



PEPFAR's Emergency Response

There From the Start

Lessons Learned Abroad

Success Against the Odds

STRENGTH THROUGH SOLIDARITY: LESSONS LEARNED IN THE FIGHT AGAINST THE GLOBAL HIV/AIDS EPIDEMIC

When I arrived in Zambia in 2001, there were 300 people per day dying of AIDS. That's like a 747 crashing every day in a country of 12 million people. . . . As fast as they dug graves, they were burying people. You couldn't even keep basic things moving, like schools and hospitals.

By 2004, PEPFAR [the U.S. President's Emergency Plan for AIDS Relief] came in and we had the start up of HIV care and treatment. Within 2 years of the start of the program, things had changed. Hospitals suddenly had room; the emergency rooms weren't flooded on the weekends.

— Michele Broemelsiek, Chief of Party, Catholic Relief Services (CRS) AIDSRelief Consortium

The rapid spread of HIV infection across the globe marks AIDS as one of the deadliest diseases in history.¹ Sixty million people have been infected with HIV and almost 30 million have died since the epidemic began.² Between 1990, when the Health Resources and Services Administration (HRSA) HIV/AIDS Program was created, and 2011, the number of people living with HIV/AIDS (PLWHA) in the United States rose from around 700,000 to more than 1 million. This increase has been eclipsed, however, by the rise over the same period in the global number of PLWHA, from 7.6 million to a staggering 34 million.^{3,4,5}

Although the HIV epidemic is undeniably a worldwide burden, it is a burden borne more heavily by some regions than by others.

- Today, more than two-thirds of all people in the world living with HIV/AIDS—and 90 percent of HIV-positive children—live in sub-Saharan Africa.⁹

DID YOU KNOW?

- ▶ The U.S. Government partners with international organizations, including the World Health Organization; the United Nations Joint Programme on AIDS; the United Nations Children's Fund; and the Global Fund for HIV, Tuberculosis, and Malaria, to execute the initiatives of the President's Emergency Plan for AIDS Relief (PEPFAR).
- ▶ Thanks to PEPFAR support, in 2009 nearly 37 percent of adults and children in sub-Saharan Africa who were medically eligible for antiretroviral therapy received it, compared with just 2 percent in 2002.⁶
- ▶ In 2009, compared with 2004, 32 percent fewer children were newly infected with HIV and 26 percent fewer children died of AIDS-related causes.⁷ In 2011 alone, approximately 200,000 children were born HIV free, thanks to PEPFAR-funded interventions.⁸



U.S. Department of Health and Human Services
Health Resources and Services Administration

For the Ryan White HIV/AIDS Program, sharing what works and what doesn't work has been one of the greatest keys to our success. Throughout the Program's more than 20 years on the frontlines of the HIV epidemic, we have built a deep well of lessons learned and tried-and-true strategies. It is our privilege to share this knowledge with the global HIV/AIDS community to improve HIV care, treatment, and prevention everywhere.

Across the globe, the HIV/AIDS epidemic remains the defining health crisis of our time. But there is more hope now than ever before, thanks to the advent of PEPFAR and its grantees, including the HRSA Global HIV/AIDS Program. Proven Ryan White HIV/AIDS Program strategies that have made inroads in our domestic epidemic have aided the remarkable progress combating HIV disease in some of the world's poorest countries.

In turn, all along this journey HRSA Global HIV/AIDS Program grantees have been teaching us invaluable lessons too. Their success delivering quality HIV care, despite the most arduous conditions, is deeply relevant to the challenges we face here in the U.S. providing for our most vulnerable.

The battle against HIV cannot be fought in silos. We must continue to share lessons and resources with our global counterparts in order to raise the bar for care of PLWHA around the world.

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- 1.2 million adults and children died of AIDS in sub-Saharan Africa in 2011, accounting for 71 percent of the world's AIDS deaths.⁹
- The Caribbean region is ranked second in the world in HIV prevalence.¹⁰ In this region, HIV infection remains the leading cause of death among people aged 20–59 and rates of infection are not declining significantly.¹¹

Many factors compound the problems of care, treatment, and prevention in countries with high rates of HIV infection. These countries are especially burdened by a lack of human and material resources, and many have an inadequate health care infrastructure. In some cases, medical professionals receive insufficient training in how to recruit, treat, and retain PLWHA in HIV care. To make matters worse, stigma continues to be a problem in many communities, in part because of a lack of education about HIV and its prevention. In many countries, recent increases in the prevalence of coinfections such as tuberculosis (TB) are an additional problem complicating efforts to care for PLWHA.¹²

All of these elements have critical inference in environments characterized by malnutrition, maternal/child mortality, political conflict, unstable food and water supplies, and high rates of poverty and internal migration. PLWHA in the countries hardest hit by the epidemic are coping with their diagnosis in the midst of other significant daily struggles. The national governments of these countries also are juggling multiple demands, such as the quest to achieve the Millennium Development Goals (MDGs) by 2015. The MDGs, established at the 2000 Millennium Summit of the United Nations, are 8 international development goals aimed at ending poverty, hunger, and disease around the world, backed with commitments to action from 189 countries.¹³ Halting the spread of HIV/AIDS is one of the MDGs; others include taxing challenges such as enhancing environmental sustainability, global partnership, and universal primary education. Thus, resources to combat HIV/AIDS in poverty-stricken countries are competing alongside other critical priorities not only at the individual level but also on a national scale.

PEPFAR'S EMERGENCY RESPONSE

PEPFAR's First Authorization (2003–2008)

As rates of HIV continued to climb around the world, a global emergency was growing more formidable every day. In response, the President's Emergency Plan for AIDS Relief (PEPFAR) was launched in 2003 with an initial investment of \$15 billion—the largest commitment by any nation to combat a single disease internationally.

During its first 5 years, PEPFAR designated 15 resource-limited focus countries as priorities for funding because

of the high HIV/AIDS prevalence. All but three of these countries—Haiti, Guyana, and Vietnam—were African: Botswana, Cote d’Ivoire, Ethiopia, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, and Zambia. PEPFAR’s initial investment paid major dividends in the fight against HIV/AIDS in these countries, providing treatment for 2 million PLWHA, preventing 7 million new HIV infections, and supporting care for 10 million people infected and affected by HIV/AIDS.¹⁴

PEPFAR II (2008–2013)

PEPFAR’s commitment more than tripled with its reauthorization under the Tom Lantos and Henry J. Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria Reauthorization Act of 2008 (PEPFAR II). With PEPFAR II, the U.S. Congress authorized up to an additional \$48 billion through 2013 to combat not only global HIV/AIDS but also the prominent coinfections TB and malaria.¹⁵ Increased U.S. Government investment in PEPFAR was matched with a heightened mandate to shift PEPFAR-funded programs to sustainable country ownership. This new mandate came with specific targets:¹⁶

- Treatment of at least 3 million PLWHA
- Prevention of 12 million new HIV/AIDS cases
- Provision of care to 12 million people (including 3 million orphans and vulnerable children)
- Sustainability of quality health care delivery through the training and retention of 140,000 new health care workers.

Today, PEPFAR constitutes the largest part of President Barack Obama’s Global Health Initiative, which was created in 2009 to strengthen the U.S. Government’s existing international health programs; increase the impact of U.S. global health investments; and expand access to better prevention, care, and treatment activities around the world.¹⁷

HRSA AND PEPFAR: THERE FROM THE START

HRSA, through its Global HIV/AIDS Program, has received PEPFAR funding since the program’s beginning. Building from the knowledge and lessons gained over more than 2 decades of administering the Ryan White HIV/AIDS Program, HRSA helped lay a strong foundation for PEPFAR’s implementation and has continued to support the program’s growth. Perhaps one of the most visible indicators of the historically close ties between PEPFAR and the Ryan White HIV/AIDS Program was the appointment of Ambassador Eric Goosby to his current role as head of the State Department’s Office of Global Health Diplomacy and U.S. Global AIDS Coordinator, with responsibility for leading the implementation of PEPFAR. Ambassador Goosby was the first director of HIV services at HRSA and the first administrator of the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act.

Jose Morales is the current head of HRSA’s Global HIV/AIDS Program and the deputy director of HRSA’s Division of Training



PEPFAR COUNTRIES REQUIRED TO SUBMIT COUNTRY OPERATIONAL PLANS (FY 2011)¹⁸

Country Operational Plans (COPs) are annual HIV care and treatment work plans for PEPFAR countries. COPs ensure that countries work toward performance targets and maintain a budget established by the U.S. Government. COPs also include measures to address orphans and vulnerable children, food and nutrition issues including food insecurity, and family planning. These contribute toward improved morbidity and mortality, as well as country stability. Regional operational plans are also submitted by the Caribbean, Central Asian, and Central American regions.

Angola	Lesotho
Botswana	Malawi
Burundi	Mozambique
Cambodia	Namibia
Cameroon	Nigeria
China	Russian Federation
Congo, Democratic Republic of	Rwanda
Cote d’Ivoire	South Africa
Dominican Republic	Sudan
Ethiopia	Swaziland
Ghana	Tanzania,
Guyana	United Republic of
Haiti	Thailand
India	Uganda
Indonesia	Vietnam
Kenya	Zambia
	Zimbabwe

and Capacity Development. “The basics of establishing systems to treat people with HIV are the same in other countries as in the United States,” says Morales. “Some of us at HRSA have been involved with Ryan White from the very beginning, and so being involved with PEPFAR is [. . .] like a chance to repeat history while being much more knowledgeable.”

This hard-earned knowledge has been painstakingly poured into the programs of today’s HRSA Global HIV/AIDS Program grantees, who have achieved far-reaching impact, touching more than 14 countries and providing much-needed services, ranging from health workforce development to quality improvement (see table, Today’s HRSA Global HIV/AIDS Program).



TODAY'S HRSA GLOBAL HIV/AIDS PROGRAM

Grantee	Function	No. of Countries
International AIDS Education and Training Center (I-TECH): University of Washington	<ul style="list-style-type: none"> • Health workforce development • Capacity building 	14
Twinning Center: American International Health Alliance*	<ul style="list-style-type: none"> • Twinning partnerships • Mentoring/volunteering 	10
International Center for AIDS Care and Treatment Programs (ICAP)	<ul style="list-style-type: none"> • Nursing capacity building • Nursing Education Partnership Initiative (NEPI) • General nursing 	11
HEALTHQUAL International: New York State Department of Health AIDS Institute	<ul style="list-style-type: none"> • Quality improvement 	8
Medical Education Partnership Initiative (MEPI): Multiple grantees	<ul style="list-style-type: none"> • Medical education capacity building 	12
New Partners Initiative: Multiple grantees	<ul style="list-style-type: none"> • Local partner capacity development 	3
Caribbean HIV/AIDS Regional Training (CHART) Network: University of the West Indies	<ul style="list-style-type: none"> • Health workforce development • Capacity building 	12

LESSONS LEARNED ABROAD FROM HRSA GRANTEES

After 8 years, HRSA's Global HIV/AIDS Program grantees have gained a critical mass of experience that they can now share with their counterparts in the United States. Even though the challenges that PEPFAR countries face may be extreme, Ryan White providers and consumers can grapple with similar issues to varying degrees. Working with HRSA's Global HIV/AIDS Program, the domestic Ryan White HIV/AIDS Program can become stronger and more innovative in its delivery of care, particularly in areas of the United States that suffer from poverty, a lack of health care workers, and other critical resources.

PEPFAR-funded countries' health ministries are increasingly taking control of the oversight and guidance of HIV care and treatment programs, aided by years of training alongside providers from HRSA's Global HIV/AIDS Program and other PEPFAR grantees. "We've taken the tools that we've developed through the Global HIV/AIDS Program and the Ryan White Program so that countries can begin to monitor, guide, and provide feedback to their grantees and also begin measuring the quality of care," says Barbara Aranda-Naranjo, director of HRSA's Division of Training and Capacity Development and former head of HRSA's Global HIV/AIDS Program.

As PEPFAR programs transition to country ownership, the door is opening for HRSA's Global HIV/AIDS Program to also transition roles—from teacher to student. Providers and others on the frontlines of the HIV/AIDS epidemic in the United

States can learn a great deal from colleagues in PEPFAR countries about overcoming challenges without sacrificing quality of care. Detailed below are lessons learned from HRSA grantees' responses to some of these formidable challenges.

Lack of Infrastructure and Resources

Issues such as poverty and resource scarcity are of a greater magnitude in PEPFAR-funded countries than in the United States. In sub-Saharan Africa, for example, nearly 70 percent of people subsist on less than \$2 per day.¹⁹ Health care providers and consumers often lack access to resources that are taken for granted in the United States, such as a reliable power grid; clean, accessible running water; and sound, traversable roads.

These resource constraints were of particular concern in the first years of PEPFAR's program. "There were a lot of naysayers who did not believe that you could work in settings with such limited means and get the results that occurred," says Aranda-Naranjo.

Many basic but critical questions had to be answered, such as which hospitals had the operational capacity to provide HIV care, how patients would be enrolled in care, and how medications would be delivered. "None of us actually knew how HIV care was going to work overseas. The countries that we were proposing to help didn't really have anything in the way of HIV care—ever," says Michele Broemelsiek, chief of party at the Catholic Relief Services-led AIDSRelief Consortium, a HRSA

*The Twinning Center establishes peer-to-peer and institution-to-institution partnerships to foster academic exchange and mentorship among international colleagues working in specialties like emergency medicine, pediatrics, social work, nursing, prevention, counseling, and testing.

Global HIV/AIDS Program grantee for 9 years. AIDSRelief supported local partners in delivering HIV programming to more than 700,000 people through 276 health facilities in 10 countries across Africa, Asia, and Latin America.

Bruce Agins is also well acquainted with the lack of resources in PEPFAR-funded countries, not the least among them information resources and data systems. Agins is director of the HEALTHQUAL program, a HRSA Global HIV/AIDS Program grantee, at the New York State Department of Health AIDS Institute. The HEALTHQUAL program model focuses on strengthening and improving health systems with the goal of creating sustainable, self-sufficient, local quality-management programs that integrate measurement and improvement science. “We do this work of capacity building through coaching and mentoring. We provide technical assistance to countries’ ministries of health to help them develop their own skills and programs,” explains Agins, adding, “I’m constantly impressed by the providers’ pervasive dedication and willingness to devote extra time to do work that they think will improve quality of care.”

This focus on quality improvement can mean juggling resources, working extra hours, or figuring out how to task-shift and optimize a clinic’s caseload. As Agins observes, “If it makes sense, work a nurse was doing might be passed down to an aide, or a physician may pass to a nurse the responsibility for prescribing medications to patients who are stable and on chronic therapy. If a patient’s status changes, the nurse refers the patient back to the physician.” He concludes, “People in the U.S. might say, ‘I can’t do certain things without dedicated funding,’ but internationally you often get the response that, if something is really important, let’s figure out how to do it.”

“In Mozambique, we’re seeing providers using cell phone technology to more quickly transmit lab data in remote areas.” — Bruce Agins, director of HEALTHQUAL

In some cases, HRSA’s Global HIV/AIDS Program grantees have overcome their resource limitations or inefficiencies in one area, such as physical infrastructure, by compensating with more advanced technologies in other areas, particularly information technology. Increasing numbers of providers are using data transfer technologies that surpass the technologies commonly used in the United States in sophistication, and often, in efficiency. An example of this is the use of mobile data systems operated by means of cell phones. “In Mozambique, we’re seeing providers using cell phone technology to more quickly transmit lab data in remote areas,” says Agins.

Haiti boasts a best-in-class example of an effective electronic medical record system called iSanté, which has been deployed at more than 100 sites, including all antiretroviral therapy (ART) programs across the country, and captures

data from more than 1,000 patients. “This system is providing country-level data so that we can quickly see what the trends are and quickly flag national priorities for improvement,” comments Agins. “It’s also saving providers from having to collect data manually to measure their performance.”

Initial challenges with developing standard practices, securing reliable hardware, and addressing issues of power shortages and training in computer literacy among staff had to be overcome. iSanté was designed so that the system user can switch as necessary from an electronic record to directly entered data to back-up paper records. To address the problem of power shortages, systems in some countries are run almost exclusively by very large batteries, thanks to funding from the U.S. Centers for Disease Control and Prevention (CDC) and the health ministry of the relevant country.

Other issues have been addressed to varying degrees through training and support from the International AIDS Education and Training Center (I-TECH) at the University of Washington (UW) in Seattle. Planning is now underway to expand iSanté beyond an HIV-exclusive arena. “We are starting to develop iSanté into more of a primary care record that can capture data on maternal and child health, malaria, and TB, says Scott Barnhart, I-TECH’s senior clinical advisor and director of Global Health Programs Administration and a UW professor of medicine and public health.

PEPFAR providers are also harnessing one resource that countries in Africa and the Caribbean have in abundance: sunlight. Because it can be difficult for some providers to access, let alone afford, the fuel needed to power generators, many are turning to solar panels to power their systems.

Inexperience Managing a U.S. Government Grant

Prior to PEPFAR, many clinics, hospitals, and health ministries lacked the ability to systematically manage patient care or the day-to-day administration of their HIV programs. The groundwork required to develop the systems necessary for office management, finances, and grant management was not unlike the groundwork needed to establish these systems in the United States decades ago at the advent of the Ryan White HIV/AIDS Program. “When HRSA started working with the clinics, States, and the metropolitan areas in the U.S. years ago, we also had challenges of creating data administration systems and networks of services, referrals, and linkages where they didn’t exist,” explains Morales. “There was a huge learning curve in terms of managing U.S. dollars and financial and administrative systems, but most of [the PEPFAR-funded providers] are doing great at this moment.”

Stigma and Lack of Community HIV Education

HIV-related stigma is still a major issue in many PEPFAR-funded countries, particularly in Africa. “Civil society in the PEPFAR-funded countries is not as actively involved with their HIV services as Ryan White patients [are] domestically, but they are becoming more active as a result of PEPFAR and play a big role

in changing communities and driving sustainability,” explains Morales. Agins adds, “The community mobilization that’s starting to build in PEPFAR countries reminds me of the early days of the HIV epidemic in the U.S.” Such mobilization can contribute greatly to dismantling stigma and raising community awareness about disease prevention.

One change that HRSA’s Global HIV/AIDS Program hopes to achieve is an increase in gender equality in PEPFAR countries, ensuring that women and children have access to the same services as men. “We’ve been working very hard in the U.S. to improve care for women, and it’s working—especially with mother-to-child transmission (MTCT) now almost zero,” says Morales. “We must work very hard on these issues with PEPFAR-funded countries as well if we want to turn the tide.”

Adherence to Medications

The rise of more effective community support networks to encourage testing, adherence, and retention in care in PEPFAR countries has led to unprecedentedly high levels of viral suppression—more than 90 percent in some African communities—that greatly exceed the average rate of suppression in the United States, which hovers around 30 percent.^{20,21} Many creative strategies have evolved to engage the community, such as enlisting community members for clinical outreach and to find patients who have dropped out of care. As Agins explains, “In Mozambique, there is even an example of patients taking turns to go and pick up medications from dispensaries so that others don’t have to travel long distances.”

Inadequate Training for Medical Professionals

“When we talk about infrastructure development and the transition to country ownership, we have to talk about human resources as well,” says Aranda-Naranjo. “Human resources include doctors, nurses, lab technicians, and all the people needed to build a team.” HRSA is working in partnership with the National Institutes of Health (NIH), CDC, and the U.S. Agency for International Development to increase curriculum quality at medical and nursing schools in PEPFAR countries. In collaboration with the NIH, HRSA is managing the Medical Education Partnership Initiative (MEPI), which involves 13 medical schools in 12 African countries. “The goals are to increase the number of medical graduates, as well as to change the way that the African-based medical schools have been teaching,” says Morales. “We want HIV/AIDS to be included in the curriculum and to be a priority so when these young doctors come out of school they know how to treat the disease.” HRSA is also managing the Nursing Education Partnership Initiative (NEPI), a counterpart to MEPI, across six nursing schools in Africa.

PEPFAR communities have struggled historically with recruiting and training their medical workforce. Recently, however, with the aid of MEPI and NEPI, they have enhanced their tracking of medical and nursing graduates to improve placement in areas of unmet need. Retention and faculty development in medical and nursing schools has also been improved under MEPI and NEPI.

HRSA’s Global HIV/AIDS Program’s work does not end when medical and nursing professionals graduate. “It’s so important to train clinicians and have ongoing training assistance,” says Morales. “Here in the U.S. we’ve been very successful with the AIDS Education and Training Centers (AETCs), and that model has been tremendously expanded and used in the PEPFAR-funded countries.”

I-TECH, which is based at UW and managed in partnership with the University of California, San Francisco (UCSF), is an outgrowth of the AETCs. Through the Clinical Assessment for Systems Strengthening (CLASS) program, I-TECH plays a supporting role in monitoring the MEPI and NEPI programs for HRSA. “CLASS is a program that looks at administrative, clinical, and technical systems with a technical assistance focus and develops reports on how to strengthen grantees,” says Michael Reyes, co-founder and senior director of I-TECH and a professor of family and community medicine at UCSF. (To learn more about CLASS, see www.classtoolkit.org/hrsa-welcome.)

HRSA is working in partnership with the National Institutes of Health (NIH), CDC, and the U.S. Agency for International Development to increase curriculum quality at medical and nursing schools in PEPFAR countries.

I-TECH also supports several programs designed to support workforce development in PEPFAR countries, including the Leadership and Management Initiative (LMI), led by Ann Downer, co-founder and executive director of I-TECH and an associate professor in the UW Department of Global Health. “It’s hard enough helping the governments to strengthen their infrastructure or deliver health care. But there’s the people side of it too,” she says. “The work in this area is more about the softer side of infrastructure, and I think that in the last 4 or 5 years, we’ve become keenly aware that you need both, and they need to evolve in parallel for PEPFAR countries to achieve true country ownership.” (The LMI trainings are self-paced and cover a wide range of leadership and management topics. They are available online at <http://everydayleadership.org/>.)

Emerging Challenges, Emerging Solutions

As PEPFAR approaches the end of its first decade of funding, the program has set specific goals for its future, which include:

1. Transitioning from emergency response to the promotion of sustainable country programs;
2. Strengthening the capacity of partner governments to lead the response to both the HIV/AIDS epidemic and other health demands;
3. Expanding prevention, care, and treatment in both concentrated and generalized epidemics;

4. Integrating and coordinating HIV/AIDS programs with broader global health and development programs to maximize impact on health systems; and
5. Investing in innovation and operations research to evaluate impact, improve service delivery, and maximize outcomes.²²

Although hurdles will need to be overcome in the pursuit of these goals, many in the PEPFAR community are already taking steps to clear the way, such as ensuring that HIV/AIDS services no longer function as isolated, vertical programs but are integrated into the larger national public health systems of the focus countries.

Antiretroviral Therapy as a Prevention Strategy

One of the most notable and most studied HIV/AIDS prevention strategies is to encourage the adoption of and adherence to antiretroviral therapy (ART), including for the prevention of MTCT. In the HIV Prevention Trials Network 052 study, which studied primarily heterosexual discordant couples, transmissibility decreased by 96 percent among ART-adherence patients.²³ For HIV-positive mothers, ART is vital, not only to prevent MTCT, but also to promote the child's well being, even if he or she is HIV negative. Research shows that the child of a parent who has died of AIDS has a threefold increased risk of death, regardless of the child's own HIV diagnosis.²⁴ The Twining Center has partnered with social work schools to help children cope with the emotional loss of a caregiver and because these children are also at high risk for labor exploitation. AIDS orphans often experience malnutrition, lack of health care, and poor access to education, as well as painful emotional distress and stigmatization. These children are also at high risk for labor exploitation, sex trafficking, and homelessness.²⁵ PEPFAR-funded ART medications are thus powerful tools in more than one battle—reducing the spread of HIV while also reducing child mortality and the number of orphaned and vulnerable children. It is estimated that PEPFAR-funded ART has prevented nearly 4 million children from becoming orphans.²⁵

Voluntary Medical Male Circumcision

Voluntary medical male circumcision (VMMC) has risen in prominence as an effective means of reducing the risk of HIV infection and transmission. Numerous studies have shown that VMMC can reduce female-to-male HIV transmission by roughly 60 percent. In 2007, the World Health Organization (WHO) and the United Nations Joint Programme on AIDS recommended that countries and regions with high HIV prevalence but low rates of male circumcision promote VMMC as part of their HIV prevention programs. Since then, PEPFAR has supported VMMC for more than 2 million men around the world.^{8,26} VMMC has the potential to prevent more than 3.4 million new HIV infections and save an estimated \$16.5 billion in HIV care and treatment costs over the next 15 years.²⁶

ONLINE RESOURCES

HRSA Global HIV/AIDS Program: hab.hrsa.gov/globalhivaids

PEPFAR: www.pepfar.gov/

Catholic Relief Services AIDSRelief Model:
[www.crsprogramquality.org/storage/pubs/hivaids/iacpubs/treatment/The AIDSRelief Model-small_high.pdf](http://www.crsprogramquality.org/storage/pubs/hivaids/iacpubs/treatment/The%20AIDSRelief%20Model-small_high.pdf)

I-TECH: www.go2itech.org/

HEALTHQUAL International: www.healthqual.org/

Oral Pre-Exposure Prophylaxis

WHO research into oral pre-exposure prophylaxis (PrEP) has shown evidence of effectiveness in HIV prevention for uninfected individuals in serodiscordant couples. Efforts are underway to scale up demonstration projects to study the potential of oral PrEP as a wide-scale HIV prevention measure.⁵

Antiretroviral Microbicides

Similar studies have investigated the effects of antiretroviral microbicides, a form of topical PrEP. The Centre for the AIDS Programme of Research in South Africa (CAPRISA) study found a reduction in HIV infection of up to 54 percent among HIV-negative women who used a 1 percent vaginal gel form of the antiretroviral drug tenofovir before and after sex.²⁷ In 2011, the FACTS 001 study was launched in South Africa with the aim of confirming and expanding upon the CAPRISA findings. Results are expected in late 2013.^{28,29}

VMMC has the potential to prevent more than 3.4 million new HIV infections and save an estimated \$16.5 billion in HIV care and treatment costs over the next 15 years.

Women would benefit most directly from oral or topical PrEP, particularly in sub-Saharan Africa, where 60 percent of all PLWHA are women and girls and more than 75 percent of all HIV-positive women in the world live.³⁰ Most women with HIV in this region have acquired the infection from their husbands or sexual partners; PrEP would allow them to take additional measures to protect themselves from disease, even if their partners do not.

Researchers have high hopes for the success of PrEP, but not all studies have demonstrated the success of this intervention. The NIH-funded Vaginal and Oral Interventions to Control the Epidemic (VOICE) study investigated the daily use of three drugs—tenofovir gel, tenofovir, and a drug containing



PEPFAR POPULATION-SPECIFIC STRATEGIES

PEPFAR activities seek to address issues specific to vulnerable populations. In particular, these include:

- women and girls
- men who have sex with men
- prostitutes
- injection drug users
- youth
- mobile populations, and
- health care workers.

PEPFAR works with countries to employ a harm reduction approach to prevention activities and assists governments in mapping their epidemics to ensure targeted outreach. In many cases, the barriers to reaching high-risk populations are great. For example, in some PEPFAR-funded countries homosexual activities are considered a crime and drive people within this community underground. While the challenges are great, PEPFAR is working hard to reduce stigma, address cultural norms that drive HIV infection, and to ensure equal access to health care for all. To learn more about PEPFAR's population-specific prevention activities, visit: www.pepfar.gov/press/strategy_briefs/138405.htm.

Source: U.S. Department of State, Bureau of Public Affairs, Global AIDS Coordinator. Prevention: strategic populations. n.d. Available at: www.pepfar.gov/press/strategy_briefs/138405.htm. Accessed April 15, 2013.

tenofovir and emtricitabine—among 5,029 women in Uganda, Zimbabwe, and South Africa.³¹ Early 2013 results from the study indicated very low adherence to the medications and the VOICE research team is conducting ongoing research to understand why women did or did not use the drugs as prescribed, including how perception of their HIV risk may have influenced their behavior. Findings from this research will prove critical in determining whether oral or topical PrEP can, indeed, prove a viable HIV prevention method for vulnerable women.

PEPFAR'S SUCCESS AGAINST THE ODDS

To date, PEPFAR has demonstrated great success against the odds. As of September 2012, PEPFAR has supported ART for 5.1 million men, women, and children worldwide, a number that has increased threefold since 2008.^{32,33} In fiscal year 2012

alone, PEPFAR directly supported HIV testing and counseling for more than 49 million people, including 11 million pregnant women. Through testing and ART prophylaxis, MTCT was eliminated for 750,000 women, allowing approximately 230,000 infants to be born HIV negative.³²

PEPFAR's effects have been resounding, and HRSA has been honored to play a role in such a game-changing development in the world's fight against HIV/AIDS. That said, HRSA's work is far from over either globally or domestically. As President Obama said on World AIDS Day 2011, "This is a global fight, and it's one that America must continue to lead. Looking back at the history of HIV/AIDS, you'll see that no other country has done more than this country, and that's testament to our leadership as a country. But we can't be complacent."³⁴

Raising the Bar at Home

PEPFAR's successes have revealed opportunities for improvement in domestic HIV/AIDS efforts. In the United States, 50,000 new people per year are infected with HIV, a rate that has persisted for nearly a decade, even as rates across the world—in areas burdened with seemingly insurmountable obstacles to treatment and care of PLWHA—are steadily declining.³⁵

In response, President Obama created the National HIV/AIDS Strategy (NHAS) and announced a new target to help 6 million people globally obtain HIV/AIDS treatment by the end of 2013. The President also committed an additional \$15 million for the Ryan White HIV/AIDS Program and an additional \$35 million for State AIDS Drug Assistance Programs.³³

Former Secretary of State Hillary Rodham Clinton also made a landmark commitment of U.S. support by pledging an additional \$80 million to support maternal health programs and eliminate MTCT globally by 2015.³⁶ This funding will support innovative approaches to ensuring that HIV-positive pregnant women around the world obtain the treatment they need to stay healthy and protect their babies and partners from HIV.

Despite the increased aggressiveness of these targets, HRSA's Global HIV/AIDS Program grantees and Ryan White grantees are up to the challenge. If the past is any indicator of the future, HRSA grantees will meet these targets and will keep achieving goals well beyond them.

LOOKING TOWARD THE FUTURE, TOGETHER

The legacy of PEPFAR is replete with examples of communities overcoming obstacles despite a lack of many advantages and resources that are taken for granted in the United States. What these countries lack in tangible resources they have made up for with grit, heart, and ingenuity. As the HIV epidemic progresses, providers around the world face increasing demands to deliver higher quality care and better outcomes, despite having to work with fewer resources. Although this may seem like an impossible exercise, if anything has been learned from PEPFAR, it is that the seemingly impossible can—and will—be done.

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