

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

Delivering more with every dollar means that PEPFAR efficiently utilizes available financial resource to find the best possible data-driven solutions to reach the greatest number of people in need of HIV/AIDS services. PEPFAR disaggregates data by sex, age, and geography to target and tailor our efforts to reach the specific and unique needs of those we serve. These data inputs give us the clearest picture of the epidemic and give our teams and partners the ability to respond efficiently to in-country challenges. The following section focuses on how PEPFAR uses data to monitor progress, identify and address key gaps, document the incredible progress that has already been achieved, and tailor the program to the phase of the epidemic.

Harnessing Data for Maximum Accountability, Efficiency, Cost-Effectiveness and Impact: Controlling the HIV/AIDS Pandemic

PEPFAR remains a global leader in the use of granular data to drive results and increase impact, including through our pioneering use of large national population-based household surveys. The surveys track progress and identify key gaps within high-burden countries, bringing HIV under control while triangulating survey findings with program data. The survey results also show that progress toward bringing HIV under control requires financial investment and effective collaboration and mutual accountability between partner governments and communities.

The benefits of using routinely collected PEPFAR data in conjunction with high quality surveys are that they provide complementary disaggregated data (by age, sex, and geography), while the surveys can also validate PEPFAR program data. Additionally, site-level data collected by PEPFAR partners are owned by the country government and may be used and disseminated when needed. Quarterly reporting and review allow for real-time data use, giving public health program managers increased ability to track the epidemic.

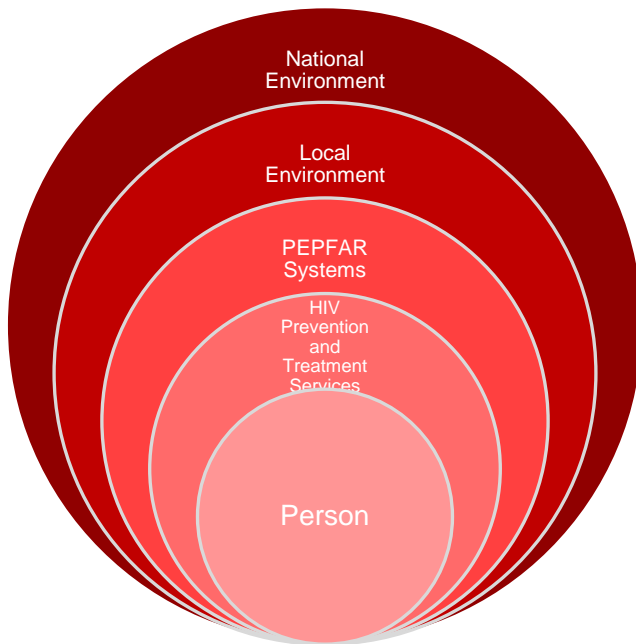
Since PEPFAR commenced data collection for key indicators at the site level and by age and sex, data quality has improved significantly, increasing our ability to use these data to inform necessary programmatic shifts.

How PEPFAR Documents Results

PEPFAR's focus on optimizing impact is a driving force behind global efforts to bring HIV under control. PEPFAR is partnering with the international community to reach the Joint United Nations Programme on HIV/AIDS (UNAIDS) 90-90-90 targets in all five-year age disaggregated populations to ultimately reach 95-95-95 at the country level. This translates to ensuring 95 percent of all people living with HIV know their status, 95 percent of all people who know their HIV status are accessing treatment, and 95 percent of all people on treatment have suppressed viral loads.

PEPFAR teams assess populations and geographies and design activities aimed at accelerating control of the HIV epidemic. To enhance the systematic gathering, analysis, synthesis, and interpretation of program data for routinely measuring progress, PEPFAR has defined a core set of program indicators that are collected and reviewed quarterly.

To monitor progress, PEPFAR relies on the quarterly submission of data from all our country teams. It is no longer adequate to collect data at the aggregate level, as the needs of the individual patients within the population differ between and even within the countries. To address these needs, PEPFAR relies on our robust set of monitoring, evaluation, and reporting indicators that collect site-level programmatic results by age, sex, and in some cases, key population for each person receiving PEPFAR-supported services at a site.

Figure 1: Patient-Centered Monitoring in PEPFAR

Progress toward bringing HIV under control will be successfully measured, in part, through an effective strategic information framework that monitors program outputs, key outcomes, and programmatic impact.

Global Trends in New HIV Infections

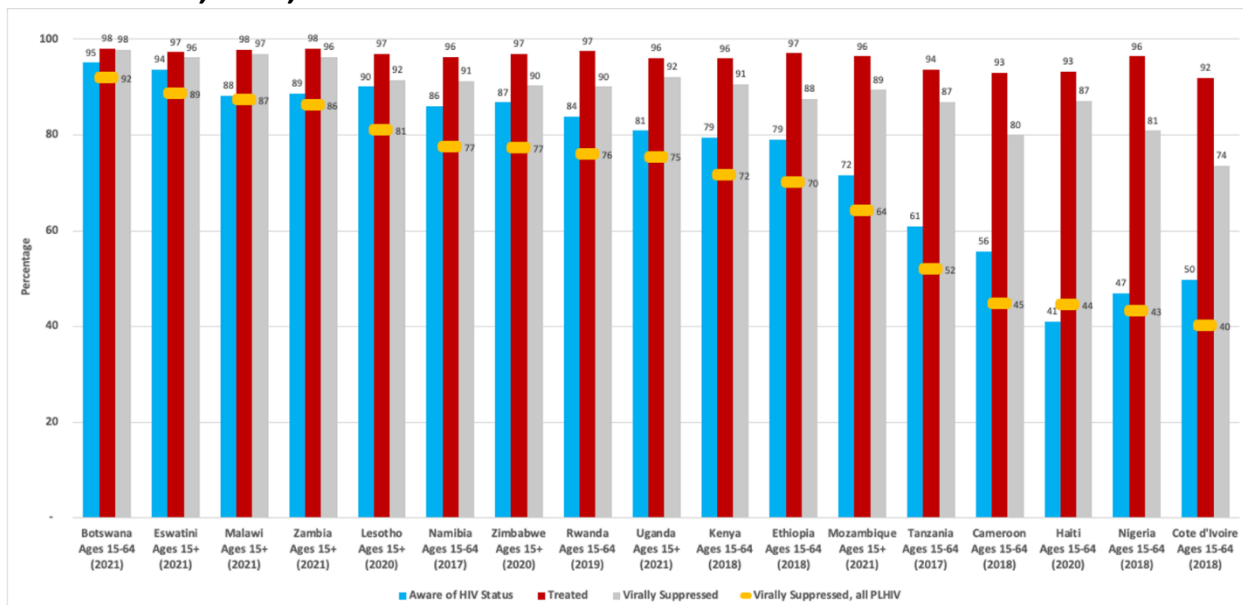
PEPFAR supports evidence-based HIV prevention and treatment interventions that are designed, targeted, and rolled out strategically to ensure the number of new HIV infections is lower than the number of all-cause deaths among people living with HIV – an essential metric in demonstrating control of HIV. Particularly notable is progress made in sub-Saharan Africa, where PEPFAR invests more than 90 percent of its bilateral Country Operational Plan resources.

There has been tremendous progress toward bringing HIV under control by implementing the UNAIDS 95-95-95 treatment framework for adult men, adult women, and children, and dramatically increasing the funding for and focus on effective primary prevention interventions. PEPFAR remains the largest funder of primary prevention interventions, leading the way on delivering voluntary medical male circumcision for adolescent boys and

men, DREAMS (Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe) interventions for adolescent girls and young women, access to pre-exposure prophylaxis (pre-exposure prophylaxis), and condoms for all populations at significant risk of acquiring HIV.

Globally, PEPFAR has helped replace death and despair with vibrant life and hope; according to UNAIDS, AIDS-related deaths have been cut by 68 percent since their peak in 2004, and new HIV infections have been reduced by 42 percent since 2004 and 54 percent since their peak in 1996. Even with this progress, there remains numerous serious challenges to fully bringing HIV under control globally.

Figure 2: Progress Toward Equitable Services Reaching UNAIDS 95-95-95 Targets Among Adults (15 Years-of-Age and Older) Across Select Countries in Southern, East, and West Africa



As shown in recent PEPFAR-supported national Population-based HIV/AIDS Impact Assessments (PHIAs, Figures 2 - 5), reaching 95-95-95 is possible but maintaining it will be hard, especially given significant barriers to maintaining clients on continuous, uninterrupted treatment and through COVID-19 as it continues to persist. This problem is compounded by the lack of national surveillance and service delivery systems to detect new infections and intervene immediately with prevention and treatment services.

Figure 3: Progress Toward Equitable Services Reaching UNAIDS 95-95-95 Targets Among 15- to 24-Year-Olds Across Select Countries in Southern, East, and West Africa

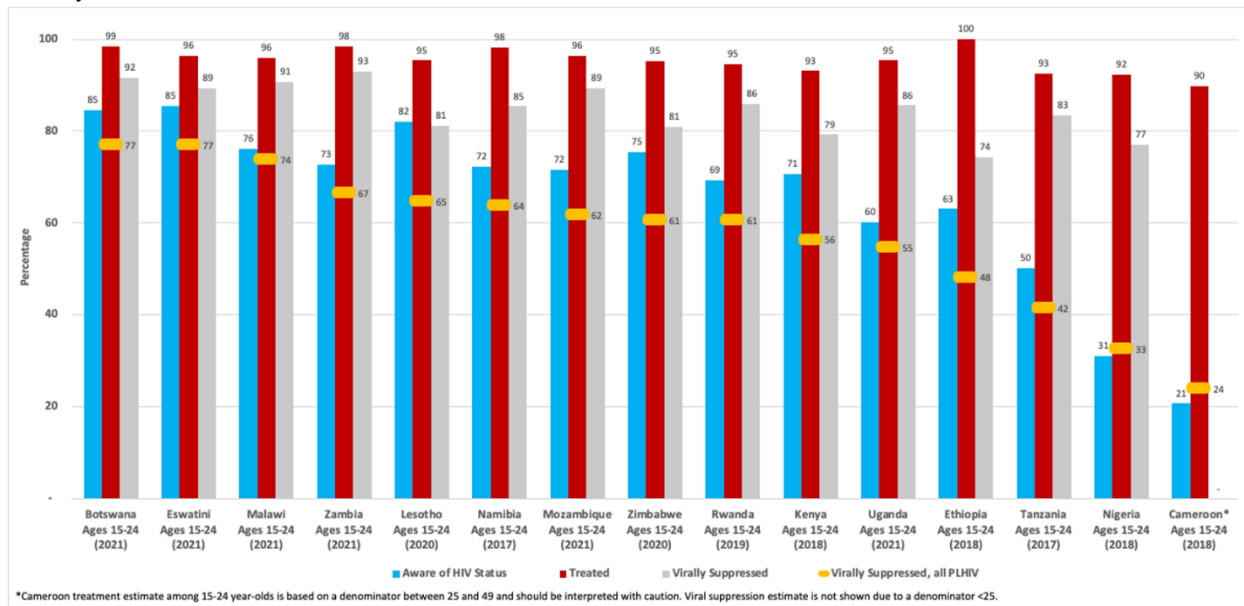


Figure 4: Progress Toward Equitable Services Reaching UNAIDS 95-95-95 Targets Among Adult Men (15 Years-of-Age and Older) Across Select Countries in Southern, East, and West Africa

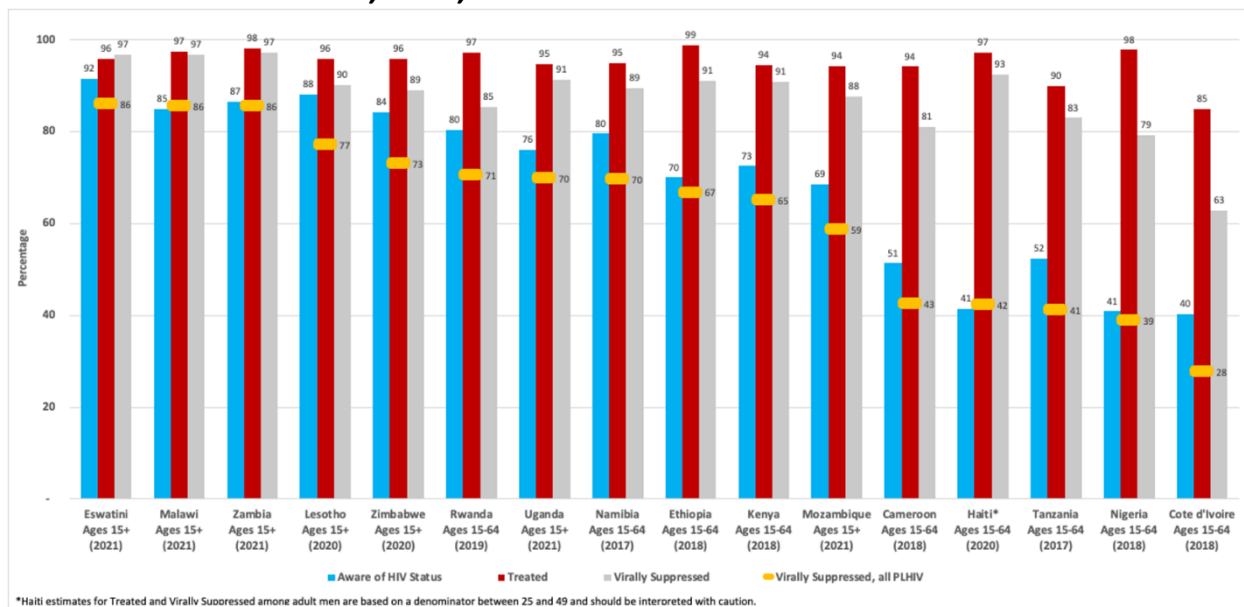
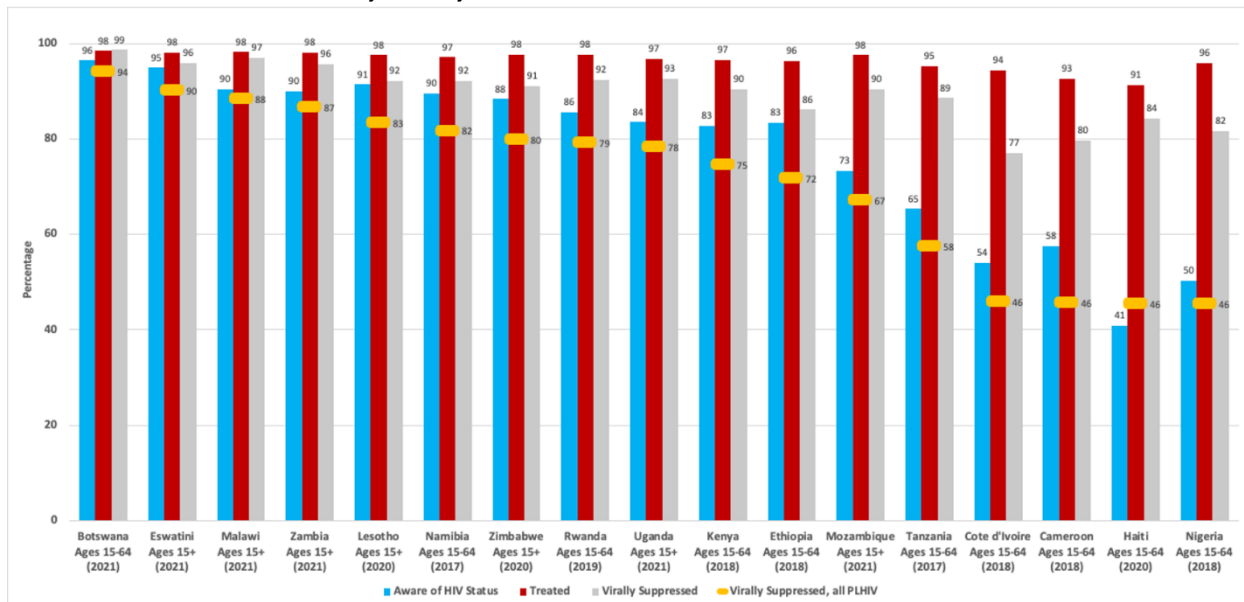


Figure 5: Progress Toward Equitable Services Reaching UNAIDS 95-95-95 Targets Among Adult Women (15 Years-of-Age and Older) Across Select Countries in Southern, East, and West Africa



PEPFAR is focused on continuing to reduce new infections by saturating areas of high HIV burden at the subnational level (i.e., region, district, and subdistrict) with prevention and treatment services, including targeted HIV testing services. Strategically focused PEPFAR programs will be able to identify and treat many more people living with HIV and reduce new infections by lowering the average viral load in supported communities in high-transmission areas.

We will have the greatest impact on the epidemic by seeking to ensure saturation with prevention services in high-transmission zones and seeking to ensure health equity for all populations, including those currently lagging behind. These efforts focus on increasing coverage of evidence-based combination prevention interventions among priority populations, including the following:

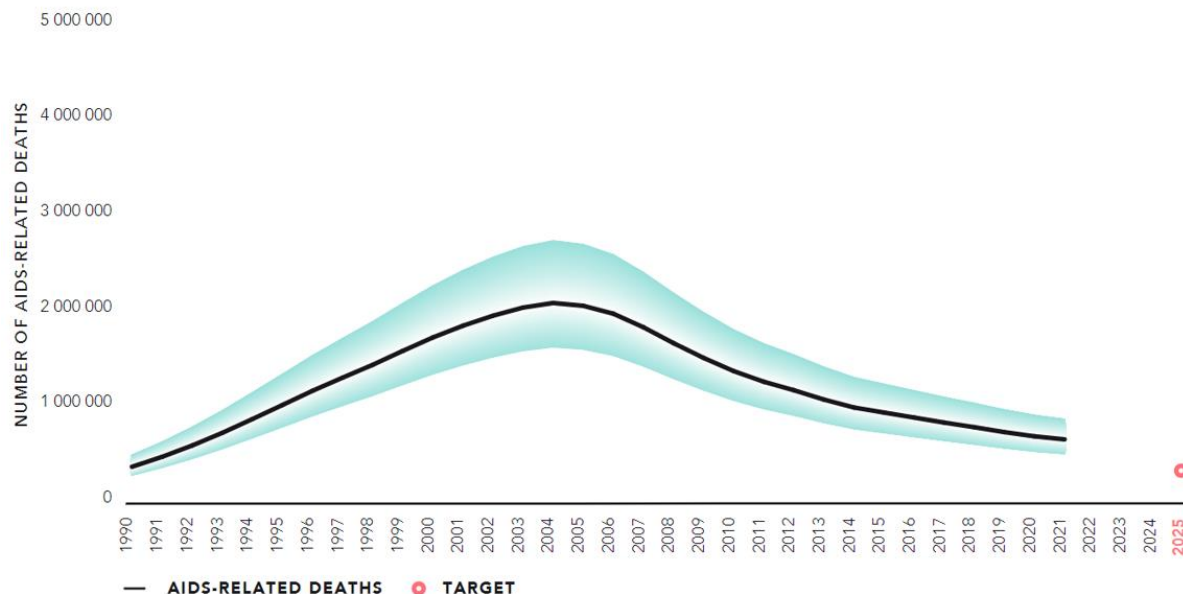
- Serodiscordant couples;
- Key populations (including men who have sex with men, transgender people, individuals in commercial sex, people who inject drugs, and people in prisons and other closed settings);
- Individuals with HIV-associated tuberculosis;

- Children and adolescents;
- Pregnant and breastfeeding women;
- Adolescent girls and women and girls through DREAMS and Orphans and Vulnerable Children programming;

PEPFAR data shows that its programs have historically underserved young men, who fuel the cycle of HIV infection by transmitting HIV to younger female partners. Special efforts to identify and treat men with HIV were launched in COP16–17 and will be a continued area of focus into COP22 and COP23.

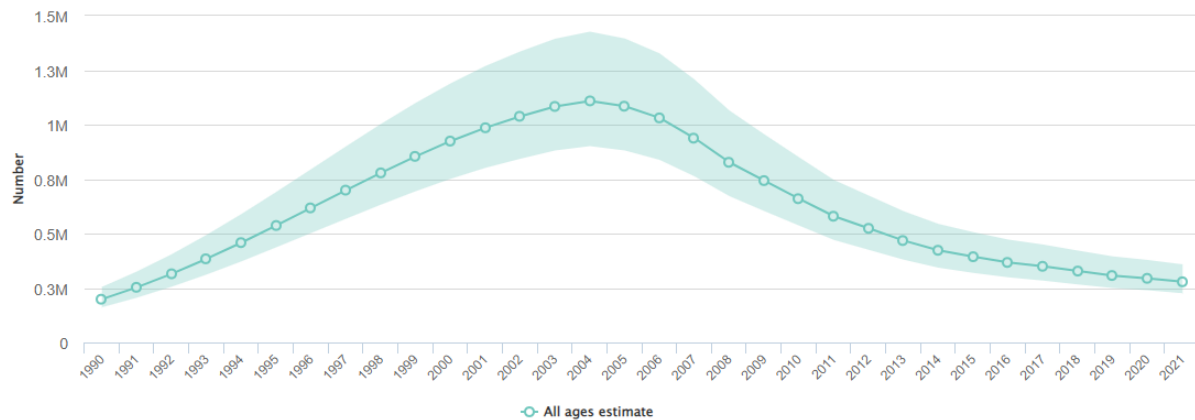
In 2021 there were 1.5 million new HIV infections, compared with 3.4 million in 1996. The annual number of deaths from AIDS-related illness among people living with HIV (all ages) globally has fallen from a peak of 2 million [1.6 million–2.7 million] in 2004 to 650,000 [510,000–680,000] in 2021. Since 2010, AIDS-related mortality has declined by 52 percent. Reaching the 2025 milestone of fewer than 250,000 deaths will require further declines of about 140,000 per year (Figure 6).

Figure 6: Number of AIDS-Related Deaths, Global, 1990–2021, and 2025 Target



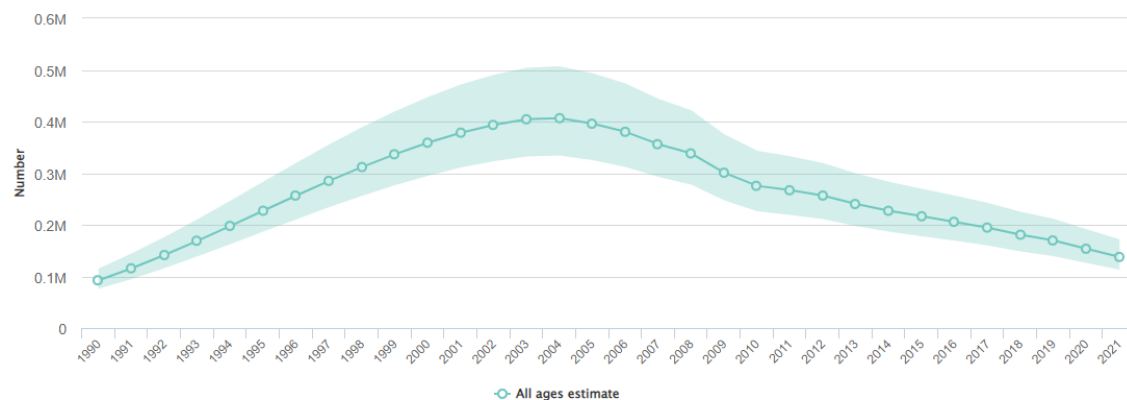
Source: UNAIDS epidemiological estimates, 2022 (<https://aidsinfo.unaids.org/>).

Figure 7: Number of AIDS-Related Deaths, Eastern and Southern Africa, 1990–2021



UNAIDS epidemiological estimates 2022

Figure 8: Number of AIDS-Related Deaths, Regions Outside Sub-Saharan Africa (Central and West Africa), 1990–2021



UNAIDS epidemiological estimates 2022

While the HIV incidence rate has declined in most PEPFAR-supported countries, the size of the populations most at risk for HIV infection, especially young women, has substantially grown in the last two decades due to overall population growth, especially among those under age 25.

PEPFAR continues to increase program effectiveness through enhancing site-level data disaggregated by sex and five-year age bands to refine our focus on geographic areas and populations most in need of HIV services. This is essential to reduce new HIV infections in sub-Saharan Africa, which are otherwise projected to grow by 25–26 million by 2030. Such growth would nearly double the current cost globally to provide lifesaving

treatment services, a level of financing that could not be sustained. We have all the tools required to change the course of the epidemic, and we are beginning to see promising results. We must continually use granular data to maximize the impact of every dollar spent for HIV services, especially in the context of the COVID-19 pandemic. Otherwise, we will face an epidemic that will once again spiral out of control, reversing our investments to date.

HIV Infections Averted Due to PEPFAR and Global HIV Response

Through PEPFAR, 5.5 million babies were born HIV-free. This amazing accomplishment was achieved through the reduction of new infections and prevalence of HIV among adolescent girls and young women, women of childbearing age, and adult men from 2004 to 2021. Additionally, modeled data suggest that through PEPFAR and the global AIDS response, more than 16 million HIV infections globally have been averted since the beginning of the epidemic, including over 11.3 million HIV infections in sub-Saharan Africa. We have achieved a 65 percent reduction in new HIV infections among males 15 to 24 years old, and a 50 percent reduction in new infections among their female counterparts since 2010.

Through Population-based HIV Impact Assessment (PHIA) surveys, the rate of new HIV infections (incidence) can now be measured directly and estimated more precisely. Currently nine high-burden PEPFAR countries have new incidence measures and estimates of their 95-95-95 target achievement from recent PHIA surveys completed between 2020 and 2022, with more PHIA's planned in the next few years.

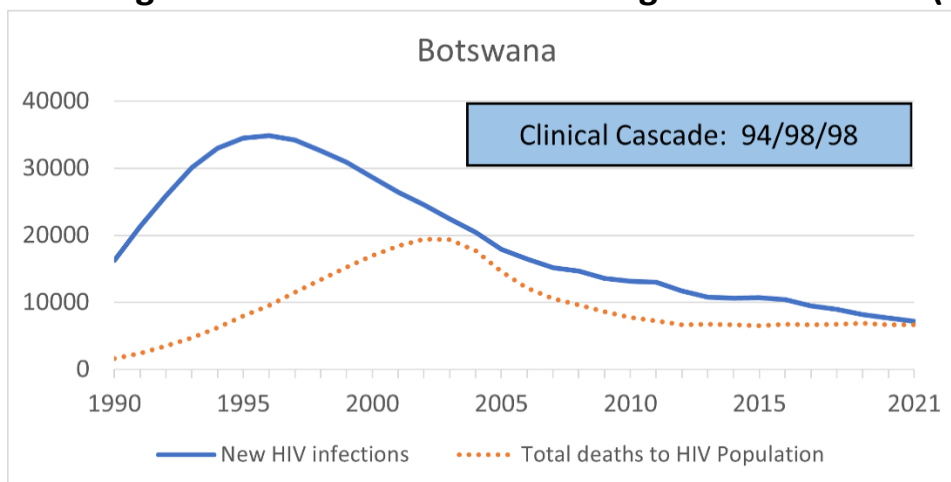
PEPFAR continues to model partner countries' results with the most recent national data available from UNAIDS using the Goals model, which is a method for costing and resource allocation during the development of national HIV strategic plans and investment framework.

Global Prevalence: Refining PEPFAR's Impact and Progress Toward Bringing HIV Under Control

Controlling the HIV epidemic means that there is not a growing burden of disease and number of people needing to be treated in a population.

Bringing HIV under control requires decreased number of new infections, decreased deaths among all people living with HIV, and reaching 73 percent population viral load suppression among all people living with HIV. Figure 9 shows the relationship in trends of all-cause mortality among people living with HIV and new HIV infections in Botswana and their estimated 95-95-95 clinical cascade achievement. Bringing HIV under control is attainable, as shown in the Botswana figure, where they have achieved 90 percent population viral suppression nationally in alignment with the UNAIDS 95-95-95 goals. Reaching 95-95-95 does not suggest near-term elimination or eradication of HIV as may be possible with other infectious diseases, but rather that we can reduce the total number of people living with HIV in a population through the reduction of new HIV infections alongside steady or declining mortality among people living with HIV consistent with natural aging.

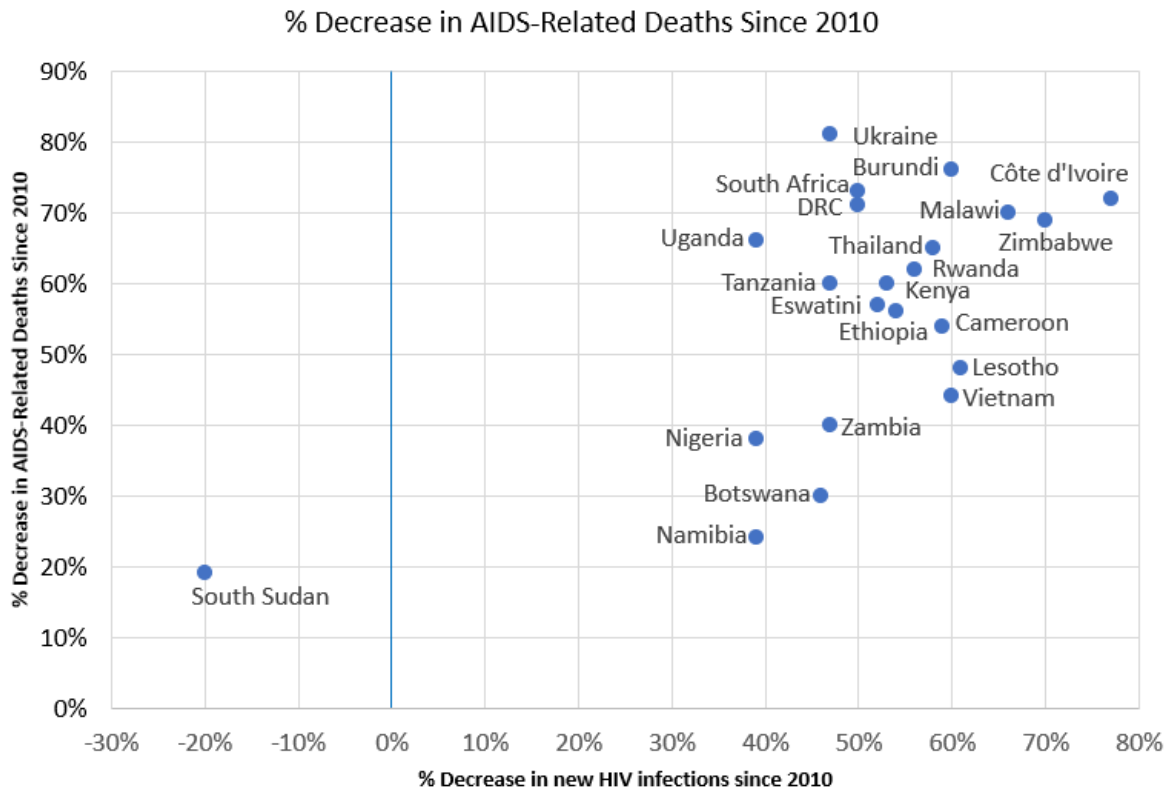
Figure 9: New HIV Infections, Total Deaths Among People Living with HIV, and Progress Toward the 95-95-95 Targets in Botswana (1990 – 2021)



We can bring HIV under control through the combination of effective prevention of mother-to-child transmission, effective primary prevention interventions, and continuous effective treatment of people living with HIV who continue to thrive and age. In this scenario, HIV incidence should continue to decline sharply across high-disease-burden countries (Figure 10). Conversely, a country will not be able to bring HIV under control and maintain that control if program efforts are not sufficiently sustained, in

which case new infections can rebound and/or clients will not remain virally suppressed.

Figure 10: Change in New Infections and All-Cause Mortality Among Individuals Aged 15 Years and Older Since 2010



Patient-level information systems are critical in this phase of the epidemic to ensure there is appropriate action at the site- and patient-levels; information systems ensure providers are alerted when patients are either experiencing treatment interruptions and/or are virally unsuppressed. Timely implementation of well-tolerated antiretroviral regimens and convenient HIV services including reduced wait times, multi-month dispensing of antiretrovirals, and decentralized drug dispensing can improve continuity of treatment and viral suppression.

Figure 11 shows the significant declines in new infections and all-cause mortality since 1990 across PEPFAR countries – achieved through implementation of effective HIV treatment and prevention services

including scale-up of antiretroviral therapy, multi-month dispensing, voluntary medical male circumcision, and prevention of mother-to-child transmission.

Implementation of programs for the next phase of the epidemic response must be designed for long-term maintenance of progress. It must also accelerate the response to end the HIV/AIDS pandemic as a public health threat by 2030 while sustainably strengthening public health systems to create a healthier, safer, and more secure world for all. To achieve this, we must:

- Ensure national and effective disease-specific surveillance systems are in place;
- Conduct primary HIV prevention interventions;
- Conduct HIV outbreak investigations that use information from recency testing to identify where and among which populations active transmission is occurring;
- Ensure durable viral load suppression of at least 73 percent among all people living with HIV;
- Ensure continued focus on treatment continuity and the return to treatment of those alive but no longer in care;
- Reduce mortality by targeting life-saving interventions to individuals in groups identified with higher mortality, including those with advanced HIV disease and people over 50 and children under 5.
- Diagnosing, treating, and preventing tuberculosis are all shown to reduce mortality in people with HIV. All eligible individuals will have timely access to these services;
- Reach global 95-95-95 treatment targets for all ages, genders, and population groups;
- Reduce new HIV infections dramatically through effective prevention and treatment, in support of UNAIDS targets;
- Close equity gaps for priority populations, including adolescent girls and young women, key populations, and children;
- Transform the PEPFAR program toward sustaining HIV impact and long-term sustainability by strengthening the capabilities of

governments to lead and manage the program, in collaboration with communities, the private sector, and local partners;

- Make measurable and sustainable gains in partner country public health systems and health security to strengthen public health prevention, data, and response capabilities for HIV, which will also have the benefit of helping countries address other health threats;

Generalized population-wide approaches should evolve based on surveillance and targeted case finding. In parallel, clear analysis at all levels of country and field team program investments must be evaluated, refined, and realigned. Strategic year-by-year shifts in personnel and investment priorities must be directed at sustaining epidemic control. Finally, outcome-oriented discussions (including measurable goals) between each country's ministry of health and ministry of finance must be facilitated to ensure long-term, sustained country investments in areas key to bringing and keeping HIV under control.

Figure 11 (Panels A-F): Changes in new infections and all-cause mortality in adults (15+) in PEPFAR supported countries that have a stabilized HIV epidemic and have reached the 73 percent population viral load suppression target

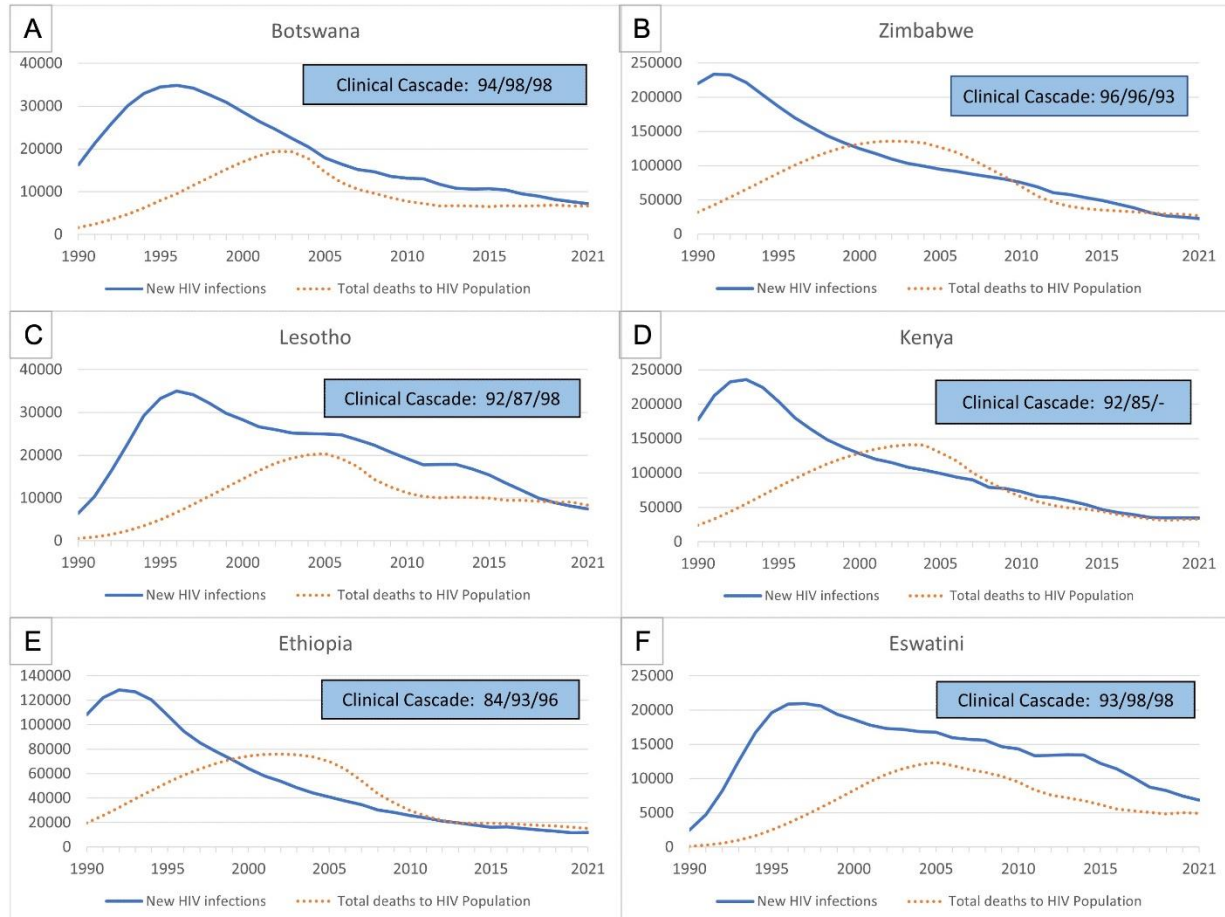


Figure 11 (Panels G-K): Changes in new infections and all-cause mortality in adults (15+) in PEPFAR supported countries that have a stabilized HIV epidemic and have reached the 73 percent population viral load suppression target

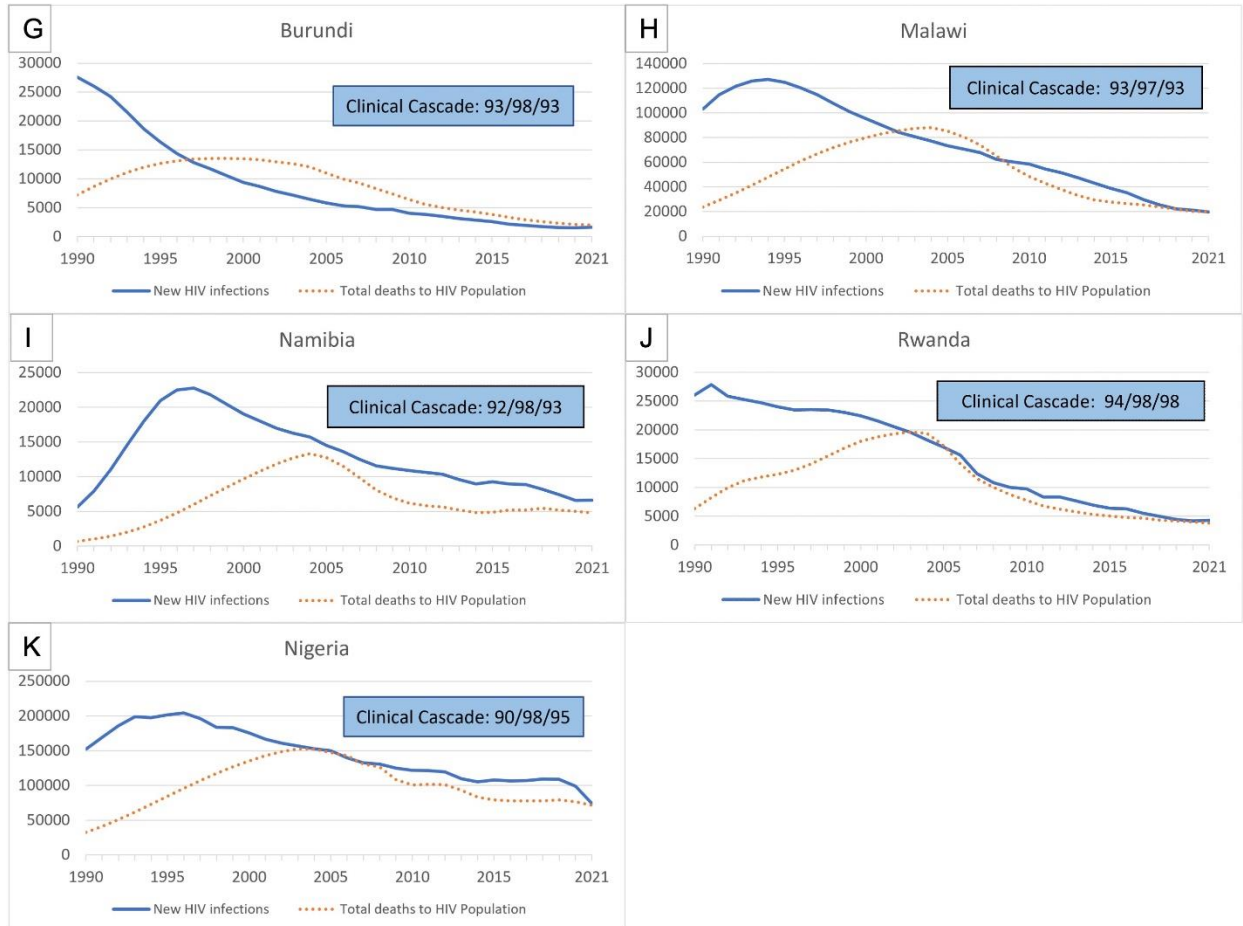


Figure 11.1: Changes in new infections and all-cause mortality in adults (15+) in PEPFAR supported countries that have a stabilized HIV epidemic but have not reached the 73 percent population viral load suppression target

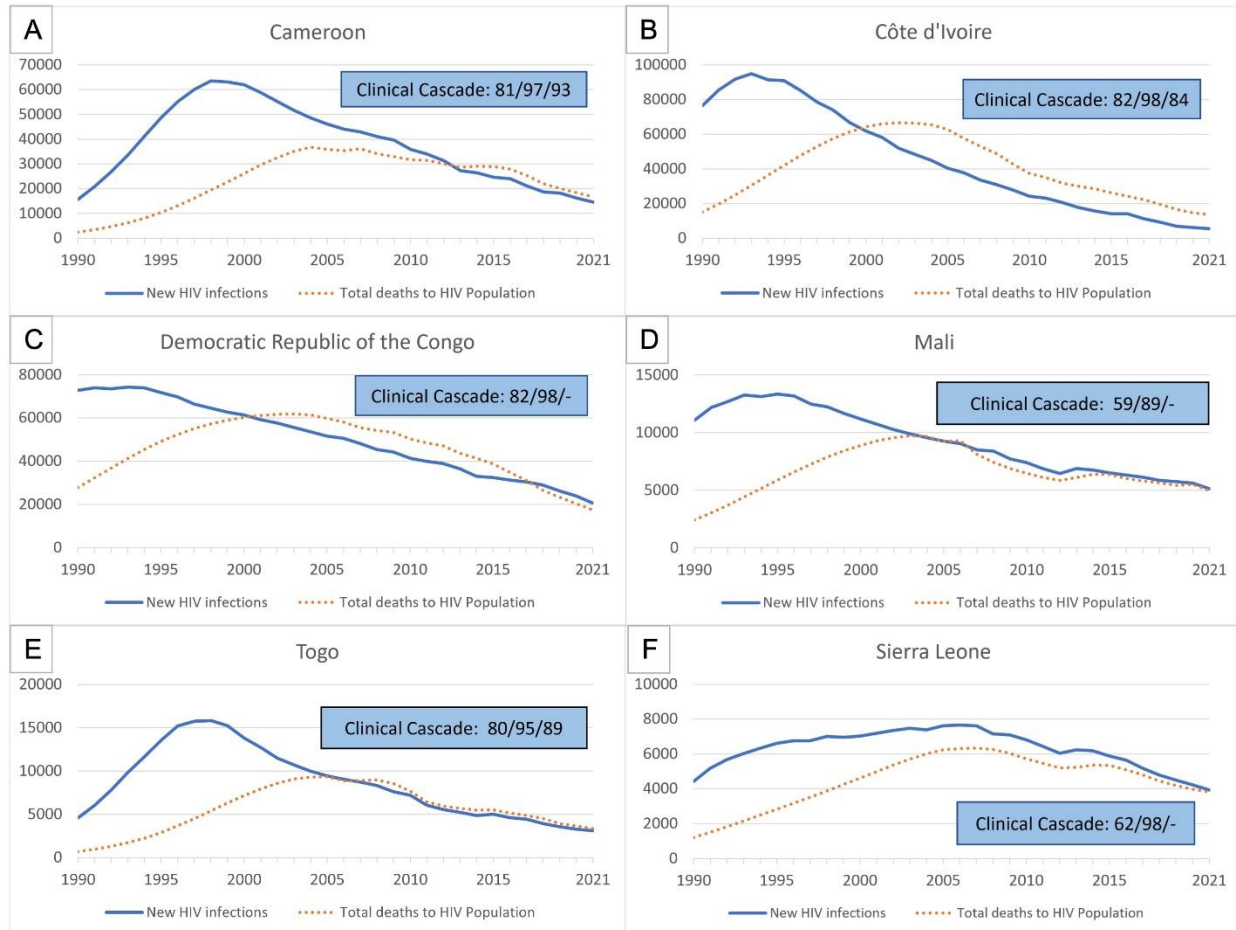
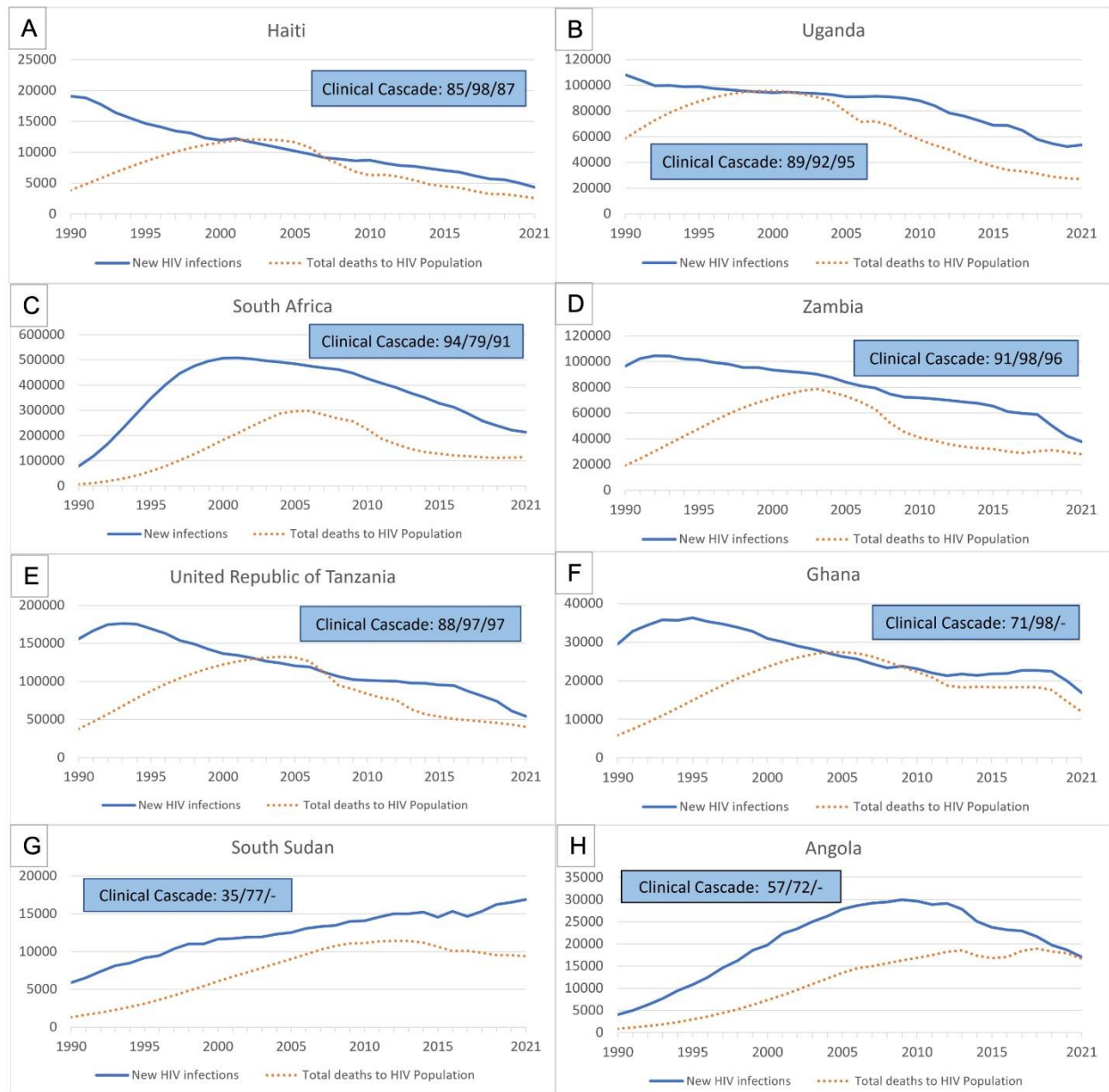


Figure 11.2: Changes in new infections and all-cause mortality in adults (15+) in select PEPFAR supported countries that have increasing epidemics



Strengthening Financial and Program Efficiencies

PEPFAR has the tools required to bring HIV under control. With appropriate pricing and innovations – and in partnership with Global Fund, partner governments, and civil society – PEPFAR will continue to scale HIV/AIDS programs to achieve epidemic control. This assumes countries adequately execute their responsibilities and that funding from other sources is well coordinated with the PEPFAR program.

The Right Policies are Fiscally Responsible

The challenge for the world is to continually increase the number of people on treatment to reach the 95-95-95 treatment targets, while at the same time working within a constrained budget environment. PEPFAR continues to generate significant cost savings and has been able to achieve our goals each year. The program has adopted several policies and innovations that enable existing resources to go further. These policies include, for example, prioritizing standard of care HIV testing services (e.g., safe and ethical index testing), Test and Start rapid treatment initiation, universal test-and-connect (status neutral) approach to programming, multi-month dispensing of antiretrovirals, person-centered differentiated service delivery that includes timely and sensitive tuberculosis diagnosis and prevention, and human resources for health interventions such as shifting certain tasks from doctors to nurses and lay workers.

The benefits of ‘treatment as prevention’ are expected to drive 60–80 percent of the HIV incidence reductions necessary for achieving epidemic control. Multiple economic and cost-benefit analyses have confirmed the benefit of early treatment to both people living with HIV and the broader society. Importantly, untreated HIV is a significant burden to fragile health care systems, and individuals with advanced untreated HIV are high users of health facilities.

A universal test-and-connect (status neutral) approach to HIV service delivery fosters prompt linkage to either prevention or treatment services. Test and Start enables countries to adopt same-day initiation of antiretroviral treatment. Early treatment reduces HIV related morbidity and

mortality and has significant prevention benefits. Test and start streamlines antiretroviral treatment costs and prevents the costs associated with reidentifying an individual who has failed to engage in treatment. Advanced HIV represents a significant burden on health resources; early therapy with antiretroviral treatment avoids the diagnostic and treatment requirements of advanced HIV.

New Drug Regimens and Other Commodity Savings

Dolutegravir (DTG), is inexpensive, safe, well tolerated, and leads to rapid reduction of HIV in the blood. DTG has a high barrier to developing drug resistance, even with incomplete adherence. PEPFAR has supported rapid rollout of regimens containing DTG including for individuals newly initiating therapy and those already on treatment, including those who are on a failing regimen. PEPFAR is also working to lower the costs of other commodities, including laboratory reagents. PEPFAR has achieved impressive reductions in the cost of viral load tests, in some cases from \$40 per test to as low as \$15. This has resulted in significant cost savings.

Toward Better Cost Data

PEPFAR continues to improve our internal budget practices. PEPFAR's revised financial classification structure provides a more comprehensive, flexible, and transparent tracking of our investments. The classification structure is now common across budget formation, budget execution, and expenditure reporting to allow for tracking of resource allocation against budgeted funding allocations. This allows PEPFAR to adhere to the basic principle that budgetary and fiscal reporting should be tracked in the same way.

In 2022, PEPFAR continued our collaboration with the Global Fund, UNAIDS, and the Bill & Melinda Gates Foundation on HIV assistance. The Resource Alignment Initiative continues to provide routine financial data harmonized across all funding sources, which has enabled us to better understand the totality of HIV investments and allowed for improved alignment across funders. Each PEPFAR country team had a detailed analysis of Global Fund, PEPFAR, and partner-country government disaggregated investments in HIV.

Global Fund Portfolio Manager and Ministry of Health officials were also present at the COP meetings, allowing PEPFAR teams to avoid duplication and ensure complementarity of PEPFAR's investment. The Resource Alignment collaboration has enhanced PEPFAR and Global Fund's bilateral cooperation on fiscal matters and has provided a foundation to extend the collaboration with UNAIDS to harmonize with the Global AIDS Monitoring and the National AIDS Spending Assessment.

Under the auspices of the Global Fund, Gates Foundation, and PEPFAR working group, we have also rolled-out Activity Based Costing and Management (ABC/M) in four high-burden countries, with additional countries forthcoming. ABC/M costing will enable all entities, including partner country governments, to understand what the actual cost of services should be as opposed to only seeing what our implementing partners pay for the service. This is a key piece of the efficiency agenda that will permit all partners to conduct critical analysis of both HIV spending and the health system. By better understanding the degree of site-level subsidies and what systems-level investments have been completed, we can support a more purposeful and informed transfer of greater fiscal and management responsibility from international donors to partner-country entities.

SECTION 2: Accelerating Access to HIV Treatment

HIV treatment is one of the most cost-effective investments 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 effective antiretroviral treatment. The sooner 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 eliminates their risk of transmitting the virus.

As of September 30, 2022, PEPFAR had supported nearly 20.1 million men, women, and children on lifesaving HIV treatment. 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 antiretroviral treatment regimens, that are both efficacious and affordable, are being produced.

The following section focuses on how PEPFAR is accelerating access to treatment for people living with HIV while working to address remaining key gaps. We are working closely with communities to create the messaging to bring healthy people into the health care delivery system. This is critical not only for the diagnosis and treatment of early-stage HIV, but also for increasing the broader community's interaction with the health care delivery system to prevent and treat all diseases.

Ensuring Continuous Treatment of HIV

The goal of treatment for people living with HIV is durable viral suppression, which reduces morbidity and mortality and prevents HIV transmission to others. Continuous, uninterrupted treatment and viral suppression is critical to maintaining the health of people living with HIV and bringing HIV under control. To reach this goal, it is critical to target interventions to those who have experienced an interruption in treatment, as well as to identify

additional interventions for special populations and those facing challenges with treatment continuity. PEPFAR continues to monitor implementation and effectiveness of interventions to refine programming and bring to scale best practices that have the most impact.

PEPFAR data support the notion that, across all age groups, the first six months are critical to staying in care. PEPFAR wide, approximately 18 percent of individuals newly initiated on treatment interrupt their treatment within the first six months. Once established for six months or more, less than two percent of individuals interrupt treatment.

Interventions to promote treatment adherence are required to promote the health of all people living with HIV and to achieve and maintain control of the HIV epidemic. The following interventions form the core package of PEPFAR's approach to durable and effective treatment:

- The complete scale-up of the fixed dose combination of tenofovir, lamivudine, and dolutegravir to all eligible people living with HIV;
- Differentiated service delivery models tailoring HIV treatment by location, provider cadre, frequency of visits, and package of services depending on individual patient needs. These models reduce congestion at treatment facilities and have been shown to improve patient retention and viral load setpoints;
- Multi-month dispensing and decentralized drug distribution for antiretrovirals are person centered interventions associated with viral suppression. These strategies are being rolled out for supporting people living with HIV during tuberculosis treatment, and when dispensing tuberculosis prevention medications. Facility-level partners are required to report supply chain indicators semiannually, underscoring the importance of implementing multi-month dispensing within their HIV/AIDS programs;
- User fees are a barrier to care. Formal and informal user fees must be eliminated for HIV testing, clinical visits, antiretroviral treatment, laboratory testing, and medications required for prophylaxis against

opportunistic infections or for treatment of advanced HIV disease complications at all PEPFAR-supported clinics;

- Provider sensitization to offer respectful and friendly care to patients with an understanding of the needs of each subpopulation (e.g., males, adolescents, key populations) is a focus of patient-centered care. Existing qualitative research and findings from community-led monitoring may help articulate challenges and enablers for people living with HIV and may help tailor interventions in the specific context;

Certain groups may require specific interventions to improve treatment outcomes. The treatment cascade for men often lags that of women. In addition, those who are exposed to gender-based violence, particularly intimate partner violence, are less likely to disclose HIV status, access HIV services, use or adhere to antiretroviral therapy, and have significantly worsened viral suppression. Experience of intimate partner violence has also been shown to negatively affect uptake of early infant HIV testing and HIV status disclosure among postpartum women, threatening progress to prevention of mother-to-child transmission. Analysis at subnational levels may show wide variability in the number of overall interruptions by gender. It is a priority for PEPFAR to support services that facilitate strong linkage and continued retention for all populations, with strong focus on improving the cascade for individuals initiating care.

Adolescents and youth have multiple challenges that can interfere with successful therapy that include diminishing caregiver oversight, lack of youth friendly services and inadequate preparation for the transition to adult HIV treatment. A focus in COP21 was on youth friendly services to address this critical need.

Key populations often encounter stigma and discrimination and unfriendly provider attitudes when seeking care and in the broader community, creating additional challenges to accessing and maintaining connection to treatment services. Community-led monitoring, through which community organizations assess specific service delivery locations for agreed upon

indicators and characteristics, continues to find, for example, that significant numbers of people who identify as members of key populations groups experience denial of service, unfriendly attitudes from service providers, harassment and other experiences that deter them from accessing services. Strategies in COP 22 to address these challenges include promoting key population-led service delivery, differentiated, key population-competent service delivery tailored to the needs and circumstances of key populations, and emphasis on provider training and sensitization.

Finally, as countries reach epidemic control there will be a growing population of adults in treatment who are older than 50 years and throughout PEPFAR this proportion is growing quickly. In mature treatment programs, current data suggest that they may represent up to one third of the total treatment population. The proportion of older individuals varies from country to country but in several countries, it is near 30 percent. The needs of older adults are different from those of younger adults, and this group has a higher all-cause mortality and adult men in all age groups experience higher mortality. Viral suppression is high in older adults leading to the inference that mortality is not related to undertreated HIV disease.

Figure 12A: Aging of the population of people on ART in the PEPFAR program, 2017-2022

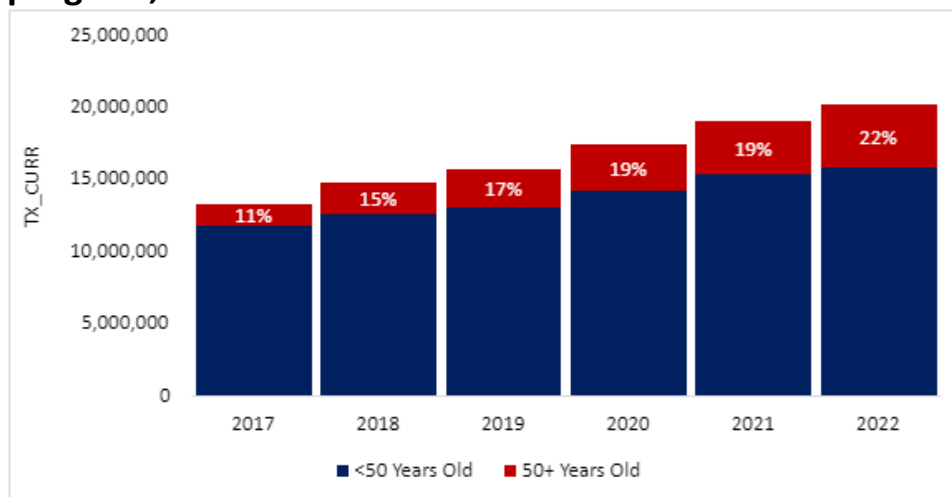


Figure 12B: Age Distribution and Proportion 50+ Years Old among People Living with HIV on Treatment in PEPFAR countries, 2022

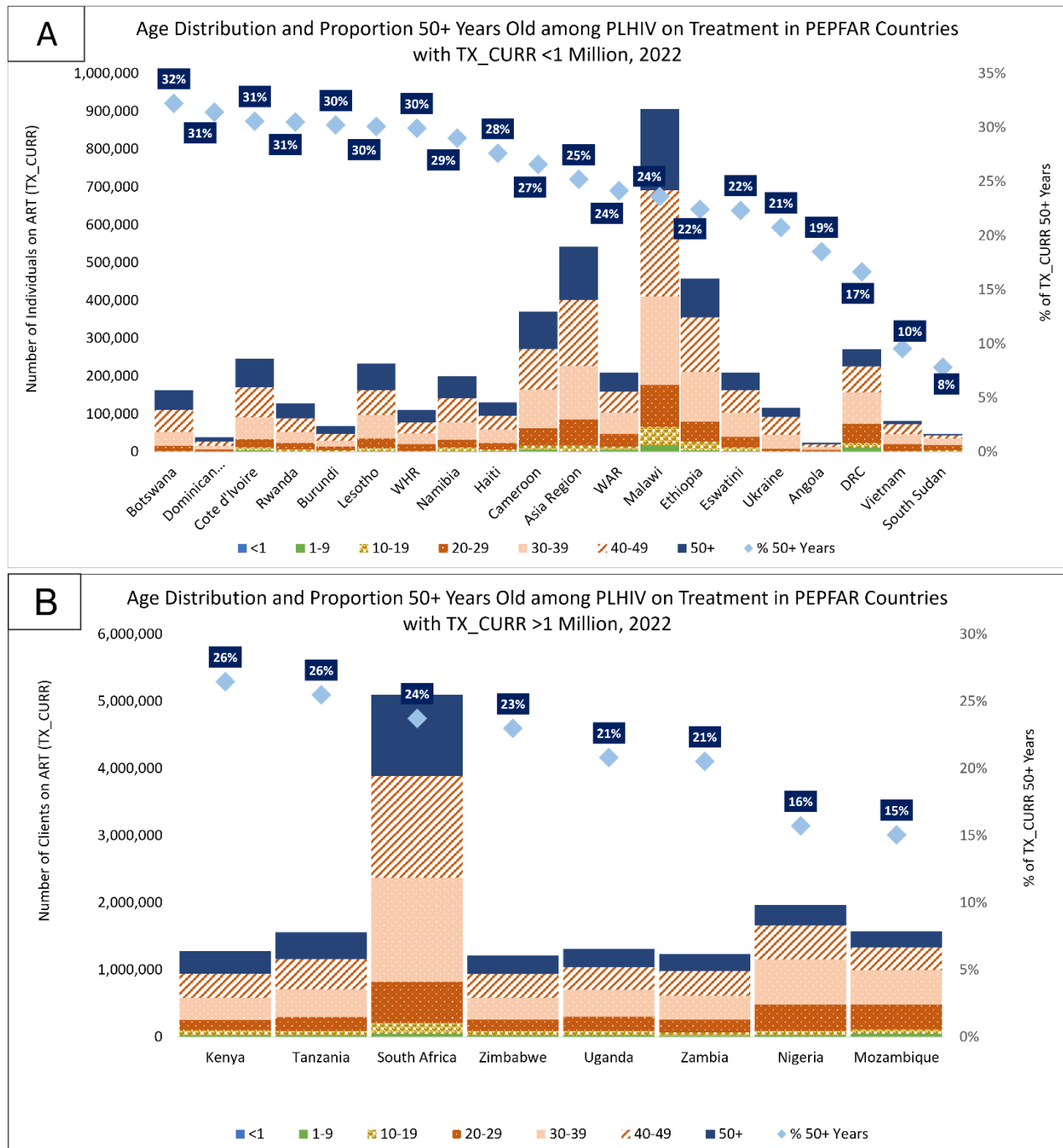
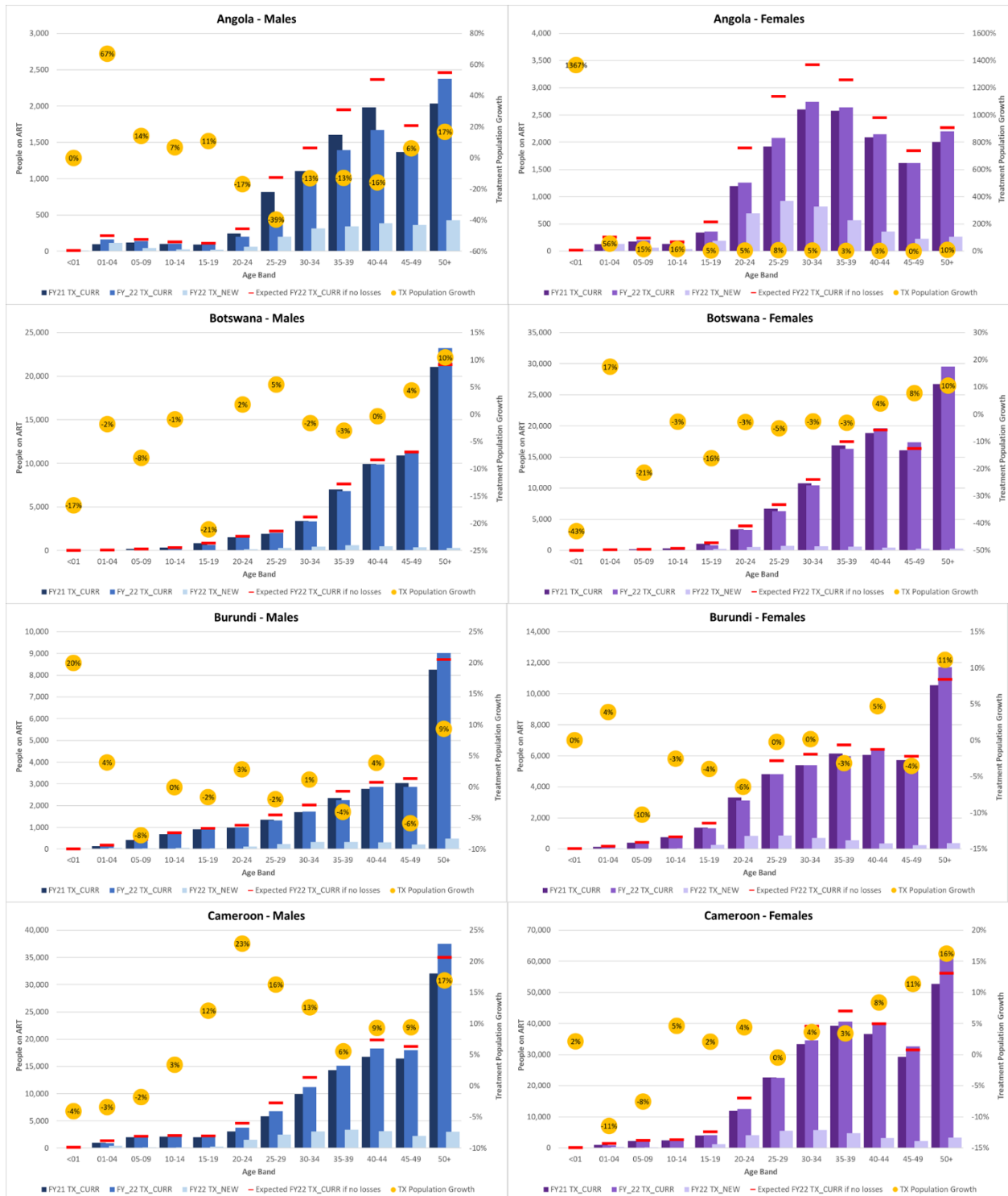
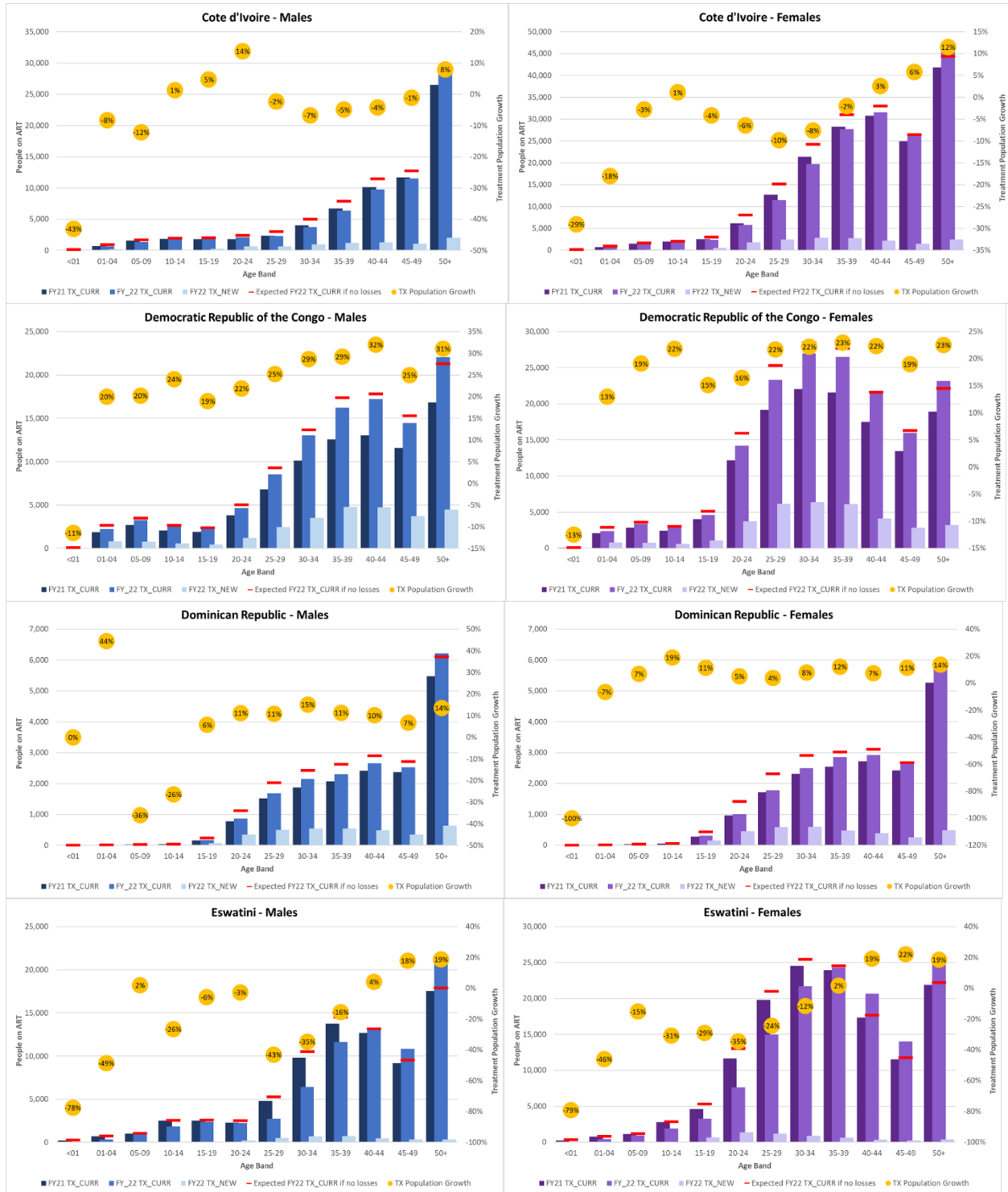
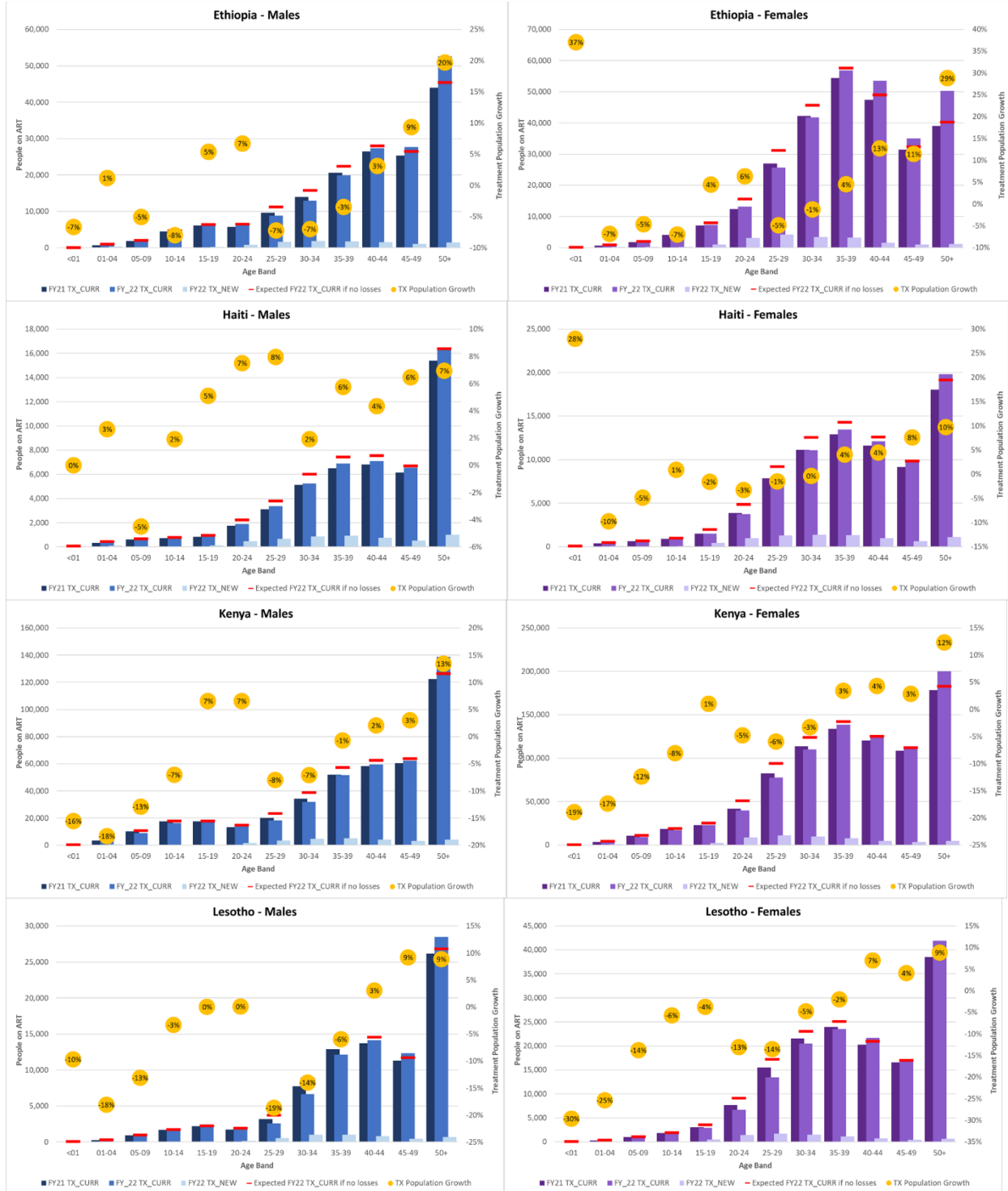
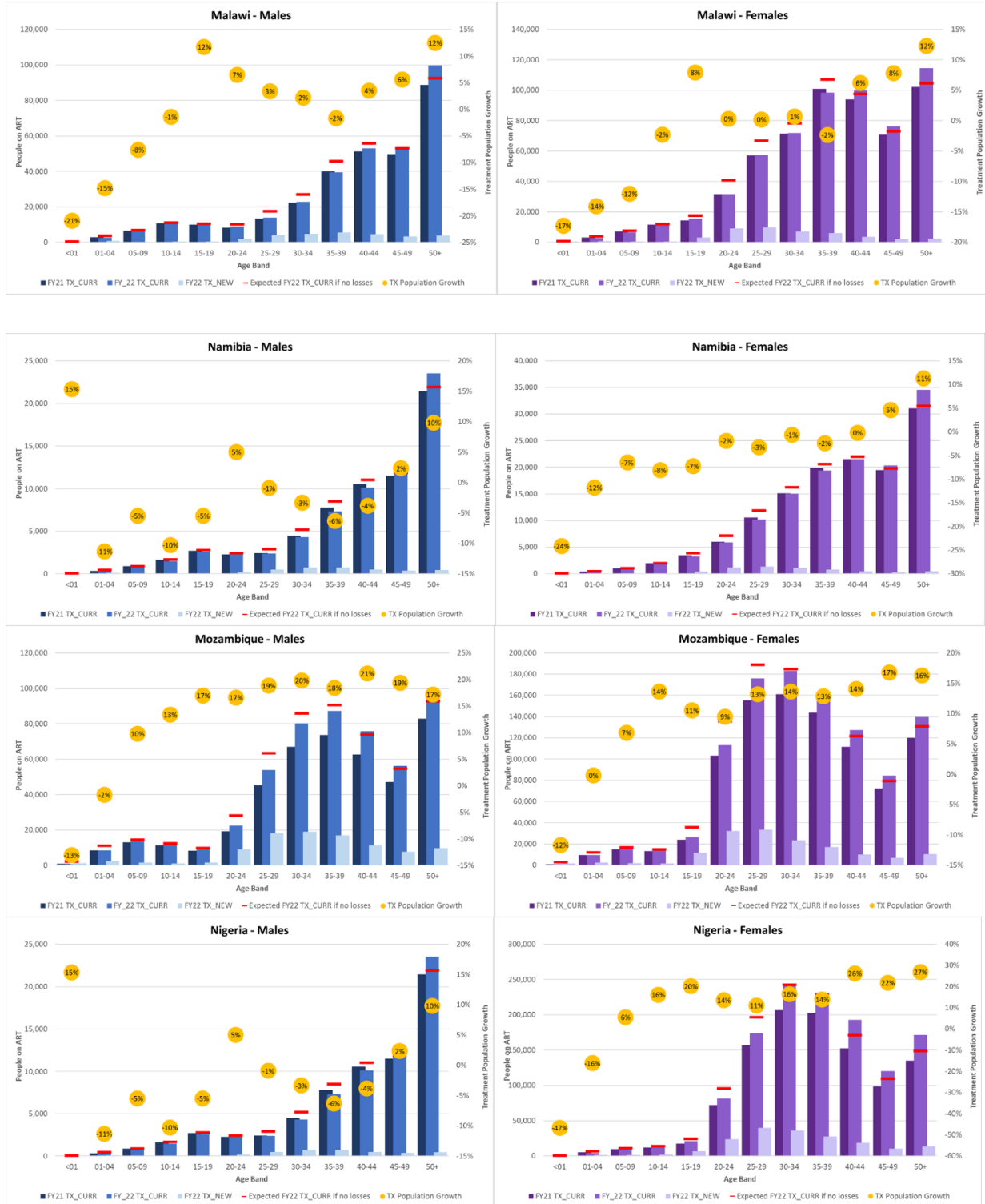


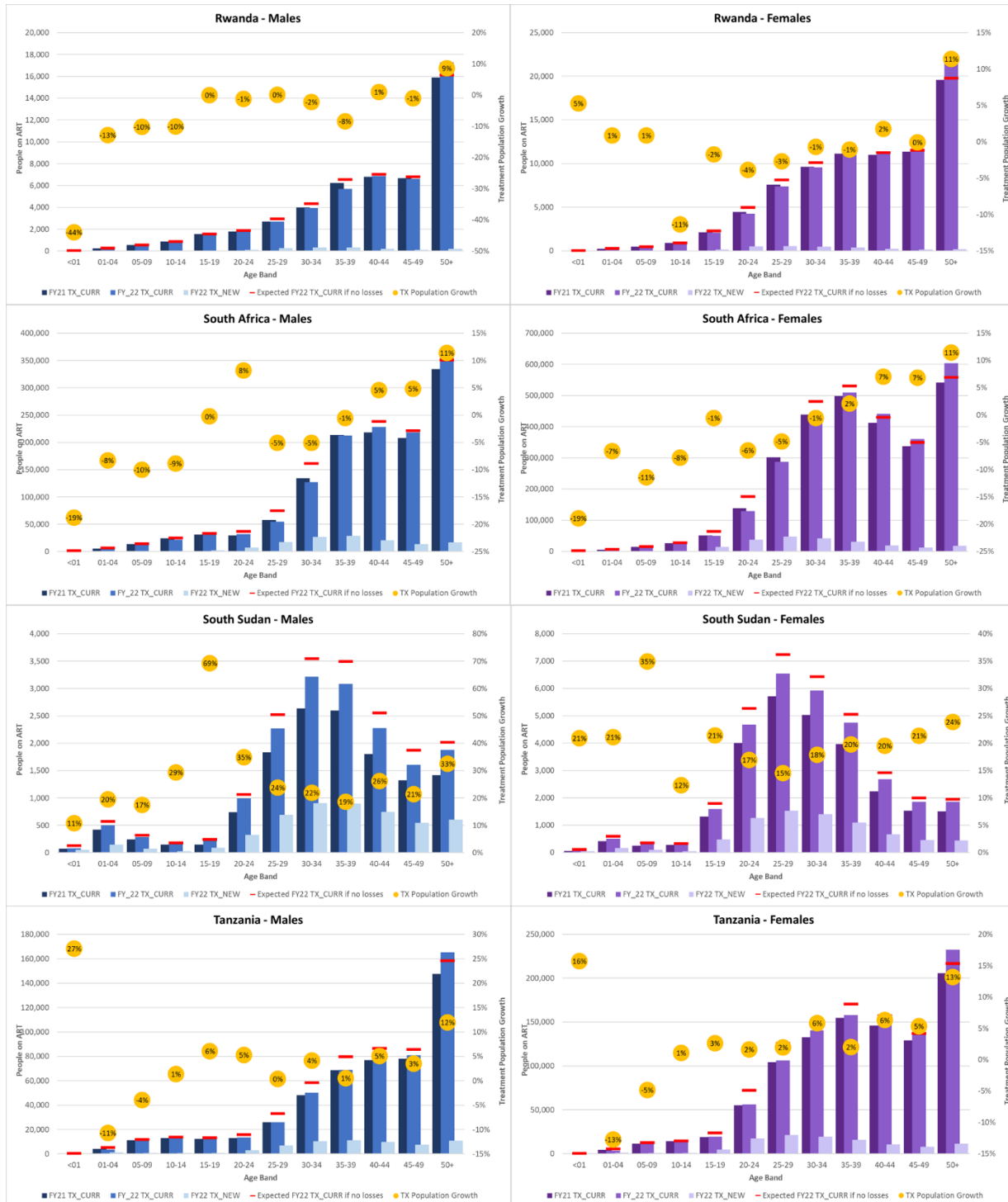
Figure 12C: Treatment Growth by Sex from FY 2021 to FY 2022 in each PEPFAR Country

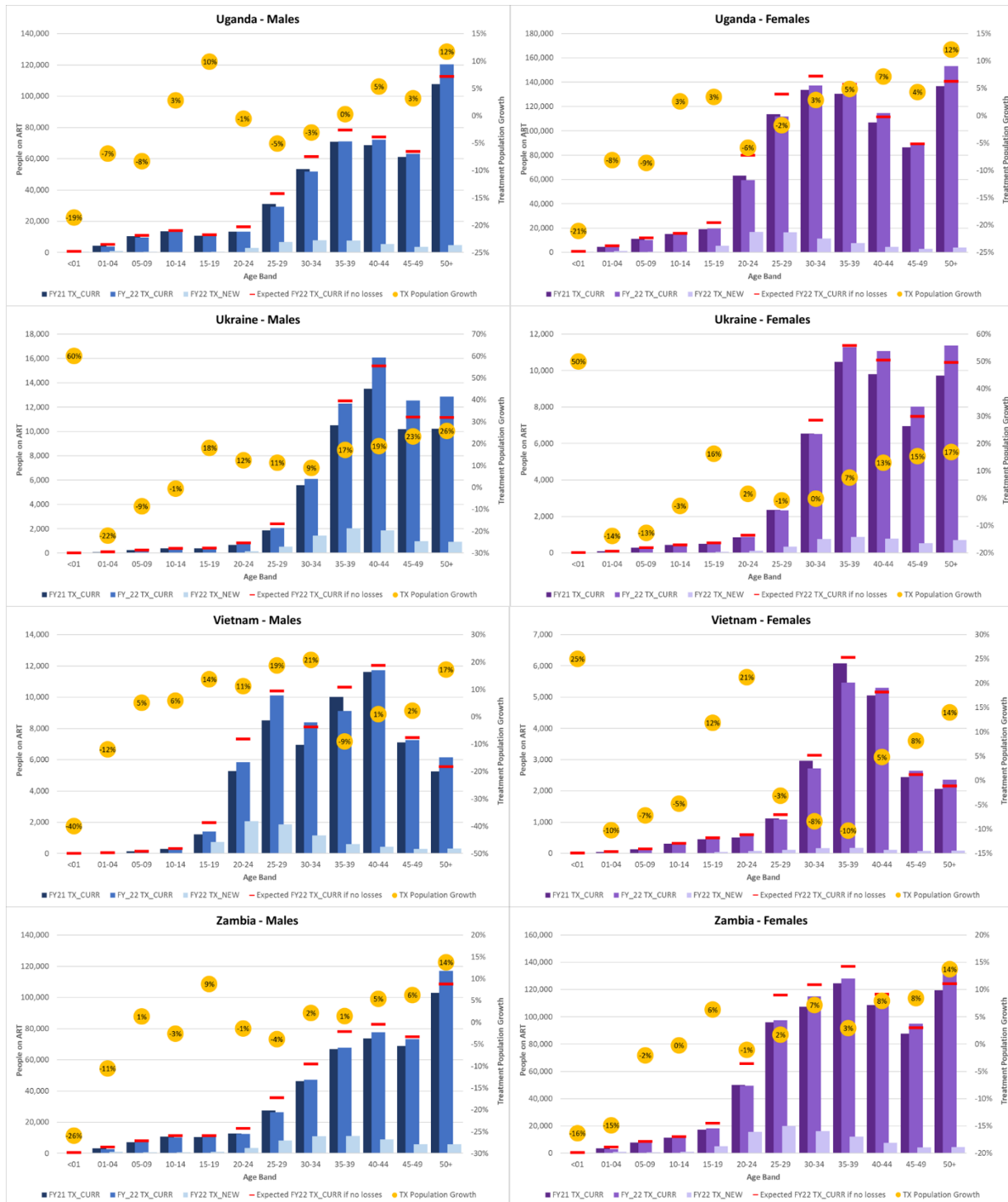










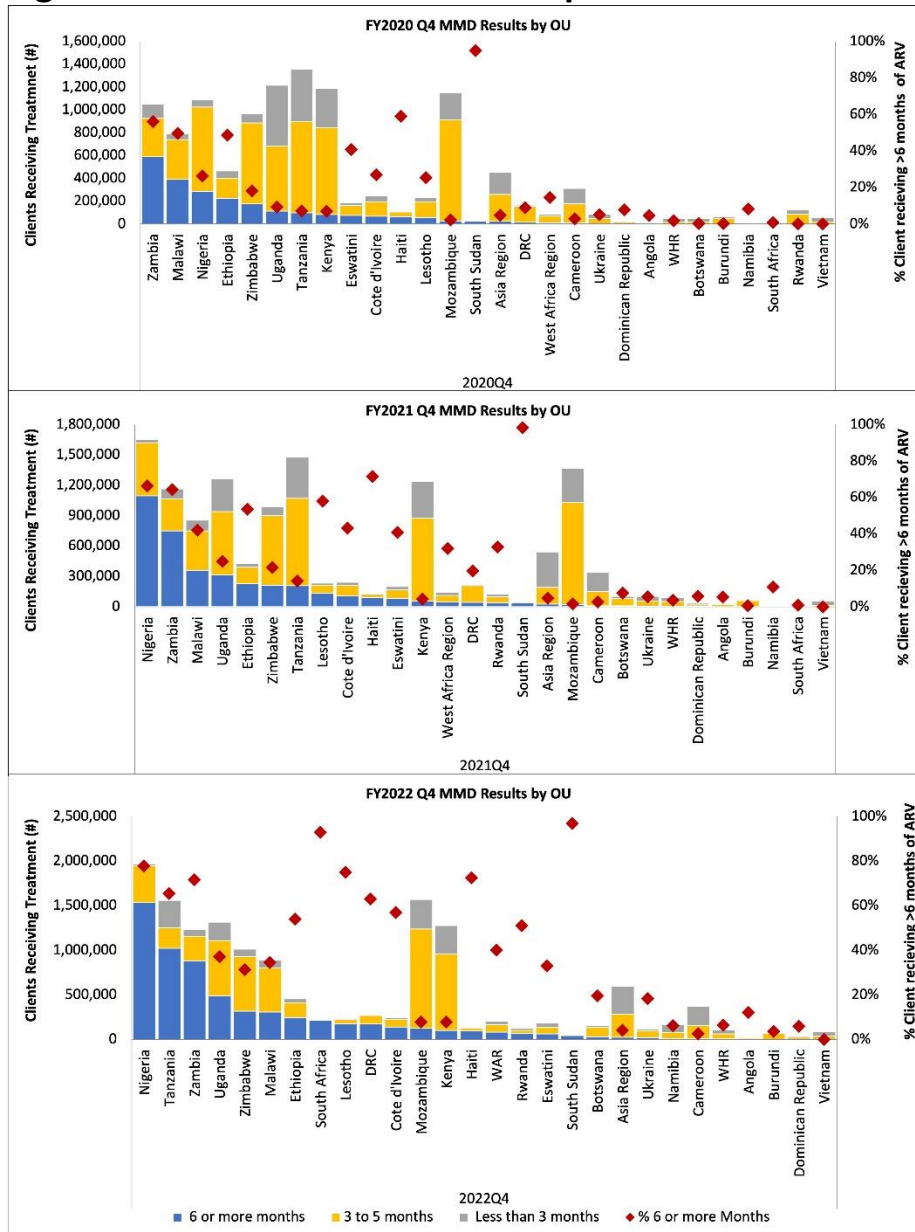




Differentiated Service Delivery and Adherence Support

There are various barriers to treatment retention and adherence, including issues of access/convenience, stigma and confidentiality, medication side effects, and deeply held belief systems. Adherence may also be challenged by other factors such as substance use and mental health issues.

Untangling specific issues for each client and addressing them directly improves patient outcomes and allows the opportunity to provide additional client-specific services. Differentiated service delivery models represent an important response to barriers threatening the therapeutic alliance as it aims to address the diverse needs of clients.

Figure 13: Increase in 6+ MMD Implementation from FY2020 - FY2022

Clinically stable patients who are two years and older should receive antiretroviral treatment for multiple months at a time. It is expected that approximately 80 percent of people living with HIV on treatment will have the choice to receive six months of medication at a time. Many program requirements, such as having a suppressed viral load, were suspended in the setting of COVID-19 and these program adaptations should continue.

Patients who are often more likely to struggle with treatment adherence, such as pregnant women, those who have experienced gender-based violence, especially intimate partner violence, those recently initiated on therapy, those with high viral loads, those with advanced HIV disease, and children and adolescents, are prioritized for more intensive support.

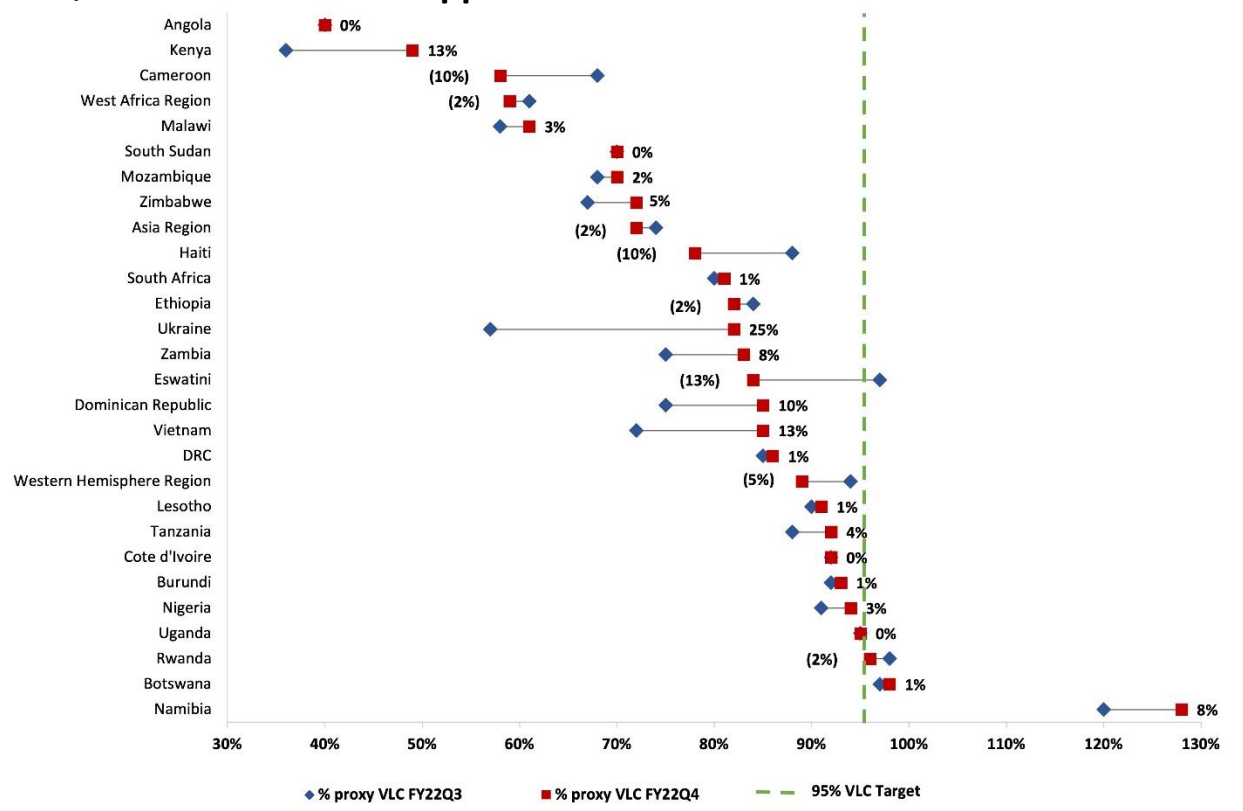
Targeted interventions for those who need additional interventions beyond the core package (and are struggling to adhere and attend) include the following:

- Ongoing case management;
- Enhanced adherence and viral load counseling and education;
- Additional contact with health care providers and regular check-in with lay health workers, including home visits staggered at different times, and the use of other forms of communication such as SMS messaging;
- The use of community support personnel to address other needs such as post-violence care and mental health issues;
- Population-specific interventions, such as for key populations groups or adolescent spaces;

Viral Load Monitoring

The goal of antiretroviral treatment is virological suppression; this should be achievable by all people living with HIV. Viral load should be assessed six months after initiating antiretroviral treatment and then yearly thereafter. Though many PEPFAR-supported programs have made remarkable progress in reaching 80-95 percent viral load testing coverage and viral load suppression, much work remains. While most OUs have seen increases in viral load coverage quarter-over-quarter, only four PEPFAR countries have achieved the 95 percent viral load coverage target in quarter 4 of FY 2022 (Figure 14). Fourteen countries reached the 95 percent viral load suppression, target by the end of FY 2022, and another 10 countries achieved 90-94 percent viral load suppression.

Figure 14: Changes in Viral Load Testing Coverage from FY 2022 Quarter 3 to Quarter 4 in PEPFAR-Supported Countries



Pregnant and breastfeeding women are priority populations for providing viral load testing to ensure viral suppression or provide enhanced counseling for antiretroviral treatment adherence if not 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. 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. Much attention should also be paid to viral load testing and suppression among infants, children, and members of key populations.

Scale-up of viral load and early infant diagnoses has mostly been with conventional large-scale, centrally placed instruments. This approach has posed some challenges, including long turnaround time and access to testing at the peripheral or community levels. To help address this issue, the World Health Organization has prequalified the use of point-of-care and

near-point-of-care platforms for early infant diagnoses and for viral load testing at or near the point of care. Point of care testing for early infant diagnoses and viral load could make results available for patient management within hours of specimen collection.

Implementation and scale-up of point of care for early infant diagnoses is essential for country programs to achieve 90 percent or more of early infant diagnoses by two months of age. Point of care early infant diagnoses was used in 2022 and will continue in 2023. PEPFAR is also prioritizing the use of point of care testing to increase its availability and the rapid return of HIV viral load testing results in pregnant and breastfeeding women, which will reduce the risk of mother-to-child transmission as well as among infants, children, key populations and non-suppressed individuals.

Optimizing HIV Care and Treatment

All people living with HIV should have access to the most effective, convenient therapy with minimal or no side effects. Optimal antiretroviral treatment is critical to lifelong adherence, minimal or no medication side effects, and viral load suppression. This is the cornerstone of the PEPFAR program.

The WHO now recommends DTG, in combination with a nucleoside reverse-transcriptase inhibitor (NRTI) backbone, as the preferred first-line regimen for all adults, including women of reproductive potential. In the updated guidelines, low-dose Efavirenz (EFV 400mg) is an alternative first-line regimen for adults and adolescents. PEPFAR continues to recommend TLD as the preferred option for antiretroviral treatment and recommends that countries continue with their transition to DTG-based regimens in 2023.

Pediatric Antiretroviral Treatment Optimization

PEPFAR and our global partners continue to prioritize making optimal antiretroviral drugs available for infants and children in a timelier fashion. We are working to accelerate the entire lifecycle of pediatric antiretroviral drugs, including drug development and testing, manufacturing, normative guidance, supply security, and program uptake (<http://www.gap-f.org/>).

Since the approval of DTG 10mg, dispersible tablets, PEPFAR country teams in collaboration with stakeholder and ministries of health have prioritized the use of DTG for use in children four weeks of age and weighing three kilograms, we have a long-awaited optimal antiretroviral drug for young children new to treatment and already established on treatment. We expect generic ABV/3TC/DTG (pALD) will be available in the coming year and PEPFAR country teams are planning accordingly for this product.

Figure 15: Current and Expected DTG formulations with FDA approval status available for PEPFAR

	LPV/r Pellets	LPV/r Granules	RAL Granules for Oral Suspension	RAL Chewable Tablets	DRV Tablet (with RTV)
Eligible Pediatric Population	1) Age: 3+ months, <i>and</i> 2) Unable to fully swallow intact LPV/r pediatric tablet	1) Age: 2+ weeks, <i>and</i> 2) Unable to fully swallow intact LPV/r pediatric tablet	Neonates (0 – 28 days of age) only who had a HIV+ birth test; to be used only during the first four weeks of life prior to transition to RAL chewable tablets or LPV/r oral solution.	To only serve as a temporary bridge for the shortest time possible between RAL granules and LPV/r solid formulation	CLHIV failing a PI-based regimen
PEPFAR Preferred Formulation	40mg/10mg capsule	40mg/10mg sachet	100mg sachet	25mg (can be chewed, crushed or dispersed for administration)	DRV 75mg tablets (with RTV 25mg tablets)

Adult Antiretroviral Treatment Optimization

DTG-containing regimens are the preferred first-line antiretroviral treatment for all people living with HIV, including women of childbearing age, due to superior efficacy, more rapid viral suppression, improved tolerability, and higher threshold for resistance as compared with EFV-containing regimens.

The fixed dose combination of TLD is affordable for low- and middle-income countries and minimizes pill burden; it is the recommended antiretroviral treatment regimen for all adolescents and adults. Routine viral load monitoring in accordance with WHO recommendations is encouraged, but viral load testing is not a requirement for transitioning to optimal regimens.

Treatment Continuity and Case Management for Key Populations

The barriers to initiation on HIV treatment and treatment continuity, in particular stigma and discrimination, is even more challenging for key populations. Differentiated service delivery models are particularly important for initiating and maintaining key populations in continuous lifesaving treatment. Mainstream efforts for same-day initiation, the shift to TLD, task shifting, and improved case management, as well as more effective viral testing strategies, must be applied using differentiated models in programs where key populations receive treatment.

An integrated case management approach is vital for linking key populations from the community to public health systems to facilitate rapid antiretroviral treatment initiation. Comprehensive case management teams can help newly diagnosed or re-engaged antiretroviral treatment patients to establish long-term treatment adherence. Peer navigators who often come from the key population's communities can establish trusted relationships with patients and receive rigorous training on a wide range of HIV topics, including HIV care and treatment; local health care systems; social and legal systems; motivational interviewing; and stigma, discrimination, and violence reduction and prevention.

At the end of FY 2022, PEPFAR was supporting approximately 652,000 members of key populations groups with live-saving HIV treatment.

HIV Burden and Treatment Response

At the end of 2021, there were 38.4 million people living with HIV globally. As treatment programs are implemented across partner countries, people living with HIV can live longer and lead more productive lives. Globally, the number of people on HIV treatment and lives saved increased markedly from 2003 to 2019, largely due to the contributions of PEPFAR and the Global Fund, working closely with partner countries. In most 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 partnered with countries to refocus efforts on high-burden areas and started monitoring the epidemic at the community level, accelerating progress with sustainable results. From 2015 to present, enrollment increased even more rapidly, in a revenue-neutral manner, as programs increased efficiency and focused on the goal of bringing HIV under control. PEPFAR has developed and regularly issued guidance for program adaptations to support continuity of operations while protecting patients and health care workers in the setting of COVID-19.

The commitment to monitor treatment coverage saves lives and decreases transmission. PEPFAR-supported countries made significant progress in reaching the 2020 90-90-90 targets and continue to make progress towards achieving the 2025 95-95-95 targets. The implementation of evidence-based interventions has been a primary driver of the declines in new HIV infections and mortality rates. Ongoing success toward controlling the HIV/AIDS epidemic is dependent on continuing and accelerating this momentum. A lower proportion of individuals under age 25 know their HIV status, are on treatment, or are virally suppressed as compared with older adults.

One of the more important milestones toward bringing HIV under control 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.

Pediatric Treatment and Orphans and Vulnerable Children – Focusing the Program Toward Achieving an AIDS-Free Generation and Healthy Children

Pediatrics

Since 2010 there has been a dramatic decline in new pediatric infections, but over the last five years this decline has plateaued. Children who become HIV at birth or during the breastfeeding period are in critical need of

lifesaving HIV treatment. In 2021, 1.8 million children under age 15 were living with HIV/AIDS – nearly 90 percent of whom live in sub-Saharan Africa. Without antiretroviral treatment, 50 percent of children who acquired HIV perinatally will die before their second birthday, and 80 percent will die before their fifth birthday. In 2021, only 52 percent of children living with HIV had access to treatment. The majority of these children remain undiagnosed with HIV and therefore PEPFAR is focused on expanding our case finding efforts for children to improve identification of children living with HIV.

Saving the lives of children with HIV is not only the right thing to do; it is the smart thing. 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.

As of the end of September 2022, PEPFAR was supporting nearly 700,000 children and young adolescents (0 – 14 years of age) on lifesaving antiretroviral treatment. PEPFAR has also enabled more than 5.5 million babies to be born HIV-free to mothers living with HIV. The program has provided critical care and support for 7.2 million OVC and their caregivers so they can survive and thrive.

To strategically address gaps in preventing mother-to-child transmission and pediatrics, in FY 2022, PEPFAR initiated “Accelerating Progress in Pediatrics and Preventing Mother-to-Child Transmission (AP3)”-an effort in seven countries with the highest pediatric burden supported by PEPFAR (the Democratic Republic of the Congo, Mozambique, Nigeria, South Africa, Tanzania, Uganda, and Zambia). This six-pronged approach focuses on surge efforts for: (1) dedicated human resources for health; (2) strategic budget/expenditure reporting; (3) strengthened monitoring and evaluation efforts; (4) pediatric community-led monitoring; (5) socioeconomic support and case management; and (6) regular review meetings. These six prongs increase accountability and improve holistic care for children and pregnant and breastfeeding women. PEPFAR has worked directly with national

partners to promote rapid policy adoption and procurement of optimal pediatric antiretroviral treatment regimens, which will make it easier for children and families to stay on treatment and to achieve virologic suppression. PEPFAR has also expanded the reach of the orphans and vulnerable children program to ensure that all vulnerable children have access to case management and vital socio-economic assistance.

In FY 2022, PEPFAR's response to the orphans and vulnerable children program continued to evolve in response to changes in the epidemic. Though the absolute number of orphans due to AIDS has increased since the start of PEPFAR, the rate of orphaning has continued to decrease since 2010 with the expansion of prevention, testing, and treatment programs in PEPFAR countries (Figure 16). UNAIDS estimated 13.6 million orphans in 2003 at PEPFAR's inception, an estimated 18 million in 2012, and an estimated 14.9 million in 2021. Significant risks and vulnerabilities remain for children and adolescents as a result of HIV/AIDS. PEPFAR's orphans and vulnerable children program serves children in a range of adverse situations, including children who are living with HIV, living with caregivers who are living with HIV, orphaned, at risk of becoming infected, or a combination of these factors.

For the youngest age band (age 0-4 year), the risks of HIV infection and orphaning have diminished greatly due to the expansion of preventing mother-to-child transmission services and adult treatment. Remaining risks pertinent to orphan and vulnerable children programs include loss to follow-up of HIV exposed infants, identifying children living with HIV who remain undiagnosed, and suboptimal viral load suppression in children living with HIV.

The orphan and vulnerable children platform's wide network of staff and volunteers support preventing mother-to-child transmission, treatment continuity, and appropriate nutrition for infants and young children, and provide family services such as socioeconomic assistance. For first-time mothers, especially adolescent girls, the orphans and vulnerable children program case management services that link young mothers to assistance

are critical to ensuring that both parent and child remain healthy and AIDS-free.

PEPFAR's orphans and vulnerable children program partners are working to improve children's treatment outcomes by providing home visits and accompanying children to clinics, addressing the broader socioeconomic needs of families through interventions such as savings and internal lending groups, and linking them to government cash transfers where available. Orphans and vulnerable children programs are uniquely poised to address the myriad factors that put adolescents living with HIV-affected households at risk.

Violence Against Children Surveys in multiple PEPFAR countries show that forced and coerced sex among females can occur at very young ages. To prevent and protect girls from violence, PEPFAR has invested in prevention, detection, and response activities. These activities include child safeguarding trainings for civil society organizations, including faith-based partners, and drop-in center staff to help increase recognition of and monitoring for signs of violence.

Because adolescent girls in sub-Saharan Africa are disproportionately more likely than boys to acquire HIV, orphans and vulnerable children programs have also served as a platform for focused efforts such as DREAMS that provide an array of protective interventions (e.g., schooling, economic support, parenting, and gender-based violence services).

Tuberculosis/HIV Co-Infection

Implementation of the package of evidenced-based tuberculosis/HIV interventions is a crucial and high-impact investment of resources, and a priority for PEPFAR programming in areas with the greatest burden of tuberculosis/HIV co-infection. National tuberculosis programs have been significantly impacted by COVID-19 as staff as well as laboratory resources have been diverted to COVID-19, as evidenced by further underdiagnosis of tuberculosis among people living with HIV over the last three years.

Ending HIV-associated tuberculosis among people living with HIV is possible through a combination of widespread antiretroviral coverage, early and accurate identification and treatment of tuberculosis, tuberculosis preventive therapy, and effective infection control activities. The PEPFAR tuberculosis/HIV strategy is intended to reduce people living with HIV mortality and is based on four objectives:

- Intensified tuberculosis case-finding among people living with HIV: all people living with HIV must be screened for tuberculosis symptoms at every clinical encounter. Tuberculosis symptom screening has poor sensitivity and should ideally be augmented with other WHO-recommended screening tests like chest radiography or the C-reactive protein inflammatory marker blood test. The new WHO guidelines on tuberculosis screening recommend an updated approach to tuberculosis screening, and PEPFAR country teams should work with national tuberculosis and HIV programs to determine what can be done to update the screening algorithm to improve on current performance. To avert deaths among people living with HIV with advanced immune suppression, where timely diagnosis is of utmost importance, a point of care urine test (“LF-LAM test”) is recommended by WHO but is not widely used by countries due to constrained supply and cost of the test;
- Optimized tuberculosis/HIV care and treatment: all people living with HIV with tuberculosis symptoms referred promptly for diagnostic work-up and optimized antiretroviral therapy and tuberculosis treatment that is provided in a patient-centric “one stop” model of care;
- Full integration of tuberculosis/HIV clinical services tuberculosis prevention: tuberculosis prevention therapy for all eligible people living with HIV, including children and adolescents;
- Effective infection prevention and control activities;

Early detection and treatment are critical for good outcomes. Regular and high-quality tuberculosis screening of people living with HIV followed by prompt diagnostic testing with a molecular WHO-recommended Rapid

Diagnostic test and treatment are essential to detect and treat tuberculosis quickly and effectively.

Optimizing Treatment for Patients with Tuberculosis and HIV

PEPFAR teams are directed to ensure that all tuberculosis patients are tested for HIV, and that all tuberculosis patients with HIV are rapidly started on the appropriate tuberculosis treatment and antiretroviral therapy. Initiation of tuberculosis treatment should not delay antiretroviral therapy start. Patients should be treated in the same clinic for both tuberculosis and HIV to lessen waiting time, optimize their treatment regimens, streamline monitoring, and avoid confusion for both patients and providers.

Appropriate care of patients with tuberculosis and HIV supports adherence by minimizing the burdens placed on the patient. This can be best accomplished through a variety of collaborative and integrated models of tuberculosis/HIV care to provide antiretroviral therapy and tuberculosis treatment in the same clinic, as well as adherence support, including addressing barriers to treatment adherence, identifying and addressing food insecurity or transportation barriers or using electronic or mobile devices for additional assistance.

Patients with HIV and tuberculosis disease should never be made to visit different clinics for treatment; rather, they should be treated by a single provider in a single clinic. If patients are enrolled in a differentiated service delivery model, efforts should be made to align tuberculosis treatment or tuberculosis prevention therapy, when appropriate.

Tuberculosis Prevention

Tuberculosis prevention therapy can reduce incident tuberculosis among people living with HIV by up to 89 percent when combined with antiretroviral therapy and has been shown to independently reduce mortality. Scale-up of tuberculosis prevention therapy for all people living with HIV and eligible household contacts of people living with HIV with tuberculosis disease is an integral part of the clinical care package. PEPFAR

has successfully treated more than 11.3 million people living with HIV with tuberculosis prevention therapy since 2018. Broader awareness is integral to reduce stigma and discrimination around tuberculosis/HIV, increasing knowledge about benefits of tuberculosis prevention therapy among providers and patients, and creating demand for services. This can be done by engaging and educating providers, health care worker organizations, and civil society organizations including former tuberculosis patients, and organizing social marketing campaigns. Increasingly, PEPFAR programs have adopted the practice of ensuring that the course of tuberculosis prevention therapy is initiated within the first 12 months of antiretroviral therapy. This, in addition to concerted national campaigns on tuberculosis prevention therapy scaleup for people living with HIV and other vulnerable, eligible populations, have resulted in PEPFAR contributing 90 percent of all tuberculosis prevention therapy completions by 2021.

As PEPFAR has committed to fully scaling up tuberculosis prevention therapy since COP19, all PEPFAR-supported care and treatment programs are fully engaged in aggressive tuberculosis prevention therapy scale-up in their individual countries with timelines for 100 percent achievement during COP22. An assessment of cumulative tuberculosis prevention therapy coverage and remaining gaps should inform countries' plans to achieve tuberculosis prevention therapy saturation.

SECTION 3: Focusing Prevention for Impact

During PEPFAR's 20 years of programming, we have continuously strived to create opportunities for individuals and national governments to prevent as many new HIV infections as possible. This will be key to "turning off the tap" in our quest for control of HIV. As research has advanced and communities have informed program design, PEPFAR has focused our support for prevention interventions on those that yield the greatest level of impact. Biomedical interventions such as voluntary medical male circumcision and pre-exposure prophylaxis have been partnered with comprehensive packages like the DREAMS program to address behavioral, social, and biomedical factors that drive HIV acquisition.

In order to control HIV, we must address the underlying social and cultural issues that prevent people from accessing HIV prevention and treatment services, especially unequal protection of human rights and the presence of stigma and discrimination. 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. The following section focuses on PEPFAR's commitment to prevention for impact by adopting an approach of universal test and connect to ensure that those at most risk of acquiring HIV can protect themselves from infection.

To further reduce new HIV infections and sustain HIV control, it is critical to support countries to build sustainable prevention programs through a mix of service options, increased capacity of the health and monitoring system, and incentivizing financing (including innovative financing) for prevention. Complimenting the strides made in treatment services, HIV prevention has become a larger focus with over 1.5 million clients enrolled on pre-exposure prophylaxis (pre-exposure prophylaxis), 30 million voluntary medical male circumcisions performed, and 2.9 million adolescent girls and young women reached through the DREAMS (Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe) HIV prevention program in 2022.

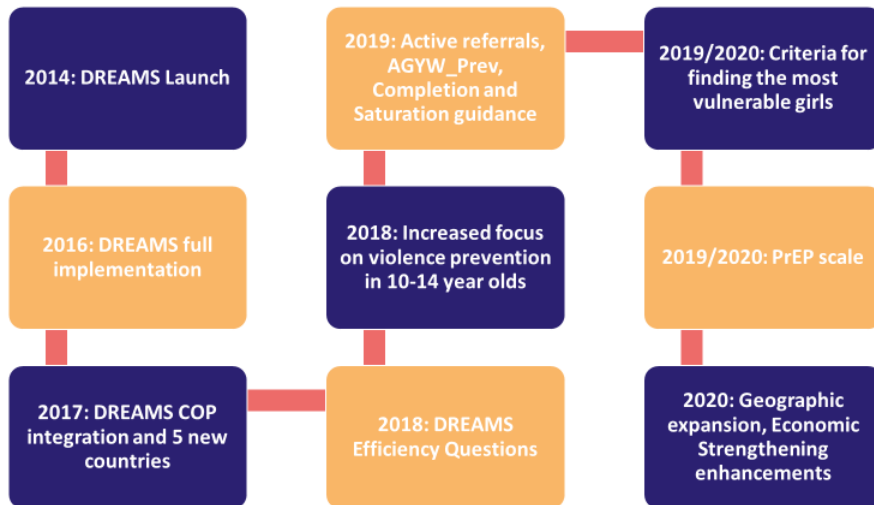
Prioritizing Prevention of New HIV Infections in Women, Adolescent Girls, and Children

PEPFAR has made remarkable progress in reaching adolescent girls and young women whose HIV risk has traditionally been overlooked or not properly addressed. PEPFAR's DREAMS Partnership, along with private sector partners, will continue to grow and evolve to ensure that adolescent girls and young women are provided an opportunity to be Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe.

Unequal gender norms, transactional sex, sexual violence, sexually transmitted infections, and early pregnancy continue to drive new HIV infections in DREAMS-supported countries. The DREAMS core package of interventions is a gender equity approach that goes beyond the health sector to address the structural drivers that directly and indirectly increase girls' HIV risk, including gender inequality, sexual violence, and a lack of access to education, and lack of economic independence.

Figure 16: DREAMS Core Package





PEPFAR program data helps us determine how many adolescent girls and young women we are reaching and their progress in completing the DREAMS package of interventions based on age and unique individual needs. In FY 2022 PEPFAR reached 2.9 million adolescent girls and young women, were reached with comprehensive prevention packages through DREAMS.

Access to pre-exposure prophylaxis continues to improve in DREAMS countries. When the DREAMS partnership began, no PEPFAR-supported country provided pre-exposure prophylaxis for adolescent girls and young women outside of research studies. Now pre-exposure prophylaxis is available to adolescent girls and young women in all DREAMS countries. Advocacy for expanding pre-exposure prophylaxis to reach more adolescent girls and young women continues, but PEPFAR has made incredible progress. In FY 2021, PEPFAR newly initiated over 1,400,000 people on pre-exposure prophylaxis, over 500,000 of whom were adolescent girls and young women between the ages of 15 and 24. Pre-exposure prophylaxis has been especially important during the COVID-19 pandemic, given reports of increases in factors associated with risk for HIV (e.g., gender-based violence).

The social issues highlighted by COVID-19 over the past two years are ones that DREAMS was already focusing on, including violence prevention and

economic strengthening. In most DREAMS countries, from a very young age adolescent girls and young women are at a disadvantage for learning the skills necessary to apply to well-paid jobs and participating in networks that support professional development. Adolescent girls and young women are often prevented from developing the financial knowledge and connections to be higher earning entrepreneurs. Given these challenges and the ongoing COVID-19 pandemic, PEPFAR has been pursuing enhanced economic strengthening programming.

DREAMS-supported countries selected evidence-based programs that have shown success in connecting adolescent girls and young women with concrete internship, entrepreneurship, and job opportunities. Additionally, economic strengthening activities in DREAMS are now tailored by age group, include improved financial literacy curricula, and market assessments. Country teams and DREAMS partners are also being encouraged to prioritize providing DREAMS beneficiaries PEPFAR-related employment opportunities, such as community health workers.

The meaningful and continuous inclusion of adolescent girls and young women in program planning, implementation, and course correction is crucial. Our interactions with DREAMS beneficiaries, mentors and ambassadors are essential to understanding how to better implement DREAMS. A strong DREAMS Ambassador program allows DREAMS beneficiaries to see themselves in future leadership positions and provides concrete opportunities for adolescent girls and young women to earn an income and reach other vulnerable adolescent girls and young women. DREAMS is leveraging the knowledge and leadership of DREAMS Ambassadors by employing them as district/regional-level DREAMS coordinators. These positions broaden the impact and reach of DREAMS programming while elevating highly capable young women leaders who often face systemic disadvantages in the labor market. DREAMS Ambassadors continue to instill in PEPFAR the mantra of “nothing about us without us.”

Private Sector Engagement

Private sector and philanthropic partners were central to the success of DREAMS by contributing their unique expertise and capabilities to strengthen and complement DREAMS programming. Leveraging private sector approaches such as human-centered design and consumer insights, as well as client-centric models of service delivery, have enabled PEPFAR to gain a stronger understanding of adolescent girls and young women and their needs.

Partnering with the private sector has also allowed for catalytic progress toward policy development and new innovations, as was the case with Gilead's pre-exposure prophylaxis donation, which enabled discussions with governments on pre-exposure prophylaxis policies and the expansion of pre-exposure prophylaxis among high-risk adolescent girls and young women.

Through the Bill & Melinda Gates Foundation, the private sector brings neutrality and independence in measuring DREAMS results through implementation science research and impact evaluation studies. This allowed for a rigorous and credible analysis of how DREAMS is making a difference in the lives of adolescent girls and young women.

Primary Prevention of Sexual Violence among 10-14 Year Old's

Vulnerability for HIV is linked to sexual violence and often begins when children are very young. Preventing sexual violence among 10–14-year-olds and responding to sexual violence among all children to ameliorate its negative consequences are fundamental approaches for preventing HIV.

Primary prevention of sexual violence accelerates progress toward these goals through several activities, including educating faith, traditional and other community leaders about sexual violence, as well as implementing evidence-based primary preventions in schools and communities through DREAMS and orphans and vulnerable children programming.

Preventing Infections in Women

Because women are uniquely vulnerable to HIV acquisition at different times in their lifecycles, PEPFAR programs must ensure that the most evidence-based interventions are available for them at the times when the intervention can provide the most impact.

Investments made to support women to remain HIV-negative have been a focus of PEPFAR since inception. As girls and young women continue to age, the continuum of prevention and treatment services must remain intact so that they can maintain their health – and that of their families over time.

Wherever possible we must strengthen the platforms where women seek care to offer enhanced services for them. Antenatal care platforms are where maternal retesting can not only be strengthened, but also utilized as an entry for screening adolescent girls and young women eligible for DREAMS and pre-exposure prophylaxis. We can also decrease stigma by linking multiple services across platforms with which women are comfortable, such as scaling up pre-exposure prophylaxis in an antenatal care setting and integrating HIV and family planning services.

Preventing Mother-to-Child Transmission

PEPFAR remains fully committed to working toward the elimination of new HIV infections among children and keeping their mothers alive.

PEPFAR supports an effective preventing mother-to-child transmission cascade of interventions – antenatal services, comprehensive HIV prevention packages, HIV testing, use of antiretroviral therapy for life; safe childbirth practices and appropriate breastfeeding; and infant HIV testing and other postnatal care services – that results in an HIV-free baby and a mother with a suppressed viral load. In 2022, PEPFAR continued to ensure that resources are targeted to high-burden areas to ensure strong linkages for pregnant women living with HIV to the continuum of care. Rates of antenatal care uptake differ greatly between communities and countries, and antenatal uptake is needed to provide preventing mother-to-child transmission services. To address these barriers, PEPFAR uses site-specific

data to ensure resources, including linking pregnant and breastfeeding women living with HIV to orphans and vulnerable children programs to support maternal health and infant follow-up, are focused in the highest burden areas with the greatest need to maximize the impact on babies and their mothers. The goal is to encourage antenatal attendance for all pregnant women and to offer HIV testing to all pregnant women in antenatal and during the breastfeeding period in our supported areas.

With PEPFAR support, a cumulative total of 5.5 million infant HIV infections were averted, allowing these infants to Start Free as we move toward the goal of eliminating the vertical transmission of HIV disease globally, we need to focus more on identifying the pregnant and breastfeeding women who are at the greatest risk of HIV acquisition and reaching them with prevention interventions. Given the heightened risk of HIV acquisition during pregnancy and breastfeeding, PEPFAR is increasing our efforts to prevent infections during this period by scaling up prevention education, optimizing repeat HIV testing protocols and uptake, and offering pre-exposure prophylaxis to those at-risk during pregnancy and lactation.

Pregnant and breastfeeding women have been shown to be at three to four times higher risk of incident HIV infections when compared with their nonpregnant counterparts, and as a result, pregnant and breastfeeding women are an important population to address with prevention services, especially pre-exposure prophylaxis. In addition to preventing incident infections in pregnant and breastfeeding women, pre-exposure prophylaxis can also prevent the vertical transmission of HIV that occur because of these new infections in pregnancy and breastfeeding.

As a part of this effort to reduce incident maternal infections in pregnant and breastfeeding women, PEPFAR programs are also increasing testing of sexual partners of women to identify serodiscordant couples and providing pre-exposure prophylaxis for the negative partner, and treatment for the partner living with HIV until viral suppression is achieved. For pregnant and breastfeeding women in the higher risk age groups (i.e., adolescent girls and young women) or geographies whose partners cannot be tested,

pre-exposure prophylaxis will be offered to prevent infection during this vulnerable period. Scaling up pre-exposure prophylaxis implementation for pregnant and breastfeeding women is a key prevention intervention.

Many mature preventing mother-to-child transmission programs now provide opt-out HIV testing to almost all pregnant women at their first antenatal clinic visit (ANC1) with rapid initiation of lifelong antiretroviral therapy; this has reduced vertical transmission rates at six weeks to below five percent in many countries. There were still, however, in 2021 160,000 new HIV infections in infants globally. According to a UNAIDS 2021 analysis, 92 percent of vertical infections were due to no (48 percent), or interrupted antiretroviral therapy coverage (22 percent) or incident maternal HIV infections (22 percent). PEPFAR is prioritizing additional interventions to reach women in this stage of life, such as an increased focus on scaling up viral load monitoring to intervene as early as possible when the viral load is not suppressed to avert potential infant infections and support maternal health. Retesting of high-risk women later in pregnancy and during the breastfeeding period will also allow the early initiation of pre-exposure prophylaxis for high risk pregnant and breastfeeding women who test negative, and the early detection of seroconversion with same-day treatment initiation in age groups and geographies with high rates of new infection.

PEPFAR has invested significantly in preventing mother-to-child transmission and provided extensive support for the use of lifelong antiretroviral therapy for all pregnant and breastfeeding women living with HIV, an approach that leads to the best outcomes for women and their partners and children. PEPFAR has worked to ensure that all supported countries are providing lifelong antiretroviral therapy to pregnant women living with HIV. Further, through co-leading the Start Free Stay Free AIDS Free initiative, PEPFAR and multilateral partners have made significant progress towards the 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's continued investment and collaboration with multilateral partners through the 2022 Global Alliance to End AIDS in Children by 2030 will solidify

gains in improving maternal health and ensure a healthy start for infants in high burden countries.

Finally, as countries reach epidemic control there will be a growing population of adults in treatment who are older than 50 years and throughout PEPFAR this proportion is growing quickly. In mature treatment programs, current data suggest that they may represent up to one third of the total treatment population. The proportion of older individuals varies from country to country but in several countries, it is near 30 percent. The needs of older adults are different from those of younger adults, and this group has a higher all-cause mortality and adult men in all age groups experience higher mortality (figure). Viral suppression is high in older adults leading to the inference that mortality is not related to undertreated HIV disease

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

Voluntary medical male circumcision reduces the risk of HIV acquisition for men by at least 60 percent and has benefits for female partners of circumcised men. PEPFAR has supported more than 30 million voluntary medical male circumcisions since the program's inception across priority countries in Eastern and Southern Africa. Recent technical and programmatic review by the WHO reaffirms continued support for voluntary medical male circumcision as a critical HIV prevention intervention. Data from the HIV modeling consortium using five independent models showed that voluntary medical male circumcision continues to be both cost effective and cost saving. In addition, recent analyses from the PEPFAR-supported PHIA have closely looked at both male circumcision status and HIV incidence, and these data are informing voluntary medical male circumcision prioritization to address geographic coverage gaps and maximize the impact of voluntary medical male circumcision by targeting men with the highest HIV incidence.

Since voluntary medical male circumcision is an elective procedure, safety is the primary consideration. Due to voluntary medical male circumcision

complications among young boys aged under 15 years, PEPFAR revised the target age group for accessing voluntary medical male circumcision to 15 years and above starting in mid-2020. Following this age guidance, PEPFAR has observed a gradual reduction in the most severe complications across all age groups.

In 2021, PEPFAR continued to explore approaches to deliver voluntary medical male circumcision safely to young boys. To that end, PEPFAR approved two countries to provide safe male circumcision to boys aged 13 and 14 years, using the ShangRing device with enhanced monitoring of complications. By the end of 2021, 570 boys were circumcised using the ShangRing method without complications. Enhanced ShangRing monitoring will continue during the current year and more countries may start Shang Ring services for boys aged 13 and 14 years.

Due to a rapidly growing youth population in the majority of the voluntary medical male circumcision priority countries, young boys continue to drive demand for voluntary medical male circumcision services. Countries reaching high levels of voluntary medical male circumcision coverage in older age groups will thus need to focus on circumcising boys aging into the lowest eligible age group 15-19 years to maintain high voluntary medical male circumcision coverage required to achieve and/or maintain bringing HIV under control.

Prevention of Infection in Key Populations

UNAIDS estimates that key populations are at significantly higher risk of HIV acquisition than other adults, and globally, key populations and their sexual partners account for most new HIV infections. Providing adequate coverage of prevention commodities and services to key populations is a critical component of PEPFAR's response to the HIV epidemic. Effective elements of the prevention toolkit, such as condoms/lubricants and other biomedical interventions (e.g., pre-exposure prophylaxis and medication-assisted treatment), should be easily accessible and consistently available to all key populations groups.

Prevention services may have greater impact, including earlier, more frequent health service engagement and improved continuity, when they are collaboratively designed, implemented, and monitored by members of the communities for which they are intended. Key populations contribute to improved service for members of their own communities because they: (1) share experiences of stigma, discrimination, and/or violence, (2) have knowledge about and access to supportive networks of other key populations who can inform outreach and service implementation, (3) are more likely to be comfortable discussing sensitive matters concerning the experiences of being part of socially marginalized (and in many instances, criminalized) groups, and therefore (4) can more easily establish trust with service recipients and gain their confidence. Key populations can provide recommendations on ways to improve programs, identify gaps in programming, and help develop solutions.

Pre-Exposure Prophylaxis

In September 2015, the WHO recommended that “oral pre-exposure prophylaxis should be offered as an additional prevention choice for people at substantial risk of HIV infection as part of combination HIV prevention.” Pre-exposure prophylaxis is a safe and highly effective biomedical prevention intervention for all those at higher risk of acquiring HIV. In FY 2022, PEPFAR initiated a remarkable 1,500,000 people on pre-exposure prophylaxis, over 525,000 of whom were members of a key population group. Community-based initiation and refill of pre-exposure prophylaxis, supported by peer or lay workers through community prevention case management, has been shown to lead to high uptake of and retention on pre-exposure prophylaxis. Programs must reduce barriers to access pre-exposure prophylaxis for the first time and enable access to multi-month dispensed pre-exposure prophylaxis across community-delivery locations. Notably, there are promising new tools on the horizon that prevention programs will benefit from, including innovations in long-acting pre-exposure prophylaxis. PEPFAR is committed to introducing and scaling new evidence-based product and service delivery innovations and taking a multisectoral approach across all parts of our government and community infrastructure to reduce new HIV acquisitions.

Condoms and Lubricants

Effective condom distribution, counseling, and promotion ensures condoms act as a barrier to sexual transmission for every sexual encounter for key populations. To achieve this, peers and providers must promote skills for key populations to use condoms and lubricants correctly and to build self-efficacy of key populations to negotiate with sexual partners. Free condoms and lubricants are distributed through sites where key populations are found, such as in drop-in centers, antiretroviral therapy, and pre-exposure prophylaxis sites, and hot spot venues including bars and other locations key populations, and their sexual partners may gather.

Medication-Assisted Treatment

People who inject drugs are among the groups most vulnerable to HIV infection. Medication-assisted treatment has been shown to be a highly effective treatment for opioid dependence, reducing injecting behaviors that put people who inject drugs at risk for HIV, preventing HIV transmission, and improving retention on HIV treatment. For medication-assisted treatment to have an impact on the overall HIV epidemic, services need to reach, provide prevention interventions for, test, treat, and retain as many people who inject drugs as possible. For countries that have recognized recent increases in HIV among people who inject drugs, or in specific subgroups such as young people who inject drugs, it is important to implement medication-assisted treatment service delivery models that are responsive to local conditions. In FY 2022, PEPFAR supported medication-assisted treatment for more than 27,000 individuals.

SECTION 4: Leveraging Partnerships for Sustainability

PEPFAR forges strategic public-private partnerships that support and complement our prevention, care, and treatment work addressing key gaps in innovative ways.

Since our founding, PEPFAR has built health infrastructure and strengthened capacity through an emphasis on sustainability to help with the HIV response. We have invested in laboratories and well-trained laboratory specialists critical to combatting HIV and to well-functioning health systems,

enabling clinicians and health workers to better diagnose and treat HIV, while also having the benefit of helping address a range of diseases and condition. To date, PEPFAR has trained over 300,000 health care workers to deliver HIV care which has also helped them deliver other health services. The platform that these investments have helped create have been vital for countries in their COVID-19 response.

No entity alone can control and ultimately end the HIV/AIDS pandemic. It requires all sectors and partners working together to provide financing, demonstrate political will, and carry out interventions both within and outside of the health sector. The following section focuses on how PEPFAR is leveraging our platform and partnerships for sustainability and to accelerate progress toward achieving epidemic control.

Driving a Sustainability Agenda with Country Partners

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 seeking to ensure 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 and programmatically sustainable. Ultimately the achievements of PEPFAR will be measured by our contribution to sustained HIV impact. 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 commit to making the systems investments required for sustainability through increased resources and mutual accountability for results. In addition, all partner countries must address any poor policies, governance, and service delivery environments that increase stigma and discrimination and create costly artificial barriers to reaching and sustaining epidemic control.

Operationalizing Sustainability

PEPFAR's core business processes embed sustainability principles and programming into our annual COPs. As part of the COP process, PEPFAR country teams assess the major policy and systemic gaps that inhibit

attainment of the 95-95-95 treatment goals and longer-term programmatic sustainability. Any barriers that are identified are analyzed and distilled in the Planning Activities for System Investments Tool (PASIT), which then enables teams to program so that they are better positioned to overcome those barriers.

PASIT compels its users to consider future or steady state goals as they engage in present day budgeting and programming. This enables the country team to be more purposeful and accountable with their systems investments, setting annual system targets and benchmarks that target barriers to achieving sustainable systems and align with the vision and priorities of building systems as defined by the partner country. For example, a team may diagnose weaknesses in a laboratory system that will require the development of new labs, equipment purchases, new supply chains, and capacity building to operate the labs. The latest PASIT format allows for greater recognition of the system barriers, aligned to the SID scores, enabling programming of activities that are strategic, specific, measurable, attainable, and time bound. This ensures that PEPFAR investments are intentionally supporting the efficiency and functionality of health systems in a coordinated and sequenced manner.

With the natural lag between science and implementation, the PASIT also supports efforts to ensure that advancements in science and preferred policies are quickly adopted and completely implemented. Investments captured in the PASIT, and the planning and approval process facilitates rapid identification and adoption of policies and programming to speed their implementation.

The Sustainability Index and Dashboard and Responsibility Matrix Tools – Providing a Road Map to Transfer Responsibility

The PASIT also helps operationalize the Sustainability Index and Dashboard. For PEPFAR, sustainability of the HIV response means that a country has the enabling environment, services, systems, and resources required to control the HIV epidemic effectively and efficiently.

The Sustainability Index and Dashboard is a measurement tool that provides a framework and periodic snapshot of the elements central to sustainable epidemic control. The biennial requirement that teams complete the Sustainability Index and Dashboard enables PEPFAR to objectively track progress across many critical sustainability goals.

The Sustainability Index and Dashboard includes 17 elements organized under the following overarching domains:

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

The specific elements, indicators, and milestones included in the Sustainability Index and Dashboard measure key areas including, for example, to what extent partner countries mobilize domestic financial resources for their HIV response and allocate those resources strategically and efficiently; whether they have an adequate laboratory system that provides accurate and timely results to patients; and if they ensure a secure, reliable, and adequate supply and distribution system for drugs and other commodities needed to achieve sustainable epidemic control. During the last cycle, which was completed in 2021, five questions were added to enhance the market openness and private sector elements. The phrase “All epidemiologically significant” has also been incorporated before mentions of key population groups in Sustainability Index and Dashboard questions to ensure countries only score positively on these questions if all epidemiologically significant key populations are included.

The most recent Sustainability Index and Dashboard review was completed by PEPFAR teams in collaboration with key stakeholders between June and October 2021. Country Sustainability Index and Dashboards are publicly available and have proven to provide an important foundational base of information for governments, other donors, and civil society that helps to determine where efforts and/or funding are most needed to reach sustainable epidemic control.

The last cycle showed that aggregate Sustainability Index and Dashboard scores for most countries' programs continue to improve, although in many places, important gaps remain. Average scores improved across 14 of the 15 elements that were in place in both the 2017 and 2019 Sustainability Index and Dashboard cycles, although many showed very modest increases. One concerning sign is that across a variety of countries, the degree of cooperation between civil society groups and governments has deteriorated. A vibrant civil society remains necessary to ensure that appropriate investments are made in activities to sustain epidemic control.

The Sustainability Index and Dashboard was completed during sustainability workshops co-chaired by PEPFAR and UNAIDS. Participating stakeholders also completed the Responsibility Matrix tool, which was introduced in 2019. These tools are intended to aid with the categorization of spending, and chart whether PEPFAR, the Global Fund, or domestic entities have responsibility for specific functional activities. Internal assessments of the completed responsibility matrices place less emphasis on what specific dollar amounts are spent by which funders and instead focus on whether partners have fulfilled the responsibilities to which they have committed. For example, this would enable users to appropriately credit governments that chose to integrate a function or activity into existing structures instead of budgeting a specific amount for an activity.

The completed Sustainability Index and Dashboard tools and responsibility matrices can inform the transformation of the PEPFAR program over time from being primarily the responsibility of donors to partner governments. Along with completed Sustainability Index and Dashboard tools, completed Responsibility Matrices are available on PEPFAR's public web pages (<https://www.state.gov/where-we-work-pepfar/>).

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, the impact of each dollar must be maximized by ensuring that investments are strategic,

effective, and cost-efficient. To ensure that necessary financing is available, 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 HIV financing;
- Engaging ministries of finance to ensure comprehensive HIV programs are developed and funded in national budgets, with increasing proportions funded by host-country governments over time;
- Working with partner governments and civil society to develop key systems, including secure procurement and supply chains and financial management systems, to maintain services and sustain epidemic control;
- Ensuring that the private sector has space to thrive and take on elements of the HIV response;

In FY 2022, the PEPFAR program continued to embed sustainability and domestic financing elements in our work. This began with the goal of having 70 percent of PEPFAR resources channeled through indigenous organizations by the end of FY 2020. These organizations are better attuned to the needs of the client and can provide a bridge from international efforts to homegrown capabilities, while international donors are still actively engaged in the HIV response and can respond if local efforts have difficulties getting started.

PEPFAR has also started to shift our focus away from tracking resources by spending category and toward tracking spending by intervention and activity. To achieve and maintain epidemic control, specific activities must be funded and executed. Without a detailed accounting of these activities, mere commitments of funding to program areas do not mean critical services will continue.

Related to this, PEPFAR has also worked to integrate Activity-Based Costing and Management (ABC/M) techniques into our budgeting and management processes. To date, PEPFAR has led an international dialogue to generate a

consensus approach and methodology for applying ABC/M to health systems and worked through FY 2021 to launch ABC/M in multiple countries and support other organizations like the Global Fund and UNAIDS to implement the agreed-upon approach in additional countries.

Another area of progress during the past year is PEPFAR's deepening engagement with the Global Fund on matters of sustainable financing. Together, through the Resource Alignment collaboration, we have comprehensively mapped our two financial systems and agreed to a new methodology to characterize domestic investments that support HIV. For COP 22 development, PEPFAR and the Global Fund were able to provide a complete picture of investments to ensure complementarity of action. In addition, Global Fund portfolio managers were involved in this year's COP planning from the outset to ensure that program changes were coherent and consistent.

PEPFAR and the Global Fund have also fully harmonized our respective expenditure data, which now give even further insight into how programming evolves after initial budgeting. An interorganizational economic working group meets quarterly and has focused on accomplishing a number of critical goals, which include the further alignment of resources and expenditures ensuring that differentiated service delivery is fully implemented, and better coordinating work with finance ministries. Our two organizations have also shared the progress and benefits of these efforts with other key stakeholders, including UNAIDS, WHO, and UNITAID.

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 allows a country to respond quickly to outbreaks and contain them before they get out of hand. Access to data builds ownership, enhances problem solving, promotes accountability, and allows for real-time decision-making that get a country to epidemic control.

The Data Collaboratives for Local Impact (DCLI) partnership between PEPFAR and the Millennium Challenge Corporation empowers individuals and communities to use data to improve health, education, gender equality, and economic opportunity while building the foundation for sustained and sustainable control of the HIV epidemic.

Africa's growing youth population represents not just a demographic challenge to achieving and sustaining control of HIV/AIDS, but also a source of energy and know-how in harnessing the data revolution to end the HIV epidemic. PEPFAR, the Global Partnership for Sustainable Development Data (GPSDD), and Sustainable Development Solutions Network – Youth (SDSN-Y) have joined forces to launch MY DATA (Mobilizing Youth on Data for Action and Transformation in Africa). MY DATA is an informal network for PEPFAR's partners and like-minded organizations to share best practices and develop new partnerships for inspiring young people as data champions.

Engaging Partner Governments and Civil Society

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 ultimately can be financed by a host country's resources and managed with its own technical capability. PEPFAR emphasizes that partnerships should be informally embedded in all aspects of program development and execution. 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 host-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 to monitoring, as it is a key to the success and sustainability of PEPFAR and the global effort to combat HIV. Civil society

has been a leading force in the response to HIV 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.

Quarterly performance reviews are similarly shared with in-country stakeholders, including governments and civil society at the national and local levels. We have developed the PEPFAR Oversight and Accountability Response Team (POART) process, which is a quarterly review of progress to identify weaknesses and areas that require midcourse adjustments.

In 2022, PEPFAR continued to invest in community-led monitoring as a critical way to listen to community voices in assessment of program quality and design of person-centered services, whereby service beneficiaries, through local, independent civil society organizations, formally and routinely monitor quality and accessibility of HIV services and the patient-provider experience at the site level. Going forward, PEPFAR will continue to expect all Operating Units to collaborate with civil society organizations in maintaining community-led monitoring activities.

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.

Engaging Faith-Based, Locally Based, and Minority Partners

Faith-Based Organizations and Other Partners

PEPFAR's success has been built in partnership with community, including faith-based organizations and traditional communities. Since 2003, faith-based organizations have been included among PEPFAR's essential partners and remain key partners to accelerate and sustain control of HIV. To find persons who do not routinely intersect with medical systems (e.g.,

boys, men, nonpregnant women, adolescents), we must work with communities to help find them.

In most countries where PEPFAR operates, 60–75 percent of the population regularly attends some form of religious services and/or participates in religious community. These communities of faith are deeply embedded regionally, with national structures, and often have unique institutional capacity, durable relationships of trust, and ready access to communities. Given the cost-effectiveness of decentralized services, PEPFAR supported the scale-up and replication in 2021 - 2022 of data-driven models such as Faith-Engaged Community Posts. This model offers decentralized HIV service delivery across the HIV prevention and care continuum for men, women, youth, and children, with sustained HIV positivity and linkage rates that compare or exceed facility-based services. Moreover, throughout the COVID-19 pandemic, this model maintained the safe delivery of services which contributed to the decongestion of health care facilities.

At this juncture of the epidemic, when finding the healthy clients and supporting their continuity in care are particularly critical to bringing HIV under control, PEPFAR must seek to expand our outreach to all partners who can help in this endeavor, including faith-based organization partners, faith-based health providers, faith communities, and traditional partners -- with the aim of leveraging their influence and compassion, for impact.

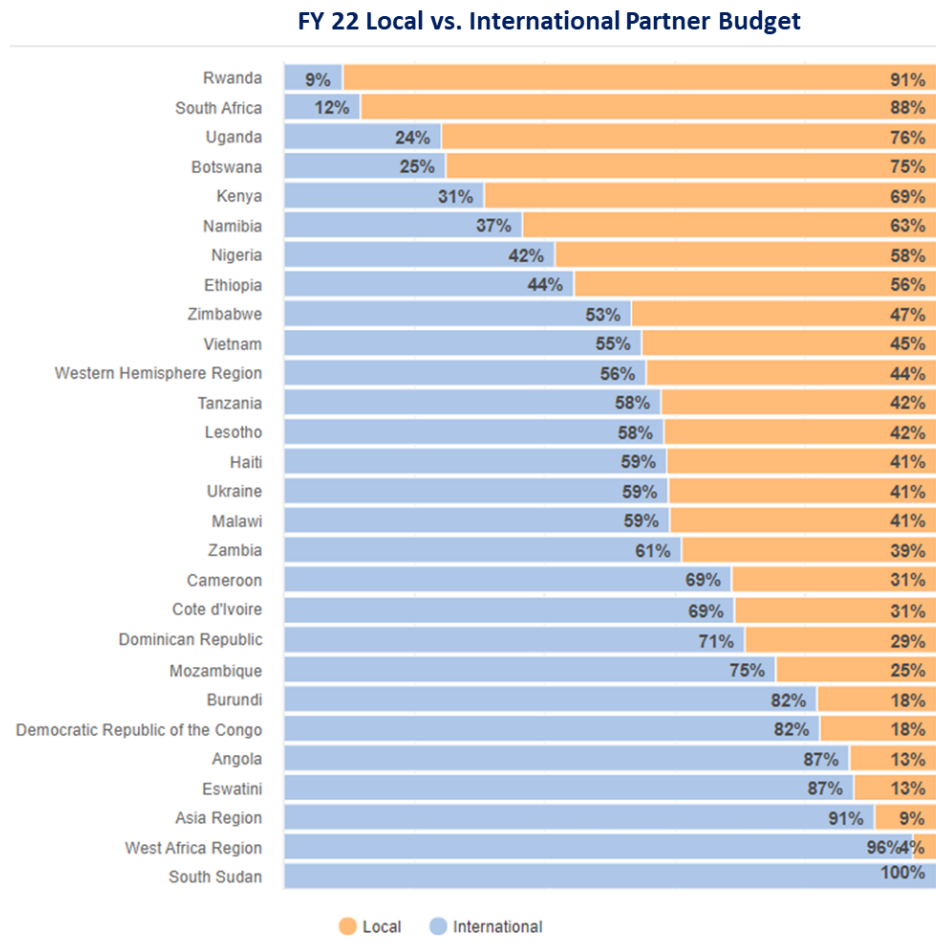
Furthermore, PEPFAR's collaborative engagement with trusted FBO partners can catalyze greatly accelerated progress in addressing persistent structural and systems challenges. For example, the Vatican convened six High-Level Dialogues from 2016 to 2022, in coordination with PEPFAR, WHO, EGPAF, UNAIDS, the Stop TB Partnership, and faith-based organizations, to address the persistent challenges facing children living with HIV and those co-infected with tuberculosis, and to reduce morbidity and mortality among these highly vulnerable group. These Dialogues resulted in the adoption of the Rome Paediatric HIV & Tuberculosis Action Plan, a broad set of commitments across the fields of pediatric HIV and tuberculosis testing and treatment, as well as treatment for breastfeeding and pregnant women with

HIV and TB. In turn, this Rome Action Plan has led to unprecedented collaboration among pharmaceutical and diagnostics companies, regulators, donors and other key stakeholders, and has prompted several positive developments in research and development, regulatory issues, funding and pricing. The partnership has set a new standard of what is achievable when stakeholders with shared values work collaboratively. For example, the 2022 High-Level Dialogue showed that the timeline to develop the new pediatric dose of Dolutegravir had been shortened by more than two years—becoming the fastest transition from adult to pediatric formulation ever approved by regulators.

Locally Based Partners

As part of the planning process, PEPFAR recognized that to sustain control of the epidemic, it is critical that the full range of HIV prevention and treatment services are owned and operated by local institutions, governments, and community-based and led organizations. In addition, PEPFAR outlined our intent to establish sufficient capacity, capability, and durability of local partners to ensure successful, long-term, local partner engagement and impact.

Figure 17: FY 2022 COP Funding Allocation by Funding Agency and Operating Unit



United States Minority Serving Institutions

To sustain PEPFAR's gains on the African continent, provide life-saving treatment, and enhance community linkages to quality person-centered care for those who need it most, PEPFAR leverages the expertise of U.S. Historical Black College and University (HBCU) affiliated medical schools in its HIV response under the HBCU Global Health (GH) Consortium, which is funded by PEPFAR through the Health Resources and Services Administration (HRSA). Established in 2017, this critical partnership addresses the social determinants that lead to health inequalities and impact the care and health outcomes of patients in the Zambian healthcare system. The HBCU Global Health Consortium brings the lessons learned from the HBCUs' HIV work in the United States to Zambia and works in

partnership with the Zambia Ministry of Health to help end the HIV/AIDS epidemic.

Historical Black College and University Global Health Consortium Members

The HBCU Global Health Consortium has a wealth of experience and expertise conducting a diverse range of HIV/AIDS projects, particularly through activities with minority populations in the United States, as well as in African countries disproportionately impacted by HIV/AIDS. The HBCU Global Health Consortium is a partnership of four HBCUs:

- Charles R. Drew University of Medicine and Science
- Meharry Medical College
- Howard University College of Medicine
- Morehouse School of Medicine

All the HBCUs use a differentiated services delivery model in their approach to support patients in Zambia along with other PEPFAR partners.

Leveraging HBCU Expertise to End Africa's HIV/AIDS Epidemic

Each of the four HBCU partner medical schools bring specific expertise to implementation and contribute to the goal of ending the global HIV/AIDS epidemic.

- Howard University College of Medicine's work utilizes increased touch points with patients and efficiencies in clinic flow and other aspects of care to provide a care experience that helps to prevent treatment interruption;
- Charles Drew University of Medicine and Science's work focuses on adolescent girls and young women as a priority population given their high risk of HIV infection and ensures that services are tailored for effective prevention and care needs;
- The Morehouse School of Medicine is implementing an innovative telehealth program within Lusaka District's four First Level Hospitals (FLH). The telemedicine activity includes 13 sites: the four first level hospitals along with the University Teaching Hospital, and eight down-referral sites at satellite locations of the four first level hospitals. The goal of the Zambian telemedicine model is to bring health care

delivery directly to the patient in the community. This will reduce the burden on the patient, decongest the hospitals, and help with the COVID-19 public health emergency response;

- The Meharry Medical College has supported the Ministry of Health to develop a “One-Stop-Shop” DSD program within the maternal child health unit at four FHLs in Lusaka. The design of the maternal child health differentiated service delivery model encourages family-centered care to identify and support HIV positive mothers and their babies by testing and tracking HIV exposed infants, as well as provide immediate supportive services for infants that are identified as HIV positive. This model delivers comprehensive, wrap-around services for moms and babies that recognizes their individual needs and provides peer and community support including HIV treatment;

Historical Black College and University Global Health Consortium Expansion

The HBCU Global Health Consortium is developing a program in Malawi that will build on the successful U.S.-based HBCU programs that train youth to enter the health field as community health workers. In collaboration with the Malawi Ministry of Health, a similar program is being designed for the Malawi context. This program will provide adolescent girls and young women who have participated in the DREAMS partnership with training that will lead to employment opportunities and increase the number of community health workers available to provide critical and essential HIV/AIDS services in Malawi.

It is through partnerships with non-U.S. Government partners such as HBCUs that PEPFAR is accelerating its HIV response in Africa to achieve epidemic control and strengthen global health security. PEPFAR’s health strengthening investments made through the HBCU Global Health Consortium project have also bolstered Africa’s capacity to significantly strengthen the infrastructure and capacity of health systems to prevent, detect, and respond to a diversity of other urgent health threats, such as tuberculosis, H1N1, Ebola, cholera—and now, COVID-19.

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

PEPFAR places great value on engagement with multilateral institutions to ensure that through the collective actions of member states we can achieve maximum efficiency of our resources and maximum impact in our response to the global HIV/AIDS epidemic.

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 and 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, tuberculosis, and malaria while building resilient and sustainable systems for health, inherently strengthening country capacity to detect and respond to acute outbreaks and disease threats. Programs delivered with Global Fund dollars contribute to enhancing global health security and protecting America's borders.

The United States has been the leader in financial and policy contributions to the Global Fund since the Global Fund's inception in 2002 and is its largest single donor and technical resource for supporting program delivery at the country level. The United States is a permanent member of the Global Fund Board of Directors and has a formal role on each of the three board subcommittees.

The U.S. investment in the Global Fund bolsters U.S. bilateral program results including that of PEPFAR, the President's Malaria Initiative, and U.S. efforts to combat tuberculosis globally; expands the geographic reach of the U.S. global health response and investment; promotes sustainable country-owned responses to the three diseases; and attracts continued investments from other donors to the Global Fund. Since the beginning of our collective global response to the three diseases, it has been evident that no one country nor institution can accomplish the mission of controlling HIV, malaria, and tuberculosis alone. This goal can be achieved only through the complementary strategies set by the leading institutions in the global health space, including PEPFAR, PMI, UNAIDS, WHO, Malaria No More, the Stop TB Partnership, and the Global Fund, among others.

As a financing institution, the Global Fund's operational model does not include an in-country presence. PEPFAR's bilateral programming is a strong partner to the Global Fund, providing in-country information 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 Secretariat is fostered in USAID's tuberculosis programming.

UNAIDS

UNAIDS is a critical leader in driving a comprehensive international response to fight HIV/AIDS. UNAIDS is a unique and innovative partnership of 11 U.N. agencies that draws on the comparative advantages of each for coordinated and targeted action to specific challenges of the HIV/AIDS epidemic. It is the only United Nations entity with civil society represented on its governing body, the Programme Coordinating Board.

The United States plays a critical and active role in the governance and oversight of UNAIDS through its participation as a member state in the biannual UNAIDS Programme Coordinating Board meetings. In this forum, the United States promotes evidence-based policies and strategies that ensure an effective global response to HIV/AIDS, including the provision of comprehensive HIV prevention, care, and treatment services that are free

from stigma and discrimination. The United States places a special emphasis on women and girl-centered approaches, country ownership, accountability, and the efficient use of resources for an effective and synergistic global HIV/AIDS response.

The Global AIDS Strategy 2022-2026 is UNAIDS' policy framework, its political commitment to eradicate HIV/AIDS complements, and helps inform PEPFAR and programmatic efforts of the Global Fund. Through PEPFAR, the U.S. government supports and advances the UNAIDS 95-95-95 goals. Based on evidence, the Global AIDS Strategy calls for "transformative actions to address inequalities." The strategy captures the urgency of the current inflection point of the global HIV/AIDS epidemic focused squarely on sub-populations who are at heightened HIV risk and not simply aggregated national or global results. The focus on science and implementing interventions with a known positive effect are important highlights in the forward leaning strategy that advocates for outdated and ineffective interventions to be stopped and replaced with those that effectively reach key populations, adolescent girls and young women, children, and men most at risk.

UNAIDS advocacy and policy support serves a critical role helping countries to plan for and provide their own resources toward sustainability in the HIV response. This effort has resulted in 11 countries funding 50 percent of their own national HIV/AIDS responses, getting us closer to the goal of sustainability and country-led responses.

UNAIDS serves as an invaluable resource for HIV data, including for PEPFAR programming. UNAIDS works with countries on results monitoring and reporting to help track progress on defined milestones and targets, informing priorities and supporting data-driven and targeted program implementation. UNAIDS also provides annual national and subnational estimates of the number of people living with HIV, new infections, and mortality – these estimates help inform PEPFAR programs and are used alongside PEPFAR programmatic and survey data to assess progress toward

ending HIV/AIDS as a public health threat and achieving global control of the epidemic.

The WHO is the normative body for developing guidelines for HIV prevention and treatment; UNAIDS is a key partner in operationalizing these guidelines by helping countries adopt them into their own HIV programs. WHO guidelines underlie PEPFAR's COPs as they relate to testing, treatment, and retention targets.

Targeted Private Sector Engagement for Impact

Partnerships are the cornerstone of PEPFAR's success. All sectors must work together – on financing, on demonstrating advocacy and political will, on delivering essential services – to end HIV.

Partnerships with the private sector play a critical role in ending the HIV/AIDS epidemic, and PEPFAR strategically focuses our public-private partnerships on increasing programmatic impact and efficiency. PEPFAR's public-private partnership strategy includes finding opportunities where the private sector can complement PEPFAR goals and priorities by leveraging private sector approaches, distribution networks, marketing expertise, innovation, and technology 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 implement our programs most effectively and efficiently.

In 2022, PEPFAR implemented and sustained several global public-private partnerships. These partnerships demonstrate PEPFAR's continued commitment to achieving epidemic control among children, adolescent girls and young women, and men. Some of these partnerships are highlighted below.

Engaging Men in New and Innovative Ways to Break the Cycle of Infection ***MedStar Coalition***

The MenStar Coalition, launched in 2018, is a global public-private partnership designed to reach an additional one million men with HIV treatment and support more than 90 percent of men to be virally suppressed, to effectively interrupt HIV transmission.

The MenStar Coalition brings together the HIV service delivery capacities of the public sector with the consumer-oriented marketing acumen of the private sector to optimize efforts to reach men with HIV testing and treatment services. The MenStar Coalition takes a coordinated, people-centered approach to identify insights and underlying barriers to men testing, linkage to HIV treatment, and achievement of viral suppression. Powered by these insights, the MenStar Coalition has developed and refined innovative demand creation and supply side strategies to engage men and differentiate treatment services for men.

MenStar's goals are being achieved through multiple approaches: quantitative and qualitative research to better understand and adapt services to men's needs, targeted demand creation using consumer marketing approaches, innovations such as HIV self-testing, and improvements to the service delivery experience. To further improve initiation and continuity of HIV treatment programs, PEPFAR has recommended strengthening the service delivery experience to be more convenient and welcoming to men, through interventions such as shorter wait times; fewer appointments; extended hours; male-only spaces; enhanced focus on confidentiality; and empathetic, well-trained, well-supported providers.

Furthermore, the partnership is applying insights gleaned from the private sector on how to communicate to men the functional and emotional benefits of this new health care model, as well as the availability of better performing drugs. The partnership is using the private sector insights to develop a rebranding campaign to communicate with men in a way that demonstrates understanding of their needs. The partnership will also help ensure essential HIV commodities and services are available to meet increased consumer demand.

In the last year, the MenStar Coalition has managed to surpass its goal of putting an additional one million men on treatment and achieving over 90 percent viral suppression in adult men. PEPFAR countries continue to scale-up and leverage the unique MenStar approach to reach men with HIV testing and services utilizing consumer marketing principles and expertise.

Flip the Script

What a tremendous difference it makes to people living with HIV to know their medication not only protects their own life, but also those of their partners and children. The powerful public health advantage of communicating this benefit is extraordinary: when people are motivated to take their treatment every day, they achieve and retain an “undetectable” status, reducing new infections and helping achieve critical UNAIDS goals. For these reasons, PEPFAR is investing in better treatment literacy, in partnership with the Bill and Melinda Gates Foundation and Johnson & Johnson we have developed the “I CAN Campaign.” This campaign not only provides critical information about treatment preventing transmission, but it does also so in a way that speaks directly to the hopes and dreams of people living with HIV.

Delivering for Adolescent Girls and Young Women

DREAMS: Determined, Resilient, Empowered, AIDS-Free, Mentored, Safe: A Public-Private Partnership

Through collaboration with the private sector, PEPFAR is leading the ambitious DREAMS Partnership to help girls develop into Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe women with the goal of reducing new HIV infections among adolescent girls and young women in the highest HIV-burdened geographic areas of 15 countries. The multisectoral DREAMS interventions go beyond the health sector to address the structural drivers that directly and indirectly increase girls’ HIV risk, including poverty, gender inequality, sexual violence, and a lack of education.

Since 2015, new HIV diagnoses among adolescent girls and young women have declined in all geographic areas implementing DREAMS. Of these areas, 96 percent have had a decline of over 25 percent and the majority (62 percent) have shown a decline of over 40 percent.

Private Sector Engagement

Private sector and philanthropic partners were central to the success of DREAMS by contributing their unique expertise and capabilities to strengthen and complement DREAMS programming. The Bill & Melinda Gates Foundation conducted an impact evaluation and implementation science research to measure the results of DREAMS and the difference it is making in the lives of adolescent girls and young women. Girl Effect leveraged its expertise in brand creation, media, and communications to develop a youth brand that reached Malawian youth with key messages on gender norms, equality, and friendship between girls and boys. Gilead Sciences provided generic pre-exposure prophylaxis drugs to meet the rising demand among adolescent girls and young women in DREAMS districts. Johnson & Johnson supported the development of DREAMS Ambassadors and amplified the voices of adolescent girls and young women through support of a peer-to-peer model program and conducted market segmentation analytics to better understand the behaviors of adolescent girls and young women to support programmatic design that is responsive to the most urgent needs of adolescent girls and young women. Lastly, ViiV Healthcare was instrumental in building the capacity of community-based organizations working on adolescent girls and young women programming.

Additional private sector engagement opportunities within DREAMS were implemented this year at the country-specific level, particularly around increasing the economic empowerment of young women in DREAMS countries. Collaborations with partners such as the Association of Supply Chain Management and Essilor continue to be leveraged to increase income-generating opportunities for young women through the DREAMS program.

Go Further Partnership

In 2020, an estimated 110,000 new cervical cancer cases and 70,000 cervical cancer deaths were reported in Sub-Saharan Africa. Women living with HIV are six times more likely to develop persistent precancerous lesions and progress to cervical cancer, often with more aggressive forms and with higher mortality. Cervical cancer is preventable through HPV immunization prior to HPV infection and screening and treatment of precancerous lesions. Cervical cancer screening of women living with HIV should be a routine element of HIV care in sub-Saharan Africa in high HIV-1/HPV coinfection areas to prevent mortality from this infection.

In 2018, PEPFAR announced a bold shift in our programming for cervical cancer screening and treatment through the formation of the Go Further public-private-partnership. Go Further is an innovative public-private partnership between PEPFAR, the George W. Bush Institute (Bush Institute), UNAIDS, Merck, and Roche. For maximum impact, Go Further focuses on reaching WLHIV in countries with among the highest HIV prevalence and cervical cancer incidence rates in the world. The partnership aims to reduce new cervical cancer cases by 95 percent among the estimated 7.1 million WLHIV who live in the 12-target high-burden African countries: Botswana, Eswatini, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Tanzania, Uganda, Zambia, and Zimbabwe. The Go Further strategy builds on over seven years of collaboration between PEPFAR and the Bush Institute and evolves the partnership to save more lives. This strategy creates a pathway to ending cervical cancer in women living with HIV in sub-Saharan Africa.

On the margins of the 2019 United Nations General Assembly, the Go Further partnership was launched and had reached more than a half-million WLHIV with cervical cancer screening and treated thousands of women for preinvasive cancerous lesions in its first year. As of FY 2022, PEPFAR has supported over 5.7 million screenings of which approximately 4.5 million were first time screens. Furthermore, precancerous lesion treatment for women living with HIV has steadily increased since FY 2018, reaching a high of 87 percent in FY 2022.

Optimizing Access to HIV Diagnosis in Children

Partnering to Save Children

Children under age 15 have inadequate access to HIV diagnosis and treatment; while there has been a dramatic decline in new pediatric infections, there are still millions of children who are in critical need of lifesaving treatment. The global community has made great progress in improving access to HIV testing and treatment services for adults; however, more than 110,000 children continue to die each year from AIDS-related causes and more than 15,000 children are newly infected each month.

To address this challenge, PEPFAR joined the Holy See and UNAIDS to convene a series of High-Level Dialogues with leaders of major diagnostic and pharmaceutical companies, multilateral organizations, governments, regulators, faith-based organizations, and others who are directly engaged in providing services to children and adolescents living with and vulnerable to HIV and tuberculosis. These Dialogues resulted in the adoption of the Rome Paediatric HIV & Tuberculosis Action Plan, a broad set of commitments across the fields of pediatric HIV and tuberculosis testing and treatment, as well as treatment for breastfeeding and pregnant women with HIV and tuberculosis. In turn, this Rome Action Plan has led to unprecedented collaboration among pharmaceutical and diagnostics companies, regulators, donors and others key stakeholders, and has prompted several positive developments in research and development, regulatory issues, funding and pricing.

The generous support from pharmaceutical and diagnostic manufacturers is critical to expanding access to lifesaving HIV therapy for children in the developing world. Specifically, these companies committed to developing and gaining regulatory approval for specific lifesaving drugs and diagnostic tools, including distributing pediatric formulations in select countries. These efforts will be instrumental toward the goal of reaching 95-95-95 for children living with HIV by 2025. The rapid development, approval, and introduction of Dolutegravir 10 mg dispersible, scored tablets (pDTG), a game changer for treatment of children under 20 kilograms, is a prime

example of an extremely successful public-private partnership that evolved from these High-level dialogues.

Dedication from all sectors – governments, donors, private sector, pharmaceutical, and faith-based and other community partners – is critically important for the PEPFAR program to succeed in reaching children in need with safe, effective, and affordable HIV testing and treatment before they get sick. This partnership has set a new standard of what is achievable when stakeholders with shared values work collaboratively

Finding Efficiencies in PEPFAR Programs

Labs for Life and Infection Prevention and Control Public-Private Partnership

PEPFAR, the CDC, and Becton Dickinson have had a longstanding public-private partnership (Labs for Life) focused on laboratory systems strengthening toward achieving the UNAIDS 90-90-90 targets. Through activities such as continuous quality improvement (CQI), accreditation to International Organization for Standardization (ISO) 15189 standards, and implementation of efficient sample referral networks, the partnership has demonstrated continued success and progress toward sustainable, quality assured, and timely HIV diagnosis and treatment monitoring services for people living with HIV in high-burden countries.

In its final year, the partnership is transitioning its implementation in Rwanda, Haiti, Ethiopia, India, Kenya, and Uganda, focused on providing continuous quality improvement, laboratory human resources strengthening, tuberculosis prevention, and specimen referral system strengthening.

PEPFAR and Beckton Dickinson also partnered on Infection Prevention and Control in Kenya to improve infection prevention practices, such as safe injection use and handling, that are critical to prevent further transmission of HIV and other blood-borne pathogens to healthcare workers and patients. The implementation approach included conducting baseline assessments, quality improvement interventions, and pre- and post-training

evaluations across nine facilities in Kenya. In its final year, the partnership is transitioning its work to address HIV transmission among healthcare workers and patients.

Partnering on Person-centered Supply Chain Modernization

PEPFAR is exploring ways to leverage private sector solutions to modernize the supply chain. The private sector can play an important role in delivering a person-centered supply chain that meets the clients' needs. Given private sector expertise in getting products to people as quickly, cost-effectively, and accurately as possible, they may be able to play a role in sourcing, warehousing, logistics, transporting, and final mile delivery. PEPFAR is also learning from industry innovations and techniques to deliver efficiently to patients by using cutting-edge technology and the latest client insights.

Re-articulating the Treatment Narrative

PEPFAR is exploring opportunities and potential partnerships to leverage consumer marketing principles to increase treatment literacy, treatment coverage, and viral suppression in Malawi and Zimbabwe. The private sector can play an important role in developing new messaging around the benefits of treatment and U=U (undetectable = untransmittable) in a way that is people-centered and effectively reaches people living with HIV. Additional PEPFAR OUs are exploring ways they might leverage this innovative approach to increase treatment coverage, return clients to treatment, and increase viral suppression in their programs.

Strengthening Health Training and Data Systems

Human Resources for Health

PEPFAR has long invested in health workforce staffing to rapidly scale up HIV services. Staffing is a key cost driver of PEPFAR programs, at well over a \$1 billion dollar investment in COP22, representing the important role that health workers play in achieving bringing HIV under control. The diversity of health worker staffing supported by PEPFAR has enabled reconfiguration of HIV service delivery models to support decentralized service delivery and community level services. These investments have made possible further

adaptations to ensure continuity of HIV service provision throughout the COVID-19 pandemic.

COVID-19 has taken a toll on health workers globally and exacerbated health workforce challenges across PEPFAR countries. Despite these challenges, there have been innovations made in how HIV services are being delivered, with a focus on using health workers more effectively and extending access to clients. As PEPFAR focuses on sustaining epidemic control, we must determine how to institutionalize these innovations as part of country systems' routine service delivery and align staffing investments to support these shifts.

This year, PEPFAR introduced the PEPFAR HRH Inventory, which catalogued the over 300,000 health workers and other individuals that PEPFAR supports to deliver on the program's mandates. The Inventory, alongside country HRIS data systems, remains critical for allocation and monitoring of HRH for achieving sustainable epidemic control.

In supporting human resources for health, PEPFAR prioritizes: (1) continuing to ensure the safety and well-being of the workforce; (2) supporting decent work and fair pay for all workers; (3) further optimizing health workforce staffing investments; (4) prioritizing key above site investments and advancing workforce sustainability under local leadership, using a whole of market approach; and (5) promoting gender equality to build a diverse, gender equitable, and gender-affirming workforce.

As many PEPFAR countries reach epidemic control, a new focus is on developing and implementing strategies to sustain the health workforce required to control the epidemic for the long-term. This will require both public sector and private sector engagement, alongside PEPFAR and other donors such as the Global Fund. In the public sector, staffing deficits have been a long-term intractable challenge, with constraints on wage bills limiting the hiring and filling of health worker vacancies.

PEPFAR will advance dialogue with countries' ministries of health, public service commissions or equivalents, ministries of finance, the private sector, and other stakeholders to plan for requirements for health workforce sustainability and ensure optimized PEPFAR human resources for health staffing investments complement government staffing availability and needs. PEPFAR will also better align human resources for health support to host-country government systems to facilitate absorption of the workers required for sustained control of the HIV epidemic.