



PEPFAR Zambia
Country Operational Plan 2021
Strategic Direction Summary
May 11, 2021

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Note on the Country Operational Plan (COP) 2021 Strategic Direction Summary (SDS)

To simplify the COP21 process, the Office of the Global AIDS Coordinator instructed PEPFAR countries to update the existing COP20 Strategic Direction Summary (SDS) to describe new strategic shifts, priorities and activities planned in COP21. This SDS is structured as follows:

- COP21 updates are provided at the beginning of each section and offer a high-level summary of any proposed strategic shifts, priority changes and/or activities required to address challenges to epidemic control.
- The narrative following the COP21 updates describes current COP20 strategies and offers relevant progress updates. PEPFAR Zambia has also updated the narrative to signal continuation of current approaches and/or new COP21 strategies, priorities or activities, while updating relevant statistics to align with tables and charts.
- All tables, charts and figures have been updated to reflect the most recent data available.

COP21 Update: Since March 2020, COVID-19 has challenged PEPFAR Zambia to expand and amplify innovative, client-centered approaches to maintain HIV epidemic control. Multi-month dispensation (MMD) of anti-retroviral therapy (ART) – introduced prior to the COVID-19 pandemic – has proven an essential and effective strategy for ensuring uninterrupted care and treatment for people living with HIV (PLHIV). PEPFAR Zambia’s prevention program took advantage of MMD to expand access to pre-exposure prophylaxis (PrEP) and tuberculosis (TB) prevention therapy. Similarly, differentiated service delivery (DSD) tailored to individual needs and preferences remained an important strategy in reaching individuals and communities with essential HIV services.

PEPFAR Zambia did not escape the effects of COVID-19. Disruptions in supply chains affected availability of essential commodities, while coronavirus testing demands created bottlenecks for HIV laboratory services. Hesitancy to visit health facilities and other community platforms, also led to diminished health-seeking behaviors amongst priority populations at the beginning of the COVID-19 pandemic. PEPFAR Zambia has addressed these challenges through cooperation with the Ministry of Health (MoH) and by ensuring that health facilities and health care workers are equipped to provide services safely with responsible mitigation measures.

In COP21, PEPFAR Zambia will continue to rely upon these effective adaptations to HIV treatment and prevention to remain resilient to the unpredictable and dynamic nature of the pandemic. In addition, the country team will remain vigilant to COVID-19 disruptions to determine when activities may need to be adapted in response to changing needs.

As PEPFAR Zambia makes up ground from obstacles created by the pandemic, it will also need to rise to the challenge of reaching PLHIV in 2021 with testing, care and treatment services. Use of new population estimates resulted in increased PLHIV estimates that was important to correct for the high (>100%) ART coverage in most provinces; from COP20 to COP21, the PLHIV estimate grew from 1,240,262 to 1,494,701. While the revised estimate has affected the country’s picture of epidemic control, it does not negate the tremendous success that Zambia marked in 2019 by achieving 90-90-90 targets. These revised estimates will ensure that PEPFAR Zambia does not leave PLHIV behind and will continue to invest in identifying and linking populations with unmet needs to care; provide quality comprehensive care; and offer prevention interventions to address individual needs. PEPFAR Zambia will reassess PLHIV estimates once national census Zambia Population HIV Impact Assessment (ZAMPHIA) data are available.

In COP21, PEPFAR Zambia will collaborate closely with the Government of the Republic of Zambia (GRZ), cooperating partners (CPs) and civil society to address stubborn gaps in treatment coverage of pediatrics, men 20-34 and men over 50; viral load coverage, particularly for pregnant and breastfeeding women; and recency testing. The SDS outlines the essential and proven strategies that PEPFAR Zambia will employ to maintain progress, but also address these remaining gaps in HIV prevention, testing and treatment services, which are necessary to realize an AIDS-free Zambia.

1.0 Goal Statement

The US President's Emergency Plan for AIDS Relief (PEPFAR) Zambia's program achieved 90-90-90 targets for HIV epidemic control in COP19 based on population and PLHIV estimates at the time. In COP20, PEPFAR Zambia focused on treatment retention with client-centered approaches and prevention of new HIV infections through evidence-based strategies. PEPFAR Zambia will maintain this focus into COP21. The GRZ is committed to ending HIV by 2030 and uses the 90-90-90 Fast Track Strategy to measure epidemic control. Through close collaboration, PEPFAR and the GRZ, continue to achieve needed milestones to reach epidemic control targets and continually dialogue over resource allocation to develop financially sustainable programs.

HIV models suggest that the number of new HIV infections still exceeds the number of AIDS-related deaths; they have not declined to the levels that epidemic control should illustrate. Recognizing this, in COP20, PEPFAR Zambia has focused on retaining PLHIV on treatment and on interrupting the HIV transmission cycle by finding and retaining men (20-34) and adolescent girls and young women (AGYW) in geographic areas with the largest treatment gaps. In COP21, PEPFAR Zambia will remain focused on reaching these at-risk groups, while placing increased attention on treatment coverage and retention for children and men between 20-34.

The key focus of COP20 has been on treatment retention, and this remains a priority in COP21. Two of the key retention strategies include transitioning 80% of adults on ART to the more efficacious and safer dolutegravir-based regimen (TLD) and providing three- and six-month MMD of anti-retroviral drugs (ARVs) to all eligible clients. Through improved adherence and retention, PEPFAR Zambia aims to achieve 95% viral load (VL) suppression by close of COP20. As of COP21 Q1, the Operating Unit (OU) had achieved 92% overall viral load suppression. Moving into COP21, PEPFAR Zambia will include greater focus on increasing viral load coverage of pregnant and breastfeeding women (PBFW). In addition, PEPFAR Zambia has continued to train GRZ provincial health workers and civil society organizations (CSOs) to spread key messages on HIV treatment literacy, including promulgating the message that an undetectable VL equals untransmittable HIV (U=U) to encourage PLHIV to stay on treatment.

Key COP20 strategies have included scale-up of the community post model, which is yielding results in finding and retaining men on treatment, and an increase of differentiated models of care for AGYW through, in part, DREAMS Centers and Safe Spaces in communities and adolescent-friendly care in high-volume facilities. PEPFAR Zambia has also implemented a pediatric surge, to strengthen identification of HIV-exposed infants. The pediatric surge will help PEPFAR Zambia achieve greater than 80% early infant diagnosis (EID) coverage starting at six to eight weeks of life through cessation of breastfeeding. The pediatric surge has packaged innovative family-centered services to treat and provide support services to the entire family to yield improved results in case-finding and treatment among children and their families. As such, PEPFAR Zambia will continue using these effective strategies in COP21.

PEPFAR Zambia has continued to invest in and expand evidence-based prevention interventions, such as voluntary medical male circumcision (VMMC), PrEP and condom distribution and continued investment in successful prevention initiatives, like DREAMS. Key populations (KPs) programming has expanded with the aim of ensuring that at least 95% of KPs living with HIV in targeted areas are linked to treatment and all those who test negative are offered PrEP. As of COP21 Q1, 110% of KPs living with HIV had been linked to treatment, according to program data. In COP21, these strategies remain an integral part of PEPFAR Zambia's approach to prevention, treatment, and retention.

PEPFAR Zambia works with the GRZ to advocate for enough funds to maintain and sustain epidemic control by advocating for increased domestic resources for the HIV response. A critical aspect of sustaining gains requires a responsible transition of the PEPFAR-supported staff paid through international non-governmental organizations (NGOs) to local NGOs and the GRZ. PEPFAR Zambia has facilitated this transition by financing government-to-government (G2G) agreements in eight provinces accompanied by USG technical assistance to train health workers and build capacity in key service delivery areas. PEPFAR Zambia monitors all investments to ensure resources are allocated where the burden is greatest. The specificity in data required by PEPFAR Zambia's implementing partners (IPs) provides essential performance data that allows for strategic program adaptations.

2.0 Epidemic, Response, and Program Context

2.1 Summary Statistics, Disease Burden and Country Profile

Zambia is a lower, middle-income country (GNI: 4,100 per capita, PPP, World Bank 2018) with an estimated population of 21,894,827 (Spectrum 2021). Men represent 49.6% of the population compared to women (50.4%); 43.1% of the population resides in urban areas compared to 56.9% in rural areas. According to the 2018 Zambia Demographic Health Survey (ZDHS) Final Report, 11.1% of persons aged 15-49 are living with HIV (14.2% of adult women, 7.5% of adult men). HIV prevalence among children under 15 is estimated to be 0.8% (Spectrum 2021).

In 2020, 1,240,262 Zambians were estimated to be living with HIV; in 2021, using a new population estimate, this number is now estimated to be 1,494,701 (Table 2.1.1). The decision to use a different population source (Grid3) in COP21 was the result of an extensive, iterative review of a variety of data inputs, the resulting outputs against program results, and robust studies such as the 2016 Zambia Population-based HIV Impact Assessment (ZAMPHIA). Zambia has not conducted a census in over 10 years, and the 2020 census was delayed to late 2021 due to COVID-19. Using the Zambia Statistics Agency (ZamStat) population projection or World Population Prospects (WPP) as was done in previous rounds resulted in an estimated national ART coverage of 97%, with five of ten provinces – including the largest – estimated at over 100% ART coverage. Considering this coverage alongside comparisons to 2016 ZAMPHIA ART coverage results and robust program growth of over

170,000 new initiations per year in Zambia, the estimates team concluded that use of these population data resulted in a likely underestimate of PLHIV.

The Grid3 population estimates are a new geospatial-based population data source produced in Zambia through collaboration with ZamStat. The resulting population estimate is nearly 2.5 million larger than the most recent ZamStat and WPP-based population estimates. Although the use of these estimates in the Spectrum modeling process resulted in a large increase in overall PLHIV estimates – and is potentially an overestimate – they were determined to be the best option available for COP21 planning. These estimates (and resulting program decisions) will be validated and updated with the upcoming census and ZAMPHIA, which are scheduled to be completed by the end of this calendar year.

Using these estimates, women remain disproportionately affected (61.6%); AGYW between 15 and 24 years of age have an incidence rate of 0.8% compared to 0.2% for adolescent boys and young men (ABYM) in the same age group. New infections among young women are consistently more than double those among young men. Of the 1,494,701 people estimated to be living with HIV, 91% (1,353,652) are estimated to know their HIV status, 79% (1,130,679) are on ART, and 73% (1,096,499) are estimated to be virally suppressed. The ART coverage for adult males above the age of 25 is 78% compared to ART coverage of 83% among adult women above the age of 25 (Spectrum 2021). ART coverage among children living with HIV (CLHIV) less than 15 years of age is 64%; children under 15 years of age have the lowest coverage of any of these age and sex groups.

For KPs, robust data on population size and HIV impact remains a challenge. PEPFAR Zambia undertook a size estimate exercise in 2020, which estimated the population of men who have sex with men (MSM) to be 114,852 with a prevalence rate of 21% and the population of female sex workers (FSW) to be 160,868 with an HIV prevalence of 29% and transgender estimated to be 12,680. HIV prevalence is not available for transgender individuals. PEPFAR Zambia is implementing an integrated biological and behavioral surveillance (IBBS) for FSW, MSM, and people who inject drugs (PWID) in COP20 to better understand the HIV epidemic among these populations and develop better size estimates.

Geographically, the 2018 ZDHS shows that Copperbelt and Lusaka Provinces have the highest HIV prevalence (15.4 and 15.1%) and absolute HIV burden (250,329 and 353,808, respectively using 2018 census population data), accounting for 49% of Zambia's total PLHIV. Prevalence is greater than 10% in Central (12.4%) Western (10.6%), and Southern (12.4%), and below 10% in Luapula (7.9%), Eastern (7.4%), and Northern (5.6%), Northwestern (6.1%), and Muchinga (5.4%). Spectrum data for morbidity and mortality approximates the total number of deaths attributed to AIDS in 2020 as 24,390 with tuberculosis (TB) remaining the leading cause of death among PLHIV.

	Table 2.1.1: Host Country Government Results														Source, Year
	Total		<15				15-24				25+				
	N	%	Female		Male		Female		Male		Female		Male		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Total population	21,894,827		4,697,473	21.5%	4,785,649	21.9%	2,323,739	10.6%	2,322,092	10.6%	4,006,774	18.3%	3,759,100	17.2%	Spectrum 2021
HIV prevalence		6.8%		0.8%		0.8%		5.5%		2.0%		19%		13%	Spectrum 2021
AIDS deaths per year	24,390		2,637	10.8%	2,709	11.1%	1,609	6.6%	1,023	4.2%	8,740	35.8%	7,672	31.5%	Spectrum 2021
Number of PLHIV	1,494,701		38,376	2.6%	39,277	2.6%	127,152	8.5%	46,519	3.1%	754,463	50.5%	488,914	32.7%	Spectrum 2021
Incidence rate (Yr)		0.3%				0.2%		0.8%		0.2%					Spectrum 2021
New infection (Yr)	58,118						16,894	29.1%	4,844	8.3%					Spectrum 2021
% pregnant women with at least one ANC visit	718,376	97.0%													ZDHS 2018
Pregnant women needing ARVs	62,442														Spectrum 2021
Orphans	247,244														Spectrum 2021
Notified TB cases	37,203														WHO 2017
% TB care that are HIV infected	20,362	58.9%													WHO 2018
% male circumcised	1,853,436	8.5%													HMIS
Estimated population, MSM	114,852	0.5%													JHU 2021
MSM HIV prevalence	24,119	21.0%													JHU 2021
Estimated population, FSW	160,865	0.7%													JHU 2021
FSW HIV prevalence	46,651	29.0%													JHU 2021
Estimated population, PWID	26,840	0.1%													
PWID HIV prevalence	6,442	24.0%													

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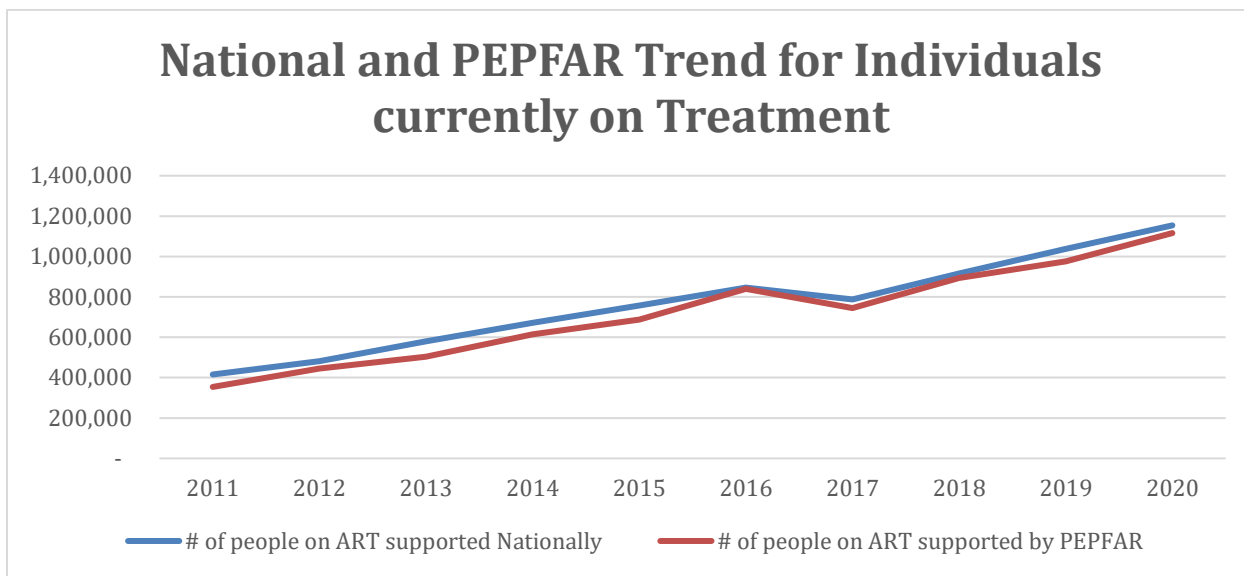
Table 2.1.2 95-95-95 cascade: HIV diagnosis, treatment and viral suppression										
Epidemiologic Data					HIV Treatment and Viral Suppression			HIV Testing and Linkage to ART Within the Last Year		
	Total Population Size Estimate	HIV Prevalence	Estimated Total PLHIV	PLHIV diagnosed	On ART	ART Coverage (%)	Viral Suppression (%) *	Tested for HIV	Diagnosed HIV Positive	Initiated on ART
	(#)	(%)	(#)	(#)	(#)			(#)	(#)	(#)
Total population	21,894,827	7%	1,494,701	1,310,177	1,182,382	79%	93%	2,875,811	204,147	175,880
Population <15 years	9,483,110	1%	77,653	52,311	49,640	64%	85%	255,682	7,492	7,508
Men 15-24 years	2,322,090	2%	46,519	34,636	32,850	71%	86%	309,305	6,676	5,594
Men 25+ years	3,759,092	13%	488,914	427,152	381,024	78%	94%	678,379	70,408	60,136
Women 15-24 years	2,323,731	5%	127,152	103,122	94,637	74%	90%	699,826	29,613	24,455
Women 25+ years	4,006,799	19%	754,463	692,956	624,231	83%	95%	932,574	89,958	78,187
MSM	114,852	21%	24,119							
FSW	160,865	29%	46,651							
People Who Inject Drugs (PWID)	26,840	24%	6,442							
Priority Pop (AGYW)	3,743,060	4%	142,051							

*Of those on ART.

Source: COP21 DataPack & DATIM

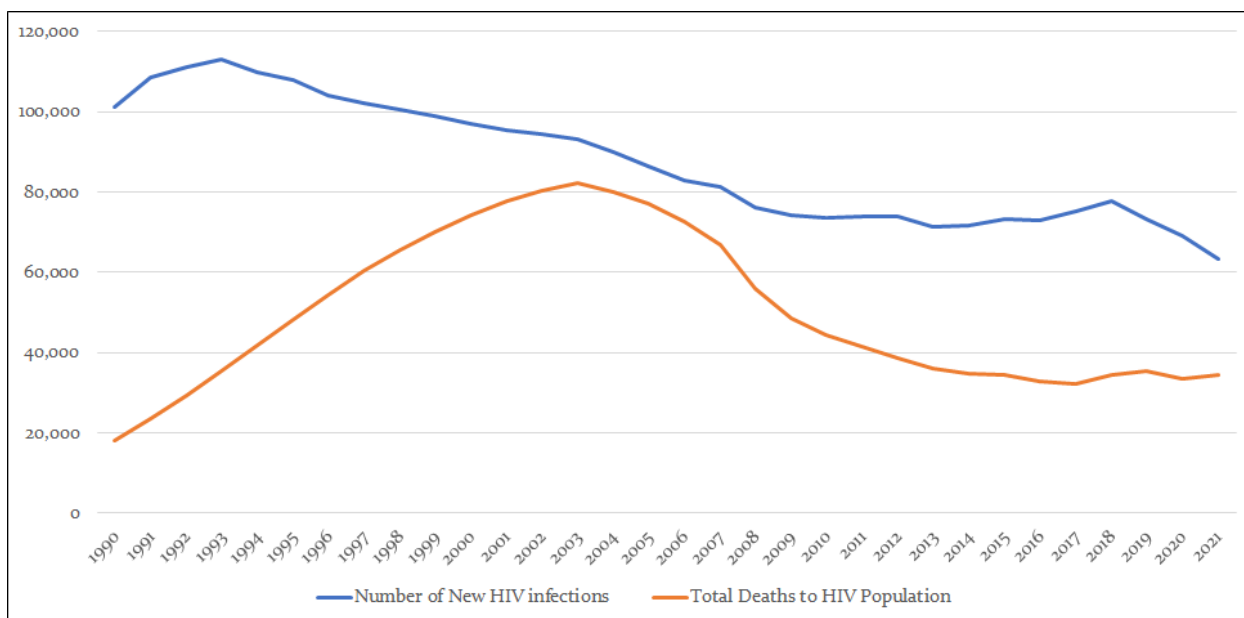
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Figure 2.1.3 Updated National and PEPFAR Trend for Individuals Currently on Treatment



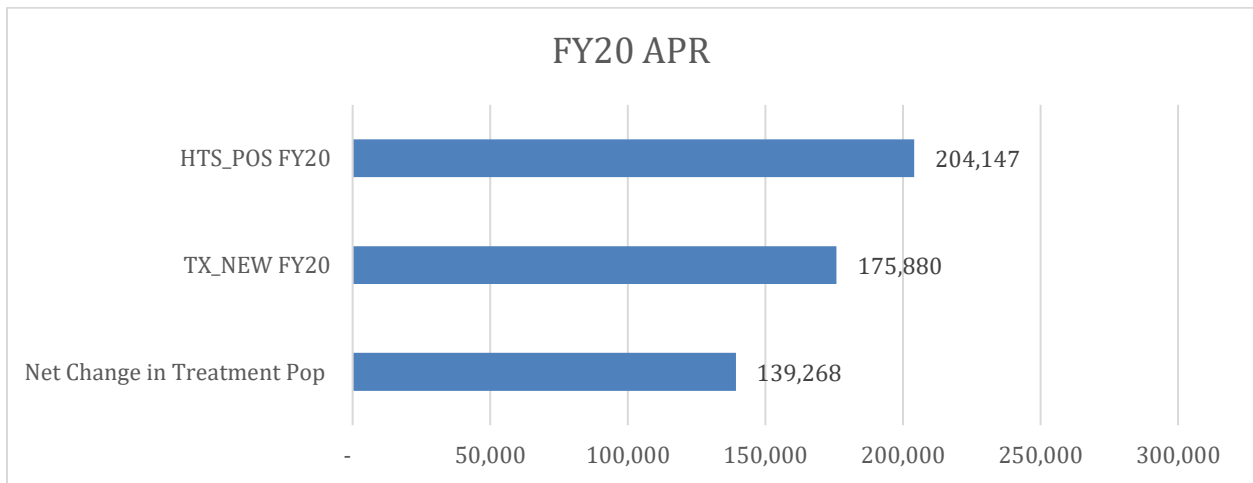
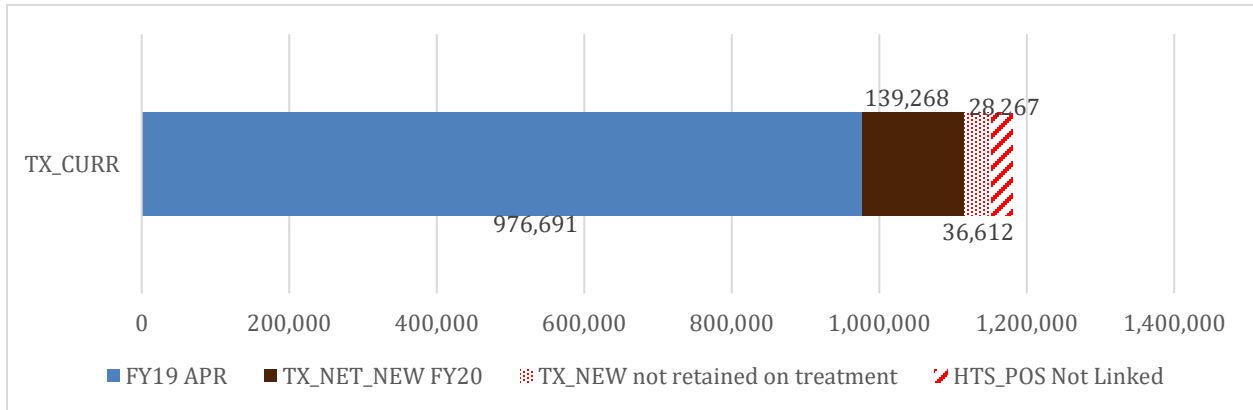
Source: Health Management Information System (HMIS) & DATIM Program Reports

Figure 2.1.4 Updated Trend of New Infections and All-Cause Mortality among PLHIV



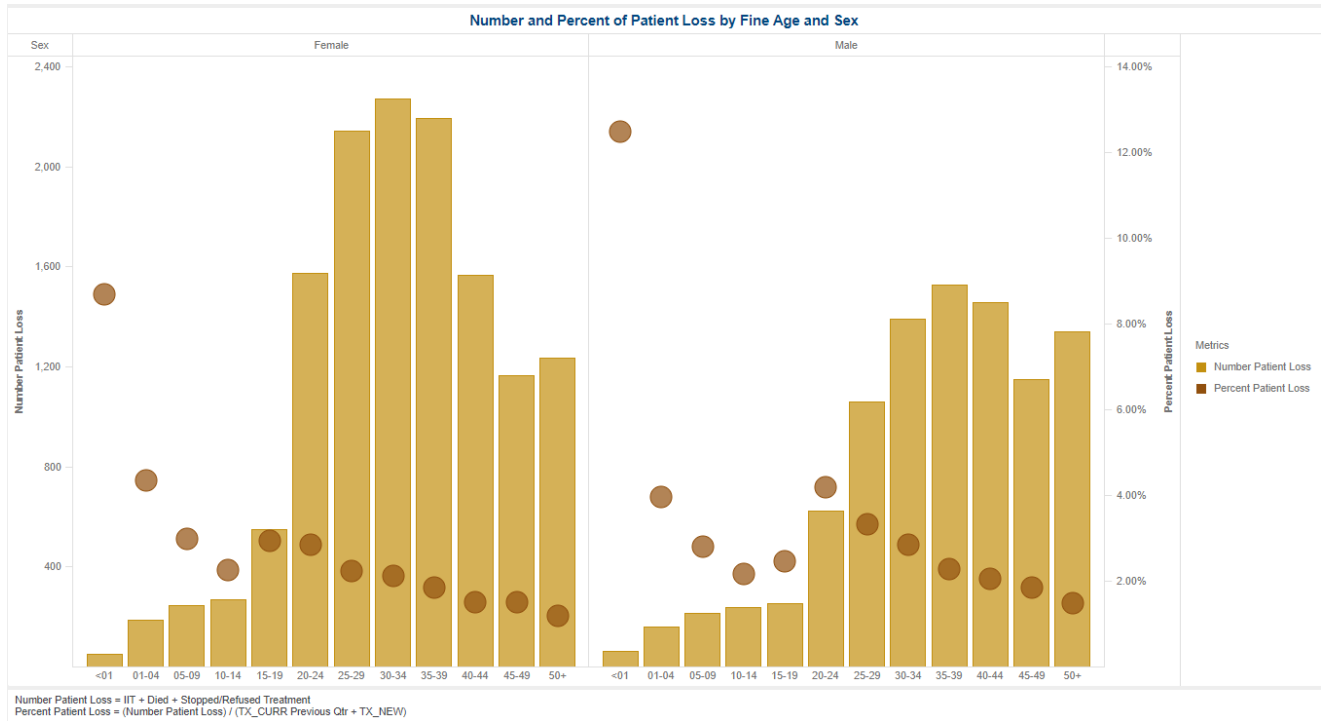
Source: UNAIDS epidemiological estimates, 2021 (using Grid3 population estimates)

Figure 2.1.5 Progress Retaining Individuals in Lifelong ART in COP19 (FY20)



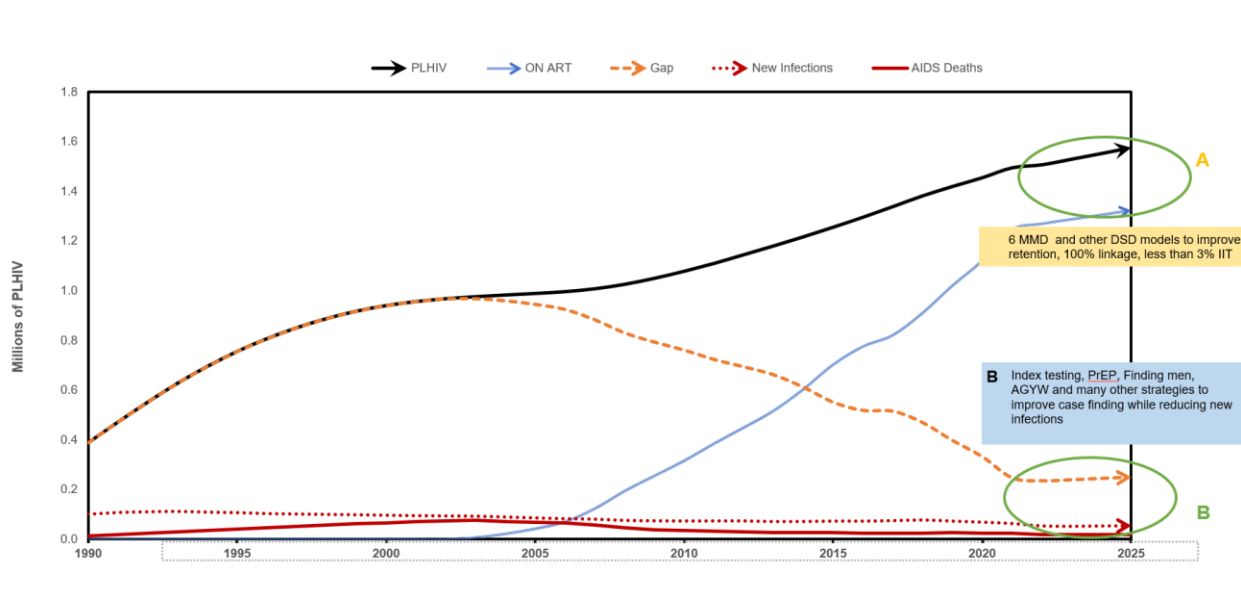
Source: DATIM

Figure 2.1.6 Clients Lost to ART by Age/Sex from 2019 Q4 to 2020 Q4



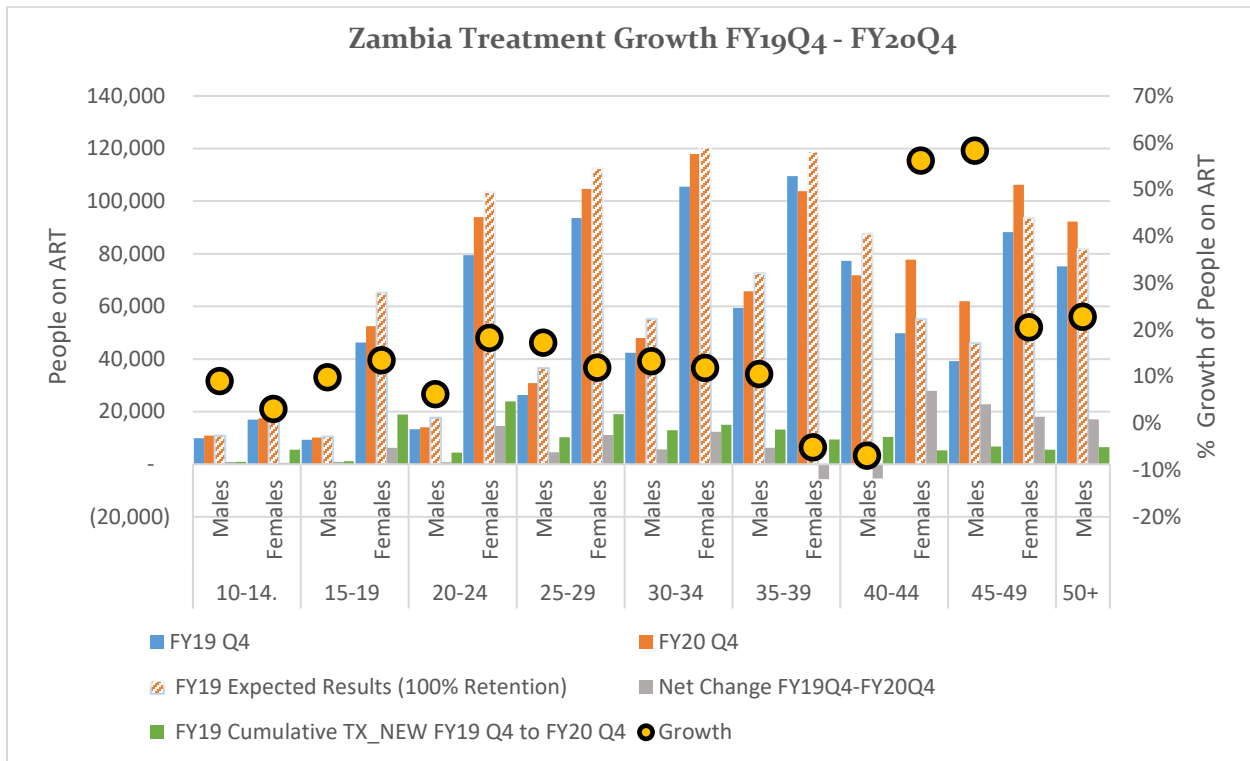
Source: DATIM

Figure 2.1.7 Epidemiologic Trends and Program Response for Zambia



Source: Spectrum 2021

Figure 2.1.8 Net Change in HIV Treatment by Sex and Age Bands 2019 Q4 to 2020 Q4



Source: DATIM

2.2 New Activities and Areas of Focus for COP21

COP21 Update: In COP21, PEPFAR Zambia will identify and link populations with unmet needs to care and treatment; provide quality comprehensive care; and offer prevention interventions to address individual needs. PEPFAR Zambia will implement highly-targeted HIV testing to ensure children, adolescents, men 20-34 and men over 50, in particular, are diagnosed and treated early. Important strategies will include index testing of sexual partners and children of PLHIV, social networking testing for KPs, and use of a HIV screening tool in high-yield areas within facilities. PEPFAR Zambia will support retention to treatment by scaling up the community post model, differentiated service delivery for adolescents, men and other priority populations, six-month MMD, and increasing the proportion of adults on TLD to 80%. PEPFAR Zambia recommits to delivering comprehensive HIV prevention interventions to AGYW, KPs, PBFW and other priority populations. These strategies, described in detail below, will help the OU respond to remaining stubborn gaps in prevention, care and treatment in cooperation with the GRZ, cooperating partners, and civil society.

2.2.1. DREAMS

In COP21, PEPFAR Zambia's DREAMS program will focus on providing high-quality prevention services to AGYW, their families and communities with continued emphasis on identification of the most at-risk AGYW, including pregnant women and mothers; enhanced economic strengthening services; increased PrEP access and uptake; improved mentor selection with expanded roles for DREAMS Ambassadors; and use of evidence-based curricula implemented with quality and fidelity. The latter includes focus on sexuality education through schools to address gender and power relations and reduce the incidence of gender-based violence. PEPFAR Zambia will continue to collaborate with the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) and the Ministry of Health (MoH).

2.2.2 Key Population Program

In COP21, PEPFAR Zambia will prioritize client-centered community DSD models and the use of comprehensive case management teams to provide holistic layered services to KPs. Activities will focus on strengthening the clinical cascade and online marketing approaches to reach KPs not previously reached through social media influencers and online ads. PEPFAR Zambia will continue to scale-up strategies for improving HIV case finding, including self-testing, enhanced peer outreach approach (EPOA), risk network referral (RNR), and use of risk assessment tools. Expanding access to and the provision of PrEP and the safety and security of KPs will be prioritized in COP21. PEPFAR Zambia will also focus on supporting KP community involvement to ensure that HIV services are relevant and meet the unique needs of KPs. PEPFAR Zambia will prioritize that competent KP-led organizations actively lead and participate in the design, implementation, and evaluation of programs. Activities will address capacity strengthening and include structural interventions for KPs. Deliberate efforts will be made to work with KP-led organizations to implement client-centered services for KPs in both facility and community settings. PEPFAR Zambia will further ensure meaningful engagement of KP communities through community-led monitoring. Lastly, PEPFAR Zambia, in collaboration with IPs, will work with KP CSOs to assess and strengthen safety and security plans for members of KPs.

2.2.3. Pre-exposure Prophylaxis

PEPFAR Zambia has expanded PrEP services to vulnerable and high-risk populations with the aim of reaching 110,000 clients with PrEP in COP20 compared to an achievement of 24,397 at the end of COP18. As of COP20 Q1, 57,455 clients were currently on PrEP, representing 52% of the COP20 target. PrEP access was expanded to include eligible pregnant and breastfeeding women (PBFW), AGYW in DREAMS, and non-DREAMS districts KPs. Increasing access to PrEP remains a priority in COP21. PEPFAR Zambia will work closely with the GRZ and GFATM to ensure consistent supplies of PrEP commodities.

2.2.4 Case Finding and Linkage

As in COP20, index testing and social network testing will remain priority case finding strategies to identify the majority of positives. PEPFAR Zambia will continue to use the S/GAC recommended site assessment tool to ensure that sites implementing index testing adhere to the PEPFAR minimum requirements for index testing. If a site is found to be below standard, index testing services will be paused, and PEPFAR Zambia staff will work with the IP at the site to address the deficiencies before safely resuming index testing. PEPFAR Zambia will use provider-initiated testing and counseling (PITC) only in limited settings, including antenatal clinics (ANC), TB and sexually-transmitted infection (STI) clinics, inpatient wards and among VMMC clients. As part of the continuing pediatric surge, PEPFAR Zambia will support index testing of all biological children up to age 19 women living with HIV enrolled in care. Given gaps in treatment coverage for children and adolescents, men between 20-34, and key populations, PEPFAR Zambia will continue to focus on identifying and linking these populations to treatment.

Furthermore, PEPFAR Zambia will continue to provide recency testing in Lusaka, Copperbelt, Central and Southern Provinces in COP21. Recency results have supported identification of demographic and geographic patterns of new HIV infections to shape an appropriate public health response. Recency testing will remain a critical surveillance tool in COP21, and PEPFAR Zambia will improve use of recency data to implement responses that advance epidemic control.

2.2.5. Orphans and Vulnerable Children

In COP21, PEPFAR Zambia will continue enrollment and service delivery to orphans and vulnerable children in seven of the country's 10 provinces: Lusaka, Central, Southern, Eastern, Copperbelt, Western and Northwestern. The OVC program will use a family-centered approach to reach at least 90% of CLHIV under 20 years old and their caregivers in targeted districts. Services will include health services, such as HIV index testing, ART adherence support and treatment literacy; education support, including school fees; household stability services such as economic strengthening; and safety services such as pre- and post-violence care and support.

The OVC program will continue supporting the pediatric surge and implement standard operating procedures (SOPs) between OVC IPs and health facilities. PEPFAR Zambia will also implement memoranda of understanding signed in COP20 to facilitate joint case finding, case conferencing and index testing with PEPFAR Zambia clinical implementing partners and provincial directorates of the MoH, where appropriate. Continued technical assistance to and collaboration with the Ministry of Community Development and Social Services (MCDSS) is designed to strengthen the government's role in OVC service delivery.

2.2.6. Voluntary Medical Male Circumcision

In COP20, PEPFAR Zambia aimed to saturate VMMC among 15-29-year-olds using base and ambition funds. PEPFAR Zambia aimed to increase the saturation rate from approximately 66% to 80% by the close of COP20. PEPFAR Zambia did not provide VMMC services to males under 15. By the end COP20 Q1, PEPFAR Zambia had already reached 25% (134,114) of the annual target of 375,608 with 89% of males in the target age group of 15-29 years.

2.2.7. Cervical Cancer

In COP20, PEPFAR Zambia supported district-wide coverage of cervical cancer screening services in 104 PEPFAR supported districts. To improve treatment rates, PEPFAR Zambia has established services or provided transport and assisted referrals for loop electrosurgical excision procedure (LEEP) services for clients who needed these services and were coming from facilities without theatre services. Additionally, UNITAID/Clinton Health Access Initiative (CHAI) and other stakeholders (World Bank, World Health Organization (WHO), GFATM) are supporting the MoH in the creation of an enabling policy environment through the development of relevant policy documents, capacity strengthening through training and mentorship, procurement of handheld thermal ablation and LEEP devices, HPV DNA test kits; and strengthening M&E systems for cervical cancer programming across the country.

2.2.8. Treatment Complete

Having reached over 1.1 million PLHIV on ART at the end of COP20 Q1, PEPFAR Zambia invested in retaining this cohort in COP20. Retention strategies included six-month MMD for eligible clients and transitioning 80% of adults to TLD by the end of 2021. In COP20, PEPFAR Zambia aims to close the remaining gap especially among males aged 20-34 and AGYW using the community post model and focusing on Lusaka, Copperbelt and Southern Provinces where the largest coverage gaps remained. As of COP21 Q1, 54% of eligible clients had received 6MMD, and 53% of adults had transitioned to TLD. Further, PEPFAR Zambia followed up on clients with missed appointments to bring them back to care. PEPFAR Zambia also provided baseline VL for all newly-identified HIV infected clients to better track recent HIV infections. Finally, PEPFAR Zambia built on the gains made in the COP19 TB preventative therapy (TPT) surge to ensure all eligible recipients of care receive and complete TPT. These treatment strategies remain essential to achieving COP21 targets.

2.2.9. Viral Load Coverage

Despite challenges caused by COVID-19 testing demands at PCR (polymerase chain reaction) labs, PEPFAR Zambia had maintained a VL coverage of 78% at the end of COP20 Q1. To achieve further major improvements, lingering support systems gaps must be addressed, and demand must be created, primarily by minimizing turnaround time of VL test results. The pre-testing steps of determining eligibility, scheduling and sample referral are the major remaining support systems gaps. The post-testing steps of results return and utilization were substantially improved and will achieve the essential goal of 100% access to digital results return by the end of COP20. COP 21 will see further refinement in results return, including additional test results (EID and Tb) being available digitally and enabling a patient SMS alert. COP21 will also see a new emphasis on collaboration between laboratory and data management teams at the site level to ensure data quality.

In COP21, the major focus for VL support systems improvement must be on sample referral. The on-call sample transfer system improved access to VL testing (and other support labs) for one rural district in which the paradigm was fully implemented. However, the stated COP20 objective of full

access to on-call sample referral was not implemented due to new challenges created by inconsistent power supply. In COP₂₁, the focus will remain on supporting all sites, regardless of the ultimate testing facility or modality (“conventional” or point of care), have access to on-call sample referral.

To further optimize VL testing in COP₂₀, PEPFAR Zambia has supported both the MoH and Ministry of Defense (MoD) to roll out the use of dried blood spot (DBS) test or plasma separation card (PSC) for VL testing for the entire catchment at designated facilities cut off from sample referral for extended periods (e.g., during the rains), and/or individuals as deemed essential by providers. This effort is especially critical for improving coverage among children, whose access to VL testing may be limited by lack of phlebotomy skills among healthcare workers to successfully obtain blood through venipuncture.

In terms of minimization of turnaround time (with the over-arching objective of stimulating demand), PEPFAR Zambia expanded point of care services for viral load and EID on the GeneXpert platform from 18 districts in COP₁₉ to an additional 18 districts in COP₂₀. In COP₂₁, 70% of pediatric and PBFW VL and 70% of EID testing will be conducted on GeneXpert, effectively reducing all priority VL and EID TAT to under 24 hours. This system, in addition to the DBS/PSC option, on-call sample referral and improved data management is expected to push VL coverage above 90% in COP₂₁

2.3 Investment Profile

COP21 Update: PEPFAR Zambia continues to provide substantial resources toward HIV epidemic control, with important commitments from the GFATM, the GRZ and other donors (Table 2.3.1). The investment profile remains largely unchanged in COP21. However, COVID-19 has amplified persistent economic challenges. Though the GRZ has mapped out the Economic Recovery Program (ERP) to address these challenges, continued financial instability could impede the country's efforts to maintain epidemic control. PEPFAR Zambia will monitor economic performance and associated implications for sustaining the GRZ's commitment to the HIV response.

The GRZ continues to demonstrate high commitment to the HIV response. The GRZ provides the majority of infrastructure and human resources, the backbone of the response. In its HIV response, the GRZ is supported by key partners notably the U.S. government through PEPFAR as the major funder followed by the GFATM.

Zambia's economic performance has slowed in recent years due to falling copper prices, declines in agricultural output and power generation, and inadequate policy adjustment to these shocks. In 2020, the Zambian economy recorded the deepest recession in more than twenty years. A depreciating Zambian Kwacha (ZMW) along with COVID-19-related expenses led to a ballooning government expenditure resulting in an even wider fiscal deficit than planned. The GRZ external debt increased to \$12.75 billion as of December 2020 (GRZ 2021), largely because of non-payment of debt service to most creditors due to the tight fiscal space. The value of the Kwacha has remained weak, hitting the ZMW 22-to-USD 1 mark in Q1 2021. Annual inflation closed at 19.2% in 2020, the highest in over four years, and reached 22.2% in February 2021 (World Bank, 2021).

The coronavirus pandemic has exacerbated Zambia's economic pressures. The pandemic has weakened the local economy, and prolonged disruptions could further amplify existing economic challenges. The high cost of servicing debts, accumulation of arrears to suppliers, depreciation of the Zambian Kwacha, increasing inflation and other economic challenges are persistent threats to the country's financial stability and could impede its ability to support the goals of maintaining epidemic control. Severe liquidity constraints have resulted in poor budget execution rates and constant cash rationing, with unpredictable budget releases for all sectors, including health.

The 2020-23 Economic Recovery Program is the basis for the government's broad policy direction to address these challenges going forward. Specifically, the ERP states that fiscal adjustment will be achieved through domestic resource mobilization, expenditure rationalization, and reducing the pace of debt accumulation. In addition, the GRZ is working with creditors to restructure their external debt portfolio and is also engaged with the International Monetary Fund to secure financial assistance through a reform program that would help stabilize the macroeconomic outlook of the country.

Given these significant economic constraints, success in maintaining epidemic control into COP21 will depend upon strong partnership between PEPFAR Zambia and the GRZ. PEPFAR Zambia will

continue to work collaboratively with GFATM and other donors in support of the GRZ to strengthen government efforts to increase efficiencies in health expenditures and capacities to effectively plan for sustainable high-impact interventions, thus facilitating the GRZ's increased share of financial responsibility for the HIV response.

Table 2.3.1 Annual Investment Profile by Program Area					
Program Area	Total Expenditure	PEPFAR	GFATM	GRZ	Other
Care and treatment	\$277,947,304	82%	10%	8%	0%
HIV testing services	\$21,664,243	93%	7%	0%	0%
Community mobilization, behavior and norms change	\$16,176,061	79%	21%	0%	0%
VMMC	\$16,737,221	91%	9%	0%	0%
Prevention incl. PrEP, condoms & lubricant, primary prevention of HIV & sexual violence and priority, AGYW and KP prevention	\$18,868,861	68%	16%	15%	0%
OVC	\$15,914,411	97%	3%	0%	0%
HMIS, surveillance and research	\$15,635,016	87%	13%	0%	0%
Lab systems strengthening	\$6,849,366	100%	0%	0%	0%
HRH, PSM management; PFM strengthening; other above-site/HSS programs	\$50,546,090	26%	11%	63%	0%
Total	\$440,338,573	77%	11%	12%	0%

Source: PEPFAR COP19 Expenditure Reporting, GF Geneva submissions, GRZ – 2019 IFMIS. Amounts in USD. Excludes program management. Reporting available expenditures for COP19 (FY20) and CY19.

Table 2.3.2 Annual Procurement Profile for Key Commodities 2020					
Commodity Category	Total Expenditure	PEPFAR	GFATM	GRZ	Other
ARVs	\$90,102,467	71%	23%	6%	0%
Rapid tests kits	\$6,529,291	78%	22%	0%	0%
Other drugs	\$7,485,360	86%	0%	4%	0%
Lab Reagents	\$12,296,326	79%	0%	21%	0%
Condoms and personal lubricants	\$5,715,409	24%	76%	0%	0%
Viral load commodities	\$22,445,876	95%	5%	0%	0%
MAT	\$0	0%	0%	0%	0%
Other commodities	\$3,967,532	74%	20%	6%	0%
Total	\$148,542,261	75%	20%	5%	0%

Source: Source 2020 National Lab Commodities Forecasting and Quantification Report and the 2020 National ARV Forecasting and Quantification Report, COP21 proposed funding, and GFATM concept note with GRZ/MoH

Table 2.3.3 Annual USG Non-PEPFAR Funded Investments and Integration					
Funding Source	Total USG Non-PEPFAR Resources	Non-PEPFAR Resources Co-Funding PEPFAR IMs	#Co-Funded IMs	PEPFAR COP Co-Funding Contribution	Objectives
USAID MCH	\$8,000,000	\$2,008,000	7	\$10,000,000	Maternal, newborn and child health (MNCH) activities support health systems strengthening and community engagement around high-impact interventions to save lives. These efforts address the leading causes of MNC death and advance Zambia toward better health services and universal health care for all. Complement PEPFAR and FP activities, particularly through close provincial and district level collaboration.
USAID TB	\$5,500,000	\$3,000,000	6	\$10,000,000	TB activities strengthen high-quality DOTS expansion and enhancement, address TB-HIV, multidrug resistant TB and the needs of poor and vulnerable populations in six high-burden target provinces, engage all categories of care providers, and enable and promote operational research.

USAID Malaria	\$30,000,000	\$12,095,000	1	\$0	Malaria activities scale up proven prevention and treatment interventions to reduce malaria illness and death and support the GRZ's malaria elimination goals primarily in five provinces. Interventions include distribution of insecticide-treated nets, indoor residual spraying, malaria case management, intermittent preventive treatment to pregnant women, behavior change interventions, policies and guidelines and strengthening management capacity at a provincial and district levels.
USAID Family Planning	\$10,000,000	\$4,140,000	7	\$10,000,000	Reproductive health/FP activities will increase modern contraceptive prevalence rates in women of reproductive age through increased access to and improved quality of family planning services in targeted sites via a strengthened, community-based FP service delivery system.
CDC (Global Health Security)	\$450,000	\$0	0	\$0	To strengthen disease surveillance, outbreak response and laboratory systems that help detect, prevent and control diseases.
CDC Internation al Task Force – COVID Funds	\$3,324,300	\$3,314,300	6	\$2,700,000	
CDC Foundation COVID Funds	\$427,800	\$0	0	\$0	
Total	\$57,692,100	\$24,629,300	27	\$22,700,000	

Source: CDC HQ supported cooperative agreements; USAID's approved FY20 Operational Plan; COP19.

2.4 National Sustainability Profile Update

PEPFAR Zambia used a transparent and participatory process to complete the Sustainability Index and Dashboard (SID) 2019 and is scheduled to conduct the next SID during the COP21 implementation period. PEPFAR and UNAIDS co-convened a multi-stakeholder SID consultative workshop in September 2019 attended by representatives from several host government ministries and departments, multilateral organizations, local NGOs and CSOs. This workshop was held over two days: the first day focused on completing the Responsibility Matrix while the second day was used to complete the SID 2019 tool.

2.4.1 Progress Addressing Sustainability Strengths

The next SID will take place in 2021. This section remains unchanged for COP21. The SID 2019 process identified four sustainability strengths:

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Performance Data (9.50): This element score increased from 6.40 in SID 3.0. The country has a harmonized set of complementary information systems, managed, and operated by the host country government with technical assistance from external agencies/institutions. The host country government finances more than 90% of routine collection of HIV service delivery data. These data are collected by population, program and geographic area in a timely manner (quarterly). GRZ routinely analyzes service delivery data to measure program performance, and structures, procedures and policies exist to assure data quality.

Availability of high-quality performance data is critical to effective program monitoring and management. Given the high element score, PEPFAR Zambia expects that limited external support will be required by the end of COP20 and into COP21.

Planning and Coordination (9.00): This element score decreased slightly from 9.29 in SID 3.0. It was considered a strength in the previous SID. Zambia has a costed, multi-year national strategy, which is updated at least every five years (with key stakeholders) and includes critical components of prevention and treatment. The GRZ leads the development/revision of the National AIDS Strategic Framework (NASF) with active participation from CSOs, businesses and corporate sector and external agencies. Additionally, the GRZ routinely tracks HIV activities of CSOs and donors, leads the process that convenes stakeholders and develops joint operational plans with implementing organizations.

Effective planning and coordination are critical to the implementation of treatment and prevention programs at scale and the achievement of 95-95-95 targets and sustained epidemic control. The GRZ leadership in planning and coordination promotes country ownership and sustainability of the national response. Considering the high element score, PEPFAR Zambia expects that limited external support will be required by the end of COP20 and into COP21.

Quality Management (8.76): This element score increased from 7.10 in SID 3.0. It supports quality management structures at national, sub-national and site level. The country has a current quality management/quality improvement (QM/QI) strategy that includes HIV program-specific elements; it is partially utilized. HIV program performance measurement data are used to identify areas of patient care and services that can be improved, and Zambia supports health workforce competency in QI.

Effective quality management improves case identification, retention, and patient outcomes (VL suppression). PEPFAR continues to support site-level continuous QI interventions and expects that most of these activities will be transitioned to local entities (primarily the GRZ) by the end of COP20.

Policies and Governance (8.62): This element score increased from 5.31 in SID 3.0. The national HIV/AIDS technical practice follows current WHO guidelines for initiation of ART, and the country has policies and legislation on health care that are inclusive of HIV service delivery. HIV infected persons are not likely to be asked to pay fees for any HIV services in the public sector, although they are asked to pay for specialized non-HIV services, such as a CT scan. The country has

protections in place for victims of violence. However, the country does not have laws or policies that specify protections for specific populations. Morality and religious norms limit freedom of expression and association of lesbian, gay, bisexual, transgender and/or intersex individuals.

The MoH has demonstrated strong leadership and partnership in the national HIV response. The GRZ has developed and implemented policies around test and start, differentiated service delivery, index testing, TLD transaction, TB preventive therapy, user fees and VL management. All of these have facilitated progress towards 95-95-95 targets and epidemic control. PEPFAR continues to provide technical support to update and disseminate national policies, as needed. External support will likely be required to ensure that key populations have unhindered access to health and HIV services.

2.4.2 Progress Addressing Sustainability Weaknesses

COP21 Update: The next SID will take place in 2021. Apart from some data updates, this section remains unchanged for COP21. The six sustainability elements identified in the 2019 SID – commodity security and supply chain, laboratory, service delivery, epidemic and health data, service delivery and human resources for health (HRH) – remain priorities in COP21.

Commodity Security and Supply Chain (4.79): This element score decreased from 7.22 in SID 3.0. The country has a national supply chain plan that guides investments, but domestic resources fund less than 10% of its implementation. Domestic resources fund 10-49% of ARV procurements, while rapid test kit and condom procurements are almost entirely procured with external resources. The host country government manages processes and systems to ensure ARV stock in all levels of the system, but inadequate number of delivery vehicles hinders last-mile distribution. A national supply chain assessment was conducted, but the score was lower than 80%.

The availability of lifesaving ARVs and other HIV commodities is essential for the achievement of sustained epidemic control. As such, PEPFAR Zambia continues to prioritize investment in this element by assuring the availability of stocks at facility level through the following actions: supporting commodity procurement, storage, distribution and tracking at the point of service; and supporting the electronic logistics management information systems (eLMIS). By COP19 Q1, facility edition of eLMIS had been deployed to 664 high volume facilities that account for 80% of the consumption of health commodities. Stock availability at sites with eLMIS improved by 26% for ARVs and 45% for lab products. In COP21, facility edition of eLMIS will be deployed to an additional 600 facilities.

In COP21, PEPFAR Zambia will award a contract directly to a local private sector 3PL provider to distribute and transport lifesaving health commodities from the central medical store to regional distribution hubs and the last mile. PEPFAR Zambia will also provide technical assistance to support the newly-established Zambia Medicines and Medical Supplies Agency (ZAMMSA). Additionally, PEPFAR planned to spend \$108.5 million on procurement of commodities, while GFATM and the GRZ planned to spend \$69.9 million and \$29.5 million, respectively. This represents a significant increase in the amount spent by GFATM in COP19 (\$43.8 million). Continued external

support will be required for procurement of commodities in COP21. Table 2.3.2 estimates PEPFAR, the GFATM, the GRZ and other stakeholder investments in essential commodities.

Laboratory (5.41): This element score increased from 2.33 in SID 3.0. The country has adequate qualified laboratory staff and there is sufficient VL testing capacity. A national laboratory strategic plan has been developed and approved, and an administrative entity exists to manage laboratory services at regional and district levels (although it has limited authority, insufficient staff and budget). The GRZ has regulations in place that monitor the quality of its laboratories and point of care testing sites, and they are implemented in 50 to 89% of sites. However, less than 10% of HIV laboratory services are funded by domestic resources.

In COP20, PEPFAR Zambia has focused on the provision of point of care VL and EID for PBFW and infants in remote areas using mostly existing GeneXpert machines. All sample referral systems and routine diagnostics were fully integrated under the direction of Provincial Health Offices of the MoH. Zambia was on a trajectory to provide VL tests to all patients on ART by close of 2020. As of COP20 Q1, VL coverage and suppression stood at 78% and 92%, respectively.

In COP20, PEPFAR Zambia has supported national laboratory optimization, national coordination of laboratory information systems, quality assurance (QA), recency testing, and drug resistance testing. PEPFAR Zambia and the GFATM have remained major funders of laboratory commodities for the national response. PEPFAR Zambia and GFATM committed \$36.4 million and \$14.5 million, respectively, for the procurement of lab commodities in COP20. Other stakeholders that have invested in HIV laboratory services include the GRZ (\$10.8 million in COP20), World Bank and other bilateral cooperation initiatives. In COP21, PEPFAR, the MoH and GFATM will work together to find efficiencies in the lab sector to reduce the projected budgetary gap.

Service Delivery (5.44): This element score increased from 5.32 in SID 3.0. Public health facilities respond to and generate demand for HIV services to meet local needs and the country has standardized the design and implementation of community-based HIV services. The country has an approved community health strategy, and it is government policy that 10% of district health budgets are expended at community level. Host country institutions finance 10 to 49% of HIV service delivery, which is done with some external technical assistance. However, HIV services to KPs are primarily delivered by external agencies. Although an administrative office with specific authority to manage HIV service delivery exists, it does not have a sufficient budget. Additionally, health authorities do not assess current and future staffing needs based on HIV program goals and budget realities for high burden locations.

Facility and community linkages are critical for effective implementation of HIV prevention, care and treatment interventions, including differentiated service delivery (DSD) models and test and start. PEPFAR Zambia continues to strengthen community-facility linkages and support provision HIV services for key populations. The 2018 Zambia Consolidated Guidelines for Treatment and Prevention of HIV Infection outline Zambia's strategic approach for implementing DSD that focuses on client centeredness and health system efficiency. In COP20, PEPFAR Zambia's

implementing partners continue to support health facility and community-based health workers to continue scaling up DSD approaches, including multi-month scripting and, to improve retention in care and reduce congestion at health facilities. Priority focus of DSD models target adolescents and men, who have had lower linkage and retention rates.

Stakeholders that have invested in HIV service delivery include the GFATM, World Bank and local organizations, including (but not limited to) the Churches Health Association of Zambia, Bwafwano Integrated Services Organization and Centre for Infectious Disease Research in Zambia. PEPFAR Zambia continues to transition service delivery to local entities, and it is expected that the level of direct support to international NGOs will significantly reduce by the end of COP20 and into COP21.

Human Resources for Health (7.30): This element score increased from 6.27 in SID 3.0. Despite this relatively high score, inadequate HRH present a vulnerability. The county faces a shortage of health workers. In 2019, 52% of positions on the MoH's 126,000 strong establishment remained vacant, and the clinical health worker to population ratio stood at 12 per 10,000 – far short of 23 per 10,000 recommended by WHO. Pre-service education institutions are producing an adequate supply and skills mix of clinical health care providers, but the current economic situation and reduced fiscal space constrains the GRZ's ability to hire and deploy new staff. Most HIV in-service training is supported by external sources.

The GRZ does not maintain a comprehensive inventory of donor-supported HIV/AIDS workers nor is there a written plan for transition of these workers. Even though an administrative office with specific authority to manage health workforce activities exists, it does not have a sufficient budget. Also, the current inventory does not include HIV/AIDS workers at MoD health facilities scattered across the country. Plans are under way to ensure MoD HIV/AIDS healthcare workers are included in the MoH's inventory. This will enable improved staffing at the MoD facilities where 80% of the clientele are civilians.

An adequate number of trained and motivated health workers, with the appropriate skills mix, deployed to areas of greatest need at facility and community levels is critical to implement an effective national HIV response and to achieve sustainable epidemic control. Under the current National Health Strategic Plan (2017-21), the MoH aims to recruit 30,000 new healthcare workers, and 21,000 had been recruited as of January 2020. Additionally, as of COP20 submission, PEPFAR and GFATM were supporting 24,849 and 3,114 healthcare workers, respectively. An analysis done by Palantir revealed that increasing the number of ART healthcare workers in facilities with retention challenges increased TX_CURR by 30% and reduced interruption in treatment (IIT) by 30%.

In COP19 PEPFAR revised and updated the HRH Inventory and developed a database to track investments; supported the MoH to roll out an integrated human resources information system (HRIS); and supported pre-service training of community health assistants (CHA) and HIV nurse prescribers (HNP). In COP20, PEPFAR continues to support pre-service training (240 CHA and 140 HNP); uses G2G agreements with PHOs to fill staffing); continues to support HRIS; and scales up

mentorship and ECHO to improve clinical skills and quality of service. PEPFAR also intends to repurpose some lay health workers to support retention. Direct support for HRH is being transitioned to local entities and the level of support is expected to significantly reduce by the end of COP20 and into COP21.

Domestic Resource Mobilization (5.56): This element score increased from 5.44 in SID 3.0. Zambia has a long-term financing strategy for the health sector outlined in the Health Financing Strategy (2017-2017), and the national budget includes HIV funding to health and other line ministries. However, budget execution is a challenge in the current economic situation. Release of funds from the Ministry of Finance (MoF) has been irregular. In July 2019, the MoH reported a budget performance for 24% for the period January 1, 2019 to June 30, 2019. During this period, Provincial and District Health Offices received only one monthly operational grant from the MoF. Additionally, less than 50% of the annual national HIV resource is financed with domestic public and private sector funding.

The military SID found that partner ministries are not fully aware of HIV program costs and activities as most are donor driven, using international implementing partners. There is a need to share data on PEPFAR Zambia costs and activities so that Zambia ministries move along with PEPFAR Zambia and develop a sense of ownership for all activities. Zambian government must be at the center of the HIV programming and should take a proactive stance on resource mobilization. Donor support and involvement should be considered supplementary and diminishing with time.

In COP20, PEPFAR Zambia strengthened G2G assistance to PHOs; this financing will continue in COP21. This assistance will improve public financial management (PFM) and health information systems, as well as strengthen PFM to improve efficiency, transparency and accountability. Additionally, resources will support implementation of the National Health Insurance Scheme to ensure that the most vulnerable have access to HIV services. Technical assistance to the Health Finance Unit at the MoH will continue to support innovative approaches for sustainable HIV financing.

Epidemic and Health Data (5.18): This element score increased from 4.37 in SID 3.0. The SID found that KP surveys and surveillance are primarily planned, financed and implemented by external agencies, organizations or institutions. The country has not conducted IBBS or size estimation studies for KPs.

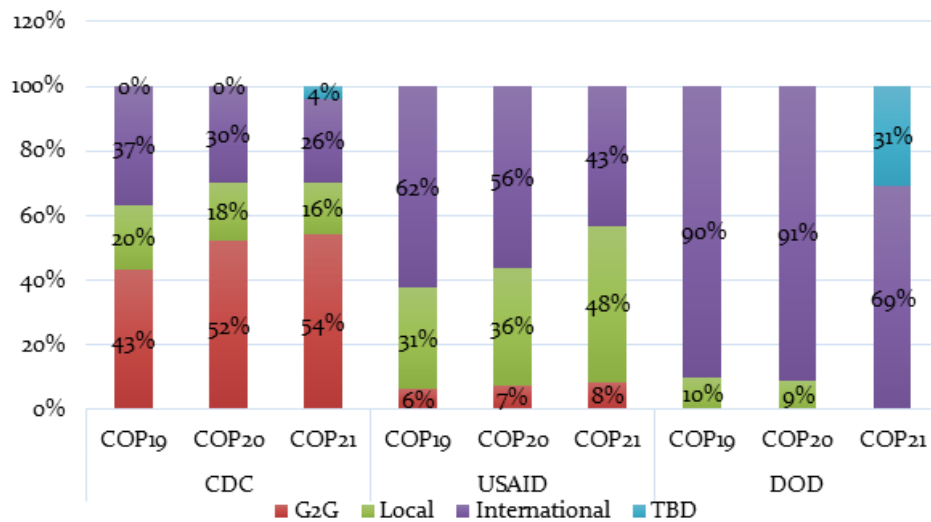
PEPFAR Zambia will continue to support interventions to increase the timely availability of high-quality data and promote its use to enhance program performance and achieve better health outcomes. This includes mortality-based mortality surveillance; KP IBBS; nation-wide scale up of case-based surveillance systems; building HMIS management capacity by utilizing an MoH standardized approach and support tools; and working with UNAIDS to provide quality PLHIV estimates to the GRZ. Main stakeholders investing in epidemic and health data include the GRZ, PEPFAR, UNAIDS, EU, DFID, WHO, GFATM, World Bank and other bilateral cooperation initiatives.

In COP19, PEPFAR met with stakeholders, MoH, Johns Hopkins University (JHU) and CSOs, to discuss KP data. JHU used available data to extrapolate KP sizes. Protocol approval for mortality surveillance and KP IBSS was obtained, and implementation commenced. PEPFAR budgeted \$1.2 million, \$909,000 and \$1.3 million, respectively, for implementation of case surveillance, mortality surveillance, and KP IBBS in COP20. Given the legislative environment, it is likely the external resources will be available for the collection, analysis and dissemination of key population data in COP20 and beyond.

2.4.3 Transition to Local or Indigenous Partners

CDC, DOD and USAID have increased the proportion of funds going to local organizations (including G2G agreements) since COP19 (Figure 2.4.1). In COP20, CDC and USAID awarded 70% and 43% of their funding, respectively, to local partners; DOD, which is constrained by restrictions on military-to-military funding, awarded 10%. CDC has accomplished its COP20 goal of allocating 70% of funding to local partners through the phased transfer of direct service delivery to the PHOs with a focus on sustainability, increased capacity and improved local financial management and oversight. USAID will increase allocation to local partners to 56% in COP21 through a combination of efforts including significantly increased funding through G2G agreements with PHOs and other government entities and transitioning several HIV care and treatment, prevention and health systems strengthening activities to local partners.

Figure 2.4.1 Transition to Local/Indigenous Partners by Agency



Source: COP21 FAST

2.5 Alignment of PEPFAR Investments Geographically to Disease Burden

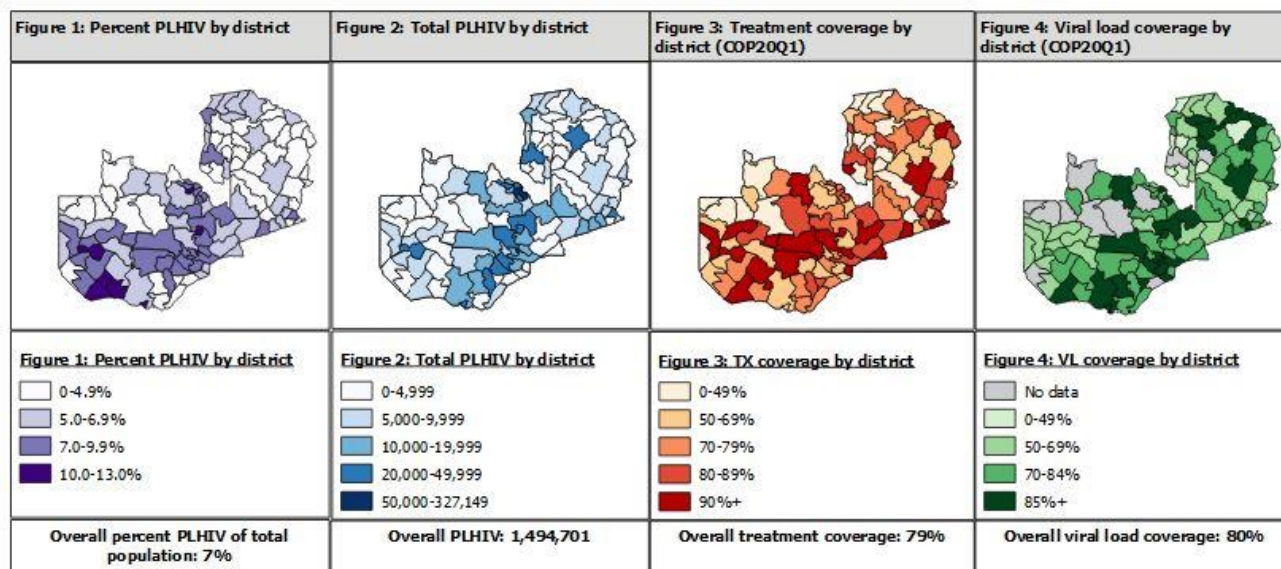
An essential component of the annual COP design process is the refinement of the geographic alignment of PEPFAR investments to disease burden. As in past planning cycles, PEPFAR Zambia relied upon Spectrum models by working closely with the Zambian National Spectrum team, which includes UNAIDS, the MoH, ZamStat and National HIV/AIDS/STI/TB Council (NAC). The draft national PHLIV estimates were run through geospatial HIV modeling to generate estimates at the district level for both sexes and five-year age bands.

The Spectrum team examined ART coverage for sex and age band across Zambia’s 116 districts and set targets for COP21 that reached the following ART coverage rates (Table 3.1):

- 88% ART coverage or higher in all age/sex bands for the 32 attained districts that constitute 64% of all PLHIV
- 85% ART coverage or higher in all age/sex bands for the 55 scale up to saturation districts that constitute 29% of all PLHIV
- 81% ART coverage or higher in all age/sex bands for the eight (8) aggressive scale up districts that constitute 3% of all PLHIV

The 10 sustained districts and 11 central support districts each constitute 2% of the PLHIV burden for Zambia. Sustained and central support districts maintained their prioritizations from COP20 given the lower burden of PLHIV relative to the attained and scale-up districts. The national Spectrum team continues to refine national and provincial PLHIV estimates. PEPFAR Zambia will revisit the above estimates if the final national estimates are significantly different from the estimates used to develop targets for COP21.

Figure 2.5.1 PLHIV, Treatment Coverage, and Viral Load Coverage by District



Sources: COP21 population and PLHIV estimates; MOH TX_CURR COP20Q1; MER TX_CURR COP19Q3 and TX_PVLS denominator COP20Q1

2.6 Stakeholder Engagement

COP21 Update: PEPFAR Zambia has continued to proactively engage external stakeholders during the COP development process. Participation in the external stakeholder engagement meeting, weekly COP21 technical updates, and the Virtual Planning Meeting (VPM) offered opportunities for meaningful, structured engagement with multiple stakeholders. As in past years, PEPFAR Zambia will continue to seek MoH participation in POARTs and the national TWGs, incorporating feedback into the HIV response. In addition, roll-out of community-led monitoring (CLM) represents PEPFAR Zambia's commitment to involving CSOs in designing effective responses to HIV. All the engagement strategies described below build from past collaboration with external stakeholders and remain valuable and relevant during the COP21 planning cycle and implementation period.

PEPFAR Zambia has made noticeable strides in improving and strengthening relationships with all external stakeholders. This was evident when close to 300 stakeholders attended the COP21 External Stakeholders Consultation in January 2021.

PEPFAR Zambia and the MoH have collaborated continuously throughout the development and planning of COP21, but their engagement extends beyond the COP planning cycle. Throughout COP implementation, the MoH and PEPFAR Zambia continue to collaborate across technical fields and geographic areas of the country. The MoH participated in all COP21 stakeholder discussions, including the COP21 VPM, and attends the PEPFAR Oversight and Accountability and Review Team (POART) meetings and national TWG meetings.

NAC remains a vital contributor and key participant in the COP planning cycle. NAC has continued to chair and host weekly COP21 update meetings with VPM participants and other stakeholders. The weekly update meetings, introduced during COP18 design, have proven an effective way for PEPFAR Zambia to engage stakeholders throughout the COP development process. The meetings focus on key priorities presented by PEPFAR Zambia technical experts and allow for invaluable feedback and questions that inform strategy design. The open dialogue and sometimes spirited debate that happens in these weekly meetings has helped PEPFAR Zambia structure inclusive COP processes that strengthen our proposed interventions.

The strengthened partnership between PEPFAR Zambia and the MOF have continued in COP20 because of the PEPFAR-funded U.S. Treasury Advisor placement at MOF. The advisor has supported PEPFAR Zambia's goal of promoting sustainable HIV financing from domestic sources and has ushered in more robust engagement with MOF, which included MOF's participation in the COP planning process. Additionally, the engagement of the U.S. Treasury Advisor has provided PEPFAR Zambia and the greater embassy community with valuable insight on Zambia's budget allocation and funding releases for health. The advisor will depart Zambia during the COP20 implementation period; at this time, PEPFAR Zambia does not intend to replace the position.

PEPFAR Zambia will continue to build from the advisor's groundwork related to domestic resource mobilization.

The PEPFAR Zambia and UNAIDS relationship continued through the COP21 development process. Outside of the COP planning cycle, PEPFAR Zambia and UNAIDS share leadership of the HIV cooperating partners group.

PEPFAR Zambia has worked closely with CSO self-selected representatives from a wide range of constituencies, including PLHIV, women, youth, people with disabilities, faith-based organizations (FBOs), KPs, local NGOs and TB. Working with these representatives, PEPFAR Zambia has capitalized on their insights and suggestions to increase CSO participation in the national HIV response. Their suggestions have resulted in PEPFAR Zambia funding capacity building training for CSOs, financing Country Coordinating Mechanism (CCM) meetings and supporting VL literacy training. PEPFAR Zambia continues to operate a Small Grants portfolio to allow CSOs the opportunity to apply for PEPFAR resources to use in their communities.

Beginning in COP20, CSOs took on a larger role in the planning process to conceptualize how the PEPFAR CLM initiative would be implemented in Zambia. Continued collaboration with CSOs through, for example, an extended working session following the COP20 IPM and consultation on CLM parameters, have led to the award of CLM grants in each of the 10 provinces in COP20. In COP21, CLM will prove an effective strategy for closer consultation with civil society in the design, adaptation and delivery of critical HIV services.

PEPFAR Zambia's continued engagement with the private sector has resulted in ART, VMMC and cervical cancer services being offered at private health clinics. In addition, DREAMS has leveraged public-private partnerships (PPP) to strengthen economic strengthening services for AGYW allowing PEPFAR resources to stretch further.

Finally, PEPFAR Zambia worked closely with UNAIDS, GFATM and other external donors in developing COP21. PEPFAR Zambia conducted consultative meetings with GFATM principal recipients to avoid duplication of effort and leverage resources during COP21 implementation. PEPFAR Zambia continues in-country dialogue with the CCM, principal recipients and Geneva-based colleagues as part of the funding request process to ensure coordination of proposed resources to address unmet gaps and support for GRZ to reach the goals laid out in national planning documents.

3.0 Geographic and Population Prioritization

COP21 Update: PEPFAR Zambia has not planned changes in geographic prioritization in COP21, but will continue to build on COP20 strategies and focus more intensely on ensuring that children, adolescents, men between 20-34 and over 50, and key populations are identified, linked to treatment, and virally suppressed.

To sustain the gains and meet the ambitious target of 85% of PLHIV on ART by the end of COP21, PEPFAR Zambia has prioritized several areas. These include targeted prevention, scaling up index testing, accelerating a broad-based pediatrics surge, optimizing HIV testing, and improving ART linkage rates for priority populations (children, AGYW, men and KPs).

ZAMPHIA (2016) data reveals that AGYW, ages 15-24, have an incidence rate of 0.8% compared to 0.2% of adolescent boys and young men (ABYM) in the same age band. As of COP20 Q1, the largest treatment gaps were observed in CLHIV under 10 and AGYW and ABYM between the ages of 15 and 24. Even with concerted efforts to reach adolescents, PEPFAR Zambia anticipates that treatment gaps will persist at close of COP20; anticipated coverage of AGYW between 15-19 and 20-24 will be 56% and 61%, respectively; for ABYM between 20-24, coverage will remain similarly low (60%). ART coverage is 19% and 16% for boys and girls, respectively, under one year; ART coverage increases to approximately 50% for boys and girls aged 1 to 10. Pediatric viral load coverage and suppression stood at 76% and 85%, respectively, as of COP20 Q1.

For KPs, PEPFAR Zambia undertook a size estimate exercise in 2020 which estimated the population of MSM to be 114,852 with a prevalence rate of 21% and the population of female sex workers (FSW) to be 160,868 with an HIV prevalence of 29% and transgender estimated to be 12,680 with an HIV prevalence of 22%. Geographically, the exercise revealed that Copperbelt Province has the highest prevalence (15.4%), followed by Lusaka (15.1%), Southern (12.4%) and Central (12.4%) Provinces. Muchinga and Northwestern Provinces have the lowest prevalence at 5.4% and 6.1%, respectively.

In COP20, PEPFAR Zambia has planned to initiate over 98,136 clients on treatment; by COP20 Q1, the OU had initiated 39,873 clients on treatment for TX_CURR of 1,130,679. This represents 757,044 of PLHIV on treatment in attained districts and 318,671 in scale-up districts (Table 3.1). To respond to the increase in PLHIV estimates, PEPFAR Zambia has established similar ambitious treatment targets for COP21. Moving into COP21, as illustrated in Figure 2.5.1, PEPFAR will continue to align resources and activities with the high HIV burden geographic areas with focus on the scale-up districts that contribute about 30% of unmet need for ART. Given the increase in PLHIV estimates from COP20 to COP21, PEPFAR Zambia will intensify effective case-finding strategies to identify and initiate 186,372 clients on treatment.

In COP21, PEPFAR Zambia will focus attention on identifying and linking children, adolescents, pediatrics, men, especially those between 30-24 years, to treatment – and keeping them on treatment. COP20 high-impact initiatives, such as the community post model, male- and adolescent-friendly services, index testing and social network testing have proven effective in finding and retaining PLHIV on treatment; these will continue into COP21. The pediatric surge, which began in COP20, will remain an integral approach to improve and retain pediatric clients. The pediatric surge will continue to provide pediatric-focused mentorship at all facilities to ensure basic level of comfort with initiating children on ART and enabling family-centered care to improve retention.

Additional efforts will focus on improving HIV case finding among KPs, linking 95% of those who test HIV-positive to treatment and offering PrEP to all who test HIV negative. Specific details on case identification and linkage to treatment for all priority and key populations are detailed in Section 4.0.

COP21 targets will result in reaching 85% ART coverage by age and sex in high burden districts and an overall national ART coverage rate of 85%. For this to happen, COP21 will focus on retaining the individuals who are on treatment by ensuring that they are getting quality HIV services and are virally suppressed.

Table 3.1 Current Status of ART Saturation				
Prioritization Area	Total PLHIV/% of all PLHIV for COP21	# Current on ART (COP20 Q1)	# of SNU COP19	# of SNU COP21
Attained	964,217/64%	757,044	30	32
Scale-up Saturation	431,669/29%	318,671	46	55
Scale-up Aggressive	38,519/3%	25,327	7	8
Sustained	29,429/2%	21,939	10	10
Central Support	32,786/2%	17,236	17	11

Source: COP21 DataPack & MoH HMIS

4.0 Client-centered Program Activities for Epidemic Control

4.1 Finding the Missing and Getting Them on Treatment

COP21 Update: Revised PLHIV estimates indicate an absolute treatment gap of 315,655 (Table 2.1.1). PEPFAR Zambia will renew efforts to find the missing and transition them to treatment, focusing on populations who have proven difficult to identify and link to and maintain on treatment. In COP21, PEPFAR Zambia will focus on reaching children, adolescents, men between 20-34 and men over 50. As in COP20, strategies to improve testing efficiencies will include index testing, social network testing, and the community post model, have proven effective case-finding approaches to bridge the treatment gap.

Zambia's national treatment program has benefited from strong leadership at the national level, creating a policy-friendly environment that seeks to improve access to HIV testing services for the most at-risk populations while ensuring that those that are found positive are linked to and retained on treatment.

Supported by PEPFAR Zambia, the MoH has moved away from universal testing and adopted a strategy to improve testing efficiencies. In COP18, the MoH finalized an HIV screening tool through the national ART technical working group. IPs continue to provide technical assistance and mentorship to supported sites to ensure that unnecessary testing reduces significantly and more efficient testing methods (e.g., index testing, social network testing) are brought to scale.

According to 2018 ZDHS, Lusaka and Copperbelt Provinces have the highest prevalence of 15.1% and 15.4%, respectively. In COP21, PEPFAR Zambia will remain focused on case finding efforts to bridge the treatment gap in these two provinces through high-impact interventions using the community post model.

In COP19, testing efficiencies resulted in the identification of 80,561 men (compared to 123,586 women) and 7,487 CLHIV as HIV-positive and initiated them on life-saving treatment. Of those identified, 3,525 CLHIV (47%) and 27,764 (34%) men were reached through index testing. In COP21, targeted testing approaches will remain important tools to find newly positives and those who are diagnosed but not linked to treatment.

In COP21, PEPFAR Zambia will maintain focus on improved case identification of HIV-positive AGYW. HIV prevalence among 20-to-24-year-olds is three times higher among females (9%) than males (3%) (ZDHS 2018). To increase access to HIV testing and treatment services among this hard-to-reach population, PEPFAR Zambia will scale-up peer-driven models in facility settings and address structural barriers and health system issues through community-based interventions, like DREAMS.

Beginning in COP19, PEPFAR Zambia made significant investments in building the capacity of lay counselors who conduct partner notification services (PNS); this has supported steady improvement in elicitation skills of this cadre. However, with the scale-up of index testing, PEPFAR Zambia recognizes the importance of ensuring that clients, as well as lay counselors who provide PNS, are safe and secure and that measures are taken to ensure that clients are not put at-risk of any intimate partner violence (IPV). In COP21, PEPFAR Zambia will work closely with the MoH and CSOs to provide stringent oversight of implementing partners to ensure that supported sites are adhering to PEPFAR guidelines and policies on index testing. PEPFAR Zambia will continue to use the S/GAC recommended site assessment tool to ensure sites implementing index testing adhere to the PEPFAR minimum requirements for index testing. If a site is found to be below standard, index testing services will be paused and PEPFAR Zambia staff will work with the implementing partner at the site to address the deficiencies before safely resuming index testing.

4.1.1 Finding Men

COP21 Update: In COP21, PEPFAR Zambia will accelerate strategies that have proven effective and efficient in finding men (and other priority populations) and linking them to treatment. This includes provision of targeted testing through social network testing, self-testing, the community post and faith-based models.

In COP21, PEPFAR Zambia will use lessons learnt from the MenStar Coalition to target the unreached males by providing positive, empowering messages, and bringing services closer to where they are found, such as in community post model. The insights from Zambia's male characterization study, which show that services should be tailored to meet men's specific needs, will also continue to inform the men's program.

PEPFAR will continue to build on the progress made in COP19 to implement high-impact interventions to identify, reach and retain men, particularly those between 20-34 years and over 50, in care and treatment. IPs will provide intensive mentorship to improve provider elicitation skills to increase case finding through contact elicitation of female index clients. PEPFAR will continue working with CSOs and IPs to improve monitoring of IPV in the index testing program. PEPFAR Zambia will continue to guide IPs to provide appropriate training and mentorship, covering IPV screening and actions to be taken to ensure safety of the client with adherence to WHO 5Cs.

Targeted communications through the Zambia Ending AIDS Campaign will encourage more men to seek HIV prevention services and expand implementation of male-friendly services (e.g., use of male providers, differentiated HIV testing services (HTS) where men are found, weekend and after-hours services). PEPFAR Zambia will also continue to scale up the implementation of the community post model in marketplaces, bus stations and faith communities in high burden districts in Zambia. In addition, IPs will provide training and equip male peers as service delivery uptake champions. Client centered interventions to improve men's facility experience will address stigma, trust, confidentiality, privacy and positive attitudes towards men.

HIV self-testing (HIVST) will be offered in informal and formal workplaces such as markets, bus stations and construction sites. Unassisted targeted testing has been shown to be the best way to reach at-risk persons in the community, and this will be expanded in COP21.

Another key strategy to find men includes expanding and strengthening partnerships with the private sector, such as mining communities on the Copperbelt Province, to increase access to HTS and linkage to treatment. IPs will also focus on conducting targeted outreach services to truckers and other mobile populations, such as fishing and timbering communities.

4.1.2 HTS Strategy for Children Living with HIV

COP21 Update: The cornerstone of the case finding strategy among children living with HIV will remain family index testing and facility-based testing by applying screening tools to ensure testing efficiency. These two testing approaches have resulted in increased pediatric testing yields of around 3% while decreasing the number of total tests in this population. Recognizing that these are tried and tested effective testing strategies for children, the focus in COP21 will be to ensure that these strategies are being applied at all facility levels, regardless of size. PEPFAR Zambia will not focus solely on medium- and large-volume facilities but also the smallest facilities, where, based on COP20 Q1, there is a disproportionately higher number of positive children compared to the TX_CURR size of the facility. This means that partners will need to ensure training and supportive supervision of effective pediatric case finding strategies at all sites, as well as ensure human resource availability for index testing of biological children

Case identification of CLHIV in health facilities remains a priority in COP21. IPs will ensure follow-up of these children's mothers and fathers through index testing. In the pediatric program, index testing has demonstrated high positivity yields. In COP18 Q1, index testing contributed to about 27% of positives identified in the pediatric program. In a span of two years, as of COP20 Q1, this contribution had risen to 47%. Building on these proven successes, index testing will continue to be provided to all biological children (up to age 19) of PLHIV. In addition, IPs will test all HIV-exposed infants (HEI) for infection, per national guidelines, until cessation of breastfeeding. PEPFAR Zambia will also utilize the Mentor Mothers model to ensure EID testing coverage and retention of mother-infant pairs in the HEI care cascade. The case finding for pediatrics will also leverage the OVC platform to provide targeted risk-based testing and diagnostic testing (e.g., poor growth/nutrition, known or suspected TB or other illnesses deemed concerning for HIV.) All identified CLHIV will immediately be linked to treatment and care and provided focused mentorship and support. Further, at facilities where there is an OVC IP presence, all CLHIV will be offered enrollment in OVC services to help them with treatment continuity and achieve viral load suppression while providing supportive services for caregivers and siblings. The OVC IPs will also play an integral role in identifying biological children of HIV-infected women who need to be tested.

4.1.3 HTS Strategy for Adolescents Living with HIV

COP21 Update: Family index testing of children up to age 19 and PITC using screening tools will remain the key case finding strategies for adolescents, along with partner notification services, which are applicable to adolescents who are sexually active. In addition, social network testing will be a critical strategy for case finding, particularly among adolescents who are active in adolescent support groups and DREAMS programs. Adolescents are a target group for using self-test kits, especially among those who are less likely to present to health facilities for testing.

Improving case finding efforts to reach adolescents living with HIV (ALHIV) will be a critical focus for PEPFAR Zambia in COP21. Zambia will build on the innovations that have demonstrated effective case finding of ALHIV. To reach ALHIV, PEPFAR Zambia will support IPs to establish high-quality, facility-based, adolescent-friendly spaces where comprehensive HIV services are provided. Providers will receive training in effective provision of adolescent-friendly services in high-volume sites. Other strategies will include identifying referral and entry points to target the most vulnerable AGYW (schools, clinical partners, faith communities and social welfare institutions) and scaling up peer-driven models. IPs will also provide packages of comprehensive HIV prevention services, that include HTS, and will address structural barriers and health system issues through community-based interventions. In addition, IPs will scale-up strategies, like school-based mobilization and peer-led education activities. PEPFAR Zambia will also enhance social network mapping in places where adolescents meet to socialize, such as markets, churches and other religious groupings.

Addressing healthcare provider attitudes (especially towards sexually active young people) will be key in getting adolescents to seek HTS in facilities. PEPFAR Zambia will work closely with the MoH adolescent unit to improve providers' service delivery skills through joint site visits to health facilities for supportive supervision of providers serving adolescents. IPs will also ensure that the parents of adolescents are engaged and consent to testing their children. Index client testing will be the main testing strategy for adolescents, although other modalities such as mobile testing may be used in hotspots. All who test HIV positive will immediately be linked to ART, whether identified at the health facility or in the community. Community IPs will continue supporting the newly initiated adolescents through adolescent support groups to ensure that they understand the need for adherence to ART and stay on treatment.

4.1.4 HTS Strategies

COP21 Update: PEPFAR Zambia does not propose significant changes to the HTS strategy in COP21. Gaps in finding men, children, adolescents, and marginalized populations remain in the HIV testing program. Therefore, PEPFAR Zambia will continue to implement safe and ethical index testing as an effective strategy for finding positives. The program will work with the OVC platform to offer HIV testing to all under 19 years of age with HIV positive biological parents. The OU will also offer targeted diagnostic testing to clients in VCT, ANC, TB, STI, malnutrition platforms, using the HIV risk screening tools in out-patient department. The program will also use HIVST and social network testing to reach KPs and other priority populations. In addition, PEPFAR Zambia will continue to use the community post model to reach men with testing services. In COP20, the OU began implementing a pediatric surge to improve diagnosis of CLHIV; this will continue in COP21. Recency testing remains an important resource for surveillance purposes.

In COP21, PEPFAR Zambia has set targets to test 1,529,562 and aims to identify 125,445 positives, of whom 119,828 will be linked to treatment. The overall expected yield is 8% with a linkage of 95%. In scale-up districts, the target is to test 615,177 individuals, out of which 46,166 will be identified positive; 95% will be linked to treatment and care services.

PEPFAR partners have significantly increased yield and reduced unnecessary testing by working closely with the MoH to formalize and roll out an HIV testing screening tool, with the goal of optimizing PITC. From COP18 Q1 to date, Zambia has seen a drastic reduction in testing volumes. The PITC and VCT modalities have seen reductions in numbers, while the yields from these modalities have been going up. The VCT modality yield increased from 5% in COP18 Q1 to 6% in COP20 Q1. The PITC modality yield increased from 4% in COP18 Q1 to 6% in COP20 Q1. Average yield from index testing increased from 16% in COP18 Q1 to 27% at the same period in COP20. PEPFAR Zambia no longer supports broad case finding but will prioritize index testing and restrict facility testing to high-yield diagnostic testing (e.g., TB, malnutrition and STI clinics and individuals with signs or symptoms of HIV).

Routine PITC that is low yield will no longer be supported in COP21. It is essential that testing protocols follow WHO guidance to ensure consent, confidentiality, adequate counseling, correct results (minimizing false negatives and false positives), and connection to treatment. For the HIV self-testing modality, IPs will use differentiated strategies, including providing referral cards, outreach follow up and phone calls/text messages to remind all those who test HIV positive to get confirmatory tests and link to treatment. PEPFAR Zambia will also strengthen collaboration between the OVC and DREAMS programs to ensure OVC and AGYW, who might not otherwise seek HIV testing at health facilities, have increased access to HIVST. In addition, DREAMS and OVC IPs will educate those who test HIV positive to go for confirmatory testing and immediately start treatment.

PEPFAR Zambia will continue to scale up recency testing in COP21 to characterize incidence, identify demographic and geographic outbreaks and target index testing to break the cycle of transmission more effectively. In COP19 Q2, recency testing implementation started in Lusaka and Copperbelt Provinces, which accounted for nearly 50% of all HIV positive results, then expanded to targeted areas of Central and Southern Provinces in COP20. Scale-up to reach 100% of new HIV positives in the four provinces will continue in COP21.

To improve the pace of recency testing in COP20, PEPFAR Zambia reduced barriers to participation by moving to verbal consent, integrating new baseline VL policy, and transitioning to a local implementing partner responsible for recency coordination. As of COP20 Q2, a total of 328 confirmed (rapid recency test plus baseline viral load) recent infections were identified out of 7,792 individuals tested. Of these, 72% were female and 52% were youth ages 15-29. PEPFAR Zambia focused on adaptation of program responses to recency data. A recency dashboard containing facility, district and provincial level results was released to implementing partners; use of dashboard has facilitated improved assessment and response in geographic area of ongoing HIV transmission among specific age and sex groups. The recent infection surveillance program will continue to prioritize data use in COP21 through partners' responses to facility-level recency results, in addition to the Zambia National Public Health Institute's field investigations into individual-level recency results.

Zambia will continue to leverage the network of faith-based organizations (FBOs), faith leaders and faith communities to create demand for the uptake of HIV services, especially encouraging the testing of men, children and adolescents. Special focus will be on bolstering case-finding and linkage to treatment, particularly for men between 20-34 and over 50. PEPFAR Zambia will also work with FBOs to leverage their access to people with disabilities and facilitate their easier access to services.

PEPFAR Zambia will mandate all IPs to reach a linkage rate of 95% and above. In COP21, PEPFAR Zambia will continue the use of linkage registers and SmartCare to ensure that all those identified as HIV positive are linked to treatment. In addition, PEPFAR Zambia will continue working with IPs to ensure that all HIV positive clients from the community are correctly documented at the facility level to avoid double counting of positives.

In COP21, PEPFAR Zambia will continue to support quality HIV testing through provider training, targeted technical support and supervision and proficiency testing. All sites providing HIV testing will undergo site certification and certification of testers as required by the MoH policy.

4.1.5 Index Testing

COP21 Update: PEPFAR Zambia does not propose changes to the index testing strategy in COP21 as this modality has continued to provide high testing yields. Index testing will continue to be the priority modality used by PEPFAR Zambia. IPs will continue to be supported to provide training, mentoring and supportive supervision to their lay counsellors to ensure they have the skills they need to provide efficient and effective index testing. All sites providing index testing will continue to be assessed to ensure they meet the minimum standards for provision of safe and ethical index testing.

PEPFAR Zambia has made significant progress in promoting index testing as demonstrated in COP20 Q1 results, which showed that 57,400 people were offered index testing, with 96% of those accepting (with an elicitation ratio of 1:2). Of those who accepted, 79% of their contacts elicited were tested, leading to the identification of 16,742 new positives, a positivity yield of 18%. Of the 16,742 positives identified, 44.7% were adult women and 33.8% were adult men; AGYW and ABYM accounted for 15.6% and 2.9% of the positives, respectively, while approximately 3% were children less than 10 years.

In COP21, PEPFAR Zambia's primary case finding approach will remain index testing, with the aim of ensuring that at least 75% of positives are being identified using this modality. PEPFAR Zambia will continue to use the S/GAC recommended site assessment tool to ensure sites implementing index testing adhere to the PEPFAR minimum requirements for index testing. If a site is found to be below standard, index testing services will be paused and PEPFAR Zambia staff will work with the implementing partner at the site to address the deficiencies before index testing can be resumed safely.

Index testing will be offered to all recently diagnosed PLHIV as well as those with unsuppressed VL. Screening for IPV risk is a standard procedure for index testing services. The primary goal of IPV risk assessment is to ensure no harm comes to the index client because of index testing services. PEPFAR IPs will undergo certification to verify compliance with WHO guidelines. For other priority populations, PEPFAR Zambia staff will continue to focus on expanding index testing by continuously building the capacity of implementing partners through refresher training and mentorship visits to ensure that both facility and community health workers implement quality index testing. PEPFAR Zambia will strengthen the collaboration between health facilities and community health workers (CHWs) to ensure all individuals newly diagnosed with HIV are assigned to a CHW for follow-up of their sexual partners and biological children. PEPFAR will, however, ensure that index testing remains voluntary, and that no client is forced to take up the service. PEPFAR Zambia will prioritize index testing of pediatrics, adolescents and young people, men aged 20-34 and over 50, mobile populations, the military, clients of sex workers, and discordant couples.

PEPFAR Zambia, GRZ and CSOs will work together to guarantee the safety and security of the clients. While currently there are no reports of IPV related to index testing, PEPFAR Zambia realizes that this could be a result of poor reporting, due to lack of knowledge on how or to whom to report in their communities. In COP21, PEPFAR Zambia will remain proactive and work with CSOs, IPs and the government to dig deeper and determine if any abuses have taken place. Through CLM, CSOs will drive the process of getting feedback from the community, and the results of these exercises will inform the certification process and future monitoring for IPV. Additionally, the USG agencies will provide enhanced oversight during site visits and SIMS exercises to ensure that IPs are adhering to the guidelines for index testing. Monitoring IPV is key to ensuring a successful index testing program and is key in counselor training. In COP21, capacity building, monitoring and routine feedback with CHWs remain valuable in ensuring they have the skills set necessary to elicit information on IPV, provide counseling and any support the clients may need. Results of adverse event tracking will be monitored regularly alongside GRZ and CSOs, to ensure any reports of IPV are immediately addressed.

HIV index testing activities in hotspots will be guided by recency testing data from prioritized populations. In health facilities, index testing will target all newly-diagnosed HIV positive clients, high VL patients and patients on treatment, but who have incomplete index testing, to link them to CHWs for follow up of their sexual partners and biological children. In addition, PEPFAR Zambia will continue to expand the use of registers for patients with unsuppressed VL to prioritize their sexual partners for index testing. With these strategies, PEPFAR Zambia expects that index testing will contribute to 75% of all positives identified. As of COP21 Q1, testing data showed that index testing contributed 38% of all positives identified.

4.1.6 HIVST Strategy

COP21 Update: PEPFAR Zambia has not planned significant changes to the HIV self-testing strategy in COP21. In COP21, the OU will continue to expand HIVST to minimize crowding at health facilities given the ongoing COVID-19 pandemic. Only those identified as HIV positive who require confirmatory tests will be directed to health facilities.

HIVST will continue to be implemented in COP21, targeting hard to find and underserved populations such as KPs, AGYW and at-risk men, particularly those aged 20-34 and over 50. PEPFAR will continue to optimize HIVST to reach first-time testers and ensure that there is tracking of the HIV positives for further testing and initiation of the confirmed HIV positives. PEPFAR Zambia will scale up HIVST to all attained and sustained districts, incorporating both assisted and unassisted models. IPs will conduct education and sensitization activities, including social media, to increase the acceptability and demand for HIVST, especially among men, AGYW and their sexual partners and KPs. Additionally, HIVST kits will be distributed to the health facilities in high burden areas with low ART coverage, targeted workplaces, institutions working with people with disabilities, institutions of higher learning and communities. IPs will immediately report any instances of adverse events associated with HIVST (e.g., self-harm because of a reactive

HIV test). PEPFAR Zambia will continue working closely with NAC and CSOs to help increase awareness of the availability of HIVST.

4.2 Retaining Clients on Treatment and Ensuring Viral Suppression

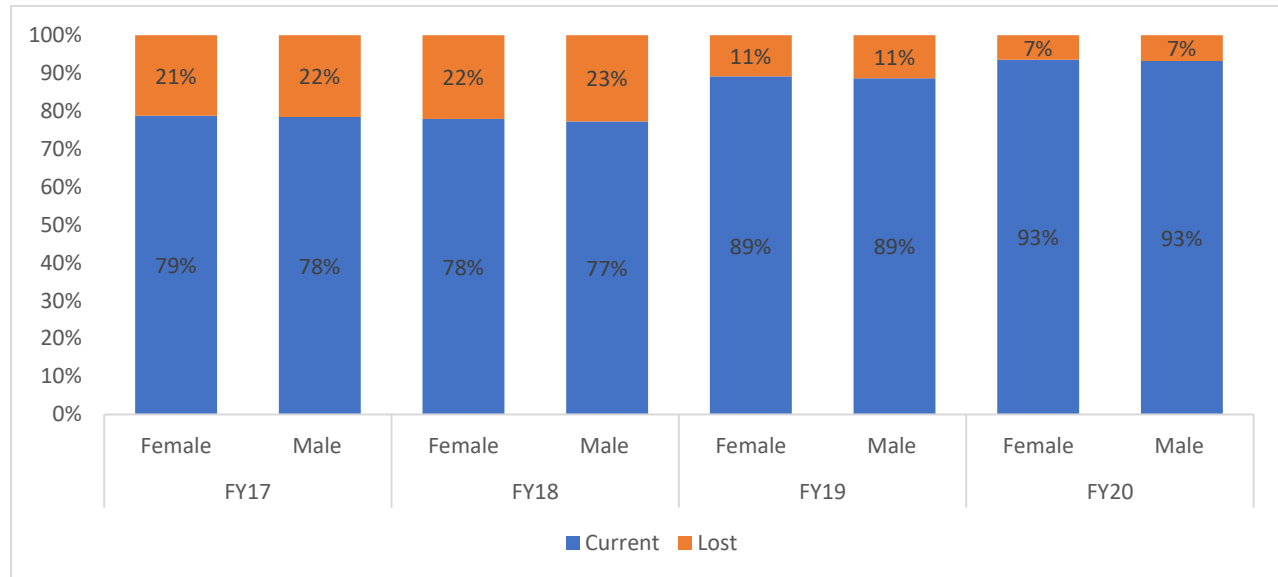
COP21 Update: Retaining clients on treatment is a key focus of the treatment program in Zambia. Our main strategy has been and will continue to be based client-centered strategies including scaling up MMD and other DSD models to eligible stable clients. Electronic health record (EHR) review of patient level program data has shown better treatment retention for recipients of care on 6MMD and those in care through community post models. These will continue to be scaled up in COP 21. In addition, implementing partners will be supported to provide client-centered services based on the unique changing needs of each client—for example, provision of mobile ART services and home ART delivery for those who are cut off from accessing health facilities during heavy rains, as well as those who are unavailable to make facility visits during the farming season. The primary goal will be to reduce barriers and improve access to care. PEPFAR Zambia will specifically target those who are known to be at high risk for treatment interruption, such as those who are newly-initiated on ART (through provision of enhanced post-test counseling and peer pairing), children and adolescents (through linkages with OVC services and peer support for adolescents), as well as continue to scale up weekend clinic hours, which has been shown to improve retention.

PEPFAR Zambia has made significant progress towards achieving the UNAIDS 90-90-90 targets with over 1.1 million PLHIV on ART as of COP20 Q1. Treatment retention has also improved from 73% in COP16 to 93% in COP20 Q1 (Patient-based analysis, 2021). Despite this improvement, retention rates remain below the target of 95% which is required to sustain HIV epidemic control. In COP21, PEPFAR Zambia will work towards a treatment retention of at least 95%. To achieve this benchmark, PEPFAR Zambia will focus on improving both program and data quality.

To address data quality, PEPFAR Zambia will introduce and roll-out a national web-based facility level SmartCare Plus (SmartCare+) to track patients on HIV treatment and facilitate real-time deduplication of patient level information. This will result in the ability for PEPFAR Zambia to report patient-level retention, rather than proxy retention. Proxy retention measures may incorrectly estimate attrition as evidenced by the triangulation of program data and patient level. EHR patient level analysis indicated that approximately 6% of client records are duplicates. This is due, in part, to silently transferred patients being treated as new patients at sites receiving them and patients who have absconded from HIV treatment returning as new on HIV treatment. (A study in Lusaka showed that 40% of clients who had presented for care as new on HIV treatment were virally suppressed). To address the issue of treatment for experienced patients appearing as new, PEPFAR Zambia will continue to use baseline VL assay for all newly identified positives at the point of diagnosis. This is also needed for recency testing. Subject to availability of resources, PEPFAR

Zambia is exploring use of ARV urine metabolites for screening newly-identified positives at the point of diagnosis to identify who may already be on treatment.

Figure 4.2.1 Reduction in Interruption to Treatment by Sex, COP16-COP20 (FY17-FY21)



Source: Foundry

Poor program quality and access barriers such as inadequate/sub-optimal counseling; use of less tolerable regimens; congestion at health facilities; long distances; and seasonal challenges contribute to poor retention of patients in HIV treatment. To address the geographic barriers, PEPFAR Zambia will continue to decentralize ART service provision through opening of more community post models in locations where people live or work. The community post model has demonstrated better retention at 97% compared to standard of care at 93% in most facility-based ART sites. PEPFAR Zambia will address psychosocial barriers with an enhanced treatment literacy strategy, driven by site-level data on gaps in linkage and retention. Working closely with the MoH, this strategy will be scaled up to all PEPFAR-supported sites. To address the service quality barriers at health facility level, IPs will implement rational appointment systems, with day and time blocks specifically for ART services, and continuous quality improvement (CQI) approaches for clients who miss appointments.

These approaches, when implemented with fidelity, have demonstrated good retention at high-volume sites in Lusaka and Copperbelt Provinces. In COP21, the focus will be to ensure uniform implementation of these strategies at all sites. EHR patient level analyses have shown improved individual-level retention outcomes among individuals who get six-month MMD during clinical visits. Individuals on TLD not only have better VL suppression at 96% but also higher retention rates of 95%. As such, the PEPFAR Zambia treatment program will continue to scale up six-month MMD to reach at least 80% of all eligible clients by the end of COP21. TLD transition, which will reach 90% of current on treatment by December 2021, and 97% of TX_CURR by December 2022.

To address retention challenges among adolescents on treatment, PEPFAR Zambia will adopt a client-centered design to provide services that meet their needs, scale up community- and facility-based adolescent-friendly spaces and implement with fidelity adolescent-led peer support groups.

Retention in care among pediatrics is lower than among adults, with similar challenges related to geographic access, psychosocial support and service quality. For children, this is made worse by provider discomfort in managing pediatric ART cases which results in the referral of children from lower-level health facilities to higher-level health facilities that are further away and costlier to access. A pediatric surge focused on improving pediatric HIV case management through structured mentorship program has begun in COP20 to build the capacity of all frontline health care providers in pediatric ART. Furthermore, the use of an electronic pediatric decision support tool integrated into SmartCare+ will provide real-time support to providers for pediatric ART management. Additionally, PEPFAR Zambia will support the expansion of family-centered DSD models that offer full coverage allowing mothers and their children to be seen at the same clinic, same day and time. VL monitoring is important for monitoring treatment efficacy. VL coverage has improved from 37% in COP18 Q1 to 83% at the end of COP20 Q1.

To achieve full coverage for all districts and populations, PEPFAR Zambia will introduce and/or scale-up new initiatives such DBS for VLs in COP20 and beyond, targeting children (because health care providers often experience challenges with phlebotomy in this population) and recipients of care in hard-to-reach populations in rural and remote health facilities (such as those cut off by seasonal flooding). In the 2020 Zambia Consolidated Guidelines, the MoH has enhanced VL monitoring for PBFW from six monthly based testing to every three months. This more aggressive approach is intended to facilitate early identification of any treatment failure among PBFW and more timely remedial action to reduce mother-to-child transmission (MTCT). To improve VL testing coverage among children and PBFW (priority populations) in COP21, PEPFAR Zambia will scale up point-of-care (POC) testing for VL using GeneXpert for about 70% of all priority VL specimens.

To improve VL suppression among children under 15 years old, PEPFAR Zambia will continue phasing out Non-Nucleoside Reverse Transcriptase Inhibitors-based regimens and replace them with more efficacious DTG and Protease Inhibitor based regimens. However, given the known implementation challenges with LPV/r granules, when the pediatric dispersible 10mg DTG tablets become available in late COP20, the country plans to transition all eligible children (over 4 weeks of age and weighing more than 3kg) to DTG-based regimens as quickly as possible.

To prevent deaths among the treatment cohort, PEPFAR Zambia will focus on ensuring that both communicable and non-communicable diseases (NCDs) are prevented and managed. TB, which is the leading cause of death among PLHIV, will be prevented by implementing the last phase of the TPT Surge in COP20 with the aim of reaching at least 700,000 recipients of care with shorter TPT regimens, including 3HP. In COP19, PEPFAR Zambia achieved TPT completion for nearly 290,000 PLHIV and is on trajectory to meet over 95% of TPT targets for COP20.

Presumptive TB clients will be screened with GeneXpert and managed according to the results. Recipients of care with a CD4 <200 cells/ μ L will be screened for cryptococcal disease using CrAg. CrAg-positive patients with or without meningitis will be treated accordingly for cryptococcal infection. Cervical cancer disproportionately affects women living with HIV (WLHIV) who have up to a fivefold higher risk compared to the general population. With support from UNITAID/CHAI and other stakeholders, PEPFAR Zambia will continue to provide cervical cancer screening using visual inspection of the cervix with acetic acid (VIA) or human papillomavirus (HPV) DNA testing; and treatment services for eligible women recipients of care, aiming to provide treatment to at least 90% of those who screen positive. To further support management of major NCDs in ART services, PEPFAR Zambia will also procure sphygmomanometers for blood pressure measurement and glucometers for blood sugar measurement.

To enhance responsiveness to the needs of recipients of care, PEPFAR Zambia will support CLM through civil society. CSOs will collect information of individual service users' experiences with ART services. This in turn will be used to improve quality of services and ensure client centered services are provided.

4.3 Prevention

4.3.1 HIV Prevention and Risk Avoidance for AGYW and Children

COP21 Update: DREAMS remains the cornerstone of HIV prevention efforts amongst AGYW in Zambia, using evidence-based approaches to address the behavioral factors, family dynamics and structural barriers that make AGYW particularly vulnerable to HIV. In COP21, PEPFAR Zambia will continue to use prescribed screening tools to identify the most vulnerable AGYW, particularly pregnant adolescents and young mothers. Stronger focus on mentor selection, training and supportive supervision will ensure that evidence-based curricula are implemented with quality and fidelity. To address the needs of older girls and young women, who have proven more difficult to recruit and retain in the DREAMS program, PEPFAR Zambia will improve the package of economic strengthening services and team with clinical partners to accelerate access to PrEP. These differentiated services are essential to meeting the unique needs of AGYW across age groups. Finally, during the pandemic, PEPFAR Zambia noted increases in GBV. This challenge requires renewed efforts to facilitate sexuality education and violence prevention programs in schools, while also building efforts to identify and support AGYW exposed to violence through diverse clinical and community platforms. Until Peace Corps Response Volunteers return to Zambia, Peace Corps will continue to collaborate with NGOs, like Grassroots Soccer, to advance HIV and violence prevention programs through schools. These priorities and the activities described below remain essential to HIV prevention amongst AGYW in COP21.

In COP20, PEPFAR Zambia expanded the DREAMS program from eight to 14 districts, extending to Mongu, Monze, Mazabuka, Kasama, Luanshya and Mufulira. Selection of the new districts was

based on an analysis of the sub-national disease burden and AGYW incidence in each district. In COP21, PEPFAR Zambia will continue to provide comprehensive prevention services in these 14 districts with the aim of reaching saturation across age bands, particularly in the eight original districts.

PEPFAR Zambia leverages multiple entry points to identify AGYW who are most vulnerable to HIV and, in COP21, will place particular emphasis on identifying and engaging pregnant AGYW and young mothers in DREAMS. Working with clinical partners, DREAMS will strengthen ties to ANC, FP and STI platforms in health facilities to identify and refer AGYW to the program. In communities, DREAMS collaborates with respected community and faith leaders and other stakeholders to identify and recruit AGYW from community spaces, including schools. Hotspot mapping will remain an effective tool to identify the most at-risk AGYW in DREAMS districts.

In COP21, DREAMS Zambia will continue to determine DREAMS eligibility using the following factors: multiple sexual partners, STIs, no or inconsistent condom use, transactional sex, experience of violence, out-of-school, alcohol and/or drug use, and orphanhood. PEPFAR Zambia will use screening questions designed to build rapport between AGYW and their mentors and identify other risk and vulnerability factors to ensure tailored support for each AGYW according to her needs. An AGYW must present with one or more of the above risks and vulnerability factors to participate in DREAMS.

PEPFAR Zambia mobilizes communities for change through school-based HIV prevention and violence prevention programs and, as such, will continue to support Comprehensive Sexuality Education and violence prevention programs in select schools across the 14 DREAMS districts. Community mobilization that engages adolescent boys and young men, community and faith leaders, and other change agents supports subtle changes in gender and social norms that increase HIV risk for AGYW. If AGYW are subject to gender-based or sexual violence, PEPFAR Zambia will make active referrals to GBV One Stop Centers, where AGYW receive comprehensive post-violence care, including provision of post-exposure prophylaxis (PEP) and emergency contraception. PEPFAR Zambia will maintain GBV prevention and crisis response as core components of Safe Spaces and expand provision of mental health services across DREAMS Centers.

Provision of needs-based, adolescent-friendly health services is critical to empowering AGYW to reduce their HIV risk. In addition to GBV prevention and response, other HIV prevention and risk avoidance or reduction strategies have included community mobilization for HIV testing services, linkage to treatment, recency testing for HIV positive, condom promotion and distribution, and voluntary, comprehensive family planning services. In COP21, DREAMS will further expand coverage of PrEP services as an integral part of a comprehensive prevention package for AGYW aged 15 to 24 in DREAMS Centers and beyond. As of COP20 Q1, PEPFAR Zambia had reached 2,834 AGYW with PrEP, representing 21% of the COP20 target. PrEP access and uptake will be facilitated by training clinical partners in adolescent-friendly PrEP service delivery, with emphasis on engaging female providers to deliver PrEP in DREAMS Centers and health facilities; DREAMS mentors will play an enhanced role in providing adherence support to AGYW on PrEP.

In COP20, DREAMS Zambia began to adapt and improve economic strengthening opportunities for AGYW across age bands, with increased focus on young women aged 20-24 to support program retention. This included the adoption of two evidence-based curricula, BRAC ELA and Siyakha Girls, which offer a complete package of economic strengthening services as a bridge to wage employment or self-employment. These packages include advanced financial literacy, entrepreneurship skills, workforce development, and savings groups with linkages to formal banking. PEPFAR Zambia will continue to offer basic financial literacy across all age groups through the Stepping Stones curriculum, while offering more comprehensive services to 15-24-year-olds, including out-of-school youth and young mothers. DREAMS will leverage existing public-private partnerships in diverse sectors, including information technology, construction, mining and other trades, and tailoring) to expand entrepreneurship, apprenticeship and employment opportunities for AGYW.

PEPFAR Zambia's commitment to the delivery of high-quality, evidence-based prevention interventions depends upon DREAMS mentors who serve as role models and provide on-going support and individual follow-up with cohorts of DREAMS beneficiaries. In COP21, PEPFAR Zambia will refine mentor recruitment by standardizing selection criteria to ensure that DREAMS mentors have the motivation and competencies required to build positive relationships with AGYW and in their communities and the willingness to learn technical skills required to deliver quality prevention services. PEPFAR Zambia will also look to former DREAMS beneficiaries to serve not only as mentors, but also peer educators, PrEP support staff and GBV survivor advocates. Finally, in COP20, PEPFAR Zambia finalized recruitment of two DREAMS Ambassadors in each of the 14 districts. Moving forward, DREAMS Ambassadors will play an important role in supporting mentors to identify high-risk AGYW, but also support coordination of district-level services to AGYW amongst IPs to deliver comprehensive prevention services through health facilities and communities.

To capture AGYW risk factors, service uptake and program impact, each DREAMS partner will maintain a layering database to track primary and secondary services delivered to AGYW. PEPFAR Zambia will promote use of data to inform program design. For example, IPs will conduct monthly analysis of site-level data to assess performance and implement course correction as needed, and PEPFAR Zambia will coordinate semi-annual DREAMS review meetings across the interagency with IPs to monitor progress against COP21 priorities. Exchange visits within sites and between districts will promote learning designed to address gaps and share successful approaches.

Partnerships between clinics and communities, implementing partners, cooperating partners and government are necessary to ensure coordinated delivery of prevention services to AGYW. As such, PEPFAR Zambia will use active referrals between communities and health facilities and increased site-level collaboration among IPs to identify and reach AGYW with services tailored to their needs, HIV risk and age group. IPs serving KPs have streamlined processes to refer AGYW KPs to DREAMS and clinical services, while OVC IPs have developed stronger systems for bi-directional referrals between DREAMS and OVC platforms. PEPFAR Zambia will continue to promote collaboration amongst IPs to enhance complementary service delivery. Beyond IPs, PEPFAR Zambia will

collaborate the GFATM, the MoH and other stakeholders to develop a unified strategy for AGYW across PEPFAR Zambia.

4.3.2 Children/PMTCT

COP21 Update: The main strategic shift in PMTCT is scaling up use of point-of-care (POC) testing platforms for both EID and VL testing for priority populations, which include children as well as pregnant and breastfeeding women. The PMTCT program recognizes the need to focus on mothers who are AGYW, especially those who are newly diagnosed in ANC. These mothers require extra support to ensure continuity of care for both themselves and their exposed infants throughout their care and testing cascade until determination of final outcome for the infants.

Zambia has a mature PMTCT program with high ANC attendance rates, testing rates and linkage to ART among HIV positive PBFW. PEPFAR Zambia has been successful in reducing mother to child transmission with positivity yield at two months reducing from 2.2% in COP 17 to 0.7% in COP20 Q1. The HEI positivity at 12 months has also reduced from 3.0% to 1.1% over the same period. To address suboptimal EID testing coverages in rural and remote districts, PEPFAR Zambia scaled up EID testing on GeneXpert platform to 36 districts in COP20, and additional districts have adopted POC EID testing given its advantages over conventional PCR testing in terms of turnaround time. Based on a national diagnostic network optimization (DNO) analysis that balanced sample referral transport and device-related costs per test, the COP21 plan for POC EID testing will be such that approximately 70% of all EID tests will be conducted on POC, while the remaining 30% will be tested using conventional PCR. Unlike in previous years, there is no clear designation of a district as an EID vs. conventional PCR district—rather, each facility will be designated based on output from the DNO.

To improve retention of mother infant pairs (MIPs) until the outcome is determined, PEPFAR Zambia will support mentor mothers to facilitate tracking of MIPs who miss appointments and/or experience interruption in treatment. PEPFAR Zambia will continue to optimize utilization within MNCH care of the same appointments and tracking systems used in the main ART clinic. In COP21, PEPFAR Zambia will continue to scale up positive infant audits to identify missed opportunities in the PMTCT cascade and be able to close those gaps. PEPFAR Zambia has also introduced a new PMTCT ART form that will be used for clinical follow up of PBFW. This electronic health record form will have a field for collecting data elements for the HEI which will be useful in linking MIPs, improve documentation for outcome and ease analysis of PMTCT outcomes as Zambia aims to attain the WHO goal of elimination of mother-to-child transmission. However, there are challenges that remain with uptake of using electronic health records in MCH, with providers continuing to prefer use of paper registers.

4.3.3 Scaling up PrEP

COP21 Update: The PrEP program demonstrated resilience to two waves of COVID-19 in the country, starting new clients on PrEP to bring the total of individuals on PrEP to 57,455. However, continuation on PrEP remains low for at-risk priority populations, including AGYW, KPs and PBFW. For this reason, in COP21, the OU will focus on the quality of PrEP services and adherence support to ensure that those currently on PrEP continue treatment. In addition, as described below, updated PLHIV estimates require the OU to prioritize filling the potential ART gap, while also continuing to meet PrEP needs. For this reason, PEPFAR Zambia will maintain the PrEP_CURR target of 110,000 individuals.

Although Zambia achieved the 90-90-90 target at the general population level, HIV incidence remains significant among some priority and key populations. According to ZAMPHIA, HIV incidence is 13 times higher among AGYW compared to their male age counterparts. Similar trends have also been demonstrated among PBFW and KP using regional data (where local data is unavailable). In COP19, PEPFAR Zambia initiated 45,926 new clients on PrEP by close of the reporting period. Despite disruptions caused by COVID-19, the PrEP program demonstrated resilience. As of COP21 Q1, the number of clients newly-initiated clients on PrEP was 26,477 bringing the total on PrEP treatment to 57,455 individuals.

PEPFAR Zambia has continued to grow the PrEP program with almost 1,000 sites offering PrEP; this accounts for 88% of districts in the country as of COP21 Q1. The national PrEP campaign, Zambia Ending AIDS, (ZEA) and the use of community gatekeepers to engage at-risk populations have significantly improved acceptability of PrEP, especially among AGYW and KPs. However, despite the increase in the number of clients newly-initiated on PrEP, continuation among at-risk populations remains a challenge. A cohort analysis of AGYW conducted in 2020 demonstrated a 60% drop-off among this at-risk group after one month. After three months, only 27% of AGYW had continued taking PrEP. Without improved PrEP continuation among this at-risk group, as well as others in Zambia, minimal progress will be made in reducing new HIV infections.

In COP21, PEPFAR Zambia will focus on providing PrEP as part of a package of comprehensive HIV prevention services that include HIV testing, sexual risk reduction education, condom distribution, contraceptives, post-exposure prophylaxis and VMMC. PEPFAR Zambia will reach populations at higher-risk of HIV infection, especially AGYW, KPs and PBFW, while supporting PrEP continuation. PrEP provision will include community-based DSD models for KPs through community posts and AGYW through DREAMS Centers. PEPFAR Zambia will integrate community-led PrEP into existing HIV services for at-risk to support adherence. Health facility-based approaches will target sero-discordant couples (SDC) and PBFW.

PEPFAR Zambia will improve the quality of services, centering efforts not only on initiating clients on PrEP but also on ensuring that at-risk clients are provided with the necessary support to enable them to improve adherence and effectively minimize their risk of contracting HIV. The program

will focus on the continuation of PrEP among at-risk groups. This will include 12,000 KPs (FSWs, MSM, transgender people and prisoners), 20,000 AGYW, 30,000 PBFW, and 20,000 SDCs. PEPFAR Zambia will also target 28,000 members of the general population, including but not limited to members of the military, migrant workers, men at higher risk, and fisher folk.

In COP21, PEPFAR Zambia will maintain the same PrEP_CURR target of 110,000 clients. By focusing on the quality of PrEP provision and adherence support for existing clients, the OU will more effectively reduce the risk of HIV infection among these priority groups. In addition, the revised PLHIV estimates require that PEPFAR efficiently manage available resources to meet ARV and other commodity gaps. Maintaining PrEP targets is a prudent decision that allows the OU to close the ARV gap, while still fully funding PrEP (TE and DVR) with no projected gap for COP21. PEPFAR will procure 1,031,863 30-tablet count bottles of TE to support 108,000 clients and 22,402 DVR for 2,000 women over the age of 18.

PEPFAR Zambia will continue to provide PrEP to AGYW enrolled in DREAMS across 14 districts; PrEP is offered as an additional option to AGYW (15-24) who meet eligibility criteria based on risk screening. DSD facilitates PrEP provision in DREAMS Centers, which offer a safe and convenient setting for at-risk AGYW. DREAMS IPs will recruit DREAMS graduates to provide adherence support and conduct follow-ups. PEPFAR Zambia will continue to use PrEP surges to stimulate demand among AGYW. A PrEP surge is a peer-led demand-generation and adherence support strategy in which mobilizers support client follow-up or demand generation and identify possible PrEP clients or provide on-going support to existing PrEP clients. This process is supervised by a community mobilization officer for quality control, while the service provider is stationed at the site to meet clients who are escorted to the site by mobilizers.

PEPFAR Zambia will scale up differentiated PrEP delivery to key populations and build capacity of community-based KP partners to provide PrEP to KPs who test HIV-negative in safe spaces. Provision of PrEP in such spaces where KPs feel safe is critical to increasing uptake among these vulnerable groups. PEPFAR Zambia will continue to work closely with gatekeepers, who will be equipped with the necessary skills to provide key messaging on PrEP and conduct follow-ups to improve adherence.

In COP21, PEPFAR Zambia will focus on improved uptake of PrEP among PBFW to reduce HIV infection among PBFW. Differentiating the provision of PrEP from ART to other departments within health facilities has reduced the workload of already overstretched ART providers and mitigated stigma and discrimination known to limit PrEP uptake in ART settings. PEPFAR Zambia will train and orient MCNH and FP providers to address inadequate knowledge and skills and reluctance of healthcare providers to screen and initiate PBFW on PrEP. Through continuous technical assistance and supportive supervision, PEPFAR Zambia implementing partners will emphasize the importance of PrEP in reducing seroconversions among PBFW. In COP21, these efforts will help PEPFAR Zambia achieve the ambitious target of initiating 30,000 PBFW on PrEP.

To mitigate against the possibility of intimate partner violence among PBFW, PEPFAR Zambia implementing partners will scale up the implementation of the LIVES (Listen, Inquire, Validate, Enhance Safety and Support) curriculum. This approach seeks to build providers' skills and address their attitudes towards survivors of violence. Healthcare workers learn how to provide women-centered clinical care, which includes identifying women experiencing violence, providing first-line support through the LIVES approach, providing essential clinical care for survivors, and identifying local support resources.

PEPFAR Zambia will work with the MoH through the National PrEP Task Force to advocate for the introduction and eventual inclusion into national guidelines of the Dapivirine Vaginal Ring (DVR). DVR will expand the HIV prevention options available to women, as studies have demonstrated that even a partially effective prevention option can have an important protective impact for women and their communities as part of a comprehensive HIV prevention strategy.

PEPFAR Zambia investments will continue to support demand creation efforts for oral PrEP through the Zambia Ending AIDS campaign. With COVID-19 community restrictions, ZEA played an integral part of maintaining demand for PrEP through use of innovative approaches for reaching young people with key messages on prevention products and services that can avert new HIV infections. The messaging has resonated with members of the public, particularly with men aged 25-34. PEPFAR Zambia will use lessons learned from this notable success to further target AGYW and men, particularly those aged 20-34 and over 50-years-old, with impactful messages to increase PrEP uptake in these two groups that are so critical to HIV epidemic control efforts in Zambia.

4.3.4 Gender-based Violence Prevention and Response

COP21 Update: Due to an increase in GBV cases during the COVID-19 pandemic, PEPFAR Zambia will scaleup screening for intimate partner violence (IPV), especially among AGYW and Key Populations. Using the WHO LIVES approach, PEPFAR Zambia will identify survivors who seek services not only from GBV One Stop Centers (OSCs) but also from other departments such as family planning and ART. Health care workers and community health workers will be trained to provide first-line support using the LIVES approach and link survivors to additional post-violence care services such as legal and psychosocial counseling. For accurate reporting and provision of post-violence care to AGYW GBV survivors, PEPFAR Zambia will continue to strengthen active referral systems between DREAMS and One Stop Centers.

Although there is a dearth of local data on GBV in Zambia, evidence from the Zambia Violence Against Children Survey (VACS), suggests that 27% of girls who had their first sex before the age of 18 years reported their experience to be forced, coerced and non-consensual. Among victims of sexual violence who are aged 18 to 24 years, only 19.8% of females and 24.6% of males knew where to seek help from. Female and male victims constituted only 1.4% and 7.2%, respectively, of those who sought help.

In part, these gaps are attributable to weak GBV program coordination systems at national and subnational levels. PEPFAR Zambia has continued to fill these gaps by collaborating with the MoH and implementing partners to prevent and respond to GBV. In COP19, 18,023 survivors received post-GBV services of which 6,135 were survivors of sexual violence and 11,888 were physical and/or emotional violence survivors.

In COP21, PEPFAR Zambia will ensure that programs are routinely screening for IPV in the context of PrEP, index testing and care and treatment services. Using standard screening tools, potential victims of IPV or survivors will be identified and linked or provided with the appropriate response services. For this reason, PEPFAR Zambia will strengthen and continue to support the provision of post-violence clinical care services at health facilities and existing GBV One Stop Centers. Services offered will include psychosocial counseling, screening for sexual violence, victim support services through the Zambia Police Service, HIV testing services and referrals for ART. PEPFAR will strengthen the quality of such services by ensuring that the minimum standard of care for sexual GBV is maintained at all GBV service delivery points.

To improve the quality of GBV services, PEPFAR will build/strengthen the capacity of health workers and other key stakeholders to provide GBV services. For the same reason, it will support the training of police officers, NGO staff, medical professionals and other social services staff in GBV awareness, prevention and care. In COP20, PEPFAR Zambia anticipates that service providers will provide improved post-GBV services for 10,464 survivors of physical or emotional violence, including prevention of IPV and post-rape care to survivors of sexual violence. In COP21, through intensive strategies to improve screening for GBV, PEPFAR Zambia plans to reach 15,431 survivors with post-sexual violence care services.

In COP21, PEPFAR Zambia will continue to support community-based GBV prevention strategies to address the social and cultural norms, myths and misconceptions that catalyze GBV. This will include the implementation of evidence-based curricula such as SASA and the Coaching boys into Men (CBIM) approach. SASA! a groundbreaking evidence-based approach for community gender-based violence prevention, HIV prevention and promotion of delayed sexual debut will reach a total of 20,000 adolescent girls aged 9-14 years with activities focusing on reducing sexual violence, delayed sexual debut and maintaining healthy sexual relationships. The CBIM approach promotes healthy non-violent relationships and will benefit 30,027 boys in COP20 and expand to 58,145 boys in COP21.

PEPFAR Zambia will also strengthen the linkage between community-based GBV prevention interventions, including GBV chiefdom secretariats, facility-based post-GBV care, GBV One Stop Centers and DREAMS Centers. With more health facilities providing higher-quality GBV services, linkage will improve the chances of survivors receiving timely HIV prevention and other reproductive health services, including emergency contraception.

At national level, PEPFAR Zambia will work with the Ministries of Gender, Justice, National Guidance and Religious Affairs and Chiefs and Traditional Affairs to improve the legal and policy

environment on GBV prevention and response. A media strategy will be developed to communicate positive gender practices through radio, TV and social media and dispel myths and misconceptions.

In COP21, PEPFAR Zambia will continue to strengthen support for the monitoring GBV case identification, prevention and response activities. This includes strengthening the existing government GBV Information Management System to improve tracking GBV cases at national and subnational levels.

4.3.5 Key Populations

Local data from bio-behavioral surveys confirm high levels of risky behavior among KPs and their sexual partners. Yet, PEPFAR Zambia's KP program faces many challenges, including high levels of socio-political resistance, violence, stigma and discrimination, and suboptimal capacity of healthcare workers to respond to the specific needs of KPs. These challenges can create barriers to KPs in accessing prevention and treatment services at facility and community levels, with consequences for HIV prevalence and incidence.

Key populations' access to and increased use of comprehensive HIV services is essential to achieving epidemic control. In CoP20, PEPFAR Zambia reached 54,105 KPs, with prevention messages. Among the KPs reached, 51% were FSWs, 29% prisoners, and 16% MSM. Of the total KPs reached with prevention interventions, 64% were tested for HIV. The highest positivity yield was among PWID (28%), FSW (21%), and MSM (16%). A total of 8,785 KPs were initiated on PrEP during the reporting period.

In COP21, PEPFAR Zambia will build on past achievements to strengthen access to HIV prevention, care and treatment services for KPs. In COP20, PEPFAR Zambia has planned to offer HIV testing to 31,447 KPs and recommend PrEP to 50% of negative KPs. In COP21, PEPFAR Zambia will build on this progress to reach 79,794 KPs with prevention messages. In planning for COP21 and for future COPs, PEPFAR Zambia will continue to review KP mechanisms being used for KP programs and discuss and plan target setting with the KP community.

Given the legally restrictive environment, DSD models help to improve access to prevention, care and treatment services for key populations. In CoP21, PEPFAR Zambia will strengthen the scale up of community-based DSD models to circumvent the challenges of safety, stigma and discrimination. The DSD approach will include services such as condom and lubricant promotion and distribution, HIV testing and counselling, peer outreach, STI screening and treatment, provision of PrEP, strengthening community-facility linkages, preventing GBV and alcohol abuse, mental health screening and harm reduction, antiretroviral treatment and VL monitoring. Prevention efforts will include testing children of KPs, enhanced use of social media to access hard to reach KPs, and cervical cancer screening for FSWs.

PEPFAR Zambia will actively consult and engage with KP-led organizations in the planning and implementation of service delivery for these at-risk communities. More active community-based follow-up will further strengthen community ART initiation and refill and provision of event-driven

PrEP. PEPFAR Zambia will continue to support the involvement of the KP consortium – amongst other KP-led organizations – in national activities such as the KP TWG, the GFATM application process and other national policy discussions focused on HIV programming. PEPFAR Zambia will continue to scale up treatment literacy through development of information and educational materials for dissemination among target groups. CSO involvement will be critical for the Dapivirine Ring pilot, full implementation and monitoring.

To increase case finding among KPs, PEPFAR Zambia will intensify approaches such as the social network testing, enhanced peer outreach, peer navigation and HIV self-testing. PEPFAR Zambia will strengthen the quality of HIV testing services by ensuring that testing strategies are in line with the WHO standards of the five “Cs” with increased monitoring of testing, provision of pre- and post-test counselling services and engagement of client-driven models of care. Testing services will require and improve IPV screening to ensure the safety, dignity and security of KPs.

COP21 efforts will continue to focus on stronger connections between facility and KP outreach providers to develop an integrated KP case management strategy. To improve linkage and retention, comprehensive community case management teams will be established to ensure that KPs are supported along the continuum of care. PEPFAR Zambia will increase the use of KP organizations to plan, implement, monitor and assure quality of interventions within communities.

KP CSOs understand their communities’ unique needs and are well-placed to support the planning, implementation and monitoring of HIV services targeted within these communities. In COP19, CDC headquarters centrally funded the Key Population Investment Fund (KPIF) as an effort to jump-start KP-specific programming led by KP partners. After successful implementation in COP19, CDC started to allocated funding within the COP process to continue KPIF activities; in COP21, all KPIF funding comes from country-allocated COP funds. In COP20, the KPIF-supported program budgeted \$1.1 million in COP funding as community testing, PrEP and general KP prevention. In COP21, the KPIF-supported program budgeted \$2.9 million in COP funding for community testing, PrEP, community mobilization, condom and lubricant programming, and structural interventions. (Approximately 85% of the proposed budget allocated to KPIF is for prevention interventions and 15% is for structural interventions.) In addition, in COP21, USAID will directly fund local KP organizations to implement HIV programs for their constituencies. In COP21, PEPFAR Zambia will continue to strengthen the engagement of CSOs to ensure accountability and effective use of PEPFAR funds. PEPFAR Zambia will work in close coordination with the NAC KP technical working group to develop clear benchmarks to build capacity of KP CSOs in project management functions such as grants, finance, and human resource management. This will support KP-led and KP-competent CSOs’ more active involvement in program design, implementation and monitoring.

KPs are not a homogenous group and thus require strategies designed to respond to the diverse and unique health care needs of KP sub-populations. Tailored services are integral to improving KP access to health services. In COP21, PEPFAR Zambia will continue to implement effective and responsive strategies for different KPs, including FSWs, MSM, transgender (TG) and PWID. For example, current HIV services for PWID do not address drug use-related risk factors due to lack of

appropriate policies. PEPFAR Zambia will collaborate with MoH and NAC to develop a policy framework that supports effective scale-up of accessory interventions for PWID. Such interventions include needle exchange programs, opioid substitution therapy, overdose prevention and management, and viral hepatitis and tuberculosis screening and management.

In COP21, PEPFAR Zambia will continue to work with KP CSOs address the safety and security challenges that impede KPs' access to HIV services. Implementing partners will continue to form KP protection networks, provide KPs with legal training to enhance safety and security, integrate human rights in KP sensitivity trainings for HCWs, and expand sexual diversity training. The safety and security of all KPs and people seeking health services is critically important to PEPFAR. In addition, PEPFAR Zambia will analyze results of a stigma index planned for COP20 and engage key stakeholders, including KP CSOs, in understanding and address the impact of HIV prevention, care and treatment services on stigma and discrimination among PLHIV.

4.3.6 Voluntary Medical Male Circumcision

The VMMC program has made strides in reaching males with the comprehensive package of HIV prevention services. Nationally, from 2016 to December 2020, 2,323,643 males have been reached with VMMC services. PEPFAR Zambia has contributed to reaching 80% (1,858,914) of the national figures. Males aged 15-29 years old who contribute significantly towards reduction of HIV prevalence, 1,417,422 (61%) of those reached. In COP18, the screening tool for HIV testing services was introduced. Males were screened and only tested if eligible or deemed to be at high risk of HIV infection. Since introduction of the screening tool, numbers tested have reduced from 98% in COP18 Q1 to 59% in Q4. In COP20 Q1, 43,366 (44%) males were tested out of the 107,976 circumcised with a positivity yield of 0.03%. This indicates that PEPFAR Zambia is reaching the relevant eligible males who are HIV negative and would benefit most from this intervention. The adverse event (AE) rate remains at less than 2% with most serious AEs presenting postoperatively with infection or bleeding. These cases were attended to at facilities by staff with favorable outcomes. In addition, several policy documents were launched by the MoH. These included the Guidelines on Quality Improvement for Voluntary Medical Male Circumcision Service Delivery in Zambia, a Training Guide for Early Male Circumcision under Anesthesia and the National Social Behavior Change Communication Strategy for Voluntary Medical Male Circumcision 2019-2022.

In COP20, using base and ambition funds, PEPFAR Zambia planned to reach an additional 400,000 males with VMMC services. As of COP20 Q1, PEPFAR Zambia had reached 134,114 contributing to 36% of the COP 20 annual target of 375,608. The program also made early substantial gains in targeting the priority age pivot 15-29 years. Of the total 134,114 circumcisions performed in the reporting period, 119,496 (89%) circumcisions were in the priority age pivot accounting for 35% contribution towards the annual priority age pivot target of 343,426. The program overachieved its targets despite the continued COVID-19 pandemic which is impacting negatively on provision of social services including health. Despite the suspension of community services such as campaigns, mobile services and outreaches, the VMMC program has continued to provide services at static sites with strict adherence to COVID-19 prevention guidelines. Some of the adaptations the program

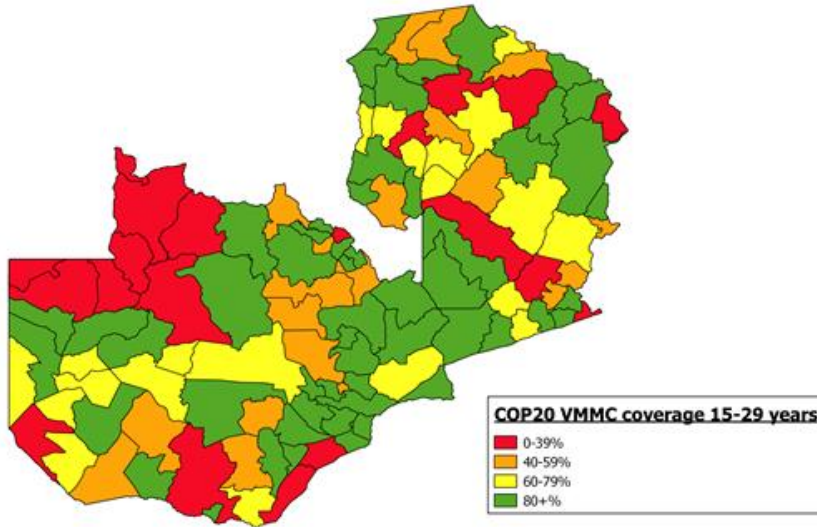
has continued to embark on, from the previous reporting period, include infection prevention and control to safeguard both providers and clients, scheduling of providers and clients to match demand and supply for efficient service provision and providing remote technical support to facilities.

In COP21, PEPFAR Zambia will continue to focus on SNUs with high HIV prevalence and unmet need, hard to reach males such as those in farming blocks and fishing camps as well as scaling up reach of older males 15 years and above with particular attention on the 15-29 years.

PEPFAR Zambia will continue to support direct service delivery by supplementing the government's efforts in human resources for health by hiring professional and lay health workers. Enhanced on-site mentorship, supervision and monitoring at site level to maximize the use and time of providers, enforce compliance with medical ethics and human rights principles (informed consent, confidentiality, absence of coercion) and delivery of quality MCs in sanitary conditions to promote client safety will be implemented. Support will also be provided to procurement of VMMC commodities, supplies and logistics tools will be used to mitigate program disruption due to stock outs. Assurance of data quality and utilization of programmatic data on an ongoing basis, and iterative review of quality and program performance through service quality assurance and continuous quality improvement, will be implemented. In COP19, PEPFAR Zambia completed the active surveillance of the Shang Ring Device and in COP 20 begun implementation of the passive surveillance. To expand the choice of methods and increase the appeal of VMMC services, PEPFAR Zambia will support use of VMMC devices. In addition, there will be continued use of the hub-and-spoke model to improve access for clients in hard-to-reach areas. The national program will be supported in coordinating stakeholders, providing oversight and technical assistance to regional programs in quality assurance, CQI, promulgation of policy and training of trainers.

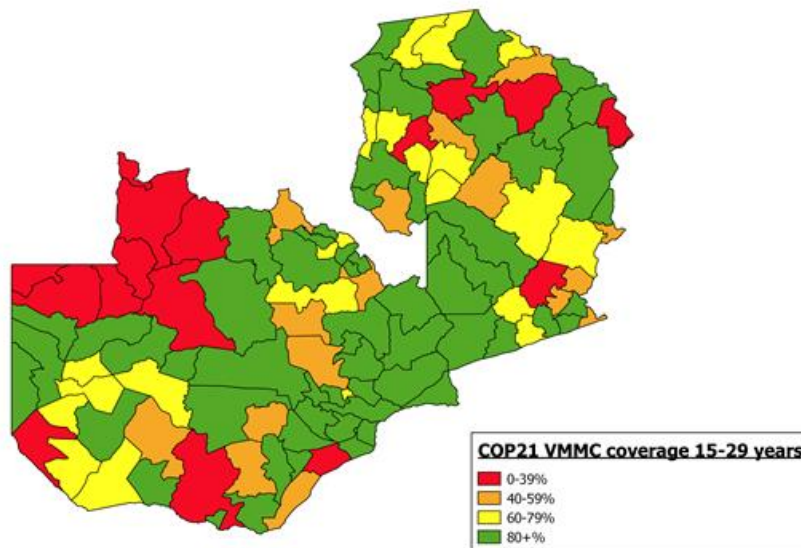
In COP20, demand generation approaches prioritized bringing to scale evidence-based interventions that reach males aged 15-29 years for immediate impact on the HIV epidemic. This will include the client-centered design approach of demand generation, sport-based approaches, such as soccer galas and community mobilization and activities using community mobilizers and peers to provide interpersonal communication messages and link targeted clients to VMMC and other relevant HIV services. The use of VMMC as an entry point to other health services presents an important opportunity for engaging adolescents and young men in health services, and holds great potential for HIV prevention, treatment and care, an opportunity which is often missed. Fostering partnerships with traditional and community leaders to generate demand and promote program ownership will also be implemented. These demand generation strategies will remain relevant to prevention in COP21.

Figure 4.3.6.1 COP20 VMMC Coverage of Males 15-29 years old



Source: Spectrum estimates, HMIS & Program Reports

Figure 4.3.6.2 COP21 VMMC Coverage of Males 15-29 years old



Source: Spectrum estimates, HMIS & Program Reports

4.4. Zambia Specific Priorities

4.4.1 Recent Policy Changes

PEPFAR Zambia will continue to scale up and implement high-impact strategies with fidelity, while also mitigating the effects of COVID19 for both health care workers and recipients of care. These high-impact strategies include but are not limited to:

1. Implementation of test-and-start
2. Provision of enhanced post-test counselling messages to improve early retention
3. Patient-peer pairing to for newly enrolled clients to enhance early retention
4. Multi-month dispensing including for children two years and older
5. TLD optimization including among children weighing less than 20 kg
6. VL scale-up using POC and near POC technology as well as VL DBS for children
7. Prevention of mortality secondary to OIs especially TB and cryptococcal disease
8. Integration of ART and non-communicable disease (NCD) management

The major policy change for clinical services was the 2020 update of the HIV treatment guidelines. The main changes in guidelines included the introduction and/or expansion of more efficacious HIV treatment for both adults and children, DTG-based regimens, diagnosis and management of severe HIV disease (including TB and cryptococcal disease), and resistance testing for first-line HIV drugs. Of note, multi-month dispensing of ARVs has been extended to children older than two years who meet criteria for stable based on national guidelines.

4.4.2 Program Direction Based on Program Performance

COP21 Update: PEPFAR Zambia will identify and link populations with unmet needs to care, provide quality comprehensive care, and offer prevention interventions to address individual needs. PEPFAR Zambia will implement highly targeted testing to ensure children, adolescents, men 20-34 and men over 50 are diagnosed and treated early. Important strategies will remain index testing of sexual partners and children of PLHIV, social network testing for KPs, and use of a HIV screening tool in high-yield areas within facilities. PEPFAR Zambia will support retention to treatment by scaling up the community post model, DSD for adolescents and KPs, six-month MMD, and increasing the proportion of adults on TLD to 80%. PEPFAR Zambia also recommits to delivering comprehensive prevention interventions to AGYW, KPs, PBFW and other priority populations. These strategies will help the OU respond to remaining stubborn gaps in prevention, care and treatment services, while also reaching more numbers of people living with HIV based on updated population estimates.

The 2021 Spectrum report shows an increase in the estimated national population, which has resulted in a significant increase in PLHIV estimates from 1,240,247 in COP20 to 1,494,170 in COP21. As of COP20 Q1, 1,179,031 individuals were currently on treatment, translating to 79% ART

treatment coverage at national level. Of this number, 1,130,632 individuals were receiving treatment at PEPFAR-supported sites. The OU is projected to achieve the TX_CURR target of 1,163,262.

To accelerate performance in COP21, PEPFAR Zambia will aim to achieve 85% treatment coverage of PLHIV at OU level. This translates to 1,268,407 individuals on treatment (TX_CURR) by close of September 2022. To achieve this ambitious target, the program will focus on maintaining treatment gains by scaling up retention interventions such as DSD and ensuring appointment systems that meet the needs of recipients of care. Additionally, the program will provide adequate support for immediate tracking of recipients of care who miss appointments. To further close the treatment gap, PEPFAR Zambia will support treatment initiations with a focus on geographies with higher treatment gaps to the second 95; this includes Lusaka, Copperbelt, Southern, Muchinga, Luapula and Northern Provinces. PEPFAR Zambia will scale up strategies that have demonstrated high yields, including index testing, family index texting, targeted testing using HIV risk screening tools, and social network testing. These strategies will target populations that have eluded identification and treatment: children, AGYW, men between 20-34 and over 50.

Differentiated service delivery, tailored to meet the unique needs of priority and key populations, has also demonstrated results across the treatment cascade. For example, the community post model has effectively reached men as well as adolescents with prevention, care and treatment services, particularly with access to PrEP. PEPFAR Zambia will rely upon this model of DSD – in addition to others described throughout this document – to strengthen services along the clinical cascade and provide integrated prevention services.

4.4.3 Implementing Partner Management

PEPFAR Zambia does not anticipate major changes related to implementing partner management in COP21. PEPFAR Zambia will continue to implement an enhanced partner management system to ensure financial and performance accountability necessary to achieve and sustain HIV epidemic control. This includes regular and structured monitoring of performance on a weekly, monthly and quarterly basis as well as targeted site visits. Each activity manager reviews outlays monthly to monitor spending is aligned with the COP approved budget.

4.4.4 New Innovative, Evidence-based Solutions for COP21

Clinical Services: Although the Zambian HIV treatment program has done well, more work needs to be done to achieve and sustain the numeric goals of HIV epidemic control of 95-95-95. The HIV treatment program will continue to implement evidence-based solutions with COP21 funding to bridge outstanding gaps such as “treatment experienced” presenting as new on HIV treatment at different treatment sites, relatively high unmet need for children on HIV treatment, low VL coverage for clients in hard-to-reach geographic areas, and morbidity and mortality among people in HIV care. For “treatment experienced” patients who present as new on HIV treatment, PEPFAR Zambia will support the MoH to introduce a basal VL assay for all newly identified PLHIV at the point of HIV diagnosis to ascertain VL suppression status (if the client is virally suppressed, s/he is

likely to be a “treatment experienced” rather than a “treatment naïve” patient. In rare circumstance, such a patient could also be an elite controller). In addition to the intervention mentioned above, and subject to availability of resources, PEPFAR Zambia might also support the use of urine TLD metabolites to identify “treatment experienced” clients entering the health system as new on HIV treatment. With COP20 funding, PEPFAR Zambia will introduce a nationwide web based SmartCare+ system with inherent capability to track clients on HIV treatment in real time and avoid client duplication. In addition to the above intervention and subject to an enabling policy and legal framework, PEPFAR Zambia might support the introduction and scale-up of a nation-wide biometric system for client identification.

To address the low treatment coverage among children under the age of 15, PEPFAR Zambia will continue to support the pediatric surge which, among other innovations, will utilize multiple platforms to provide pediatric HIV services, including OVC, schools and child-friendly spaces, train health care workers in pediatric HIV care and optimize the use of more tolerable pediatric HIV treatment regimes. In COP20, PEPFAR Zambia introduced use of DBS for VL testing, especially for children and adults in hard-to-reach areas on GeneXpert platforms to increase VL coverage.

To counter background mortality and AIDS-related mortality among clients in HIV care, PEPFAR Zambia also invested in the management of communicable and non-communicable co-morbidities among clients in HIV care. For communicable diseases, PEPFAR Zambia has invested in TPT, intensified TB case finding using GeneXpert and lipoarabinomannan, and in TB infection control. For non-communicable diseases, PEPFAR Zambia has focused diabetes mellitus, renal disease and cardio-vascular diseases. PEPFAR Zambia has supported the training, development of job aids and procurement of reagents needed for managing these co-morbidities. For renal disease particularly, PEPFAR Zambia has planned to leverage other funders’ effort to provide renal sparing regimens.

OVC: The OVC program remains a critical component of PEPFAR Zambia’s strategy to maintain gains made in achieving epidemic control. PEPFAR Zambia will continue the work begun in COP20 of aligning the OVC portfolio to the changing epidemic by providing structured, evidence-based interventions to targeted sub-populations and by formalizing relationships with health facilities and PEPFAR care and treatment partners to improve case finding, adherence, retention, VL coverage and VL suppression in pediatric clients through a family centered approach.

In COP20, PEPFAR Zambia merged its pediatric ambitions with its OVC platform to improve case finding of CLHIV and ensure that they are retained in care to increase their likelihood of viral suppression. These innovative practices, which are employed in COP20 and will continue into COP21, will form a package of high impact interventions implemented as part of PEPFAR Zambia’s pediatric surge. The pediatric surge has focused on sites accounting for 65% of CLHIV on ART, consisting of 215 health facilities in 75 districts. Beyond the package of targeted interventions implemented in these facilities, PEPFAR Zambia will also ensure that mentorship is provided to all ART facilities to increase provider confidence in initiating children on treatment.

Support to the pediatric surge has been two-fold: at the facility and in the community. At the facility, multidisciplinary teams consisting of clinicians, OVC case managers and CHWs have provided case conferencing and client centered service for improved adherence and retention for C/ALHIV. All WLHIV and their children are being assessed for enrollment in the OVC program and provided with supportive referrals for psychosocial support, socio-economic interventions and parenting programs. All C/ALHIV have also been assessed to determine eligibility for enrollment into the OVC program. These efforts will continue in COP21.

In the community, multidisciplinary teams provide bi-directional referrals to ensure pediatric recipients of care are comprehensively supported to assure retention in care while maintaining viral suppression. OVC case managers provide strengthened caregiver treatment literacy and psychosocial support during OVC home visits. The OVC program also leverages the power of the CHWs to identify children of WLHIV clients and facilitate access to conduct index testing of any children with an unknown HIV status. Bi-directional referrals through trained OVC case managers remain valuable to the program in COP21.

Supply Chain: An uninterrupted supply of commodities remains a critical component of PEPFAR Zambia's strategy to maintain gains made in achieving epidemic control. In COP21, PEPFAR Zambia will change the way it engages with central medical stores through the Zambia Medical and Medicines Supply Agency (ZAMMSA). The OU will build the capacity of ZAMMSA to provide effective oversight of the supply chain and take on the responsibility of procuring some HIV commodities. In COP21, USAID plans to support a local private sector entity to manage segments of the distribution system to improve commodity availability at service delivery points.

4.5 Commodities

COP21 Update: Ensuring that HIV commodities are fully supplied and accessible to all patients is a priority and critical to achieving the 95-95-95 epidemic control targets. For COP21, PEPFAR Zambia used Spectrum modeling outputs incorporating Grid3 population estimates to quantify ARV and non-ARV commodities. Estimates were used to set treatment targets, which were then used to determine commodity requirements and ending the year with four- and two-months buffer stock for ARVs and non-ARVs commodities, respectively. A mid-point estimate for clients expected to be on treatment (1,243,828, from the latest national data and expected net new growth through COP21 Q2) was used to quantify for commodities needed during the first half of the year; COP21 TX_CURR targets were used to estimate commodities needed for the last half of the year. PEPFAR Zambia will assess ongoing needs by continually monitoring stock on hand, what has been planned, and what has been procured but not yet received to avert stock imbalances, possible wastage, and ensure adequate stocks are available throughout COP21 to meet the needs of Zambians living with HIV.

PEPFAR Zambia and the GRZ and are committed to client-centered HIV treatment services. All PLHIV, will be offered TLD as the preferred first line regimen for HIV treatment. By the end of COP20, PEPFAR Zambia aims to reach 90% of adults on TLD; by the end of COP21, Zambia will aim to achieve 95%. All individuals on TLD will be offered MMD. The transition to TLD 90-count bottles began in December 2019. PEPFAR Zambia will transition to orders of TLD in COP21 are 180-count bottles. This switch will further decrease the burden on limited storage space and improve retention. Adult ARVs are funded by PEPFAR, GFATM and the GRZ, with no projected gap in COP21 to meet our target with a four-month buffer stock.

Beginning in COP20 Q3, Zambia will phase out LPV/r-based regimens and start transitioning pediatric patients to optimized DTG-based regimens. In COP21, orders of DTG 10mg and DTG 50 mg are planned as 90-count bottles. Pediatric ARVs are funded by PEPFAR, GFATM and GRZ with no gap projected for COP21.

For effective supply chain management of VL commodities, PEPFAR Zambia established the goal of providing VL testing to over 50% at baseline and to 100% of TX_CURR. PEPFAR Zambia continued to provide technical assistance to the ZAMMSA (formerly Medical Stores Limited) and the MoH to manage and maintain cold chain systems that ensure full stock availability of all reagents, consumables and calibrators needed to conduct VL tests.

In COP20, there was no funding gap projected for HIV lab commodities, which are currently purchased through reagent rental agreements with Hologic and Roche; lab commodities are funded by PEPFAR, GFATM and the GRZ. However, in COP21, PEPFAR Zambia anticipates a funding gap of \$40,427,760.79. The bulk of the stated gap is listed as a deficit in FBC/chemistry reagents. Together with all stakeholders, PEPFAR Zambia acknowledges the uncertainty around quantification of the need for FBC/chemistry reagents, but also notes that their procurement is explicitly proscribed in COP guidance. Nonetheless, through the diagnostic optimization process (at no cost to the program), PEPFAR Zambia will assist in clarifying the quantification. In addition, PEPFAR, the MoH and GFATM will work together to find efficiencies in the lab sector to reduce any actual funding gap.

In COP21, USAID plans to support a new local private sector entity with responsibility for 4th party logistics (4PL) to deliver drugs to service delivery points.

Table 4.5.1 Funding Gap					
Commodity Category	COP21 Funding Need	COP21 Funding Commitment	GFATM	GRZ	COP21 Funding Gap
ARVs	\$128,393,611	\$61,236,461	\$37,836,981	\$29,320,166	\$0
OIs (Prev. & TX)	\$3,643,326	\$3,000,000	\$26,400	\$616,926	\$0
VL/EID	\$22,828,879	\$21,170,757	\$1,658,121	\$0	\$0
CrAg	\$522,413	\$437,160	\$85,252	\$0	\$0
GeneXpert Cartridges (VL)	\$2,342,550	\$2,342,550	\$0	\$0	\$0

GeneXpert Cartridges (TB)	\$6,668,100	\$4,067,556	\$1,993,684	\$606,859	\$0
Lipo-Arabinomannan (LAM) Strips	\$1,390,545	\$1,332,095	\$58,450	\$0	\$0
Other HIV lab Commodities	\$51,119,317	\$7,083,722	\$2,107,834	\$1,500,000	\$(40,427,760.79)
Rapid test kits	\$9,804,162	\$4,007,132	\$3,376,980	\$2,420,050	\$0
INH	\$1,936,977	\$578,466	\$0	\$1,358,511	\$0
Rifapentene	\$2,247,156	\$1,477,509	\$756,509	\$13,138	\$0
Vit B6	\$844,733	\$0	\$844,733	\$0	\$0

Source: 2020 National Lab Commodities Forecasting and Quantification Report and the 2019 National ARV Forecasting and Quantification Report, COP21 proposed funding and proposed GFATM concept note with GRZ/MoH

4.6 Collaboration, Integration and Monitoring

4.6.1 Strengthening Cross Technical Collaboration and Implementation

COP21 Update: PEPFAR Zambia proactively collaborates with the MoH, GFATM and other external stakeholders for efficient and effective implementation that facilitates continuity and sustainability of HIV care, treatment and prevention services. PEPFAR Zambia's coordination of the proposal for the American Rescue Plan reflects this commitment to partnership. PEPFAR Zambia planned the design of the proposal jointly with the MoH, GFATM and cooperating health partners. The proposal team also participate in writing committees to develop the C19RM to ensure all plans were coordinated and complementary and support the urgent priorities of Zambia.

PEPFAR Zambia has continued to collaborate with GFATM and the MoH on all technical aspects of program implementation including external stakeholder engagement. These engagements have stimulated broad participation which includes representation from several host government ministries and departments, multilateral organizations, local and international non-governmental organizations and CSOs. Engagement with the GRZ through the Ministry of Defense (MoD) was achieved through joint planning, site visits and formalized agreements specifying support and implementation.

There is a common understanding on USG support to ensure sustainability and continuity of programs and activities. USAID and CDC collaborate with PHOs and DHOs to convene regular joint site-level data reviews, conduct site visits to identify performance weaknesses and develop remediation plans. Once a site has been assessed and a remediation plan developed, progress towards site-level targets is reviewed during regular meetings. Additional follow-up through technical supportive supervision to improve site-level performance is then provided by a USAID or

CDC implementing partner in collaboration with the MoH. PEPFAR Zambia technical staff participate in the monthly provincial surge review meetings and meet routinely within the national TWG structure to escalate and address policy barriers, respond to technical issues at sites and share best practices. PEPFAR Zambia supports Extension of Community Health Outcomes (ECHO) sessions every Monday afternoon to enhance the technical skills of the providers. During COP20, the ECHO sessions have been rolled out to all provinces of Zambia; during COP21, PEPFAR Zambia will continue to scale up the ECHO model by supporting the addition of more spoke sites.

DoD through the MoD has put in place a forum for the Zambian Defense Force (ZDF) to meet and interact with senior command to review program gaps and poorly performing sites. In addition, enhanced joint facility assessments comprised of ZDF, IPs and DoD staff have been instituted to facilitate on-the-spot program correction. The enhanced site assessments have had the additional benefits of increasing the collaboration of all stakeholders, better problem solving and improved client service. With the onset of the COVID-19 pandemic, PEPFAR Zambia has relied more on virtual platforms to conduct meetings and sites visits.

In COP21, PEPFAR Zambia will continue as a voting member of the CCM, will have a seat on the CCM Oversight Committee and will continue its leadership roles on both the Health (USAID and CDC) and HIV (PCO) Cooperating Partners Groups. PEPFAR Zambia has placed a technical advisor within the MoF through U.S. Treasury's Office of Technical Assistance to strengthen Zambia's efforts to implement and manage a sustainable national response to HIV. The technical advisor strengthens the technical capacity of the Oversight Working Group on Sustainable Financing; establish systems and processes to accurately track HIV resources and expenditures on country-wide basis; and develop sustainable funding options and efficient resource management systems. PEPFAR Zambia will continue to work closely with UNAIDS in the areas of SI, advocacy and CSO capacity building and coordination.

4.6.2 Strengthening IP Management and Monitoring

All USG agencies have prioritized partner management for achieving results. All partners report data monthly on key 95-95-95 indicators, and these are jointly reviewed by PEPFAR Zambia to identify gaps and areas where course correction is needed.

In collaboration with the GRZ, CDC conducts granular site management as a strategy for partner management by focusing on performance improvement at the site level. During the COVID-19 pandemic, CDC has held weekly virtual Situation Rooms (SRs) with each province to assess their performance. In these SRs annual targets are broken down into weekly targets which CDC review in collaboration with the GRZ district and provincial health offices. Focused site visits to underperforming sites were undertaken by mentors and other program officers at district and provincial level to quickly fix performance gaps as they are identified. On a monthly basis, CDC has cooperative agreement meetings with all partners (DSD, TA, community partners) to assess the overall performance. Additionally, on quarterly basis, CDC will continue to hold virtual oversight and accountability meetings with IPs where issues at the above site and/or policy level can be

resolved by the provincial leadership in consultation with CDC and the IP leadership. PEPFAR Zambia will continue to expand its practice of utilizing evidence-based best practices by requesting the interagency team to implement evidence-based practices where feasible and applicable.

USAID has employed multiple management approaches to improve partner performance which has resulted in significant improvements across the treatment cascade. USAID will continue to use performance-based contracts which tie contractor fee payments to the achievement of results, hold monthly regional data review meetings in coordination with the MoH, conduct regular joint site visits and develop site-level remediation plans for all poorly performing sites. Regional situation rooms are used to review data in real time. USAID will also continue to meet IPs at least monthly to review activity performance and expenditure data. During the COVID-19 pandemic USAID has used virtual platforms to conduct meetings with the MoH and IPs. Through these enhanced partner performance methods, USAID is identifying issues far more rapidly than in the past and working with partners to fix issues in real time as they are identified.

DOD uses a client-centered approach to monitoring and evaluation. This approach focuses on IPs having a clear understanding of the technical guidance on program implementation and PEPFAR requirements to ensure the client needs are met. Partner performance is assessed by collaboration meetings, regular review of PEPFAR Zambia results, enhanced monitoring of program implementation in the field and DOD provided technical assistance to partner staff. As with other agencies, DOD has used virtual platforms to conduct meetings to mitigate the risk of COVID-19.

4.6.3 Improving Integration of Key Health System Interventions

PEPFAR Zambia priorities have directed the implementation of key health system interventions including supplementing the GRZ's human resources for health (HRH) efforts and electronic health record management. To achieve PEPFAR Zambia programmatic priorities, including case finding, linkage, retention on ART and VL, PEPFAR Zambia recognizes that a robust clinical and community health workforce is essential. Currently, the MoH employs more than 62,000 staff, including 38,000 clinical staff and 1,365 community health assistants. This staffing complement represents nearly 50% of the establishment. To further supplement the HRH, PEPFAR Zambia in COP20 has maintained salary, stipend and in-kind support for 4,672 clinical staff and 17,533 community health workers (CHWs). These supplemental support staff were deployed based on the geographical distribution of the TX_CURR gap, with more CHWs deployed to the highest burden provinces. Community cadres are responsible for scaling up key case-finding strategies such as index testing, ensuring all clients found positive are properly counseled so they start on ARVs, tracing all defaulters and making sure clients who are eligible for VL testing get tested. Additionally, these CHWs serve as the cornerstone for implementation of the community post model and other forms of community-based DSD models. The deployment of USG-supported staff will routinely incorporate HRH reviews (including site and individual performance reviews) into site and partner-level management to allow PEPFAR Zambia to identify sites where increased or optimized HRH support is necessary.

In anticipation of reaching epidemic control targets by 2021, PEPFAR Zambia conducts modeling and analysis of workforce requirements for the maintenance of HIV services. The results of this exercise are the foundation in the planning of HRH support and dialogue with the host country government towards greater shared responsibility of HRH requirements and as part of domestic resource mobilization efforts for HIV. PEPFAR Zambia continues to dialogue with the MoH Community Health Unit regarding constant refinement of the standards for community health workers within the framework of the national HIV response as current standards are for the general population. Concurrently, PEPFAR Zambia has invested in the revision and roll-out of standardized incentives, training packages and guidelines for non-community health assistant CHWs as well as harmonization of data collection tools for CHWs. PEPFAR Zambia has revamped the role of Neighborhood Health Committees, community-based support groups formed under the guidance of health personnel, to manage the performance of CHWs and maximize their contribution to advancing the goal towards HIV epidemic control.

As PEPFAR Zambia transitions management of the national HIV program to the GRZ, PEPFAR Zambia invests in the MoH National HIV Clinical Mentoring program and the ECHO program. The Zambia ECHO program is a weekly virtual learning network where cases from facilities (spokes) are discussed by the network led by a hub of experts at the University Teaching Hospital. The cases are submitted based on a range of topics including TLD transition, TPT, pediatric HIV clinical management and management of treatment failure. This program will help ensure that frontline workers receive mentorship on key clinical issues on a regular basis and will ultimately improve quality clinical care at health facilities.

Additionally, PEPFAR Zambia continues to support interventions to increase the timely availability of high-quality data and promote its use to enhance program performance to achieve better health outcomes. This includes the nation-wide scale-up of case-based surveillance systems; provision of tools and technical assistance to improve program data quality and support HIV-related surveillance; building HMIS management capacity by utilizing an MoH standardized approach and support tools; conducting rapid qualitative assessments of selected research institutions on the real and perceived gaps in research capacity; and building the capacity of CSOs to utilize data.

In accordance with the Zambia National eHealth Strategy to improve data management, patient management and patient tracking, PEPFAR Zambia will continue to roll out an upgraded version of SmartCare+ to all provinces so that 95% of ART patients have their patient information in the system. Key features of this upgrade will include client-centered enhancements such as patient satisfaction surveys by SMS that trace back to the specific provider, automated return and notification of lab results, and improved patient identification incorporating lessons learned from the current implementation of fingerprint biometrics technology for unique patient identification to improve patient tracking, linkage and retention.

As a priority, PEPFAR Zambia will continue to support interoperability among information systems to improve retention and close monitoring of VL suppression. In this regard, PEPFAR Zambia will support the roll out of an integrated system that links the laboratory information system (LIS) and

the eLMIS to the EHR in all facilities where these systems are being used. This system linkage will ensure efficient tracking of the 95-95-95 cascade and the availability of adequate stocks medications and commodities at facility level. PEPFAR Zambia supported the development of the National Data Warehouse (NDW), which is able to pull data from disparate systems (EHR, LIS, eLMIS and HRIS) and create visualizations which provide a broader view of the state of the epidemic, at national and sub-national levels. PEPFAR Zambia will continue to support the enhancement of the NDW functionality and visualization using Palantir technologies to improve data utilization for program management, at all levels. PEPFAR will also support sub-national level roll out of the human resource information system to support HRH deployment and management.

4.6.4 Improving Quality and Efficiencies of Service Delivery

The 2020 Zambia Consolidated Guidelines for Treatment and Prevention of HIV Infection outlines Zambia's strategic approach for implementing DSD that focuses on client-centered services and improved health system efficiency. DSD models can be grouped into four categories: (1) healthcare worker managed group, in which clients receive their ART refills in a group and either a professional or lay health care worker manages this group; (2) client-managed group, in which clients receive their ART refills in a group but this group is managed and run by clients themselves (e.g., Community Adherence Groups (CAGs)); (3) out-of-facility managed individuals for whom ART refills are provided outside of health care facilities (e.g., health post dispensation, home delivery and community-based drug pick-ups); and (4) in-facility managed models, in which ART refill visits are separated from clinical consultations. When clients have an ART refill visit, they bypass any clinical staff or adherence support and proceed directly to receive their medication (e.g., appointment spacing and "fast-track"). The guidelines also recommend that all stable clients should be on MMD, defined as dispensing of ARVs for six months.

TB programs are also adapting DSD models. As part of COVID mitigation strategy to prevent and reduce transmission of COVID by decongesting health facilities, the National TB Program issued guidance to allow dispensation of TB drugs for up to one month during the intensive phase and every two months during the continuation phase. TPT dispensation was aligned to the ART dispensation so clients were receiving three or six months TPT dispensation.

In COP21, IPs will work with both community and health facility staff to continue scaling up these DSD approaches, including MMD for ARVs and TB drugs, to improve quality of care, retention in care and reduce congestion at health facilities. PEPFAR planned to transition 80% of clients to TLD by the end of COP20 Q1; however, delayed commodity shipments and scale up of 6MMD during COVID pandemic slowed the TLD transition. In COP21, PEPFAR will aim to have 97.5% of first line therapy clients on TLD. Priority focus of DSD models target children, adolescents and men, who have had lower case finding, linkage, treatment coverage, retention and viral load suppression rates.

4.6.5 Supporting Community-led Monitoring

COP21 Update: PEPFAR Zambia awarded 10 CLM grants to civil society organizations in COP20. In COP21, the CLM grantees will play an important role in collecting and analyzing feedback from individuals and communities receiving HIV prevention, care and treatment services to inform the adaptation of program approaches in response to persistent challenges.

In COP21, PEPFAR Zambia will collaborate with Zambian based CSOs to conduct community-led monitoring (CLM) to help discover any persistent barriers or challenges clients are experiencing in Zambia revolving around HIV services. PEPFAR Zambia will issue 10 grants (one per province) to Zambian-based CSOs in COP20 Q3. PEPFAR Zambia will also fund NAC to work in partnership with all stakeholders to develop a national survey that guides these CLM grantees on issues to query with tailored questions specific to all the different demographics. In conjunction with the national survey, NAC will design a reporting mechanism to record survey results, observations and recommendations collected by the CLM grantees. NAC will also convene quarterly meetings with GRZ, PEPFAR, IPs and CSOs to review the findings from not just the CLM reporting mechanism but other stakeholders' monitoring tools allowing all stakeholders to see possible problems from every angle. Follow up on prior actionable issues will be also be reported at these meetings.

4.6.6 Ensuring Above Service Delivery Activities are Related to Reaching Epidemic Control

COP21 Update: Above service delivery activities, including community engagement, effective domestic resource mobilization and sustained stock supplies, are critical to reaching epidemic control. PEPFAR Zambia remain committed to addressing these gaps and barriers and those identified below.

PEPFAR Zambia reviewed MER indicator results, SID 2019 and SIMS/enhanced site visit findings, to determine above service delivery investments to achieve epidemic control. While notable progress was made overall, the analysis revealed the following gaps or barriers:

1. Inadequate policies that enable adolescent HIV testing from under the age of 15 years old
2. CSOs funding for HIV programming is low
3. Private sector engagement is weak
4. No domestic financing and specific service provision or surveillance for key populations
5. No definitive health workforce transition inventory/plan
6. Inadequate health care worker (HCW) capacity to provide HIV services
7. Interruptions in stock supply
8. Low HIV, health domestic funding and budget execution

In COP20, PEPFAR Zambia allocated \$28,391,632 to above service delivery interventions. In COP21, PEPFAR Zambia will invest \$32,564,223 to implement above site and above service delivery interventions, including those that will address these highlighted challenges.

4.6.7 Use of Unique Identifiers Across Sites and Programs in Clinical Settings

COP21 Update: PEPFAR Zambia plans to continue introduction of unique identifiers across sites and programs in COP21 through continued roll-out of SmartCard, fingerprint biometrics and the web-based SmartCare Plus. In addition, PEPFAR Zambia has collaboration with MoH and Palantir to allow fixed sets of data to be accessed by Foundry for analytics of key program areas. This includes tracking probably individuals across the national EHR system to better inform our understanding of lost to follow-up, interruption to treatment and patient movement. This capacity will be further strengthened in the MoH through data scientists working with both Foundry and Power BI to analyze data and produced dashboards through the National Data Warehouse (NDW) in COP21.

The challenge of unique identification has been observed within and across sites through such ways as silent transfers where clients move from one site to another without identifying at the destination site that they are already on treatment at the origin site. This leads to duplicate registration under the PEPFAR Zambia program. This also occurs within site where a client is initiated on ART in one clinical area then, when referred to the ART clinic for lifelong treatment, this client is registered a second time and provided with a different identifier from the original identifier.

In sites that use the SmartCare national electronic health record (EHR) system, PEPFAR Zambia has employed several solutions to better assure unique identification. These strategies include use of SmartCard, fingerprint biometrics, and the web-based SmartCare Plus. The SmartCare system provides for a client to be issued with a SmartCard, which is a portable electronic record that the patient carries from site-to-site. The SmartCard allows healthcare workers to identify the client every visited site, and also helps the next provider review the complete patient record and better plan for service provision. Because the SmartCard has a unique number assigned electronically, each patient can be identified wherever services are sought, provided the client presents the SmartCard.

In COP20, the use of fingerprint biometrics is being integrated into SmartCare to provide an additional biomarker to improve the system's ability to uniquely identify clients as they receive services in facilities. This also helps with reconciling fragmented client records in the current set up where SmartCare is a standalone distributed system. In addition, deduplication of clients at higher than facility level, especially for reporting, is better aided by the addition of the fingerprint biometric. PEPFAR Zambia intends to scale up biometrics to 344 sites by end of COP20 and to an additional 240 sites during COP21. SmartCare will migrate to a web-based platform to create one centralized system. The benefit for unique identification is that the web-based platform means that every client has one record that is shared for use across sites that they visit thereby minimizing the

risk of duplication of records across sites. PEPFAR Zambia intends for the web-based platform to be implemented in 231 sites by close of COP20, while expanding to an additional 240 sites in COP21.

It is important to note that there is no single identifier that assures uniqueness. However, the combination of the solutions identified will improve confidence in uniqueness of client identification for both patient care and reporting.

4.7 Targets by Population

Table 4.7.1 ART Targets by Prioritization for Epidemic Control						
Prioritization Area	Total PLHIV	Expected current on ART (COP20)	Additional patients required for 95% ART coverage	Target current on ART (COP21) TX_CURR	Newly initiated (COP21) TX_NEW	ART Coverage (COP21)
Attained	964,217	804,444	111,562	823,543	69,723	85%
Scale-Up Saturation	431,669	315,835	94,251	347,000	41,196	80%
Scale-Up Aggressive	38,519	23,479	13,114	25,805	2,997	67%
Sustained	29,429	18,976	8,982	20,918	2,126	71%
Central Support	30,867	513	28,811			
Commodities		NA	NA	NA	NA	NA
Total	1,494,701	1,163,247	256,719	1,268,407*	119,828*	85%

*Total also includes military COP21 TX_CURR (51,141) and TX_NEW (3,786)

Source: COP21 DataPack and DATIM

Table 4.7.2: VMMC Current (COP20 Q1) and Expected Coverage (COP21)					
Target Age Group	Population Size Estimate (SNUs)	Current Coverage (COP20 Q1)	Expected Coverage end of COP20	VMMC_CIRC (COP21)	Expected Coverage (COP21)
15-29	1,332,470	68%	78%	1,083,461	83%

Source: COP21 DataPack and DATIM

Table 4.7.3 Target Populations for Prevention Interventions to Facilitate Epidemic Control			
Target Populations	Population Size Estimate (Disease Burden)	Coverage Goal (in COP21)	COP21 Target
AGYW (PP_PREV)	3,743,060 (5% HIV prevalence)	13%	473,209
FSW (KP_PREV)	160,865 (29% HIV prevalence)	20%	32,474
MSM (KP_PREV)	114,852 (21% HIV prevalence)	17%	18,979
PWID (KP_PREV)	26,840 (24% HIV prevalence)	3%	860
Prison population	--	--	23,110
TG (KP_PREV)	12,680 (HIV prevalence unavailable)	14%	1,754
TOTAL	4,058,297	14%	550,386

Source: COP21 DataPack

Table 4.7.4 Targets for OVC and Linkages to HIV Services			
SNU	Estimated # of OVC	Target # of OVC who will be active in COP21 OVC_SERV <18	Target # of active beneficiaries receiving support from PEPFAR OVC programs whose HIV status is known in program files (COP21 Target) OVC
Military	--	12,714	12,714
Chibombo	26,001	7,573	5,394
Chikankata	--	5,805	4,247
Chilanga	--	6,341	4,639
Chingola	44,883	42,434	6,537
Chipata	45,015	28,097	6,483
Chisamba	--	5,892	3,871
Choma	21,612	9,382	6,571
Chongwe	20,595	9,413	5,263
Kabwe	25,242	33,669	7,346
Kafue	21,387	6,733	4,925
Kalabo	11,697	54	--
Kalomo	32,316	6,368	4,367

UNCLASSIFIED

Kalulushi	--	2,622	--
Kaoma	--	6,232	2,216
Kapiri-Mposhi	29,558	33,613	5,756
Kasama	23,083	7,554	--
Kitwe	88,723	59,450	13,121
Livingstone	16,323	28,569	6,064
Luanshya	27,124	22,742	6,424
Lusaka	130,497	134,829	31,718
Masaiti	--	834	--
Mazabuka	43,273	15,603	6,065
Mkushi	14,272	6,852	4,720
Mongu	28,034	25,016	7,100
Monze	27,714	14,599	5,772
Mufulira	28,806	21,131	6,471
Mumbwa	16,852	7,796	5,705
Namwala	7,262	6,759	4,944
Ndola	91,037	54,195	12,376
Petauke	16,275	5,095	3,727
Senanga	--	5,500	2,526
Sesheke	--	5,995	3,340
Sinazongwe	7,303	4,795	3,507
Solwezi	22,504	9,368	5,272
TOTAL	867,388	653,624	209,181

Source: Estimates from 2018 National HIV/AIDS/STI/TB Council Management Information Systems, targets from COP21 DataPack

4.8 Cervical Cancer Program Plans

Cervical cancer is the leading cause of cancer deaths in Zambia. Most women with cervical cancer are also living with HIV. Since 2006, PEPFAR Zambia has collaborated with the MoH and other donors to implement cervical cancer screening services countrywide using VIA, which is a same-day screen-and-treat approach. Treatment options include thermal ablation for eligible pre-cancerous lesions; women with ineligible lesions are referred for LEEP or punch biopsy. Cold coagulation is conducted on a smaller scale due to challenges in the availability of nitrous oxide.

In COP20, approximately 76% of districts (ranging from 50%-100% of districts per province) have at least one VIA site where screen-and-treat services are offered; approximately 54% of districts (ranging from 33% to 100%) have one LEEP site. Invasive cervical carcinoma cases are referred for further management at provincial hospitals or the Cancer Diseases Hospital in Lusaka. In COP20, a total of 138 PEPFAR Zambia-supported static sites were offering cervical cancer services with additional screening conducted through mobile outreach services.

Zambia is embarking on making HPV DNA testing the gold standard for cervical cancer screening and setting up systems. However due to challenges with procurement of HPV DNA commodities, implementation has been a challenge. In COP19, PEPFAR Zambia screened a total of 109,722 out of a total target of 130,000 set out for the year constituting an 84% achievement. Of those screened, 7,311 tested VIA positive, constituting 7% of the total women screened and 4,357 (60%) WLHIV were referred for LEEP services. In COP20, PEPFAR Zambia plans to screen 258,343 WLHIV on ART; by COP20 Q1, PEPFAR Zambia had screened 90,351 WLHIV on ART representing 35% of target.

In COP21, PEPFAR Zambia will continue to strengthen screening services country wide. PEPFAR Zambia will focus on approaches that target the screening of WLHIV women in the ART clinics and use adherence counsellors to create demand in communities. Referral systems and linkage services will continue to be strengthened through improved health literacy of healthcare providers and CHWs to ensure consistent cervical cancer screening of WLHIV. PEPFAR Zambia's IPs will work with sites to create an enabling environment that will effectively target WLHIV with screening services. In addition, the development of relevant guidelines, SOPs, job aids and training materials will continue to be prioritized.

In COP21, PEPFAR Zambia will scale-up screen-and-treat using VIA and treatment with cryotherapy or thermal ablation in all sites along with strengthening LEEP referral services will improve treatment rates of identified large precancerous lesions. In COP20, PEPFAR Zambia has expanded HPV DNA self-testing from Eastern, Lusaka, Southern and Western Provinces to include sites in Central and Copperbelt Provinces where VIA is not available. PEPFAR Zambia will continue to create demand through routine health literacy of staff and clients and sensitization/engagement of HIV advocacy groups such as Network of Zambian People Living with HIV/AIDS. Strengthening of biopsy referral systems through expansion of histopathology services and specimen evaluation, including telepathology, remains an important strategy to improve results return of specimens. Continued technical support supervision and mentorship will ensure VIA and LEEP quality assurance; participation in TWGs and other relevant meetings will assist in stakeholder and telemedicine coordination.

4.9 Viral Load and Early Infant Diagnosis Optimization

COP21 Update: In COP21, 70% of viral load testing of children, as well as for pregnant and breastfeeding women, will be conducted on “near” POC GeneXpert systems. Similarly, aligned with the new WHO recommendations to conduct all nucleic acid testing for EID on POC platforms, Zambia plans to prioritize POC testing for EID. Diagnostic network optimization (DNO) allows for optimized configuration and placement of POC platforms in the country to prioritize VL testing for pediatric and PMTCT populations and EID on POC, while balancing costs. As a result of the DNO output, in COP21, 70% of priority VL tests (for children and PBFW) and EID will be processed on POC GeneXpert, and the remaining 30% will be run on conventional PCR platforms, still allowing for 24-hour turnaround of all tests. This would require planning for adequate procurement of GeneXpert cartridges for VL and EID testing, as well as use of microtainers to collect peripheral blood specimens from infants and children. In addition to supporting critical case finding, care and treatment targets, PEPFAR Zambia aims to achieve two major milestones in COP21: full diagnostics network optimization and full transition of all quality systems oversight to the MoH.

VL “conventional” platform infrastructure and lab information management systems scale up was completed by the end of COP18 and in early COP19 PEPFAR Zambia moved into the optimization phase. PEPFAR will continue to optimize the high throughput and conventional VL system throughout COP20 and beyond. There are 22 facilities performing high throughput VL and/or EID currently comprising a total of 24 laboratories. The University Teaching Hospital in Lusaka has three separate centers that have their own high throughput VL and/or EID testing capacity. This number will decrease over time as the Cobas AmpliPrep/Cobas TaqMan HIV-1 (CAP/CTM) system is phased out and as selected testing moves to point of care. In early COP20, all routine (follow-up and baseline) VL testing, including VL during breastfeeding, is being performed on conventional platforms. In COP19, 18 districts with poor coverage for EID and/or VL for PBFW received technical assistance to improve POC testing, specifically on the GeneXpert platform. An additional district was added by MoH direction. In COP20, over 18 more districts have been added to be served by point of care testing for EID and VL during pregnancy.

Prior to COP20, the Zambia Consolidated Guidelines were amended to require testing every three months during pregnancy and breastfeeding for WLHIV. Due to concerns about overwhelming the POC testing capacity, PEPFAR Zambia reached consensus to conduct VL during pregnancy on POC, but to conduct VL during breastfeeding through referral to one of the 24 central VL/EID high throughput labs. This will change in COP21 such that all tests for PBFW and pediatrics from selected facilities will be conducted on GeneXpert (70% of priority VL will be conducted on GeneXpert). The remaining 30% of priority viral load tests will continue to be done on “conventional” platforms, but only in circumstances where TAT will be within 24 hours (primarily urban centers).

Point of care testing provides same-day results whereas testing at a centralized facility requires sample referral and, in some cases, hard copy results return, in total requiring a minimum of three days outside urban centers. Logistical challenges in many settings have extended this turnaround

time (TAT) substantially. The national minimum standard is for VL TAT to be less than 14 days. This was already achieved in COP19 for most facilities. Minimizing TAT will be a major focus of lab optimization efforts throughout the remainder of COP20 and into COP21. Minimizing TAT increases demand, which increases coverage and suppression rates, and thereby reduces transmission. The decentralized VL/EID testing system has proven successful in Zambia and will be maintained, while some individual facilities will cease to be counted among “high throughput” labs as the CAP/CTM 48 platform is decommissioned, possibly prior to the end of COP20. Currently, there are 11 CAP/CTM 48 platforms, and three of the 24 VL labs have only the CAP/CTM 48. As a result, when this system is obsolete, these facilities will transition to a combination of referral and the use of GeneXpert to serve both VL and EID needs. The CAP/CTM 48 system contributes approximately 220,000 tests of the total capacity, but the system is now comparatively so inefficient as to become more problematic to maintain than beneficial. Removing the system from the lab network will still leave Zambia with capacity for nearly 2 million conventional system tests even in a normal work-year. This will allow most platforms to attain the recommended 50-80% utilization range which is a target of COP20 diagnostic network optimization. The remaining systems will be comprised of 10 CAP/CTM 96, 9 COBAS 4800, 12 Hologic Panthers and 2 COBAS 6800s, distributed among all 10 provinces in alignment with local testing demand.

The approximate total maximum volume of tests to be performed is the TX_CURR plus retesting of unsuppressed (approximately 10% of TX_CURR), baseline VL (if done) and VL during pregnancy and breastfeeding (approximately 120,000 in addition to those that would count toward routine VL). Thus, the total conventional VL demand will be approximately 1.56 million in COP20 and increase to 1.78 million in COP21. Currently, the high throughput testing system capacity is approximately 2.1million and, as noted, with removal of the CAP/CTM system, capacity even within a normal work year, would still be nearly 2 million tests.

PEPFAR Zambia estimated that 270,000 EID tests and 180,000 VL tests would be required during pregnancy in COP20; these numbers are expected to be 165,000 EID and 120,000 VL tests in COP21 (adjusted as per observed adherence to ZCG and in accordance with PEPFAR minimum program requirements). All of these can be accommodated on POC systems, however, doing so would de-optimize the current conventional PCR testing system. The current array of GeneXperts already in place in Zambia can perform far more than 1,000,000 tests in a normal work-year, however, diagnostic network optimization shows that a mix of 70% POC and 30% conventional testing for EID and priority VL will allow for a cost-neutral balance while still achieving less than 24-hour turnaround for all EID and priority VL. As the conventional platform constellation is optimized, it is expected that more EID and possibly more VL will move to POC.

To meet the COP20 guidance to provide 100% access to VL, Zambia improved some elements of the sample referral system and implemented targeted use of DBS for VL. In COP 21, the program and partners will fully implement on call sample referral to not only assure access, but also radically improve convenience and turnaround time to increase demand.

In COP20, PEPFAR Zambia is supporting a major upgrade and harmonization of the lab information and digital results return systems. The COP19 commitment for access to digital results return for all sites is on track for achievement; however, four separate systems are still used. In COP20 PEPFAR Zambia began to fully harmonize the systems to arrive at one lab information system and one digital result return system. With this effort, PEPFAR Zambia plans for TAT for VL to be less than 14 days and TAT for EID to be less than 5 days by the end of COP20. In COP 21, the program aims to reduce TAT for all priority VL and EID to less than 24 hrs.

In addition to supporting critical case finding, care and treatment targets, in COP21 PEPFAR Zambia will build on COP20 laboratory services and aims to achieve two major milestones: full diagnostics network optimization and full transition of all quality systems oversight to the MoH. These two goals represent the minimum program requirements for sustainability and achieving these pivotal aims will allow for continuous reduction in laboratory funding in COP 22 and beyond. Of note, the investments to achieve these aims must be made at some time to achieve the transition to sustainability – if not funded and achieved in COP 21, they will need to be funded and achieved in a later COP cycle. COP21 is the right time to strive for these achievements because this is the first moment at which they are achievable, as demonstrated by key, independent MoH accomplishments in COP 20 such as QMS root cause analyses and the COVID response. There is no justification to delay the transition process.

In support of case finding, care and treatment targets, the laboratory program will continue to support and is committed to achieving 100% HIV rapid test site and tester certification, 100% access to VL and EID, and 24-hour turnaround time for priority viral load, EID, urgent Tb and CD4 testing. Viral load and EID coverage is on target to substantially exceed 90% by the completion of COP 21. 70% of EID and priority viral load testing will be conducted on point of care instruments in COP 21, at no net additional cost to the program. Baseline VL on all samples referred for recency testing will be possible. Improved recency coverage will be enabled by improved access to sample referral. CD4 testing will utilize existing FACS or pima machine-based systems, relying on substantially improved sample referral, to enable identification of ROC who require CrAg and LAM testing. The improved “on call” sample referral systems will also support machine-based referred sample creatinine testing at hub facilities. Full integration of data systems at the hub level will allow for universal digital results return with patient SMS alert for all VL and EID results, with real time transfer of all point of care testing results to the central data repository. This latter feature will allow for real time program monitoring (dashboards) and improved data quality. Laboratory IPs will support SmartCare:DISA and DISA:DHIS2 integration including infrastructure improvement, training and oversight at hub-level facilities.

In COP21, PEPFAR Zambia will support a full transition of all laboratory quality systems to the MoH. COP21 funding will support establishment of the MoH Quality Assurance Unit at Levy Mwanawasa Medical University. The QA unit will take on full responsibility for Quality Management Systems training and mentorship toward accreditation and certification of all laboratories. The QA unit will exercise oversight and full internal management of viral load, EID, Tb and COVID external quality assurance. The unit will also oversee rapid test and recency

Continuous Quality Improvement programs, ensuring 100% site and tester certification by the end of COP 21 and beyond. MoH will oversee 3 calibration centers and will ensure that they are fully self-sustaining by virtue of charging fee for service from private entities. MoH will oversee the laboratory staff occupational health program.

PEPFAR Zambia will minimize fuel, HR and reagents costs through a lab optimization process based on formal establishment of the lab network, the minimum standards of facilities at all levels and guided by computer modeling. To ensure efficient use of resources, diagnostic network optimization will be extended to cover optimization of CD4, full blood count, and chemistry in addition to viral load, EID, Tb, HPV and COVID PCR diagnostics. The DISA laboratory information system will be connected to all diagnostic platforms conducting PEPFAR supported viral load, EID, Tb, HPV or COVID testing. The sample referral system will become fully “on call,” reaching every facility in Zambia as needed, and transporting any diagnostic sample. Interim funding for fuel, human resources and waste management services will continue in COP 21. PEPFAR Zambia will provide modest continued support for HIV drug resistance surveillance, HPV PCR testing and cervical cancer histopathology.

5.0 Program Support Necessary to Achieve Sustained Epidemic Control

Analyses of the SID 2019 findings, along with MER results, SIMS visit reports and other sources, identified key systems barriers and sustainability vulnerabilities that must be addressed to achieve and maintain epidemic control. The systems barriers include inadequate data for planning; inadequate supply chain (specifically commodity distribution); inadequate financial management procedures/domestic resource mobilization (DRM); inadequate HR; and inadequate civil society engagement. Other key barriers relate to limitations in patient tracking using EMR, especially in the context of silent transfers, and the fact that subsystems are not sufficiently integrated leading to suboptimal use of information. The SID process identified six sustainability vulnerabilities that have been prioritized in COP20: commodity security and supply chain; epidemic and health data; laboratory; service delivery; DRM; and HRH. These priorities will carry into COP21.

Inadequate human and infrastructure capacity to commence and retain patients on treatment results in sub-optimal quality of care and congestion of health facilities. With a clinical health worker to population ratio of 12 per 10,000 and 50% of positions on the MoH establishment remaining vacant, there are inadequate numbers of health workers to achieve optimal linkage and retention. Activities to resolve this gap include preservice training, recruitment and deployment of community health assistants and HIV nurse prescribers and the use of G2G agreements with Provincial Health Offices and other entities to fill staffing gaps (with the view of transitioning them to the GRZ payroll). PEPFAR has supported the continued roll out of a human resource information system (HRIS) to improve HR management, as well as support the operationalization of the

national community health strategy that harmonizes the training and job descriptions of community-based workers.

To improve service delivery and retention PEPFAR will continued implementation of the Test and Start and differentiated service delivery models including community-based ART models, TLD transition and MMD. PEPFAR will improve patient tracking by supporting the upgrade and maintenance of SmartCare, as well as integration with other systems to optimize use of information. Additionally, PEPFAR will support laboratory optimization, integration of laboratory information systems and lab quality assurance to improve VL coverage and suppression. These activities will focus on high burden geographic areas and/or populations, including KPs for epidemic control.

Inadequate commodity security is due to break down in planning and distribution along the continuum of care. HTS, EID and VMMC commodities are particularly vulnerable. In COP21, PEPFAR has planned to improve stock availability at facility level by engaging a local private sector 4PL provider to distribute commodities, rolling out eLMIS to all facilities in priority districts and strengthening commodity forecasting and quantification capacity.

During COP20 implementation, PEPFAR Zambia has been carrying out Surveillance, Research, and Evaluations (SRE) including:

- CADRE: Conduct lab based acquired drug resistance surveillance
- Case-based surveillance
- Mortuary based mortality surveillance
- HIV Recency and Response
- Key populations IBBS
- Seroprevalence and Behavioral Epidemiology Risk Survey (SABERS)

Together, the above activities will not only help the PEPFAR Zambia team better understand the dynamics of the HIV population but will significantly improve the precision with which PEPFAR Zambia adjusts to accelerate towards the goal of HIV epidemic control. These activities will carry over into COP 21.

PEPFAR Zambia will continue to work closely with and leverage resources of key stakeholders, including the GFATM, the GRZ and civil society. PEPFAR Zambia has set measurable annual benchmarks and outcomes for each investment that will be used to monitor implementation and ensure achievement of results. The goal of the PEPFAR Zambia systems investments is to address systems barriers to the timely identification, initiation and retention of clients on ART and to provide quality care to people living with HIV. PEPFAR Zambia will have reached its goal when the rate of new infections and mortality due to HIV significantly decreases from year to year.

Appendices

Appendix A - SNU Prioritization



Appendix A. SNU
Prioritization.xlsx

Appendix B - Budget Profile and Resource Projections

B.1 COP21 Planned Spending

Figure B.1.1. COP21 Budget by Program Area

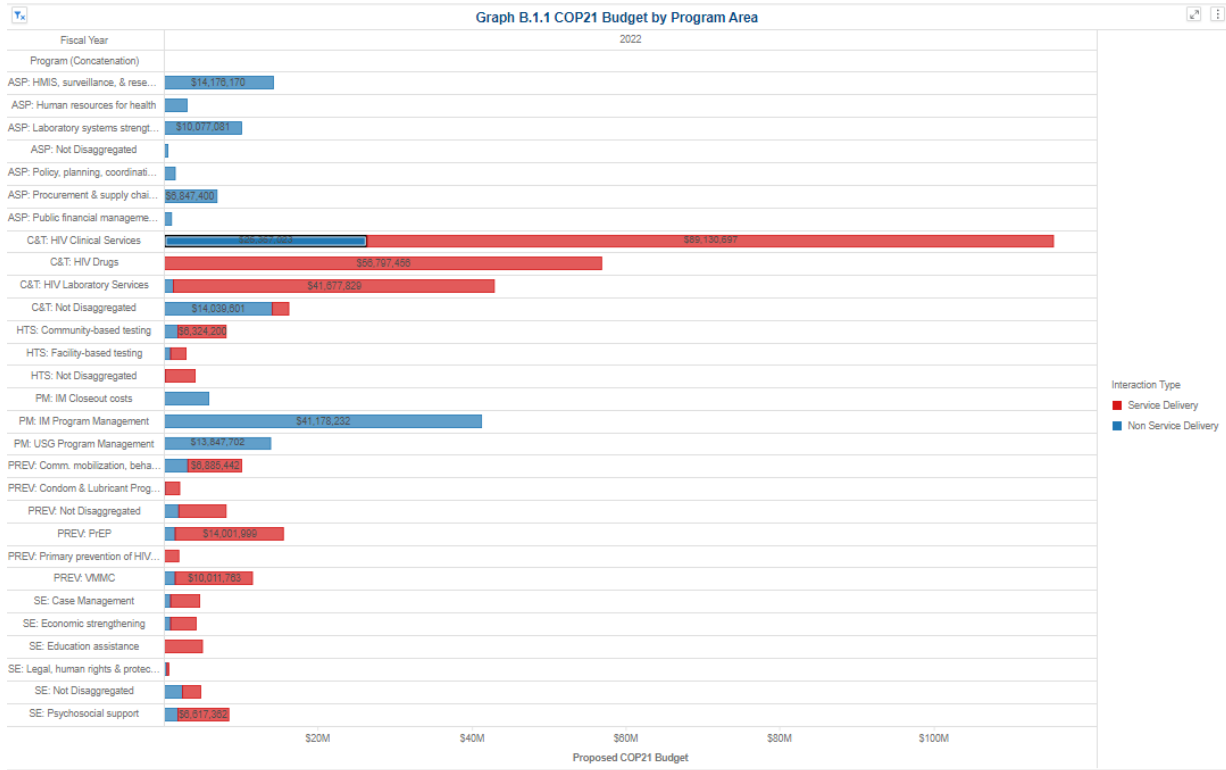


Table B.1.2. COP21 Total Planning Level

Operating Unit	Applied Pipeline	New	Total
Total	\$35,474,602	\$384,625,398	\$420,100,000
Zambia	\$35,474,602	\$384,625,398	\$420,100,000

Table B.1.3. Resource Allocation by PEPFAR Budget Code (new funds only)

Table B.1.2 COP21 Budget by Program Area

Program	Fiscal Year	2022						
		Metrics	Proposed COP21 Budget			Percent of COP 21 Proposed Budget		
			Subprogram	Non Service Delivery	Service Delivery	Total	Non Service Delivery	Service Delivery
Total			\$156,051,785	\$264,048,215	\$420,100,000	37.15%	62.85%	100.00%
C&T	Total		\$41,606,624	\$189,799,782	\$231,406,406	17.58%	82.02%	100.00%
	HIV Clinical Services		\$26,367,023	\$89,130,697	\$115,497,720	22.83%	77.17%	100.00%
	HIV Drugs			\$56,797,456	\$56,797,456		100.00%	100.00%
	HIV Laboratory Services		\$1,200,000	\$41,677,829	\$42,877,829	2.80%	97.20%	100.00%
	Not Disaggregated		\$14,039,601	\$2,193,800	\$16,233,401	86.49%	13.51%	100.00%
HTS	Total		\$2,669,800	\$12,219,013	\$14,888,813	17.53%	82.07%	100.00%
	Community-based testing		\$1,739,800	\$6,324,200	\$8,064,000	21.57%	78.43%	100.00%
	Facility-based testing		\$800,000	\$2,050,000	\$2,850,000	28.07%	71.93%	100.00%
	Not Disaggregated		\$130,000	\$3,844,813	\$3,574,813	3.27%	96.73%	100.00%
PREV	Total		\$7,528,662	\$40,760,583	\$48,690,225	16.29%	83.71%	100.00%
	Comm. mobilization, behavior & norms change		\$3,097,412	\$6,685,442	\$9,582,854	31.03%	68.97%	100.00%
	Condom & Lubricant Programming		\$50,000	\$1,900,000	\$1,950,000	2.56%	97.44%	100.00%
	Not Disaggregated		\$1,929,950	\$6,091,359	\$8,021,309	24.06%	75.94%	100.00%
	PrEP		\$1,419,000	\$14,001,999	\$15,420,999	9.20%	90.80%	100.00%
	Primary prevention of HIV and sexual violence			\$1,870,000	\$1,870,000		100.00%	100.00%
	VMMC		\$1,433,300	\$10,011,783	\$11,445,083	12.52%	87.48%	100.00%
SE	Total		\$6,151,589	\$21,268,857	\$27,420,446	22.43%	77.57%	100.00%
	Case Management		\$844,225	\$3,725,066	\$4,569,291	18.48%	81.52%	100.00%
	Economic strengthening		\$797,221	\$3,358,913	\$4,156,134	19.18%	80.82%	100.00%
	Education assistance			\$4,627,516	\$4,627,516		100.00%	100.00%
	Legal, human rights & protection		\$323,682	\$320,000	\$643,682	50.29%	49.71%	100.00%
	Not Disaggregated		\$2,405,461	\$2,320,000	\$4,725,461	50.90%	49.10%	100.00%
	Psychosocial support		\$1,781,000	\$6,617,362	\$8,398,362	21.21%	78.79%	100.00%
ASP	Total		\$36,880,372		\$36,880,372	100.00%		100.00%
	HMIS, surveillance, & research		\$14,176,170		\$14,176,170	100.00%		100.00%
	Human resources for health		\$2,923,335		\$2,923,335	100.00%		100.00%
	Laboratory systems strengthening		\$10,077,081		\$10,077,081	100.00%		100.00%
	Not Disaggregated		\$497,447		\$497,447	100.00%		100.00%
	Policy, planning, coordination & management of disease control programs		\$1,418,939		\$1,418,939	100.00%		100.00%
	Procurement & supply chain management		\$6,847,400		\$6,847,400	100.00%		100.00%
	Public financial management strengthening		\$940,000		\$940,000	100.00%		100.00%
PM	Total		\$60,813,738		\$60,813,738	100.00%		100.00%
	IM Closeout costs		\$5,787,804		\$5,787,804	100.00%		100.00%
	IM Program Management		\$41,178,232		\$41,178,232	100.00%		100.00%
	USG Program Management		\$13,847,702		\$13,847,702	100.00%		100.00%

Table B.1.4. COP21 Resource Allocation by Program and Beneficiary

Fiscal Year	2022												
Program	C&T		HTS		PREV		SE		ASP		PM		Proposed COP21 Budget
Beneficiary	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total	
Total	\$231,406,406	100%	\$14,888,813	100%	\$48,690,225	100%	\$27,420,446	100%	\$36,880,372	100%	\$60,813,738	100%	\$420,100,000
Females	\$15,263,709	7%	\$30,000	0%	\$9,978,680	20%	\$10,220,000	37%					\$35,492,389
Key Pops	\$305,000	0%	\$900,000	6%	\$6,820,000	14%	\$900,000	3%	\$1,493,000	4%			\$10,518,000
Males	\$10,100,000	4%	\$2,000,000	13%	\$10,979,876	23%	\$1,500,000	5%					\$24,579,876
Non-Targeted Pop	\$199,416,200	86%	\$8,414,290	57%	\$17,914,869	37%	\$175,000	1%	\$33,380,037	91%	\$59,813,738	98%	\$319,114,134
OVC					\$70,000	0%	\$14,291,655	52%			\$1,000,000	2%	\$15,361,655
Pregnant & Breastfeeding Women	\$3,960,000	2%	\$1,460,523	10%	\$1,455,500	3%							\$6,876,023
Priority Pops	\$2,361,497	1%	\$2,084,000	14%	\$1,371,300	3%	\$333,791	1%	\$2,007,335	5%			\$8,157,923

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B.2 Resource Projections

PEPFAR Zambia based resource projections on an incremental budgeting methodology consistent with S/GAC guidance and the FAST process. The base for budgeting was the COP20 budget as shown in the FAST tool. Incremental budget adjustments reflected in the COP21 budget were made at the IM level based on past performance against targets and outlays; COP19 results; projected targets and outlays for COP21; and accounting for intervention and programmatic shifts that may have occurred from the previous year's budget. Innovation was promoted through the budgeting process by undertaking a complete assessment of funding requirements for new IMs prior to budget setting and for continuing IMs, changing the implementation strategy where warranted.

Throughout the resource allocation process, PEPFAR Zambia engaged in thoughtful and deliberate discussions to determine the most efficient and effective use of the COP21 budget to ensure that it advances sustained epidemic control. Following a technical priority-setting process, which encouraged and collected stakeholder feedback, TWGs (prevention, community services, clinical services, health systems strengthening and strategic information) worked together to establish targets, ensuring strong coordination across program areas. The TWGs triangulated program performance data and fiscal performance data from prior annual progress reports and COP20 Q1 results. The TWGs also conducted a review of literature on unit costs to inform decision making. Other sources of data to inform the resource projections were gap analyses conducted in close collaboration with the GRZ through national TWGs and civil society organizations engaged in diverse program areas.

Appendix C - Tables and Systems Investments for Section 5.0

Table 6 and SRE not required in COP21. PEPFAR Zambia has updated information on above-site level investments in the SDS narrative.

Appendix D - Minimum Program Requirements

Care and Treatment	<p>1. Adoption and implementation of Test and Start with demonstrable access across all age, sex, and risk groups, with direct and immediate (>95%) linkage of clients from testing to treatment across age, sex, and risk groups.</p> <p style="color: red;">Met</p>
	<p>2. Rapid optimization of ART by offering TLD to all PLHIV weighing ≥ 30 kg (including adolescents and women of childbearing potential), transition to other DTG-based regimens for children who are ≥ 4 weeks of age and weigh ≥ 3kg, and removal of all nevirapine- and EVP-based ART regimens.</p> <p style="color: red;">Met</p>
	<p>3. Adoption and implementation of differentiated service delivery models for all clients with HIV, including six-month MMD, decentralized drug distribution (DDD), and services design to improve identification and ARV coverage and continuity of men and adolescents.</p> <p style="color: red;">Met</p>
	<p>4. All eligible PLHIV, including children, should complete TB preventive treatment (TPT) by end of COP21, and cotrimoxazole, where indicated, must be fully integrated into the HIV clinical care package at no cost to the patient.⁴</p> <p style="color: red;">In Progress</p>
	<p>5. Completion of Diagnostic Network Optimization activities for VL/EID, TB, and other coinfections, and ongoing monitoring to ensure reductions in morbidity and mortality across age, sex, and risk groups, including 100% access to EID and annual VL testing and results delivered to caregiver within 4 weeks.</p> <p style="color: red;">Met</p>
Testing	<p>1. Scale up of index testing and self-testing, ensuring consent procedures and confidentiality are protected and assessment IPV is established. All children under age 19 with an HIV positive biological parent must be tested for HIV.</p> <p style="color: red;">In Progress</p>
Prevention and OVC	<p>1. Direct and immediate assessment for and offer of prevention services, including PrEP, to HIV-negative clients found through testing in populations at elevated risk of HIV acquisition (PBFW and AGYW in high HIV-burden areas, high-risk HIV-negative partners of index cases, KP and adult men engaged in high-risk sex practices)</p> <p style="color: red;">Met</p>
	<p>2. Alignment of OVC packages of services and enrollment to provide comprehensive prevention and treatment services to OVC ages 0-17, with particular focus on 1) actively facilitating testing for all children at risk of HIV infection, 2) facilitating linkage to treatment and providing support and case management for vulnerable children and adolescents living with HIV, 3) reducing risk for adolescent girls in high HIV-burden areas and for 9-14 year-old girls and boys in regard to primary prevention of sexual violence and HIV.</p> <p style="color: red;">Met</p>

Policy & Public Health Systems Support	<p>1. Elimination of all formal and informal user fees in the public sector for access to all direct HIV services and medications, and related services, such as ANC, TB, cervical cancer, PrEP and routine clinical services, affecting access to HIV testing and treatment and prevention.</p> <p>Not Applicable</p>
	<p>2. OUs assure program and site standards are met by integrating effective quality assurance and CQI practices into site and program management. CQI is supported by IP work plans, Agency agreements, and national policy.</p> <p>Met</p>
	<p>3. Evidence of treatment and VL literacy activities supported by MOH, NAC and other host country leadership offices with the general population and health care providers regarding U = U and other updated HIV messaging to reduce stigma and encourage HIV treatment and prevention.</p> <p>Met</p>
	<p>4. Clear evidence of agency progress toward local, indigenous partner direct funding.</p> <p>Met</p>
	<p>5. Evidence of host government assuming greater responsibility of the HIV response including demonstrable evidence of year after year increased resources expended.</p> <p>Met</p>
	<p>6. Monitoring and reporting of morbidity and mortality outcomes including infectious and non-infectious morbidity.</p> <p>Met</p>
	<p>7. Scale-up of case-based surveillance and unique identifiers for patients across all sites.</p> <p>In Progress</p>

Appendix E – Management and Operations Plan

USAID

USAID has implemented a robust partner management plan and data driven approach that has resulted in marked achievements in meeting COP targets. The proposed staffing plans ensures that USAID can meet both administrative and partner management requirements that USAID has instituted to improve partner performance. This includes monthly data and financial performance reviews and targeted site visits. USAID has outlined a site visit strategy that will be implemented both by Lusaka and provincial staff. USAID currently has provincial offices in Luapula, Northern, Copperbelt and Central provinces. In addition, USAID is currently working to hire and place staff in Muchinga and Southern (which will only have one staff member who will work on OVC collaboration). The USAID provincial offices support the implementation of G2G agreements and coordinate USAID's IPs operating in those provinces to ensure alignment of work plans with provincial GRZ plans.

USAID is not requesting any new positions in COP₂₁ but is looking to repurpose two positions from a Special Initiatives Advisor and Senior Technical Advisor to an ART Advisor and to a Supply Chain Advisor. This change is necessary to manage critical supply chain activities as well as support new local ART implementing partners.

A major USAID program shift that started in COP₁₉ and is continuing in COP₂₁ is to increase the amount of funding going to G2G and local partners by reducing the amount of funding going to international NGOs. USAID has focused on completing the recruitment of staff for positions approved in COP 20 to ensure a full staff complement required to deliver on our COP objectives and targets as well as manage the continued transition to local partners.

DOD

During COP₂₀, due to COVID 19 constraints and limited access to military sites, DOD Zambia has worked to maintain the significant gains and achievements of the previous year's COP targets and activities. This has meant consistent engagement with the Host Country Military and implementing partners on multiple communication and virtual platforms. This was a critical strategy to keep the program moving forward as DOD worked to close out three of its implementing partners and transition the program into a focused operation.

DOD Zambia will continue to build upon these latest accomplishments, while at the same time working with our Zambian military partners and IPs to "do more with less." To this end, DOD will not be requesting any new staff positions in COP₂₁ as all planned positions have been filled and classifications completed. One position will be repurposed as the construction program winds down and is moved to oversight level.

In COP21, DOD will continue to engage military leadership and make sustainable investments in electronic platforms to improve data systems and integration of programs into the military human resource structures and systems.

Peace Corps

Peace Corps Zambia (PCZ) works to ensure efficient alignment of staffing which is responsive to the PEPFAR business model and program priorities of Zambia. Proposed staffing positions funded by PEPFAR are 23 with no changes from last year.

CDC

CDC is not requesting any new positions in COP21. CDC continues to review current positions to better align staffing with key programmatic shifts to better focus on retaining patients and addressing retention and current treatment gaps in men, AGYW, children, and KPs. Additionally, CDC has been helping Zambia with the COVID-19 response.

Before COVID-19, CDC integrated SIMS and Granular Site Management (GSM) strategy focused on visits to high-volume sites and visits were scheduled at least one month before they occurred to allow staff to get approval to visit the sites. While most site visits were conducted by technical staff, management and operations staff also participated in a few. During peak periods of COVID transmission, all SIMS and GSM visits were stopped. However, the team did pilot and rolled out virtual SIMS and GSM visits again that have been very informative on the purpose of the SIMS has since been suspended due to COVID-19. The assignment of CDC staff to each of the four provinces where CDC works allows for more frequent visits by the provincial teams with support from CDC staff in Lusaka.

COP21 CODB has reduced by \$900,000 due to exchange rate changes and large onetime costs that were incurred last year. The nine new CDC positions that were with State Department Regional Classifiers have since been fully classified and moved into recruitment stage. CDC will continue to invest in training for all filled positions based on identified needs during performance evaluations.

PEPFAR Coordination Office

The PEPFAR Coordination Office was restructured in 2020 to better align with PEPFAR's priorities around DREAMS and Community-Led Monitoring (CLM). There will be adjustments to roles and responsibilities to align PCO staff to allow for CLM management.

PCO is currently understaffed, with three vacant positions: PEPFAR Deputy Country Coordinator, External Engagement Advisor and Global Fund Liaison Specialist. The Deputy Country Coordinator position underwent interviews and selection in COP20 Q2, and PCO anticipates filling the position within three to six months. The position will be filled using a USAID USPSC hiring mechanism initially. PCO has identified a candidate for the External Engagement Advisor and anticipates filling the position within one to three months. The Global Fund Liaison Specialist

position is unfilled. Roles and responsibilities of team members are being reviewed for possible adjustment to address the gap.

The vacancies for the PEPFAR Deputy Country Coordinator, External Engagement Advisor and Global Fund Liaison Specialist position will change PCO's CODB budget. The External Engagement Advisor position will be funded through PCO CODB budget. The funding for PEPFAR Deputy Country Coordinator and Global Fund Liaison Specialist will be reallocated to USAID budget as both positions will be hired under USAID mechanisms.