



United States Government Accountability Office

Report to the Chairman, Committee on
Foreign Relations, U.S. Senate

May 2021

PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF

State Should Improve Data Quality and Assess Long-term Resource Needs

GAO@100

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GAO@100 Highlights

Highlights of [GAO-21-374](#), a report to the Chairman, Committee on Foreign Relations, U.S. Senate

Why GAO Did This Study

To address the HIV epidemic, the U.S. Global AIDS Coordinator oversees about \$6 billion annually across several U.S. implementing agencies and two international organizations through the PEPFAR program. According to S/GAC, without concentrated efforts to reach the growing youth population, progress achieved toward controlling the HIV epidemic could be reversed.

GAO was asked to review PEPFAR's response to the growing youth population for achieving its goals. This report examines (1) what is known about the growing youth population and HIV in Sub-Saharan Africa, (2) PEPFAR's response to reach the growing youth population, (3) the extent to which S/GAC's PEPFAR program-level budget data are reliable for a resource trends analysis to inform future programming, and (4) the extent to which PEPFAR officials have determined the long-term resources needed to achieve and sustain HIV epidemic control given known factors.

GAO reviewed PEPFAR documents and budget data, and reports by UNAIDS and other entities. GAO also interviewed PEPFAR officials from State, implementing agencies, and country teams in Kenya, Mozambique, South Africa, and Uganda.

What GAO Recommends

GAO recommends that State establish documented procedures and develop a plan to improve budget data, and assess the long-term resources it needs to continue progress toward HIV epidemic control. State accepted all three recommendations.

View [GAO-21-374](#). For more information, contact David Gootnick at (202) 512-3149 or gootnickd@gao.gov.

May 2021

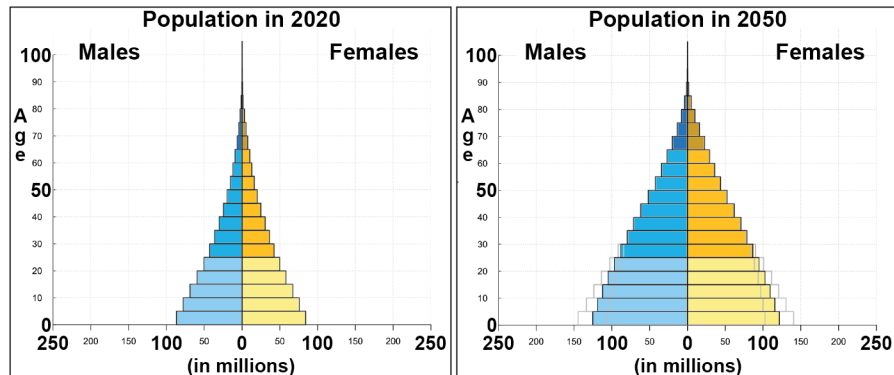
PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF

State Should Improve Data Quality and Assess Long-term Resource Needs

What GAO Found

While HIV infection rates have declined in Sub-Saharan Africa since 2010, the doubling of the youth population—a group particularly vulnerable to acquiring new HIV infections—partially offset the rate of decline, according to the Joint United Nations Program on HIV/AIDS (UNAIDS). The youth population in Sub-Saharan Africa is growing as part of overall population growth, which more than doubled from 1990 to 2020 and is projected to nearly double again by 2050.

Estimated Population Growth in Sub-Saharan Africa, 2020 to 2050



Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019, Volume II: Demographic Profiles* (ST/ESA/SER/A/427). Copyright © 2019 by United Nations, made available under a Creative Commons license (CC BY 3.0 IGO) <http://creativecommons.org/licenses/by/3.0/igo/>. | GAO-21-374

The Department of State, through the President's Emergency Plan for AIDS Relief (PEPFAR), allocated an estimated \$4 billion from fiscal years 2016 through 2020 to three key interventions that officials identified as PEPFAR's response to reach the growing youth population. These interventions aim to address the cycle of HIV transmission among youth. For example, through MenStar, PEPFAR aims to treat HIV-positive men to prevent HIV transmission.

State's Office of the Global AIDS Coordinator (S/GAC) lacks procedures to reasonably assure PEPFAR program-level budget data, including data for congressional reporting, are reliable for a resource trends analysis to inform future programming. Specifically, GAO found issues with data completeness and accuracy. Officials said they are taking steps to improve data quality, but the steps do not fully address the issues and S/GAC does not have a plan to ensure timely implementation of data quality improvements. Without sufficient data quality procedures or a documented plan, S/GAC lacks reasonable assurance that its data are reliable for analysis of resource trends.

PEPFAR officials analyze data to inform short-term decisions; however, officials have not performed long-term resource planning to assess how known factors—including the growing youth population—may affect resource needs. Officials said they generally do not assess long-term resource needs, due in part to uncertainty about future PEPFAR funding levels. Without assessing long-term resource needs, PEPFAR officials cannot adequately advocate, coordinate, and plan resources in response to known challenges to controlling the HIV epidemic.

Contents

Letter		1
	Background	3
	Growing Youth Population in Sub-Saharan Africa Partially Offsets the Rate of Decline in New HIV Infections, Potentially Risking PEPFAR's Achievement of Goals	10
	To Respond to the Growing Youth Population, PEPFAR Officials Allocated an Estimated \$4 Billion from Fiscal Years 2016 through 2020 to Three Key Interventions	15
	The Office of the Global AIDS Coordinator Lacks Documented Procedures to Help Ensure Program-Level Budget Data, Including Data Used for Congressional Reporting, Are Sufficiently Reliable to Analyze Resource Trends	23
	PEPFAR Officials Analyze Data for Annual and Quarterly Decisions, but Have Not Determined Sustainable Ways to Expand Services or Assessed Long-term Resources Needed to Achieve Epidemic Control Given Known Factors	29
	Conclusions	36
	Recommendations for Executive Action	37
	Agency Comments	37
Appendix I	Objectives, Scope, and Methodology	39
Appendix II	Comments from the Department of State	44
Appendix III	Comments from the United States Agency for International Development	48
Appendix IV	GAO Contact and Staff Acknowledgments	49
Tables		
	Table 1: PEPFAR Funding Amounts by Fiscal Year of Appropriation and by Agency, Fiscal Years 2015–2020	9
	Table 2: PEPFAR Estimated Allocations Amounts for DREAMS, VMMC, and MenStar Interventions, Fiscal Years 2016–2020	17

Figures

Figure 1: PEPFAR Supported Activities to Combat HIV/AIDS in 54 Countries Worldwide as of Fiscal Year 2020	5
Figure 2: Percentages of PEPFAR Funding for U.S. Agencies and International Organizations, Fiscal Years 2015–2020	7
Figure 3: PEPFAR Funding by Fiscal Year of Appropriation and by Agency, Fiscal Years 2015–2020	8
Figure 4: Estimated Population Growth in Sub-Saharan Africa, Males and Females, 1990 to 2050	11
Figure 5: Growing Youth Population in Sub-Saharan Africa Partially Offsets the Rate of Decline in New HIV Infections among Youth Aged 15–24, 2010–2019	14
Figure 6: PEPFAR Estimated Allocations for DREAMS, VMMC, and MenStar Interventions, Fiscal Years 2016–2020	16
Figure 7: PEPFAR Priority Countries for DREAMS, VMMC, and MenStar Interventions	20

Abbreviations

AIDS	acquired immunodeficiency syndrome
CDC	Centers for Disease Control and Prevention
COP	Country Operational Plan
COVID-19	Coronavirus Disease 2019
DREAMS	Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe
Global Fund	Global Fund to Fight AIDS, Tuberculosis, and Malaria
HHS	Department of Health and Human Services
HIV	human immunodeficiency virus
OMB	Office of Management and Budget
PEPFAR	President's Emergency Plan for AIDS Relief
State	Department of State
S/GAC	Office of the Global AIDS Coordinator
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
USAID	United States Agency for International Development
VMMC	Voluntary Medical Male Circumcision
WHO	World Health Organization

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May 20, 2021

The Honorable Robert Menendez
Chairman
Committee on Foreign Relations
United States Senate

Dear Mr. Chairman:

Since the inception of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) in 2003, the U.S. government has reported providing more than \$85 billion to, among other things, slow the rate of new human immunodeficiency virus (HIV) infections and acquired immunodeficiency syndrome (AIDS)-related deaths, decrease mother-to-child transmission, and provide treatment and care for millions of people affected by the virus. Nevertheless, about 1.7 million people—mostly in Sub-Saharan Africa—were newly infected with HIV in 2019, according to the Joint United Nations (UN) Programme on HIV/AIDS (UNAIDS).¹ Many countries in Sub-Saharan Africa with high HIV prevalence are also experiencing significant population growth, including among youth—a demographic phenomenon commonly referred to as a “youth bulge.”² According to PEPFAR documents, without concentrated and concerted efforts to reach the growing youth population—who are disproportionately vulnerable to HIV infection—progress achieved toward controlling the HIV epidemic could be reversed.

You asked us to review PEPFAR's programmatic response to the implications of the growing youth population for achieving PEPFAR goals. This report examines (1) what is known about the growing youth

¹UNAIDS' list of Sub-Saharan Africa countries includes: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Cote d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, South Sudan, Tanzania, Togo, Uganda, Zambia, and Zimbabwe.

²Youth aged 15–24 in Sub-Saharan Africa comprise nearly 20 percent of the total population—a demographic phenomenon commonly referred to as a “youth bulge.” This nearly 20 percent share has been stable since at least 1990 and is expected to remain stable over the next 20 years, according to the UN, because the youth population is growing as part of the overall population growth in the region.

population and HIV in Sub-Saharan Africa; (2) the specific PEPFAR programmatic response to reach the growing youth population; (3) the extent to which the Office of the Global AIDS Coordinator's (S/GAC)³ PEPFAR program-level budget data⁴ are reliable for an analysis of resource trends to inform future programming; and (4) the extent to which PEPFAR officials have determined the long-term resources needed to achieve and sustain HIV epidemic control given known factors.

To address these objectives, we reviewed PEPFAR documents and budget data, as well as reports or articles by UNAIDS, the World Bank, the World Health Organization (WHO), and other organizations. Because PEPFAR officials said they identified the growing youth population as a challenge to HIV epidemic control in 2015, we reviewed program documents from at least 2015 through 2020. We also reviewed PEPFAR program-level budget data maintained and used by S/GAC during this time frame related to (1) estimated allocations for three key interventions tracked by program officials and (2) allocations, obligations, disbursements, and unobligated balances at the PEPFAR program level derived from S/GAC's congressional reporting and programming datasets.⁵ As discussed further in the report, we evaluated the data against federal standards for internal control, which call for the use of quality information.⁶ Based on our review and discussions with PEPFAR officials, we determined the data in (1) were sufficiently reliable for reporting on estimated allocations for three key interventions. However, we found the data in (2) did not satisfy quality information standards due to issues with completeness and accuracy. Therefore, we reported on data quality issues rather than on resource trends.

In addition, we interviewed PEPFAR officials from the Departments of State and Health and Human Services (HHS); United States Agency for

³In this report, we refer to the Department of State's Office of the U.S. Global AIDS Coordinator and Health Diplomacy as either "Office of the Global AIDS Coordinator" or "S/GAC."

⁴For the purposes of this report, budget data refers to funding information such as allocations, obligations, disbursements, and unobligated balances.

⁵PEPFAR budget data are also included in quarterly Office of Management and Budget reports and Department of State reports at the agency and account level. Because S/GAC officials said they do not routinely disaggregate these data for use at the PEPFAR program level, we did not use these data for our report.

⁶GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 2014), Principles 13–15.

International Development (USAID); and Peace Corps; as well as PEPFAR country team members in four countries with high HIV burden and large youth populations (Kenya, Mozambique, South Africa, and Uganda). We also interviewed officials from global health or research organizations such as UNAIDS. To determine the extent to which PEPFAR officials assessed the long-term resources needed to achieve and sustain HIV epidemic control, we evaluated information obtained from officials against Office of Management and Budget (OMB) criteria, which directs agencies to coordinate resources and address challenges to achieve long-term goals,⁷ and against the risk assessment component of federal standards for internal control, which calls for management to identify and analyze risks to goal achievement.⁸ Because the Coronavirus Disease 2019 (COVID-19) pandemic emerged during the course of this review, we also included limited information from recent reports and interviews with PEPFAR officials about the challenges COVID-19 is posing for key PEPFAR activities.⁹

We conducted this performance audit from July 2019 to May 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

PEPFAR Agencies' Roles and Responsibilities

The U.S. Leadership Against HIV/AIDS, Tuberculosis, and Malaria Act of 2003 established within State a Coordinator of United States Government Activities to Combat HIV/AIDS Globally, which State refers to as the U.S. Global AIDS Coordinator.¹⁰ The U.S. Global AIDS Coordinator leads S/GAC with primary responsibility for overseeing and coordinating all resources and international activities of the U.S. government to combat HIV/AIDS—including directly approving all U.S. activities and funding

⁷Office of Management and Budget, *Preparation, Submission, and Execution of the Budget*, Circular No. A-11, Part 6 (June 2019).

⁸[GAO-14-704G](#), Principle 7.

⁹On March 11, 2020, the WHO declared COVID-19 a pandemic.

¹⁰Pub. L. No. 108-25, § 102, *codified at* 22 U.S.C. § 2651a(f).

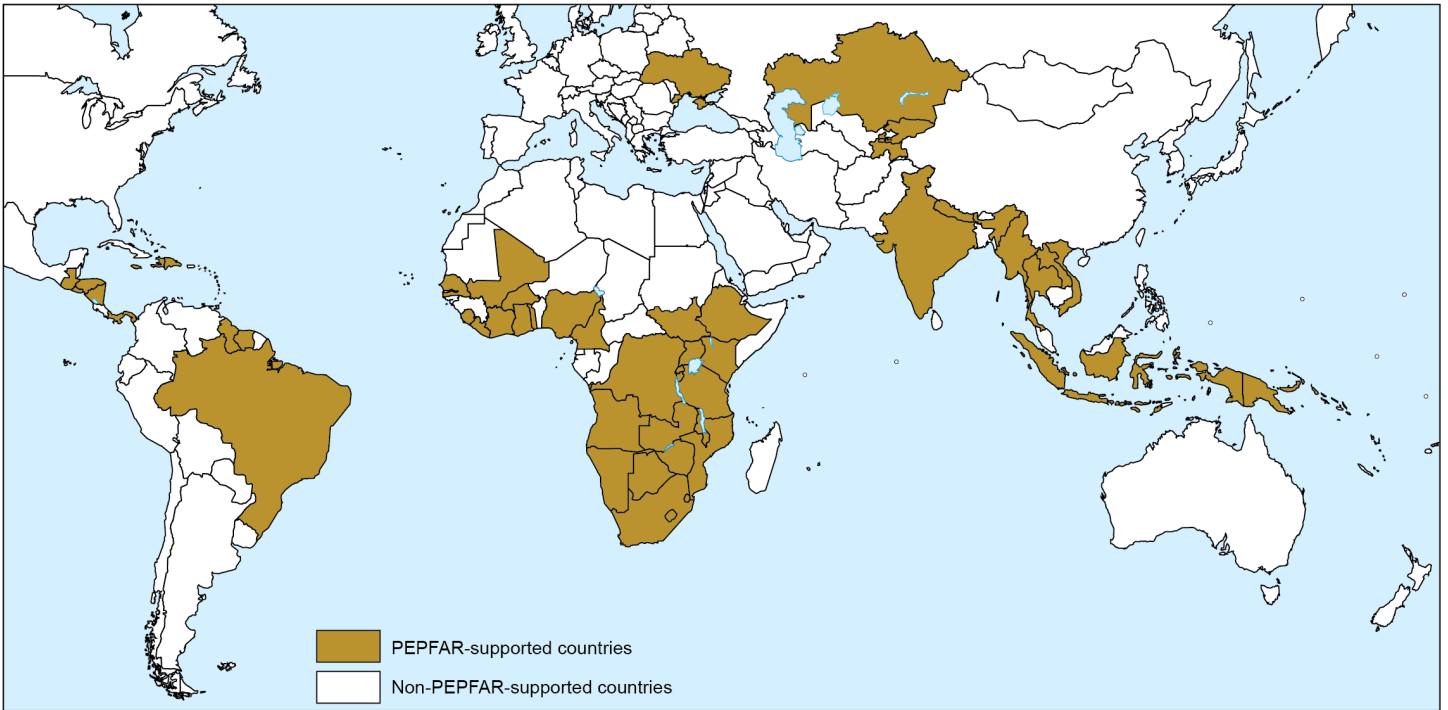
relating to combatting HIV/AIDS implemented through nongovernmental organizations and relevant executive branch agencies.¹¹ According to State, PEPFAR activities¹² are implemented under S/GAC’s leadership and through a number of U.S. government agencies, including USAID; HHS’ Centers for Disease Control and Prevention (CDC), Health Resources and Services Administration, and National Institutes of Health; Peace Corps; and Departments of Defense, Labor, Commerce, and the Treasury.¹³ State provides funds to relevant executive branch agencies and to two international organizations—UNAIDS and the Global Fund to Fight AIDS, Tuberculosis, and Malaria (Global Fund)—to implement PEPFAR activities in over 50 countries, most of which are in Sub-Saharan Africa, where HIV remains highly prevalent in the general population (see fig. 1).

¹¹See 22 U.S.C. § 2651a(f)(2)(B).

¹²In this report, we refer to international activities of the U.S. government to combat HIV/AIDS overseen by the U.S. Global AIDS Coordinator, including contributions to international organizations, as “PEPFAR activities.”

¹³Based on discussions with S/GAC officials, we scoped our report to three key agencies coordinating or implementing PEPFAR activities—State, USAID, and CDC.

Figure 1: PEPFAR Supported Activities to Combat HIV/AIDS in 54 Countries Worldwide as of Fiscal Year 2020



Legend: PEPFAR = President's Emergency Plan for AIDS Relief.

Sources: Department of State (data); Map Resources (map). | GAO-21-374

Spending Requirements for PEPFAR Activities Have Remained Consistent

Spending Requirements for PEPFAR Activities

Appropriations acts funding government operations from fiscal years 2015 through 2020 included spending requirements¹⁴ totaling between \$6.13 billion and \$6.39 billion annually for PEPFAR activities for the three key PEPFAR agencies.¹⁵ Congress directed that 93 percent of PEPFAR funding be apportioned¹⁶ to State, while two other agencies (CDC and USAID) received the remaining 7 percent. Congress further directed that about 23 percent of the total PEPFAR funding apportioned to State be provided to international organizations (Global Fund and UNAIDS). State generally provides the remaining 69 percent to other U.S. agencies.¹⁷ For example, among the remaining 69 percent, S/GAC officials estimated that about 2 percent of State’s annual PEPFAR funding is retained and executed at State, while 98 percent of this funding is provided to other U.S. agencies—primarily USAID, but also HHS, Peace Corps, and Department of Defense (see fig. 2).¹⁸

¹⁴In this report, we use “spending requirements” to refer to the congressional instructions in the annual appropriations acts and those allocation tables within the joint explanatory statements that are incorporated by reference into the acts. Congress issues the joint explanatory statement along with the annual appropriations act to give further details on the intent of the appropriations act. For example, the appropriations act funding the Department of State, Foreign Operations and Related Programs for fiscal year 2020, incorporated by reference House Appropriations Committee Print 38-679. See Pub. L. No 116-94, div. G, § 7019 (Dec. 20, 2019). These tables outline how State and USAID are required to allocate the funds.

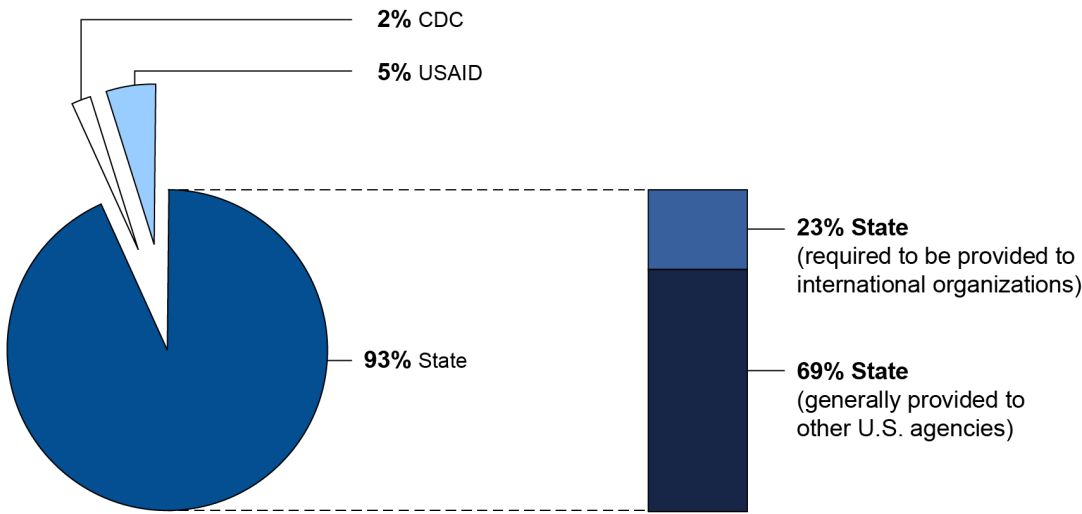
¹⁵In this report, we refer to the spending requirements for PEPFAR activities as “PEPFAR funding.”

¹⁶Apportionment is the action by which OMB distributes amounts available for obligation. An apportionment can be further subdivided by an agency into allotments, suballotments, and allocations, which are an authorization by an agency head or another authorized employee to subordinates to incur obligations within a specific amount. See [GAO-05-732SP](#).

¹⁷Percentages shown (23 percent and 69 percent) do not sum to 93 because of rounding.

¹⁸The Department of Defense has been subject to a spending requirement for HIV/AIDS programming through the Defense Health Program account. These funds are generally available for new obligation for 1 fiscal year, but, according to S/GAC officials, these funds are managed independent of State.

Figure 2: Percentages of PEPFAR Funding for U.S. Agencies and International Organizations, Fiscal Years 2015–2020



Legend: PEPFAR = President's Emergency Plan for AIDS Relief; CDC = Centers for Disease Control and Prevention; USAID = United States Agency for International Development; State = Department of State.

Source: GAO (analysis); appropriations acts from fiscal years 2015 through 2020. | GAO-21-374

Note: Percentages shown (23 percent and 69 percent) do not sum to 93 because of rounding. Other U.S. agencies include USAID, Departments of Health and Human Services and Defense, and Peace Corps, according to State officials.

PEPFAR funding directed to be apportioned to State from fiscal years 2012 through 2020 was made available for new obligation for 5 fiscal years.¹⁹ For PEPFAR funding provided to State prior to fiscal year 2012, the period of availability for new obligation does not expire. As shown in figure 2, from fiscal years 2015 through 2020, Congress directed about 5 percent of total PEPFAR funding be apportioned to USAID²⁰ and made available about 2 percent of total PEPFAR funding to CDC.²¹ These 7 percent of funds were made available for new obligation for 2 fiscal years.

Consistent Funding for PEPFAR Activities

PEPFAR funding for State, USAID, and CDC—including amounts required to be provided to international organizations—remained fairly

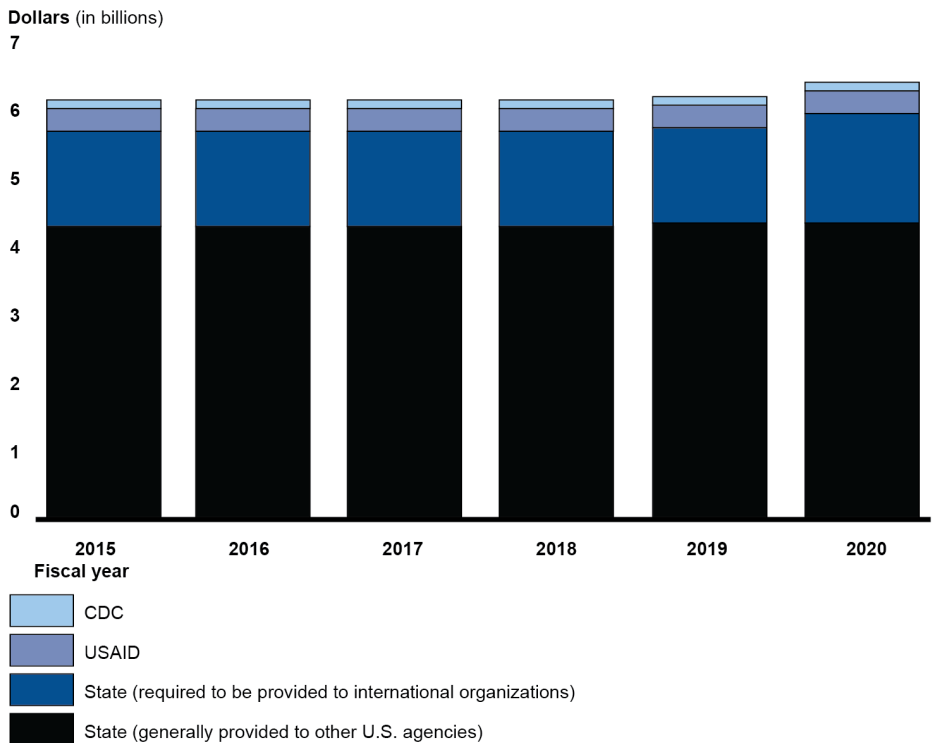
¹⁹These funds were directed to be apportioned to State from the Global Health Programs account.

²⁰These funds were directed to be allocated for international HIV/AIDS activities from amounts directed to be apportioned to USAID from the Global Health Programs account.

²¹These funds were made available from the CDC's Global Health account.

consistent from fiscal years 2015 through 2020, with slight increases in fiscal years 2019 and 2020 (see fig. 3).

Figure 3: PEPFAR Funding by Fiscal Year of Appropriation and by Agency, Fiscal Years 2015–2020



Legend: PEPFAR = President’s Emergency Plan for AIDS Relief; CDC = Centers for Disease Control and Prevention; USAID = United States Agency for International Development; State = Department of State.

Source: GAO (analysis); appropriations acts from fiscal years 2015 through 2020. | GAO-21-374

Note: Other U.S. agencies include USAID, Departments of Health and Human Services and Defense, and Peace Corps, according to State officials.

The average PEPFAR funding for the three key agencies over this time frame, including amounts required to be provided to international organizations, was about \$6.18 billion. Excluding the amounts directed to international organizations, the average PEPFAR funding overseen and coordinated by State, including PEPFAR funding directed to CDC and USAID, was about \$4.75 billion. (Table 1 shows the amounts of PEPFAR funding from figure 3.)

Table 1: PEPFAR Funding Amounts by Fiscal Year of Appropriation and by Agency, Fiscal Years 2015–2020

Dollars (in thousands)

Agency	Fiscal Year					
	2015	2016	2017	2018	2019	2020
CDC	128,421	128,421	128,421	128,421	128,421	128,421
USAID	330,000	330,000	330,000	330,000	330,000	330,000
State (required to be provided to international organizations)	1,395,000	1,395,000	1,395,000	1,395,000	1,395,000	1,605,000
State (generally provided to other U.S. agencies)	4,275,000	4,275,000	4,275,000	4,275,000	4,325,000	4,325,000
Total	6,128,421	6,128,421	6,128,421	6,128,421	6,178,421	6,388,421

Legend: PEPFAR = President’s Emergency Plan for AIDS Relief; CDC = Centers for Disease Control and Prevention; USAID = United States Agency for International Development; State = Department of State.

Source: GAO (analysis); appropriations acts from fiscal years 2015 through 2020. | GAO-21-374

Note: Other U.S. agencies include USAID, Departments of Health and Human Services and Defense, and Peace Corps, according to State officials.

PEPFAR Epidemic Control Strategy

S/GAC establishes PEPFAR policy and program strategies. The PEPFAR epidemic control strategy—*PEPFAR Strategy for Accelerating HIV/AIDS Epidemic Control (2017–2020)*—focuses U.S. government resources and activities on expanding HIV prevention, particularly for young women under age 25 and men under age 30, and HIV testing and treatment, particularly for men under age 35.²² Pursued in combination, these interventions aim to reduce the amount of HIV circulating in the population and, in turn, the transmission of HIV.²³

According to S/GAC, the PEPFAR epidemic control strategy provides a road map for accelerated implementation in 13 high HIV burden countries with the greatest potential to achieve HIV epidemic control—12 of which

²²As of April 2021, S/GAC has not publically released a new PEPFAR epidemic control strategy for 2021 and beyond.

²³Treatment of HIV-positive individuals through antiretroviral therapy can reduce the amount of HIV in the blood to levels that are undetectable with standard tests and, in turn, can prevent sexual transmission of the virus to an HIV-negative partner. According to the PEPFAR epidemic control strategy, HIV epidemic control refers to the point at which new HIV infections have decreased and fall below AIDS related deaths.

are in Sub-Saharan Africa.²⁴ HIV epidemic control is to be accomplished by expanding HIV prevention and attaining the UNAIDS “90-90-90” goals, whereby

- 90 percent of people living with HIV know their status,
- 90 percent of people who know their status are accessing treatment, and
- 90 percent of people on treatment have suppressed HIV viral loads.

According to S/GAC, countries endorsed and PEPFAR supports these global goals for HIV epidemic control. These goals were to be achieved by 2020 and rise to 95-95-95 by 2030.²⁵

Growing Youth Population in Sub-Saharan Africa Partially Offsets the Rate of Decline in New HIV Infections, Potentially Risking PEPFAR’s Achievement of Goals

Population of Sub-Saharan Africa Is Growing, Including among Youth Aged 15–24

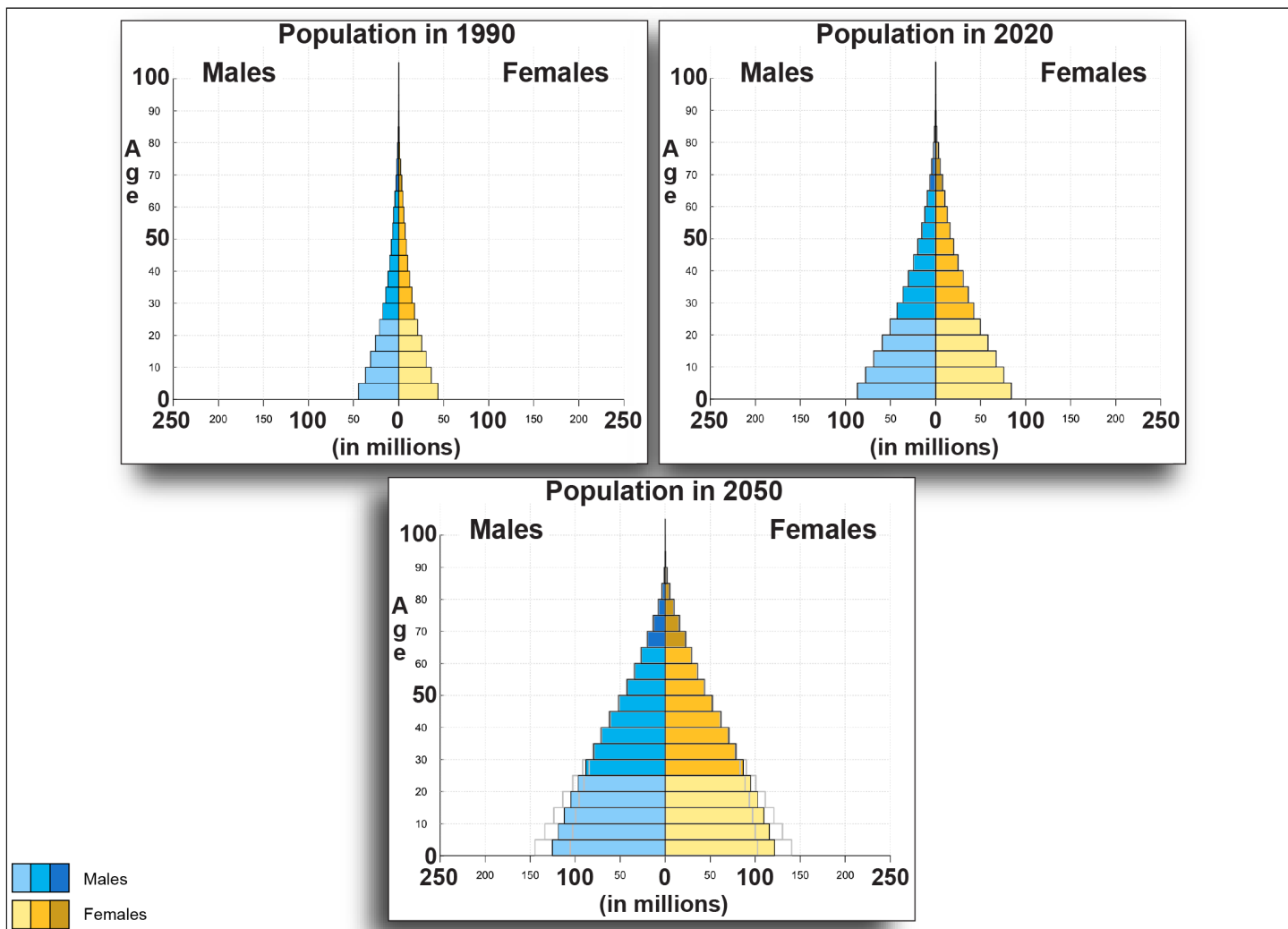
According to UN population data, the estimated population of Sub-Saharan Africa has significantly increased and is projected to continue to grow: it more than doubled from 490.6 million in 1990 to 1.1 billion in 2020, and is projected to nearly double again to 2.1 billion by 2050 (see fig. 4). According to the World Bank, population growth in the region is

²⁴The 13 countries are Botswana, Côte d’Ivoire, Eswatini, Haiti, Kenya, Lesotho, Malawi, Namibia, Rwanda, Tanzania, Uganda, Zambia, and Zimbabwe. According to S/GAC officials, these countries were chosen based on their HIV prevalence, rate of new HIV infections, treatment coverage, and number of AIDS-related deaths, among other factors.

²⁵UNAIDS modeling estimates show that five countries, including three PEPFAR countries, reached each of the three 90-90-90 goals.

mainly a result of continuing high fertility rates combined with declines in infant and child mortality.²⁶

Figure 4: Estimated Population Growth in Sub-Saharan Africa, Males and Females, 1990 to 2050



Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019, Volume II: Demographic Profiles (ST/ESA/SER/A/427)*. Copyright © 2019 by United Nations, made available under a Creative Commons license (CC BY 3.0 IGO) <http://creativecommons.org/licenses/by/3.0/igo/>. | GAO-21-374

Note: According to the United Nations, the population pyramids for 1990 and 2020 reflect estimates, while the population pyramid for 2050 reflects projections. Medium-variant projections are shown as thin lines, and uncertainty for 95 percent prediction intervals is shown in lighter shades.

²⁶According to UNAIDS, declines in infant and child mortality are largely driven by improvements in nutrition and health services.

The youth population aged 15–24 in Sub-Saharan Africa is growing as part of the overall population growth in the region—also more than doubling since 1990 and projected to nearly double again by 2050. UN population data show that, in 1990, there were an estimated 93.7 million youth in Sub-Saharan Africa; in 2020, there were approximately 217.7 million; and by 2050, there are projected to be more than 398.9 million.

Youth in Sub-Saharan Africa Are Particularly Vulnerable to Acquiring New HIV Infections

Several risk factors make youth in Sub-Saharan Africa particularly vulnerable to acquiring new HIV infections. UNAIDS data show that, in 2019, over 70 percent of global new HIV infections among youth occurred in Sub-Saharan Africa—about 327,000 of 462,000 new HIV infections. In addition to high HIV prevalence and incidence among youth in Sub-Saharan Africa, UNAIDS, WHO, and PEPFAR documents identified several risk factors that increase young people’s vulnerability to acquiring HIV such as limited knowledge of HIV, multiple sexual partners, and low condom use. For example, according to UNAIDS, 34 percent of young men and 28 percent of young women in the region had basic knowledge of how to protect themselves from HIV, based on nationally representative surveys conducted between 2012 and 2017. Further, nationally representative surveys conducted between 2000 and 2015 reported fewer than 60 percent of young people with multiple sexual partners used a condom during their last sexual intercourse.

Among youth in Sub-Saharan Africa, adolescent girls and young women are at higher risk for acquiring new HIV infections. UNAIDS data show that adolescent girls and young women aged 15–24 accounted for 24 percent of HIV infections in 2019, more than double their 9 percent share of the total population. They were also more than twice as likely to acquire HIV as young men the same age, who accounted for 10 percent of HIV infections in 2019.

UNAIDS, WHO, and PEPFAR documents identified several risk factors that put adolescent girls and young women at higher risk for new HIV infections. For example, according to UNAIDS, poor access to education, lower levels of economic independence, and intimate partner violence erode the ability of young women to negotiate safer sex and have control of their bodies, increasing their vulnerability to HIV. Transactional sex may be among the key factors contributing to the gender disparity in HIV among young people in Sub-Saharan Africa, according to UNAIDS.²⁷

²⁷According to UNAIDS, transactional sex refers to a nonmarital, noncommercial sexual relationship motivated by an assumption that sex would be exchanged for material support or other benefits.

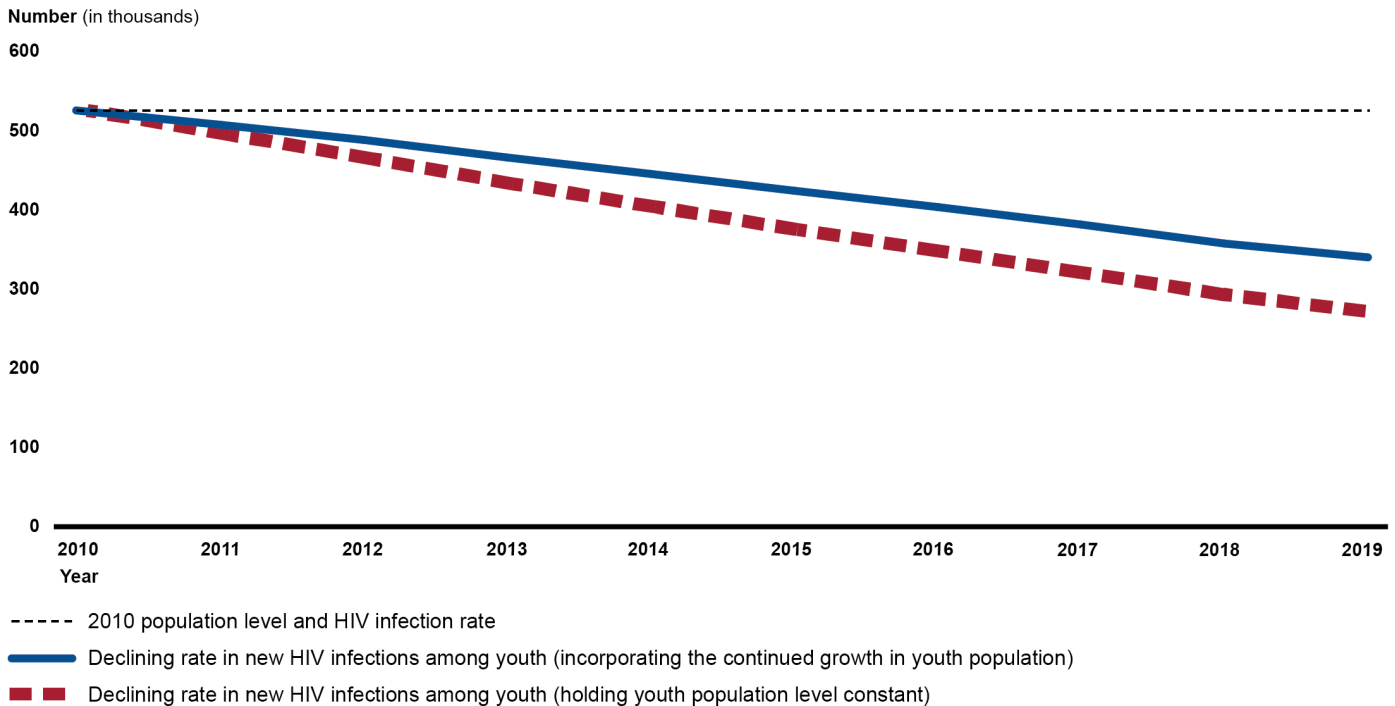
Adolescent girls and young women in Sub-Saharan Africa who had transactional sex were found, on average, to be 50 percent more likely to acquire HIV than those who had never engaged in similar behavior. It is not uncommon for young women to have sexual relations with men 10 to 20 years older and to receive cash or gifts in exchange for sex. According to UNAIDS, a persistent cycle of HIV transmission happens when the young women, who acquired HIV from older male partners, have sex with men their own age who, as they grow older, commence relations with younger women and continue the cycle.

Declining Rate of New HIV Infections in Sub-Saharan Africa Is Being Partially Offset by the Growing Number of Youth, Which May Risk PEPFAR's Achievement of Goals

HIV infection rates have declined in Sub-Saharan Africa since 2010. However, the declining rate of new HIV infections is being partially offset by the continued growth in the number of youth, a group particularly vulnerable to acquiring HIV, according to UNAIDS. To illustrate the offsetting effect of the growing youth population on the declining rate of new HIV infections, UNAIDS graphed declining HIV infection rates among youth aged 15–24 in Sub-Saharan Africa, with and without continued population growth among youth in the region (see fig. 5).²⁸

²⁸UNAIDS, *The Youth Bulge and HIV*, 2018. UNAIDS' analysis from 2010 to 2017 is captured in *The Youth Bulge and HIV*. A UNAIDS official subsequently updated UNAIDS' analysis to include 2018 and 2019.

Figure 5: Growing Youth Population in Sub-Saharan Africa Partially Offsets the Rate of Decline in New HIV Infections among Youth Aged 15–24, 2010–2019



Source: Joint United Nations Programme on HIV/AIDS epidemiological estimates 2020. | GAO-21-374

In addition, the growing youth population could also lead to an increasing number of new HIV infections. According to UNAIDS, as the number of youth grows, a lack of sufficient health services to support the increasing number of young people could result in the number of new HIV infections plateauing or, worse, beginning to increase. This potential increase in HIV infections in Sub-Saharan Africa, according to the *PEPFAR 2020 Annual Report to Congress*, would nearly double the current cost globally to provide lifesaving treatment services, which the report notes could not be sustained by any combination of financing from the host country, the Global Fund, or PEPFAR. PEPFAR documents since at least 2015 have identified the growing population of youth as a challenge that, unless addressed, may roll back progress made in reducing HIV and thus in achieving and sustaining the 90-90-90 or 95-95-95 goals of HIV epidemic control.

To Respond to the Growing Youth Population, PEPFAR Officials Allocated an Estimated \$4 Billion from Fiscal Years 2016 through 2020 to Three Key Interventions

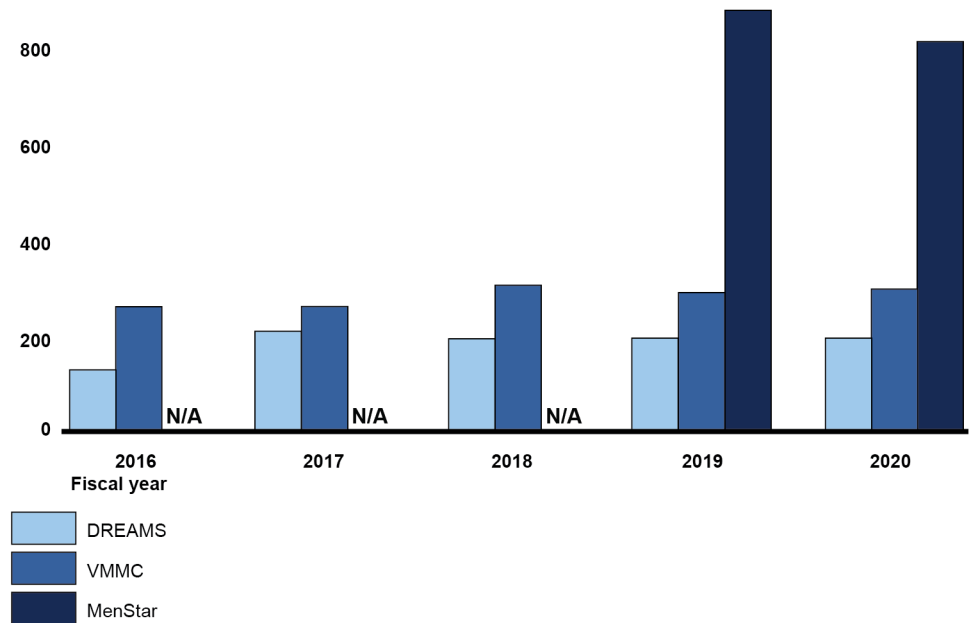
From fiscal years 2016 through 2020, PEPFAR officials allocated an estimated \$4 billion to three key interventions that officials identified as PEPFAR’s programmatic response to reach the growing youth population—Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe (DREAMS); Voluntary Medical Male Circumcision (VMMC); and MenStar.²⁹ Pursued in combination, these prevention or treatment interventions aim to address the persistent cycle of HIV transmission—in which the virus is commonly transferred between young men aged 24–35 and younger women aged 15–24. As shown in figure 6, PEPFAR estimated allocations for DREAMS and VMMC interventions remained fairly consistent from fiscal years 2018 through 2020, and funding for MenStar interventions began in fiscal year 2019.³⁰

²⁹With the exception of Haiti, these interventions are being implemented in Sub-Saharan Africa countries.

³⁰Funding for MenStar represents shifts in existing treatment and care funding to focus interventions on young men, according to S/GAC officials.

Figure 6: PEPFAR Estimated Allocations for DREAMS, VMMC, and MenStar Interventions, Fiscal Years 2016–2020

Dollars (in millions)
1000



Legend: PEPFAR = President’s Emergency Plan for AIDS Relief; DREAMS = Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe; VMMC = Voluntary Medical Male Circumcision; N/A = not applicable.

Source: Department of State data. | GAO-21-374

Note: According to Department of State officials, the data reflect planned allocations for program and resource planning purposes and may differ from actual spending. In addition, officials did not know the specific amounts allocated for DREAMS programming for fiscal years 2016 and 2017, as their budget databases did not track these amounts by a unique budget code. For the purpose of tracking the overall budget for DREAMS programming, officials evenly divided about \$249 million across the 2 fiscal years, and included an additional \$80 million in fiscal year 2017 for the DREAMS Innovation Challenge. Additionally, funding for MenStar represents shifts in existing treatment and care funding to focus interventions on young men, according to officials.

Table 2 shows the amounts of estimated allocations from figure 6.

Table 2: PEPFAR Estimated Allocations Amounts for DREAMS, VMMC, and MenStar Interventions, Fiscal Years 2016–2020

Dollars (in thousands)

Intervention	Fiscal Year				
	2016	2017	2018	2019	2020
DREAMS	124,623	204,623	188,915	190,415	190,415
VMMC	255,094	255,529	299,407	284,443	291,558
MenStar	N/A	N/A	N/A	866,939	801,917
Total	379,717	460,152	488,322	1,341,797	1,283,890

Legend: PEPFAR = President’s Emergency Plan for AIDS Relief; DREAMS = Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe; VMMC = Voluntary Medical Male Circumcision; N/A = not applicable.

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DREAMS Program Focuses on HIV Prevention for Adolescent Girls and Young Women

Through the DREAMS program, PEPFAR officials aim to reduce HIV risk and lower HIV incidence rates among adolescent girls and young women aged 9–24 in the highest HIV burdened geographic areas of 15 countries. Initially, in fiscal year 2016, PEPFAR officials implemented DREAMS programming in 10 countries whose populations of adolescent girls and young women aged 15–24 accounted for over half of all global HIV infections in 2014, according to PEPFAR documents.³¹ In fiscal year 2018, PEPFAR officials expanded DREAMS programming to five additional countries with a particular focus on preventing sexual violence and HIV among girls aged 9–14.³²

The DREAMS program consists of a core package of interventions designed to reduce adolescent girls’ and young women’s risk for HIV.

- Some components of the core package are **primary** that is, provided to all adolescent girls and young women in an age group (e.g., school- or community-based HIV prevention).

³¹The 10 countries were Eswatini, Kenya, Lesotho, Malawi, Mozambique, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe.

³²The five countries were Botswana, Cote d’Ivoire, Haiti, Namibia, and Rwanda.

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- Other components are **secondary or needs-based interventions** that are part of the core package but may not be received by all adolescent girls and young women in that age group (e.g., only survivors of sexual violence are provided with postviolence care).

The core package includes interventions that: (1) empower adolescent girls and young women and reduce their HIV risk, (2) strengthen the families of adolescent girls and young women, (3) mobilize communities for change, and (4) reduce the HIV risk of male sexual partners of adolescent girls and young women.

1. **Empower adolescent girls and young women and reduce their HIV risk.** These interventions—such as condom promotion, pre-exposure prophylaxis,³³ postviolence care, and social asset building—aim to empower girls and reduce risk for HIV, unintended pregnancy, and violence.³⁴ For example, the DREAMS project in Kenya that we selected for further review provided age-specific primary and secondary interventions to adolescent girls and young women aged 15–24 to help ensure that they remain HIV-free.³⁵ As primary interventions, adolescent girls and young women received, among other things, education on condoms, contraceptives, and pre-exposure prophylaxis, and participated in social asset building activities such as sports, crafts, and drama and dance. Adolescent girls and young women who were survivors of sexual violence also received postviolence care—including postexposure prophylaxis,³⁶ emergency contraception, and psychosocial support—as a secondary intervention.
2. **Strengthen the families of adolescent girls and young women.** These interventions—such as educational subsidies and parenting programs—aim to economically strengthen the families of adolescent

³³Pre-exposure prophylaxis is medicine people at risk for HIV take to prevent acquiring HIV from sex or injection drug use.

³⁴The DREAMS program also provides HIV testing and connects HIV-positive individuals with treatment services.

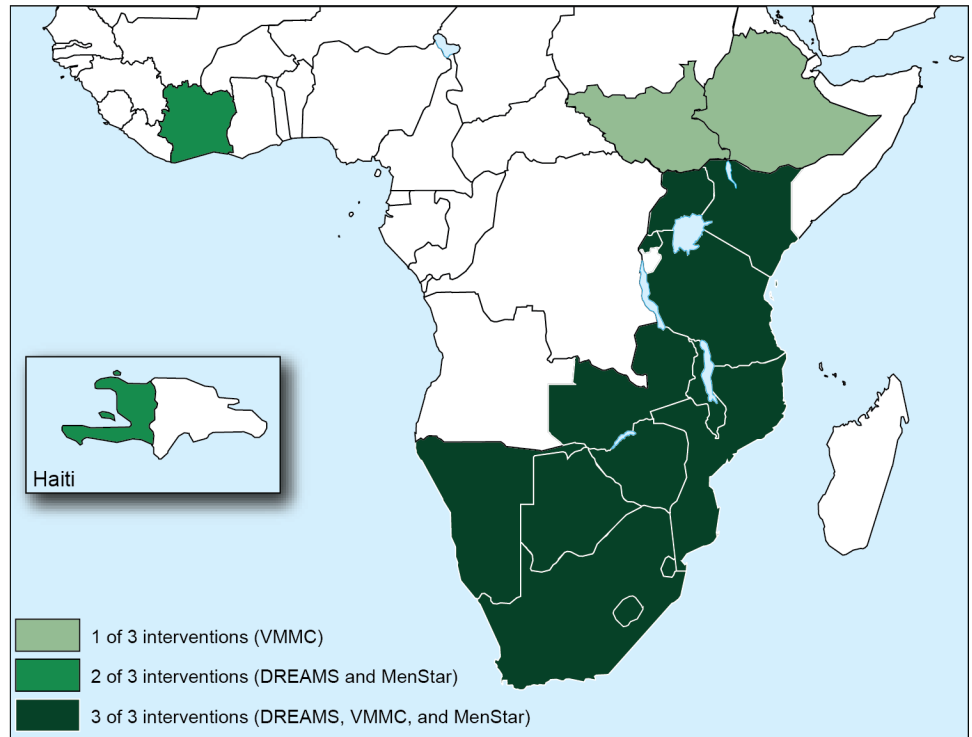
³⁵For further review of examples of PEPFAR's programmatic response to reach the growing youth population, we selected four projects (two DREAMS and two VMMC) from the countries receiving the top cumulative estimated allocations for DREAMS and VMMC program implementation in fiscal years 2019–2020. We also selected the recently launched PEPFAR *MenStar Strategy* for further review in Uganda. See appendix I for additional details on our scope and methodology.

³⁶Postexposure prophylaxis is medicine people take to prevent acquiring HIV after a possible exposure.

girls and young women, and improve their ability to positively and effectively parent.

3. **Mobilize communities for change.** These interventions—such as school- and community-based HIV and violence prevention—aim to educate communities surrounding adolescent girls and young women, including boys and young men, and mobilize communities for change to keep girls HIV-free and safe from violence. For example, the DREAMS project in South Africa focused on delivering school-based HIV and violence prevention education for Grades 4–11 as the primary package of interventions. PEPFAR country team officials explained that because adolescent girls and young women reported having experienced some form of sexual violence during childhood, officials determined that it was important to target both girls and boys at school from an early age. The goal is to improve understanding of gender norms and gender-based violence so that girls and boys get a similar message about antiviolenace and gender equity. According to PEPFAR country team officials, because the majority of young people in South Africa are in school, DREAMS programming in South Africa generally targets young people in the schooling system for greater effect.
4. **Reduce the HIV risk of male sexual partners of adolescent girls and young women.** These interventions aim to decrease the HIV risk of male sexual partners of adolescent girls and young women. PEPFAR activities include a focus on men in the same geographic locations as DREAMS programming, including HIV testing and treatment such as through MenStar, and VMMC (see fig. 7).

Figure 7: PEPFAR Priority Countries for DREAMS, VMMC, and MenStar Interventions



Legend: PEPFAR = President's Emergency Plan for AIDS Relief; DREAMS = Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe; VMMC = Voluntary Medical Male Circumcision.

Sources: Department of State (data); Map Resources (map). | GAO-21-374

PEPFAR officials reported that, as of fiscal year 2019, new HIV diagnoses among adolescent girls and young women had declined by 25 percent or more in nearly all of the regions in the 10 original countries implementing DREAMS programming.³⁷ Starting in fiscal year 2021, PEPFAR officials are striving for 75 percent or higher of vulnerable adolescent girls and young women in DREAMS-supported districts to complete the appropriate package of interventions for their age group.

³⁷PEPFAR, *PEPFAR 2020 Annual Report to Congress* (Sept. 2020). Other factors, such as PEPFAR's HIV testing and treatment program and VMMC program, could account for the decline.

VMMC Program Focuses on HIV Prevention for Young Men

PEPFAR officials are targeting men aged 15–29 for VMMC in 15 priority countries, where HIV prevalence is high and the rate of male circumcision is low.³⁸ PEPFAR officials are targeting this age group based on modeling evidence that suggests doing so would have the greatest effect on HIV transmission in the shortest period of time. PEPFAR officials began implementing the VMMC program in 2007 and since 2016 have prioritized men aged 15–29.

VMMC reduces the risk of HIV acquisition for men, and therefore, the probability of transmitting HIV to sexual partners, including adolescent girls and young women. According to PEPFAR documents, VMMC is a one-time, low-cost intervention shown in randomized controlled trials to reduce men’s risk of acquiring HIV by up to 60 percent. Because VMMC is an effective form of HIV prevention for men, it reduces transmission and therefore also reduces incidence among adolescent girls and young women. Specifically, as HIV incidence decreases in men through VMMC, the probability of adolescent girls and young women encountering infected male partners decreases, with a consequent reduction in HIV incidence among adolescent girls and young women.³⁹

Through the VMMC program, PEPFAR officials also provide VMMC clients a minimum package of health services tailored for men. For example, the VMMC projects in Mozambique and South Africa linked clients to HIV risk prevention education and health services. PEPFAR country team officials said that these services included sexual risk reduction counseling; condom education, use promotion, and distribution; screening and treatment of sexually transmitted infections; and HIV testing and referral to treatment.

PEPFAR officials reported having supported nearly 2 million VMMC procedures in the 15–29 age group in the 15 priority countries in fiscal

³⁸The 15 countries are Botswana, Eswatini, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Tanzania, Uganda, Zambia, and Zimbabwe.

³⁹Modeling evidence suggests that, overall, VMMC reduces the rate of infections by about 37 percent—both female-to-male and male-to-female transmission. The 60 percent cited above decreases to 37 percent when taking into account transmission in both directions. For example, see B.G. Williams, J.O. Lloyd-Smith, E. Gouws, C. Hankins, W.M. Getz, J. Hargrove, I. de Zoysa, C. Dye, and B. Auvert, *The Potential Impact of Male Circumcision on HIV in Sub-Saharan Africa*, (PLOS Medicine, July 11, 2006).

year 2019.⁴⁰ Starting in fiscal year 2021, PEPFAR officials continue to prioritize VMMC with a particular focus on scaling up VMMC to achieve a goal of circumcising at least 80 percent of men aged 15–29.

***MenStar Strategy* Focuses on HIV Treatment for Young Men**

PEPFAR officials identified 15 priority countries to focus their existing treatment and care interventions on implementing the *MenStar Strategy* between fiscal years 2019 and 2021.⁴¹ The *MenStar Strategy* seeks to combine private sector expertise in consumer marketing with PEPFAR’s existing service delivery infrastructure to increase HIV testing and treatment among young men. Specifically, through the MenStar Strategy, PEPFAR officials aim to

- treat an additional 1 million men aged 24–35 for HIV, and
- help over 90 percent of HIV-positive men in this age group to become virally suppressed, in order to effectively interrupt HIV transmission and thus avert new HIV infections.

According to PEPFAR documents, PEPFAR programs have historically underserved young men, who then go on to infect younger women, fueling the cycle of HIV transmission in the countries PEPFAR supports. Diagnosing and treating more HIV infections in men—particularly among those aged 24–35, who are the potential male sexual partners of adolescent girls and young women—is key to breaking the HIV transmission cycle.

For example, PEPFAR country team officials said that PEPFAR in Uganda sets out to reach almost 350,000 men aged 24–35 with HIV testing and treatment through existing cooperative agreements or contracts that will incorporate the MenStar Strategy. According to PEPFAR country team officials, these agreements will focus on finding HIV positive men and better retaining them on antiretroviral therapy by, for example, employing communication strategies that successfully generated demand for treatment services in other countries, and promoting client-centered approaches to treatment including use of “differentiated service delivery models.” These models adapt HIV treatment services to the needs of individual clients, such as ensuring clients receive the optimal medication regimens (e.g., multimonth

⁴⁰PEPFAR Panorama, *Age and Sex Disaggregates*, as of Sept. 30, 2020.

⁴¹The 15 countries are Botswana, Cote d’Ivoire, Eswatini, Haiti, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe.

dispensing) and have access to decentralized distribution points for medication in convenient locations outside of health facilities (e.g., community pharmacies in urban settings). These models can reduce congestion at treatment facilities, make treatment less burdensome to clients and the healthcare system, and support high rates of client retention and viral load suppression. PEPFAR country team officials noted that, as of December 2019, Uganda had achieved a viral load suppression rate of 88 percent among men aged 24–35, and is on track to achieve viral load suppression in over 90 percent of men in this age group by the end of fiscal year 2021.

**The Office of the
Global AIDS
Coordinator Lacks
Documented
Procedures to Help
Ensure Program-
Level Budget Data,
Including Data Used
for Congressional
Reporting, Are
Sufficiently Reliable to
Analyze Resource
Trends**

State officials noted that the agency has processes to ensure compliance with federal funds control requirements.⁴² However, the Office of the

⁴²With respect to PEPFAR funding retained by State, S/GAC officials said they rely on processes coordinated by State's Bureau of Budget and Planning, including the use of State's Global Financial Management System, to ensure compliance with funds control requirements. With respect to PEPFAR funding transferred to other U.S. government agencies, S/GAC officials noted that they enter into memoranda of understanding with those agencies to help ensure administrative control of funds and then rely on the systems those agencies have in place to ensure compliance with federal fiscal laws. USAID and CDC officials said they control PEPFAR funds using agency-wide accounting systems, which comply with federal policies related to funds control. We did not assess the efficacy of these systems; rather, we focused on S/GAC's PEPFAR program-level budget data and systems.

Global AIDS Coordinator (S/GAC)⁴³ does not have reasonable assurance that its PEPFAR program-level budget data, including data used for congressional reporting,⁴⁴ are sufficiently reliable to analyze resource trends⁴⁵ to inform future programming. Specifically, a 5-year resource trends analysis would allow for the determination of trends in available PEPFAR funds and use of resources to help inform future programming decisions—including how to address effects of the growing youth population. S/GAC officials noted the quality of their PEPFAR program-level budget data has been a significant, ongoing challenge and they have taken some steps to improve the quality of their data. However, we found they have not established (1) sufficient, documented procedures needed to provide reasonable assurance that the data are reliable or (2) a documented plan with a timeline to implement data quality improvements. As a result, S/GAC does not have reasonable assurance that its PEPFAR program-level budget data, including data reported to Congress, are reliable for an analysis of resource trends to help inform future programming.

The Office of the Global AIDS Coordinator's PEPFAR Program-Level Budget Data Are Incomplete and Inaccurate

Through our review of S/GAC's PEPFAR program-level budget data, we identified data reliability issues that prevented an analysis of resource

⁴³As noted above, in this report, we refer to State's Office of the U.S. Global AIDS Coordinator and Health Diplomacy as either "Office of the Global AIDS Coordinator" or "S/GAC."

⁴⁴In this report, we use "congressional reporting" to refer to the quarterly and annual *Summary Financial Status* reports—colloquially referred to as "Obligations and Outlays" reports—that State's U.S. Global AIDS Coordinator was directed to develop, pursuant to the Statement of Managers accompanying the Foreign Operations, Export Financing, and Related Programs Appropriations Act. Specifically, the statement directs the U.S. Global AIDS Coordinator to submit brief reports to the Committees on Appropriations, the House Committee on International Relations, and the Senate Committee on Foreign Relations no later than 90 days following the enactment of this act, updated every 90 days thereafter, describing the obligation and transfers between accounts during the previous quarter of all funds overseen by the U.S. Global AIDS Coordinator. H. Rept. No. 108-401 at 685.

⁴⁵To analyze resource trends, we reviewed PEPFAR program-level budget data from fiscal years 2015 through 2019 to include the status of PEPFAR funds appropriated since fiscal year 2004. At the time of our request in August 2020, S/GAC officials said fiscal year 2019 data was the most recent budget data available and they did not expect to have fiscal year 2020 data finalized until the end of fiscal year 2021. See appendix I for additional details on our scope and methodology.

trends needed to inform future programming.⁴⁶ While S/GAC does not maintain a program-level dataset specifically designed to determine resource trends, officials provided us with their dataset used for congressional reporting, which they said was best suited for this type of analysis.⁴⁷ We reviewed their dataset for fiscal years 2015 through 2019, which contained budget execution data used to generate quarterly reports to Congress. Through our analysis of the congressional reporting dataset, however, we identified data quality issues that affected the completeness and accuracy of the data and prevented an analysis of resource trends. Specifically:

- **Incomplete data.** The dataset S/GAC used for congressional reporting did not include appropriations-level data and instead started tracking funds at the allocations level. As a result, this dataset could not provide visibility into PEPFAR funds that were appropriated but not yet allocated. Furthermore, the dataset contained incomplete information needed to determine when funds that had not yet been obligated would expire. Officials confirmed some funds expired because they were not identified, and therefore not obligated, within the period of availability for new obligations.⁴⁸
- **Inaccurate data.** We identified the following inaccuracies in the dataset used for congressional reporting. Due to data reliability issues with the congressional reporting dataset and lack of additional accurate data at the program level to verify the data against, we were unable to determine the extent of the inaccuracies we identified.
 - **Inconsistent unobligated balances data.** We found instances in which year-end unobligated balances data were inconsistent between the report to Congress and underlying data used to generate the report, and we could not determine which data were accurate.

⁴⁶PEPFAR budget data are also included in quarterly OMB reports and State reports at the agency and account level. Because S/GAC officials said they do not routinely disaggregate these data for use at the PEPFAR program level, we did not use these data for our report.

⁴⁷In this report, we use “dataset” to refer to a subset of a larger database.

⁴⁸According to S/GAC officials, \$4 million expired in fiscal year 2018, \$6 million expired in fiscal year 2019, and \$2 million expired in fiscal year 2020. These officials said they identified the expired funds through a 2019 review and disaggregation of OMB-reported agency-level data, but this process is not standard or routine and officials could not confirm whether S/GAC performed such an analysis in the past, due to staff turnover and lack of documentation. We were unable to independently verify or quantify the expired funds due to data reliability issues.

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- **Inconsistent allocations data.** We found instances in which the reported allocations data for one fiscal year appropriation changed from year to year, and we could not determine which figure was accurate.
 - **Obligations do not align with allocations.** We found instances in which reported obligations for one fiscal year appropriation exceeded reported allocations for that fiscal year of appropriation.

S/GAC officials stated that these inaccuracies reflect poor data consistency and do not reflect how PEPFAR funds are obligated or expended because State and other PEPFAR agencies have systems to ensure compliance with federal funds control requirements. Officials said they could improve data accuracy by verifying their data against accurate Office of Management and Budget (OMB) agency- and account-level reports, but they do not routinely do so because it would require time-intensive, burdensome disaggregation of PEPFAR program-level budget data from at least seven agency-level reports to capture all PEPFAR funds.

We also reviewed the dataset S/GAC officials said they primarily rely upon for annual programming and, in consultation with S/GAC officials, determined that this dataset was not suited for a resource trends analysis because it was not designed to completely and precisely capture the requisite data.⁴⁹ Specifically, it does not track budget information needed to determine resource trends—such as appropriations-level data, the amount of unobligated funds, or data needed to determine expiration dates for new obligation of funds.⁵⁰ Moreover, we determined that because the dataset included estimated data used for annual planning purposes, it was not appropriate for an accurate analysis of resource trends.

According to S/GAC officials, apart from the two datasets we reviewed, S/GAC does not maintain additional program-level budget data that would be readily available for a resource trends analysis.

⁴⁹In this report, we use “programming dataset” to refer to the dataset—colloquially referred to as the “COP Matrix”—S/GAC uses to inform its annual country operational planning process. S/GAC officials said the programming data they provided to us were sourced from State’s FACTS Info Next Gen database.

⁵⁰Based on the gaps we identified, S/GAC officials said they were taking steps to add features to the programming dataset that would allow them to better track budget information going forward.

The Office of the Global AIDS Coordinator Has Taken Some Steps to Improve PEPFAR Budget Data, but Lacks Sufficient Procedures and a Documented Plan to Ensure Data Reliability

S/GAC officials stated the quality of their PEPFAR program-level budget data has been a significant challenge that the office has been working to address over the past 7 years. While they have taken some steps to improve the data, the steps do not fully address the data quality issues we identified. S/GAC also has not established standard, documented procedures to ensure the PEPFAR program-level budget data it maintains and uses are complete and accurate, and lacks a documented plan with a timeline for completing data improvements.

Officials identified a number of challenges to ensuring S/GAC's PEPFAR program-level budget data are complete and accurate.

- **Complex, multi-agency program.** S/GAC officials said it is challenging to track all PEPFAR funds given the complex nature of the multi-agency PEPFAR program. As previously discussed, although State received the majority (93 percent) of PEPFAR funding from fiscal years 2015 through 2020, S/GAC officials said State retained a limited amount of these funds. Specifically, State was directed to provide about 23 percent of total PEPFAR funding to international organizations and generally provides the remaining 69 percent to other U.S. agencies.⁵¹ According to S/GAC officials, of the 69 percent, State transferred most (about 98 percent) of this funding to other U.S. agencies to implement PEPFAR activities and only retained about 2 percent at State to execute PEPFAR activities. Implementing agencies are then responsible for managing these funds—along with any funds directed to them in appropriations acts—using their own budget databases and systems for administrative control of funds, according to S/GAC officials. S/GAC typically does not have direct access to these databases, so officials must request this data when tracking and reporting on PEPFAR funds.
- **Staffing issues and lack of standard procedures.** S/GAC officials said that staffing shortages and staff turnover—without requisite knowledge transfer or documented standard operating procedures for data maintenance—resulted in S/GAC staff inconsistently maintaining and using data, and delayed reporting. According to officials, S/GAC's management and budget team operated at approximately half capacity for periods of time and some officials left during a 2017 hiring freeze, which resulted in a loss of expertise, inconsistent management of budget data, and reporting delays. For example, we found S/GAC's fiscal year 2018 and 2019 quarterly reports to Congress were delayed by 1 or more calendar year. According to officials, staffing challenges

⁵¹Percentages shown (23 percent and 69 percent) do not sum to 93 because of rounding.

were further amplified by analyzing their budget data manually, which was time-intensive. Officials said they recently added automation features to their datasets in hopes of improving timeliness and efficiency going forward.

- **Data are not precise and underwent recent changes.** S/GAC officials said their PEPFAR budget databases do not provide an exact accounting of all PEPFAR budget data and noted S/GAC would benefit from more comprehensive, detailed budget data. Officials also said S/GAC made changes in fiscal year 2018 to the format of the dataset used for congressional reporting, which resulted in inconsistent data between old and new data.

S/GAC officials said they have taken steps to improve their data, and identified others, but these steps do not fully address the issues we found. For example, in the short term, officials said they verified some recent program-level budget data against OMB agency-level reports. However, while officials said they intend to repeat these verification steps in the future, these processes are not documented, or routine, which limits S/GAC's ability to ensure continuous data quality.

In the long term, officials said they intend to modify the budget database they use for programming in order to fully capture data throughout the budgeting process, allowing it to function as one consistent, multi-use database for planning and reporting. However, according to officials, the modifications to this database are under development, and officials estimated it will take at least 3 years to finish. Furthermore, officials said they are making and identifying improvements to their PEPFAR program-level budget data overall, and do not yet have any documented plans with a timeline for completion.

Standards for Internal Control in the Federal Government—incorporated by State by reference in the Foreign Affairs Manual⁵²—call for management to use and report quality information to achieve the agency's objectives.⁵³ Quality information is appropriate, current, complete, accurate, accessible, and provided on a timely basis.⁵⁴ Establishing standard, documented procedures and developing a plan with a timeline for implementing data improvements would help improve the completeness and accuracy of PEPFAR program-level budget data.

⁵² FAM 021.1.c (Management Controls, Policy and Scope).

⁵³ [GAO-14-704G](#), Principles 13–15.

⁵⁴ [GAO-14-704G](#), Principle 13.05.

This, in turn, would help S/GAC track all PEPFAR funding, including when these funds expire. It would also help S/GAC to improve the reliability of the data used for congressional reporting, and allow for a resource trends analysis needed to inform future programming.

PEPFAR Officials Analyze Data for Annual and Quarterly Decisions, but Have Not Determined Sustainable Ways to Expand Services or Assessed Long-term Resources Needed to Achieve Epidemic Control Given Known Factors

PEPFAR officials analyze data to inform annual and quarterly decisions; however, officials have not assessed long-term resource needs and how known factors, including the growing youth population, may affect these needs. Specifically, PEPFAR officials analyze data to inform annual planning and quarterly monitoring at the overall program and country levels. Officials also perform various resource assessments at the country level but not at the overall program level. According to officials, despite generally consistent budgets recently, they have identified efficiencies and relied on prior year funding to expand services and maintain progress toward their goals. However, these approaches may not be sustainable and PEPFAR officials have not assessed how known factors, including the growing youth population, may affect future resources needed to achieve their goals. Without such an assessment, PEPFAR officials cannot adequately advocate, coordinate, and plan resources and effectively respond to challenges to achieving and sustaining the long-term goal of HIV epidemic control.

PEPFAR Officials Analyze Data to Inform Annual and Quarterly Decisions at the Overall Program and Country Levels

PEPFAR officials conduct annual planning at the overall program and country levels and quarterly monitoring at the country level that allows them to make decisions, track progress, and respond to risks within 12-month periods. As part of these processes, PEPFAR officials analyze various inputs, including epidemiological, demographic, and PEPFAR program-level data, by age, sex, and location. Officials then use this analysis to inform key decisions, such as annual resource levels, programming strategies, and performance targets, and to make adjustments to meet their targets and address challenges.

The two key PEPFAR planning and monitoring processes include:

- **Annual Country Operational Plan Process.** PEPFAR officials meet annually with key stakeholders, including implementing partners and multilateral organizations, and local stakeholders, to develop overall program-level and country-level PEPFAR Country Operational Plans (COP), which serve as strategic plans for HIV programming for the

next fiscal year.⁵⁵ As part of this process, PEPFAR officials and stakeholders analyze various data and use this analysis to inform key strategic decisions, including annual resource allocations by country and agency, programmatic strategies, and performance targets. For example:

- According to the PEPFAR 2020 COP Guidance, PEPFAR officials decided to generally stop funding VMMC procedures for boys under 15 years.⁵⁶ This decision was based on research and analysis that found that boys under 15 years experienced more adverse events from the VMMC procedure than boys and men older than 15 years.
- According to the PEPFAR 2019 Kenya COP, PEPFAR officials shifted programming and investments to align with priority geographic areas, based on findings from the Kenya Population-Based HIV Impact Assessment including data on estimated HIV burden and unmet need for treatment.
- **Quarterly Meetings.** PEPFAR officials meet quarterly to discuss the status of PEPFAR efforts in each country or region, and to discuss the extent to which they are achieving annual goals outlined in the COP in order to make mid-year changes. Officials said quarterly meetings vary by country or region, but participants typically review key performance data to assess progress toward achieving annual performance targets, and discuss key challenges and steps to mitigate these challenges. For example:
 - According to documents from the 2nd quarter of fiscal year 2019 meeting for South Africa, PEPFAR officials reviewed progress toward key goals, such as antiretroviral therapy treatment enrollment and HIV case identification through testing. The documents also showed that officials reviewed key DREAMS programming performance data and determined that while the program was on track to meet key annual targets, outreach to adolescent girls and young women aged 15–19 remained a challenge. The documents note that, in response, officials

⁵⁵While the COP is done on an annual basis and therefore focuses on near-term resource levels and programming shifts, officials noted that some elements of the COP process address longer-term issues, such as aspects pertaining to sustainability and multiyear interventions.

⁵⁶According to the PEPFAR 2020 COP Guidance, there are some exceptions in which PEPFAR programs can perform VMMC on boys younger than 15 years, though various criteria must be met.

proposed possible mitigation strategies, including client counseling and stigma reduction interventions.

- According to documents from the 2nd quarter of fiscal year 2019 meeting for Uganda, PEPFAR officials reviewed key performance data by age, sex, and location. For example, they determined that overall trends for index testing⁵⁷ were continuing to improve, but that HIV identification varied among districts, and certain areas were falling short of their targets. As a result, the documents note, officials discussed best practices in high-performing districts and how to apply them to lower performing districts, and strategies to better identify HIV-positive men.

PEPFAR Has Some Long-term, Country-Level Resource Needs Assessments, but the Office of the Global AIDS Coordinator Has Not Assessed Long-term Resource Needs at the Overall Program Level

During the course of our review, we identified some PEPFAR resource assessments, including long-term assessments, at the country level. However, the results are not generalizable to all PEPFAR countries because they are not consistently performed across PEPFAR countries. In addition, S/GAC officials expressed concerns about some of the assessments' methodologies and findings and ultimately found the quality of the assessments varied. For example, S/GAC officials said that, in general, existing long-term assessments do not produce reliable, useful data for use at the overall program level and the assessments are quickly outdated due to changes in technology, medicine, and costs. As a result, S/GAC officials said existing assessments are not suitable for the overall program level and they have not otherwise assessed long-term resource needs at the overall program level. For example:

- **Country-Level Studies.** We found examples that some PEPFAR country teams had performed studies that assessed resource needs against country-level performance targets. For example, the PEPFAR country team in Mozambique assessed VMMC needs taking into account various factors including current VMMC coverage for the target age group and districts—which was about 67 percent—and programmatic feasibility to achieve the proposed targets. According to this study, the country team determined that to increase VMMC coverage from 67 percent to 71 percent among 15–29 year olds in seven provinces, they would need to perform 131,496 more circumcisions, costing about \$14.5 million. To increase VMMC coverage from 67 percent to 80 percent, however, the country team would need to perform 454,252 circumcisions—over three times the

⁵⁷According to PEPFAR documents, index testing is a strategy used to identify and test individuals who have a known exposure to HIV, including sexual partners, drug partners, and biological children of individuals who have tested positive for HIV.

current targets—requiring a COP 2020 budget of \$50 million. According to S/GAC officials, however, there were flaws with the methodology of this study in that it combined fixed and marginal costs, which resulted in inflated conclusions about resources needed to achieve the intended coverage targets. Moreover, S/GAC officials questioned the validity of the study’s cost assumptions. In addition, these types of studies are not conducted across countries, which prevents aggregations. As a result, S/GAC officials said this study exemplifies why they do not include these types of existing, country-level studies in the overall PEPFAR program-level budget process.

- **National HIV/AIDS Strategic Plans.** According to PEPFAR officials, the Global Fund requires grantee countries to develop National HIV/AIDS Strategic Plans, which include 3- to 5-year cost estimates. Some PEPFAR country team officials we spoke to said they refer to these estimates for country-level planning, but S/GAC officials said that the quality of these assessments varies across countries so they do not aggregate the country estimates at the PEPFAR overall program level. Specifically, S/GAC officials said some of these estimates are outdated and do not reflect current needs. Further, S/GAC officials said these studies lack sophistication and rigor—for example, the estimates do not separate fixed and variable costs and are based on flawed epidemiological needs modeling. As a result, S/GAC officials said these estimates have limited utility for PEPFAR programming and are not used at the overall program level.

S/GAC officials said they recognize the need for improved PEPFAR resource information and long-term assessments and they are in the process of reforming their annual budgeting processes—however, these steps are not specifically designed to assess or plan long-term resource needs. For example, officials said they are instituting a new budgeting classification system, improving tracking of entities’ funding and management responsibilities, and working with partners to better align resources. The key effort in this reform, according to officials, is a new approach intended to more accurately determine costs for PEPFAR activities and drive efficiencies, which they are currently piloting in six PEPFAR countries.⁵⁸ While the pilot is not intended to assess future costs or long-term resource needs, and is not designed to factor in known risks or challenges, officials said the data generated through the initiative could be used as an input for long-term resource needs assessments in the future. Given that the pilot is only being implemented in a small number of

⁵⁸As of January 2021, officials said they were performing baseline studies and had generated preliminary data in two countries.

PEPFAR countries, and that costs are based on local markets, officials said findings will be limited to the country level at this time and cannot be extrapolated for use at the overall program level. In the future, however, officials intend to expand this pilot into more PEPFAR countries and make the processes routine in order to regularly monitor and update cost data.

PEPFAR Officials Said They Expanded Services despite Flat Budgets by Using Prior Year Funds and Resource Efficiencies, but This May Not Be Sustainable

According to PEPFAR documents and statements from PEPFAR officials, officials have so far been able to identify resources to sustain and expand HIV services to meet demand increases, despite a lack of increase in their budgets, by using two approaches:

1. **Efficiencies.** Officials said they identified and implemented technical and programmatic efficiencies, such as identifying and replicating best practices and targeting more specific populations, to achieve resource efficiency gains.
2. **Prior Year Funds.** Officials said they have identified prior year funds that remain available for obligation to expand programming to meet demand increases. According to officials, these were largely comprised of PEPFAR funding received from fiscal years 2004 through 2011 that remained available for obligation until expended. As previously discussed, we were unable to assess resource trends⁵⁹ to verify officials' statements on use and availability of prior year funds due to data quality issues with S/GAC's PEPFAR program-level budget datasets.⁶⁰

According to PEPFAR officials, PEPFAR's reserve of prior year funds that remained available for obligation until expended was largely expended by fiscal year 2015, so officials said savings from efficiencies is now their primary method for freeing up resources needed to address emerging priorities. However, PEPFAR officials said that at some point they would need to find alternate ways to address increases in demand for HIV services under what they called flat budgets. As a result, use of prior year funds and efficiencies may not be sustainable to address future demand increases caused by the growing youth population.

⁵⁹As noted above, we use "resource trends analysis" to refer to an analysis of PEPFAR program-level budget data to determine 5-year trends in available PEPFAR funds and use of resources.

⁶⁰As previously discussed, we reviewed S/GAC program-level budget datasets used for congressional reporting and programming, which officials said were the only two datasets they maintain at the program level that could be used for a resource trends analysis. Through our review, we found that the information in these datasets was not suitable to inform a resource trends analysis needed to verify officials' statements.

PEPFAR Officials Said They Have Not Assessed Resources Needed to Achieve Long-term Goal of HIV Epidemic Control Given Known Factors, Including the Growing Youth Population

PEPFAR officials said they have not performed long-term resource assessment and planning at the overall program level that accounts for known factors—including the growing youth population, and other demographic, epidemiological, and program factors—to determine what resources will be needed to achieve and sustain PEPFAR’s long-term goal of HIV epidemic control. While PEPFAR annual and quarterly planning and monitoring allow officials to coordinate, plan, and execute PEPFAR resources and activities within 12-month periods, and while some country teams have performed resource needs assessments at the country level, there is no established process to determine longer-term resource needs at the PEPFAR program level that considers known factors and challenges. PEPFAR officials said they have referred to external sources that model trends in the HIV epidemic and resource needs at the global level and have participated in UNAIDS resource estimate discussions. However, officials said they have not performed a long-term resource assessment at the PEPFAR program level, which limits understanding of what PEPFAR resources are needed to achieve PEPFAR goals and how this may be affected by known factors and challenges. As a result, their ability to perform long-term resource planning and risk mitigation is limited. Some known factors that affect PEPFAR resource needs and goal achievement include:

1. **Demographic changes** such as the growing youth population in Sub-Saharan Africa that PEPFAR documents and officials identified as a challenge to achieving HIV epidemic control given it could affect the number of HIV infections and therefore resources needed to provide services to people living with HIV.
2. **HIV epidemiological trends** such as the rate and number of new HIV infections and estimated number of deaths among people living with HIV.
3. **PEPFAR interventions** such as the effect of key PEPFAR prevention and treatment efforts on combatting the HIV epidemic.
4. **Other factors** such as political, economic, social, and environmental conditions that may significantly affect efforts to achieve HIV epidemic control (for example, see text box).

Effect of COVID-19 Pandemic on PEPFAR Activities

According to President's Emergency Plan for AIDS Relief (PEPFAR) documents, the Coronavirus Disease 2019 (COVID-19) pandemic poses unique challenges to PEPFAR prevention and treatment services, among them, shortages of medical supplies, overwhelmed medical facilities, and staff illness. PEPFAR services including Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe (DREAMS) and Voluntary Medical Male Circumcision (VMMC) activities and HIV testing were severely curtailed or suspended in certain countries because of COVID-19. For example, according to PEPFAR officials, in-person DREAMS activities in Kenya were limited or paused, and VMMC services in Mozambique were suspended countrywide, to minimize the risk of COVID-19 transmission. As of April 2021, the COVID-19 pandemic continued to affect DREAMS and VMMC activities. While most PEPFAR priority countries have resumed VMMC services, resumption is not uniform and most programs continue to operate at decreased volume due to COVID-19 related restrictions. Further, PEPFAR officials must regularly reassess paused DREAMS activities to ensure they are resumed as soon as safe and allowable by local guidelines.

Source: GAO summary of program documents. | GAO-21-374

According to OMB Circular A-11, which serves as leading practices for agency subcomponents such as PEPFAR, agencies are directed to coordinate resources to achieve long-term goals and determine how they will address challenges or risks that hinder progress toward their goals.⁶¹ Further, according to *Standards for Internal Control in the Federal Government*, management should assess risks by identifying and analyzing risks related to achieving defined objectives, and estimating the effect of the risks.⁶² In doing so, management should consider changes in the internal and external environment and other significant internal and external factors through various methods, including forecasting, strategic planning, audits, and other assessments.

According to PEPFAR officials, they do not perform long-term resource assessment or planning for several reasons. First, officials said they plan resources based on known PEPFAR funding levels determined during the annual budget cycle. Consequently, they do not plan further out than the annual planning cycle because future year PEPFAR funding levels are unknown. Second, officials said future resource needs assessments are quickly outdated due to the changing needs of the program. Third, officials said current methodologies for assessing future resource needs are inconsistent or inaccurate. However, the inherent uncertainty associated with long-term resource assessments and planning does not negate the benefits of such an assessment. For example, according to UNAIDS, if the global community continues to provide the same level of

⁶¹OMB, Circular No. A-11, Part 6.

⁶²[GAO-14-704G](#), Principle 7.

services, without making adjustments based on long-term modeling, it will miss the opportunity to avert new HIV infections, and thus prolong achievement of HIV epidemic control goals—requiring more time and resources. Therefore, investing in long-term resource needs assessment and planning, despite inherent uncertainties, will provide S/GAC perspective on long-term resource needs and the opportunity to make timely and appropriate resource decisions that could help to mitigate challenges both now and in the future. Without a long-term resource needs assessment that accounts for known factors, it will be difficult for PEPFAR officials to adequately advocate, coordinate, and plan resources needed to progress toward the goal of HIV epidemic control by 2030 and proactively respond to known risks.

Conclusions

Through its PEPFAR program, the U.S. government has been a global leader in HIV prevention, treatment, and care, helping to slow the rate of new HIV infections and AIDS-related deaths, and decrease mother-to-child transmission. It is credited with helping to save millions of people affected by the virus, since its launch in 2003. However, the population in Sub-Saharan Africa—including among youth, who are disproportionately vulnerable to HIV infection—is projected to nearly double by 2050, challenging PEPFAR’s ability to meet the potential increased demand for key interventions, and to achieve and sustain HIV epidemic control. Beginning in 2015, PEPFAR officials identified the growing youth population as a risk to PEPFAR goals and, in response, developed or expanded three key interventions—DREAMS, VMMC and MenStar—to help stop the cycle of HIV transmission specifically among youth.

Since 2015, spending requirements for PEPFAR activities contained in annual appropriations acts remained at about \$6 billion. However, we found that S/GAC has not (1) established sufficient, standard, documented data quality procedures to fully track and verify PEPFAR program-level budget data, including data used for reporting to Congress, or (2) developed a documented plan with a timeline to ensure timely implementation of data quality improvements. As a result, S/GAC does not have complete and accurate PEPFAR program-level budget data for a resource trends analysis needed to inform future programming and cannot reasonably assure the data it uses for congressional reporting are reliable.

Further, current processes allow PEPFAR officials to analyze data to inform decision making and to adjust programs and resources within a 12-month period. However, officials do not assess long-term resources needed or account for how known factors, such as the growing youth

population in Sub-Saharan Africa, may affect resources needed to achieve and sustain HIV epidemic control. Without such an assessment, officials cannot adequately advocate, coordinate, and plan resources needed to progress toward the long-term goal of HIV epidemic control.

Recommendations for Executive Action

We are making the following three recommendations to the Department of State:

The Secretary of State should ensure the U.S. Global AIDS Coordinator establishes standard, documented procedures to fully track and verify PEPFAR program-level budget data, including data used for reporting to Congress, to ensure that these data are complete and accurate. (Recommendation 1)

The Secretary of State should ensure the U.S. Global AIDS Coordinator develops a documented plan with a timeline for implementing data improvements to fully track and verify PEPFAR program-level budget data, including data used for reporting to Congress, to ensure that these data are complete and accurate. (Recommendation 2)

The Secretary of State should ensure the U.S. Global AIDS Coordinator assesses the long-term resources PEPFAR needs to continue progress toward the goal of HIV epidemic control, given known factors, including the growing youth population, that affect PEPFAR's ability to achieve its goals. (Recommendation 3)

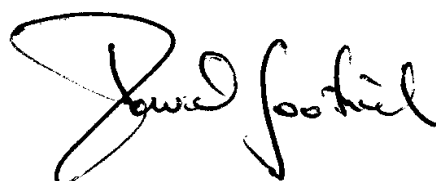
Agency Comments

We provided a draft of this report to State, USAID, HHS, and Peace Corps for comment. State and USAID provided comments, reproduced in appendixes II and III, respectively. HHS and Peace Corps had no comments. In its comments, State accepted all three of our recommendations and described actions taken and planned to address recommendations 1 and 2. For recommendation 3, State reiterated its effort to implement activity-based costing for more accurate quantification of resource needs and to drive efficiencies. We maintain that an assessment of its long-term resource needs would aid PEPFAR's progress toward the goal of HIV epidemic control, given known factors, including the growing youth population. State also provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, Secretary of State, Administrator of USAID, Secretary of Health and Human Services, and Acting Director of Peace Corps.

If you or your staff have any questions about this report, please contact me at (202) 512-3149 or gootnickd@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.

Sincerely yours,

A handwritten signature in black ink that reads "David Gootnick". The signature is written in a cursive style with a large, looping initial "D".

David Gootnick
Director, International Affairs and Trade

Appendix I: Objectives, Scope, and Methodology

This report examines (1) what is known about the growing youth population and human immunodeficiency virus (HIV) in Sub-Saharan Africa; (2) the specific President's Emergency Plan for AIDS Relief (PEPFAR) programmatic response to reach the growing youth population; (3) the extent to which the Office of the Global AIDS Coordinator's (S/GAC)¹ PEPFAR program-level budget data² are reliable for an analysis of resource trends to inform future programming; and (4) the extent to which PEPFAR officials have determined the long-term resources needed to achieve and sustain HIV epidemic control given known factors.

To examine what is known about the growing youth population and HIV in Sub-Saharan Africa, we reviewed literature describing the growing youth population and factors contributing to population growth, implications for HIV epidemic control, and the geographic location where this demographic trend is most acute. We reviewed reports or articles by PEPFAR officials and by several global health or research organizations, including the Joint United Nations (UN) Programme on HIV/AIDS (UNAIDS), World Health Organization, World Bank, Kaiser Family Foundation, Center for Strategic and International Studies, and Avenir Health. We also interviewed officials to obtain their perspective on the growing youth population and its implications for the HIV epidemic, including (1) PEPFAR officials from the Departments of State and Health and Human Services (HHS), United States Agency for International Development (USAID), and Peace Corps;³ (2) PEPFAR country team members in Kenya, Mozambique, South Africa, and Uganda; and (3) officials from global health or research organizations.

Additionally, we collected data from UN organizations—including UNAIDS and the Population Division of the Department of Economic and Social Affairs—on population estimates and projections, HIV incidence

¹In this report, we refer to the Department of State's Office of the U.S. Global AIDS Coordinator and Health Diplomacy as either "Office of the Global AIDS Coordinator" or "S/GAC."

²For the purposes of this report, budget data refers to funding information such as allocations, obligations, disbursements, and unobligated balances. For definitions of these terms, see GAO, *A Glossary of Terms Used in the Federal Budget Process*, [GAO-05-734SP](#) (Washington, D.C.: Sept. 2005).

³Specifically, for State and HHS, we interviewed officials from S/GAC and State's Office of Foreign Assistance, and HHS' Centers for Disease Control and Prevention (CDC) and Health Resources and Services Administration.

estimates, and the effect of the growing youth population on HIV infection rates.⁴ Based on our review of UN methodology documents, including information sources and models for projections, we determined the data to be sufficiently reliable for the purposes of reporting on (1) estimated and projected population growth in Sub-Saharan Africa, including among youth, as of 1990, 2020, and 2050; (2) the number of new HIV infections globally and among youth aged 15–24 in Sub-Saharan Africa in 2019; and (3) the declining rate of new HIV infections among youth aged 15–24 in Sub-Saharan Africa between 2010 and 2019, with and without the continued growth in the youth population.

To examine the specific PEPFAR programmatic response to reach the growing youth population, we reviewed program-level documents and interviewed program officials to identify and describe the three key interventions cited as PEPFAR’s response—Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe (DREAMS); Voluntary Medical Male Circumcision (VMMC); and MenStar. We reviewed documents since at least 2015, when PEPFAR officials said they identified the growing youth population as a challenge to HIV epidemic control. These documents included PEPFAR’s Strategy for Accelerating HIV Epidemic Control (2017–2020), Country Operational Plan Guidance for each year from 2015 through 2020, Annual Report to Congress for each year from 2015 through 2020, intervention-specific guidance or strategy documents, and academic articles. We also collected and reviewed program-level budget data to identify and describe PEPFAR estimated allocations for the three key interventions from fiscal years 2016 through 2020. Based on our review and interviews with PEPFAR officials, we found the data to be sufficiently reliable for reporting on estimated allocations for the three key interventions.

Further, to provide examples of PEPFAR’s response in four countries with high HIV burden and large youth populations—Kenya, Mozambique, South Africa, and Uganda—we requested from PEPFAR officials a list of DREAMS, VMMC, and MenStar interventions that were active anytime between October 1, 2018, and September 30, 2020. Based on the list, we selected four projects (two DREAMS across Kenya and South Africa and

⁴To illustrate the offsetting effect of the growing youth population on the declining rate of new HIV infections, UNAIDS graphed declining HIV infection rates among youth aged 15–24 in Sub-Saharan Africa, with and without continued population growth among youth in the region. UNAIDS’ analysis from 2010 to 2017 is captured in, UNAIDS, *The Youth Bulge and HIV*, 2018. A UNAIDS official subsequently updated UNAIDS’ analysis to include 2018 and 2019.

two VMMC across Mozambique and South Africa) representing the top recipient countries of cumulative fiscal years 2019 through 2020 estimated allocations for DREAMS and VMMC program implementation. We also selected the recently launched PEPFAR *MenStar Strategy* for further review in Uganda, as Uganda was the only country for which MenStar interventions were listed for the requested time frame. We then interviewed PEPFAR country team officials in the four countries to obtain their perspective on the selected projects, including how the projects served as examples of PEPFAR’s programmatic response to reach the growing youth population.

To examine the extent to which S/GAC’s PEPFAR program-level budget data are reliable for an analysis of resource trends to inform future programming, we collected and analyzed program-level budget data and interviewed program officials.⁵ Specifically, we reviewed S/GAC’s dataset⁶ used for congressional reporting⁷ that S/GAC officials said would be best suited for a resource trends analysis.⁸ This dataset included reported data from year-end, 4th quarter *Summary Financial Status* reports and underlying data used to generate these reports, which we considered annual reports because they included data from all previous quarters.⁹ We also reviewed S/GAC’s dataset used for programming, which

⁵In this report, we use “resource trends analysis” to refer to an analysis of PEPFAR program-level budget data to determine 5-year trends in available PEPFAR funds and use of resources.

⁶In this report, we use “dataset” to refer to a subset of a larger database.

⁷In this report, we use “congressional reporting” to refer to the quarterly and annual *Summary Financial Status* reports—colloquially referred to as “Obligations and Outlays” reports—that State’s U.S. Global AIDS Coordinator was directed to develop, pursuant to the Statement of Managers accompanying the Foreign Operations, Export Financing, and Related Programs Appropriations Act. Specifically, the statement directs the U.S. Global AIDS Coordinator to submit brief reports to the Committees on Appropriations, the House Committee on International Relations, and the Senate Committee on Foreign Relations no later than 90 days following the enactment of this act, updated every 90 days thereafter, describing the obligation and transfers between accounts during the previous quarter of all funds overseen by the U.S. Global AIDS Coordinator. H. Rept. No. 108-401 at 685.

⁸PEPFAR budget data are also included in quarterly Office of Management and Budget reports and State reports at the agency and account level. Because S/GAC officials said they do not routinely disaggregate the data for use at the PEPFAR program level, we did not use these data for our report.

⁹Because S/GAC changed the format of these reports in fiscal year 2018 and combined data across fiscal years of appropriation, we also reviewed underlying data S/GAC used to generate reports for fiscal years 2018 and 2019 when we needed to analyze data by fiscal year of appropriation.

officials said they rely upon to inform their annual programming process.¹⁰ For both datasets, we sought to analyze annual allocations, obligations, disbursements, and unobligated balances data for the three key agencies coordinating or implementing PEPFAR activities (State, USAID, and CDC) from fiscal years 2015 through 2019, which included the status of PEPFAR funds appropriated since fiscal year 2004.¹¹ We also interviewed S/GAC officials to understand how officials compile and use these datasets, what known limitations exist, and what data quality procedures are in place to ensure data reliability. We discussed our analysis with S/GAC officials and sought their perspective on our methodology, characterization of key findings, and data reliability concerns. We evaluated the data and information we obtained from officials against the information and communication component of federal standards for internal control, which calls for the use of quality information.¹² Overall, we determined that the datasets did not satisfy quality information standards due to issues with completeness and accuracy. Therefore, we reported on data quality issues rather than on resource trends.

To examine the extent to which PEPFAR officials have determined the long-term resources needed to achieve and sustain HIV epidemic control given known factors, we reviewed PEPFAR strategy, planning, and resource assessment documents and interviewed PEPFAR officials. Our document review included PEPFAR’s Strategy for Accelerating HIV/AIDS Epidemic Control (2017–2020), Country Operational Plan Guidance for each year from 2015 through 2020, and Annual Report to Congress for each year from 2015 through 2020, as well as internal documents and external data assessments and articles that PEPFAR officials said they used or will use to inform decisions on future programming and resource needs.

We also reviewed PEPFAR program-level budget data S/GAC maintained and used for congressional reporting and programming from fiscal years

¹⁰In this report, we use “programming data” to refer to the budget dataset—colloquially referred to as the “COP Matrix”—S/GAC uses to inform its annual country operational planning process. S/GAC officials said the programming data they provided to us were sourced from State’s FACTS Info Next Gen database.

¹¹At the time of our request in August 2020, S/GAC officials said fiscal year 2019 data was the most recent budget data available and they did not expect to have fiscal year 2020 data finalized until the end of fiscal year 2021.

¹²GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 2014), Principles 13–15.

2015 through 2019 to verify S/GAC statements on use and availability of prior year funds that remain available for new obligation. However, we were unable to use these datasets for a resource trends analysis to verify officials' statements due to data quality issues, which we noted in the report.

For the four countries—Kenya, Mozambique, South Africa, and Uganda—we reviewed annual and quarterly strategy and planning documents, and country-level studies that examined resource needs. We also spoke with PEPFAR officials at the program level and from the four countries to discuss the extent to which they perform long-term resource planning and assessment to determine how known factors, including the growing youth population, affect long-term resource needs. We evaluated this information against Office of Management and Budget criteria, which directs agencies to coordinate resources and address challenges to achieve long-term goals,¹³ and against the risk assessment component of federal standards for internal control, which calls for management to identify and analyze risks to goal achievement.¹⁴

We conducted this performance audit from July 2019 to May 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

¹³Office of Management and Budget, *Preparation, Submission, and Execution of the Budget*, Circular No. A-11, Part 6 (June 2019).

¹⁴[GAO-14-704G](#), Principle 7.

Appendix II: Comments from the Department of State



United States Department of State
Comptroller
Washington, DC 20520

APR 27 2021

Thomas Melito
Managing Director
International Affairs and Trade
Government Accountability Office
441 G Street, N.W.
Washington, D.C. 20548-0001

Dear Mr. Melito:

We appreciate the opportunity to review your draft report, "PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF: State Should Improve Data Quality and Assess Long-Term Resource Needs" GAO Job Code 103680.

The enclosed Department of State comments are provided for incorporation with this letter as an appendix to the final report.

Sincerely,

A handwritten signature in blue ink that reads "Jeffrey C. Mounts".

Jeffrey C. Mounts

Enclosure:
As stated

cc: GAO – David Gootnick
S/GAC – Angeli Achrekar (Acting)
OIG - Norman Brown

Department of State Comments on GAO Draft Report

**PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF (PEPFAR):
State Should Improve Data Quality and Assess Long-Term Resource Needs
(GAO-21-374, GAO Code 103680)**

Thank you for the opportunity to comment on the GAO draft report, "*President's Emergency Plan for AIDS Relief (PEPFAR): State Should Improve Data Quality and Assess Long-Term Resource Needs.*"

Recommendation 1: The Secretary of State should ensure the U.S. Global AIDS Coordinator establishes standard, documented procedures to fully track and verify PEPFAR program-level budget data, including data used for reporting to Congress, to ensure that these data are complete and accurate.

Recommendation 2: The Secretary of State should ensure the U.S. Global AIDS Coordinator develops a documented plan with a timeline for implementing data improvements to fully track and verify PEPFAR program-level budget data, including data used for reporting to Congress, to ensure that these data are complete and accurate.

Recommendation 3: The Secretary of State should ensure the U.S. Global AIDS Coordinator assesses the long-term resources PEPFAR needs to continue progress toward the goal of HIV epidemic control, given known factors, including the growing youth population, that affect PEPFAR's ability to achieve its goals.

The Department of State's Office of the Global AIDS Coordinator and Health Diplomacy (S/GAC) accepts the GAO's three recommendations for improving data quality and assessing long-term resource needs. S/GAC has effectively led and coordinated the U.S. response to global HIV/AIDS through the President's Emergency Plan for AIDS Relief (PEPFAR) which has resulted in over 20 million lives saved since 2003 and multiple countries having achieved or nearing epidemic control of HIV – without a vaccine or cure. At its core, these results are not possible without SGAC's focus on ensuring all PEPFAR implementation is grounded in deep, granular, data-driven programming targeted at sub-national and sub-population levels. Since 2015, PEPFAR program results have been further validated in over 18 population-based household surveys from Zimbabwe, Zambia, Lesotho, eSwatini, Malawi, Rwanda, Namibia, Uganda, Kenya, Tanzania,

Ethiopia, Nigeria, Cote d'Ivoire, Cameroon, and Haiti, identifying successes and gaps in programs and in monitoring systems.

S/GAC continues to strive to improve all PEPFAR budget and program data quality, accuracy, completeness, and transparency, as this is critical for immediate- and long-term program impact toward the goal of HIV epidemic control. The program has evolved significantly since its beginning in 2004, including a switch from “no year” appropriated funding to “five year” appropriated funding in 2012, and the pace of systems improvement has not always kept up. As far as Recommendations 1 and 2, S/GAC has made improvements in establishing standards and procedures, and improving systems, to track and verify program-level budget data at its completeness and accuracy but acknowledges the need to continue to improve and document as recommended by the GAO. Critical context to these findings and recommendations is the fact that S/GAC serves as the coordinator of the whole-of-government response implemented by seven different U.S. government agencies. PEPFAR is unique for a U.S. government program in that its budget and strategy is managed by one agency (S/GAC) and executed by numerous other U.S. government agencies (HHS, USAID, DOD, Peace Corps, Treasury and others). S/GAC is not the sole executor of the funds, and therefore, transfers the vast majority of its funds to these other U.S. government implementing agencies and relies on their systems as the systems of record for budget execution information. While S/GAC has taken substantial steps over the last few years to increase documentation of the budget data from planning through execution, S/GAC acknowledges that the pace of those reforms has not been fast enough, leading to a situation where critical information was being tracked in PDF documents and excel spreadsheets, rather than within FACTSInfo NextGen, which is our system of record for budget planning information. Further, staffing gaps prior to 2019, driven in part by hiring restrictions in prior years, meant that the manual processes to track certain information in PDF and excel form were not sufficient. Consequently, S/GAC was not able to compile the information GAO sought in the way that GAO desired. In 2019, S/GAC initiated a process to modify the FACTSInfo NextGen system to track funding by appropriation year, rather than just Country Operational Plan (COP) planning year, from planning through transfer/allocation to agencies. Successful completion of this process will enable S/GAC to address most of the issues raised by the GAO and we plan dedicate additional resources to accelerate this effort. Additionally, S/GAC has filled all of the budget-related staffing gaps that existed prior to 2019 and has increased the use of SF-133 data to ensure that our tools and reports tie closely to the high-level budget execution information contained in the SF 133s.

As far as Recommendation 3, the PEPFAR program in 2015 devised and has been implementing a comprehensive strategy to mitigate the risk of the youth bulge and to achieve epidemic control, in response to the demographic data showing the increases in the youth population. This comprehensive strategy addresses the required prevention and treatment responses, by age and by sex – including targeted prevention programs for adolescent girls and young women through DREAMS and for men through targeted voluntary medical male circumcision as well as the broader age- and sex- treatment and retention programming. In addition to important impact of specific prevention programming to serve young people, the foundational PEPFAR HIV care and treatment strategy to achieve UNAIDS 95/95/95 in all age and sex categories, will lead to declining numbers of new cases regardless of changes in demographics. That is, ensuring 95 percent of all people living with HIV (PLHIV) 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.

This strategy aligns with the U.N. Sustainable Development Goals, which have been adopted by country heads of state in PEPFAR-supported countries. Thus, PEPFAR’s comprehensive prevention and treatment strategy is a robust and effective approach to epidemic control, reducing new HIV infections and reducing total deaths among those who have HIV. This strategy has and continues to yield positive results, mitigating the risks of the growing youth population. Repeat population-based household surveys in Zimbabwe and Lesotho have shown program and epidemiologic goals have been reached with continued declines in new infections counteracting the youth bulge. S/GAC is concerned that the COVID-19 pandemic has impacted the delivery of prevention and treatment services across the PEPFAR-supported countries. S/GAC closely monitors COVID-19 transmission and provides real-time solutions for program adaptations. Repeat population-based household surveys in Malawi and Uganda will provide insights of the COVID-19 impact on HIV.

As far as long-term resource needs, S/GAC utilizes different forecasts of funding needs and is simultaneously working to validate those forecasts and implement activity-based costing for more accurate quantification of the resource needs but also to drive efficiencies in the program to maximize resources. However, if the strategy continues to work in the way it has, there will be no shock to long-term funding. And critically, the internationally agreed upon UNAIDS strategy depends not just on U.S. government resources, but other multilateral investments and most importantly domestic resources. Continued efficiencies will also stretch resources further if there are short-term economic effects from COVID-19.

Appendix III: Comments from the United States Agency for International Development



April 21, 2021

David Gootnick
Managing Director, International Affairs and Trade
U.S. Government Accountability Office
441 G Street, N.W.
Washington, D.C. 20226

Re: President's Emergency Plan for AIDS Relief: State Should Improve Data Quality and Assess Long-term Resource Needs (GAO-21-374)

Dear Mr. Gootnick:

I am pleased to provide the formal response of the U.S. Agency for International Development (USAID) to the draft report produced by the U.S. Government Accountability Office (GAO) titled, President's Emergency Plan for AIDS Relief: State Should Improve Data Quality and Assess Long-term Resource Needs (GAO-21-374).

USAID would like to thank the GAO for the opportunity to respond to this draft report and appreciate the extensive work of the GAO engagement team. This report contains no recommendations for USAID; however, we were pleased to participate in the GAO's study of the President's Emergency Plan for AIDS Relief's (PEPFAR) data quality and long-term resource needs, and appreciate the GAO's recognition of the critical contributions that USAID has made with sustainable HIV epidemic control. Through PEPFAR, USAID tested over 23 million individuals and diagnosed 1 million people in 2020, and currently supports more than 6.2 million people on antiretroviral treatment. USAID made progress in HIV prevention services, ensuring that nearly 200,000 people received pre-exposure prophylaxis (PrEP), expanding to more than 500,000 people on PrEP in the current fiscal year. USAID also contributed to support for 1,497,255 of 1,661,685 adolescent girls and young women (AGYW) (ages 10-29), across the PEPFAR DREAMS program, which provides prevention, education, and empowerment services.

I am transmitting this letter from USAID for inclusion in the GAO's final report. Thank you for the opportunity to respond to the draft report, and for the courtesies extended by your staff while conducting this engagement. We appreciate the opportunity to participate in the complete and thorough study of our contributions to PEPFAR's response to the growing youth population for achieving PEPFAR goals.

Sincerely,

Colleen R. Allen

Colleen Allen
Acting Assistant Administrator
Bureau for Management

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

David Gootnick, (202) 512-3149 or gootnickd@gao.gov

Staff Acknowledgments

In addition to the contact named above, Christina Werth (Assistant Director), Tom Zingale (Analyst-in-Charge), Esther Toledo, and Kayli Westling made key contributions to this report. Neil Doherty, Mark Dowling, Justin Fisher, John Hussey, Jeff Isaacs, and Marc Rockmore also contributed to this report.

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