infection for those who engage in risky sexual behaviors.

It must be recognized that certain young people will, either by choice or coercion, engage in sexual activity. In these cases an integrated “ABC” approach is necessary. When individual students are identified as engaging in or at high risk for engaging in risky sexual behaviors, they should be appropriately referred to integrated “ABC” programs. Such programs should have the following characteristics: 1) be located in communities where youth engaging in high-risk behaviors congregate; 2) be coordinated with school-based abstinence programs so that high risk in-school youth can be easily referred; and 3) be targeted to specific high-risk individuals or groups (i.e., not involve the marketing of condoms to broad audiences of young people). Again, for programs that include a “C” component, information about correct and consistent use of condoms must be coupled with information about abstinence as the only 100 percent effective method of eliminating risk of HIV infection; and the importance of HIV counseling and testing, partner reduction, and mutual faithfulness as methods of risk reduction. In summary:

1. Emergency Plan funds may be used in schools to support programs that deliver age-appropriate “AB” information to young people age 10-14.
2. Emergency Plan funds may be used in schools to support programs that deliver age-appropriate “ABC” information for young people above age 14.

3. Emergency Plan funds may be used to support integrated ABC programs that include condom provision in out-of-school programs for youth identified as engaging in or at high risk for engaging in risky sexual behaviors.
4. Emergency Plan funds may not be used to physically distribute or provide condoms in school settings.
5. Emergency Plan funds may not be used in schools for marketing efforts to promote condoms to youth.
6. Emergency Plan funds may not be used in any setting for marketing campaigns that target youth and encourage condom use as the primary intervention for HIV prevention.

### ***Priority Interventions: Promoting Healthy Norms and Behaviors***

Communities must mobilize to address the norms, attitudes, values, and behaviors that increase vulnerability to HIV, including the acceptance or tolerance of multiple casual sex partnerships, cross-generational and transactional sex, forced sex, the unequal status of women, and the sexual coercion and exploitation of young people. To stimulate such mobilization, there is an urgent need to help communities identify the ways in which they contribute to establishing and reinforcing norms that contribute to risk, vulnerability, and stigma, and to help communities identify interventions that can change norms, attitudes, values, and behaviors that increase vulnerability to HIV. In addition, mobilization and change are most likely when messages are reinforced through a variety of fora: social and cultural networks; religious and other leaders; and personal relationships, including parents, grandparents, and peers.

Emergency Plan funds can be used to support activities that will generate public discussion and problem-solving about harmful social and sexual behaviors through a variety of means at both the community and national levels. Suggested activities include the following:

1. Educating parents to improve parent-child communication on HIV, sexuality, and broader issues such as limit-setting through parent-teacher groups, local associations, and faith-based groups;
2. Training local religious and other traditional leaders in HIV concerns and supporting them in publicizing the risks of early sexual activity, sex outside of marriage, multiple partners, and cross-generational sex;
3. Supporting youth-led community programs to help youth, their parents, and the broader community personalize the risk associated with early sexual activity, sex outside of marriage, multiple partnerships, and cross-generational sex;
4. Supporting media campaigns that reinforce and make abstinence, fidelity, partner reduction, HIV counseling and testing, and other safer behaviors legitimate options and standards of behavior for both youth and adults;
5. Developing and training mentors for youth who lack sufficient parental or other adult supervision, including training in messages for HIV prevention;
6. Organizing campaigns and events to educate local communities about sexual violence against youth and strengthen community sanctions against such behaviors;
7. Implementing workplace programs for older men to stress male sexual and familial responsibility, and school-based programs for younger males to provide education about preventing sexual violence;
8. Promoting the use of counseling and testing services, including developing innovative strategies to encourage and increase HIV testing, such as routine testing where appropriate;
9. Training health care providers, teachers, and peer educators to identify, counsel, and refer young victims of rape, incest, or other sexual abuse for other health care; and
10. Coordinating with governments and NGOs to eliminate gender inequalities in the civil and criminal code and enforce existing sanctions against sexual abuse and sexual violence.

### ***Priority Interventions: Prevention of HIV Infection in the Most At-Risk Populations***

Following the ABC model, and recognizing that correct and consistent condom use is an essential means of reducing, but not eliminating, the risk of HIV infection for populations who engage in risky behavior, the Emergency Plan will fund those activities that target at-risk populations with specific outreach, services, comprehensive prevention messages, and condom information

and provision. As defined above, these populations include persons in prostitution and their clients, sexually active discordant couples or couples with unknown HIV status, substance abusers, mobile male populations, MSM, PLWHA, and those who have sex with an HIV-positive partner or one whose status is unknown.

Some of the populations most affected by HIV/AIDS are also the most difficult to reach through conventional health care programs. Persons in prostitution and their clients, MSM, and injecting drug users have the least access to basic health care. These populations are generally at higher risk of infection and in greatest need of prevention services. The experiences of Cambodia, the Dominican Republic, Senegal, Thailand, and other countries illustrate that targeted efforts to promote correct and consistent condom use with specific high-risk groups can prevent concentrated epidemics from maturing into generalized epidemics. In generalized epidemics, such targeted approaches remain crucial but must be augmented by balanced ABC approaches that can reach broader audiences in order to provide information to those who may be having sex with a partner whose status is unknown. First and foremost, the Emergency Plan will support approaches directed at ending risky behavior. In addition, the Emergency Plan supports effective new approaches to serve groups at high risk through a combination of the following:

1. Interpersonal approaches to behavior change, such as counseling, mentoring, and peer outreach;
2. Community and workplace interventions to eliminate or reduce risky behaviors;
3. Initiatives to promote the use of counseling and testing services, including developing innovative strategies to encourage and increase HIV testing, such as routine testing where appropriate;
4. Promoting and supporting substance abuse prevention and treatment targeting HIV-infected individuals;
5. Promoting a comprehensive package for people in prostitution and other high-risk groups, including HIV counseling and testing, STI screening and treatment, targeted condom promotion and distribution, and other risk reduction education;
6. Promoting correct and consistent condom use during high-risk sexual activity; and
7. Media interventions with specially tailored messages appropriately targeted to specific populations.

### Botswana: Teaching Students Life Skills

With support from PEPFAR, a new life skills manual was designed by the Botswana Ministry of Education and the BOTUSA Project, a collaboration between the governments of the U.S. and Botswana. The Skills for Life: Botswana's Window of Hope curriculum materials help teachers discuss life issues important to Botswana youth.

Five sets of teacher guides and student workbooks were developed to deliver age-appropriate messages for students ranging from primary to secondary school. Teachers use stories, role-playing, poems, and class discussions to impart knowledge and build skills for healthy decision-making. Topics include self-awareness, goal setting, managing stress, social responsibility, healthy living, relationships, sexuality, risk reduction, and facts and myths about HIV/AIDS. The materials discuss HIV prevention, promoting abstinence and emphasizing delaying sexual debut. For students ages 15 and older, the program also addresses intergenerational sex and transactional sex, and also discusses and provides referrals for condoms and other prevention interventions.

Released at a special launch in July 2006, the materials are being distributed throughout Botswana by the Ministry of Education. "The survival of learners depends on them acquiring these skills," Susan Makgothi, Director of Curriculum Development and Evaluation in the Botswana Ministry of Education, said.



Ambassador Mark Dybul and Professor Sheila Tlou visit a Form 5 classroom at Mater Spei where the PEPFAR-supported Life Skills Materials Curriculum is being taught. The class discusses the "Self Understanding" chapter.

## Addressing the Vulnerabilities of Women and Girls

As discussed in detail in the chapter on Gender, women and girls face special vulnerability to HIV/AIDS. This is due both to biology and to harmful gender-based societal norms and practices that restrict women's access to HIV/AIDS information and services, severely limit girls' and women's control over their sexual lives, and deprive them of the economic resources and legal rights necessary for them to protect themselves from HIV/AIDS. Further information also is available in the Emergency Plan's November 2006 report to Congress on Gender-Based Violence and HIV/AIDS, located at <http://www.PEPFAR.gov/progress/>.

These same factors make prevention activities for women particularly challenging – and particularly essential. These factors contribute to such prevention challenges as:

- Stigma, making women vulnerable to infection and preventing them from accessing services;
- Sexual violence and coercion;
- Transactional sex – often as a survival mechanism;
- Child marriage;
- Male norms that accept unfaithfulness, casual sex, and cross-generational sex;
- Patterns of coercion, violence, and rape;
- Sex trafficking, abuse, and exploitation;
- Women's lack of access to income; and
- Laws that may afford women insufficient protections.

The Emergency Plan supports girls and women specifically and explicitly in its HIV/AIDS prevention programs, which include activities to:

- Reduce stigma;
- Increase the gender equity of HIV/AIDS programs and services;
- Address male norms and behaviors;
- Prevent violence and coercion and respond to survivors of such abuse;
- Increase girls' and women's access to income and productive resources;
- Increase women's legal protection; and
- Increase women's ability to negotiate safer practices.



The NamibiAlive! compilation targets at-risk groups with HIV prevention information.

### Namibia: Taking AIDS Prevention on the Road

December 1, 2006, marked the launch of NamibiAlive!, a compilation of popular Namibian music featuring HIV/AIDS prevention messages. The CDs will be distributed free of charge to bus and truck drivers operating in Namibia. Truck and bus drivers are at risk for HIV infection, due to their mobility and expendable income.

Developed with support from PEPFAR, NamibiAlive! offers an innovative approach to HIV prevention – bringing the message to this at-risk group by taking AIDS prevention on the road. The CD provides information on HIV prevention using the ABC approach – Abstain, Be faithful, and correct and consistent use of Condoms. The ABC approach, developed in Africa, is an evidence-based, public health approach that provides information to people, so they can decide how to best protect themselves. The musical compilation also provides information on accessing confidential HIV counseling and testing services, and promotes gender equity in relationships.

NamibiAlive! was the brainchild of two Peace Corps Education Volunteers working in northern Namibia who persuaded 14 of the country's most popular musicians to donate songs and messages for the compilation.

Namibia's Ministry of Works, Transport, and Communication has pledged to distribute the CDs through its HIV/AIDS workplace programs, as well as at border crossings and checkpoints. A PEPFAR partner organization helped to promote the album by designing and distributing NamibiAlive! posters and stickers. The partner will also use its outreach network to distribute the CDs to the more remote regions of the country.

## Results: Rapid Scale-Up

In fiscal year 2006, the Emergency Plan continued to expand its support for host nations' efforts to prevent sexual transmission of HIV – the leading source of new infections worldwide and in the focus countries.

Fiscal year 2006 funding for activities to prevent the sexual transmission of HIV in the focus countries totaled approximately \$236 million, of which approximately \$131 million (approximately 56 percent) was for abstinence and faithful-

ness (AB) activities. When all prevention resources are considered (including those for activities focused on non-sexual modes of transmission), 33 percent of total prevention funding in the focus countries supported AB programs.

Emergency Plan-supported community outreach activities that promoted abstinence and faithfulness reached more than 40 million individuals. As a subset of these activities, nearly 11 million individuals – primarily youth – were

**Table 1.1: Prevention: FY2006 Prevention of Sexual Transmission Results**

Country	Number of individuals reached with community outreach HIV/AIDS prevention activities that promote abstinence and/or being faithful <sup>1</sup>	Number of individuals reached with community outreach HIV/AIDS prevention activities that promote condoms and related services <sup>2</sup>	Total
Botswana <sup>3</sup>	102,100	55,900	158,000
Côte d'Ivoire	111,400	84,200	195,600
Ethiopia	12,397,400	1,035,000	13,432,400
Guyana <sup>4</sup>	33,900	25,000	58,900
Haiti	481,200	467,200	948,400
Kenya	3,565,100	3,775,400	7,340,500
Mozambique	1,349,500	460,000	1,809,500
Namibia	233,000	218,700	451,700
Nigeria	3,421,100	279,500	3,700,600
Rwanda <sup>5</sup>	361,200	120,500	481,700
South Africa	6,513,200	4,353,400	10,866,600
Tanzania	4,356,500	8,099,100	12,455,600
Uganda	5,654,800	1,651,300	7,306,100
Vietnam	247,300	267,100	514,400
Zambia <sup>6</sup>	1,419,800	311,000	1,730,800
<b>Total</b>	<b>40,247,500</b>	<b>21,203,300</b>	<b>61,450,800</b>

### Notes:

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

Numbers above 100 are rounded to nearest 100.

### Footnotes:

<sup>1</sup> 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. Abstinence programs promote as their primary behavioral objective that 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. Programs may focus on individual behavior change or may address relevant social and community norms. Abstinence programs are counted as a subset of AB programs.

<sup>2</sup> 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 mass media and community outreach programs to promote avoidance of or reduction of HIV risk behavior, community mobilization for HIV testing, 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.

<sup>3</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

<sup>4</sup> The number of people reached through community outreach AB programs declined in Guyana. This was due to the implementation of data quality control measures, which found these numbers were being over-reported due to incomplete data collection systems.

<sup>5</sup> Rwanda's results in FY2006 are lower than FY2005 due to de-emphasis on mass media targets and increased emphasis on interpersonal communications and repeat contacts in order to have a greater effect on behavior change.

<sup>6</sup> Zambia's results in FY2006 are lower than FY2005. An error was reported in the FY2005 2nd Annual Report to Congress. The correct number of individuals reached with condoms and other prevention activities in FY2005 should have been 512,778. In addition, a major implementing partner was not active for 7 months of the reporting period due to a late signing.

reached by activities that promoted abstinence as their primary behavioral objective.

While PEPFAR continues to support targeted mass media activities, country teams no longer provide estimates of numbers of persons reached by these activities. The Emergency Plan has concluded that such estimates are too inaccurate to be useful and is focusing on obtaining and analyzing behavior change impact data rather than program output data.

Emergency Plan funding in fiscal year 2006 for condoms and related prevention strategies directed at people who

engage in high-risk activity in the focus countries totaled approximately \$105 million, reaching more than 21 million people with community outreach activities. This funding represented approximately 44 percent of funding for activities focused on sexual transmission. When all prevention resources are considered (including those for activities focused on non-sexual modes of transmission), approximately 27 percent of total prevention funding in the focus countries was for condoms and related prevention activities.

Most United States Government (USG)-supported condoms were purchased and shipped through the mechanism of the United States Agency for International

**Table 1.2: Prevention: FY2006 Prevention of Sexual Transmission Capacity-Building Results**

Country	Number of individuals trained or retrained to provide HIV/AIDS prevention activities that promote abstinence and/or being faithful <sup>1,2</sup>	Number of individuals trained or retrained to provide condoms and related services <sup>3</sup>	Total
Botswana <sup>4</sup>	400	600	1,000
Côte d'Ivoire	3,300	1,700	5,000
Ethiopia	41,200	7,100	48,300
Guyana	800	500	1,300
Haiti	10,500	4,100	14,600
Kenya	25,100	4,900	30,000
Mozambique	31,500	900	32,400
Namibia	3,100	4,500	7,600
Nigeria	39,900	1,700	41,600
Rwanda	10,100	1,200	11,300
South Africa	49,500	73,400	122,900
Tanzania	22,700	2,900	25,600
Uganda	32,900	5,200	38,100
Vietnam	1,100	16,500	17,600
Zambia	27,200	4,100	31,300
<b>Total</b>	<b>299,300</b>	<b>129,300</b>	<b>428,600</b>

**Notes:**

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

Numbers above 100 are rounded to nearest 100.

**Footnotes:**

<sup>1</sup> 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.

<sup>2</sup> Abstinence programs promote as their primary behavioral objective that 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. Programs may focus on individual behavior change or may address relevant social and community norms. Abstinence programs are counted as a subset of AB programs.

<sup>3</sup> 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 mass media and community outreach programs to promote avoidance of or reduction of HIV risk behavior, community mobilization for HIV testing, 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.

<sup>4</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.



## Prevention for Positives: Best Practices

Recent efforts to prevent new infections have expanded to target not just HIV-negative individuals, but also those who are HIV-positive. Designed for people living with HIV/AIDS, “prevention for positives” is an essential part of the Emergency Plan’s comprehensive prevention strategy.

Priorities in this area for PEPFAR implementers include:

1. Discussing strategies for disclosure of HIV status to sex partners with all HIV-positive persons. To support those who do not feel comfortable disclosing on their own, provider- and/or counselor-mediated disclosure are options.
2. Offering confidential HIV counseling and testing to the sex partners of and children born to all HIV-positive persons, as they are at high risk for HIV infection and may need treatment and care. Counseling supports couples in taking steps to prevent mother-to-child transmission (PMTCT) and transmission to an HIV-negative partner.
3. Encouraging and counseling all HIV-positive persons to prevent transmission of HIV. In order to limit the number of people exposed to HIV, behavioral interventions that encourage and offer skill development for practicing sexual abstinence, reducing the number of sexual partners, and correct and consistent use of male or female condoms should be part of every medical and/or counseling visit.
4. Giving HIV-positive individuals information about protecting their own health through sexual abstinence, fidelity, and correct and consistent use of male or female condoms. These interventions protect infected individuals from acquiring sexually-transmitted infections (STIs), other strains of HIV that may be difficult to treat, and unplanned pregnancies.
5. Providing condoms to all sexually-active HIV-positive individuals and promoting their correct and consistent use. Correct and consistent condom use is an essential component of prevention strategies with HIV-positive people in order to prevent transmission to HIV-negative sex partners, reduce the risk of acquiring other STIs, support voluntary family planning, and prevent transmission of HIV from mothers to their babies.
6. Providing diagnosis and treatment of STIs as a part of routine HIV care, with particular care to syndromic management, diagnosis, and treatment of genital herpes and other STIs in HIV-positive persons and their partners.
7. Providing all women and young people age-appropriate counseling on voluntary family planning and HIV, and referring those who do not desire to become pregnant for contraceptive planning. For HIV-positive women and couples who desire children, it is important to discuss strategies to reduce the likelihood of transmission to sex partners and infants. Women who become pregnant should receive referrals to PMTCT clinics as early as possible. PEPFAR funds may only purchase condoms and promote their correct and consistent use; other contraceptives must come from wrap-around programs.
8. Integrating prevention interventions as a part of all HIV treatment and care programs. These programs are strategic points for reaching large numbers of HIV-positive individuals with prevention interventions.
9. Developing strategies to increase adherence to PMTCT and therapeutic treatment regimens. Adherence facilitates maximum viral suppression and thus reduces HIV transmission risk. Interventions such as adherence counseling, use of pill boxes, and medication companions can be provided in clinical, community, or home settings.
10. Incorporating prevention interventions with HIV-positive individuals in community-based settings and home-based care programs. Prevention messages and strategies can be included in counseling, support groups or peer-led interventions, or through home-based care providers. These settings may also be used for efforts to address the important role of alcohol in HIV transmission. Drawing upon the leadership of people living with HIV/AIDS strengthens such interventions and provides further support for HIV-positive individuals. Also, interventions that include such components as income-generation activities or empowerment of women and girls increase the likelihood that individuals will have the means to avoid or change high-risk behaviors.

Development’s (USAID) Commodity Fund, which achieves economies of scale and obtains low prices that allow funds to go farther. USG condom procurement levels to host countries depend upon a variety of factors, including whether the host government procures condoms directly or asks international partners such as the USG to do so. Total USG-supported procurement of male and

female condoms to focus countries was estimated by USAID as of January 4, 2007, to have been approximately 112 million in calendar year 2006, and in calendar years 2004-2006, a cumulative total of approximately 406,860,000. Since the inception of the Emergency Plan, worldwide USG-supported condom procurement for calendar years 2004-2006 was estimated to have been approxi-

mately 1,298,322,000. It should be noted that projections of planned condom procurement for the current year and future years may fluctuate as countries change their orders, and that projections may also differ from numbers that are ultimately shipped. Factors that may lead to such variability include changes in condom inventories in-country (e.g., overstocks that lead countries to request delay of further shipments), changes in the capacity of condom manufacturers, and host government regulatory issues that may delay condom shipments.

### ***Sustainability: Building Capacity***

In support of the array of approaches described above, PEPFAR focuses on building capacity for behavior change interventions at the community level, where activities can best be tailored to local circumstances. Emergency Plan activities support peer educators in reaching youth, parents, faith communities, and other leaders, and in managing their activities and maintaining accountability and quality. In Haiti, for example, dedicated and responsible young people are getting involved in a variety of HIV prevention activities that promote abstinence and faithfulness, while also creating a supportive family and community environment for discussing HIV/AIDS. In addition to learning more about HIV prevention, youth involved in program development gain experience and confidence that will be of great value in the future. In the 15 focus countries, more than 299,300 people were trained or retrained in promoting abstinence and/or faithfulness.

Outreach to at-risk populations is most credibly conducted by local organizations close to those they serve. For example, in Zambia, PEPFAR supports two Defense Force drama troops that travel to military units with HIV prevention messages for soldiers and their families. Drama troops use behavior change communication strategies to reach audiences with culturally appropriate HIV prevention messages. The Emergency Plan is supporting local organizations with training and capacity-building in order to help them reach out with effective, evidence-based strategies. In fiscal year 2006, PEPFAR helped to lay a foundation for sustainability by supporting training or retraining for more than 129,300 people in the provision of condoms and related prevention services.

### ***Key Challenges and Future Directions***

Ensuring consistent quality across a wide range of locally-tailored prevention activities is crucial. The Emergency

Plan thus supports efforts to develop indicators that measure the quality of processes, in addition to outcome indicators. Both are yielding information essential for program management. For further information, see the chapter on Improving Accountability and Programming.

Strengthening the knowledge base of effective behavior change interventions is a challenge, due in part to a limited understanding of the factors that influence sexual behavior. PEPFAR monitoring and evaluation of activities and results is helping to expand the knowledge base and allow for adjustment of programming decisions.

Girls and young women remain disproportionately vulnerable to HIV transmission, and PEPFAR programs are addressing this vulnerability. Sexual coercion, exploitation, and violence remain major issues, and a growing number of PEPFAR activities focus on men and boys in order to break this cycle. The Emergency Plan also reaches out to faith communities, supporting them in addressing this issue. For further information, please see the chapter on Gender.

Schools offer unique venues for reaching large numbers of youth with prevention messages, and PEPFAR is increasing its investment in school-based prevention activities. These include activities that involve parents, strengthening the impact while supporting families.

Partner reduction and mutual fidelity hold great promise for reducing rates of infection, and the Emergency Plan is working with a broad range of local and international organizations to support the “Be faithful” component of ABC activities. These organizations challenge gender inequities, including male behaviors that often place female partners at risk. For example, in Mozambique the JOMA Project aims to reduce the spread of HIV/AIDS by teaching young men to think critically about gender roles and healthy behavior. For additional information on programs that address gender roles, see the chapter on Gender.

Ensuring full participation of PLWHA in prevention is a key and continuing challenge, and the Emergency Plan is supporting activities to help these communities receive the full benefit of outreach through PLWHA networks.

Reaching HIV-discordant couples with prevention strategies they can apply to their relationships is a key priority.

The scale-up of couples counseling represents a key opportunity to identify HIV-discordant couples and support them with condoms and other prevention services (see the “Prevention for Positives” text box).

Since shortages of well-trained prevention workers are a major barrier to outreach in the developing world, PEPFAR supports training activities as well as linkages to existing networks. For more information, see the chapter on Building Capacity: Partnerships for Sustainability.

Alcohol is gaining growing recognition as a factor in HIV transmission, and Emergency Plan programs have begun to address it directly. In addition, stigma, discrimination, and marginalization of groups that face especially high risks remain serious obstacles to effective prevention, and PEPFAR activities seek to combat these persistent problems.

In order for the Emergency Plan to be successful in meeting its prevention goals, validated new technologies and research findings must be rapidly incorporated. PEPFAR works with USG implementing agencies to monitor such emerging prevention areas as male circumcision and female-controlled prevention technologies. The Emergency

Plan contributed approximately \$116 million for microbicide research efforts in fiscal year 2006.

### Prevention of Mother-to-Child Transmission (PMTCT)

#### Results: Rapid Scale-Up

In the focus countries, the Emergency Plan provided approximately \$92 million in fiscal year 2006 funding for comprehensive programs to provide HIV testing for pregnant women, prevention services for those who test HIV-negative, and antiretroviral (ARV) drug prophylaxis to HIV-positive women and their newborn children in order to prevent transmission, as well as linkages to treatment and care.

PMTCT program support encompasses a wide range of critical interventions, including:

- Scaling up PMTCT programs by rapidly mobilizing resources.
- Providing technical assistance and expanded training for health care providers on: appropriate antenatal care; safe labor and delivery practices; infant-feeding counseling and nutrition support; and malaria prevention.

### Rwanda: Men Are the “Secret Ingredient” in PMTCT Program

PEPFAR supports an impressive prevention of mother-to-child HIV transmission (PMTCT) program in Rwanda, which targets male involvement in PMTCT services.

In Rwanda, couples are a population at risk for HIV infection. Thus, male involvement in PMTCT programs is essential for reducing the risk of HIV infection, both for couples and their unborn children. Couples who come for PMTCT services are tested for HIV and counseled on HIV prevention, general health matters, and voluntary family planning. Women who test HIV-positive are advised about how to prevent transmission of HIV to their babies.

Twenty-six-year-old Jean Claude Mutabazi and his wife, Olive Nyirabagirayabo, are veterans of the PMTCT program. Prior to the birth of their first child, Jean Claude twice accompanied Olive for antenatal visits at Kinihira Health Center in Rulindo District. In October 2006, the couple returned for the first antenatal visit for their second child, due in April 2007.

Jean Claude noted: “It’s very important, very useful to accompany your wife. You have to know your status, so you know how to act. If it happens that you’re positive and your wife is negative, you need to know what to do.” Jean Claude and Olive said that couples counseling and HIV testing helped their relationship. Now, they’re able to make decisions together about their baby and their sexual behavior.



Counseling and HIV testing have helped Jean Claude and Olive make informed, positive decisions about their own health and the health of their children.

**Table 1.3: Prevention: Estimated Coverage of Prevention of Mother-to-Child Transmission<sup>1</sup> with USG support in FY2004 and FY2006**

Country	Pregnant women receiving PMTCT services		HIV+ pregnant women receiving ARV prophylaxis	
	Percent Coverage		Percent Coverage	
	FY2004	FY2006	FY2004	FY2006
Botswana <sup>2</sup>	66%	95%	13%	91%
Côte d'Ivoire	4%	9%	3%	7%
Ethiopia	0%	2%	0%	2%
Guyana	36%	69%	17%	25%
Haiti	11%	30%	6%	11%
Kenya	25%	42%	18%	36%
Mozambique	5%	17%	2%	9%
Namibia	14%	57%	12%	55%
Nigeria	0%	2%	0%	6%
Rwanda	14%	61%	21%	59%
South Africa	45%	52%	22%	41%
Tanzania	3%	26%	1%	11%
Uganda	9%	21%	8%	17%
Vietnam	0%	28%	0%	8%
Zambia	4%	9%	14%	24%
<b>Total</b>	<b>7%</b>	<b>16%</b>	<b>9%</b>	<b>21%</b>

**Notes:**

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

Coverage based on upstream and downstream results from the first and third years of the Emergency Plan. In FY2004 only, it was assumed that 80% of women receiving PMTCT services were counseled and tested.

Percents were calculated by dividing PEPFAR program (upstream and downstream) results by the estimated population eligible for the service. Eligible populations include pregnant women and pregnant HIV+ women and were estimated using multiple sources, including UNAIDS, country surveillance, national surveys, DHS, etc. The same denominators were used for both 2004 and 2006 calculations.

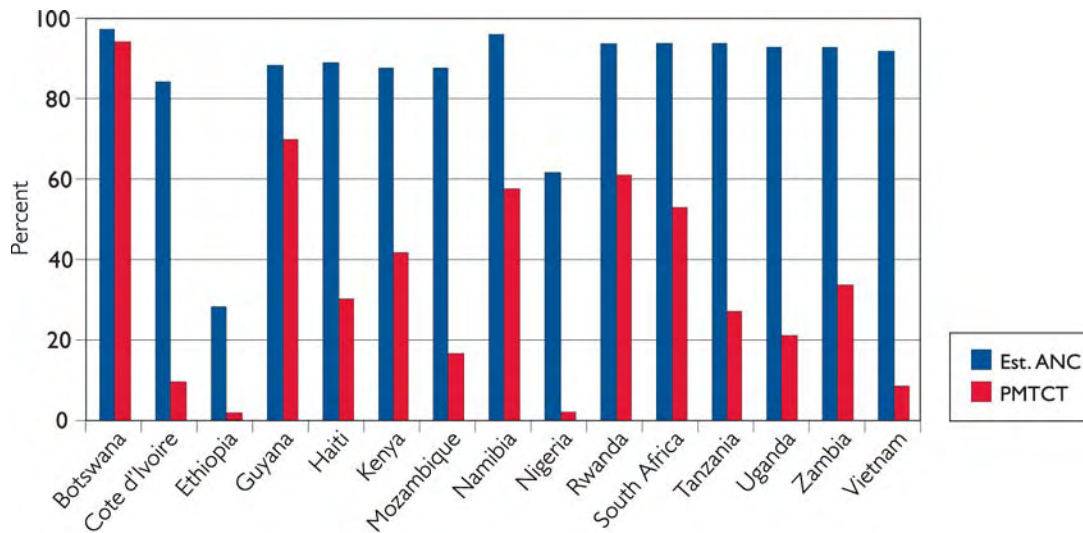
**Footnotes:**

<sup>1</sup> 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, and counseling and support for safe infant feeding practices.

<sup>2</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

- Strengthening referral links to family-centered anti-retroviral treatment (ART) and care programs, so that eligible HIV-infected mothers, children, and fathers can access life-saving therapy together.
- Networking with nutrition, child survival, and family-planning programs to improve overall HIV-free survival among children born to HIV-positive mothers.
- Ensuring effective supply chain management of the range of PMTCT-related products and equipment.
- Expanding access to short-course preventive ARVs while also assisting countries in developing plans to scale up the implementation of more effective combination prophylaxis regimens.
- Providing technical assistance to countries in strengthening national PMTCT monitoring systems and revising national PMTCT guidelines to reflect best practices.
- Strengthening systems to improve the postnatal follow-up for HIV-exposed infants, including piloting of polymerase chain reaction (PCR) testing using dried blood spots, which enables the identification of HIV-infected infants who are in need of treatment and care.
- Strengthening referrals for HIV testing for partners of HIV-positive women identified in antenatal clinics.
- Implementing routine (opt-out) testing and counseling in antenatal, delivery, and postpartum settings.

**Figure 1.2: Prevention: Estimated Number of Pregnant Women Attending at Least One ANC Visit<sup>1</sup> and Number of Women Receiving USG-Supported PMTCT Services<sup>2</sup> as Proportions of Estimated Annual Births in the 15 Focus Countries, FY2006**



**Footnotes:**

<sup>1</sup> Estimates were calculated using multiple sources, including UNAIDS, country surveillance, national surveys, DHS, etc.

<sup>2</sup> 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, and counseling and support for safe infant feeding practices.

As noted, PMTCT programs provide a key opportunity to provide HIV counseling and testing to pregnant women. The PMTCT services indicator for fiscal year 2005 and beyond was clarified to ensure that a woman was only counted as receiving PMTCT services if she was counseled and tested and received her test result. PMTCT services are thus crucial to the Emergency Plan’s efforts to increase the numbers of women provided with counseling and testing and who know their HIV status.

Ensuring that all women who visit antenatal clinics (ANCs) receive the option of an HIV test through pre-test counselling is a key goal. By promoting the routine, voluntary offer of HIV testing, so that women receive testing unless they elect not to receive it, the Emergency Plan has helped to increase the rate of uptake among pregnant women from low levels to around 90 percent at many sites. A major focus in the past year was to support countries to scale up the “opt-out” approach at as many sites as possible, to reach many more women while improving the performance and efficiency of health workers.

Access to vital ANC services varies across the focus countries (see figure 1.2). For example, in Botswana nearly 100

percent of pregnant women have at least one clinic visit, whereas in Ethiopia less than 30 percent visit a clinic. As a key element of its comprehensive programs, the Emergency Plan supports host governments and other partners’ efforts to provide PMTCT services, such as counseling and testing for all women who attend ANC clinics. In some countries, such as Botswana, Guyana, Namibia, and South Africa, significant progress has been made in reaching pregnant women with PMTCT services. In others, the progress has been slower, and the Emergency Plan is redoubling efforts to close the gap. When comparing results from the first year of the Emergency Plan in fiscal year 2004 to fiscal year 2006, all countries have scaled up, and most have dramatically improved availability of PMTCT services to pregnant women.

Many of the women attending ANCs and receiving HIV counseling and testing receive the good news that they are not infected with HIV, and prevention information can help them to better understand the threat of HIV and how to avoid becoming infected. However, others test positive and need prevention, care, and support services. PEPFAR and its partners are working to ensure that these women receive life-saving ART involving triple therapy; or, if they

**Table 1.4: Prevention: FY2006 Prevention of Mother-to-Child Transmission<sup>1</sup> Results**

Country	Number of pregnant women receiving PMTCT services <sup>2</sup>			Number of HIV+ pregnant women receiving ARV prophylaxis			Total estimated infant infections averted <sup>5</sup>
	Number receiving upstream systems-strengthening support <sup>3</sup>	Number receiving downstream site-specific support <sup>4</sup>	Total	Number receiving upstream systems-strengthening support <sup>3</sup>	Number receiving downstream site-specific support <sup>4</sup>	Total	
Botswana <sup>6</sup>	43,800	0	43,800	14,200	0	14,200	2700
Côte d'Ivoire	12,900	47,700	60,600	600	3,400	4,000	800
Ethiopia	0	47,600	47,600	0	2,300	2,300	400
Guyana	0	11,000	11,000	0	100	100	19
Haiti	0	75,200	75,200	0	900	900	200
Kenya	0	549,500	549,500	0	33,300	33,300	6,300
Mozambique <sup>7</sup>	0	132,100	132,100	0	10,800	10,800	2,100
Namibia	0	31,900	31,900	0	6,100	6,100	1,200
Nigeria	14,000	111,800	125,800	6,900	5,300	12,200	2,300
Rwanda	133,300	88,700	222,000	3,600	4,100	7,700	1,500
South Africa	464,500	98,800	563,300	114,900	29,500	144,400	27,400
Tanzania	79,900	286,600	366,500	3,100	10,400	13,500	2,600
Uganda	36,600	263,400	300,000	1,800	12,900	14,700	2,800
Vietnam	0	130,600	130,600	0	500	500	95
Zambia	0	154,800	154,800	0	20,900	20,900	4,000
<b>Total</b>	<b>785,000</b>	<b>2,029,700</b>	<b>2,814,700</b>	<b>145,100</b>	<b>140,500</b>	<b>285,600</b>	<b>54,400</b>

**Notes:**

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:**

<sup>1</sup> PMTCT includes activities aimed at providing the minimum package of services for preventing mother-to-child transmission including: HIV and counseling and testing for pregnant women, ARV prophylaxis to prevent MTCT, and counseling and support for safe infant feeding practices.

<sup>2</sup> The number of pregnant women receiving PMTCT services includes only women who have been counseled and tested, and received their test result.

<sup>3</sup> 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.

<sup>4</sup> Number of individuals reached through downstream site-specific support includes those receiving services at U.S. Government-funded service delivery sites.

<sup>5</sup> 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 (e.g. Botswana) are likely averting more infant infections than shown here.

<sup>6</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

<sup>7</sup> In Mozambique, counseling and testing through PMTCT and other settings use the same reporting system. An analysis of the data show that some sites have incorrectly reported PMTCT. Data from these misclassified sites have been excluded from the FY2006 results.

**Table 1.5: Prevention: Cumulative Prevention of Mother-to-Child Transmission<sup>1</sup> Results, FY2004-FY2006**

Country	Number of pregnant women receiving PMTCT services <sup>1,2</sup>				Number of HIV+ pregnant women receiving ARV prophylaxis <sup>2</sup>				Total estimated infant infections averted <sup>3</sup>			
	FY2004	FY2005	FY2006	Total	FY2004 <sup>3</sup>	FY2005	FY2006	Total	FY2004	FY2005	FY2006	Total
Botswana <sup>4</sup>	30,500	37,500	43,800	111,800	2,000	7,800	14,200	24,000	400	1,500	2,700	4,600
Côte d'Ivoire	24,900	22,800	60,600	108,300	1,900	1,900	4,000	7,800	400	400	800	1,600
Ethiopia	6,600	23,600	47,600	77,800	200	1,000	2,300	3,500	38	200	400	638
Guyana	5,700	6,900	11,000	23,600	67	95	100	262	13	18	19	50
Haiti	28,000	59,800	75,200	163,000	500	700	900	2,100	95	100	200	35
Kenya	333,700	343,000	549,500	1,226,200	16,600	21,000	33,300	70,900	3,200	4,000	6,300	13,500
Mozambique <sup>5</sup>	36,100	88,000	132,100	256,200	2,300	6,000	10,800	19,100	400	1,100	2,100	3,600
Namibia	7,800	12,100	31,900	51,800	1,300	2,500	6,100	9,900	200	500	1,200	1,900
Nigeria	22,900	75,200	125,800	223,900	600	1,400	12,200	14,200	100	300	2,300	2,700
Rwanda	49,300	132,900	222,000	404,200	2,800	7,200	7,700	17,700	500	1,400	1,500	3,400
South Africa <sup>6</sup>	487,300	533,600	563,300	1,584,200	76,000	31,000	144,400	251,400	14,400	5,900	27,400	47,700
Tanzania	42,800	174,400	366,500	583,700	1,800	6,800	13,500	22,100	300	1,300	2,600	4,200
Uganda	131,200	250,000	300,000	681,200	6,600	11,300	14,700	32,600	1,300	2,100	2,800	6,200
Vietnam	1,200	70,700	130,600	202,500	0	200	500	700	0	38	95	133
Zambia <sup>7</sup>	63,300	127,400	154,800	345,500	12,800	23,700	20,900	57,400	2,400	4,500	4,000	10,900
<b>Total</b>	<b>1,271,300</b>	<b>1,957,900</b>	<b>2,814,700</b>	<b>6,043,900</b>	<b>125,500</b>	<b>122,600</b>	<b>285,600</b>	<b>533,700</b>	<b>23,700</b>	<b>23,400</b>	<b>54,400</b>	<b>101,500</b>

**Notes:**

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:**

- <sup>1</sup> 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, and counseling and support for safe infant feeding practices. The number of pregnant women receiving PMTCT services includes only women who have been counseled and tested, and received their test result. In FY2004 only, it was assumed that 80% of women receiving PMTCT services were counseled and tested.
- <sup>2</sup> Total number receiving PMTCT services includes 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 and those receiving downstream services at U.S. Government-funded service delivery sites.
- <sup>3</sup> 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 (e.g. Botswana) are likely averting more infant infections than shown here.
- <sup>4</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.
- <sup>5</sup> In Mozambique, counseling and testing through PMTCT and other settings use the same reporting system. An analysis of the data show that some sites have incorrectly reported PMTCT. Data from these misclassified sites have been excluded from the FY2006 results.
- <sup>6</sup> In South Africa, the drop in the number of women receiving ARV prophylaxis in 2005 was primarily due to the introduction of a new data source, which improved data quality. In addition, international publicity over the controversy of nevirapine caused reduced uptake of services.
- <sup>7</sup> In Zambia, the decline in women receiving ARV prophylaxis is due to increased compliance among partners with Government of the Republic of Zambia protocols, which call for ARV prophylaxis at 32 weeks. Given this, only women returning at 32 weeks are receiving prophylaxis.

are not yet eligible for triple therapy, ARV prophylaxis to prevent transmission to their children. In some program settings, ARV prophylaxis has reduced the rate of HIV transmission to children to approximately 5-10 percent. This represents a dramatic decrease that spares thousands of children from HIV infection. Countries such as Botswana, South Africa, and Tanzania are making considerable progress, and the Emergency Plan is devoting considerable resources and efforts to supporting this objective.

The Emergency Plan also has made progress through expanding the use of rapid tests, thereby allowing many more women who receive antenatal, maternity and postpartum care to receive their test results. Finger-prick (whole blood) and oral rapid testing allow health care workers to test women in a variety of settings and provide results at the time of testing. Rapid testing is now being offered at many PEPFAR-supported PMTCT sites, and plans are to continue to scale up this best practice in the coming year. In addition, PMTCT sites in many focus countries offer partner

**Table 1.6: Prevention: FY2006 Prevention of Mother-to-Child Transmission<sup>1</sup> Capacity Building Results**

Country	Number of USG-supported service outlets providing the minimum package of PMTCT services	Number of health workers trained or retrained in the provision of PMTCT services
Botswana <sup>2</sup>	634	400
Côte d'Ivoire	69	400
Ethiopia	204	2,700
Guyana	45	50
Haiti	73	800
Kenya	1,674	4,800
Mozambique	81	1,500
Namibia	179	1,300
Nigeria	80	1,600
Rwanda	103	1,000
South Africa	570	11,100
Tanzania	488	2,000
Uganda	362	3,900
Vietnam	17	500
Zambia	284	500
<b>Total</b>	<b>4,863</b>	<b>32,600</b>

**Notes:**  
Numbers may be adjusted as attribution criteria and reporting systems are refined.  
Among individuals trained, numbers above 100 are rounded to nearest 100. Number of sites are not rounded.

**Footnotes:**  
<sup>1</sup> 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, and counseling and support for safe infant feeding practices.  
<sup>2</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

testing. These approaches have successfully identified many patients in need of PMTCT, treatment, and care services.

Expanding the ability to effectively treat HIV-exposed infants, including increasing the availability of polymerase chain reaction (PCR) diagnostic testing, will continue to be a priority as successful pilot approaches are scaled up in the coming year. Many countries have utilized PEPFAR funds to improve public health laboratory networks by providing training, purchasing PCR equipment, and improving supervision, all of which have facilitated earlier diagnosis of infant HIV infection. For additional information on early infant diagnosis programs, please see the chapter on Children.

A number of PEPFAR programs have achieved excellent results through a comprehensive approach to maternal and child health. In Durban, South Africa, McCord Hospital's antenatal clinic works to stop HIV/AIDS, starting at birth.

McCord offers counseling and testing to all pregnant women who come to the clinic. Those found to be HIV-positive are offered drugs that reduce the risk to their babies; they also can access treatment for themselves. Without intervention, an HIV-positive mother faces over a 30 percent risk of passing the infection to her newborn. With Emergency Plan support, McCord has reduced the mother-to-child transmission rate of patients to less than one percent.

The Emergency Plan has provided support for PMTCT interventions for women during approximately six million pregnancies to date, including more than 2.8 million in fiscal year 2006. Of these, PEPFAR supported antiretroviral prophylaxis for HIV-positive women during 533,700 pregnancies (including more than 285,600 in fiscal year 2006), averting an estimated 101,500 infant HIV infections to date, including an estimated 54,400 infections in fiscal year 2006. For additional information on PMTCT programs, see the chapters on Children and Care.

### **Sustainability: Building Capacity**

In addition to supporting host governments in building the capacity to scale up PMTCT programs, the Emergency Plan supported training or re-training of more than 32,500 people in the provision of PMTCT services and supported approximately 4,863 service outlets that provide the minimum package of PMTCT services.

### **Key Challenges and Future Directions**

PEPFAR activities reach women with antenatal care services, including home-based services, through community outreach. Even in resource-poor settings, including rural areas, interventions reach women with comprehensive information, rapid HIV testing, and access to ARVs that reduce the risk of mother-to-child transmission. For example, in Mozambique, health workers provide PMTCT outreach to clients who opt to deliver at home. Home births are a common occurrence in many countries, and outreach ensures that mothers and newborns have access to PMTCT services and are linked to the appropriate follow-up care and support services.

New state-of-the-art, short-course ARV combination regimens that can reduce mother-to-child transmission rates from more than 30 percent to approximately two percent are now scientifically validated. A focus of the Emergency Plan in the coming year will be to assist countries in scaling



## Supporting Compassionate Care for Injecting Drug Users

Substance abuse, including the use of injection drugs, is a major means of spreading HIV in many parts of the world. Injecting drug users (IDUs) everywhere are at great risk for infection with HIV, including risk associated with contracting hepatitis and sexually transmitted infections (STIs). Section 104A of the Foreign Assistance Act, as amended by the U.S. Leadership Against HIV/AIDS, Tuberculosis and Malaria Act of 2003 (P.L. 108-25), authorizes HIV/AIDS prevention through activities “to help avoid substance abuse and intravenous drug use that can lead to HIV infection.” Consistent with that authorization, the Emergency Plan issued policy guidance in 2006 on HIV prevention programs aimed at substance abusers and users of injection drugs, such as heroin. Emergency Plan policy guidance on injection drug use may be found at <http://www.PEPFAR.gov/>.

Comprehensive HIV/AIDS prevention programs can help substance abusers stop using drugs, change their risk behaviors, and reduce their risk for acquiring or transmitting HIV infection. In order to respond to the HIV risks associated with injection drug use, the Emergency Plan’s policy guidance articulates three clear approaches, namely: 1) tailoring HIV prevention programs to substance abusers; 2) supporting, with approval from the Office of the U.S. Global AIDS Coordinator (OGAC), substance abuse therapy programs for HIV-infected individuals as an HIV prevention measure; and 3) offering HIV-infected drug users comprehensive HIV/AIDS treatment programs to reduce the risk of transmission.

Emergency Plan funds can be used to support a range of specific activities that can significantly assist in addressing the HIV needs and risks of injection drug-using populations. For example, Emergency Plan funds can support:

- Policy activities that encourage countries to remove barriers to medication-assisted treatment for heroin users;
- Confidential, routine HIV counseling and testing in substance abuse programs;
- Prevention education on the risks of injecting drugs and sharing syringes and how to reduce or stop use of injection drugs;
- Education of health professionals and policymakers regarding best practices for HIV prevention strategies for substance users; and
- HIV treatment or referral to treatment for the HIV-infected IDU in the context of a comprehensive prevention program.

Importantly, Emergency Plan funds also can support substance abuse treatment programs for HIV-infected individuals, including medication-assisted treatment with methadone, buprenorphine, and naltrexone.

## Vietnam: PEPFAR supports exciting changes in care for injecting drug users

PEPFAR has supported Vietnam’s recent steps to address stigma and discrimination and to broaden interventions for injecting drug users (IDUs). Since 2004, PEPFAR’s Vietnam team supported advocacy and technical assistance to provide Vietnamese leadership with critical information needed to authorize medication-assisted substitution therapy in the new HIV/AIDS Prevention Control Law. Three study tours to observe methadone therapy in the United States, Mainland China, and Hong Kong helped lay the groundwork, expanding Vietnamese authorities’ acceptance of methadone programs in the face of local skepticism.

In April 2005, with technical assistance from PEPFAR, the Hai Phong Department of Health submitted a proposal to implement methadone therapy for drug users who repeatedly failed conventional therapy. To prepare for the anticipated program, 15 local substance abuse counselors were trained; in March 2006, they were among the first Vietnamese to receive international certification in addiction counseling and work with patients on methadone therapy.

On November 15, 2005, PEPFAR and the Government of Vietnam’s Central Committee on Science and Education convened a national conference on “Substitution Therapies in Preventing HIV/AIDS,” where U.S. Ambassador Michael Marine gave opening remarks. In the following months PEPFAR advocacy included: furnishing publications on medication-assisted therapy to the Ministry of Health (MoH) and other government agencies; promoting acceptance of methadone in meetings with the MoH and provincial HIV/AIDS authorities; providing the Minister of Health a requested methadone fact sheet; and reaching out to numerous officials and clinical personnel.

In June 2006, the Vietnam National Assembly passed its first law to protect the rights of people living with HIV/AIDS (PLWHA). This groundbreaking law promotes access for PLWHA to HIV/AIDS prevention, treatment, and care services, supports the right to be free from stigma and discrimination, and promotes medication-assisted substitution therapy for drug users wishing to quit.

In a variety of ways, the Emergency Plan strongly supports Vietnam’s effort to help HIV-positive people achieve freedom from drugs and a better quality of life. PEPFAR resources support both government programs and programs of faith- and community-based organizations that care for over 40,000 PLWHA in Vietnam. With support from the Emergency Plan, Vietnam’s first comprehensive rehabilitation program for IDUs, including medication-assisted therapy, is expected to open in 2007. This will be the first time the USG has supported medication-assisted therapy outside the United States. It is hoped that this program will serve as a model for compassionate care of IDUs throughout East Asia.

up these highly effective regimens to many more PMTCT sites, thereby averting many more infant infections.

Linking HIV-positive pregnant women and their family members to a continuum of treatment and care services continues to be a high priority for PEPFAR-supported programs. The Emergency Plan focuses on developing and implementing adaptable and replicable models of HIV primary care for women and families; linking PMTCT to voluntary family planning programs is another important objective.

Emergency Plan activities also seek to strengthen postnatal follow-up and care for HIV-exposed infants, focusing on improving infant-feeding practices among HIV-positive mothers. These efforts promote exclusive infant feeding practices and seek to enable the cessation of breastfeeding as soon as replacement feeding can be provided in a feasible and safe manner. Linking PMTCT with maternal health programs is an essential aspect of ensuring a comprehensive approach to improving the health of mothers and their families.

PEPFAR is working to improve monitoring of referrals of PMTCT clients to HIV treatment and care, as well as follow-up of mothers and HIV-exposed children. PEPFAR also seeks to address the need to monitor infant feeding and family planning at national levels.

Personnel and health systems issues remain serious, and PEPFAR supports efforts to train providers and systematize procurement of testing supplies and ARVs. For more information on procurement systems, please see the Building Capacity: Partnerships for Sustainability chapter.

### Prevention of Medical Transmission of HIV

#### Results: Rapid Scale-Up

Blood transfusions and unsafe medical injections continue to account for some HIV infections in the focus countries, and addressing these issues requires major health system changes and advancements. While all host nations are responding, their responses are at different stages, and PEPFAR is lending support tailored to the unique needs of each country. Total Emergency Plan funding for medical transmission activities in the focus countries in fiscal year 2006 was approximately \$68 million.

To reduce the risks of blood transfusions, the Emergency Plan supports national programs to improve the quality of blood supplies through improved policies, infrastructure, commodity procurement, and management. In fiscal year 2006, the Emergency Plan supported approximately 3,846 blood safety service outlets or programs in the focus nations.

Addressing the challenges of medical injection safety, PEPFAR supports efforts to reduce the number of injections

### Kenya: Public-Private Partnerships Help Ensure a Safe Blood Supply

With PEPFAR support, the Kenyan National Blood Transfusion Service and blood donor mobilizing organizations target low-risk, volunteer blood donors, including adults in workplaces, high school and college students, and members of community- and faith-based organizations. All blood is screened for HIV, syphilis, hepatitis B, and hepatitis C. These efforts have contributed to a decline in HIV prevalence among donors – from approximately six percent in 2000 to less than two percent in 2006. There also has been a significant increase in safe blood units collected – from approximately 43,000 units in 2004 to 113,000 units in 2006. Safe blood collection efforts help to fulfill an estimated need for approximately 250,000 units.

Public-private partnerships to identify low-risk, regular blood donors in the workplace have bolstered safe blood collection efforts. In 2006, more than 60 businesses actively mobilized their employees to donate blood regularly. For example, in 2006, the Kenyan National Blood Transfusion Service and the Bloodlink Foundation partnered with Safaricom, a leading cell phone company in Kenya, in the year-long, national “Safaricom Blood for Life Drive.” Safaricom provides logistical support, as well as advertising through a series of five-day campaigns on five major radio stations and in print media. During the launch of the Safaricom Blood for Life Campaign in Nairobi on Valentine’s Day 2006, the Kenya Flower Council donated long-stemmed red roses, which were given to donors. These public-private partnerships are contributing to the sustainability of the Kenyan volunteer blood donation program and are helping to save lives.



Men and women donate blood as part of the Safaricom Blood for Life Campaign.

**Table 1.7: Prevention: FY2006 Medical Transmission<sup>1</sup> Capacity-Building Results**

Country	Number of service outlets carrying out blood safety activities	Number of individuals trained or retrained in blood safety	Number of individuals trained or retrained in injection safety
Botswana <sup>2</sup>	30	400	3,100
Côte d'Ivoire	7	200	3,100
Ethiopia	12	100	3,400
Guyana <sup>3</sup>	5	35	500
Haiti	26	600	1,800
Kenya	294	1,100	3,100
Mozambique	111	91	1,700
Namibia	37	400	200
Nigeria	66	800	17,700
Rwanda	43	0	6,800
South Africa	2,921	1,800	400
Tanzania	5	100	5,100
Uganda	177	700	4,300
Vietnam	2	0	500
Zambia	112	300	400
<b>Total</b>	<b>3,848</b>	<b>6,600</b>	<b>52,100</b>

**Notes:**

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

Among individuals trained, numbers above 100 are rounded to nearest 100. Number of sites are not rounded.

**Footnotes:**

<sup>1</sup> Medical Transmission includes programs in blood safety (supporting a national coordinated blood program that includes policies, infrastructure, equipment, and supplies; donor recruitment activities; blood collection, distribution/supply chain/logistics, testing, screening, and transfusion; waste management; training; and management to ensure a safe and adequate blood supply) and programs in injection safety (policies, training, waste management systems, advocacy and other activities to promote medical injection safety, including distribution/supply chain/logistics, cost and appropriate disposal of injection equipment, and other related equipment and supplies).

<sup>2</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

<sup>3</sup> In Guyana the number of service outlets carrying out blood safety activities is reduced to from 10 to 5 in FY2006. The reason for this is the adoption of a centralized blood safety model.

and to make injections safer. This is accomplished through programs to improve provider practices, reduce community demand for injections, strengthen supply of appropriate injection commodities, and facilitate safe disposal of injection equipment and supplies, especially sharps. The Emergency Plan supported procurement of more than 97 million syringes for injection safety in the focus countries in fiscal year 2006.

The Emergency Plan also supports training of health workers, including training in universal medical precautions to reduce their risk of blood-borne infections. In the focus nations in fiscal year 2006, PEPFAR supported training or retraining for approximately 6,600 people in blood safety and 52,100 in medical injection safety.

Many health workers who become exposed to HIV benefit from Emergency Plan post-exposure prophylaxis (PEP) treatment interventions to prevent exposure from progressing to infection, helping to maintain the fragile health workforce of the developing world. For further information please see PEPFAR's 2006 Congressional Report on Blood Safety and HIV/AIDS located at <http://www.PEPFAR.gov/progress/>.

**Sustainability: Building Capacity**

The Emergency Plan goal of promoting sustainability through support for locally-owned responses is reflected in the Emergency Plan's approach to blood and injection safety. Support is channeled largely to national governmental initiatives to implement and manage distribution and logistics systems.

As noted above, the Emergency Plan also made significant investments in training of health care workers and managers of blood safety and medical injection safety activities.

The Emergency Plan also supports public-private partnerships that fight HIV/AIDS, by combining public- and private-sector resources. For example, public-private partnerships have contributed to a significant increase in blood units collected by Kenya's blood safety program (see accompanying story). For further discussion of public-private partnerships, see the chapter on Building Capacity: Partnerships for Sustainability.

**Key Challenges and Future Directions**

The new Supply Chain Management System, discussed in the chapter on Building Capacity: Partnerships for

Sustainability, will help to address the significant commodity procurement challenges in the medical transmission area by strengthening supply chains, allowing for bulk purchasing, and improved forecasting.

Shortages of personnel trained in blood safety and medical injection safety remain a major concern, and PEPFAR supports national efforts to expand training in safe injection techniques, as well as universal medical precautions and infection control.

### **Accountability: Reporting on the Components of Prevention**

Where partnership limitations or technical, material, or financial constraints require it, the Emergency Plan, or another international partner, may support every aspect of the complete package of prevention, treatment, or care services at a specific public or private delivery site, in coordination with host country national strategies.

*Attribution Challenges Due to Country-Level Collaboration.* The Emergency Plan supports national HIV/AIDS treatment strategies, leveraging resources in coordination with host country multi-sectoral organizations and other international partners to ensure a comprehensive response. Host nations must lead a multi-sectoral national strategy for HIV/AIDS for an effective and sustainable response. International partners must ensure that interventions are conducted in concert with host government national strategies, are responsive to host country needs, and are coordi-

nated with both host governments and other partners. Stand-alone service sites that are managed by individual international partners are neither desirable nor sustainable. In such an environment, attribution is complex, including both upstream and downstream activities, often with multiple partners supporting the same sites to maximize comparative advantages. PEPFAR is conducting audits of its current reporting system to refine methodologies for the future and continues to assess attribution and reporting methodologies in collaboration with other international partners.

*Prevention Reporting Conventions.* To account for Emergency Plan prevention programming, in-country partners total all of the programs, services, and activities aimed at preventing HIV transmission. This includes community outreach programs to promote ABC and other behavior change to support avoidance or reduction of HIV risk behaviors; community mobilization for HIV testing; and PMTCT and medical transmission (blood safety and injection safety). These indicator data are drawn from country program reports that are collected in-country from partners, with guidance from the Office of the U.S. Global AIDS Coordinator. Condom shipments are tracked by a central database within the USG. It should be noted, however, that estimates of persons reached by mass media programs are no longer reported, since such estimates are not sufficiently reliable to be useful.

To account for programs addressing medically transmitted HIV, in-country partners identify programs that support a

## **Downstream and Upstream Support**

### *Downstream support*

In many areas, the Emergency Plan will coordinate with other partners to leverage resources at a specific site, providing those essential aspects of quality services that others cannot provide due to limited technical and/or financial circumstances. For example, in some settings components of services are provided to specific sites through the host country government or other international partners such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, while the Emergency Plan may contribute other essential services, training, commodities, and infrastructure. "Downstream" site-specific support refers to these instances where the Emergency Plan is providing all or part of the necessary components for quality services at the point at which services are delivered.

### *Upstream support*

Beyond the site-oriented downstream components of services, support is required to provide other critical elements, which may include the training of physicians, nurses, laboratory technicians, other health care providers, and counselors or outreach workers; laboratory systems; strategic information systems, including surveillance and monitoring and evaluation systems; logistics and distribution systems; and other support that is essential to the effective roll-out of quality services. This coordination and leveraging of resources optimizes results while limiting duplication of effort among partners, with roles determined within the context of each national strategy. Such support, however, often cannot easily be attributed to specific sites because it is national or regional in nature, and, in fact, many sites benefit from these strategic and comprehensive improvements. Therefore, this support is referred to as "upstream" support and is essential to developing network systems for prevention, treatment, and care.

national blood program to ensure a safe and adequate blood supply, including policy development, infrastructure, equipment, and supplies; donor recruitment activities; blood collection, distribution, and supply chain logistics, testing, screening, and transfusion; waste management; training; and management. In addition, they identify programs that support policy development, training, waste management systems, advocacy, and other activities that promote medical injection safety, including activities to reduce inappropriate injections, improve distribution and supply of appropriate injection equipment, and promote appropriate disposal of injection equipment and related supplies.

Country teams monitor activities aimed at providing the minimum package of PMTCT services, including counseling and testing for pregnant women; preventive ARV prophylaxis; counseling and support for safe infant feeding practices; and voluntary family planning referral. These data are drawn from program reports and health management information systems.

The Emergency Plan has funded the MEASURE Evaluation Project, discussed in the chapter on Improving Accountability and Programming. This collaboration will result in:

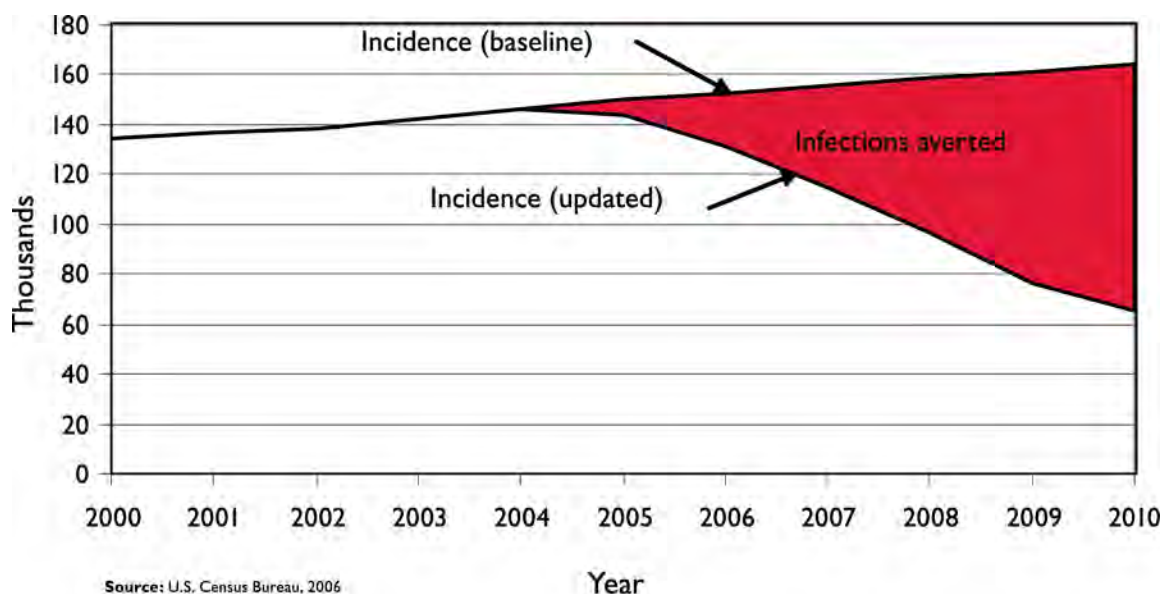
- Data quality audit guidance for program-level indicators;
- Best practices for program-level reporting; and
- Implementation of data standards guidance in select countries.

These products will help PEPFAR develop systems and processes that contribute to long-term, sustainable, high-quality HIV/AIDS monitoring and evaluation capacity in host nations.

**Estimating Infections Averted.** The estimation of infections averted, toward the Emergency Plan goal of 7 million infections averted, was one of the first quantifiable demands placed upon PEPFAR’s interagency strategic information team. The number of infections averted over the lifetime of the Emergency Plan has to be estimated through modeling, because it cannot be measured directly – since it is, by definition, a non-event.

In fiscal year 2006, the U.S. Census Bureau completed development of all 15 of the focus country baseline estimates of HIV incidence for the years 2005 through 2010. The measurement of impact is understood to be restricted to the estimated number of infections averted in a country,

**Figure 1.3: Prevention: Estimating Infections Averted: 2000-2010 Hypothetical Example**



starting in 2005; this is because few, if any, new prevention activities associated with the Emergency Plan had been implemented by the end of 2004. The baseline projections of HIV incidence were supplied to the 15 U.S. country teams for review, along with a concept document describing the methodology to be used for estimation of infections averted. Twelve of the 15 focus country teams reviewed the baseline figures and provided feedback to the Census Bureau on improving the baseline estimates or answering concerns that the country teams had regarding the baseline estimates.

New estimates of HIV incidence for the few countries where data for 2005 are available are currently under review.

Figure 1.3 is a hypothetical example illustrating how the number of cases averted will be calculated. The incidence baseline currently is being finalized. The incidence updates will be based upon new prevalence data as it becomes available. The space between the two curves will represent the number of averted infections.

Trends in HIV prevalence can be used to estimate trends in HIV incidence and the number of infections averted. Since it takes several years to detect changes in prevalence trends, this can only be done on a periodic basis. In this approach, prevalence trends will be established for each country using data through 2003. These prevalence trends will be re-estimated for those countries with additional surveillance data available for 2004 and 2005, and estimates of new HIV infections will be made. The difference between the trends in new HIV infections (baseline versus new data) will represent the net impact of all program changes since Emergency Plan programs began being implemented.

The Census Bureau is continuing to work with the models that underlie these projections, particularly to address the inclusion of individuals on ART who are included within the prevalence estimates.





On January 18, 2006, First Lady Laura Bush visited St. Mary's Catholic Hospital in Gwagwalada, Nigeria.

“Today, there are over 800,000 people receiving lifesaving drugs, and we thank those who are on the ground in the countries around the world who are using taxpayers’ money to save lives. We believe that it’s one thing to spend money, we also believe it’s another thing to say that we expect there to be results.”

President George W. Bush  
World AIDS Day  
December 1, 2006

## Chapter 2

# Critical Intervention in the Focus Countries: Treatment

### Introduction

Support for antiretroviral treatment (ART) is more than drugs – it is a sign of hope. To people who have understood their HIV infection to be a death sentence, treatment promises a second chance at life. 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 2.1).

### Treatment Summary

#### Five-Year Goal in the 15 Focus Countries

Support antiretroviral treatment (ART) for two million HIV-infected individuals

#### Progress Achieved through September 30, 2006

- Supported ART for approximately 822,000 people in the focus countries; of those receiving treatment with downstream USG support in focus countries, 61 percent were women and 9 percent were children age 14 and younger.
- Supported training or retraining of approximately 52,000 people in providing quality ART services.
- Supported approximately 1,912 ART sites.

#### Allocation of Resources in Fiscal Year 2006

Approximately \$819 million to support ART in focus countries (46 percent of total focus country resources for prevention, treatment, and care, excluding funding for pediatric AIDS).

**Table 2.1: Treatment: National Treatment Coverage Supported by All Sources**

Country	% Coverage 2003 <sup>1</sup>	% Coverage 2006 <sup>2</sup>	% Change in Coverage
Botswana	15.2%	80.4%	430%
Côte d'Ivoire	4.1%	24.9%	506%
Ethiopia	1.0%	14.4%	1369%
Guyana	12.6%	64.0%	410%
Haiti	2.9%	23.5%	707%
Kenya	1.5%	35.8%	2214%
Mozambique	1.0%	15.8%	1561%
Namibia	1.3%	64.1%	4871%
Nigeria	2.3%	10.6%	366%
Rwanda	4.4%	61.2%	1278%
South Africa	0.2%	21.4%	10773%
Tanzania	0.1%	14.1%	10905%
Uganda	6.5%	60.3%	834%
Vietnam	14.0%	26.4%	89%
Zambia	0.6%	39.1%	6139%
<b>Total</b>	<b>1.9%</b>	<b>24.3%</b>	<b>1212%</b>

#### Notes:

National treatment coverage includes individuals on treatment as reported by WHO and other multi-lateral agencies and includes all sources of support.

#### Footnotes:

<sup>1</sup> "Coverage of selected services for HIV/AIDS prevention, care and support in low and middle income countries in 2003," WHO, June 2004.

<sup>2</sup> WHO, 2006.



The President's Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR) has supported the leadership of host nations in the area of treatment. Just three years into the initiative, through the end of fiscal year 2006, PEPFAR has partnered with host nations to support treatment for approximately 822,000 people in the 15 focus nations, as well as 165,100 people elsewhere in the developing world, for a total of 987,100 people receiving HIV/AIDS treatment worldwide.

PEPFAR is dedicated to supporting treatment for both adults and children. Of the people receiving treatment with downstream U.S. Government (USG) support in focus countries, approximately 48,600 – almost nine percent – were children. Reflecting PEPFAR's commitment to meet the needs of both men and women, 61 percent were female.

In achieving this success, the Emergency Plan has moved faster than any other bilateral or multilateral initiative to support the expansion of HIV/AIDS services, using a network model of care in order to bring treatment to areas that are among the world's most difficult to serve. This success is providing hope and confidence to people in struggling health systems in many places. It is rapidly transforming the social landscape in many of the nations hardest-hit by HIV/AIDS, and this is an achievement to celebrate.

However, it is not enough to scale up quickly. In the area of treatment, it is particularly essential that programs maintain the highest quality. Establishing and maintaining high-quality, standardized HIV/AIDS treatment programs is a challenge for many host governments, because treatment is complex and consists of many elements. With Emergency Plan support, partners and host governments are using modern approaches to quality improvement. Key to these efforts is the selection and monitoring of essential program quality indicators. Supportive on-site supervision and proven team-building approaches are now being used in many programs to benchmark and then improve the quality of services. Supporting partners in their efforts to apply the principles of quality improvement helps the local health workers improve services, not only for HIV/AIDS patients, but in other key health programs, as well.

The effects of low-quality treatment go beyond simple waste of scarce resources. Low-quality treatment means increased risk of morbidity and mortality for individual patients and

can lead to widespread development of toxicity and transmission of HIV resistant to first-line treatment. Durability of therapy is critical to the long-term success of HIV/AIDS treatment programs. Antiretroviral drug (ARV) regimens need to be effective and have few or at least manageable side effects, and people who start on ART need support to ensure that they take at least 95 percent of their medications. These conditions are more likely to be met with first-line therapy. Second-line therapy is far more expensive, has more side effects, and is more difficult to manage. So far, the number of patients needing these costly medications in PEPFAR programs is less than 10 percent.

The Emergency Plan is building high-quality programs to support patients in their efforts to stay on first-line therapy. Emergency Plan-supported ART programs take a comprehensive approach to care, which includes links to social services and other essential programs. Program monitoring and evaluation systems are being established to be sure that patients receive and take the most appropriate regimens.

To further improve its partnerships with host country ART programs, PEPFAR has collaborated on the development of World Health Organization (WHO) ARV patient monitoring guidelines, which recommend a cohort approach that assesses ART programs based on their success at keeping patients on therapy. Many programs now use the simple WHO-recommended registers and monitoring system to account for each patient started on ART at the end of the reporting period. Determining an outcome at the end of the reporting period such as "alive on therapy," "lost," "transferred," or "died" helps health care providers focus on ensuring adequate support and provides feedback regarding how they are doing.

Another key factor is preventing and monitoring the development of resistance. Good adherence to treatment regimens is one sure way to prevent the development of resistance. However, the Emergency Plan also supports surveillance efforts to monitor levels of resistance in individuals and the community. This is especially critical in order to monitor overall program performance and help set guidelines regarding the most appropriate first-line regimens. Rising drug resistance within the community could be a sign of a poorly performing program and may indicate the need for increased support to improve service delivery and safeguard ARVs to ensure that they are still useful against the virus.

Poor drug quality is another potential threat to ART programs, and depending on the nature of the product, it can directly put patients' lives at risk. To combat this problem, the Emergency Plan insists upon using products approved by the expedited process (described later in this chapter) established by the Food and Drug Administration (FDA) within the Department of Health and Human Services (HHS). The Emergency Plan also created the Supply Chain Management System (SCMS) in order to ensure post-production and post-delivery surveillance of drug quality.

One of the main causes of attrition is mortality, and other patients may transfer or be lost to follow-up. Emergency Plan-supported programs have also found that late initiation of ART is associated with higher death rates, so recruiting patients earlier is a goal. The focus on supporting long-term adherence to ARVs, although challenging in any setting, has resulted in very impressive results.

The emphasis on ensuring quality services has paid off – in many programs the percentage of patients who are still on treatment after a year is very high. For example, in Ethiopia, the survival rate after 12 months on ART is nearly 89 percent, and a partner in Uganda was pleasantly surprised to report that more than 90 percent of the patients on therapy had almost undetectable viral loads. In other words, the patients were not only returning to the clinic regularly for follow-up, but were also taking all of their medications.

The quality assurance/quality improvement process is designed to help strengthen the capacity of facilities to improve their quality of care and increase the long-term sustainability of their programs. In general, quality assurance programs are evidence-based and use on-site supervision, chart abstraction, adherence surveys, and in some cases viral loads with a sample of patients. The process often follows the “plan-do-study-act” model, and Emergency Plan partners work with the local staff to interpret results and identify small changes that can be implemented to improve the quality of care. These changes are then monitored to see if they have an impact; if so, they can be implemented more broadly.

The Emergency Plan thus is devoting intensive resources to strengthening the systems that are necessary to ensure that the treatment offered to HIV-positive people in the developing world is of high quality.

Additionally, it is critically important to ensure adherence to and availability of lifesaving ART. When managed with ART, HIV is a chronic condition, but patients who begin therapy must maintain it for the rest of their lives. If people on ART lose their access to medications, they will die. Therefore, an uninterrupted supply of ARVs also is essential to preclude the development of drug-resistant HIV.

During 2006, the newly-established SCMS played a critical role in preventing stock-outs of key HIV/AIDS commodities. Emergency Plan countries called on SCMS to provide technical assistance, and in some cases, to arrange for the emergency delivery of life-saving products. When requested by the host government, SCMS worked with other multilateral organizations such as the Global Fund to intervene to avoid stock interruptions (see the section on “Actions to Prevent Stockouts,” later in this chapter).

Sustainability for the indefinite future is critical for ART efforts, and as with all HIV/AIDS responses, this can only be guaranteed by local leadership and ownership. For this reason, the Emergency Plan focuses its efforts on working with host nations to develop critical health network systems. PEPFAR forms partnerships with these nations in order to build capacity by leveraging and maximizing not only other sources of funding, but also the countries' own resources to treat their people for the long term.

It is important to remember that adults and children living with HIV/AIDS may require a broad range of additional health interventions. Therefore, the Emergency Plan promotes a comprehensive package of other services to prevent infections that can lead to illness or death; these interventions are classified as “care” for PEPFAR purposes, and are described at greater length in the Care chapter. PEPFAR's adult and pediatric preventive care packages include life-saving interventions such as cotrimoxazole prophylaxis to prevent opportunistic infections (including diarrheal diseases); screening for tuberculosis; prevention of malaria using long-lasting insecticide-treated mosquito nets; support for therapeutic nutrition for children and, on a time-limited basis, severely malnourished adults; and safe water. For further information on ARVs, please see PEPFAR's 2006 Congressional Report, *Bringing Hope: Supplying Antiretroviral Drugs for HIV/AIDS Treatment* at <http://www.PEPFAR.gov/progress/>.

## Nigeria: Military Partnership Extends Life-Saving Antiretroviral Treatment

In Nigeria, PEPFAR supports a military-to-military partnership with the Nigerian Armed Forces to fight HIV/AIDS. In April 2006, a need for antiretroviral treatment services was identified in the state of Benue, which has Nigeria's highest HIV prevalence rate. With support from the Emergency Plan, dedicated Nigerian military staff worked in partnership with the U.S. Government and key stakeholders to rapidly establish and scale up treatment services in Benue.

A team of three Nigerian military medical staff was dispatched to assist in establishing services. They met extensively with local support groups to ensure that the planned service would meet local needs. In June 2006, free antiretroviral treatment was launched at the 44 Nigerian Air Force Hospital in Makurdi, the capital of Benue. Both the Minister of State for Defence and the Governor of Benue lent political support to the inaugural program.

selling rooms, laboratories, and distribution and logistics systems; monitoring and reporting systems; and other relevant components of treatment, including the ARVs themselves. Drugs remain a significant component of cost, to be sure, but are no longer the fundamental obstacle to treatment that they once were. Because there are so many elements of quality ART, the cost of ARV drugs is estimated to be around 30 percent of the average cost per person, per year for the complete ART package. This reality highlights the importance of all the components required to provide quality ART.

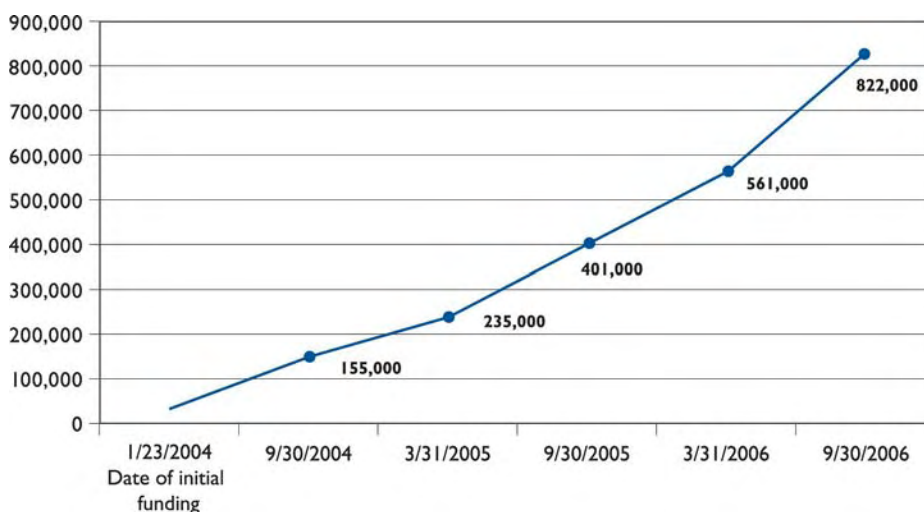
In fiscal year 2006, ART— including ARV drugs and services, as well as laboratory support — received approximately \$819 million in Emergency Plan funding, or approximately 46 percent of total focus country resources for prevention, treatment, and care activities, excluding funding for pediatric AIDS.

### Results: Rapid Scale-Up

Comprehensive treatment is a complicated endeavor, and the needs of host countries, as defined by their national strategies, differ. There are a number of significant components of high-quality ART, including: general clinical support for patients, such as non-antiretroviral medications and laboratory tests; training and support for health care personnel; physical infrastructure, including clinics, coun-

As a result of this unprecedented commitment to partnership with host nations, PEPFAR has supported ART for approximately 822,000 people in the focus countries through September 2006. Of these people, approximately 528,300 benefited from site-specific “downstream” support, while approximately 293,700 benefited from “upstream” support from public- and private-sector networks and systems for the provision of ART. Of those

**Figure 2.1: Treatment: Number of Individuals Receiving Antiretroviral Treatment in the 15 Focus Countries**  
(Total of both upstream and downstream USG-supported interventions)



receiving downstream support, approximately 249,000 were on treatment during fiscal year 2005 (see the accompanying box for more information on downstream and upstream support for treatment).

**Table 2.2: Treatment<sup>1</sup>: FY2006 Progress Toward Emergency Plan Target of 2 Million Individuals Receiving Treatment**

Country	Emergency Plan 5-Year target	Total number of individuals reached <sup>2</sup>	Percentage of 5-Year target met
Botswana <sup>3</sup>	33,000	67,500	205%
Côte d'Ivoire	77,000	27,600	36%
Ethiopia	210,000	40,000	19%
Guyana	2,000	1,600	80%
Haiti	25,000	8,000	32%
Kenya	250,000	97,800	39%
Mozambique	110,000	34,200	31%
Namibia	23,000	26,300	114%
Nigeria <sup>4</sup>	350,000	67,100	19%
Rwanda	50,000	30,000	60%
South Africa	500,000	210,300	42%
Tanzania	150,000	44,300	30%
Uganda	60,000	89,200	149%
Vietnam	22,000	6,600	30%
Zambia	120,000	71,500	60%
<b>Total</b>	<b>2,000,000</b>	<b>822,000</b>	<b>41%</b>

**Notes:**

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:**

<sup>1</sup> Treatment includes the provision of antiretroviral drugs and clinical monitoring of ART among those with advanced HIV infection.

<sup>2</sup> 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, protocol and curriculum development, and those receiving downstream services at U.S. Government-funded service delivery sites.

<sup>3</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

<sup>4</sup> In Nigeria, it is currently unknown if the government's number of people on treatment accounts for people who are lost to follow up. Therefore, the total number of people on treatment has been reduced by 15% to account for estimated attrition.

## Downstream and Upstream Support for Treatment

### Downstream support

In many areas, the Emergency Plan will coordinate with other partners to leverage resources at a specific site, providing those essential aspects of quality services that others cannot provide, due to limited technical and/or financial circumstances. For example, in some settings components of services are provided to specific sites through the host-country government or other international partners such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, while the Emergency Plan may contribute other essential services, training, commodities, and infrastructure. "Downstream" site-specific support refers to these instances where the Emergency Plan is providing all or part of the necessary components for quality services at the point at which services are delivered.

### Upstream support

Beyond the site-oriented downstream components of services, support is required to provide other critical elements, which may include the training of physicians, nurses, laboratory technicians, other health care providers, and counselors or outreach workers; laboratory systems; strategic information systems, including surveillance and monitoring and evaluation systems; logistics and distribution systems; and other support that is essential to the effective roll-out of quality services.

This coordination and leveraging of resources optimizes results while limiting duplication of effort among partners, with roles determined within the context of each national strategy. However, such support often cannot easily be attributed to specific sites because it is national or regional in nature; in fact, many sites benefit from these strategic and comprehensive improvements. Therefore, this support is referred to as "upstream" support. It is essential to developing network systems for prevention, treatment, and care.

The Emergency Plan features a growing commitment to pediatric AIDS treatment (see the section on pediatric treatment), and approximately nine percent of those who received treatment at downstream sites where implementing partners reported the age of those served were children age 14 or under. PEPFAR also is committed to ensuring full participation of women in treatment activities and is working with implementing partners toward the goal that all patients who are served are reported by gender. At downstream sites where implementing partners reported results by gender, 61 percent of those receiving PEPFAR-supported ART were female, and 39 percent were male.

**Table 2.3: Treatment<sup>1</sup>: FY2006 Overall Results**

Country	Number of individuals receiving upstream systems-strengthening support for treatment <sup>2</sup>	Number of individuals receiving downstream site-specific support for treatment <sup>3</sup>	Total number of individuals reached
Botswana <sup>4</sup>	67,500	0	67,500
Côte d'Ivoire	6,700	20,900	27,600
Ethiopia	0	40,000	40,000
Guyana	0	1,600	1,600
Haiti	0	8,000	8,000
Kenya	10,000	87,800	97,800
Mozambique	17,500	16,700	34,200
Namibia	0	26,300	26,300
Nigeria <sup>5</sup>	17,000	50,100	67,100
Rwanda	15,300	14,700	30,000
South Africa	111,700	98,600	210,300
Tanzania	7,300	37,000	44,300
Uganda	37,800	51,400	89,200
Vietnam	2,900	3,700	6,600
Zambia	0	71,500	71,500
<b>Total</b>	<b>293,700</b>	<b>528,300</b>	<b>822,000</b>

**Notes:**

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:**

- <sup>1</sup> Treatment includes the provision of antiretroviral drugs and clinical monitoring of ART among those with advanced HIV infection.
- <sup>2</sup> 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.
- <sup>3</sup> Number of individuals reached through downstream site-specific support includes those receiving services at U.S. Government-funded service delivery sites.
- <sup>4</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.
- <sup>5</sup> In Nigeria, it is currently unknown if the government's number of people on treatment accounts for people who are lost to follow up, therefore the total number of people on treatment has been reduced by 15% to account for estimated attrition.

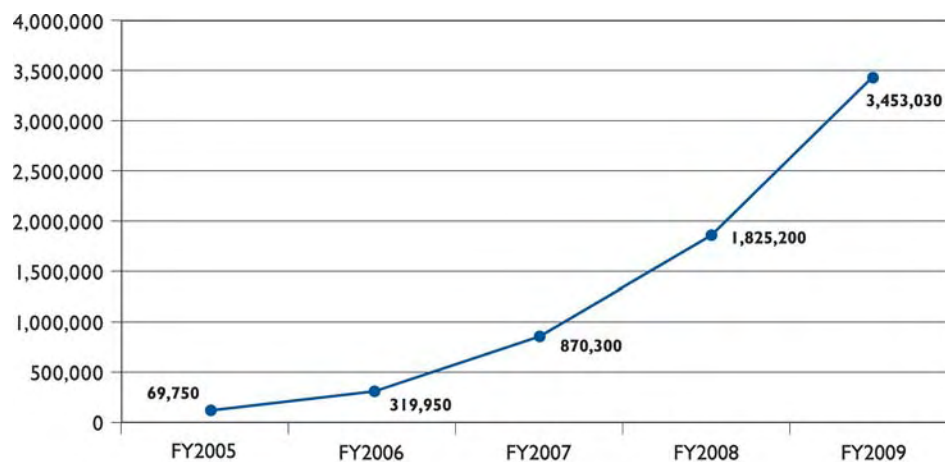
Beyond the 15 focus countries, the Emergency Plan also supported ART for approximately 165,100 people through bilateral programs in 40 other nations, for a total of approximately 987,100 people worldwide receiving ART with PEPFAR support.

As part of the massive scale-up in the focus countries, the number of sites providing treatment has increased from 800 in fiscal year 2005 to 1,912 in fiscal year 2006 – a 139 percent increase. Every month during fiscal year 2006, an average of approximately 93 new ART sites came on line. By the end of fiscal year 2006, approximately 50,000 individuals were being added to the growing number of people benefiting from life-extending therapy every month.

This effort represented a 105 percent increase in the number of persons on ART over a 12 month period, keeping the Emergency Plan on target to reach its goal of two million on ART with fiscal year 2008 funding.

Another way to assess the impact of PEPFAR's partnerships with host nations is to estimate treatment's effect on the life spans of individuals. The World Health Organization has recently developed a methodology for calculating the number of life-years added by ART; when applied to the number supported by PEPFAR, as shown in figure 2.2, this approach generates very significant results. The more than 822,000 persons who began treatment with support from PEPFAR in the focus countries during fiscal years 2004 through 2006 represent approximately 2,200,000 person-years-of-life added through the end of fiscal year 2009 (September 30, 2009). Projecting the additional number of people expected to be placed on ART by the end of fiscal years 2007 and 2008 under current PEPFAR budget plans, an additional 1,250,000 person-years-of-life would be added by the end of fiscal year 2009. In all, PEPFAR support for treatment is expected to save around 3,450,000 person-years through September 30, 2009, alone and undoubtedly will have much greater effects beyond that time frame.

**Figure 2.2: Treatment: Estimated Cumulative Years of Life Added through FY2009 Due to PEPFAR Support for ART in Focus Countries**



**Note:** Calculations are based on methodology developed by the WHO, 2006. Total person-years-of-life added are based on the actual number of persons on ART in FY2004-FY2006 and projected numbers of people to be on treatment for FY2007 and FY2008.

### Zambia: Treatment Support Worker Makes a Difference

In Zambia, 36-year-old Daniel Ngoshe, a father of six children, was jobless when he discovered he was HIV-positive. Fortunately, his life dramatically changed when he began antiretroviral treatment (ART) and was disciplined about adhering to his drug regimen.

ART is effective only if patients take the life-extending medications correctly. Taking drugs at the wrong time of the day or at the wrong dosage can result in drug resistance, where ART becomes less effective or ineffective. For this reason, the Zambia Prevention, Care and Treatment Partnership (ZPCT) started a project in 2006 to ensure that, as more Zambians begin ART, they receive support to take the drugs correctly and to seek follow-up care.

Daniel attended the ZPCT adherence support workers training, supported by PEPFAR. The training targeted people who are living openly with HIV and taking antiretroviral drugs. At the training, Daniel learned about methods to support drug adherence, as well as basic facts about the HIV epidemic, counseling, testing, and ways to live positively with HIV/AIDS.

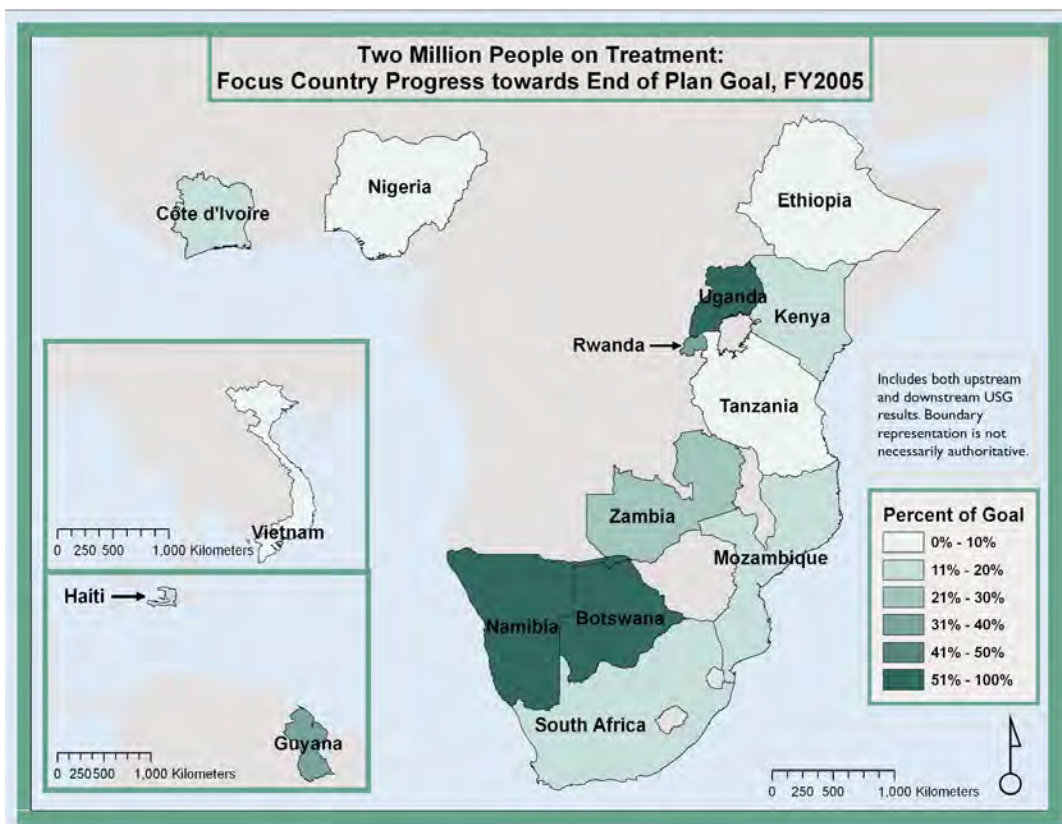
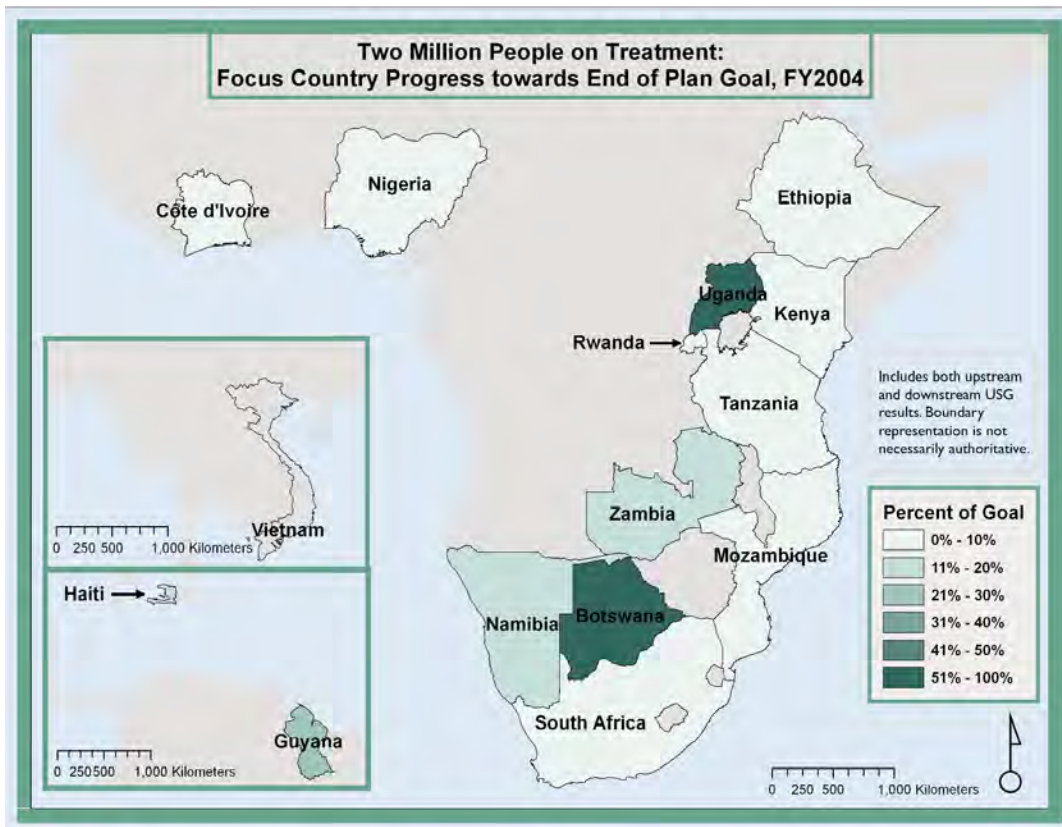
Daniel is an active Adherence Support Worker at Mahatma Gandhi Health Center in Kabwe. He reflects: "When I started taking the drugs my strength increased, which allowed me to do some work at home, in the community, and at the health clinic." He beams with pride when he sees the clients he counseled on treatment adherence. Thanks to his advice, his clients are careful to take their ART every day, adhere to their essential drug treatment, and live healthier lives. Daniel is one of a growing number of Adherence Support Workers who help to improve the health and livelihood of community members.

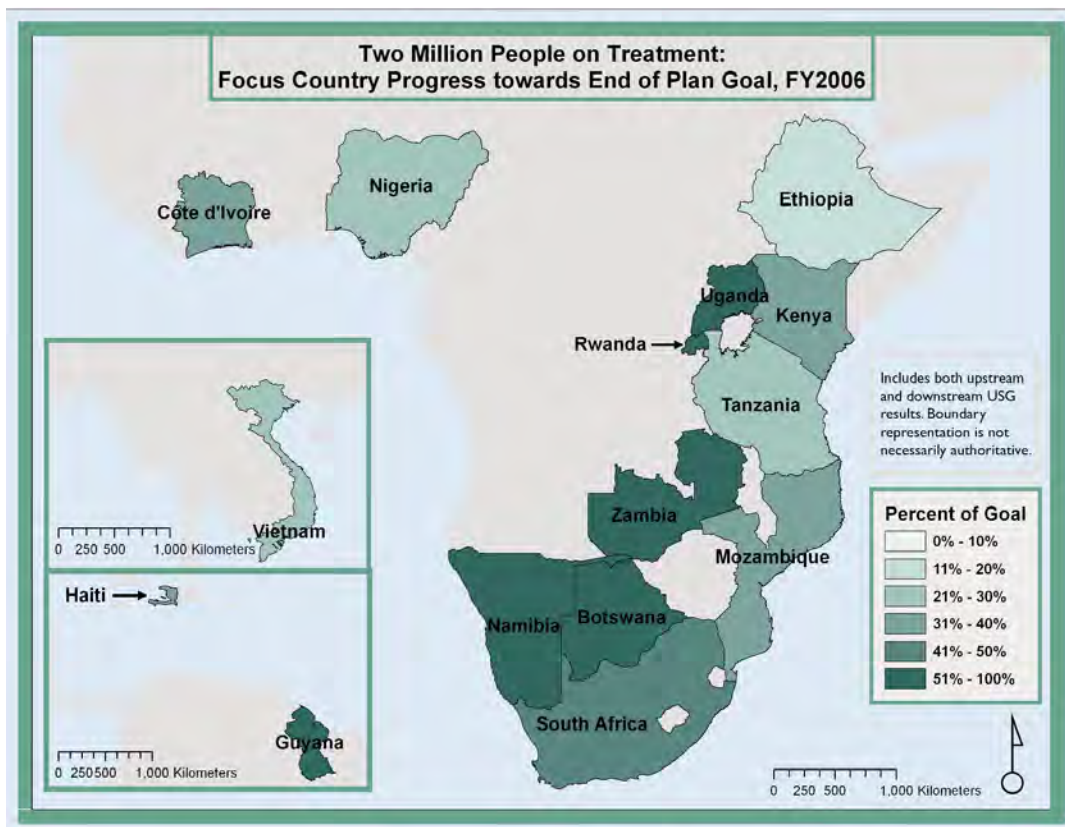


At Mahatma Gandhi Health Center in Kabwe, Zambia, Daniel Ngoshe (right) counsels Alex Chipoya, a 46-year-old widower with five children, on the importance of drug adherence.

Malekiado Phiri/ZPCT

Figure 2.3: Treatment: Map of the Scale-Up in Treatment Coverage in Focus Countries from FY2004 -FY2006





## Emergency Plan Strategies to Support ART Adherence and Quality

Adherence to antiretroviral treatment (ART) is critical – both for the survival of the individual patient and to prevent the development of drug-resistant HIV. Emergency Plan support allows programs providing ART to implement a variety of approaches to improve ART adherence. The specific “best practice” varies by setting, but broadly speaking, it should include efforts to ensure that patients and families understand the appropriate way to take antiretroviral drugs (ARVs). Under the Emergency Plan, the following all have been used to promote adherence: counseling by pharmacists, other care providers, peer counselors, etc.; reminder devices, such as medication boxes; support programs, such as the assignment of “medication buddies”; and regular visits to patients’ homes by community health workers. There is evidence to support the importance of patient preparedness and simplified regimens, and studies show that the provision of a variety of interventions is associated with high rates of viral-load suppression, even in challenging settings like large urban slums.

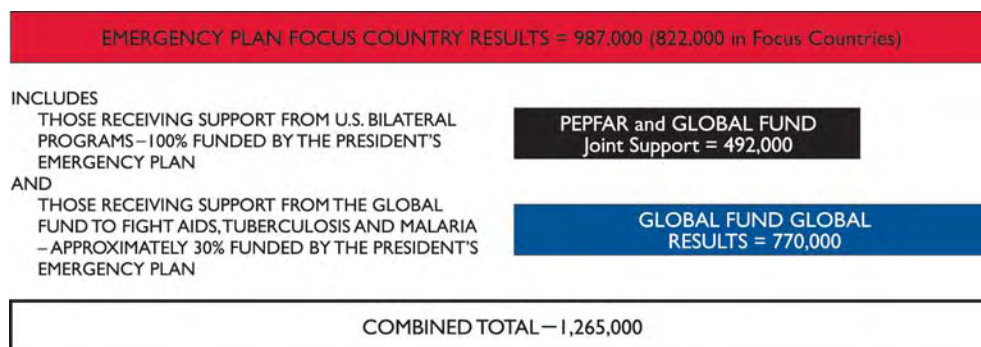
For example, one PEPFAR partner in Uganda recently reviewed 443 patients it supports in a number of facilities and found that, after a median time on therapy of 15 months, 87 percent had viral loads of less than 400 copies/ml. Perhaps most remarkably, of the 93 percent whose HIV was suppressed, 86 percent reported disclosure to and support of a family member or close friend, 92 percent reported missing zero doses in the past month, and 93 percent demonstrated good knowledge of their medications and of their disease. Clearly, through well-trained and motivated staff and patients, it is possible to achieve and maintain outstanding adherence and high-quality programs.

Another critical focus of the Emergency Plan is maintaining the high quality of ARVs. The quality, safety, and efficacy of medications must be ensured, and ARVs and other needed commodities must be transported to treatment sites via a secure and reliable supply chain. The Supply Chain Management System has started a post-distribution quality assurance program that will ensure that quality ARVs are being delivered to patients across the Emergency Plan. For a more detailed description of supply chain management, please see the Building Capacity: Partnerships for Sustainability chapter.

In order for treatment to be effective, medical care also must be of high quality, and those administering and monitoring treatment must be well-trained in the nuances of complex regimens. The unique dosing needs of children receiving ART must be considered on an individual basis, and there must be effective integration of treatment with prevention and care. Community outreach to support people is important, as is program monitoring and evaluation through the collection of key indicators and supportive on-site supervision.

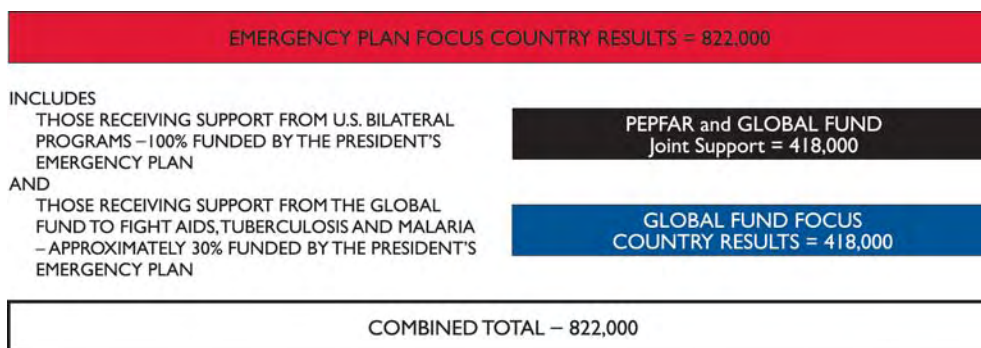


**Figure 2.4: Treatment: People Receiving ARV Treatment with Support from the President's Emergency Plan for AIDS Relief Globally through FY2006**



**Notes:** Numbers are rounded off to the nearest thousand. Treatment numbers include upstream and downstream results for the Emergency Plan bilateral programs provided by the Office of the U.S. Global AIDS Coordinator. Treatment results for the Global Fund programs provided by the Global Fund to Fight AIDS, Tuberculosis and Malaria. Overlap estimate based on review of country data with Global Fund and the WHO. Overlap differs by country.

**Figure 2.5: Treatment: People Receiving ARV Treatment with Support from the President's Emergency Plan for AIDS Relief in Focus Countries through FY2006**



**Notes:** Numbers are rounded off to the nearest thousand. Treatment numbers include upstream and downstream results for the Emergency Plan bilateral programs provided by the Office of the U.S. Global AIDS Coordinator. Treatment results for the Global Fund programs provided by the Global Fund to Fight AIDS, Tuberculosis and Malaria. Overlap estimate based on review of country data with Global Fund and the WHO. Overlap differs by country.

The Emergency Plan is working to support the implementation of effective monitoring and evaluation (M&E) systems across implementing partners in support of national information systems. This is assisting PEPFAR's in-country USG teams and implementing partners to monitor and improve delivery of services and, in particular, program quality and adherence to therapy. For example, in KwaZulu-Natal, South Africa, Emergency Plan partners are working with the government to build teams at the facility level to focus on improving patient care services in a number of programs that are essential to people living with

HIV/AIDS (PLWHA). Most host countries have recognized the need to combine program indicator data with regular supportive on-site supervision. The regular supervision provides an opportunity to use monitoring data to improve services and conduct brief refresher training. Other innovative M&E programs are being developed for use in focus countries and beyond.

The Emergency Plan is the largest contributor to the Global Fund, providing approximately 30 percent of all resources to date. The Global Fund has reported support

## Critical Components of an Effective PEPFAR-Supported ART Program

- Political commitment by government and community leaders.
- National HIV/AIDS policy and clinical guidelines.
- National antiretroviral treatment (ART) training programs for clinical and laboratory staff.
- Adequate space and personnel for clinical care in medical facilities.
- A continuous and secure supply of high-quality drugs, laboratory reagents, and other health commodities.
- A national tiered, quality-assured laboratory network.
- Community outreach to promote HIV prevention and ART adherence.
- National, unified monitoring and evaluation systems.
- Effective links and integration of HIV/AIDS services, including care (e.g., diagnosis and management of opportunistic infections), prevention (e.g., prevention of mother-to-child transmission) and counseling and testing.
- HIV treatment and care programs that promote HIV prevention.

for ART for 770,000 people globally as of the end of 2006; strikingly, 418,000 of those were reported in PEPFAR focus countries. For 2005, it was estimated that 80 percent of those receiving Global Fund support in the focus countries also benefited from Emergency Plan bilateral support; this year, it is estimated that all of them do. This is a testament to close country-level coordination in support of national programs.

### *Pediatric Treatment: the Emergency Plan Response*

Approximately 2.1 million children under age 15 are living with HIV/AIDS, including almost 1.3 million in PEPFAR's 15 focus countries. HIV-positive infants are especially vulnerable and, without treatment, the majority of infected infants die before they are two years of age.

Preventing, diagnosing, and treating pediatric HIV/AIDS present daunting challenges. The limited capacity of health systems in resource-poor nations hampers pediatric HIV/AIDS care, as it does a range of other health issues.

The most effective way to prevent HIV in children is prevention of mother-to-child transmission (PMTCT). PMTCT is challenging in resource-limited settings, beginning with difficulty in getting pregnant women to access antenatal care and HIV prevention programs in the first place. Even when women are reached with prevention services, there are significant barriers of stigma, reluctance to return for HIV test results, issues related to delivering short-course preventive ARVs in situations where women

have their babies at home, and the complexities of infant feeding for an HIV-positive mother.

Diagnosis of children – especially the young children most likely to be infected – is complex and expensive. Technologies to improve pediatric diagnosis are not yet widely available, and shortages of trained health workers are a major problem. In addition to supporting host nations' programs that provide pediatric ART, PEPFAR has also been a leader in expanding a prerequisite to treatment – early infant diagnosis for children under 18 months. PEPFAR supports nations in expanding polymerase chain reaction (PCR) testing of dried blood spots, which require less blood per test than older methods and can be transported to central laboratories for testing.

PEPFAR has supported country-level policy change to allow PCR-based testing in order to reduce the cost and burden of infant diagnosis. As table 2.4 shows, most focus countries have now adopted such policies. In some cases, national policy is behind actual implementation, with 14 focus countries reportedly using PCR testing – making accurate diagnosis and management of pediatric ART a growing reality.

Long-term combination ART for children also poses special challenges. ARVs are often unavailable in pediatric formulations, partly because they are often much more costly than adult drugs. In addition, pediatric regimens can be difficult to follow because of the complexity of dosing by

**Table 2.4: Treatment: Key Policy Changes: Infant Diagnosis**

Country	Date of policy adoption on infant diagnosis <sup>1</sup>
Botswana	2006
Côte d'Ivoire	2006
Ethiopia	2005
Guyana	2006
Haiti <sup>2</sup>	-
Kenya <sup>3</sup>	-
Mozambique	2006
Namibia	2005
Nigeria <sup>3</sup>	-
Rwanda	2006
South Africa	2005
Tanzania <sup>2</sup>	-
Uganda	2005/2006 <sup>4</sup>
Vietnam	2006
Zambia <sup>2</sup>	-

**Footnotes:**

<sup>1</sup> Unless otherwise noted, information obtained through correspondence with country teams.

<sup>2</sup> Countries are implementing infant HIV counseling and testing without a policy.

<sup>3</sup> Policy is pending.

<sup>4</sup> Uganda's Counseling and Testing Policy (2005) has a section on Infant Diagnosis, and the Revised PMICT Guidelines (2006) has sections on Infant Diagnosis and treatment.

weight. Communities do not always focus on the special issues of children with HIV/AIDS, whose parents may be ill or dead, and their caregivers often lack the needed support. Even where there is a community response, older children in particular have issues which may be neglected.

The Emergency Plan features a growing commitment to pediatric AIDS treatment. In fiscal year 2006, of those people receiving ART at downstream sites for whom partners reported age, approximately 48,600 – almost nine percent – were children. This number is likely understated, as many partners, with PEPFAR support, still are developing systems for reporting adult or child status in all data.

The Emergency Plan embraces a comprehensive approach to addressing the need to increase access to life-saving ART for children. On March 13, 2006, First Lady Laura Bush announced an unprecedented public-private partnership to promote scientific and technical discussions on solutions for pediatric HIV treatment, formulations, and access. Through the Emergency Plan, this partnership encourages innovator and generic pharmaceutical companies, civil society organiza-

tions such as The Elizabeth Glaser Pediatric AIDS Foundation, and The Clinton Foundation, WHO, and the UN's UNAIDS and UNICEF, to work together with agencies across the USG, in order to bring together a wide range of expertise. This new partnership also seeks to maximize the utility of currently available pediatric formulations and to accelerate children's access to treatment.

This partnership will complement other PEPFAR efforts to support programs that expand treatment for adults and children, such as support for health care capacity-building and expedited regulatory review of drugs through HHS/FDA (discussed later in this chapter), which has made eight new pediatric formulations available for PEPFAR programs. The partnership will offer children and parents hope for a better day, when families can stay together, lead healthy lives, and live positively with HIV/AIDS.

Further information on the challenges and results regarding pediatric AIDS treatment may be found in the chapter on Children.

### **Sustainability: Supporting Efforts to Build Capacity**

While host nations rapidly scale up high-quality treatment today, the Emergency Plan is also partnering with them to build the capacity and institute the systems to expand treatment in the future.

Training in ART services for health workers is a major focus; in fiscal year 2006, the Emergency Plan supported training or retraining for approximately 52,000 service providers in the focus countries. These efforts range from lecture format to bedside mentoring and include on-the-job training and other strategies to encourage those who have been trained to remain at their posts. Maintaining systems that support delivery of high-quality care is an important aspect of supporting health care personnel, and the Emergency Plan works closely with partners to improve quality of care through regular on-site supervision, monitoring of key program indicators, distance learning and refresher training programs, and initiatives to support staff to focus on improving service delivery. Also, Emergency Plan-supported activities involve networks of PLWHA to support treatment literacy and adherence, fostering quality as well as sustainability.

Strengthening sites so that they are adequately equipped to provide high-quality ART is critical. This includes address-

**Table 2.5: Treatment: Percentages of Children and Women Among Those Receiving Treatment with Downstream Emergency Plan Support for Focus Countries in FY2006**

	Children (ages 0-14) <sup>1</sup>	Women (all ages) <sup>1</sup>
<b>Total</b>	<b>9%</b>	<b>61%</b>

**Notes:**  
 Numbers may be adjusted as attribution criteria and reporting systems are refined.  
 Percentages shown reflect only those receiving downstream support. Data 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 U.S. Government-funded service delivery sites.

**Footnote:**  
<sup>1</sup> According to the 2006 UNAIDS Epidemic Update, 45 percent of those infected with HIV worldwide in 2006 were women, and 13 percent were children.

ing deficits in infrastructure, laboratory capacity, and procurement and distribution of ARVs and other commodities. In fiscal year 2006, the Emergency Plan supported 1,912 ART service sites in focus countries, and the new Supply Chain Management System (described in the chapter on Building Capacity: Partnerships for Sustainability) already is making a major contribution to meeting procurement and distribution challenges for ARVs and other commodities needed for quality treatment. PEPFAR support for laboratory capacity – including equipment, training,

and quality control – is helping nations improve their ability to monitor responses to treatment and care and make better informed clinical judgments.

Since the majority of people living with HIV/AIDS live far from major medical centers, moving beyond a hospital- and clinic-based model for provision of ART will help make services more widely available and sustainable. Therefore, PEPFAR is supporting development of a widening range of treatment settings. In addition, strengthening linkages under the network model to give patients access to seamless prevention, treatment, and care services is a priority. This is particularly important for persons with tuberculosis (TB), orphans and vulnerable children (OVCs), and mothers, among others.

### *Savings on Safe and Effective Antiretroviral Drugs*

Safe and effective ARVs are essential for the effective treatment of HIV/AIDS. It is important to provide a selection of safe and effective ARVs, including alternative ARVs for cases in which the virus has acquired resistance to certain ARVs, or when other conditions and/or medications dictate a change from certain ARVs to others (e.g., when treating for co-infection with TB). As the choice of ARVs expands, including lower-cost medications, treatment can be extended to more people.

### **Tanzania: Regionalization Facilitates Treatment Scale-Up**

In March 2003, the Tanzanian Ministry of Health developed the National Care and Treatment Plan for HIV/AIDS for 2003-2008, setting forth ambitious goals for providing antiretroviral treatment (ART). The U.S. Government, through PEPFAR, is working in partnership with the Government of Tanzania to meet these goals.

A new approach, known as “regionalization,” was developed in conjunction with the National AIDS Control Program and redistributes partners with the goal of ensuring that only one partner operates within any given region, reducing duplication of efforts. Regionalization gives each partner sole, region-wide responsibility for providing antiretroviral treatment in all hospitals and clinics – whether public, private, or faith-based. The regionalization model is being implemented throughout Tanzania.

Challenges remain, and the physical re-orientation of partners to new areas will need to be carefully managed. Ultimately, it is hoped that the regionalization of antiretroviral treatment services under the National Care and Treatment Plan will lead to a more effective and better coordinated response.



At the Mawenzi Regional Hospital in Kilimanjaro, an Emergency Plan partner organization is working under the new regionalization strategy to provide antiretroviral treatment to HIV-positive men, women and children.

## Utilizing Task-Shifting to Expand Delivery of Treatment and Care

The scale-up of HIV treatment and care has provided new opportunities for medical interventions with HIV-infected persons and their families. These interventions increase the use of health care, improve adherence to medication, and prevent HIV transmission from one infected person to others, including family members. Unfortunately, since busy treatment and care sites often lack trained personnel to provide these ancillary interventions, issues of adherence and prevention may not receive adequate attention as a routine part of care. In addition, health workforce shortages in many developing nations make it necessary to promote "task-shifting" to community health workers, wherever possible.

In Namibia, in partnership with the U.S. Government, the Ministry of Health has recruited and trained more than 300 lay counselors who are based in HIV treatment and care clinics. These counselors provide antiretroviral treatment adherence counseling, confidential HIV counseling and testing of partners and family members, and prevention counseling to infected persons and their partners. Additionally, they offer prevention of mother-to-child HIV transmission counseling and testing to women in antenatal clinics. The nurses and physicians in these clinics supervise the lay counselors, who are able to provide more personalized support to patients than the often overworked health professionals can offer.

In other countries, the USG is working closely with host governments and partners to develop policies that would allow for additional cadres of health workers beyond physicians to deliver HIV/AIDS treatment and care services, including ART. Given the serious lack of human capacity in the health sectors in many countries, task-shifting in order to share the burden of care delivery allows the limited number of highly-trained health professionals to focus upon those tasks for which their specific professional training is required. See the chapter on Building Capacity: Partnerships for Sustainability for more information.

**Table 2.6: Treatment<sup>1</sup>: FY2006 Capacity-Building Results**

Country	Number of USG-supported sites providing treatment	Number of health workers trained or retrained, according to national and/or international standards, in the provision of treatment
Botswana <sup>2</sup>	129	1,900
Côte d'Ivoire	58	400
Ethiopia	159	3,600
Guyana	12	500
Haiti	30	700
Kenya	281	3,200
Mozambique	44	1,700
Namibia	34	700
Nigeria	48	2,600
Rwanda	57	1,100
South Africa	751	26,900
Tanzania	67	2,600
Uganda	116	2,600
Vietnam	28	1,400
Zambia	98	2,100
<b>Total</b>	<b>1,912</b>	<b>52,000</b>

**Notes:**

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

Among individuals trained, numbers above 100 are rounded to nearest 100. Number of sites are not rounded.

**Footnotes:**

<sup>1</sup> Treatment includes the provision of antiretroviral drugs and clinical monitoring of ART among those with advanced HIV infection.

<sup>2</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

**Table 2.7: Treatment<sup>1</sup>: FY2006 Laboratory Capacity-Building Results**

Country	Number of USG-supported laboratories with the capacity to perform HIV tests, CD4 tests and/or total lymphocyte tests	Number of individuals trained or retrained in the provision of lab-related activities
Botswana <sup>2</sup>	52	100
Côte d'Ivoire	20	100
Ethiopia	89	400
Guyana	7	33
Haiti	79	1,100
Kenya	342	800
Mozambique	17	43
Namibia	6	48
Nigeria	69	1,100
Rwanda	13	200
South Africa	3	500
Tanzania	73	400
Uganda	138	3,300
Vietnam	5	200
Zambia	45	300
<b>Total</b>	<b>958</b>	<b>8,300</b>

**Notes:**

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

Among individuals trained, numbers above 100 are rounded to nearest 100. Number of sites are not rounded.

**Footnotes:**

<sup>1</sup> Treatment includes the provision of antiretroviral drugs and clinical monitoring of ART among those with advanced HIV infection.

<sup>2</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

## Côte d'Ivoire: A Family Finds Hope through a Network of Caring

Under national strategies and in partnership with host nations, PEPFAR focuses special attention on the prevention, treatment, and care needs of families impacted by HIV/AIDS. Efforts are directed not just at those who may be infected, but at the entire family – helping to keep families intact.

In Côte d'Ivoire's port city of San Pedro, IRIS is a network of integrated health and social services that is a model of an effective district-level response to HIV/AIDS. Developed with PEPFAR support, the network revolves around a community social center, with an affiliated coordinating committee designed to link health and social services for families affected by HIV/AIDS. Services include HIV counseling and testing, prevention of mother-to-child HIV transmission, antiretroviral treatment, palliative care, treatment for tuberculosis and sexually transmitted infections, and care for orphans and vulnerable children.

In 2006, Maguy Theodore (Theo) and his family found hope through IRIS. Theo, who is HIV-positive, was given a new lease on life, thanks to antiretroviral treatment offered through IRIS. "I thought I would die, but with the [antiretroviral] treatments I received, it was as if I was resuscitated," the 50-year-old father of five said. "I couldn't keep that for myself alone..." Theo now promotes HIV testing and support for people living with HIV/AIDS through his church and a small non-governmental organization.



In Bardot quarter of the Côte d'Ivoire city of San Pedro, Maguy Theodore and his family have found hope through antiretroviral treatment, school support, health care, and other networked services for families affected by HIV/AIDS.

The Emergency Plan remains committed to funding the purchase of the lowest-cost ARVs from any source, regardless of origin – whether they are innovator, generic, or copy drugs, as long as those medications have been proven safe, effective, and of high quality, and their purchase is consistent with international law.

To meet the need for a selection of ARVs that are proven to be safe, effective, and of low cost, in May 2004 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 quality standards and subsequently cleared for purchase under PEPFAR. Tentatively approved ARVs meet standards equal to those established for the U.S., ensuring that no drug purchased for use in PEPFAR programs abroad falls below standards for the U.S. market.

As of January 4, 2007, 34 generic ARV formulations have been approved or tentatively approved by HHS/FDA under the expedited review, including eight fixed-dose combination (FDC) formulations containing at least two individual ARVs. FDCs are invaluable because they are easier to manage for patients, health workers, and program managers and can serve as an important bulwark against the development of HIV drug resistance. Three co-packaged triple drug combinations and two triple FDCs have been tentatively approved by HHS/FDA and are available for use by

Emergency Plan partners and others. The steady increase in HHS/FDA ARV approvals is shown in figure 2.6.

By late 2006, 14 focus countries had imported HHS/FDA-approved generics. Most approved products to date are widely used, standard, first-line generic ARVs. In many countries, host governments also have requested USG support for more expensive second-line ARVs. As a side benefit of the FDA's approval process, it has also expedited the availability of five generic versions of ARVs whose U.S. patent protection has expired.

The establishment of the Supply Chain Management System (SCMS) is a key element in efforts to support comprehensive HIV/AIDS programs (for more information, see the chapter on Building Capacity: Partnerships for Sustainability). To date, approximately \$94 million of focus country prevention, treatment, and care resources have been provided to SCMS to support procurement of commodities such as ARVs, technical assistance, logistics, and other aspects of supply chain management. Usage of SCMS is expected to increase significantly during its second full year of operation, fiscal year 2007.

The HHS/FDA fast-track approval process has supported the increased procurement of high-quality but less-expensive generic ARVs. A recent survey of all 36 USG partners that procured ARVs in the focus countries showed that

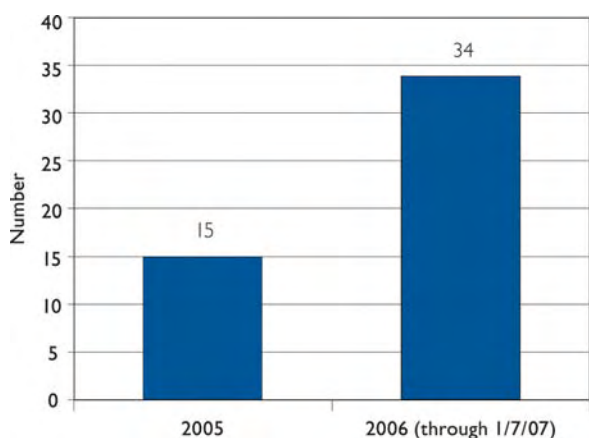
they spent \$109,843,477 to procure ARVs in fiscal year 2006 (see table 2.8 and figure 2.7).

These advances are critical, because they significantly lower the annual price of a standard first-line regimen. The cost savings allow more people to access life extending treatment – and as the number of people on treatment increases, the cost savings also will increase, as greater economies of scale will be achieved (see figure 2.8).

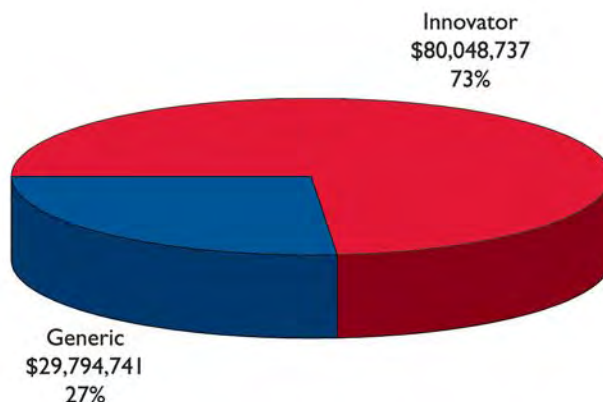
Table 2.9 is drawn from the work of SCMS in fiscal year 2006. By using generics in preference to innovator drugs, SCMS was able to save an estimated \$1.7 million – a 42 percent reduction of the cost using innovator drugs (particularly due to major differences in pricing for nevirapine; excluding nevirapine, a more typical reduction is approximately 20 percent). The competition that is now emerging between generic and innovator companies as more products are approved by HHS/FDA is expected to exert further downward pressure on prices in 2007.

The increased use of HHS/FDA-approved generic ARVs has made Emergency Plan resources go farther, giving thousands of additional people access to prevention, treatment, and care. Emergency Plan partners have an incentive to procure the least expensive, highest-quality medications, since this enables them to redirect resources as needed to meet their treatment and other targets. The data collected shows that countries have diversified the procurement of ARVs and purchased from numerous manufacturers (including generic manufacturers) as seen in table 2.10.

**Figure 2.6: Treatment: Cumulative HHS/FDA Approvals/Tentative Approvals of Generic ARVs, Calendar Years 2005 and 2006**



**Figure 2.7: Treatment: Amount and Percentage of HHS/FDA-Approved Innovator and Generic ARVs Delivered in FY2006**



**Note:** December 2006 data from the SCMS survey of all 36 Emergency Plan partners who procure ARVs for focus countries. Survey requested information regarding the delivery of ARVs in FY 2006; response rate was 100%.

**Table 2.8: Treatment: Total Antiretroviral Procurement and Delivery by Innovator and Generic FY2006<sup>1</sup>**

Country	Innovator	Generic	Total	Generic (%)
Botswana	\$2,816,811	\$2,197,424	\$5,014,235	44%
Côte d'Ivoire	\$4,302,345	\$553,547	\$4,855,893	11%
Ethiopia	\$3,832,452	\$3,805,394	\$7,637,846	50%
Guyana	\$76,671	\$7,431	\$84,102	9%
Haiti	\$339,822	\$2,359,378	\$2,699,200	87%
Kenya	\$19,398,334	\$1,658,845	\$21,057,180	8%
Mozambique	\$1,382,476	\$230,900	\$1,613,377	14%
Namibia	\$888,031		\$888,031	0%
Nigeria	\$8,340,469	\$5,078,349	\$13,418,818	38%
Rwanda	\$338,535	\$605,618	\$944,153	64%
South Africa	\$5,968,289	\$253,879	\$6,222,167	4%
Tanzania	\$3,725,338		\$3,725,338	0%
Uganda	\$14,989,290	\$3,996,395	\$18,985,685	21%
Vietnam	\$1,818,359	\$1,222,267	\$3,040,626	40%
Zambia	\$11,831,514	\$7,825,313	\$19,656,827	40%
<b>Total</b>	<b>\$80,048,737</b>	<b>\$29,794,741</b>	<b>\$109,843,477</b>	<b>27%</b>

**Footnotes:**

<sup>1</sup> December 2006 data from the SCMS survey of all 36 Emergency Plan partners who procure ARVs for focus countries. Survey requested information regarding the delivery of ARVs in FY2006; response rate was 100%.

**Table 2.9: Treatment: Cost Savings from Use of Generic ARVs vs. Accelerating Access Initiative Prices for Innovator ARVs<sup>1</sup>**

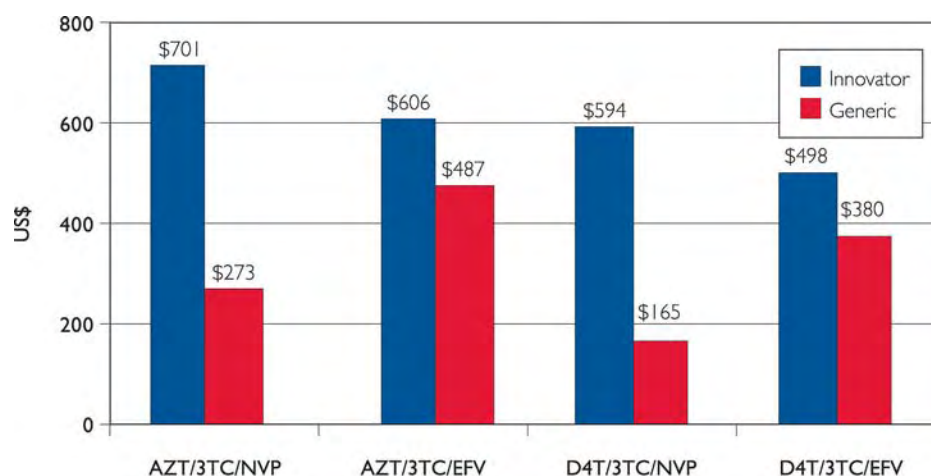
FDA-Approved Generic Drug Product	Dosage	Unit	Qty	Generic Unit Price (USD)	AAI Unit Price (USD)	Generic Total Cost (USD)	AAI Total Cost (USD)	Savings (USD)
Abacavir (as sulphate)	300mg	60TAB	1,296	44.50	52.29	\$57,672	\$67,768	\$10,096
Abacavir (as sulphate)	300mg	60TAB	1,000	44.50	52.29	\$44,500	\$52,290	\$7,790
Abacavir (as sulphate)	300mg	60TAB	2,754	44.50	52.29	\$122,553	\$144,007	\$21,454
Efavirenz	600mg	30TAB	14,640	19.20	22.82	\$281,088	\$334,085	\$52,997
Efavirenz	600mg	30TAB	19,000	17.00	22.82	\$323,000	\$433,580	\$110,580
Efavirenz	600mg	30TAB	9,345	17.60	22.82	\$164,472	\$213,253	\$48,781
Lamivudine	150mg	60TAB	34,000	3.99	5.70	\$135,660	\$193,800	\$58,140
Lamivudine	150mg	60TAB	34,000	3.99	5.70	\$135,660	\$193,800	\$58,140
Lamivudine	150mg	60TAB	486	4.20	5.70	\$2,041	\$2,770	\$729
Lamivudine	150mg	60TAB	16,683	3.95	5.70	\$65,898	\$95,093	\$29,195
Lamivudine, oral suspension	300mg	240ML	4,974	4.35	6.73	\$21,637	\$33,475	\$11,838
Lamivudine, oral suspension	10mg/ml	240ML	416	4.35	6.73	\$1,810	\$2,800	\$990
Lamivudine/Zidovudine	150mg/ 300mg	60TAB	10,005	16.90	19.50	\$169,085	\$195,098	\$26,013
Lamivudine/Zidovudine	150mg/ 300mg	60TAB	20,000	16.90	19.50	\$338,000	\$390,000	\$52,000
Lamivudine/Zidovudine	150mg/ 300mg	60TAB	6,300	16.90	19.50	\$106,470	\$122,850	\$16,380
Nevirapine	200mg	60TAB	35,000	4.35	36.00	\$152,250	\$1,260,000	\$1,107,750
Nevirapine, oral suspension	10mg/ml	240ML	416	6.20	17.80	\$2,579	\$7,405	\$4,826
Nevirapine, oral suspension	10mg/ml	240ML	1,000	6.20	17.80	\$6,200	\$17,800	\$11,600
Stavudine	30mg	60CAP	38,000	3.20	3.96	\$121,600	\$150,480	\$28,880
Stavudine	30mg	60CAP	9,321	3.15	3.96	\$29,361	\$36,911	\$7,550
Stavudine, powder for oral solution	1mg/ml	200ML	3,600	1.45	1.50	\$5,220	\$5,400	\$180
Stavudine, powder for oral solution	1mg/ml	200ML	13,840	1.45	1.50	\$20,068	\$20,760	\$692
Zidovudine	100mg	100CAP	900	10.40	15.77	\$9,360	\$14,193	\$4,833
Zidovudine	100mg	100CAP	300	10.40	15.77	\$3,120	\$4,731	\$1,611
Zidovudine, oral solution	10mg/ml	240ML	1,851	5.35	7.10	\$9,903	\$13,142	\$3,239
Zidovudine, oral solution	10mg/ml	240ML	416	5.35	7.10	\$2,226	\$2,954	\$728
					<b>Totals</b>	<b>\$2,331,432</b>	<b>\$4,008,443</b>	<b>\$1,677,012</b>
								<b>or</b>
								<b>42%</b>

**Footnotes:**

<sup>1</sup> This table gives examples of estimated cost savings achieved by the SCMS during FY2006 in purchasing generic ARVs rather than innovator products. The unit prices quoted in this table are as of September 30, 2006.



Figure 2.8: Treatment: Comparison of Annual Treatment Costs based on Innovator and Generic Costs



Note: December 2006 data from the SCMS survey of all 36 Emergency Plan partners who procure ARVs for focus countries. Survey requested information regarding the delivery of ARVs in FY 2006; response rate was 100%.

### Progress on Pediatric Formulations

Table 2.10: Treatment: Manufacturers by Country for ARVs Delivered in 2006<sup>1</sup>

Country	Abbott	Aspen	Aurobindo	BMS <sup>2</sup>	Boehringer	Cipla	Gilead	Glaxo <sup>3</sup>	Hoffman <sup>4</sup>	Merck	Ranbaxy <sup>5</sup>	Roxane <sup>5</sup>
Botswana	X	X		X	X		X	X	X			
Côte d'Ivoire	X		X	X	X			X	X	X		
Ethiopia	X		X	X			X	X	X	X		X
Guyana	X		X	X	X		X	X		X		
Haiti	X		X	X	X			X	X	X	X	X
Kenya	X		X	X	X		X	X	X	X	X	
Mozambique	X		X	X				X	X	X		
Namibia	X			X	X		X	X		X		
Nigeria	X	X	X	X	X		X	X	X	X	X	X
Rwanda	X		X				X	X		X		
South Africa	X	X		X	X	X	X	X	X	X		X
Tanzania	X			X	X			X	X	X		
Uganda	X	X	X	X	X	X	X	X	X	X	X	
Vietnam	X		X	X	X	X	X	X	X	X	X	X
Zambia	X		X	X	X		X	X	X	X	X	

**Footnotes:**

<sup>1</sup> December 2006 data from the SCMS survey of all 36 Emergency Plan partners who procure ARVs for focus countries. Survey requested information regarding the delivery of ARVs in FY2006; response rate was 100%.

<sup>2</sup> Bristol Myers Squibb

<sup>3</sup> Glaxo-SmithKline

<sup>4</sup> Hoffman-La Roche

<sup>5</sup> Generic manufacturer

The benefits of the expedited approval process also extend to children. To date, 11 ARVs have been approved by HHS/FDA for use in children and thus are eligible for purchase with PEPFAR funds. These include eight generic products approved or tentatively approved under HHS/FDA's expedited process. As of November 2006, these products and their manufacturers are:

- ZDV solution (Aurobindo)
- ZDV 100 mg Capsule (Aurobindo)
- Lamivudine solution (Aurobindo and Cipla)
- Abacavir Sulfate solution (Aurobindo)
- Stavudine solution (Aurobindo)
- Stavudine 15 & 20 mg capsules (Aurobindo)
- Didanosine solution (Aurobindo)
- Nevirapine suspension (Aurobindo)

### ***Overcoming Obstacles to Treatment Scale-up***

Despite encouraging progress, several factors continue to limit access of ARVs in PEPFAR countries. Current HHS/FDA-approved generics are not available for all ARVs and combination therapies. In a number of countries, PEPFAR is the primary supplier for second-line and pediatric ARVs for which there are fewer generic alternatives, limiting savings by those programs.

In addition to review and approval by HHS/FDA, high-quality, lower-cost ARVs still must be reviewed and approved by host government drug regulatory authorities (DRAs). Action on the part of many DRAs can be slowed by weak infrastructure. The process sometimes can be hastened when the host country DRA has comprehensive knowledge of the process that other DRAs have taken when reviewing and approving ARVs. To this end, HHS/FDA conducted a workshop in 2005 for host government DRAs from the focus countries. Since this workshop, HHS/FDA has been in contact with several of these authorities to share information when requested (and when confidential information is shared, with permission of the sponsoring corporation).

Within Emergency Plan focus countries, several host government DRAs also rely on the WHO prequalification drug approval process in their dossier review. To expedite this process, HHS/FDA has entered into a confidentiality agreement with WHO to share dossier information (with permission of the sponsoring corporation), such that the WHO Secretariat can place generic ARVs that have received approval or tentative approval from HHS/FDA immediately on its prequalification list.

In addition to the purchase of HHS/FDA-approved and tentatively approved ARVs by the Emergency Plan, the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) now recognizes HHS/FDA tentative approval as approval by a "stringent regulatory authority," which means Global Fund resources may go to purchase HHS/FDA tentatively approved generic ARVs. In collaboration with PEPFAR, WHO now automatically lists HHS/FDA-approved generics as WHO pre-qualified shortly after the FDA approval is granted. For the complete list go to <http://www.fda.gov/oia/PEPFAR.htm>, or see *Appendix VI: Generic HIV/AIDS Formulations Made Eligible for Purchase by PEPFAR Programs Under the HHS/FDA Expedited Review Process*.

### ***Action to Prevent Stockouts***

If comprehensive HIV/AIDS programs are to be sustained for the long term, they must have a continuous inflow of high-quality medicines and supplies. In concert with in-country partners, the USG is supporting host nations to build the necessary infrastructure to fight HIV/AIDS. SCMS strengthens systems in order to deliver an uninterrupted supply of high-quality, low-cost products that will flow through a transparent and accountable system.

Through its diverse multinational consortium, SCMS already has had a major positive impact by ensuring a regular supply of HIV/AIDS commodities. Large procurements, regional warehouses, a broad consortium of partners, and an ongoing dialogue with major manufacturers give SCMS the flexibility to "pitch in" when routine systems do not work. By working directly with host governments and their partners, SCMS has responded to requests to make emergency procurements in a number of countries. These actions have ensured that programs can continue to provide life-saving medications and products to PLWHA.

With the growing numbers of patients on treatment, it has become increasingly important that the major partners work ever more closely together to ensure continuity of treatment. Constant availability of high-quality drugs is critical to ensure appropriate treatment and decrease the risk of drug resistance. In addition, the constant availability of HIV test kits is essential to ensure continued prevention of infection, while also providing a critical entry point for treatment. Strengthening systems to ensure that clinics have the drugs and HIV test kits they need, when they need them, is essential. As PEPFAR and its partners respond to make drugs available to those in need, it is essential that their efforts are coordinated, in order to alleviate the risk of clinics either overstocking or stocking out the products. For example, PEPFAR has worked with partner governments through SCMS to avoid a number of stockout situations that could have disrupted services for patients:

- In August 2006, in Côte d'Ivoire, SCMS was able to procure Stavudine and Lamivudine to ensure continued supplies that otherwise would have been interrupted due to delays in Global Fund financing. When funding issues continued through December 2006, PEPFAR was approached again and through SCMS the Emergency Plan again supplied \$3 million for purchase of eight ARVs which were urgently required to avoid further stockouts.
- In December 2006, PEPFAR worked through SCMS to partner with the government of Mozambique to overcome threatened stockouts of Efavirenz and Nelfinavir in its national program, which is supported by PEPFAR and the Global Fund.
- In Zambia, SCMS supplied 400,000 HIV rapid test kits in place of a procurement originally programmed under a World Bank grant.
- In Haiti, SCMS responded to an urgent request from partners facing immediate stockouts of rapid test kits. By using local stocklists, SCMS responded overnight for initial supplies and rebuilt the local stocks with subsequent international supply.
- As part of its PMTCT program, the Government of Botswana guarantees provision of infant formula to all nursing mothers who request it. In September 2006, due to procurement delays, Botswana was within three

weeks of running out of infant formula. PEPFAR worked with SCMS and USG agencies to arrange urgent delivery of 280,000 tins of infant formula, valued at approximately \$1.1 million, over a four-week period. This action not only averted the stockout but also rebuilt stocks enough to last until the next delivery of government-procured product some six weeks later.

In each case in which stockouts or near stockouts have occurred, SCMS has offered to work with partner governments and implementing partners to improve planning and forecasting to prevent future shortages and emergency purchases. SCMS's objective is to support partners in establishing a regular, flexible product supply that can be adjusted to meet actual demands and avoid the risk of stockouts and treatment interruptions.

### ***Key Challenges and Future Directions***

There are a number of key challenges for Emergency Plan efforts to support treatment for two million people. Supporting a family-centered approach is essential in order to reach eligible pregnant women and their children with life-saving ART, as well as prevention and care services. Starting eligible pregnant women on ART is a critical component of prevention, treatment, and care – this intervention can not only save the mother and child's lives, but also can work to prevent HIV transmission. The Emergency Plan is thus supporting efforts to improve pregnant women's access to ART.

As noted above, delivering ART to HIV-positive children is also a major challenge, due in large part to the difficulty of infant diagnosis of HIV. The Emergency Plan has launched a major effort to meet and overcome this and other obstacles, and is greatly expanding its pediatric treatment efforts. In 2006, PEPFAR teams reported 14 countries that are in various stages of implementing the PCR-based technology to test dried blood spots to diagnose HIV-1 infections in children under two years of age.<sup>1</sup> This technology involves the use of a small sample of blood from a finger or heel that can then be transported, often days later, to a central laboratory that has the capacity to perform PCR testing. Using this approach, countries such as Botswana and Namibia are establishing a network of health care facilities and public health laboratories that will make more accurate diagnosis and management of pediatric ART available to thousands of children. For more information on pediatric treatment,

see the chapters on Children and Building Capacity: Partnerships for Sustainability.

As noted, ensuring adherence to ART is a critical challenge the Emergency Plan is working to confront. Treatment partners are collecting client-level data to document 95 percent adherence and are reporting cohort data to monitor patient retention. Additionally, information regarding the proportion of patients on second-line therapy is used to monitor program progress. The Emergency Plan also is expanding support for testing for resistance and toxicities in order to adjust treatment, as well as laboratory support for testing to determine when a person needs to begin HIV treatment and to monitor that therapy.

Quality is also being addressed with a number of system-strengthening approaches, including monitoring and evaluating programmatic indicators, on-site supervision, and district, national, and international ART program reviews. Reviews involve international and local experts from a variety of technical backgrounds, including prevention, treatment, care, and laboratory and supply chain management. Review participants work in teams and use a standardized



An adherence counselor at the PEPFAR-supported Binh Thanh Out Patient Clinic in Vietnam shows a patient how to fill and use a pill box to support antiretroviral treatment adherence.

approach to developing consensus facility and program level recommendations for the host government and partners. The Emergency Plan's interagency ART Technical Working Group has guided such efforts, and the information now is being used to improve programs. PEPFAR provides intensive technical assistance to ensure treatment quality, supporting such activities as equipment procure-

### Botswana: Meeting the needs of HIV-exposed infants

By working closely with host governments and partners, the Emergency Plan has provided considerable support for scaling up HIV/AIDS prevention, treatment, and care services for women, children, and families. In Botswana, the national PMTCT program provides routine, "opt-out" HIV testing for all pregnant women, triple ARV therapy for eligible women, long-course AZT and single-dose Nevirapine prophylaxis for all HIV-positive pregnant women, and free infant formula for 12 months for all HIV-positive mothers of newborns. Since the routine HIV testing program was launched in 2004, the program has had very high uptake. In 2006, an estimated 95 percent of pregnant women in Botswana received interventions for PMTCT and an estimated 91 percent of HIV-positive pregnant women received ARV prophylaxis.

Since 2005, PEPFAR has helped the Ministry of Health to begin routine testing of all HIV-exposed infants by performing HIV polymerase chain reaction (PCR) testing on dried blood spots, which are collected at immunization visits at six weeks of age. Use of dried blood spot is an important technological advance, helping to address problems obtaining blood samples from babies, because blood can be taken from a simple heel or toe prick. Perhaps most importantly, the blood samples can be transported to a PCR testing laboratory without the need for refrigeration.

In 2005, the new approach was piloted in Botswana's largest cities – Gaborone and Francistown. Of 1,931 infants tested, seven percent were HIV-infected. However, among infants whose mothers had received all available PMTCT interventions, only four percent were HIV-infected. PCR testing of infants was well-accepted by both staff members and mothers, and more than 90 percent of HIV-exposed infants in Francistown were tested during the first six months of the pilot. In 2006, a national roll-out of infant testing using DBS PCR began.

During 2007, two training teams are visiting every district to provide classroom and practical training in follow-up of HIV-exposed infants. Botswana's national HIV reference laboratory, with support from the Emergency Plan, is performing all infant tests, and expansion to a second laboratory is expected soon. The roll-out is expected to be completed during the first half of 2007, allowing many more infants who are HIV-infected to receive early, life-saving ARV therapy. Additional countries, such as Namibia, are taking similar steps to make prevention, early infant diagnosis, care and treatment available to children and their families.

<sup>1</sup> These countries are Botswana, Cameroon, China, Côte d'Ivoire, Ethiopia, Kenya, Malawi, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Uganda, and Zambia.

ment, review and development of operating procedures, improvement of store management, and management and information systems.

One promising approach to meeting the challenge of reaching HIV-positive people with ART is the formation of public-private partnerships (for additional information, see the Building Capacity: Partnerships for Sustainability chapter). Among these partnerships are workplace efforts, through which PEPFAR is partnering with employers to support ART for employees and their families. In some cases, the Emergency Plan conducts training while the employer procures the ARVs. A number of U.S. Embassies have demonstrated leadership by instituting ART workplace programs for their own employees.

Human capacity constraints remain a serious impediment to ART scale-up, a situation which is exacerbated by the “brain drain” of health workers to developed countries and also by the toll HIV/AIDS has taken on health workers. Administering ART requires training, which the Emergency Plan is working to provide through innovative school and on-the-job methods. Despite the shortage of health workers, some countries are reluctant to expand responsibility for ART administration and monitoring beyond physicians. The Emergency Plan has been working with governments to promote the “network model,” which seeks to allocate highly trained health workers – such as physicians with specialized training – to referral centers where their level of training is essential, while allowing non-physicians trained in ART to administer treatment at field sites. The soaring demand for ART in resource-poor nations and the lack of access to urban centers of excellence require a flexible health workforce, and PEPFAR supports policy initiatives to permit such flexibility and innovative training programs in order to expand available ART-educated personnel. This topic is also discussed further in the chapter on Building Capacity: Partnerships for Sustainability.

The geographic dispersal of PLWHA, with many living in remote rural areas, provides a key challenge in making ART available to those who need it. PEPFAR efforts to reach rural populations include innovative models, as well as the expansion of the network system to community-based health care facilities and outreach to community- and faith-based providers. A home-based care model for delivery of ART is also being used successfully in many settings; in

Nigeria, for example, the community-based Faith Alive program provides home-based care. There are training manuals on home-based care and a network system that links home-based care to services in the area, including pediatric services.

Another key challenge is coordination with other international partners. ARV supply challenges faced by Côte d’Ivoire in 2006 demonstrated the benefit of close cooperation among partners such as PEPFAR, the Global Fund, and the World Bank. There are a number of stakeholders addressing the serious challenges involved in achieving a reliable and sustainable supply chain. In an effort to coordinate scarce resources and remove bureaucratic barriers, the Global Fund, World Bank and Emergency Plan have launched an initiative in six initial countries to identify and remove obstacles and develop a simplified, collaborative approach to supply chain strengthening. Specifically, SCMS will serve as the technical secretariat, and joint missions are planned for early 2007. The Emergency Plan has supported nations that have moved to country-level, unified procurement and distribution systems, such as Rwanda. For more information on collaboration with multilateral organizations, see the chapter on Strengthening Multilateral Action.

### **Accountability: Reporting on the Components of Treatment**

As discussed earlier, PEPFAR works closely with countries to maximize both downstream and upstream support where partnership limitations or technical, material or financial constraints require it. The Emergency Plan, either alone or in concert with another partner, may support every aspect of the complete package of prevention, treatment, or care services at a specific public or private delivery site, in coordination with host country national strategies.

Upstream support is vital to creating sustainable national systems. In Botswana, for example, the government has led an aggressive and highly successful multi-sectoral response with its own resources and significant downstream contributions from the private sector through the African Comprehensive HIV/AIDS Partnerships (funded by the Bill & Melinda Gates Foundation and the Merck Company Foundation). The USG has provided significant contributions to the development and implementation of national systems for training, quality assurance, and guidelines applied to clinical delivery of ART, HIV laboratory,

and monitoring and evaluation of the ART program. These contributions strengthen the overall success of Botswana's national strategy.

This report covers patients who are receiving upstream and downstream Emergency Plan support. The complexities of both forms of support highlight the vital importance of implementing the "Three Ones" agreement (see the chapter on Strengthening Multilateral Action). In working with major partners, including the Global Fund, WHO, and UNAIDS, the Emergency Plan is coordinating its monitoring and evaluation efforts and reporting criteria to develop consistent methodologies to determine the number and attribution of patients receiving treatment through upstream and downstream support from multiple organizations.

***Attribution Challenges Due to Country-Level Collaboration.*** The Emergency Plan supports national HIV/AIDS treatment strategies, leveraging resources in coordination with host country organizations and other international partners to ensure a comprehensive response. Host nations must lead a multi-sectoral national strategy for HIV/AIDS for an effective and sustainable response. International partners must ensure that interventions are in concert with host government national strategies, responsive to host country needs, and coordinated with both host governments and other partners. Stand-alone service sites managed by individual international partners are not desirable or sustainable. In such an environment, attribution is complex, including both upstream and downstream activities, often with multiple partners supporting the same sites to maximize comparative advantages. PEPFAR is conducting audits of its current reporting system to refine methodologies for the future, and continues to assess attribution and reporting methodologies in collaboration with other partners. PEPFAR is conducting audits of its current reporting system to refine methodologies for the future, and continues to assess attribution and reporting methodologies in collaboration with other major partners. PEPFAR and its partners have developed the Monitoring and Evaluation Systems Strengthening Tool, which established guidance to refine methodologies for the improvement of treatment and other indicator data quality. For further information, see the Improving Accountability and Programming chapter.

***Treatment Reporting Conventions.*** During this reporting period, to account for Emergency Plan treatment program-



The Topologo Freedom Park Clinic in Rustenburg, South Africa provides patients routine check-ups with a physician, support groups, and antiretroviral treatment.

ming, in-country partners counted those activities that supported ART provision, including training, the provision of ARV drugs, clinical monitoring of ART for people with advanced HIV infection, related laboratory services, infrastructure support, and other activities described above. Where downstream service delivery sites were directly supported by USG funding, distinct individuals receiving services at those sites were counted. Support to a specific site may or may not be in partnership with other funders of HIV prevention, treatment, and care. For example, the USG may fund the clinical staff delivering ARV treatment, while Global Fund monies support the pharmaceuticals used in the clinic. For support to national treatment programs provided upstream (for which funding is not directly given to a specific service delivery site or program), the Emergency Plan estimated, in conjunction with other partners and national governments, the number of individuals receiving treatment or care supported by the USG's contribution to national, regional, or local activities.

***Reporting by Gender and Age.*** The Emergency Plan requirement that ART service sites report on the gender and adult/child status of those served, in order to ensure that ART activities are reaching women and children, became mandatory for all partners in fiscal year 2006. The Emergency Plan also recognizes the importance of monitoring and evaluating services for pregnant women living with HIV who require ARVs. Helping women to access ARVs is critical not only for the health of the mother and unborn child but also to help prevent HIV transmission. However, many programs are reluctant to place pregnant women on life-saving ARVs. The Emergency Plan, through training

and technical support, has placed an increased emphasis on ensuring that all HIV-positive pregnant women are screened and receive appropriate ART. Although it is very challenging to monitor pregnancy among women receiving care, Emergency Plan resources now are being used to support the development and implementation of information systems that can track our efforts in this vital area.



Two new motorcycles were presented to the Tanzania Red Cross Society to aid health care workers administering home-based care.

“The Emergency Plan is the single largest international initiative by any country for any disease, and we’re making progress each step along the way; one more orphan, one more patient is taken care of or treated, and one more person can live with the disease.”

Secretary of State Condoleezza Rice  
Remarks at the Swearing-in of the  
U.S. Global AIDS Coordinator  
October 10, 2006

## Chapter 3

# Critical Intervention in the Focus Countries: Care

### Care Summary

#### Five-Year Goal in the 15 Focus Countries

Support care for 10 million people infected and affected by HIV/AIDS, including orphans and vulnerable children.

#### Progress Achieved by September 30, 2006

- Care for more than two million orphans and vulnerable children.
- Care for more than 2.4 million people living with HIV/AIDS, including over 301,000 who received treatment and care for tuberculosis.
- Supported over 18.6 million counseling and testing sessions to date, including over 9.2 million in fiscal year 2006, through prevention of mother-to-child transmission and other counseling and testing activities.
- Supported training or retraining of approximately 143,000 individuals to care for orphans and vulnerable children in fiscal year 2006.
- Supported training or retraining of nearly 94,000 individuals to care for people living with HIV/AIDS at 8,019 service sites.
- Supported training or retraining of over 66,000 individuals to provide counseling and testing at over 11,300 service sites through prevention of mother-to-child transmission and other counseling and testing activities.

#### Allocation of Resources in Fiscal Year 2006

Approximately \$541 million to support care for orphans and vulnerable children and people living with HIV/AIDS, and for counseling and testing in settings other than prevention of mother-to-child transmission (including approximately \$63 million for pediatric AIDS). This comprises approximately 31 percent of total focus country resources for prevention, treatment, and care when funding for pediatric AIDS is included, and approximately 27 percent excluding pediatric AIDS funding.



The President's Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR) is committed to supporting societies in developing comprehensive responses that address the many impacts of HIV/AIDS. Only responses that address the full range of HIV/AIDS-related challenges will fully enable nations to move from despair to hope.

The focus nations of the Emergency Plan are places in which this need for care is especially great. Approximately half of the more than 39 million people currently living with HIV/AIDS worldwide live in the 15 focus countries of PEPFAR. Of the more than 15 million children orphaned by HIV/AIDS, at least eight million are estimated to live in the focus countries, and many more children are made vulnerable due to the reduced care-taking abilities of their HIV-positive parents. In most of the focus nations, the limited availability of care for those infected or affected by the virus is placing additional stresses on social bonds that already may be severely frayed. Solutions that are of high quality and can be sustained for the long term may be all that protect these societies from unraveling altogether.

Perhaps the most obvious manifestation of HIV/AIDS in many countries is the large number of orphans and vulnerable children (OVCs). Orphans are defined as children under age 18 who have lost a mother, a father, or both, and vulnerable children are those affected by HIV through the illness of a parent or principal caregiver.

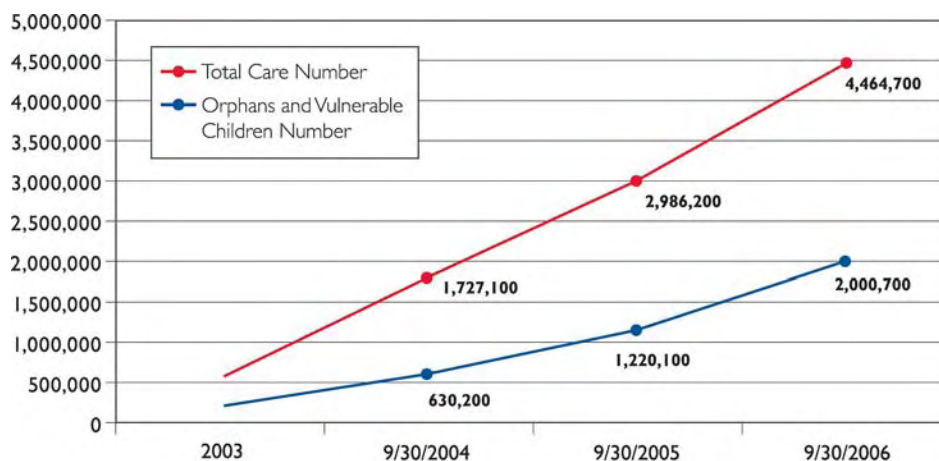
Many communities have traditional, family-based care approaches for children, such as care by grandparents, but even extended family and social structures are being stretched beyond their capacity, overwhelmed by the sheer number of children who are in need of care. Orphans and other vulnerable children are often forced into roles for which they are not yet prepared, and their vulnerability places them at high risk of HIV infection.

Also straining these societies are the large numbers of people living with HIV/AIDS (PLWHA) who are in need of care. Both those not yet in need of antiretroviral treatment (ART) and those receiving it require basic health care, social, spiritual and emotional support, and in some cases, end-of-life care. Again, many communities' current resources for meeting the needs of PLWHA are inadequate for the task.

In many cases, caring for family, friends, and children infected or affected by HIV/AIDS consumes energies and resources needed for survival. Communities may abandon or reject those who need care, creating hopelessness that undermines all efforts to mobilize communities, and even nations, to respond.

A related challenge is increasing the number of people who know their HIV status. In some surveys, only 10 percent of people know their HIV status, yet when asked, most people say that they would like to know. Confidential counseling and testing provide an entry point to treatment and care,

**Figure 3.1: Care: Number of Individuals Receiving Care in the 15 Focus Countries (Orphans and Vulnerable Children + Care for People Living with HIV/AIDS)**



Note: 2003 OVC estimate includes all OVCs in focus countries whether or not affected by AIDS.

as well as a crucial opportunity for prevention education – for those who are infected and their partners, and also for those who are not infected. Unfortunately, counseling and testing remain stigmatized and thus are utilized by far too few people in nations hard-hit by HIV/AIDS.

The Emergency Plan thus works in concert with national strategies in the following areas, which collectively are considered “care” for PEPFAR purposes:

- Support basic needs of OVCs.
- Support care for PLWHA (also known as palliative care).

- Support HIV counseling and testing, especially in settings with people at high risk for having HIV (e.g., tuberculosis clinics).

### Orphans and Vulnerable Children

Because HIV/AIDS predominantly affects people of child-bearing age, its impact on children, extended families, and communities is devastating. If a parent dies of AIDS, the child is three times more likely to die, even though he or she is HIV-negative. Besides increased risk of death, children whose parents have died of AIDS also face stigmatization and rejection, and often suffer from emotional distress, malnutrition, a lack of health care, poor or no access to education, and a lack of love and care. They are also at high risk for labor exploitation, sex trafficking, homelessness, and exposure to HIV. Extended families and communities in highly affected areas often are hard-pressed to care for all the children.

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 infected with HIV might not receive the care and support they require, and may instead become their parents’ caregivers, 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 most fundamental way to meet the needs of vulnerable children is to keep their parents alive and well, thus preventing these children from becoming caretakers or orphans. Treatment and care for PLWHA, supported by the Emergency Plan, often enable parents to resume their role as caregivers, allow children to reclaim their childhood, and protect families. Nonetheless, even with treatment and a reduction in HIV prevalence, the number of orphans will continue to rise in many countries. By 2010, the number of children orphaned by AIDS is projected to exceed 20 million, and the number of other children made vulnerable because of HIV/AIDS is estimated by some to be more than double that number.

The Emergency Plan recognizes the urgency of addressing the growing needs of children orphaned or made vulnerable by HIV/AIDS. PEPFAR is committed to the development of evidence-based policy and the implementation of sound practices in the care and support of orphans and

<b>Table 3.1: Care<sup>1</sup>: FY2006 Progress Toward Emergency Plan Target of 10 Million Individuals Receiving Care (including OVC and care for people living with HIV/AIDS activities)</b>			
<b>Country</b>	<b>Emergency Plan 5-year target</b>	<b>Total number receiving care services<sup>2</sup></b>	<b>Percentage of 5-year target met</b>
Botswana <sup>3</sup>	165,000	149,300	90%
Côte d’Ivoire	385,000	65,200	17%
Ethiopia	1,050,000	484,100	46%
Guyana	9,000	3,800	42%
Haiti	125,000	77,200	62%
Kenya	1,250,000	546,000	44%
Mozambique	550,000	323,400	59%
Namibia	115,000	142,700	124%
Nigeria	1,750,000	234,600	13%
Rwanda	250,000	100,800	40%
South Africa	2,500,000	763,200	31%
Tanzania	750,000	568,800	76%
Uganda	300,000	511,800	171%
Vietnam	110,000	26,200	24%
Zambia	600,000	467,700	78%
<b>Total</b>	<b>10,000,000</b>	<b>4,464,700</b>	<b>45%</b>

**Notes:**  
 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:**  
<sup>1</sup> Care includes the areas of Palliative Care: Basic Health Care & Support; TB/HIV; and Orphans and Vulnerable Children.  
<sup>2</sup> 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, protocol and curriculum development, and those receiving downstream services at U.S. Government-funded service delivery sites.  
<sup>3</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

## PEPFAR-Supported Services Provided to Orphans and Vulnerable Children

- Strengthening the capacity of families to care for OVCs by prolonging the lives of parents and caregivers and by providing therapeutic, economic, psychosocial, and other risk reduction support to OVCs and their families and caregivers.
- Mobilizing and supporting community-based responses to identify, locate, and protect OVCs and provide both immediate and long-term therapeutic and socioeconomic assistance to vulnerable households.
- Ensuring OVC access to core services including education, vocational training, prevention, treatment, care, psychosocial support, targeted food and nutrition, protection, birth registration, legal services, and other resources.
- Supporting efforts by governments to protect the most vulnerable children through improved policy and legislation and by channeling resources to communities, particularly those with disproportionate numbers of OVCs with unmet therapeutic and service needs.
- Raising awareness at all levels through advocacy and social mobilization to create a supportive environment for OVCs and reduce stigma and discrimination.
- Helping OVCs acquire the skills and knowledge to protect themselves from HIV infection.

other children made vulnerable by HIV/AIDS. Our goal is to support these children's and adolescents' growth and development, so they become healthy, stable, and productive members of society.

The Emergency Plan supports varied interventions to enable communities to mobilize their own resources to care for their own children and families affected by HIV/AIDS. 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.

OVC services include caregiver training, access to education, economic support, targeted food and nutritional support, protection and legal aid, medical care, psychological and emotional care, and other social and material support. Please see accompanying text box and the chapter on Children.

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, the Emergency Plan recognizes that 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 services.

## Promoting Comprehensive, High-Quality Care: Reporting as a Tool for Better Care

PEPFAR supports comprehensive, high-quality care for OVCs so that these children may live happy, healthy lives with opportunities for a positive future. The important information gained through PEPFAR's reporting requirements serves to further this goal. Reporting requirements also increase transparency and accountability. Therefore, in 2006, PEPFAR changed its OVC reporting structure, to be implemented for reporting in fiscal year 2007.

**Direct OVC Support:** Direct recipients of support are OVCs who are regularly monitored in the six core areas (food/nutrition, shelter and care, protection, health care, psychosocial support, and education) and whose individual needs are addressed accordingly. Economic strengthening should be evaluated according to its benefit to the six core areas.

- *Primary Direct Support:* OVCs in this category are periodically monitored in all six core areas and receive PEPFAR-funded or -leveraged support during the relevant reporting period, in three or more areas that are appropriate for that child's needs and context.
- *Supplemental Direct Support:* OVCs in this category are periodically monitored in all six core areas and receive PEPFAR-funded or -leveraged support during the relevant reporting period, in one or two areas that are appropriate for that child's needs and context.

The total number of OVCs receiving direct support in a country is the sum of those receiving primary and supplemental support.

**Indirect OVC Support:** Indirect recipients of support are OVCs who are not individually monitored but who collectively benefit from national- or district-level system-strengthening or other interventions. For example:

- OVCs benefiting from a policy change or improved system (e.g., birth registration, inheritance laws, educational system).
- OVCs benefiting from the training of, or support for, caregivers.

**Table 3.2: Care: FY2006 Orphans and Vulnerable Children<sup>1</sup> Results**

Country	Number of OVCs receiving upstream systems-strengthening support <sup>2</sup>	Number of OVCs receiving downstream site-specific support <sup>3</sup>	Total
Botswana <sup>4</sup>	58,800	0	58,800
Côte d'Ivoire	0	22,600	22,600
Ethiopia	0	173,300	173,300
Guyana <sup>5</sup>	0	800	800
Haiti	0	20,000	20,000
Kenya	0	239,600	239,600
Mozambique	0	147,500	147,500
Namibia	51,000	37,700	88,700
Nigeria	1,100	21,200	22,300
Rwanda	14,700	28,700	43,400
South Africa	141,900	107,000	248,900
Tanzania	250,000	145,300	395,300
Uganda	83,100	138,800	221,900
Vietnam	0	2,000	2,000
Zambia	53,800	261,800	315,600
<b>Total</b>	<b>654,400</b>	<b>1,346,300</b>	<b>2,000,700</b>

**Notes:**

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:**

- <sup>1</sup> Orphans and vulnerable children activities are aimed at improving the lives of children and families directly affected by AIDS-related morbidity and/or mortality.
- <sup>2</sup> 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, and protocol and curriculum development.
- <sup>3</sup> Number of individuals reached through downstream site-specific support includes those receiving services at U.S. Government-funded service delivery sites.
- <sup>4</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.
- <sup>5</sup> In Guyana, there was a decrease in the reported number of OVC served in FY2006 as compared to FY2005 due to increased reporting compliance with final OVC Guidance and the OGAC SI indicator definitions; implementing agencies adhere more strictly now to reporting only the number of OVC who received services over a period of time (as opposed and OVC who received services on only one occasion). Additionally, the reporting system utilized by implementing agencies providing OVC services was standardized in FY2006, leading to an increase in data quality and ability to verify numbers reported.

**Results: Rapid Scale-Up**

In fiscal year 2006, Emergency Plan funding for treatment and care services for OVCs totaled more than \$213 million in the focus countries (including approximately \$63 million for pediatric AIDS) – approximately 12 percent of prevention, treatment, and care resources (approximately nine

percent when funding for pediatric AIDS is excluded). PEPFAR-supported activities reached more than two million OVCs during fiscal year 2006. This figure is in addition to OVCs receiving antiretroviral treatment (ART) through USG programs. More than 1,346,00 of the children who received care services were beneficiaries of downstream support at the site of service, while the remainder received upstream support through USG contributions to national, regional, and/or local activities such as training, systems strengthening, and policy and protocol development. Of those receiving downstream support that partners reported by gender, 51 percent were girls and 49 percent were boys.

PEPFAR seeks to support evidence-based, high-quality OVC programs that result in making a measurable difference in the lives of children affected by HIV/AIDS, so that these children can enjoy their childhoods and grow into healthy, productive members of society. In 2006, to increase the effectiveness and expand the reach of PEPFAR-supported OVC programs, PEPFAR’s OVC Technical Working Group (including field staff) developed guidance for OVC programs. The guidance includes principles for program implementation and examples of core services that can be funded by PEPFAR. The guidance emphasizes developmentally based and gender-sensitive programs, along with clear definitions of an OVC and distinctions between OVCs receiving primary and supplemental direct services and those receiving indirect support (please see accompanying text box).

**Sustainability: Building Capacity**

The Emergency Plan seeks to support communities, families, and OVCs themselves in accessing the full range of supportive resources available to them. These resources include those funded by PEPFAR, but must also include those provided by a range of other sources (including other USG programs).

Among the most important potential sources of long-term support for OVC care are national governments. Strengthening citizens’ ability to work with – and, when necessary, demand – effective responses from their governments is a key Emergency Plan strategy for building sustainability in OVC responses.

Further laying the foundation for sustainable responses, the USG supported the training of more than 143,000

**Table 3.3: Care: FY2006 Orphans and Vulnerable Children<sup>1</sup> Capacity-Building Results**

Country	Total number of individuals trained or retrained to provide OVC care
Botswana <sup>2</sup>	1,600
Côte d'Ivoire	400
Ethiopia	12,600
Guyana	15
Haiti	4,400
Kenya	13,600
Mozambique	24,800
Namibia	4,600
Nigeria	2,200
Rwanda	4,900
South Africa	16,100
Tanzania	21,000
Uganda	25,000
Vietnam	400
Zambia	11,700
<b>Total</b>	<b>143,300</b>

**Notes:**

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

Numbers above 100 are rounded to nearest 100.

**Footnotes:**

<sup>1</sup> Orphans and vulnerable children activities are aimed at improving the lives of children and families directly affected by AIDS-related morbidity and/or mortality.

<sup>2</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

community or family caregivers in the focus nations during fiscal year 2006, enabling them to access time- and labor-saving technologies and income-generating activities, and connecting children and families to health and social services, where available.

**Key Challenges and Future Directions**

*Scaling Up Support to Families and Communities*



Isablita Orlando and her daughter Evancia Raimundo, age 10, benefit from HIV treatment and care services, supported by the Emergency Plan in Mozambique.

**Haiti: Integrating OVC and Other Services**

In Fond des Nègres, Haiti, the Bethel Clinic supports a wide range of interventions in children's health and protection, including comprehensive services for orphans and vulnerable children (OVCs). With support from PEPFAR, Bethel Clinic staff and a PEPFAR partner organization have established a successful community-based model for HIV/AIDS treatment and care. The project integrates OVC support services with an antiretroviral treatment program.

In addition to treatment services, OVCs enrolled at the clinic benefit from a wide variety of support activities. Services include support for professional and vocational training fees, and training in subjects such as HIV/AIDS prevention and care, living positively with HIV/AIDS, civic education, health, and hygiene and nutrition.

The Emergency Plan has linked these activities to USAID Food for Peace/Title II support, which provides clients with food rations. At the same time, the program staff works to develop sustainable food sources by actively supporting OVC efforts to develop community gardens. These gardens serve as both a food source and a source of income. Bethel Clinic's integrated program is serving as a model for future projects in Haiti and beyond.

The ideal for orphaned children is usually to remain in family settings within their communities. In hard-hit communities, however, families' capabilities are already stretched to the breaking point by poverty and, in many cases, HIV/AIDS within the family itself. Continued stigma against children and caregiving families makes the ideal situation still more difficult to achieve.

The Emergency Plan thus concentrates its efforts on strengthening families and communities, working with community- and faith-based organizations (CBOs and FBOs) to identify promising models and bring them to scale. For example, in Fond des Nègres, Haiti, Bethel Clinic supports a wide range of interventions in health and child protection, including comprehensive services for OVCs (see accompanying story).

*Quality of Programs for Orphans and Vulnerable Children*

Providing high-quality services that make a measurable difference in the lives of the children is essential in programming for OVCs. One way of supporting quality is by requesting programs to monitor the well-being of a child in

six key areas of his or her life and to provide comprehensive services to address the areas of need. In order to facilitate this monitoring and service provision, new service tracking requirements were established in 2006 that will be implemented for reporting in fiscal year 2007. Coordinating activities with government and civil society partners to determine standards of care for delivering effective and efficient services to OVCs also serves to improve quality in line with national plans of action for OVCs. Harmonized care practices paired with continuous quality improvement will enable programs to achieve measurable results in the lives of children.

### *Addressing the Special Vulnerability of Girls*

As noted in the chapters on Prevention and Gender, adolescent girls in the developing world often face special vulnerability to the HIV/AIDS pandemic and its effects. This vulnerability can be greatly compounded for girls who are orphaned, losing their means of economic and social support and protection. They often bear the burdens of care for families impacted by the disease and become primary care providers. Girls are typically the first to lose access to school, as resources are diverted to provide care for persons in households infected with HIV. Such girls are at high risk of abuse and exploitation, violence, and transactional and cross-generational sex – all pathways to HIV/AIDS infection.

Because of this special vulnerability, the Emergency Plan focuses special attention on female OVCs and their distinctive issues. In Mozambique, a PEPFAR partner developed a plan to boost the income of OVCs and single mothers affected by HIV/AIDS by hiring a dressmaker to train older female orphans and single mothers in dressmaking and other handiwork with a local market. When the local school introduced a school uniforms requirement for the new academic year, the existing income-generating activity was incorporated into the on-site manufacture of the school uniforms, with additional skills training provided with USG support.

### *Working with Other Sectors and Partners for a Multi-Sectoral Approach*

The Emergency Plan recognizes the broad array of challenges facing OVCs and supports a coordinated, holistic approach, with linkages to programs that meet key needs of OVCs in such areas as:

- Care & shelter
- Food
- Education
- Vocational training
- Protection
- Health care
- Emotional support
- Substance abuse prevention and treatment

Like the other aspects of the HIV/AIDS emergency in a given nation, the OVC crisis requires more resources than the USG alone can contribute. The Emergency Plan recognizes that the ability and willingness of host governments to marshal all resources available to them – not only those of outside partners – for an effective response must be fostered. The USG, therefore, is working with host governments, while coordinating with other international partners, the private sector, and communities themselves, to ensure development of sustainable systems that fully recognize and meet the needs of children, including those affected by HIV/AIDS. OVC programs and the OVC technical working group work closely with the United Nations Children’s Fund (UNICEF) in particular, on both the



PEPFAR programs target orphans and vulnerable children with support services. These children from Côte d’Ivoire benefit from educational support through integrated care services.

## Education and HIV/AIDS

For too many children, education has been a casualty of the HIV/AIDS pandemic. Millions of children face enormous obstacles to schooling. In families where one or both parents are chronically ill or have died, there is often little money to pay for school fees and other related expenses. HIV-associated illnesses often increase family health care expenses while inhibiting the ability to earn an income. Children, especially young girls, are often required to care for the sick family members. Additionally, the grief a child experiences in anticipating or seeing their parents die inhibits a child's ability to concentrate on learning, even if they are able to attend school. Many teachers have been infected with HIV, and their illnesses and deaths have forced schools to close and class sizes to explode.

Yet schooling remains an essential element to a robust individual and societal future, and partnerships with the education sector provide important opportunities to fight back against the pandemic. PEPFAR supports programs in schools that offer important prevention education for youth, while also linking with other programs to address difficulties in the educational sector due to HIV/AIDS. Partnerships to ensure that children affected by AIDS have access to education, and that schools are a safe resource center for these children, are also central to the Emergency Plan approach.

The Emergency Plan "wraps around" other organizations that promote access to education for those affected by and infected with HIV/AIDS leveraging a comprehensive response for OVCs. A key example is with the USG's African Education Initiative (AEI), implemented through USAID. The goal of AEI is to improve educational opportunities for Africa's children, so they may lead happier, healthier lives, and become productive members of society.

In June of 2005, President Bush recognized the importance of the AEI by doubling the funding for the initiative. Over the next four years, the United States will provide \$400 million for the AEI to train half-a-million teachers and provide scholarships for 300,000 young people, mostly girls. Many partner programs are already in place with the Emergency Plan and AEI.

An example of effective prevention education in the schools is the Community Health and Nutrition, Gender and Education Support Project (CHANGES-2). Supported by the Emergency Plan and AEI, the CHANGES-2 scholarship program helps to keep nearly 3,500 AIDS-affected orphans and vulnerable children in secondary school and encourages them to play an active role in HIV/AIDS prevention activities.

Ruth, a grade 12 student at Mumbwa High School in Kabwe, Zambia, is one beneficiary of the CHANGES-2 program. When she was younger, Ruth lacked proper care and support at home from her mother, a poor subsistence farmer. Ruth dropped out of school and sought love and comfort in her boyfriend, from whom she contracted HIV.

When she found out that she was HIV-positive, she started antiretroviral treatment. With the life-saving drugs, Ruth regained her health and the willpower to live positively with HIV/AIDS.

Ruth was offered a scholarship from CHANGES-2, which pays for her tuition, books and school uniform. She said, "I want to complete school, become a teacher, and contribute to the nation's development."

country and international levels, to coordinate programs, strategize, and leverage funding.

In many cases, successful programs are those in which the Emergency Plan interventions link or "wrap around" critical support to other sectors. Examples of wraparound programs in the area of education with which the Emergency Plan coordinates support are found in the accompanying text box.

Food insecurity is a critical challenge for children in many countries, and PEPFAR works with other international and USG partners to leverage food and nutrition resources for OVCs. USG high priority target groups for food and nutritional support include OVCs, especially children under the

age of two born to HIV-positive mothers. Support to these groups can include nutritional assessment and counseling, therapeutic and supplementary feeding, replacement feeding and support under acceptable, feasible, affordable, sustainable, and safe conditions, and, where indicated, micronutrient supplementation. For the wider group of OVCs, leveraging nutritional support from other sources is a central focus of PEPFAR efforts. PEPFAR provided guidance to the field on food and nutritional support in May 2006 (*Use of Emergency Plan Funds to Address Food and Nutrition Needs of People Infected and Affected by HIV/AIDS*), and reported to Congress on its activities in this area (*Report to Congress: Food and Nutrition for People Living with HIV/AIDS*). Both documents can be found at <http://www.PEPFAR.gov/progress>.

## Tanzania: A Local Leader in the Fight Against HIV/AIDS

Aisha Ally enjoys her work as a community home-based care supervisor. She has nine clients, whom she visits one to three times per week, depending on their condition. Through her work, Aisha has gained respect and prominence in her community. "People love me because I am saving them," she said.

With support from PEPFAR, the Tutunzane program reaches clients who are unable physically or financially to travel to health facilities. It also serves to ease the burden that HIV/AIDS has placed on the traditional medical infrastructure.

Communities ultimately must take ownership of community home-based care activities for them to be sustainable. Aisha found a way to promote community ownership through her job in the local government. She uses her influence in this position to allocate money to help care for PLWHA. If her clients are too sick or otherwise unable to feed themselves, she makes sure they receive assistance from the local government.

Local people like Aisha are leading the fight against HIV/AIDS in their own nations and communities, buoyed by the generosity and goodwill of the American people.



Aisha Ally is a leader in her Tanzanian community in the fight against HIV/AIDS.

### Care for People Living with HIV/AIDS

For HIV-positive people, the need for care extends throughout the continuum from diagnosis of infection until death. This entire spectrum of care for PLWHA is known as palliative care, under definitions developed by PEPFAR, based on those of the U.S. Department of Health and Human Services (HHS) and the World Health Organization (WHO). In the United States, palliative care sometimes is used in a much more narrow sense, to refer only to end-of-life care. The broader definition used by the Emergency Plan, however, is the one customarily used in Africa and much of the rest of the world.

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. Of the nearly 40 million HIV-positive people living worldwide at present, it is estimated that about 6.8 million currently need ART. Therefore it is critical to establish programs and services for HIV-positive people that address the needs of those not yet on ART. A key aspect of caring for PLWHA who are not yet on ART is ensuring that they receive ART soon after they are eligible. Studies and program reports show that patients who start ART late, often when their immune systems are already severely compromised and they have serious oppor-

tunistic illnesses, do not fare as well as those who start on ART soon after being eligible. In fact, Emergency Plan programs are working hard to enroll PLWHA in care programs that include regular evaluations for ART eligibility – programs that do this have experienced fewer early illnesses and death than other programs.

While the basic health care needs of HIV-positive people and people who are HIV-negative are similar, HIV-positive individuals often require additional care for HIV related symptoms. 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.

In fact, some countries are beginning to standardize their approach and are working with implementing partners to ensure that all HIV-positive people who receive care, even if they are not eligible for ART, receive a “basic preventive care package” that provides a number of these lifesaving interventions (see accompanying text box). These interventions benefit all HIV-positive individuals at every stage of the disease. Moreover, when people receive ART without other needed care, they fail to reap the full clinical benefit of ART. Establishing a basic standard of care allows health



## Adult and Pediatric Basic Preventive Care Packages

As part of a comprehensive approach to Care, the Emergency Plan has supported the development of preventive care packages for HIV-positive adults and children. For adults, preventive services include, but are not necessarily limited to: cotrimoxazole, a broad spectrum antibiotic that reduces the risk of opportunistic infections and mortality; insecticide-treated bed nets to reduce the risk of malaria; commodities needed for point-of-use chlorination to improve water safety and reduce the risk of diarrhea; condoms; prevention counseling for people living with HIV/AIDS; counseling and testing for family members; and screening and treatment for tuberculosis (TB).

Although many of the recommendations for preventive care for adults hold true for children, the clinical, immunologic, and virologic manifestations of HIV/AIDS in children differ from those in adults. Moreover, children are growing, have different metabolisms, and are dependent upon adults. As a result, infants and adolescents have very specific and age-dependent needs. Preventive care for children supported by the Emergency Plan includes early diagnosis, prevention, screening and management of opportunistic infections and water-borne illnesses, and nutritional assessment and support.

The prevention of HIV infection in children and the treatment and care of HIV-infected children are important priorities of the Emergency Plan. Since other health programs support basic health care and basic social services for children, in many cases, the Emergency Plan links delivery of HIV/AIDS care interventions with existing community and health facilities that provide such care, supported by other mechanisms. Emergency Plan programs link, where possible, with other Emergency Plan programs, such as those to prevent mother-to-child HIV transmission, those to serve orphans and vulnerable children, and those to provide home-based care. In addition, USG teams in countries that also are part of the President's Malaria Initiative (PMI) and/or are recipients of grants for the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) work closely to integrate Emergency Plan work with activities funded by these programs.

Emergency Plan teams in countries such as Kenya, Nigeria, Uganda, and Zambia are working with host governments and partners to ensure that PLWHAs have access to a minimum package of care services. In Uganda, for example, the Emergency Plan supports district-wide, community-based counseling and testing for families and a package of preventive services. HIV-positive persons obtain replacement commodities from village health workers in their parish. By September 2006, 80,000 kits with the full package of services had been distributed, making substantial progress toward their goal of providing these services to all HIV-positive Ugandans.

Contents of the Emergency Plan's adult and pediatric preventive care packages may be found at <http://www.PEPFAR.gov>.

## Care Activities for People Living with HIV/AIDS (PLWHA) Supported by the Emergency Plan

- Evaluation of PLWHA eligibility for antiretroviral treatment (ART) is an important component of providing quality care services. Starting ART as soon as a person is eligible is critical in reducing deaths and morbidity from HIV/AIDS. Many Emergency Plan programs enroll or register PLWHA and have regular clinical and laboratory follow-up to be sure that they receive ART when they become eligible; this sort of follow-up also ensures that they can be offered other key care services.
- Clinical services include preventive care for opportunistic infections (OIs) with antibiotic prophylaxis (e.g., cotrimoxazole), insecticide treated bed nets, and interventions to improve the quality of drinking water and hygienic practices; screening for active tuberculosis (TB), treatment and care services related to the treatment of OIs (including TB); pain alleviation and symptom management; nutritional counseling, assessment and rehabilitation for malnourishment; routine clinical monitoring, including evaluating the need for ART; support for ART adherence; and end-of-life care. PEPFAR support includes advocacy for appropriate policies related to antibiotic prophylaxis and pain control.
- Social care supports community mobilization, leadership development for people living with HIV/AIDS, legal services, linkages to food support and income-generating programs, and other activities to strengthen the health and well-being of affected households and communities.
- Psychological services include mental health counseling, family care and support groups, memory books, cultural and age-specific approaches for psychological care, identification and treatment of HIV-related psychiatric illnesses, and bereavement preparedness.
- Spiritual care includes assessment, counseling, facilitating forgiveness, and life completion tasks.

## Exciting Developments in Care for People Living with HIV/AIDS

Among the accomplishments in fiscal year 2006, the Emergency Plan team has worked with the Zambian government for full recognition of the Palliative Care Association of Zambia as a nationally recognized palliative care professional association. Through its leadership, palliative care has evolved from a solely hospice-focused program to a wide-ranging set of preventive, clinical, and supportive care services for PLWHA.

In Ethiopia, the Emergency Plan supports the delivery of elements of the preventive care package for adults, including long-lasting insecticide-treated nets (LLITNs) to prevent malaria in endemic areas, cotrimoxazole prophylaxis, screening for tuberculosis (TB) infection, prevention for positives counseling, condoms, referral of household contacts for confidential counseling and testing, safe water and hygiene support, nutrition counseling, and multivitamin supplementation.

In Rwanda, the Emergency Plan supports palliative care clinical services such as the provision of cotrimoxazole for eligible adults and exposed infants according to national guidelines, referral for CD4 testing, diagnosis and treatment of opportunistic infections (OIs), adherence counseling, clinical monitoring and related laboratory services, nutritional assessment and support, and referrals for community-based care and support services.

In fiscal year 2007, the Emergency Plan will support Rwanda's efforts to implement a preventive care package for children that will include: prevention of serious illnesses like pneumocystis pneumonia, TB and malaria; prevention and treatment of diarrhea; nutrition and micronutrient supplementation; and linkage to national childhood immunization programs.

In Tanzania, with USG support, the National AIDS Control Programme (NACP) has developed national guidelines for palliative care services, a training course and trainer's guide, standardized referral forms, and a simple provider reference guide. The guidelines set out the minimum package for high-quality, facility- and home-based palliative care, including physical care (health care; OI treatment; nursing care; ART monitoring for side effects and adherence; pain/symptom management; nutritional counseling and support; and hygiene), emotional, social, spiritual, legal/economic support; and stigma and discrimination reduction. The guidelines also emphasize prevention; care for caretakers; and effective referral, record-keeping, and reporting systems. In addition, NACP has established a Home-Based Care (HBC) Working Group to ensure that implementing organizations are coordinated and adhere to quality and service standards. Priorities for the future are to support the development of a national palliative care strategy, promote a minimum package of comprehensive high-quality services, strengthen links between health care facilities and home-based care programs, and implement a newly developed accreditation system.

The Emergency Plan in South Africa will work to support the integration of the preventive care package and family-centered services across all treatment and care programs for adults and children living with HIV; and improving integrated supply chain management systems for an uninterrupted stock of essential medications for OI management and pain and symptom control, and HBC kit supplies. The USG's minimum standard of HIV-related services will be adopted and implemented at facility- and community-based sites for HIV-infected adults and children. Many facility-based services are integrated into comprehensive ART programs, providing wellness care for HIV-infected people prior to their eligibility for ART.

care providers to benchmark the quality of services and strive to improve, so that all PLWHA receive high-quality care interventions.

The Emergency Plan focuses on integrating care for PLWHA with treatment and prevention. Prevention is a crucial component of PEPFAR and is important regardless of one's sero-status. Linkages between care for PLWHA and "prevention with positives" programs, further discussed in the chapter on Prevention, support positive living.

For successful implementation of care programs, reliable procurement and distribution of essential commodities are required. In addition to medications for pain and symptom relief and OI management, providers of care need access to items necessary for managing clinical conditions (e.g., drug-

dispensing equipment, gloves, wound-care and mouth-care supplies, and HIV-testing kits). The Emergency Plan works closely with governments and their procurement systems to strengthen timely acquisition and usage of these types of commodities and to increase the effectiveness of care.

Furthermore, there is a need to train health providers and peer educators in the prevention of HIV transmission, the prevention and management of OIs, and the use of program data and reporting to inform and improve the delivery of interventions. Experience in Uganda and elsewhere also supports the development and monitoring of program indicators to benchmark and improve program quality and ensure that PLWHA receive the highest possible standard of care. The Emergency Plan provides support for an inter-

disciplinary, holistic range of palliative care services, listed in the accompanying text box.

### **Results: Rapid Scale-Up**

In fiscal year 2006, the Emergency Plan committed \$198 million for care for PLWHA (consisting of funding for palliative care, including basic health care and support and TB/HIV services; funding for OVCs; and counseling and testing as discussed elsewhere in this chapter) in the focus countries. These resources supported care for nearly 4.5 million people. Approximately 11.3 percent of resources for prevention, treatment, and care activities in the focus countries were devoted to care for PLWHA.

Emergency Plan support is provided for a variety of interventions at different levels within the network model (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.

### **Tuberculosis and HIV/AIDS**

More than 40 percent of HIV-infected people in many areas of the focus nations are co-infected with *Mycobacterium tuberculosis* – a leading cause of illness and death in PLWHA. Of those co-infected, approximately 10 percent per year devel-

op active TB. It is vital to treat people with TB to prevent illness and death, as well as to prevent its spread to others. The Emergency Plan thus supports activities to serve people living with HIV-TB co-infection.

Cohort analyses of patients on highly active antiretroviral therapy (HAART) reveal high rates of prevalent and incident TB (15-30 percent). TB incidence is especially high during the first six months of HAART and is associated with high mortality in HIV-infected patients. Screening for TB as part of the preventive care package for HIV-infected persons is taking place in many places, and the Emergency Plan is working closely with host country partners to expand these efforts.

Given the serious implications of TB/HIV for PLWHA, the Emergency Plan supports governments and non-governmental organizations, including community- and faith-based organizations, which work at the facility level, including hospital wards, to ensure that health care providers screen HIV-infected patients for TB at each encounter. With USG support, host country programs have developed simple symptom-screening tools and recording-and-reporting forms to document screening for TB. When appropriate, health facilities are responsible for ensuring the proper diagnosis and management of TB according to WHO-recommended Directly Observed Therapy, Short Course (DOTS) strategy and national TB program guidelines. Because TB is so common among PLWHA, the Emergency

### **A TB/HIV Partnership with Kenya**

The Emergency Plan, through its support for the Ministry of Health and other partners, has played an important role in efforts to address Kenya's serious TB/HIV problem. Kenya launched Guidelines for HIV counseling and testing in clinical settings in October 2004. In November 2004, the national TB/HIV steering committee was launched to coordinate implementation of TB/HIV collaborative activities. TB/HIV guidelines were adopted in the country in September 2005, followed by the development of TB/HIV training curricula and revision of data collection tools. In addition, tools to facilitate referrals between TB and HIV services were developed, pre-tested, and printed. The training materials, data collection tools and referral forms were widely disseminated to all sites where TB and HIV patients access treatment and care. Steering committees have been formed at all levels - national, provincial, and district-level committees are involved in implementation of TB/HIV activities.

HIV counseling and testing in TB patients began in Kenya in the second quarter of 2005 in the context of Diagnostic Testing and Counseling (DTC). Within nine months almost all government health units providing tuberculosis treatment offered HIV testing, and 42 percent (28,227) of all newly recruited TB patients in the country had been tested for HIV. Of these, 56 percent (15,877) turned out to have HIV infection. For these patients, lifesaving antibiotic treatment with cotrimoxazole, recommended by the World Health Organization (WHO) for HIV-associated tuberculosis, was made available. In addition, 30 percent of tuberculosis patients with HIV have started on ART, making a considerable contribution toward access for HIV diagnosis and treatment.

In early 2005, the Emergency Plan and WHO renewed their commitment to work together to confront the HIV/AIDS pandemic. During discussions, TB/HIV was highlighted as an important potential area for focused activities. The Emergency Plan is working with WHO to complement the ongoing country-level TB/HIV activities in 15 districts that do not have international support for TB/HIV activities. The primary objectives of this proposal are to: 1) scale up district TB control for TB patients and provide care and support for HIV infected TB patients; and 2) enhance TB case finding among PLWHAs and access to TB services as needed.

PEPFAR will work with WHO, the Government of Kenya, and civil society to promote DTC for all TB patients and TB screening for PLWHA, thus expanding access to HIV care and prevention.

Plan also supports screening of HIV-infected persons in settings outside of health care facilities, such as in their homes through home-based care programs.

The Emergency Plan is working with host governments and technical partners such as WHO to increase TB patients' access to HIV testing and other HIV/AIDS services. At present, TB patients in many places are referred to voluntary counseling and testing centers that are physically separate from their TB clinics, while elsewhere HIV testing is available in the TB clinic. The percentage of TB patients who

undergo HIV testing varies accordingly. For example, in An Giang province in Vietnam 100 percent of TB patients undergo HIV testing, while in Western province of Zambia only about 50 percent of TB patients undergo HIV testing.

In many countries, including Botswana, Ethiopia, Kenya, Rwanda, and Tanzania, the Emergency Plan is thus working with partners to support expansion of provider-initiated HIV counseling and testing among TB patients. The results are impressive. Recent data from Botswana's National TB program suggest that 68 percent of registered

## Malaria and HIV/AIDS

In sub-Saharan Africa, malaria and HIV co-infection is common. Even modest interactions between malaria and HIV infections can have substantial public health impact. HIV may increase the risk of clinical malaria for both adults and children; it may increase the likelihood of severe disease, particularly in areas of unstable malaria transmission; and it increases the risk of adverse outcomes of malaria in pregnancy. There is also some evidence regarding the impact of malaria on the risk of HIV transmission.

Clinical malaria can be prevented by reducing exposure to infected mosquitoes with indoor residual spraying, insecticide-treated nets, or intermittent preventive treatment with two doses of sulfadoxine-pyrimethamine (SP) during pregnancy. Cotrimoxazole, which is a commonly prescribed medication for people with HIV, also serves as a malaria prophylaxis, and is especially valuable for this purpose in areas where resistance to sulfa drugs is common. Pregnant women with HIV require additional doses of intermittent preventive therapy to achieve the same health benefits seen in women without HIV. Whether cotrimoxazole prevents the morbidity associated with placental malaria is unknown, but WHO does not recommend SP-based therapy for HIV-infected women who are receiving cotrimoxazole prophylaxis for opportunistic infections.

WHO recommends that all countries adopt artemisinin-based combination therapy (ACT) for first-line treatment of malaria. ACT rapidly reduces parasite density in the blood and controls fever, and the drugs have essentially no serious or life-threatening adverse drug reactions (even mild side effects are uncommon). In addition, these drugs offer the potential of reducing the rate of transmission, as they are active against the stages of the malaria parasite, which are transmitted to mosquitoes.

Patients with HIV infection are more likely to have symptomatic malaria infections, and co-infection with HIV and malaria increases both the severity of illness and the risk of anemia. Treatment of malaria in people with HIV may be complicated by drug resistance, particularly if malaria occurs despite cotrimoxazole, and there is some evidence that advanced HIV is a risk factor for malaria treatment failure. For these reasons, accurate diagnosis and prompt therapy with a highly-effective antimalarial drug regimen, preferably ACT, is recommended.

Because of high prevalence and substantial geographic overlap of both diseases, there is a compelling need for HIV/AIDS and malaria programs to interface in the field. Coordination is needed in order to: avoid duplication of efforts; capitalize on opportunities to reach populations at risk of both diseases with essential interventions; and ensure that there is efficient use of resources, commodities, and personnel.

The Presidential Malaria Initiative (PMI) and PEPFAR are both five-year programs that focus on expanded efforts to reduce the burden of malaria and HIV/AIDS, respectively. PMI is a \$1.2 billion program that aims to achieve a 50 percent reduction in malaria-related mortality in its focus countries. It seeks to do so by rapidly scaling up insecticide-treated net coverage among pregnant women and children under five to 85 percent; ensuring prompt access to effective treatment, especially ACT; increasing the use of indoor residual spraying; and increasing the coverage of pregnant women with intermittent preventive treatment to 85 percent. Over the next three years, PMI will add eight additional countries to its current focus countries (Angola, Benin, Ethiopia, Ghana, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Rwanda, Senegal, Tanzania, Uganda, and Zambia), and it will seek to serve 175 million people.

PMI target groups include those who bear the major burden of malaria in sub-Saharan Africa - children under five (a priority group), pregnant women, and to a lesser extent people living with HIV/AIDS (PLWHA). PEPFAR targets a broad cross-section of people, as the goals of the program are to not only provide treatment and care for PLWHA, but also to prevent new infections and provide care to orphans and vulnerable children. Recent data suggests that a combination of interventions, including the provision of nets, cotrimoxazole and ART, contributes to a greater reduction in the risk of malaria among PLWHA than each of the individual interventions alone.

PMI and PEPFAR will continue to work together to support host countries in their efforts to confront HIV and malaria.

## Collaboration to Address TB/HIV in Rwanda

In early 2005, the Emergency Plan and WHO renewed their commitment to work together to confront the HIV/AIDS pandemic, and TB/HIV was highlighted as a potential area for focused activities. As part of ongoing USG and WHO collaboration with the Government of Rwanda (GoR), the Emergency Plan is working with WHO to complement the ongoing country-level TB/HIV activities supported by the USG and the Global Fund.

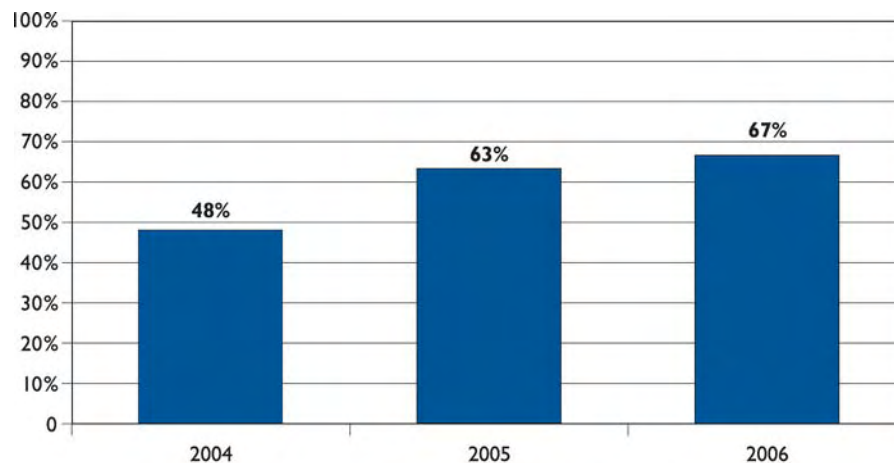
The collaborative project will build on significant successes integrating TB and HIV care in Rwanda. For example, the GoR has led efforts to identify and address the extent of TB/HIV co-infection, and innovative approaches to the identification of HIV infections in TB patients and the adoption of feasible methods to screen for TB in HIV-infected patients has led to a 50 percent increase in HIV testing of TB patients and successful initiation of appropriate HIV care. According to a GoR epidemiological report, 48 percent of the 6,167 total registered TB patients in 2004 were tested for HIV, and, of those, 1,429 (48 percent) were found to be HIV-positive. Records for Quarters 1 and 2 in 2005 and 2006 show an increase in HIV testing among registered TB patients, to 63 and 67 percent, respectively, as illustrated in figure 3.2. Additionally, preliminary reports suggest that in Quarter 3 of 2006, 81 percent of all patients were tested for HIV. As part of a comprehensive treatment and care approach, 49 percent received cotrimoxazole and 34 percent received ART.

Over the two-year project period, the new WHO-USG TB/HIV collaboration will contribute to achieving the following measurable goals by September 2007:

- 100 percent of Centres Diagnostic and Treatment (CDT) and ART clinics per district staff will be trained on provider-initiated HIV testing (PIT), cotrimoxazole preventive therapy (CPT) and TB screening.
- 75 percent of registered TB cases in each district each quarter will be tested for HIV.
- 80 percent of HIV-infected TB patients registered in each district each quarter will receive CPT.
- 40 percent of HIV-infected TB patients registered in each district each quarter will be referred to ART clinics and receive ART.
- 80 percent of PLWHA will be screened for TB.

WHO will leverage its comparative advantage in catalyzing change, supporting and mobilizing health ministries and authorities, and convening and coordinating national and local partnerships. This will support all partners in achieving the goal of testing all TB patients for HIV, ensuring their access to HIV care and prevention, and identifying and ensuring TB treatment for PLWHA found to have TB. As part of this collaborative project, WHO's country-based technical staff will continue to work closely with the USG country team, technical advisors and the GoR to prepare and implement a work plan focused on achieving measurable results.

**Figure 3.2: Care: Percentage of TB patients tested for HIV in Rwanda**



Note: 2004 represents data from the completed treatment cohort; 2005 and 2006 represent half-year results.



Shadrack and his family discovered the promise of partnerships in fighting HIV/AIDS.

### South Africa: Good Shepherd Hospice Gives Hope to a Young Family

Shadrack Lelani is a 31-year-old husband and father of a three-year-old daughter. Shadrack and his family live in a small, rural community in South Africa's Eastern Cape province. In 2004, Shadrack contracted tuberculosis and learned that he was HIV-positive. "I did not even feel sick at the time," he recalled.

Thankfully, the PEPFAR-supported Good Shepherd Hospice was able to provide Shadrack with tuberculosis medication. His cough improved, but soon he fell ill and began to lose weight.

In May 2006, Shadrack returned to the Hospice for life-saving antiretroviral treatment. Today he reports: "I have picked up some weight. It has really helped me." Like many people living with HIV/AIDS in the community, Shadrack is visited regularly by Hospice staff and his home-based caregiver, Sylvia. Sylvia lives a couple of streets away and visits Shadrack every week. Shadrack considers the Good Shepherd Hospice staff very supportive: "They are good to me and have helped me a lot."

The hospice also provides Shadrack's family with a food parcel every two weeks and hospice staff members helped him access a disability grant from the South African government. The antiretroviral medication and care packages – and the community's love and support – have given Shadrack and his family hope for a brighter future.

TB patients undergo HIV testing. In districts with provider-initiated HIV counseling and testing in Tanzania, more than 80 percent of TB patients accept testing and learn their HIV status. Other Emergency Plan countries are also

moving toward provider-initiated HIV counseling and testing. Emergency Plan support for efforts to increase HIV testing among TB patients translates into increasing numbers of HIV-infected TB patients being linked to prevention programs and HIV treatment and care.

For TB/HIV co-infected patients, there is a critical need to ensure adequate treatment and care for both diseases. Linking suspected TB patients who have been identified through screening to TB diagnosis and treatment, and maintaining HIV-infected TB patients on both TB treatment and HIV treatment and care, are major challenges. Some countries, including Kenya and Mozambique, are exploring ways to provide DOTS TB treatment in HIV clinics or cotrimoxazole at TB sites, to facilitate simultaneous care for TB/HIV co-infected patients. Other countries, such as Tanzania, are initiating provision of ARVs in TB clinics; this requires a strong national TB program. Others, such as Côte d'Ivoire, whose ART programs are decentralizing, are trying to co-locate TB and HIV care in the same facilities. Regardless of the location of care, the Emergency Plan and its partners are increasing support for efforts to control TB infection in health care facilities.

The Emergency Plan supported TB treatment and care for approximately 301,000 co-infected people in focus countries during fiscal year 2006. Given the high prevalence of TB among PLWHA both before and after starting treatment, the priority is support for the diagnosis and treatment of active TB using DOTS principles, with support also provided for diagnosis and treatment of latent TB infection to prevent the development of active disease. Another important priority is ensuring that all TB patients receive confidential HIV counseling and testing and are provided access to HIV prevention and, if necessary, treatment and care. In most focus countries, the Emergency Plan also supports the development of a strong, tiered public health laboratory network for diagnosing and managing OIs such as TB. Laboratories will be especially important as countries increase their efforts to diagnose and manage drug-resistant TB, particularly extensively drug-resistant TB (XDR TB), which is resistant to many of the essential TB medicines. Of all adults and children who received TB treatment and care with PEPFAR support, 139,000 received it at USG-supported delivery sites, while the remainder received support through contributions to national, regional, and local programs.

**Table 3.4: Care: FY2006 Palliative Care<sup>1</sup> Results**

Country	Number of HIV-infected individuals who received palliative care/basic health care and support (including TB/HIV)			Number of HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (subset of all palliative care)		
	Number receiving upstream systems-strengthening support <sup>2</sup>	Number receiving downstream site-specific support <sup>3</sup>	Total	Number receiving upstream systems-strengthening support <sup>2</sup>	Number receiving downstream site-specific support <sup>3</sup>	Total
Botswana <sup>4</sup>	90,500	0	90,500	5,900	0	5,900
Côte d'Ivoire	0	42,600	42,600	0	1,500	1,500
Ethiopia <sup>5</sup>	0	310,800	310,800	0	11,000	11,000
Guyana	0	2,900	2,900	0	300	300
Haiti	2,500	54,700	57,200	0	1,000	1,000
Kenya <sup>6</sup>	0	306,400	306,400	0	59,800	59,800
Mozambique <sup>7</sup>	67,600	108,300	175,900	0	1,700	1,700
Namibia <sup>6</sup>	7,700	46,300	54,000	0	3,000	3,000
Nigeria <sup>6</sup>	1,600	210,700	212,300	300	6,200	6,500
Rwanda	17,100	40,300	57,400	1,800	600	2,400
South Africa	62,400	451,900	514,300	148,000	28,800	176,800
Tanzania <sup>8</sup>	75,000	98,500	173,500	0	6,200	6,200
Uganda	37,800	252,100	289,900	6,600	14,600	21,200
Vietnam	0	24,200	24,200	0	1,600	1,600
Zambia <sup>9</sup>	0	152,100	152,100	0	2,700	2,700
<b>Total</b>	<b>362,200</b>	<b>2,101,800</b>	<b>2,464,000</b>	<b>162,600</b>	<b>139,000</b>	<b>301,600</b>

**Notes:**

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:**

<sup>1</sup> Palliative Care 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.

<sup>2</sup> 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, and protocol and curriculum development.

<sup>3</sup> Number of individuals reached through downstream site-specific support includes those receiving services at U.S. Government-funded service delivery sites.

<sup>4</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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. 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.

<sup>5</sup> In Ethiopia the reported number of HIV-infected clients receiving care/treatment for TB disease dropped by 67 percent compared to the previous year's report. This was primarily due to underreporting. Last year partners were able to collect information directly from the delivery sites. This year National numbers are reported directly by the MoH and the USG team reports that these numbers are greatly underestimated. The team is currently working with the MoH and other USG partners to collect the unreported information and improve the reporting mechanism.

<sup>6</sup> Introduction of data quality measures in 2006 resulted in reduced number of people reported as receiving TB treatment in 2006 compared to 2005.

<sup>7</sup> In Mozambique, persons receiving upstream HIV care are likely undercounted. Reasons for this include, 1) Home-based Care (HBC) data are incomplete or missing for months or for smaller non-USG HBC providers; 2) MoH lacks staff to collect and ensure data quality for HBC; 3) Clinical care data are generated from ARV reports from day clinics and this number does not include persons receiving HIV care outside of day clinics. The USG recognizes that some overcounting may occur due to duplicated counts for persons in clinical care that are also receiving home-based care. Despite this, we believe that the number of persons not counted in care services is greater than the number of persons included incorrectly.

<sup>8</sup> Tanzania noted significant increases in the number of HIV-infected clients receiving treatment for TB disease due to improvements in both referrals systems and monitoring tools.

<sup>9</sup> In Zambia, the number of HIV-infected clients receiving care/treatment for TB disease dropped by 88 percent compared to the previous year's report. The drop is due to a change in how this indicator is reported. The mission no longer counts home-based care clients receiving DOTS at the community level. Currently, only clients receiving TB treatment at the facility level are included due to reliability of data.

For example, the Emergency Plan has made a major commitment to support the Government of Rwanda's (GoR) national efforts to address TB/HIV. The Emergency Plan has provided technical and financial support, assistance with national implementation guidelines, and training of health care workers. In fiscal year 2006, the USG supported central-level coordination through a national TB/HIV technical advisor and program coordinators at the Programme National Intégré de lutte contre la Lèpre et la Tuberculose (PNILT) and the Treatment and Research AIDS Center (TRAC). The PNILT technical manual has been revised to include a chapter on TB/HIV, and the national TB register and treatment cards have been updated

to include HIV-related information. A paper-based HIV register was developed that includes information on screening for active TB disease and will be distributed for use at all HIV treatment and care sites. In fiscal year 2007, the USG plans to support implementation of recently developed national guidelines to achieve the goal of testing all TB patients for HIV as part of routine care and providing referral and access to HIV treatment and care. Priority will be placed on regular evaluation of HIV-infected patients for TB, using a recently developed WHO TB screening tool to quickly identify and ensure appropriate and timely TB treatment. For more information on PEPFAR's TB/HIV efforts in Rwanda, see the accompanying text box.

**Table 3.5: Care: FY2006 Palliative Care<sup>1</sup> Capacity-Building Results**

Country	Number of USG-supported service outlets or programs providing palliative care	Total number of individuals trained or retrained to provide palliative care
Botswana <sup>2</sup>	718	4,200
Côte d'Ivoire	118	700
Ethiopia	455	6,300
Guyana	19	500
Haiti	39	800
Kenya	2,369	5,500
Mozambique	44	1,400
Namibia	333	4,200
Nigeria	94	3,700
Rwanda	190	5,700
South Africa	2,268	21,300
Tanzania	173	10,500
Uganda	561	16,400
Vietnam	163	2,600
Zambia	475	10,100
<b>Total</b>	<b>8,019</b>	<b>93,900</b>

**Notes:**

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

Among individuals trained, numbers above 100 are rounded to nearest 100. Number of sites is not rounded.

**Footnotes:**

<sup>1</sup> Palliative Care 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.

<sup>2</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

**Sustainability: Building Capacity**

The Emergency Plan focuses on supporting the expansion of networks of health care providers and linking them to home-based care programs, in order to support sustainable care for people living with HIV/AIDS. PEPFAR efforts focus on building the capacity of community- and faith-based groups, which have played a leading role in home-based care in many countries. USG in-country teams have found that even small grants can be very empowering for these grassroots organizations, allowing them to expand their services and advocate for increased community and national commitment to people living with HIV/AIDS.

Building the capacity of networks of PLWHA to provide care and leadership is another key element of PEPFAR's work in this area. The involvement of these networks in palliative care helps build sustainable systems that respond fully to the challenges PLWHA face.

Recognizing the long-term importance of appropriate national policies in regard to care for people living with HIV/AIDS, the Emergency Plan has supported policy development initiatives. Another focus is strengthening referral systems to medical care for PLWHA.

USG support was provided for training of close to 94,000 palliative care providers in the focus countries in fiscal year 2006, while 8,019 sites received support for personnel, infrastructure development, logistics, strategic information services, and other components of high-quality care.

**Key Challenges and Future Directions**

**Human Capacity.** As in other areas of HIV/AIDS response, inadequate human capacity remains a major challenge to



ensuring quality of care for PLWHA, with nurses and other health care providers in desperately short supply in many nations.

For lay workers and volunteers who provide palliative care as well as professional health care workers, there is a need to expand and improve training, and strengthened supervision systems and appropriate incentives are essential. With PEPFAR support, South Africa's Hospice Palliative Care Association was able to strengthen its financial and technical capacity, increasing its ability to provide high-quality outreach and services to people living with HIV/AIDS. To expand this initiative throughout the region, PEPFAR also has supported the African Palliative Care Association.

To ensure quality, the Emergency Plan supports efforts to strengthen supervision of lay workers by health professionals, where possible. Initiatives to provide incentives to volunteers, including remuneration, also receive support, which strengthens the care networks. Key training programs include pre-service training for future health care professionals and in-service training for current health workers.

**Addressing Key Policies That Limit Care.** National policies in some countries prevent health aides, including nurses, from engaging in key activities for care of PLWHA. Given the centrality of nurses to provision of care in the developing world, it is essential that nurses become HIV experts who may develop capabilities to provide medication. In collaborative efforts with host governments, advanced practice nursing is a priority for Emergency Plan policy development efforts.

Opioids, which may be one element of such care, and can be essential for pain relief, are often not registered by national governments for pain relief for AIDS patients. Working with host governments, PEPFAR continues to offer strong support to efforts to improve end-of-life care policies as well as programs.

Also critical is the dissemination of "basic preventive care packages" developed by the Emergency Plan under National Strategies, offering services such as medications to prevent OIs, insecticide-treated nets to prevent malaria, and clean drinking water. The effort to establish a high standard of care for PLWHA includes support for the development of basic program monitoring indicators, sup-

portive supervision to provide on-site guidance and mentoring, and monitoring and evaluation to measure the impact of the new care services.

**Addressing Burden on Women and Girls.** The burden of caregiving for PLWHA falls disproportionately on women and girls, exacting an emotional, physical, and financial toll on a group of people who have limited access to resources. The Emergency Plan thus supports efforts to make comprehensive, high-quality care available at the community level, with links to broader health networks. These initiatives augment policy advocacy on behalf of women and community outreach to involve men in caregiving, thus reducing the burdens on women and girls. For example, countries such as Uganda and Zambia have established programs that provide legal protection and education for women and orphans at the community level, focusing on issues such as inheritance rights.

**Food and Nutrition.** The Emergency Plan's interagency technical working group on food and nutrition includes OGAC, U.S. Agency for International Development (USAID), HHS, and the U.S. Department of Agriculture (USDA). As discussed above, this interagency group has developed guidance on food and nutrition for incorporation into the care activities of USG teams in the field. The guidance clarifies circumstances under which the Emergency Plan supports appropriate assessment, monitoring, and counseling regarding the nutritional needs of PLWHA.

Emergency Plan teams work to leverage food and nutrition resources from other USG sources, such as USAID's Title II program and USDA's Food for Progress program, among others. In addition, the Emergency Plan seeks to leverage food from other sources, including the World Food Program and the private sector. The Emergency Plan will also expand collaboration with host governments as they increase their efforts to provide for their own populations.

**Community Support for Care, Including Involvement of People Living with HIV/AIDS.** The Emergency Plan strongly supports efforts to include PLWHA in the provision of care, which not only helps to address the human capacity shortfall in developing countries, but also ensures that care activities are conducted in ways that respond to the needs of PLWHA. USG country teams are reaching out to groups of PLWHA, including them in the design and implementa-

tion of care programs, and providing funding for a growing number of support groups in all focus country programs. PEPFAR also supports associations that reach out to the most highly stigmatized individuals, such as men who have sex with men and injecting drug users. In Kenya, faith-based organization (FBO) leaders who are living with HIV provide outreach to members of the faith community to help reduce stigma, while providing education and a system of support. In addition, PEPFAR is supporting a variety of efforts to support communities as they confront the challenge of providing care and support. As part of these efforts to engage the community, many countries have pioneered the provision of home-based care. In Uganda, a family-centered approach serves as the foundation for home-based HIV testing for entire families, with linkages to treatment and care services. More than 90 percent of all family members who participate in this program accept confidential testing in the privacy of their home.

#### ***Secure and Reliable Supply Chain for Drugs and Commodities.***

As with antiretroviral drugs, a consistent and secure supply chain for commodities and medications is necessary for high-quality palliative care. The Supply Chain Management System, described in the chapter on Building Capacity: Partnerships for Sustainability, is working to ensure the quality of these items.

#### **HIV Counseling and Testing**

The Emergency Plan has led the way in supporting the expansion of access to HIV/AIDS prevention, treatment, and care in the developing world. Knowledge of HIV status is increasingly recognized as essential for all persons living in high-prevalence countries, both for access to treatment and care and so that individuals and couples can make informed decisions and choices about HIV prevention strategies. Technological advances have led to rapid HIV tests that provide results within minutes. In spite of these advances, however, it is estimated that more than 80 percent of all people living in PEPFAR focus countries do not know their HIV status.

Knowing one's status provides a gateway for critical prevention, treatment, and care services. Millions of persons must be tested for PEPFAR to meet its ambitious treatment and care and goals in the focus countries. It is estimated that a minimum of 30 million people will need to be tested to meet PEPFAR's 2-7-10 goals – if countries appropriately target counseling and testing to populations at increased risk

of HIV infection (such as TB patients and women seeking PMTCT services) and if health care providers offer counseling and testing in health care encounters. To the extent counseling and testing is not well-targeted, the number who must be tested for PEPFAR to meet its goals will be correspondingly higher.

Table 3.6 shows the steep increase in the number of people receiving counseling and testing services with Emergency Plan support. Although many others also receive these serv-

#### **Uganda: Door-to-Door Counseling and Testing Restores Hope for HIV-Discordant Couple**

"I used to be weak, with frequent fevers and skin rash, and I had lost a lot of weight," Mawanda Magezi said. A married, 42-year-old farmer with three children, Mawanda and his family learned that he is HIV-positive through an innovative door-to-door HIV counseling and testing program in Uganda's Bushenyi District.

With support from PEPFAR, a local non-governmental organization called Integrated Community Based Initiatives (ICOBI) brings HIV counseling and testing services to clients' homes. This home-based approach provides all family members the opportunity to learn about HIV and the benefits of knowing their status, and to share their concerns with trained community members in the comfort of their own homes.

The ICOBI team visited Mawanda's home equipped with educational materials and rapid HIV test kits. Mawanda and his wife were tested for HIV together as a couple. The results showed that they are HIV-discordant.

"Discovering that I was HIV-positive and my wife negative shocked us, and I felt that this was the end of the world. But with support from the counselors on HIV prevention and positive living, we learned how to continue," Mawanda explained.

Mawanda was immediately referred to the health unit for care, tuberculosis screening and treatment assessments. The family received a basic preventive care package consisting of a safe water system, insecticide-treated bed nets, condoms and information on positive prevention strategies. With regular follow-up visits from the ICOBI team, Mawanda's health greatly improved. Ongoing counseling facilitated the couple's decision to disclose their HIV status to their children and community.

The door-to-door approach to counseling and testing enables families and communities to build stronger support systems in the fight against HIV/AIDS.

**Table 3.6: Care: FY2006 Counseling & Testing Services Results<sup>1</sup> (in settings other than PMTCT)**

Country	Number of individuals receiving upstream system-strengthening support <sup>2</sup>	Number of individuals receiving downstream site-specific support <sup>3</sup>	Total number of individuals receiving counseling and testing
Botswana <sup>4</sup>	189,300	0	189,300
Côte d'Ivoire	18,600	48,300	66,900
Ethiopia	0	516,800	516,800
Guyana	0	28,300	28,300
Haiti	0	193,600	193,600
Kenya	0	748,900	748,900
Mozambique <sup>5</sup>	52,500	156,300	208,800
Namibia	0	107,600	107,600
Nigeria	64,400	450,400	514,800
Rwanda	258,000	207,500	465,500
South Africa	1,135,200	342,700	1,477,900
Tanzania	287,200	393,400	680,600
Uganda	74,600	925,400	1,000,000
Vietnam	0	59,100	59,100
Zambia <sup>6</sup>	0	168,400	168,400
<b>Total</b>	<b>2,079,800</b>	<b>4,346,700</b>	<b>6,426,500</b>

**Notes:**

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:**

<sup>1</sup> Counseling and testing includes only those individuals who received their test results.

<sup>2</sup> 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, and protocol and curriculum development.

<sup>3</sup> Number of individuals reached through downstream site-specific support includes those receiving services at U.S. Government funded service delivery sites.

<sup>4</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

<sup>5</sup> In Mozambique, counseling and testing through PMTCT and other settings use the same reporting system. An analysis of the data show that some sites have incorrectly reported PMTCT. Data from these misclassified sites have been excluded from the FY2006 results.

<sup>6</sup> In Zambia, the total number of individuals receiving counseling and testing has dropped. This is because nationally-reported data on counseling and testing has not been updated since June 2005, therefore upstream results were not reported. The number of individuals reached through downstream support has doubled since the last reporting period.

**Table 3.7: Care: Cumulative Counseling and Testing (C&T) Results, FY2004-FY2006**

	FY2004 <sup>1</sup>	FY2005	FY2006	Cumulative C&T to date
<b>Number of women receiving C&amp;T through PMTCT</b>	1,017,000	1,957,900	2,814,700	<b>5,789,600</b>
<b>Number of individuals receiving C&amp;T in other settings</b>	1,791,900	4,653,200	6,426,500	<b>12,871,600</b>
<b>Total</b>	<b>2,809,900</b>	<b>6,611,100</b>	<b>9,241,200</b>	<b>18,661,200</b>
<b>Women as a percentage of all individuals receiving C&amp;T in PMTCT and other settings through downstream support</b>				
	<b>66%</b>	<b>69%</b>	<b>71%</b>	<b>70%</b>

**Notes:**

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 and those receiving downstream services at U.S. Government-funded service delivery sites.

The same individual may receive counseling and testing on multiple occasions.

**Footnote:**

<sup>1</sup> In FY2004 only, it was assumed that 80 percent of women receiving PMTCT services were counseled and tested.

**Table 3.8: Care: Counseling and Testing: Percent of Counseling and Testing Targets Reached as of September 30, 2006**

	Cumulative Counseling and Testing results, FY2004-FY2006	Estimated Number of Counseling and Testing sessions required to meet treatment goal	% of goal reached (2006)
<b>Total</b>	18,661,200	30-40 million	47-62%

**Notes:**

Numbers may be adjusted as attribution criteria and reporting systems are refined.  
The actual number of counseling and testing sessions required to meet the Emergency Plan treatment goal depends on the balance of counseling and testing in low-risk settings such as PMTCT and community outreach, versus settings where a higher percentage of persons tested are likely to be HIV infected, such as TB clinics and medical wards and high-risk settings such as TB clinics.

ices through the support of host governments, the Global Fund and others, the Emergency Plan is a leader in support for access to HIV testing. The figure also shows that the massive increase in testing is accompanied by a sharp increase in the number of PLWHA who are accessing ART. As expected, the numbers receiving ART are far below those receiving counseling and testing, since people can be tested for HIV more than once and most of those tested are not yet eligible for ART.

The Emergency Plan is moving with urgency and innovation, commensurate with this extraordinary challenge. A growing number of best practices have been identified to increase testing in health facilities and to increase access to testing services in rural and remote areas. In addition, the PEPFAR-supported scale-up of PMTCT programs has increased the number of women who have learned their HIV status during pregnancy.

A key barrier to the universal knowledge of serostatus is the lack of routine testing in medical settings, including TB and sexually transmitted infection (STI) clinics 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. As noted in table 3.10, there is increasing international support for this model of “routine” or “opt-out” testing, where in selected health care settings, all patients are tested for HIV unless they refuse; this approach has successfully identified many patients in need of treatment and care. Several studies presented at the HIV/AIDS Implementers’ Meeting in Durban demonstrated the

impact this policy can have. A pilot project in Zimbabwe showed a 54 percent increase in testing rates at urban ANCs after the introduction of routine testing and a 76 percent increase in rural areas. Another study conducted in the maternity ward of a 200-bed hospital in rural Uganda found that moving to routine testing more than doubled the proportion of women discharged from the ward with a known HIV status, from 39 percent to 88 percent.

In all approaches, the person tested should give consent, be informed of his or her test results, be provided with information on how to prevent HIV transmission or acquisition, and if infected, be referred for treatment and care. Nigeria has made considerable progress in this area, with some partners having a tenfold increase in the number of

**Table 3.9: Care: FY2006 Counseling and Testing Capacity-Building Results (in settings other than PMTCT)**

Country	Number of USG-supported sites providing counseling and testing in settings other than PMTCT	Total number of individuals trained or retrained in counseling and testing in settings other than PMTCT
Botswana <sup>1</sup>	710	600
Côte d'Ivoire	81	500
Ethiopia	625	3,400
Guyana	27	52
Haiti	93	700
Kenya	947	2,200
Mozambique	90	300
Namibia	232	1,000
Nigeria	277	1,000
Rwanda	97	400
South Africa	1,519	15,500
Tanzania	206	900
Uganda	1,178	4,400
Vietnam	67	1,000
Zambia	317	1,500
<b>Total</b>	<b>6,466</b>	<b>33,500</b>

**Notes:**

Numbers may be adjusted as attribution criteria and reporting systems are refined.  
Among individuals trained, numbers above 100 are rounded to nearest 100. Number of sites is not rounded.

**Footnotes:**

<sup>1</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

**Table 3.10: Care: Key Policy Changes: Counseling and Testing**

Country	Date of policy adoption on provider-initiated testing <sup>1</sup>	Date of policy adoption on use of rapid test kits <sup>1</sup>
Botswana	2003	2006
Côte d'Ivoire	-	2001
Ethiopia	-	2006
Guyana	2006 <sup>2</sup>	2004
Haiti <sup>3</sup>	-	-
Kenya	2004	2006
Mozambique	-	2006
Namibia	2004 <sup>4</sup>	2005
Nigeria	-	2006 <sup>5</sup>
Rwanda	2006	2006
South Africa	-	2006
Tanzania	2006	2006
Uganda	2005	2006
Vietnam	2006	-
Zambia	2005 <sup>6</sup>	2005

**Footnotes:**

- <sup>1</sup> Unless otherwise noted, information obtained through correspondence with country teams.
- <sup>2</sup> Guyana's provider-initiated testing policy is for labor and delivery wards only.
- <sup>3</sup> While Haiti has no official written policy on the use of rapid test kits, the use of rapid test kits is the *de facto* policy. Haiti's health system adopted rapid test kits early and use of rapid kits is considered routine practice.
- <sup>4</sup> Namibia's provider-initiated testing policy is for PMTCT, ANC, and TB only and includes provision for non-laboratory personnel including community counselors to perform rapid HIV-testing.
- <sup>5</sup> Nigeria adopted an interim testing policy to support the use of rapid tests in 2006 and will draft its final policy after the results of the PEPFAR-supported rapid test assessment.
- <sup>6</sup> Zambia adopted a PMTCT-specific provider-initiated testing policy in 2004.

patients being tested at their clinical sites. Other countries that have made significant progress in the scale-up of HIV counseling and testing in medical settings in 2006 include Botswana, Kenya, Malawi, Rwanda, and Tanzania.

A major challenge associated with this best practice is linking patients who have been identified as seropositive with HIV care, including cotrimoxazole and ART. Other obstacles include the distance of patients from facilities and the inadequate numbers of health care workers and inconsistent test kit supplies at health care facilities.

In addition to HIV testing in medical settings, PEPFAR continues to support the expansion of testing in the community in many countries. Stand-alone centers in urban areas attract many young men and other groups who otherwise do not frequent medical facilities. Some of these centers, often known as voluntary counseling and testing (VCT) sites, also provide services to special groups such as

### Emergency Plan Priorities for HIV Counseling and Testing

- Promote counseling and testing in clinical settings: With the availability of antiretroviral and opportunistic infection treatment, there is an urgent need to ensure that people who are ill with HIV-related symptoms are tested for HIV.
- Make diagnostic HIV counseling and testing routine for patients in tuberculosis (TB) clinics, antenatal clinics, and medical wards.
- Improve access to counseling and testing for the general population: Every person who wants to know his or her status should have access to testing, particularly in countries with high HIV prevalence.
- Support innovative approaches to extending the availability of confidential counseling and testing.
- Support couple counseling and testing to identify discordant couples: Once they learn they are HIV-discordant, couples can adopt preventive behaviors to reduce the chances of HIV transmission to the negative partner.
- Promote varied forms of HIV counseling and testing: Professional advertising campaigns have proved highly effective in increasing demand for counseling and testing services and reducing stigma associated with testing.
- Link counseling and testing to other HIV services: Functioning referral systems are essential to ensure that clients are linked to prevention, treatment, and care.
- Expand availability and acceptance of rapid test kit technology: Rapid testing is important for testing conducted outside of health facilities. Finger-prick (whole blood) and oral rapid testing do not require cold chain storage or additional equipment and supplies, allowing health care workers to test in a variety of settings. In some countries, policy barriers block the use of rapid testing.
- Support routine, opt-out HIV testing for pregnant women by using rapid tests with same-day results.

the deaf, rape victims, injecting drug users, and people in prostitution. Couple counseling and testing, both for pre-marital and married couples, is provided in many sites supported by PEPFAR, including through faith-based organizations that encourage members to know their status. Couples who know they are HIV-discordant (couples in which one partner has HIV and the other does not) can successfully prevent transmission to the negative partner.



A ceremony in Côte d'Ivoire marking a counseling and testing center in San Pedro brought together support from national leaders, local partners and the Emergency Plan.

The experience of home-based counseling and testing in Uganda demonstrates the value of identifying family members who are at high risk of either having undiagnosed HIV infection or acquiring HIV. Identification of discordant couples through home-based HIV testing was identified as a best practice at the PEPFAR Implementers' Meeting in June 2006.

The Emergency Plan also supports laboratory quality improvement, a key element of effective testing programs, through training of laboratory workers, improving the

physical infrastructure of labs, and ensuring consistent supplies of test kits.

Effective programs must overcome these obstacles, while ensuring that counseling and testing services are of high quality. Compounding all these challenges are the fear, stigma, and discrimination against those who are infected with HIV, which remain significant barriers in many nations.

### **Results: Rapid Scale-Up**

To date, the Emergency Plan has provided support for more than 18.6 million confidential HIV counseling and testing sessions in the focus countries. More than 9.2 million of these occurred in fiscal year 2006: more than 2.8 million in PMTCT settings and more than 6.4 million through other counseling and testing activities.

Of the more than 9.2 million counseling and testing sessions in fiscal year 2006, approximately 6.4 million were performed at USG-supported sites, while the remainder were the result of PEPFAR support for countries' capacity to provide services (including assistance for national and regional policies, communications, protocols to ensure high-quality services, laboratory support, and purchase of test kits).

Reflecting the importance of counseling and testing in achieving the goals of the Emergency Plan, \$130 million,

## **Vietnam: Counseling and Testing Program Reaches Out to At-Risk Populations**

Vietnam's HIV/AIDS epidemic is concentrated primarily among injecting drug users, women in prostitution and men who have sex with men. Outreach workers regularly walk into neighborhoods in Hai Phong City with the hope of reaching these at-risk populations with information about HIV/AIDS and voluntary counseling and testing. The outreach workers encourage individuals to seek confidential HIV counseling and testing at the Community Health Counseling Center in Hai Phong City.

The Community Health Counseling Center is one of many HIV counseling and testing sites operated by the Vietnamese Ministry of Health with support from PEPFAR. Counseling and testing services in Vietnam have expanded rapidly, and are currently located in the 40 provinces with the highest HIV prevalence. These sites reach out to the country's most stigmatized individuals by offering flexible hours and confidential services free of charge.

The counseling and testing program is having a positive impact. "This intervention helps HIV-negative people maintain their negative status, assists HIV-infected people to avoid HIV transmission to others and to live healthy lives, and links infected people to care and treatment services," said Huynh Thi Nhan, a counselor at a Ministry of Health site in Can Tho City.

Launched at the end of May 2006, a new communications campaign will further expand the reach of the program. The campaign targets potential clients with information about confidential HIV counseling and testing and the locations of service sites. Billboards and posters encourage clients to talk with counselors to discuss feelings of fear and concern and to answer questions related to HIV/AIDS. The campaign also emphasizes the importance of testing as a crucial step in improving overall health and quality of life.

or approximately seven percent of fiscal year 2006 focus country resources for prevention, treatment, and care, were committed to counseling and testing activities. An additional \$92 million, or five percent, were committed to PMTCT activities, which include counseling and testing of pregnant women along with other activities.

Approximately 71 percent of those who received downstream USG-supported counseling and testing services in fiscal year 2006 were female. This figure includes all women tested through PMTCT services. In other, non-PMTCT sites, including VCT centers, medical facilities, and mobile sites, 56 percent were women.

### **Sustainability: Building Capacity**

Emergency Plan teams have worked with host governments and other partners to integrate counseling and testing into routine health care, as well as supporting local, indigenous, and faith-based organizations to provide confidential counseling and testing services to their communities.

In the focus countries in fiscal year 2006, the Emergency Plan provided support for training of approximately 66,100 individuals in counseling and testing (including approximately 32,600 as part of PMTCT training and approximately 33,500 others). PEPFAR also supported more than 11,000 service sites (including 4,800 PMTCT sites and 6,400 other counseling and testing sites).

### **Key Challenges and Future Directions**

#### ***Bolstering Sustainable Activities to Increase the Number of People Who Learn their HIV Status.***

Given the challenges involved in rolling out counseling and testing on a massive scale, it is critical to focus efforts upon people with a higher likelihood of HIV infection than the general population. Making diagnostic testing a part of health care interactions is among the most efficient and sustainable ways of accomplishing this goal. Accordingly, the Emergency Plan is bolstering its support for routine counseling and testing in clinics that treat TB or STIs, hospitals, and other health care settings.

**Table 3.11: Care: FY2006 Total Counseling and Testing Capacity-Building Results**

Country	Number of USG-supported sites in a PMTCT setting	Number of USG-supported sites other than PMTCT	Total	Number of health workers trained or retrained in PMTCT services	Total number of individuals trained or retrained in counseling and testing in settings other than PMTCT	Total
Botswana <sup>1</sup>	634	710	1,344	400	600	1,000
Côte d'Ivoire	69	81	150	400	500	900
Ethiopia	204	625	829	2,700	3,400	6,100
Guyana	45	27	72	50	52	102
Haiti	73	93	166	800	700	1,500
Kenya	1,674	947	2,621	4,800	2,200	7,000
Mozambique	81	90	171	1,500	300	1,800
Namibia	179	232	411	1,300	1,000	2,300
Nigeria	80	277	357	1,600	1,000	2,600
Rwanda	103	97	200	1,000	400	1,400
South Africa	570	1,519	2,089	11,100	15,500	26,600
Tanzania	488	206	694	2,000	900	2,900
Uganda	362	1,178	1,540	3,900	4,400	8,300
Vietnam	17	67	84	500	1,000	1,500
Zambia	284	317	601	500	1,500	2,000
<b>Total</b>	<b>4,863</b>	<b>6,466</b>	<b>11,329</b>	<b>32,600</b>	<b>33,500</b>	<b>66,100</b>

**Notes:**

Numbers may be adjusted as attribution criteria and reporting systems are refined. Among individuals trained, numbers above 100 are rounded to nearest 100. Number of sites is not rounded.

**Footnote:**

<sup>1</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

The Emergency Plan has taken special efforts to ensure that women receive counseling and testing without stigma and discrimination, and that they have full access to treatment and care as needed. Many of the initiatives described have fostered the achievement of these goals, including testing for pregnant women in health care settings, partner testing, and activities to reduce stigma and cultural barriers that inhibit women's access to services. The USG has collaborated with UNICEF, WHO, and others to produce a PMTCT counseling and testing tool that streamlines and standardizes high-quality counseling and increases the uptake of HIV testing.

At the same time, it is important to ensure access for the population at large, especially in countries with generalized epidemics. Community-based counseling and testing remains an important HIV prevention opportunity. PEPFAR works to ensure that all people who want to know their status have access to testing services, particularly in countries with high HIV prevalence, where all sexually active persons have some risk for HIV infection. This includes innovative methods to reach special or hard-to-reach populations, such as mobile services in remote areas; outreach services for persons engaging in high-risk behaviors, such as persons in prostitution or injecting drug users; or services targeting vulnerable groups, such as refugees, prisoners, and the disabled. Several countries, including Kenya and Nigeria, have piloted "moonlight VCT" programs, in which teams of counselors go out at night to provide outreach services to high-risk groups such as truck drivers, people in prostitution and their clients, and patrons at bars and clubs. Moonlight VCT was highlighted as a "best practice" at the 2006 HIV/AIDS Implementers' Meeting. Another innovation highlighted at the meeting was a mobile testing service for rural populations; some community groups use bicycles and even camels to reach nomadic populations.

One requisite for high-quality counseling and testing programming is that those who are tested actually receive their test results. Due to long delays in obtaining test results, however, many who are tested have not returned for their results. Finger-prick (whole blood) and oral rapid testing, which do not require cold chain storage or additional equipment or supplies, can be used in a variety of settings by a variety of health care workers, from nurses to lay counselors. Rapid testing is especially important when testing is conducted outside of health facilities. The increasing avail-

ability and quality of rapid tests is one of the most encouraging developments in the fight to expand counseling and testing, and PEPFAR continues to strongly support country teams and partners' inclusion of rapid tests in their plans. A number of host nations and partners have moved to rapid testing in recent years, with USG support, and PEPFAR supports efforts to resolve regulatory and policy obstacles to the implementation of rapid tests.

***Ensuring Quality in Counseling and Testing.*** Widely available, high-quality HIV testing requires large numbers of testing kits. The Emergency Plan-supported Supply Chain Management System, described in the chapter on Building Capacity: Partnerships for Sustainability, works with host nations to ensure uninterrupted supplies of high-quality test kits.

High quality in counseling is equally important. A number of countries have developed protocols and systems to assess and improve counseling services. Counseling for those who test negative is an area that has received insufficient attention in the past, wasting critical opportunities for prevention efforts. The Emergency Plan therefore is supporting efforts to expand and improve training of counselors to ensure that they are able to offer appropriate prevention information.

***International Counseling and Testing Day.*** In her remarks to the United Nations General Assembly High Level Meeting on HIV/AIDS in June 2006, First Lady Laura Bush called



Due to capacity building assistance, staff at the Nyarami Voluntary Counseling and Testing Center in Migori, Kenya learned technical skills that enabled them to provide better HIV counseling and testing services to clients.



for the establishment of an International HIV Testing Day. PEPFAR subsequently developed a feasibility analysis for UNAIDS, outlining issues to be addressed for the establishment and success of an International HIV Testing Day. In December 2006, the General Assembly of the United Nations adopted the proposal. This initiative, implemented by each country beginning in 2007 according to its own capacity and needs, will be an important step toward expanding access to confidential HIV counseling and testing and de-stigmatizing learning one's status; in so doing, it will contribute to meeting PEPFAR's prevention, treatment, and care goals.

### **Accountability: Reporting on the Components of Care**

As discussed earlier, PEPFAR works closely with countries to maximize both downstream and upstream support wherever partnership limitations or technical, material or financial constraints require it. The Emergency Plan, either alone or in concert with another partner, may support every aspect of the complete package of prevention, treatment, or care services at a specific public or private delivery site, in coordination with the host country's national strategies. The comprehensive and ongoing nature of providing HIV/AIDS care poses significant challenges for program monitoring and evaluation. The Emergency Plan recognizes this, as well as the importance of accurate program monitoring in establishing high-quality services. Understanding and recording the types of care services that are delivered is the foundation of ensuring that programs maximize scarce resources for as many PLWHA as possible. As part of Emergency Plan capacity-building, country teams are working closely with host governments and partners to build and improve upon information systems for monitoring and evaluating routine program indicators for care. For more information, please see the Improving Accountability and Programming chapter.

***Attribution Challenges Due to Country-Level Coordination.*** The Emergency Plan supports national HIV/AIDS treatment strategies, leveraging resources in coordination with the host countries' multi-sectoral organizations and other partners, to ensure a comprehensive response. For an effective and sustainable response, host nations must lead a multi-sectoral national strategy for HIV/AIDS. International partners must ensure that interventions are in concert with host government national strategies, responsive to host country needs, and coordinated with both host governments and

other partners. Stand-alone service sites managed by individual international partners are not desirable or sustainable. In such an environment, attribution is complex, including both upstream and downstream activities, often with multiple partners supporting the same sites to maximize comparative advantages. PEPFAR is conducting audits of its current reporting system to refine methodologies for the future, and continues to assess attribution and reporting methodologies in collaboration with other partners.

***Care Reporting Conventions.*** During this reporting period, results for PEPFAR care programming were determined by totaling all the programs, services, and activities aimed at optimizing quality of life for OVCs; at caring for patients and their families throughout the continuum of illness; and at diagnosing HIV-infection through counseling and testing, including through PMTCT activities.

Activities aimed at improving the lives of children and families directly affected by AIDS-related morbidity and/or mortality are counted as OVC programs. These may include training caregivers; increasing access to education; economic support; targeted food and nutrition support; legal aid; medical, psychological, and emotional care; and/or other social and material support. Institutional responses are also included.

Given the need to independently account for TB prevention, treatment, and care, palliative care totals are made up of two service categories – basic health care and support, and TB/HIV care and support. Basic health care and support includes all clinic- and home/community-based activities aimed at optimizing quality of life of HIV-infected (diagnosed or presumed) clients and their families by means of symptom diagnosis and relief; clinical monitoring and management (and/or referral for these) of opportunistic infections, including 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; psychological and spiritual support; and training and support for caregivers. TB/HIV care and support activities include examinations, clinical monitoring, treatment, and prevention of tuberculosis in HIV palliative care settings, as well as screening and referral for HIV testing and TB-related clinical care. In-country partners derive these counts from program reports and health management information systems.

In the area of HIV testing, results report on numbers of individuals trained, numbers of sites where HIV testing is supported, and numbers of individuals tested, disaggregated by gender. Equipment and commodities, in particular test kits, are provided through the program and are inventoried and tracked through standard USG reporting and accounting systems by the grantees acquiring the goods.

The Emergency Plan has also funded an evaluation project, discussed in the chapter on Improving Accountability and Programming. This evaluation will provide:

- Data quality audit guidance for program-level indicators;
- Best practices for program-level reporting; and
- Implementation of data standards guidance in select countries.





At the Clinton Global Initiative on September 20, 2006, First Lady Laura Bush announced the PlayPump Alliance, a new public-private partnership. With her, from left, are: Raymond Chambers, Chairman; MCJ and Amelie Foundations; former President Bill Clinton, and Jean Case and Steve Case, founders of the Case Foundation.

**“The President’s Emergency Plan for AIDS Relief is a key example of effective foreign assistance and transformational diplomacy in action. Our approach is to empower every nation to take ownership of its own fight against HIV/AIDS through prevention, treatment, and care.”**

**Secretary of State Condoleezza Rice  
Remarks at the Release of the  
Second Annual PEPFAR Report to Congress  
February 8, 2006**

## Chapter 4

# Building Capacity: Partnerships for Sustainability

**Table 4.1: Sustainability: Emergency Plan Support for Capacity-Building FY2004-FY2006**

	Number of individuals trained or retrained	Number of USG supported service outlets
Prevention of Sexual Transmission <sup>1</sup>	863,300	-
Prevention of Mother-to-Child Transmission	85,800	4,863
Prevention of Medical Transmission <sup>2</sup>	85,500	3,848
Provision of Antiretroviral Treatment	100,700	1,912
Provision of Care for Orphans and Vulnerable Children <sup>1</sup>	240,700	-
Provision of Palliative Care for HIV-positive People	216,900	8,019
Provision of Counseling and Testing	69,800	6,466
<b>Total</b>	<b>1,662,700</b>	<b>25,108</b>

**Notes:**

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

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

**Footnotes:**

<sup>1</sup> These services are provided in a variety of settings and are often not facility-based.

<sup>2</sup> Service outlets counted under prevention of medical transmission include only outlets that carry out blood safety activities.

The reality is that the fight against HIV/AIDS in hard-hit nations will have to continue for the long term. This fight will be sustainable only if it is owned by the people of each country. In many nations, this will require an increase in response of a magnitude that can best be described as a transformation. The primary responsibility for achieving such dramatic change ultimately rests with the leadership and citizens of developing nations themselves. The U.S. Government (USG) and other international partners can play a vital role, but outside resources for HIV/AIDS and other development efforts must be focused on transformational initiatives that are owned by host nations.

Governments and local civil society organizations – including non-governmental organizations (NGOs), faith-based organizations (FBOs), community-based organizations (CBOs), associations of health care workers, and the private sector – are crucial for this development, and are well-placed to identify the needs of their own countries and devise strategies for meeting them. In addition to working with governments, the Emergency Plan focuses on supporting local indigenous organizations, prioritizing funding to develop their capacity. A commitment to local ownership is the basis for the President’s Emergency Plan for AIDS Relief’s (Emergency Plan/PEPFAR’s) focus on working

with host nations and supporting their strategies to bring comprehensive national responses to scale.

International NGOs are indispensable partners in PEPFAR implementation, and there will always be more work to do in resource-poor settings. Yet international partners must support the building of sustainable, country-owned programs. Therefore, new grant language for international NGO partners requires them to take steps to build local capacity. The Emergency Plan also now requires such partners to develop “exit strategies” – plans for reducing their own role and devolving responsibility to local people and organizations on a reasonable time frame.

Review of annual Country Operational Plans (COPs) includes an evaluation of efforts to increase the number of indigenous organizations partnering with the Emergency Plan. This emphasis has led to impressive results: In fiscal year 2006, approximately 1,532 partners, or 83 percent of Emergency Plan partners, were indigenous organizations (that is, organizations based in the host nations). Reliance on such local organizations, while 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, COPs for fiscal year 2007 are required to devote no more than 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 will help to expand and diversify PEPFAR’s base of partners and facilitate efforts to reach out to new partners, particularly local partners – a key to sustainability.

Alongside efforts to support community capacity-building, other crucial activities for sustainability include: enhancing the capacity of health systems and health care workers; strengthening quality assurance; improving financial management and accounting systems; building health infrastructure; and improving commodity distribution and control. The Emergency Plan is intensively supporting national strategies to strengthen these critical systems. Focus country partners reported that, in fiscal year 2006, approximately 25 percent of all activities had components that directly supported sustainable network development. Because building capacity goes hand-in-hand with expanding services, the previous chapters on Prevention, Treatment, and Care also summarize Emergency Plan efforts to ensure sustainability.

The capacity of host nations to finance HIV/AIDS and other health efforts on the scale required varies widely. While it is true that many deeply impoverished nations are years from being able to mount comprehensive programs with their own resources alone, 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. The USG has urged African governments to meet their commitments from the Abuja Declaration, including their pledge to devote at least 15 percent of their budgets to health. Progress is being made by some countries, 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. Such developments within hard-hit nations build sustainability in each country’s fight against HIV/AIDS.

While HIV/AIDS is unmistakably the focus of PEPFAR, the initiative’s support for capacity-building has important spillover effects that support nations’ broader efforts for sustainable development. Organizations whose capacity is expanded in order to meet USG 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. Supply chain management capacity-building improves procurement for general health commodities. Improving the capacity to report on results fosters quality/systems improvement, and the resulting accountability helps to develop good governance and democracy. In a variety of ways, the Emergency Plan supports host nations in identifying their needs and in building the tools to address them in the future. (For further information please see PEPFAR’s 2006 *Report on Workforce Capacity and HIV/AIDS* located at <http://www.PEPFAR.gov/progress/>.)

### **Building Sustainable Institutional Capacity**

Because of the intensive focus of the Emergency Plan on sustainability, many activities are intended to build the institutional capacity of local organizations to plan, implement, evaluate and manage HIV/AIDS programs. The Emergency Plan recognizes that all sectors of society,

## Ethiopia: Improving Prevention of Mother-to-Child HIV Transmission Services at Bella Hospital

With support from PEPFAR, Bella Hospital in Ethiopia has been recognized for its high-quality prevention of mother-to-child HIV transmission (PMTCT) program, which was assessed using a nationally developed PMTCT performance standard. The performance assessment takes into consideration all the inputs and processes needed to provide a high-quality PMTCT program. According to the performance standards, hospitals that scored at least 80 percent in each of the assessment areas would be recognized for the quality of their PMTCT programs. Many initially considered the 80 percent target performance standard to be unreachable in the general context of health system performance in the country. Bella Hospital proved this thinking wrong.

With support from the Emergency Plan, the hospital began implementation of standards-based management for a high-quality PMTCT program. The hospital held a series of modular workshops that were carried out at three-month intervals. During the first stage of implementation, the hospital promoted agreed-upon standards, changed management practices, and conducted a baseline assessment of services. The next steps in the process included gap identification, cause analysis, intervention selection, and gap filling.

After implementing interventions to address performance gaps, a final external assessment of PMTCT services at Bella Hospital was conducted, and the hospital scored above the 80 percent standard of excellence. This was a great success for both the hospital staff and the partners, who worked closely through each step of the implementation process. The hospital's success shows that a standards-based management approach can successfully improve health care, even in resource-limited settings.

including governments, civil society institutions, and the private sector, must be involved.

The fiduciary accountability of local organizations is crucial to the Emergency Plan's effort to build capacity, and the Emergency Plan has made a major effort to provide technical assistance to partners in this area. An impediment to working with many local groups is the limited technical expertise in accounting, managerial and administrative skills, auditing practices, and other activities required to receive funding directly from the USG. In fiscal year 2006, several focus countries used local "umbrella contractors," including those that serve as local fiduciary agents for the Global Fund to Fight AIDS, Tuberculosis and Malaria.

The Emergency Plan also has begun to gather data on capacity-building via COPs and results reporting. USG partner agencies are instructed to review partner performance in strengthening indigenous organizations as part of portfolio reviews conducted in the field. As noted previously, in fiscal year 2007, country teams will devote no more than eight percent of resources to a single partner, unless one of several specified exceptions is satisfied, helping to broaden PEPFAR's partner base.

### **Host Governments**

The organizing structure, management, coordination, and leadership provided by capable, committed host governments are essential to an effective, efficient HIV/AIDS response. Without commitment from government, parallel

unlinked service delivery systems – usually dependent on large international funding and NGOs – dominate a country's response. This model puts host nations at the mercy of continued funding, and continued management, by outsiders – the antithesis of sustainability.

Strengthening the institutional capacity of host governments and national systems is a fundamental strategy of the Emergency Plan. As a result, more than 19 percent of Emergency Plan partners in fiscal year 2006 were host government entities, including ministries of health (MoHs) and associated institutions, research organizations, and AIDS coordinating authorities. The Emergency Plan has supported the development of national policy and training in planning, budgeting, performance improvement, monitoring of activities and finances, and other management skills.

In several focus countries, U.S. personnel are located in, or detailed to, MoHs. In others, PEPFAR has supported MoH personnel retention schemes or contractual staffing arrangements, bolstering the number of health professionals working in the public sector and in rural areas. This supports national health system development in the face of the dramatic human resource crises these countries are facing. In Namibia, for example, the USG partners with Potentia, a private sector Namibian personnel agency, to support doctors, nurses, and pharmacists for public hospitals, at the same salaries as government workers, thus supporting needed staff positions in an equitable fashion. The Kenyan Medical Research Institute uses PEPFAR funds to actively

train and support 260 healthcare workers, who provide such services as: technical assistance; personnel support to improve laboratory capacity; support for adherence to counseling; and assistance with monitoring and reporting on the progress of antiretroviral treatment (ART) regimens.

### *Local Civil Society Organizations*

Local community- and faith-based organizations also play critical roles as first responders to community needs, and often have access to hard-to-reach or underserved populations, such as orphans and people living with HIV/AIDS (PLWHA) in urban slums or remote rural areas. When trained in program management and HIV/AIDS best practices, these groups often design the most culturally appropriate and responsive interventions. They have the legitimacy and authority to implement successful programs that deal with sensitive subjects. In many focus countries, more than 80 percent of the citizens participate in religious institutions, and upwards of 50 percent of health services are provided through faith-based institutions, making them crucial delivery points for HIV/AIDS information and services.

The Emergency Plan thus recognizes the value that faith-based organizations can add to HIV/AIDS efforts. In fiscal year 2006, approximately 23 percent of all Emergency Plan focus nation partners were faith-based.

In addition, local civil society organizations play a key role in organizing citizens to work in effective partnership with their governments. Organizations of PLWHA are among the key community-based groups that have been integrated into the Emergency Plan. PEPFAR also has launched pilot programs in multiple countries that allow groups to apply directly to Emergency Plan country teams for rapid approval of small grants, in order to get funds quickly to local organizations doing needed work on the ground. One example of PEPFAR's impact comes from Côte d'Ivoire, where despite a fragile political environment, the Emergency Plan has worked with community leaders to create a local organization which has now become a PEPFAR partner, while also making grants to smaller community-based entities.

### *The New Partners Initiative*

Through the New Partners Initiative (NPI) announced by President George W. Bush on World AIDS Day 2005, the Emergency Plan builds the capacity of organizations at the

community level, while also building local ownership of HIV/AIDS responses for the long term.

### **The Need for New Partners**

- Many organizations have the capability to reach people who need HIV/AIDS services, but lack experience in working with the USG and its processes. Community- and faith-based organizations, in particular, represent vital but underutilized resources. Many such organizations are well-established within communities and well-placed to reach out to those infected and affected by HIV/AIDS.
- Building the capacity of organizations at the community level also helps to build local ownership of HIV/AIDS responses for the long term. In some countries, such organizations provide as much as 40-50 percent of all care for people living with HIV/AIDS – with little support from the USG. In some cases, existing U.S.-based organizations can serve as a “bridge,” due to their relationships with these entities in host countries.
- The alliance between PEPFAR and new partners will promote better care for people living with and affected by HIV/AIDS, and hope for stronger families and healthier communities.

### **New Partners Initiative Goals**

The Emergency Plan is reaching out to organizations through NPI, working to enable them to become new partners. The goals of the initiative are to:

- Increase the Emergency Plan's ability to reach people with needed services, by identifying potential new PEPFAR partner organizations, increasing their capacity to provide prevention and care services, and increasing the total number of Emergency Plan partners.
- Build capacity in host nations by developing indigenous capacity to address HIV/AIDS to promote the sustainability of host nations' efforts.

### **How the New Partners Initiative Works**

- **Competitive grants:** NPI includes a competitive process for \$200 million in grants to provide HIV/AIDS prevention and care services. Eligible entities are NGOs, working in any of the 15 Emergency Plan focus coun-

## The Promise of New Partnerships Against HIV/AIDS

Through the New Partners Initiative (NPI) announced by President George W. Bush on World AIDS Day 2005, the Emergency Plan builds the capacity of organizations at the community level, while building local ownership of HIV/AIDS responses for the long term.

The USG announced the first round of grant awards under the NPI on World AIDS Day 2006 – exactly one year after the President launched the initiative. Of the first 23 grants announced, 11 are to local organizations, and the remainder are to recipients with direct links to local organizations. The recipients who were announced are:

- Ajuda de Desenvolvimento de Povo para Povo – Machava, Mozambique
- Catholic Medical Mission Board – New York City, New York, USA
- Christian Reformed World Relief Committee – Grand Rapids, Michigan, USA
- Church Alliance for Orphans – Windhoek, Namibia
- Foundation for Hospices in Sub-Saharan Africa – Alexandria, Virginia, USA
- Genesis Trust (Ugu AIDS Alliance) – Port Shepstone, South Africa
- Geneva Global (Ethiopia) – Wayne, Pennsylvania, USA
- Geneva Global (Côte d'Ivoire) – Wayne, Pennsylvania, USA
- Global Outreach for Addiction Leadership and Learning – Aliquippa, Pennsylvania, USA
- Kara Counseling and Training Trust – Lusaka, Zambia
- Light and Courage Centre Trust – Francistown, Botswana
- Luapula Foundation – Mansa, Zambia
- Mothers 2 Mothers – Cape Town, South Africa
- Natural Family Planning Center of Washington, D.C. – Bethesda, Maryland, USA
- Nazarene Compassionate Ministries Inc. – Olathe, Kansas, USA
- Nordic Assistance to Vietnam – Oslo, Norway
- ONG Le Soutien – Abidjan, Côte d'Ivoire
- Réseau Ivoirien des Organisations de PVVIH (RIP+) – Abidjan, Côte d'Ivoire
- ServeHAITI, Inc. – Atlanta, Georgia, USA
- Universidade Católica De Moçambique – Beira, Mozambique
- Visions in Action – Washington, D.C., USA
- World Hope International – Alexandria, Virginia, USA
- Youth Health Organization – Gaborone, Botswana

With the support of the American people, this first group of new partners will work in 13 of the 15 focus countries to provide HIV prevention and care services, including prevention of mother-to-child transmission, abstinence and faithfulness, condoms and related prevention, palliative care, orphans and vulnerable children, and counseling and testing.

Under the NPI, the Emergency Plan will award a series of grants totaling approximately \$200 million to new partners to provide services in the Emergency Plan's 15 focus countries. This first round of three-year grants under the NPI will award a total of up to \$72 million.



tries, with little or no experience working with the USG – defined as no more than \$5 million in USG funding during the preceding five years, excluding disaster and emergency assistance or funding as a subcontractor.

- **Leadership:** NPI is led by the U.S. Global AIDS Coordinator, assisted by an interagency USG Executive Committee with representation from Emergency Plan in-country teams. The Coordinator set and approved policies and direction for NPI and appointed a New Partnerships Director, who manages the program.
- **Partner outreach:** In 2006, a series of regional bidders' conferences were held in the U.S. and abroad.
- **Pre-competition assistance:** NPI offered technical and capacity-building assistance to participants, to empower them to compete now and in the future – both within the NPI grant process and in other competitions. Technical assistance focused on topics such as: initial needs assessment; proposal writing; pre-award audits; personnel recruitment; competition processes; and monitoring and evaluation planning.
- **Postaward capacity-building assistance:** To ensure the sustainability of the response, NPI offers assistance to successful applicants, focusing on: successful program implementation; needs analysis; and organizational growth and strengthening.

### **The Private Sector**

The nations where the Emergency Plan is at work have private sectors in a wide variety of stages of development. In many of the nations of sub-Saharan Africa, the private sector remains small, while in such nations as China, India, and South Africa, it is large and growing. Every nation does have a business community on some scale, however, and in every nation businesses have special contributions to make to the national HIV/AIDS response. Key strengths businesses bring to the fight include:

- Leveraging products, expertise and core competencies;
- Educating employees and surrounding communities on HIV/AIDS prevention;

- Making voluntary, confidential HIV counseling and testing available;
- Supporting lifesaving ART;
- Combating stigma and advocating for people living with HIV/AIDS;
- Adopting company-wide policies to protect against HIV/AIDS discrimination; and
- Forming strategic partnerships with governments and civil society to address the needs of the broader community.

### **Public-Private Partnerships**

PEPFAR seeks to develop public-private partnerships (PPPs) to bring HIV/AIDS interventions to scale, enhance the effectiveness of programs, and fully integrate the initiative into the future health and development plans of partner countries. PEPFAR defines public-private partnerships as collaborative endeavors that combine resources from the public sector with resources from the private sector to accomplish the goals of HIV/AIDS prevention, treatment, and care. PPPs enable the USG and private sector entities to maximize their efforts through jointly defined objectives, program design, and implementation. These mutually beneficial arrangements enhance local and international capacity to deliver high-quality health services and prevention programs, and leverage the core competencies of each sector to multiply their impact.

PPPs bring outside resources to bear on areas of local need. PPPs contribute to the fight against HIV/AIDS by:

- **Ensuring sustainability** of programs by enhancing the skills and capacities of local organizations, and by increasing the public's access to the unique expertise and core competencies of the private sector;
- **Facilitating scale-up** of proven, cost-effective interventions through private sector networks and associations;
- **Expanding the reach of interventions** by accessing target populations in their milieu (e.g., through workplace programs); and

## Sub-Saharan Africa: Harnessing the Power of Play

Ten sub-Saharan African nations will benefit from the groundbreaking \$60 million PlayPump Alliance announced by First Lady Laura Bush at the Clinton Global Initiative on September 20, 2006. The alliance will bring the benefits of clean drinking water to up to 10 million people in sub-Saharan Africa by 2010.

The PlayPump Alliance is a public-private partnership with PlayPumps International, the Case Foundation, USAID, PEPFAR, and other private sector partners. The goal is for every USG tax dollar to be matched by five dollars from the private sector.

This partnership will improve access to clean drinking water by installing PlayPump™ water systems throughout the region. Through an innovative water delivery system, a merry-go-round attached to a water pump and storage tank pumps water from underground. Children's play, a limitless source of energy, powers the system, making it both a sustainable and child-friendly water delivery system.

The USG, through USAID and the Emergency Plan, will provide a combined \$10 million to the alliance over three years. This will directly support the provision and installation of PlayPump water systems in approximately 650 schools, health centers and HIV-affected communities.

"Around the world, more than a billion people do not have safe water to drink, or to use to keep themselves and their homes clean," Mrs. Bush said during the announcement. Limited access to clean drinking water and basic sanitation facilities adversely impacts the quality of life of children and families in sub-Saharan Africa.

For people living with HIV/AIDS, clean water, proper hygiene, and sanitation facilities are of the utmost importance. Access to these resources helps HIV-infected people remain healthy as long as possible and avoid opportunistic infections.

Easy access to clean water will enhance PEPFAR's ability to support quality care in rural and peri-urban areas where the Emergency Plan supports hospitals, health facilities, and clinics. In addition, HIV/AIDS messages on PlayPump billboards will spread the word about healthy behaviors.

Invented and manufactured in Africa and first installed in South Africa, PlayPump water systems also benefit the community by spurring economic growth. Long-term jobs are created by hiring and training workers to maintain the PlayPump water systems.



Through the power of play, children use the PlayPump™ water system to bring clean drinking water to their communities in sub-Saharan Africa.

- **Sharing program costs** and promoting synergy in programs. Additionally, partners contribute in-kind contributions that otherwise would be beyond the reach of implementers.

Potential private sector partners include a wide range of organizations, U.S. and non-U.S. private businesses, multinational corporations, small and medium-sized enterprises, business and trade associations, labor unions, foundations, and philanthropic leaders, including venture capitalists. PEPFAR engages the private sector in various ways and many countries are actively and creatively pursuing this objective.

The Emergency Plan works in partnership with a growing number of local industries, supporting their efforts to grow

their capacity to meet the needs of their employees and their families, as well as the larger communities of which they are a part. In South Africa, for example, the large mining company Anglo American is a PEPFAR partner, reaching out to the community with effective programs and building the nation's capacity to address HIV/AIDS.

The following examples illustrate the diversity of PEPFAR's PPPs in support of HIV/AIDS prevention, treatment, and care programs:

- **Promoting HIV Prevention through Zambia's Tourism Industry.** The USG has partnered with Sun Hotel International and the Livingstone Tourist Lodge Association to conduct a series of music and artistic performance events that call for social and behavioral

change to reduce sexual transmission of HIV among employees and clients. This newly-developed partnership includes mobile counseling and testing services at these events, as well as HIV information booths and educational materials. In addition, Sun Hotel will provide a training facility for all HIV/AIDS-related training to the tourism industry, free of charge. This PPP will provide a sustainable means of continuing support to HIV prevention beyond PEPFAR, as ownership of these activities is in the hands of the local tourism industry.

■ **Expanding Care and Treatment through Sugar Companies in Kenya.** Kenya Medical Research Institute (KMRI), the USG, and four sugar companies in the Migori and Nyando districts of Kenya are working together in partnership to expand HIV treatment and care. Sony, Chemelil, Muhoroni, and Miwani Sugar Companies all provide health care services for approximately 16,000 workers, their families, and community residents, totalling approximately 60,000 people. This ongoing partnership will be scaled up to more than double the number of patients on ART in this population, from 274 to 600, and will create an enabling environment for long-term prevention, treatment, and care.

■ **Building Human Capacity through Pfizer.** The USG has partnered with Pfizer, through its Global Health Fellows program, to strengthen skills and build capacity of PEPFAR partners locally. Through this partnership, Pfizer Fellows are placed in healthcare settings in

heavily HIV/AIDS affected countries. For example, Pfizer's program provided a fellow with financial expertise to support the Mothers to Mothers to Be (M2M2B) program in Cape Town, South Africa, a PEPFAR partner in the prevention of mother-to-child transmission program. The Pfizer contribution assisted M2M2B to open 15 new sites and plan for 17 more.

■ **Extending Care to the Community.** In South Africa, a new PEPFAR-supported PPP with the Global Business Coalition, Xstrata mining company, and Mpumalanga Health Department has been formed to build ART capacity in eight public-sector clinics in the communities surrounding the mining facility. This program is a community extension of Xstrata's HIV/AIDS program. The main activities will include support for palliative care, counseling and testing, and ARV services, with a strong focus on TB/HIV integration.

■ **Training Prevention Programs in the Workplace.** PepsiCo India has 5,500 employees in 39 offices. They requested support from the International Labor Organization to address HIV/AIDS in the workplace. Working together as part of the USG's workplace education program, they trained 60 Master Trainers in four regions, who received a Master Trainer/Peer Educator Manual, the PepsiCo HIV/AIDS Policy, a Card Game, key presentation materials, posters, and red ribbon. The Master trainers held a series of awareness programs to educate employees, and enlisted 383 volunteers for a peer educator program. The program is now being developed to cover workers in the supply chains and set up effective links with ART treatment centers.

■ **Life Skills Training for Orphans and Vulnerable Children.** PEPFAR and USAID partnered with Coca-Cola's East Africa Bottling Share Company PLC, to pioneer a Vendor Employment Model for orphans and vulnerable children in Ethiopia. This PPP supports older adolescent orphans and vulnerable children deemed "head of household," via income generated through employment as vendors of Coca-Cola products. The job candidates receive marketing and business skills training from Coca-Cola, as well as life skills training, guardian counseling, educational support and psychosocial counseling through the Emergency Plan. Currently, half of the job candidates are young women. Plans are in place to scale up this project in other PEPFAR countries for

### Scaling Up Pediatric HIV/AIDS Treatment

Launched by First Lady Laura Bush, PEPFAR's pediatric AIDS public-private partnership brings the USG and many partners together to overcome major barriers to scaling up pediatric HIV treatment. Partners include eight innovator companies – Abbott Laboratories, Bristol-Myers Squibb, Boehringer Ingelheim, Gilead Sciences, Inc., GlaxoSmithKline, Merck & Co., Pfizer, and Tibotec, and five generic companies – Aspen Pharmacare, Aurobindo Pharma, Cipla Limited, Emcure Pharmaceuticals, and Ranbaxy Laboratories – as well as the Elizabeth Glaser Pediatric AIDS Foundation, UNAIDS, UNICEF, WHO, and the Clinton Foundation. In particular, the partnership is working to expand the number of pediatric ARV formulations, improve forecasting and supply of ARVs, coordinate provider education and training, and expedite drug registration. The partnership offers children and parents the hope that their families will stay together, leading healthy lives and living positively with HIV/AIDS.

2007. PEPFAR is exploring opportunities to expand this partnership beyond Coca-Cola and include other companies that support the vendor employment model (such as cell phone companies).

- **System Strengthening through Health Care Financing.** The USG supports employer-funded health insurance schemes that include a comprehensive HIV/AIDS prevention, treatment, and care component. This cost-sharing mechanism strengthens quality and efficiency standards for public and private health care systems and supports workers' access to HIV/AIDS treatment.
- **Exploring Opportunities with the Information and Communication Technology (ICT) Sector.** PEPFAR is currently working with the ICT sector to generate creative, concrete programs to improve HIV/AIDS knowledge diffusion to peripheral rural sites and develop human capacity using innovative technology.

#### **Future Directions for Public-Private Partnerships**

PEPFAR is leading an unprecedented scale-up of HIV/AIDS prevention, treatment, and care, but the work of the USG is not enough. Much more must be done in collaboration with the private sector, NGOs, and PLWHA. PEPFAR has not tapped all potential partners, and recognizes that broader partnerships – with multilateral organizations such as the Global Fund or the World Bank's Multi-Country AIDS Programme (MAP) – are viable options in areas where all entities are working toward common goals. Additionally, there is potential to engage other developed governments in PEPFAR's current and future partnerships.

Goals for future PPPs include developing programs for training healthcare and ancillary workers, promoting treatment and care for orphans and vulnerable children (OVCs), providing resources for innovative workplace prevention programs and links to services, supporting laboratory systems, and developing information technology for clinical care and strategic information programs.

#### **Building Human Resource Capacity**

Over 25 million of the estimated 40 million people living with HIV/AIDS worldwide live in resource-poor areas – areas with weak and understaffed health systems. HIV/AIDS places a growing strain on already stressed health care systems and workers in these countries. The



With PEPFAR support, the Caribbean HIV/AIDS Regional Training Initiative (CHART) helps to build a cadre of highly-trained, committed professionals to help combat HIV/AIDS by training health practitioners and encouraging them to work together.

challenge of this disease is compounded by nations' struggles to acquire the capacity, knowledge, and skills to deliver prevention, treatment, and care to all those infected with and affected by HIV/AIDS.

In fiscal year 2006, PEPFAR provided approximately \$350 million in support of network development, human resources and local organizational capacity development, and training. However, systemic weaknesses in areas such as health networks and infrastructure are persistent obstacles to expanding health systems and building human resource capacity in many PEPFAR countries. The Emergency Plan, working with host countries, supports national strategies to strengthen these critical systems. In fiscal year 2006, partners reported that approximately 25 percent of all programmatic activities had components that directly supported development of networks, linkages and/or referral systems. This focus on strengthening networks provides a base from which to build institutional and human resource capacity, in order to rapidly expand prevention, treatment, and care services.

The Emergency Plan recognizes that quality and sustainability in HIV/AIDS prevention, treatment, and care require skilled providers of health services. However, many PEPFAR countries lack the trained health workers necessary to respond to the need. With this in mind, the Emergency Plan and its host country partners support:

- National strategies with innovative approaches to training and retention.
- Broadening of policies to allow for task-shifting from physicians and nurses to clinical officers, health extension workers, and community health workers.
- The use of volunteers and twinning relationships to rapidly expand the number of local service providers required to respond to this disease.

The Emergency Plan supports focused training for the development of human capacity to deliver HIV/AIDS services. In fiscal year 2006, the Emergency Plan supported training or retraining for more than 842,600 service providers (with some providers receiving multiple trainings). Approximately 428,600 individuals were trained or retrained in the prevention of sexual transmission; 32,600 in PMTCT; 58,700 in prevention of medical transmission; 52,000 to support antiretroviral treatment; 143,300 to care for OVCs; and 93,900 to provide care for PLWHA.

In addition to training existing health care workers, it is also essential to bring new workers into the health workforce. 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 to deliver HIV/AIDS services. The experience in Ethiopia, described in the accompanying text box, shows that changing national and local policies to support task-shifting can foster dramatic progress in expanding access to prevention, treatment, and care services. The Emergency Plan works with its host country partners to broaden national policies to allow trained members of the community – including people living with HIV/AIDS – to become part of clinical teams as community health workers.

Another challenge to providing high-quality HIV/AIDS treatment and care is the retention of skilled health workers such as physicians, nurses, pharmacists, and laboratory personnel. The Emergency Plan is supporting a number of innovative approaches to retaining health care workers. In a successful effort to prevent “brain drain” from Namibia, the MoH provides a package of benefits, including medical benefits, housing support, paid maternity leave, and competitive salaries. As part of a comprehensive strategy for strengthening human resources for health, the Malawi

## Human Resource Capacity-Building Fiscal Year 2006 Results

83 percent of Emergency Plan partners in fiscal year 2006 were indigenous organizations.

In fiscal year 2006, the Emergency Plan supported training or retraining for more than 842,600 service providers (with individuals being trained in multiple areas in certain cases) and supported approximately 25,100 service sites in the focus countries, including:

- Support for training of approximately 428,600 individuals in prevention of sexual transmission.
- Support for training of approximately 32,600 individuals in prevention of mother-to-child transmission and 4,863 service sites.
- Support for training of approximately 58,700 individuals in prevention of medical transmission and 3,848 service outlets that carry out blood safety activities.
- Support for training of approximately 52,000 individuals to provide antiretroviral treatment and 1,912 treatment sites.
- Support for training of approximately 143,300 individuals to care for orphans and vulnerable children.
- Support for training of approximately 93,900 individuals to care for HIV-positive people and 8,019 service sites.
- Support for training of approximately 33,500 individuals to provide counseling and testing (in addition to those trained in prevention of mother-to-child transmission) and 6,466 service sites.

MoH provides free housing and support for educational scholarships to nursing tutors, who are critical to creating a larger pool of new health workers. Kenya, like many sub-Saharan countries, faces a human resources crisis due to lack of health care workers to deliver treatment and care in high need areas.

With PEPFAR support, the Capacity Project is working with the health sector on the Kenya Emergency Hiring Plan to take advantage of Kenya’s surplus of unemployed nurses, physicians, and other health professionals. The plan – approved and endorsed by the MoH – creates a non-governmental outsourcing mechanism to quickly hire, train, and deploy 800 providers in public-sector health centers. In Botswana, the Botswana Retired Nurses Society is expanding access to palliative care services for people living with

## The HIV/AIDS Twinning Center and Volunteer Healthcare Corps

The Emergency Plan supports twinning partnerships to build sustainable local capacity. The PEPFAR-funded HIV/AIDS Twinning Center supports strengthening of human and organizational capacity through the use of health care volunteers and twinning relationships to facilitate skills transfer and rapidly expand the pool of trained providers, managers, and other health staff delivering HIV/AIDS prevention, treatment, and care.

The Twinning Center currently supports 17 partnerships, with several new partnerships in development. Twinning partnerships are typically formed between a U.S. partner and a country partner, but eligible participants may be U.S.-based, regional, or local. Eligible entities include government agencies; schools of medicine, nursing, public health, management, and public administration; health sciences centers; community- and faith-based organizations; and third party country governments or organizations with cultural or linguistic ties to host nations. A South-to-South twinning partnership between the Government of Botswana and the African Palliative Care Association, based in Uganda, has resulted in the training of 200 health care workers in palliative care.

The Volunteer Healthcare Corps, another project of the Twinning Center, recruits individuals with expertise in health care and HIV/AIDS for mid- and long-term assignments in twinning partnership projects and other endeavors supported by the Emergency Plan. Volunteers from the Ethiopian Diaspora were recently placed in USG-supported treatment sites in Ethiopia, to work with hospital staff on infection control and to develop and implement a health education program. In Zambia, discussions are underway to place volunteer nursing faculty in nursing schools in rural areas of the country. The Corps, a network of health care volunteers, HIV/AIDS professionals and support personnel, assists Emergency Plan partners with clinical, educational, and capacity-building services without interrupting ongoing efforts.

HIV/AIDS through an innovative program using volunteer retired nurses. With PEPFAR support, the Society has recruited 25 retired nurses to provide comprehensive health and support services, including pain management, to 200 PLWHA. These trained health professionals are able to assess pain, advocate for the provision of appropriate pain relief medications including opiates, prescribe analgesics to minimize pain, and assist patients in adherence to their ARV regimen. This program has been so successful that the Society is planning to recruit, train and deploy 50 additional volunteer retired nurses in fiscal year 2007.

Twinning partnerships are another important tool to build local capacity. The resources of the PEPFAR-supported

Twinning Center, described in the accompanying text box, are used to expand and strengthen local expertise in administrative as well as clinical capacity building.

MoHs throughout Africa are recognizing the importance of building their capacity in human resources management and human capacity development. The Emergency Plan, along with other international partners such as the Global Fund and the World Bank, is working with host governments to support these institutions, many of which suffer from severe shortages of staff. In the Rwanda MoH, the USG funds and mentors a specialist in human resources for health (HRH). Strong leadership has made a significant difference on several important HRH initiatives, such as:

- Advising on recruitment criteria and contributing to plans for a staff appraisal system.
- Preparing and presenting a draft HRH policy for an interagency HRH technical working group.
- Developing a human resources strategic plan.
- Identifying the need for, and guiding the development of, an HRH information database.
- Arranging 32 postgraduate scholarships for Rwandan health professionals.

## Ethiopia: Task-Shifting to Health Officers and Health Extension Workers

In Ethiopia, a country with one doctor per 34,000 people, PEPFAR works with the Ministry of Health's Ethiopian Public Health Officer Training Program, developed and implemented by the Carter Center, to train 5,000 health officers to improve access to HIV/AIDS treatment and care in rural communities. The goal is to have one extension worker per 5,000 residents. With HIV/AIDS as a central component of the program, 2,400 students began their training to be Public Health Officers in 2006. Emphasis on task-shifting from physicians to health officers will enable health centers and health offices in rural and hard-to-reach areas of Ethiopia to retain staff and allow physicians to manage more complicated HIV/AIDS cases. In addition to the 5,000 health officers, 30,000 health extension workers will be trained by 2010 and will be assigned to rural areas to serve as the first point of contact for most Ethiopians accessing public health services. To date, 9,000 health extension workers have been trained, with an additional 7,000 expected to graduate in January 2007.

This model of supporting the human resource planning and management functions within the MoH is currently being considered for other countries, as well.

### **Training Networks**

The Emergency Plan supports efforts to train individuals to provide services at the hospital, clinic, community, and home levels, helping to expand the reach of a limited pool of trained medical doctors, nurses, and pharmacists. Collaboration with the International Training and Education Center on HIV (I-TECH), which is active in Africa, East Asia, India, and the Caribbean, is a key part of efforts to develop highly trained HIV/AIDS educators, providers, and managers. In fiscal year 2006, PEPFAR funded a Nursing Capacity Building program with the goal of developing a critical mass of nurse leaders – linked in regional support networks of colleagues – who can receive ongoing mentoring, as needed, from global expert HIV nursing professionals.

In collaboration with WHO, PEPFAR has developed a PMTCT Generic Training Package, building provider capacity and collaborative partnerships within countries. The Emergency Plan has sought to anchor the training in advanced centers to ensure quality, while developing tools to assess the quality of the training. One example of a training assessment tool is the Instructional Design and Materials Evaluation Form. This research and evaluation tool evaluates and scores curricula in terms of instructional design elements, content review, and evaluation methodology. USG training efforts are directed not only at expanding clinical capacity, but at developing the pool of trained managerial personnel. The non-clinical staff is a key element of effective health networks, which fosters quality programs. The Emergency Plan has made on-the-job HIV/AIDS training for health care workers a priority in order to avoid the disruption in care that can occur with off-site training.

### **Strengthening Essential Health Care Systems**

In most of the resource-poor countries served by the Emergency Plan, achieving the Plan's vision of a high-quality, sustainable HIV/AIDS response requires implementing and strengthening essential systems, including clinical quality assurance systems; health care networks, including infrastructure; and commodity procurement, distribution, and management systems. One critical area of PEPFAR's work with host nations is the development of surveillance

and monitoring and evaluation capacity, including training of host government staff to carry out surveillance activities, analyze data, and report results to key stakeholders. These activities are discussed in the chapter on Improving Accountability and Programming.

### **Clinical Quality Assurance**

The Emergency Plan reflects a belief that people in the developing world deserve HIV/AIDS prevention, treatment, and care services that are of high quality. In all of its clinical capacity-building work, PEPFAR seeks to support host nations as they expand their capacity to ensure quality.

Quality assurance capacity-building activities include support for monitoring and evaluating programmatic indicators, on-site supervision systems, and district, national, and international reviews. The Emergency Plan supports programs to adapt quality improvement approaches to the needs of developing countries. For example, the Quality Assurance and Workforce Development Project, implemented by USAID, uses a collaborative approach in which teams of providers have documented improvements in the quality of prevention, treatment, and care services. These teams may bring counselors, clinicians, laboratory professionals, and pharmacists together to discuss difficult cases and recommend courses of action, such as helping to oversee changes to costly second line therapies. The providers work in tandem with community volunteers, who help people living with HIV/AIDS to access appropriate services and develop self care skills.

Innovative methods of managing clinical information to monitor and evaluate the quality of HIV care also receive PEPFAR support. The Emergency Plan supports the development, distribution, training and support of HIV clinical care data management software (CAREWare), originally developed by the U.S. Department of Health and Human Services/Health Resource and Services Administration (HHS/HRSA) for providers of care in the U.S. The software promotes quality care by providing a clear, customizable, user-friendly, and confidential platform for entering, collecting, and reporting demographic, service, and clinical information. The international version of CAREWare has been implemented with PEPFAR support in Nigeria, Russia, Uganda, Vietnam, and Zambia.

In fiscal year 2006, PEPFAR and the National Hospice and Palliative Care Association supported the development of a

*Guide to Supportive and Palliative Care for HIV/AIDS in Sub-Saharan Africa.* This guide, written by African health care professionals, is now available on the web site of the Foundation for Hospices in Sub-Saharan Africa (<http://www.fhssa.org>).

The HIVQual software program is another tool currently in use in some PEPFAR host nations, such as in Uganda's HIV care programs. To facilitate quality improvement, HIVQual enables participants to measure key indicators and use these measurements to benchmark and make progress on working toward objectives. The HIVQual software includes validated HIV clinical indicators for measurement of HIV clinical care (including ART management, opportunistic infection prophylaxis, tuberculosis screening and others), algorithm-based prompts to guide data entry, the ability to generate reports of performance data, and the capacity to analyze data by subgroups.

#### ***Health Care Network and Infrastructure Development***

The HIV/AIDS epidemic has placed a huge burden on the health care systems of many high-prevalence countries. Major disparities often exist between urban and rural health services, with a concentration of health professionals and institutions in major cities. The Emergency Plan is supporting host nations in meeting the demand for services by rapidly expanding existing indigenous health networks. This includes supporting linkages and coordination between central health facilities and outlying health clinics, including those in rural areas, to deliver quality HIV/AIDS services.

Common infrastructure obstacles to national responses include under-resourced facilities; unreliable electricity and water supplies, especially outside urban areas; outdated or broken equipment; and lack of information and communications technology for basic program planning and monitoring. Flexible, computer-based data systems enable host nations to classify, store, and analyze scientific information, allowing them to set national priorities, make important decisions on resource allocation, and monitor program activities.

In support of national strategies and Emergency Plan goals, PEPFAR is addressing these barriers by supporting such activities as the renovation of existing health facilities; procurement of equipment, supplies, furniture, and vehicles; improvement of information systems; and financing for

### **South Africa: Building Capacity to Manage Treatment Regimes**

Frere Hospital is a 650-bed facility located in the Amatole district of South Africa's Eastern Cape province. At the facility, PEPFAR supports efforts to enable health care professionals to improve their management skills. Through the program, Frere Hospital pharmacists learn when to order pharmaceuticals, how much inventory to stock, and how to store medicines safely.

These efforts prompted Frere Hospital to develop professional policies and procedures to manage their pharmacy competently. Pharmacists now maintain stock levels that are appropriate for patients' needs, helping to ensure that the drugs are dispensed reliably and in the correct doses. Medical staff also identify factors that affect drug costs, so they can keep their inventory up-to-date and affordable for patients.

Technical training through the project emphasizes the importance of building well-organized health care settings, with staff capable of selecting suitable and inexpensive drug therapy. This process, known as a "formulary management system," enables medical professionals to work together to promote clinically sound, safe and cost-effective pharmaceutical care. Medical providers learn how to quickly identify and find solutions to potential problem areas and to improve the overall use of medicines.

expanded HIV/AIDS service delivery under the Emergency Plan. In South Africa, the Emergency Plan supports efforts at the Frere Hospital to enable health care professionals to improve their management skills (see text box on South Africa).

#### ***Laboratory Support***

A good public health laboratory network is a cornerstone of a strong response to HIV/AIDS. Without laboratory support, it is very difficult to diagnose HIV infection and provide quality care and treatment for PLWHA. In many Emergency Plan countries, existing laboratories lack equipment and trained staff, as well as established quality assurance procedures to help ensure the reliability of laboratory services. In an effort to support laboratory sustainability, the Emergency Plan is devoting considerable resources to building capacity in a National Reference Laboratory (NRL) in each country. As the apex of a laboratory network, NRLs have an important responsibility to supervise and train personnel in other laboratory sites within a country. Perhaps most importantly, the NRL is usually responsible for quality assurance for the laboratory network.



## Key Components for Building Laboratory Capacity

- Developing comprehensive in-country laboratory policies, strategic plans and implementation strategies.
- Planning for and providing technical assistance to national laboratories.
- Facilitating communication between and among countries (including South-to-South technical assistance) on good laboratory practices.
- Providing technical review of laboratory activities, technical documents, papers, and abstracts.
- Integrating good laboratory practices into strategies, technical guidance, and technical assistance.
- Ensuring coordinated laboratory technical assistance.
- Integrating laboratory activities into prevention, treatment, care and strategic information programs within each country.

## Zambia: Project Supplies HIV Test Kits and ARVs, Conducts National Quantification of Lab Supplies

HIV test kits are in high demand, as more and more people are interested in knowing their HIV status. In response, with support from PEPFAR, the Supply Chain Management System (SCMS) project delivers HIV test kits to the Zambia Ministry of Health's Central Medical Stores, for use at various testing sites throughout Zambia. By delivering kits in smaller shipments on a monthly basis, rather than in one bulk shipment, clients receive test kits with a longer shelf life, and space-constrained warehouses keep a smaller amount of inventory on hand. In addition, the first shipment of a large order of ARVs arrived in Zambia on November 17, 2006. These drugs will be provided to patients served by the Ministry of Health's AIDS treatment program.

In September 2006, SCMS provided short-term technical assistance to the Zambia Ministry of Health's laboratory staff and other partners, to conduct the national level laboratory quantification of lab commodities. This produced an estimate of the quantities needed to meet short- and long-term planning. Based on this exercise, the Ministry will produce a procurement plan for lab commodities, which will be supported by the Emergency Plan.

## Building Laboratory Capacity and Supporting Quality Testing

With the rapid expansion of HIV treatment in resource-poor countries, and the accompanying need for HIV diagnosis and care that comes with it, there is a need to build capacity for high-quality laboratory services. This effort includes:

- **The use of rapid HIV tests.** These tests, which require minimal equipment and can be reliably performed by lay counselors, can dramatically expand a country's capacity to perform HIV testing. Rapid tests can detect HIV infection in less than an hour and are used in voluntary counseling and testing sites throughout PEPFAR countries. In 2006, several countries made great progress in implementing and scaling up rapid HIV testing, including Botswana, Ethiopia, Kenya, Mozambique, Nigeria, Rwanda, South Africa, Tanzania, Uganda, and Zambia. Rapid HIV tests are especially important at peripheral testing sites – those far from fully equipped laboratories.
- **Laboratory quality assurance.** This is critical for making an accurate diagnosis of HIV infection, determining when to start treatment, and monitoring patients while on treatment. It also includes on-site supervision and monitoring to support laboratories in smaller facilities.
- **Incidence testing.** This provides countries with the best data on where recent transmission has occurred. This information is essential for planning effective prevention programs and for measuring the success of programs.
- **Tests for early infant diagnosis of HIV infection.** Diagnosing newborns is technically complicated and costly. Laboratories providing such testing are usually not located near PMTCT sites. In an effort to expand access to vital infant testing, the Emergency Plan is promoting early infant HIV diagnosis through the use of dried blood spots. This simple, inexpensive sample collection approach allows for easier transportation and storage of samples than other collection devices, and requires less blood from the infant. This approach can help determine the HIV status of infants as young as six weeks old.
- **CD4 testing.** This is helpful for determining the level of immunosuppression of the HIV infection. It is an important component for determining when to initiate treatment and for monitoring response to treatment.
- **Detection of resistance to ARVs.** As more individuals are treated, the issue of resistance to ARVs will become more prominent. PEPFAR works with WHO to support its efforts to improve global, population-based surveillance for HIV drug resistance.
- **Diagnosing opportunistic infections, including sexually transmitted infections.**
- **Tuberculosis (TB) diagnosis and TB drug resistance testing.** Since up to half of all AIDS-related deaths are caused by TB, it is critically important to rapidly diagnose and treat people with TB to prevent illness and death, and to prevent the spread of TB to others.

## Uganda: Better Treatment Management through Better Labs

Fully functional laboratories are critical for a high-quality anti-retroviral treatment program. Special tests are required to monitor the progression of the disease in order to provide correct treatment. However, in many parts of Uganda, either the laboratories cannot perform the necessary tests or there are no labs at all.

The Joint Clinical Research Center (JCRC) works to address gaps in Uganda's overburdened health sector, and to scale up HIV/AIDS treatment. To respond to the critical need for high-quality laboratory services, JCRC has established four Regional Centers of Excellence in the northern, western, southwestern, and eastern regions of Uganda.

To create the Centers of Excellence, existing laboratories underwent extensive renovations. The Acting Head of JCRC in Mbale, Dr. William Kizito, explained: "If I could rate the change, it would be 150 percent improvement." With funding from PEPFAR, JCRC built extensions, installed computers, improved data collection systems, and provided clinical furniture, secure drug storage facilities, and communication equipment.

The renovated laboratories have the capacity to conduct the sophisticated tests required in ART management and monitoring. Although diagnostic and monitoring tests for children had previously been available only at JCRC in Uganda's capital of Kampala, these services now are available at the Mbale and Fort Portal laboratories. Located in the east and west of Uganda, these Centers of Excellence act as regional training and quality assurance centers.

JCRC has established laboratory management teams, whose role is to monitor and ensure delivery of high-quality laboratory services at the regional centers. In addition, strong links have been established with the laboratories and the Ministry of Health, the National Laboratory Technical Committee, and the National Public Health Laboratory. These links ensure that coordination of laboratory services is in line with national plans.



The Mbale Hospital JCRC AIDS Clinic underwent renovations with support from the Emergency Plan, providing the clinic with the capacity to conduct sophisticated tests required in ART management and monitoring that were not previously available.

Emergency Plan staff have worked to strengthen the capacity of all focus countries to diagnose HIV and related infections. This allows growing numbers of people to learn their HIV infection status, and enables physicians to reliably determine which patients will benefit from treatment and monitor the success of that therapy. In Uganda, the Joint Clinical Research Center works to provide additional laboratory support to address gaps in the country's overburdened health sector and to scale up HIV/AIDS treatment (see accompanying text box).

One priority is to support the use of rapid HIV tests. These tests, which require minimal equipment and can be reliably performed by lay counselors, can dramatically expand the capacity of countries that allow their use to perform HIV

testing, as described in the Care chapter. Rapid HIV tests are especially important in peripheral testing sites, far from fully equipped laboratories. Emergency Plan personnel have prepared a training package on Rapid HIV Testing. They have participated in training programs for trainers and other staff, to ensure that trained manpower will be available for conducting such testing at PMTCT and other counseling and testing sites. Similar training packages for hematology, chemistry, CD4 testing, and for the diagnosis of HIV infection in infants are being prepared, which can be used by national personnel for future trainings.

To this end, the Emergency Plan has supported the development of a rapid HIV test training package and a plan for integration of HIV rapid testing in HIV prevention, treat-

ment, and care programs. This training package has been customized by host nations and used to train hundreds of health care workers in Botswana, Kenya, Namibia, Tanzania, Uganda, and Zambia. Emergency Plan staff have been involved in supporting countries and collaborating agencies in the important task of evaluating rapid HIV test algorithms for use in-country. New rapid HIV tests are validated prior to their use in USG programs. This ensures that counseling and testing programs use the proper tests to identify people living with HIV/AIDS.

HIV incidence testing provides countries with the best data on where recent transmission has occurred. This information is essential for planning effective prevention programs and for measuring the success of programs in achieving the PEPFAR prevention goal. Emergency Plan teams have provided in-country/regional training on incidence testing in China, Ethiopia, Rwanda, South Africa, and Vietnam. Training in China and an Asia regional workshop are planned.

As discussed in the chapters on Children and Treatment, diagnosis of HIV infection in newborns is technically complicated and costly. Laboratories providing such testing are usually not located near PMTCT sites. In an effort to expand access to vital infant testing, Emergency Plan staff has trained local staff in the use of dried blood spots. This allows for the ready transport of specimens to central or provincial laboratories where testing is available. Training on the polymerase chain reaction (PCR) laboratory assay needed to detect HIV infection in infants has been provided to Ethiopia, Kenya, Mozambique, and Zambia and trainings in Nigeria and Tanzania are planned.

CD4 testing is very helpful for determining the level of immunosuppression in HIV infection. It also can be used as an important adjunct for determining when to initiate treatment and for monitoring response to treatment. Emergency Plan staff has been involved in the evaluation of lower cost and simpler assays for measuring CD4 cells. Training has been provided in conjunction with partners in Côte d'Ivoire, Ethiopia, Malawi, and Tanzania.

As more individuals are treated, the issue of resistance to ARVs will become more prominent. PEPFAR country teams are working with host nations to develop national or regional programs to conduct population-based resistance testing for monitoring resistance within a country. These



Sponsored by an Emergency Plan partner, the Djibouti Armed Forces deliver laboratory equipment, including a CD4 counter, to assist with antiretroviral treatment.

also will use dried blood spots, which will be transported to laboratories for analysis. Training of laboratory staff to perform resistance genotyping testing has been provided to Ethiopia and Kenya.

Laboratory quality assurance is critical in assuring accurate diagnosis of HIV infection, determining when to start treatment, and monitoring patients while on treatment. The Emergency Plan has supported extensive training of in-county staff on building and sustaining high-quality laboratory systems. PEPFAR also supports the establishment of proficiency testing programs for laboratory testing in such areas as hematology, chemistry, CD4 testing, and infant diagnosis. This will build confidence in the ability of the laboratories to support the HIV programs, as well as sexually transmitted infection (STI) and TB programs. The USG also supports the development of laboratory certification programs in each country.

### ***Commodity Procurement: Toward Sustainable Supply Chain Management***

Comprehensive HIV/AIDS programs that are sustained for the long term require a continuous inflow of high-quality medicines and supplies. In concert with in-country partners, the USG is partnering with host nations to build the necessary infrastructure to fight the global pandemic of HIV/AIDS. The Partnership for Supply Chain Management was established in 2005 by PEPFAR and leaders in international supply chain management, including four African organizations, to implement PEPFAR's Supply Chain Management System (SCMS). SCMS strengthens systems to deliver an uninterrupted supply of

## Rwanda: Pooled Procurement and Capacity-Building Help to Scale Up Treatment

The Rwandan Government and its international and implementing partners have pioneered an effective and accountable system to jointly procure antiretroviral drugs (ARVs) for Rwanda. Project partners include the U.S. Government, the Global Fund, the World Bank, and others.

In October 2004, the Rwandan Ministry of Health issued a Ministerial Order requiring that all ARVs be procured through the Centrale d'Achats des Médicaments Essentiels Consommables et Equipements Medicaux du Rwanda (CAMERWA), the national pharmaceutical procurement agency, in order to maximize purchasing power.

The CAMERWA-coordinated procurement in February 2006 included support from program partners, which purchased portions of Rwanda's overall ARV needs while adhering to their individual procurement requirements. PEPFAR funds were used to buy HHS/FDA-approved ARVs for first- and second-line treatment, while the Global Fund, World Bank and others purchased other WHO-prequalified drugs for first-line treatment. As a result of this new system, CAMERWA now distributes ARVs to pharmacies according to their patients' needs, regardless of which donor supports the site.

There are several benefits associated with the combined procurement system. Rwanda obtains a better price for the ARVs, due to the large quantities being ordered, and money is also saved through lower management costs and reduced transportation costs. The coordination also has a clinical benefit: since drugs are packaged with different shapes, quantities and inscriptions, leading to confusion and potential non-adherence, the coordinated procurement program reduces the risk of confusion.

In addition, the Partnership signed a landmark sub-agreement and Memorandum of Understanding with CAMERWA on November 13, 2006. The sub-agreement enables SCMS to contract with CAMERWA to provide port clearance, storage, and distribution services for all Emergency Plan commodities in Rwanda. The Memorandum of Understanding defines the roles and responsibilities of both CAMERWA and SCMS, in a collaborative relationship that will promote sustainable improvements to the HIV/AIDS commodity supply chain in Rwanda. SCMS will provide technical support, to enhance the capacity of CAMERWA so it can qualify to become a direct recipient of USG funds in the future.



Ambassador Zephyr Mutangwa, Director General of CAMERWA signs the Sub-Agreement and Memorandum of Understanding while Mme. Caroline Kayonga, Permanent Secretary of the Rwandan Ministry of Health witnesses.

high-quality, low-cost products that will flow through a transparent and accountable system.

SCMS's activities include supporting the purchase of life-saving antiretroviral drugs, including low-cost generic ARVs; drugs for PLWHA care, including drugs for OIs such as tuberculosis; laboratory materials such as rapid test kits; and supplies including gowns, gloves, injection equipment, and cleaning and sterilization items.

To meet the need for a range of ARVs that are proven to be safe, effective, and of low cost, HHS/Food and Drug Administration (FDA) introduced in May 2004 an expedited

process whereby ARVs from anywhere in the world, produced by any manufacturer, could be rapidly reviewed for purchase under PEPFAR. Approved or tentatively approved ARVs meet standards equal to those established for the U.S., ensuring that no drug purchased for use in PEPFAR programs abroad falls below standards for the U.S. market. Through January 7, 2007, 34 generic ARV formulations received approval or tentative approval from HHS/FDA under the expedited review, including eight pediatric formulations and eight fixed-dose combination (FDC) formulations containing at least two individual ARVs. FDCs are invaluable because they are easier to manage for patients, health workers, and program managers

and can serve as an important bulwark against the development of HIV drug resistance. Three co-packaged triple drug combinations and two triple FDCs are now HHS/FDA tentatively approved and available for use by Emergency Plan partners and others.

SCMS and Emergency Plan partners have worked together to ensure that the lowest-priced, highest-quality drugs are available for ART. By late 2006, 14 focus countries had imported HHS/FDA-approved generics. Most FDA-approved products to date are widely used, standard first-line generic ARVs such as Triimmune. In many countries, host governments also have requested USG support for more expensive second-line ARVs. As a side benefit, the process developed for PEPFAR also has expedited availability of generic versions of ARVs whose U.S. patent protection has expired.

SCMS supports delivery of essential lifesaving medicines to the front lines of Emergency Plan joint efforts with host nations. In its first year, SCMS established the infrastructure necessary to bring 17 organizations together to establish a global enterprise with the capability of procuring and delivering millions of dollars worth of life-saving HIV/AIDS drugs and supplies to those who need them. To date, approximately \$94 million of focus country prevention, treatment, and care resources have been provided to the Partnership to support procurement of commodities such as ARVs, technical assistance, logistics and other aspects of supply chain management. Usage of SCMS is expected to increase significantly during its second full year of operation in fiscal year 2007. The project not just met but exceeded its goal of making initial country visits to all 15 of the Emergency Plan focus countries. Moreover, SCMS responded to in-country requests for long-term technical assistance by opening 10 country offices.

Since October 2005, SCMS has ensured an uninterrupted supply of ARVs, test kits, and other vital commodities to HIV/AIDS programs in Botswana, Côte d'Ivoire, Guyana, Haiti, Nigeria, Rwanda, Vietnam, and Zambia. SCMS has filled commodity orders on behalf of country programs that were frequently in danger of stockouts. (For more information, please see the Stockouts Averted section in the Treatment chapter.) Additionally, SCMS was enlisted to contribute to the coordination of significant donor-funded initiatives such as the World Health Organization (WHO)/Joint United Nations Programme on HIV/AIDS

(UNAIDS) efforts to prepare a global ARV demand forecast, including active pharmaceutical ingredients, through 2008. As the technical secretariat of the Global Fund to Fight AIDS, Tuberculosis and Malaria, the World Bank, and PEPFAR's joint procurement planning initiative, SCMS facilitates national procurement planning and supply chain management of HIV/AIDS commodities in six countries (Ethiopia, Guyana, Haiti, Mozambique, Rwanda, and Vietnam). For more information on SCMS and PEPFAR's treatment programs, see the chapter on Treatment.

In collaboration with in-country and international partners, SCMS employs the following key strategies:

- Strengthen existing systems and avoided building parallel systems.
- Aggregate procurement across many countries using longer-term supplier contracts to leverage economies of scale.
- Freight forwarding and inventory management, using regional distribution centers for efficiency and cost savings.
- Improve availability and use of logistics information for supply chain decision-making at the local, national, and international levels.

### Pioneering Sustainable Supply Chain Systems

A sound and reliable global supply chain incorporates innovative elements, including:

- *Pooled procurement across countries:* Working with manufacturers to stabilize supply and plan for capacity expansion and achieving economies of scale.
- *Field-driven:* Ensuring a field-driven approach, from initial product selection and forecasting through product delivery to patients in need.
- *In-country supply systems:* Augmenting and improving in-country supply chains, rather than replacing functioning systems.
- *Regional warehousing and distribution:* Strengthening national supply chains by using regional distribution centers. Distributing commodities in quantities that existing infrastructure can handle reliably and safely.

- Global quantification of needs and coordination of efforts.
- Sustainable solutions and capacity building in quantification, procurement, quality assurance, freight forwarding and inventory management, distribution, and logistics management information systems.
- Voxiva, Inc. – Washington, D.C.
- 3i Infotech, Inc. – Edison, N.J.

Each partner offers unique capabilities to ensure that high-quality ARVs, HIV tests, and other supplies for diagnosing and treating HIV/AIDS are available to the people – patients, clinicians, laboratory technicians, and others – who need them.

The implementing members of the Partnership for Supply Chain Management are:

- Affordable Medicines for Africa – Johannesburg, South Africa
- AMFA Foundation – St. Charles, Ill.
- Booz Allen Hamilton – McLean, Va.
- Crown Agents Consultancy, Inc. – Washington, D.C.
- Fuel Logistics Group (Pty) Ltd. – Sandton, South Africa
- International Dispensary Association – Amsterdam, Netherlands
- JSI Research and Training Institute, Inc. – Boston, Mass.
- Management Sciences for Health, Inc. – Boston, Mass.
- The Manoff Group, Inc. – Washington, D.C.
- MAP International – Brunswick, Ga.
- Net1 UEPS Technologies, Inc. – Rosebank, South Africa
- The North-West University – Potchefstroom, South Africa
- Northrop Grumman Information Technology – McLean, Va.
- Program for Appropriate Technology in Health – Seattle, Wash.
- UPS Supply Chain Solutions<sup>SM</sup> – Atlanta, Ga.

## Action to Ensure Effective Supply Chains

The Supply Chain Management System (SCMS) supports developing countries in rapidly scaling up HIV/AIDS prevention, treatment and care, programs in three ways: 1) strengthening capacity of national supply chains to ensure long-term sustainability; 2) operating a safe, secure, affordable and reliable supply chain to buy and distribute essential medicines, HIV test kits, lab supplies, and other commodities; and 3) supporting supply chain collaboration and information-sharing by global and local partners in the HIV/AIDS community.

SCMS brings together 17 organizations to take advantage of best practices in the private and public sectors, including: the prevention of overstocks and stockouts by supporting national quantifications and forecasting; achieving best-price by aggregating orders and forming long-term contracts with brand and generic drug manufacturers; and ensuring the rapid and reliable re-supply of drugs through the establishment of secure regional distribution centers.

Now entering its second year of operation, SCMS has the full capability to procure and deliver millions of dollars worth of life-saving HIV/AIDS drugs and supplies to those who need them, and is working in PEPFAR focus countries to build the capacity of national supply chains. Joint teams, comprised of staff from SCMS and the USG, completed initial visits to all 15 focus countries. The purpose of these visits was to meet key stakeholders, make preliminary inquiries about USG needs for HIV/AIDS product procurement and technical assistance, and discuss the strengths of SCMS in fulfilling them.

As part of a separate initiative, SCMS recently was appointed Technical Lead, to support enhanced collaboration among PEPFAR, the World Bank, and the Global Fund in order to facilitate joint national procurement planning and supply chain management of HIV/AIDS commodities. Six pilot countries have been selected for the first phase of this activity, including Ethiopia, Guyana, Haiti, Mozambique, Rwanda, and Vietnam.

Country highlights include:

**Botswana:** In September, SCMS received an urgent request from the Ministry of Health through the PEPFAR team in Botswana for the procurement of infant formula. SCMS identified potential sourcing options and sought the necessary core funds to finance the emergency procurement of 280,000 tins of infant formula. This quantity was enough to meet the country's needs and bridge the gap until their regularly scheduled order arrived.

**Côte d'Ivoire:** SCMS has made multiple deliveries of HIV/AIDS-related commodities, such as ARVs and laboratory supplies, for USG-supported partner sites. SCMS and the USG PEPFAR team collaborated with key partners in a national ARV quantification exercise, which included the Elizabeth Glazer Pediatric AIDS Foundation, Global Fund, United Nations Development Program, and the Ministry of Health. As part of the ongoing capacity building, SCMS will conduct a laboratory quantification exercise that will include all partners and stakeholders.

**Ethiopia:** In collaboration with the Ministry of Health and Pharmid, an Ethiopian parastatal company, SCMS will support the distribution of all HIV/AIDS commodities, including those funded by PEPFAR. SCMS also will provide support to the Ethiopian Health and Nutrition Research Institute for the development of a comprehensive laboratory logistics system.

**Guyana:** SCMS is supporting the Ministry of Health in its efforts to strengthen warehousing and inventory management systems, by providing technical expertise, personnel training, and resources. In July, SCMS partnered with the MoH to open a new warehouse that is secure and temperature-controlled, using best-practice operating procedures for storing and distributing HIV/AIDS-related commodities. Through the newly created Guyana Quantification Stakeholders Group, a national quantification has been completed for ARVs and drugs used to treat opportunistic infections and sexually-transmitted infections.

**Haiti:** In September 2006, the USG team asked SCMS to assist with an emergency procurement of HIV test kits in Haiti, in order to prevent a potential stockout. The next day, 16,200 test kits were delivered to the SCMS warehouse in Port au Prince. As part of a capacity building effort, SCMS has conducted trainings in ARV Dispensing Tool, a patient-tracking and drug consumption software tool, as well as trainings in inventory management. SCMS also has conducted a national level quantification for anti-retrovirals, drugs for opportunistic infections, and laboratory equipment and supplies. In addition, SCMS designed a PEPFAR program management information system for the USG team.

**Kenya:** In collaboration with the USG team, and in an effort to support established supply chains operated by faith-based organizations, SCMS has continued its discussions with Mission for Essential Drugs (MEDS) to identify areas of potential collaboration. SCMS is planning to open a regional distribution center (RDC) in Nairobi in early 2007 to serve the HIV/AIDS commodity needs of East African focus countries.

**Mozambique:** An initial procurement work-plan has been developed for Mozambique, and the first ARV order was delivered in early 2007 through the SCMS southern Africa regional distribution center.

**Namibia:** In addition to general supply chain support for anti-retroviral treatment, SCMS will provide support to the Namibia Institute of Pathology in the development of laboratory logistics systems. In order to better support voluntary counseling and testing centers in Namibia, SCMS also will be assisting the Social Marketing Association in the development of a logistics system for HIV test kits.

**Nigeria:** SCMS procured and delivered HIV test kits to the USG Team in Abuja, via the Ghana regional distribution center. An urgent procurement of ARVs for the Nigerian Department of Defense also was delivered on time in 2006.

**Rwanda:** With the goal of supporting a well-developed procurement system, SCMS staff signed a subcontract, a memorandum of understanding, and a technical assistance plan with CAMERWA, the national public sector drug procurement and supply agency, in 2006. SCMS has used a national quantification exercise, carried out by the Rwanda's Treatment and AIDS Research Centre, to develop estimates for the procurement costs of ARVs, drugs for opportunistic infections, test kits, and laboratory supplies needed through March 2008. SCMS and CAMERWA issued joint contracts for PEPFAR commodities in December 2006. The first antiretrovirals will arrive in January 2007.

**South Africa:** In 2006, SCMS established a regional distribution center in Johannesburg to serve focus countries throughout the region. The distribution center will enable SCMS to provide a more rapid and regular supply of vital drugs and other commodities for HIV/AIDS programs.

**Tanzania:** SCMS completed a national-level assessment of the supply chain systems related to HIV/AIDS programs. In response to a Ministry of Health request, SCMS procured one million tablets of an ARV.

**Uganda:** SCMS is working with the Inter-Religious Council of Uganda (IRCU), to prepare them to launch an antiretroviral program in January 2007 that will scale up to treat 1,500 patients by the end of September 2007. SCMS is assisting IRCU with quantification and procurement of drugs. SCMS also has contributed to the development of a memorandum of understanding between the IRCU and the Joint Medical Stores, a faith-based organization, which will handle in-country warehousing.

**Vietnam:** SCMS has been working with the Government of Vietnam to procure antiretrovirals in support of the national AIDS treatment and care program. In August 2006, SCMS delivered its first shipment of generic antiretrovirals, and in November 2006 its first shipment of pediatric antiretrovirals.

**Zambia:** In September 2006, SCMS provided short-term technical support to the Ministry of Health's laboratory staff and partners, to conduct the national-level quantification of lab commodities. SCMS has made multiple deliveries of HIV test kits and antiretrovirals to support the national HIV/AIDS treatment and care program.



A warehouse staff worker in Rwanda verifies ARV shipment contents at CAMERWA.

Greg Roche







Mrs. Laura Bush visits with representatives from the Mothers to Mothers-To-Be program of South Africa on March 13, 2006 in the private residence at the White House. From left to right are Babalwa Mbono, Aunt Manyongo "Kunene" Mosima Tantoh and Gloria Ncanywa.

**“When we talk about respect for women, we are referring to a moral truth. Women are free by nature, equal in dignity and entitled the same rights, the same protections and the same opportunities as men.”**

**Secretary of State Condoleezza Rice  
Remarks at the Independent Women’s Forum  
upon Receiving Woman of Valor Award  
May 10, 2006**

## Chapter 5

# Responding to Critical Issues: Gender and HIV/AIDS

### Issues and Challenges

Over the past year, the President’s Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR) has played an important role in responding to the growing feminization of the HIV/AIDS epidemic. As highlighted during the U.N. General Assembly High Level Meeting on HIV/AIDS, it is essential that HIV/AIDS programming be responsive to gender disparities. The Emergency Plan is proactively confronting the changing demographics of the disease; working to reduce gender inequalities and gender-based abuse and violence; expanding priority gender activities; and integrating gender considerations throughout all programming areas.

The number of women and girls living with HIV continues to grow rapidly. The Joint United Nations Programme on HIV/AIDS (UNAIDS) estimates that there are more than 17.7 million women living with HIV worldwide – more than a million more than in 2003. In sub-Saharan Africa, approximately 58 percent of all people living with HIV are female. The United Nations estimates that every day more than 4,000 young people aged 15 to 24 become infected with HIV around the world. By some estimates, a staggering two-thirds of these new infections are among women. In some countries, girls between the ages of 15 and 19 are

infected at rates that are three to six times higher than among boys their age.

Among the harmful social norms and practices that increase the vulnerability of women and girls are those that: restrict women’s access to HIV/AIDS information and services; severely limit women’s control over their sexual lives, leaving them vulnerable to sexual violence and abuse and putting them at increased risk of HIV transmission; and deprive them of economic resources and legal rights necessary to protect themselves from HIV/AIDS and contribute productively to caring for others affected by the disease. It is also important to note that harmful social norms and practices can also increase vulnerability of boys and men, such as pressure from peers or others to have multiple sexual partners or to seek transactional sex. Some of the implications of these challenges are introduced in the chapters on Prevention, Care, and Children.

As noted in the chapter on Care, women carry a disproportionate care-giving burden when family and community members become sick with AIDS or die. These burdens often fall on girls and young women, preventing them from obtaining an education and losing the potential for economic empowerment which an education can provide. In

addition, women who provide care – or who become HIV-positive themselves – often face severe stigma.

The societal issues around gender and HIV/AIDS are complex, and in some cases the issues vary from one country to another, requiring different approaches. Addressing these challenges successfully, however, is critical to the achievement of the Emergency Plan’s ambitious prevention, treatment, and care goals.

### Priority Gender Strategies

The authorizing legislation for PEPFAR (Public Law 108-25) specifies that PEPFAR will support five high-priority gender strategies:

1. Increasing gender equity in HIV/AIDS activities and services;
2. Reducing violence and coercion;
3. Addressing male norms and behaviors;
4. Increasing women’s legal protection; and
5. Increasing women’s access to income and productive resources.

These five priority gender strategies of the Emergency Plan are monitored annually during the Country Operational Plan (COP) review process. In fiscal year 2006, a total of \$442 million supported more than 830 interventions that included one or more of these gender strategies. Highlights



Men, such as those pictured here from Kenya, play an important role in addressing gender issues and the Emergency Plan supports community-based prevention programs and media messages to change male norms and behavior.

of these activities are summarized in table 5.1 and presented in greater detail throughout this chapter.

### Strengthening PEPFAR’s Approach to Gender

On June 1, 2006, PEPFAR convened a wide range of gender experts for a one-day meeting to facilitate discussion among key stakeholders on issues and priorities for gender and HIV/AIDS prevention, treatment, and care programming. More than 120 participants attended the “President’s Emergency Plan for AIDS Relief: Gender and HIV/AIDS Consultation,” including Congressional staff, researchers, and program staff from U.S. Government (USG) agencies, multilateral agencies, and HIV/AIDS implementers, including from non-U.S. funded organizations. Objectives of the meeting were to review the state of knowledge and the latest findings on gender and global HIV/AIDS; to examine innovative programs currently being implemented under PEPFAR; to identify program opportunities and gaps for innovation and scale-up; and to inform PEPFAR’s gender programming priorities for the coming year.

The meeting was organized around panels and small-group discussions and featured presentations by leading experts on gender issues and strategies related to HIV/AIDS; illustrative examples of how PEPFAR is programmatically addressing gender issues; and recommendations for strengthening gender and HIV/AIDS programming.

Outcomes of the Consultation were summarized and presented for feedback at the HIV/AIDS Implementers’ Meeting on June 13, 2006, in Durban, South Africa. Based

Table 5.1: Gender: Number of activities per Gender Strategic Focus Area in FY2006	
Gender Strategic Focus Area	Number of activities that include this Strategic Focus Area
Increasing Gender Equity	460
Addressing Male Norms and Behaviors	348
Reducing Violence and Coercion	243
Increasing Women’s and Girls’ Access to Income and Productive Resources	97
Increasing Women’s Legal Protection	80
<b>Note:</b> Each activity may include multiple focus areas.	

on this feedback, three high-priority topic areas were identified:

- Creating positive change in male norms, roles, and behaviors;
- Strengthening services for gender-based violence within the health setting; and
- Addressing HIV vulnerabilities among young girls and women.

### *Taking Recommendations into Action*

In August 2006, PEPFAR allocated an initial \$8 million in central funding to launch gender-specific initiatives that were designed based on the priority topics identified through the Gender Consultation process. These initiatives represent an opportunity to develop innovative approaches and test implementation across several countries. Robust assessments of each approach will result in greater opportunity for expansive scale-up of effective gender programming in the context of HIV/AIDS.

- **Changing male norms** – This project aims to scale up coordinated, evidence-based interventions by providing technical resources and support in order to develop and implement a strategic, intensive, and coordinated approach to changing male norms and behaviors. The program scale-up will be evaluated by assessing changes in social/community norms and individual behavior.
- **Responding to gender-based violence** – This project aims to increase access for survivors of sexual violence to comprehensive treatment services, including HIV post-exposure prophylaxis (PEP), by: implementing sexual violence service delivery models and strengthening the capacity of local partners and institutions to deliver high-quality health care services, including PEP, to survivors of sexual violence; establishing and improving linkages among the health, law enforcement, legal, and community service sectors for delivery of a coordinated response to sexual violence survivors; fostering South-to-South exchange of programmatic experience, protocols, and tools; and measuring the costs and outcomes of implementing these services.

- **Addressing adolescent vulnerability** – This project aims to prevent HIV infection among 13 to 19-year-old orphaned girls, by developing innovative program interventions to successfully modify contextual factors (such as economic and social vulnerabilities) associated with increased sexual risk behavior and rates of HIV infection among these adolescents; and assessing the feasibility and effectiveness of these interventions and their potential for sustainability, scale-up, and transferability to other settings.

Programming of these funds is planned to begin in fiscal year 2007, and will be supplemented with country funds to expand implementation. The Gender Technical Working Group (discussed further later in this chapter) will oversee implementation of the initiatives and continue to support field programs in these and other critical gender areas.

### **Results**

#### *Increasing Gender Equity in HIV/AIDS Activities and Services*

The Emergency Plan was the first international HIV/AIDS program to disaggregate results data by gender. This disaggregation is critical to understanding the extent to which women and men are reached by life-saving interventions, and helps implementers to better understand whether programs are achieving gender equity. Utilizing gender-equitable strategies supported by this growing evidence base allows the Emergency Plan to reduce vulnerabilities that contribute to the significant gender disparities of the HIV/AIDS epidemic. An important part of this effort involves working with men to change norms and behaviors through HIV prevention, treatment, and care services with efforts such as male-partner testing activities within prevention of mother-to-child transmission (PMTCT).

The Emergency Plan is committed to ensuring that all the activities it supports provide equitable access to services and meet the unique needs of women, girls, men and boys, including orphans and victims of sex trafficking, rape, abuse, and exploitation. In fiscal year 2006 in the focus countries, gender-disaggregated data were available for more than 90 percent of service statistics at downstream sites.

An encouraging fact is that an estimated 61 percent of those receiving antiretroviral treatment through downstream USG support in fiscal year 2006 were women; of these, nearly seven percent were under the age of 15. Given

that most people on USG-supported treatment live in Africa – where 58 percent of infected adults are women – ensuring equitable access to treatment is essential, and the Emergency Plan is a leader in making equitable access a reality. Moving forward, PEPFAR programs will build on this success by identifying gender-related barriers that women and men may face in accessing and adhering to treatment and staying healthy. Goals include improving hours of services to meet patients’ needs, facilitating linkages among different types of services, and reducing the costs of services – recognizing that ART costs can be especially prohibitive to women, due to their economic disadvantages within the family and society.

PMTCT programs serve as an important entry point for women to access HIV treatment and care services. Approximately six million pregnant women (including more than 2.8 million in fiscal year 2006) have accessed Emergency Plan-supported PMTCT services in the 15 focus countries. Innovative programs in Kenya, Uganda, Zambia, and elsewhere reach out to the male partners of PMTCT clients, encouraging them and other family members to be counseled and tested, and linking them to follow-up HIV services.

Approximately equal numbers of females and males were reached by ABC prevention programs in fiscal year 2006. These programs include a wide range of gender components that tailor messages and behavior change interventions to the specific needs of boys, girls, women, and men. For example, in Mozambique and Rwanda, the Emergency Plan supports faith-based programs that encourage youth to either abstain or practice healthy sexual behaviors. These programs, working in partnership with churches, schools, and community clubs, are designed to be developmentally appropriate with age-specific, gender-sensitive curricula; they also work to reach girls through “girl-friendly” clubs, activities, and small groups. In Botswana, the Emergency Plan supports the Ministry of Education’s HIV/AIDS life skills curriculum, which was designed for use in all Botswana primary and secondary schools in an effort to reach young people with HIV prevention information and provide appropriate skill-building to assist students in reducing the behaviors that put them at risk of contracting HIV/AIDS (see story *Botswana: Teaching Students Life Skills* in the chapter on Prevention).

Emergency Plan programs recognize that gender norms can present barriers to prevention for men as well as women. Expectations that men are self-reliant, sexually experienced, and knowledgeable can inhibit them from seeking information about HIV and participating in behavior change programs.

Women represented approximately 71 percent of all people who received downstream PEPFAR-supported counseling and testing in fiscal year 2006. Of those who received HIV counseling and testing in downstream settings other than PMTCT, 56 percent were women (for further discussion of these figures and PMTCT, see the chapter on Care). Emergency Plan programs in many countries are addressing gender relations among men and women by offering couples counseling and testing services. For example, during couples counseling in Uganda, men receive their test results first and are counseled on violence prevention, in order to reduce the likelihood of men blaming their partners for their test results.

Among the orphans and vulnerable children (OVCs) served by Emergency Plan activities, 51 percent are girls and 49 percent are boys. A large number of gender issues have an impact upon access to and delivery of HIV services, including the extreme vulnerabilities of many young female OVCs, who often are the first to drop out of school and provide care for sick or bedridden family members. PEPFAR partners work with rural OVCs to provide care, while also ensuring that girls and boys have equal access to education and other support services.

A key strategy for promoting gender equity across all program areas is enhancing women’s personal decision-making capacity and their capacity to provide leadership to community and national HIV/AIDS efforts. Emergency Plan support to women’s non-governmental organizations (NGOs) through training and financial support helps to strengthen health care networks. Women’s NGOs often play a vital role in linking health care clients to community services to ensure comprehensiveness and continuity of care. In Kenya, South Africa, and Uganda, for example, women’s NGOs help to link HIV-positive pregnant and postpartum women to psychosocial support groups run by peers.

Finally, the Emergency Plan supports expanded access to female-controlled methods of HIV/AIDS protection, including social marketing of female condoms in many

countries and support for microbicide research, as noted in the chapter on Prevention.

### **Reducing Violence and Coercion**

Gender-based violence (GBV) is a pervasive public health and development problem throughout the world that severely increases women's vulnerability to contracting HIV/AIDS. Globally, as many as 69 percent of women report physical abuse by an intimate partner at least once in their lives, and up to one in four women experience sexual violence by an intimate partner in their lifetimes. Sexual and other forms of abuse against women fuel the spread of HIV in several ways. The practice or threat of sexual violence against women and girls places them at increased risk of contracting HIV, by creating situations in which women are unable to abstain from intercourse or negotiate condom use. Fear of violence and rejection from partners, families, and communities keeps women from seeking HIV information, seeking counseling, being tested for HIV, and receiving treatment and care. A woman also can be at heightened risk of violence or rejection by disclosing her HIV-positive status. For further information please see PEPFAR's 2006 *Congressional Report on Gender-Based Violence and HIV/AIDS* located at <http://www.PEPFAR.gov/progress/>.

Concern about gender-based violence in the context of HIV/AIDS continues to grow, and in response, the Emergency Plan has intensified its programming in this

#### **Kenya: Supporting Survivors of Violence and Coercion**

In Kenya, PEPFAR supports the Gender Violence Recovery Centre, a program the Nairobi Women's Hospital launched in 2001. The Centre provides specialized medical services, including post-exposure prophylaxis (PEP) and psychological treatment to survivors of domestic violence and sexual abuse, as well as HIV counseling and testing and medical care for rape survivors. The Emergency Plan supports the cost of PEP for the Centre. The Centre also works with the community to raise awareness of the problem of gender-based violence, assists the police in apprehension of perpetrators, and makes appropriate referrals for survivors. With Emergency Plan support, additional activities include increasing the number of health facilities to institutionalize PEP; supporting awareness-raising activities on gender-based violence and rape management; and establishing rape desks in Rift Valley and Coast Provinces.

area. In fiscal year 2005, the Emergency Plan dedicated \$98 million to support GBV activities in the 15 focus countries. In fiscal year 2006, an additional \$104 million supported a total of 243 activities to address GBV and sexual coercion.

Emergency Plan-supported GBV programs include those whose primary objective is to prevent violence or enhance care for survivors, as well as those that incorporate violence-related activities indirectly as part of a spectrum of HIV/AIDS-related efforts. Typically, Emergency Plan activities are coordinated and leveraged with broader, more comprehensive programs within countries, acknowledging that multi-sectoral, multi-pronged approaches are critical to stemming the practice of gender-based violence and addressing its consequences.

In fiscal year 2006, the Emergency Plan established important linkages with the President's Women's Justice and Empowerment Initiative (WJEI). This \$55 million, three-year program is designed to support the existing efforts of four African countries (Benin, Kenya, South Africa, and Zambia) to strengthen the capacity of legal systems to protect women and punish perpetrators; improve health, counseling, and shelter services for survivors; and raise awareness of the need for action to improve women's justice and empowerment.

Strengthening post-exposure prophylaxis (PEP) services for survivors of sexual assault is a critical Emergency Plan intervention. In most countries, PEP services currently are offered only in urban and peri-urban settings. Due to a number of barriers, including cost of transportation, fear, lack of PEP services, and a lack of knowledge regarding where the services are available, a majority of survivors of rape and sexual assault do not receive PEP – particularly those living in rural areas. In Kenya, the Emergency Plan supports the Nairobi Women's Hospital Gender Violence Recovery Centre to expand its medical and psychosocial support for survivors of rape and sexual assault (see accompanying story). In both Zambia and South Africa, USG partners are assisting women through concerted efforts to scale up sexual violence prevention services, with availability of PEP services at both the local and national levels. Organizations are training health care providers in PEP provision, and projects have established coordinated programs with integrated post-rape services provided by pharmacists, police, and social workers. Furthermore, HIV-positive rape survivors are being referred to hospitals or clinics

for ongoing clinical care and antiretroviral treatment assessment.

Other types of GBV activities that the Emergency Plan supports include: changing social norms that condone or encourage male violence against women; preventing violence resulting from HIV status disclosure, through couples counseling and counseling on violence; strengthening policy and legal frameworks outlawing GBV; and linking HIV programs with community and social services, such as programs to strengthen conflict resolution skills and protect and care for victims of violence.

In Rwanda, a program has been launched to determine the feasibility of including GBV screening at selected PMTCT sites. In response to the findings that sexual violence and abuse are much higher among both male and female OVCs than among children in the general population, South Africa and Zambia have developed specific programs for adolescent OVCs that incorporate interventions such as violence prevention. The Emergency Plan also supports special programs designed to respond to the heightened violence faced by refugees. For example, Kenya and Uganda have initiated GBV and HIV prevention services in refugee camps and border areas.

Emergency Plan-supported activities in conflict areas acknowledge the urgency of GBV issues. In Uganda, the Emergency Plan works in conflict areas to address GBV, sexual assault, and alcohol abuse. The refugee HIV/AIDS services in Kyaka II Settlement leverage a wraparound community sensitization project on sexual exploitation and GBV. For further information on PEPFAR's support for refugees and internally displaced persons, please see the 2006 *Congressional Report on Refugees and Internally Displaced Persons* located at <http://www.PEPFAR.gov/progress/>.

### **Addressing Male Norms and Behaviors**

Emergency Plan prevention efforts recognize that deep-seated norms revolving around male sexual behavior must be changed in order to curb the HIV epidemic. Practices such as multiple and concurrent sex partners, cross-generational sex, and transactional sex increase vulnerability to HIV infection, particularly among women and girls. These risky practices are perpetuated by norms that reinforce such behaviors among men and leave women and girls with few options to avoid them. In generalized epidemics, most new infections result from chains of concurrent sexual partner-

## **Mozambique: Challenging Gender Roles to Promote Healthy Behavior**

The JOMA Project aims to reduce the spread of HIV/AIDS in Mozambique by teaching young men to think critically about gender roles and healthy behavior. The Project began in April 2006 with a training conference for teachers and students. Participants debated the definition of a "real Mozambican man," and discussed the impact of men's behavior on society as a whole. They were also trained to communicate HIV prevention messages to their peers.

In the months following the training conference, groups carried out micro-projects in schools with support from PEPFAR. These efforts help to examine male stereotypes steeped in history and social norms. Several groups produced "wall newspapers" with student-authored articles exploring the social impact of HIV/AIDS. Students also created murals that raise awareness of gender inequalities and held public debates during the inaugurations of the murals.

A group at an agricultural school brought students together to practice sustainable farming techniques, and used the opportunity to also discuss the importance of healthy behavior and the social pressures faced by young Mozambican men. Theater groups created performance pieces examining gender roles by considering the community realities: fathers traveling to work in the mines, parents arranging early marriages for their daughters, and sexual relationships between teachers and students.

ships among adults in the general population. As noted in the chapter on Prevention, successful prevention programs target the general population by heightening risk perception about multiple, concurrent sexual partners. Although these partnerships are often regular and trusted, they lead to most new infections in high-prevalence epidemics. Prevention programs must address gender vulnerabilities and the social norms that can be barriers to adopting "ABC" behaviors (Abstain, Be faithful, correct and consistent use of Condoms).

In Mozambique, the JOMA Project aims to reduce the spread of HIV/AIDS by teaching young men to think critically about gender roles and healthy behavior (see accompanying story). In South Africa, the USG-supported Men as Partners (MAP) program works with men to challenge gender-related attitudes, address norms of masculinity, and discuss the risks of having multiple sex partners. Through workshops, community education, media advocacy, and public policy, MAP supports ABC prevention approaches to reducing the risks of HIV infection for men and their

partners. MAP also coordinates a network of community-based, faith-based, and non-governmental organizations to collaborate for the social change needed to prevent the spread of HIV/AIDS.

In fiscal year 2006, Emergency Plan implementing partners in the focus countries reported that 348 of their activities had a component specifically targeting men. Many of these activities target youth as well as adults, recognizing that the seeds of negative male behavior often are planted in youth.

### **Increasing Women's Legal Protection**

Many of the norms and practices that increase women's vulnerability to HIV/AIDS and limit their capacity to deal with its consequences are reinforced by policies, laws, and legal practices that discriminate against women. Discrimination against women with regard to property and

inheritance rights is especially harmful. Since land and housing serve as collateral for credit; land can be used to grow food, both for sustenance and as a source of livelihood; and housing not only provides physical shelter but also protects women by creating a source of assets – economic empowerment can foster the ability to avoid high-risk sexual behavior. The Emergency Plan therefore supports efforts to review, revise, and enforce laws relating to both sexual violence and women's property and inheritance rights. PEPFAR also supports efforts to eliminate gender inequalities in civil and criminal codes and enhance women's access to legal assistance. In fiscal year 2006, implementing partners reported that 80 activities in the focus countries have such a component. For example, the Orongo Widows and Orphans Group in Kenya (see accompanying story) offer legal and support services to women.

## **Kenya: The Women of Orongo**

"Had I not joined the Orongo Widows and Orphans Group, I would be dead by now," says Betty Atieno, a 28 year-old mother of three.

Shortly after her husband died, Betty's parents-in-law said she would be inherited by their other son. She refused, but her brother-in-law often came home drunk and abused her. Each time, Betty would run away to friends. He gave Betty an ultimatum: become his wife or be thrown out of her marital home.

Betty, who had already lost her parents to AIDS, lost hope. Then a friend told her about the Orongo Widows and Orphans Group. "I now know I have rights and I will not run away the next time he assaults me," Betty says.

The Orongo Widows and Orphans Group was founded by Florence Gundo in 1999. She formed the group because, in addition to the practice of wife inheritance, Florence noticed that "widows were resorting to selling illicit liquor, and orphans were being used as herdsboys and maids."

"When you are inherited by your brother-in-law, it's almost impossible to ask him to get tested for HIV," Florence explains.

After attending a women's property rights workshop... Florence mobilized widows to teach them about their rights. "We started teaching women in churches, schools, even during funerals, and gradually their attitude started changing," Florence says.

The group has successfully reclaimed land snatched from widows and orphans. Moreover, the project has encouraged members to learn their HIV status, leading to greater acceptance of people living with HIV. Some members have even been trained to provide home-based care for those affected by HIV/AIDS.

The group still faces challenges. It cares for more than 300 orphans. Providing them food, support, and education is a monumental task. The group is also teaching women to be self-reliant by providing training in tailoring, horticulture, and other income-generating activities.

*Written by Anne Waitthera, a journalist for Citizen Radio based in Nairobi, Kenya. Anne was trained in responsible HIV/AIDS reporting through a PEPFAR-supported project.*



Betty Atieno, a 28-year-old mother of three, is a member of the Orongo Widows and Orphans Group.



### Increasing Women's Access to Income and Resources

For many disadvantaged women and girls, transactional sex can seem like one of the few options available for survival. The Emergency Plan supports efforts to ensure more empowering and sustainable livelihoods for women and girls which enable them to avoid prostitution, protect themselves from HIV/AIDS, and mitigate the impact of HIV/AIDS on themselves and their families. Implementing partners reported 97 activities in the focus countries that provide support for increasing women's access to income and productive resources.

In Haiti, the "Other Choice" program provides women in prostitution with socio-economic alternatives. Women formerly in prostitution serve as peer trainers, helping other women who are still in prostitution and wish to seek alternative forms of income. These peer trainers help women gain access to vocational training resources, ranging from computer training to arts and cosmetology. In Namibia, a micro-credit program gives OVC caregivers start-up capital for income-generating projects (see accompanying story).

This year, the Emergency Plan has launched several programs, including public-private partnerships (PPPs), that

### Namibia: Grandmother Supports Orphaned Grandchildren through Micro-Credit

Josephine Nuuyoma, age 65, and her husband, Frans Shiimi, have lived in the Omusati region of Namibia for more than 51 years. She gave birth to nine children, six of whom died from HIV/AIDS-related illnesses. Thanks to a micro-credit program supported by PEPFAR, Josephine has become a self-employed businesswoman, selling bread and marula oil to support her extended family. She received start-up capital of US\$100 (approximately \$15) through a loan from the Village Health Fund Project run by a PEPFAR partner organization. Earning a profit of nearly N\$90 per week has allowed her to support six of her grandsons who were left orphaned by AIDS. She pays their school fees, buys books and clothes, and covers hospital expenses. A shrewd money manager, Josephine is even able to put some money away for the future.

Josephine recently took out her third loan of N\$300 (approximately \$43) to expand her business. She used the loan to purchase materials for her business, which is located near the local school. She sells bread to students every day when school lets out. "My bread is so tasty that it only takes them a few minutes before they are finished," she said. Josephine also supplies bread for weddings, funerals and other occasions.

### Guyana: Microfinance Project Is a Source of Empowerment

With support from the Emergency Plan, a partner organization in Guyana is helping people living with HIV/AIDS become more productive and economically independent by providing small loans through a microfinance program. The program empowers HIV-positive men and women by providing loans, ranging from US\$375 to US\$1,750, which enable recipients to expand their small businesses and support their families.

The loans are made possible by a public-private partnership among the Institute of Private Enterprise Development, the Guyana Telephone and Telegraph Company, and the Guyana Lotto Company. Many people living with HIV/AIDS who receive loans under the project are unable to obtain them through traditional means, either because of their economic status or because of discrimination.

For female beneficiaries, the grants are a source of empowerment. In July 2006, Samantha Brown received a loan to expand her and her husband's business producing cooking utensils. Before obtaining the loan, the couple worked long hours, but could not produce enough each week to meet demand. They used the loan to purchase materials that enabled them to increase production. Now the couple employs several family members in the business.

"This is truly the best thing that has happened to me since learning I had HIV," Samantha said. "I am able to make ends meet and give my daughter, who was born HIV-positive, more nutritious food."



Andrea Rohlehr-McAdam

Samantha Brown obtained a small loan to expand her and her husband's business producing and selling tin products.

address this critical issue. For example, in Tanzania and Zambia, the activities of the PlayPump Alliance, discussed in the Building Capacity: Partnerships for Sustainability chapter, include a specific gender component. Without the daily burden of water collection, girls may be more likely to attend school, and women can focus on other productive activities, building stronger families and healthier communities. Additionally, linkages between Emergency Plan and other USG-supported education, economic development, and microfinance programs are being strengthened.

### Multilateral Collaborations

The Emergency Plan is proud to join the many local, international, and bilateral organizations that are committed to addressing gender disparities in the HIV/AIDS epidemic. At the 2006 United Nations General Assembly High Level Meeting on AIDS, the United States joined all other member states of the United Nations to pledge to “eliminate gender inequalities, gender-based abuse and violence.” To follow up on this new commitment, the United States led gender-related discussions at the 18th UNAIDS Board Meeting, held in June 2006, which adopted a decision that “requests UNAIDS, in partnership with national governments, to conduct gender assessment of three to five national AIDS plans ... in response to the increased feminization of the epidemic.” These assessments provide the



Karungi Grace receives free antiretroviral medicine from the Finlays Tea Mulenge Clinic in Uganda. Her health has improved and she is able to earn a small income through hair braiding.

U.N. system with a concrete opportunity to introduce coherent and comprehensive gender approaches to its work in the fight against HIV/AIDS.

During the 19<sup>th</sup> UNAIDS Board Meeting, held in December 2006, the United States supported civil society in pushing a gender-related decision, adopted under the heading of “AIDS, Security and Humanitarian Response.” This decision “Calls on UNAIDS to intensify programmatic efforts on the intersection between gender-based violence and HIV, including but not limited to situations of conflict, particularly acknowledging the unique contributions of women survivors and those affected by violence.” The Emergency Plan will explore, along with UNAIDS and others, possible actions involved in implementing this decision as part of the ongoing global effort to respond to the increasing feminization of the HIV/AIDS epidemic.

### Mainstreaming Gender into Prevention, Treatment, and Care Programs

The USG interagency Gender Technical Working Group was established in 2005 and currently has more than 30 members, representing all the USG agencies that implement PEPFAR. PEPFAR supports host countries’ implementation of evidence-based, gender-sensitive approaches, in order to meet legislative requirements and program goals. An underlying principle of this effort is that implementation of gender integrated approaches is critical to:

- Achieving PEPFAR’s “2-7-10” goals for treatment (support antiretroviral treatment for 2 million people); prevention (support prevention of 7 million infections); and care (support care for 10 million people);
- Strengthening program quality and sustainability;
- Guaranteeing women’s and men’s equitable access to programs; and
- Preventing or ameliorating program outcomes that may unintentionally and differentially harm women and men.

Gender-focused technical reviews of the fiscal year 2006 COPs for the 15 focus countries, and the strategies and mini-COPs for the five largest other bilateral program countries, offered an opportunity to comprehensively examine gender issues and HIV programming within the

Emergency Plan. These reviews indicated considerable variation within the various program areas and across countries, with regard to the articulation and quality of gender-integrated approaches. Based on the fiscal year 2006 findings, PEPFAR began offering gender-related technical resources and program assistance, in order to strengthen the integration of gender-related issues across prevention, treatment, and care programs. Technical resources include a technical considerations guide and an accompanying gender assessment tool. The tool, which was piloted in Nigeria and subsequently introduced at the 2006 HIV/AIDS Implementers' Meeting in Durban, South Africa, will be implemented in all focus countries during fiscal year 2007.

### **Future Directions**

As programs mature and attention to quality of services continues to grow, the need to focus on gender-related factors is increasingly evident. The Emergency Plan Gender Technical Working Group will continue to offer technical assistance to field programs, including supporting countries as they conduct gender assessments to help mainstream gender-related issues across all program areas. PEPFAR also will expand its support for effective programming by documenting evidence-based approaches to gender issues and taking them to scale, through implementation of the recommendations from the Gender and HIV/AIDS Consultation. The addition of central resources will enable PEPFAR to further enhance the global understanding of gender and HIV/AIDS programming.

It remains clear that attention to gender issues is critical to Emergency Plan success in achieving its prevention, treatment, and care goals. Thus, the Emergency Plan has supported a wide variety of gender-focused activities and will continue to intensify support for the gender-sensitive approaches to programming described above. These activities focus not only on access to services, but also on the empowerment of women through strengthened individual, family, and community-level interventions. Ongoing efforts will continue to address central issues, such as GBV and the expansion of violence prevention services. In addition, programs that focus on men and boys will continue to grow, as they are critical to achieving both successful gender programs and to slowing the tide of HIV transmission.

The Emergency Plan's gender strategy is making an important contribution to the global effort to turn the tide against HIV/AIDS. The Emergency Plan is continuing to

develop plans to work closely with local, national, and international partners, to identify concrete actions to address gender issues within the context of the HIV/AIDS epidemic. The Emergency Plan recognizes that in order for the global community to succeed in this critical area, it is essential that it leverage its own resources to build synergies and continue to work together effectively.



Students at the Mukaro Primary School in Zimbabwe participate in a savings and loan initiative. Students partaking in the initiative contribute a small amount of money each month, which is used to provide loans to other members in need of money for items like school supplies.

“These are desires written in the heart of every human being, of every race, religion, income level, and nationality. And through the generosity of governments, and contributions from the private sector, and the leadership of the governments of developing nations, we can succeed in helping people everywhere build a healthier, more prosperous, and more hopeful world for their children.”

First Lady Laura Bush  
Remarks at the Clinton Global Initiative  
September 20, 2006

## Chapter 6

# Responding to Critical Issues: Children and HIV/AIDS

### Issues and Challenges

Approximately 2.3 million children under the age of 15 currently are infected with HIV, and a majority live in the 15 focus countries of the President’s Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR). More than 90 percent of pediatric infections are due to mother-to-child transmission. When prevention of mother-to-child trans-

mission (PMTCT) fails, the cost is enormous in terms of human suffering. HIV-infected children are especially vulnerable: without treatment, the majority of infected children die before two years of age.

Providing antiretroviral treatment (ART) and care services for children is very rewarding, as children often respond well to treatment, with a significantly improved quality of life and life expectancy. However, there are also many obstacles to providing pediatric HIV treatment, which is more complicated and expensive than adult treatment. This is particularly true among the youngest children, who are at the highest risk of death from AIDS, but also are difficult to diagnose and provide with appropriate antiretroviral drug (ARV) formulations.

In addition to children infected with HIV/AIDS, hard-hit nations have many more orphans and vulnerable children (OVCs), with one or both parents dead or chronically ill as a result of AIDS. At least eight million children have been orphaned by AIDS in the focus countries.

Along with the tragedies individual children may experience, the increasing needs of millions of vulnerable children are severely straining the economic and social resources of families, communities, and entire societies. Inadequate care and protection of children can result in

### Children and HIV/AIDS Summary

Globally, the number of children infected or affected by HIV/AIDS continues to grow. Preventing children from being infected by their HIV-positive mothers, and treating and caring for those children who are infected or affected by HIV is now increasingly possible.

#### Progress Achieved by September 30, 2006, in the 15 focus countries:

- **Prevention/PMTCT:** Emergency Plan-supported programs have averted an estimated 101,500 infant infections (including an estimated 54,400 in fiscal year 2006).
- **Treatment:** Approximately 9 percent of all people receiving downstream PEPFAR support for antiretroviral treatment are children.
- **Care:** The Emergency Plan has supported care for over two million orphans and vulnerable children (OVCs).



Children outside Itumaleng Primary School in Botswana play a soccer game that integrates messages about HIV prevention and healthy choices.

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.

Children have distinctive needs that must be addressed in a comprehensive, multi-sectoral way, with high-quality programs that can be sustained by governments and communities for the long term. While there is much left to do, the Emergency Plan has brought an intensive focus to children and HIV/AIDS. Part of this focus is the requirement, which is unique among the major international partners, that programs receiving direct Emergency Plan support report people on ART by age. This allows PEPFAR to monitor and evaluate progress toward increasing the number of HIV-infected children receiving treatment.

Through PEPFAR, the United States Government (USG) is working with international organizations such as the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), the World Bank, and the Clinton Foundation, for both PMTCT and pediatric HIV program development. As part of these collaborative efforts, PEPFAR has supported the development

of internationally-used guidelines and training materials, as well as specific activities related to PMTCT and pediatrics.

One significant advance involves the recently published pediatric HIV treatment guidelines from WHO, which were prepared in collaboration with a panel of USG and international experts. These guidelines include consensus dosing tables for most ARVs, a major step in simplifying dosing of these drugs for use in resource-limited settings. PEPFAR-supported efforts also have identified priority drug formulations and combination products that are appropriate for pediatrics. As part of PEPFAR's intense focus on children, the USG has mobilized well known U.S.-based organizations and institutions to capitalize on their expertise in order to support PMTCT and pediatric HIV programs. Most importantly, the USG has established strong in-country partnerships with host governmental organizations, usually working with and funding Ministries of Health to develop programs for PMTCT and pediatric HIV interventions, as well as other related HIV programs. As part of PEPFAR's support for a community response to pediatric HIV/AIDS, the USG has worked to support community- and faith-based organizations to create and improve programs for children who are affected by HIV/AIDS.

### *Challenges in Meeting the Needs of HIV-Exposed Children*

The vast majority of pediatric infections can be prevented through the provision of highly effective short-course ARV regimens through PMTCT programs. Expanded ART for eligible pregnant women is also a highly effective means of preventing transmission, while also saving the life of the mother.

In the United States, PMTCT programs have cut the incidence of new pediatric HIV infections by more than 95 percent, with fewer than 100 new pediatric HIV infections reported every year. In the developing world, however, the difficulties associated with preventing, diagnosing, and treating pediatric HIV/AIDS are daunting, and scaling up effective interventions to prevent mother-to-child transmission has been challenging. The prevalence of HIV among pregnant women is high and rising in many nations. The limited capacity of health systems in resource-poor nations hampers pediatric HIV/AIDS efforts, as it does a range of other health initiatives.

The challenges of providing PMTCT services in resource-limited settings begin with the difficulties pregnant women

face in accessing and maintaining contact with antenatal care and HIV prevention programs in the first place. Even when women are reached with prevention services, there are significant barriers of cost, stigma, reluctance to return for HIV test results, and issues related to using short-course preventive ARVs in situations where women deliver their babies at home – as well as the risk of HIV transmission through breastfeeding in settings where replacement feeding is neither safe nor feasible. In addition to scaling up PMTCT programs, it is also important for PMTCT programs to be linked to ART programs to ensure rapid referral of pregnant women for evaluation for highly active antiretroviral therapy (HAART).

Because a majority of HIV-positive children die before the age of two without intervention, systematic follow-up, care, early diagnosis, and treatment are essential. Unfortunately, diagnosis of young children is complex and expensive. The traditional tests used for adults (HIV antibody detection tests) are not useful until after the child is 18 months old. Technologies to improve pediatric diagnosis are not yet widely available in resource-limited settings, and there are severe shortages of trained health workers.

### ***Challenges in Meeting the Needs of HIV-Infected Children***

Delivering care and long-term combination ART for children who become infected also poses special challenges. HIV/AIDS care for children often is unavailable or omits key interventions, such as cotrimoxazole to treat opportunistic infections. Some ARVs are unavailable in pediatric formulations, and some of those that are available are much more costly than adult drugs. Pediatric regimens can be difficult to follow because of the complexity of dosing by weight, and few providers are trained in pediatric HIV treatment. Parents often need to reconstitute the formulation, which is complicated, and the formulations often need refrigeration for storage. Treatment of infants is subject to higher failure rates than older children, due to the difficulties in administering these formulations.

Communities do not always focus on the special needs of children with HIV/AIDS, whose parents may be ill or dead, and their caregivers often lack needed support. Even in cases where there is a community response, older children in particular have issues that may be neglected.

### **PEPFAR-Supported Interventions to Optimize Survival of HIV-Exposed and -Infected Children**

- Provision of basic preventive care, including support for infant and young child nutrition, immunizations and prevention of infections such as malaria, tuberculosis, and pneumonia;
- Routine follow-up of HIV-exposed infants and appropriate testing algorithms;
- Cotrimoxazole prophylaxis for all HIV-exposed infants;
- Links and referrals to routine child health services;
- Clinical staging and regular monitoring to determine eligibility for antiretroviral treatment;
- Antiretroviral treatment for children provided in a family-centered context;
- Treatment of malnutrition and life-threatening infections, such as diarrhea and pneumonia;
- Pain and symptom management; and
- Support for children and their families, including psychosocial support and support for orphans and vulnerable children.

### ***Challenges in Meeting the Needs of Orphans and Vulnerable Children***

All children are vulnerable, simply by virtue of being children. Children whose parents become chronically ill or die from AIDS, however, face an especially daunting array of issues.

Dimensions of risk for children affected by HIV/AIDS may include:

- **Survival vulnerability** – poor health, nutrition, and basic care;
- **Economic vulnerability** – loss of income and property, family and community fragility, and/or inability to afford health care;
- **Academic vulnerability** – leaving school due to poor health or lack of time, money, and hope for the future;
- **Psycho-social vulnerability** – post-traumatic stress disorder, grief, and/or burdens of caring for sick household members or younger children; and

- **Exploitation vulnerability** – abuse and exploitation, due to loss of protective parents and community support.

It is the interaction of a number of factors in a child’s life that determines his or her level of vulnerability. Age and developmental level, gender, geography, and a complex array of social factors all interact to heighten or reduce a child’s vulnerability. Effective responses must address all these elements.

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 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 Tanzania and Zimbabwe, sound strategies and programs directed towards OVCs have rekindled local Girl Guide programs, creating a safe social environment for at-risk girls. The Emergency Plan has developed a training curriculum that is sensitive to local culture and beliefs. Young female group leaders receive training in age-appropriate reproductive health, HIV prevention,

nutrition, palliative care, and protection, including skills around effectively negotiating social relationships. Through regular, predictable group meetings and outings, the girls receive much-needed psychosocial support.

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.

Activities must strengthen the capacity of those who take on the burden of caring for OVCs. Partnerships in support of families, communities, and community organizations are crucial. The most fundamental way to protect children is to help their parents stay alive through effective prevention, treatment, and care interventions.

### Results

The Emergency Plan has brought USG leadership to focus on the pediatric HIV/AIDS crisis, as part of the response

**Table 6.1: Children: Summary of Child Prevention, Treatment, and Care Results in Focus Countries, FY2003-FY2006**

	October 2002 – March 2004	October 2003 – September 2004	October 2004 – September 2005	October 2005 – September 2006	October 2003 – September 2006
<b>Services for children infected and affected by HIV/AIDS</b>	<b>FY2003</b>	<b>FY2004 total results<sup>1</sup></b>	<b>FY2005 total results</b>	<b>FY2006 total results</b>	<b>Total results: cumulative total of FY2004 - FY2006 results</b>
<b>Number of infant infections averted<sup>2</sup></b>	6,400	23,800	23,300	54,400	101,500
<b>Number of pregnant women who received HIV C&amp;T for PMTCT and received their test results<sup>1</sup></b>	355,300	1,017,000	1,957,900	2,814,700	5,789,600
<b>Number of women receiving ARV prophylaxis for PMTCT</b>	33,800	125,500	122,600	285,600	533,700
<b>Number of children (0-14) on ART<sup>3</sup></b>	N/A	4,800	<b>17,700</b> <b>(7% of downstream ART patients)</b>	<b>48,600</b> <b>(9% of downstream ART patients)</b>	N/A
<b>Number of OVCs served</b>	N/A	630,200	1,220,100	2,000,700	N/A

**Notes:**

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.

Reporting in 2003 was for an 18-month period from October 2002 through March 2004 as the (MCT) Mother-to-Child-Transmission Initiative was integrated into the Emergency Plan. Reporting in FY2004 was from October 2003 through September 2004. There is thus some overlap in reporting during the months between October 2003 and March 2004. For this reason, results from the 2003 period are not included in Total Results for FY2004.

Total number receiving care and treatment includes 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 and those receiving downstream services at U.S. Government-funded service delivery sites.

**Footnotes:**

<sup>1</sup> In FY2004 only, it was assumed that 80% of women receiving PMTCT services were counseled and tested.

<sup>2</sup> 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 (e.g., Botswana) are likely averting more infant infections than shown here.

<sup>3</sup> Based on downstream reporting.

to the overall emergency. With governmental and non-governmental host country and international partners, PEPFAR is scaling up a family-based approach to prevention, treatment, and care for children infected with and affected by HIV/AIDS.

Table 6.1 summarizes fiscal year 2006 Emergency Plan results in providing a range of prevention, treatment, and care services to children in the focus countries. (The terms “upstream” and “downstream,” as used in this table and chapter, are defined in the chapters on Prevention, Treatment, and Care.)

### Support for Pediatric HIV Prevention

By most estimates, children represent between 12 and 15 percent of all new infections worldwide. Mother-to-child HIV transmission accounts for more than 90 percent of these new HIV infections in children. Without intervention, there is approximately a 35 percent overall risk of an HIV-infected mother transmitting HIV to her child during pregnancy, delivery, or breastfeeding.

While comprehensive PMTCT programs have nearly eliminated mother-to-child transmission in developed countries, progress in implementing similar prevention programs in resource-limited settings has been slower. More than 50 percent of perinatal infections worldwide are estimated to occur in the 15 PEPFAR focus countries, where approximately 1.3 million of the 18 million women who deliver annually are HIV-positive. Building upon the original goals of the President’s Mother and Child HIV Initiative, PEPFAR aims to work with focus countries to provide PMTCT services to at least 80 percent of all pregnant women, and reduce mother-to-child transmission by at least 50 percent.

Simple, effective interventions for PMTCT include provision of:

- Routinely recommended rapid HIV counseling and testing in antenatal and maternity settings;
- Combination short-course antiretroviral prophylaxis for mother and infant, and ART for eligible mothers;
- Infant feeding counseling and support;
- ART for pregnant women with advanced HIV/AIDS;

- Linkages with wraparound services, such as nutrition, voluntary family planning for women living with HIV, and safe water; and
- Strong linkages to treatment, care, and support services for follow-up of women and infants.

The first step in preventing children from becoming infected by HIV involves using ARVs to reduce transmission of the virus from an HIV-positive mother to her child at birth, or after birth through nursing. Another key approach is to ensure that pregnant women are evaluated and, if eligible for treatment, have access to triple combination ARVs. PMTCT programs offer a combination of services that includes: HIV counseling and testing, enhanced obstetric practices, infant feeding support and education, ARVs for the woman and infant, and postnatal follow-up care for the mother and infant.

PMTCT programs can serve as a “gateway” to services, and often identify women and children in need of life-saving ART. PMTCT programs can ensure that eligible mothers and children have access to ART. For mothers who are not eligible, short-course single-drug prophylaxis to mothers and infants, beginning during the onset of labor, can reduce transmission by more than 40 percent. However, more effective short-course combination prophylaxis and treatment regimens have been developed that can reduce transmission to a range from approximately 30 percent to as low as two percent in a non-breastfeeding population. The Emergency Plan has been working with host countries to support the revision of national guidelines to incorporate these interventions, and to develop plans to scale up implementation in coming years. The number of focus countries that have improved the regimens available under their national guidelines has increased dramatically during 2006, and PEPFAR teams are working actively with these countries to provide support in implementing these new guidelines. For example, in Côte d’Ivoire, the Emergency Plan supported a review process that led to new strategies being integrated into PMTCT policy and guidelines (see accompanying story).

Through its support for PMTCT programs, in many countries the Emergency Plan has taken the first step in addressing HIV/AIDS in environments where long-term ART is not available. These programs are also among the first to address the critical need to treat HIV-positive mothers and



## Côte d'Ivoire: Influencing National PMTCT Policies

In May 2006, a PEPFAR partner organization initiated a review of prevention of mother-to-child HIV transmission (PMTCT) policy and guidelines in Côte d'Ivoire. Key health sector stakeholders participated in regular working group meetings, a document-writing retreat, and a two-day national validation workshop. The recommendations from the meetings were integrated into a final report.

The review process allowed new strategies to be integrated into PMTCT policy and guidelines. Côte d'Ivoire now has a national policy calling for health district leadership of PMTCT activities; routine, opt-out HIV counseling and testing; HIV rapid testing in maternity units; early infant diagnosis; use of highly active anti-retroviral therapy for HIV-positive pregnant women who require treatment, and short-course antiretroviral prophylaxis regimens for women who do not yet need treatment.

The next priority is to disseminate the new guidelines to health care sites, and train staff to use the new guidelines to increase uptake of PMTCT services among HIV-positive pregnant women.



Participants at a PMTCT policy training workshop in Côte d'Ivoire.

fathers who need long-term ART, as well as children who may have become infected in spite of short-course ARVs, in order to preserve families and prevent a generation from being orphaned. Beginning in fiscal year 2004, the first year of Emergency Plan implementation, emphasis was placed upon supporting national strategies to expand PMTCT programs, as well as ART for pregnant women and their families. This required strengthening health care systems, including infrastructure and human capacity, and improving the monitoring of PMTCT programs.

In fiscal year 2006, PEPFAR supported training for approximately 32,600 health care workers in PMTCT services, and provided support for 4,863 PMTCT service sites in the focus countries.

Through September 2006, the Emergency Plan provided support for PMTCT services for approximately 6,043,900 pregnant women, including 2,814,700 in fiscal year 2006 alone. Cumulative for fiscal years 2004 through 2006, PEPFAR supported antiretroviral prophylaxis for HIV-positive women during 533,700 pregnancies, including prophylaxis during 286,600 pregnancies in fiscal year 2006.

Under internationally accepted standards for calculating infections averted, the Emergency Plan estimates that it has supported programs that have prevented the infection of approximately 101,500 newborns. This figure includes

approximately 54,400 in fiscal year 2006, more than double the number in fiscal year 2005. In addition to short-course preventive ARVs, PEPFAR-supported PMTCT programs seek to ensure that exposed children receive follow-up care after birth, including opportunistic infection (OI) prophylaxis and HIV diagnostic testing.

The Emergency Plan has continued to support countries in moving toward the routine offer of voluntary diagnostic HIV testing, sometimes called the “opt-out” approach, in PMTCT and other health care settings. While few focus countries were utilizing opt-out testing a few years ago, almost all focus countries now have adopted opt-out testing as a matter of policy, although many have done so only recently. In 2006, progress continued to be made in increasing the number of women who receive their results through rapid testing. As these approaches continue to be scaled up in 2007, they will enable crucial interventions to reach many more women.

### Support for Children Exposed to HIV

Diagnosing HIV in children is challenging. The Emergency Plan supports host country efforts to make diagnostic tests more widely available, improve the capacity of laboratories, and ensure the availability of appropriate technologies for testing children. Efforts to expand a network of laboratory services in order to rapidly reach the largest possible number of children have emphasized development of national

laboratory strategies, infrastructure renovations, training of personnel, and development of quality-assured laboratory services.

HIV rapid tests, discussed above, work only for children older than 18 months of age. For children under 18 months, additional tests are needed to confirm a diagnosis. PEPFAR is working with host countries to address policy barriers to the use of rapid tests for children.

For children under 18 months, PEPFAR supports efforts to expand availability of polymerase chain reaction (PCR) tests and the capacity to use dried blood spots to diagnose HIV infection. Dried blood spots, which require less blood per test than older methods, involve the use of a small sample of blood from a finger stick or heel prick, which then can be transported, often days later, to a central laboratory that has the capacity to perform PCR testing.

The USG has supported policy change to allow PCR-based testing in order to reduce the cost and burden of infant diagnosis, and most focus countries have now adopted such policies (see Table 6.2). As technology and infrastructure are improved, PCR technology is being scaled up in a growing number of countries (and in some cases, national policy is behind actual implementation). In 2006, PEPFAR teams reported 14 countries that are in various stages of

implementing the PCR-based technology to test dried blood spots to diagnose HIV-1 infections in children under two years of age. These countries are Botswana, Cameroon, China, Côte d'Ivoire, Ethiopia, Kenya, Malawi, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Uganda, and Zambia. With PEPFAR support, countries are establishing networks of health care facilities and public health laboratories that will make accurate diagnosis and management of pediatric ART more widely available to children.

In addition, the Emergency Plan supports expanding information and training related to testing children and, where testing is not an option, improving clinical diagnosis based on symptoms. As with all Emergency Plan interventions, support is provided with an eye to long-term sustainability by developing local capacity and strengthening systems.

Diagnostic tests for infants are often costly and technically challenging in less-developed settings. The newly formed laboratory technical working group is working with the Office of the U.S. Global AIDS Coordinator (OGAC) to liaise with the private sector to develop less expensive and easier approaches to infant diagnostics.

The Emergency Plan also has supported extensive training of in-county staff on building and sustaining high-quality

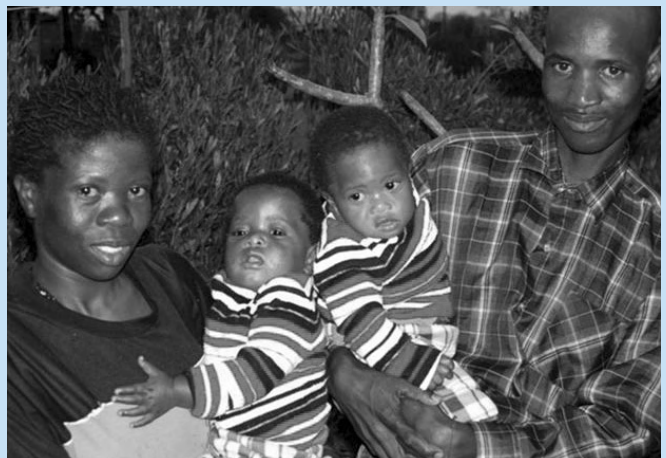
### Botswana: Families Benefit from Early Infant Testing Program

When she discovered that she was pregnant with twins, Balekanye Mosweu, a 25-year-old, HIV-positive mother in Botswana, worried about mother-to-child HIV transmission. However, because of early infant testing, she learned that her babies were HIV-negative soon after their birth.

Mosweu's twins were tested as part of a PEPFAR-supported prevention of mother-to-child HIV transmission program. Under the early infant testing method used in Botswana, health care providers can diagnose infants with HIV using DNA PCR by collecting dried blood spots, to test infants as early as six weeks after birth. These dried blood samples are stable, do not require refrigeration, and can be transported whenever practical.

Previously, health care workers had to wait until the infant was 18 months old to be tested. By this time, many infants are no longer close to a testing facility or already have advanced HIV.

"It was a miracle," Mosweu said. "At the end of the day, the results came so fast, so it was so much easier to relax and enjoy bringing up my children."



Balekanye Mosweu was relieved to discover through early infant testing that her twin boys, Thata and Thatayaone, are HIV-negative.

Table 6.2: Children: Key Policy Changes: Infant Diagnosis	
Country	Date of policy adoption on infant diagnosis <sup>1</sup>
Botswana	2006
Côte d'Ivoire	2006
Ethiopia	2005
Guyana	2006
Haiti <sup>2</sup>	-
Kenya <sup>3</sup>	-
Mozambique	2006
Namibia	2005
Nigeria <sup>3</sup>	-
Rwanda	2006
South Africa	2005
Tanzania <sup>2</sup>	-
Uganda	2005/2006 <sup>4</sup>
Vietnam	2006
Zambia <sup>2</sup>	-

**Footnotes:**  
<sup>1</sup> Unless otherwise noted, information obtained through correspondence with country teams.  
<sup>2</sup> Countries are implementing infant HIV counseling and testing without a policy.  
<sup>3</sup> Policy is pending.  
<sup>4</sup> Uganda's Counseling and Testing Policy (2005) has a section on Infant Diagnosis, and the Revised PMTCT Guidelines (2006) has sections on Infant Diagnosis and treatment.

laboratory systems, and is helping to establish proficiency testing programs for laboratory testing in such areas as hematology, chemistry, CD4 testing (including CD4 percentage), and infant diagnosis.

In addition to support for diagnosis of HIV-exposed children, PEPFAR supports routine follow-up care of HIV-exposed infants, including cotrimoxazole, infant feeding support, and HIV testing.

### Support for Children Infected with HIV

In addition to the primary strategy of preventing new pediatric infections through PMTCT programs, a major emphasis of the Emergency Plan is the provision of family-centered treatment and care for infected persons, including

children. Despite the large number of children living with HIV, children in most developing countries currently have disproportionately low access to HIV treatment and care, as compared to adult populations. There are several factors that contribute to this disparity, including: lack of provider training on pediatric treatment and care; limited pediatric HIV counseling and testing; limited access to pediatric drugs; and difficulties with diagnosis and follow-up of HIV-exposed children identified in PMTCT programs.

The failure to diagnose children at an early stage of infection comes at a high cost; without the provision of treatment and care, approximately half of HIV-infected children die before age two. In order to rapidly increase the number of HIV-infected children who receive life-saving care and antiretroviral treatment, PEPFAR is focusing on linking PMTCT programs with pediatric follow-up, including pediatric treatment in ART programs; pediatric training; support of routine testing of children; and scale-up of laboratory capacity and systems for diagnosing infants.

Once HIV-infected children are identified, the prompt initiation of appropriate treatment and care is essential in order to maximize the chances of child survival. 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 ART. Although many of the recommendations for preventive care for adults also hold true for children, the clinical, immunologic, and virologic manifestations of HIV/AIDS in children differ from those in adults. Moreover, growing children have different metabolisms. As a result, infants and adolescents have very specific and age-dependent needs.

While treatment and care of HIV-infected children present special challenges, experience in resource-poor settings has demonstrated that they are feasible and highly effective. The Emergency Plan supports a comprehensive set of interventions to optimize survival of HIV-infected children, including:

- Provision of basic preventive care, including support for infant and young child nutrition, immunizations, and prevention of infections such as malaria, tuberculosis, and pneumonia;
- Strengthening linkages and referrals to routine child health services;

- Clinical staging and regular monitoring to determine eligibility for ART;
- Treatment provided in a family-centered context;
- Treatment of malnutrition and life-threatening infections, such as diarrhea and pneumonia;
- Pain and symptom management; and
- Psychosocial and other support for children and their families.

Because ARV doses are dependent on weight and other biologic factors that may differ for adults and children, pediatric ARV formulations are necessary, and the Emergency Plan is working to ensure their availability. As discussed in the chapter on Treatment, the USG has created an expedited review process for generic versions of ARVs, including pediatric formulations. These products are being submitted for review and approval, which will provide additional sources of high-quality, inexpensive products. As of January 7, 2007, eight generic pediatric formulations had earned approval or tentative approval from the U.S. Department of Health and Human Services (HHS)/Food and Drug Administration (FDA) and were available for use in Emergency Plan programs (see accompanying text box).

Children with HIV may require a broad range of additional health interventions. The Emergency Plan thus promotes a comprehensive package of other services to prevent infections that can lead to illness or death. This pediatric preventive care package includes life-saving interventions, such as cotrimoxazole prophylaxis to prevent opportunistic infections, including diarrheal disease; screening for tuberculosis and malaria; prevention of malaria using long-lasting insecticide-treated mosquito nets; and support for nutrition and safe water (see the chapter on Care for more information).

From the outset, the Emergency Plan has recognized the importance of supporting treatment for children and has required reporting treatment data by age categories from programs receiving downstream support so that the number of children served can be determined. PEPFAR has been the leader among international HIV/AIDS programs in this area.

In fiscal year 2006, approximately 48,600 of 528,300 patients receiving ART with downstream PEPFAR support – or about nine percent – were children. This figure likely under-represents the actual numbers, as there are a number of sites that have not yet disaggregated patients by age. Perhaps more importantly, the percentage of children has increased from seven percent in fiscal year 2005 and is

### Progress on Access to Pediatric AIDS Formulations

PEPFAR is working to ensure that safe, low cost, effective and quality-controlled antiretroviral drugs (ARVs) are made available to HIV-infected children of all ages. As described in the chapter on Treatment, Food and Drug Administration (FDA) within the Department of Health and Human Services (HHS) has established an expedited approval process for generic ARVs. To ensure the delivery of high-quality commodities to the point of service, the Emergency Plan has established the Supply Chain Management System (SCMS), to support procurement of ARV drugs and other essential materials. As noted in the chapter on Building Capacity, the SCMS works with local partners to maintain a continuous supply of high-quality treatment products, while strengthening the capacity at the country level to manage, procure, store and distribute ARVs and related products efficiently. In some countries, this mechanism has already been used to supply ARVs and to fill in supply gaps when other procurement mechanisms have been unable to secure the needed products.

As of January 7, 2007, 11 ARVs have been approved by HHS/FDA for use in children and are eligible for purchase with PEPFAR funds. These include eight generic products approved or tentatively approved under the FDA's expedited process. These eight products and their manufacturers as of November 2006 are:

- ZDV solution (Aurobindo)
- ZDV 100 mg Capsule (Aurobindo)
- Lamivudine solution (Aurobindo and Cipla)
- Abacavir Sulfate solution (Aurobindo)
- Stavudine solution (Aurobindo)
- Stavudine 15 & 20 mg capsules (Aurobindo)
- Didanosine solution (Aurobindo)
- Nevirapine suspension (Aurobindo)

(Source: <http://www.fda.gov>)

## Building a New Public-Private Partnership for Pediatric AIDS Treatment

In March 2006, First Lady Laura Bush announced a public-private partnership for pediatric AIDS treatment. Through this partnership, PEPFAR is working with pharmaceutical companies, implementing organizations, and multinational organizations to promote scientific and technical discussions on solutions for pediatric HIV treatment, formulations, and access. The partnership is groundbreaking because it is the first time that innovator and generic companies have joined together to tackle the incredible challenge of pediatric HIV/AIDS treatment. These partnerships seek to capitalize on the current strengths and resources of:

- **Innovator pharmaceutical companies** in developing, producing and distributing new and improved pediatric ARV preparations;
- **Generic pharmaceutical companies** that manufacture pediatric ARVs or have pediatric drug development programs;
- **The U.S. Government** in expediting regulatory review of new pediatric ARV preparations and supporting programs to address structural barriers to delivering ART to children; and
- **Civil society/multilateral organizations** to provide their expertise to support the success of the partnership.

### Building Hope for the Future

The Emergency Plan and its partners bring a wide range of expertise, seeking to maximize the utility of currently available pediatric formulations and to accelerate children's access to treatment. This partnership complements other PEPFAR efforts to support initiatives that expand treatment for adults and children, such as health care capacity-building programs and the expedited regulatory review of drugs through HHS/FDA.

### The Partnership in Action

Initial steps by PEPFAR and its partners include the following:

- Working to **identify scientific obstacles** to treatment for children that the cooperative relationship could address.
- **Taking practical steps** and **sharing best practices** on the scientific issues surrounding dosing of ARVs for pediatric applications.
- **Developing systems for clinical and technical support** to facilitate rapid regulatory review, approval, manufacturing, and availability of pediatric ARV formulations.

### Partners:

#### Innovator Companies

Abbott Laboratories, Boehringer-Ingelheim, Bristol-Myers Squibb, Gilead Sciences, Inc., GlaxoSmithKline, Merck & Co., Pfizer, Roche, and Tibotec

#### Generic Companies

Aspen Pharmacare, Aurobindo Pharma, Cipla Limited, Emcure Pharmaceuticals, and Ranbaxy Laboratories

#### Civil Society/Multilateral Organizations

Elizabeth Glaser Pediatric AIDS Foundation, UNAIDS, UNICEF, and WHO

moving toward the Emergency Plan goal of children representing 10 to 15 percent of all people supported on ART.

### Support for Orphans and Vulnerable Children

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. The Emergency Plan 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 impacted by their HIV-infected parents and community members through loss of care, income, nutritional food, and schooling. For more information on PEPFAR support for OVCs, see the chapter on Care.

In fiscal year 2006, the Emergency Plan provided more than \$213 million in funding for OVC activities (including \$63 million for pediatric AIDS) in the focus countries. PEPFAR supported care for more than two million OVCs. Of these PEPFAR-supported children, over 1,346,000 received downstream support, while support for the remainder was provided through upstream support of national, regional, and/or local activities, such as training, systems strengthening, or policy development.

Care activities under the Emergency Plan 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. The Emergency Plan supported training or retraining for approximately 143,000 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 social services, where available.

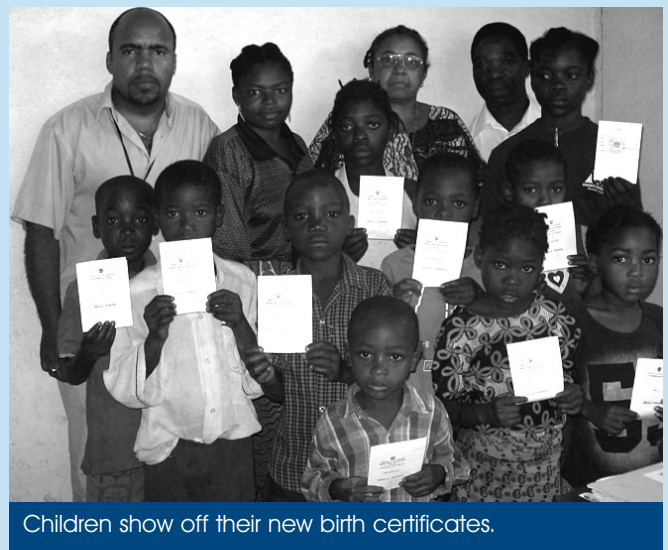
After their family, the community is the next safety net for children who are affected by HIV/AIDS, and the Emergency Plan supported 178 activities that included community-based initiatives for OVCs. PEPFAR activities seek to provide OVCs access to other core services, beyond traditional health partners and networks, by reaching out to new partners to ensure a coordinated, multi-sectoral approach. Linkages have been established to programs that provide basic care for physical survival (including health care and nutrition), economic support, education and vocational training, emotional support, and protection (including birth registration, inheritance protection, and protection from violence and exploitation). The Emergency Plan works with its governmental and non-governmental partners to increase awareness, seeking to foster leadership that helps to create a supportive environment for OVCs. In Mozambique, a PEPFAR partner organization spearheaded efforts to obtain birth certificates for unregistered OVCs (see accompanying story).

## Mozambique: Facilitating Birth Registration for Orphans and Vulnerable Children

PEPFAR supports a wide range of services for orphans and vulnerable children (OVCs), including efforts to ensure OVCs access to essential services, such as education, vocational training, health care, case management, birth registration, legal services, and other resources.

In Mozambique, birth registration is required for OVCs to access important government-subsidized support programs. A PEPFAR partner organization spearheaded efforts to obtain birth certificates for unregistered OVCs in Milange and surrounding areas. The partner organization worked with local authorities to have these children registered free of charge.

The registration process was complicated by the fact that many of the caregivers themselves did not have birth certificates. Prior to registering the orphans, the caregivers had to obtain their own birth certificates. Project staff held discussions with caretakers about the importance of having a birth certificate, and worked with local authorities to facilitate the registration process.



Children show off their new birth certificates.

Because OVCs are so numerous, the response must include the private sector and international partners beyond the USG. The Emergency Plan seeks to leverage these resources. While the Emergency Plan is focused on children orphaned and made vulnerable by AIDS, many nations have large numbers of orphans from other causes, and the Emergency Plan is working to foster comprehensive responses at the community level. PEPFAR's OVC Technical Working Group is working with the USG implementing leadership for Public Law 109.95 (the Assistance to Orphans and Vulnerable Children in Developing Countries Act) to coordinate the PEPFAR response with the other USG commitments to the broader range of OVCs. As the international commitment to OVCs grows, the USG is bringing stakeholders together under national OVC strategies, promoting coordination for effective delivery of resources.

Finally, the Emergency Plan seeks to ensure that governments protect the most vulnerable children through improving policy and legislation and channeling resources to communities, particularly those with disproportionate numbers of OVCs with unmet clinical and support needs.

### **Challenges and Future Directions**

Despite encouraging progress, the challenges in meeting the needs of children at risk of, infected with, or affected by HIV/AIDS are significant. The Emergency Plan is taking steps on several fronts to address these challenges.

Incorporating a family-based approach and increasing the capacity of both adult treatment centers and maternal and child health programs to integrate pediatric HIV prevention, treatment, and care is an important beginning. Stronger linkages among providers are also key, as progress is made toward seamless PMTCT, treatment, care, and community services for children and families.

Through supporting optimal infant feeding and nutrition, ensuring life-saving cotrimoxazole prophylaxis, and linking HIV-infected children to core child survival interventions, PEPFAR will seek to ensure that as many children as possible survive and can access treatment.

The interagency PMTCT/Pediatric AIDS Technical Working Group, drawing upon leading USG experts in the area, will continue to play an important role in helping country teams to support high-quality PMTCT and pedi-

atric HIV programs that incorporate key best practices. Priorities will continue to include supporting the implementation of better PMTCT prophylaxis regimens, improving postnatal follow-up and diagnosis of infants, identifying treatment targets for children, systematizing infant and childhood HIV testing, and increasing access to treatment for pregnant women and children.

The Emergency Plan is working to improve assessment of the impact of ART on children and monitoring and evaluation of pediatric programs. Improving reporting of data by age will remain a high priority.

### **Prevention**

Given that PMTCT interventions can dramatically reduce rates of pediatric HIV, PEPFAR will continue to focus its efforts on scaling up high-quality PMTCT services. When one considers the complexity, difficulties, and costs involved in diagnosing and treating children with HIV, it is clear that scaling up to improve access to PMTCT services is the most feasible long-term approach to mitigating the tremendous suffering that is being caused by pediatric HIV.

In 2007, PEPFAR efforts will focus on increasing the impact of PMTCT programs by continuing to scale up services, while actively assisting countries to implement the most effective interventions, including combination ARV prophylaxis regimens, rapid testing in antenatal clinics, and the routine offer of voluntary diagnostic HIV testing to all pregnant women (the "opt-out" approach). It is also the Emergency Plan's goal to see rapid HIV testing and infant diagnosis adopted as policy and implemented in all countries.

As PMTCT and ART services are scaled up in the focus countries, an important priority in fiscal year 2007 will be to continue to strengthen the linkages among these services. For every two HIV-positive pregnant women in need of treatment who receive it, at least one infant infection is likely averted, which underscores the importance of strengthening these linkages for saving the lives of both mothers and children. Another important focus is the need to monitor and evaluate pregnant HIV-positive women for eligibility for ART.

Another key priority for PMTCT services is to improve postnatal follow-up of mothers and infants to prevent transmission through breastfeeding and ensure that mothers, fathers, and children enter into a long-term continuum

of HIV treatment and care services after delivery. Stronger linkages to the larger health system programs promoting maternal and child health also are important to ensure that HIV-exposed infants receive life-saving child survival interventions and mothers have access to voluntary family-planning services. By taking a holistic family approach, PMTCT services can serve as a “gateway” for mothers and their families to access other essential HIV/AIDS services.

### **Treatment**

As PMTCT services are scaled up, the Emergency Plan also is addressing the enormous need to scale up pediatric HIV treatment. There are hundreds of thousands of children in immediate need of ART in the focus nations. Many of these children are exhibiting clinical symptoms of AIDS and can be rapidly identified through active case-finding in pediatric hospital wards and clinics.

Immediate efforts will focus on promoting active case-finding of such children, most of whom are older than two years and can be more easily diagnosed and treated than younger infants. At the same time, the Emergency Plan will continue to support development of systems to enable earlier diagnosis of HIV-infected infants and the use of more effective clinical methods to diagnose HIV-infected infants.

As part of PEPFAR’s support for rapid expansion of treatment for children, making pediatric liquid ARV formulations as well as scored, combination tablets more widely available remains a high priority. Ensuring that ARVs are available that are appropriate for children to take and easy for providers to dispense will also improve adherence to what will be a lifetime of treatment.

### **Care**

For HIV-infected children, the Emergency Plan will continue to support a comprehensive approach to pediatric care, including the prevention, diagnosis, and management of OIs. Promotion of the pediatric preventive care package will remain a central priority.

As the dramatic scale-up of OVC services takes place, ensuring that the services supported are of high quality is crucial. In 2006, OVC Programming Guidance was published in order to enhance common efforts towards comprehensive quality services that make a measurable difference in the lives of children. The Emergency Plan also is working to

identify and disseminate best practices based on age group, geographic location, gender, and degree of vulnerability.

Given that large-scale OVC programs are a relatively recent development, quality standards are still under development. The Emergency Plan will intensify efforts to develop consistent program indicators and improve monitoring and evaluation, and to support host nation partners in developing standards for services for OVCs. Another tool being developed is a Child Status Index, to be used to monitor the progress of a child’s development. The goal is to focus on the actual impact a service is having on the life of a vulnerable child.

Scaling up OVC support to meet the needs of the increasing number of children being affected by HIV/AIDS continues to be a major challenge, especially because many families in hard-hit communities are not in a position to take care of additional children. Stigma and a lack of specialized expertise are also obstacles. The Emergency Plan is working through community- and faith-based organizations to bring best practices to scale.

Ensuring sustainability of care services for OVCs is another key challenge that PEPFAR is addressing by focusing resources at the community level. The Emergency Plan will also maintain its focus on improving coordination of care for OVCs at local, national, regional, and global levels. The OVC Technical Working Group is specifically coordinating with UNICEF to enhance coordinated service provision at the local level.







Health care workers in Ethiopia take special care to ensure patient records are kept accurately.

“Creating a world free of HIV is one of the great moral callings of our time and one that requires a global response. On this World AIDS Day, I commend the people who are leading the fight in their nations and communities, and I especially call on the world community to rededicate efforts to prevent stigma and discrimination against people living with and affected by HIV/AIDS. The American people stand with the people of the world in the fight against HIV/AIDS.”

Secretary of State Condoleezza Rice  
World AIDS Day  
December 1, 2006

## Chapter 7

# Improving Accountability and Programming

In order to ensure quality and sustainability of its programs, the President’s Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR) is committed to the strategic collection and use of information for program accountability and improvement. With each year of implementation, PEPFAR expands its knowledge base of best practices and lessons learned, which drives funding decisions and adjustments to ongoing programs.

The collection and analysis of high-quality data in under-resourced settings is a critical challenge. For example, given the obstacles they face, health care personnel often find it difficult to track patients and manage records. In many countries, health management information systems (HMIS) are weak and thus compound the challenge.

To support host nations in addressing these issues, U.S. Government (USG) country teams, in coordination with host governments and partners, determine strategic information (SI) activities and priorities for each upcoming fiscal year as the part of the Country Operational Plan (COP) process.

PEPFAR-supported programs are monitored at different levels, providing information needed to improve programs.

This work starts with reporting core output results, in terms of three fundamental questions:

1. How many people are reached through prevention, treatment, and care programs?
2. How many sites and programs are supported to provide prevention, treatment, and care services?
3. How many people have been trained and/or retrained to deliver services?

To monitor the outcomes and impact of PEPFAR and other international efforts at a higher level, the Emergency Plan supports serologic surveys to monitor trends in HIV prevalence within countries. Population-based surveys such as the Demographic and Health Survey (DHS) and AIDS Indicator Survey (AIS) measure changes in HIV-related behaviors. Program monitoring and evaluation systems also measure behavioral and health status changes of individuals who participate in PEPFAR-supported programs.

Many international partners are deeply involved in supporting the nations that have been hard hit by HIV/AIDS; this raises the specter of uncoordinated efforts, which can handicap international responses. One of the “Three

Ones” principles for international coordination at the country level (discussed in the chapter on Strengthening Multilateral Action) is to support a single national monitoring and evaluation (M&E) system. Coordination with international partners is central to PEPFAR’s strategic information efforts.

Initiatives in 2006 to improve the information required for accountability and programming focused on:

- Measuring changes in the HIV epidemic and related behaviors;
- Strengthening, standardizing, and coordinating USG and host country strategic information systems;
- Improving data quality and PEPFAR results reporting;
- Expanding the use of results reports;
- Refining the Emergency Plan evaluation strategy;
- Communicating results and best practices;
- Expanding the use of data to improve HIV service provision;
- Scaling up HMIS infrastructures to accommodate service provision scale-up; and
- Protecting confidentiality and security of HIV-related information.

### Measuring Changes in the HIV Epidemic and Related Behaviors

Successful prevention, treatment, and care programs match service delivery with the people who need it. Decision makers cannot make informed judgments about effective service scale-up without a clear understanding of the relationships among population, HIV prevalence, and existing services.

#### Surveillance and Surveys

In order to measure changes in the HIV epidemic in focus countries, PEPFAR supported periodic antenatal clinic (ANC) HIV sentinel surveillance (serologic surveys of women attending clinics), as well as DHS or AIS surveys that include HIV testing. Data from these surveys are fun-

### Mozambique: HIV and Associated Risks in the Mozambique Armed Defense Forces

The personnel of the Mozambique Armed Defense Forces (FADM) view HIV/AIDS and its consequences as a true enemy to military readiness, and to Mozambican society as a whole. Military members know anecdotally that HIV/AIDS affects FADM personnel, but until recently, there were no data to quantify the rates of HIV infection or the unique risk factors of this population.

The FADM sought support through PEPFAR to conduct a survey examining FADM demographics and risk factors, HIV prevalence, and behavioral risk. The survey also tracked referrals from counseling and testing services to treatment and care for individuals who test HIV-positive.

The study was developed at the request of the FADM as a collaborative project with the U.S. Government. Twelve individuals with backgrounds in health were selected by the FADM as HIV counselors and testers. They underwent a one-week classroom training, followed by a one-week practical internship at a counseling and testing site.

Volunteers were encouraged by the FADM leadership to participate in the survey. At survey sites, the senior officer briefed personnel on the study, stressed its importance, and often participated in the survey him-or herself.

The results of the study provide invaluable information on the impact of the HIV/AIDS epidemic on the FADM. The study will also serve as a model for future surveillance surveys of military members.

damental to understanding the local epidemics. They become the basis for program planning and are used to evaluate program efficacy (when used longitudinally).

#### Mapping

Historically, spatial references in sentinel surveillance and DHS data have been underutilized. When working at the national level, program planners and implementers have given insufficient attention to how the spatial aspects of population and HIV distribution affect the efficiency and effectiveness of their programs. Population is distributed unevenly within countries, as is HIV prevalence within populations.

To address this challenge, PEPFAR uses Geographic Information Systems (GIS) as an information management and analytic tool to improve HIV/AIDS program delivery. By facilitating the integration and analysis of spatially referenced data by mapping, GIS help PEPFAR answer essential

Table 7.1: Accountability: ANC and DHS/AIS Survey Summary		
Country	Last year completed	
	ANC	DHS/AIS
Botswana	2005	
Côte d'Ivoire	2006	2006 <sup>3</sup>
Ethiopia	2006	2005 <sup>2</sup>
Guyana	2006	2004 <sup>1</sup>
Haiti	2006	2006 <sup>2</sup>
Kenya	2006	2003 <sup>2</sup>
Mozambique	2004	2003 <sup>5</sup>
Namibia	2006	2000 <sup>5</sup>
Nigeria	2005	2003 <sup>5</sup>
Rwanda	2006	2005 <sup>2</sup>
South Africa	2006	2005
Tanzania	2006	2003/2004 <sup>3</sup>
Uganda	2005	2005/2006 <sup>2</sup>
Vietnam	2006	2006 <sup>4</sup>
Zambia	2004	2002 <sup>5</sup>

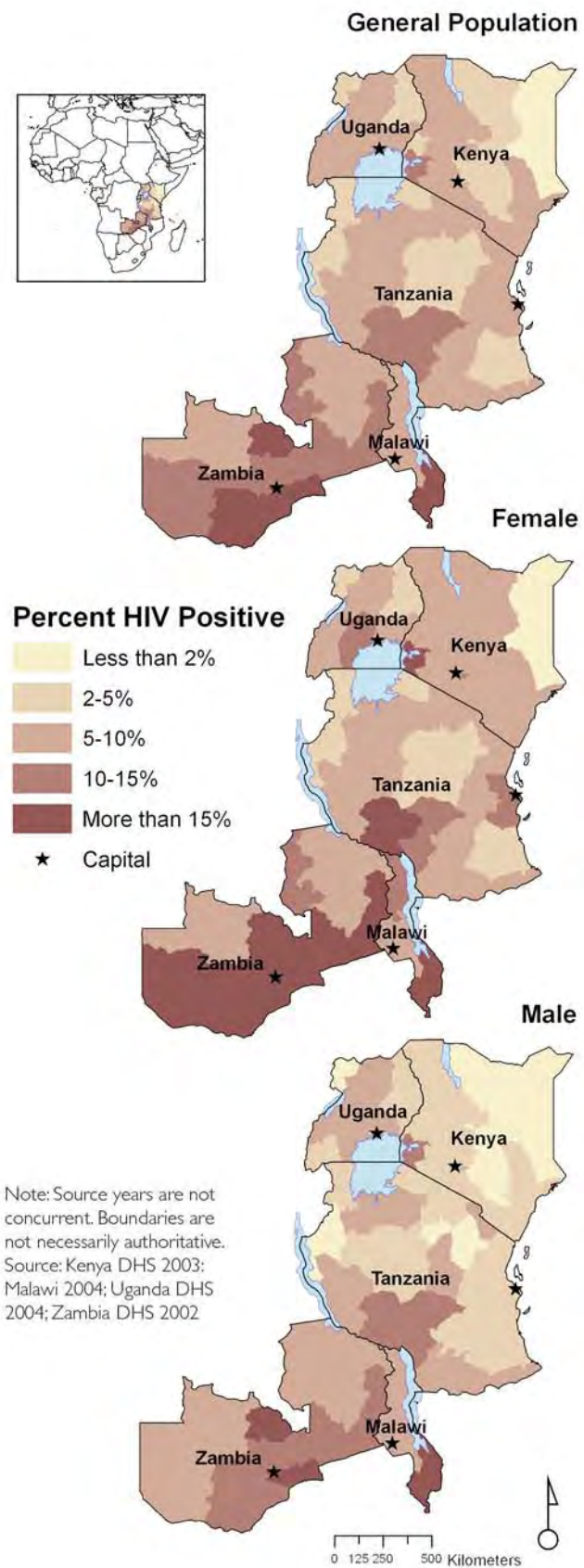
**Footnotes:**  
<sup>1</sup> AIS  
<sup>2</sup> DHS+testing  
<sup>3</sup> AIS+testing  
<sup>4</sup> AIS+testing in one province  
<sup>5</sup> DHS

questions, such as: Where are the highest HIV-prevalence districts in the country? What is the geographic distribution of counseling and testing service delivery points? How many people live within the catchment areas of facilities that currently offer ARVs? Where should PEPFAR expand its services in order to maximize coverage or equity?

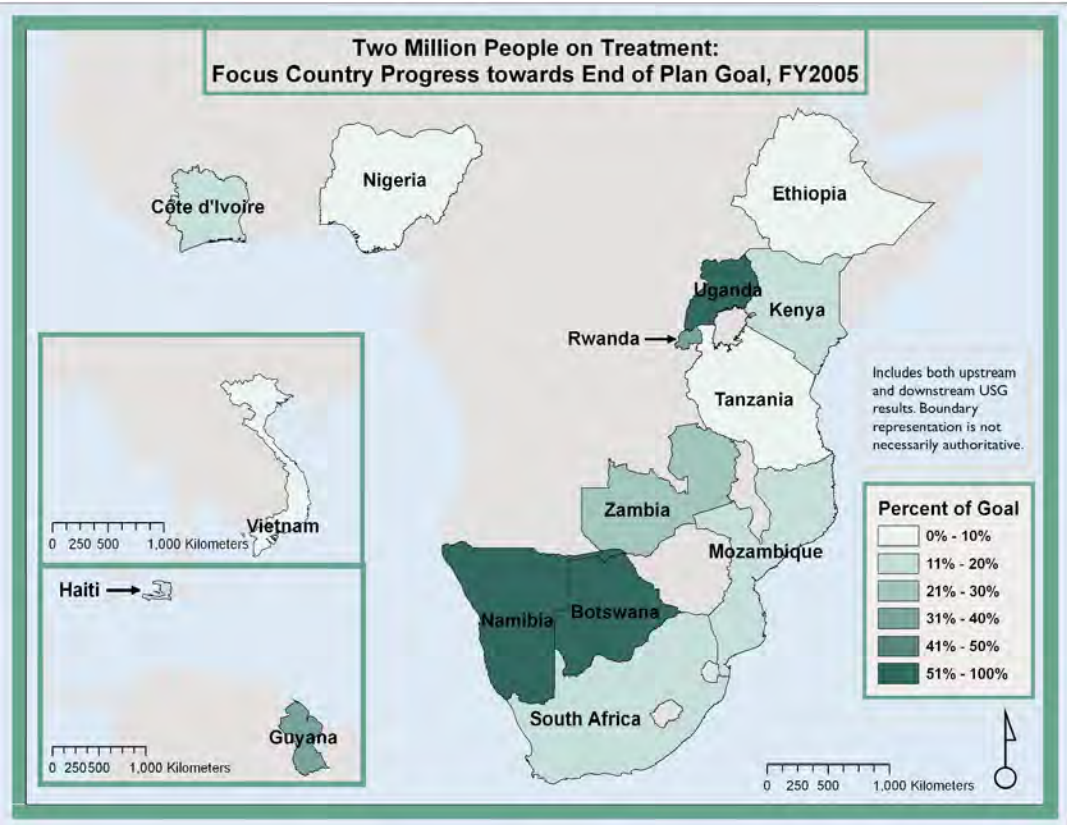
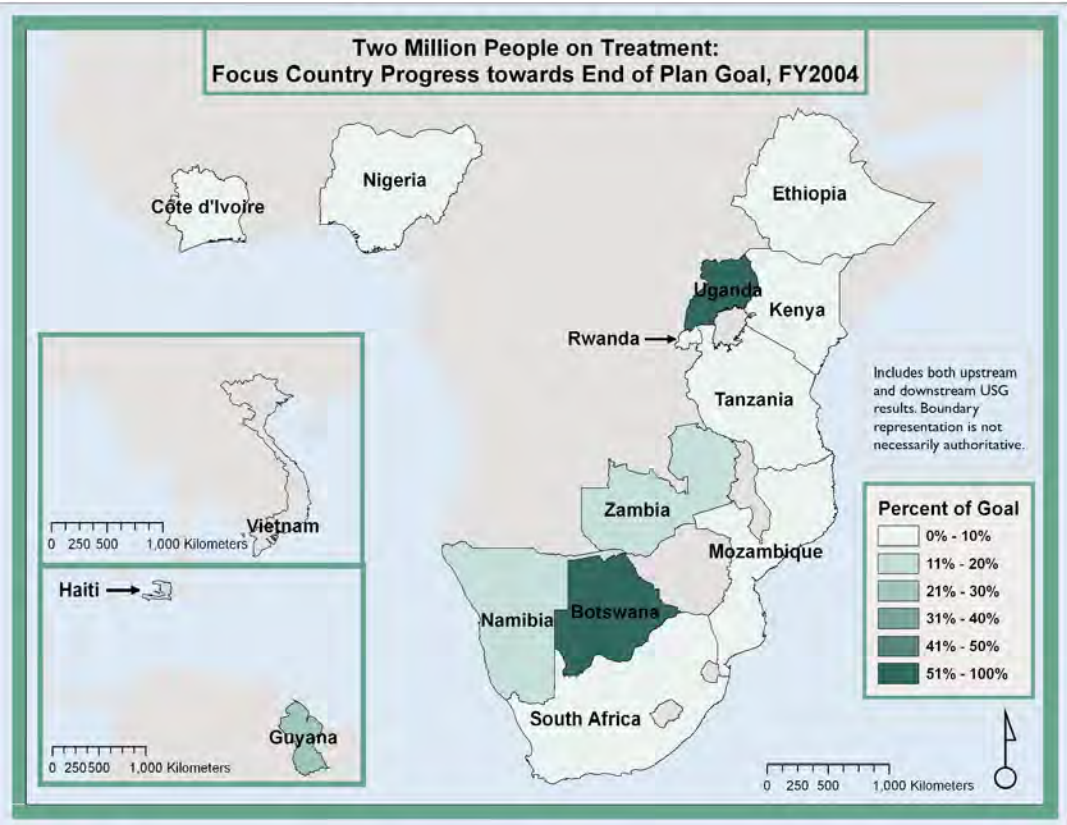
To obtain the kind of information needed for strategic decision-making, PEPFAR is using novel geo-spatial modeling techniques, in addition to techniques that have been applied to other diseases. GIS analytic tools improve the measurement and management of rapid service scale-up, which is essential as PEPFAR works to meet its prevention, treatment, and care targets. In the past, decisions regarding the distribution of services might have been based on an equity principle and/or convenience of access. Now, using the more quantitative, geographically linked GIS data, PEPFAR can target service delivery points to areas of greatest need.

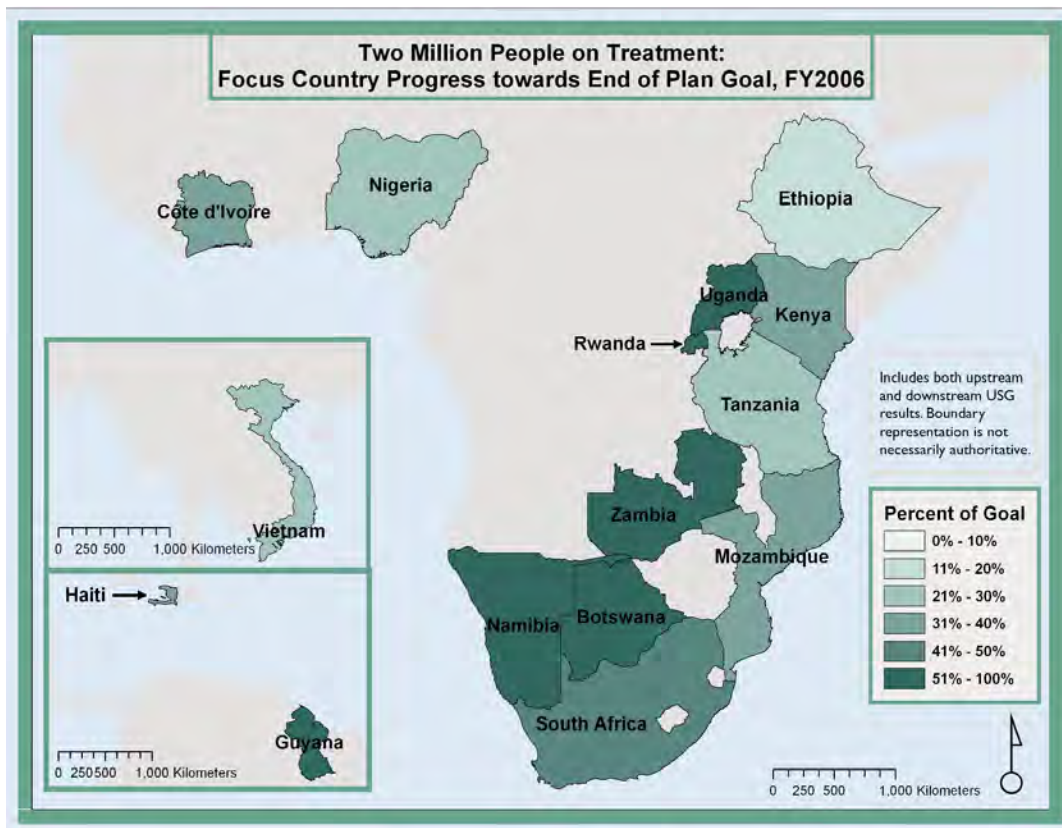
For example, using GIS mapping, figure 7.1 communicates the gender disparity in HIV prevalence by geospatial

Figure 7.1: HIV Prevalence by Gender, 2002-2004 Data Aggregated to First Order Administrative Divisions



**Figure 7.2: Map of the Scale-Up in Treatment Coverage in Focus Countries from FY2004-FY2006**





dimensions; this data can be used to inform program planning. Figure 7.2 also demonstrates how GIS mapping can be used to track changes in treatment scale-up across all PEPFAR focus countries.

### Surveillance

Measuring the national burden of HIV is essential for developing effective prevention and care interventions. Historically, the only data for estimating HIV rates in most countries were the results of HIV tests among selected groups in the population. In general, this “sentinel surveillance” included pregnant women visiting health centers for antenatal care and less frequently clients seeking treatment for sexually transmitted infections. In 1997, the Joint United Nations Programme on HIV/AIDS (UNAIDS) began using sentinel surveillance data to estimate national HIV prevalence levels. These estimates, the only data available at that time, were widely circulated and accepted internationally.

Starting in 2001, another source of data became available. The MEASURE DHS project, now funded by both the U.S. Agency for International Development (USAID) and

PEPFAR, began including HIV testing of large, nationally representative samples of the population through the DHS. To date, 20 DHS and AIS surveys with HIV testing have been carried out in Latin America, sub-Saharan Africa, and Asia, and surveys are underway in another 11 countries. In almost all of these surveys, the percentage of women and men testing positive for HIV has been lower than levels estimated from sentinel surveillance. In Kenya, for example, national HIV prevalence estimated from sentinel surveillance ranged from 12 to 18 percent, as compared to the DHS population-based estimate of 6.7 percent.

What accounts for this difference? The most common sentinel surveillance sites, are predominantly urban and exclude men and non-pregnant women. Because HIV infection in developing countries is more common both among women and within urban areas, data collected from ANCs may lead monitors to overestimate national HIV prevalence. In contrast, the DHS tests a more representative sample of the population, including both women and men from all areas of the country.

## Innovative Use of Survey Data

In Kenya, the PEPFAR-funded dissemination activities for the Kenya Service Provision Assessment survey (KSPA) have contributed to closer collaboration between the public and private health care sectors in Nairobi. In February 2006, PEPFAR and the National Coordinating Agency of Population and Development (NCAPD) carried out a series of small group workshops to discuss KSPA results. A participant in one of these seminars, Dr. David E. Bukusi, director of HIV counseling and testing at Kenyatta Hospital in Nairobi, invited PEPFAR staff and NCAPD to present the KSPA findings to staff at Kenyatta Hospital. These workshops were so successful that requests began coming in from other hospitals for similar programs.

To meet this demand, NCAPD convened a meeting of 23 administrators of public and private hospitals in Nairobi. During the discussion that followed the KSPA presentations, participants acknowledged the lack of collaboration, and often even contact, between the managers of private health care facilities and high-level policy-makers in the Ministry of Health. Participants also recognized the need to foster collaboration in order to improve health care delivery.

In June 2006, as a result of this meeting, Dr. Gakuruh, the Head of Health Sector Reform in Kenya, highlighted the lack of collaboration between the public and private sectors at a health summit convened by the Ministry of Health. Consequently, the Assistant Minister for Health, Dr. Machege challenged both sectors to collaborate. She asked the private hospitals to form a professional association to represent the needs of the private sector at the Ministry of Health. This action is the first time Kenya has made a formal effort to coordinate the work of both the public and private sectors in its HIV/AIDS interventions.

All international health and scientific agencies, including UNAIDS, now agree that population-based testing provides a more accurate estimate of national HIV prevalence. In fact, based on the DHS results, UNAIDS has revised its national HIV prevalence estimates downwards for most countries.

In addition to providing a better estimate of overall HIV prevalence, the DHS also links HIV infection status with other social and behavioral information, such as education, knowledge, and condom use, giving a more detailed picture of the epidemic. This information is vital for developing appropriately-targeted programs across the spectrum of potential prevention, treatment, and care interventions.

To improve the quality of the data being collected to monitor HIV prevalence, morbidity, mortality, and behaviors, the USG developed training materials and participated in and supported regional surveillance trainings and workshops on estimating HIV prevalence and incidence. Training materials also are available on implementing basic HIV seroprevalence surveys, using Epi Info software to analyze ANC HIV sentinel surveillance data, sampling hard-to-reach populations, conducting behavioral surveillance, and performing sample vital registry with verbal autopsies. Additionally, the USG helps UNAIDS and the World Health Organization (WHO) to conduct regional workshops on HIV estimates and projections, and provides expert consultation on the modeling used to develop these estimates and projections. Finally, PEPFAR has supported the development of new surveillance methods, which

include targeting hard-to-reach populations, monitoring antiretroviral drug (ARV) resistance, improving the quality of laboratory testing for HIV serologic surveys, and assessing new laboratory methods to monitor recent infections among HIV surveillance and survey samples.

## Strengthening Country Strategic Information Systems

Program accountability and improvement are dependent on the collection, analysis, reporting, and use of data regarding HIV/AIDS program management and results. Unfortunately, many Emergency Plan countries have neither the human capacity nor a robust infrastructure for HMIS and information and communications technology (ICT). Consequently, timely access to and analyses of high-quality data in order to manage the above activities, and to report on core indicators, can be problematic. HMIS activities funded under the Emergency Plan build upon existing data and information systems so PEPFAR can better monitor and contribute to HIV service provision.

In 2006, the Emergency Plan worked with experts from host governments, implementing partners, and other multilateral and bilateral partners, to:

- Enable the collection, aggregation, transmission, and use of core indicator data from service delivery at the district and national levels, including reporting to the

## Zambia: New Technology Helps Track Patients on Antiretroviral Treatment

Agness is a midwife and the coordinator for HIV counseling and testing services at the Prevention of Mother-To-Child HIV Transmission program at the Nangongwe Clinic in Kafue District, Zambia. In April 2005, the clinic started using a Smart Card as part of an electronic medical record (EMR) system, the Continuity of Care Patient Tracking System. This EMR system, which is supported by the PEPFAR, is the product of collaboration between the Zambian Ministry of Health and the U.S. Government.

With the Smart Card-EMR service, Agness and other health care workers can access up-to-date medical information on their patients and compile end-of-month reports much more quickly than they could with paper records. Agness has participated in trainings on the use of the EMR system and is proud of her ability to use the new technology to care for her patients.

Zambia is the first country in Africa to introduce EMR technology, which is particularly important for people on antiretroviral treatment. The system allows health care workers to carefully monitor patient medications and emerging drug resistance. This close patient tracking helps to control the number of patients who must switch from first- to second-line drugs. In so doing, the EMR system also helps to control expenses associated with second-line regimens.



A health care worker uses the new Continuity of Care Patient Tracking System at Nangongwe Clinic.

- Document in-country, HIV-related HMIS, including the relationship to Ministry of Health routine health information systems, with the goal of integrating HIV facility-based information systems into broader regional or national health information systems.
- Facilitate the design of country-level HMIS that integrate separate HIV information systems, including patient management, laboratory services, supply chain management, and program indicators.
- Provide country-specific support for design, implementation, and maintenance of sustainable information systems to support service delivery and supply chain management.
- Identify, evaluate and promote the use of appropriate information system technologies to support innovative PEPFAR technical and program management strategies.
- Develop the human and organizational capacity essential to managing HIV/AIDS HMIS.
- Strengthen human resource and training information systems that capture the deployment of service providers trained to serve HIV/AIDS program clients.
- Identify, adapt, and promote universally beneficial best practices and innovative technologies for HMIS, including adopting international guidelines and developing, adopting, and strengthening data exchange standards and tools.
- Support efforts to harmonize data elements and core data sets.

HMIS activities are supported at both the central level as well as within country programs. Examples of significant activities that have been undertaken at the central level include:

- Development of a strong public-private partnership initiative with leaders in the information and communication technology (ICT) sector in order to develop innovative, concrete solutions to some of these challenges. The ICT sector in the United States is the largest and most advanced in the world. Its experience and expertise, gained through work in multiple sectors, can be leveraged to improve the lives of the millions of people around the world who are affected by the



HIV/AIDS pandemic. It is anticipated that several joint projects will be implemented in Emergency Plan-supported countries over the next year.

- Guidelines to ensure Confidentiality and Security of HIV-Related Information. These guidelines were developed by an international consultative group co-chaired by UNAIDS and the Office of the Global AIDS Commissioner, and focus on data collected for patient management and monitoring, as well as program and HIV services monitoring and evaluation as part of scaling up HIV services in middle- and lower-income countries. In 2007, these guidelines will be adapted and piloted in selected countries.
- The Emergency Plan is supporting the development of a spatial data repository to provide electronic files needed for mapping country-specific program planning and results data to show geographic coverage. These efforts include the production of digital sub-national administrative boundaries, with population data from the U.S. Census Bureau's International Database, as well as the compilation of available health facility geographic points available across Emergency Plan countries.

In-country Emergency Plan programs continue to support a host of innovative solutions that not only meet immediate program needs, but also build in-country capacity in health information systems. Some of these include the following efforts:

CareWare is free, client-level software for monitoring HIV clinical and supportive care. This program was developed under contract for the Health Resources and Services Administration within the Department of Health and Human Services, and was initially released in 2000 for use in U.S. HIV/AIDS clinics. Major clinical modules and reporting functions were added over time. In 2006, a major new version was released, configurable as standalone, on a wide area network, or on the Internet. A number of new features were added, included pharmacy prescription, invoicing, medication inventory, appointment scheduler, medication regimen builder, a Quality of Care module that tracks HIVQUAL indicators, a language translation module, and a forms designer to allow each local installation to customize the look of their data entry screens. CareWare is being implemented in Honduras, Kenya, Nigeria, Russia, Tanzania, Thailand, Uganda, Vietnam, and Zambia.

The Ethiopian Telehealth Project is a collaboration among the Emergency Plan, the U.S. Army Telemedicine and Advanced Technology Research Center, the National Defense Force of Ethiopia, the Ministry of Health, and Jimma University. Its goal is to use information and communications technologies to support the development of communities of practice within the country and to demonstrate the use of ICT to extend service delivery to peripheral settings, where most of the population lives.

The project has two basic components. The first is the creation of resource centers, from hospitals to health clinics. The resource centers, which vary in size from 30 seats in large teaching hospitals to a single computer at a rural health clinic, are connected via telecommunications links (mesh radio networks and national telecommunication backbone), and support the development of communities of practice through e-learning, simulation-based training, and tele-consultation. They also provide the ability to effectively exchange patient record data.

The second component of the project is the deployment of mobile HIV/ART clinics. These clinics are based at health clinics and will allow clinic nurses to provide HIV/AIDS services, equivalent to those provided in hospitals, on a rotating basis at community-level health posts. In Ethiopia, where nearly 50 percent of the people have no direct access to a health clinic, the ability to offer consistent health care services and the capacity to link directly to higher-level facilities will greatly increase and improve HIV/AIDS management.

The Ethiopian Telehealth Project will demonstrate that:

1. Resource centers can be used to support both distance learning and simulation-based training, using both locally-created course material as well as material adapted from U.S.-based medical schools.
2. Tele-consultation among reference hospitals, secondary hospitals, and health clinics facilitates real-time patient management.
3. Medical records (based on an adaptation of the BMIST program) can be electronically transmitted between health facilities.

## Ethiopia: New Postgraduate Diploma to Improve Public Health Sector

The lack of adequately trained health personnel has negatively affected the entire Ethiopian public health sector in all areas of activity, but most seriously in terms of patient treatment and care.

In February 2006, the Postgraduate Diploma/Master of Science (MSc) in Health Monitoring and Evaluation was launched at Jimma University in Ethiopia – the first course of its kind on the African continent. The new program, created at the request of the Ethiopian Minister of Health, was supported by PEPFAR and allows students to work towards either a one-year postgraduate diploma or a two-year Master of Science degree.

The principal objective of the course is to create a new cadre of health professionals with skills in improving health care management. This will help improve the quality of care, promote health-sector development, and facilitate evidence-based decision making in Ethiopia's public health care sector.

The philosophy of the graduate course conforms to the Jimma University model of combining community, team, and research-based training. The course consists of three two-month blocks of courses, with two months in between each course block, during which time students are placed in an internship. The first group of 31 students, who were recruited from the public health sector, are completing their first year of studies. As of December 2006, Jimma University had received 80 applications for next year's cohort.

This program partners Jimma University with the National School of Public Health in Brazil and a PEPFAR partner university in the United States. The program will greatly enhance monitoring and evaluation capacity in Ethiopian health institutions, and also will help to alleviate the current lack of trained staff, which constantly threatens to undermine HIV/AIDS prevention, treatment, and care efforts.

This program serves as a model and will be replicated in other universities, including seven in Ethiopia and others throughout Africa. Jimma University also hopes to institute new distance learning programs.



CDC/University Teaching Hospital PCOE

A February 16, 2006, inauguration ceremony recognized the launch of the Postgraduate Diploma/Master of Science (MSc) in Health Monitoring and Evaluation at Jimma University in Ethiopia.

The portable HIV/AIDS clinic project will demonstrate that:

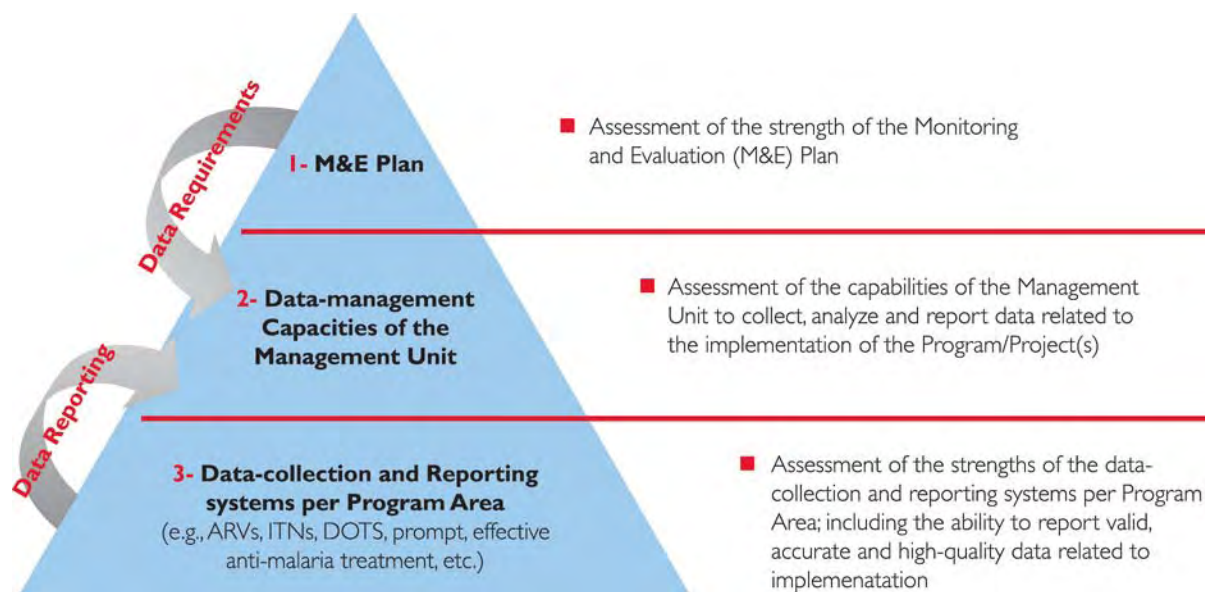
1. The complete range of HIV/AIDS management services (except lab) can be provided from a foot locker-sized package. These services include HIV counseling and testing, physiologic monitoring, drug management, and other therapies, as defined by Ethiopian national HIV/AIDS treatment guidelines.
2. Patient information can be captured locally and transmitted to a health clinic, via a PDA-based version of modified BMIST electronic medical record.
3. Health workers at a community-based health post can tele-consult with clinicians at a health clinic or hospital for real-time patient management.

### Improving Data Quality of PEPFAR Results Reporting

During fiscal years 2005 and 2006, USAID/Office of Inspector General (OIG) performed audits of USAID missions in 10 of the 15 PEPFAR focus countries. The Audit Objective was to determine if USAID's Emergency Plan prevention and care activities were progressing as expected towards the planned outputs in its grants, cooperative agreements, and contracts. The OIG capping report noted two areas of concern: 1) measuring output progress and achievements and 2) quality of output data.

The setting of targets is complex, and the quality of partner results or output data varies. Because the United States remains the only international HIV partner to require that its partners report annually on standardized indicators, the introduction of data quality standards is an ongoing effort. However, one benefit of standardized indicators is that PEPFAR tracks key services by age and by gender.

Figure 7.3: Monitoring and Evaluation Systems Strengthening Framework



PEPFAR has been transparent regarding the challenges it has faced in regard to data quality, especially in the areas of prevention and care. The only OIG audit reports to look at treatment were Ethiopia and Haiti, and neither had reporting issues. The Emergency Plan has taken steps to correct obvious data deficiencies.

For instance, in Côte d'Ivoire, national numbers are not included in upstream totals because they are not reliable. Other national totals also have been reduced to offset the duplication of counts. Even before the OIG audits, PEPFAR had already recognized these challenges and taken steps in improving and monitoring community-level programs. Strategic information advisors were sent to help countries strategize about how to strengthen their program measurements.

In 2006, for example, South Africa added a Data-Quality Advisor position to its PEPFAR USG team and constructed a single data warehouse into which all PEPFAR partners report on their performance, thereby ensuring an audit trail on all data reported by the Mission. As the OIG noted, there are as many cases of under-reporting numbers as there are of over-reporting by partners.

All of the 15 focus countries, along with 16 additional countries receiving more than \$5 million annually in USG bilat-

eral HIV/AIDS funding, now have a headquarters advisor to assist them with in-country partner trainings on data collection and data quality. The Strategic Information advisor works on record-keeping, program reporting standards, HMIS systems, and other quality improvement initiatives.

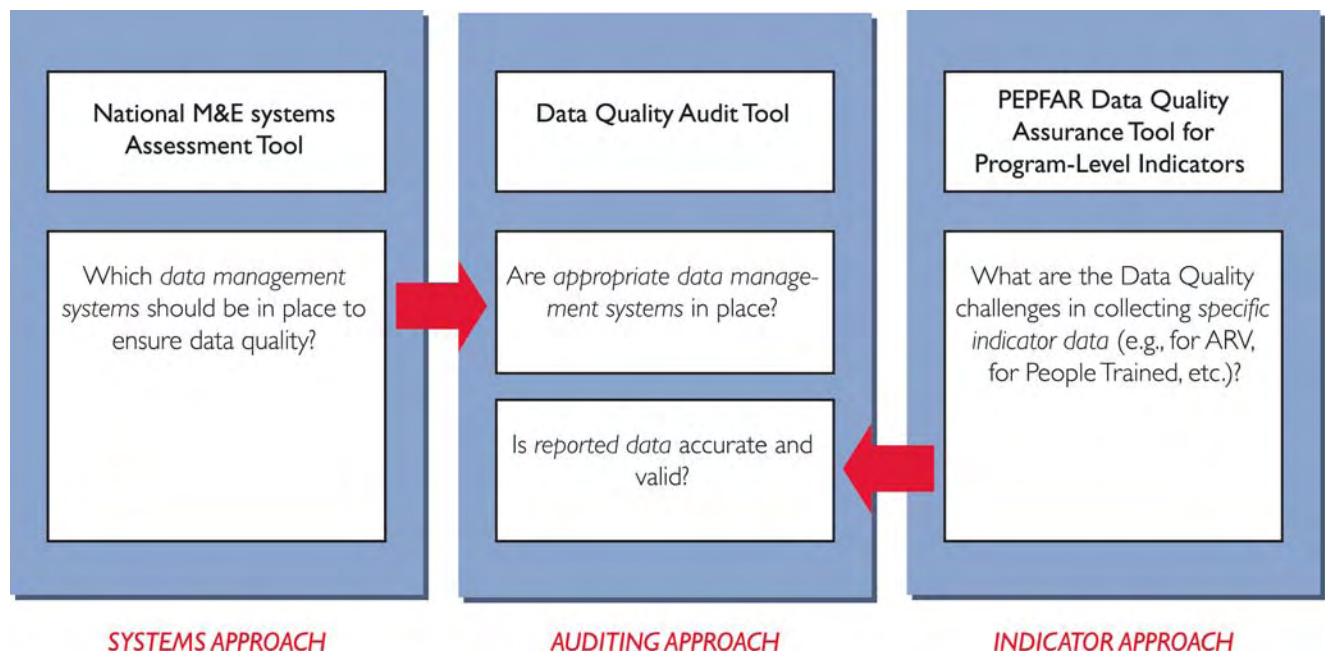
PEPFAR continues to improve and clarify target and reporting dates and associated guidance. The number of targets and reporting measures has been reduced, from the original set of 63 measures in 2004 to the current set of 41 measures.

Each year, the guidelines for measuring progress are improved and re-issued. This guidance builds upon a reporting innovation introduced by PEPFAR, which clarifies both target-setting and related results: the use of the terms upstream (indirect) and downstream (direct) to distinguish between strengthening the service delivery system (e.g., laboratory support for HIV testing) and providing direct services at the site of delivery.

Addressing data quality challenges, in 2006 PEPFAR introduced tools for ensuring data quality, such as:

- The Monitoring and Evaluation Systems Strengthening Tool;
- The Data Quality Audit Tool; and

Figure 7.4: Summary of Tools and Approaches to Data Quality Assurance



- The PEPFAR Data Quality Assurance Tool for Program-Level Indicators.

These tools were co-sponsored by PEPFAR, the Global Fund, and the Health Metrics Network.

In addition, the National M&E Systems Assessment Tool, which assists in the evaluation of M&E plans and systems (figure 7.3) and has been endorsed by the Emergency Plan, the Global Fund, UNAIDS, WHO, the World Bank, Health Metrics Network, and Roll Back Malaria, was published in December 2006. This tool was pilot-tested with the help of Global Fund and USG partners in eight countries: Bangladesh, Chile, China, Democratic Republic of Congo, Niger, Russia, and Rwanda. The tool was designed to assess data collection, reporting, and management systems to measure indicators of program/project success. This tool addresses primarily the M&E plan and systems that need to be in place to collect and report data for aggregation into indicators.

The objectives of the M&E Systems Strengthening Tool are to:

- Help identify M&E capacity gaps and corresponding strengthening measures, including through technical assistance; and

- Guide investments in M&E (to better inform the development of the M&E Budget).

The second tool, the Data Quality Audit Tool, was successfully-pilot tested in November 2006 in Tanzania and is being finalized. It provides an audit form and guidance for USG audits of their partners and was developed by MEASURE consultants, including a former USG program auditor.

The third tool, the Data Quality Assurance Tool for Program-Level Indicators, is a PEPFAR-specific tool that outlines essential parameters of data quality and how data quality fits within the Emergency Plan system of results reporting. This document provides USG country teams with the tools they need to improve the data quality of PEPFAR results reporting.

From June to August 2005, assessments of existing USG and national data collection and reporting systems were conducted in Botswana, Kenya, South Africa, and Zambia.

Following these visits the team developed the Data Quality Assessment Tool, which was then reviewed by additional USG country teams, edited, and finalized in spring 2006. The Data Quality Assurance Tool addresses three important issues in assessing and improving the quality of data:

- The completeness, accuracy, and consistency of the data;
- The upstream (indirect) and downstream (direct) framework for target setting and results reporting; and
- How to identify and resolve double-counting.

These products (figure 7.4) will help PEPFAR to ensure that systems and processes contribute to long-term, sustainable, high-quality HIV/AIDS monitoring and evaluation capacity in host nations. Together, they provide a comprehensive approach to improving PEPFAR data quality.

### Data Quality Training

To initiate the use of these tools, the completed Data Quality Assessment tool was presented to USG country teams during a series of regional trainings conducted in summer 2006:

- Latin America/Caribbean Region (Port of Spain, Trinidad): June 20-22
- East/West Africa Region (Dakar, Senegal): June 28-30
- Southern Africa Region (Johannesburg, South Africa): July 11-13
- Eastern Europe Region (Kiev, Ukraine): July 17-18
- Central Asia Region (Almaty, Kazakhstan): July 20-21
- Asia Region (Bangkok, Thailand): July 25-28

The trainings, which were attended by several hundred field staff, addressed indicators and reporting to PEPFAR, data quality assessments, M&E capacity-building, agency and national coordination, and target setting. A series of follow-up distance-based trainings have followed. PEPFAR now holds monthly digital video conferences and/or conference calls with headquarters and country staff, addressing issues related to both challenges and best practices, regarding implementation, management, and strategic information (SI). These sessions give staff regular opportunities to present and exchange information.

Approximately 27,200 people from the focus countries have been trained and/or retrained as a result of 2004 and 2005 SI training. The number of people participating in SI training in 2006 continued to increase.

### Expanded Use of PEPFAR Results Reporting

USG country teams continue to define specific HIV/AIDS prevention, treatment, and care goals and detailed strategies in Country Operational Plans (COPs) for each coming year. They then report results twice a year and annual financial obligations once a year to the Office of the U.S. Global AIDS Coordinator (figure 7.4). PEPFAR's web database, the Country Operational Plan Reporting Systems (COPRS), makes the COP and reporting process feasible across long distances and multiple time zones. In 2006, the Department of State adapted this PEPFAR planning and reporting model for all foreign assistance programs, and in future years focus country HIV planning and reporting will be incorporated into the new Foreign Assistance Operational Plans.

**Table 7.2: Accountability: FY2006 Capacity-Building Results**

Country	Number of individuals trained in strategic information (includes M&E, surveillance, and/or HMIS)
Botswana <sup>1</sup>	200
Côte d'Ivoire	800
Ethiopia	1,500
Guyana	100
Haiti <sup>2</sup>	500
Kenya	2,900
Mozambique	2,200
Namibia	500
Nigeria	1,500
Rwanda	300
South Africa	13,200
Tanzania	4,600
Uganda	4,200
Vietnam	700
Zambia	900
<b>Total</b>	<b>34,100</b>

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

**Footnotes:**

<sup>1</sup> Botswana results are attributed to the National HIV Program. Beginning FY2006, 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.

**Figure 7.5: Country Operational Plan Reporting System Planning and Reporting Model**



Additionally, because all USG programs providing global HIV/AIDS assistance fall under the auspices of the Emergency Plan, the COPRS planning and reporting model (figure 7.5) was expanded in 2006 to cover five additional countries receiving more than \$10 million annually – Cambodia, India, Malawi, Russia, and Zimbabwe. These countries completed 2006 mini-COPs, a reduced version of the full COP. In addition, six countries that received more than \$5 million in HIV/AIDS funding annually completed five-year planning strategies – China, the Democratic Republic of Congo, the Dominican Republic, Lesotho, Senegal, and Swaziland. For fiscal year 2007, a total of 16 countries are completing mini-COPs. Development of a strategy and/or an annual COP provides an important opportunity to bring the USG country team and key host country and international partners together. This joint planning effort highlights areas for USG investments and support within the context of one HIV planning and coordinated country system.

Just as the number of countries involved in joint COP planning has expanded, the number of USG-presence countries reporting results has expanded. In 2006, USG teams in the 42 countries receiving over \$1 million in HIV funding annually reported HIV results, using a common set of indicators that measure prevention, treatment, and care activities. Data quality guidance and related training have been undertaken for these countries.

### **The Public Health Evaluation Strategy**

The Emergency Plan's experience with focused, targeted evaluations provides the basis for transformation to a full Public Health Evaluation strategy. This step represents a broadening of studies and methodologies to include communities and populations. This reorientation comes at an important time: the scope of programs and services being delivered is unprecedented; continued expansion and improvement in quality may require new approaches and interventions; and new opportunities are arising to strengthen wraparound services with other development and humanitarian assistance programs.

The objective of this transformation is to further strengthen the Emergency Plan's strategy to support the most scientifically sound and cost-effective methodologies as the epidemic, the responses, and new opportunities develop. Of note, the Public Health Evaluation approach will not support basic or investigational clinical research activities, which are already well-supported by the National Institutes of Health within the U.S. Department of Health and Human Services.

The shift to Public Health Evaluation includes a commitment to implement a routine system to allow for identification of strategically important questions, coordination of efforts (across projects, partners, and countries) to answer priority questions, and dissemination and application of methods, tools, and findings. Key elements of the system include a multi-agency Public Health Evaluation Subcommittee, which operates under the authority of the Scientific Steering Committee, and Evaluation Teams comprised of technical experts, field staff, and partners to oversee specific questions/topical studies. The Public Health Evaluation Subcommittee was formed in late 2006, and quickly reviewed more than 200 country and centrally submitted studies, identified areas of multi-country focus, and assessed gaps in the current evaluation portfolio. The first Evaluation Teams are expected to be set up in early 2007. An annual priority-setting process will be undertaken in order to solicit priority questions from agencies, field staff, partners, and other experts.

### **Communicating Results and Best Practices**

The 2006 HIV/AIDS Implementers' Meeting organized by PEPFAR included more than 1,000 implementers. They discussed lessons learned during the implementation of multi-sectoral HIV/AIDS programs, with a focus on scale-up of

prevention, treatment, and care, and building local capacity, quality, and coordination among partners. The meeting catalyzed an open dialogue about future directions of HIV/AIDS programs, with the goal of having a direct impact upon HIV/AIDS program implementation in the upcoming year. Participants discussed a wide range of subjects informed by knowledge gained through program monitoring and evaluation. The meeting was a primary vehicle for communicating program accountability and results, and was followed by targeted reporting and accountability trainings directed to both focus and other bilateral countries.

One new initiative announced at the Meeting was the PEPFAR Extranet. This website is an online community where USG personnel can exchange information and best practices about HIV programs. Country staff may list best practices and local presentations, and use the site for online discussions. Technical working groups also can post best practices and results. For example, information on country electronic information systems can be found on the PEPFAR Extranet.

The Implementers' Meeting was followed by regional targeted trainings in Latin America and Caribbean, East/West Africa, Eastern Europe/Eurasia and Asia. These sessions provided information about PEPFAR policies, program planning, and reporting requirements for countries receiving more than \$1 million in annual funding through PEPFAR. Technical staff from the 15 focus countries, along with headquarters advisors, acted as trainers, enabling peer-to-peer exchanges of best practices. The Asia training was jointly sponsored and conducted with UNAIDS. Participants commented that the opportunity to share information with their peers in other countries through networking, presentations, and group exercises was particularly helpful. Also helpful to participants, most of whom were new to the PEPFAR concept of "One USG Team," were the discussions of PEPFAR's organizational structure and evolving policy issues. These meetings paved the way for the fiscal year 2007 expansion of the number of countries that complete COPs and report annual program and outcome results.

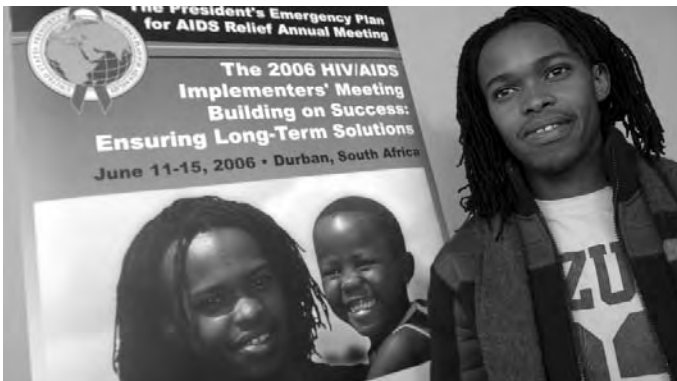
In 2006, the Implementers' Meeting and the regional trainings were supplemented with postings of abstracted results from intervention research by the Cochran Group – University of California San Francisco and distance-based trainings. COP digital video trainings reached USG staff located throughout the world. Twice monthly, literature

abstracts highlighted new HIV intervention findings, to keep staff in the field current. Annual meetings with international partners on the joint analysis of treatment and care results continued, as did other joint international efforts to strengthen country SI systems. The USG also continued collaborating with the Global Fund, UNAIDS, UNICEF, the World Bank, and WHO to produce coordinated guidelines for reporting future results.

### **Key Challenges and Future Directions**

Many of the countries in which PEPFAR currently work in historically have suffered from weak health information systems, and thus have few personnel who are trained in the area. The SI challenges of these under-resourced nations remain immense. Working with such partners as UNAIDS, WHO, Health Metrics Network, World Bank, Global Fund, and others, PEPFAR is expanding country reporting infrastructures and increasing the number of personnel who are trained in SI. An international effort to harmonize global reporting indicators also should enable countries to more easily track their HIV programs and results. In 2006, country and international SI efforts supported by PEPFAR continued to build the necessary infrastructure for accessing useful and timely information.

Disruptions to national health systems have included major setbacks to efforts to monitor and evaluate programs, since M&E activities are often the first programs to be abandoned during emergencies. For example, during fiscal year 2006, Côte d'Ivoire experienced difficult challenges due to civil unrest, which complicated the reporting task of in-country teams.



Originally a participant in a program supported by the U.S. President's Emergency Plan for AIDS Relief, Nkonzo Khanyile was selected as the face of the 2006 HIV/AIDS Implementers' Meeting in Durban, South Africa as an example of those who have moved from program beneficiary to program implementer.

**“HIV/AIDS is a global health crisis and a constant struggle for many of our families, friends, and neighbors. On World AIDS Day, we underscore our commitment to fight the AIDS pandemic with compassion and decisive action.”**

**President George W. Bush  
World AIDS Day  
December 1, 2006**

## Chapter 8

# Implementation and Management

## Implementation and Management

### Goal

Efficient, effective, and accountable use of resources

### Achievements in Fiscal Year 2006

- Obligated approximately \$3.2 billion.
- Streamlined policy and programmatic decision-making.
- Expanded the PEPFAR strategic vision to all bilateral HIV/AIDS programs and transferred key country team best practices beyond the focus countries.
- Established a PEPFAR Extranet system to share information through the Internet among all staff implementing PEPFAR.
- Launched the New Partners Initiative.
- Created a Public Health Evaluation Sub-Committee to be focal point for the annual development of PEPFAR-wide evaluation priorities based on input from the broader PEPFAR community.
- Implemented the Supply Chain Management System.
- Held HIV/AIDS Implementers' Meeting to facilitate flow of lessons learned and best practices among PEPFAR personnel and with key implementing partners, as well as non-partner HIV/AIDS implementers.
- Launched a Staffing for Results initiative to focus on having the right “footprint” at the country level.
- Began a series of monthly video conferences with headquarters and field staff on implementation, management, and strategic information challenges and best practices.



With the President's Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR), for the first time the U.S. Government (USG) has a unified, strategic approach to international development in order to ensure results. Rather than creating a new agency, PEPFAR established an innovative "virtual organization" model to create and implement a unified, USG-wide strategy on global HIV/AIDS.

During 2006, Ambassador Mark Dybul was sworn in as the second U.S. Global AIDS Coordinator, succeeding Ambassador Randall Tobias. The Coordinator, reporting directly to the Secretary of State, has primary responsibility for the oversight and coordination of all USG global HIV/AIDS spending, and strategically leverages the particular strengths of all USG agencies involved in HIV/AIDS interventions. These agencies are:

- Department of State
- Department of Health and Human Services
- Department of Defense
- Department of Commerce
- Department of Labor
- U.S. Agency for International Development
- Peace Corps

At its inception, PEPFAR's imperative to embrace a "new way of doing business" created numerous implementation and management challenges. PEPFAR has instituted systems to learn from its implementation hurdles and successes, and translate those lessons learned into action. PEPFAR is focused on meeting challenges while continuing to evolve in order to address emerging needs. In light of the results PEPFAR has achieved, there is a broad recognition - within and beyond the USG - that the interagency PEPFAR model is effective and should be maintained. Credit for its success belongs to the people of PEPFAR's primary implementing agencies - both in the field and in Washington - who have demonstrated the power of a unified USG response.

### **Management Mechanisms**

The interagency PEPFAR decision-making structure includes the Policy Group, Deputy Principals Group, Technical Working Groups, Country Core Teams, Scientific Steering Committee, and Office of the U.S. Global AIDS Coordinator (OGAC) operating units. Key policy structures established since the founding of PEPFAR have been maintained and strengthened. In 2005, the decision-making structure was formalized to improve the timeliness and inclusiveness of PEPFAR policy and programmatic decisions. In 2006, PEPFAR continued to formalize and improve its processes based upon recommendations made during self-studies conducted in both the field and at agency headquarters.

The Coordinator continues to chair a weekly meeting of the Policy Group, comprised of the principals at the lead implementing agencies and other key Executive Branch stakeholders. This group provides policy leadership, including approval of policy guidance for program implementation. In 2006, the Policy Group identified a number of key issues to target for improvement, including organizing procedures for systematically reviewing USG support for international HIV/AIDS efforts; USG interagency participation in international meetings; and the approval process for PEPFAR policy guidance.

Senior OGAC staff chair a weekly meeting of Deputy Principals from USG participating agencies, who focus on program management issues. The Deputy Principals develop and implement procedures to respond to policy requests, and they support a systematic decision-making process. In 2006, this group sought both field and headquarters reviews and recommendations for improving PEPFAR initiatives ranging from the Implementers' Meeting to Public Health Evaluations; Country Operational Plan (COP) reviews; and priorities for international HIV/AIDS coordination.

The Coordinator also holds quarterly coordination calls with the Chiefs of Mission (COMs) to PEPFAR countries. These calls provide an opportunity for OGAC to update the COMs on implementation, management, and budget issues, as well as discuss in-country issues and ways to improve PEPFAR implementation.

A Scientific Steering Committee meets regularly to ensure that PEPFAR programs are scientifically sound. In 2006, PEPFAR began transitioning from targeted evaluations to Public Health Evaluations (PHEs). A PEPFAR PHE strate-

gy was approved and a new evaluation management structure was implemented. This strategy responds to USG staff recommendations for a more coordinated approach to program evaluations, and recognizes the needs and opportunities to systematically identify and answer critical questions across countries in order to facilitate the continued improvement in scope and quality of PEPFAR programs.

To oversee this new approach, a PHE Subcommittee was formed. The new Subcommittee has the authority to convene Evaluation Teams and is the focal point for the annual development of PEPFAR-wide evaluation priorities, based upon input from the broader PEPFAR community. Partners and USG staff, both in-country and at headquarters, have the opportunity to submit ideas for high-priority evaluation areas and studies; they also will be able to participate in the design and implementation of studies. The PHE Subcommittee is now developing a list of evaluation priorities for 2007.

Technical and Operational Working Groups – which are co-chaired by OGAC and agency personnel, with headquarters and field representation – formulate technical guidance and support implementation in the field. In 2006, PEPFAR’s interagency Technical Working Groups produced quality improvement measures that countries may use to monitor program quality.

Country-specific interagency Core Teams also continue to serve as a source of technical assistance, as well as a channel through which information can flow between the field and headquarters. In 2006, best practices in structuring and operating USG country teams were developed based on peer reviews and experience, and were disseminated to the field. These best practices include adding a PEPFAR Country Coordinator in focus countries, and scheduling country team and partner meetings. USG country management and staffing details are now included in COPs and reviewed by headquarters.

OGAC’s Program Management Systems division and the interagency Management and Staffing Technical Working Group address management issues that arise as part of PEPFAR implementation. They also troubleshoot issues and devise systematic solutions, which are then shared with relevant stakeholders. In order to evaluate staffing required to implement and manage PEPFAR, OGAC is examining current staffing requirements, both at headquarters and in the

field. “Staffing for Results” is a key initiative that aims to improve in country management and staffing practices, with the goal of developing a long term USG staffing plan for implementation of HIV/AIDS programs. In 2006, interagency Deputy Principal teams visited five countries to promote this concept; further visits are planned for 2007. This initiative is leading to an innovative approach to staffing, using a single USG organizational chart for HIV/AIDS in-country rather than an agency-specific structure. The approach will be formalized and instituted in 2007.

In the focus countries where the interagency country team approach has been pioneered, the Staffing for Results model has sharpened the focus of programming, helping to ensure that decisions are made in a strategic fashion. This model has also helped to promote a unified voice and strategy for interacting with host governments and other partners.

The expansion of Staffing for Results to a growing number of countries is a PEPFAR priority. In the field, PEPFAR is also working to disseminate best practices developed in the focus countries to all PEPFAR countries. Increasingly, country teams are talking to each other in order to share concerns, successes, and lessons learned.

### ***Country Operational Plans and Reporting***

The heart of the interagency approach is Ambassadorial leadership of a unified interagency country team. This approach produces a five-year country USG strategy and an annual COP, describing how the strategy is to be made operational and outlining the allocation of budget and activities. The COP, submitted by Ambassadors in their capacities as leaders of PEPFAR country teams, is a statement of annual HIV/AIDS targets for the coming year, along with detailed program and budget plans to reach them. Because they offer a detailed description of what the USG expects of each implementing partner for the year, the COPs have proven to be a key tool for tracking partner performance in-country.

In keeping with the principles of the “Three Ones,” COPs are developed in close consultation with partners in-country, in particular the host country government, to:

1. Reflect unique challenges and opportunities for each country;
2. Ensure support of host-country HIV/AIDS strategies;

3. Effectively build on USG expertise; and
4. Complement other international partners' programs.

Fiscal year 2007 is the fourth year for which COPs have been required in the focus countries, and both the COPs themselves and the process for their review continue to improve with each year of experience. After submission of the COPs to OGAC, interagency technical teams assessed the technical quality of proposed activities and management, as well as consistency with PEPFAR strategies. Programmatic teams then reviewed entire COPs from a more strategic perspective, incorporating the technical review findings. The findings then were discussed in detail with country teams. Program review teams submitted recommendations and comments to the interagency Policy Group, which is chaired by the Coordinator, who then made final funding decisions. In addition to technical reviews, in 2006, focus country management and staffing were also analyzed through the introduction of new country management and staffing charts in the COPs. Recommendations then were made in COP reviews for strengthening country staffing, including having teams of Deputy Principals visit those countries that had management and staffing challenges in order to help resolve issues.

The results reporting system is critical to PEPFAR accountability and is another key element of this country team approach. It is being expanded in stages to the bilateral programs outside of the focus countries. In fiscal year 2006, all bilateral programs that receive \$1 million or more in USG HIV/AIDS funding reported their performance against a set of common PEPFAR indicators. Specific reporting requirements by country are determined by funding level and are detailed in the general policy guidance document for all bilateral programs (see the chapter on Strengthening Bilateral Programs).

For fiscal year 2006, OGAC expanded COP and reporting requirements to five other bilateral countries that are receiving more than \$10 million in HIV/AIDS funding annually. Six countries that receive more than \$5 million in HIV/AIDS funding annually completed five-year PEPFAR planning strategies. For fiscal year 2007, a total of 16 other bilateral countries (in addition to the 15 focus countries) completed mini-COPs, which are abbreviated versions of the full COPs.

Augmenting existing programs funded through the COP process, the New Partners Initiative (NPI) is increasing PEPFAR's ability to reach people with needed services by identifying potential new partner organizations. Under the NPI, the Emergency Plan will award a series of grants totaling approximately \$200 million for new partners to serve the Emergency Plan's 15 focus countries. With NPI funding, these organizations will increase their capacity to provide prevention and care, strengthening capacity in host nations to address HIV/AIDS and thereby promoting the sustainability of future HIV/AIDS efforts. Eligible entities are non-governmental organizations working in any of the 15 Emergency Plan focus countries, with little or no experience working with the USG, defined as having received no more than \$5 million in USG funding during the preceding five years, excluding disaster and emergency assistance or funding as a subcontractor. Announced on World AIDS Day, December 1, 2006, the first round of three-year NPI grants will award a total of up to \$72 million to 22 recipient organizations.

#### ***Internal and External Communication***

Stakeholder engagement in program planning has helped to create a culture of transparency at PEPFAR. In 2006, country PEPFAR teams developed a number of communication vehicles, ranging from mission websites to modified COPs to share with country partners. In order to facilitate transparent communication with the general public as well as with PEPFAR personnel and partners, OGAC significantly upgraded its website in 2006, making available a growing amount of information on program activities. Further website improvements are planned for fiscal year 2007. The Department of State OGAC webpage, <http://www.state.gov/s/sgac> was redesigned as <http://www.PEPFAR.gov>, a full website for PEPFAR information. The new site was launched before World AIDS Day 2006. Additional PEPFAR partner, budget, and program information has been added to the website.

Program evaluations disseminated at the 2005 Annual Meeting indicated a need for better sharing of information about best practices in the field and improved technical assistance and peer-to-peer communications. In direct response to these expressed needs, OGAC established the PEPFAR Extranet in June 2006. The Extranet, which is open to all USG employees working on PEPFAR, contains country team sites, technical working group sites, *News to the Field*, and group spaces for policy and program operations program development. Use of the site is evaluated

monthly, and more extensive user evaluations are conducted at regular intervals.

Weekly *News to the Field* email messages serve as a vehicle for dissemination of PEPFAR guidance, immediate answers to questions concerning PEPFAR policies and processes, and other information to the field. In December 2006, OGAC began a new series of monthly video conferences on implementation, management, and strategic information challenges and best practices. They provide regular opportunities for headquarters and country-based staff to present and exchange information.

In fiscal year 2006, an OGAC information technology (IT) strategic plan was researched, written, and implemented. Four goals and 19 initiatives support OGAC's business plans and processes and address enhanced collaboration and knowledge management, improvements in the use of mobile computing and communication technologies, improvements in workforce IT skills and support, and improved data quality and data management processes. The 19 initiatives are completed or pending, and a continuing process for updating the plan is in place. This will promote use and dissemination of relevant PEPFAR information to the public and to personnel and partners in the field, as well as addressing the operational needs and data management issues of PEPFAR.

In response to requests for improved internal communications, OGAC organized monthly Executive Branch briefings, which are attended by USG employees from any agency who want to learn more about what PEPFAR is doing. At the request of participants, a "spotlight issue" segment recently was included in these meetings. After U.S.-based non-governmental organizations requested a forum for their questions, PEPFAR began holding quarterly meetings in Washington or New York City.

### ***Performance-based Budgeting***

Just as the COPs have improved USG country planning, the use of a performance-based planning and reporting system has enabled USG agencies for the first time to use performance-based budgeting as a means of coordinating HIV/AIDS funding streams and proposed dollar allocations for future years. Working with the White House Office of Management and Budget (OMB), PEPFAR has developed a series of joint program indicators to use in measuring country progress toward the 2-7-10 PEPFAR goals.

From its inception, PEPFAR has insisted on connecting funding to results. Decisions on funding and continuation of partnerships are tied to performance in terms of targets that have been set by country teams and partners and finalized in the COPs. In the field, country teams conduct annual reviews of partner performance prior to submitting COPs for the succeeding year. In 2005 and 2006, each focus country analyzed progress toward its targets in key areas such as treatment, care, counseling and testing, and prevention of mother-to-child transmission; these analyses enabled headquarters agencies to propose future budget requests and establish a set of budget allocations for 2006 and 2007 funding. The Principals' and Deputy Principals' planning groups used this information when making country comparisons of targets-to-results and results-to-costs in funding decisions.

PEPFAR has also developed valuable tools with which to strengthen this performance-based budgeting approach. Based on analysis conducted during fiscal year 2005, select high-performing countries received additional resources for fiscal year 2006, while others that performed below expectations were maintained at their base levels. In fiscal year 2007, PEPFAR will continue to apply and refine its tools for performance-based budgeting in order to ensure optimal use of prevention, treatment, and care resources.

In fiscal year 2007, PEPFAR country teams will report on their partners' programmatic and financial performance in the Semi Annual Program Results report. Country teams will assess how well partners are meeting their goals and maintaining good implementation practices. The reporting will formalize countries' ongoing "pipeline" analyses (which assess partner efficiency in putting funds to work), assessment of cost-effectiveness of partner activities, and review of partners' performance against targets established in the COPs.

PEPFAR also reports on its targets and results in a variety of strategic planning reports, including agency planning and results reports and OMB's Performance Assessment Rating Tool (PART). In spring and fall PART updates, PEPFAR reports on progress in the focus countries and other bilateral countries, as well as progress of the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund).

### ***PEPFAR Annual Meeting and 2006 HIV/AIDS Implementers' Meeting***

"Building on Success: Ensuring Long-Term Solutions," was the theme for the Third Annual PEPFAR Field Meeting



Ambassador Mark Dybul, U.S. Global AIDS Coordinator, visited NOAH's Siyawela Ark on June 13, 2006. The site visit coincided with the HIV/AIDS Implementers' Meeting in Durban, South Africa.

and 2006 HIV/AIDS Implementers' Meeting, held consecutively in Durban, South Africa, in June 2006.

The Annual Field Meeting included extensive programmatic presentations and papers. In addition, representatives of PEPFAR country teams – led by their Ambassadors – reported on their implementation challenges, successes, and lessons learned. This sharing of information generated invaluable dialogue among the country teams.

Representing more than 50 countries worldwide, over 1,000 people attended the 2006 HIV/AIDS Implementers' Meeting. They included implementers from selected PEPFAR partners, including host governments; indigenous community- and faith-based organizations; and organizations that are not USG partners. The vision for this meeting was to provide a forum for HIV/AIDS implementers worldwide to discuss the successes and challenges of bringing programs to scale and to share lessons learned. More than 500 oral and poster abstracts were presented during the Implementers' Meeting. Abstracts and presentations from the meeting are available on the conference website (<http://www.blsm meetings.net/implementhiv2006>).

The 2007 HIV/AIDS Implementers' Meeting, scheduled for June in Kigali, Rwanda, will bring together approximately 1,500 HIV/AIDS implementers. The theme for the 2007 meeting, "Scaling Up Through Partnerships," recognizes the rapid expansion of HIV/AIDS programs worldwide. The increase in projected attendees is attributable to the fact that this year's Implementers' Meeting will include international implementers, with co-sponsorship by

PEPFAR's multilateral organization partners, including the Global Fund, UNAIDS, UNICEF, the World Bank, and the World Health Organization.

Together, implementers will exchange lessons learned on building the capacity of local prevention, treatment, and care programs, maintaining quality control, and coordinating efforts. This forum will facilitate an open dialogue about future directions of HIV/AIDS programs, with a strong emphasis on best practices and implementation of PEPFAR and other programs.

### ***Streamlining Reporting Requirements***

Following requests made by USG field staff at the 2005 Annual Meeting, PEPFAR formed the Reporting Burden Task Force, composed of field and headquarters staff. The Task Force reviewed and streamlined information requests made by headquarters agencies. In 2006, the Task Force conducted structured interviews with implementing agencies and partners in order to gather data on the scope, demand for, and cost of collecting information. As a result of these interviews, PEPFAR reporting requirements were reduced and work commenced on standardizing portfolio management processes. For instance, countries currently submit Semi-Annual Program Results (SAPR) reports, in which they report on progress made through the first half of each fiscal year. In 2007, OGAC is considering making changes to the SAPR, in order to reduce reporting burdens. In addition, OGAC is redesigning the Country Operational Plan Reporting System database in order to make it more user-friendly. This redesign is expected to reduce the administrative burden of reporting and results in more useful information for headquarters agencies and field staff.

### ***Commodities Procurement***

PEPFAR's efforts to build capacity for the delivery of services in the focus countries have been enormously successful – to the point that capacity in many countries now exceeds USG funds to provide services. Therefore, it is essential to ensure that available funds be used with maximum efficiency. With the rapid growth in the availability of treatment and care under PEPFAR, management issues around the procurement of commodities – including antiretroviral drugs, laboratory supplies, and reagents – are critical.

Interruptions or disruptions in the supply of antiretroviral drugs can be disastrous for people receiving this life-saving treatment. PEPFAR is committed to supporting a supply

system that prevents this from occurring. PEPFAR initiated the Partnership for Supply Chain Management in 2005, which manages the Supply Chain Management System (SCMS) project. SCMS, described in the chapters on

Treatment and Building Capacity: Partnerships for Sustainability, will improve the supply chain in order to ensure an uninterrupted supply of high-quality, affordable products.

## PEPFAR Implementing Departments and Agencies

### Department of State (DoS)

The U.S. Global AIDS Coordinator reports directly to the Secretary of State. At the direction of the Secretary, the Department of State's support for the Office of the Global AIDS Commissioner (OGAC) includes:

- Providing human resources services;
- Tracking budgets within its accounting system;
- Transferring funds to other implementing agencies; and
- Providing office space, communication, and information technology services.

Chiefs of Mission provide essential leadership to interagency HIV/AIDS teams and, along with other U.S. officials, engage in policy discussions with host-country leaders to generate additional attention and resources for the pandemic and ensure strong partner coordination. The Coordinator has also created the PEPFAR Small Grants Programs, in order to make funds available to Ambassadors for support of local projects. These projects have been developed with extensive community involvement in coordination with local non-governmental organizations (NGOs) and municipalities and are targeted at the specific needs of the host country.

In addition, the State Department's programs under both the Freedom Support Act and the Support for Eastern European Democracies Act contribute to combating the HIV/AIDS pandemic under the Emergency Plan. Through its embassies in 162 countries, the Department also implements a variety of diplomatic initiatives and other community-based HIV/AIDS programs, most of which focus on prevention. The embassies also use the tools of public diplomacy to reach out through print and electronic media, facilitate exchange programs, and engage new partners for PEPFAR.

### Department of Health and Human Services (HHS)

HHS has a long history of HIV/AIDS work within the United States and at the global level. Under the Emergency Plan, HHS implements prevention, treatment, and care programs in developing countries and conducts HIV/AIDS research through its:

- Centers for Disease Control and Prevention (CDC);
- National Institutes of Health (NIH);
- Health Resources and Services Administration (HRSA);
- Food and Drug Administration (FDA); and
- Substance Abuse and Mental Health Services Administration (SAMHSA).

HHS field staff also work with the country coordinating mechanisms of the Global Fund to improve implementation of Global Fund grants and programs and their coordination with USG programs.

Examples of HHS programs and activities include:

- HHS/CDC's Global AIDS Program (GAP) works through highly trained physicians, epidemiologists, public health advisors, behavioral scientists, and laboratory scientists in 29 countries (including the 15 focus countries), who are part of USG teams implementing the Emergency Plan. GAP supports more than 25 additional countries through its headquarters and regional offices. Through partnerships with host governments, Ministries of Health, NGOs, international organizations, U.S.-based universities, and the private sector, GAP assists with HIV prevention, treatment, and care; laboratory capacity building; surveillance; monitoring and evaluation; and public health evaluation research. It is uniquely positioned to coordinate with HHS's other global health programs, such as global disease detection, public health training, and prevention and control of other infec-

tious diseases such as malaria and tuberculosis, as well as with HHS's domestic HIV/AIDS prevention programs in the United States.

- HHS/NIH supports a comprehensive program of basic, clinical, and behavioral research on HIV infection and its associated opportunistic infections, co-infections, and malignancies. This research will lead to a better understanding of the basic biology of HIV and the development of effective therapies to treat it. It also will foster the design of better counter-measures to prevent new infections, including vaccines and prophylaxis with antiretroviral drugs (ARVs) and microbicides. NIH supports an international research and training portfolio that encompasses more than 90 countries; it also is the lead federal agency for biomedical research on AIDS.
- HHS/HRSA builds human and institutional capacity for scaling up HIV treatment and care, based on its experience in providing quality comprehensive HIV/AIDS care to underserved communities in the United States for more than 20 years. HRSA's Global HIV/AIDS Program implements its strategies through rapid roll-out of ARVs and clinical services, training and technical assistance, nursing leadership development, and promotion of the continuum of palliative care. Supporting education and training in more than 25 countries, thousands of health care workers are able to provide care and services in order to help PEPFAR meet its 2-7-10 goals. HRSA also is providing HIV quality improvement models, as well as supplying patient, provider, and population-level software to PEPFAR countries in order to improve the quality of care.
- HHS/FDA ensures the availability of safe and effective ARVs to meet the in-country treatment goals of global agencies and governments engaged in the treatment and care of patients living with HIV/AIDS. As of January 2007, using a process that combines focused engagement with companies prior to submitting authorization packages with a priority assessment of the submitted packages, the FDA has approved or tentatively approved 34 single-entity, fixed-dose combination, and co-packaged versions of previously-approved ARVs (most of which are still protected in the United States by patent and/or exclusivity) to increase the arsenal of low-cost, high-quality HIV/AIDS therapies available for purchase under PEPFAR. By making these much-needed, high-quality generic products available for registration and marketing in the 15 PEPFAR focus countries, the FDA has helped save lives and has significantly reduced the cost of treatment.
- HHS/SAMHSA works through state and tribal governments and faith- and community-based programs to support substance abuse and dependence and mental illness prevention, treatment and recovery, including support of an educational and training center network that disseminates state-of-the-art information and best practices. This technical expertise and program experience is being applied to the Emergency Plan within the program areas of drug and alcohol abuse, with an emphasis on the use of medication-assisted treatment as an HIV prevention intervention.

The Office of Global Health Affairs in the Office of the Secretary coordinates all of the HHS agencies to be sure the Department's resources are working effectively and efficiently under the leadership of the Coordinator.

### **U.S. Agency for International Development (USAID)**

USAID implemented its first HIV/AIDS programs in 1986 and currently supports the implementation of Emergency Plan HIV/AIDS programs in nearly 100 countries, through direct in-country presence in 50 countries and through seven regional programs in the remaining countries. As a development agency, USAID has focused for many years on strengthening primary health care systems in order to prevent, and more recently to treat and care for, a number of communicable diseases, including HIV/AIDS.

Under the Emergency Plan, USAID's foreign service officers, trained physicians, epidemiologists, and public health advisors work with governments, NGOs, and the private sector in order to provide training, technical assistance, and commodities (including pharmaceuticals) to prevent and reduce the transmission of HIV/AIDS and to provide treatment and care to people living with HIV/AIDS. As the HIV/AIDS epidemic in most countries outside of the focus countries is still limited to high-risk groups, USAID focuses considerable resources on reducing high-risk behaviors not only in high-risk groups, but also in the general population.

USAID is uniquely positioned to support multi-sectoral responses to HIV/AIDS that address the widespread impact of HIV/AIDS outside the health sector in high-prevalence countries. In these countries, USAID is supporting programs, in areas such as agriculture, education, democracy, and trade, linked to HIV/AIDS and which mutually support the objective of reducing the impact of the pandemic on nations, communities, families, and individuals. USAID also supports the New Partners Initiative (NPI), which builds the capacity of organizations at the community level, while also building local ownership of HIV/AIDS responses for the long term.

Under the Emergency Plan, USAID also supports a number of international partnerships (such as the International AIDS Vaccine Initiative and UNAIDS); provides staff support to the U.S. delegation to the Global Fund to Fight AIDS, Tuberculosis and Malaria; and works with local coordinating committees of the Global Fund to improve implementation of Global Fund programs and

ensure that they complement USG programs. Finally, USAID supports targeted research, development, and dissemination of new technologies (including microbicides), as well as packaging and distribution mechanisms for ARVs through the Supply Chain Management System, established in fiscal year 2005.

### **Department of Defense (DoD)**

The DoD implements Emergency Plan programs by supporting HIV/AIDS prevention, treatment, and care, strategic information, human capacity development, and program and policy development in host militaries and civilian communities of 69 countries around the world. These activities are accomplished through direct military-to-military assistance, support to NGOs and universities, and collaboration with other USG agencies in country. The DoD supports a broad spectrum of military-specific HIV prevention programs, infrastructure development and support (including laboratory, clinic and hospital facility renovation, equipment, and training), and treatment and care activities. Under the Emergency Plan, the DoD HIV/AIDS Prevention Program (DHAPP) conducts a one-month HIV/AIDS training program for military clinicians who provide HIV-related treatment and care. DoD international HIV/AIDS programs support six clinical trial and vaccine research sites and have established permanent laboratory and research capabilities in nine countries.

Members of the defense forces in 13 Emergency Plan focus countries have been the recipients of DoD military-specific HIV/AIDS prevention programs designed to address their unique risk factors, in addition to treatment and care programs for their personnel. In these 13 countries alone, military programs have the potential to make an impact on more than 1.2 million people, including active duty troops, their dependents, employees and surrounding civilian communities. With PEPFAR support and in collaboration with the USG, Ministries of Defense in Emergency Plan countries have developed culturally appropriate peer education, drama, video, and interactive “edutainment” methods of sharing comprehensive prevention messages with their troops. Military members have been trained to promote HIV prevention on an individual level, and country military programs have supported targeted condom service outlets, with some countries even developing a military-specific theme for condom packaging and distribution to appeal to soldiers. Ministries of Defense and DHAPP have jointly supported second generation HIV surveillance, as well as counseling and testing centers and provider-initiated testing. DoD programs provide support for a full-spectrum care effort, including TB/HIV, treatment for opportunistic infections, and pre-ART care. DoD efforts under the Emergency Plan also have provided the necessary training, infrastructure, and support for HIV/AIDS treatment in host militaries.

### **Department of Labor (DoL)**

The DoL implements Emergency Plan workplace-targeted projects that focus on prevention and reduction of HIV/AIDS-related stigma and discrimination. DoL has programs in over 23 countries and has received PEPFAR funding for projects in Guyana, Haiti, India, Nigeria, and Vietnam. As of March 2006, DoL programs that work with the International Labor Organization and the Academy for Educational Development have helped 415 enterprises adopt policies that promote worker retention and access to treatment. These programs have reached more than 2,500,000 workers now covered under protective HIV/AIDS workplace policies. DoL brings to all these endeavors its unique experience in building strategic alliances with employers, unions, and Ministries of Labor, which are often overlooked and difficult to target.

DoL programs focus on three major components:

- Education – Increasing awareness and knowledge of HIV/AIDS by focusing on a comprehensive workplace education program, including the ABC approach and linkages with counseling, testing, and other support services.
- Policy – Improving the workplace environment by helping business, government, and labor develop and implement workplace policies that reduce stigma and discrimination associated with HIV/AIDS.
- Capacity – Building capacity within employer associations, government, and trade unions to replicate workplace-based programs in other enterprises; improving worker access to counseling, testing, and other supportive HIV/AIDS services.

The result is a direct contribution to the objectives and goals incorporated into the Emergency Plan to prevent new infections and offer care and support. Appropriate policy development to overcome discrimination and ensure continued employment is in itself an essential first step in care and support. Workplaces where workers and managers have already received training and policies are in place can be strategic locations for counseling and testing, care, support, and other services.

Another extensive DoL international technical assistance program focusing on child labor also involves the International Labor Organization, UNICEF, and non-governmental and faith-based organizations, in order to implement programs targeting HIV-affected children who must work to support themselves and/or their families, as well as children who have been forced into prostitution.



## Department of Commerce (DoC)

The DoC has provided and continues to provide in-kind support to PEPFAR, aimed at furthering private sector engagement by fostering public-private partnerships. Recent activities include:

- Presentations about HIV/AIDS in industry/trade advisory committee meetings, including discussions on how the private sector can contribute to global HIV/AIDS interventions.
- The creation and dissemination of sector-specific strategies for various industries (e.g., consumer goods, oil and extractives, health care) detailing to companies concrete examples of how the private sector can be engaged in HIV/AIDS.
- Departmental support for various private sector activities, such as the Business-Higher Education Forum and events with the Global Business Coalition on HIV/AIDS.
- Regular meetings with multilateral organizations such as the World Bank and the Global Fund to discuss how the Department has been able to reach out to businesses and industry and what other organizations might do.
- Regular contact with dozens of companies working on HIV/AIDS around the world to discuss coordination and identify opportunities for public-private partnerships.

The U.S. Census Bureau, within the Department of Commerce, is also an important partner in the Emergency Plan. Activities include assisting with data management and analysis, survey support, estimating infections averted, and supporting mapping of country-level activities.

## Peace Corps

The Peace Corps is heavily involved in the fight against HIV/AIDS, with programs in approximately 90 percent of its 67 posts, serving 73 countries<sup>1</sup> throughout the world. In its global, biennial Peace Corps volunteer survey (fiscal year 2006), 55 percent of all volunteers report being involved in at least one HIV/AIDS activity (e.g., awareness, prevention, OVC, care, etc.) during their service – a significant increase over the 25 percent reported in fiscal year 2004. The Peace Corps implements Emergency Plan programs in nine of the 15 Emergency Plan focus countries – Botswana, Guyana, Kenya, Mozambique, Namibia, South Africa, Tanzania, Uganda, and Zambia.<sup>2</sup> Peace Corps posts in these countries are using Emergency Plan resources to enhance their HIV/AIDS programming and in-country training; field additional Crisis Corps and Peace Corps volunteers specifically in support of Emergency Plan goals; and provide targeted support for community-initiated projects.

As a grassroots capacity-building organization, the Peace Corps is uniquely positioned to play an essential role in any country strategy aimed at combating HIV/AIDS. The Peace Corps' involvement in the Emergency Plan acts as a catalyst, since Peace Corps volunteers provide long-term capacity development support to non-governmental, community-based, and faith-based organizations, with particular emphasis on ensuring that community-initiated projects and programs provide holistic support to people living with and affected by HIV/AIDS. Peace Corps volunteers also aim to develop the necessary management and programmatic expertise at recipient and beneficiary organizations to ensure long-lasting support, particularly in rural communities. All of this is possible in large part because Peace Corps volunteers receive language and cultural training that enables them to become members of the communities in which they live and work.

<sup>1</sup> As of September 30, 2006.

<sup>2</sup> The Peace Corps recently announced that it will re-open a Peace Corps program in fiscal year 2007 in Ethiopia that will focus on HIV/AIDS. This new program will also help further Emergency Plan goals.



Dr. Skripka, right, practices counseling skills in the Mykolajiv region of Ukraine.

**“The President’s Emergency Plan for AIDS Relief is a key example of effective foreign assistance and transformational diplomacy in action. Our approach is to empower every nation to take ownership of its own fight against HIV/AIDS through prevention, treatment, and care.”**

**Secretary of State Condoleezza Rice  
Remarks at the Release of the  
Second Annual PEPFAR Report to Congress  
February 8, 2006**

## Chapter 9

# Strengthening Bilateral Programs Worldwide

### PEPFAR Worldwide Bilateral Programs Summary

#### Progress Achieved Through September 30, 2006

- Supported 12.8 million counseling and testing sessions worldwide in fiscal year 2006, through prevention of mother-to-child HIV transmission (PMTCT) and other counseling and testing activities.
- Supported antiretroviral prophylaxis for 316,600 HIV-positive pregnant women worldwide, averting an estimated 60,154 infant HIV infections.
- Supported ART for approximately 987,100 people worldwide.

The President’s Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR) is the single umbrella program for all existing and new U.S. Government (USG) international HIV/AIDS activities, including:

- Existing HIV/AIDS programs of all USG agencies and departments in 114 countries;
- Enhanced bilateral programs of all USG agencies and departments in the 15 nations designated as focus countries;

- USG-funded international HIV/AIDS research activities;
- USG policies and oversight pertaining to the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund);
- USG relationships with the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the HIV/AIDS-related activities of all other multilateral organizations;
- USG bilateral relationships with HIV/AIDS international partner governments; and
- All other USG international HIV/AIDS activities and partnerships, including regional platforms.

The Emergency Plan targets \$10 billion over five years to dramatically scale up HIV/AIDS services in the 15 focus countries that account for approximately one-half of the world’s HIV infections. The Emergency Plan also targets \$5 billion over five years to support HIV/AIDS programs in additional countries, international research, international partnerships (including the Global Fund), and other activities. In fiscal year 2006, PEPFAR directed approxi-

mately \$428 million to HIV/AIDS program activities in nations outside the focus countries.

Beyond financial resources, the Emergency Plan represents an important change in how USG global HIV/AIDS support is planned, managed, and implemented. Priorities include coordinating all of the USG agencies working in HIV/AIDS, to create one unified USG response at the headquarters and country levels; a focus on accountability and achievement of results; and the strengthening of indigenous responses, organizations, and systems to combat the pandemic and ensure sustainability.

In 2004, PEPFAR established a Five-Year Global AIDS Strategy for achieving the President's goals; since then, programs, systems, and structures have operationalized the strategy in the focus countries. Fiscal year 2006 was an important year for formally rolling out communications, coordinated strategic planning, resource allocation, and evaluation mechanisms to bilateral HIV/AIDS programs beyond the focus countries.

These mechanisms are helping to ensure that PEPFAR programs worldwide are in keeping with, and contributing to, the goals identified in the Five-Year Global Strategy. The Emergency Plan is working to develop lessons learned from the rapid scale-up of national-level integrated prevention,

treatment, and care programs in the focus countries in order to strengthen interventions worldwide.

Even as PEPFAR works to ensure areas of consistency among programs in all nations with bilateral USG programs, it recognizes that every host nation faces a unique HIV/AIDS epidemic. In all nations, the Emergency Plan works with national strategies to support interventions tailored to local circumstances.

### **Strengthening Coordination, Management, and Accountability: Ensuring Consistency with Emergency Plan Principles**

After an interagency development process during fiscal year 2005, the Emergency Plan issued "General Policy Guidance for All Bilateral Programs" in October 2005. Seeking to ensure consistency of all bilateral programs with PEPFAR principles, the guidance sets forth the basic requirements for programs in all nations receiving bilateral USG resources. In 2006, guidance on Modified Country Operational Plans (mini-COPs), shorter versions of the Country Operational Plans (COPs) used in the focus countries, was developed and disseminated for the 2007 fiscal year planning cycle to 16 other bilateral countries receiving more than \$5 million of PEPFAR support. To support efforts for a more consistent approach to policy and reporting across all USG programs, regionally-targeted trainings

## **Bolivia: Using Data to Fight HIV/AIDS**

High-quality, real-time data are helping Bolivian health officials carry out more effective HIV/AIDS prevention education, including HIV counseling and testing services. According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), the HIV/AIDS prevalence rates in Bolivia's general population have remained under 0.1 percent, which is a remarkable success compared to some neighboring countries. One study in Santa Cruz, however, detected a prevalence rate of 22 percent among high-risk groups. Tracking these groups remains a high priority for the government, but effective public health programming depends on access to reliable information.

In 2005, an epidemiologist and a data manager began working with Bolivia's nine regional HIV/AIDS clinics to revise and complete existing data, automate and standardize clinical records, and improve notification forms. The work was conducted in partnership with PEPFAR.

Dr. Percy Calderon, an HIV/AIDS epidemiologist at Bolivia's Health Ministry, said that PEPFAR "has provided essential support to the Bolivian HIV/AIDS program to achieve an important breakthrough in advanced data management and epidemiological surveillance. This allows decision-makers and health workers to improve the prevention and control of HIV/AIDS."



In Bolivia, Dr. Percy Calderon (left), assists a health worker in analyzing HIV/AIDS trends using a new, PEPFAR-supported automated reporting system.

took place in Latin America and the Caribbean, East/West Africa, Eastern Europe/Eurasia, and Asia, providing a comprehensive explanation of PEPFAR policies, program planning, and reporting requirements. Countries receiving more than \$1 million in annual funding through PEPFAR also took part in these trainings.

### ***Adherence to Emergency Plan Policy***

All HIV/AIDS programs, regardless of program size or funding account source, must follow PEPFAR policies as outlined in the Global Strategy and associated policy documents, such as the Orphans and Vulnerable Children (OVC) or Food and Nutrition program guidance (described in the chapter on Care), although the determination of how certain elements of the Emergency Plan structure and priorities are implemented varies, based upon the country context.

### ***Coordinated Programming Across USG Agencies***

Coordination and collaborative programming of HIV/AIDS activities across USG agencies is an Emergency Plan essential standard of practice. In countries with small programs and few USG agencies physically present, this practice may translate, for example, into coordination meetings several times a year, to include the embassy, USG agencies, and implementing partners. In larger country programs, programming is to assume the model of the focus countries, in which interagency teams working under Chiefs of Mission meet regularly, coordinate annual programming and reporting, and have single USG representation for communication with the Office of the U.S. Global AIDS Coordinator (OGAC) and host country government counterparts. 2006 marked an important year for building these new working relationships among the other bilateral program countries, ensuring more strategic investments with USG dollars, so that maximum impact can be achieved.

### ***Collaboration with the Global Fund to Fight AIDS, Tuberculosis and Malaria***

All USG bilateral programs must coordinate with and facilitate implementation of Global Fund resources, which in general are significantly larger than bilateral resources in countries outside of the focus countries. The USG is the largest contributor to the Global Fund, providing approximately 30 percent of all Global Fund resources. Investing in the Global Fund is a crucial element of the Emergency Plan strategy, and PEPFAR implementation to date has demonstrated the interdependence of these two approaches on the ground.

Given the magnitude of the USG investment in the Global Fund and the commitment of the USG to working collaboratively with other international partners and multilateral institutions, bilateral programs provide support to Global Fund grantees; help to leverage Global Fund resources, when necessary; and bring successful programs to scale. One example of support is the provision of targeted technical assistance, in order to improve Global Fund grant effectiveness. This assistance often includes strengthening the capacity of Country Coordination Mechanisms (CCMs), placing time-limited logistics advisors in Ministries of Health to strengthen logistics systems, create unified procurement approaches, and offer management training. USG health teams around the world also play a regular role in reviewing Global Fund grants as members of CCMs, supporting the review of grant progress, and advising Global Fund management staff on implementation issues. These cooperative efforts and resources contribute to making Global Fund money flow more quickly and efficiently. Please see the chapter on Strengthening Multilateral Action for more information regarding coordination between the bilateral and multilateral components of PEPFAR, including support for the Global Fund.

### ***Relationship to Host Country HIV/AIDS Strategies***

The USG is committed to implementing the principles of the “Three Ones” (one agreed-upon action framework; one national HIV/AIDS coordinating authority; one agreed-upon country-level monitoring and evaluation system) across all of its international HIV/AIDS activities. All USG bilateral HIV/AIDS programs, therefore, are developed and implemented within the context of multi-sectoral national HIV/AIDS strategies, under the host country’s national authority. Programming is designed to reflect the comparative advantage of the USG within the national strategy, and it also leverages other resources, including both other international partner and private-sector resources. As noted, given the USG investment in the Global Fund, coordination with and provision of support to the Global Fund are of paramount importance in all countries.

### ***Comprehensive HIV/AIDS Technical Interventions***

PEPFAR programs are tailored to respond to how HIV/AIDS manifests within each country context, addressing gaps in the existing response, and utilizing the comparative advantage of the USG agencies working in country. Not all countries are required to support all key elements of the Emergency Plan Five-Year Global Strategy (i.e., prevention,

treatment, and care, including people living with HIV/AIDS (PLWHA) and OVCs). However, USG programs in all countries are expected to adhere to the general goals of the Global Strategy, including strengthening leadership in the fight against the epidemic; capacity-building for indigenous organizations; and diversifying in-country partners, including faith- and community-based organizations.

Programs receiving greater than \$10 million in USG funding are expected to reflect a comprehensive approach to the epidemic, in order to ensure that all key technical areas are addressed, if not directly by the USG, then by other partners who may or may not receive support from the USG. For example, a country may be supporting AIDS treatment using Global Fund resources. It would not then be expected that USG bilateral resources would be used in this area, although the USG team may choose to provide technical assistance to Global Fund grantees to promote the success of treatment efforts.

#### ***Accountability and Focus on Results***

Regardless of levels of funding, all Emergency Plan programs are results-oriented, with clearly-established targets. Budget reporting and program reporting against standard indicators in the relevant programming areas will be required.

#### ***Reporting and Documentation***

As the Department of State reforms and streamlines the Foreign Assistance process, OGAC will work to align planning and reporting requirements for the other bilateral program countries covered by the Emergency Plan. For fiscal year 2007, the regional platforms and those countries receiving less than \$5 million in HIV/AIDS funding will be incorporated into the Foreign Assistance planning and reporting process. For fiscal year 2008, focus countries receiving more than \$10 million will continue to plan and report primarily through the Emergency Plan structures, while countries receiving less than \$10 million will be fully incorporated into the Foreign Assistance Operational Plans. OGAC has worked closely with the Office of the Director of Foreign Assistance, to ensure that HIV/AIDS indicators and measures included in the Foreign Assistance Operational Plans match what is requested by the Emergency Plan through the Country Operational Plans. The information for all countries will be coordinated and shared with the Emergency Plan and Office of the Director of Foreign Assistance in a systematic manner.

In fiscal year 2006, among the 99 programs receiving bilateral HIV/AIDS resources outside of the 15 focus countries, five received more than \$10 million, 15 received between \$5 and \$10 million, 23 received between \$1 million and \$5 million, and the remainder received less than \$1 million. A list of PEPFAR countries that received \$1 million or more is provided at the end of this chapter. Requirements for reporting and documentation are dependent upon fiscal year 2005 HIV/AIDS funding levels, as follows.

#### ***Countries with Funding Under \$1 Million***

- USG missions in these countries are expected to report to implementing agencies according to existing reporting requirements.
- No additional documents (e.g., Country Operational Plan, Joint USG Strategy, or report of indicator data to OGAC) are required.

#### ***Countries with Funding Between \$1 Million and \$5 Million***

- In 2006, USG missions were expected to report annually to their agency headquarters, using standard indicators that measure results of funded program areas. The information is then harmonized among agencies and transmitted to OGAC. Reporting applies only to those indicators (of the 29 total) for which countries have programs, and only downstream results are included.
- For 2007, these countries will be expected to report annually to their agency headquarters using the full set of indicators.
- No additional documents (e.g., Country Operational Plan or Joint USG strategy) are required.

#### ***Countries with Funding Between \$5 Million and \$10 Million***

- In 2006, U.S. missions in these countries were required to submit a Five-Year Country Strategy, prepared according to “Country-Specific HIV/AIDS Five-Year Strategy Guidance for Other Bilateral Country Programs,” issued in October 2005. These country strategies were reviewed by an interagency team and the appropriate USG home agency leadership, and approved by the U.S. Global AIDS Coordinator.

- In 2006, these countries were expected to report annually to their agency headquarters, using standard indicators that measure results of funded program areas. The information was then harmonized among agencies and transmitted to OGAC. Reporting applied only to those indicators (of the 29 total) for which countries have programs, and only downstream results were included.
- For 2007, Modified Annual Country Operational Plans, known as “Mini-COPs,” will be required for 11 of these countries. The Mini-COP is a simplified COP – a single interagency USG operational plan which outlines key activities, targets, funding requests, and implementation partners for the limited number of program service areas that are funded by a country. For 2007, in these 11 countries, interagency teams under the leadership of the Ambassador in each of these nations will be expected to report results regarding

funded programs, using standard PEPFAR indicators. Reporting will be conducted through the agencies and apply only to those indicators (of the 41 total) for which countries have programs; only downstream results will be included.

### Countries with Funding Over \$10 Million

- The significant programming levels in these countries have generated a need for greater accountability in terms of programming and results. While these country programs are not expected to support activities across the full range of HIV/AIDS initiatives, it is anticipated that they reflect a comprehensive mix of prevention, treatment, and care interventions.
- As noted above, if resources for a central component of a comprehensive strategy are being supported by another partner, in particular the Global Fund, then USG resources may be directed to facilitate those programs. Even in countries receiving more than \$10 million in bilateral USG resources, it is likely that the greatest investment of USG resources will be through the Global Fund. It is unlikely that sufficient bilateral resources will be available to bring successful USG-supported pilots to scale; instead, there is an expectation that the USG will work to ensure that information from successful pilots and other best practices is widely available and expanded through other resource avenues, such as the Global Fund.
- In 2006, USG missions in the five other bilateral countries receiving more than \$10 million completed five-year country strategies and Mini-COPs. Starting in 2007, these countries will complete mini-COPS on an annual basis.
- Annual reporting directly to OGAC using the standard Emergency Plan indicators is required. Reporting applies only to those indicators (of the 41 total) for which countries have programs; downstream results are reported for all indicators, and upstream results also are reported for the seven country-level indicators.

<b>Table 9.1: Other Bilateral: FY2006 Country Funding Levels</b>	
<b>Over \$10 million</b>	
Cambodia India Malawi Russia Zimbabwe	
<b>\$5 million to \$10 million</b>	
<b>Africa</b> Angola Democratic Republic of Congo Ghana Lesotho Senegal Sudan Swaziland	<b>Asia/Near East</b> China Indonesia Nepal Thailand <b>Europe/Eurasia</b> Georgia Ukraine <b>Latin America/Caribbean</b> Dominican Republic Honduras
<b>\$1 million to \$5 million</b>	
<b>Africa</b> Benin Burundi Guinea Liberia Madagascar Mali <b>Asia/Near East</b> Bangladesh Burma Egypt Laos Papua New Guinea Pakistan	<b>Europe/Eurasia</b> Kazakhstan Kyrgyzstan Tajikistan Uzbekistan <b>Latin America/Caribbean</b> Brazil El Salvador Guatemala Jamaica Mexico Nicaragua Peru

### Regional Platforms

In addition to the guidance issued to countries receiving bilateral funding, in 2006 Emergency Plan “Guidelines for Regional Programs” were developed and disseminated to the 11 regional USG offices conducting HIV/AIDS work.

These platforms perform three basic types of work as part of the Emergency Plan. Their most important role is to budget for, plan, implement, and monitor HIV/AIDS programs in countries with no dedicated, resident USG HIV/AIDS staff. This role includes providing technical assistance, particularly in strategic information, to these “non-presence” countries, and providing management and administrative support for HIV/AIDS programs.

In addition to their primary role supporting non-presence countries, regional platforms provide technical and management support to Emergency Plan programs in “presence” countries. They also conduct cross-country activities to address regional needs and build the capacity of regional networks. Technical support to presence countries consists of technical assistance, training, and the exchange of information and experiences among countries in the region. The regional platforms foster close collaboration and coordination among the different USG bilateral programs working in the region and facilitate periodic meetings of USG HIV/AIDS staff and other key stakeholders. They also conduct cross-country activities, such as cross-border prevention and care programs that serve mobile populations.

### ***Communication and Support Strategy***

OGAC and implementing agencies are working to ensure that USG missions are fully informed of their roles relative to the Emergency Plan, including the associated requirements for planning, reporting, and coordination. Particular support is offered to enable countries to complete the documentation requirements, especially for those countries that complete COPs and mini-COPS. Key efforts include:

- Ensuring the online accessibility of all relevant documents that provide information on the Global Strategy and its key policies, along with guidance thereon.
- Using multi-country meetings as venues to disseminate information.
- Engaging OGAC regional coordinators and host-agency country backstops, including State Department regional bureaus and country desk officers, to serve as key communication channels.

- Identifying partners from agencies and OGAC regional coordinators to provide technical assistance and support in the development of documents.
- Engaging in interagency field visits to further disseminate information and expectations on the ground.
- Conducting quarterly conference calls between the Global AIDS Coordinator and Chiefs of Mission (COMs) in the focus and other bilateral countries to update the COMs on implementation, management, and budget issues. For more information, see the Implementation and Management chapter.
- Organizing phone-based, distance-based, and regional COP development training.

### **Results**

In fiscal year 2006, all countries with funding over \$1 million reported results for programs implemented, using the standard Emergency Plan indicators (see table 9.1 for a complete listing). Countries with funding between \$1 million and \$10 million reported only downstream results for relevant indicators (i.e., those linked to specific programs areas), while countries with funding greater than \$10 million followed a similar practice and also reported upstream results for the seven country-level indicators. Results for select country-level indicators for all of these countries are reviewed in this chapter. The five countries with funding greater than \$10 million are described individually, while the remaining countries are clustered according to geographic region. All of these results are added to the focus country totals in order to determine worldwide PEPFAR-supported totals.

### **Prevention**

Emergency Plan bilateral programs support prevention activities and build prevention capacity in host countries. As discussed in the chapter on Prevention, specific activities reflect whether the national HIV epidemic is generalized or concentrated. Generalized epidemics are those in which some subgroups have higher HIV prevalence than others and HIV affects a broad cross-section of society; the primary mode of transmission is sexual activity. Concentrated epidemics are those in which HIV prevalence is heavily concentrated within recognized risk groups, such as people in prostitution, injecting drug users, and men who have sex with men. Potential prevention activities

## Egypt: Clinics Help Prevent HIV/AIDS

The social taboos surrounding sexually transmitted infections (STIs) in countries such as Egypt make it difficult to hold open discussions on prevention and treatment. As a result, HIV-positive people are reluctant to seek medical care, infected partners are not treated, and doctors are hesitant to offer advice about HIV/AIDS prevention and treatment.

To address this challenge, Egypt's Ministry of Health, in partnership with PEPFAR, has embarked upon a comprehensive program to prevent the spread of STIs, including HIV. The program created national guidelines for STI management, training manuals for frontline service providers, and a chart that details common infections and nationally-available treatments. It also has put in place educational programs addressing high-risk behaviors and prevention and providing information about voluntary counseling and testing services, including a confidential hotline. The program established pilot clinics to offer these services.



In a renovated clinic in Cairo, Egypt, patients can receive information about STIs and HIV/AIDS.

## Greater Mekong Sub-Region: Purple Sky Network Coordinates Regional MSM Activities

In order to address the rise in HIV prevalence among men who have sex with men (MSM) in Asia, a collaborative initiative has been developed involving PEPFAR partner organizations and in-country government representatives from throughout the Greater Mekong sub-region.\* This regional network has come to be known as the Purple Sky Network.

In 2005, when the first meetings were held, none of the countries in the Greater Mekong sub-region were addressing MSM issues in their national AIDS plans. Participants agreed on a two-year action plan, including 20 specific targets for improving peer education and outreach, coverage of prevention programs, surveillance, and advocacy. Each country developed specific plans for accomplishing these targets. An MSM Regional Coordination Secretariat was established that was responsible for moving the plan forward.

By late 2006, all of the countries in the sub-region addressed MSM in their national AIDS plans. Many also had established MSM working groups that included representatives from government bodies, international organizations, and national and local non-governmental organizations, who are working to address HIV/AIDS issues that are MSM-related.

*\* Greater Mekong sub-region countries include Thailand, Cambodia, Vietnam, Burma, Laos, and the two southwestern Chinese provinces of Yunnan and Guangxi.*

## Uzbekistan: Preventing HIV/AIDS in Women's Prison

With PEPFAR support, Tatyana Nikitina, the director of a community organization that works to prevent the spread of HIV/AIDS in Uzbekistan, has developed a training course on HIV/AIDS for prisoners. Four prison officials and 22 female prisoners participated in the program, where they learned about prevention techniques and gained skills and materials for disseminating HIV/AIDS awareness information to other prisoners. Participants learned about antiretroviral treatment, stigma reduction techniques, and methods for supporting people living with HIV/AIDS.

"I saw that the training helped women prisoners believe that life continues and that they can help prevent others from being infected with HIV/AIDS," said Tatyana Nikitina.

Ms. Nikitina continues to work on HIV/AIDS prevention activities and now is developing a series of training sessions on HIV/AIDS prevention for male prisoners in Uzbekistan.



At a women's prison in Uzbekistan, Tatyana Nikitina is leading a PEPFAR-funded HIV/AIDS training session which she developed for inmates and prison employees.



**Table 9.2: Other Bilateral: FY2006 Prevention of Mother-to-Child Transmission<sup>1</sup> Results**

Country <sup>5</sup>	Number of pregnant women receiving PMTCT services <sup>2</sup>			Number of HIV+ pregnant women receiving ARV prophylaxis		
	Number receiving upstream system strengthening support <sup>3</sup>	Number receiving downstream site-specific support <sup>4</sup>	Total	Number receiving upstream system strengthening support <sup>3</sup>	Number receiving downstream site-specific support <sup>4</sup>	Total
Cambodia	13,600	22,700	36,300	100	200	300
India	676,100	16,100	692,200	2,900	29	2,900
Malawi	42,800	10,100	52,900	4,600	400	5,000
Russia	87,400	3	87,403	900	0	900
Zimbabwe	97,100	45,500	142,600	8,900	6,000	14,900
<b>Subtotal</b>	<b>917,000</b>	<b>94,400</b>	<b>1,011,400</b>	<b>17,400</b>	<b>6,600</b>	<b>24,000</b>
<b>Additional Countries<sup>6</sup></b>						
Africa	N/A	84,700	84,700	N/A	5,300	5,300
LAC	N/A	N/A	N/A	N/A	700	700
E&E	N/A	9,700	9,700	N/A	900	900
ANE	N/A	2,700	2,700	N/A	56	56
<b>Subtotal</b>	<b>N/A</b>	<b>97,100</b>	<b>97,100</b>	<b>N/A</b>	<b>7,000</b>	<b>7,000</b>
<b>Total</b>	<b>917,000</b>	<b>191,500</b>	<b>1,108,500</b>	<b>17,400</b>	<b>13,600</b>	<b>31,000</b>
<b>Notes:</b>						
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.						
<b>Footnotes:</b>						
<sup>1</sup> 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, and counseling and support for safe infant feeding practices.						
<sup>2</sup> The number of pregnant women receiving PMTCT services includes only women who have been counseled and tested, and received their test result.						
<sup>3</sup> 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.						
<sup>4</sup> The number of individuals reached through downstream site-specific support includes those receiving services at U.S. Government-funded service delivery sites.						
<sup>5</sup> Five countries reported annual results through the PEPFAR reporting system for the first time in FY2006.						
<sup>6</sup> All bilateral country programs receiving over \$1 million and less than \$10 million in HIV funding reported directly to agencies on PEPFAR indicators in FY2006. These results represent 38 countries aggregated here into regional totals, though not all countries have activities in all program areas. In FY2006 countries were required to report downstream results only; program activities likely resulted in some upstream results, as well, and might be included in the downstream report. LAC – Latin America and the Caribbean; E&E – Europe and Eurasia; ANE – Asia and Near East.						

include ABC behavior change to address sexual transmission of HIV, targeted according to the country's epidemic; PMTCT; safe medical injection and blood safety activities; and efforts to help injecting drug users.

Prevention data for the seven country-level indicators are limited to the PMTCT programs. Both downstream and upstream data are reported for the five countries with more than \$10 million in PEPFAR support, while only downstream data are reported for the remaining 38 countries.

### **Treatment**

In addition to the 15 focus nations, the Emergency Plan now partners with 19 host nations to support treatment for approximately 165,100 people. While the USG programs in these nations provide some downstream support, they largely provide critical upstream support, through system-strengthening and capacity-building, including technical assistance to international partners that support treatment. Additionally, many of these countries are working with PEPFAR and other international partners to start pediatric treatment.

## Zimbabwe: Standardizing National Antiretroviral Treatment Monitoring Tools

In 2004, the government of Zimbabwe began a national program to provide antiretroviral treatment (ART) to people living with HIV/AIDS. With an expanding program, it became clear that there was an urgent need to develop standardized tools to strengthen program management at all levels. In response, Zimbabwe's Ministry of Health and Child Welfare, in partnership with PEPFAR, developed paper-based national monitoring tools for the ART program.

The goals of this effort are to standardize indicators for service providers, strengthen national data collection and analysis, improve reporting systems, monitor scale-up of ART services delivery, and improve logistics planning for HIV/AIDS commodities. The standardized, easy-to-use monitoring tools represent a major step forward in the scale-up of ART.

**Table 9.3: Other Bilateral: FY2006 Treatment<sup>1</sup> Results**

Number of individuals receiving ART			
Country <sup>4</sup>	Number receiving upstream systems-strengthening support <sup>2</sup>	Number receiving downstream site-specific support <sup>3</sup>	Total
Cambodia	13,900	4,300	18,200
India	18,700	4,300	23,000
Malawi	51,200	3,900	55,100
Russia	1,400	0	1,400
Zimbabwe	40,000	500	40,500
<b>Subtotal</b>	<b>125,200</b>	<b>13,000</b>	<b>138,200</b>
Additional Countries <sup>5</sup>			
Africa	N/A	6,300	6,300
LAC	N/A	4,300	4,300
E&E	N/A	0	0
ANE	N/A	16,300	16,300
<b>Subtotal</b>	<b>N/A</b>	<b>26,900</b>	<b>26,900</b>
<b>Total</b>	<b>125,200</b>	<b>39,900</b>	<b>165,100</b>

**Notes:**

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:**

<sup>1</sup> Treatment includes the provision of antiretroviral drugs and clinical monitoring of ART among those with advanced HIV infection.

<sup>2</sup> 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.

<sup>3</sup> Number of individuals reached through downstream site-specific support includes those receiving services at U.S. Government-funded service delivery sites.

<sup>4</sup> Five countries reported annual results through the PEPFAR reporting system for the first time in FY2006.

<sup>5</sup> All bilateral country programs receiving over \$1 million and less than \$10 million in HIV funding reported directly to agencies on PEPFAR indicators in FY2006. These results represent 13 of 14 countries that have treatment programs (the one exception had data quality problems), aggregated here into regional totals. In FY2006 countries were required to report downstream results only; program activities likely resulted in some upstream results, as well, and might be included in the downstream report. LAC – Latin America and the Caribbean; E&E – Europe and Eurasia; ANE – Asia and Near East.

Country-level treatment results are limited to the number of persons receiving antiretroviral treatment. Each of the five countries receiving greater than \$10 million has PEPFAR-supported treatment programs, while 14 of the remaining 38 countries receive PEPFAR treatment support. Downstream data are available for all countries, and only the five countries with greater than \$10 million report upstream results.

### Care

OVC care received USG support in many nations beyond the focus countries in fiscal year 2006, strengthening the capacity of families and communities to care for children in their midst. The Emergency Plan also supports programs to care for PLWHA and to provide HIV counseling and testing in a growing number of countries. These countries are building downstream care services coordinated and linked with counseling and testing services. In addition, many countries, such as Cambodia, are beginning to introduce successful “continuum of care” models.

## Suriname: Rapid Testing Implementation a Tremendous Success

In Suriname, a same-visit rapid testing program employs a multi-sectoral approach to HIV counseling and testing, bringing together the country's Ministry of Health, the private sector, the community, and U.S. Government staff. PEPFAR supports the program by providing laboratory technical assistance during implementation.

Program activities include a media campaign to increase awareness that resulted in a significant increase in HIV testing between December 2005 and August 2006. According to counseling and testing staff, client satisfaction has improved and staff workload decreased since the implementation of same-visit testing. This program is a regional success story and can serve as a model for other Caribbean countries.

**Table 9.4: Other Bilateral: FY2006 Care – Counseling & Testing Services Results (in settings other than PMTCT)**

Number of individuals who received Counseling and Testing <sup>1</sup>			
Country <sup>4</sup>	Number receiving upstream systems-strengthening support <sup>2</sup>	Number receiving downstream site-specific support <sup>3</sup>	Total
Cambodia	87,700	105,200	192,900
India	509,200	90,800	600,000
Malawi	426,300	152,900	579,200
Russia	144,000	600	144,600
Zimbabwe	60,000	441,200	501,200
<b>Subtotal</b>	<b>1,227,200</b>	<b>790,700</b>	<b>2,017,900</b>
Additional Countries <sup>5</sup>			
Africa	N/A	170,100	170,100
LAC	N/A	197,900	197,900
E&E	N/A	31,900	31,900
ANE	N/A	68,100	68,100
<b>Subtotal</b>	<b>N/A</b>	<b>468,000</b>	<b>468,000</b>
<b>Total</b>	<b>1,227,200</b>	<b>1,258,700</b>	<b>2,485,900</b>
<b>Notes:</b>			
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.			
<b>Footnotes:</b>			
<sup>1</sup> Counseling and testing includes only those individuals who received their test results.			
<sup>2</sup> 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.			
<sup>3</sup> Number of individuals reached through downstream site-specific support includes those receiving services at U.S. Government-funded service delivery sites.			
<sup>4</sup> Five countries reported annual results through the PEPFAR reporting system for the first time in FY2006.			
<sup>5</sup> All bilateral country programs receiving over \$1 million and less than \$10 million in HIV funding reported directly to agencies on PEPFAR indicators in FY2006. These results represent 38 countries aggregated here into regional totals, though not all countries have activities in all program areas. In FY2006 countries were required to report downstream results only; program activities likely resulted in some upstream results, as well, and might be included in the downstream report. LAC – Latin America and the Caribbean; E&E – Europe and Eurasia; ANE – Asia and Near East.			

Reporting of care indicators is limited to counseling and testing results. Both downstream and upstream data are reported for five countries with more than \$10 million, while only downstream data are reported for the remaining 38 countries.



Olga Fyodorova and Vladimir Dementyev are pioneering the new system of health care service delivery for people living with HIV/AIDS in Engels, Russia.

### Russia: Twinning Partnership Builds Capacity

In Russia, PEPFAR is supporting efforts to improve the quality and scope of health care and related services available to people living with HIV/AIDS (PLWHA) through a twinning partnership between Russia and the United States.

The Emergency Plan-supported twinning partnership pairs new Russian HIV/AIDS case managers with experienced case managers from Minnesota and New York. Russian case managers attend courses in which they learn about case management from their American counterparts.

Olga Fyodorova and Vladimir Dementyev, two case managers, are pioneering the new system of health care service delivery for PLWHA in the Saratov Oblast city of Engels. Thanks to the training they received through the PEPFAR-supported twinning partnership, Olga and Vladimir now provide comprehensive care and support services to their HIV-positive clients.

The case workers now refer clients to resources for antiretroviral and tuberculosis treatment, HIV-discordant couples counseling, and employment and legal services. They also provide assistance with disability pension applications. The new case management system has significantly improved services for PLWHA in Engels and throughout Russia.

### Capacity-Building

The Emergency Plan works with national strategies to improve HIV/AIDS responses worldwide. It supports system-strengthening (including laboratories and surveillance and information systems), capitalizing on USG expertise in technical assistance and capacity-building for quality improvement and sustainability of programs. PEPFAR also provides technical assistance to public-and private-sector institutions in policy development, including policies

## India: A Brighter Future for Sunita

Sunita is one of many migrant workers who came to Mumbai, India, in search of work. She found work as a day laborer in one of the city's 200 nakas or open labor markets. While employed at the naka, Sunita was sexually exploited by the contractor and managers at the construction site where she was working. Degraded by her employers' treatment and unable to earn sufficient wages through the naka, Sunita turned to prostitution to support her disabled husband and five teenage children.

During an information session on HIV/AIDS prevention, Sunita met an outreach worker from NIRMAN, a PEPFAR-supported non-governmental organization that promotes HIV/AIDS awareness among women working in construction. The outreach worker provided Sunita with counseling, which empowered her to share her experiences of sexual exploitation and take action to escape exploitation and prostitution.

Sunita continues to work as a day laborer, but she is no longer involved in prostitution, nor is she being sexually exploited. With the knowledge she gained from NIRMAN, Sunita was inspired to become a peer educator and now helps other female workers at the nakas. She addressed participants at a state-level discussion on sexual harassment in the workplace organized by the Women's Commission and the India Center for Human Rights and Law. She says, "I am determined to share my experience with other women like me, so that they can safeguard their lives and support their families with dignity."



Charu Badloney

A NIRMAN counselor discusses information about women's issues in the workplace.

aimed at reducing stigma and discrimination, and other institutional capacity-building activities.

PEPFAR continues to support host nations' efforts to build human capacity, train people to prevent the medical transmission of HIV, provide PMTCT services to pregnant women and their infants, deliver HIV-related palliative care, conduct HIV counseling and testing, and perform necessary laboratory tests. In addition, PEPFAR supports programs to train country staff in monitoring and evaluation, surveillance, and health management information systems, as well as policy, capacity-building, and stigma and discrimination reduction programs.

### Increased Financial Commitments

As the PEPFAR program continues to evolve, closer attention is being paid to resource allocations in countries with significant HIV/AIDS epidemics and where opportunities to leverage other international and host country partner resources are present. For example, support for India – the largest Emergency Plan program outside the focus nations – was over \$29 million in fiscal year 2006, up from approximately \$17 million in fiscal year 2003. In Russia, PEPFAR funding in fiscal year 2006 was almost \$14 million – an increase of approximately 100 percent since fiscal

year 2003. Funding for the Democratic Republic of the Congo in fiscal year 2006 totaled \$9.3 million, an increase of \$3.5 million over fiscal year 2003. Emergency Plan coordination with China continues to grow, as the Chinese government has continued to seek active partnerships with PEPFAR to improve its national health care infrastructure and human capacity.

Similarly, the USG has continued to remain the largest contributor to the Global Fund, having provided approximately 30 percent of the Global Fund's \$4.8 billion in funding commitments through fiscal year 2006. Thus, of the \$476 million the Global Fund has committed to projects in China, India, and Russia, approximately \$143 million is attributable to USG contributions. For more information, see the chapter on Strengthening Multilateral Action.





With support from the Emergency Plan, Dr. Abdalla, a United Nations volunteer, conducts biweekly visits to clinics in Guyana where he trains and mentors staff and supports HIV treatment and care through screenings, medical management, and delivery of antiretroviral treatment.

**“The pandemic of HIV/AIDS can be defeated, and the United States is willing to take the lead in that fight. But we can’t do it alone, and so for our international partners, we appreciate what you do.”**

**President George W. Bush  
World AIDS Day  
December 1, 2006**

## Chapter 10

# Strengthening Multilateral Action

### Strengthening Multilateral Action

#### Goal

Ensure a comprehensive and amplified response to global HIV/AIDS through leadership, engagement, and coordination with multilateral institutions and international organizations.

#### Strategies

- Coordinate programs to ensure a comprehensive and efficient response, and capitalize on the comparative advantages offered by each organization, including targeting organizational strengths to address unique challenges.
- Promote evidence-based policies and sound management strategies.
- Encourage expanded partnerships that build local capacity.

The fight against HIV/AIDS must be sustained, and ultimately won, at the national and community levels. At this stage of the fight, the support of international partners is of vital importance in many places, and each must ensure that it supports communities in developing their own capacity to create and sustain their leadership in the fight.

The “stove-piping” that often occurs when international partners make contributions poses risks of duplication and waste, while failing to help develop indigenous capacity. The responsibility to avoid this rests on international partners – including the United States Government. In addition to implementing high-quality, sustainable programs that deliver results, all partners must work together to ensure coordinated action in support of host countries’ national strategies.

Increasingly, the President’s Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR) is seen as a leader in the international fight against HIV/AIDS – not only at the aggregate level of total resources, but also at the country level for its commitment to local capacity-building. PEPFAR is working to ensure that effectiveness and sustainability are core values upheld by all partners in the fight.

### Strengthening Multilateral Action at the Country Level

#### *The Global Fund to Fight AIDS, Tuberculosis and Malaria*

The Emergency Plan’s five-year, \$15 billion commitment not only includes bilateral and regional programs worldwide, but also supports international HIV/AIDS research and contributes to a number of multilateral efforts, includ-

ing a substantial commitment to the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund).

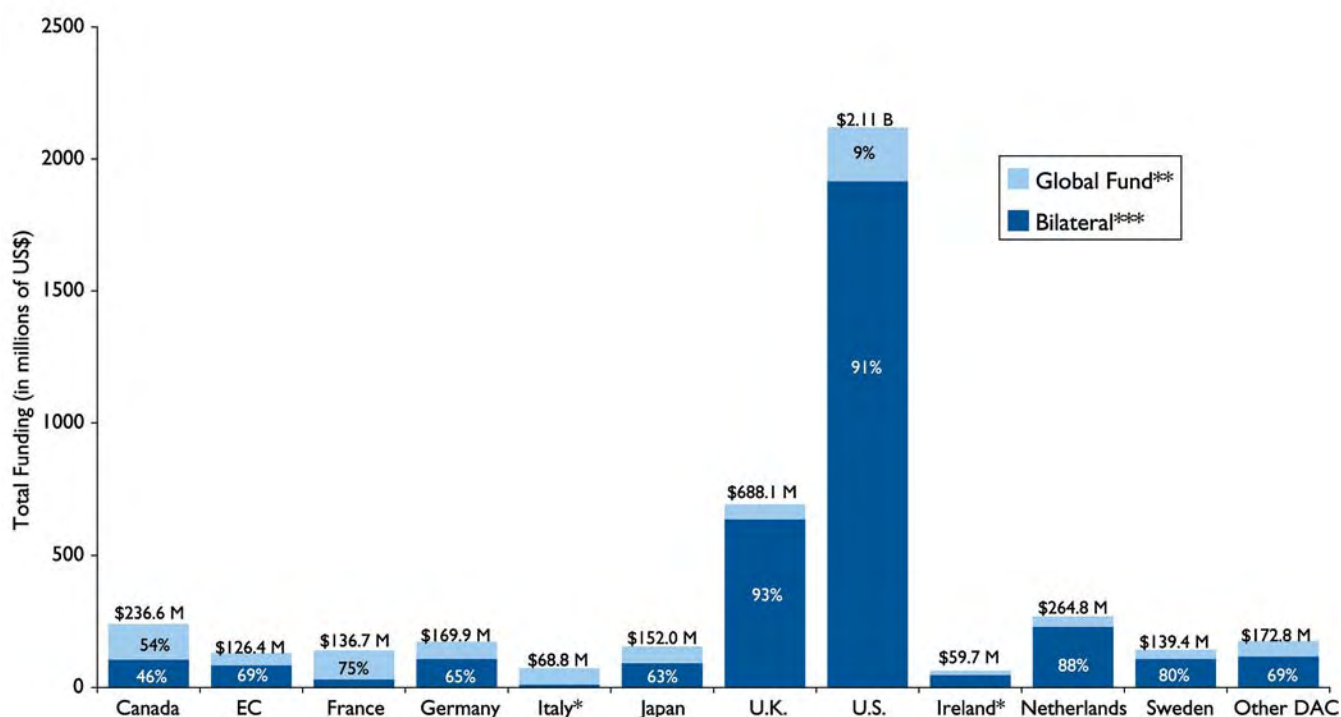
The U.S. Government (USG), as a founding member of the Global Fund and its first and largest contributor, continues to play a leadership role in ensuring the success of this essential international effort. The Global Fund is based on a unique model which encourages and relies upon partnerships among governments, civil society (including community- and faith-based organizations), international organizations, bilateral and multilateral contributors, the private sector, and affected communities – all united in the fight against HIV/AIDS, tuberculosis (TB), and malaria.

### U.S. Financial Support

At the end of fiscal year 2006, the total USG contribution to the Global Fund was \$1.9 billion – nearly double the initial pledge of \$1 billion over five years that President Bush made in 2003.

Founded in January 2002, the Global Fund operates as a financing instrument – not an implementing entity – to attract and disburse additional resources to prevent and treat these three deadly diseases. As a partnership among governments, civil society, the private sector, and affected communities, the Global Fund acts as a coordinated, multilateral financing mechanism, which enables a variety of international partners to pool their resources and finance essential programs in resource-limited settings.

**Figure 10.1: G7/EC Funding Channels for HIV/AIDS Commitments, by Donor, 2005 (Excluding Funding for HIV/AIDS Research)**



This graph understates the U.S. commitment because it does not include significant U.S. funding for research in the area of HIV/AIDS. In FY 2005, the United States provided a total of \$2.7 billion for global HIV/AIDS, TB, and HIV/AIDS research. If funding for global TB initiatives is excluded, but the funding for HIV/AIDS research is included, U.S. funding for global HIV/AIDS was approximately \$2.5 billion in FY2005.

\* Percentages represent the portion of a country's HIV/AIDS commitments through the Global Fund or Bilateral Programs, respectively. Combined Bilateral and Global Fund percentages equal 100 for each country. Some countries' percentages are omitted from the graph for lack of space. Those include: Italy's Global Fund Contribution: 80%; Ireland's Bilateral Contribution: 84%.

\*\* Global Fund contributions are by donor fiscal year, not Global Fund fiscal year, and are adjusted to represent the estimated HIV/AIDS share based on Global Fund grant distribution by disease to date (57% for HIV/AIDS).

\*\*\* Bilateral data for the U.K. are preliminary only, based on analysis of prior-year expenditure figures; methodology under review. Bilateral data for the Netherlands differ from those presented in HGIS annual reports, owing to exclusion of TB and Malaria funding, imputed multilateral funding and indirect administrative costs. Bilateral data from Japan, Italy, and other Development Assistance Committee (DAC) countries are estimates based on prior year reporting to the Organisation for Economic Co-operation and Development and UNAIDS.

Source: Jennifer Kates and Eric Lief, "International Assistance for HIV/AIDS in the Developing World: Taking Stock of the G8, Other Donor Governments and the European Commission," Kaiser Family Foundation, July 2006.

The USG contribution to the Global Fund is particularly impressive because it is *in addition to* massive bilateral efforts. As the world's largest source of financing for combating HIV/AIDS, TB, and malaria internationally, the United States views its contribution to the Global Fund as both an invitation and a call to action to the rest of the international community to join in the commitment to combating these diseases. Many countries have become generous contributors to the Global Fund, and international foundations recently have joined their ranks. While resources mobilized to date have been impressive, more new contributors are needed. For the long-term viability of the Global Fund, the Board of the Fund must seek and engage new public- and private-sector donors and turn them into sustained and committed contributors.

As mandated by Congress, the USG contribution to the Global Fund cannot exceed 33 percent of all contributions to the Fund. The United States has made clear to the Global Fund Secretariat, Board, and others that the cap on USG contributions is a maximum limit, not an annual obligation. At the same time, the scale of USG appropriations for the Global Fund in recent years has encouraged the Global Fund Board and Secretariat to vigorously pursue sufficient contributions from others, in order to enable the Global Fund to access the full USG contribution. The 33 percent limit provides others with added incentive to contribute to the Fund.

Because of the terrible and immediate effects of HIV/AIDS – 11,000 new infections and 8,000 deaths every day – each country must assess how it can respond most urgently and effectively to the global epidemic. Each nation must make its own decision about how to allocate its contributions, between its bilateral programs and multilateral initiatives such as the Global Fund. Although it is essential that the USG continue to provide resources for the Global Fund, the most effective use of USG resources in the near term is through bilateral programs, and we are not alone in this view. As shown in figure 10.1, other countries with significant bilateral programs have a higher bilateral ratio, as a share of all global HIV/AIDS funding, than the United States, and many other nations have ratios comparable to that of the United States.

The Emergency Plan consistently encourages other developed countries to increase their own financial commitments to the global HIV/AIDS fight. The Global Fund

provides a vital mechanism through which they can increase their financial commitment.

### ***USG Country-Level Support for Grant Management and Coordination***

It is in the interest of the United States, as well as in the interest of all people who are affected by HIV/AIDS, TB, and malaria, to ensure that the Global Fund is an effective, efficient, and successful partner on the ground. With bilateral programs worldwide, established partners, and two decades of experience combating HIV/AIDS internationally, the United States is well positioned to assist Global Fund grantees, in order to help ensure grant impact.

In the PEPFAR focus countries, where the USG has committed resources to bring HIV/AIDS prevention, treatment, and care programs up to national scale, collaboration based on comparative advantages contributes to consistent and comprehensive service provision. In many nations outside the 15 focus countries, Global Fund financing plays a leading role in bringing national programs of prevention, treatment, and care to full national scale. In such countries, through the provision of technical assistance and improved coordination, USG bilateral support is working to ensure that Global Fund dollars are used to maximum advantage through a national-level focus. This will ensure that the Global Fund efforts support and complement our bilateral efforts.

Recognizing the importance of technical assistance to the success of the Global Fund, Congress authorized the U.S. Global AIDS Coordinator to use up to five percent of the USG contribution for technical assistance to Global Fund grantees through USG bilateral mechanisms. In fiscal years 2005 and 2006, the USG directed approximately \$12 million to provide technical assistance to Global Fund grantees.

These funds filled a critical need expressed by many Global Fund grantees and allowed them to expand access to services and support the success of their grants. To ensure that the requests were demand-driven, it was required that they be submitted by Global Fund Country Coordinating Mechanisms (CCMs) or Principal Recipients (PRs).

The USG'S technical assistance helped alleviate bottlenecks and resolve major issues that can cause these grants to falter. The funding has been used to:



- Improve institutional and program management.
- Strengthen governance and transparency.
- Upgrade financial management systems.
- Strengthen procurement and supply-chain management.
- Improve monitoring and evaluation systems.
- Foster multi-sectoral implementation.
- Build technical capacity.

In view of the close link between TB and HIV/AIDS, the USG also provided technical assistance funding to WHO's Green Light Committee (GLC), to help country programs improve their capacity to provide treatment for multi-drug resistant TB (MDR-TB). This followed the Global Fund's decision to require GLC approval for all MDR-TB programs supported by the Global Fund, aimed at preventing the spread of deadly new drug-resistant TB strains. In addition, to improve effectiveness of TB prevention and treatment programs, the USG supported technical assistance for the Advocacy, Communication and Social Mobilization (ACSM) components of country TB programs, through STOP TB.

Based on the field response to this initiative to date, the Office of the U.S. Global AIDS Coordinator (OGAC) will continue to provide technical assistance funding into 2007.

USG Global Fund financial support, bilateral programs, and technical assistance all provide important opportunities to help Global Fund grants succeed. Also crucial are the unparalleled relationships the United States has in these host nations, thanks to the dedicated USG teams in country. USG field personnel represent the United States on local CCMs, contributing to the development and selection of proposals to recommend for Global Fund Secretariat and Board approval, and playing a role in the oversight of program implementation. During the second Round of grant proposal submission in 2003, USG representatives had seats on just over 26 percent of the Global Fund CCMs around the world. By the sixth Round in 2006, the USG had representatives on 57 CCMs (59 per-

cent) from the 97 countries that submitted Round 6 proposals.

To promote coordination, the USG has entered into Memoranda of Understanding (MOUs) in a number of countries. These documents bring together Ministries of Health, PEPFAR, and the Global Fund to clarify collaboration and partnership activities. Such MOUs have been entered into in Tanzania and Ethiopia and will help to ensure a coordinated approach in such areas as antiretroviral treatment (ART) provision.

To strengthen coordination, PEPFAR held bilateral meetings with the World Bank and the Global Fund to better understand management practices and priorities at the country level. These discussions in Washington, D.C., in January 2006 strengthened understanding and collaboration among international partners in the field. One of the most innovative partnerships underway in 2006 as a result of the January 2006 meetings involves a cooperative agreement among the Global Fund, World Bank, and Emergency Plan to coordinate efforts in procurement issues through a procurement working group. In a "first" for multilateral organizations in the fight against HIV/AIDS, both the Fund and the Bank have agreed to use the Emergency Plan-funded Partnership for Supply Chain Management System as the Secretariat for the working group.

### *USG Policy and Strategy Support*

The United States was privileged to be the leading participant in launching the Global Fund, and remains committed to supporting the Global Fund as an effective part of the global fight against HIV/AIDS and to helping it overcome the inevitable hurdles it faces as it continues to grow and develop. Through membership on the Global Fund's Board and its Committees, and through both formal representations and informal discussions with the Fund's Executive Director and Secretariat staff, the United States is working to ensure that the Global Fund:

- Achieves maximum effectiveness.
- Operates with appropriate transparency and accountability.

- Maintains its performance-based funding approach and unique financing role in the global response to AIDS, TB, and malaria.
- Supports country-driven processes and participation from civil society, private, and government sectors.

Dr. William Steiger, Director of the Office of Global Health Affairs at the U.S. Department of Health and Human Services, continues to serve as the United States representative on the Board. In 2006, the Board Chair and Vice Chair confirmed Dr. Steiger as head of the Policy and Strategy Committee (PSC). The PSC is leading the development of a five-year strategy for the Fund, the first phase of which was adopted by the Global Fund Board in November 2006. Ambassador Jimmy Kolker, Deputy U.S. Global AIDS Coordinator, serves as the United States' Alternate Board Member and representative on the PSC. With the assistance of USG field staff and an interagency headquarters core team, the United States actively contributes to discussions on Global Fund policies and procedures in Geneva.

The United States continues to work with the Global Fund Secretariat and its Board of Directors to establish a set of performance measures for all grants to maintain the consistent application of the Global Fund's principle of "performance-based" funding, and continues to encourage the Global Fund to use agreed-upon indicators within the Secretariat to evaluate grant effectiveness. OGAC also has continued to work closely with the Global Fund Secretariat and other international partners to develop a standardized set of progress indicators for each disease.

An area of special concern is the Global Fund's current inability to track the budgets of specific prevention, treatment, and care interventions within each grant. However, the Global Fund Secretariat is working to improve its reporting system in order to capture this breakdown of budgetary data. It has built a spreadsheet for this purpose into the new grant proposal form and currently is seeking the information from existing grantees.

The Global Fund has been fully operational since January 2002, and in less than five years, the institution has made remarkable progress. The USG will remain alert to the common need to monitor absorptive capacity in developing countries, as well as fiduciary oversight and accountability.

As part of this monitoring effort, PEPFAR teams are working closely with the Global Fund on an ambitious process and impact evaluation of the Fund's work and that of its partners. The impact study is of special interest because it will review the impact of all international partners in the selected countries. A total of 20 countries will be selected for study, of which eight will be "Comprehensive Analysis" countries and 12 will be "Secondary Analysis" countries.

The USG remains deeply committed to ensuring that the Global Fund succeeds in its mission to help in the global fight to combat HIV/AIDS, TB, and malaria. Through its seat on the Board of Directors and its Chairmanship of the critical PSC; through formal and informal discussions with Global Fund Secretariat staff, CCMs, and local fund agents; and through active engagement with both private- and public-sector stakeholders in affected countries, the USG will stay fully engaged with the Global Fund in order to ensure its ultimate success.

#### ***Cooperation within the UN System, the "Three Ones" and the Global Task Team***

The United States works closely with the United Nations system in the fight against HIV/AIDS. Working through the UN system, as well as through the Global Fund and PEPFAR's bilateral programs, offers a number of unique advantages. For example, working with and through the UN and its technical and specialized agencies enables the USG to leverage existing resources and expertise, increase international acceptance of PEPFAR's evidence-based policies and programs, increase reach to all 192 UN Member States, and gain additional visibility and recognition for USG leadership in the fight against HIV/AIDS.

A visible example of the advantages of working through the UN emerged in 2006 in the area of HIV counseling and testing. Noting that it is not possible to receive life-saving treatment without knowing one's status, First Lady Laura Bush used the occasion of her remarks to the UN General Assembly High Level Meeting on AIDS in June to call for the establishment of an International Voluntary HIV Counseling and Testing Day. At the request of the United States, UNAIDS followed up this call with a feasibility study on the merits of holding an International Testing Day; the study determined that it could be useful in many circumstances with proper planning and preparation. Heeding this advice, the USG and 24 other governments from Africa, the Americas, and Asia proposed a decision calling on all UN

Member States to observe an International Voluntary HIV Counseling and Testing Day in 2007 on December 1, or such other day or days as each country decides. The UN General Assembly adopted this decision by consensus on December 4, 2006. PEPFAR is working with WHO and UNAIDS to support countries in holding successful Testing Day events.

A number of disparate UN programs and agencies are engaged in the fight against HIV/AIDS. Their efforts are coordinated by the Joint UN Programme on HIV/AIDS (UNAIDS), which also works to raise awareness and develop and disseminate international policies in the fight against HIV/AIDS. The United States was a driving force behind the creation of UNAIDS and continues to support its work, both financially and politically. The USG is one of the largest contributors to UNAIDS' all-voluntary budget each year.

UNAIDS has ten official UN co-sponsors:

- United Nations High Commissioner for Refugees (UNHCR)
- United Nations Children's Fund (UNICEF)
- World Food Program (WFP)
- United Nations Development Program (UNDP)
- United Nations Population Fund (UNFPA)
- United Nations Office on Drugs and Crime (UNODC)
- International Labor Organization (ILO)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- World Health Organization (WHO)
- The World Bank

All of these organizations have a role to play in supporting national and local leadership in the fight. In one example of cooperation, the United States is working closely with UNAIDS to develop a uniform set of indicators countries can use for monitoring and evaluation of the effectiveness of HIV/AIDS programs. It is expected that such a uniform set of indicators will reduce duplication and improve pro-

gram effectiveness over time. UNAIDS has also developed a Technical Support Division of Labor that identifies the core competencies of its cosponsors and works to reduce duplication and overlap among their efforts by designating a lead agency and supporting agencies for particular types of activities.

In 2004, the United States co-sponsored the "Three Ones" agreement under the auspices of UNAIDS. The Three Ones represent a commitment on the part of the major international HIV/AIDS partners, including PEPFAR, to support one national HIV/AIDS framework, one national coordinating authority, and one country-level monitoring and evaluation system in each nation. This commitment is fully consistent with the principles established at the United Nations International Conference on Financing for Development, held in March 2002 in Monterrey, Mexico (the "Monterrey Consensus"), which asserted that developing countries must take ownership of their development activities in order for these activities to fully succeed. It further complies with commitments the United States made in March 2005 through the Paris Declaration on Aid Effectiveness: Ownership, Harmonization, Alignment, Results, and Accountability. International support for the "Three Ones" principles has significantly improved coordination and the ability of recipient countries to effectively utilize the funds they receive.

The Global Task Team on Improving AIDS Coordination Among Multilateral Institutions and International Donors (GTT) was created after a March 2005 UNAIDS conference aimed at identifying strategies to implement the Three Ones. The GTT has made specific recommendations for further coordination, particularly within the multilateral system, to resolve areas of duplication and gaps in the global response to AIDS.

As a leader in both the adoption of the Three Ones and the development of the GTT recommendations, the USG commends the GTT recommendations for identifying specific strategies for furthering international collaboration and coordination in the fight against HIV/AIDS. However, the USG emphasizes that implementation of the GTT recommendations must be within the framework of national laws and policies, as well as regulations and policies of the governing bodies of multilateral organizations and international institutions.

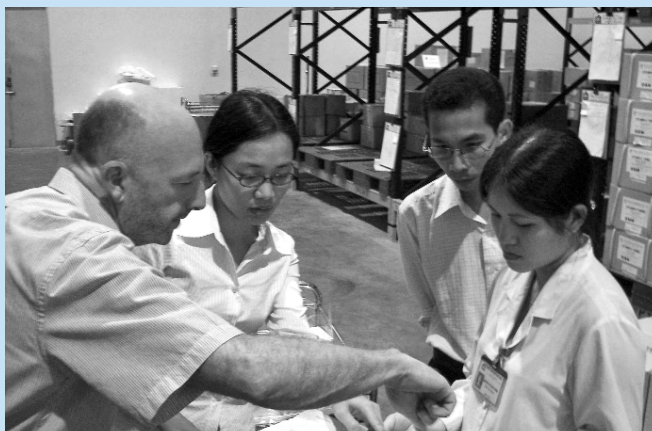
## Vietnam: Increasing Access to Antiretroviral Treatment

In Vietnam, the Joint United Nations Programme on HIV/AIDS (UNAIDS) estimated that approximately 260,000 adults and children were living with HIV/AIDS in 2005. Before the Ministry of Health launched its national AIDS treatment program in 2003, very few people had access to life-extending antiretroviral drugs (ARVs).

With PEPFAR support, the Supply Chain Management System (SCMS) project has been working with the government of Vietnam to procure ARVs in support of the national AIDS treatment and care program. In August 2006, SCMS delivered its first shipment of generic ARVs, and in November its first shipment of pediatric ARVs.

The average price for ARVs decreased significantly during 2006, largely because of the availability of generics. Based on the cost savings that SCMS has been able to obtain, an estimated 30 percent more people will be treated within the existing budget over the next year. As Vietnam scales up its treatment and care program to reach additional people, SCMS will continue to support the program by strengthening the existing supply chain through providing technical assistance, procuring and delivering ARVs, and sharing supply chain-related information in order to improve decision-making.

Vietnam also has been selected as one of the first countries for the PEPFAR, World Bank, and Global Fund joint procurement supply chain initiative. SCMS serves as the technical Secretariat of this initiative. The three partners are exploring ways to best coordinate procurement of commodities for HIV/AIDS prevention, treatment, and care in order to minimize duplication and maximize efficiency.



Taking samples of ARVs in the Central Pharmaceutical Company #1 warehouse to be sent to North-West University in South Africa for testing.

The GTT recommendations provide a means for partners to work together to ensure that programs reflect the values of accountability and program effectiveness, as well as the realities and priorities of governments and civil society in recipient countries. To promote follow-through by all relevant partners, the USG is supporting the work of UNAIDS to conduct an independent assessment of progress on the implementation of the GTT recommendations in support of national AIDS responses. The assessment will focus on how the UN system has provided and coordinated technical support to countries, and how effectively international partners have rationalized and simplified management of development funding for national partners. Results from the GTT assessment are expected to be made public by May 2007.

PEPFAR's strategic information team has worked intensively with UNAIDS and other international partners to implement the GTT's recommendations in the monitoring and evaluation area. One result has been the development of a Global Fund assessment tool, discussed further in the chapter on Improving Accountability and Programming. This tool will allow improved accountability for the effectiveness of Fund grants. Finally, the USG has partnered

closely with WHO on developing patient monitoring guidelines, which are an important step towards a standardized approach to monitoring patients on ART.

### *Reform and Accountability within the UN System – UNAIDS Leading the Way*

As it seeks to implement each of the GTT recommendations and the Three Ones, UNAIDS is at the forefront of efforts to implement management reforms and increase accountability within the UN system. UNAIDS has, with Board approval, sunsetted a few of its numerous existing mandates, in order to better track its high priority tasks. UNAIDS is also working to further improve its results-based budgeting and has put in place a Performance Monitoring Evaluation Framework for the 2006-2007 Unified Budget and Work plan. This results-based structure includes 16 principal results for UNAIDS as a whole, and 49 key results for individual UNAIDS cosponsors, cooperative interagency efforts, and the Secretariat. This multi-agency, results-based, and all-voluntary budget is unique within the UN system and should result in more effective services and assistance from the UN system in support of national HIV/AIDS responses. As a member of the UNAIDS Program

Coordinating Board, the United States has played a key role in promoting this reform and accountability agenda.

### **World Health Organization**

After the tragic death of Dr. Lee Jong-Wook, Dr. Margaret Chan was elected as Director-General of WHO. The USG looks forward to working closely with Dr. Chan to support WHO's implementation of evidence-based policies and sound management. WHO provides technical leadership, as well as norms and standards for a wide range of areas within the international public health response to HIV/AIDS.

As a WHO Member State with considerable expertise in HIV/AIDS, the United States has been intimately involved in formulating HIV/AIDS-related policy and guidelines,

actively participating in the World Health Assembly – where Emergency Plan policy often informs the discussion – and partnering with WHO and host countries to adapt and implement such policies.

In recognition of WHO's leadership role in establishing norms and standards in public health and in global TB control, the Emergency Plan is working cooperatively with WHO to fight TB and HIV/AIDS (see accompanying text box). The approximately \$2 million joint WHO-Emergency Plan TB/HIV project is an example of the kind of cooperation between bilateral and multilateral programs in support of national goals that must be a priority for international partners.

### **PEPFAR Partnerships on Tuberculosis: An Urgent Front in the Global Fight Against AIDS**

Tuberculosis (TB) is the leading cause of death among people who are HIV-positive. The World Health Organization (WHO) estimates that 11.4 million people worldwide are infected with both microbacterium tuberculosis and HIV – that is, nearly one of every three people living with HIV/AIDS. Of these individuals, about 10 percent per year develop active TB. In areas such as sub-Saharan Africa, up to half of HIV/AIDS-related deaths are caused by TB.

With good public awareness and effective outreach, TB is both preventable and treatable. However, in countries where TB programs are under-resourced and/or poorly run, one consequence is the development and spread of drug resistant TB. For a person living with HIV/AIDS, the development of multi drug-resistant (MDR) TB is a death sentence in most developing countries. Perhaps most worrisome is the emergence of new strains of extensively drug-resistant (XDR) TB cases, which are resistant to even the most powerful second-line drugs.

The USG has responded quickly to the HIV/AIDS-related resurgence of TB through a range of multilateral initiatives (please see the chapter on Care for more information):

- USG contributions to the Global Fund have supported the expansion of host-country TB prevention and treatment programs. PEPFAR country teams have worked to leverage Global Fund TB and TB/HIV grants in order to improve TB health services.
- A USG Technical Assistance (TA) grant to the WHO's Green Light Committee is expanding the number of Global Fund-supported clinics that are certified to provide advanced treatment regimens for patients with MDR-TB patients, so that more people can be treated and cured.
- The international StopTB Partnership is using a similar TA grant from the USG to ensure that countries gain the knowledge and skills needed to launch effective TB public-awareness campaigns.
- The USG is supporting direct technical assistance to national TB Control programs in host countries, through the Tuberculosis Control Assistance Program (TBCAP). TBCAP is a five-year cooperative agreement, awarded in October 2005 to a coalition of the major international organizations in TB control. TBCAP currently is working in 16 countries worldwide, including several throughout Southern Africa, with significant investments of over \$300,000 per year.
- The approximately \$2 million, two-year USG-WHO TB/HIV collaborative project is conducting work in Ethiopia, Kenya, and Rwanda. This project supports WHO's efforts to foster HIV counseling and testing for clients attending TB clinics, as well as linkages between TB and HIV/AIDS program areas and collaborations with TB programs, in order to improve access to anti-retroviral treatment (ART).
- USG technical experts participate in UN-led joint reviews of TB and HIV/AIDS programs and collaborate closely with WHO experts to support the development of normative WHO guidelines in areas such as treating children with TB and managing smear-negative TB.

A second possible collaborative project between the United States and WHO would involve work to expand the health workforce in order to scale up HIV services through “task-shifting” (see accompanying text box).

PEPFAR and WHO are working together to make essential antiretroviral drugs (ARVs) more rapidly available in countries where they are most urgently needed. In order to hasten the in-country drug regulatory approval process, HHS/FDA and the WHO Prequalification Program have established a confidentiality agreement by which, with company permission, the two organizations share dossier information regarding reviews and inspections. As a result, generic ARVs which have been HHS/FDA approved or tentatively approved can be added rapidly to the WHO prequalification list. The rapid WHO prequalification of these medications facilitates in-country drug regulatory review and thereby hastens the availability of these lower-cost, high-quality ARVs for purchase under the Emergency Plan. The USG also participated in the high-level WHO/UNICEF meeting to enhance and accelerate prevention of mother-to-child HIV transmission and provided funding to WHO for HIV/TB and safe blood programs.

### Building Human Capacity through Task-Shifting

One of the most severe constraints to meeting the Emergency Plan prevention, treatment, and care goals is the chronic lack of adequately trained health care workers. Task-shifting, a key feature of emerging models for expanding access to HIV/AIDS prevention, treatment, and care, involves shifting responsibility for tasks from more-specialized to less-specialized health care workers. Task-shifting can help expand the health workforce pool and maximize the availability of more-skilled workers.

Pending availability of funds, a proposed WHO-USG joint effort would seek to address the constraints countries face in promoting effective task-shifting from physicians and nurses to less-highly-skilled health care workers. The joint project would focus on three activities: 1) identification and documentation of best practices; 2) standardization of training and certification criteria; and 3) definition of the policy, legal, financial, and social framework for task-shifting. In accomplishing these three activities, research would be conducted and methods piloted in a targeted but diverse group of countries which includes Ethiopia, Haiti, Malawi, Mozambique, Rwanda, and Uganda.

Please see the chapter on Building Capacity: Partnerships for Sustainability for more information.



An HIV-positive child is seen by a doctor for a routine health check. Medicines for her and other children in Vietnam help to save lives.

Together with UNICEF and WHO, PEPFAR has launched a public-private partnership to promote scientific and technical discussions on solutions for pediatric HIV treatment, formulations, and access. This partnership brings together the resources of innovator and generic pharmaceutical companies, civil society organizations such as the Elizabeth Glaser Pediatric AIDS Foundation and the Clinton Foundation, and the UN system to maximize the utility of currently-available pediatric formulations and to accelerate children’s access to treatment. This partnership will complement other PEPFAR efforts to support programs that expand treatment for adults and children, such as support for health care capacity-building and the expedited regulatory review of drugs. The partnership will offer children and parents hope for a better day – the hope of families staying together, leading healthy lives, and living positively with HIV/AIDS. Please see the chapter on Building Capacity: Partnerships for Sustainability for more information.

### Key Challenges and Future Directions

PEPFAR will continue to make coordination of international partner responses an intensive focus going forward. The Emergency Plan will continue to be a leader in working with international organizations and other partners to put accessibility, quality and sustainability at the center of all HIV/AIDS work. These cannot be achieved without accountability, and PEPFAR is working to disseminate best practices for accountability as bilateral programs scale up.

Given the importance of the Global Fund to the overall PEPFAR initiative, the USG will continue to work with the

Fund, as well as the World Bank, to address grant management and implementation issues, as well as coordination challenges on the ground. Starting in 2004, the USG and the Global Fund jointly announced treatment results, reflecting the large number of sites where programs complement each other directly. Similarly, the PEPFAR partnership with UNAIDS and its co-sponsoring agencies will be vital to building and maintaining momentum in the fight. The Global Fund's unique approach is working, and is an essential part of the effort to improve the health and lives of millions of people around the world. This is a global epidemic that requires a global response, and the Global Fund and other multilateral entities are critical to achieving sustainability in the international community's response to HIV/AIDS.



President George W. Bush welcomes Cyriaque Yapo Ako, executive director of the Réseau Ivoirien des Organisations de PVVIH in Côte d'Ivoire, Africa, to the White House on World AIDS Day.

**“No country can ignore this crisis. Fighting AIDS is an urgent calling – because every life, in every land, has value and dignity.”**

**First Lady Laura Bush  
Remarks at the UN General Assembly  
High Level Meeting on HIV/AIDS  
June 2, 2006**

## Chapter 11

# Engendering Bold Leadership

HIV/AIDS is a public health emergency that is global. Yet it is also local – taking a toll on individuals, families, and communities, one by one.

The leadership needed to defeat HIV/AIDS must come from every nation and from every sector of society within nations. Therefore, the President’s Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR) has focused on fostering host country leadership in the governmental and non-governmental sectors, especially among people living with HIV/AIDS (PLWHA). Such leadership is critical in combating the stigma that continues to inhibit the fight against HIV/AIDS.

Public affairs outreach within the United States and public diplomacy abroad contribute importantly to the accountability and leadership goals of the Emergency Plan. Public diplomacy is the vital effort to share America’s story and ideals with others around the world. At the global level, the United States continues to play the leadership role it assumed in the world’s fight against HIV/AIDS when President Bush launched the Emergency Plan, by seeking to mobilize bold leadership and additional resources from other countries, entities, and individuals. Through diplomacy with other current and potential international partner governments and multilateral organizations, the

Emergency Plan works to deepen other developed nations’ commitment to the fight against global AIDS.

### **Supporting Leadership on HIV/AIDS in Host Nations**

As senior U.S. Government (USG) leaders have visited host nations, they have made it a priority to participate in public events that support national HIV/AIDS responses.

In November 2006, the President and Mrs. Bush toured the Pasteur Institute in Ho Chi Minh City, Vietnam, a site supported by the Emergency Plan. During the visit, President Bush acknowledged the strides being made in the fight against HIV/AIDS as a result of the partnership between Vietnam and the United States. The visit and the President’s commendations of the U.S.-Vietnam partnership received extensive media coverage in Vietnam, as well as internationally.

In January 2006, the First Lady visited St. Mary’s Hospital in Gwagwalada, Nigeria, and reaffirmed the U.S. commitment on HIV/AIDS, noting: “We are all hopeful that one day an entire generation will be born free of HIV.” During the President’s visit to Russia for the G-8 summit in July 2006, the First Lady participated in a roundtable discussion at the Pediatric HIV/AIDS Clinical Center in St.





In St. Petersburg, Russia, First Lady Laura Bush participated in a roundtable discussion at the Pediatric HIV/AIDS Clinical Center of Russia.

Petersburg, Russia, highlighting the U.S. commitment to children living with the virus.

Along with her travels, Mrs. Bush represented the U.S. as an outspoken advocate in the fight against HIV/AIDS. Her advocacy has resulted in increased attention by policymakers, members of the media, and diplomatic leaders. In March 2006, Mrs. Bush announced an unprecedented public-private partnership for pediatric AIDS treatment (please see the chapter on Children). The Emergency Plan developed this initiative to promote scientific and technical discussions to devise solutions for pediatric HIV treatment, maximize the utility of currently-available pediatric formulations, and accelerate children's access to treatment.

In June 2006, Mrs. Bush addressed the United Nations General Assembly High Level Review Meeting on HIV/AIDS. She proposed the designation of an International HIV Testing Day, arguing that "... [L]ife-saving treatment never reaches people who do not know they are infected." In December 2006, the U.N. General Assembly unanimously adopted the concept of an International Counseling and Testing Day.

Mrs. Bush continued her HIV/AIDS advocacy in September 2006 at the Annual Meeting of the Clinton Global Initiative, where she announced a groundbreaking public-private partnership involving the USG, PlayPumps International, the Case Foundation, and other public- and private-sector partners. This alliance will work with 10 sub-Saharan African countries to bring clean drinking water to up to 10 million people by 2010 (please see the chapter on Building Capacity: Partnerships for Sustainability).

Meetings and events attended by host nation government and civil society leaders also afford key opportunities to encourage action against the pandemic. In August 2006, the U.S. Global AIDS Coordinator, Ambassador Mark Dybul, led a USG delegation to the XVI International AIDS Conference in Toronto, Canada. Ambassador Dybul explained to participants how the USG is working with host nations, and in an interview with the Kaiser Family Foundation, he stressed the importance of sustainability and local capacity-building in meeting the Emergency Plan's goals. He explained, "President Bush committed \$15 billion over five years, so we could achieve those goals and so we're on track to do it, and we're going to do it by building local capacity, building the systems in country ... in a multi-sector way."

Ambassador Dybul and the Director of Kenya's National AIDS/STI Control Programme, Dr. Ibrahim Mohammed, co-authored an opinion piece on USG support for Kenya's HIV prevention efforts, which was published in the *Toronto Star* newspaper during the conference. Additionally, Kenyans discussed their role in implementing the Emergency Plan via a digital video conference from Nairobi which was attended by Canadian journalists in Toronto.

PEPFAR's 2006 HIV/AIDS Implementers' Meeting in Durban, South Africa, was attended by numerous governmental and non-governmental leaders from host nations, providing another key outreach opportunity. This meeting is discussed at length in the chapter on Implementation and Management.

### Fostering Leadership of People Living with HIV/AIDS

The Emergency Plan seeks to actively engage PLWHA in planning for, delivering, and monitoring the effectiveness of prevention, treatment, and care services. Emergency Plan in-country teams consult with national networks of PLWHA when determining priorities for annual Country Operational Plans, and involve PLWHAs in site visits and other efforts to assess program responsiveness. The leadership of PLWHA is also important for advocacy and social mobilization at the local, country, and regional level. PLWHA are the best advocates for HIV/AIDS interventions, and their involvement and visibility help to increase HIV/AIDS awareness and decrease stigma.

## China: PLWHA Network Makes a Difference

With support from PEPFAR, a network of people living with HIV/AIDS (PLWHA) is changing local attitudes and policies concerning HIV/AIDS. The network is a significant achievement for the community of Wuzhou City, located in Guangxi Zhuang Autonomous Region – one of China’s most severely affected areas.

In China, where as elsewhere the fear of stigma and discrimination prevents many people from disclosing their HIV status, PLWHA networks are few. In 2005 and 2006, the Emergency Plan organized training workshops to build the capacity of a core group of PLWHA leaders. As a result, in March 2006, participants formed a network of PLWHA in Wuzhou City, which has grown quickly.

The strengthening of PLWHA leaders in Wuzhou is having a significant impact on the lives of HIV-positive people in the region. In addition to exercising leadership, network members also have gained respect from the community.

The Wuzhou PLWHA network has received two public “Praise Letters,” recognizing the group for its “noble” work. One letter from local police thanked the PLWHA network for responding when police called in the network to care for an HIV-positive woman who was considering suicide. The other letter was from a local community committee, thanking the network members for putting out a fire in a nearby residence before the fire brigade could arrive. By being open about their HIV status, members of the Wuzhou network have received positive, public recognition – a groundbreaking achievement in a country where HIV-related stigma and discrimination are high.



Groups of people living with HIV/AIDS in China are breaking down barriers to stigma by becoming community leaders.

In December 2006, President Bush highlighted this issue by inviting Mr. Cyriaque Yapo Ako of Côte d’Ivoire, Executive Director of the Réseau Ivoirien des Organisations des Personnes Vivant avec le VIH/SIDA (RIP+), to a World AIDS Day roundtable at the White House (discussed further in this chapter). RIP+, one of the 22 initial grantees under the New Partners Initiative (please see the chapter on Building Capacity: Partnerships for Sustainability) is an association of groups for PLWHA. It employs integrated and comprehensive programming, in order to build the capacity of local organizations to provide care and support to PLWHA. Mr. Ako is a leader in the campaign for the rights of PLWHA and for the extension of HIV/AIDS prevention, treatment, and care services in Côte d’Ivoire.

PEPFAR supports numerous activities that engender leadership among PLWHA. A few examples include:

- In South Africa, the Mothers to Mothers-to-Be program has received international attention for achieving striking results. This program employs, trains, and supports HIV-positive women who have received prevention of mother-to-child HIV transmission (PMTCT) interventions. These women educate HIV-positive

pregnant women about PMTCT. Through the program, pregnant women learn the importance of knowing their HIV status, are given information about how to access PMTCT programs, and are told about steps to prevent mother-to-child transmission.

- In Kenya, PEPFAR supports a number of efforts to link PLWHA who have similar interests. For example, a growing network of HIV-positive educators provides care for its members and works to improve the educational environment. Similar networks of HIV-positive religious leaders, Muslim women, and disabled people have also been effective within their communities.
- In Nepal, a group of 15 Nepalese women founded Sneha Samaj, the first support group for women and children living with or affected by HIV/AIDS. Sneha Samaj means “community for love and affection.” The organization received start-up money to open a shop to generate income. With the funds, they purchased six sewing machines, sewing tables, racks, irons, scissors and lights, and employed seven women. Profits from the sale of products go toward Sneha Samaj’s treatment and care programs.

The President considers the participation of PLWHA to be a critical element in the global HIV/AIDS response. On World AIDS Day 2006, President Bush directed the Secretary of State to request, and the Secretary of Homeland Security to initiate, a rulemaking process that would create a categorical waiver for PLWHA seeking to enter the United States on short-term visas. A 1993 law prohibits HIV-positive people from receiving visas to visit the United States without a waiver, but a categorical waiver will enable PLWHA to enter the United States for short visits through a streamlined process.

### Uganda: HIV-Positive Journalist Leads in the Fight Against HIV/AIDS

Elvis Basudde, one of the attendees of the “Editorial Leadership in HIV/AIDS Reporting: Changing Hearts, Minds and Behaviors” workshop, is a Ugandan journalist living with HIV/AIDS. He is one of a growing number of prominent Ugandans who are openly disclosing their HIV status and who are actively involved in the fight against HIV/AIDS.

Basudde shares with others his experience as a person living with HIV/AIDS (PLWHA). “I have lived on because I refused to interpret my condition as terminal and learned to live positively. The first thing I did was to accept my status,” Basudde said.

Initially very ill, Basudde sought treatment. He recalled his weight was only 80 pounds when he was admitted to a clinical research center. “My face was sunken. I had full-blown AIDS. My relatives and friends cried, knowing there was not much time left,” he said. Thanks to antiretroviral treatment, his health was dramatically restored.

Today, Basudde is a leader in his country. “I have gone from the frightened ‘victim’ to a spokesman for new views about HIV and AIDS, and I hope I can celebrate more birthdays,” he said.

He works to spread the message about HIV/AIDS. “I am sounding a serious warning, particularly to the young people, who are more vulnerable. They should avoid unsafe sex, by abstaining or using a condom. Never have a sexual relationship before testing for HIV. So many people look healthy, but may have the virus.” He added: “Using my experience I am encouraging those living with HIV not to give up on life. Many are dying psychologically.”

With support from PEPFAR for the journalist training workshop, Basudde’s message will reach a growing number of people. The bold leadership of people like Basudde is helping to turn the tide against HIV/AIDS.

### Fighting Stigma and Discrimination Against PLWHA: Statement on World AIDS Day by Secretary of State Condoleezza Rice

Dead Sea, Jordan  
December 1, 2006

On this World AIDS Day, we mourn the more than 25 million people who have died from AIDS in our world, and we remember the over 39 million people who are currently living with HIV. It is also a time for the world community to come together in commitment to the promise of partnerships that are creating new hope. President Bush’s Emergency Plan for AIDS Relief is making great strides as a result of partnerships with people in communities around the world. Success is possible only where there is leadership and commitment by governmental and non-governmental sectors in host nations, and it is exciting to see the growing leadership and commitment to fighting AIDS in hard-hit nations.

Creating a world free of HIV is one of the great moral callings of our time and one that requires a global response. On this World AIDS Day, I commend the people who are leading the fight in their nations and communities, and I especially call on the world community to rededicate efforts to prevent stigma and discrimination against people living with and affected by HIV/AIDS. The American people stand with the people of the world in the fight against HIV/AIDS.

### Raising Awareness through Public Affairs and Public Diplomacy

In an effort to build awareness of the global HIV/AIDS emergency, reduce stigma, and encourage bold leadership, the USG employs a wide range of communications and outreach strategies to engage domestic and international audiences.

For example, World AIDS Day is observed on December 1st of each year. In 2006, the USG selected “the promise of partnerships,” as the theme around which to coordinate all its outreach and awareness endeavors. A variety of communication initiatives highlighted local people and organizations around the world that are creating hope in their own nations and communities, resulting in extensive domestic and international press coverage.

At the White House, President Bush discussed the global and domestic response to HIV/AIDS at a roundtable discussion with Mrs. Bush, Health and Human Services (HHS) Secretary Michael Leavitt, Ambassador Dybul, and HIV/AIDS community leaders from the U.S. and Africa.



Eugenio Pazarín Osornio, who works with Consejo Nacional Empresarial sobre SIDA in Mexico, is an advocate for reducing discrimination in the workplace and increasing awareness regarding the prevention of HIV.

On World AIDS Day, the White House also announced new partnerships under PEPFAR’s New Partners Initiative

(discussed in the chapter on Building Capacity: Partnerships for Sustainability).

A wide range of media activities illustrated the promise of partnerships between the American people and the people of the world in the fight against HIV/AIDS. These included domestic and international press coverage, opinion editorials, and digital video conferences. Ambassador Dybul’s editorial on the “Promise of Partnerships” ran in seven U.S. newspapers, and a joint op-ed on public-private partnerships by Sir Richard Branson, Chairman of Virgin Group, and Ambassador Dybul ran in the *Financial Times*. Digital video conferences between PEPFAR principals and Malta, Taiwan, and Zambia, domestic and international media, and students from 10 universities were held leading up to World AIDS Day.

Other principals from the Office of the U.S. Global AIDS Coordinator participated in World AIDS Day activities around the world. Dr. Tom Kenyon, Principal Deputy Coordinator and Chief Medical Officer, participated in the Government of Tanzania’s World AIDS Day commemorations, which were attended by President Kikwete and U.S. Ambassador Retzer. The event was held in the rural town of Musoma and drew a crowd of close to 30,000 peo-

## Côte d’Ivoire: Fighting HIV/AIDS in War Zones

HIV-positive people living in war zones under the control of the New Forces in Côte d’Ivoire often face challenges when trying to access HIV/AIDS treatment. However, a recently launched partnership in the Northern and Western parts of Côte d’Ivoire is providing much-needed HIV/AIDS interventions in these war-torn regions. Supported by PEPFAR, the program is restoring health care services devastated by the country’s four-year civil war.

This program, which is the second of its kind, provides HIV/AIDS services to hundreds of villages and towns located in the country’s war-torn regions. Designed and implemented with PEPFAR support, the project was launched in Bouake on August 25, 2006, by U.S. Ambassador to Côte d’Ivoire Aubrey Hooks and Miss Côte d’Ivoire, Alima Diomandé.

To launch the program, Ambassador Hooks and Miss Côte d’Ivoire led a kilometer march with more than 300 Bouake residents to an HIV/AIDS testing center, where they were publicly tested for HIV. It sent a powerful message across the country about the importance of knowing one’s HIV status.

The program has engaged peer educators and supports campaigns aimed at preventing new infections, treating and caring for those living with HIV, and offering care for orphans and vulnerable children affected by the epidemic.



In an effort to reduce the stigma about being tested, Ambassador Aubrey Hooks and Miss Côte d’Ivoire are publicly tested for HIV/AIDS in Bouake.

ple, many of whom were young adults. Ambassador Jimmy Kolker, Deputy U.S. Global AIDS Coordinator and Director of Diplomatic Outreach, participated in a World AIDS Day roundtable discussion at the United States Mission to the United Nations in New York City.

At the country level, U.S. Ambassadors are key public advocates for HIV/AIDS awareness and local partnerships. By meeting with PLWHA, visiting PEPFAR-supported projects, and being publicly tested for HIV, U.S. Ambassadors play active roles in raising awareness and advocating for HIV/AIDS initiatives. Around World AIDS Day, U.S. Ambassadors authored op-eds in local newspapers and participated in a wide range of events. Among the highlights:

- The U.S. Ambassador to India, David C. Mulford, authored an op-ed entitled, “The U.S. and India - The Promise of Partnerships against AIDS,” in a widely-read, national English daily in India. In addition, the Embassy team contacted key media outlets, including leading Indian newspapers and television channels, to offer use of a red HIV/AIDS ribbon they designed. On December 1, 2006, most of India’s major television channels superimposed the ribbon on their screens throughout the day. The team described sharing the HIV/AIDS ribbon as “one of the simplest, yet most effective strategies used this year.” The U.S. Embassy in Delhi, as well as U.S. Consulates in Calcutta, Chennai, and Mumbai, organized multiple, high-profile activities, including art exhibits and youth summits. In Mumbai, dabbawallas (couriers of boxed lunches) distributed bookmarks from a USG-supported youth campaign and red ribbons to more than 100,000 recipients.
- The week of World AIDS Day, the U.S. Ambassador to Zambia, Carmen Martinez, opened a PEPFAR-sponsored, five-day workshop for editors and reporters from Zambia and 12 other Emergency Plan partner countries. The workshop, entitled “Editorial Leadership in HIV/AIDS Reporting: Changing Hearts, Minds and Behaviors,” attracted 32 editors and journalists from Botswana, Côte d’Ivoire, Ethiopia, Guyana, Kenya, Mozambique, Namibia, Rwanda, South Africa, Tanzania, Uganda, Vietnam, and Zambia. Via video conference from Washington, Ambassador Kolker spoke to journalists on the media’s vital role in raising

HIV/AIDS awareness and decreasing stigma and discrimination.



On World AIDS Day, U.S. Ambassador to South Africa Eric M. Bost, traveled to a PlayPump site in Diepsloot in Guateng Province in South Africa. This pump’s billboard features Kami, the HIV-positive Muppet from *Takalani Sesame*.

- In addition to being featured on the Department of State’s “Ask the Ambassador” web chat, the U.S. Ambassador to South Africa, Eric M. Bost, traveled on World AIDS Day to Guateng Province to see a PlayPump in action (please see chapter on Building Capacity: Partnerships for Sustainability). Complementing this PlayPump’s installation are positive living messages featuring the image of Kami, the HIV-positive Muppet from *Takalani Sesame*.

One of the most effective new public diplomacy tools produced this year was a 30-minute documentary entitled, “Voices of Hope,” which was produced by Still Life Projects. The film features community leaders and recipients of services from Guyana, Kenya, Mozambique, South Africa, Uganda, Vietnam, and Zambia. Participants spoke about how PEPFAR’s prevention, treatment, and care initiatives are making a difference in their lives. To view “Voices of Hope,” visit <http://www.PEPFAR.gov>.

On August 9, 2006, “Voices of Hope” premiered at the Eisenhower Executive Office Building in Washington. Ambassadors to the United States from Namibia, Swaziland, Tanzania, and Vietnam, as well as other members of the diplomatic corps from PEPFAR partner nations, were in the audience. Ambassador Dybul told attendees: “The Emergency Plan was the first quantum leap in commitment by the American people ... to support the fight against HIV/AIDS. The American people will stand with the people of the world in this fight, until the fight is won.” Dina Powell, Assistant Secretary of State for Educational and Cultural Affairs, stressed the importance of the Emergency Plan’s efforts to unite a variety of organizations in the fight against HIV/AIDS. She highlighted the importance of “Voices of Hope” as a public diplomacy tool.

Since its release, the film has been used by U.S. Embassies to increase awareness of HIV/AIDS and of the partner-

ships between the American people and the people of many nations. It also was used to educate U.S. audiences about HIV/AIDS on World AIDS Day. It is provided free of charge, and high schools and universities across the United States requested copies of the DVD to play not only on World AIDS Day, but also in conjunction with lessons in health, science, and social studies classes throughout the school year. The film resonates with audiences because it features people and families living with HIV/AIDS who share their experiences in their own words.

### **Ethiopia: People Living with HIV/AIDS Speak to the Nation**

“When Tizita discovered her husband’s notebooks, she wasn’t expecting them to change her life. As she leafed through them she was shocked to find that he was HIV-positive. Page after page, he agonized over how to tell her, but until now he had kept silent,” the radio rang out.

This account, which sounds like the plot of a drama serial, is actually the true experience of one of Ethiopia’s HIV-positive radio diarists. Broadcast on national radio, the series gives millions of Ethiopians a chance to hear about the real-life experiences of people living with HIV/AIDS. On the show, six HIV-positive people talk about their lives openly during weekly installments.

PEPFAR supports this initiative by providing training in radio programming. “What strikes me most is just how powerful the stories of the diarists have been,” advisor Jim Clarke said. “When we first got involved, I was a little worried that they might not have very much to say. But now I find the problem is that we get too much good material rather than not enough.”

In addition to empowering HIV-positive people to tell their stories, this unique program - and the courage of the people featured on it - is breaking down the barriers of stigma and discrimination in both large and small communities throughout Ethiopia. These people no longer hide their status in shame, but work to educate others about the importance of preventing HIV.



## APPENDIX I

# THE PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF SOURCES OF FUNDING

(Dollars in Millions)

	2004 Enacted	2005 Enacted	2006 Enacted
<b>USAID Bilateral Programs:</b>	<b>641</b>	<b>477</b>	<b>465</b>
Child Survival <i>HIV/AIDS</i>	513	347	347
Child Survival TB	75	79	79
Other Accounts HIV/AIDS, TB	52	50	40
<i>HIV/AIDS</i>	42	37	27
<i>TB</i>	10	13	12
<b>HHS Bilateral Programs:</b>	<b>471</b>	<b>510</b>	<b>496</b>
CDC HIV/AIDS	152	138	123
<i>CDC Global AIDS Program</i>	143	124	123
<i>CDC International HIV Research</i>	9	14	0
CDC TB	2	2	0
NIH HIV/AIDS Research <sup>2</sup>	317	370	373
<b>State/Foreign Military Finance</b>	<b>1</b>	<b>2</b>	<b>2</b>
<b>DOL Bilateral Programs</b>	<b>10</b>	<b>2</b>	<b>0</b>
<b>DOD Bilateral Programs</b>	<b>4</b>	<b>7</b>	<b>5</b>
<b>Global HIV/AIDS Initiative (GHAI) – excluding Global Fund</b>	<b>488</b>	<b>1,374</b>	<b>1,777</b>
<b>Mother and Child HIV/AIDS Prevention Initiative:</b>	<b>149</b>	<b>0</b>	<b>0</b>
<i>USAID Child Survival</i>	0	0	0
<i>HHS/CDC</i>	149	0	0
<b>Global Trust Fund:</b>	<b>547</b>	<b>347</b>	<b>545</b>
<i>USAID Child Survival</i>	398	248	248
<i>HHS/NIH</i>	149	99	99
<i>Global AIDS Coordinator's Office</i>	0	0	198
<b>TOTAL, GLOBAL HIV/AIDS &amp; TB<sup>1</sup></b>	<b>2,311</b>	<b>2,719</b>	<b>3,290</b>
<sup>1</sup> USG spending on Malaria, newly categorized (beginning in FY 2006) as the President's Malaria Initiative (PMI), is now tracked separately as part of the PMI. <sup>2</sup> Funding for NIH research is estimated for FY 2006 and may change depending on actual research projects.			



## APPENDIX II

# THE PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF USES OF FUNDING

(Dollars in Millions)

PROGRAMS	FY2004 ENACTED	FY2005 ENACTED	FY2006 ENACTED	FY2004-2006 CUMULATIVE TOTAL
FOCUS COUNTRIES	845	1,370	1,756	3,971
GLOBAL FUND	547	347	545	1,439
OTHER BILATERAL PROGRAMS	444	455	428	1,327
OTHER ACTIVITIES (including NIH Research and TB Programs)	475	547	561	1,583
TOTAL EMERGENCY PLAN (without malaria)	2,311	2,719	3,290	8,320

## APPENDIX III

# ALLOCATION OF FUNDING TO FOCUS COUNTRIES

(Dollars)

Country	FY 04 Field Dollars (COP)	FY 04 Central Programs	FY 04 Total	FY 05 Field Dollars (COP)	FY 05 Central Programs	FY 05 Total	FY 06 Field Dollars (COP)	FY 06 Central Programs	FY 06 Total
Botswana	17,870,871	6,472,447	24,343,318	43,329,129	8,508,989	51,838,118	48,547,000	6,378,022	54,925,022
Côte d'Ivoire	13,035,496	11,323,967	24,359,463	30,764,505	13,611,261	44,375,766	35,390,000	11,218,183	46,608,183
Ethiopia	40,990,732	7,099,750	48,090,482	75,744,213	7,987,207	83,731,420	115,300,000	7,657,747	122,957,747
Guyana	9,326,543	2,740,714	12,067,257	15,753,000	3,639,318	19,392,318	19,000,000	2,727,116	21,727,116
Haiti	20,326,735	7,712,683	28,039,418	45,094,931	6,690,090	51,785,021	48,300,000	7,306,667	55,606,667
Kenya	71,359,718	21,114,672	92,474,390	124,615,281	18,321,872	142,937,153	184,071,000	24,198,879	208,269,879
Mozambique	25,528,206	11,940,854	37,469,060	50,771,038	9,446,052	60,217,090	81,937,000	12,481,869	94,418,869
Namibia	21,185,762	3,311,478	24,497,240	38,961,474	3,557,034	42,518,508	53,000,000	4,288,878	57,288,878
Nigeria	55,491,358	15,441,817	70,933,175	88,983,642	21,266,455	110,250,097	141,656,000	21,951,749	163,607,749
Rwanda	27,973,778	11,267,207	39,240,985	46,234,725	10,674,762	56,909,487	61,135,000	10,967,434	72,102,434
South Africa	65,424,371	23,848,617	89,272,988	123,860,630	24,326,797	148,187,427	196,371,000	25,168,430	221,539,430
Tanzania	45,791,174	24,954,400	70,745,574	85,683,827	23,094,268	108,778,095	104,195,000	25,772,925	129,967,925
Uganda	80,579,298	10,194,797	90,774,095	132,280,223	16,155,104	148,435,327	153,040,000	16,835,461	169,875,461
Vietnam	17,354,885	0	17,354,885	27,575,000	0	27,575,000	34,069,000	0	34,069,000
Zambia	57,933,801	23,728,609	81,662,410	102,745,140	27,343,465	130,088,605	118,914,000	30,108,153	149,022,153
<b>Total</b>	<b>570,172,728</b>	<b>181,152,012</b>	<b>751,324,740</b>	<b>1,032,396,758</b>	<b>194,622,674</b>	<b>1,227,019,432</b>	<b>1,394,925,000</b>	<b>207,061,517</b>	<b>1,601,986,513</b>

## APPENDIX IV

# ALLOCATION OF FUNDING BY PROGRAM AREA FY 2006

(Dollars)

SUMMARY BUDGET TABLE – ALL COUNTRIES	GRAND TOTAL: DOLLARS ALLOCATED TO DATE <sup>1</sup>	GRAND TOTAL: % OF PREVENTION, TREATMENT, & CARE BUDGET APPROVED TO DATE
<b>Program Area</b>		
<b>Prevention</b>		
PMTCT	91,825,882	5.2%
Abstinence/Be Faithful	130,842,615	7.5%
Blood Safety	33,384,298	1.9%
Injection Safety	35,454,640	2.0%
Other Prevention	104,978,651	6.0%
<i>Prevention Subtotal</i>	<i>396,486,087</i>	<i>22.6%</i>
<b>Care</b>		
Palliative Care: Basic health care & support	148,643,844	8.5%
Palliative Care: TB/HIV	48,619,471	2.8%
<i>Orphans and Vulnerable Children</i>	<i>213,209,067</i>	<i>12.1%</i>
Of Which, Orphans Programs	150,241,202	8.6%
Of Which, Pediatric AIDS	62,967,865	3.6%
Counseling and Testing	130,475,803	7.4%
<i>Care Subtotal (Including Pediatric AIDS)</i>	<i>540,948,185</i>	<i>30.8%</i>
<b>Treatment</b>		
Treatment: ARV Drugs	348,336,503	19.8%
Treatment: ARV Services	443,762,694	25.3%
Laboratory Infrastructure	89,491,123	5.1%
<i>Treatment Subtotal (Including Pediatric AIDS)</i>	<i>881,590,320</i>	<i>50.2%</i>
Less Pediatric AIDS Attributed to OVC (Care)	-62,967,865	-3.6%
<i>Treatment Subtotal (Excluding Pediatric AIDS)</i>	<i>818,622,455</i>	<i>46.6%</i>
<b>Subtotal, Prevention, Care, and Treatment</b>	<b>1,756,056,728</b>	<b>100.0%</b>
<b>Notes:</b>		
<sup>1</sup> Includes attributions by program area of field and central dollars.		

## APPENDIX V

# THE PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF TECHNICAL WORKING GROUPS

(December 2006)

### Prevention Steering Committee

- Prevention of Sexual Transmission in the General Population (including youth) Working Group
- Prevention of HIV in Persons Engaged in High-Risk Behaviors (PHREHRB) Working Group
- Subcommittee on HIV and Substance Abuse
- Medical Transmission Working Group

### Care and Treatment Steering Committee

- Adult Treatment Working Group
- Prevention of Mother-to-Child Transmission and Pediatric AIDS Working Group
- Tuberculosis/HIV Working Group
- Palliative Care Working Group

### Counseling and Testing Working Group

### Human Capacity Development Working Group

### Orphans and Vulnerable Children Working Group

### Community and Faith-Based Organizations

### Working Group

### Gender Working Group

### Food, Nutrition and HIV/AIDS Working Group

### Public Private Partnership Working Group

### Laboratory Working Group

### Male Circumcision Taskforce

### Prevention with Positives Taskforce

### Strategic Information Steering Committee

- Monitoring & Evaluation Working Group
- Indicator & Reporting Working Group
- Management Information Systems Working Group

### Scientific Steering Committee

- Scientific Advisory Board
- Public Health Evaluations Subcommittee

## APPENDIX VI

# GENERIC HIV/AIDS FORMULATIONS MADE ELIGIBLE FOR PURCHASE BY PEPFAR PROGRAMS UNDER THE HHS/FDA EXPEDITED REVIEW PROCESS, THROUGH DECEMBER 10, 2006

(<http://www.fda.gov/oia/pepfar.htm>)

Drug	Company	Date of FDA Approval or Tentative Approval
Didanosine (200mg, 250mg, 400mg delayed release capsules )	Barr Laboratories	Approved 12/03/04
Zidovudine (300mg)/lamivudine (150mg) tablets co-packaged with Nevirapine (200mg)	Aspen Pharmacare	Tentatively Approved 1/25/05
Lamivudine (150mg and 300mg tablets)	Aurobindo Pharma	Tentatively Approved 6/15/05
Lamivudine (150mg tablets)	Ranbaxy Laboratories	Tentatively Approved 5/27/05
Nevirapine (200mg tablets)	Ranbaxy Laboratories	Tentatively Approved 6/20/05
Nevirapine (200mg tablets)	Aurobindo Pharma	Tentatively Approved 6/20/05
Efavirenz (600mg tablets)	Aurobindo Pharma	Tentatively Approved 6/24/05
Stavudine (30mg and 40mg capsules)	Aurobindo Pharma	Tentatively Approved 7/1/05
Lamivudine (150mg)/Zidovudine (300mg) tablets	Aurobindo Pharma	Tentatively Approved 7/7/05
Zidovudine (300mg tablets)	Ranbaxy Laboratories	Tentatively Approved 7/13/05; Approved 9/19/05
Zidovudine (300mg tablets)	Aurobindo Pharma	Tentatively Approved 8/25/05; Approved 9/19/05
Zidovudine (oral solution 50mg/5ml)	Aurobindo Pharma	Tentatively Approved 9/7/05; Approved 9/19/05
Lamivudine (10mg/ml oral solution)	Aurobindo Pharma	Tentatively Approved 11/8/05
Stavudine (oral solution 1mg/mL)	Aurobindo Pharma	Tentatively Approved 12/21/05
Nevirapine (oral suspension 50 mg/5 mL)	Aurobindo Pharma	Tentatively Approved 12/27/05
Lamivudine (150mg)/Zidovudine (300mg) tablets co-packaged with Efavirenz (600mg)	Aurobindo Pharma	Tentatively Approved 3/6/06
Zidovudine (100mg capsules)	Aurobindo Pharma	Approved 3/27/06
Abacavir (300mg tablets)	Aurobindo Pharma	Tentatively Approved 5/17/06
Nevirapine (200mg tablets)	Cipla Limited	Tentatively Approved 5/19/06
Efavirenz (600mg tablets)	Cipla Limited	Tentatively Approved 5/24/06
Lamivudine (10mg/ml oral solution)	Cipla Limited	Tentatively Approved 6/22/06
Abacavir (20mg/ml oral solution)	Aurobindo Pharma	Tentatively Approved 6/27/06
Stavudine (15mg and 20mg capsules)	Aurobindo Pharma	Tentatively Approved 6/27/06
Lamivudine (150mg)/Zidovudine (300mg)/Nevirapine (200mg) tablets	Aurobindo Pharma	Tentatively Approved 6/30/06
Didanosine (100mg, 150 mg, 200 mg) chewable tablets	Aurobindo Pharma	Tentatively Approved 7/10/06
Lamivudine (150mg)/Zidovudine (300mg) tablets co-packaged with Abacavir (300mg) tablets	Aurobindo Pharma	Tentatively Approved 7/26/06
Nevirapine (200mg) tablets	Strides Arcolabs	Tentatively Approved 8/11/06
Lamivudine (150mg)/Zidovudine (300mg tablets)	Pharmacare Limited	Tentatively Approved 8/23/06
Stavudine (30mg and 40mg tablets)	Strides Arcolabs	Tentatively Approved 8/28/06
Lamivudine (150mg)/Zidovudine (300mg) tablets	Cipla Limited	Tentatively Approved 9/13/06
Didanosine (10mg/ml oral solution)	Aurobindo Pharma	Tentatively Approved 10/05/06
Abacavir (300mg tablets)	Cipla Limited	Tentatively Approved 11/06/06
Lamivudine (150mg)/Stavudine (30mg and 40mg)/Nevirapine 200mg) tablets	Cipla Limited	Tentatively Approved 11/17/06



Pursuant to Section 104A of the Foreign Assistance Act of 1961, as amended by Section 301(a)(2) of the United States Leadership Against HIV/AIDS, Tuberculosis, and Malaria Act of 2003 (P.L. 108-25), the Office of the Global AIDS Coordinator has requested from the relevant executive branch agencies a description of efforts made by each relevant executive branch agency to implement the policies set forth in section 104(B), “Assistance to Combat Tuberculosis,” and 104(C), “Assistance to Combat Malaria,” a description of the programs established pursuant to such sections, and a detailed assessment of the impact of programs established pursuant to such sections. The relevant executive branch agencies will be providing this information under separate cover.

