



PEPFAR

2018 ANNUAL REPORT TO CONGRESS



15 YEARS OF SAVING LIVES THROUGH
AMERICAN GENEROSITY AND PARTNERSHIP

**THE UNITED STATES
PRESIDENT'S EMERGENCY PLAN
FOR AIDS RELIEF**



15 Years of Bipartisan Leadership

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EXECUTIVE SUMMARY

With American leadership, we are at an unprecedented moment in the global HIV/AIDS response. For the first time in modern history, we have the opportunity to control a pandemic without a vaccine or a cure. We have the tools to do this, but the key will be comprehensive implementation brought to scale to reach people already living with HIV and prevent new infections. Controlling the HIV/AIDS pandemic will lay the groundwork for eventually eliminating or eradicating HIV, which will be possible through continued and future scientific breakthroughs in vaccine development and cure research.

Fifteen years ago, when the United States (U.S.) President's Emergency Plan for AIDS Relief (PEPFAR) was launched, these possibilities were unimaginable. Today, with the continued bipartisan support of the U.S. Congress and the leadership of President Donald Trump, the U.S. government is unquestionably the world's leader in responding to the global HIV/AIDS crisis.

Through the work of PEPFAR, in partnership with other governments and communities, the U.S. has saved millions of lives, prevented millions of new infections, and changed the very course of the pandemic. Since our inception in 2003, PEPFAR

has received strong bipartisan support in Congress and through three administrations. The program has been reauthorized twice, with significant majorities. Conceived as a compassionate effort to save the lives of people in countries hardest hit by HIV/AIDS through the delivery of urgently needed treatment and care, PEPFAR is firmly poised to control and to ultimately end the pandemic as a public health threat. PEPFAR is demonstrating that resources can be laser-focused with clear strategies, constant assessment, and rapid programmatic corrections to increase their impact and achieve what was once an unimaginable goal.



President Bush with a group of children during a visit to Africa.

CREDIT: George W. Bush Presidential Center

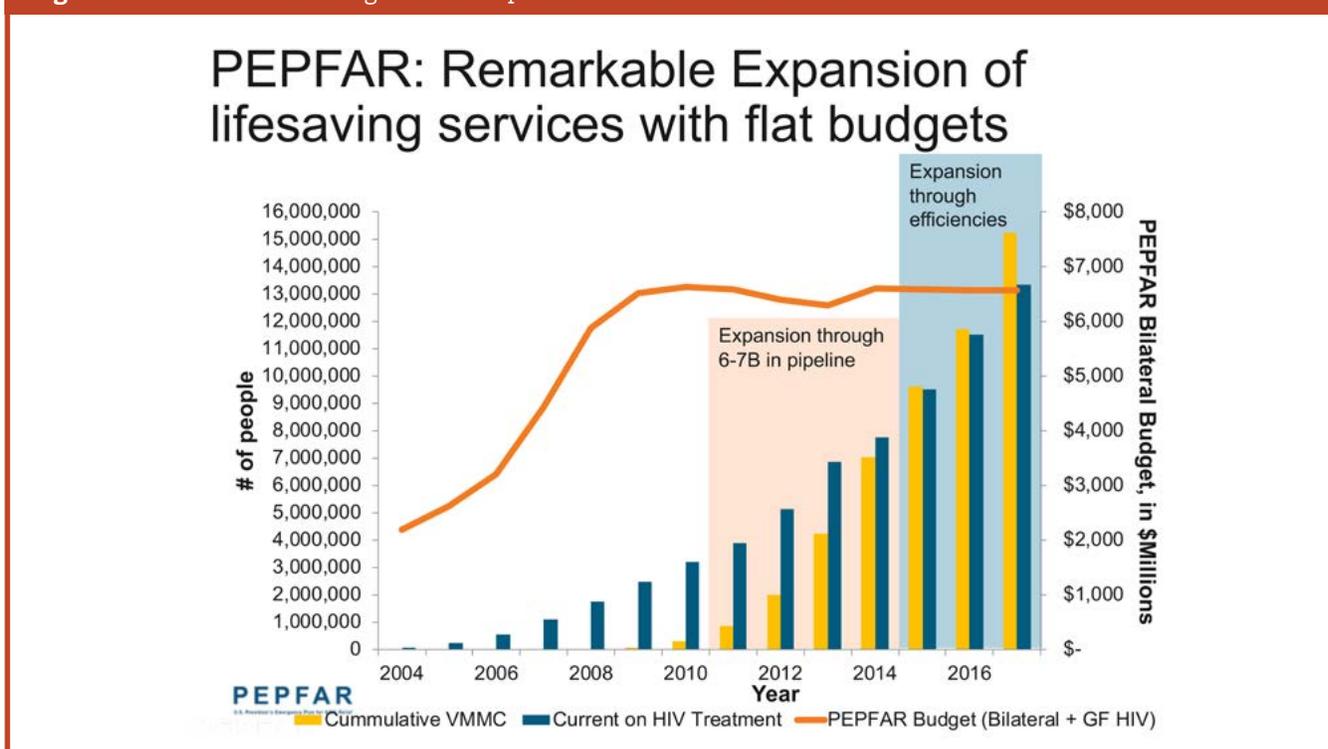
When signing PEPFAR into law in May 2003, through the U.S. Leadership Against HIV/AIDS, Tuberculosis and Malaria Act of 2003 (U.S. Leadership Act), President George W. Bush remarked that *“HIV/AIDS is one of the great medical challenges of our time...Across Africa, this disease is filling graveyards and creating orphans and leaving millions in a desperate fight for their own lives. They will not fight alone... The legislation I sign today launches an emergency effort that will provide \$15 billion over the next five years to fight AIDS abroad... In the face of preventable death and suffering, we have a moral duty to act, and we are acting.”*

PEPFAR is widely regarded as one of the most effective and efficient foreign assistance programs in history, because our approach has shifted and our impact has expanded based on the latest science and the best available data. The result is enormous cost-efficiency – ensuring we have the greatest possible impact with each dollar entrusted to us by the American people. Over

the past year, we have eliminated duplication, streamlined business practices, and shifted resources to serve those most in need and implement the most impactful interventions.

Our relentless commitment to accountability, transparency, and partnership has allowed the program to dramatically expand our results and impact in recent years without increases in budget (Figure A). PEPFAR continues to realign and refocus the program in every country where we work, employing better data and business practices to save more lives, prevent more infections, and accelerate progress toward controlling the epidemic. These critical program and business process improvements include targeting our investment using granular, site-level data; rigorous partner management to increase performance and efficiency; and intensive quarterly monitoring of the entire program. These efforts make PEPFAR a model for cost-effective foreign assistance.

Figure A: PEPFAR – Achieving Greater Impact on Current Investments





A young girl in Uganda.

Furthermore, through the PEPFAR platform, the U.S. has enhanced global health security, accelerating the progress toward a world more secure from infectious disease threats. We have demonstrably strengthened the global capacity to prevent, detect, and respond to new and existing risks. PEPFAR's investments in countries with sizable HIV/AIDS burdens have bolstered their ability to swiftly address Ebola, avian flu, cholera, and other outbreaks, which ultimately protects America's borders. PEPFAR has an impact beyond HIV/AIDS and continues to invest strategically in the systems critical to ensure global health security. These invaluable lessons and experiences will continue to inform and improve the U.S. government's response to unforeseen health crises.

Above all, PEPFAR is an expression of the compassion and generosity of the American people. We are the iconic brand of U.S. government engagement in health,

Spotlight

Increasing Our Impact Through Data-Driven, Cost-Effective Investments

PEPFAR is widely regarded as one of the most effective and efficient foreign assistance programs in history, because our approach has shifted and our impact has expanded based on the latest science and the best available data. As a result, PEPFAR's data-driven, cost-effective investments are accelerating progress toward controlling and ultimately ending the HIV/AIDS pandemic as a public health threat.

We work relentlessly to ensure we are delivering the greatest possible impact with every dollar that we invest. At every level of the program, we have eliminated duplication, streamlined business practices, and shifted resources to where they will be used in the most cost-effective manner to serve those most in need. This rigor has allowed PEPFAR to significantly expand our results and impact without increased financial resources.

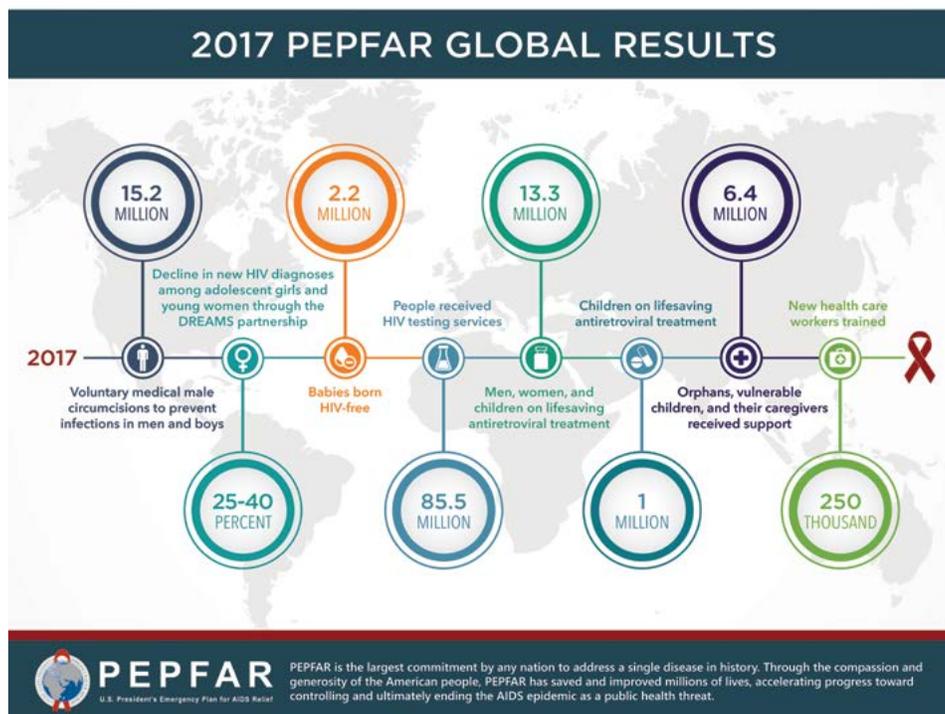
We continue to realign and refocus the program in every country where we work, employing better data and business practices to save more lives, prevent more infections, and have the largest impact on the epidemic.

development, security, and diplomacy, unparalleled in our capacity to deliver clear, measurable, and transformative impact.

In advance of World AIDS Day 2017, President Donald Trump announced that PEPFAR has reached historic highs in our impact – preventing more HIV infections and saving more lives than ever before, driven by transparent, accountable, and cost-effective investments (Figure B).

As of September 30, 2017, PEPFAR had supported more than 13.3 million men, women, and children on lifesaving antiretroviral treatment (ART). When PEPFAR began in 2003, only 50,000 people were receiving ART in sub-Saharan Africa at

Figure B: PEPFAR – Latest Global Results, 2017



that time; communities were decimated with children left alone without mothers or fathers.

Today, we are saving lives not only by treating HIV, but also by stopping transmission before it happens, through three key prevention interventions. PEPFAR continues to be the driving force in preventing mother-to-child transmission. To date, PEPFAR has enabled more than 2.2 million babies to be born HIV-negative to HIV-positive mothers. To prevent new infections in boys and men, PEPFAR has supported more than 15.2 million of them through the provision of voluntary medical male circumcision (VMMC), including through the largest single-year increase (nearly 3.5 million) in VMMC results during fiscal year (FY) 2017, since the beginning of PEPFAR. To prevent infection in girls and young women, PEPFAR designed the groundbreaking DREAMS (Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe) public-private partnership (PPP).

The latest PEPFAR data also show that, for the first time, we drove significant declines in new HIV diagnoses among adolescent girls and young women. In the 10 African countries implementing PEPFAR's pioneering DREAMS PPP, nearly two-thirds of the highest HIV-burden communities or districts achieved a 25–40 percent or greater decline in new HIV diagnoses among young women since 2015. Importantly, new diagnoses declined in nearly all DREAMS intervention districts. The DREAMS partnership is not only preventing HIV among adolescent girls and young women, but also empowering them to be the leaders of tomorrow.

To ensure children thrive and are protected from HIV, PEPFAR now supports more than 6.4 million orphans and vulnerable children (OVC) and their caregivers affected by HIV/AIDS. To ensure that children with HIV thrive, PEPFAR continues to focus more than \$450 million annually on the diagnosis and treatment of children living with

HIV, reaching more babies and children with lifesaving ART. And to ensure that more people can know their HIV status, PEPFAR supported more than 85.5 million people with HIV testing services in FY 2017 alone. All of these remarkable successes are possible due to our aggressive program monitoring focused on improving the impact of our investments quarter by quarter.

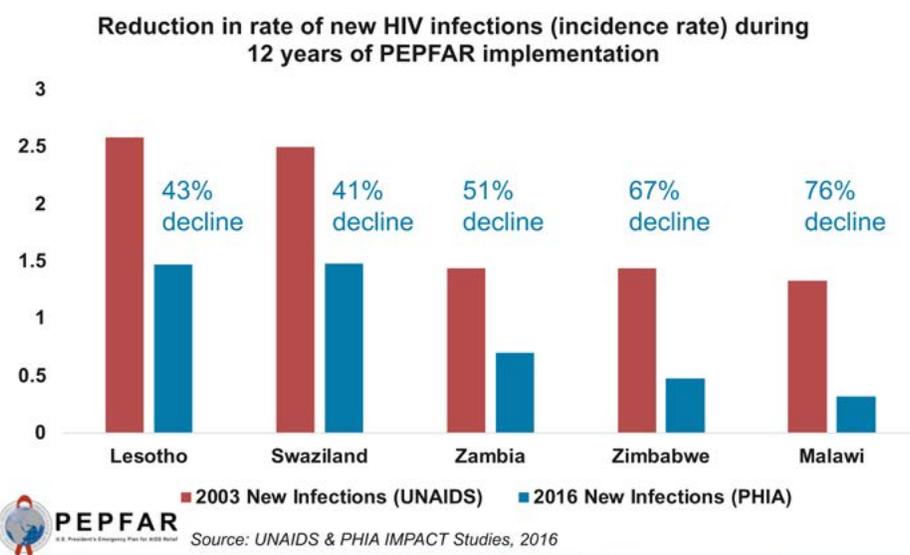
These new achievements add to PEPFAR’s impact results released in the past year, which show that five African countries – Lesotho, Malawi, Swaziland, Zambia, and Zimbabwe – are approaching control of their HIV epidemics (Figures C and D). Epidemic control is the point at which new HIV infections fall below the total number of deaths from all causes among HIV-infected individuals. These countries are closing in on the targets set by the Joint United Nations Programme on HIV/AIDS (UNAIDS)

as part of its 90-90-90 by 2020 goals – whereby 90 percent of people living with HIV (PLHIV) know their status, 90 percent of people who know their status are accessing treatment, and 90 percent of people on treatment have suppressed viral loads.¹ This fast-track strategy focused on controlling the HIV/AIDS pandemic has been endorsed by all of the countries where PEPFAR works and aims to ensure that 73 percent of all HIV-positive communities are virally suppressed, both for their own health and to reduce the possibility of their transmitting HIV.

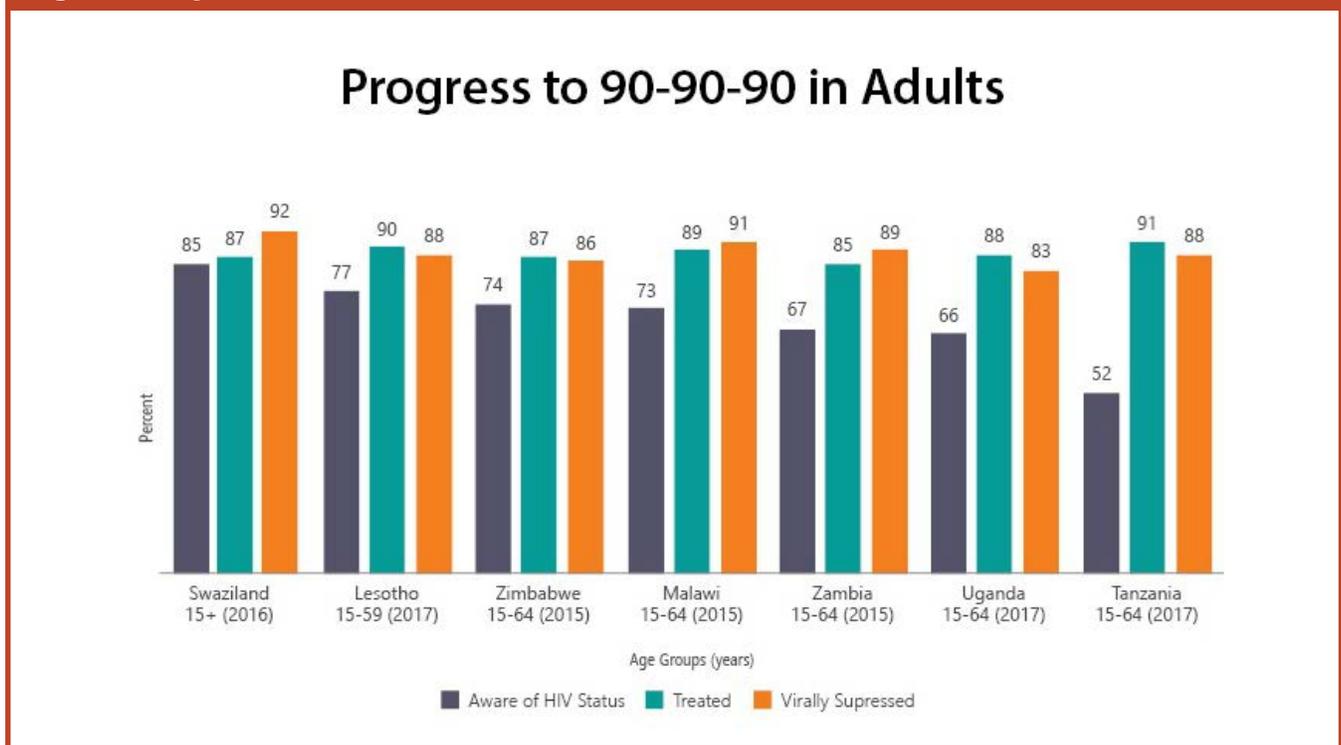
These accomplishments also highlight critical advances being made under the *PEPFAR Strategy for Accelerating HIV/AIDS Epidemic Control (2017-2020)*. The Strategy was launched at the 2017 United Nations General Assembly (UNGA) and reaffirms the U.S. government’s HIV/AIDS leadership and commitment in more

Figure C: New Infections Have Declined 43-76% Since the Start of PEPFAR

Since the Start of PEPFAR, New HIV Infections Have Declined 41-76%



¹ UNAIDS. (2014). 90-90-90: An Ambitious Treatment Target to Help End the AIDS Epidemic. Retrieved from http://www.unaids.org/sites/default/files/media_asset/90-90-90_en_o.pdf

Figure D: Progress to 90-90-90 in Adults

than 50 countries. As the secretary stated in his introduction to the Strategy: *“The Trump administration remains deeply committed to the global HIV/AIDS response and to demonstrating clear outcomes and impact for every U.S. dollar spent. We want to look back together and recognize that it was here, at this point in time, that our accelerated focus led to a world free of HIV/AIDS.”*

At UNGA 72 in September 2017, President Trump underscored his support to PEPFAR, noting the program’s overall importance and citing it as an example of how the U.S. government is doing more by finding greater efficiencies and ensuring we drive forward with impact and clear value for each dollar invested. As the President stated: *“We have invested in better health and opportunity all over the world through programs like PEPFAR.”*

With continued aggressive focus, quarterly data analysis, and partner alignment for maximum impact, under our new Strategy, PEPFAR is poised

to help control the epidemic in up to 13 countries by 2020. Beyond saving an untold number of lives, this will reduce the future costs required to sustain the HIV/AIDS response. In less than two decades of PEPFAR’s commitment and funding, the pandemic has the potential to progress from crisis to control. This would create the road map and the global evidence base for how future deadly pandemics can be controlled, by utilizing the best interventions and constantly assessing progress.

PEPFAR has built and strengthened the capacity of country-led responses in both the government and civil society while bringing key multisectoral partners to the table. We have fostered collaboration across the whole of the U.S. government, partner governments, and global partners, including multilateral institutions, civil society, faith-based organizations (FBOs), the private sector, philanthropic organizations, and PLHIV.

PEPFAR's impact extends well beyond the health sector. The program has helped advance economic development, particularly in sub-Saharan Africa, by assisting in stabilizing countries and communities, creating returns on investment that will continue to pay dividends across multiple sectors long into the future. PEPFAR powerfully and unequivocally proves that investing in health is not only the right thing to do, but also the smart thing to do. PEPFAR has paved the pathway for effective and impactful foreign assistance by holding to the principles of accountability, transparency, and impact. We know that with continued focus we will control this epidemic.

The World Before PEPFAR

Before PEPFAR, controlling the HIV/AIDS pandemic was unimaginable. Reports from the

front lines of the epidemic, especially in sub-Saharan Africa, were dire. In many countries, an HIV diagnosis was a death sentence, and entire families and communities were falling ill. Gains in global health and development were being lost. In the hardest-hit regions of sub-Saharan Africa, infant mortality doubled, child mortality tripled, and life expectancy dropped by 20 years. The rate of new HIV infections in the highest burden regions was exploding, and people were getting sick and dying during the most productive years of their lives. Millions of babies were becoming HIV-infected and millions of children were being orphaned by AIDS, leaving them susceptible to recruitment by negative influencers.

Despite early efforts to provide HIV prevention, care, and treatment services, at that time the epidemic continued to rage unabated. Lifesaving

Meet Hadijah – Empowering Girls to Fulfill Their Dreams



Outreach to adolescent girls and young women.

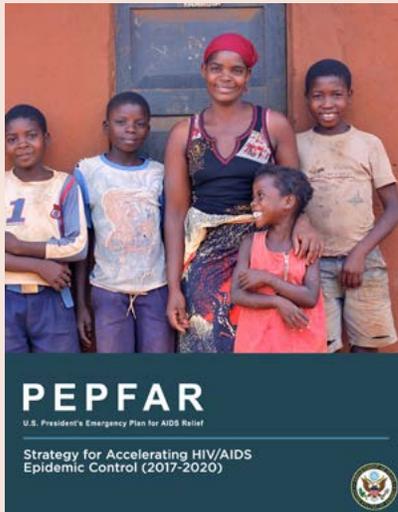
When Hadijah, a young woman in Uganda, became pregnant with her first child, she dropped out of school. Shortly afterward, her mother died, and she went to live with her father and then her stepfather, both of whom abused her, and she frequently went without shelter or food. Unfortunately, Hadijah also ended up living with an abusive boyfriend. Eventually the mother of four children, she began engaging in transactional sex to provide for her growing family, which exposed her to many risks, including gender-based violence.

It was Hadijah's love of sports that provided her the spark for positive change. One day at a netball meeting, a friend told her about a PEPFAR-supported program that helps adolescent girls and young women stay Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe (DREAMS).

She enrolled, accessed HIV testing, and learned that she was HIV-negative. Within three weeks, she was equipped with DREAMS training on parenting and HIV prevention, and qualified as a peer facilitator. Thanks to DREAMS-supported hairstyling workshops, Hadijah now earns money braiding the hair of her netball teammates. Today, she is a local DREAMS safe space sports coordinator, netball team captain, and girl mentor. In addition, she runs a catering business for students at the DREAMS safe space.

"I am grateful for the knowledge I have acquired about HIV prevention, and I will continue to help other girls to make the right choices for their bright futures," Hadijah said.

Spotlight



Under the PEPFAR Strategy for Accelerating HIV/AIDS Epidemic Control (2017-2020), which was launched at the 2017 United Nations General Assembly, PEPFAR is rapidly advancing efforts toward reaching epidemic control in more than 50 countries. With continued aggressive focus, quarterly data analysis, and partner alignment for maximum impact, under this Strategy, PEPFAR is poised to help control the epidemic in up to 13 countries by 2020.

We have already seen tremendous results. PEPFAR's Population-based HIV Impact Assessment data released in the past year show that five African countries – Lesotho, Malawi, Swaziland, Zambia, and Zimbabwe – are approaching control of their HIV epidemics. Epidemic control is the point at which new HIV infections fall below the total number of deaths from all causes among HIV-infected individuals.

Beyond saving an untold numbers of lives, achieving epidemic control will reduce the future costs required to sustain the HIV/AIDS response. In less than two decades of commitment and funding, the pandemic has the potential to progress from crisis to control. This would create the road map and the global evidence base for how future deadly pandemics can be controlled utilizing the best interventions and by constantly assessing progress.

medications that could turn the tide were inaccessible and unaffordable to virtually all but the richest. Further, many experts assumed

that PLHIV in many parts of the world would be unable to sustain the complicated dosing regimens required for effective treatment.

The U.S. government responded. The U.S. Congress passed PEPFAR with strong bipartisan support just four months after President George W. Bush's call to action in his 2003 State of the Union address. With this unprecedented investment, the bright light of hope began to shine across the most devastated regions of the world.

Since our inception, PEPFAR has evolved through three major phases, all of which were underpinned by the significant leadership and support of the U.S. Congress.

PEPFAR I

During our first phase, under the leadership of President George W. Bush, PEPFAR was aptly named. The global HIV/AIDS epidemic was an emergency. By 2003, more than 20 million men, women, and children had died of AIDS-related illnesses in sub-Saharan Africa alone. Mothers, fathers, teachers, doctors, nurses, police, and soldiers were dying, and in the wake of their untimely deaths, 14 million children were left behind, without parents or communities to support them. There were substantial concerns, including those voiced by the U.S. National Intelligence Council, that HIV/AIDS was not only an unprecedented health crisis, but also a threat to security. In this phase, PEPFAR helped to reverse the death and devastation wrought by the epidemic, dramatically expanding access to HIV prevention, treatment, and care services – often where few if any such resources were previously available.

PEPFAR II

During our second phase, under the leadership of President Barack Obama, PEPFAR continued to expand access to HIV prevention and treatment,

reaching millions more men, women, and children in need. The program also embraced a greater focus on country ownership and sustainability, seeking to ensure that the gains being made and the health delivery systems that were built to support them would be in place for the long term. In this phase, a range of new scientific breakthroughs – including VMMC, treatment as prevention, and more efficacious and less costly treatment regimens – were rapidly translated into program implementation, saving and improving more lives.

PEPFAR III

During our third (and current) phase, under the leadership of President Donald Trump, PEPFAR is firmly focused on controlling the HIV/AIDS epidemic as a public health threat. Building from the strong foundation from the prior years, PEPFAR is using the latest scientific tools and the

best available data to rapidly accelerate progress toward epidemic control, driven by transparent, accountable, and cost-effective investments. With a strong commitment to advancing HIV/AIDS efforts in the more than 50 countries that PEPFAR supports, the program is also working to seize the unique opportunity to achieve epidemic control in up to 13 high-HIV-burden countries by 2020, creating the road map to reach epidemic control in all PEPFAR-supported countries. PEPFAR is also strengthening our partnerships with the private sector, faith-based community, and others that can help us to reach these goals.

Accelerating Progress Toward Epidemic Control

Today, thanks to PEPFAR and our partners, despair and death have been overwhelmingly replaced by hope and life. The HIV/AIDS



CREDIT: The White House

The Trump administration commemorates World AIDS Day by placing an AIDS Ribbon in front of the White House on December 1, 2017.



A mother and her child visit a health clinic in Honduras.

epidemic is not only becoming controlled in five African countries, but the *PEPFAR Strategy for Accelerating HIV/AIDS Epidemic Control (2017-2020)* reaffirms the U.S. government's commitment to contributing to accelerated progress toward achieving epidemic control in more than 50 countries. It also highlights the unique possibility that up to 13 high-HIV-burden countries are poised to control their epidemics by 2020 with continued focus and support. This bold Strategy, along with increased funding from implementing countries, provides a road map to sustain gains made from the U.S. government investment. Ending the health security threat posed by the epidemic is now possible, but it will not happen easily or automatically. We have the ability to finish what PEPFAR started, but it will take urgency, action, and focus. PEPFAR has made the impossible possible, and we are well positioned to do it again.

The American people – as they so often do – are leading the way. We can make our resources even

more effective with respect to lives saved and infections averted as high-HIV/AIDS-burden countries expand treatment eligibility to all PLHIV, while at the same time, appropriately and aggressively implementing key recommendations for models of differentiated service delivery. Above all else, we must continue using data to drive decisions.

Delivering on the Vision

To accelerate progress toward controlling the epidemic and, ultimately, ending the AIDS pandemic as a public health threat, we must sustain and expand our collective gains. Led by our strategic vision, PEPFAR 3.0—Controlling the Epidemic: Delivering on the Promise of an AIDS-free Generation, we are using data to do the right things, in the right places, in the right way, and right now. PEPFAR 3.0 outlines how we can reach sustainable control of the

HIV/AIDS epidemic through transparency, accountability, and impact. To deliver on this vision, PEPFAR is focused on four core priorities.

1. Increasing the Impact and Cost-Effectiveness of Every Dollar Invested

PEPFAR's data-driven, cost-effective investments are accelerating progress toward controlling and ultimately ending the HIV/AIDS pandemic. We use the latest science and the best available data to ensure we are delivering the greatest possible impact with every dollar that we invest. At every level of the program, we have eliminated duplication, streamlined business practices, and shifted resources to where they will be used in the most cost-effective manner to serve those most in need. This rigor has allowed PEPFAR to significantly expand our results and impact without increased financial resources.

PEPFAR works tirelessly to analyze data down to the site level to focus programs in the geographic areas and populations with the greatest HIV/AIDS burden. Data on HIV incidence, viral suppression, prevalence, and other key elements are essential to evaluating progress toward achieving epidemic control. PEPFAR disaggregates all of our data by sex, age, and geography in order to target and tailor our efforts to reach the specific needs of those we serve. These data inputs not only give us the clearest picture of the epidemic, but also our teams and partners the ability to respond efficiently to in-country challenges.

The PEPFAR-supported Population-based HIV Impact Assessments (PHIAs) provide valuable data on the progress we have made and the critical gaps that remain toward achieving HIV/AIDS epidemic control. To date, seven countries have completed PHIAs (six additional countries will conduct PHIAs on a rolling basis from 2018–2019). These assessments show that five of these countries – Lesotho, Malawi, Swaziland,

Spotlight



A group of young children in South Africa. CREDIT: USAID

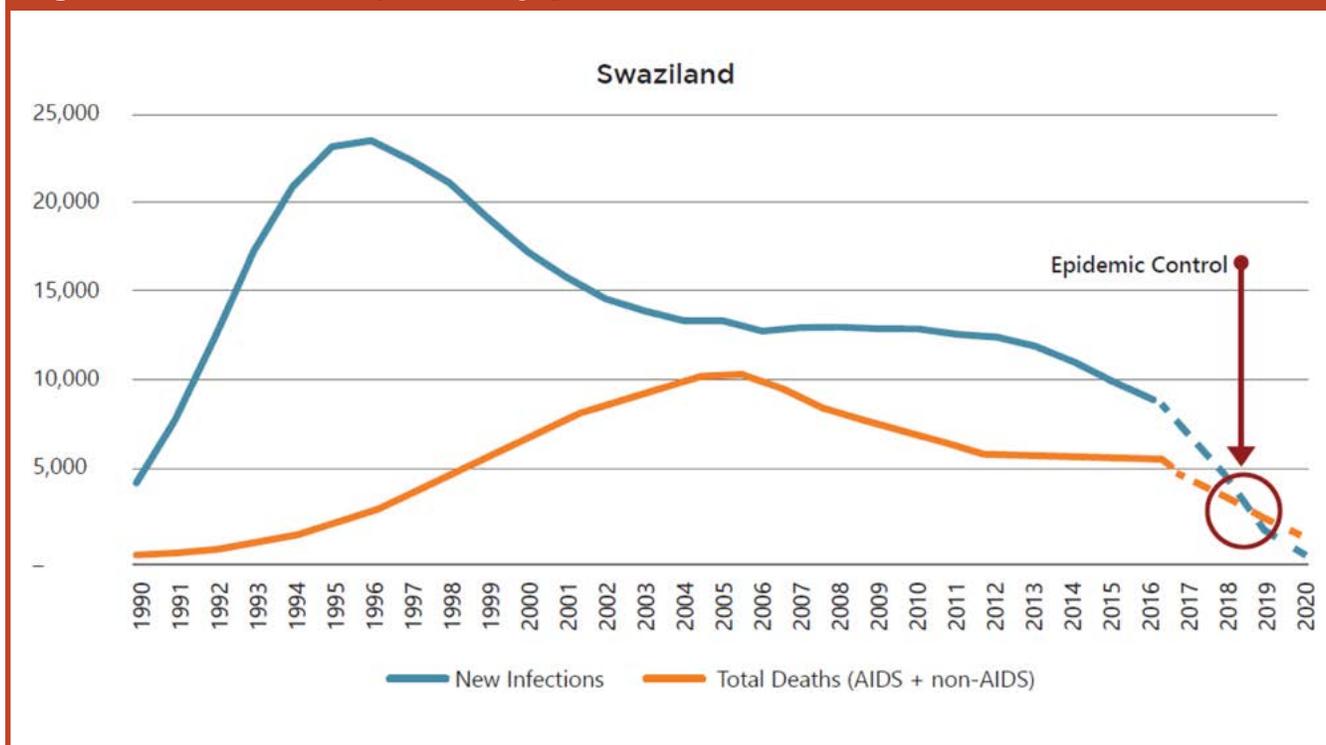
Ensuring Children Survive and Thrive

PEPFAR is the world's largest supporter of children living with and affected by HIV/AIDS.

PEPFAR continues to contribute 10 percent of all of our program funds to mitigate the physical, emotional, and economic impacts of HIV/AIDS on children. To ensure children thrive and are protected from HIV, as of September 30, 2017, PEPFAR had supported more than 6.4 million orphans and vulnerable children and their caregivers affected by HIV/AIDS.

To ensure that children with HIV thrive, PEPFAR continues to focus nearly a half billion dollars annually on expanding the diagnosis and treatment of children living with HIV. This includes by identifying and addressing key barriers to diagnosing children living with HIV and by working with industry to ensure that more child-friendly, efficacious, and affordable antiretroviral treatment regimens are produced. Without treatment, 50 percent of HIV-positive children will die before their second birthday, and 80 percent before turning 5 years of age. As of September 30, 2017, PEPFAR had supported nearly 1 million children on lifesaving ART.

Zambia, and Zimbabwe – are approaching control of their HIV/AIDS epidemics. In Swaziland, for example, HIV incidence dramatically declined by more than 45 percent between 2011 and 2016, coinciding with the U.S.'s increased investment in

Figure E: Swaziland – Pathway to Reaching Epidemic Control

and focus on expansion of effective programming in partnership with the Kingdom of Swaziland. The repeat PEPFAR-supported HIV incidence and prevalence survey showed that the country is projected to achieve epidemic control if we maintain our momentum and focus (Figure E).

Across these countries, the major drivers of success were data-driven strategies to increase HIV treatment coverage; expand access to proven HIV prevention interventions, such as VMMC; and reduce new HIV infections among adolescent girls and young women through the PEPFAR-led DREAMS partnership. In the two countries where the PHIA results show that progress was slower – Tanzania and Uganda – these strategies were not nearly as focused and the coverage of core interventions is lower, but has the ability to expand rapidly and increase impact. A recent study in Uganda’s Rakai District published in the *New England Journal of Medicine* shows that progress is possible and the lessons from

Rakai must be utilized throughout Uganda to increase impact and achieve epidemic control.

While the PHIA results demonstrate tremendous gains, they also reveal key gaps in HIV prevention and treatment programming for children, younger men and younger women that require urgent attention and action. Children under 15 years of age have inadequate access to HIV diagnosis and treatment. PEPFAR is committed to improve service access for babies and children by analyzing data and holding ourselves accountable. In all seven completed PHIA, young women and men under age 35 were far less likely to know their HIV status, be on HIV treatment, or be virally suppressed than older adults. These gaps are all areas in which PEPFAR continues to invest and innovate under our new Strategy. In particular, PEPFAR will continue to advance efforts to reduce HIV incidence among adolescent girls and young women through the DREAMS PPP and reach and link more young men to HIV services.

Creating Male-Friendly HIV Services

Data from many countries show that men, especially those ages 20–35, tend to access HIV testing at lower rates than do young women. As a result, men living with HIV often enter care with more advanced disease, are less likely to receive lifesaving antiretroviral treatment, miss opportunities to prevent ongoing transmission, and have higher AIDS-related mortality than their female counterparts.

To help break down barriers to men accessing HIV prevention and treatment, the PEPFAR-supported Witkoppen’s Mvuselelo Male-Friendly Clinic in South Africa has created an environment where men can relax and address their health problems. Witkoppen, a winner of the PEPFAR-funded DREAMS Innovation Challenge, consulted directly with men in developing the clinic. Male patients identified barriers such as long wait times, and the importance of male staff and flexible operating hours. “Mvuselelo provides a space where we can talk freely without fear of being stigmatized,” says one patient.



CREDIT: Robin Kirk

Outreach to young men.

The clinic is a one-stop shop for men, offering primary health services such as screening and management of sexually transmitted infections and other acute and chronic conditions; HIV testing, counseling, care, and treatment; and health education, as well as referrals for other health needs. Many men who visit Mvuselelo also have learned to discuss HIV transmission risk reduction, treatment, and care with their partners.

Through the PEPFAR Dashboards, we make PEPFAR data public to drive greater impact, transparency, and accountability for all stakeholders, including U.S. citizens, communities around the world, civil society organizations, U.S. government agencies, donors, and partner country governments. Anyone, anywhere may view and utilize PEPFAR-planned funding, program results, and expenditure analysis data in an accessible and easy-to-use format. By using data, we have improved partner performance and increased program efficiency and effectiveness. As part of this effort, the Interagency Collaborative for Program Improvement (ICPI) brings together experts from PEPFAR’s seven implementing agencies to analyze, monitor, and optimally allocate the resources needed to control the epidemic.

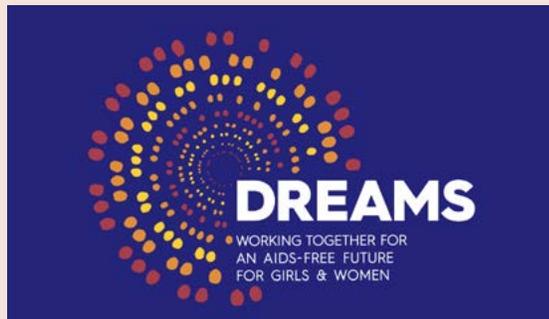
We also rigorously manage our partners to increase their performance and efficiency and conduct intensive quarterly reporting and monitoring of the entire program. In the end, we are all accountable to the U.S. Congress and the American people, who put their trust in PEPFAR to save lives and to adapt and evolve in order to deliver the greatest possible return on investment. The people we serve and the American taxpayer deserve nothing less.

2. Focusing Prevention for Impact

PEPFAR’s prevention investments are having their greatest impact in the history of the program.

As of September 30, 2017, PEPFAR had supported more than 15.2 million men and boys in eastern

Spotlight



DREAMS Partnership

The latest PEPFAR data show that, for the first time, we have driven significant declines in new HIV diagnoses among adolescent girls and young women. In the 10 African countries implementing PEPFAR's pioneering DREAMS (Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe) public-private partnership, nearly two-thirds of the highest HIV-burden communities or districts have achieved a 25–40 percent or greater decline in new HIV diagnoses among young women since 2015. Importantly, new diagnoses have declined in nearly all DREAMS intervention districts. The DREAMS partnership is not only preventing HIV among adolescent girls and young women, but also empowering them to be the leaders of tomorrow.

Alongside DREAMS, we have invested substantially to find and reach more men with HIV prevention and treatment services, including through applying innovative approaches to bring men into the health care system, which they often otherwise do not access until they are ill.

and southern Africa with substantial protection from HIV infection through the provision of VMMC. In FY 2017 alone, PEPFAR supported the largest single-year increase (nearly 3.5 million) in VMMC procedures since the program's inception.

Every year, 360,000 adolescent girls and young women are infected with HIV – nearly 1,000 a day. Gender-based violence (GBV) is a significant

reason why, affecting millions of adolescent girls and young women. Girls who experience violence are up to three times more likely to be infected with HIV or other sexually transmitted infections. Violence Against Children (VAC) surveys (most of them supported by PEPFAR) in 11 countries found that an average of one in three children reported their first sexual experience was forced or coerced. PEPFAR will need to move from the primary focus on post-rape care to a laser focus on the prevention of rape of girls ages 9–14 to help ensure all children can thrive, HIV-free.

To address these alarming statistics, PEPFAR launched the DREAMS PPP on World AIDS Day 2014. On World AIDS Day 2017, we reported that in the 10 African countries implementing DREAMS programs, nearly two-thirds (65 percent) of the highest HIV-burden communities or districts have achieved a 25–40 percent or greater decline in new HIV diagnoses among young women since 2015. Importantly, new diagnoses declined in nearly all of the 63 DREAMS intervention districts. DREAMS private sector partners include the Bill & Melinda Gates Foundation, Gilead Sciences, Girl Effect, Johnson & Johnson, and ViiV Healthcare.

To ensure the sustainability of our DREAMS efforts, PEPFAR integrated DREAMS programming and budgets into our 2017 Country Operational Plans (COP 2017). In COP 2017, we also added DREAMS-like programming in five additional countries – Botswana, Côte d'Ivoire, Haiti, Namibia, and Rwanda – with a particular focus on girls ages 9–14 to prevent sexual violence and prevent HIV through avoiding sexual risk.

Also, on January 23, 2017, President Trump issued a Presidential Memorandum reinstating the January 22, 2001 Presidential Memorandum on the “Mexico City Policy” for the U.S. Agency for International Development's (USAID) family planning assistance and directing the secretary



CREDIT: USAID

Beneficiaries of PEPFAR's PMTCT programs in Swaziland.

of state, in coordination with the secretary of Health and Human Services, to implement a plan to extend the Mexico City Policy to “global health assistance furnished by all departments or agencies” to the extent allowable by law. The expanded policy is referred to as Protecting Life in Global Health Assistance (PLGHA). PEPFAR works with the relevant U.S. government agencies to implement the policy consistently, examine progress toward its implementation, and monitor its effects to ensure U.S. taxpayer money is not used to fund foreign organizations that perform or actively promote abortion as a method of family planning in other nations.

PEPFAR continues to contribute 10 percent of all of our program funds to mitigate the physical, emotional, and economic impacts of HIV/AIDS on children. As of September 30, 2017, PEPFAR had provided care and support

to more than 6.4 million orphans, vulnerable children, and their caregivers. We have also enhanced the quality of services across our OVC programs to support even better health outcomes for children. Additionally, PEPFAR is collaborating with UNAIDS and other partners on the *Start Free Stay Free AIDS Free* framework for children, adolescents, and young adults.

We cannot end the HIV/AIDS epidemic through medical interventions alone. We must also address the underlying social issues, especially unequal human rights and stigma and discrimination, that prevent people from accessing the medical interventions of HIV prevention and treatment. When any person is stigmatized or unable to access services due to discrimination, the health of everyone in the community is threatened and the epidemic continues to expand rather than contract.



U.S. Secretary of State Rex Tillerson shakes hands with Mozambique President Filipe Jacinto Nyusi before their bilateral meeting at the U.S. Department of State in Washington, D.C., on June 14, 2017.

PEPFAR has specific initiatives addressing the dynamics driving stigma, discrimination, and violence as a part of our broader efforts to expand key populations' access to and retention in quality HIV/AIDS prevention and treatment services.² Programs such as the Key Populations Investment Fund, the Key Populations Implementation Science Initiative, and the Local Capacity Initiative work to understand, document, and respond to the unique needs of these populations, as well as strengthen the implementation capacity of key population-led and other civil society organizations. PEPFAR continues to prioritize efforts and leverage partnerships to ensure all individuals have safe, nondiscriminatory access to HIV prevention and treatment. But we need to move to more precise measurements of stigma

and discrimination to ensure we are having a clear impact and that service access is improving.

PEPFAR partners with the Elton John AIDS Foundation on a \$10 million Key Population Fund initiative to strengthen organizations working to meet the HIV needs of Lesbian, Gay, Bisexual, and Transgender (LGBT) people, with a focus on sub-Saharan Africa and the Caribbean. PEPFAR is also a founding donor of the Robert Carr Civil Society Networks Fund, which supports civil society networks to support inadequately served populations' access to HIV services. Through PEPFAR's various collaborations, such as with the Elton John AIDS Foundation and the Robert Carr Civil Society Networks Fund, and our own initiatives, such as the Key Populations Investment Fund, the program is investing in civil society leadership and capacity to increase quality access to HIV services for key populations.

3. Accelerating Access to HIV Treatment

As of September 30, 2017, PEPFAR had supported more than 13.3 million men, women, and children on lifesaving HIV treatment – nearly twice as many as only four years ago.

HIV treatment is one of the most cost-effective investments toward controlling the epidemic, both for the health of the patient receiving the medication and to prevent onward transmission of HIV. Science shows that one of the most important factors in the successful treatment of HIV is the early initiation of ART. The sooner that a person living with HIV begins treatment, the more intact their immune system remains and the faster they can achieve viral suppression, which virtually eliminates their risk of them transmitting the virus.

² UNAIDS. (2014). 90-90-90: An Ambitious Treatment Target to Help End the AIDS Epidemic. Retrieved from http://www.unaids.org/sites/default/files/media_asset/90-90-90_en_o.pdf

PEPFAR has worked aggressively with our partner countries to adopt and rapidly implement “Test and Start” approaches to HIV treatment, whereby an individual who tests positive for HIV is immediately offered lifelong ART. By combining this approach with the implementation of other key policies priorities – such as using differentiated models of care, including multi-month ART prescriptions for stable HIV patients and same-day initiation of ART for new patients – we can dramatically increase the coverage of ART, improve retention in HIV treatment programs, and reduce the financial and time burden placed on both national health systems and our patients. With these critical changes, we can treat more people with the same financial resources.

We are also committed to using the most efficacious, safest, quality-assured, and lowest cost ART regimens possible. For this reason, PEPFAR is working with partner governments and multilateral partners to support the rapid adoption of tenofovir/lamivudine/dolutegravir (TLD) as a first-line ART for adults and adolescents currently receiving efavirenz-based first-line ART or for those who are ready to start ART. This will not only be better for the patient, but also it will reduce overall costs of PEPFAR support into the future.

PEPFAR is the world’s largest supporter of children living with and affected by HIV/AIDS. Without treatment, 50 percent of HIV-positive children will die before their second birthday, and 80 percent before turning 5 years of age. PEPFAR is significantly expanding access to pediatric treatment. This includes by identifying and addressing key barriers to diagnosing children living with HIV and by working with industry to ensure that more child-friendly, efficacious, and affordable ART regimens are produced. As of September 30, 2017, PEPFAR had supported nearly 1 million children on lifesaving ART and continues to invest nearly a half billion dollars annually to ensure children are prioritized within PEPFAR.

Spotlight



Religious leaders gather with school children to commemorate the Day of the African Child on June 16, 2017.

CREDIT: World Council of Churches

Strengthening Our Partnership with Faith-Based Organizations

From the earliest days of the epidemic, faith-based organizations (FBOs) have been central to the HIV/AIDS response. They remain indispensable partners in the effort. In many PEPFAR countries, FBOs are the largest nongovernmental provider of HIV services. This is why PEPFAR has committed more than \$1 billion in planned funding to more than 40 faith-based partners since 2012.

PEPFAR continues to strengthen our partnership with FBOs. One of the most important facets of our commitment to work with faith-based partners is our shared focus on pediatric treatment and our ambitious goals toward ending AIDS in children, adolescents, and young women by 2020 as captured by the *Start Free Stay Free AIDS Free Framework*.

In November 2017, PEPFAR, along with the Vatican Dicastery for the Promotion of Integral Human Development, UNAIDS, Caritas International, Ecumenical Advocacy Alliance – World Council of Churches, the WHO, and the Elizabeth Glaser Pediatric AIDS Foundation, convened leaders of major pharmaceutical and medical technology companies, multilateral organizations, donors, governments, faith-based partners, and other key stakeholders for a High-Level Discussion on Scaling Up Early Diagnosis and Treatment of Children and Adolescents. Participants gathered to discuss ways to expedite the research, development, approval, introduction, and uptake of optimal drugs and formulations for infants, children, and adolescents.

To expand access to HIV treatment, PEPFAR continues to work closely with The Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), partner country governments, and others, with a focus on reducing duplication and maximizing impact – so that the most people in need of ART can be reached with all available resources.

There are also numerous economic benefits from treating PLHIV before they develop AIDS.

Healthy HIV-infected individuals on treatment are able to work and support their families. Keeping parents healthy also lessens other social costs, such as caring for children whose parents die of AIDS-related illnesses. Robust statistical models show the economic benefits of treatment will likely exceed program costs within just a decade of investment. In other words, treating people not only saves lives, but also generates considerable economic returns.

Serving Children in Kenya

Mercy Millicent only learned her own HIV status after her mother died in 2007. Her aunt took her to Lea Toto for treatment, and there Mercy found much more than just medication. She learned to accept her status, and participated in Lea Toto programs around life skills, education, and counseling. Today, she is 22 and a student at the Kenya Institute of Management. Mercy credits Lea Toto for her thriving. “Today, I am who I am because of Lea Toto. Acceptance came from within.”

Lea Toto means “to raise a child” in Swahili, and the work done by the Children of God Relief Institute (COGRI) in Kenya at their Lea Toto Program has helped to raise more than 10,000 HIV-positive children to lead their healthiest and fullest lives. Lea Toto is just one of the four essential programs run by COGRI in Kenya; there is also Nyumbani Home, Nyumbani Village, and Nyumbani Lab.

Lea Toto aims to improve the quality of life of HIV-positive children living in eight of Nairobi's poorest informal settlements. Since its founding in 1999, it has become one of the largest nongovernmental pediatric HIV/AIDS providers in Kenya. It currently cares for more than 3,000 HIV-positive children who live with a family member, and facilitates a holistic process to health care that involves comprehensive medical care, provision of antiretroviral drugs, nutrition and food services, psychosocial support, education, and vocational training.



Sister Mary with a group of children at Lea Toto in Kenya.

CREDIT: COGRI

Additionally, Lea Toto is at the forefront of adolescent outreach, and the program focuses on teaching comprehensive life skills and economic empowerment, while building capacity.

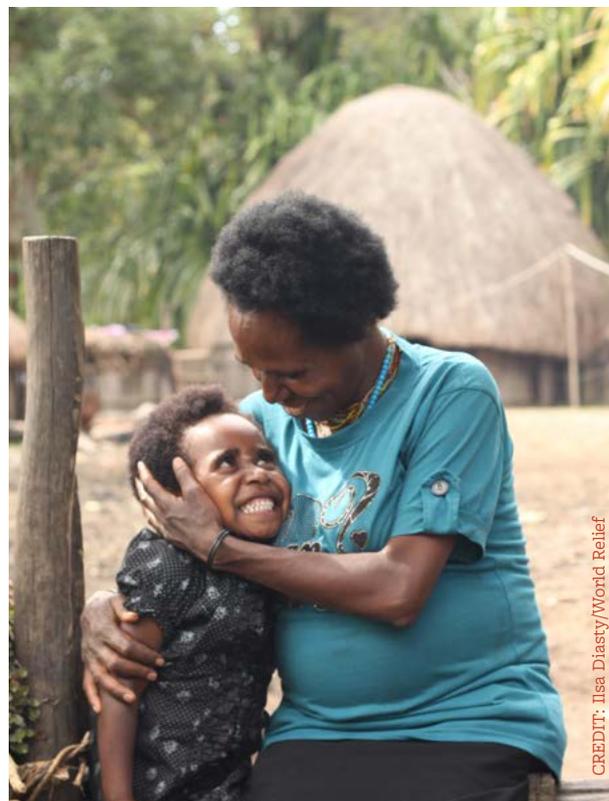
PEPFAR and USAID have been longtime funders of the work done by COGRI; for example, PEPFAR funds 80 percent of the Lea Toto program and provides all antiretroviral treatment to the children living at Nyumbani Home. Sister Mary Owens, COGRI's executive director, says that the impact of these essential funds is clear when you look around and see their children grow up. “It gives us the chance to do more work, and also a means of creating awareness among people and properly informing them about what HIV is: It is simply a medical condition that can be contained, and young people living with it can still live full lives.”

4. Leveraging Partnerships for Sustainability

No single actor alone can control and ultimately end the HIV/AIDS pandemic. We need all sectors and diverse partners working together to provide financing, demonstrate political will, and carry out interventions both within and outside of the health sector, and we must always include people directly affected by HIV in any response.

PEPFAR works closely with our partner countries toward achieving epidemic control while promoting the long-term sustainability of their HIV/AIDS responses. We use the new tools we have developed, including the Sustainability Index and Dashboard, to track progress on our overall goals, as outlined in the Sustainable HIV Epidemic Control PEPFAR Position Paper. We must continue to act decisively and strategically with our resources and continue to bring other donors and partner countries to the table to respond to and ultimately help end the epidemic. Over the past few years under U.S. leadership, many countries have substantially increased their own investments in controlling HIV. Several countries in southern Africa provide the majority of available resources to address their own epidemics, including by covering the lion's share of cost for HIV treatment. These countries include Botswana, Namibia, South Africa, and Swaziland. Vietnam is also taking over the primary cost of HIV treatment. Each year, additional PEPFAR-supported countries are increasing their own investment in their response and critically focusing these investments on the most effective interventions, creating a partnership with impact.

Working with multilateral partners such as UNAIDS and the Global Fund, PEPFAR optimizes our investments, strengthens country leadership and sustainability, and enhances service delivery. UNAIDS is the international standard bearer in HIV/AIDS for setting critical goals in the global



A local pastor greets a child in the highlands of Papua New Guinea. The pastor teaches his congregation about HIV transmission and prevention.

call to end the epidemic. Our collaboration with UNAIDS supports countries in overcoming key policy, programming, and implementation challenges. Over the last several years, PEPFAR and UNAIDS have worked together to build global commitment to achieve the UNAIDS 90-90-90 treatment goals as a key benchmark in reaching epidemic control and moving toward the end of the AIDS epidemic. The increased partnership between PEPFAR and the Global Fund, to which we are the largest donor, maximizes the impact of our joint investments through the more strategic use of resources to support programs that are impactful and sustainable. PEPFAR also dedicates initiatives to strengthen civil society engagement, leadership, and capacity, including with FBOs, recognizing that sustainable HIV/AIDS interventions must be tailored to and informed by the communities we serve.



CREDIT: U.S. Department of State

Deputy Secretary of State John Sullivan delivers remarks to commemorate World AIDS Day at an event at the U.S. Department of State in Washington, D.C., on November 30, 2017.

PEPFAR forges strategic PPPs that support and complement our HIV prevention, care, and treatment work. These partnerships translate new ideas into practice and accelerate impact, benefiting from the private sector's expertise and resources as well as its leadership, energy, and inspiration. PEPFAR also advances global health diplomacy through close engagement with U.S. chiefs of mission in partner countries, as well as with their counterpart foreign diplomats based in Washington, D.C., to increase the impact of U.S. health investments and partnerships.

Since our founding, PEPFAR has built health infrastructure and strengthened capacity through an emphasis on sustainability. This infrastructure and capacity not only support people living with HIV/AIDS, but also are leveraged for maternal and child health, tuberculosis, malaria, immunizations, and emergency disease outbreak responses. We invest in robust laboratories and

well-trained laboratory specialists critical to well-functioning health systems, enabling clinicians and health workers to better diagnose and treat a range of diseases and conditions. PEPFAR has trained nearly 250,000 health care workers to deliver and improve HIV care and other health services, creating a lasting infrastructure that enables partner countries to address all health challenges of today and tomorrow.

Key Remaining Challenges

We have a narrow window to change the course of the pandemic and put the world on track to end AIDS by 2030, the target set by the global community when 193 countries adopted the 2030 Agenda for Sustainable Development and the Sustainable Development Goals. We must seize this historic opportunity.

According to UNAIDS, nearly 37 million people are living with HIV globally; however, the number of those on treatment is currently 20.9 million. While treatment access has increased by more than 160 percent since 2010, there is still much more to do to ensure everyone is virally suppressed, especially children and individuals under age 35. Constant evaluation of program implementation, epidemic data, and partner performance is essential to continue to accelerate our impact. We must continue to act decisively and strategically with our resources and to bring other donors and high-HIV-burden countries to the table; otherwise, we all risk an epidemic that rebounds beyond the global community's capacity to respond.

The time to act is now. Every week, 32,000 people are infected with HIV globally, including 6,900 young women and 3,000 children, and 19,000 people die of AIDS-related illnesses. In sub-Saharan Africa, adolescent girls and young

women are especially affected. Of all the new HIV infections in adolescents in the region, nearly 75 percent are among females; they are up to 14 times more likely to contract HIV/AIDS than young men.

This is particularly concerning as the population of those ages 15–24 in sub-Saharan Africa is set to double in size by 2020, reaching 200 million (Figure F). This “youth bulge” comprises 100 million more young people in sub-Saharan Africa than we had in 1990. The result: millions more young people who are entering a time in life when they are most susceptible to HIV infection, often without an education or job opportunities. These demographic trends mean that we must work hard just to keep up, and we must work even harder and faster to stay ahead of the epidemic.

As results from the PHIA demonstrate, while we see strong progress for older adults and children, there are critical gaps in HIV prevention and treatment programming for younger men

Figure F: Youth Bulge in Sub-Saharan Africa

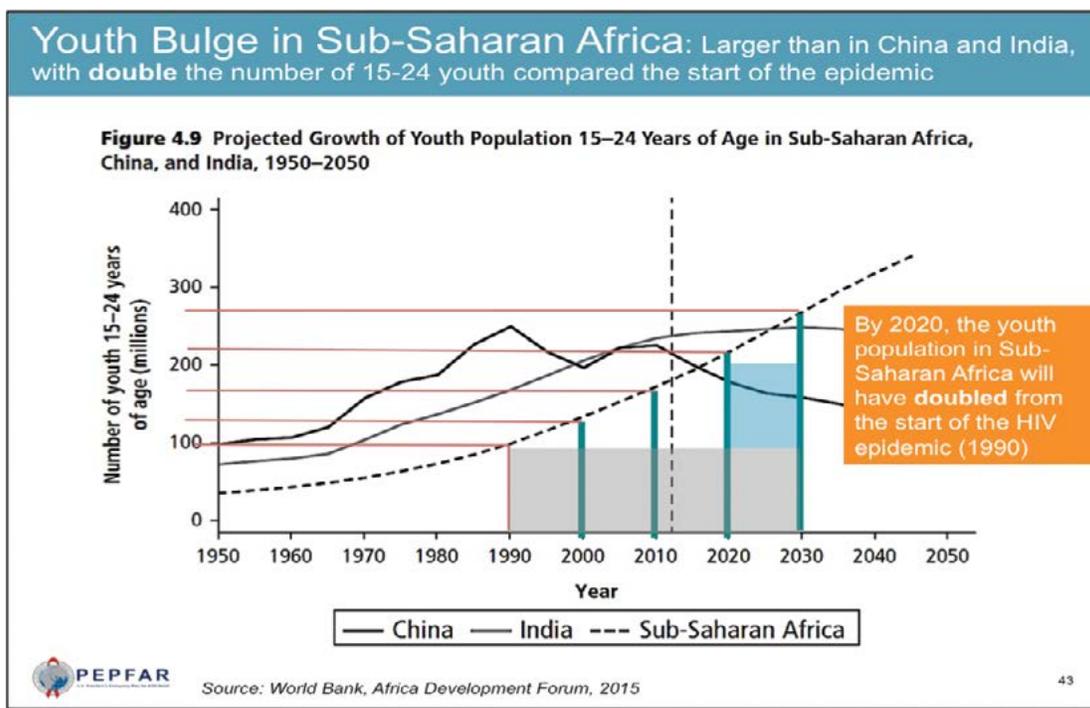
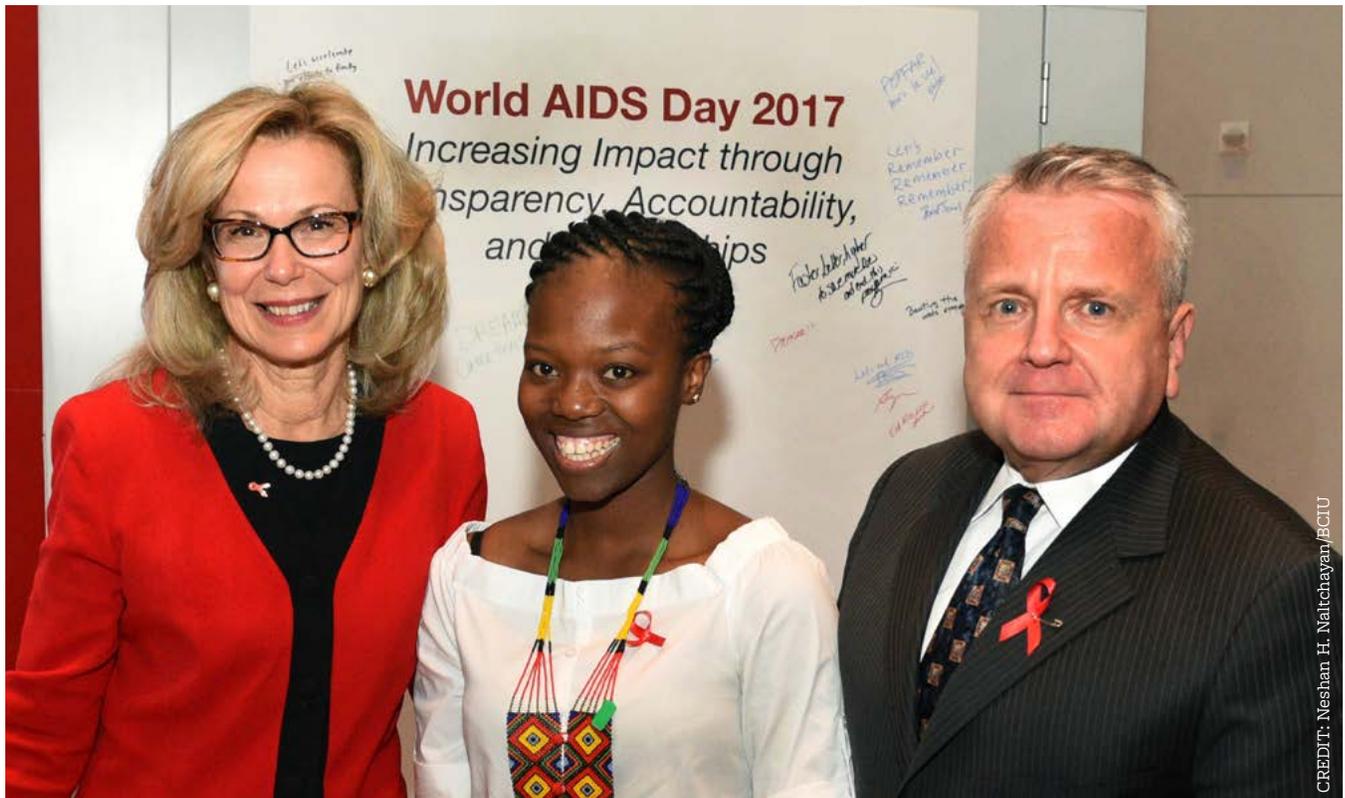
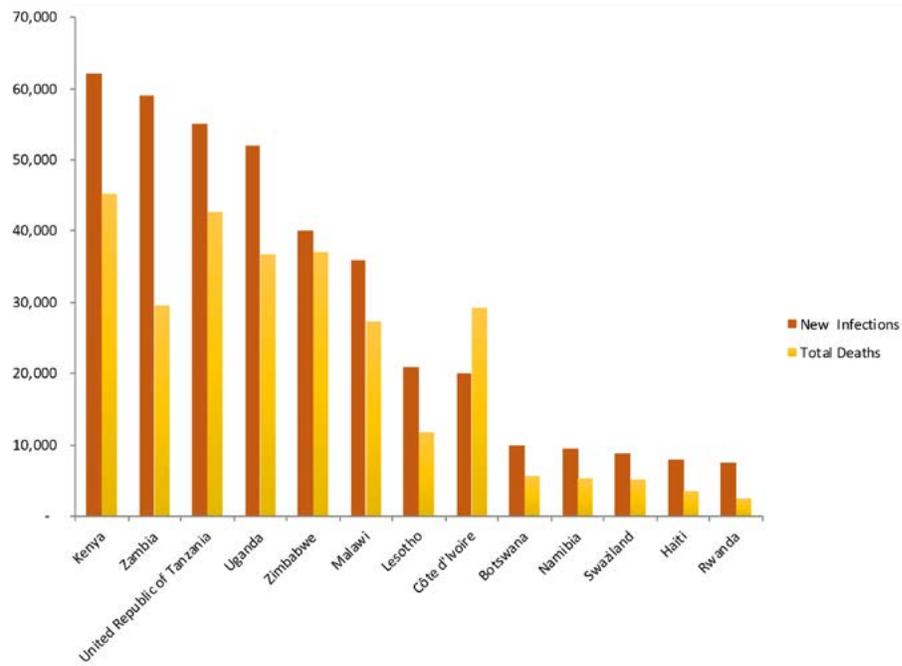


Figure G: Progress Needed to Achieve Epidemic Control in 13 High-Burden Countries



CREDIT: Neshan H. Nalchayan/BCIU

Deputy Secretary of State John Sullivan (right), celebrating World AIDS Day with DREAMS Ambassador Nontokoza Zakwe (middle) and Ambassador Deborah L. Birx (left) at the U.S. Diplomacy Center.

and women that require urgent attention and action. In all seven surveys conducted to date, young women and men under age 35 were far less likely to know their HIV status, be on HIV treatment, or be virally suppressed than older adults. Despite important gains achieved through DREAMS, adolescent girls and young women remain highly vulnerable to infection. We are also still struggling to find and reach many younger men with HIV services. Moreover, key populations are too often relegated to the shadows by stigma, discrimination, and violence.

Above all, while the gains we have made together are remarkable, they are also fragile and can be quickly reversed if we slow down or grow complacent. Protecting our investment to date, ensuring control of this pandemic, and decreasing the future costs required to address HIV/AIDS are our daily focus and will be the key to our collective success.

PEPFAR Strategy for Accelerating Progress Toward Epidemic Control

The *PEPFAR Strategy for Accelerating HIV/AIDS Epidemic Control (2017-2020)* reaffirms the U.S. government's leadership and commitment, through PEPFAR, to accelerate efforts toward epidemic control in more than 50 countries, ensuring access to services by all populations, including the most vulnerable and at-risk groups. It also sets a bold course for accelerated PEPFAR implementation in a subset of 13 high-burden countries with the greatest potential to achieve HIV/AIDS epidemic control by 2020 (Figure G). PEPFAR will support these 13 countries to achieve at least 90 percent of PLHIV who know their status, 90 percent of people who know their status accessing treatment, and 90 percent of people on treatment having suppressed viral loads across all ages, genders, and at-risk groups by 2020. Epidemic control

Spotlight

Targeting Public-Private Partnerships for Impact

Partnerships with the private sector play a critical role in advancing progress toward ending the HIV/AIDS epidemic. PEPFAR strategically focuses on our public-private partnerships (PPPs) to increase programmatic impact and efficiency. PEPFAR's PPP strategy includes finding opportunities where the private sector can complement PEPFAR goals and priorities by leveraging private sector brands, distribution networks, innovation, technology, and market-driven approaches to help achieve epidemic control.

Much like the private sector, PEPFAR is focused on accountability and scale. PEPFAR often looks to business models of private sector companies for ideas on how to run the program most effectively and efficiently. PPPs enable PEPFAR to not only share risks, resources, and rewards, but also find greater efficiencies in program delivery.

In 2017, PEPFAR developed, implemented, and sustained 16 global PPPs. In addition to achieving greater efficiencies within the program, these partnerships demonstrate PEPFAR's continued commitment to achieving epidemic control among children, adolescent girls and young women, boys and men, and key populations.

will only be attained when these targets are met for adults and children.

This Epidemic Control Strategy focuses and aligns U.S. government resources and activities by emphasizing the following five action steps:

- Acceleration of optimized HIV testing and treatment strategies, particularly to reach men under age 35. This is important, as we know that more than half of men under age 35 do not know their HIV status and are not on treatment, which is fueling the epidemic in young women ages 15–24 and young men ages 25–35



CREDIT: USAID

A patient receives an HIV test at a mobile clinic in Thailand.

- Expansion of HIV prevention, particularly for young women under age 25 and men under age 30, through the scale-up of innovative and successful DREAMS efforts and the expansion of VMMC for boys and young men in targeted age bands
- Continuous use of granular epidemiologic and cost data to improve partner performance and increase program impact and effectiveness
- Renewed engagement with FBOs and the private sector to accelerate and improve efforts toward epidemic control and ensuring access to lifesaving services for children
- Strengthened policy and financial contributions by partner governments in the HIV/AIDS response

Conclusion

We have the historic opportunity to control and ultimately end the HIV/AIDS pandemic as a public health threat. This year marks the 15th anniversary of PEPFAR. Since our inception, PEPFAR has worked tirelessly to strengthen our partnerships, increase efficiencies, and expand impact, driven by a relentless commitment to transparency and accountability. Our stewardship over PEPFAR is inspired and enabled by the compassion and generosity of the American people and the U.S. Congress, which we honor daily through our commitment to programmatic excellence and oversight, and to the millions of men, women, and children whom we are privileged to serve around the world.

PEPFAR thrives due to the exceptional contributions from within the U.S. government.

Around the globe, the U.S. ambassadors have been essential in ensuring that critical policy changes occur, so our dollars are utilized more effectively, and that our partnerships are more accountable and transparent. The leadership at the U.S. Department of State's Office of the Global AIDS Coordinator and Health Diplomacy, combined with the implementation through USAID; the U.S. Department of Health and Human Services and its agencies, including the Centers for Disease Control and Prevention, Health Resources and Services Administration, and the National Institutes of Health; the Department of Defense; the Peace Corps; and the Department of Labor, as well as our partnership with the Department of the Treasury, demonstrate the true strength of the whole-of-government approach. The dedicated career staff working internationally under the leadership of the chiefs of mission at our embassies overseas are vital to bilateral engagement and ensuring successful implementation.

Together, we apply a data-driven, targeted approach to address one of the most complex global health crises in modern history. The U.S. challenged the conventional wisdom that nothing could be done to reduce new HIV infections and control the epidemic in high-burden countries by dramatically expanding evidence-based, community-focused HIV prevention, treatment, and care programs in under-resourced settings. Time and again, PEPFAR has made the impossible possible.

Each day we wake up guided by the memory of the 35 million men, women, and children who have died from AIDS-related illnesses since the start of the epidemic. PEPFAR is determined to work even harder and smarter to save and improve the lives of the nearly 37 million people who are still living with the disease.

For the first time, the end of the HIV/AIDS epidemic is in sight. The U.S., through PEPFAR, continues to lead the way.

INCREASING THE IMPACT AND COST-EFFECTIVENESS OF EVERY DOLLAR INVESTED

PEPFAR is committed to using data to focus investments in evidence-based interventions in the geographic areas and populations with the greatest HIV/AIDS burden for maximum impact. Utilizing data for decision-making is critical to reach those in most need of HIV services. Programmatic and surveillance data on HIV incidence, viral suppression, and prevalence across gender and all age groups are essential to evaluating progress toward the achievement of epidemic control.

PEPFAR disaggregates all of our data by sex, age, and geography in order to target and tailor our efforts to reach the specific and unique needs of those we serve. These data inputs give us not only the clearest picture of the epidemic, but also our teams and partners the ability to respond efficiently to in-country challenges.

We also rigorously manage our partners to increase their performance and efficiency, and conduct intensive quarterly reporting and monitoring of the entire program. In the end, we are all accountable to the United States (U.S.) Congress and the American people, who put their

trust in PEPFAR to save lives and to adapt and evolve in order to deliver the greatest possible return on investment. The people we serve and the American taxpayer deserve nothing less.

Delivering more with every dollar means that PEPFAR will continue to use data and collaborate with partners to look for the best possible solutions to reach the most people in need of HIV/AIDS services with our available financial resources. The following section focuses on how PEPFAR uses data to monitor progress, identify and address key gaps, and document the incredible progress that has already been achieved.



A group of school girls in Botswana.

CREDIT: USAID

How PEPFAR Harnesses Data for Maximizing Cost Effectiveness and Impact: Controlling the HIV/AIDS Pandemic

Since 2003, the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) has continuously updated the way we program, collect, and use data to reach the front edge of the HIV/AIDS epidemic (Figure 1). In prior years, when data collection was less frequent or granular, countries relied heavily on survey results and modeling to assess their epidemics and underserved populations.

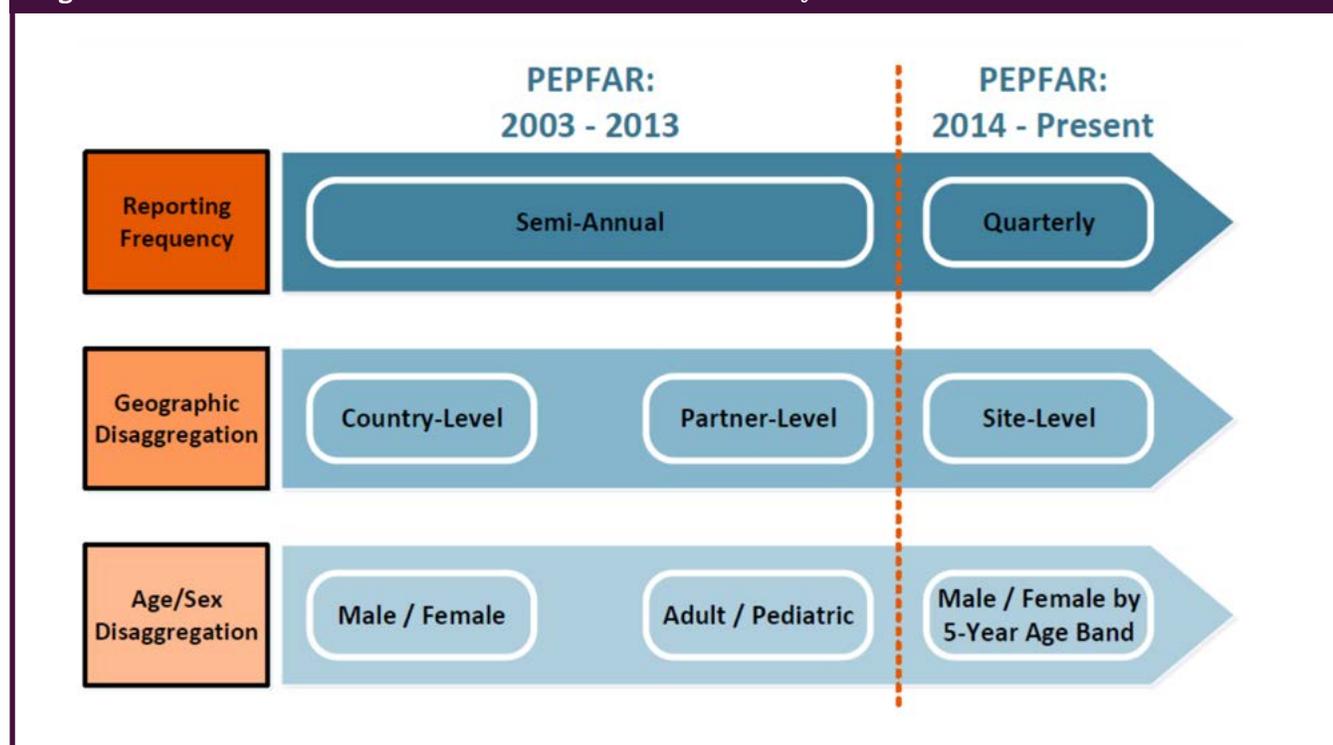
While nationally representative surveys like Demographic Health Surveys and previously conducted AIDS Impact Surveys are excellent sources of information, these large surveys are expensive and typically take a long time to complete and disseminate findings. Resulting

delays in programmatic course corrections would allow an epidemic to continue to expand without targeted interventions.

Surveys such as Population-based HIV Impact Assessments (PHIAs) are critical to detect changes in incidence and prevalence by geography and age groups, and as high-prevalence countries are approaching the Joint United Nations Programme on HIV/AIDS (UNAIDS) 90-90-90 targets, it is critical to tailor programs to reach those populations and places with the highest HIV burden and risk. In order to tailor a country program appropriately between surveys, PEPFAR program data can be used as a proxy, especially as the use of new HIV incidence assays are taken to scale.

The 90-90-90 targets set by UNAIDS and endorsed by member countries aim to have 90 percent of all people living with HIV (PLHIV) to know their HIV status, 90 percent of all people with diagnosed HIV infection to

Figure 1: Then and Now: Innovations Maximize PEPFAR's Efficiency





A group of young boys in Lesotho.

receive sustained antiretroviral therapy (ART), and 90 percent of all people receiving ART to have viral suppression by 2020. PEPFAR has expanded the definition of 90-90-90 to include all age groups and genders to ensure that everyone at risk is accessing prevention and treatment and that progress is evident.

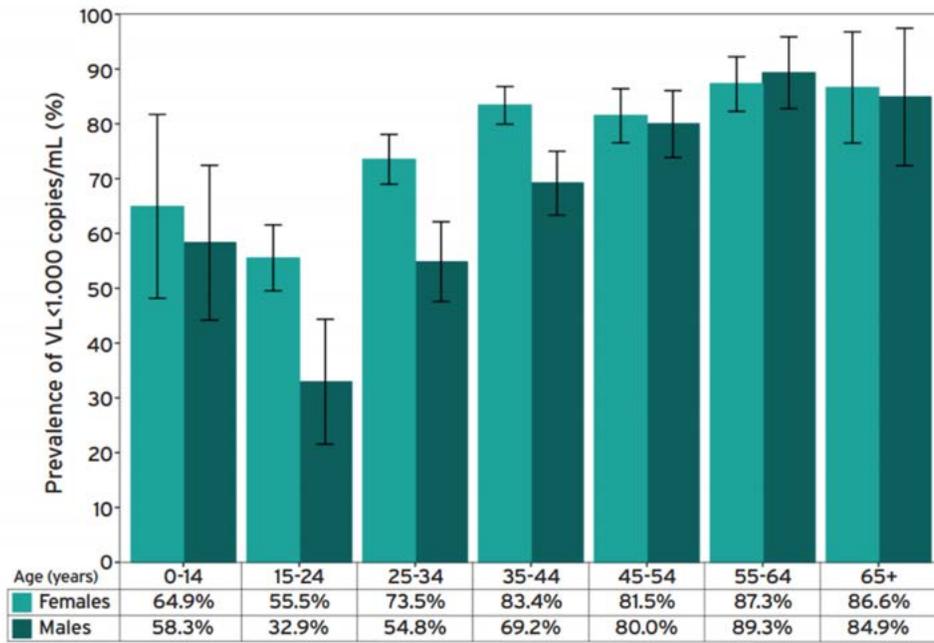
The benefit of using PEPFAR data is that it is collected frequently and provides disaggregated data by age, gender, and geographic location. Additionally, site-level data collected by PEPFAR partners are owned by the country government and can be used and disseminated as needed. Quarterly reporting and review allow for real-time data use so public health program managers can more easily keep up with the epidemic.

Since PEPFAR began collecting data on key indicators at the site level and by age and sex, data quality has significantly improved the information

available to inform critical programmatic shifts. One example of using PEPFAR data to stay on top of the epidemic can be seen in Swaziland. Prior to the PEPFAR-supported Swaziland HIV Incidence Measurement Surveys (SHIMS2) published in 2017, the last incidence survey in Swaziland had been completed in 2012. Incredibly, over five years, Swaziland reduced its HIV incidence by almost half. However, looking at the result of SHIMS2, the evidence of viral load suppression among young men ages 15–34 is significantly lower than that of young women the same age. These results are consistent with a population of young men who are HIV-positive and have either not been diagnosed or are not active and adherent on treatment. This is the same group that data show are most likely to transmit the virus, especially to younger women.

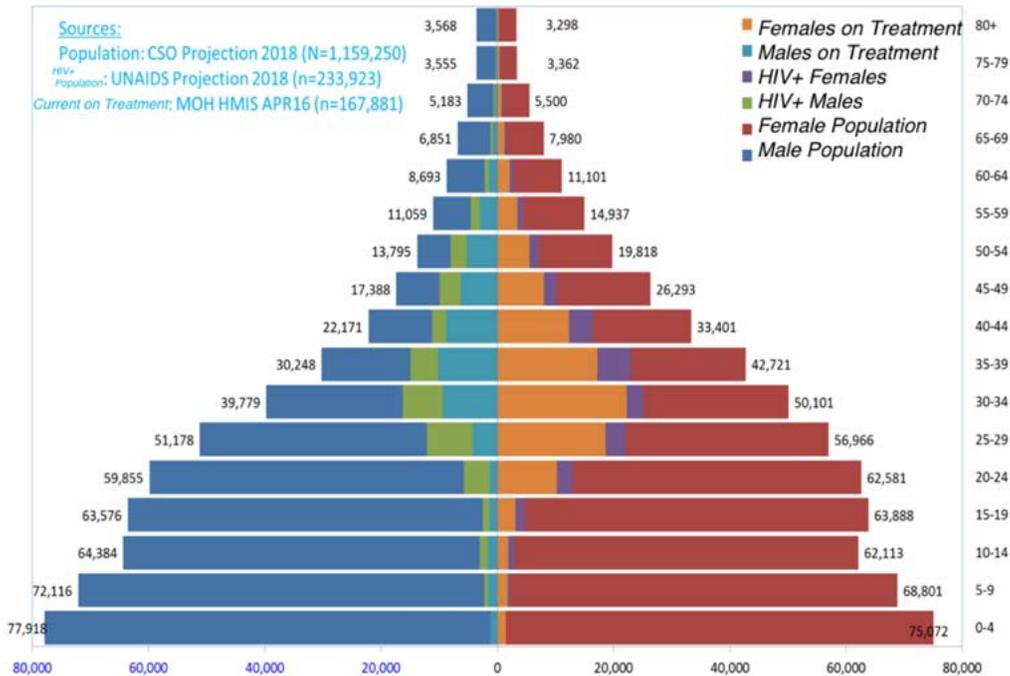
In Figures 2 and 3, PEPFAR data show a similar trend in examining ART coverage and viral

Figure 2: Swaziland SHIMS Prevalence of Viral Load Suppression, 2017



Error bars represent 95% confidence intervals.

Figure 3: PEPFAR-Reported Swaziland Treatment Coverage



load suppression by age and sex. The coverage among men ages 15–34 is considerably lower than among same-aged females. Using this PEPFAR-reported data, a country team could decide that young men are a critical intervention point and create new and innovative ways to reach this population for HIV diagnosis and treatment. Ensuring that all populations are effectively reached with prevention and treatment are key to ensuring our impact on the epidemic and the most lives saved. In many geographic areas, infants, children, and young men are especially underdiagnosed and treated. These analyses must be constant to ensure we stay ahead of the epidemic and ensure everyone at risk and in need of treatment is reached.

How PEPFAR Documents Results

PEPFAR’s focus on optimizing outcomes and impact is a driving force behind global efforts to reach epidemic control. PEPFAR is partnering with the international community to accelerate toward reaching the UNAIDS 90-90-90 targets in all five-year age disaggregated populations to ultimately reach 95-95-95 at the country level by 2030. This translates to ensuring 95 percent of all PLHIV know their status, 95 percent of all people who know their HIV status are accessing treatment, and 95 percent of people on treatment have suppressed viral loads.

Within PEPFAR, teams assess populations and geographies, design interventions, and set targets aimed at accelerating epidemic control based on the clarity provided by the data. This allows the program, in partnership with governments and communities, to focus services, stop or improve the activities that are not having the desired outcomes, and expand those activities that are reaching essential groups. To enhance the systematic gathering, analysis,



Young children in Vietnam.

synthesis, and interpretation of program data for routinely measuring progress, PEPFAR has defined a core set of program indicators that are collected and reviewed at least quarterly.

Going forward, PEPFAR planning will be based on five-year age bands for 10- to 40-year-olds (Figure 4) as well as those at the most vulnerable ages, including under 1 and 1–9 years, to efficiently target and implement programs for specific populations as identified by the latest PHIA findings. Progress toward epidemic control will be successfully measured in part through an effective strategic information framework that monitors not only program outputs, but also key outcomes and programmatic impact.

In order to monitor progress in all populations, PEPFAR relies on the quarterly submission of data from all country teams. It is no longer adequate



CREDIT: Quinn Tvey, ETAF

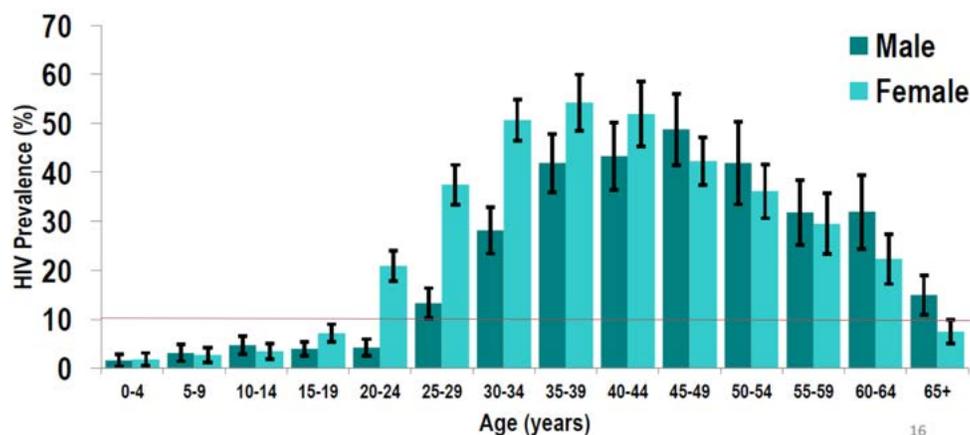
A man brings his wife to a men's health event for HIV testing in Malawi.

Figure 4: New Focused Age Bands for PEPFAR Programming

	5-Year Age Bands for 90-90-90 Attainment
Gender Independent	<ul style="list-style-type: none"> • <1 • 1-9
Male/ Female	<ul style="list-style-type: none"> • 10-14 • 15-19 • 20-24 • 25-29 • 30-34 • 35-39 • 40-49 • 50+

Figure 5: Swaziland Viral Load Suppression Among HIV-Positive People, by Age and Sex

HIV Prevalence by Age & Sex Swaziland



PEPFAR
U.S. President's Emergency Plan for AIDS Relief

Source: SHIMS, 2017

to collect data at the aggregate level, as the needs of the individual people within the population differ among and even within the countries.

PEPFAR relies on our robust set of Monitoring, Evaluation, and Reporting (MER) indicators that collect site-level programmatic results by age, sex, and, in some cases, key population (KP) for each person receiving PEPFAR-supported services at a site. In the most recent version of the MER indicators (Version 2.2), there is an increased focus on understanding the nuances of how adult populations access services to reach treatment saturation and viral suppression. Whereas previously adults in the 25- to 49-year-old age band were targeted similarly, the recent PHIA results showed that adults in the 25- to 49-year-old age band access services differently.

For example, Figure 5 shows the prevalence of viral load suppression by age and sex in Swaziland

based on SHIMS2 data. Prevalence of viral load suppression among men is not uniform among men older than 25. Specifically, men ages 25–34 and 35–44 had much lower rates of viral suppression than men in other age bands and women within the same age band. These findings emphasize the need to further disaggregate the data reported to PEPFAR in order to better understand the factors driving these differences.

To ensure PEPFAR is reaching the populations with the highest need, the MER Version 2.2 encourages data collection in five-year age bands from ages 0 to 50. Using these more granular age bands, public health program managers are better able to tailor programs to reach the appropriate populations with treatment and adherence services.



CREDIT: Albin Hillert, World Council of Churches

A group of young boys celebrate during the Day of the African Child in Nairobi, Kenya, an event to highlight the rights of children and adolescents living with HIV.

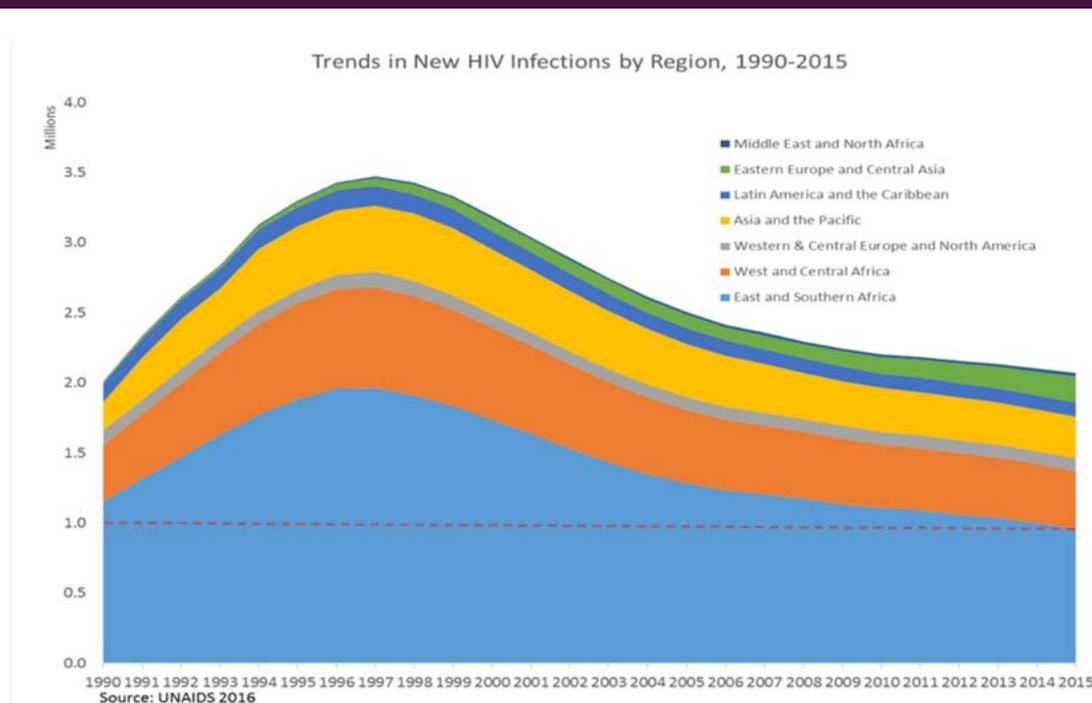
Global Trends in New HIV Infections

PEPFAR supports strategic core HIV prevention and treatment interventions in order to ensure that the number of new HIV infections is lower than the number of total deaths among all HIV-positive individuals – an essential metric in reaching epidemic control. Figure 6 documents the tremendous reduction in the number of new HIV infections that has been achieved since the peak of the epidemic.

Particularly notable is the progress made in sub-Saharan Africa, where PEPFAR invests more than 90 percent of our Country/Regional Operational Plan (COP/ROP) resources. The only regions with an increase in new infections during this time period are Eastern Europe and Central Asia, where the numbers are primarily

driven by an increase in new HIV infections in Russia, accounting for 80 percent of all new infections in the region. PEPFAR strategically invests in the Ukraine, which is responsible for 10 percent of all new infections in the region.

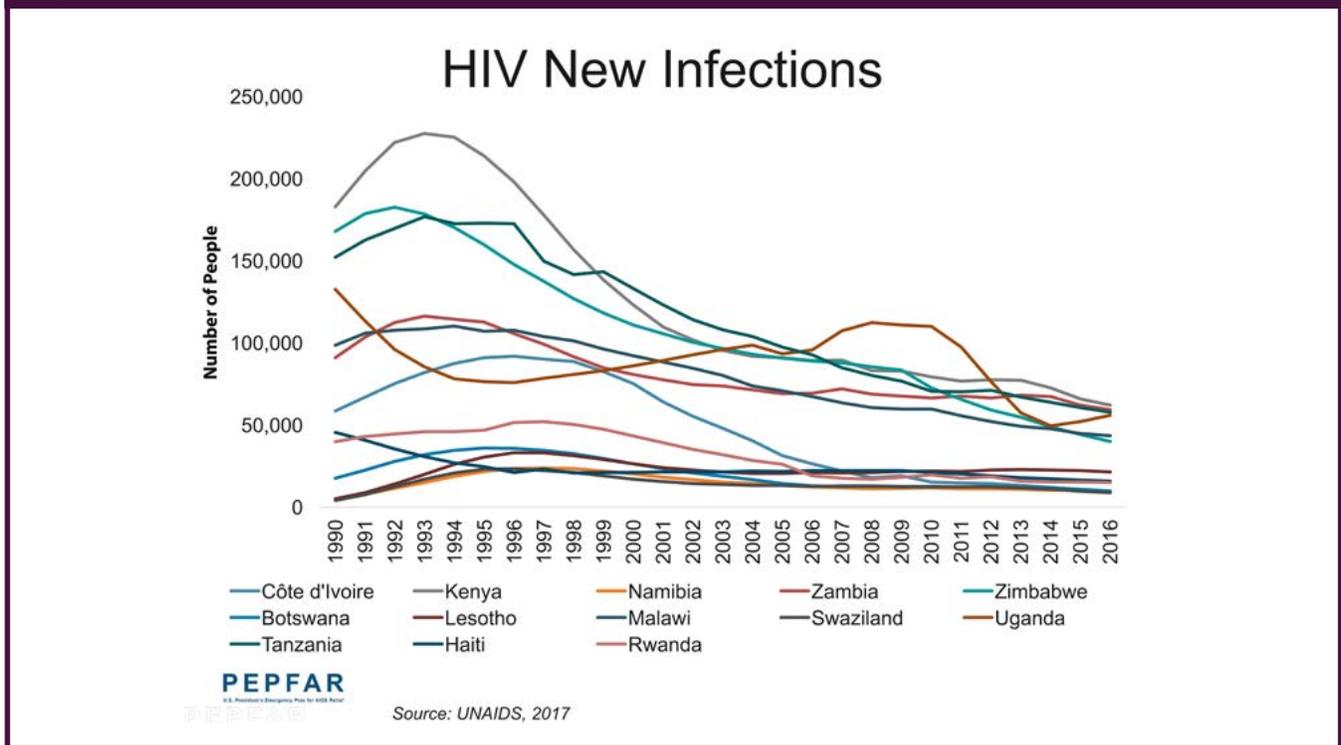
When the number of new infections is less than the number of total deaths among all HIV-positive individuals, the total burden of disease and the financial cost of the epidemic will decline community-by-community, county-by-county, and country-by-country. Importantly, these numbers need to be analyzed on a community-by-community and country-by-country basis to ensure success. The number of annual new infections across all PEPFAR-supported countries was 2.2 million in 2003, 1.6 million in 2013, and 1.3 million in 2016. Accelerating this downward trend, to reach under 1 million, is critical to

Figure 6: Global Trends in New HIV Infections, 1990–2015

achieving control of the pandemic across PEPFAR, geographic area by geographic area.

PEPFAR is focused on continuing to reduce new infections by saturating areas of high HIV burden at the most local subnational level (region, district, and subdistrict) with prevention and treatment services, including targeted HIV testing services (HTS). By strategically refocusing, PEPFAR programs will identify and treat many more HIV-infected persons, reducing new infections and lowering the average viral load in the high-transmission communities that we support. Tracking down to this granular level and with these details will be critical to success. Viral load is defined as the amount of HIV particles in a sample of blood, and individuals with high viral loads are more likely to transmit HIV to uninfected individuals. Those with undetectable viral loads are unable to transmit the virus – either between mothers and babies in utero and during breastfeeding, and sexually between couples.

Ensuring saturation with HIV prevention services in the same high-transmission zones will also have the greatest impact on the epidemic. These efforts will focus on increasing the coverage of evidence-based combination prevention interventions among the following priority populations: young men ensuring 100 percent circumcision rates to prevent young men from acquiring HIV; discordant couples; key populations; tuberculosis (TB)/HIV co-infected patients; children; pregnant and breastfeeding women; and young women and girls through Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe (DREAMS) and orphans and vulnerable children (OVC) programming. In addition, program data has recently highlighted that we have historically underserved young men, who often go on to infect younger women, fueling the cycle of HIV infection. We launched special efforts to identify and treat HIV-positive men for 2016–2017 COPs/ROPs, and these underserved young men will be a continued area of focus for 2018 COPs/ROPs.

Figure 7: Number of New HIV Infections in Select PEPFAR-Supported Countries, 1990–2016

Overall, there has been a significant decrease in the rate (incidence) of new HIV infections during the last 15 years, although the decline in new infections varies significantly by country (Figure 7).

In sub-Saharan Africa, where the epidemic is the most costly and deadly, results vary from country to country due to the history of the epidemic and coverage of specific interventions. Effective interventions were not advanced at the same rate and in the same manner, so changes in new infections and AIDS-related mortality differ across countries (Appendix W).

Decreasing the absolute number of new infections – and not only incidence – is essential for both epidemic control and fiscal sustainability, as it drives down the burden of disease and the cost of caring for HIV-positive individuals. While the incidence rate has declined in most PEPFAR countries, the size of the populations most at risk for HIV infection, especially young women,

has substantially expanded in the last 20 years. Overall populations have grown, especially those under 25 years of age, nearly doubling since the beginning of the HIV pandemic. Therefore, even with incidence declining by 50 percent, only a steady state – not a decline – would be achieved with the doubling of the population at risk.

This is particularly the case in sub-Saharan Africa where, due to high fertility rates and improved child survival, the population of 15- to 24-year-olds will have doubled by 2020 from the beginning of the epidemic on the continent (Figure 9). This is further illustrated by a single country, Zambia (Figure 10), and this is replicated in country after country. With the significant increases in the total population of sub-Saharan Africa, specifically the increase in young people, we have reached a critical juncture. In this context, our programs must continually be even more effective just to maintain the status quo and must significantly increase their impact to control the pandemic. This is why PEPFAR

Figure 8: Number of AIDS-Related Deaths in Select PEPFAR-Supported Countries, 1990–2016

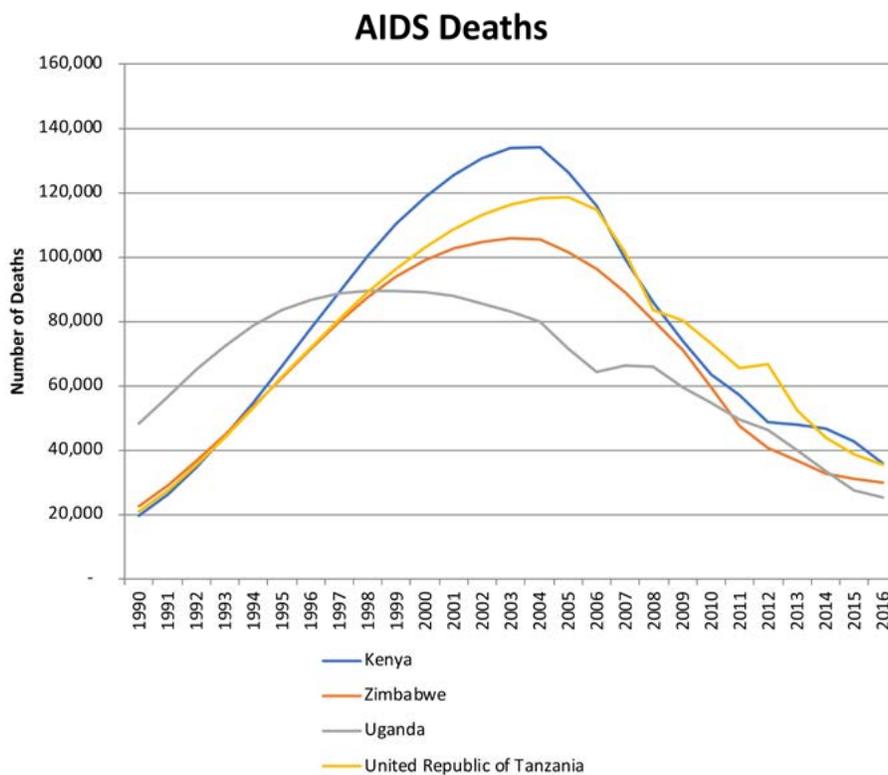
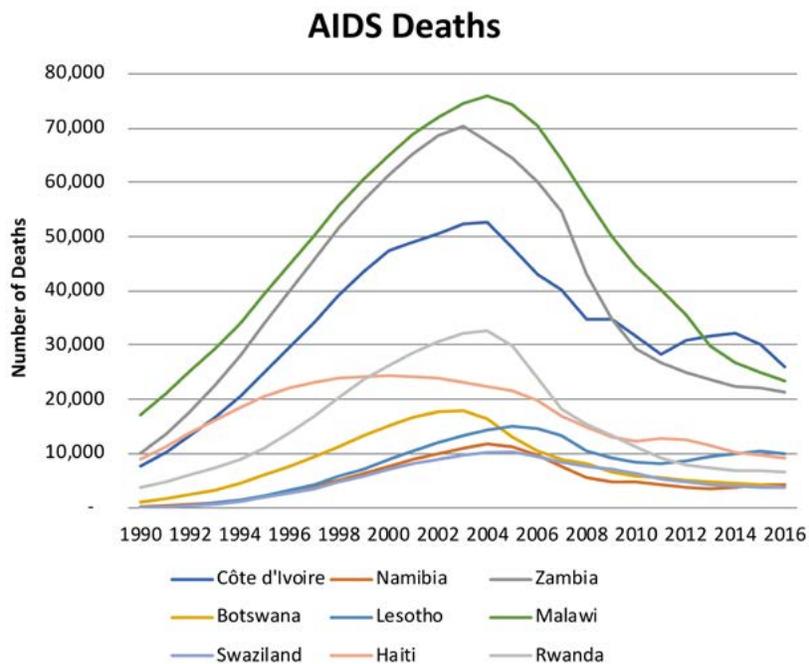


Figure 9: Youth Bulge in Sub-Saharan Africa

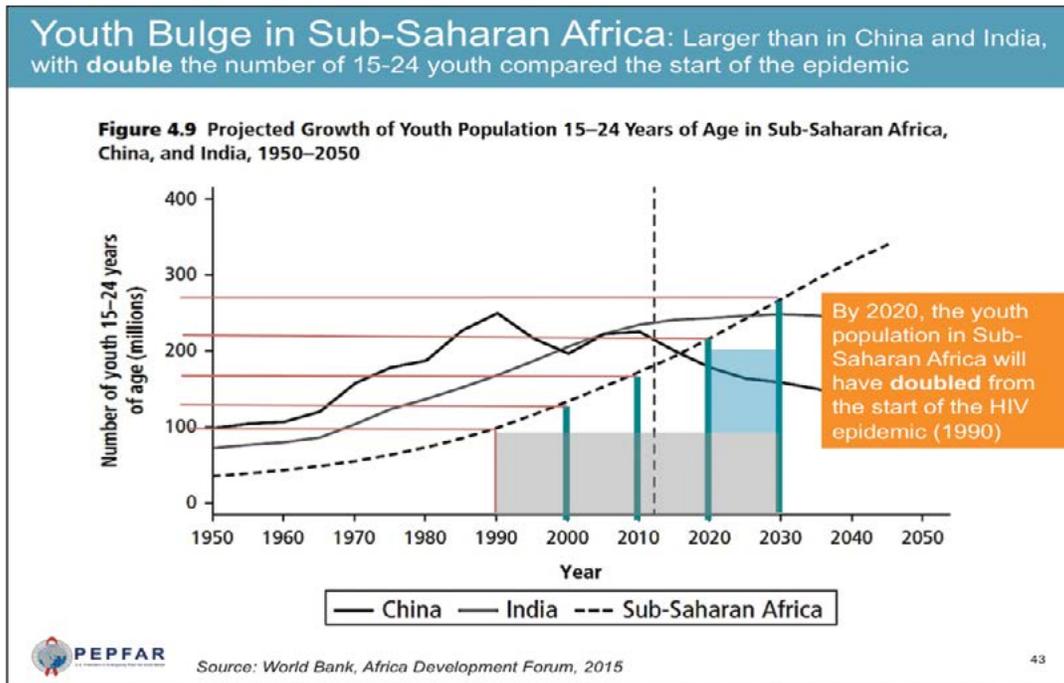
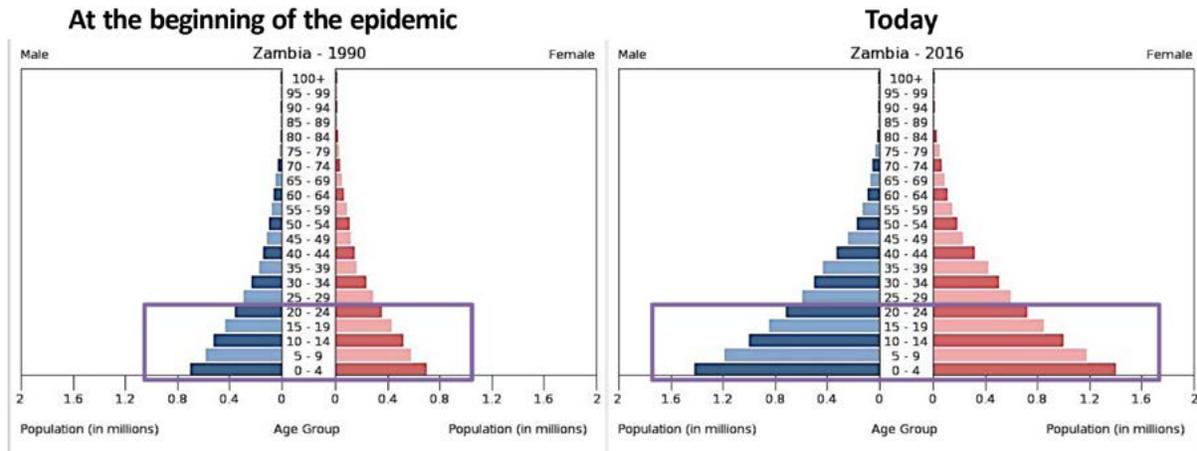


Figure 10: Youth Bulge in Zambia



Young Men Population: 781,000
 Young Men PLHIV: 38,000
 Young Women Population: 772,000
 Young Women PLHIV: 66,000

Young Men Population: 1.6 million
 Young Men PLHIV: 48,000
 Young Women Population: 1.6 million
 Young Women PLHIV: 77,000



CREDIT: Quinn Tivey, ETAF

A community health worker tests a man for HIV at his home.

continues to expand prevention for young women and is focused on diagnosing and treating young men to break the transmission cycle.

PEPFAR will continue increasing program effectiveness through the enhanced use of facility-level data disaggregated by sex and five-year age bands. We will continue refining our focus on the geographic areas and populations most in need of services to prevent new HIV infections in sub-Saharan Africa, which are otherwise projected to increase by an additional 25–26 million by 2030.³ Such an increase would nearly double the current cost globally to provide lifesaving services to all of those in need. The escalating total cost of treatment to save lives associated with such an increase cannot be sustained by any combination of financing from the host country, The Global Fund to Fight AIDS, Tuberculosis and Malaria (Global

Fund), PEPFAR, or increased partner country contributions. The absolute key to sustainability is to decrease the number of new infections.

We are at a moment in time when we have all of the tools necessary to change the course of the epidemic, and we are beginning to see these promising results in our PHIA surveys (Figures 11 and 13). However, we must continually use granular data and laser-focus every dollar spent to ensure we are addressing those in greatest need, especially the younger populations, as shown in Figure 12. Otherwise, we will face an epidemic that will once again spiral out of control, reversing the progress achieved through our investments to date. It is a quarter-by-quarter, community-by-community intense focus on prevention and treatment that will result in persistent control of the pandemic.

³ UNAIDS. (2014). *Fast-Track – Ending the AIDS Epidemic by 2030*. Geneva.

Figure 11: Progress to 90-90-90 in Adults

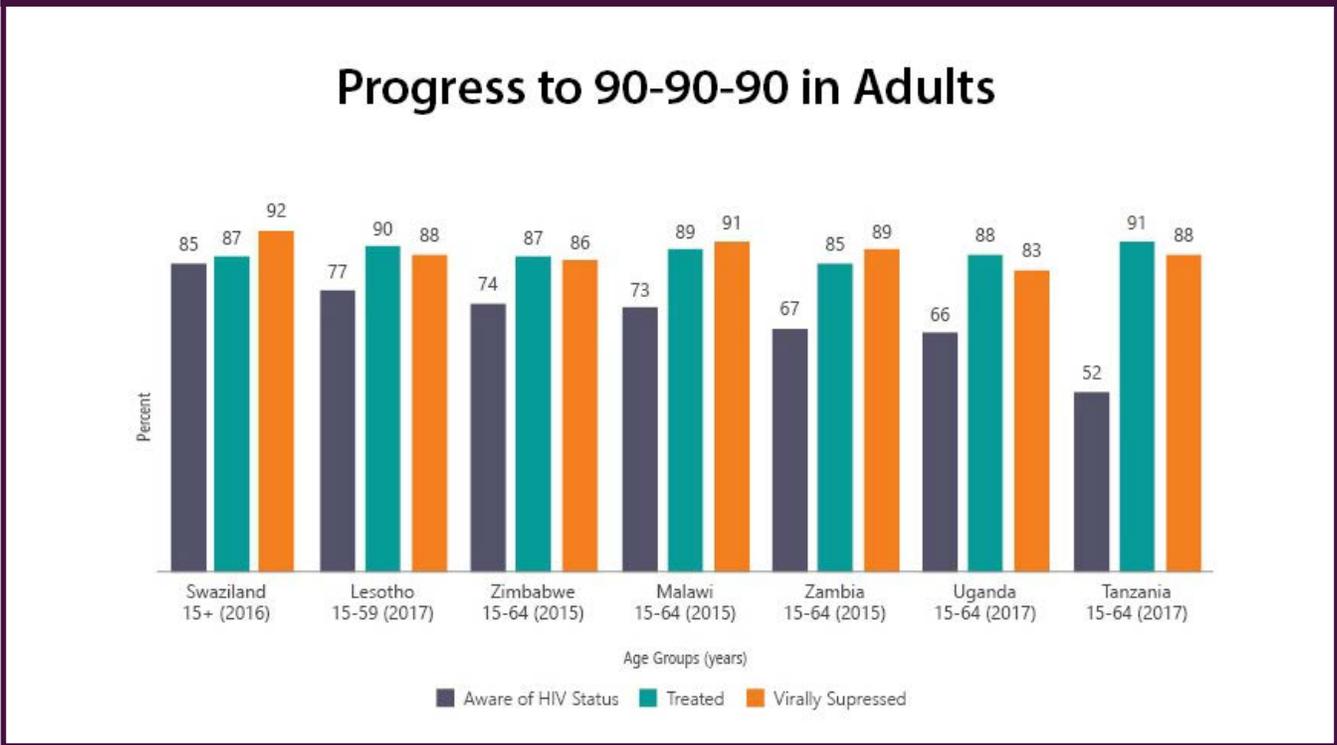


Figure 12: Progress to 90-90-90 in Adolescents and Young Adults (15-24-year-olds)

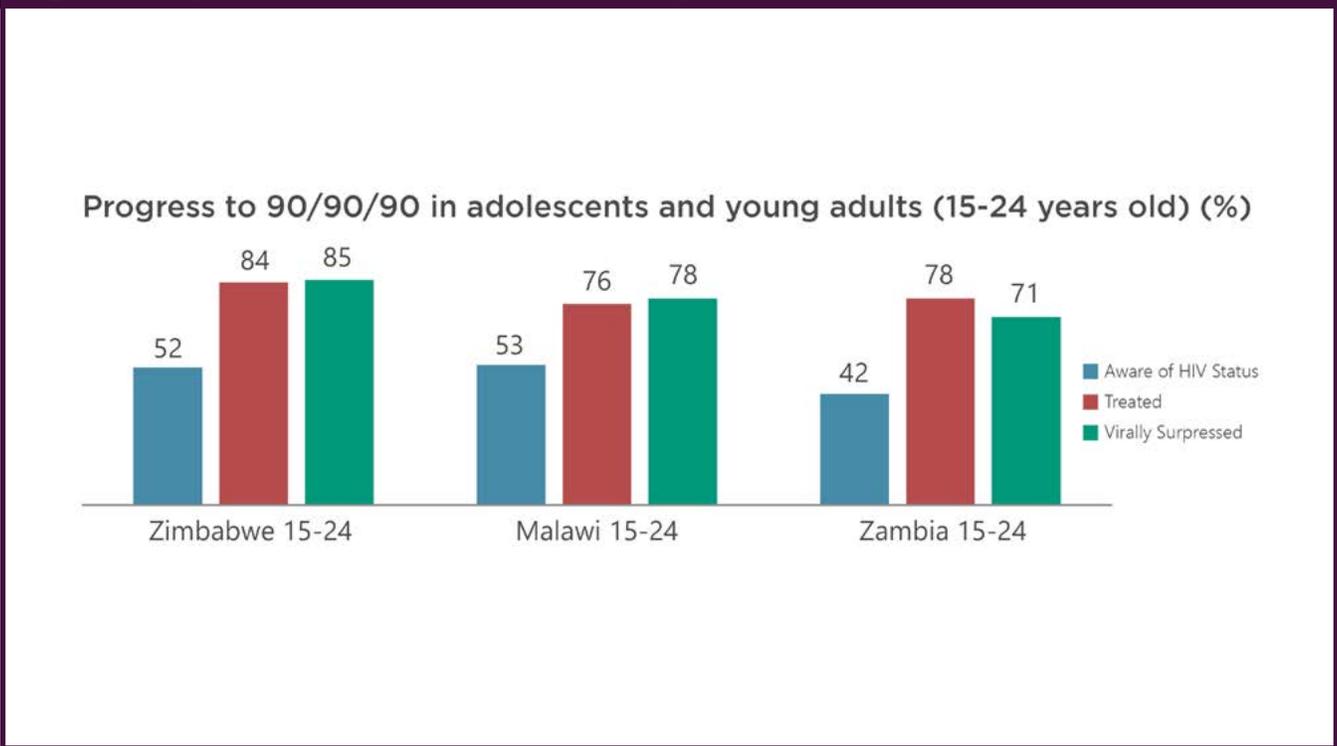
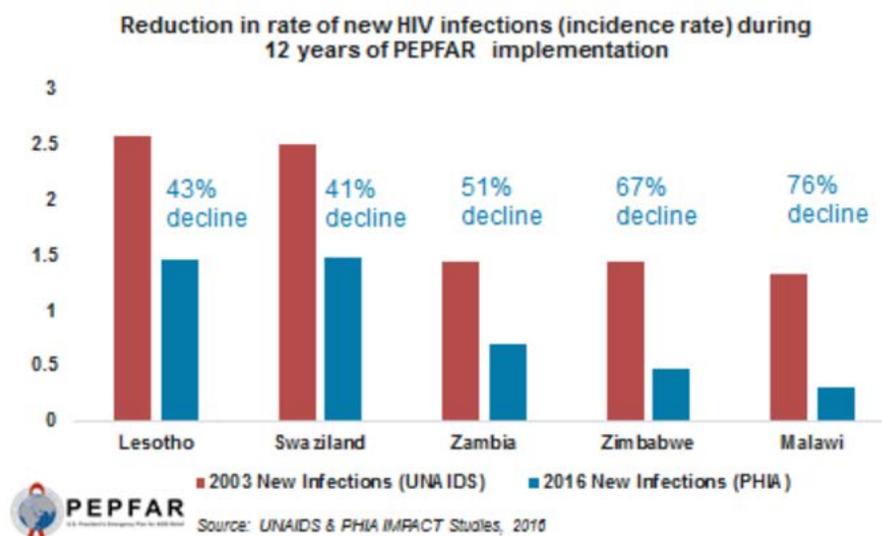


Figure 13: Decline in New HIV Infections in Select PEPFAR-Supported Countries

Since the Start of PEPFAR, New HIV Infections Have Declined 41-76%



HIV Infections Averted Due to PEPFAR and Global HIV Response

Modeled data suggest that a cumulative total of nearly 16 million HIV infections globally have been averted since the beginning of the epidemic, including 11.3 million HIV infections in sub-Saharan Africa, due to PEPFAR and the global HIV/AIDS response.

Validating the Models

Due to PEPFAR investments in the PHIA, the HIV incidence rate is now measured directly and estimated more precisely. Currently, six of the 13 high-burden countries have new incidence measures as well as clear prevalence data disaggregated by both age and sex. Among the remaining seven high-burden countries, the PHIA is planned or ongoing.

PEPFAR funded a comprehensive survey in 2011 that provides a clear baseline in Swaziland and a comparator of current results and progress of PEPFAR investments over a five-year period (Figure 14). Figure 14 compares findings from the two PEPFAR-supported SHIMS conducted in 2011 and 2016–17, respectively. It shows a dramatic decline in new infections in women under age 25 as seen by the decreases in early prevalence and a real improvement in life expectancy of HIV-positive adults who are mothers and fathers, teachers, and nurses thriving in their communities. It also captures the impact of PEPFAR over the past five years, which we are focused on accelerating.

PEPFAR continues to model partner countries' results with the most recent national data available from UNAIDS using the Goals model, which is a method for costing and resource allocation that can be used in the development of national HIV/AIDS strategic plans and investment frameworks.⁴

⁴ Stover, J., Walker, N., Garnett, G., Salomon, J., Stanecki, K., Ghys, P., ... Schwartzlander, B. (2002). Can we reverse the HIV/AIDS pandemic with an expanded response? *The Lancet*, 360, 73–77.



PEPFAR beneficiaries in Mozambique.

Figure 14: Dramatic Declines in HIV Prevalence and Success of ART in Swaziland

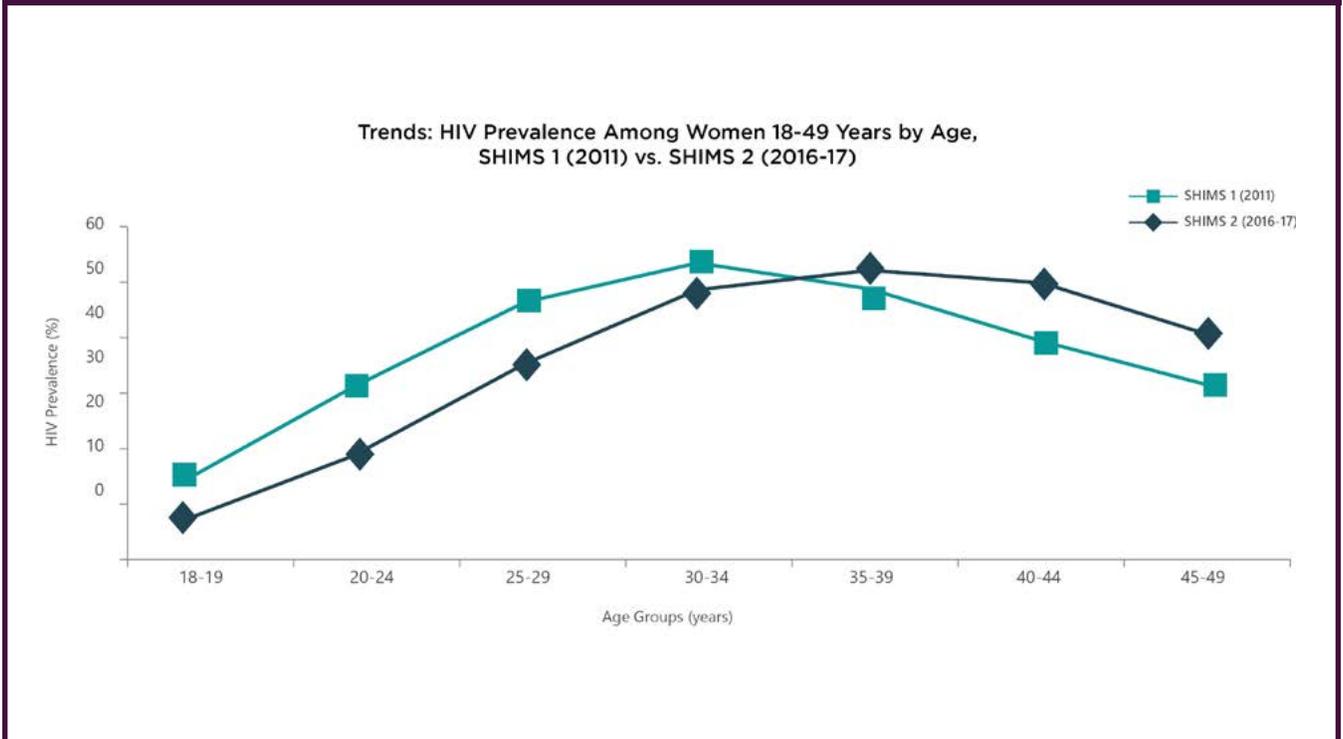
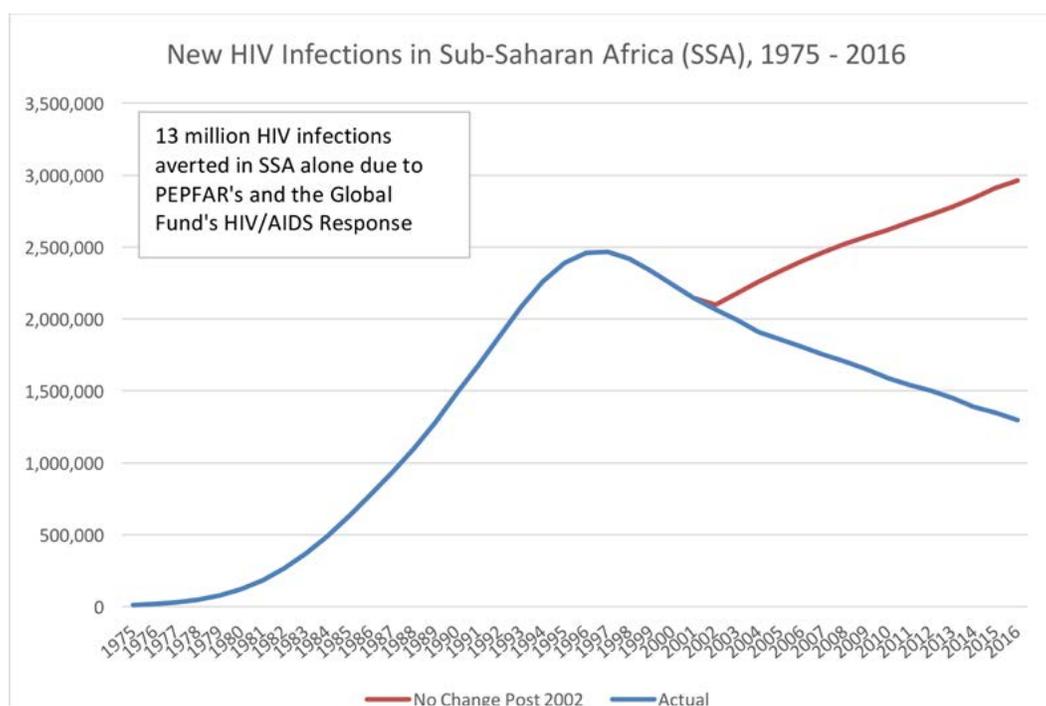


Figure 15: New HIV Infections in Sub-Saharan Africa, 1975–2016

Global Prevalence: Refining PEPFAR's Impact and Progress Toward Epidemic Control and Implications of Future Costs for a Sustained HIV/AIDS Response

According to UNAIDS, eastern and southern Africa accounted for 44 percent of the 1.8 million new HIV infections globally in 2016, which is a decline of 54 percent since 2006 (Figure 15). Reducing the absolute number of annual new HIV infections is essential, particularly in eastern and southern Africa where these must fall below 500,000. Beyond saving untold numbers of lives, this will reduce the future costs required to sustain the HIV/AIDS response.

The report notes that focusing on populations that are underserved and at a higher risk of HIV infection is critical to ending the AIDS epidemic. This principle underpins the PEPFAR 3.0 Strategy, which aims to do the right things, in the right places, in the right way, and at the right time to achieve maximum impact.

PEPFAR invests in more than 50 countries around the globe through both country and regional platforms. Among these, 13 high-burden countries have the greatest potential to reach epidemic control by 2020. It is in these 13 countries where PEPFAR is intensifying our focus to create the road map to reach epidemic control and demonstrate the requirements needed to maintain it. PEPFAR will continue to support the other countries utilizing available resources to focus our investments. Figure 17 shows the progress needed to get new infections below the total number of deaths among all HIV-positive individuals.

To accelerate progress toward achieving epidemic control, PEPFAR supports programs that significantly decrease transmission by HIV-positive individuals by providing them with lifesaving ART, advancing HIV prevention through risk avoidance and risk prevention strategies for those who are HIV-negative, and expanding voluntary medical male circumcision (VMMC) for HIV-negative young men. Pursued in combination, these strategies will reduce the transmission of new infections, and through using the age and sex disaggregated data will ensure all groups decrease their transmission. Through these efforts, 13 countries can reach greater than 70 percent ART coverage by the end of fiscal year (FY) 2018.

Aligning with the PEPFAR 3.0 Strategy, we continue to show outcomes and impact through our comprehensive PHIA, which measure HIV prevalence, incidence, historic mortality, and service coverage down to the household level. Figure 18 shows the timeline and countries

where these surveys are being conducted and where we are directly measuring impact.

According to the most recent PHIA results, four PEPFAR countries have greater than 70 percent of HIV-positive people with known status, and greater than 85 percent of those currently active on treatment. However, coverage is not equal across genders and age groups. Coverage is particularly lagging among children who are currently well, asymptomatic young women and young men who are thereby not accessing health facilities for diagnosis and treatment.

Strengthening Program Cost Effectiveness

Efficiency

For the first time in modern history, we have the tools to achieve epidemic control. As PEPFAR invests in new innovations, we will

Figure 16: Swaziland – Pathway to Reaching Epidemic Control

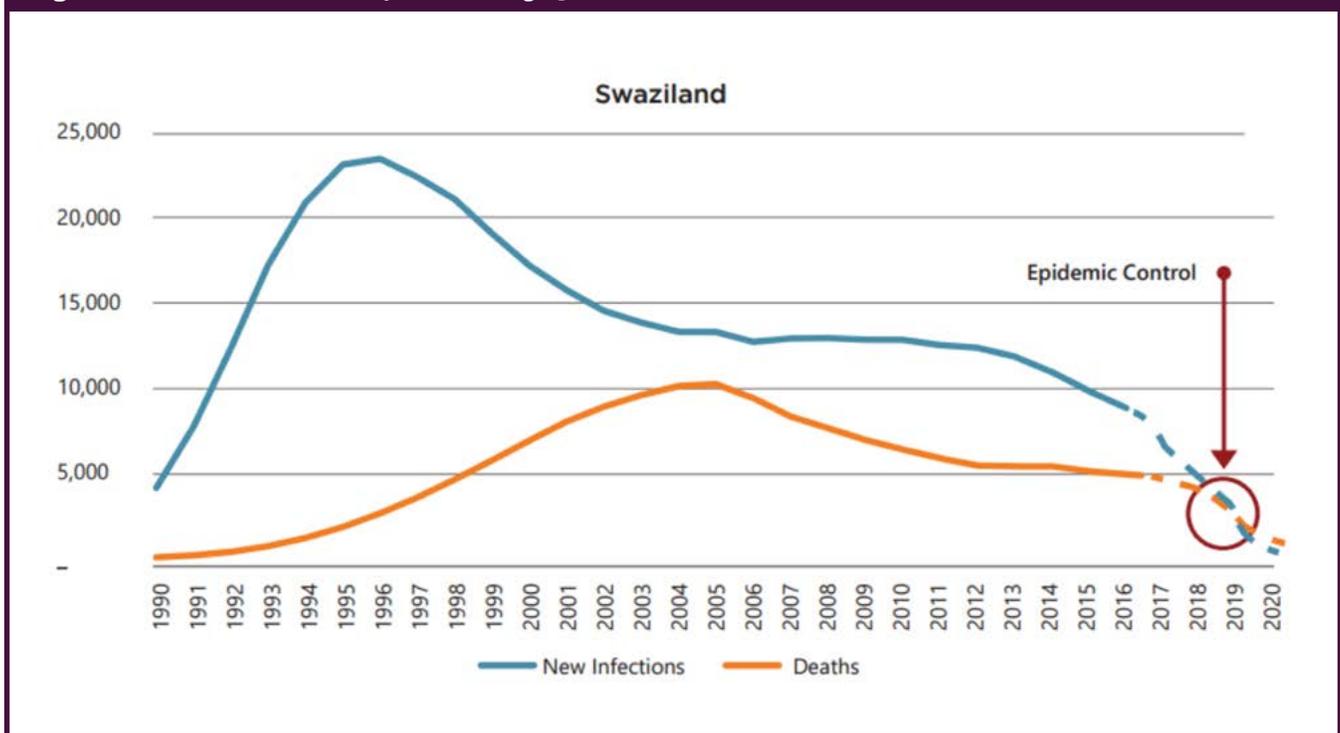


Figure 17: Comparing Annual New HIV Infections and Annual Total Deaths Among HIV-Positive Individuals in 13 High-Burden Countries

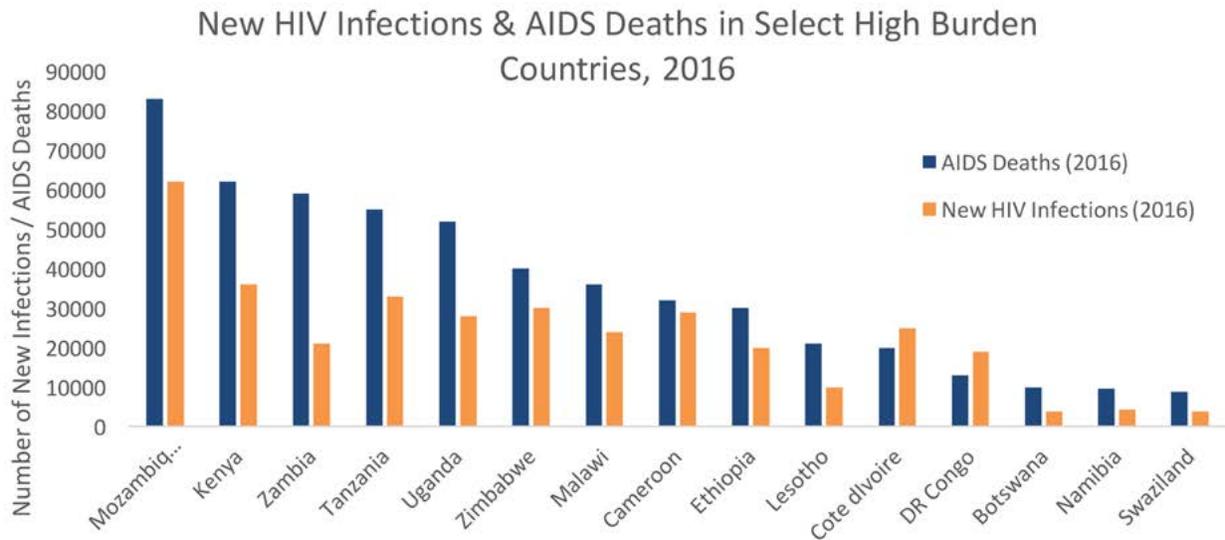
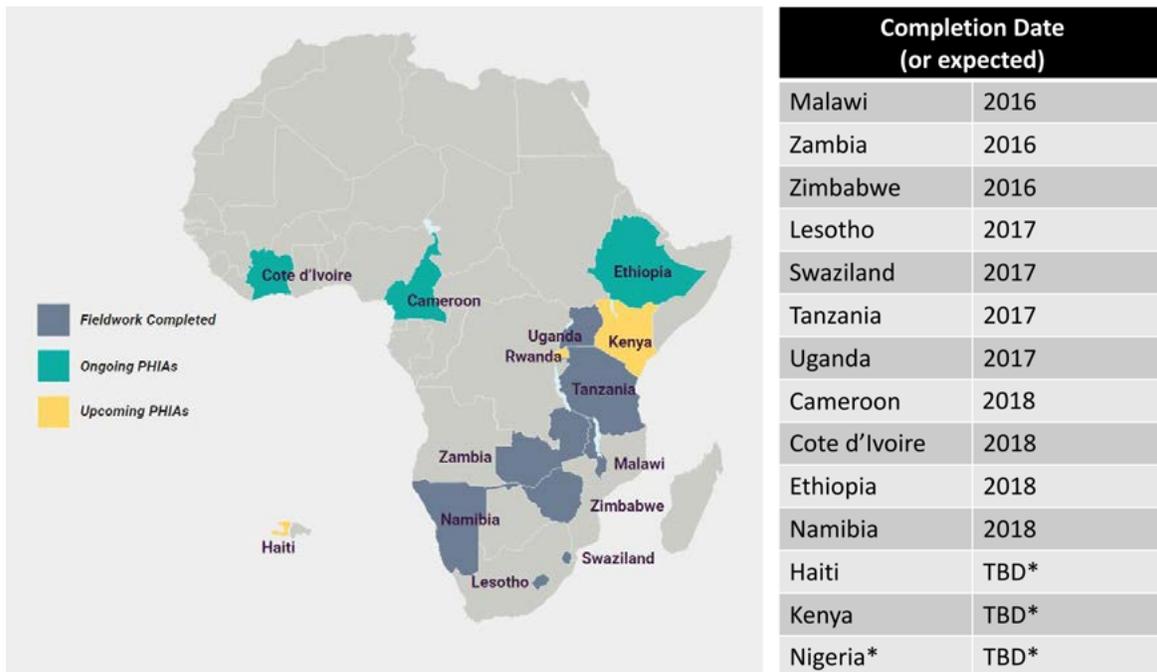


Figure 18: Implementation Timeline and Status of HIV Impact Assessments





A group of young mothers receive health training in India.

continue scaling our programs using these tools toward reaching this goal in all PEPFAR countries. This attainable progress requires that countries demonstrate political will and execute their own responsibilities, including by ensuring that their existing funding from other bilateral and multilateral organizations is well coordinated with funding from PEPFAR.

The Right Policies Are Fiscally Responsible

The challenge for the world is to increase the number of people on treatment and reach the UNAIDS 90-90-90 treatment targets while at the same time working within a constrained budget environment. PEPFAR continues to generate significant savings to achieve greater goals. The program adopted a number of policies and innovations that enable existing resources to go further. These policies include Test and

Start, multi-month ART prescriptions, same-day initiation, and differentiated service delivery.

In 2017, PEPFAR worked to ensure full and complete rollout of Test and Start policies. While it may seem counterintuitive to initiate lifetime treatment as a cost control measure, quicker initiation of treatment pays off in the long run. There are many benefits to starting treatment as soon as an individual tests positive.

First, and most importantly, patients who are on effective HIV treatment are not sick, do not require hospitalization, remain employed, and are more productive, which also has positive economic benefits. Critically, there is also the prevention benefit of a person who is virally suppressed. Between 60 and 80 percent of incidence reductions necessary for epidemic control will come from prevention benefits resulting from treatment.

There are also other health systems savings resulting from early treatment, including lower hospitalization costs and lower levels of TB and other opportunistic infections. Finally, there are additional societal savings. Households with members on treatment have higher levels of education and incomes, and there are fewer OVC.

Test and Start also enables countries to adopt same-day initiation of ART. While same-day initiation is not appropriate in every case, wider use of the policy streamlines ART costs and prevents loss to follow-up costs. The cost of finding patients who test positive and are lost to follow-up is more expensive than the cost of putting them on treatment in the first place.

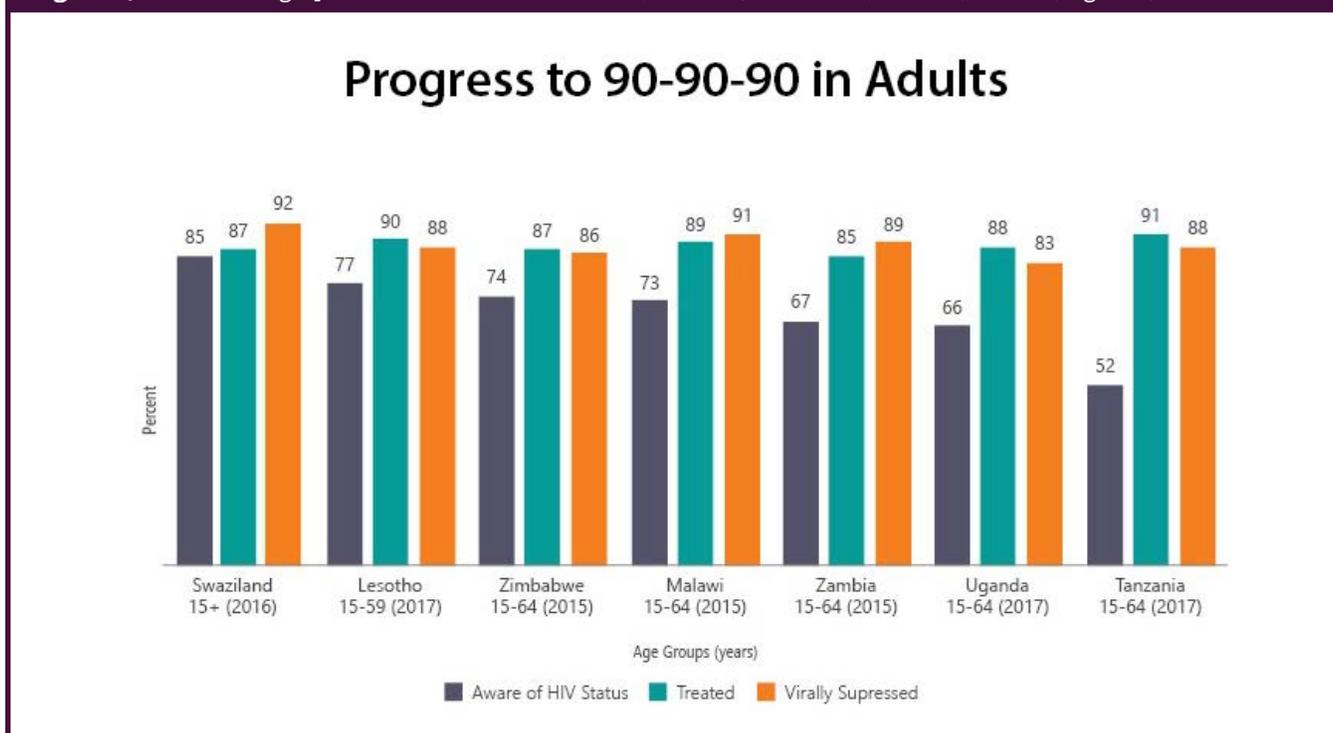
Finding patients who are more recently infected and healthier also means that initiation costs are lower and less complex, and drug regimens more tolerated. Same-day initiation also helps the patient become virally suppressed sooner, and generates more prevention benefits and other health systems savings.

CREDIT: US, USAID



A young girl learns about preventing gender-based violence in Zimbabwe.

Figure 19: Accelerating Epidemic Control in Swaziland, Lesotho, Zimbabwe, Malawi, Zambia, Uganda, and Tanzania



In FY 2017, PEPFAR launched a coordinated push for implementation of differentiated models of care. As more people become stable on treatment, their infection can be managed as a chronic disease, and they can be transitioned to a treatment regimen that has fewer clinic and pharmacy visits to collect their antiretroviral medications (ARVs). Existing clinic staff can, in turn, maintain larger caseloads of clients, enabling these medical facilities to implement Test and Start without significantly increasing costs.

U.S. ambassadors posted around the globe have been critical in promoting and ensuring the adoption and implementation of the key policies by the host countries in which PEPFAR works, allowing our dollars to be more effective. The right policies not only save lives, but also make our program more impactful, dollar for dollar.

New Drug Regimens and Other Commodity Savings

PEPFAR is also supporting a rapid rollout of new and more effective regimens based on Dolutegravir, a new integrase inhibitor. Dolutegravir (DTG) is cheaper, more tolerable, and leads to better results including faster viral suppression. There is a virtuous circle created by DTG's low side effect profile, which makes adherence easier. Easier adherence and fewer side effects mean a more rapid adoption of differentiated care and more models of community care. It will be critical to utilize these more effective regimens that are more easily tolerated, especially as we start clients on treatment who are early in the progression of the disease and feeling well. Regimens must be well-tolerated to ensure people stay on their effective treatment.



CREDIT: Quimm Tivey, ETAF

Five women and one man wait to be seen at a mobile health clinic in Malawi. The photo captures the ratio of women to men being tested for HIV at our mobile health clinics prior to the implementation of a special male-focused program. In 2017, the ratio had been reduced to 1:1.5.

Due to faster viral suppression, ART prevention benefits are also felt quicker with the use of DTG. The drug’s wide applicability – including for patients currently on second-line regimens – simplifies supply chain regimes. It creates very low resistance, which should allay concerns that too many people on treatment could lead to the rise of drug-resistant strains of HIV.

PEPFAR is also working to lower the costs of other purchases, most notably the cost of laboratory reagents. For example, PEPFAR has achieved impressive reductions in the cost of viral load tests, in some cases from \$40 per test to as low as \$15. Further future reductions are possible. In addition, with fewer clinic visits, fewer laboratory tests are needed as PEPFAR works hard to eliminate unnecessary tests. In fact, with Test and Start, CD4 counts are no longer necessary to determine the initiation of ART. PEPFAR is scaling back support to CD4 testing, which is generally needed in fewer cases, freeing up resources for the expansion of viral load monitoring to ensure clients remain virally suppressed.

Toward Better Cost Data

In 2017, PEPFAR launched a new effort to improve internal budget practices, collecting and analyzing more accurate cost data. The existing Expenditure Analysis system was updated to reflect the fixed and variable costs of treatment and support. In partnership with others, including the Global Fund and the Bill & Melinda Gates Foundation (Gates Foundation), PEPFAR launched new efforts to better align resources, avoid duplication, and improve the cost analysis of HIV treatment and prevention programming.

The Gates Foundation has taken the lead on developing the Global Health Cost Consortium (GHCC). GHCC is providing more comprehensive and analytic data for planning COP/ROP budgets

and discussions with partner country ministries of health and finance on shared responsibilities of the HIV response. This collaboration will be a multiyear effort to better align resources, change financial systems, and drive down program costs. Through an accounting of investments made “above the site” level described in Section 4, PEPFAR is also gathering better information on the costs and outcomes of our systems investments, which enable a more purposeful transfer of responsibility from PEPFAR and international donors to partner countries. Annually PEPFAR invests more than \$700 million above-site in health systems required for effective HIV/AIDS services but also needed for an effective global health security agenda.

**Table 1: Reported PEPFAR Expenditures by Program Area for Select Core Programs, 2016 Fiscal Year
(October 2015 to September 2016), Millions**

Country	Facility-based Care Treatment, and Support	Community-based Care Treatment, and Support	PMTCT	VMMC	HTC	Laboratory	OVC	Key Population Prevention - person who injects drugs	Key Population Prevention	Strategic Information	Total Core Programs
Angola	\$4.73	\$1.67	\$0.63	\$1.94	\$2.96	\$0.53	\$0.58	\$0.11	\$12.88	\$0.53	\$12.88
Botswana	\$12.10	\$5.70	\$1.48	\$5.87	\$8.34	\$4.48	\$2.45	\$0.79	\$43.10	\$1.90	\$43.10
Burma	\$2.16	\$0.14	\$0.06	\$0.95	\$1.22	\$0.04	\$0.11	\$1.56	\$6.60	\$0.35	\$6.60
Burundi	\$1.93	\$0.22	\$3.95	\$0.02	\$1.78	\$0.24	\$0.08	\$0.05	\$8.89	\$0.34	\$8.89
Cambodia	\$1.65	\$0.60	\$0.34	\$0.88	\$0.62	\$0.29	\$3.04	\$0.08	\$7.51	\$0.08	\$7.51
Cameroon	\$10.41	\$1.26	\$9.52	\$2.21	\$1.79	\$0.97	\$1.29	\$0.39	\$27.85	\$0.39	\$27.85
Costa Rica	\$0.17	\$0.05	\$0.07	\$8.42	\$0.01	\$0.20	\$0.04	\$0.20	\$0.53	\$0.04	\$0.53
Cote d'Ivoire	\$35.81	\$8.42	\$11.11	\$8.42	\$17.46	\$1.39	\$2.19	\$93.29	\$1.39	\$1.39	\$93.29
Democratic Republic of Congo	\$2.40	\$0.93	\$0.23	\$1.17	\$0.96	\$0.18	\$1.70	\$0.72	\$8.28	\$0.72	\$8.28
Dominican Republic							\$0.00	\$0.02	\$6.95	\$0.02	\$6.95
Ethiopia	\$63.57	\$4.89	\$13.28	\$9.03	\$19.38	\$11.17	\$5.41	\$138.69	\$11.17	\$11.11	\$138.69
Ghana	\$1.08	\$0.04	\$0.01	\$0.93	\$1.40	\$0.02	\$3.47	\$6.95	\$0.02	\$0.02	\$6.95
Guyana	\$1.34	\$0.42	\$0.03	\$0.29	\$0.38	\$0.58	\$3.30	\$0.58	\$3.30	\$0.03	\$3.30
Haiti	\$28.52	\$7.61	\$7.25	\$11.52	\$15.15	\$6.12	\$1.99	\$79.94	\$1.99	\$1.44	\$79.94
India	\$1.81	\$0.43	\$0.60	\$0.46	\$1.14	\$1.27	\$2.91	\$10.93	\$1.47	\$0.84	\$10.93
Indonesia	\$1.45	\$0.83	\$1.08	\$0.87	\$2.46	\$0.46	\$7.71	\$0.55	\$7.71	\$0.46	\$7.71
Kenya	\$211.48	\$13.65	\$24.25	\$43.76	\$25.57	\$40.04	\$7.51	\$394.43	\$10.68	\$10.68	\$394.43

**Table 1: Reported PEPFAR Expenditures by Program Area for Select Core Programs, 2016 Fiscal Year
(October 2015 to September 2016), Millions**

Country	Facility-based Care Treatment, and Support	Community-based Care Treatment, and Support	PMTCT	VMMC	HTC	Laboratory	OVC	Key Population Prevention - person whoinjects drugs	Key Population Prevention	Strategic Information	Total Core Programs
Lestho	\$11.30	\$1.45	\$3.38	\$5.08	\$5.29	\$3.19	\$3.00	\$0.22	\$0.49	\$33.41	
Malawi	\$33.22	\$4.63	\$6.91	\$9.41	\$13.23	\$9.57	\$3.24	\$0.04	\$1.79	\$83.89	
Mozambique	\$92.41	\$14.87	\$25.32	\$19.00	\$16.09	\$29.85	\$12.97	\$0.18	\$1.99	\$4.28	\$216.95
Nambia	\$9.76	\$3.37	\$1.33	\$6.11	\$5.34	\$4.81	\$3.55	\$0.04	\$0.47	\$1.79	\$36.93
Nigeria	\$148.74	\$22.80	\$34.86	\$58.15	\$36.18	\$37.74	\$4.33	\$19.48	\$4.65	\$366.92	
Papua Ne Guinea	\$0.83	\$0.02	\$0.44	\$0.19	\$0.08	\$1.65	\$0.08	\$3.24	\$0.08	\$70.29	
Rwanda	\$31.63	\$2.56	\$7.84	\$1.71	\$5.33	\$10.64	\$8.14	\$0.01	\$2.17	\$0.24	\$70.29
South Africa	\$129.02	\$24.17	\$20.20	\$52.24	\$67.31	\$8.38	\$44.66	\$0.70	\$5.94	\$10.49	\$363.18
South Sudan	\$2.84	\$0.16	\$1.66	\$3.03	\$0.59	\$0.56	\$0.08	\$2.10	\$0.06	\$11.08	
Swaziland	\$11.62	\$2.31	\$2.81	\$3.58	\$3.88	\$2.50	\$7.74	\$0.48	\$1.67	\$36.61	
Tanzania	\$122.67	\$30.77	\$41.09	\$23.42	\$37.25	\$15.91	\$32.25	\$1.17	\$5.54	\$5.65	\$315.72
Uganda	\$123.78	\$15.06	\$25.82	\$23.25	\$16.25	\$21.62	\$23.35	\$0.12	\$5.59	\$9.86	\$264.69
Ukraine	\$4.56	\$1.49	\$0.02	\$1.33	\$0.66	\$0.00	\$1.67	\$0.32	\$6.74	\$16.78	
Vietnam	\$23.03	\$0.23	\$0.47	\$4.03	\$2.42	\$2.04	\$1.29	\$337.53	\$1.29	\$337.53	
Zambia	\$112.45	\$13.43	\$20.84	\$13.33	\$16.38	\$27.95	\$18.28	\$0.12	\$2.39	\$2.82	\$227.99
Zimbabwe	\$41.29	\$2.56	\$4.34	\$18.48	\$9.69	\$6.83	\$8.63	\$0.62	\$2.94	\$95.39	

FOCUSING PREVENTION FOR IMPACT

As of September 30, 2017, PEPFAR had supported more than 15.2 million men and boys in eastern and southern Africa with substantial protection from HIV infection through the provision of VMMC. In FY 2017 alone, PEPFAR supported the largest single-year increase (nearly 3.5 million) in VMMC results since the program's inception.

This prevention intervention is durable and has at least 60 percent efficacy, making it a highly effective and efficient prevention intervention for men and boys. As nearly 50 percent of the VMMC performed are for school-age boys under 14 years, it will take 10 years to realize the full prevention benefits from this intervention when sexual risk of HIV begins to increase for men. We continue to focus the intervention on 15–29-year-old men, which remains a difficult age group to reach, both for VMMC and for HIV testing for diagnosis and treatment.

To address the alarming rates of gender-based violence (GBV) faced by children and the disproportional risk of HIV infection among adolescent girls and young women (AGYW) in many African countries, PEPFAR launched the Determined, Resilient, Empowered, AIDS-free, Mentored and Safe (DREAMS) public-private partnership (PPP) on World AIDS Day 2014. Every year, 360,000 AGYW are infected with HIV – nearly 1,000 a day. GBV is a significant reason why, affecting millions of AGYW. Girls who experience violence are up to three times

more likely to be infected with HIV or other sexually transmitted infections. On World AIDS Day 2017, we reported that in the 10 African countries implementing DREAMS programs, nearly two-thirds (65 percent) of the highest HIV-burden communities or districts achieved a 25–40 percent or greater decline in new HIV diagnoses among young women since 2015. Reaching those at most risk, including adolescent girls and young women, men, and key populations, is critical to ending the HIV/AIDS epidemic.

In order to reach epidemic control, we must address the underlying social and cultural issues, especially unequal human rights and stigma and discrimination, that prevent people from accessing HIV prevention and treatment services. When any person is stigmatized or unable to access services due to discrimination, the health of everyone in the community is threatened and the epidemic continues to expand rather than contract. The following section focuses on PEPFAR's commitment to prevention for impact by ensuring that those at most risk of acquiring HIV are able to protect themselves from infection.



Voluntary Medical Male Circumcision is a focus area for USAID's AIDSFree Project.

CREDIT: Lisa Russell, Governess Films and AIDSFree Project

PEPFAR and Prevention Interventions

Prevention, treatment, and care have been the three pillars of PEPFAR programming since our inception in 2003. This comprehensive approach was mandated by Congress in PEPFAR's initial authorizing legislation and was included in each subsequent reauthorization. Prevention services are grouped together in a comprehensive package for maximum impact. This package can include our continued focus on the prevention of mother-to-child transmission (PMTCT) of HIV followed by condom programming, behavioral and structural interventions, risk avoidance and reduction, pre-exposure prophylaxis (PrEP) with ARVs, HTS, and VMMC for HIV-negative young men. These prevention activities target those most at risk of HIV acquisition, focused on risk groups and areas of high HIV burden.

Global results show dramatic improvement in preventing babies from being born with HIV, but much less of an impact on reducing new adult infections, indicating a need to refocus on prevention in young adults. PEPFAR was enormously successful in PMTCT implementation, dramatically decreasing new pediatric infections and helping mothers with HIV live healthy, productive lives. These programs will continue to be a cornerstone of PEPFAR. Protecting and ensuring that babies remain HIV-free resulted in significant improvements in under age 5 survival rates, reflected in the impressive progress achieved toward the Millennium Development Goals. Also, a continued critical focus of PEPFAR has been ensuring that HIV-positive mothers remain on lifesaving treatment, for their own health and that of their babies. The next challenge is keeping these babies HIV-free as they age into adolescents and young adults.

PEPFAR aims to meet that challenge and is co-leading with UNAIDS *Start Free Stay Free AIDS Free*, a super-fast-track framework for ending AIDS

among children, adolescents, and young women by 2020. This means that PEPFAR is working to ensure that infants are born HIV-free, AGYW stay HIV-free, and children and adolescents living with HIV have access to the lifesaving treatment and care needed for them to be AIDS-free. This collaboration with key partners is building on the progress of the *Global Plan Towards the Elimination of New HIV Infections Among Children by 2015 and Keeping Their Mothers Alive* as well as accelerating key initiatives (Figure 20).

The collective global framework aims to achieve these goals: (1) Start Free – provide 95 percent of pregnant women living with HIV with lifelong HIV treatment by 2018 and reduce the number of children newly infected to less than 40,000 by 2018 and 20,000 by 2020; (2) Stay Free – reduce the number of new HIV infections among adolescents and young women to less than 100,000 by 2020 and provide VMMC to 25 million additional men, especially young men



In Zimbabwe, a group of men in the community break into a traditional dance called “hoko” as they celebrate the safe return of new graduates who had just been circumcised, and their successful completion of the rite of passage.

Figure 20: The Goals of the *Start Free Stay Free AIDS Free* Framework⁵

ages 10–29, by 2020; and (3) AIDS Free – provide ART to 1.6 million children (0–14 years) and 1.2 million adolescents (15–19) living with HIV by 2018 and to 1.4 million children (0–14) and 1 million adolescents (15–19) with HIV by 2020.

Since PEPFAR’s inception in 2003, a total of nearly 2.2 million infant HIV infections have been averted, allowing these infants to Start Free, thanks to PEPFAR support. Nearly half of that progress has been achieved since 2013. In 2017, PEPFAR supported HTS for 11.2 million pregnant women; 94 percent of the women who tested positive for HIV were then provided with ART.

Through our DREAMS PPP with the Gates Foundation, Girl Effect, Johnson & Johnson, Gilead Sciences, and ViiV Healthcare, PEPFAR is helping girls stay free of HIV infection and grow into a Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe woman.

PEPFAR expanded DREAMS programming in the 10 original countries in 2017.

As a result, 41 of the highest HIV-burden districts (65 percent) have achieved a decline in new diagnoses among AGYW ages 15–24 by more than 25 percent since 2015; 14 of those districts have had a decline of greater than 40 percent. Five more countries are implementing DREAMS in 2018, reaching even more AGYW with interventions that go beyond the health sector to address the structural drivers that increase girls’ HIV risk, including poverty, gender inequality, sexual violence, and lack of access to an education. Among 10–14-year-old girls, the program has focused on risk avoidance and strengthening families and communities to embrace and protect their girls.

In addition, of more than 3.4 million VMMCs that PEPFAR supported for HIV prevention

⁵ UNAIDS. (2016). *Start Free, Stay Free, AIDS Free: A Super-Fast-Track Framework for Ending AIDS Among Children, Adolescents and Young Women by 2020*.

in eastern and southern Africa in 2017, nearly 1.6 million were among men ages 15-29. Male circumcision has the potential to prevent millions of new infections, preserve millions of lives, and save billions of dollars in averted HIV treatment costs. Importantly, this procedure brings men – some for the first time since childhood – into health services and is a key intervention for reducing risk of HIV transmission to AGYW.

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

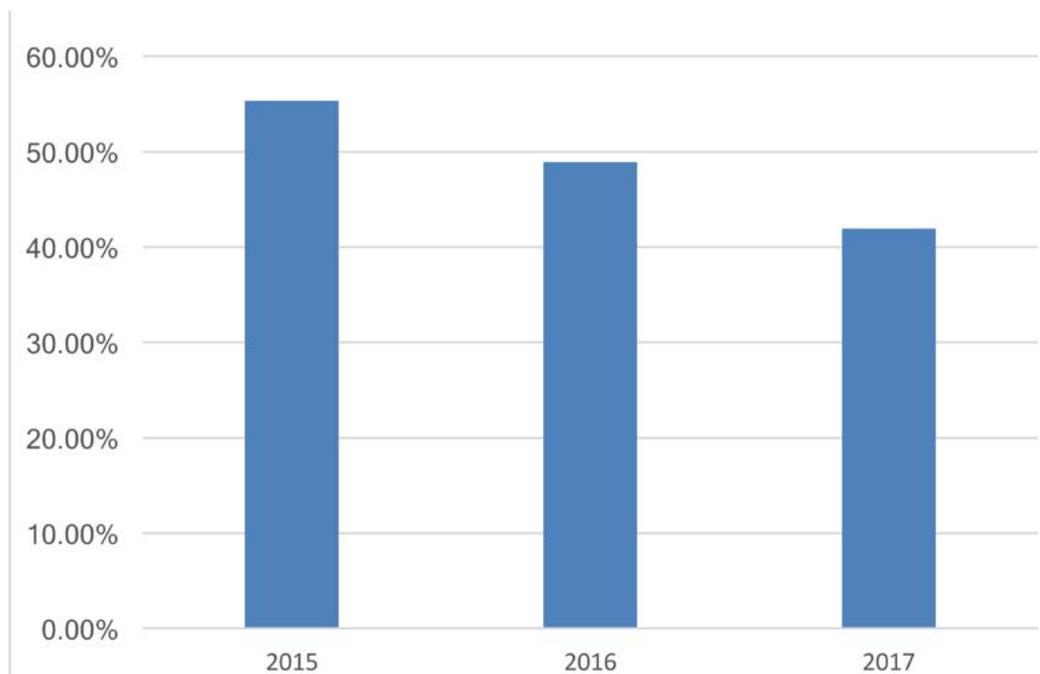
PEPFAR remains fully committed to working toward the elimination of new HIV infections among children and keeping their mothers alive. A cumulative total of 2.2 million infant HIV infections have been averted since the beginning of PEPFAR – with nearly half of that progress achieved since 2013. That

means babies are being born HIV-free, and their mothers are staying healthy and AIDS-free to protect and nurture them.

Over the past two years, the rate of HIV testing of pregnant women presenting to PEPFAR-supported sites has increased from 93.3 percent to 99.8 percent. In addition, the proportion of pregnant women newly diagnosed with HIV among all pregnant women who tested positive has decreased from 53 percent to 43 percent. This shows that more women are entering pregnancy with known status and already on antiretroviral therapy to protect their health and that of their infants, and suggests a decrease in new infections among women of reproductive age (Figure 21).

This result is consistent with PHIA data from several countries showing high treatment coverage in PMTCT target age groups, with more women knowing their HIV status and those who are HIV-positive being on treatment.

Figure 21: Proportion of Pregnant Women Newly Diagnosed Among Those Tested HIV-Positive





CREDIT: Wendy Tacruk, CapacityPlus and Intra-Health International

A mother and her baby visit a health clinic in the Dominican Republic.

Women entering pregnancy already on ART have a decreased risk of transmission to the infant – less than 1 percent – compared with up to 25 percent during pregnancy with no treatment. This leads to better outcomes for women, children, and families. PEPFAR's support has been essential for these achievements, and continued focus on PMTCT is needed to both maintain these results and to improve outcomes in countries that continue to have higher mother-to-child transmission rates such as Nigeria and South Sudan.

PEPFAR has invested significantly in PMTCT and provided extensive support for the use of lifelong ART for all HIV-infected pregnant and breastfeeding women, an approach that leads to the best outcomes for women and their partners and children. Since the announcement of the *Global Plan* at the United Nations (UN) in June

2011, the number of new HIV infections in infants each year has dropped by 60 percent in the 21 Global Plan priority countries in sub-Saharan Africa. Following recommendations of WHO's 2015 publication, *Guideline on When to Start Antiretroviral Therapy and on Pre-exposure Prophylaxis for HIV*,⁶ PEPFAR has worked to ensure that all supported countries are providing lifelong ART to pregnant women living with HIV. Further, through the *Start Free Stay Free AIDS Free* initiative, PEPFAR and multilateral partners will continue to work toward elimination of mother-to-child transmission by preventing infections in HIV-free young women and identifying and providing treatment to those living with HIV.

PEPFAR supports an effective PMTCT cascade of interventions – antenatal services, HIV testing, and use of ART for life; safe childbirth practices and appropriate breastfeeding; and

⁶ WHO. (2015). *Guideline on When to Start Antiretroviral Therapy and on Pre-exposure Prophylaxis for HIV*.

infant HIV testing and other postnatal care services – that usually results in an HIV-free baby and a mother with a suppressed viral load. In 2017, PEPFAR continued to ensure that our resources were targeted to high-burden areas to ensure strong linkages for HIV-positive pregnant women to the continuum of care. Antenatal care (ANC) uptake is needed to provide PMTCT services, but rates of ANC uptake differ greatly among communities and countries.

To address these barriers, PEPFAR uses site-specific data to ensure resources are focused in the highest burden areas with the greatest need to maximize the impact on babies and their mothers. In addition, to increase the quality and uptake of ANC in these areas, PEPFAR is working to map areas of low ANC attendance compared with HIV burden and target interventions. The ultimate goal is to achieve ANC attendance for all women and to offer HIV testing to all pregnant women in ANC in our supported areas.

An additional benefit of this site-level analysis is the utilization of program data to geographically map the HIV epidemic at a granular level. This analysis is being replicated across partner countries to further focus the HIV response and understand the evolving epidemic at a geographic and facility level. The addition of recency assays to HIV testing in pregnant women in select DREAMS districts allows for the identification of women with HIV infection acquired in the past six months who are at the highest risk both for transmission to the fetus/infant and to their sexual partners. It also allows mapping of where new infections are occurring for targeting of intensive prevention and testing activities.

PEPFAR continues to focus testing in high-HIV-burden areas. We increased our focus on supporting pregnant women who test negative for HIV to stay HIV-free through increased partner testing and linkages to prevention interventions,

including linkage to DREAMS programming and to PrEP for pregnant women at high risk of acquiring HIV. This platform gives PEPFAR the opportunity to engage HIV-negative women in prevention activities and to empower them.

In Kenya, one solution being implemented by a DREAMS Innovation Challenge partner is integrating PrEP provision into maternal and child health and family planning sites and leveraging these platforms to reach HIV-negative women who are at a high risk of infection. This model will be replicated in additional countries in the coming year to increase access to prevention among high-risk young women.

Through partner testing, ANC clinics are key settings to identify serodiscordant couples – when one partner is HIV-positive and the other is HIV-negative – and provide interventions that can lower the risk of HIV transmission, such as immediate treatment for men living with HIV to reduce their transmission risk and referral to VMMC for men who are HIV-negative to reduce their HIV acquisition risk.

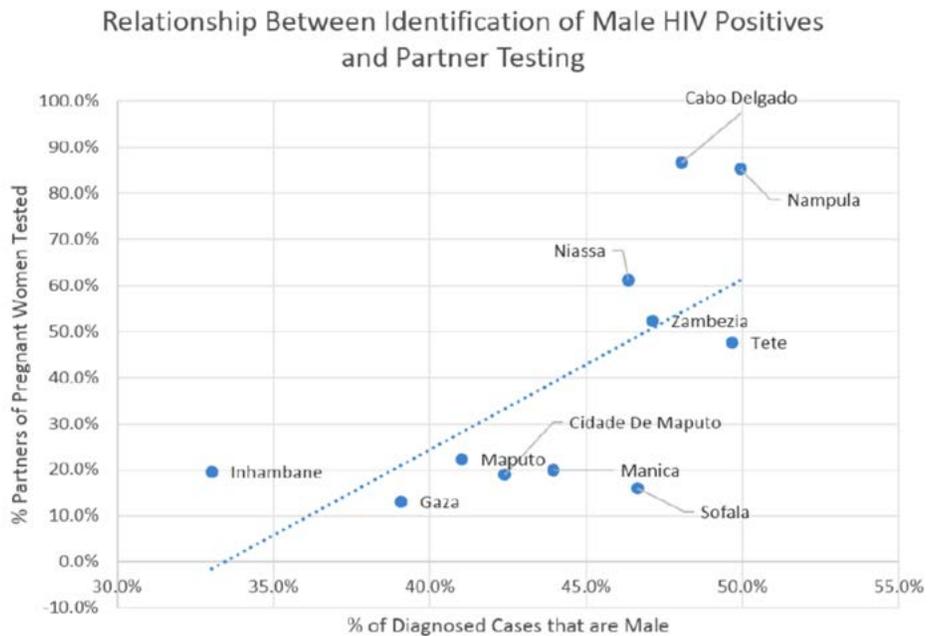
PEPFAR's Mozambique team presented FY 2017 Quarter 3 data showing the potential effects of increased partner testing of men through ANC settings, which resulted in more men receiving treatment (Figure 22). Reaching men and identifying those living with HIV is often difficult since asymptomatic men rarely access the health care system. The ANC platform represents an important access point. In the coming year, PEPFAR teams will be introducing self-testing for HIV into ANC to allow women to provide tests for their male partners who may not be able to accompany them to their ANC visits.

In FY 2017, 11.2 million pregnant women learned their HIV status thanks to PEPFAR support. Of those identified as HIV-positive, 94 percent received ARVs during their pregnancy to reduce



Students participate in a live radio show with Zathu Radio in Malawi.

Figure 22: PEPFAR Mozambique Data from FY 2017, Quarter 3, Showing an Increased Proportion of Men on Treatment for HIV with Increased Partner Testing in the Antenatal Clinic





A mother with her baby in Zimbabwe.

vertical transmission. ART reduces mother-to-child transmission at birth to less than 5 percent. Transmission rates under 1 percent are seen among women who conceive while on ART and who continue their ART throughout pregnancy with suppressed viral load.

While 95 percent of babies are born HIV-free with effective interventions at birth, if their mothers do not remain on treatment, there is a 15 to 25 percent risk for infection to be transferred to the infant during the breastfeeding period. The breastfeeding period is therefore a crucial time for women to be retained in care and on ART. PEPFAR recognizes the need for data on retention of pregnant and breastfeeding women, and now requires partner countries to report the percentage of women known to be alive and on treatment 12 months after the initiation of lifelong therapy.

In 2017, PEPFAR's retention rate for pregnant women on ART was 70 percent. In some cases, loss to follow-up in one clinic is related to women seeking care at a different clinic after delivery closer to where they stay with their family postpartum. In several countries, public electronic systems and unique identifiers are being developed to allow for better tracking and coordination of care. Increased efforts are being directed at retaining pregnant and breastfeeding women in care and treatment and providing testing for their infants to allow for early treatment of infected infants. For example, in Mozambique, areas with low retention of pregnant and breastfeeding women intensified efforts to provide mentor mothers who support fellow mothers living with HIV and encourage them to take their medicines and attend clinic visits, and monitor retention rates monthly to ensure improvements.

Pregnant and breastfeeding women are priority populations for providing viral load testing to ensure their viral suppression or provide enhanced counseling for ART adherence if they are not yet suppressed. If HIV is suppressed to undetectable levels, the risk of transmission to the fetus during pregnancy, to the infant during breastfeeding, and to sexual partners is essentially zero. PEPFAR advocates for countries to prioritize viral load testing for pregnant and breastfeeding women within their national guidelines. For example, Uganda is updating its national guidelines on testing for viral load to include instructions on more frequent testing for pregnant and breastfeeding women to optimize their treatment. With concerted efforts for optimizing the detection, care, and treatment for pregnant and breastfeeding women living with HIV, transmission to infants can be virtually eliminated. In addition, the ANC platform can be utilized to maximize prevention opportunities to keep young women HIV-free.

Preventing New HIV Infections in Young Men: Voluntary Medical Male Circumcision (VMMC)

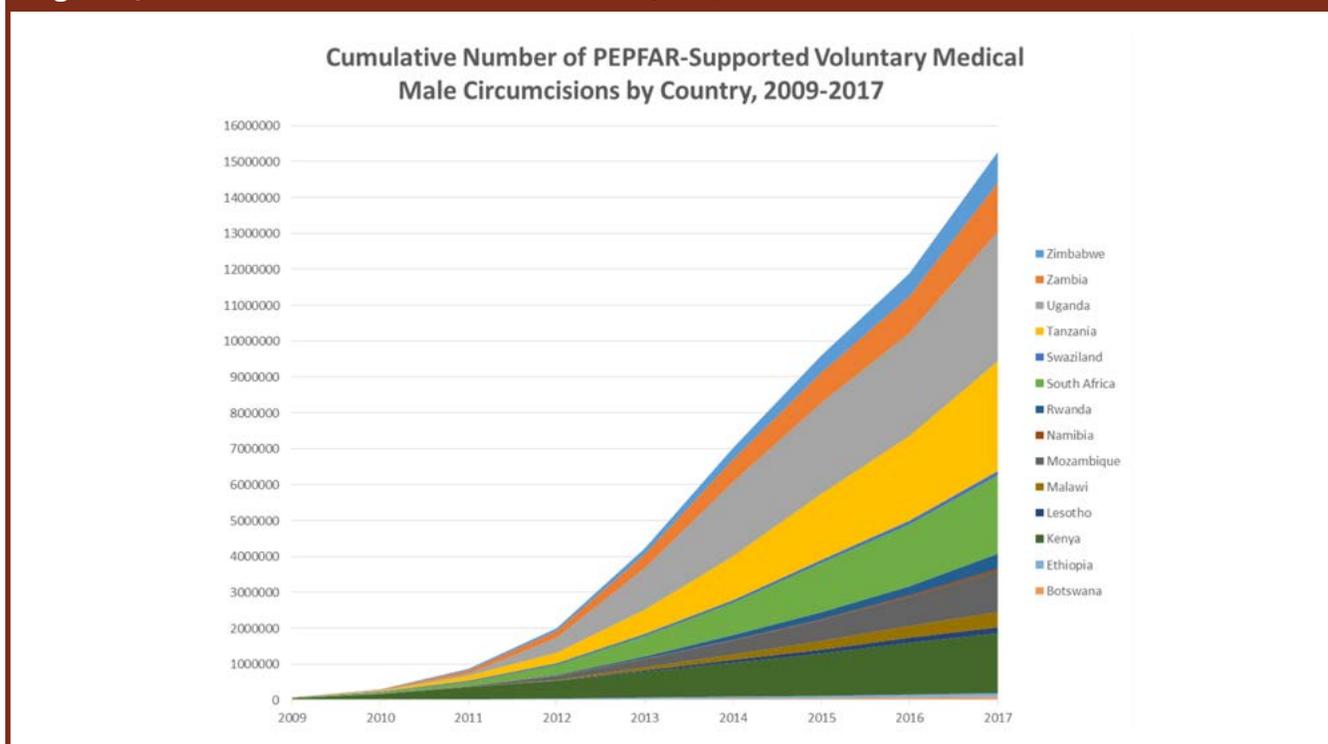
VMMC is a one-time, low-cost intervention shown in randomized controlled trials to reduce men's risk of HIV by approximately 60 percent, with the prevention effect maintained for life. Male circumcision has the potential to prevent millions of new infections, preserve millions of lives, and save billions of dollars in averted HIV treatment costs. Importantly, the procedure brings men, some for the first time since childhood, into health services.

PEPFAR is targeting men ages 15–29 for VMMC to maximize the preventive benefits, with the expanded inclusion of boys ages 10–14 as saturation is reached in the older age groups. Maximum benefit is seen when the

circumcision is done before sexual debut, and the most immediate benefits are obtained by focusing on the 15–29 age group. Further, by prioritizing high-HIV-transmission areas among the 14 PEPFAR VMMC priority countries with low background circumcision rates, PEPFAR partners are maximizing efficient and timely implementation to reduce HIV incidence.

As of the end of FY 2017, cumulatively, PEPFAR had supported more than 15.2 million VMMC procedures in eastern and southern African countries, thereby exceeding our ambitious goal, set forward at the 2015 United Nations General Assembly Sustainable Development Summit of 13 million PEPFAR-funded VMMCs, by more than 2 million. PEPFAR supported 3.38 million VMMC procedures in FY 2017 alone, 46 percent in the 15–29 age group (Figure 23). Early modeling suggests that achieving 80 percent coverage of VMMC among males 15–49 years old in the 14 priority countries would prevent

Figure 23: PEPFAR Cumulative VMMC Results, FY 2009–2017





CREDIT: Sympathy Mpofo, CHAPS Swaziland

A group of young boys pose for a photo prior to receiving circumcision at a health clinic in Swaziland.

millions of HIV infections and save billions of dollars. PEPFAR continues to prioritize this one-time intervention by increasing central funding to this intervention in 2018.

Scaling up VMMC to achieve a coverage of at least 80 percent in men ages 15–29 is a key PEPFAR focus and requires continued efforts to improve target setting, demand creation (where appropriate), and efficiency, all of which rely on better site-level data (Figure 24). PEPFAR is implementing innovative solutions to address barriers to VMMC uptake, including through increased staffing capacity and training to meet the annual seasonality of the intervention. In the past year, a PEPFAR-funded tool was shown to effectively optimize site utilization in Mozambique, matching demand for VMMC with staff capacity. Paired with Geographic Information System mapping, this tool led to marked increases in VMMC in

the provinces where it was used (Figure 25).

Following the success in select provinces in Mozambique, these methodologies are being shared throughout VMMC programs. In Zimbabwe, aggressive expansion of outreach-based VMMC services, and a hybrid service model where roving full-time VMMC specialists fill short-term personnel gaps and provide capacity-building mentorship at government VMMC sites, resulted in dramatic growth for the PEPFAR VMMC program, culminating in 159,243 circumcisions performed in FY 2016 and an anticipated substantial increase to 227,299 in FY 2017.

Enhanced partner management that included weekly target setting and reporting of results also contributed to the program's enhanced performance. In the summer of 2017, South Africa launched a highly successful acceleration plan to

Figure 24: Number of Circumcisions by Priority Age Band and Priority Country, FY 2017

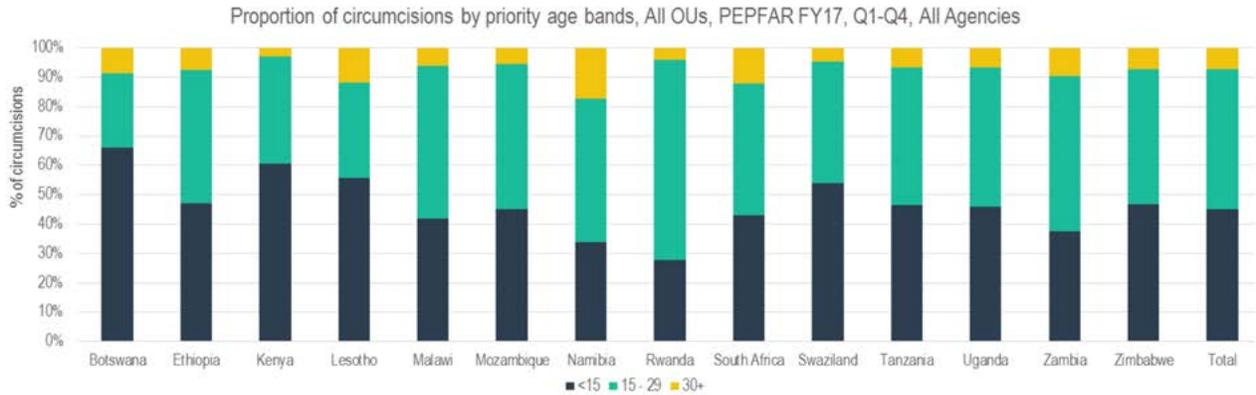
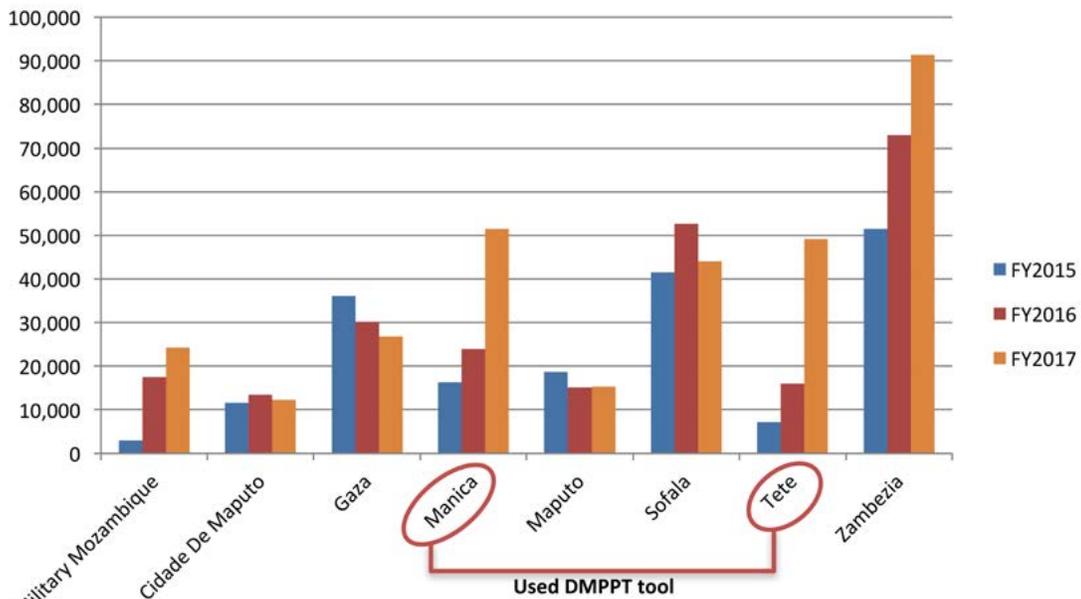


Figure 25: Change in VMMC Numbers in Manica and Tete Provinces in Mozambique Using the DMPPT Tool, Compared with Provinces That Had Not Yet Used the Tool



rapidly improve VMMC through increased partner management, weekly reporting and monitoring, increased engagement with traditional and community influencers, expanded service delivery, and refined age band targeting. Even in the short term, this campaign resulted in a marked increase in program performance.

Prioritizing Prevention of New HIV Infections in Women, Adolescent Girls, and Children

According to the recent PHIA results, several countries are approaching epidemic control among older adults – Lesotho, Malawi, Swaziland, Zambia, and Zimbabwe. Despite these substantial gains, the PHIA also reveal key gaps for young women and men under age 35 who are significantly less likely to be tested, on treatment, and/or virally suppressed.

Girls remain up to 14 times more likely to be infected with HIV than boys the same age due to the unique and often inequitable circumstances affecting their daily lives.⁷ This is compounded by the rising population of adolescents in sub-Saharan Africa due to the youth bulge and the persistent cycle of HIV transmission between AGYW and young adult men. Now, more than ever, it is evident that there is still much work to do for this population.

The data show that girls and young women account for around three quarters of new HIV infections among adolescents in sub-Saharan Africa.⁸ To control the epidemic in this highly vulnerable population, PEPFAR has partnered with the Gates Foundation, Girl

Effect, Johnson & Johnson, Gilead Sciences, and ViiV Healthcare on the DREAMS PPP. DREAMS is a comprehensive prevention program addressing the multidimensional circumstances that place young women at increased risk of contracting HIV. DREAMS was launched on World AIDS Day in 2014 and followed by the DREAMS Innovation Challenge in 2016.

The goal of DREAMS is to reduce new HIV infections in AGYW by providing a holistic and layered approach to HIV prevention. DREAMS originally operated in 10 countries that represent more than half of all infections occurring among AGYW globally: Kenya, Lesotho, Malawi, Mozambique, South Africa, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe.⁹

PEPFAR was pleased to announce exciting new DREAMS results on World AIDS Day 2017. In the 10 African countries (63 districts) implementing DREAMS, the majority (41, or 65 percent) of the highest HIV-burden districts achieved a decline in new diagnoses among AGYW ages 15–24 of more than 25 percent since 2015; 14 of those districts had a decline of greater than 40 percent. Importantly, new diagnoses declined in nearly all DREAMS intervention districts.

Given the impact DREAMS has had on reducing new infections, PEPFAR continues to invest in comprehensive and layered prevention in AGYW through DREAMS incorporation into the PEPFAR COP processes in 2017, thereby institutionalizing the DREAMS core package of interventions as standard PEPFAR programming. In 2017, five additional countries – Botswana, Cote d'Ivoire, Haiti, Namibia, and Rwanda – received funds to implement DREAMS packages with an emphasis on programming focused on preventing sexual violence and HIV through avoiding sexual risk among 9- to 14-year-olds.

⁷ ICAP. (2016). Zambia Population-Based HIV Impact Assessment ZAMPHIA 2015–2016. Columbia University, Health MSOP.

⁸ UNAIDS. (2015). Empower Young Women And Adolescent Girls: Fast-Tracking The End Of The AIDS Epidemic In Africa. Retrieved from http://www.unaids.org/sites/default/files/media_asset/JC2746_en.pdf

⁹ UNAIDS. (2014). The Gap Report: Adolescent Girls and Young Women. Retrieved from http://www.unaids.org/sites/default/files/media_asset/02_Adolescentgirlsandyoungwomen.pdf.



CREDIT: Girl Effect

Students participate in a live version of the Zathu radio show in Malawi and are given an opportunity to interact with the cast.

DREAMS and Private Sector Engagement

Private sector and philanthropic partners remain central to the success of DREAMS by contributing their unique expertise and capabilities. For example, Girl Effect conducted extensive research to understand the context of relationships between boys and girls in Malawi and what messaging would resonate most with adolescents.

The research found that relationships between boys and girls are highly sexualized in Malawi, and society often discourages boys and girls from being platonic friends, putting girls at greater risk. Girl Effect created a youth brand called *Zathu* (meaning “ours”) to close the gender gap through the power of music and storytelling, and tackle challenging topics such as relationships, confidence, and friendships between girls and boys.

Since its launch, *Zathu* has reached more than 1 million people through various platforms. Brand ambassadors have reached 300 youth clubs, more than 7,500 young people, and more than 200 village heads; digital platforms such as the *Zathu* website, YouTube, Facebook, and malawi-music.com have been accessed more than 1.02 million times; and 2,500 text messages have been received from the audience since its launch. Johnson & Johnson has also brought girls’ voices to life to tell success stories, inform programming, and amplify DREAMS messaging, and conducted market segmentation analytics to better understand the behaviors of AGYW. Gilead continues to support the purchase and distribution of PrEP medication to AGYW and has supported the registration of PrEP across DREAMS countries, and ViiV Healthcare is investing in capacity building of community-based organizations through the DREAMS Innovation Challenge. The Gates Foundation is supporting

an impact evaluation as well as implementation science (IS) research to understand program results and evaluate the success of DREAMS.

Implementation of the DREAMS Innovation Challenge began in 2017 to identify innovative solutions that complement the core DREAMS program. Supported by PEPFAR, Johnson & Johnson, and ViiV Healthcare, the Innovation Challenge aims to infuse new thinking and high-impact approaches to meet the needs of AGYW in sub-Saharan Africa, engage new partners that have never received PEPFAR funding, and support funding for small organizations including local, community-based, youth-led organizations.

JSI Research & Training Institute, Inc. (JSI) continues to manage the execution of the Innovation Challenge on behalf of PEPFAR, providing technical assistance, capacity building, and grants management to 45 PEPFAR-funded grantees across all 10 DREAMS countries. Given that nearly half of grantees are new to PEPFAR funding and two-thirds are small community-based organizations, the first year of Innovation Challenge implementation was spent heavily on training, capacity building, start-up activities, and preparing grantees for reporting on program indicators.

In addition, JSI worked on cross-collaboration and coordination in-country among the core DREAMS program and Innovation Challenge key stakeholders. Through the Innovation Challenge, PEPFAR aims to identify new approaches and solutions to addressing the complex needs of AGYW. For example, in Lesotho, Luboto Library Partners created a mentorship program at local libraries where girls can learn about self-esteem, empowerment, and resilience.

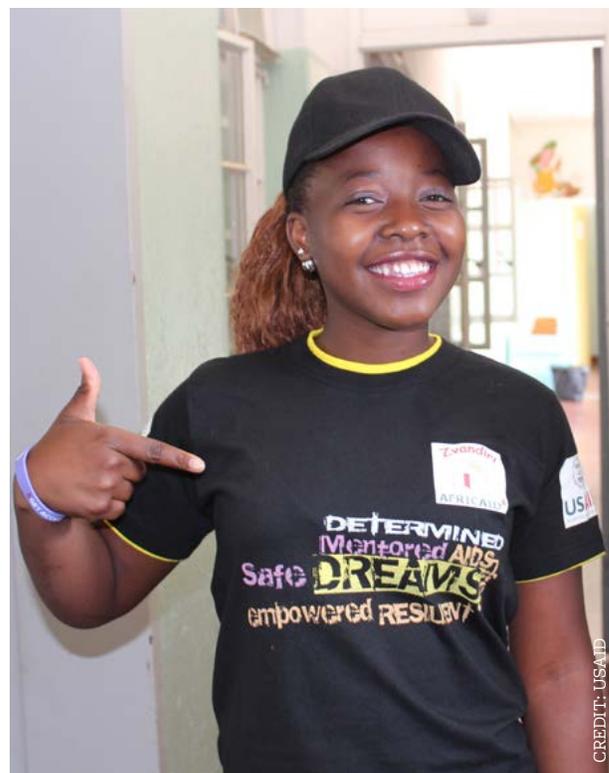
After attending the mentoring sessions, one beneficiary stated, *“I am determined to share what I have learned with the girls in Nyimba, especially my sister, who needs to go back to*

school. I want to teach them about resilience, about getting back up when life knocks you down. I am ready to go home and take a stand.”

Complex Challenges in the Lives of AGYW

PEPFAR is dedicated to continued implementation of our 2013 Gender Strategy. The Strategy calls for providing gender-equitable HIV prevention, care, treatment, and support; implementing GBV prevention activities and post-GBV care services; implementing interventions to change harmful gender norms and promote positive gender norms; bolstering gender-related policies and laws that increase legal protection; and expanding gender-equitable access to income and productive resources, including education.

In carrying out the Strategy, PEPFAR recognizes the complexities of young women's lives and focuses on holistically addressing factors that



A young woman supporting the DREAMS program in Zimbabwe.

are related to their HIV risk. Programming includes increasing access to secondary education, reducing GBV, building strong parenting/caregiver relationships, and changing harmful community norms and structures that may make it difficult for young women to navigate their daily life challenges.

For example, evidence shows that remaining in school is a protective factor for adolescent girls. Further, additional years of education reduce the risk of HIV acquisition in adolescent girls and contributes to their future economic success.¹⁰ Each year of secondary school education reduces the risk of child marriage for girls by six percentage points.¹¹ Education also improves girls' overall health and reduces their number of unplanned pregnancies. Transitioning girls into secondary school and supporting completion of their education has become a high priority for PEPFAR and is supported by both DREAMS and OVC programming.

Violence is another factor placing AGYW at risk, and it permeates the lives of girls and women all over the world. One in three women will experience GBV in her lifetime, increasing the likelihood of contracting HIV and other sexually transmitted infections (STIs).¹² The PEPFAR-funded Violence Against Children (VAC) surveys reveal that, in some countries, one in three girls' first sexual encounter is forced or coerced.¹³ PEPFAR is working on reducing violence in the lives of AGYW while also mitigating the impact of violence through education and implementation of post-GBV care. Across DREAMS countries,

communities are participating in programs such as Stepping Stones and SASA! that improve outlook on gender norms and reduce instances of violence. PEPFAR recognizes there is a gap in programmatic intensity in preventing the rape of 9–14-year-old girls in communities around the world, and more needs to be done to prevent rape and provide post-rape care. PEPFAR continues to reach tens of thousands of women with post-GBV care, including post-exposure prophylaxis.

Girls often find themselves with very limited economic opportunities. Women make up more than half of the world's population, but only 40 percent of the global labor force.¹⁴ Beyond struggling economies, there are numerous barriers that prevent women from finding jobs or creating businesses, including their level of education and the sexism they often face in hiring. The DREAMS Innovation Challenge is finding new ways to bridge girls to employment.

The complex risks faced by girls often begin when they are very young. That is why PEPFAR is significantly expanding efforts to support adolescent girls ages 9–14 through the prevention of sexual and gender-based violence and helping young people delay their age of sexual debut. Early sexual debut, defined as first sexual intercourse before the age of 15, correlates with multiple risks for girls, such as increased risk of HIV acquisition, substance abuse, school dropout, and early pregnancy.^{15, 16, 17, 18} PEPFAR is deploying evidence-based strategies to help adolescent girls avoid risk before it begins.

¹⁰ De Neve et al. (2015). *The Lancet*.

¹¹ World Bank and ICRW. (2017, June). *Economic Impacts of Child Marriage: Global Synthesis Brief*. Washington, DC.

¹² United States Agency for International Development. (2015). *Report on Gender Equality and Women's Empowerment*.

¹³ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (2015). *Prevalence of Sexual Violence Against Children and Use of Social Services – Seven Countries, 2007–2013* (MMWR Vol. 64, No. 21).

¹⁴ Pew Research Center analysis of national labor force survey data aggregated by the International Labor Organization, accessed March 1, 2017.

¹⁵ UNAIDS. (2016).

¹⁶ Mengo, Small, Sharma, & Paula. (2016).

¹⁷ Tucker-Halpern, Spriggs, Martin, & Kupper. (2009).

¹⁸ Harrison, Cleland, Gouws, & Frolich. (2005).

DREAMing of an AIDS-Free Future for AGYW

Country ownership of HIV prevention for AGYW is strengthening DREAMS programs and expanding DREAMS-like activities beyond DREAMS districts. The government of Malawi released an AGYW strategy, South Africa started a national program called “She Conquers,” and Swaziland expanded DREAMS nationally. The Global Fund, World Bank, and various UN agencies are all increasing their focus on AGYW. DREAMS is not a moment; it is a movement.

Girls are being empowered to step up as leaders in their communities to speak openly about their risks for HIV, and they are embracing programs to mitigate these risks. Parents and caregivers are gaining the necessary skills to engage honestly with their daughters – and sons – about HIV and other issues affecting their health and overall quality of life. Community and faith leaders are dedicating themselves to changing harmful gender norms that increase the vulnerability of girls and young women.

As communities continue to galvanize around AGYW, PEPFAR enthusiastically collaborates and supports evidence-based programming to reduce their risk for HIV and the negative outcomes that increase as girls move into adolescence and young adulthood.

Preventing Stigma and Discrimination

PEPFAR has focused on responding to the significant unmet need for comprehensive prevention, care, and treatment programs and services among key populations globally alongside targeted efforts to support key populations at the local and national level. While strides have been made to strengthen HIV clinical and community

services serving key populations, size estimates are frequently inaccurate, and there is a lack of adequate resources invested in programs to address social and structural issues that inhibits access to and retention in quality HIV services. It is essential to address socio-structural factors such as stigma, discrimination, violence, and law enforcement harassment. These factors create barriers to accessing HIV services and limit the effectiveness of service delivery.

In FY 2017, PEPFAR reached more than 7.1 million members of priority populations and more than 2.1 million members of specific key populations with HIV prevention packages (Appendix W). PEPFAR is focused on ensuring that reaching individuals at risk results in a prevention cascade that ensures 100 percent of those reached are tested for HIV and 100 percent receive prevention and treatment services. PEPFAR is funding the Linkages Across the Continuum of HIV Services for Key Populations Affected



A young boy in Mozambique.

CREDIT: Sarah Day Smith/PEPFAR



Safe spaces supported by the DREAMS partnership give young women living in informal settlements in Nairobi a place to express themselves without the fear of judgment or harm and learn to stay HIV-free.

by HIV Project (LINKAGES) in an effort to accelerate the ability of partner governments, key population-led civil society organizations (CSOs), and private sector providers to plan, deliver, and optimize comprehensive HIV prevention, care, and treatment services to reduce HIV transmission among key populations and help those who are HIV-positive live longer. LINKAGES enhances HIV prevention and care by improving the outreach to key populations most at risk of acquiring or transmitting HIV, promoting routine HIV testing and counseling, actively enrolling those with HIV into care and support interventions, and enabling them to remain in care.

The project also helps countries to use and scale up evidence-based approaches to service provision; assists key populations to mobilize and advocate for changes in laws and the conduct

of police, health care workers (HCW), and policymakers; and works with governments to make programs sustainable for the long term. Other PEPFAR-supported initiatives to reach key populations include the Key Populations Challenge Fund, the Key Populations Implementation Science Initiative, the Local Capacity Initiative (LCI) (Section 4), the Robert Carr Civil Society Networks Fund (RCNF) (Section 4), and a partnership with the Elton John AIDS Foundation (EJAF) (Section 4).

PEPFAR has identified a number of possible solutions to help address some of the barriers to comprehensive prevention, care, and treatment facing key populations. For instance, perceived stigma from HCW, experiences of discrimination while seeking health services, and services that are unresponsive to unique needs are all documented barriers to HIV services, particularly

for key populations. With the broad adoption of universal Test and Treat in PEPFAR-supported countries, a larger number/proportion of key population clients will be referred for ART initiation and retained in clinical services as countries strive to achieve epidemic control. Persistent stigmatizing and discriminatory treatment of key populations by HCW and others encountered in clinical settings warrant specific measures to improve key populations' access to friendly and competent ART services. As a first step, specific training is required to reduce access barriers by sensitizing HCW to the unique context of key populations. Increasing HCW competency at providing comprehensive, nonstigmatizing services will improve access to services for those with the greatest need and those that are historically underserved.

PEPFAR has also identified enhanced peer outreach approaches and social network

strategies as a way to reach increasing numbers of key populations. Key population programs have typically relied on peer outreach workers to reach key population members who frequent hotspots or visit drop-in centers. However, these programs quickly reached testing saturation as the same key population subpopulations received services with frequency. In the quest to improve HIV-positive test yield, several countries piloted and scaled up enhanced peer outreach approaches and social network strategies that take advantage of characteristics of social/sexual/drug-using networks to increase case-finding effectiveness and efficiency.

These newer case-finding approaches were deployed to improve access by and identification of previously untapped KP network members (e.g., KPs who are at higher risk of HIV or who have never been tested) to increase HIV-positive test yield and to find higher absolute numbers



CREDIT: USAID

A group of young people in Cambodia take part in a workshop focusing on outreach to key populations.



A young girl with her caregiver in Uganda.

of HIV-positive key populations for potentially lower investment. Previous research in the U.S. demonstrated greater HIV testing efficiency associated with incentivized approaches that enlist HIV-positive and high-risk HIV-negative individuals to refer their contacts (e.g., friends, sexual partners, drug-using partners, etc.) to HTS.

In addition, PEPFAR has placed a priority on engaging law enforcement in key population programming. Key populations experience high levels of violence all over the world, which increases their HIV risk, decreases their rates of HIV testing and partner disclosure, and reduces their adherence to ART. Police cooperation and protection is essential to reducing violence against key populations and operating successful HIV programs for key populations. In Swaziland, the Dominican Republic, and Kenya, high-level advocacy occurs with police

leadership to help HIV programs for key populations operate safely. This is accompanied by training police officers to reduce their stigma and discrimination against key populations, interpret local law, increase their understanding of the link between violence and HIV, instill in them a sense that they are part of curtail the HIV epidemic, and help them understand the needs of victims of violence and link those victims to the other services they may need.

ACCELERATING ACCESS TO HIV TREATMENT

HIV treatment is one of the most cost-effective investments that we can make toward controlling the epidemic, both for the health of the person receiving the medication and to prevent their onward transmission of HIV. Science shows that one of the most important factors in the successful treatment of HIV is the early initiation of ART. The sooner that a person living with HIV begins treatment, the more intact and effective their immune system remains, and the faster they can achieve viral suppression, which virtually eliminates their risk of transmitting the virus.

As of September 30, 2017, PEPFAR had supported more than 13.3 million men, women, and children on lifesaving HIV treatment – nearly twice as many as only four years ago. Further, PEPFAR is the world’s largest supporter of children living with and affected by HIV/AIDS. Without treatment, 50 percent of HIV-positive children will die before their second birthday, and 80 percent before turning 5 years of age. PEPFAR is expanding access to pediatric treatment. This includes by identifying and addressing key barriers to diagnosing children living with HIV and working with industry to ensure that more child-friendly ART regimens, which are both efficacious and affordable, are being produced. As of September 30, 2017, PEPFAR had supported nearly 1 million children on lifesaving ART.

To expand access to HIV treatment, PEPFAR continues to work closely with the The Global Fund to Fight AIDS, Tuberculosis and Malaria,

partner country governments, and others, with a focus on reducing duplication and maximizing impact – so that the most people in need of ART can be reached with all available resources. The following section focuses on how PEPFAR is accelerating access to treatment for those infected with HIV, while working to address the key gaps that remain. These gaps include finding, diagnosing, and treating babies, children, and young adults that are all feeling well, early in HIV infection and when symptom-free. This is our collective challenge, and we are working closely with communities to create the messaging to bring healthy people into the health delivery system. This is key for the diagnosis and treatment of early stage HIV, but also for the creation of the community demand of interacting with the health delivery system to prevent all diseases – also essential for global health security to find and diagnose the next zoonotic event before it spreads.



Young boys in Ethiopia.

CREDIT: USAID

Rates of Adherence and Retention

PEPFAR evaluates rates of ART adherence and retention across all supported countries by examining the total number of people on treatment from one year to the next. This analysis determines how many individuals stopped their treatment regimen, were lost to follow-up, or died. Generally, this process involves monitoring a cohort of individuals who were on ART for 12, 24, and 36 months or longer. At the end of FY 2017, PEPFAR maintained a 74 percent retention rate at 12 months on ART by programmatic data. Studies have shown that the majority of clients have moved to new sites and remain on treatment, and this is consistent with the PHIA data that show high rates of viral suppression of those on treatment.

Reviewing country- and community-level retention rates helps PEPFAR treatment programs focus on both geographic and programmatic gaps that, if filled, help individuals who start their treatment to remain on it for life. For example, Côte d'Ivoire's treatment retention rate was 70 percent in 2014. However, after ensuring a consistent stock of drugs and supplies, conducting appropriate clinical staff support training on retention issues, and making improvements in loss-to-follow-up and contact tracing, the program's retention rate increased to 85 percent in 2017. As PEPFAR focuses on achieving the first and second "90" in high-burden areas, adherence and retention remain critical to ensuring that transmission, incidence, and costs decline.

Importantly, the PHIA data showed an impressive overall viral suppression for individuals on HIV treatment, demonstrating a very high level of retention and adherence to treatment and high durability of first-line ARVs. Figure 26 shows rates of viral load suppression among adult PLHIV in each district of Lesotho and

each region of Uganda. It is important to note that these rates represent the proportion of all PLHIV who are virally suppressed and are not limited to only those with a known HIV status.

In contrast, Figure 34 shows the proportion of people who are on HIV treatment and are also virally suppressed. The final orange bar on each cascade for Swaziland, Lesotho, Zimbabwe, Malawi, Zambia, and Uganda represents viral suppression among adults on HIV treatment. In this example, Lesotho's suppression rate is 88 percent, which means that of all PLHIV who are currently on HIV treatment, 88 percent are currently virally suppressed. These suppression rates measure adherence to medication and clearly demonstrate that, once people know they are HIV-positive and accessing treatment, they stay on treatment. These results are very encouraging and demonstrate that the key gap is in the diagnosis of HIV infection. Less than half of those under age 25 know they are HIV-positive.

Overall community levels of viral suppression are in the 60 percent range and need to reach 73 percent to achieve the goals of 90-90-90 fast track to epidemic control. The key gap to viral suppression is awareness of HIV infection through HIV testing, as we know that once adult men and women are diagnosed, they access and stay on treatment at high rates. Children and adolescents across PEPFAR have lower rates of viral suppression and PEPFAR is investigating whether this is due to increased viral resistance as a result of single-dose nevirapine for PMTCT historically or adherence issues resulting from stock outs and drug side effects. It is also the reason PEPFAR is working intently with countries and communities to move to the more effective and lower side effects of tenofovir, lamivudine, and dolutegravir (TLD) regimens.

To improve our treatment programs, PEPFAR continues to expand access to viral load



A group of young girls in Malawi.

testing. Routine viral load monitoring is now recommended by the World Health Organization (WHO) and forms the cornerstone of the third “90” of the Joint United Nations Programme on HIV/AIDS (UNAIDS) 90-90-90 goals. People who are known to have an undetectable viral load can also safely reduce their number of clinic visits and lengthen the duration between pharmacy drug refills – from monthly to quarterly or longer. This both lessens the burden on stable patients and decongests health service delivery sites.

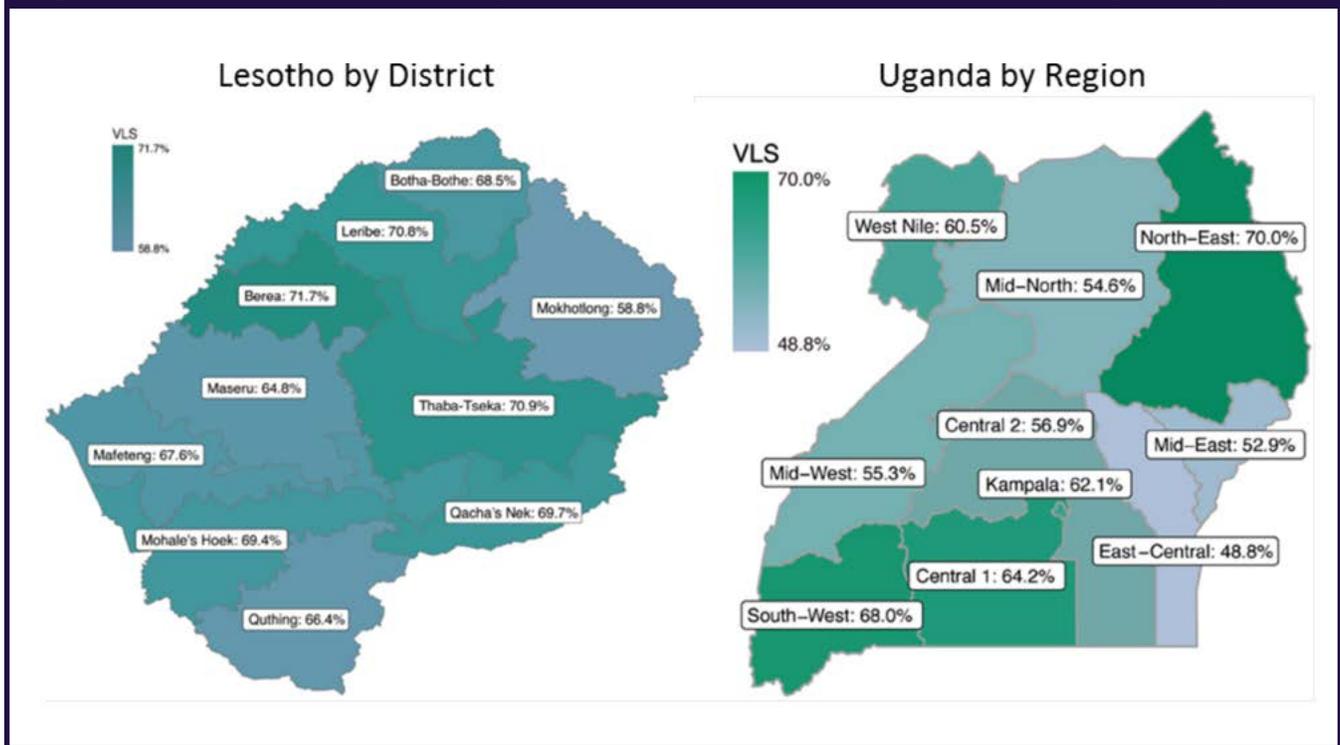
Effective prevention programs, alongside successful HIV treatment and viral suppression in 90 percent of HIV-positive individuals within geographically prioritized areas, will prevent the majority of transmissions and lead to eventual epidemic control. During the 2017 COP/ROP process, all PEPFAR-supported countries with site-level availability of viral load testing, national planning, and use of

results to provide differentiated patient care developed plans to scale up viral load testing and monitor progress toward the third “90.”

Like treatment coverage, rates of viral load suppression can vary geographically. In its most recent PHIA, Lesotho notes that the overall national rate of viral load suppression is 67.6 percent for all HIV-positive individuals, regardless of their treatment status. However, there are significant geographic differences; in Lesotho, suppression ranges between 59 percent and 72 percent of all HIV-positive people depending on the district.

With high national suppression rates, Lesotho and Swaziland are both well on their way to reach the third “90” goal of having 73 percent of all PLHIV virally suppressed. Critically, among the countries described in Figure 26, the viral load suppression for those on treatment range from 83

Figure 26: Viral Load Suppression Among HIV-Positive Adults by District in Lesotho and by Region in Uganda



percent to 92 percent, showing high levels of drug effectiveness and individual adherence. Also, the data show that the difference between national viral suppression and those on treatment reflects the gap between those who know their status compared with those who do not, rather than being a function of poor treatment retention.

HIV/AIDS Guidance – New Guidelines: Impact on the Epidemic and Policy Change as Part of Shared Responsibility

The WHO is the leading institution responsible for establishing international normative guidance related to HIV/AIDS programs. In June 2016, WHO released the full, consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection, including PrEP.

In July 2017, the WHO, in collaboration with PEPFAR, the U.S. Centers for Disease Control and Prevention (CDC), and the International AIDS Society (IAS), released key considerations for differentiated ART delivery for specific populations: children, adolescents, pregnant and breastfeeding women, and key populations.

The WHO also released guidelines for managing advanced HIV disease and the rapid initiation of ART, making a strong recommendation for offering ART to PLHIV on the same day that they test positive. By easing the burden on patients and making care more efficient, the program recommendations in these guidelines are helping countries develop more sustainable health care platforms that better foster adherence to lifelong therapy.

The WHO guidelines recommend a reconceptualization of service delivery models to offer more streamlined services to patients

who are clinically well (stable on ART or newly initiating with few symptoms) – estimated to be 80 percent of all those currently on treatment – and more intensive services to those who need it (patients with clinical disease or who are failing therapy). These guidelines also promote more patient-friendly services and expansion of community-based models. As the costs of ARVs declined over the last decade, the costs of ART are now driven largely by service delivery costs rather than drug costs.

Over the last year, PEPFAR has focused on streamlining service delivery and decreasing our costs. Data from Mozambique show that for stable patients, scheduling less frequent clinic visits, prescribing multimonth drug disbursements, and using community adherence groups led to better patient satisfaction and improved adherence, and allowed facilities to treat more patients with existing resources.

The Democratic Republic of the Congo adopted a community-based model, run by community service organizations, through which clients can pick up their medication and receive additional services (such as psychosocial support and counseling) from fellow PLHIV. This model is associated with retention rates of greater than 92 percent in all sites, with most having a retention rate closer to 98 percent. Similar models and others that include community-based drug distribution points are flourishing in other countries.

Through our annual country planning process, PEPFAR has diligently promoted the rapid adoption and implementation of the WHO-recommended Test and Start or Treat All (these terms are synonymous) approach (Figure 28), which reduces the number of patients lost to follow-up, improves the health of PLHIV, and reduces onward transmission.



A group of students in Lesotho.

In South Africa and Kenya, programming for same-day initiation was studied and demonstrated feasibility and success, as well as important obstacles to address. In September 2017, South Africa issued a circular instructing clinicians to provide ART on the same day for PLHIV who are clinically ready and willing to commit to lifelong treatment. In Botswana, Treat All resulted in 76 percent of newly diagnosed PLHIV starting ART on the same day, and an additional 14 percent starting within seven days.

In Tanzania, the Fikia Project outreach to key populations was expanded to 28 districts in FY 2017 and demonstrated same-day linkage to care and ART initiation rates above 75 percent. In Uganda, a coordinated adoption of same-day ART for children under age 15, a hard-to-reach population with historically poor linkage and delayed treatment initiation, resulted in rapidly

Figure 27: Differentiated Models of Care

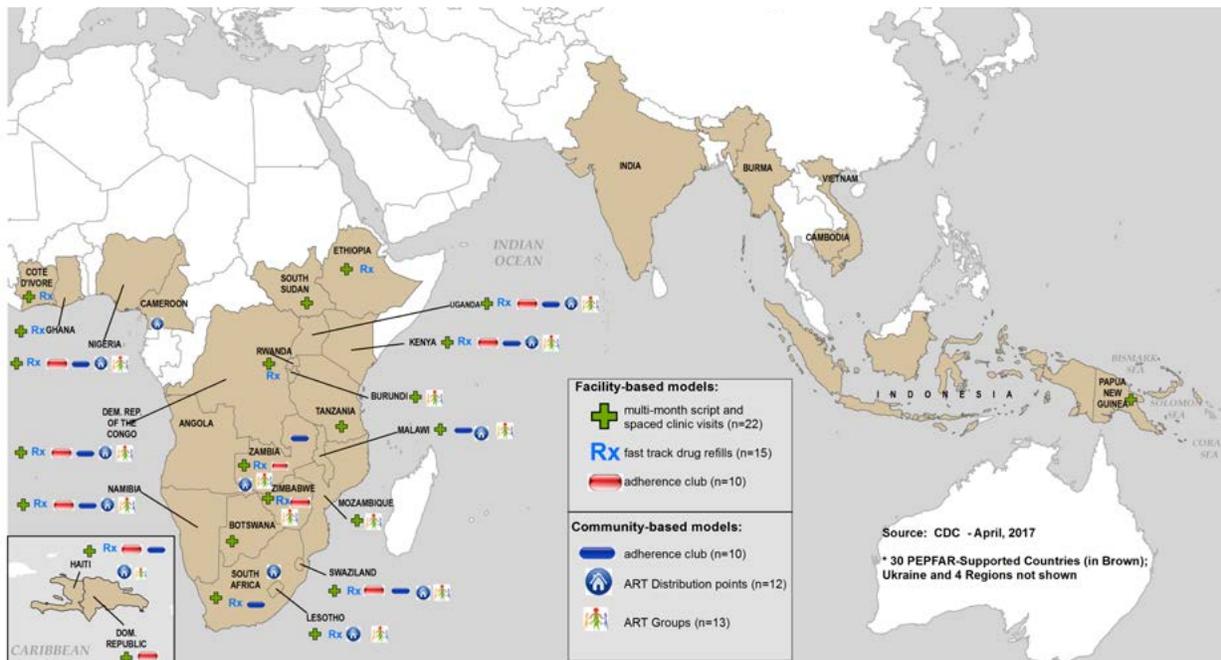
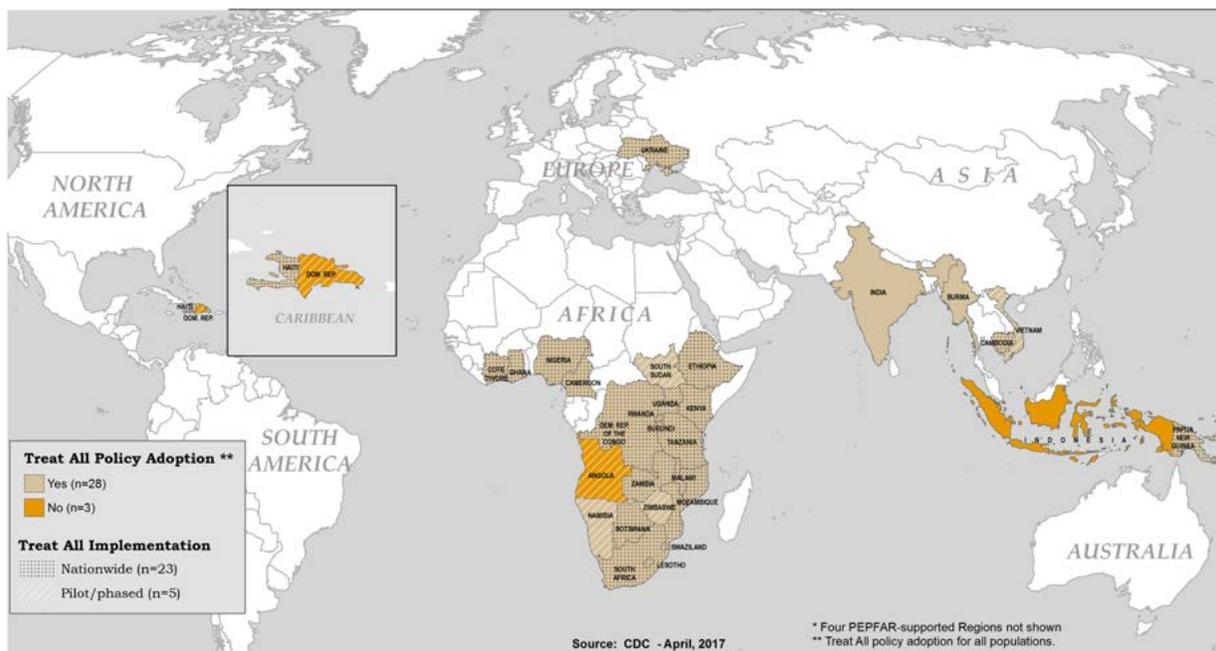


Figure 28: Adoption of WHO Guidelines Recommending a Test and Start (Treat All) Strategy



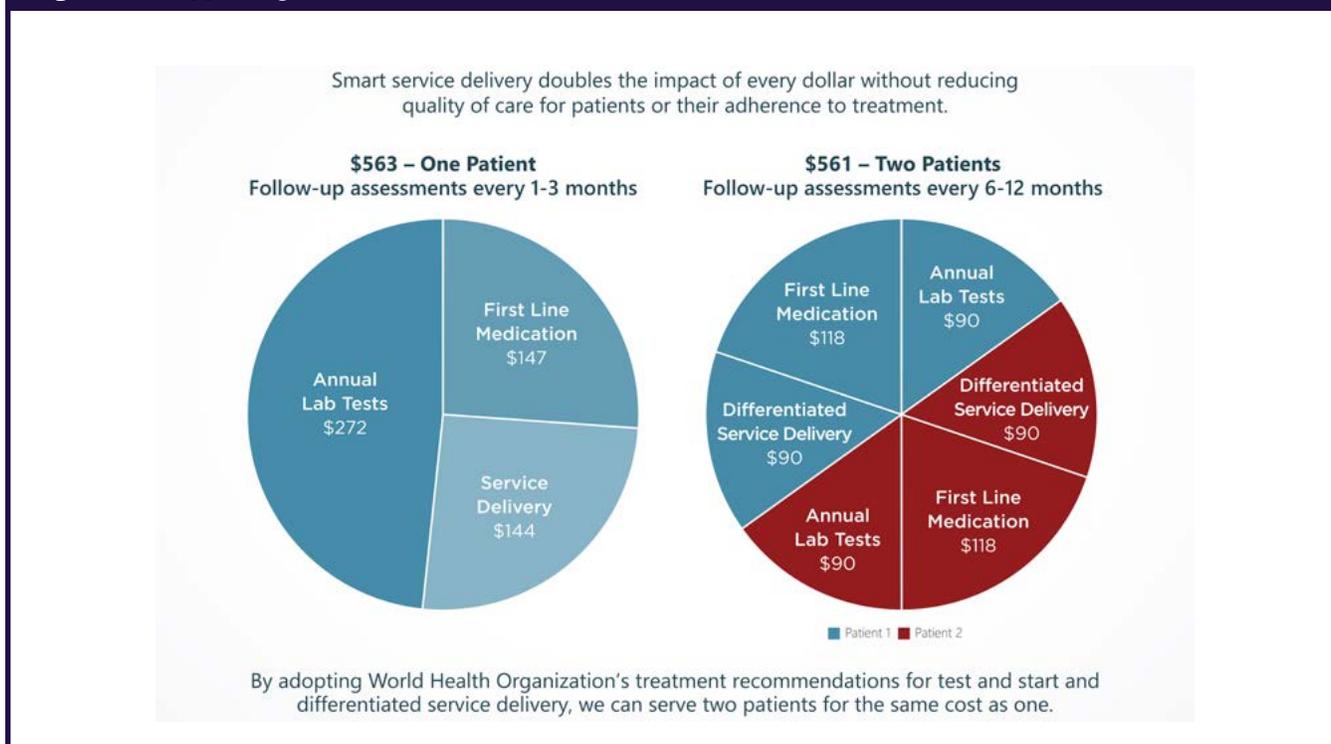
increasing ART coverage among children, now exceeding 67 percent, and a median of zero days between diagnosis and ART initiation.

PEPFAR is committed to taking these insights and clear validation of evidence to scale and ensuring lessons from one country can be adapted to another country without the need to repeat the same studies – ultimately saving PEPFAR and host countries millions of dollars that can be immediately programmed into more effective interventions. However, to be successful, PEPFAR needs to share the study concept during the planning phase, ensuring the study meets the requirements of all of the PEPFAR countries and that research findings can be shared and adapted proactively. PEPFAR has instituted processes to ensure this occurs within the 2018 COP cycle, thereby continuing to adapt management and oversight processes to increase the effectiveness, efficiency, and impact of the program.

The implementation of policy changes is essential to controlling the pandemic. By adopting the WHO’s treatment recommendations for Test and Start as well as models of differentiated service delivery, we can serve two patients for the price of one, without reducing either the quality of care for patients or their adherence to treatment (Figure 29). This will expand our impact, save more lives, and avert new infections.

Another key policy adaptation is for VMMC. In September 2016, the WHO released an updated report clarifying the risk of tetanus occurring after circumcision with devices that leave the foreskin in place, compared with surgical circumcision, which immediately removes the foreskin. Data from PEPFAR’s VMMC Adverse Event Reporting System were instrumental in determining this risk. The risk of tetanus was estimated to be 30 times higher after device VMMC with foreskin retention compared with surgical VMMC.

Figure 29: Supporting Two Patients for the Price of One





A mother and her child visit a health clinic in Uganda.

The policy report emphasized the need for two doses of tetanus vaccine before device circumcision unless the client could provide documentation of a full and current tetanus immunization. The report also reiterated the recommendation to provide a single dose of tetanus vaccine before or at the time of surgical VMMC for men without confirmed vaccination status. The WHO report was reviewed and endorsed by the PEPFAR Scientific Advisory Board in November 2016, and PEPFAR continued to work with our partners to scale up effective and appropriate vaccination programming. Again, U.S. ambassadors have been essential in ensuring that this and other critical policy changes occur that work toward epidemic control.

In FY 2017, 3.4 percent of VMMC procedures were performed via circumcision device, and two countries – Rwanda and Zimbabwe – accounted for 92 percent of these procedures. Since Rwanda has a high background level of tetanus immunization, the primary impact of

this new policy was expected to be in Zimbabwe. Indeed, the number of device VMMC procedures increased to 93,697 in FY 2017 from 26,721 in FY 2016 in Rwanda, while the number of device VMMC procedures in Zimbabwe dropped to 10,649 from 43,060 in this same period.

In Zimbabwe, from FY 2016 to FY 2017, the new policy helped increase VMMC by 68,056 procedures. In addition, clarification of the risk and policy allowed Uganda to target the two-dose immunization schedule for clients undergoing device VMMC and lift its previous policy of two doses of tetanus immunization for all VMMC procedures. Uganda saw an increase of surgical VMMC procedures to 750,786 in FY 2017 from 321,681 in FY 2016. Thus, PEPFAR data has informed policy, allowing for better client care and greater access to the important preventive benefits of VMMC.

In FY 2017, PEPFAR and other key stakeholders continued to support countries in implementing

and scaling up PrEP to populations at highest risk of HIV infection. Oral PrEP with oral tenofovir or tenofovir-containing regimens show a reduction in the risk of HIV acquisition among numerous populations.¹⁹

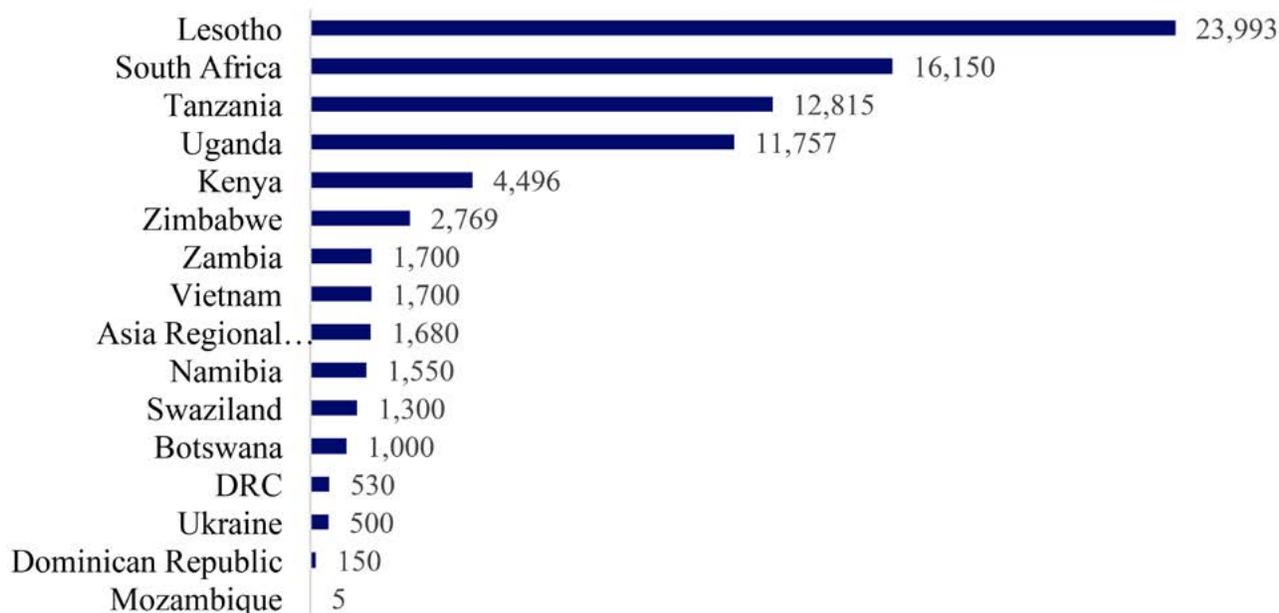
Since 2015, WHO guidelines have recommended offering oral PrEP to those at substantial risk of HIV infection, defined as an incidence rate of three per 100 persons per year.²⁰ This level of risk has been seen among serodiscordant couples with inconsistent condom use when the partner living with HIV is not virally suppressed, key populations, and AGYW in many parts of sub-Saharan Africa.

PEPFAR supports WHO guidelines on the use of PrEP as a component of a package of comprehensive prevention services that includes risk reduction education and counseling,

condom promotion and provision, VMMC, and structural interventions to reduce vulnerability to HIV infection. In July 2017, the WHO released new implementation tools for PrEP, consisting of 11 modules designed to address above-site and implementations issues. These modules include specific guidance for PrEP users, providers in clinic- and community-based settings, and national authorities.²¹

These new WHO tools were created to support and improve the continued rollout of PrEP. Implementation of PrEP in low- and middle-income countries outside of research studies and demonstration projects has been relatively limited. Accelerating PrEP implementation was a priority for PEPFAR in FY 2017 and continues to be in FY 2018 (Figure 30). PEPFAR supported 10,733 individuals newly on PrEP in FY 2017 across 14 countries. PEPFAR is engaging in PPPs

Figure 30: The FY 2018 Targets for the Annual Number of PEPFAR-Supported Individuals Newly Enrolled on PrEP



¹⁹ <http://www.who.int/hiv/pub/arv/arv-2016/en/>

²⁰ <http://www.who.int/hiv/pub/guidelines/earlyrelease-arv/en/>

²¹ <http://www.who.int/hiv/pub/prep/prep-implementation-tool/en/>



CREDIT: USAID

A family in Malawi.

to roll out the provision of PrEP. For example, Gilead is purchasing medication and paying operational expenses for the procurement, transportation, and dissemination of PrEP for young women who are uninfected but at substantial risk for acquiring HIV.

PEPFAR in-country teams and implementing partners expanded PrEP provision in multiple countries in FY 2017. An example of success with PrEP implementation in FY 2017 was the PEPFAR-funded, key populations-focused LINKAGES model in Thailand. With this model, PrEP was provided by working with well-established networks of community-based organizations that gave access and support to eligible clients.

PEPFAR is providing updated guidance for FY 2018 on accelerating PrEP implementation through data-driven approaches to identifying prioritized groups, target setting, budgeting, and implementing PrEP as a key intervention

for ultimately achieving epidemic control. PEPFAR teams are being advised to work with partner governments to advance above-site PrEP readiness and implementation.

These teams will work to help develop national PrEP policies, adopt implementation and operational guidelines product registration, support awareness-building and demand-creation efforts, test integrated PrEP service delivery models, and explore private sector engagement. Given that PrEP rollout is still in its early phase, PEPFAR recommends that in-country teams work with established key or other vulnerable populations.

HIV Burden and Treatment Response

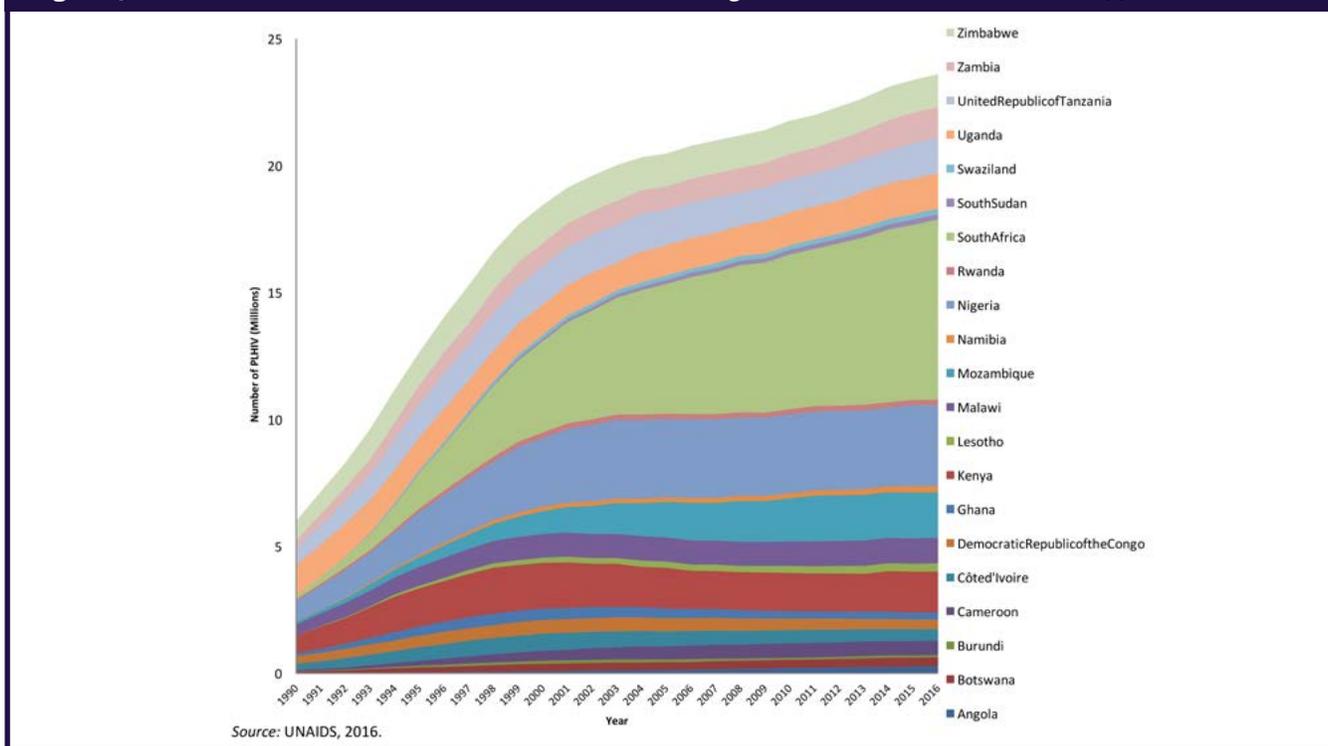
At the end of 2016, there were 36.7 million PLHIV globally, including nearly 23.6 million

in sub-Saharan Africa (Figure 31). As treatment programs are implemented across partner countries, PLHIV are able to live longer and more productive lives. It is clear from the graphic that the most rapid increase in PLHIV is in South Africa. Controlling the pandemic will require a new approach to South Africa in partnerships with communities and the host government. PEPFAR is working closely with South Africa as they have dramatically increased their own resources committed to their HIV response, have aligned resources with the highest burden areas where transmission continues unabated, and expanded prevention efforts. The South African government funds 80 percent of the HIV response, but more is needed now to change the course of this pandemic. In other countries where the specific depth and breadth of the epidemic is less known, PEPFAR will use the PHIA data from Nigeria, Kenya, Haiti, and Rwanda to validate the Spectrum Model and define future investments to ensure the epidemic is being addressed in the

most effective and focused manner for impact. In another series of countries, including most of west and west central Africa, Tanzania, Mozambique, and South Sudan, the majority of citizens are unaware of their status and need more effective testing and expansion of treatment to change the course of the HIV pandemic. Country-by-country data allow PEPFAR, host-country governments, and communities to program resources in the most effective and impactful manner.

Globally, the number of people on HIV treatment and lives saved increased from 2003 to 2016, largely due to the contributions of PEPFAR and the Global Fund, working closely with partner countries. In the large majority of countries, the expansion of treatment was slow but steady from 2004 to 2007 (PEPFAR Phase I), after which enrollments on treatment increased. From 2008 to 2010 (beginning of PEPFAR Phase II), enrollments rapidly increased and continued along similar trajectories. In 2014, PEPFAR

Figure 31: Cumulative Trends of National Data, Persons Living with HIV, Sub-Saharan Africa: 1990–2016





A group of teenagers in Nicaragua.

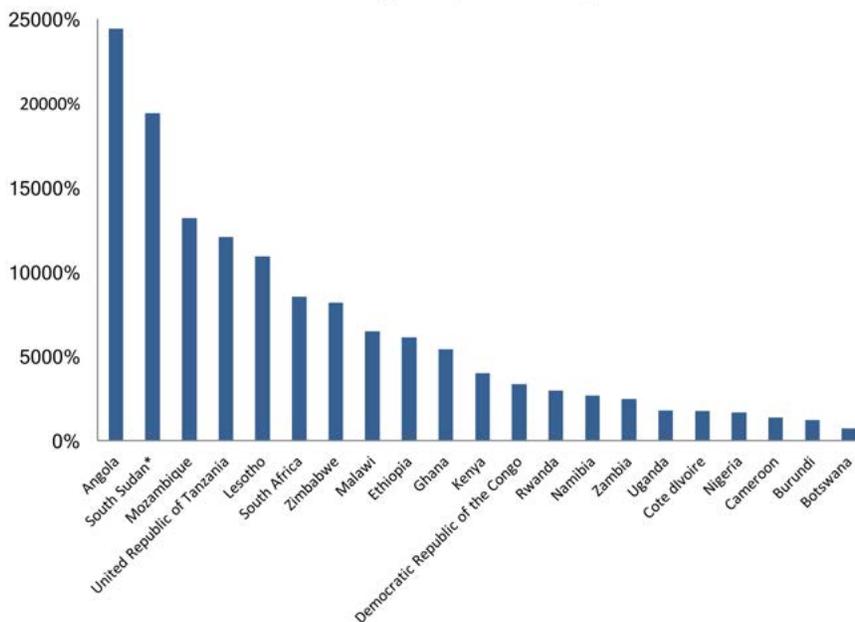
partnered with countries to refocus efforts to high-burden areas and started monitoring the epidemic at the community level, accelerating progress with sustainable results. From 2015 to the current reporting period, enrollment increased even more rapidly, in a revenue-neutral manner, as programs increase efficiency and focus on moving toward the goal of epidemic control.

There has been a dramatic increase in people receiving ART since 2004, as shown for PEPFAR-supported countries in Africa in Figure 32. There was a flattening of the treatment expansion in the 2013–2014 timeframe in most countries, but that recovered in 2014–2016 with the realignment of resources to the U.S. congressional 50 percent care and treatment earmark, and the program closely tracking both the slope of scale-up of services and the geographic coverage. This tracking helps ensure countries are reaching at least 80 percent treatment coverage at the subnational level while community viral load levels

are suppressed to undetectable. It is clear that both the speed to reach greater service coverage and the percentage coverage are important to controlling the HIV epidemic. The commitment to monitor treatment coverage saves lives and decreases transmission. PEPFAR-supported countries made significant progress in reaching UNAIDS 90–90–90 targets, with five countries approaching epidemic control (Figure 34).

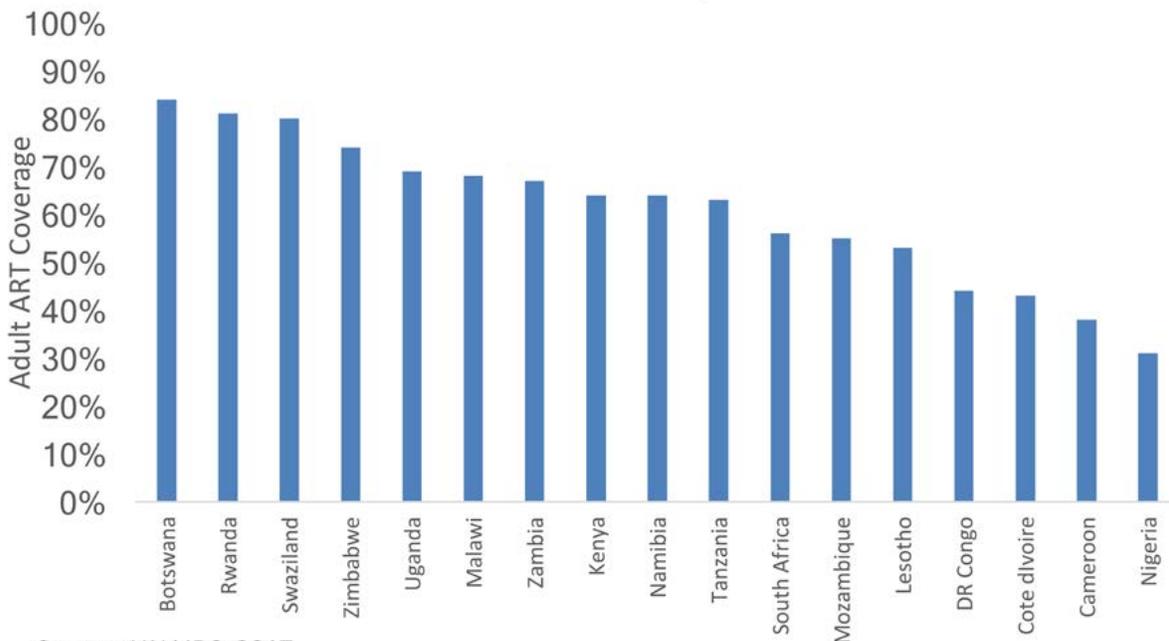
The rapid implementation of evidenced-based interventions has been a primary driver of the dramatic declines in new HIV infections and mortality rates. Ongoing success toward controlling the HIV/AIDS epidemic is completely dependent on continuing and accelerating this momentum. Far fewer individuals under age 25 know their HIV status, are on treatment, or are virally suppressed as compared with older adults. Combined with the doubling of the population aged 15–24 in sub-Saharan Africa, the HIV pandemic could

Figure 32: Host Country National Data, Percent Increase of People HIV+, Adults (15+), Receiving ART (2004–2016), Select PEPFAR-Supported Countries in Africa, 2016



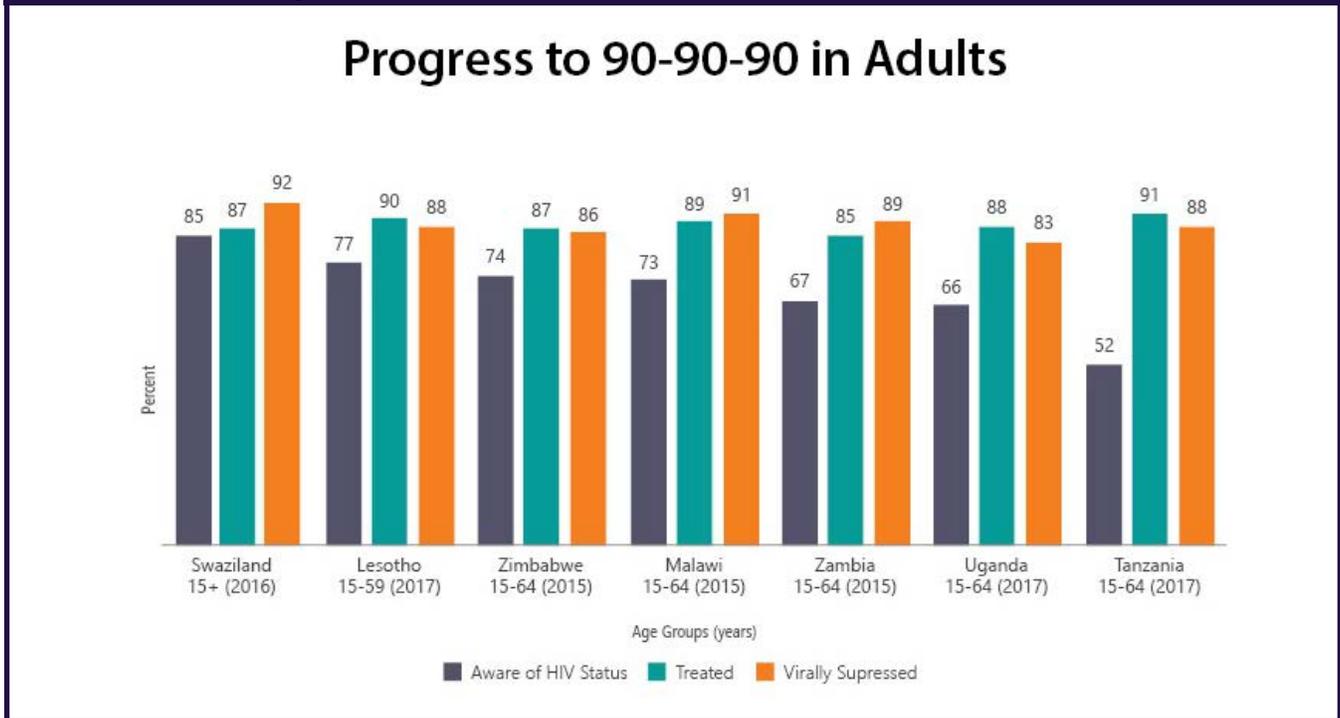
Source: UNAIDS, 2016.

Figure 33: Adult (15+) Antiretroviral Treatment Coverage, Select High-Burden Countries, 2016



Source: UNAIDS, 2017

Figure 34: PHIA Data Showing Progress Toward 90-90-90 Targets in Ages 15-64 in Lesotho, Malawi, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe



dramatically expand without concentrated and concerted efforts to reach this age group. PEPFAR will continue to focus intensely on 15-24-year-old AGYW through increased prevention efforts, including the following:

- Continuing to expand effective components of DREAMS programming. Impact data from the PEPFAR-led DREAMS partnership was released in December 2017, and they show a 25-40 percent or greater decline in new HIV diagnoses among AGYW in the majority (65 percent) of the highest HIV-burden communities or districts receiving DREAMS interventions.
- Scaling up VMMC to achieve coverage of at least 80 percent in men ages 15-29; in FY 2017, PEPFAR supported VMMC for nearly 1.6 million men in this prioritized age range.
- Improving HTS to find more men and link them to treatment. PEPFAR supported

HTS for more than 85.5 million people in FY 2017 and continued to roll out and scale up innovative testing approaches, including HIV self-testing, index patient testing, and partner testing.

ART coverage rates combine the figures for persons on treatment and those who need ART (as modeled by countries and UNAIDS as all persons with HIV infection). These rates provide a telling story of progress in each country (Appendix W). Some indications suggest that countries with an HIV prevalence of greater than 5 percent are improving at a slightly accelerated rate. However, considerable variation exists across countries. This reaffirms PEPFAR's strategy of utilizing our resources to support services in settings with the greatest need and potential for impact. This strategic focus remains a priority to ensure that countries can aggressively address their epidemics with available global HIV/AIDS funding. Viral loads must be suppressed to control the epidemic and allow communities and countries to thrive.

One of the more important milestones toward controlling the epidemic is when the annual number of new enrollments in treatment approaches 80 percent at the national level. This transition point reflects a care and treatment scale-up rate that is successfully limiting the transmission of HIV to uninfected persons. A lower number of new infections suggests that the future influx of patients requiring treatment will be more manageable, smaller, and less expensive – causing the epidemic to contract.

This shift in trends, while important in the ongoing effort to control the epidemic, does not imply that continuing efforts can slow down. Any faltering of national treatment efforts may return the trend lines to an earlier, more negative pattern, once again driving up new HIV infections. Any drop in adherence or retention will result in increasing viral loads and substantial surges in HIV transmission.

Supportive Care

In February 2014, PEPFAR developed a strategy for the prioritization of care and support interventions based on an extensive, in-depth review of evidence and best practices. Four universally applicable activities were identified as priorities for the greatest impact on reducing AIDS-related morbidity and mortality:

- Regular clinical and viral load monitoring
- Screening and treatment for active TB and prophylaxis for those without active TB
- Cotrimoxazole prophylaxis for opportunistic infections per PEPFAR country/regional guidelines
- Clinical and nonclinical evidence-based interventions to optimize retention and adherence, including PLHIV community support groups



A group of children in South Sudan.



CREDIT: USAID

A peer health educator in Uganda.

Based on the evolution of WHO guidelines to recommend treatment for all PLHIV, care and treatment were collapsed into one entity, consistent with the guidelines. As a result, additional focus will be placed on strategies to improve linkages, adherence to and retention of care and treatment, viral load monitoring, diagnosis and treatment of TB co-infection, and preventing TB reactivation.

Ensuring Pediatric Treatment and Psychosocial Support So Children Can Thrive

Over the last several years there has been a dramatic decline in new pediatric infections, but children born infected with HIV are still in critical need of lifesaving HIV treatment. In 2016, 2.1 million children under age 15 were living with

HIV/AIDS – nearly 90 percent of whom live in sub-Saharan Africa – and one new pediatric HIV infection occurred approximately every three minutes. Without ART, 50 percent of children living with HIV/AIDS will die before their second birthday, and 80 percent will die before their fifth birthday. In 2016, only 43 percent of children living with HIV/AIDS had access to treatment. In west and central African countries, only one in five children living with HIV infection received ART. This must change. Saving the lives of children with HIV is not only the right thing to do; it is the smart thing to do. By treating children early in their HIV infection, they can stay healthy and thrive. Healthy children who can pursue their dreams will grow economies, create jobs, and strengthen their communities for decades to come.

In August 2014, PEPFAR, through the U.S. Department of State, announced the Accelerating Children's HIV/AIDS Treatment (ACT) initiative at the U.S. African Leaders Summit. ACT was a

two-year initiative to significantly increase the total number of children receiving lifesaving ART in nine high-priority countries in sub-Saharan Africa. The nine ACT countries (Cameroon, Democratic Republic of the Congo, Kenya, Lesotho, Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe) include countries with some of the greatest need for pediatric treatment and some of the greatest disparities in treatment coverage for children compared with adults living with HIV/AIDS. The \$200 million initiative represented a joint investment by PEPFAR and the Children’s Investment Fund Foundation.

As of the end of September 2017, PEPFAR had supported more than 494,000 children (<20 years old) with lifesaving ART in the nine ACT countries (Table 2). At the same time, across all of the countries for which PEPFAR provides support to children with HIV, nearly 1 million children were receiving ART, demonstrating the impact of our investment far beyond the nine original ACT countries, while more children are thriving and aging out of the pediatric age cohorts and fewer

children are being born. Pediatric ART coverage increased by 10 percent or more from 2014 to 2015 in several of the ACT countries (Kenya, Lesotho, Malawi, Tanzania, Zambia, and Zimbabwe), with Zimbabwe reaching 80 percent pediatric ART coverage. We have an excellent road map for how to increase diagnosis and treatment, and this must be translated to scale through all implementing partners across all regions, countries, and counties to ensure all children thrive with HIV.

ACT shows the power of PPPs, and that focus can lead to tremendous impact in just two years. Countries will continue to receive technical support to build on pediatric treatment scale-up in FY 2018. While we increased children’s treatment across all ACT countries, we also nearly doubled the number of children on treatment across all PEPFAR-supported countries from 2014–2017.

Adoption of the WHO guidelines to treat all HIV-infected children and adolescents was a critical step in linking HIV-positive children to the care they need and will be a major factor in

Table 2: Accelerating Children’s HIV/AIDS Treatment (ACT) Initiative – Children Receiving ART by September 2017

Countries Participating in Accelerating Children on HIV/AIDS Treatment (ACT) Initiative	0–19-year-olds
Cameroon	9,763
Democratic Republic of the Congo	6,534
Kenya	118,665
Lesotho	10,726
Malawi	34,425
Mozambique	95,844
Tanzania	75,813
Zambia	60,248
Zimbabwe	82,723
All ACT Countries	494,741



A mother with her baby in Swaziland.

furthering the successes in pediatric treatment attained under ACT. PEPFAR expanded the OVC program to ensure that all vulnerable children have access to HTS, care, and treatment.

PEPFAR's response to OVC continues to evolve in response to changes in the epidemic. While the rate of orphaning continues to decline with the expansion of treatment (Figure 35), significant risks and vulnerabilities remain for children and adolescents as a result of HIV/AIDS. PEPFAR's OVC program serves children in a range of adverse situations, including children who are living with HIV, living with caregivers who are HIV-positive, orphaned, at risk of becoming infected, or a combination of these factors.

Although children of all ages are affected, those at either end of the age 0–17 spectrum face specific heightened risks related to HIV. For orphans specifically, the proportion of children

orphaned within each age band rises as children grow older (Figure 36), resulting in a much higher proportion of children in older age bands who are likely to have lost one or both parents.

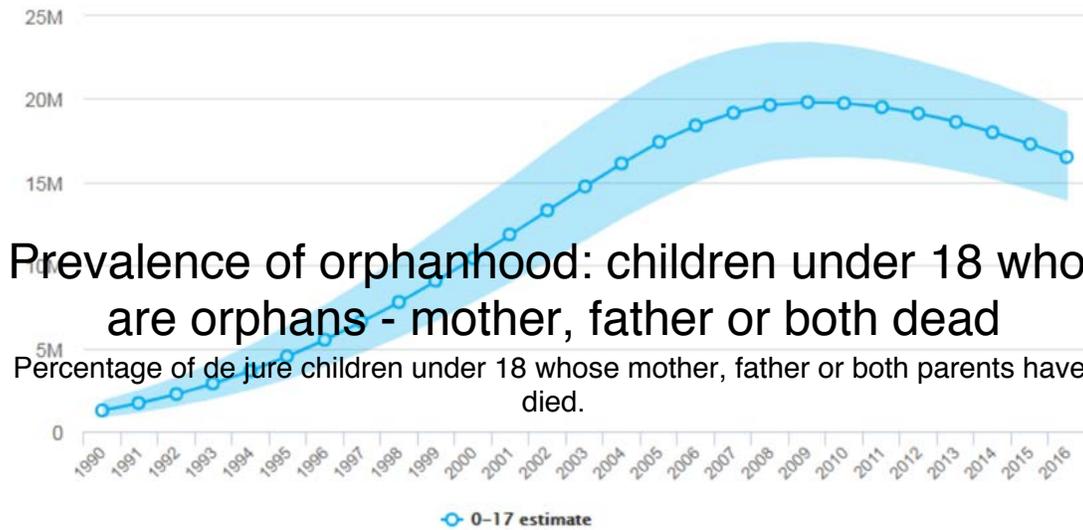
For the youngest age band (age 0–4) the risks of HIV infection and orphaning diminished greatly due to the expansion of PMTCT and adult treatment. Remaining risks pertinent to OVC programs include loss to follow-up of HIV-exposed infants and suboptimal viral load suppression in children. Additionally, concerns remain regarding potential cognitive delays in HIV-infected infants and, to a lesser degree but still salient, in HIV-exposed but uninfected infants.²²

The OVC platform's wide network of faith- and community-based staff and volunteers support treatment adherence and proper nutrition for infants and young children, and also provide

²² Wedi, et al. (2016). Perinatal Outcomes Associated with Maternal HIV Infection: A Systematic Review and Meta-analysis. *The Lancet*, 1, e33–e48.

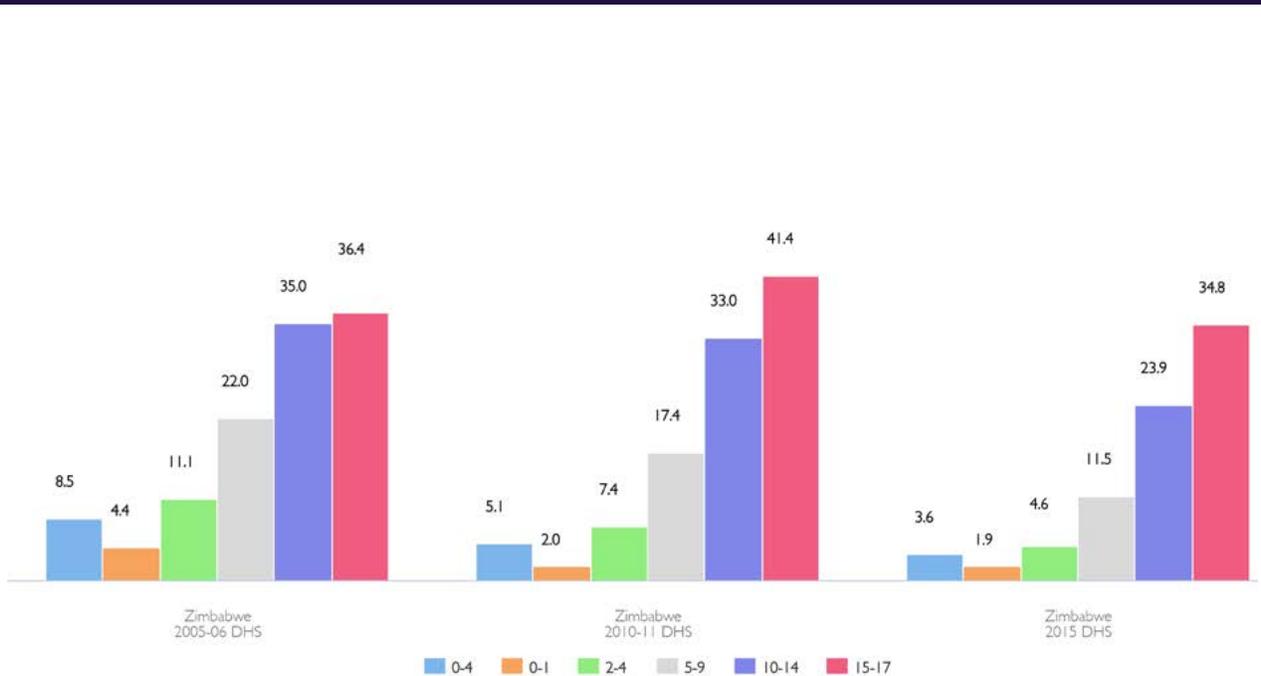
Figure 35: Children Orphaned by AIDS (1990–2016)

AIDS orphans (0-17)



Source: UNAIDS Estimates 2017

Figure 36: Prevalence of Orphanhood: Children Under 18 Who Are Orphans – Mother, Father, or Both Dead





A group of students in Ethiopia.

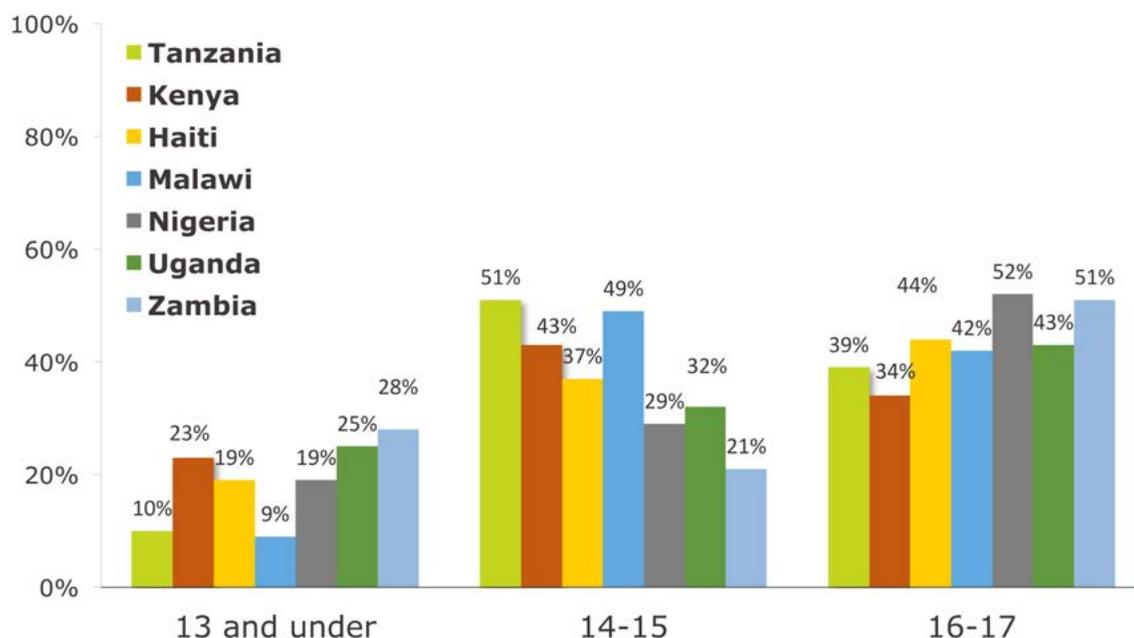
family services such as socioeconomic assistance. For first-time mothers, especially adolescent girls, OVC program case management services that link young mothers to assistance are critical to ensuring that both parent and child remain healthy and AIDS-free. OVC programs are also incorporating activities that promote cognitive stimulation and development into PMTCT and pediatric HIV platforms to help identify and mitigate cognitive effects.

OVC community networks are also helpful in finding older asymptomatic children who are infected with HIV, but whose lack of routine contact with health centers makes them less likely to be diagnosed through traditional clinic-based HIV testing modalities. The ACT initiative significantly increased the number of children on treatment who were more easily identified, but children who are not visibly sick and are past immunization benchmarks are more difficult to find. PEPFAR initiated a

new indicator in 2017 that measures the ability of OVC programs to facilitate diagnosis of asymptomatic beneficiaries and ensure that all beneficiaries – newly and previously diagnosed with HIV infection – are receiving lifesaving ART.

Many more children are now on treatment, thanks to the ACT initiative, but viral suppression among young children and adolescents remains a challenge. PEPFAR's OVC partners are working to improve children's treatment outcomes by providing home visits and accompanying children to clinics, and addressing the broader socioeconomic needs of families through interventions such as savings and internal lending groups.

Adolescents living with HIV infection also benefit from the added socioeconomic support available through the PEPFAR-supported OVC platform. Adolescents on ART in South Africa, for example, who had access to multicomponent interventions,

Figure 37: Age at First Incident of Forced or Coerced Sex in Childhood Reported by 18–24-Year-Old Females²⁵

including parental monitoring, support groups, and social transfers such as cash and food provisions, had greater adherence than those who did not.²³ For the OVC platform, the focus for adolescents is two-fold: adhering to treatment and living a productive, healthy, AIDS-free life.

As children become young adults, their risk for acquiring HIV through sexual transmission increases sharply. OVC programs are uniquely poised to address the myriad of factors that put adolescents at risk. Adolescent female orphans, for example, have an earlier sexual debut than their nonorphaned (and orphaned) male counterparts.²⁴ Furthermore, adolescent females orphaned or living with a caregiver who is ill due to HIV have higher rates of transactional or other unsafe sex and higher exposure to physical

and emotional abuse. VAC surveys in multiple PEPFAR countries show that forced and coerced sex among females can occur at very young ages. In FY 2017, PEPFAR supported activities related to the VAC surveys in six countries.

Since adolescent girls in sub-Saharan Africa are nearly three times more likely than boys to become infected with HIV, OVC programs also serve as a platform for focused efforts, such as DREAMS, that provide an array of protective interventions (e.g., schooling, economic support, parenting, and GBV services).

In FY 2017, PEPFAR allocated \$50 million of OVC Plus Up funds to improve the delivery and quality of a comprehensive service package of health and social services. These funds

²³ Cluver, et al. (2016). Achieving Equity in HIV-treatment Outcomes: Can Social Protection Improve Adolescent ART-adherence in South Africa? *AIDS Care*, 28(sup2), 73–82.

²⁴ Robertson, et al. (2010). Sexual Risk among Orphaned Adolescents: Is Country-Level HIV Prevalence an Important Factor? *AIDS Care*, 22(8), 927–938.

²⁵ <https://www.cdc.gov/violenceprevention/vacs/publications.html>



Young girls advocate for access to HIV services in Uganda.

were used to address the unique needs and risk factors of currently served OVC and their families in nine PEPFAR countries – Cameroon, Cote d'Ivoire, Ethiopia, Kenya, Lesotho, South Africa, Tanzania, Uganda, and Zimbabwe.

OVC's access to multiple services demonstrates a compounding effect, yielding greater improvements in health and well-being than isolated interventions. OVC Plus Up fund activities addressed the priority areas of secondary school for adolescent girls, supporting children living with HIV to access and be retained on treatment, GBV prevention and post-violence care, and overall economic strengthening of OVC families in the PEPFAR program. These funds were also used to implement OVC interventions in the areas of primary education, case management, health promotion, early childhood development, parenting, food and nutrition, and psychosocial support.

Although the vast majority of OVC impacted by the AIDS pandemic live with their immediate or extended family members, PEPFAR has also supported evidence-based practice for children living outside of family care. PEPFAR has expanded implementation of the Social Service Systems Strengthening Monitoring and Evaluation Framework to support the everyday functioning of government ministries mandated to prevent and respond to VAC and to prevent separation and promote permanency. In Kenya, for example, PEPFAR, through the U.S. Agency for International Development (USAID), supported the Department of Children Services to roll out a new management information system to improve tracking and monitoring of services delivery. In addition to providing on-site technical assistance to social welfare ministries, PEPFAR has continued to support cross-country experience sharing and evidence-based practice through the Better Care Network, a global learning hub for those preventing and addressing children's separation from family. PEPFAR also worked collaboratively on the Action Plan for Children in Adversity with the U.S. government's Displaced Children and Orphan's Fund and other U.S. government agencies.

PEPFAR will continue to work with OVC implementing partners to ensure that the most vulnerable, at-risk children receive appropriate HIV testing and access to lifesaving services. PEPFAR regularly evaluates OVC programs to ensure they adapt to the changing demographics of the epidemic and the shifting evidence for core interventions. PEPFAR sets aside 10 percent of the bilateral program funding to address the diverse, complex, and often critical needs of OVC. In FY 2017 alone, PEPFAR supported critical care and support for nearly 6.4 million OVC and their caregivers, including nearly 4.8 million children and adolescents under 18 years of age, in order to mitigate the physical, emotional, and economic impact of HIV/AIDS on children. Furthermore, there are 2 million children who did not become

orphans thanks to PEPFAR-supported treatment of their parents and caregivers living with HIV.

Addressing Tuberculosis/ HIV Co-Infection

TB-HIV Co-Infection

Worldwide, TB is the leading cause of death from an infectious disease, and by far the leading cause of death among PLHIV in sub-Saharan Africa. In 2016, an estimated 10.4 million people developed TB, 10 percent of whom were PLHIV. Of the PLHIV who developed TB, 74 percent were in Africa. In that same year, approximately 1.7 million people died from TB, including 374,000 PLHIV. TB still accounted for more than a third of the estimated 1 million AIDS-related deaths in 2016.

The tragedy is that these deaths are almost entirely avoidable and should no longer be occurring with this frequency. We can prevent

cases of TB in the first place by scaling up ART, which reduces the risk that a person living with HIV will develop TB by around 65 percent, and the addition of TB preventive therapy to ART reduces the risk by 97 percent. Among PLHIV who do develop TB, early ART can halve the mortality rate, which is why testing for HIV and initiating ART are key interventions. Globally, however, only 57 percent of notified TB cases have a documented HIV status. Among those with documented HIV infection, 85 percent were started on ART.

Over the past few years, there has been an increase in the provision of TB preventive therapy to persons newly enrolling in HIV care, driven largely by the programmatic activities of PEPFAR-supported countries. In 2016, an estimated 42 percent of new enrollees initiated TB preventive therapy. Yet, if we are to directly address the leading cause of mortality in PLHIV and achieve the goals described in the WHO's End TB Strategy, we need to do better.



CREDIT: USAID

A patient receives a TB test in Thailand.



CREDIT: USAID

A family visits a TB clinic in Kenya.

PEPFAR remains committed to addressing TB as a top policy and programmatic priority. Utilizing the full array of prevention approaches, active TB and HIV case-finding, and access to early treatment, PEPFAR has been instrumental in reducing the breadth and mortality of the TB/HIV epidemic. The continued focus on effective and innovative TB/HIV programming will help consolidate those achievements and further global efforts to end the TB pandemic. In PEPFAR-supported countries in the fourth quarter of FY 2017, the proportion of TB patients with documented HIV status exceeded 95 percent, and the proportion of those with HIV infection who were started on ART was more than 90 percent. PEPFAR recently revised the suite of TB indicators and now requires reporting on initiation and completion of TB preventive therapy as well as TB screening and initiation of TB therapy in those diagnosed with the disease. These additions were part of a deliberate attempt to drive programming and encourage fully integrated

TB/HIV care in PEPFAR countries. Encouragingly, despite no requirements for targets or advanced planning, 17 countries initiated or expanded TB preventive therapy programming in FY 2017.

A number of markedly successful programs have been introduced throughout PEPFAR. Mozambique, South Africa, and Zimbabwe all had steady progress incorporating TB preventive therapy into routine care with approaches that are well documented and replicable. More notably, Kenya had tremendous rapid success rolling out TB preventive therapy through a well-designed, carefully crafted collaboration between the country's national TB and HIV programs. Their approach resulted in an increase in the number of PLHIV who initiated TB preventive therapy from a baseline of 10,000 PLHIV in 2014 to more than 490,000 by 2016, with a 90 percent treatment completion rate.

In Swaziland, a pilot project featuring patient-centered care demonstrated remarkable adherence and completion rates for TB preventive therapy, and cost-effectiveness analyses were modeled for Botswana, India, Tanzania, and elsewhere, setting the stage for committed programming. Historically, in most settings, patients with TB and HIV have been required to visit the two clinics separately, imposing a large burden on patients and compromising care. This is beginning to change: In Swaziland's public clinics, TB/HIV activities are now fully integrated and colocated and boast a 97 percent documentation of HIV status among TB patients and 99 percent ART initiation within six months of TB treatment initiation among those with HIV infection. Kenya is introducing a policy to integrate treatment of HIV into TB clinic visits for the duration of treatment for their TB

disease, greatly diminishing the burden on the patients. All of these programmatic approaches are being shared throughout PEPFAR.

PEPFAR continues efforts to support scale-up of the Cepheid GeneXpert MTB/RIF test, a fully automated, molecular diagnostic test for TB. This test enables programs to diagnose TB quickly, which can help reduce transmission and decrease mortality. Even more sensitive cartridges are coming to market, and truly portable devices, which will allow testing at any point of care, will be available in 2018. An inexpensive urine dipstick test for very ill PLHIV presenting late to care was shown to reduce mortality in the hospital setting. PEPFAR will continue to support the expansion of these diagnostic technologies to help ensure that effective TB diagnostic testing is accessible to all PLHIV.

LEVERAGING PARTNERSHIPS FOR SUSTAINABILITY

PEPFAR forges strategic public-private partnerships that support and specifically complement our prevention, care, and treatment work addressing key gaps in innovative ways. These partnerships translate new ideas into practice and accelerate impact, benefiting from the private sector's expertise and resources as well as its leadership, energy, and inspiration.

PEPFAR also advances global health diplomacy through close engagement with U.S. chiefs of mission globally and with the diplomatic corps in Washington, D.C., as well as by connecting health impacts to other U.S. foreign policy priorities, including economic growth, trade, education, and political stability, to ultimately increase the impact of U.S. health investments and partnerships.

Additionally, since its founding, PEPFAR has built health infrastructure and strengthened capacity through an emphasis on sustainability. We have invested in robust laboratories and well-trained laboratory specialists critical to well-functioning health systems, enabling clinicians and health workers to better diagnose and treat a range of diseases and conditions. PEPFAR has trained nearly 250,000 HCW to deliver HIV care and other health services.

No single actor alone can control and ultimately end the HIV/AIDS pandemic. We need all sectors and diverse partners working together to provide financing, demonstrate political will, and carry out interventions both within and outside of the health sector, and we must always include people directly affected by HIV in any response. We must also continue to act decisively and strategically with our resources and continue to bring other donors and countries themselves to the table to respond to and ultimately help end the epidemic. The following section focuses on how PEPFAR is leveraging our platform and partnerships for sustainability and to accelerate progress toward achieving epidemic control.



Young girls in Mozambique.

CREDIT: Peace Corps

Building a Safer, More Secure World Through Strategic PEPFAR Health Investments

PEPFAR's investments are not only controlling the HIV/AIDS pandemic, but are also contributing to stability and American national security. The U.S. government, including through PEPFAR, has built health infrastructure and strengthened capacity with an emphasis on sustainability. This not only has supported patients living with HIV/AIDS, but also has been leveraged to address maternal and child health, TB, malaria, immunizations, and noncommunicable diseases. Since 2015, S/GAC has required the development and monitoring of clear metrics and milestones in the Country Operational Plans (COPs) of all horizontal health system investments, captured in the COPs as Table 6 (described in detail later). This is in addition to the vertical system strengthening investments captured through site-level and above-site-level investments.

In 2017 alone, through PEPFAR's COPs/ROPs (Figure 38), we invested nearly \$600 million in horizontal, above-site health system strengthening investments. This includes nearly \$100 million to strengthen laboratory systems. The health system strengthening component, specifically laboratory system strengthening, is horizontal in this category supporting the overall system. PEPFAR invests an additional \$20–30 million through our Headquarters Operating Plans (HOP). These efforts have also strengthened the ability of countries with sizable HIV/AIDS burdens to swiftly address other outbreaks, such as Ebola, avian flu, and cholera, ultimately enhancing global health security and protecting America's borders.

PEPFAR's support of robust surveillance and health information systems, as well as laboratories and well-trained laboratory specialists critical to well-functioning health systems, enable clinicians and health workers to better diagnose and treat a range of diseases and conditions. PEPFAR has trained nearly 250,000 HCW to deliver HIV care and other health services, improving

Figure 38: Country Operational Plan Investment in Health Systems

OU	Total Table 6	Surveys, studies, pilots, etc.			HRH: Training		HRH: Other		Governance: Test and Start		Governance: Other		Inst & Org Development		Inst & Org Development		Strategic Information Systems		Laboratory Systems		Pilots		Other	
Botswana	\$ 10,329,360	\$ 2,454,812	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000	\$ 536,730	\$ 50,000	\$ 1,000,000	\$ -	\$ -	\$ 238,778	\$ 4,310,271	\$ 1,338,769	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Burundi	\$ 2,470,000	\$ 150,000	\$ 200,000	\$ 70,000	\$ -	\$ -	\$ -	\$ -	\$ 525,000	\$ -	\$ -	\$ -	\$ -	\$ 700,000	\$ 700,000	\$ 125,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Cameroon	\$ 4,338,429	\$ 250,000	\$ 259,174	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 108,857	\$ -	\$ 1,518,856	\$ 38,000	\$ 473,510	\$ 608,372	\$ 1,016,660	\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Cote d'Ivoire	\$ 17,446,679	\$ 980,000	\$ 1,279,000	\$ 925,000	\$ -	\$ -	\$ -	\$ 1,116,500	\$ 309,000	\$ 3,237,177	\$ 50,000	\$ 2,037,002	\$ 2,386,000	\$ 3,937,000	\$ 350,000	\$ 840,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
DRC	\$ 10,588,577	\$ 750,000	\$ 1,125,000	\$ 150,000	\$ -	\$ -	\$ -	\$ 255,000	\$ -	\$ 1,972,827	\$ 13,500	\$ -	\$ 2,372,000	\$ 1,204,500	\$ -	\$ 1,295,750	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Ethiopia	\$ 25,867,864	\$ 1,720,937	\$ 3,580,328	\$ 714,358	\$ -	\$ -	\$ -	\$ 1,280,486	\$ 50,000	\$ 1,400,000	\$ 888,638	\$ 5,354,803	\$ 1,804,426	\$ 4,339,968	\$ -	\$ 4,733,920	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Haiti	\$ 14,610,500	\$ 2,595,000	\$ 970,000	\$ 345,000	\$ -	\$ -	\$ -	\$ 2,770,500	\$ 100,000	\$ 200,000	\$ -	\$ 1,500,000	\$ 4,430,000	\$ 1,700,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Kenya	\$ 73,522,446	\$ 11,360,000	\$ 3,505,525	\$ 3,115,000	\$ 2,170,000	\$ 7,198,637	\$ 800,000	\$ 1,000,000	\$ -	\$ 3,000,000	\$ 19,300,000	\$ 15,662,130	\$ -	\$ -	\$ -	\$ 6,411,154	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Lesotho	\$ 10,129,873	\$ 3,000,000	\$ 100,000	\$ 189,873	\$ -	\$ -	\$ -	\$ 200,000	\$ -	\$ 1,500,000	\$ -	\$ 450,000	\$ 4,130,000	\$ 260,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Malawi	\$ 20,936,791	\$ 4,230,000	\$ 2,709,650	\$ 4,292,883	\$ -	\$ -	\$ -	\$ 1,171,335	\$ -	\$ 2,791,650	\$ 667,503	\$ 800,000	\$ 552,975	\$ 1,865,000	\$ 400,000	\$ 1,455,795	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Mozambique	\$ 36,978,367	\$ 3,640,402	\$ 2,665,004	\$ 2,823,046	\$ 180,000	\$ 3,322,625	\$ -	\$ 5,061,145	\$ 91,143	\$ 1,412,381	\$ 11,794,580	\$ 5,289,684	\$ 698,357	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Namibia	\$ 7,906,799	\$ 1,420,000	\$ 1,387,701	\$ 267,730	\$ -	\$ -	\$ -	\$ 732,164	\$ 300,000	\$ 664,000	\$ -	\$ 261,000	\$ 1,316,115	\$ 583,089	\$ -	\$ 975,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Nigeria	\$ 46,060,928	\$ 15,039,806	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,800,000	\$ 3,770,500	\$ 100,000	\$ 3,119,400	\$ 9,149,400	\$ 11,131,373	\$ 750,449	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Rwanda	\$ 8,733,833	\$ 3,358,050	\$ 1,143,041	\$ 350,900	\$ -	\$ -	\$ -	\$ 348,823	\$ -	\$ 621,504	\$ 19,000	\$ 458,114	\$ 1,257,023	\$ 741,040	\$ -	\$ 436,338	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
South Africa	\$ 71,271,514	\$ 7,302,915	\$ 4,654,114	\$ 8,921,766	\$ 1,179,685	\$ 8,597,903	\$ 1,804,473	\$ 6,989,970	\$ -	\$ 17,580,791	\$ 5,700,000	\$ 2,606,625	\$ -	\$ 5,933,272	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
South Sudan	\$ 8,373,350	\$ 1,860,000	\$ 50,000	\$ 200,000	\$ -	\$ -	\$ -	\$ 1,203,350	\$ -	\$ 530,000	\$ 800,000	\$ 1,075,000	\$ 1,200,000	\$ -	\$ 1,005,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Swaziland	\$ 7,370,730	\$ 380,000	\$ 95,000	\$ 2,300,500	\$ -	\$ 920,000	\$ 13,000	\$ 600,000	\$ 350,000	\$ 650,000	\$ 1,750,000	\$ 85,000	\$ -	\$ 227,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Tanzania	\$ 44,522,000	\$ 2,900,000	\$ 1,613,000	\$ 8,403,000	\$ 1,090,000	\$ 6,160,000	\$ 2,950,000	\$ 2,590,000	\$ 1,700,000	\$ 200,000	\$ 10,366,000	\$ 3,700,000	\$ -	\$ 2,850,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Uganda	\$ 43,079,968	\$ 3,801,200	\$ 420,000	\$ 11,149,118	\$ -	\$ 6,484,825	\$ -	\$ 5,243,616	\$ 294,000	\$ -	\$ 11,341,806	\$ 4,345,403	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Ukraine	\$ 10,389,928	\$ 1,014,575	\$ 585,000	\$ 900,000	\$ 490,000	\$ 1,690,236	\$ 595,000	\$ 600,000	\$ 200,000	\$ 765,000	\$ 2,165,000	\$ 840,000	\$ -	\$ 545,117	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vietnam	\$ 12,123,121	\$ 450,100	\$ 1,422,300	\$ 401,700	\$ 130,000	\$ 3,012,928	\$ 1,257,000	\$ 654,400	\$ 604,345	\$ 253,000	\$ 2,002,788	\$ 1,143,000	\$ 7,800	\$ 783,760	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Zambia	\$ 81,186,034	\$ 2,810,000	\$ 4,888,202	\$ 11,252,516	\$ -	\$ 869,735	\$ 158,752	\$ 20,938,150	\$ -	\$ 805,906	\$ 13,875,663	\$ 25,587,110	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Zimbabwe	\$ 19,314,356	\$ 750,000	\$ 542,689	\$ 1,450,000	\$ -	\$ 2,518,000	\$ -	\$ 6,964,159	\$ 347,700	\$ -	\$ 1,862,199	\$ 3,886,703	\$ -	\$ 992,906	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
TOTAL	\$587,551,447	\$72,217,797	\$33,194,728	\$58,222,390	\$5,639,685	\$51,023,634	\$10,187,225	\$69,847,954	\$6,163,829	\$41,909,685	\$112,849,618	\$92,588,054	\$2,271,606	\$29,685,242										

HIV care and creating a lasting infrastructure that enables partner countries to address the health challenges of today – and tomorrow.

The value of the American people’s investments in PEPFAR also goes beyond health. A 2015 study by the Bipartisan Policy Center shows that, from 2004 to 2013, political instability and violence fell by 40 percent in countries that received PEPFAR assistance versus only 3 percent in similar countries that did not. The strength of the rule of law increased 31 percent versus only 7 percent.

PEPFAR has also helped advance economic development, particularly in sub-Saharan Africa, by extending not just average life expectancy, but the quality of that life, and the ability to engage in labor. That has a ripple effect, as far fewer parents, siblings, and children die of AIDS – or need to leave school or work to take care of family members dying from AIDS. All of which support economic growth and enlarge potential markets for American goods and services.

These critical health systems investments have enabled PEPFAR to directly support the global health security agenda (Figure 39). The programs that PEPFAR supports are about delivering results today, but also about creating lasting services, systems, and policies that will allow countries to be resilient and successful tomorrow. Healthy populations are a prerequisite for prosperous and stable societies. Investing in the well-being of our partner countries not only saves lives, but also enhances global public health and security. In our interconnected world, there is no better investment. Americans at home and abroad are safer and more secure when systems to prevent, detect, and respond to infectious disease threats are strong.

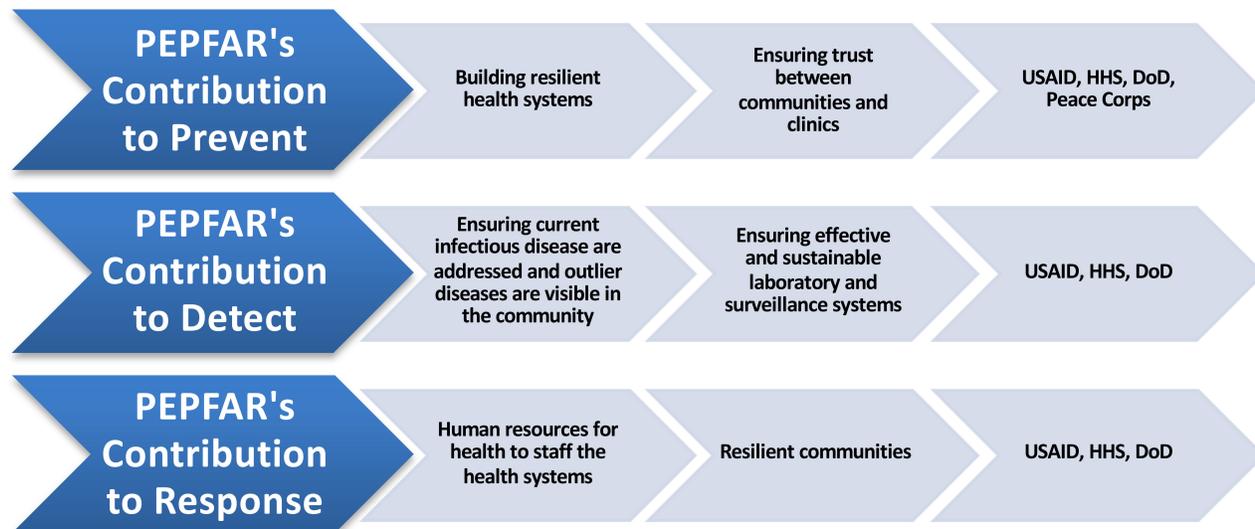
As demonstrated during the West Africa Ebola outbreak in 2014, in our interconnected world, infectious diseases are only a short flight away. PEPFAR has not invested heavily in countries



A lab in Kenya.

like Liberia, Sierra Leone, and Guinea due to their low HIV prevalence. As such, their health systems were not equipped to detect the Ebola outbreak earlier when it could have been contained, preventing risk to American aid workers in-country and its ultimate spread to those within the U.S. In contrast, thanks to the capacity built, in large part with U.S. support through PEPFAR, in countries like Nigeria, DRC, and Uganda, when the Ebola crisis hit, they were able to contain it, preventing its spread to their neighbors and international travelers.

Above all else, the backbone of PEPFAR and the key to our success toward controlling the HIV pandemic and contributing to a sustainable health system is the interagency partnership – a whole of U.S. government approach. PEPFAR was established with a commitment to program resources and leverage competencies differently. PEPFAR harnesses the unique capacities in each U.S. government agency to create a

Figure 39: PEPFAR's Contribution to Global Health Security Agenda

comprehensive and highly efficient approach to programmatic impact coordinated by the Department of State. PEPFAR models the key whole-of-sector and horizontal integration of line ministries that are required by host governments to successfully control the HIV pandemic and build sustainable health systems.

Sustainability of these efforts and ending AIDS as a public health threat cannot be accomplished by any single actor. It requires all sectors working together to contribute financing, demonstrate political will, and carry out interventions both within and outside of the health sector. Partnerships enable business to enter new markets; gain exposure to new customers; enhance brand and goodwill in communities; recruit, retain, and engage the workforce; ensure the health and wellness of employees; and contribute to the global HIV/AIDS response.

PEPFAR has strategically partnered across multiple sectors, including with the private

sector, and is increasingly looking to its business expertise to help solve global health challenges. We are translating the optimized business practices to our global health world to improve the efficiency of our programs.

Driving a Sustainability Agenda with Country Partners

The global response to the HIV pandemic is unprecedented. Billions of dollars and millions of people have been mobilized to save lives and accelerate progress toward controlling the pandemic. Together, we have achieved remarkable gains. If country governments, donors, and civil society work in partnership and continue to ensure every investment has a clear outcome, it is within our grasp to reach epidemic control. Yet, our progress is at risk if we do not take decisive actions to ensure the HIV

response is sustainable. We must take concrete actions to increase our impact and accelerate our progress toward long-term sustainability.

Given the magnitude of our contributions to the global HIV response, PEPFAR plays a major role in determining the future path of the HIV epidemic and bears great responsibility for ensuring that the HIV response is sustainable. Indeed, all PEPFAR investments move us closer to sustainability; only an epidemic that is shrinking and not expanding is financially sustainable.

Ultimately, PEPFAR's achievements will be measured by our contribution to sustained control of the HIV epidemic. However, PEPFAR is not in this alone and all HIV development partners must do their part. As a key element of our partnerships with country programs, PEPFAR needs every country to make the health systems investments required for ensuring sustainability

through increased national resources allocation and mutual accountability for results.

Table 6: Operationalizing Sustainability

PEPFAR is deeply committed to firmly embedding sustainability principles and programming into our annual COPs. The major innovation in this direction in 2016 was the Table 6 process. As part of the Strategic Direction Summary (SDS) that is included within each COP, PEPFAR added a new requirement for country teams to assess the major policy and systemic gaps that inhibit attainment of 90-90-90 treatment goals and longer term programmatic sustainability. These gaps are analyzed and distilled in Table 6 of the SDS. In 2016, there was special emphasis on addressing barriers to Test and Start policies and barriers to implementing differentiated care.



A group of children in Cambodia.



A group of young girls in South Africa.

The purpose of Table 6 is to present multiyear efforts that contain several components or activities grouped together with indicators that show annual progress toward a longer term goal above the site of service delivery. In essence, Table 6 brings future end-state goals into present-day budgeting and programming. This enables the country team to be more purposeful and accountable with their health systems investments, setting annual targets and benchmarks that are similar to the annual treatment and service goals.

For example, a team may diagnose weaknesses in a lab system that will require the development of new labs, equipment purchases, new supply chains, and capacity building to operate the labs. The new Table 6 groups the activities logically and assigns benchmarks that monitor the scale-up and functioning of the new system while ensuring that the varied activities are coordinated and sequenced properly. In 2017,

PEPFAR validated and updated the annual indicators to ensure they are well aligned with the desired programmatic outcome.

With the natural lag between science and implementation, Table 6 also ensures that new science and policies are adopted quickly and completely. Investments captured in Table 6 and the resulting approval process engenders the rapid identification and adoption of policies and programming to speed their implementation. Notably, the rapid adoption of the Test and Start policy that calls for HIV-positive individuals to start ART as soon as they are diagnosed was significantly accelerated through PEPFAR's focus on this critical policy to enhance viral suppression.

Table 6 also helps operationalize the Sustainability Index and Dashboard (SID). For PEPFAR, sustainability of the HIV response means that a country has the enabling environment, services,

systems, and resources required to effectively and efficiently control the HIV/AIDS epidemic.

The Sustainability Index and Dashboard – A Road Map to Transfer Responsibility

The SID is a measurement tool, began in 2015, that provides a framework and periodic snapshot of the elements central to a sustained and controlled epidemic. The implementation of the SID allows PEPFAR to objectively track progress toward program sustainability goals.

The Index targets 15 elements organized under the following four overarching domains:

- Governance, leadership, and accountability
- National health system and service delivery
- Strategic investments, efficiency, and sustainable financing
- Strategic information

The specific indicators and milestones included in the SID measure key areas, including partner countries mobilizing domestic financial resources for their HIV/AIDS response and allocating those resources strategically and efficiently; collecting, analyzing, and using the right types of data for decision-making; and ensuring a secure, reliable, and adequate supply of and distribution system for drugs and other commodities needed to achieve sustainable epidemic control.

The SID data collection and validation process is conducted every two years, and FY 2016 was marked by a complete review and updating of the tool in anticipation of the biennial data collection that occurred in November 2017. This review process, which was conducted with headquarters and field input as well as with multilateral and

country partners, confirmed the existing 15 elements as essential to a sustainable response. By confirming the basic elements, PEPFAR can publish a comparable time series of data, which charts progress toward sustainability. Country SIDs are publicly available and provide an important information base for governments, other donors, and civil society to reflect on where efforts and funding are most needed to remove barriers to reach and sustain epidemic control.

Sustainable Financing as a Key Priority

A stable financial resource base, mobilized both domestically and externally, is essential for sustainability and critical for long-term planning and decision-making. Because funding will always be limited, each dollar must be stretched to ensure that investments are strategic, effective, and cost-efficient.

For PEPFAR, financial sustainability is located at the intersection of epidemiology and economics. It is the ability to afford epidemic control and to secure a stable funding source for HIV treatment, prevention, and surveillance and the health system that supports the program after control is achieved. To ensure that the financing is available to achieve epidemic control, PEPFAR is doing the following:

- Focusing on the efficient use of existing resources to ensure that maximum performance is achieved with limited funding
- Standardizing and sharing budget and expenditure data with the Global Fund, partner governments, civil society, and other donors to develop a complete picture of existing HIV financing
- Engaging Ministries of Finance (MOFs) to ensure comprehensive HIV programs are developed and funded in

national budgets with increasing shares domestically funded over time

- Working with partner governments and civil society to develop key systems, including secure procurement supply chains and financial management systems, to maintain services and epidemic control

PEPFAR took a number of steps to integrate domestic resource mobilization and sustainable financing into our programming. FY 2016 saw an important maturation of the USAID-led Sustainable Finance Initiative (SFI). SFI focuses on encouraging domestic resource mobilization in the delivery of HIV/AIDS services in PEPFAR-supported countries.

To ensure the sustainability of HIV programs and strengthen country ownership, SFI is investing to leverage domestic resources for HIV/AIDS and improve approaches to health financing. SFI helps governments improve efficiency to meet the coverage goals for 90-90-90/Test and Start through data-driven resource allocation for health and HIV/AIDS at the national and subnational levels. As plans are developed, four areas of assistance are considered: advocacy through information, improved public financial management, supporting insurance and risk pooling mechanisms, and strengthening the private sector.

Building a Data Platform

Transparent, accurate, and timely health, epidemiologic, performance, and financial/expenditure data are essential for making informed and impactful investments that drive long-term improvements in health care services and systems and lower costs. In addition, they allow for the type of active surveillance that enables a country to respond quickly to outbreaks and contain them before they become uncontrollable. Access to data builds

ownership, enhances problem solving, promotes accountability, and allows for real-time decision-making that gets a country to epidemic control.

To achieve sustainable epidemic control, we are complementing our efforts to enhance Minister of Health (MOH) data capacity by forging innovative partnerships to support countries in building robust, wider data systems that engage all stakeholders and leveraging these systems to accelerate, focus, and sustain the response to HIV/AIDS.

The Data Collaboratives for Local Impact partnership between PEPFAR and the Millennium Challenge Corporation promotes data for decision-making at the community and national level in Tanzania and will expand to Côte d'Ivoire in 2018. More than 300 individuals, principally from the health sector, were trained. Data Collaboratives for Local Impact's Data for Local Impact Innovation Challenge recently awarded 10 grants for innovative data-driven approaches to support the DREAMS program. One Innovation Challenge winner is working with schools in Tanzania to build a predictive analysis tool to keep girls in school and lower their risk of contracting HIV.

Similarly, with PEPFAR's support, the Global Partnership for Sustainable Development Data (GPSDD) helps countries like Ghana, Kenya, and Tanzania engage stakeholders to develop data road maps to tackle development priorities. These efforts gained momentum at a June 2017 meeting hosted by Kenya and GPSDD, Data for Development in Africa, which featured innovative ideas on how to harness data to end AIDS. GPSDD's Leave No One Behind Data Collaborative promotes best practices on data disaggregation and citizen-generated data to ensure that the most vulnerable benefit from improvements in health, education, and equity that help reduce their risk of HIV/AIDS.



On June 16, 2017, more than 500 people gathered to commemorate the Day of the African Child in Nairobi, Kenya, and to speak up publicly for the rights of children and adolescents living with HIV.

PEPFAR has partnered with Humanitarian OpenStreetMaps, USAID’s YouthMappers, the Department of State’s MapGive, and the Young African Leaders Initiative to engage youth in mapping more than 195,000 buildings and 44,000 miles of road in high-HIV-prevalence districts of Côte d’Ivoire, Kenya, Tanzania, and Uganda. These “mapathons” help PEPFAR and our partners make data-informed decisions and improve program impact, while inspiring young Africans to engage in AIDS-prevention efforts. Participants have mapped remote fishing settlements in Uganda’s highest HIV-prevalence district, helping optimize HIV service delivery and outreach and facilitate linkage to care and treatment.

Table 6. Spending Breakdown

Long-term strategy countries invest in above-site activities mostly in the areas of strategic information systems (19 percent of above-site

spending on average), laboratory systems (16 percent), surveys and surveillance (12 percent), and supply chain (12 percent). Overall, long-term strategy countries spend an average of 13 percent of their total planning levels on Table 6 activities.

- In **Kenya**, SFI supported training for 26 out of 47 County Health Teams in program-based budgeting, which shifts the budget focus from line item inputs to programmatic results, in addition to training in advocacy, to ensure budgetary allocations are made for HIV/AIDS services.
- In **Vietnam**, SFI is actively supporting transition of program financing and enrollment of HIV patients to Vietnam’s Social Health Insurance system.
- Support for advocacy at the national level in **Tanzania** resulted in a first-time allocation of \$4.6 million for ARVs in Tanzania’s FY 2016/2017 budget.



CREDIT: USAID

A couple in Kenya receiving HIV counseling in Kenya.

- In **Nigeria**, in the private sector, SFI supports market-based approaches for HIV service delivery to mobilize resources from clients in higher income brackets, providing \$705,799 for HIV/AIDS programming in its first year.
- SFI supported the government of **Uganda** to adopt program-based budgeting and to increase to its annual government budget absorption rate from 79.9 percent in FY 2015/2016 to 96.41 percent in FY 2016/2017, thereby increasing the fiscal space for health and HIV/AIDS services.
- In the **Dominican Republic**, SFI is generating evidence and supporting advocacy efforts to cover more than \$16 million of the cost of ARVs within the Dominican Republic's social health insurance scheme.

Engaging Partner Governments and Civil Society

For PEPFAR, sustainability means that a country has the laws, policies, services, systems, and resources required to effectively and efficiently control the HIV/AIDS epidemic. Sustainability demands a long-term effort to ensure that a country establishes and maintains requisite levels of fiscal ability, technical capability, political will, and citizen engagement. PEPFAR uses a sustainability framework that emphasizes a drive to control the epidemic to the point that the remaining disease burden can be financed by a partner country's resources and managed with its own technical capability.

In the past, PEPFAR has emphasized formal partnership frameworks to drive host-country

stakeholders toward sustainability and self-sufficiency. Now, PEPFAR emphasizes that partnerships should be continuously evolving and embedded in all aspects of program development and execution using data analytics jointly. Embedding partnerships into daily operations encourages shared responsibility that engages all country stakeholders to develop a system that fits their needs and realities, with an eye toward full partner country responsibility in the future.

Engagement with civil society, including faith-based organizations (FBOs), is a strong driver of sustainability. PEPFAR encourages the full participation of civil society in every stage of our programming and planning, from advocacy to service delivery, as it is a key to the success and sustainability of PEPFAR and the global effort to address HIV. Civil society has been a leading force in the response to HIV/AIDS since the beginning of the epidemic, and this longstanding involvement has resulted in expertise and relationships with local communities that nonindigenous organizations often struggle to achieve. It is critical to ensure that community and civil society are meaningfully engaged and have a voice at the decision-making table.

Efforts to embed partnerships in normal program operations start with the development of a PEPFAR COP/ROP. More than ever before, partner governments and in-country Civil Society Organizations (CSOs) were involved in the development, planning, and approval of the 2017 COPs. Representatives from the MOH and CSOs, including FBOs, attended the 2017 COP in-person reviews.

Together, PEPFAR teams, PEPFAR headquarters representatives, multilateral colleagues, and MOH and CSO partners reviewed epidemiological and program data, allowing all stakeholders to analyze and understand the information that underpins PEPFAR program planning and decision-making. MOH presence allowed real-time, effective

discussion concerning high-level policy decisions, including Test and Start, and ensured MOH buy-in on planned activities. CSO presence helped better integrate the concerns of civil society into COP planning, and in many instances, CSOs strongly advocated to move the PEPFAR teams forward to reach even more PLHIV with services during the COP 2017 implementation.

We developed the PEPFAR Oversight and Accountability Review Team (POART) process, which is a quarterly review of progress to identify weaknesses and areas that require midcourse adjustments. Results are reviewed in person with partner country stakeholders who are integral to identifying problems and bottlenecks that inhibit performance and to mitigating the problems with appropriate solutions and actions.

PEPFAR teams are building new relationships in partner countries. In 2016, the U.S. Department of the Treasury joined PEPFAR as an implementing agency with the important goal of engaging peer MOFs in the HIV/AIDS response. For example, in countries like Zambia and Uganda, Treasury advisors are facilitating MOF involvement in the development of country HIV plans and are supporting the establishment of HIV expenditure steering committees. Treasury is also working on a range of activities, including helping domestic resource mobilization efforts in PEPFAR-supported Technical Assistance/Technical Cooperation countries where the country scored low on the SID, and assisting in the execution of HIV budgets in long-term strategy countries.

As PEPFAR countries move toward more sustainable programs and transition to local ownership, many national governments will depend on civil society to an even greater extent to meet the health needs of their citizens. Meaningful engagement with PEPFAR builds the capacity of local CSOs to meet this challenge, better preparing them to play a leadership role now and in the future.

Locally Based Partners

Sustainable epidemic control will not be possible without locally based partners. PEPFAR 3.0 reiterated that PEPFAR cannot achieve an end to HIV/AIDS alone; strong partnerships are critical. That is why PEPFAR seeks to foster locally led prevention, treatment, and care services by partnering with local organizations and institutions.

PEPFAR's Local Capacity Initiative (LCI):

The LCI began in 2012 provides funding to local nongovernmental organizations (NGOs) in 14 PEPFAR-supported countries to assist local CSOs in increasing the effectiveness and responsiveness of local health systems through expanding advocacy efforts at all levels. The LCI's goals include increased accountability and transparency of government, reduced legal and policy structural barriers, reduced stigma and discrimination for key populations, and an enabling environment for CSOs. Below are highlights and achievements stemming from LCI programming:

- The Cameroon Baptist Convention Health Board (LCI grantee) is working in local health districts to influence local ownership and financing of health activities, such as introducing a first-ever line item for health in local council budgets.
- The Central Asian Association of PLHIV (LCI grantee) and other stakeholders successfully convinced the Ministry of Health and Social Development in Kazakhstan to commit to utilizing the UNICEF ARV procurement system in 2016 to dramatically reduce the procurement cost of ARVs. All LCI countries undergo significant Policy and Advocacy Training with technical assistance providers.
- In India, LCI grantees used GIS hotspot mapping with CSO groups working with

key populations. Through GIS, services can be mapped against hotspots to determine how to navigate high-risk clients into testing and care services.

- In Zimbabwe, CECHLA (LCI grantee) pioneered a Community Scorecard (CSC) System that tracks service provision and health worker attitudes at the clinic level. The CSC documented improvement in health worker attitudes and stigma against Key Populations (KPs). Several LCI countries are developing and implementing community scorecards to increase discussion/advocacy for stigma and discrimination. The CSC also encourages more transparency and accountability from service providers and empowers clients to take control of their own care, while also helping the clinics succeed. For example, the CSC process revealed that clinics were not open late enough for the entire community to use their services and, as a result, several clinics extended their hours to better meet the health care needs of their community.

Gender and Sexual Diversity (GSD) Trainings:

Building on the success of the in-country GSD trainings, the Health Policy Plus (HPP) project and PEPFAR developed a GSD blended learning package that includes online and in-person training components. The blended learning package requires all PEPFAR field and headquarters staff who were not trained in person to spend 90 minutes participating in the online interactive GSD curriculum, and all our staff must also join an in-person panel discussion with local gender and sexual minority representatives around HIV, human rights, and meaningful engagement of GSD in PEPFAR programming.

Thus far, more than 400 PEPFAR field and headquarters staff have taken the online training. HPP also continues to conduct yearly



CREDIT: U.S. Mission Uganda

A group of young women in Uganda.

in-person trainings of CDC, USAID, and S/GAC headquarters staff. Many PEPFAR programs operate in countries where gender and sexual minorities face increasing violence, legal sanctions, and a disproportionate burden of HIV, and are further imperiled under hostile social and political conditions, making our efforts to scale up HIV programs increasingly difficult.

It is important that PEPFAR and partner staff understand the existing constructs around GSD and our impact on the HIV epidemic, especially among high-burden sexual and gender minorities. PEPFAR will continue to innovate in this area to ensure that our staff is knowledgeable and effective at serving our most vulnerable populations.

While PEPFAR moves forward in our drive to be more efficient and transparent, PEPFAR country teams will continue to expand their collaboration with local civil society, including activists, advocacy groups, and service delivery organizations, to ensure they

are actively engaged in PEPFAR processes and in the country-level HIV/AIDS response. PEPFAR will also work to do the following:

- Expand PPPs to address critical issues and challenges faced by communities and key populations
- Ensure that programs such as the Key Populations Investment Fund, the Faith Initiative, and the Elton John LGBT Fund scale up quality HIV/AIDS prevention, care, and treatment programs
- Continue to work with stakeholders and partner governments to address social and structural factors (such as stigma, discrimination, violence, and human rights violations)
- Work more closely with partners such as community and CSOs, governments, UNAIDS, the Global Fund, and others to strengthen and coordinate efforts



A group of mothers in Kenya.

Robert Carr Civil Society Networks Fund:

PEPFAR is a founding donor of the Robert Carr Civil Society Networks Fund (RCNF), along with the United Kingdom, the Netherlands, Norway, and the Gates Foundation, which aims to support and strengthen the capacity of global and regional civil society networks as strong partners in the delivery of HIV services and as champions of human rights. This investment helps bring often-marginalized populations out of the shadows and into prevention services and health care clinics. Through the RCNF, 18 global and/or regional networks have been funded in every geographic region of the world. The RCNF is especially important to supporting efforts aimed at key populations that include men who have sex with men (MSM), sex workers, transgender individuals, people who inject drugs, and all PLHIV – from young people who have lived with HIV since birth

to older men and women who have survived more than a decade due to the success of HIV treatment.

By funding consortia of networks of CSOs, the RCNF is able to achieve “economies of scale” in civil society impact. RCNF provides grants to equip smaller entities to function as organizations, which are capable of producing budgets, running audits, and utilizing the latest technology. As a result, these groups have become a stable global platform for advocacy, able to engage in Global Fund and PEPFAR processes. In 2017, as a result of the investment of RCNF, one network in the MSM consortium, the Global Forum on MSM and HIV, outpaced the MSM consortia’s own growth and became a principal recipient of Global Fund grants. This outcome was a result of core and infrastructure support provided by RCNF to build network capacity to have an impact.

NGO Delegation to UNAIDS

In 2017, PEPFAR supported the UNAIDS Non-Governmental Organization (NGO) Delegation members from PEPFAR countries across all UNAIDS regions for a retreat held at the S/GAC offices in Washington, D.C. This provided NGO Delegation members the chance to explore key policy issues of UNAIDS and sharpen the program and advocacy expertise of the group to recommend new and pragmatic approaches that the UNAIDS Program Coordinating Board (PCB) could adopt in the short and long term. The impact of this training opportunity was evident through the inclusion of civil society recommendations into the final decision points of a very successful PCB at the end of the year. The group recommended a thematic day at the PCB that addressed discrimination in health care settings and saw the issues thoroughly discussed and the majority of decision points adopted. The opportunity presented by PEPFAR allowed the group a chance to work together, learn together, and develop strategies for the upcoming year. This best practice has now been embedded in the NGO delegation's annual work plan, with Germany and India offering to host the group in 2018.

PEPFAR and the Elton John AIDS Foundation (EJAF) continue a \$10 million partnership, originally launched in November 2015, to provide grants to organizations working to meet the HIV-related needs of key populations, with an initial focus on sub-Saharan Africa. The EJAF and PEPFAR each invested \$5 million to improve access to HIV services for key populations and to help create nonstigmatizing environments by working with community leaders, civil society, and service providers, and targeting projects that provide outreach and support to LGBT people in countries with a high HIV burden.

A Rapid Response Fund, managed by the International HIV/AIDS Alliance and the Global

Forum on MSM & HIV, was created to support activities that respond to immediate and urgent threats to the key population community as well as longer term projects aimed at influencing legal, policy, or other developments deemed hostile to those communities. In addition, a Deeper Engagement Fund was created to support grants in Kenya, Uganda, and Mozambique that improve access to HIV prevention, care, and treatment information and services for key populations; decrease stigma and discrimination; and increase the capacity of related community-based CSOs.

Engaging Faith-Based, Locally Based, and Minority-Serving Partners

Ending AIDS by 2030 requires the global community to work together, including FBOs, locally based partners, and minority-serving institutions (MSI).

Faith-Based Organizations

From the earliest days of the epidemic, FBOs have been central to the HIV/AIDS response, both domestically and internationally. Compelled by their mission to care for the least fortunate among us, FBOs have been on the ground for decades, even centuries, providing care and treatment to communities outside the reach of public health systems and acting as a voice for the voiceless. In the global context, FBOs were among the first programs to respond to the particular needs of children infected with, affected by, and orphaned by HIV/AIDS.

Since the beginning of the epidemic, we have made great progress in reducing the impact of HIV/AIDS on families and communities around the world, and faith-based partners remain indispensable partners in the effort. In many PEPFAR countries, FBOs are the largest nongovernmental provider

of HIV services. A PEPFAR-funded study in Kenya conducted across all 47 counties in the country found that only 22 percent of HIV treatment-related services were provided by health care service providers, excluding other services that may be provided such as HIV testing or PMTCT.²⁶ In Nairobi County, the highest-burden county in Kenya, faith-based health providers support 79 percent of children on treatment, and 40 percent of adults. These numbers demonstrate why PEPFAR has committed more than \$1 billion in planned funding to more than 40 faith-based partners since 2012.

Revitalized and Increased Engagement with Faith-Based Organizations

In September 2017, the contribution of faith-based partners was recognized by the U.S. Department of State, and in the new PEPFAR Strategy, one of the strategic pillars is “renewed engagement with faith-based organizations... to accelerate and improve efforts toward epidemic control.”

To that end, PEPFAR is expanding faith-based engagement in the following ways in 2018:

- Partnering to reach men and boys
- Partnering to reduce risk among young people
- Partnering to increase access to treatment for children and adolescents

Action Plan on Scaling Up Early Diagnosis and Treatment of Children and Adolescents

One of the most important facets of our commitment to work with faith-based partners is our shared focus on pediatric treatment and our ambitious goals to end AIDS in children, adolescents, and young women by 2020 as captured by the *Start Free Stay Free AIDS Free* Framework.

In November 2017, PEPFAR, along with the Vatican Dicastery for the Promotion of Integral Human Development; UNAIDS; Caritas



CREDIT: USAID

A nun greets a group of children in Lesotho.

²⁶ <http://ihpememory.org/kenya-overview/kenya-high-incidence/>

International; the Ecumenical Advocacy Alliance, an ecumenical initiative of the World Council of Churches; WHO; and the Elizabeth Glaser Pediatric AIDS Foundation convened leaders of major pharmaceutical and medical technology companies, multilateral organizations, donors, governments, faith-based partners, and other key stakeholders for a High-Level Discussion on Scaling Up Early Diagnosis and Treatment of Children and Adolescents. Participants gathered to discuss ways to expedite the research, development, approval, introduction, and uptake of optimal drugs and formulations for infants, children, and adolescents.

Building on meetings held in 2016 and 2017, the High-Level Dialogue provided an opportunity for stakeholders to put forward a set of concrete actions to better support the research, development, and introduction spectrum. Following the meeting, a new Action Plan for Scaling Up Early Diagnosis and Treatment of Children and Adolescents was released on World AIDS Day 2017, which was endorsed by stakeholders from all sectors and built on commitments within the Global Accelerator for Pediatric Formulations (GAP-f) and the *Start Free Stay Free AIDS Free* framework.²⁷ In this plan, the participants agreed to focus, accelerate, and collaborate on the development, registration, introduction, and rollout of the most optimal pediatric formulations and diagnostics.

PEPFAR is fully supportive of the new Action Plan and will be taking positive steps in 2018, including additional assistance and funding of research to inform development, approval, and use of pediatric formulations, and supporting actions required for quick introduction and scale-up of new, optimal pediatric formulations.

A key reason for our global success is the role of the U.S. Food and Drug Administration and its willingness to create a workable

pathway for earlier access to safe and effective drugs. Recently, they noted a new, innovative approach that brings a parallel drug development process for the most vulnerable populations we serve: infants and children.

At the conclusion of the Vatican Consultation, Pope Francis released the following statement: *“Health care strategies aimed at pursuing justice and the common good must be economically and ethically sustainable. Indeed, while they must safeguard the sustainability both of research and of health care systems, at the same time they ought to make available essential drugs in adequate quantities, in usable forms of guaranteed quality, along with correct information, and at costs that are affordable by individuals and communities.”* This is in line with PEPFAR’s goals and with Ambassador Birx’s leadership in the effort to end pediatric HIV.

PEPFAR-UNAIDS Faith Initiative

We know that to help our faith-based partners contribute to a truly sustainable HIV/AIDS response, we must equip them to do more than service provision funding. PEPFAR currently contributes to local capacity building and technical assistance, particularly in the area of data collection and analysis.

In July 2015, The Lancet published a seminal series on faith-based health care that called for more robust data on the contributions of faith-based health providers. PEPFAR is committed to data for impact, and, in response to The Lancet series, PEPFAR, in partnership with UNAIDS, announced the PEPFAR-UNAIDS Faith Initiative. This is a \$4 million initiative to fast-track the faith-based response to achieve the UNAIDS 90-90-90 goals by strengthening the capacity of faith-based leaders and organizations to advocate for and deliver a sustainable HIV/AIDS response.

FBOs are powerful voices in making national policies, calling for justice, protecting the

²⁷ http://www.pedaids.org/page/-/Rome_Action_Plan_2017.pdf

rights of the marginalized, addressing stigma and discrimination, and mobilizing people to employ testing, treatment, and prevention services. This PEPFAR-UNAIDS Faith Initiative aims to recognize and harness the strengths of the faith community in the HIV/AIDS response. The focus areas are as follows:

- **Collect, analyze, and disseminate data** on health care services provided by faith-inspired organizations
- **Address stigma and discrimination** in communities and health care settings
- **Create demand for service uptake and retention in care** by building the capacity for joint action between communities of PLHIV and faith to increase demand for HIV services and retain people in care
- **Strengthen HIV- and AIDS-related service provision** by strengthening networks of faith-based health service providers – Christian, Islamic, and others – to reach the most marginalized and at-risk populations with comprehensive, equitable HIV testing, prevention, and treatment services through strengthened national partnerships, improved data collection, and careful monitoring and evaluation
- **Strengthen FBO leadership and advocacy** for the fast-track approach and a sustained AIDS response to end the global AIDS epidemic by 2030

In 2017, PEPFAR's faith-based partners concluded their work on Phase I of the initiative, focusing on Kenya and Zambia. Phase II began in Democratic Republic of the Congo, Nigeria, Tanzania, and Zimbabwe. On the ground, faith-based partners are engaged in the following:

- Research on FBO service delivery

- Research on stigma and discrimination in faith-based health care settings
- Demand creation and addressing stigma and discrimination in communities
- Building stronger faith-based health systems

Simultaneously, PEPFAR's faith-based implementing partners were active in the United States and abroad, strengthening FBO leadership and advocacy for a sustained, fast-track approach to end the AIDS epidemic by 2030.

In June 2017, Caritas International, with PEPFAR support, convened a regional multistakeholder consultation in Abuja, Nigeria, focused on the early diagnosis of and treatment for HIV-positive children. Outputs of this meeting included plans to strengthen collaborative national partnership and national action plans, and highlight opportunities for cross-country exchange of lessons learned and replicable models. The discussions at the Nigeria Consultation informed Phase II programming in partner countries.

Adjacent to the September 2017 United Nations General Assembly Meeting, with PEPFAR support, Ecumenical Advocacy Alliance – World Council of Churches hosted its annual high-level interfaith prayer breakfast, Fostering Partnerships for Fast-Tracking Access to Testing and Treatment for Infants, Children, and Adolescents, which brought together leaders from all major church traditions, government, private sector, and other NGOs, and served as an opportunity for all stakeholders to recommit to our shared goals.

Our faith-based partners are key stakeholders in the HIV/AIDS response. Their role needs to be better recognized, understood, and supported, not only by PEPFAR, but also by all global funding institutions. In many countries hardest hit by the epidemic, religion plays an important role, both spiritually and as a source of information



A mother visits a health clinic with her baby in Tanzania.

and inspiration. It is essential for PEPFAR to continue our engagement with FBOs as the global community begins to tackle the most intractable barriers to access to treatment, including stigma and discrimination. The commitment of FBOs and faith leaders to service, nonjudgmental support, and universal access serve as an example to the U.S. government as we engage in care and treatment around the world.

U.S. Minority-Serving Institutions (MSI)

In 2017, PEPFAR supported the Historically Black Colleges and Universities (HBCUs) of Charles R. Drew University of Medicine and Science, Meharry Medical College, Morehouse School of Medicine, and Howard University College of Medicine and their African-based teaching and training institutions in the creation of an HBCU Global Health Consortium. The Consortium works with health care worker training centers

and clinics to transform clinical HIV practice to provide high-quality, comprehensive, and professional care and treatment to PLHIV.

The project is designed to train HCW within high-burden HIV settings on how to reduce stigma and discrimination and on how the social determinants of health impact health outcomes along the HIV care continuum. After the project launch in February 2017, the Consortium conducted a clinical needs assessment site visit in Zambia, the first country selected, this summer. In December 2017, implementation of site-level clinical practice transformation will start with a follow-up visit to Zambia.

Additionally, the PEPFAR Scientific Advisory Board includes experts affiliated with HBCUs, such as Celia Maxwell of Howard University and Lejeune Lockett of Charles Drew University of Medicine and Science, and the faith community, such as Reverend Edwin Sanders of the Metropolitan Interdenominational Church of Nashville and Nyambura Njoroge of the World Council of Churches.

Engaging International and Nongovernment Partners & Coordination with Multilaterals

Global Fund

The Global Fund is a multilateral financing mechanism that relies on public and private contributions on a three-year replenishment cycle. The Global Fund is a partnership between donor countries, the private sector, private foundations, implementing governments, civil society, international organizations, and affected communities. This partnership governs, oversees, and implements the Global Fund strategic vision of ending HIV/AIDS,

TB, and malaria while building resilient and sustainable systems for health.

The Global Fund was established in 2002 as an independent nonprofit foundation. Since the Global Fund's inception, the United States is its largest single donor and its largest technical resource for supporting program delivery at the country level. The United States views the Global Fund as additive to its bilateral programs in HIV, TB, and malaria, and an additional mechanism to achieve the goal of HIV epidemic control and reduction of TB and malaria morbidity and mortality. As with its bilateral programs, the United States prioritizes performance against funding – in this case, the Global Fund delivering the greatest possible impact for those most in need with its investments.

The United States is a leader in making financial and policy contributions to the Global Fund. Since 2002, the United States has contributed \$12.92 billion (as of December 30, 2017) to the Global Fund, abiding by limits on U.S. contributions to no more than 33 percent of the total amount of funding contributions as specified in applicable U.S. law. For the current fifth replenishment period (2017–19), the maximum pledge from the United States will be \$3.84 billion over the three-year period. Additionally, the United States is an active presence in the Global Fund's governance structure, including a seat on the Global Fund Board of Directors, and each of the three Board subcommittees: Strategy, Audit and Finance, and Ethics and Governance.

As a financing institution, the Global Fund operational model does not include an in-country presence. PEPFAR's bilateral programming serves as a strong partner to the Global Fund, providing in-country intelligence and advice. The Global Fund Secretariat sees PEPFAR and the President's Malaria Initiative as essential contributors to shaping the content of in-country grants. The same approach with the Global Fund Secretariat

is fostered in USAID TB programming. The U.S. investment in the Global Fund is additive to the PEPFAR program, bolstering our bilateral program results, expanding the geographic reach of the U.S. global health response and investment, promoting sustainable country-owned responses to the three diseases, and attracting continued investments from other donors to the Global Fund.

Since the beginning of our global response to the three diseases, it is evident that no one country or one institution can accomplish the mission of controlling the HIV/AIDS pandemic alone. Only through the complementary goals set by the leading institutions in the global health space, including PEPFAR, UNAIDS, and the Global Fund, can this be achieved. In July 2017, the Global Fund reported the global HIV, TB, and malaria results, which were achieved by countries through the collective effort of the Global Fund, U.S. bilateral programs, national leadership, and other catalytic donor support. Significant reductions in deaths from HIV, TB, and malaria were reported: 22 million lives saved since 2002 and 11 million on ART. In line with PEPFAR priorities, the Global Fund is moving to evaluate its performance against funding in 25 countries that receive more than 80 percent of the available funding.

In the past year, the Global Fund began to enact its new strategy, *Strategy 2017-2022: Investing to End Epidemics*. The Global Fund Strategy has four key strategic objectives:

- Maximize impact against HIV, TB, and malaria
- Build resilient and sustainable systems for health
- Promote and protect human rights and gender equality
- Mobilize increased resources

Responding to the call to increase transparency on the impact of Global Fund investments and



A group of young girls in Namibia create an AIDS ribbon out of soda cans to bring awareness to HIV/AIDS.

linking program results to funds expended, the Global Fund made significant changes to its reporting requirements for grant recipients and the level of detail of results reporting to the Board and Board committees.

Commencing with the allocation period 2017–2019 and program results reporting in 2018, country grant recipients must report on a standardized set of program indicators that shifted from output-based metrics (e.g., persons trained or HIV test kits procured) to outcome metrics that are connected with program impact (e.g., number of persons tested for HIV and percent HIV-positive). The Global Fund Secretariat will provide a report of disaggregated and aggregate-level results reporting across countries and by disease based on data collected as part of the grant results performance frameworks. While the Global Fund reports on national country-level results, it will move

to a more transparent contribution reporting through Country Results Profile reporting.

The Country Results Profiles will be done for 25 countries, representing 80 percent of the Global Fund investments. The Results Profiles will show the financial level of Global Fund investment against the national results reported for a specific program area, thus clarifying the level of Global Fund investment in a given program area. For example, if the Global Fund invests 60 percent of a country allocation in ARVs and finances 90 percent of ARV procurement for that country, it will be held to account for positive or negative numbers of new persons enrolled in treatment and persons retained on treatment.

Lastly, the Global Fund will report on a new set of Key Performance Indicators for the institutions that are aligned with the major objectives of the Fund Strategy (2017–2022). This will not only provide the United States with improved visibility on the full scale of the Global Fund investments, but also allow the U.S. government to ensure that investments are being made efficiently and effectively.

Additionally, there were leadership changes at the Global Fund in 2017. In May, former Global AIDS Coordinator Mark Dybul ended his tenure as Global Fund executive director. Following a robust and transparent search process, the Global Fund Board of Directors selected a new executive director in November 2017. The board appointed Peter Sands, a former CEO of Standard Chartered Bank and a Global Health fellow at the Harvard Kennedy School.

The Global Fund Board leadership also changed in May 2017, with Ambassador John Simon selected as the vice-chair of the board; he will hold that post until May 2019. The U.S. remains committed to the mission of the Global Fund and working with its board to end the three pandemics.

PEPFAR's ambitious goals to end HIV as a public health threat will be assisted by the investments made by the Global Fund. Our shared challenges – issues faced by women and girls, the need for sustainable and robust health systems that will serve the three diseases as well as contributing to efforts to address global health security and noncommunicable disease threats, and human rights – can be converted into successes by continuing this effective partnership. The Global Fund as an attractive platform for investors in the health sector of developing economies is a continued goal of PEPFAR.

UNAIDS

UNAIDS coordinates global efforts to end the HIV/AIDS epidemic by bringing together, and guiding the efforts of, the UN system, governments, civil society, and the private sector. It coordinates 11 UN bodies to end HIV/AIDS as a public health threat globally by 2030. UNAIDS is a global norm-setting organization for the HIV/AIDS response that convenes partners and stakeholders for the purposes of collecting and reporting the best strategic public health information, and ensuring that the UN system's response to HIV/AIDS is coherent and unified.

The United States works with UNAIDS to make tangible progress on addressing HIV/AIDS, a long-standing U.S. policy priority. Using our position as a member state on the UNAIDS Board, the United States is able to leverage the resources and commitments of other member states' donor groups to support HIV/AIDS efforts and promote evidence-based policies and strategies to facilitate a more effective global response to the pandemic.

PEPFAR prioritizes working with and through others to build political will, particularly for much-needed policies that will help control the pandemic and sustain our joint impact on treatment and prevention, establish international norms, and ensure a broad-based multisector

response to enhance and support service delivery. Through PEPFAR, the U.S. government supports and advances the UNAIDS 90-90-90 goals: 90 percent of people with HIV diagnosed, 90 percent of those diagnosed on treatment, and 90 percent of those on treatment virally suppressed by 2020. UNAIDS joined PEPFAR in 2017 to implement the new PEPFAR strategy to demonstrate a road map to epidemic control in 13 countries.

UNAIDS's policy framework and the political commitment to eradicate HIV/AIDS complement the goals of PEPFAR and the Global Fund. The United States relies on UNAIDS for data and a strategic framework to ensure that programs implemented through PEPFAR are effective and sustainable. As a multilateral organization, UNAIDS is also viewed as a neutral policy arbiter. In addition, UNAIDS's coordination and partnership with national governments enables alignment with country needs and priorities to be successful for the United States.

In FY 2017, Global Fund Technical Assistance resources supported UNAIDS Technical Support Facilities, technical assistance programs administered by UNAIDS to provide vital support to scale up HIV programs. Funding impacted 62 countries in Africa and Asia.

Achievements were noted in the operational, management, and financial systems to implement Global Fund-supported programs for 30 Global Fund Principal Recipients (PRs) and sub-Recipients (SRs); strengthened monitoring and evaluation systems for 10 Global Fund PRs and SRs; improved procurement and supply management systems for eight Global Fund PRs; supported four countries to revise policies that were barriers to implementation; supported 23 countries to develop or revise national strategic frameworks to fully align with the Fast-Track targets; conducted modeling analysis of different funding options for power for revenue generation undertaken in six countries and one region;



CREDIT: USAID

A baby receives medical care at a clinic in Lesotho.

developed subnational strategic frameworks in 11 countries; developed fast-track action plans in 21 cities across six countries; delivered technical support for innovative service delivery models in eight countries; and conducted transition and financial sustainability assessment and planning conducted in six countries and two regions.

Targeted Public-Private Partnerships for Impact

Partnerships with the private sector play a critical role in advancing progress toward ending the HIV/AIDS epidemic. PEPFAR strategically focused our PPPs to increase programmatic impact and efficiency. PEPFAR's PPP strategy includes finding opportunities where the private sector can complement PEPFAR goals and priorities by leveraging private sector brands, distribution networks, innovation, technology, and market-driven approaches to help achieve epidemic control. Much like the private sector,

PEPFAR is focused on accountability and scale. PEPFAR often looks to business models of private sector companies for ideas on how to run the program most effectively and efficiently. PPPs enable PEPFAR to not only share risks, resources, and rewards but also find greater efficiencies in program delivery.

In 2017, PEPFAR developed, implemented, and sustained 16 global PPPs. In addition to achieving greater efficiencies within the program, these partnerships demonstrate PEPFAR's continued commitment to achieving epidemic control among children, adolescent girls and young women, boys and men, and key populations. Some of these partnerships are highlighted below.

Achieving Greater Efficiencies in PEPFAR Programs

MasterCard

Innovative technology and service delivery models can help achieve greater efficiency in

PEPFAR's efforts. At the 2017 Concordia Annual Summit, PEPFAR launched a new and pioneering partnership with MasterCard aimed at accelerating progress toward HIV/AIDS epidemic control through the use of digital technologies and data analytics. Leveraging these tools, the partnership intends to improve access to and outcomes of HIV/AIDS prevention and treatment services in resource-limited settings throughout Africa.

Project Last Mile

In an effort to increase efficiencies within the supply chain, PEPFAR partnered on Project Last Mile with the Coca-Cola Company, USAID, the Global Fund, and the Gates Foundation. The partnership aims to build supply chain and distribution capability in African Ministries of Health. Through the partnership, Coca-Cola shares its logistics, supply chain, distribution, and marketing expertise to help African governments maximize their own capacity to

deliver critical medicines and medical supplies the "last mile" to remote African communities.

To date, Project Last Mile has reached regions within seven countries: Ethiopia, Ghana, Mozambique, Nigeria, South Africa, Tanzania, and Zambia. The partnership has helped establish systems to track stock products, create human resource systems that allow governments to evaluate employees' objectives and performance, and benchmark private sector spending on third-party services to ensure optimal use of public funds.

Labs for Life

PEPFAR has made remarkable contributions to ensure partner countries have sustainable laboratory systems to accurately detect, confirm, treat, and monitor disease in developing countries. Efficient diagnostic measures require strong laboratory systems, and PEPFAR's efforts have



Through the President's Emergency Plan for AIDS Relief (PEPFAR), the American people provide 65 percent of the monthly ARV therapy needed for 600,000 Kenyans living with HIV to enable them to live productive lives.

contributed to not only control of HIV, but also to the larger global health security agenda. The next phase of the Labs for Life partnership with Becton Dickinson was renewed in 2017 and will continue to build capacity for laboratory systems to improve HIV and TB diagnosis, treatment, and monitoring in countries that it supported in Phase II. Additionally, it will leverage support to key countries where weak laboratory systems are an obstacle to meeting the goals of epidemic control.

Pink Ribbon Red Ribbon

Pink Ribbon Red Ribbon (PRRR) was formed to address cervical and breast cancer in low- and middle-income countries in sub-Saharan Africa, especially for high-risk HIV-positive women. PRRR leverages the PEPFAR platform to provide care for women infected with HIV and other associated conditions, particularly cervical cancer. The focus on high-risk HIV-positive women is important to PEPFAR given that women with HIV infection are four to five times more likely to develop cervical cancer, compared with HIV-negative women. As of the second quarter of 2017, 99,980 women had been identified as HIV-positive through a basic screening for cervical cancer. The integration of HIV and cervical cancer services has been an effective and efficient method of responding to both diseases.

Finding Men to Break the Cycle of Infection

More than half of men under age 35 do not know their HIV status and are not on treatment, fueling the epidemic, especially among women ages 15–24. PEPFAR is working with several private sector partners to find innovative solutions to find and reach at-risk men under age 35 to increase their rates of HIV testing and overall interaction with the health care system. In late 2017, PEPFAR brought these private sector partners together to source ideas on core competencies and subject matter expertise in consumer marketing, data analytics, and product innovation that

could be applied to addressing this challenge. A new PPP will leverage shared public health and business value in investing in innovative initiatives to engage men in quality care services.

Healthy Heart Africa, with AstraZeneca

There is an urgent need for innovative approaches to better identify and serve harder-to-reach populations, including men, who too often only seek care when they are very ill. Through a partnership with AstraZeneca, PEPFAR is enhancing our ability to deliver earlier and more effective HIV/AIDS testing and treatment for working-age men ages 25–50 in Homa Bay and Kisumu, Kenya. PEPFAR seeks to demonstrate that an integrated HIV-hypertension service delivery model results in efficiency and greater synergy in the identification, linkage to care, and treatment of men with HIV/AIDS.

Elizabeth Taylor AIDS Foundation (ETAF)

In Malawi, as in many other countries, data show that men often access HIV testing at far lower rates than women. As a result, men living with HIV often enter care with more advanced disease, are less likely to receive lifesaving antiretroviral therapy, miss opportunities to prevent ongoing transmission, and have higher AIDS-related mortality than their female counterparts. Prevailing cultural norms around masculinity in Malawi also can act as an additional barrier to men accessing HIV services.

PEPFAR partnered with the Elizabeth Taylor AIDS Foundation (ETAF) to accelerate progress toward controlling the AIDS epidemic in Mulanje, Malawi, among men ages 25–40. PEPFAR and ETAF combine resources and expertise to refine and innovate HIV testing and treatment strategies for identifying and serving men. For example, the partners used risk assessment tools to screen for high-risk behavior, which led to a more targeted testing strategy, resulting in higher HIV testing yields through more efficient testing modalities.



A patient receives a rapid HIV test in Kazakhstan.

Delivering on Our Commitment to Children

Accelerating Children's HIV/AIDS Treatment (ACT)

In 2013, only 24 percent of children living with HIV were receiving ART. In response, PEPFAR and the Children's Investment Fund Foundation launched the \$200 million ACT Initiative, which represented an unprecedented investment of resources and technical expertise to achieve greater efficiencies. At the end of the two-year partnership, ACT was supporting 561,610 children (19 years or under) living with HIV with access to high-quality treatment in the nine ACT high-priority countries in sub-Saharan Africa. Additionally, pediatric ART coverage increased by 10 percent or more from 2014–2015 in most of the ACT countries – Kenya, Lesotho, Malawi, Tanzania, Zambia, and Zimbabwe – with Zimbabwe reaching 80 percent pediatric ART coverage.

Ensuring Access to Essential Prevention and Treatment Services for Key Populations

Elton John AIDS Foundation – LGBT Fund

In many countries, despite the significant progress made in addressing HIV/AIDS in the general population, LGBT populations often experience higher rates of HIV infection and more limited access to HIV/AIDS services than the general population. In response, PEPFAR launched the LGBT Fund in partnership with the EJAF to expand access to nondiscriminatory HIV-related services for key populations that lack access to adequate HIV services. As part of the overall partnership, a Rapid Response Fund was established to provide support for LGBT individuals and organizations requiring an emergency response and supported 115 grants across 20 countries. Additionally, a Deep Engagement Fund worth \$6 million was formed and is providing larger grants to several organizations in Kenya, Mozambique, and Uganda.

Strengthening Health Training and Data Systems

Human Resources for Health (HRH)

PEPFAR supports partner countries to increase their human resources for health (HRH) in order to deliver HIV services where the epidemic is most acute. Our HRH investments ensure that health workers with the right skills are in the right places to scale up HIV services at the right time to achieve UNAIDS' 90-90-90 goal. PEPFAR 3.0's HRH Strategy focuses investments on supporting the delivery of HIV services to priority populations in PEPFAR-supported sites and geographic areas by doing the following:

- Assessing HRH capacity
- Improving HRH information systems and data use
- Supporting HRH supply and retention
- Improving service quality
- Ensuring sustainable financing for health workers providing HIV services

To support this ambitious strategy, PEPFAR committed \$110 million at the above-service delivery level at the end of FY 2016 to strengthen the capacity of health workers and country HRH systems to address HIV/AIDS across Africa. Additionally, specific funding increased the supply of skilled clinicians available to provide HIV services and supported the National Institutes of Health Fogarty International Center to enhance the capacity of key training institutions in Africa.

HRH investments are being leveraged to address the drivers of HIV and other health epidemics through health professions education programs implemented by the Health Resources and Services Administration (HRSA). Funding

further supports Information Systems by the National Institutes of Health Division of AIDS to continue to ensure PEPFAR invests in evidence-based interventions.

In addition to these investments, USAID and CDC have continued to strengthen HRH to strategically expand the quantity and quality of health workforces to reach the UNAIDS 90-90-90 goals. In addition to above-service delivery investments, PEPFAR has provided financial and nonfinancial support to facility- and community-level health workers through salaries, in-service training, and benefits.

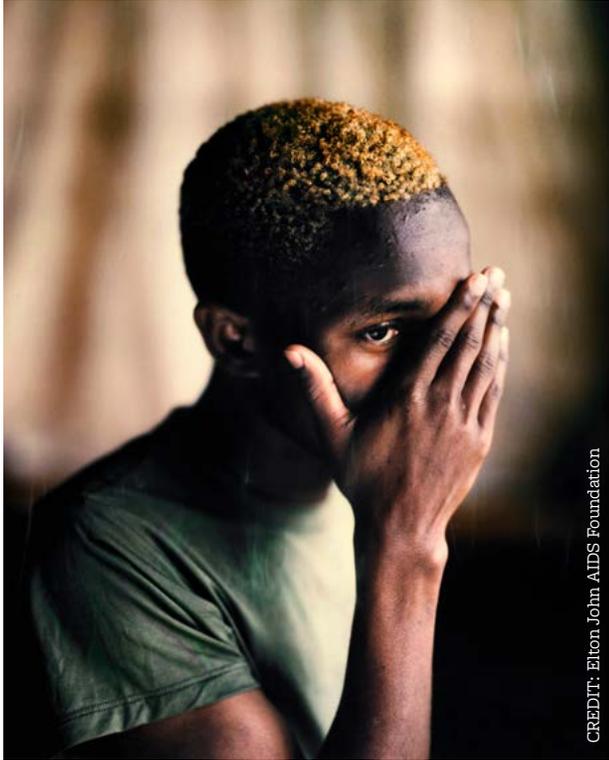
- PEPFAR's HRH Strategy has enhanced HRH programming by increasing the availability, quality, and retention of HCW, resulting in the improved delivery of HIV/AIDS services. In FY 2017, PEPFAR supported preservice training of an additional 29,750 workers to strengthen country capacity for the delivery of HIV and other health services.
- In Malawi, coordinated support from USAID and CDC has resulted in the recruitment and deployment of 378 health workers to support the government of Malawi, relieve work pressures in the facilities constraining HIV service delivery, and provide job opportunities for health workers who were unemployed due to a multiyear government freeze on recruitment. The HCW recruited included nurse midwife technicians, clinical technicians, laboratory assistants, medical assistants, and pharmacy assistants. Many of the health workers are PEPFAR scholarship beneficiaries and were previously unemployed despite the critical need for trained health workers in the country. Working in partnership with key government authorities, agreements are in place to transition health workers to government payroll after a period of PEPFAR support. These efforts serve as a best practice for other countries.

- In Uganda, the HRH2030 program undertook an analysis to build a stronger investment case in HRH for increased domestic resource contribution and to guide the more strategic and efficient use of resources for HRH to support HIV/AIDS services. A methodology was developed to analyze HIV-related HRH costs, fiscal space, and the political economy of HRH financial decision-making. The analysis showed that a rollout of differentiated care models in Uganda could result in an estimated \$1.7 million in HRH cost savings by 2020. Using the methodology developed, HIV investment cases can be used across PEPFAR country HRH stakeholders to advocate for increased domestic contributions for HRH needs to support HIV services, particularly in countries where PEPFAR provides significant HRH remuneration support.
- To assess HRH constraints and needs for continued implementation of Test and Start guidelines and differentiated service delivery models, PEPFAR further developed and applied rapid HRH facility assessments in Cameroon, Ethiopia, and South Africa.
- Unresolved facility-level health workforce bottlenecks can seriously hinder HIV services and efforts to achieve epidemic control. In response, the HRH2030 program developed a complementary resource to provide service delivery partners and facility managers with easily accessible and quickly applied tools to scale analysis and address common HRH-related performance and productivity gaps inhibiting HIV service delivery impact. In FY 2017, trainings were delivered in Nigeria and Tanzania.
- In Mozambique, the MOH successfully used the Workforce Allocation Optimization Tool for the last three rounds of allocation (December 2015, July 2016, and December 2016) for all midlevel cadres and more than 2,500 graduates. As a result, the MOH improved HRH retention and had far fewer reallocation requests, thereby saving significant HRH transfer costs.
- Health worker shortages pose a challenge to the scale-up of HIV care and treatment in Uganda. Training midlevel practitioners (MLP) in the provision of HIV and TB treatment can expand existing health workforce capacity and increase access to HIV services. In Uganda, the MENTORS project conducted a cluster-randomized trial of one-on-one, on-site clinical mentorship on HIV and TB care among 40 MLP in 10 health facilities in rural Uganda. MLP mean scores for knowledge increased by 14.5 percent and competence by 27 percent in the intervention arm relative to the change in the control arm. One-on-one, on-site mentorship improved HIV and TB knowledge and competence, has a downstream effect on facility performance, and is a simple approach to training MLP for task-sharing.
- Through funding to the African Health Professions Regional Collaborative, PEPFAR supported national nursing leaders from 14 countries in sub-Saharan Africa to improve the quality of HIV services in health facilities. Through CDC, PEPFAR provided small grants and facilitated peer-to-peer learning among nurse leaders from MOH, health professional regulatory councils, professional associations, and training institutions in order to advance site-level and national-level quality improvement for nurses who comprise the bulk of the health workforce in these countries.

Evaluation Standards of Practice

Background

In January 2014, we issued the PEPFAR Evaluation Standards of Practice (ESOP),



CREDIT: Elton John AIDS Foundation

PEPFAR has specific initiatives addressing the dynamics driving stigma, discrimination, and violence as a part of our broader efforts to expand key populations' access to and retention in quality HIV/AIDS prevention and treatment services.

and in September 2015, released version 2.0.²⁸ The second document retained the original 11 standards and also provided operational guidance regarding requirements for annual planning (COPs/ROPs) and reporting processes (Annual Program Results). ESOP 3.0, which includes the same standards and some additional types of activities that must be reported on, was released in December 2017.

PEPFAR defines evaluation as the “systematic collection and analysis of information about the characteristics, outcomes, and impact of programs and projects.”²⁹ All PEPFAR evaluations, regardless of the implementing agency, partner, or type of evaluation, must adhere to these standards.

In FY 2017, country and regional programs were asked not only to report on the four types of evaluations (process, outcome, impact, and economic) as in previous years, but also on IS and operations research (OR) activities. Expanded definitions, timeframes, indicators, and examples of questions can be found in ESOP 3.0. An Adherence Checklist, the tool that assesses completed evaluations against the standards, must be submitted for all evaluations and IS/OR activities.

The Standards of Practice

The 11 evaluation standards were developed and agreed upon by representatives from PEPFAR implementing agencies. The 11 standards are listed below, and full descriptions can be found in all of the ESOP documents cited above.

1. Engage stakeholders
2. Clearly state evaluation questions, purpose, and objectives
3. Use appropriate evaluation design, methods, and analytical techniques
4. Address ethical considerations and assurances
5. Identify resources and articulate budget
6. Construct data collection and management plans
7. Ensure appropriate evaluator qualifications and independence
8. Monitor the planning and implementation of evaluations
9. Produce quality evaluation reports
10. Disseminate results
11. Use findings for program improvement

²⁸ PEPFAR. (2015). Evaluation Standards of Practice – Version 2.0. Retrieved from <http://www.pepfar.gov/documents/organization/247074.pdf>

²⁹ Patton, M. Q. (1997). Utilization Focused Evaluation: The New Century Text. (pp. 23). Sage Publications.



A young boy in Uganda.

Methods

This report includes a presentation of overall findings from evaluation, IS, and OR submissions in PEPFAR's Data for Accountability, Transparency, and Impact Monitoring (DATIM) system for FY 2017. FY 2017 is the fourth year for submission of evaluation results. Some evaluations started in years prior to the release of the ESOP in 2014, and as such, some flexibility was allowed for evaluations that began before the release of the standards. Agencies reviewed, verified, and assessed the evaluation, IS, and OR data submitted for PEPFAR's 2017 APR process, each using an agency-specific process. Results from the agencies were aggregated for this report.

Determining adherence to the standards is dependent on a review of a final evaluation report using the Adherence Checklist to answer a series of review criteria associated with each

standard. Responses to these criteria include yes, partial, and no. For composite standards based on several questions, if all answers were yes, the final score was yes; if all were no, the final score was no; and any other combination of answers was given a partial score. The data presented were verified to assess completeness and confirmed to be completed during the reporting period and meeting the PEPFAR ESOP definitions of evaluation, IS, or OR activities.

Findings

Overall, a total of 314 evaluation, IS, and OR submissions were reported in FY 2017. In FY 2016, there were a total of 94 completed evaluations.³⁰ In FY 2017, the number increased to 109 completed evaluations. USAID had a total of 142 entries, of which 50 were completed evaluation, IS, and OR activities, and the remainder are in planning and implementation stages. The 50 completed evaluations represent activities in 19 PEPFAR countries, with Vietnam completing the highest number of activities (14). Of the 50 completed evaluations, seven are process evaluations, 15 outcome evaluations, three impact evaluations, and one economic evaluation. The new additions of IS and OR in FY 2017 reporting included 15 IS activities and five OR activities. Four activities were classified as "other."

CDC had a total of 172 entries, of which 59 were completed evaluation, IS, and OR activities, and the remainder are in the planning and implementation stages. The 59 completed evaluations represent activities in 18 PEPFAR countries, with South Africa completing the highest number of activities (nine).

Of the 59 completed evaluations, 27 are process evaluations, 25 outcome evaluations, two impact evaluations, and one economic evaluation. The new additions of IS and OR in FY 2017 reporting included two IS activities and one OR activity.

³⁰ Due to the extensive data cleaning and verification process that occurs after the annual reporting deadline (November 15, 2017), the actual number of completed evaluations and reporting of the standards based on submitted Adherence Checklists presented in this report may change.

One activity was classified as “other.” The U.S. Department of Defense and HRSA reported a number of evaluations at different stages, including one completed evaluation for HRSA.³¹

PEPFAR legislation requires reporting on the number of completed evaluations that are publicly accessible within the fiscal year. Note that this is separate from Standards of Practice 10, which relates to public dissemination within 90 days of completion. Overall, 76 percent of the FY 2017 evaluation, IS, and OR activities have been publicly disseminated, which is a slight decrease from 89 percent in FY 2016. Agencies are working to further increase the timely dissemination of results on publicly available websites. The dissemination of findings is critical to ensuring that results are used in a timely manner to make critical decisions. PEPFAR and our implementing agencies will continue making efforts to ensure stakeholders are aware of the importance of the requirement to disseminate results, and we expect to see improvements on this in subsequent years.

Adherence to Standards

FY 2017 evaluations were found to have high adherence to five of the 11 SOPs, moderate

adherence to five of the standards, and low adherence to one of the standards (Table 3).

Reporting and adherence to standards improved in several ways between FY 2016 and FY 2017 (Figure 40). Country and regional teams reported an increase of 94 completed reports with checklists in FY 2016 compared with 109 in FY 2017. The total number of evaluations fully meeting an SOP (score = yes) increased for all standards. Improvements between FY 2016 and FY 2017, by percentage for a score of yes, occurred across all standards' adherence to the following:

- SOP 1 (stakeholder engagement) improved from 45 percent (42) to 57 percent (62)
- SOP 2 (evaluation purpose) improved from 72 percent (68) to 99 percent (108)
- SOP 3 (appropriate evaluation design, methods, and analytical techniques) improved from 89 percent (84) to 97 percent (106)
- SOP 4 (ethical considerations) improved from 74 percent (70) to 83 percent (90)
- SOP 5 (articulate budget) improved from 18 percent (17) to 23 percent (25)

Table 3: Adherence to Standards FY 2017

	SOP 1	SOP 2	SOP 3	SOP 4	SOP 5	SOP 6	SOP 7	SOP 8	SOP 9	SOP 10	SOP 11
Yes	62	108	106	90	25	107	50	59	86	63	52
Partial	4	0	2	3	27	1	39	6	0	20	39
No	43	1	1	16	57	1	20	44	23	26	18
% Adherence	57%	99%	97%	83%	23%	98%	46%	54%	79%	58%	48%

■ High (61% or greater) ■ Moderate (41 - 60%) ■ Low (40% or less)

³¹ Results of the completed evaluation for HRSA were not included in the analysis below, but will be incorporated in future reporting.



A mother with her child in Uganda.

- SOP 6 (data collection and management) improved from 94 percent (88) to 98 percent (107)
- SOP 7 (ensuring appropriate evaluator competencies and qualifications) improved from 17 percent (16) to 46 percent (50)
- SOP 8 (monitoring implementation) improved from 40 percent (38) to 54 percent (59)
- SOP 9 (produce quality reports) improved from 16 percent (15) to 79 percent (86)
- SOP 10 (dissemination) improved from 15 percent (14) to 58 percent (63)
- SOP 11 (use of findings) improved from 37 percent (35) to 48 percent (52)

The one standard that requires significant improvement is SOP 5 (articulate budget). While there were improvements, noted above, in many of the standards, SOP 5 is still

showing low adherence at 23 percent. There are multiple reasons for poor adherence to this standard, one being that including budget data on the cost of evaluation, IS, and OR activities is not a standard practice and therefore has been a slow process to integrate.

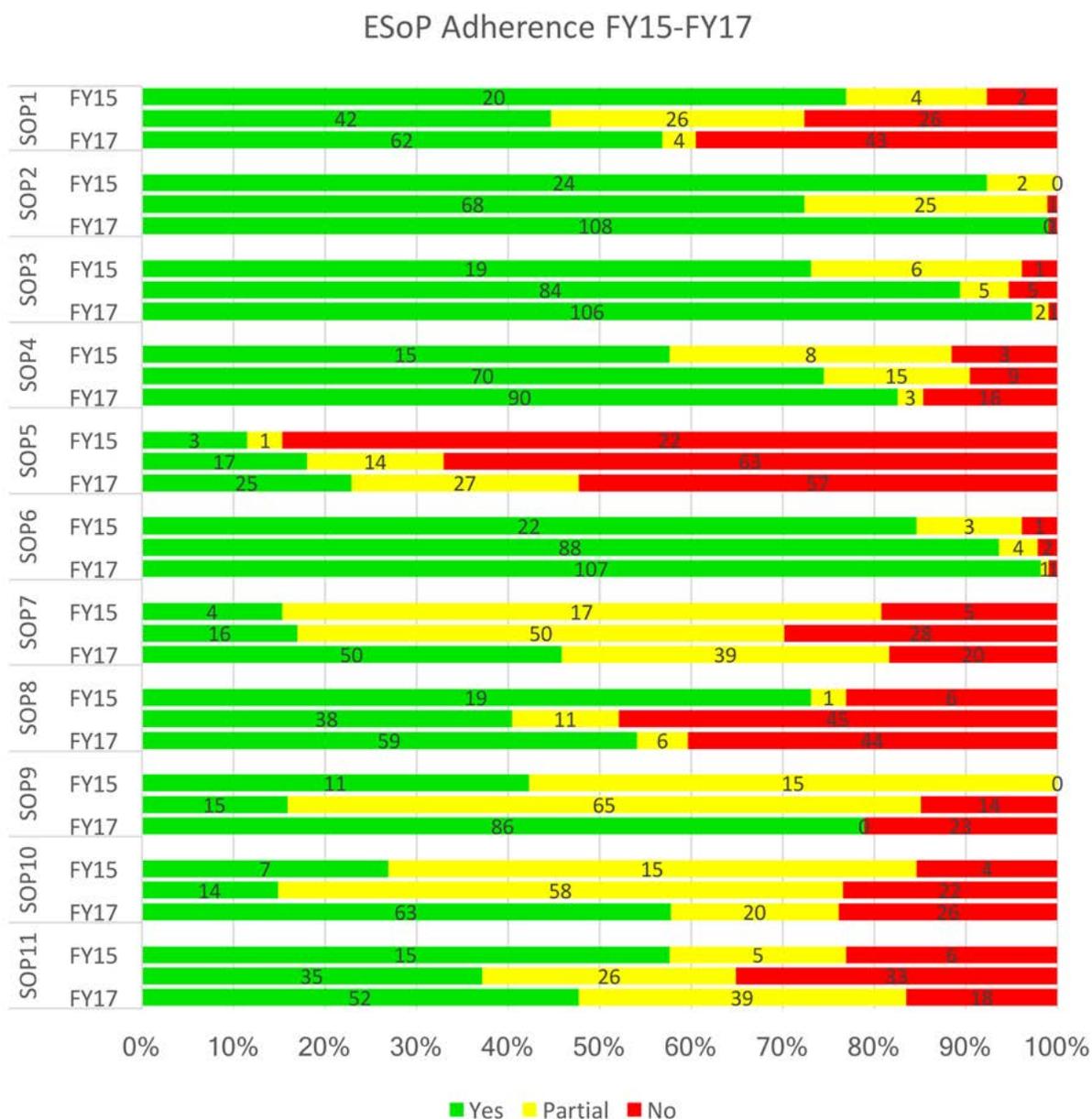
Discussion

PEPFAR will continue providing field teams with technical assistance and support to improve areas that fall short of high adherence. Overall adherence scores are expected to increase in subsequent years as 1) ESOP will be used to inform all newly started evaluations, 2) implementing partners become more familiar with the standards and improve evaluation reporting, and 3) agencies work to amend policies so they adhere to ESOP.

PEPFAR will continue working closely with headquarters and country/regional teams to improve the quality of evaluations and expand the availability of results. Existing gaps are being actively analyzed to assess how to best fulfill existing policies and requirements, and whether any need special consideration or modification. PEPFAR is pursuing ways to increase the engagement of headquarters and country/regional-level staff with evaluators and working to promote these SOPs to all implementing partners and ensure improved adherence.

Agencies are integrating more formal evaluation requirements, tying the standards into contracts, and monitoring efforts as the number of evaluations conducted increase. These results also highlight the need to improve public dissemination of reports and findings to reach 100 percent. PEPFAR is reviewing agency policies and practices to ensure they are consistent and share the same ultimate objective of public access. This year, greater attention will be focused on more strategic

Figure 40: Report Adherence to Evaluation Standards of Practice, FY 2015–2017



evaluation portfolios that are well-planned, answer existing evidence gaps, and are linked to country/regional priorities and the PEPFAR goal of reaching the UNAIDS 90-90-90 targets.

PEPFAR’s recently created Epidemic Control Teams (ECTs) will help emphasize the use of evidence-based programming to ensure that

all PEPFAR countries and regions are investing in and scaling up interventions that are proven to be effective and efficient. The continued accurate and consistent reporting of evaluation data will help inform ECTs, the solutions they propose, and the identification of evidence gaps for which future investments would be prudent.

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GLOSSARY

ACT	Accelerating Children's HIV/AIDS Treatment Initiative	HRSA	Heath Resources and Services Administration
AGYW	Adolescent Girls and Young Women	HTS	HIV Testing Services
ANC	Antenatal Care	JSI	JSI Research & Training Institute, Inc.
ART	Antiretroviral Therapy/Treatment	KP	Key Population
ARV	Antiretroviral Medications	LCI	Local Capacity Initiative
CDC	Centers for Disease Control and Prevention	LGBT	Lesbian, Gay, Bisexual, and Transgender
COP	Country Operational Plan	MER	Monitoring, Evaluation, and Reporting
CSC	Community Scorecard	MLP	Midlevel Practitioners
CSO	Civil Society Organization	MOFs	Ministries of Finance
DREAMS	Determined, Resilient, Empowered, AIDS-free, Mentored and Safe	MOH	Minister of Health
DTG	Dolutegravir	MSI	Minority-Serving Institutions
ECT	Epidemic Control Team	MSM	Men who have Sex with Men
EJAF	Elton John AIDS Foundation	NGO	Non-Governmental Organization
ESOP	Evaluation Standards of Practice	OVC	Orphans and Vulnerable Children
FBO	Faith-Based Organization	PCB	Program Coordinating Board
FY	Fiscal Year	PEPFAR	U.S. President's Emergency Plan for AIDS Relief
GBV	Gender-Based Violence	PHIA	Population-Based HIV/AIDS Impact Assessment
GHCC	Global Health Cost Consortium	PLHIV	People Living with HIV
Global Fund	The Global Fund to Fight AIDS, Tuberculosis and Malaria	PMTCT	Prevention of Mother-to-Child Transmission
GPSDD	Global Partnership for Sustainable Development Data	PPP	Public-Private Partnerships
GSD	Gender and Sexual Diversity	PrEP	Pre-Exposure Prophylaxis
HBCU	Historically Black Colleges and Universities	PRRR	Pink Ribbon Red Ribbon
HCW	Health Care Worker	ROP	Regional Operational Plan
HIV	Human Immunodeficiency Virus	SDS	Strategic Direction Summary
HRH	Human Resources for Health	SFI	Sustainable Finance Initiative

SHIMS	Swaziland HIV Incidence Measurement Surveys	UNGA	United Nations General Assembly
SID	Sustainability Index and Dashboard	USAID	United States Agency for International Development
TB	Tuberculosis	VAC	Violence Against Children
TLD	Tenofovir/Lamivudine/Dolutegravir	VMMC	Voluntary Medical Male Circumcision
UNAIDS	Joint United Nations Programme on HIV/AIDS	WHO	World Health Organization
UN	United Nations		



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Office of the U.S. Global AIDS Coordinator
and Health Diplomacy**

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