

**PEPFAR Zambia**  
**Country Operational Plan**  
**(COP/ROP) 2019**  
**Strategic Direction Summary**  
**April 5, 2019**



# Table of Contents

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## **1.0 Goal Statement**

## **2.0 Epidemic, Response, and Program Context**

- 2.1 Summary Statistics, Disease Burden, and Country Profile
- 2.2 Investment Profile
- 2.3 National Sustainability Profile Update
  - 2.3.1 Progress Addressing Sustainability Strengths
  - 2.3.2 Progress Addressing Sustainability Weaknesses
  - 2.3.3 Transition to Indigenous Partners
- 2.4 Alignment of PEPFAR Investments Geographically to Disease Burden
- 2.5 Stakeholder Engagement

## **3.0 Geographic and Population Prioritization**

## **4.0 Program Activities for Epidemic Control in Scale-up Locations and Populations**

- 4.1 Finding the Missing, Getting Them on Treatment, and Retaining Them
  - 4.1.1 Finding the Missing
  - 4.1.2 Index Testing
  - 4.1.3 HTS Strategies
    - 4.1.3.1 HTS Strategy for CLHIV
    - 4.1.3.2 HTS Strategy for ALHIV
    - 4.1.3.3 HTS Strategy for Men
    - 4.1.3.4 HIVST Strategy
  - 4.1.4 Adult Care and Support
  - 4.1.5 Pediatric Care And Support
  - 4.1.6 TB/HIV Co-Infection
- 4.2 Prevention
  - 4.2.1 Scaling Up PrEP
  - 4.2.2 HIV Prevention For AGYW And Children
  - 4.2.3 Key Populations
  - 4.2.4 Voluntary Medical Male Circumcision (VMMC)
  - 4.2.5 Prevention of Mother-To-Child Transmission (PMTCT)
- 4.3 Commodities
- 4.4 Collaboration, Integration and Monitoring
  - 4.4.1 Strengthening Cross Technical Collaboration And Implementation
  - 4.4.2 Strengthening IP Management and Monitoring
  - 4.4.3 Improving in Integration of Key Health System Interventions
  - 4.4.4 Improving Quality and Efficiencies of Service Delivery

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

4.5 Targets For Scale-Up Locations And Populations

4.6 Cervical Cancer Program Plans

4.7 Viral Load and Early Infant Diagnosis Optimization

**5.0 Program Activities for Epidemic Control in Attained and Sustained Locations and Populations**

5.1 COP19 Programmatic Priorities

5.2 Targets For Attained And Sustained Locations And Populations

5.3 Establishing Service Packages To Meet Targets In Attained And Sustained Districts

**Appendix A - Prioritization**

**Appendix B - Budget Profile and Resource Projections**

B.1 COP19 Planned Spending

B.2 Resource Projections

**Appendix C - Minimum Program Requirements**

## 1.0 Goal Statement

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The US President's Emergency Plan for AIDS Relief (PEPFAR) Zambia's close collaborative partnership and regular engagement with the Government of the Republic of Zambia (GRZ) has continued to move Zambia towards epidemic control. Since the 2015 Country Operational Plan (COP) pivot, the program has continued to focus its resources where the burden is the greatest. As a 'Scaling with Fidelity' country, in COP19 PEPFAR Zambia will increase its focus on applying evidence-based solution strategies and micro-targeting to identify those still undiagnosed, link them to treatment, and focus on retention in care.

COP19 builds on the momentum demonstrated in COP17 and COP18 (to date) which has resulted in current estimates that 89% of PLHIV know their status, 78% of PLHIV are on treatment, and 69% of PLHIV are virally suppressed<sup>1</sup>. PEPFAR Zambia will aim to increase the number of PLHIV receiving ART from 942,578 (78% of PLHIV) currently to 1,092,322 (89% of PLHIV) by the end of COP18, and 1,114,777 (91% of PLHIV) by the end of COP19.

In COP19, the PEPFAR Zambia program has planned for key interventions to achieve HIV epidemic control including ensuring that all persons diagnosed with HIV are offered index testing and partner notification services, expanding best practices to increase the linkage rate to 95% across all populations, improving diligent patient monitoring to reduce loss to follow up and silent transfers, and ensuring that all persons on treatment receive a viral load test. In addition, PEPFAR Zambia has planned to scale up recency testing nationwide and case-based surveillance to monitor the HIV epidemic and identify areas where priority prevention interventions are needed. PEPFAR Zambia is also prioritizing the scale-up of electronic health record known in Zambia as SmartCare (aimed at 88.6% of all persons on ART by the end of COP18) and has initiated its integration with the electronic logistics management information systems which tracks facility-level pharmacy data to improve patient monitoring.

PEPFAR Zambia recognizes the inherent challenges in the final strides of reaching 95-95-95 and acknowledges it will take the unified effort of PEPFAR Zambia, the GRZ, and all external stakeholders to reach epidemic control. PEPFAR has expanded engagement with key external stakeholders such as civil society organizations (CSOs), faith-based organizations (FBOs), communities of faith and traditional leaders in COP18 to immediately increase its efforts in micro-targeting especially for increasing access to prevention and ART services for men, children, and adolescent girls and young women (AGYW). CSOs and FBOs will be instrumental in furthering key messaging on HIV treatment literacy including promulgating the viral load messaging and undetectable equals untransmittable (U=U) to encourage PLHIV to stay on HIV treatment as well as translation of messages for sight and hearing impaired.

The GRZ has demonstrated exemplary leadership in working with PEPFAR to achieve epidemic control especially in COP19 planning. For example, the GRZ drafted and distributed circulars to all provinces to prioritize the scale-up of TLD and multi-month dispensing. Subsequent to the COP meeting in Johannesburg in March, the MOH debriefed all Ministry of Health (MOH) directors on the GRZ/PEPFAR Zambia vision to ensure there was a common understanding of key strategies and technical direction. A central theme to that meeting was a discussion on more efficient HIV testing strategies, including the utilization of improved screening tools for HIV testing.

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<sup>1</sup> HMIS Data for ART; ZAMPHIA estimates for PLHIV with known status and VL suppression.

## 2.0 Epidemic, Response, and Program Context

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### 2.1 Summary Statistics, Disease Burden, and Country Profile

Zambia is a lower, middle-income country (GDP: 4,024 per capita, PPP adjusted<sup>2</sup>) with an estimated population of 17,609,171 in 2018 (population demographics: 49.6% male, 50.4% female; 56.5% rural, 43.5% urban). According to the 2016 Zambia Population Based HIV Impact Assessment (ZAMPHIA) Final Report (February 2019), 12.0% of persons aged 15 – 59 years are living with HIV (9.3% among adult males, 14.6% among adult females) (Table 2.1.1). HIV prevalence among children under 15 years is estimated to be 1.1%. Zambia's HIV epidemic remains generalized, with each district having an adult prevalence of greater than 5%.

The primary mode of HIV transmission is through heterosexual route, estimated at 90% adult transmission by UNAIDS. AGYW ages 15-24 have an incidence rate of 1.07% compared to .08% of men ages 15-24. Of the estimated 1,224,017 PLHIV in Zambia, 89% are estimated to know their HIV status, 78% are on ART, and 69% are estimated to be virally suppressed. According to the most recent DHIS data, adult men (25+) have an ART coverage of 71% compared to ART coverage of 87% among women. ART coverage among children living with HIV (CLHIV) less than 15 years of age is 72%.

For key populations, PEPFAR Zambia undertook a size estimate exercise which estimated the population of MSM to be 67,264 with a prevalence rate of 17.1% and the population of FSW to be 74,761 with an HIV prevalence rate of 41.6%. There has never been an integrated bio-behavioural survey (IBBS) for MSM and there is no data on whether injection drug use is a sizable problem in Zambia. PEPFAR Zambia is planning to implement an IBBS for FSW, MSM, and people who inject drugs (PWID) in 2019 to better understand the HIV epidemic among these populations and develop better size estimates.

Geographically, Lusaka province has the highest prevalence (16.6%), followed by Copperbelt (14.7%), Western (14.6%), Central (12.6%), and Southern (12.5%) provinces. Muchinga and North-Western provinces have the lowest prevalence, estimated at 5.2% and 6.3% respectively. Disease burden is highest in densely-populated Lusaka, Copperbelt, and Southern provinces.

Spectrum data for morbidity and mortality approximates the total number of deaths attributed to AIDS in 2017 as 17,040 (49.1% male and 81.8% adult, 15+) with TB continuing to be the leading cause of death among PLHIV.

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<sup>2</sup> World Bank 2018 data.

<sup>2</sup> United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision, custom data acquired via website accessed 22 March 2019.

Table 2.1.1 The Government of the Republic of Zambia's Results

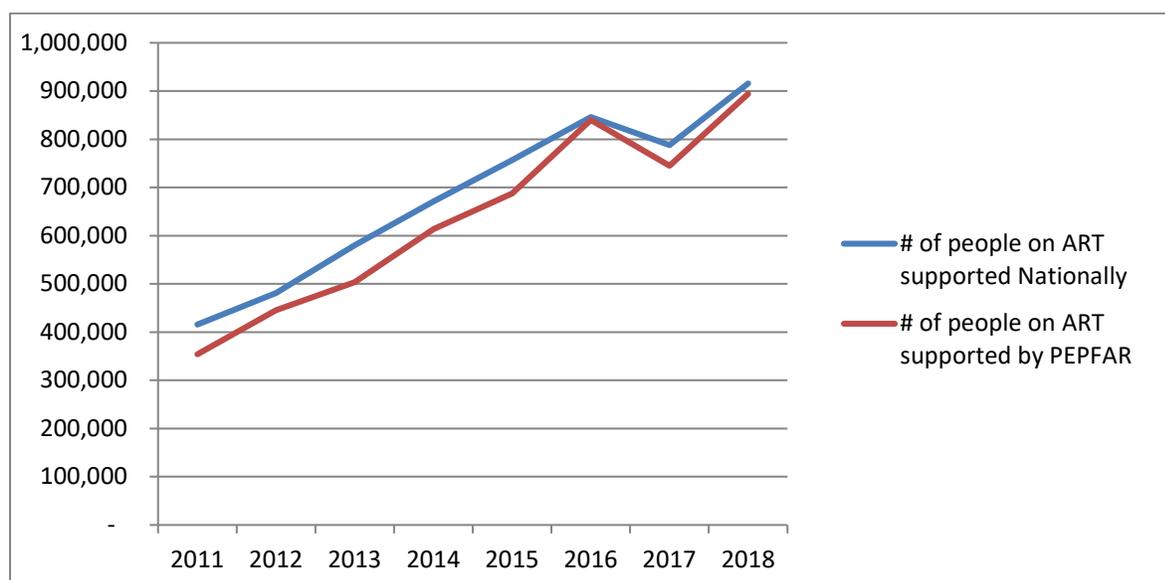
	Total		<15				15-24				25+				Source, Year
			Female		Male		Female		Male		Female		Male		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Total Population	17,080,572		3,825,571	22.4	3,839,577	22.5	1,675,952	9.8	1,652,680	9.7	3,057,176	17.9	3,026,616	17.7	Spectrum, 2018
HIV Prevalence (%)		7.2		0.9		0.9		5.4		2.8		19.0		14.4	Spectrum, 2018
AIDS Deaths (per year)	17,040		1,541		1,562		1,189		863		5,943		5,942		Spectrum, 2018
# PLHIV	1,224,017		34,928		35,102		90,612		45,839		581,464		436,072		Spectrum, 2018
Incidence Rate (Yr)		0.61		NA		NA		0.94107		0.08		1.0716*		0.25*	ZAMPHIA, 2016 *25-34
New Infections (Yr)	55,802														Spectrum, 2018
Annual births	696,305	4.1													Zambia Central Statistical Office, 2018
% of Pregnant Women with at least one ANC visit	689,342	99.0	NA	NA			NA	99.2			NA	98.9*			ZAMPHIA, 2016 *15-49
Pregnant women needing ARVs	113,171	16.3													Spectrum, 2018
Orphans (maternal, paternal, double)	1,017,051														Spectrum, 2018
Notified TB cases (Yr)	37,203														WHO, 2017
% of TB cases that are HIV infected*	20,362	58.9													WHO Global report, 2018 *with known HIV status
% of Males Circumcised	1,281,019	64.5%													HMIS
Estimated Population Size of MSM	67,264	1.4													UCSF, 2018
MSM HIV Prevalence	11,875	17.7													UCSF, 2018
Estimated Population Size of FSW	74,761	1.6													UCSF, 2018
FSW HIV Prevalence	31,093	41.6													UCSF, 2018
Estimated Population Size of PWID	26,838	0.3													UCSF, 2018
PWID HIV Prevalence	4,445	16.6													UCSF, 2018

Table 2.1.2 90-90-90 cascade: HIV diagnosis, treatment and viral suppression\*

Table 2.1.2 90-90-90 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	17,080,572	9%	1,224,017	1,055,532 <sup>2</sup>	942,578	77%	69.2%	7,545,151	265,078	228,073
Population <15 years	7,688,148	1%	70,030	64,638	50,271	72%	33.4%	1,238,866	13,306	12,364
Men 15-24 years	1,652,680	3%	45,839	40,888	23,602	51%	36.7%	721,404	11,961	10,444
Men 25+ years	3,026,616	14%	436,072	374,669	310,699	71%	59.0%	1,525,912	73,109	74,218
Women 15-24 years	1,675,952	5%	90,612	73,758	53,795	59%	33.6% <sup>3</sup>	1,269,445	35,345	34,112
Women 25+ years	3,057,176	18%	581,464	501,578	504,211	87%	57.5%	2,274,344	108,927	96,935
MSM	67,264	17.7%								
FSW	74,761	41.6								
PWID	26,838	0.3								
Priority Pop (specify)										

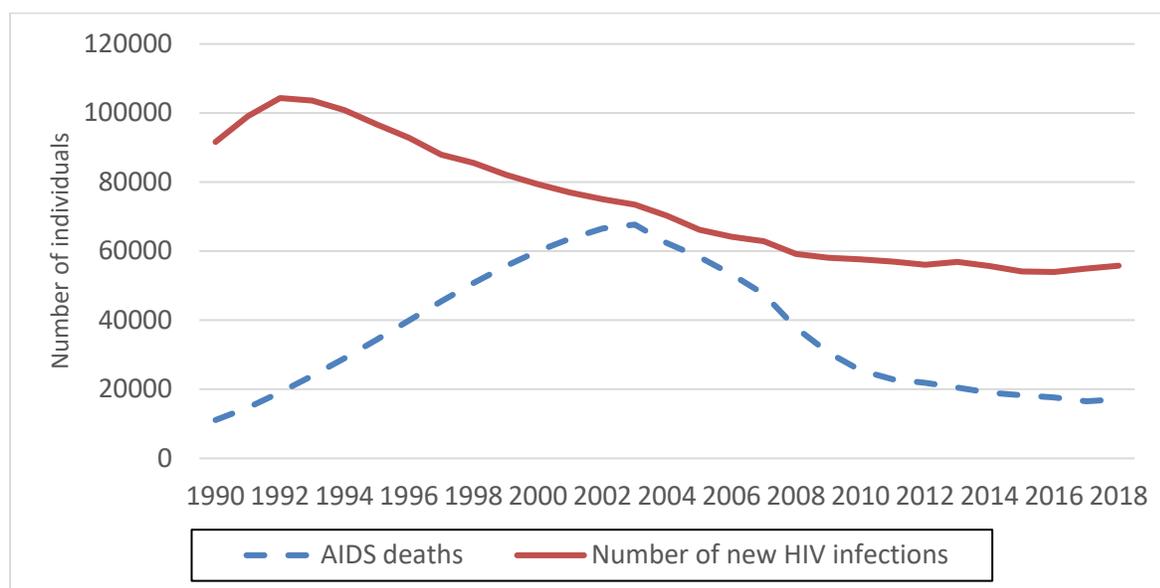
Source data: <sup>1</sup> UNAIDS Spectrum, 2018; <sup>2</sup> ZAMPHIA, 2016 – calculated based on percent of PLHIV linked to ART; <sup>3</sup> ZAMPHIA, 2016 – VLS based on VL and detectable among PLHIV on ART

**Figure 2.1.3 National and PEPFAR Trend for Individuals currently on Treatment**



Source HMIS, DATIM & Program Reports

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



Source HMIS, DATIM & Program Reports

## 2.2 Investment Profile

Preliminary results of the most recent National AIDS Spending Assessment (NASA 2014 - 2017) show that domestic financing increased from 6% in 2015 to 8% in 2017. Zambia continues to face significant budgetary challenges, with 87% of the national budget going towards salaries and debt servicing in 2019, making commitments to other priorities difficult. Despite these challenges, the GRZ has increased its human resources for health (HRH) commitment by increasing staffing for hospitals and district health offices in all provinces in the 2019 budget by 21% compared with the

previous year's budget, and continues to invest in much needed infrastructure. The GRZ also contributes a significant amount annually towards the ARV budget and has indicated a willingness to increase its commitment for ARV procurements in COP19 from the original commitment of \$30M to \$35M.

The US government, through PEPFAR, is the largest donor followed by the Global Fund to Fight AIDS, TB, and Malaria (GFATM). There is limited funding from other bilateral and multi-lateral partners such as Deutsche Gesellschaft für Internationale Zusammenarbeit, European Union (EU), and the United Nations family.

The private sector contribution to the HIV response in Zambia is small, and is primarily through private, not-for-profit organizations that provide HIV treatment and prevention activities. PEPFAR partners are working with the private sector, especially the mining sector, to increase access to ART.

In addition to PEPFAR resources, other USG investments in Health complement HIV programs including the integrated service delivery for the provision of TB, maternal and child health, family planning, nutrition, and malaria services.

In anticipation of reaching epidemic control by 2020, PEPFAR Zambia will continue to work closely with the GRZ, GFATM, and other donors to plan, identify efficiencies, and support activities that strengthen Zambia's domestic resource mobilization efforts for HIV.

<b>Program Area</b>	<b>Total Expenditure</b>	<b>% PEPFAR</b>	<b>% GFATM</b>	<b>% GRZ</b>	<b>% Other</b>
Clinical care, treatment and support	\$233,040,170	79%	8%	14%	0%
Community-based care, treatment, and support	\$38,399,272	98%	2%	0%	0%
PMTCT	\$15,007,066	94%	2%	0%	4%
HTS	\$20,946,831	97%	3%	0%	0%
VMMC	\$22,225,352	96%	3%	0%	0%
Priority population prevention includes KP prevention	\$15,256,480	94%	6%	0%	0%
AGYW Prevention	\$15,170,634	87%	10%	0%	3%
OVC	\$22,149,235	95%	5%	0%	0%
Laboratory	\$40,874,126	100%	0%	0%	0%
SI, Surveys and Surveillance	\$23,666,629	80%	3%	0%	17%
HSS	\$16,849,101	44%	13%	35%	8%

Source 2018-2019 Yellow Book, National AIDS Spending Assessment 2014-2017, EU, SIDA, GIZ, DFID, and GFATM

Table 2.2.2 Annual Procurement Profile for Key Commodities 2018					
Commodity Category	Total Expenditure	% PEPFAR	% GFATM	% GRZ	% Other
ARVs	\$ 131,438,323	42%	37%	21%	0%
Rapid test kits	\$ 11,146,042	88%	8%	0%	4%
Other drugs	\$ 4,842,181	79%	0%	21%	0%
Lab reagents	\$ 22,618,031	73%	2%	26%	0%
Condoms	\$ 2,892,480	42%	14%	0%	44%
VL commodities	\$ 22,735,030	100%	0%	0%	0%
VMMC kits	\$ 1,838,351	69%	31%	0%	0%
MAT	\$ -	0%	0%	0%	0%
Other commodities	\$ -	0%	0%	0%	0%
<b>Total</b>	<b>\$ 197,510,437</b>	<b>56%</b>	<b>25%</b>	<b>17%</b>	<b>1%</b>

Source 2018 National Lab Commodities Forecasting and Quantification Reports and the 2018 National ARV Forecasting and Quantification Report

## 2.3 National Sustainability Profile Update

The PEPFAR Zambia team used a transparent and participatory process to complete the Sustainability Index and Dashboard (SID 3.0). PEPFAR and UNAIDS co-convened a multi-stakeholder SID consultative workshop in November 2017 attended by representatives from several host government ministries and departments, multilateral organizations, local NGOs, and CSOs.

### 2.3.1 Progress Addressing Sustainability Strengths

**Planning and Coordination (9.29):** This element score increased from 7.73 in SID 2.0. 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, through the National HIV/AIDS/STI/TB Council (NAC) leads the development/revision of the National AIDS Strategic Framework with active participation from civil society, 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. Host country leadership in planning and coordination promotes country ownership and sustainability of the national response.

In COP19, PEPFAR Zambia will continue to provide technical and financial support to the GRZ, as required, to further strengthen planning and coordination capacity. Considering the high element score, PEPFAR Zambia expects that no further support external will be required by the end of COP19.

**Private Sector Engagement (8.39):** This element score increased from 6.11 in SID 2.0. The host country government has formal channels and opportunities for diverse private sector entities to engage and provide feedback on its HIV policies, programs, and services. Systems and policies that allow for private corporate contributions and health service delivery exist.

In COP19, PEPFAR Zambia will continue to support social marketing (SM) of condoms as a key strategy for implementing a total market approach. SM condoms are distributed at over 500 sales

points across Zambia. Additionally, PEPFAR will continue to engage local private pharmacies to serve as ARV pick up points for stable clients to decongest public health facilities.

**Commodity Security and Supply Chain (7.22):** This element score increased from 5.69 in SID 2.0. Domestic resources fund 10-49% of ARV, rapid test kit and condom procurements. The country has a national supply chain plan that guides investments and the host government manages processes and systems that ensure appropriate ARV stock at all levels.

The availability of life-saving ARV medications 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). Implementation of the eLMIS improved stock visibility and management reduced drug expiries from 1.3% in October 2017 to 0.3% in September 2018, and the MOH now leads forecasting and quantification activities, decreasing PEPFAR Zambia's expenditures on the exercise.

The completion of regional hubs and upgrades to the central warehouse in Lusaka has reduced the country's transportation and storage burden, addressing the vulnerability previously identified through the SID 3.0 process. PEPFAR Zambia, GFATM, and the EU, which spent \$12,623,409, \$13,250,395, and \$5,000,000 respectively over the period 2016 to 2018, have funded this infrastructure support. PEPFAR and other donors will decrease or end investment in these infrastructure activities, with domestic entities taking responsibility and ownership by end of COP18. However, PEPFAR will prioritize technical and operational support for Medical Stores Limited (MSL) as the financing for MSL is a major potential risk to ensuring sustained availability of stocks at facility level in COP18. Over the past years, GRZ has reduced financial support to MSL by 35% (ZMK40 million to ZMK26 million). This reduction has a potential to hinder MSL's delivery schedule adherence and ultimately the availability of stock at facility level.

### 2.3.2 Progress Addressing Sustainability Weaknesses

The SID analysis revealed weaknesses in four sustainability elements that were prioritized for support in COP18. After review of the current state of sustainability of the national response, the PEPFAR Zambia team has made a decision to maintain the same priority sustainability elements for COP19. These four sustainability elements are listed below and ranked on the basis of element score and criticality to sustained epidemic control.

**Laboratory (2.33):** This element score decreased from 4.86 in SID 2.0. The availability of high quality laboratory services is critical to scale up HIV services, including implementation of test and start and achievement of the third 95. In 2017, Zambia did not have adequate qualified laboratory personnel or infrastructure to achieve sustained epidemic control. However, since then, there have been significant investments in laboratory systems strengthening and there is sufficient capacity for VL testing. Although regulations to monitor quality of laboratory and POC testing sites exist, they are partially implemented, and the national laboratory strategic plan has not been approved. Domestic resources fund only 1-9% of laboratory services.

In COP18, PEPFAR Zambia has continued to support activities to increase laboratory capacity, including addressing the staffing gap, procurement of equipment/reagents, targeted infrastructure

improvement, provision of backup power solutions for labs in high HIV burden areas, quality assurance through provision of QMS support, and strengthening sample transportation and result return systems. Viral load capacity has significantly increased over the past one year, with the number of tests doubling between January 2018 (32,723) and January 2019 (68,459). PEPFAR-supported VL infrastructure scale up is expected to be complete in COP19 Q1. There are currently 22 active VL labs supported by PEPFAR Zambia. Three additional labs (one PEPFAR and two GFATM supported) will become active in Q1, COP19. In COP18, PEPFAR Zambia is focusing on sample referral system and digital results return capacity strengthening to reduce turnaround times. Timely return of results to clinicians and clients will improve patient management and retention on treatment. In COP19, PEPFAR will focus on the provision of point of care VL and EID for pregnant/breastfeeding women and infants in remote areas (using mostly existing GeneXpert machines) and all sample referral systems and routine diagnostics will be fully integrated under the direction of provincial and district health offices of the MOH. Zambia is on a trajectory to provide VL tests to all patients on ART by 2020.

PEPFAR Zambia and the GFATM are major funders of laboratory commodities for the national response. GFATM has committed \$1,628,029 for the procurement EID/GeneXpert (TB) cartridges in COP19. Other stakeholders that have invested in HIV lab services include the GRZ, PEPFAR, GFATM, World Bank, and other bilateral cooperation initiatives.

**Epidemic and Health Data (4.37):** This element score has decreased from 4.62 in SID 2.0. The timely availability of accurate and reliable data is critical to plan and implement a successful national HIV response. The SID found that key population surveys and surveillance are primarily planned, financed and implemented by external agencies, organizations or institutions. The host government does not conduct IBBS or size estimation studies for key populations as these behaviors are against the law.

PEPFAR Zambia continues 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: Surveillance and Behavioral Epidemiology Risk Survey (SABERS); Mortuary-based mortality surveillance; FSW IBBS Protocol Development; MSM and PWID IBBS; nation-wide scale up of case-based surveillance system; 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; working with UNAIDS to provide quality PLHIV estimates to GRZ, and building the capacity of CSOs to utilize data. Main stakeholders that have invested in Epidemic and Health Data include the GRZ, PEPFAR, UNAIDS, EU, DFID, WHO, GFATM, World Bank, and other bilateral cooperation initiatives.

**Service Delivery (5.32):** This element score increased from 4.72 in SID 2.0. Facility-community linkages are critical for HIV prevention, care and treatment scale up, including implementation of differentiated service delivery models and test and start. Although the country has standardized the design and implementation of community-based HIV services, not all representative service providers are included. It is unclear whether 10% of District Health Office budgets actually go towards implementation of community activities. Further, inadequate facility infrastructure has impeded effective facility linkage to community. Host country institutions deliver HIV services with substantial external technical assistance and provide minimal (1-9%) financing for delivery of HIV

services to key populations. National and sub-national health authorities do not develop sub-national budgets that allocate resources to high HIV burden service delivery locations. Rather, resources are allocated based on catchment population.

PEPFAR Zambia will continue 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 differentiated service delivery models (DSD) that focuses on patient centeredness and health system efficiency. The four main DSD models are facility or community based and health provider or client (community) managed. This allows stable clients to receive their ARV refills at longer (and more convenient) intervals and significantly reduces waiting times at health facilities. In January 2019 the MOH issued a memorandum with guidance on the multi-month scripting and dispensing (MMSD) of ARVs and directed that all stable clients be offered six month prescriptions. In COP19, PEPFAR Zambia's IPs will work with health facility and community-based health workers to continue scaling up these DSD approaches, including MMSD, in order 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.

The following key policies have facilitated service delivery and progress towards achievement of 95-95-95 targets: Test and Start (ongoing since 2016); TLD transition (61% of patients to be transitioned by December 2019); Index testing (since 2018); self-testing (launched in August 2018); TPT (guideline revision to be completed in March 2019); User fees (prohibited in public health facilities); and Routine VL testing (since 2017). Stakeholders that have invested in HIV service delivery include the GFATM, World Bank, and local non-governmental organizations such as Churches Health Association of Zambia, Bwafwano Integrated Services Organization and Centre for Infections Disease Research in Zambia.

**Human Resources for Health (6.27):** This element score increased from 6.17 in SID 2.0. The SID found that Zambia has an inadequate supply of health workers to enable the volume and quality of HIV services needed for sustained epidemic control at the facility and/or community site level. Pre-service training institutions are not producing an adequate supply and skills mix of health care providers and the country's health workers are not adequately deployed to facilities and communities with high HIV burden. Although an inventory of donor-supported health workers exists, there is no official plan to transition these staff to local support.

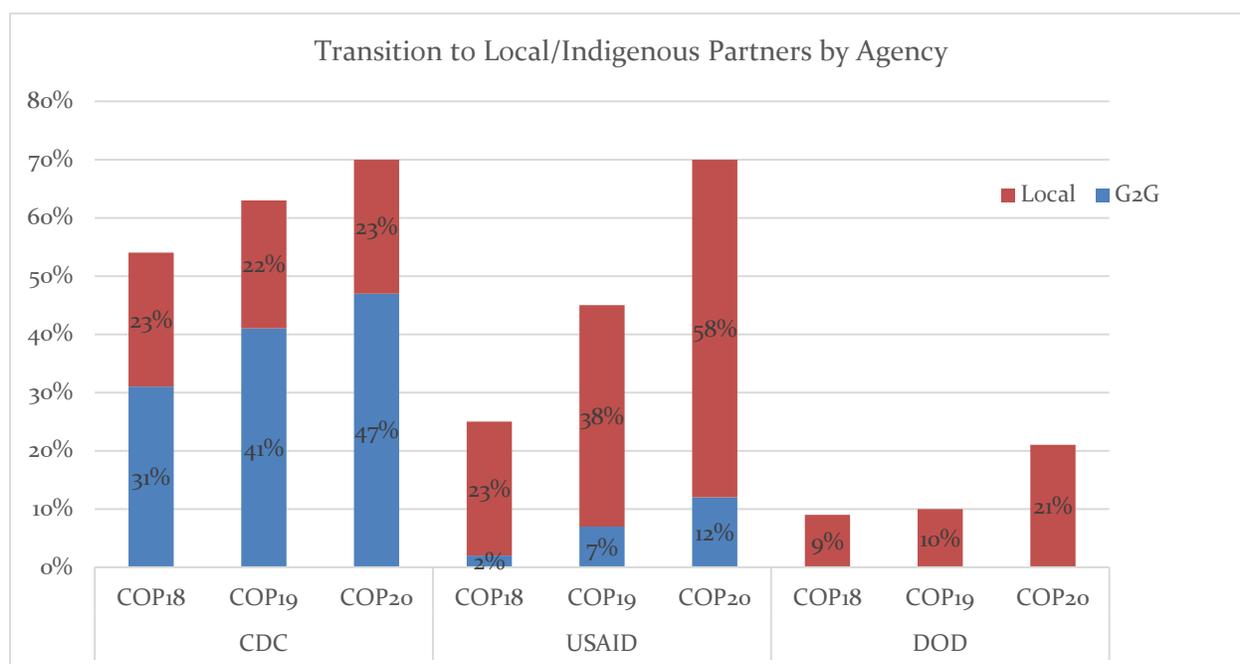
An adequate number of trained and motivated health workers, with the appropriate skills mix, deployed to areas of greatest need (at facility and community level) is critical to implementation of Test and START and differentiated service delivery models. Zambia is facing a critical shortage of health workers with approximately 40% of positions in the health sector establishment remaining vacant. Currently, the MOH employs 21,500 clinical staff and 1,329 community health assistants (CHA), while GFATM supports 600 clinical staff and 167 CHA. The GRZ, through its National Health Strategic Plan, aims to employ 30,000 additional health workers between 2017 and 2021. The MOH has so far recruited 16,000 new health workers and plans to recruit 5,000 per year from 2019 to 2021. To increase the number of health workers available to provide high quality health services, the GRZ has also invested in a 3,000 student capacity training institution, which is 90% complete, as well as decentralized training of specialist doctors.

PEPFAR Zambia's HRH strategy in COP19 aims to maintain salary support for 1,315 clinical staff and 12,000 community health workers (44 CHA, over 1,000 lay counselors, 330 treatment/adherence supporters, 1,050 peer educators/mentors and nearly 9,000 community based workers with multiple roles including treatment support) as well as further reduce the gap of community health workers by providing salary support to the 480 CHA (out of 1,042 who are not on the government payroll). Currently, over 90% of the staff is placed in the attained and scale up districts and similarly, the deployment of these additional community staff will be based on treatment current (TX\_CURR) target, with more community workers deployed to the highest burden provinces. In anticipation of reaching epidemic control targets by 2020, PEPFAR Zambia is conducting modeling and analysis of workforce requirements for the maintenance of HIV services. This will inform 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. This dialogue will also include the time lines for transitioning of PEPFAR community and facility staff to the GRZ. Several key stakeholders have invested in HRH, including the World Bank, DFID, EU, and Clinton Health Access Initiative.

### **2.3.3 Transition to Local/Indigenous Partners**

As illustrated in Figure 2.3.1, CDC and USAID are on track to achieve the local partner target of allocating 70% funding to local partners by agency by the end of COP20. In COP18, CDC awarded 54% of its funding to local prime partners, USAID 25% and DOD 9%. USAID will make the largest shift in COP19 to increase its funding to local partners at 45%. DOD will also increase in COP19 from 9% to 10%, though constrained by restrictions against military to military funding. CDC will increase its funding to local partners to 63%. By COP20, CDC and USAID aim to allocate 70% of the programmatic budgets to local partners. CDC will accomplish this through the phased transfer of direct service delivery to the provincial health offices (PHOs) with a focus on sustainability, increased capacity, and improved local financial management and oversight. USAID will reach this milestone through a combination of efforts including significantly increasing funding through Government to Government (G2G) agreements with provincial health offices and other government entities and transitioning a number of HIV care and treatment, prevention, and health systems strengthening activities to local partners. Despite the constraints that DOD faces, it will increase support to local partners to 20% by end of COP20.

**Figure 2.3.3 Transition to Local/Indigenous Partners by Agency**



#### 2.4 Alignment of PEPFAR Investments Geographically to Disease Burden

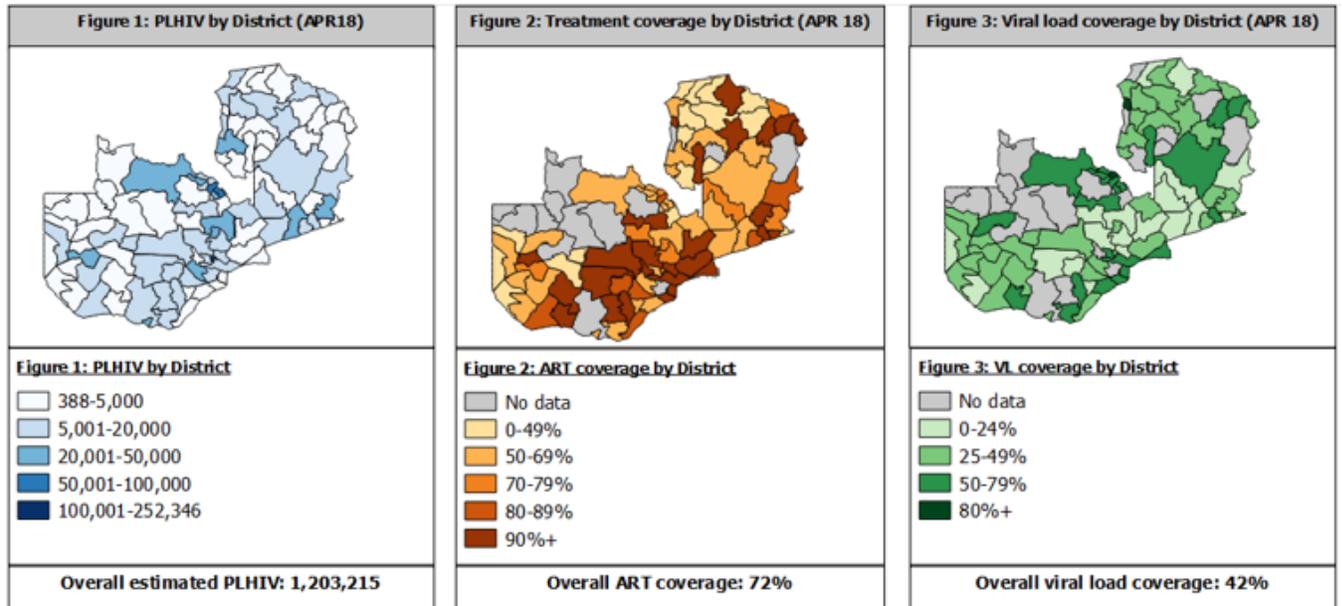
An essential component of the annual COP design process is the refinement of the geographic alignment of PEPFAR investments to disease burden. In the development of COP19 PEPFAR Zambia worked closely with the Zambian National Spectrum team which includes UNAIDS, MOH, Central Statistics Office, and NAC to update Zambia’s Spectrum models. The draft national PLHIV estimates were then run through geospatial HIVE modeling to generate estimations at the district level for both sexes and five-year age bands.

The National Spectrum team, examined ART coverage for each sex and age band across the 110 districts of Zambia and set targets for COP19 that reached the following ART coverage rates:

- 90% ART coverage or higher in all age/sex bands for the 30 attained districts that constitute 64% of all PLHIV
- 80% ART coverage or higher in all age/sex bands for the 46 scale up to saturation districts that constitute 27% of all PLHIV
- 75% ART coverage or higher in all age/sex bands for the 7 scale up to saturation districts that constitute 2% of all PLHIV

The 10 sustained districts and 17 central support districts constitute 2% and 5% of the PLHIV burden for Zambia respectively. These districts maintained their district prioritizations from COP given the lower burden of PLHIV relative to the attained and scale up districts. The National Spectrum team is continuing to work on national and provincial PLHIV estimates and there may be a need to revisit the above estimates if the final estimates are significantly different from the estimates used to develop targets for COP19.

**Figure 2.4.1 PLHIV, Treatment Coverage, and Viral Load Coverage by District**



Source PEPFAR PLHIV estimates, MER TX\_CURR, TX\_PVLS denominator

## 2.5 Stakeholder Engagement

PEPFAR Zambia engages with MOH continually in the implementation of COP18 and in the development of COP19. This engagement has included policy and guideline development, technical-level oversight through national-level working groups, performance management (national, provincial, district and site-levels), supply chain management, development of national strategies and annual program/budget planning. MOH participated in all COP19 stakeholder meetings, including the COP19 Planning Meetings. PEPFAR Zambia regularly met with the Minister of Health, NAC and other MOH senior leadership to prioritize COP19 goals such as scaling up PrEP, increasing index testing, and HRH along with numerous discussions about supply planning.

In COP19 planning, NAC was an active participant in all stakeholder meetings and a key participant and leader in the development of COP19. NAC also hosted the weekly COP19 update meetings with the COP19 Planning Meetings delegation (GRZ, WHO, GFATM, UNAIDS and CSOs). The weekly update meetings, a new, successful initiative implemented during the COP18 development, was expanded and improved in COP19 and focused on technical, programmatic and policy direction. The content of the meetings focused on key priorities presented by PEPFAR Zambia technical experts and allowed for invaluable feedback and questions on these priorities. The additional benefit of these meetings was the active participation of the GRZ and the opportunity for open dialogue to address and debate some policy barriers to achieve epidemic control with the other stakeholders.

The partnership between PEPFAR Zambia and the Ministry of Finance (MOF) has strengthened exponentially in COP18, because a PEPFAR-funded Treasury Advisor is now working directly at MOF. The US Treasury Advisor started in July 2018 and has provided additional support to achieve PEPFAR Zambia's goal of sustainable HIV financing and sustainability. Additionally, the engagement of the US Treasury Advisor has provided PEPFAR Zambia and the greater embassy community with invaluable insight on how to improve Zambia allocation and distribution financial transparency. MOF also participated in all COP19 stakeholder meetings.

PEPFAR Zambia and UNAIDS continue to work closely together. This includes co-leadership of the HIV donor group (known as cooperating partners), joint efforts towards quality HIV data in Zambia, and working closely with the GRZ to advance policies critical to epidemic control.

PEPFAR Zambia prioritized increasing civil society's participation in COP19 development, and worked hard to ensure diverse and widespread participation across civil society. PEPFAR Zambia worked closely with civil society self-selected representatives from a wide range of constituencies including: PLHIV, women, youth, people with disabilities, FBOs, KPs, local NGOs and TB. PEPFAR Zambia met with civil society representatives weekly, and also supported several large-scale consultations. PEPFAR Zambia plans to use the success of this experience to further strengthen civil society engagement within COP18 implementation. This will include expanding the partnership with NAC to further build the capacity of CSOs in such areas as data literacy. In COP19, PEPFAR Zambia will further engage CSOs in Zambia based outside of Lusaka by utilizing American Spaces and NAC provincial offices throughout Zambia to further increase the involvement of CSO engagement throughout the year. In COP18, the PEPFAR Small Grant program implemented the recommendation from civil society to allow both small and medium-sized groups to access PEPFAR resources through the Small Grant portfolio, and this modification will continue in COP19.

PEPFAR Zambia continues to make strides in broadening the private sector's support of Zambia's national HIV response. In COP18, PEPFAR Zambia hired an External Engagement Advisor to enhance the PPP portfolio, by collaborating with Zambian banks, hotels, mobile telephone companies, retail conglomerates and private health service providers and manufacturers, to contribute resources to economic resilience initiatives that provide the much needed economic means to OVC, youth and young women. Engagement with the PPP sector has resulted in ART and VMMC services being offered at private health clinics and HIVST at mines through cost sharing.

Finally, PEPFAR Zambia also worked closely with the GFATM in developing COP19. This included in-country consultations with the CCM and principal recipients to align resources and geographic priorities. As well as with Geneva-based colleagues to address critical commodity gaps.

### 3.0 Geographic and Population Prioritization

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In order to achieve HIV epidemic control and meet the ambitious target of having 90% of PLHIV on ART by the end of COP19, PEPFAR Zambia is prioritizing targeted prevention, optimized HIV testing and linkage for priority populations with high HIV incidence and unmet need for ART including children, AGYW, men, and key populations. AGYW ages 15-24 have an incidence rate of 1.07% compared to .08% of men ages 15-24. According to the most recent DHIS data, adult men (25+) have an ART coverage of 71% compared to 87% ART coverage among women. ART coverage among children living with HIV (CLHIV) less than 15 years of age is 72%. In addition, according to ZAMPHIA, VL suppression among CLHIV was 33%, females 15-24 was 33.6%, and 36.7% for males 25-34 and the low VLS is driven primarily by lower ART coverage among these populations.

For key populations, PEPFAR Zambia undertook a size estimate exercise which estimated the population of MSM to be 67,264 with a prevalence rate of 17.1% and population of FSW to be 74,761 with an HIV prevalence rate of 41.6%. PEPFAR Zambia is planning to implement an IBBS for FSW, MSM and PWID in 2019 to better understand the HIV epidemic among these populations and to develop better size estimates.

Geographically, Lusaka province has the highest prevalence (16.6%), followed by Copperbelt (14.7%), Western (14.6%), Central (12.6%) and Southern (12.5%) provinces. Muchinga and North-Western provinces have the lowest prevalence, estimated at 5.2% and 6.3% respectively. COP19 resources are aligned with the provinces and the districts with the greatest HIV burden and unmet ART need.

PEPFAR Zambia will initiate over 83,178 clients on treatment in COP19, over 50,000 of these will be initiated from the attained districts and 24,000 from scale-up districts bringing the total number of PLHIV on treatment to over 1,114,000, 740,000 in attained districts and 320,000 from scale up districts. As illustrated in Figure 2.4.1, PEPFAR will continue to align resources and activities with the high HIV burden geographic areas with focus on scale-up districts which contribute to 59% of unmet need for ART.

Men 20-39, AGYW 15-24, and children under 15 are specifically targeted and will achieve ART coverage of 98%, 91%, and 88%, respectively by the end of COP19. COP19 also outlines plans to improve HIV case finding among key populations, linking 95% of those who test HIV-positive to treatment, and offering PrEP to all KP who test HIV negative. Specific details on case identification and linkage to treatment for all priority and key populations are detailed in section 4.

As of COP18 Q1 PEPFAR Zambia had 13 districts with ART coverage rates above 90%, of which 7 had VMMC coverage rate of over 90% for ages 15-29. By the end of COP18, PEPFAR Zambia expects to achieve 90% ART coverage in an additional 30 districts bring the total to 43 districts with >90% ART coverage. Building off of this achievement, achieving COP19 targets will result in reaching 90% ART coverage by age and sex in 30 high burden districts and an overall national ART coverage rate of 90%. For this to happen, PEPFAR Zambia in COP19 will focus on retaining the individuals who are on treatment and ensuring that they are getting quality HIV services and are virally suppressed.

<b>Prioritization Area</b>	<b>Total PLHIV/% of all PLHIV for COP19</b>	<b># Current on ART FY18</b>	<b># of Districts COP18 (FY19)</b>	<b># of Districts COP19 (FY20)</b>
Attained	784,923/64%	629,569	28	30
Scale-up Saturation	325,929/27%	249,776	45	46
Scale-up Aggressive	28,939/2%	18,454	7	7
Sustained	27,848/2%	14,804	10	10
Central Support	56,378/5%	29,972	17	17

Source Data Pack COP19

## 4.0 Program Activities for Epidemic Control in Scale-Up Locations and Populations

### 4.1 Finding the Missing, Getting Them on Treatment, and Retaining Them Ensuring Viral Suppression

#### 4.1.1 Finding the Missing

Zambia's national HIV program has benefited from leadership at the highest levels of government. President Lungu has been particularly engaged in the areas of HIV testing and finding men. In 2017, the President launched the universal test and treat strategy that resulted in a drastic increase in HIV testing and ART initiation in most provinces. In mid-April, the Zambian First Lady, joined by the First Ladies from the neighboring countries, will launch the Free to Shine initiative and Ending HIV campaign. These initiatives aim to improve case finding among pediatrics and men as well as create demand for priority prevention initiatives such as PrEP.

While the increase in HIV testing has resulted in a significant increase new cases being identified and linked to treatment, this has also resulted in inefficient testing strategies. In order to improve case identification and reduce unnecessary testing, PEPFAR Zambia is working closely with MOH to formalize and rapidly rollout an HIV testing screening tool with the goal of optimizing provider-initiated testing and counseling (PITC). PEPFAR Zambia has also started the process of reviewing PEPFAR-supported facilities that have high testing rates with low yields to prioritize those sites for implementing the use of screening tools. Sites that have identified zero positives in the last quarter are being transitioned out of PEPFAR support.

In COP19, HTS activities align with the GRZ efforts to achieve 95-95-95. PEPFAR Zambia has set targets to test 1,323,588 and aims to identify 86,719 positives, of whom 83,178 will be linked to

treatment. In scale-up districts, the target is to test 455,925 individuals, out of which 25,315 will be identified positive and 24,234 will be linked to treatment and care services. In COP19, PEPFAR will continue to focus HTS activities on hard-to-reach populations such as pediatrics, men, and AGYW by employing a variety of targeted, differentiated, and client-centered testing services and interventions.

#### **4.1.2 Index Testing**

PEPFAR Zambia has made progress in index testing as demonstrated in FY19 Q1 results, which showed that 65,074 (82%) of newly identified positives were offered index testing, 93% of whom accepted. Of those who accepted, 93% of their contacts elicited were tested, leading to the identification of 10,405 new positives, a positivity yield of 16%. Of the 10,405 positives identified, 36% were adult women and 36% were adult men; AGYW and adolescent boys and young men (ABYM) accounted for 14% and 6% of the positives respectively, while 7% were children less than 10 years. In COP19, 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 are implementing 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 Zambia will prioritize adolescents and young people, men aged 20-39, women aged 15-29, mobile populations, the military, clients of sex workers, FSW, MSMs, and discordant couples. Population-appropriate tools will be developed, evaluated, and shared to ensure that populations accessing index testing receive quality care.

HIV hotspots will be identified through utilizing recency testing data from these prioritized populations (though results of recency tests will not be returned to patients). In health facilities, index testing will target all newly diagnosed HIV positive patients and 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 viral load and prioritizing their sexual partners for index testing. With these strategies, PEPFAR Zambia expects that index testing will contribute to 40% of all positives identified.

Monitoring intimate partner violence (IPV) is key to ensuring a successful index testing program; this is a key component in index testing counselor training. To date, no cases of IPV have been reported as a result of index testing and partner notification. However, PEPFAR Zambia is keenly aware of the potential for IPV in index testing, particularly for AGYW and KPs, and will, therefore, continue to monitor implementation at the site level and ensure that partners have a reporting mechanism for IPV and addressing cases appropriately when they occur. PEPFAR Zambia will also engage in South to South collaboration to learn from countries, such as Uganda, which have implemented an index testing IPV monitoring system. In COP19, capacity building, monitoring, and routine feedback with CHWs are key to ensuring they have the skill necessary to elicit information on IPV, provide counseling, and any support the clients need. Results of adverse event tracking will be monitored regularly along with performance against other indicators, triggering immediate action. If any cases of IPV are reported, this will be discussed in quarterly POART reviews.

### **4.1.3 HTS Strategies**

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. In centrally supported sites, PEPFAR Zambia will provide periodic targeted quality improvement and quality assurance technical assistance at provincial and district levels.

IPs will use differentiated strategies, including providing referral cards, outreach follow up, phone calls/test messages to remind all those who test HIV positive to get confirmatory tests and linked to treatment. PEPFAR Zambia will strengthen the collaboration with 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 to the above mentioned services, DREAMS and OVC IPs will educate those who test HIV positive to go for confirmatory testing and immediately start treatment. OVC and DREAMS beneficiaries will be educated on access to ART, benefits of treatment including maintenance of health and decreased risk of transmission to sexual partners, need for VL testing, and availability of other services.

As part of the overall HTS strategy, PEPFAR Zambia will work closely with FBOs to expand HIV service delivery across the cascade. FBOs will be engaged to create demand for the uptake of HIV services, especially encouraging the testing of men, children, and adolescents. Zambia will leverage existing relationships with FBOs and faith communities and engage them to bolster case-finding and linkage to treatment, especially among men. PEPFAR Zambia will work with FBO to leverage their access to people with disabilities and facilitate to easier access to services.

PEPFAR Zambia will mandate all IPs to reach a linkage rate of 95% and above. Linkage registers have been shown to improve linkage, from 72% in FY18 Q1 to 81% in FY19 Q1. Building upon this success, in COP19, PEPFAR Zambia will continue the use of these 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.

#### **4.1.3.1 HTS Strategy for CLHIV**

According to DHIS data, approximately 72% of all CLHIV are on treatment; however, ZAMPHIA indicated that VL suppression among this population was at 33.4% indicating there is still a significant unmet need for CLHIV across the 95-95-95 cascade. Case identification of CLHIV in health facilities will therefore be prioritized, and IPs will ensure follow-up of their mothers and fathers through index testing. PEPFAR IPs will strengthen national EID guidelines, including testing all children of HIV positive women by and/or at two months and subsequently at 6, 12, 18, and 24 months. PEPFAR will undertake close monitoring and supervision of providers to ensure compliance with guidelines. In addition, PEPFAR Zambia will strengthen collaboration between the HIV program and the national immunization program to help identify pediatrics who may have missed EID or those who may have been infected during delivery or during breastfeeding period. Immunization coverage in Zambia is very high with over 85% of children receiving their 2<sup>nd</sup> dose of measles at 18 months. PEPFAR Zambia is working with MOH to introduce new immunization cards which requires providers to ascertain HIV status of children before giving children vaccines that may be counter-indicated in CLHIV. Moreover, PEPFAR Zambia will be using HIV self-testing to

screen mothers at immunization clinics in high burden areas and provide HIV testing to children whose mothers screen positive for HIV.

#### **4.1.3.2 HTS Strategy for ALHIV**

To reach adolescents living with HIV (ALHIV) testing, focusing on AGYW, services PEPFAR Zambia will use strategies like school-based mobilization through safe spaces and peer-led education activities, social network mapping in places where adolescents meet to socialize, and also in churches and other religious groupings. One of the challenges in getting adolescents to seek HTS in facilities is their fear of health facilities, including healthcare provider attitudes towards sexually active adolescents. PEPFAR Zambia will therefore work closely with the MOH adolescent unit to improve adolescents' access to HIV services. This will be done through joint site visits to health facilities for supportive supervision of health care providers serving adolescents. IPs will also ensure that the parents of adolescents are engaged and consent to testing their children is provided. Index client testing will be the main testing strategy for adolescents, although other modalities such as mobile testing may be used in hotspots. All those testing HIV positive will be immediately linked to ART, whether identified at the health facility or in the community. Community IPs will continue supporting the newly initiated adolescents to ensure that they understand the need for adherence to ART, and stay on treatment.

#### **4.1.3.3 HTS Strategy for Men**

PEPFAR Zambia will use crucial insights from the recently completed Male Characterization study and other studies on men's health seeking behaviors to tailor services to meet their specific needs. Key findings include men's reluctance to seek care in public health facilities and the strong influence of peers in health-seeking behavior. HTS will be targeted and differentiated, with male-friendly services being provided in locations where men are found, such as markets and bus stations. Client-centered interventions to improve men's facility experience will address confidentiality, privacy, and long waiting times.

HIV self-testing (HIVST) will be offered in informal and formal workplaces such as markets, bus stations, and construction sites. HIVST will also be used to optimize facility settings, especially in high volume facilities where long waiting times can demotivate men from accessing HTS. This model fast-tracks male clients from registration to screening rooms to reduce waiting times and ensures that specific screening rooms are allocated to men.

PEPFAR Zambia will continue to intensify index testing and partner notification to find men. A critical component of this effort will be to build the interviewing and elicitation skills of CHWs to improve their capacity to coach reluctant clients, particularly women, to reveal their sexual contacts. PEPFAR Zambia will continue to employ active follow-up of identified contacts to ensure that all are tested and linked to treatment if positive. For men identified as positive, who may feel limited by normal clinic working hours, flexible services on evenings and weekends will facilitate their immediate initiation. Zambia's ongoing efforts to reduce stigma against PLHIV will be tailored and targeted to men to improve linkage and retention on treatment.

Other key strategies for finding men include increasing partnerships with the private sector such as in the mining communities in the Copperbelt to increase access to HTS and linkage to treatment. IPs will also focus on conducting targeted outreach services particular in areas along the trucking route as well as mobile populations such as fishing communities.

#### **4.1.3.4 HIVST Strategy**

In COP19, PEPFAR Zambia will scale up HIV self-testing (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, including. Additionally, PEPFAR Zambia is working closely with NAC and CSOs to help increase awareness of the availability of HIVST. HIVST kits will be distributed to the health facilities in high burden areas with low ART coverage through central medical stores, and to targeted work places, institutions working with people with disabilities, institutions of higher learning and communities by PEPFAR IPs who work in these areas. IPs will be directed to immediately report any instances of adverse events associated with HIVST, e.g. self-harm as a result of a reactive HIV test.

#### **4.1.4 Adult Care and Support**

In COP19, PEPFAR Zambia will increase linkage to treatment from 81% in COP18 Q1 to 95% in COP19 through the scale up of key activities that will contribute to finding the missing. PEPFAR will support hiring clinicians to supplement the current HR numbers to ensure they are available at all ART sites, at all times to initiate newly diagnosed HIV positive clients on ART. Where the HR numbers are adequate, PEPFAR will support training and mentorship of clinicians in ART provision to ensure they provide quality ART services. Patients will be assisted by linkage coordinators immediately upon diagnosis. The linkage coordinators will physically escort newly diagnosed HIV positive clients from the testing point to the clinician who will initiate them on ART. This will ensure that no patients will be lost between the point of testing and point of ART initiation. For patients diagnosed with HIV in the community, PEPFAR Zambia will continue to use starter packs for immediate ART initiation for patients who are unable to get to ART clinics when they are diagnosed.

PEPFAR Zambia will support a treatment literacy campaign in collaboration with GRZ, CSOs including the association of people with disabilities. The treatment literacy initiative under development will include counseling of newly initiated ART clients to ensure patients understand the importance of lifelong treatment, meaning that enrolled patients adhere to treatment and aim for viral suppression. Treatment literacy will also be prioritized in COP19. This will include counseling of newly initiated ART clients to ensure that they understand the importance of lifelong treatment and VL suppression. Health facilities will provide services during weekends and after hours clinics to cater for clients who fail to access ART services during working hours. Additionally, PEPFAR Zambia will support opening up additional health posts and non-traditional sites to provide ART services located and designed to increase access to services with high unmet need.

PEPFAR Zambia will aim to increase ART retention through a multi-pronged approach. The GRZ distributed a circular to all provinces in January 2019 that guided facilities to provide 6 month ART dispensing to avoid the inconvenience of frequent clinic visits. PEPFAR Zambia will continue to support GRZ in transitioning and/or initiating all eligible adults on TLD to improve outcomes and reduce side effects and scaling up multi-month scripting and dispensing. To assure quality, health care workers will be trained in new ART regimens to improve case management.

HCWs will be provided with job aids such as hotlines, dash-boards and apps and proactive appointment systems including calling clients to remind them of upcoming appointments. Patients who miss appointments will be identified by HCWs using SmartCare and the Missed Visit register,

assigned lay counselors responsible to follow-up, and bring them back into care. In several facilities in Lusaka, PEPFAR Zambia will employ biometric technology linked to SmartCare, to uniquely identify patients on HIV treatment who may have self-transferred. The use of biometric technology will be in line with Zambia regulations and in consultation with CSOs to ensure privacy.

IPs will implement age appropriate proactive psychosocial support and other community adherence strategies such as community based ART distribution, community adherence groups and teen clubs. PEPFAR Zambia will optimize HRH placement by ensuring that facilities with low retention rates have appropriate numbers of HRH deployed. PEPFAR Zambia in collaboration with MOH will work on providing trainings on customer service to HCWs at high volume sites. The training will incorporate patient feedback and will be used to designed DSD models that meet individual patient needs.

PEPFAR Zambia COP19 VL coverage target is 100% of all persons on ART. To support the achievement of this target, PEPFAR Zambia will employ the several “soft” non-lab related strategies, in addition to the lab-based strategies detailed in 4.8. These strategies are to expand PEPFAR’s work in lab staff mentorship and capacity building. To work in collaboration with the GRZ and CSOs to support VL literacy for providers and patients, including intensifying the U=U messaging.

#### **4.1.5 Pediatric Care and Support**

In COP19, PEPFAR Zambia pediatric HIV treatment will focus on HIV case identification, linkage to HIV treatment, retention on treatment, and viral suppression. PEPFAR Zambia will deploy point-of-care EID testing technologies (including GeneXpert) to at least 18 high-burden and hard-to-reach jurisdictions with EID coverage of less than 50%. High burden is defined as a jurisdiction having a HIV prevalence of more than 7% among pregnant women and more than 200 HIV exposed infants in a year. PEPFAR IPs will reinforce national EID guidelines, including testing all exposed infants by and/or at two months and subsequently at 6, 12, 18, and 24 months by closely monitoring and supervision of providers to ensure compliance with guidelines. Additional, regular site monitoring visits will reinforce these messages across all sites. Through the scale up of index testing, all children of WLHIV and the children of fathers widowed due to HIV will be offered index testing and followed up.

Children who test positive for HIV will be offered same day initiation and age appropriate adherence information. Pediatric HIV cases will benefit from increased clinical staff and capacity building as described above. PEPFAR Zambia is committed to reducing turnaround times for dry blood spots (DBS) samples which will increase the identification of CLHIV. PBFW will be paired with a CHW for follow up through the pregnancy and breastfeeding.

PEPFAR Zambia will reinforce pediatric ART drug optimization, including the use of DTG, Raltegravir granules for neonates and LPV/r granules/tablets, to improve outcomes and reduce side effects. Healthcare workers will be trained to improve case management and provided with job aids such as hotlines, dash-boards, mobile apps and appointment systems to remind clients of upcoming appointments, proactively. PEPFAR Zambia will scale up the implementation of age appropriate proactive psychosocial support and scale-up of pediatric and adolescent patient centered DSD models. In 2018, OVC partners started to report OVC service provision at the health facility catchment area to improve linkage between community and facility partners. This has resulted in

improved bi-directional referrals. This practice will continue in COP19 so that CLHIV can access available community-based services.

Finally, FBOs and faith leadership will be engaged to support the linkage of CLHIV and adolescents to health facilities. FBOs will be instrumental in encouraging parents to ensure their children are tested. FBOs will engage people with disabilities to facilitate access to treatment.

#### **4.1.6 TB/HIV Co-infection**

At 58%,<sup>3</sup> Zambia has one of the highest TB/HIV co-infection rates in the world. The TB/HIV COP19 targets aim to increase TB annual notification from 40,000 to 60,000, successfully treat at least 90% of all notified TB cases, test all notified TB cases for HIV and initiate all TB cases found with HIV on life-long HIV treatment, screen all HIV infected patients for TB and treat those found with TB, and initiate those without TB on TB preventive therapy.

At the end of COP17 the program screened 60% of HIV patients for TB. Of those 97% (523,602) who screened negative, 3% completed isoniazid preventive therapy. The National TB program recently launched TPT guidelines and the implementation of the TPT scale up plan will propel performance from this low level, scaling up services in COP18 to meet a TPT target of 123,000 and will make further gains in COP19 to achieve the target of 315,133.

In COP19, PEPFAR Zambia will focus on addressing key challenges with intensified TB case finding to close the 20,000 notifications gap, screening all PLHIV for TB, and initiating PLHIV in TB care with no evidence of active TB on TPT. PEPFAR Zambia will disseminate guidelines, intensify the introduction of alternative TPT regimens including 3HP, improve logistics system, conduct provider training and mentorship, and literacy campaigns to increase TB case finding. PEPFAR will facilitate joint planning for and implementation of TB and HIV services and activities at provincial and district levels, including supervision, data review, and site visits.

All PEPFAR supported sites will institute infection control plans based on the universal concept of hierarchy of controls, minor renovations, support for personal protective equipment, and support for biosafety equipment. Through the universal coverage of GeneXpert MTB/RIF and/or fluorescent microscopy testing, and introducing the LAM test, training, and testing among prisoners, congregate settings, and the indigent populations PEPFAR Zambia will intensify and increase case finding.

#### **4.2 Prevention**

In addition to scaling up HIV testing and treatment, in COP19 PEPFAR Zambia will continue to scale up strategies to prevent new HIV infections especially among priority and key populations by focusing on PrEP, VMMC, and other evidence-based prevention strategies.

##### **4.2.1 Scaling Up PrEP**

COP17 was the first year of PrEP implementation and PEPFAR partners reached 3,601 beneficiaries with PrEP and scaled up from 4 sites to 192 sites by the end of the fiscal year. For COP19, PEPFAR targets for PrEP\_NEW will more than double (20,326) compared to COP18 (8,673) in an effort to increase access to populations at high risk of contracting HIV infection. These include a focus on

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<sup>3</sup> WHO, 2018 Global TB Report

MSM (924), FSW (2,042), sero-discordant couples (SDC), PBFW, and AGYW (3,839). PEPFAR Zambia is making a deliberate effort to scale-up PrEP among PBFW because of the incidence of HIV infection in that population and the risk of vertical transmission. Although PrEP has now been incorporated into the National Guidelines for HIV Prevention and Treatment, implementation will prioritize geographical areas with high HIV burden including focusing on Lusaka and Copperbelt provinces.

The national PrEP technical working group meets on a quarterly basis to share lessons learned and PrEP cascades to identify challenges and identify solutions. One of the key challenges that has been identified is the need to create demand and awareness for PrEP as this is a new intervention in Zambia. As a result, PEPFAR Zambia is intensifying community sensitization and demand creation strategies to dispel myths and misconceptions, and increase community awareness and uptake of PrEP services. The Ending AIDS Campaign, which has a focus on PrEP will be launched in April 2019, was developed using insights for targeted populations using a human-centered design approach which is expected to increase demand for and awareness of PrEP.

Another area of focus that has been identified is retention to PrEP and the specific needs of target populations. To address this, PEPFAR has supported a strategy that offers differentiated models of service delivery for targeted populations including supportive services through a peer-based approach. For SDC couples including PBFW, services largely take place as part of an integrated service in public health facilities, leveraging ART-trained health workers, and laboratory and pharmaceutical services. For AGYW, services are predominantly provided at DREAMS centers, which are currently offered in 13 sites in high HIV burden districts as part of a layered intervention for AGYW. In COP19, services will be expanded to a total of 26 sites. For MSM and FSW, this service is offered outside public health facilities as well as through outreach and health post sites where services are tailored to the specific needs of these populations. Finally, PEPFAR was recently given permission to provide PrEP in prisons; this should commence in COP18 Q3.

PrEP services will continue to be provided as a part of comprehensive HIV prevention services that include HIV testing, sexual risk reduction education and counselling, condom distribution, contraceptives, post-exposure prophylaxis and medical male circumcision. PrEP client will also be routinely screened for other sexually transmitted disease.

In COP19, PEPFAR investments will focus on training of health workers and community volunteers and other lay healthcare workers. PEPFAR will also strengthen existing M&E systems to monitor the PrEP cascade across populations and age/gender dimensions and implement interventions to improve the quality of service delivery and retention.

#### **4.2.2 HIV Prevention for AGYW and Children**

In COP19, PEPFAR Zambia will ensure integration and complementary service delivery between the DREAMS and OVC platforms. Special focus will be placed on primary prevention of sexual violence and HIV among 9-14 year olds, for which FBO funds will be used to strengthen the engagement of faith communities and leaders. IPs will expand utilization of churches and mosques for DREAMS Safe Spaces and parenting programs, while also targeting the wider faith community with appropriate messaging on GBV, HIV prevention and pediatric testing. Faith and traditional leaders will be engaged on issues of early marriage, GBV prevention, and socio-behavioral norms change. IPs will also work with faith leadership to update and operationalize child protection policies along with building their skills to identify and respond to cases of sexual violence in their

communities. Additionally, church groups (such as religious text studies, district religious leaders' fellowship groups, and youth groups) will be leveraged to integrate evidence-based interventions on sexual violence and HIV. More broadly, OVC and DREAMS platforms will jointly focus on school-based GBV and HIV interventions addressing issues such as sexual consent, delayed sexual debut, and empowerment. Within the wider community, broad-based GBV prevention interventions, such as SASA!, will continue as a layered service under DREAMS and a stand-alone intervention in non-DREAMS sites. DREAMS and OVC IPs will work together, through monthly district coordination meetings to increase demand for post-violence care and provide technical assistance to GBV One-Stop Centers as needed. In areas of geographic overlap, strong bi-directional referrals between DREAMS and OVC partners will continue to ensure comprehensive service support for the most vulnerable AGYW.

General targeted HIV prevention and risk avoidance/reduction for AGYW aged 10-24 will continue to include community mobilization for HTS (including family planning and PrEP), linkage to care, recency testing for HIV positive AGYW, GBV prevention and response, and condom promotion/distribution. Hotspot mapping will continue to be used as a tool to ensure the most at-risk populations are found to provide them with high-impact prevention interventions. Special focus will be placed on scaling up self-testing for AGYW and their partners as well as identifying and referring the highest risk for PrEP. Evidence-based interventions will continue to be led by peer outreach and, within DREAMS zones, delivering a layered service package will remain the primary goal. Linkage to care will continue through the use of escorted referrals, adolescent-friendly hours/spaces, and increased site-level collaboration among IPs. IPs serving KPs will be supported to reach and refer AGYW KPs to clinical services and DREAMS programming. DREAMS partners will continue to focus efforts in 40 zones across 8 districts, using real time data (collected through the DREAMS M&E database) to ensure the most vulnerable AGYW are found and engaged. This will include in-depth analysis of AGYW risk factors, such as experiences with transactional sex, education (in or out of school), experience with GBV, early pregnancy, and number of concurrent sexual partners. Ongoing saturation analysis will also be used as a tool for determining geographical targeting and assessing gaps in coverage. PrEP service delivery, through DREAMS centers, will expand from 13 to 26 centers. Economic strengthening interventions, including savings groups, financial literacy training, and skills building will also significantly expand, with a focus on the 20-24 year old AGYW age band. As stated above, the DREAMS platform will continue to serve as a primary mechanism for the prevention of HIV and sexual violence against 9-14 year olds.

Within the OVC portfolio, IPs will continue to prioritize young mothers (10-24 years old), adolescent girls who have dropped out of school, child-headed households, young PLHIV, children of sex workers, and children/adolescents living in a household with at least one adult living with HIV. An improved OVC minimum package will include HIV status awareness (with age appropriate adherence support for those living with HIV), age-appropriate HIV prevention messaging for negative clients, positive parenting training for guardians of OVC, referrals to clinical services, and a holistic support package (psychosocial, education, household economic strengthening, and nutrition assessments for children under five). Special focus will be placed on integrating sexual violence prevention activities for 9-14 year olds into the OVC minimum package. OVC IPs will focus on increasing coordination with facility partners for bi-directional referrals, optimization of clinical support for pediatric cases, and improved case management. PEPFAR Zambia, through the new GBV project will strengthen Gender Based Violence Information Management System through the GRZ and usage of VAC survey data to improve sexual GBV and HTS screening among AGYW.

### 4.2.3 Key Populations

The COP19 target for KP\_Prev is 58,565, which is comprised of 28,730 FSW, 14,381 MSM, 382 transgender (TG), and 13,062 prisoners. These targets are based on current size estimates and historical program data, and represent an increase of over 24% from the COP18 targets. In COP19, activities will focus on ensuring that every KP reached receives HTS, index testing is scaled up in tandem with increased screening for IPV, PrEP uptake increases through the training of KP peer promoters and lay counselors. Social media and information, communication, and technology (ICT) platforms are used to reach first time testers and MSM, especially those who are older. These activities are an expansion of services already included in the PEPFAR Zambia KP package which includes condom and lubricant promotion and distribution, HTS, peer outreach, STI screening and treatment, provision of PrEP, strengthening community-facility linkages, preventing GBV and/or IPV, alcohol abuse awareness, mental health screening, and harm reduction. Commodities directed towards KP activities will be closely monitored, including lubricants. In COP19, additional indicators will be added to improve the quality of HIV services PrEP coverage and KP specific TX\_NEW targets IPs providing treatment services to KPs.

The adoption of sexual risk reduction behavior among KPs is an important public health necessity because of the ongoing nature of the HIV related risks. In COP19, PEPFAR Zambia will scale up U=U messaging through the training of health workers and the development of information and educational materials for dissemination among targeted groups. Training will focus on educating health workers, peer educators, and counselors about KPs and create self-awareness about HCW biases toward KPs may prevent them from offering quality KP-friendly services. HCWs will be trained to provide the recommended package of services in a non-judgmental, supportive, responsive, and respectful manner.

In COP19, case finding among KPs will be intensified through social network strategies, enhanced peer outreach model for HIV testing within KP networks, and the use of the peer navigation approach to support newly identified positives to enroll on treatment and be retained in care. Enhanced peer outreach approach will focus on KPs that are hard to reach and not found at traditional hotspots. This will complement peer outreach efforts by engaging KPs that have never been tested in the peer's own social, sexual and drug-using networks. The goal is to break into untapped networks, increase the rate of HIV case finding, link HIV-positive KPs to care and treatment, and connect HIV-negative KPs to services that will help them remain HIV negative. IPs will increase index testing among KPs to reach the sexual networks of newly identified KPs and those already on HIV care and treatment. Community ART models will continue to be scaled up to ensure KPs are reached, including through the use of self-testing to increase access to and frequency of testing.

DSD models will continue to be used to mitigate facility based hurdles to accessing care and treatment, and ensure that eligible HIV negative and HIV positive KPs are retained on PrEP and treatment. A stigma monitoring tool kit will be operationalized to guide stigma reduction efforts at the facility level and help assess outcomes continuously. In addition, IPs will actively and routinely review the legal environment assessment undertaken in 2017 to monitor progress made towards addressing legal and policy barriers, and support the development of strategies that improve KP access to HIV services.

PEPFAR Zambia will also support programs in COP19 that address the safety and security of KPs and impede access to HIV services. PEPFAR Zambia IPs will work closely with law enforcement and relevant stakeholders, including CSOs to address KP security concerns through the establishment of KP networks that monitor and respond to KPs that have had their right to health care violated based on their KP status.

#### **4.2.4 Voluntary Medical Male Circumcision (VMMC)**

The GRZ designed the VMMC scale-up strategy in the National Operational Plan (2016-2020) to reach 1.98 million eligible males with VMMC services by 2020. By the end of FY18, the national achievement was 1.3 million. PEPFAR Zambia contributed 884,000 VMMC (68%) towards this achievement. In COP19, PEPFAR Zambia has set a target of 400,000 VMMC to eligible males across the country. In apportioning this target, PEPFAR Zambia prioritized areas with low VMMC rates by assigning 87% of targets to regions with less than 50% saturation, 7% to regions which are above 50% but less than 80% saturation and only 1% to regions which have achieved 80% or above saturation while 4% of the target was allocated to military facilities. The aim is to achieve 80% saturation in all regions. The program will also continue prioritizing regions with high HIV burden as well as attainment of 80% saturation for men aged 15 – 29 years old.

In districts which have not attained 80% saturation, PEPFAR Zambia will support direct service delivery by supplementing the MOH's human resource numbers and capacity through hiring, training and mentoring both healthcare workers as well as lay counselors and CHWs; procurement of VMMC commodities, supplies and reporting tools to mitigate program disruption due to stock outs, and quality assurance and improvement (QA/QI) activities to address quality issues affecting patient safety and outcomes. In an effort to expand the choice of method, PEPFAR Zambia will support the passive surveillance and scale up of VMMC devices after active surveillance. In districts which have either attained VMMC saturation and/or have lower unmet need will have support limited to national-level technical assistance for quality assurance and improvement, promulgation of policy, and training of trainers.

PEPFAR Zambia will also support community mobilization activities by engaging community mobilisers to link clients to VMMC services at community level during routine and campaign periods. Fostering partnerships with traditional and community leaders to generate demand and promote program ownership will also be prioritized. Demand generation activities targeted at finding and linking the priority age group 15 – 29 years old to VMMC services will be enhanced. This will include scaling up of the Human Centered Design approach of demand generation.

Evidence from previous years indicates that the majority of VMMC (75%) are conducted during periodic campaigns in April, August, and December. PEPFAR Zambia will build on this evidence to create a strategy of ongoing “mini - campaigns” to shift from reliance on campaigns to routine provision of the service.

#### **4.2.5 Prevention of Mother-to-Child Transmission (PMTCT)**

Pregnant Zambian women have universal access to PMTCT services, with 98% of all ANC attendees being tested for HIV and 95% of all newly identified pregnant women with HIV are being initiated on treatment. Program data shows that 70% of all pregnant women living with HIV already know their status and 95% of these are already on HIV treatment. Yet retention in care may be low, as

COP17 data shows 12 months retention of only 83% among pregnant women. This challenge to EMTCT goals.

PEPFAR Zambia will address low VL coverage and suppression among PBFW by repeating HIV testing in HIV negative PBFW, testing partners of HIV-negative PBFW for HIV using self-testing (where applicable), and provision of PrEP for discordant couples, and women in high risk relationships where the HIV status of the partner is unknown despite efforts to test the partner. Retesting will identify mothers who tested negative during ANC, but sero convert during breastfeeding.

To improve retention of pregnant women on ART, PEPFAR Zambia will increase its efforts in intensive counselling on the benefits of life long ART, while strengthening mother-baby pair follow up to encourage and ensure ART adherence. PEPFAR Zambia will scale up DSD models for pregnant women including community distribution of ART. Appointment registers will be used and pregnant women who miss appointments will be prioritized for tracing by CHWs.

### **4.3 Commodities**

Ensuring that HIV commodities are in full supply and accessible to all patients is a priority in Zambia's COP19 and critical to achieving the 95-95-95 goals in partnership with the GRZ. In COP19, PEPFAR Zambia will transition 619,5000 patients to TLD. All individuals on TLD will be provided with MMS. COP19 PEPFAR orders of TLD in COP19 are planned as 90 count bottles this switch will decrease the burden of limited storage space and will improve retention. The GRZ and PEPFAR Zambia are committed to a woman centered, informed consent, decision making approach for use of TLD in women of childbearing age. All women will be offered TLD only after being given information on the risks of TLD should they become pregnant along with family planning counseling and access, in line with the Zambia MOH guidelines. Through intense adherence of national treatment algorithm, use of teaching aids, weekly tele-monitoring at clinics, and monthly reporting to the TLD steering committee, it is anticipated that TLD will be disseminated according to the approved TLD transition plan by December 2019.

Zambia has phased-out NVP-based regimens and is transitioning pediatric patients to optimized regimens such as DTG, Raltegravir granules, and LPV/r granules. All pediatric ARVs are fully funded by PEPFAR with no gap projected.

For effective supply chain management for VL commodities, the COP19 goal is to provide testing to over 80% of TX\_CURR. PEPFAR Zambia continues to provide technical assistance to Medical Stores Limited and MOH to manage and maintain cold chain systems that ensure full stock availability of all reagents, consumables, and calibrators needed to conduct VL tests. There is no funding gap projected for these HIV lab commodities which are currently purchased through, or moving toward being purchased through, reagent rental agreements with Hologic and Roche.

In COP19, HIV commodity gaps exist for RTKs, ARVs and other lab commodities. PEPFAR Zambia is working closely with the GFATM and the GRZ to close the commodity gap through the reprogramming and application of GFATM savings from FY 18 and FY 19 to ARV funding gap for COP19. For RTKs, PEPFAR Zambia is implementing a targeted testing approach which will ensure the committed funds in table 4.3.1 will provide the adequate number of tests needed to achieve testing targets. PEPFAR Zambia is working closely with the GRZ to ensure that these tests are sufficient for the national supply plan.

<b>Commodity Category</b>	<b>COP19 Funding Need</b>	<b>COP19 Funding Commitment</b>	<b>COP19 Funding Gap</b>
Rapid test kits	\$14,113,698	\$4,475,846	\$9,367,840
VL/EID	\$22,464,843	\$22,464,843	\$0.00
Condoms *	\$2,745,735	\$2,745,735	\$0.00
Cotrimoxazole	\$3,428,983	\$3,428,983	\$0.00
ARVs	\$108,401,836	\$94,112,086	\$14,289,750
INH	\$1,078,245	\$1,078,245	\$0.00
Rifapentine	\$1,458,053	\$1,458,053	\$0.00
Vit B6	\$389,691	\$389,691	\$0.00
Gene Xpert Cartridges	\$3,324,000	\$3,324,000	\$0.00
CrAg	\$72,888	\$72,888	\$0.00
Lipo-Arabinomannan Strips	\$28,426	\$28,426	\$0.00
Other HIV lab Commodities	\$14,396,5120	\$5,718,572	\$8,677,940

*Source 2018 National Lab Commodities Forecasting and Quantification Reports and the 2018 National ARV Forecasting and Quantification Report, COP19 proposed funding, and GFATM concept note with GRZ/MOH*

*\*Includes 469,000 units of personal lubricants (\$15,000).*

## **4.4 Collaboration, Integration and Monitoring**

### **4.4.1 Strengthening Cross Technical Collaboration and Implementation**

PEPFAR Zambia is committed to continued collaboration with GFATM and MOH on all technical aspects of program implementation including through external stakeholder engagement. These engagements have stimulated broad participation including representation from several host government ministries and departments, multilateral organizations, local and international non-governmental organizations, and CSOs. Close collaboration and engagement with the GRZ through Ministry of Defense was obtained 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 all these above mentioned core activities.

USAID and CDC are collaborating with Provincial and District MOH offices 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. In addition, PEPFAR Zambia technical staff will continue to 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 the site-level, and share best practices. DOD through the Ministry of Defense have put in place a forum for the Zambian Defence 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.

In COP19, 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

HIV (PEPFAR Coordination Office (PCO)) Cooperating Partners Groups. PEPFAR Zambia has placed a technical advisor within the MOF through Treasury's Office of Technical Assistance to strengthen Zambia's efforts to implement and manage a sustainable national response to HIV. The technical advisor provides assistance to strengthen 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.

#### **4.4.2 Strengthening IP Management and Monitoring**

All USG agencies have prioritized partner management for achieving results. All partners report data on key 95-95-95 indicators on a monthly basis 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. Annual targets will be broken down into weekly targets which CDC will review in collaboration with the GRZ district and provincial health offices. Focused site visits to underperforming sites by the site management team comprising of MOH and CDC staff will take place to quickly fix performance gaps as they are identified. Additionally, CDC will continue to hold 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 leadership and the IP leadership. PEPFAR Zambia will continue and 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 increases, for example, in the number of new HIV treatment initiates. 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 on a monthly basis to review activity performance and expenditure data. 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 joint collaboration meetings, regular review of the program results, enhanced monitoring of program implementation in the field, and DOD provided technical assistance to partner staff.

#### **4.4.3 Improving Integration of Key Health System Interventions**

PEPFAR Zambia priorities have directed the implementation of key health system interventions including supplementing the GRZ's HRH efforts and electronic health record management. In order to achieve the programmatic priorities outlined in sections 4.1 and 4.2, including case finding, linkage, retention on ART and viral load, PEPFAR Zambia recognizes that a robust clinical and community health work-force is essential, as is the need to optimize existing HRH. Currently, the

MOH is employing: 21,500 clinical staff, 1,329 community health assistants, 600 clinical staff, and 167 community health assistants.

The PEPFAR Zambia HRH strategy in COP19 aims to maintain salary support for 1,315 clinical staff and 12,000 CHWs (44 CHA, over 1,000 lay counselors, 330 treatment/adherence supporters, and 1,050 peer educators/mentors and nearly 9,000 community based workers with multiple roles including treatment support) as well as further reduce the gap of community health workers by providing salary support to the 480 Community Health Assistants CHA (out of 1,042 who are not on the government payroll). Community cadres will be 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 viral load testing return to the clinic for their tests. Additionally, these CHWs will be the cornerstone for implementation of the DSD models highlighted in section 4.5.4. The deployment of these additional community staff will be based on the geographical distribution of TX\_CURR target, with more community workers deployed to the highest burden provinces. PEPFAR Zambia will routinely incorporate HRH reviews (including site and individual performance reviews) into monthly site and partner-level management. This will allow PEPFAR Zambia to identify sites where increased HRH support or optimized HRH is necessary.

In anticipation of reaching epidemic control targets by 2020, PEPFAR Zambia is conducting modeling and analysis of workforce requirements for the maintenance of HIV services. The results of this exercise is 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 is continuing to dialogue with 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.

As PEPFAR Zambia transitions the sole management of the National HIV program to the GRZ, PEPFAR Zambia is investing in the MOH National HIV Clinical Mentoring program and Extension of Community Health Outcomes (ECHO). 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 make sure that frontline workers receive mentorship on key clinical issues on a regular basis and will ultimately improve quality clinical care at in health facilities.

Concurrently, PEPFAR Zambia will invest in the revision and roll-out of standardized incentives, training packages, and guidelines for non-CHA community health workers as well as harmonization of data collection tools for CHWs. PEPFAR Zambia is working to re-vamp the role of Neighborhood Health Committees, community-based support groups formed under the guidance of health personnel, to manage the performance of CHWs to maximize their performance and contribution to advancing the goal towards HIV epidemic control.

Additionally, PEPFAR Zambia will 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 will include the nation-wide scale up of case-based surveillance system; 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 support the roll out of the electronic health record (SmartCare) system to all Provinces. In COP19, PEPFAR Zambia will transition most of the high volume facilities to the EHR in point of care (eFirst) mode while increasing the number of facilities using the EHR. In consultation with MOH and CSOs, PEPFAR Zambia will implement fingerprint biometrics technology for unique patient identification and to link to the EHR in urban areas, which will 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 viral load suppression. In this regard, PEPFAR Zambia will support the roll out of an integrated system that links the laboratory information system and the electronic logistics management information system (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, 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. In COP19, PEPFAR will support the enhancement of the NDW functionality and visualization through the use of 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.

In COP19, PEPFAR Zambia will promote participation and coordination of all stakeholders in the national response in order to accelerate progress towards sustained epidemic control. COP19 will strengthen NAC's capacity to coordinate the national response and improve CSO engagement; build the capacity of community structures and CSOs to implement community level HIV activities including treatment literacy to improve facility-community linkages and linkages to treatment; and build capacity of Community Welfare Assistance Committees to enhance community level OVC case management and access to services for people living with disabilities.

#### **4.4.4 Improving Quality and Efficiencies of Service Delivery**

The Zambia Consolidated Guidelines for Treatment and Prevention of HIV Infection (2018) outlines Zambia's strategic approach for implementing DSD that focuses on patient centeredness and health system efficiency. The four primary approaches are: 1) Patients receive their ART refills in a group and either a professional or a lay health care worker manages this group; 2) Clients receive their ART refills in a group but this group is managed and run by clients themselves, e.g. Community Adherence Groups; 3) ART refills are provided to individuals outside of health care facilities (e.g., of health post dispensation, home delivery, and community based drug pick-ups); and 4) ART refill visits are separated from clinical consultations and patients can proceed directly to receive their medication so as to reduce their waiting time at facilities. In January 2019, the MOH issued a memorandum with guidance on the MMS/D of ARVs and directed that all stable clients be offered six month prescriptions. PEPFAR Zambia has started the implementation of the new guidance at the large ART sites. In COP19, PEPFAR Zambia's IPs will work with health facility staff to continue scaling up these DSD approaches, including MMS/D, in order 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.

PEPFAR Zambia's largest OVC programs are concentrated in Southern, Lusaka, Central, and Copperbelt provinces where the HIV burden is highest. In COP19, PEPFAR Zambia will continue to support the OVC minimum package. The minimum package includes the two domains of health and safe regardless of the outcomes of the vulnerability assessment. The inclusion of the two domains (schooled and stable) in the household level case plan is dependent on the results of the vulnerability assessment. Reducing risk of HIV infection among adolescents 10-14 years will be a key focus as this age group is particular vulnerability to physical and sexual abuse and HIV infection. Prevention of all forms of violence, imparting risk reduction skills, and help seeking behavior are key components of the minimum package. OVC programming will collaborate with treatment IPs to facilitate index case finding and referral of HIV infected children to ART and adherence support to those with unsuppressed viral loads. These measures will increase HIV treatment adherence, retention, and VL suppression in HIV positive OVC.

#### **4.4.5 Ensuring above Service Delivery Activities are Related to Reaching Epidemic Control**

PEPFAR Zambia reviewed MER indicator results, as well as Sustainability Index and Dashboard (SID 3.0) and SIMS/enhanced site visit findings, to determine above service delivery investments to achieve epidemic control by 2020. This analysis revealed three key programmatic gaps and 10 contributing key systems barriers:

- Low linkage and retention
  - Key Systems Barriers - Limited EMR for patient tracking; inadequate human resource; inadequate civil society engagement; insufficient capacity to promote key HIV prevention and treatment behaviors; inadequate financial management policy and procedures.
- Inadequate VL infrastructure and capacity
  - Key Systems Barriers - Lack of quality standards and accreditation in central labs; weak sample transport systems; low VL capacity.
- Sub-optimal supply chain management
  - Key Systems Barriers - Inadequate data for planning; inadequate supply chain management

In COP19, PEPFAR Zambia will spend \$35,869,432 on above service delivery interventions. The table below illustrates how PEPFAR Zambia has mapped above service delivery activities to key barriers and measurable outcomes related to reaching epidemic control.

**Table 4.4.1: Mapping Above-Service Delivery Activities to Key Barriers**

Key Programmatic Gap	Key Systems Barrier	COP19 Activity	Expected Outcome	Relevant Indicator or Measurement Tool	COP19 Baseline	COP19 Benchmark
Low Linkage and Retention	Inadequate HR	Technical support to two CHA training schools to improve quality of training	Increased number of appropriately trained CHW available to provide services at facility and community sites	HRH_PRE (Number of new health workers who graduated from a pre-service training institution or program as a result of PEPFAR-supported strengthening efforts, within the reporting period, by select cadre)	0	400 CHA graduate with PEPFAR support.
	Inadequate HR	Training & roll out of clinical guidelines using ECHO	Staff trained in HIV guidelines, availability of required guidelines and tools for service delivery	Number of Sites participating in ECHO	40 sites participating in ECHO	50 sites participating in ECHO
	Limited EMR for patient tracking	Maintenance and support of SmartCare EMR through 10 provincial hubs	Timely and accurate turnaround of data reporting at site level facilitates patient tracking	Percent of PEPFAR supported sites with functional EMR	50% of PEPFAR supported sites have functional EMR	100% of PEPFAR supported sites have functional EMR
	Inadequate CSO engagement	Media campaigns and engagement with CSOs to increase treatment literacy	Increased demand for VL tests, VL suppression and retention	Tx_PVLS (Percentage of ART patients with a suppressed VL result (<1000 copies/ml) documented in the medical or laboratory records/laboratory	Tx_PVLS 45%	Tx_PVLS 90%

Key Programmatic Gap	Key Systems Barrier	COP19 Activity	Expected Outcome	Relevant Indicator or Measurement Tool	COP19 Baseline	COP19 Benchmark
				information systems within the past 12 months)		
Inadequate VL Infrastructure and Capacity	Lack of quality standards and accreditation in central labs	Strengthening laboratory quality management	QMS implementation in labs; ISO Accreditation	Number of labs accredited	Total of 7 central labs with accreditation	Total of 11 central labs with accreditation
	Weak sample transport systems	Coordinate sample referral system improvement, results return (including digital results return) improvement and hub facility capacity building	Coordinated functional sample referral system	Number of hubs strengthened; Sample pickup rate and TAT	Provincial hub strengthened; ~0.5x / wk; ~1 month	Additional 55 hubs strengthened; 2x / wk; 14 d.
Sub-optimal Supply Chain Management	Inadequate supply chain management	Provide supplemental storage space, and infrastructure support to enhance warehousing and distribution capacity	Coordinated supply chain distribution system	Number of storage in a box units installed at selected facilities with inadequate storage space in priority districts	10 storage in a box units procured and installed	40 storage in a box units procured and installed
	Inadequate data for planning	Improve availability of adequate health commodities through use of information technology	Improved stock visibility and data for supply chain planning and management	Number of facilities with functional electronic supply chain management information system (eSCMIS)	eSCMIS rolled out to 600 facilities	eSCMIS rolled out to 1000 facilities
Other	Inadequate data for planning	Strengthening data platform through routine system upgrades, maintenance, data	Timely availability of good quality data for programmatic decision-making.	Proportion of supported districts/facilities reporting timely HMIS data	85% reporting on time	90% reporting on time

Key Programmatic Gap	Key Systems Barrier	COP19 Activity	Expected Outcome	Relevant Indicator or Measurement Tool	COP19 Baseline	COP19 Benchmark
		collection, routine cleaning of indicators within the DHIS2 platform, and linking HMIS data to vital statistics and population estimates in DHIS2		monthly (% Reporting on time)		
	Inadequate data for planning	Recency cluster rapid investigations	Timely availability of good quality data for programmatic decision-making	HTS_RECENT (Percentage of persons aged ≥15 years newly diagnosed with HIV-1 infection who have a test for recent infection result of 'recent infection' during the reporting period)	There is currently no data on recency apart from ZAMPHIA 2016 which was not powered for use below the provincial level	At least 35% of recent infection clusters will be investigated
	Inadequate financial management policy and procedures	Capacity building to address recommendations of Public Financial Management Risk Assessment Framework to support G2G funding in Copperbelt and Central Provinces	Increased transparency and accountability in the use of resources	Percentage of Provincial Risk Mitigation Plan Action items that IP is responsible for are addressed within the plan year	83%	90%

PEPFAR Zambia is implementing above service delivery interventions to address these programmatic gaps and systems barriers. Table 4.4.1 illustrates how PEPFAR Zambia has mapped individual activities to key barriers and measurable outcomes related to reaching epidemic control. Section 6.0 and Table 6 (Appendix C) contain more detailed description of above service delivery activities.

#### 4.5 Targets for scale-up locations and populations

Entry Streams for ART Enrollment	Tested for HIV (APR FY20) <i>HTS_TST</i>	Newly Identified Positive (APR FY20) <i>HTS_TST_POS</i>	Newly Initiated on ART (APR FY 20) <i>TX_NEW</i>
Total Men	201,141	9,178	8,822
Total Women	254,784	16,138	15,412
Total Children (<15)	68,472	2,835	2,825
Total from Index Testing	48,171	8,920	NA
<b>Adults</b>			
TB Patients	4,310	1,093	1,093
Pregnant Women	142,120	2,291	2,194
VMMC clients	115,551	122	121
Key populations	3,909	1,213	1,977
Priority Populations	NA	NA	NA
Other Testing	NA	NA	NA
Previously diagnosed and/or in care	NA	NA	NA
<b>Pediatrics (&lt;15)</b>			
HIV Exposed Infants	43,283	375	375
Other pediatric testing	NA	NA	NA
Previously diagnosed and/or in care	NA	NA	NA

Source Data Pack COP19

Target Age Group	Population Size Estimate	Current Coverage (date)	VMMC_CIRC (in FY20)	Expected Coverage (in FY20)
10-14	418,459	92%	99	9%
15-19	336,854	75%	22,934	57%
20-24	271,606	50%	34,172	59%
25-29	221,799	36%	36,897	57%
30-34	184,232	23%	3,048	8%
35-39	152,930	10%	4,031	8%
40-44	121,200	5%	2,756	6%
45-49	85,994	3%	3,458	7%
50+	236,517	2%	9,287	6%
<b>Total/Average</b>	<b>2,029,591/225,510</b>		<b>116,682/12,965</b>	<b>6%</b>

Source Data Pack COP19

Target Populations	Population Size Estimate (scale-up districts)	Coverage Goal (in FY20)	FY20 Target
FSW (KP_PREV)	7,461	15%	1,136
MSM (KP_PREV)	6,164	9%	557
PWID (KP_PREV)	2,433		
Prisons Population			269
TG (KP_PREV)	126	12%	15
<b>TOTAL</b>	<b>16,184</b>	<b>12%</b>	<b>1,977</b>

Source Data Pack COP19

District	Estimated # of OVC	Target # of active OVC (FY20 Target) OVC_SERV	Target # of active beneficiaries receiving support from PEPFAR OVC programs whose HIV status is known in program files (FY20 Target) OVC*
Military Zambia	-	12,743	12,743
Chibombo	26,001	14,678	14,678
Chilanga	-	1,568	1,568
Chingola	44,883	18,955	18,955
Chipata	45,015	10,830	10,830
Choma	21,612	11,392	11,392
Chongwe	20,595	6,040	6,040
Kabwe	25,242	33,803	33,803
Kafue	21,387	2,638	2,638
Kalabo	11,697	50	50
Kalulushi	14,183	839	839
Kapiri Mposhi	29,558	31,423	31,423
Kitwe	88,723	21,713	21,713
Livingstone	16,323	31,421	31,421
Luanshya	27,124	3,468	3,468
Lusaka Urban	130,497	44,349	44,349
Masaiti	12,806	1,312	1,312
Mazabuka	43,273	21,230	21,230
Mongu	28,034	4,190	4,190
Monze	27,714	5,363	5,363
Mufulira	28,806	4,508	4,508
Mumbwa	16,852	13,157	13,157
Namwala	7,262	5,804	5,804
Ndola	9,1037	32,777	32,777
Sesheke	9,341	2,276	2,276
Sinazongwe	7,303	6,528	6,528
Solwezi	22,504	5,641	5,641
<b>TOTAL</b>	<b>817,772</b>	<b>348,696</b>	<b>348,696</b>

Source Data Pack COP19

## 4.6 Cervical Cancer Program Plans

Cervical cancer remains the highest cause of all cancer deaths in Zambia. Every day an average of seven women are diagnosed with cervical cancer, and about four women die. More than half of all women with cervical cancer are also living with HIV. Since 2006, the MOH has collaborated with PEPFAR Zambia and other donors to implement cervical cancer screening services. To date, 297,887 Zambian women have been screened for cervical cancer, irrespective of HIV status, using Visual Inspection of the cervix with Acetic Acid (VIA). Currently, the cervical cancer program in the country offers visual inspection with acetic acid enhanced by digital cervicography, same-day cryotherapy or cold coagulation for eligible precancerous lesions, and referral for loop electrosurgical excision procedure (LEEP) or punch biopsy for women with lesions ineligible for cryotherapy or cold coagulation. Images from digital cervicography are transmitted to a central hub where experienced clinicians review and provide feedback. Approximately 70% of districts in Zambia offer 'screen & treat' services with at least one LEEP site in each province. Advanced cases of invasive cervical carcinoma are referred for further management at provincial hospitals or the Cancer Diseases Hospital in Lusaka. There are 66 PEPFAR Zambia supported static sites offering cervical cancer services and additional screening is also offered through mobile outreach services. In COP19, at least 85% of supported districts will have a minimum of one high volume static screening site, which will serve as a referral to all sites in the district or act as a base for outreach. In FY19 Q1, PEPFAR Zambia screened 10,858 women living with HIV (WLHIV) on ART using the VIA based 'screen and treat' strategy. Of those screened, 782 were VIA positive, or 7% of those screened, and 316 (40%) WLHIV were referred for LEEP.

The MOH has adopted the WHO recommendation to incorporate HPV DNA testing using GeneXpert into cervical cancer screening programs in low-middle-income countries. Implementation will begin in COP18 using the self-sampling technique.

In COP19, PEPFAR Zambia will strengthen screening services. PEPFAR Zambia will change the screening model from a village-based model or outreach model offered to all women regardless of status, to focus on screening HIV-infected women in ART clinics through static or mobile modalities. MOH supports this focus and has sent out a memo to all provinces providing guidance on provision of cervical cancer services. Referral systems and linkage services will be strengthened to ensure regular cervical cancer screening of WLHIV, by sensitizing staff and lay counsellors, and incorporating additional cervical cancer prompts/information on the ART client paper and electronic intake forms. PEPFAR Zambia IPs will work with sites to create an enabling environment that will effectively target WLHIV with screening services. Development of guidelines, SOPs, job aids and training materials will be prioritized.

In COP19, PEPFAR Zambia will address inadequate infrastructure, equipment, and commodities for provision of cervical cancer screening services through site rehabilitation. Also, cervical cancer screening will be integrated into ART clinics. Facilities will be supplied with the necessary equipment and supplies to effectively screen for cervical cancer. Furthermore, PEPFAR Zambia will build on the success of the VL sample referral network and integrate HPV samples referral into the network.

#### 4.7 Viral Load and Early Infant Diagnosis Optimization

In terms of platforms and laboratories, VL scale up will be complete prior to the start of COP19. No additional platforms will be placed or labs established in COP19. Viral load infrastructural scale up will be complete prior to FY20 Q1 and is expected to be stable. In COP19, the scale up will transition to process refinement, accreditation, and lab mapping re-assessment to ensure 100% VL coverage and availability of near POC VL for all PBFW and EID. PEPFAR Zambia will move deliberately toward 100% POC EID, primarily on the GeneXpert platform, with some gaps filled by Abbott/Alere Q (mPima). Studies by EGPAF and UNC in Zambia have shown that availability of POCT for EID increases coverage. Lab mapping of GeneXperts indicates that the vast majority of catchments served can perform all necessary Tb/RIF, EID, and VL tests for PBFW on a GeneXpert. Sample referral systems for TB, HIV, AMR, and routine diagnostics will be fully integrated under the direction of PHOs/DHOs. Management of the GeneXpert system will be harmonized under the authority of the MOH National Laboratory Coordinator and the National Tuberculosis Program. In the exceptionally rare cases where local GeneXpert capacity is insufficient to perform TB, EID, and VL in PBFW, the Abbott/Alere Q (mPima) system will be placed. Existing mPima platforms will be placed strategically under MOH direction, with a supply of cartridges already budgeted for in COP19.

Importantly, the VL/EID system is decentralized - geographically confined within provinces, or even zones within provinces. Districts or zones are mapped to VL testing facilities based on PLHIV numbers in light of the respective lab capacity. The given VL lab is served by a single coordinated sample referral system. This system will be enhanced throughout COP19 by adding resources, adjusting routes, or enhancing communication in areas where coverage is low. A variety of transportation methods will be explored. The VL testing facilities also control results return and additional tailored digital results return methods will be established in consultation with MOH, local leadership, and IPs. In COP18, USAID EQUIP has shown that digital results return shortened turnaround time by more than two weeks and improved sample referral shortened turnaround time in Western Province from over one month to 2-3 weeks. These process improvements are key to demand creation; coverage is improving in areas where sample referral and results return are being improved. The system will achieve 100% VL coverage in COP19, allowing the 3d 95 to represent fully accurate suppression rates. Nationally available POC EID testing will ensure 100% identification and allow for linkage of HIV positive infants.

PEPFAR Zambia will address suboptimal QA by providing coordinated QMS support and mentorship from a harmonized MOH QA coordination unit. In COP19, VL labs in Zambia will increase from 20 to 24. The additional labs are 2 PEPFAR funded labs in Lusaka and Copperbelt provinces and 2 GFATM labs. All labs are under the direction of MOH for QMS and QA, and overall, the system is well coordinated in terms of laboratory mapping. Zones are established based on PLHIV in the expectation of reaching 95-95-95 and central laboratory testing capacity is geographically or programmatically aligned with the expected ultimate peak demand for VL testing.

In COP19, the central lab system will be comprised of 11 CAP CTM 48s, 13 CAP CTM 96s, 8 COBAS 4800s, 2 COBAS 6800s, and 7 Hologic Panthers. Together these platforms are capable of testing 1.8 million VL and/or EID samples in a standard 240 day work year with standard 8 hour shifts. Lab mapping will continue in COP19 in order to ensure that as the CAP CTM system is phased out, central lab capacity will remain sufficient to test all VL samples that need to be tested.

The system of sample referral, testing, and results return within provinces or zones is overseen by an oversight group consisting of the technical staff of the lab, IP technical, and program staff in some cases, and, in some instances, PHO leadership. In COP18, many of the sample referral systems and results return challenges will be resolved. MOH has promulgated key indicators and targets specifically for sample referral and results return, i.e., route establishment, availability of sufficient resources, and a dispatcher system for sample referral such that all sites have access to sample pickup at least twice per week. MOH has established TAT minimum targets of 2 weeks for both VL and EID. All these systems improving in parallel will allow for 100% VL and EID coverage in COP19, and by the end of COP19, all VL and EID results will be reported by automated digital means directly to sites.

For COP19, all VL samples will continue to be plasma, and all but a subset of samples from PBFW will be tested on a high throughput platform. This is supportive of the U=U concept in its strictest sense, i.e., all but a minor proportion of VL results will be quantified at thresholds that can be clearly defined as being below the agreed upon threshold to be classified “undetectable.” DBS collection for EID may continue to be the norm, but many samples will be whole blood directly tested on a POC platform same day. DBS will continue to be used in many cases as samples will continue to need to be referred to a location equipped with a GeneXpert (“near POC”), though they will no longer need to be referred all the way to a central testing facility, thus radically reducing TATs.

## 5.0 Program Activities for Epidemic Control in Attained and Sustained Locations and Populations

### 5.1 COP19 Programmatic Priorities

There are no different program approaches or activities to meet COP19 priorities than those described in sections 4.1 thru 4.7.

### 5.2 Targets for attained and sustained locations and populations

Attained Support Volume by Group		Expected result APR 19	Expected result APR 20
HIV testing (all populations)	<i>HTS_TST</i>	1,471,972	737,130
HIV positives (all populations)	<i>HTS_TST_POS</i>	113,571	52,658
Treatment new	<i>TX_NEW</i>	59,844	50,596
Current on ART	<i>TX_CURR</i>	719, 884	739,808
OVC	<i>OVC_SERV</i>	277,746	274,335
KP	<i>KP_PREV</i>	21,365	22,939

Source Data Pack COP19

Sustained Support Volume by Group		Expected result APR 19	Expected result APR 20
HIV testing in PMTCT sites	<i>PMTCT_STAT</i>		8,996
HTS (only sustained ART sites in COP17)	<i>HTS_TST/HTS_TST_POS</i>	133,471/11,932	47,186/1.754
Current on ART	<i>TX_CURR</i>	8,120	9,238
OVC	<i>OVC_SERV</i>	NA	NA

Source Data Pack COP19

### 5.3 Establishing service packages to meet targets in attained and sustained districts

In COP19, the PEPFAR approach is premised on the value for money principle by ensuring that service packages to meet targets in attained and sustained districts prioritize high volume with high yields and low volume with high yields geographical locations rather delivering complete packages to all locations including those with low volumes and low yield.

COP19 will focus on rolling out intervention packages in attained and sustained districts (Table 5.3.1) proven to contribute greatest towards epidemic control. Specifically, COP19 will discontinue universal testing in all facility based service points, community and OVC platforms. Instead, PEPFAR will prioritize testing clients who are at high risk of HIV infection identified by using a screening tool and HIV suggestive symptoms. Further, COP19 will focus on index testing of all eligible clients with the target of achieving the targeted 50% yield from index testing. PEPFAR will also continue to prioritize optimization of PICT as it has shown to produce high yield in health facility platforms, but will continue to build the capacity of clinical staff to effectively use the GRZ testing algorithm and screening tools to ensure that testing continues to be effective and efficient.

The linkage of PLHIV to treatment, retention on treatment, and PMTCT service packages are the same in both attained and sustained districts as these interventions are critical to the quality of services in all sites regardless of district prioritization.

<b>Table 5.3.1 Service Delivery Packages for Attained and Sustained Districts</b>	
<b>Geographic location</b>	<b>Service Package</b>
<b>Attained</b>	<b>Index testing</b> <ul style="list-style-type: none"> <li>○ Assisted partner notification and testing of all sexual networks of index clients</li> <li>○ Targeted testing of biological children of index clients</li> <li>○ Testing other household members only after screening for HIV test eligibility using HIV screening tool</li> </ul>
	<b>HIVST</b> <ul style="list-style-type: none"> <li>○ HIVST for partners of pregnant and lactating mothers</li> <li>○ HIVST for KP</li> <li>○ HIVST for AGYW</li> </ul>
	<b>PICT</b> <ul style="list-style-type: none"> <li>○ Prioritize high yielding service delivery points e. g malnutrition, TB clinics</li> <li>○ Use of HIV eligibility screening tool in OPD</li> </ul>
	<b>Localizing the epidemic</b> <ul style="list-style-type: none"> <li>○ Micro-targeting for community testing to reach men, AGYW and their partners, men and KP</li> <li>○ Geo mapping of hotspots based on results of recency testing</li> <li>○ Collaboration with FBOs to reach more who are likely to be infected with HIV</li> <li>○ Networking with group leaders and peers</li> <li>○ Collaboration between communities and facilities to stimulate demand and improve access to HTS services as well as facilitate linkage</li> </ul>
	<b>Appropriate service structuring</b> <ul style="list-style-type: none"> <li>○ Integration of HTS with well child clinics</li> <li>○ Adolescent friendly services</li> <li>○ HTS for GBV survivors and OVC</li> <li>○ KP friendly services</li> </ul>
	<b>Data analysis and use for service improvement</b> <ul style="list-style-type: none"> <li>○ Daily reporting by service providers to IPs on case identification and linkage by age and gender</li> <li>○ Weekly reporting by IP to PEPFAR on case identification and linkage by age and gender</li> <li>○ Weekly of data with IPs</li> <li>○ Use of CQI to immediately address gaps in achieving targets in case identification and linkage</li> </ul>
<b>Sustained</b>	<b>Index testing</b> <ul style="list-style-type: none"> <li>○ Assisted partner notification and testing of all sexual networks of index clients</li> <li>○ Targeted testing of biological children of index clients</li> </ul>
	<b>PICT</b> <ul style="list-style-type: none"> <li>○ Prioritize high yielding service delivery points e.g. malnutrition and TB clinics</li> <li>○ Use of HIV eligibility screening tool in OPD</li> </ul>
	<b>HIVST</b> <ul style="list-style-type: none"> <li>○ HIV self-testing for partners of pregnant and lactating mothers</li> <li>○ HIVST for KP</li> </ul>
	<b>Data analysis and use for service improvement</b> <ul style="list-style-type: none"> <li>○ Daily reporting by service providers to IPs on case identification and linkage by age and gender</li> <li>○ Weekly reporting by IP to PEPFAR on case identification and linkage by age and gender</li> <li>○ Weekly of data with IPs</li> <li>○ Use of CQI to immediately address gaps in achieving targets in case identification and linkage</li> </ul>

## 6.0 Program Support Necessary to Achieve Sustained Epidemic Control

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Analyses of the SID 3.0 findings, along with MER results and SIMS visit reports and other sources, identified three critical programmatic gaps that must be addressed in order to achieve epidemic control by 2020. These critical programmatic gaps are inadequate community systems to improve linkage and retention; inadequate supply chain capacity and infrastructure; and limited VL capacity and infrastructure. Other gaps identified during the analyses were limited EMR for patient tracking especially in the context where the issue of silent transfers are significant and lack of adequate laboratory quality standards.

Inadequate human and infrastructure capacity to commence and retain patients on treatment results in sub-optimal quality of care and congestion of health facilities. In particular, there are inadequate numbers of CHWs needed to achieve optimal linkage and retention. Table 6 activities to resolve this gap include continued implementation of the Test and Start and alternative service delivery models including community based ART models, technical assistance for implementation of electronic health records at high volume sites, support for development of CHW standards for incentive packages and training, activities targeted at improvement of on-time delivery of supplies at all facilities. These activities will focus on high burden geographic areas and/or populations, including KPs for epidemic control.

Inadequate commodity assurance are due to break downs planning and in distribution along the continuum of care. HTC, EID and VMMC commodities are particularly vulnerable. Table 6 activities that will address are activities to improve facility level stock availability by strengthening commodity forecasting and quantification capacity and electronic logistic management information systems.

A critical programmatic gap is routine VL testing which is constrained by suboptimal demand creation. Compounding the problem is that while tests are being performed there is lag time between testing and results ending up in patient files. Table 6 activities to solve this problem include expansion of VL activities by increasing the number and capacity of VL platforms, point of care for EID, laboratory information systems, effective courier systems and electronic results transmission to ensure timely return of VL results in patient files for effective patient management. Other activities included in Table 6 are treatment and viral load literacy in collaboration with MOH and CSOs and activities to build the capacity of CBOs and structures to deliver HIV services and strengthen community-facility linkages.

During COP19 implementation, PEPFAR Zambia will also conduct SREs including:

### Surveys/Surveillance:

- CADRE: Conduct lab based acquired drug resistance surveillance
- Case-based surveillance
- Mortuary based mortality surveillance
- HIV Recency and STIs in ANC
- Surveillance and Behavioral Epidemiology Risk Survey (SABERS) - a military specific study to understand the HIV prevalence and networks in the Zambia Defence Force
- Key populations size estimation survey

## Research

- Applying social network analysis to routine index testing in Zambia
- Measuring the effect of fingerprint biometrics in reducing silent transfers and lab-based acquired drug resistance surveillance.
- TLD Pharmacovigilance

## Evaluation

- Faith matters evaluation

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 by which PEPFAR Zambia adjusts the program to accelerate towards the goal of HIV epidemic control.

PEPFAR Zambia will continue to work closely with and leverage resources of key stakeholders, including the GFATM, the GRZ, and CSO. PEPFAR Zambia has set measurable annual benchmarks and outcomes for each Table 6 investment that will be used to monitor implementation and ensure achievement of results. UNAIDS report<sup>4</sup> estimates 48,000 new HIV infections and 16,000 AIDS-related deaths in 2017. This indicates that gaps remain in timely identification and initiation of people living with HIV on ART and maintaining them on life saving ARVs. The ultimate goal of the PEPFAR Zambia systems investments is to address systems barriers to the timely identification and initiation of clients on ART clients 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.

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<sup>4</sup> UNAIDS 2018 Global Update

# APPENDIX A -- PRIORITIZATION

## Continuous Nature of District Prioritization to Reach Epidemic Control

**Table A.1. Attained 90-90-90 by Each Age and Sex**



Attained 90-90-90  
by Each Age and Sex

Table A.2 ART Targets by Prioritization for Epidemic Control						
Prioritization Area	Total PLHIV	Expected current on ART (APR FY19)	Additional patients required for 80% ART coverage	Target current on ART (APR FY20) TX_CURR	Newly initiated (APR FY20) TX_NEW	ART Coverage (APR 20)
Attained	784,923	730,944	NA	739,808	50,596	93%
Scale-Up Saturation	325,929	287,751	NA	293,655	22,526	22,526
Scale-Up Aggressive	28,939	25,848	NA	26,108	1,708	89%
Sustained	27,848	8,120	14,158	9,238	1,673	29%
Central Support	56,378	NA	NA	NA	NA	NA
Commodities (if not included in previous categories)	NA	NA	NA	NA	NA	NA
<b>Total</b>	<b>1,224,017</b>	<b>1,052,679</b>	<b>NA</b>	<b>1,068,809</b>	<b>76,503</b>	<b>86%</b>

Source Data Pack COP19

# APPENDIX B – Budget Profile and Resource Projections

## B1. COP19 Planned Spending

**Table B.1.1 COP19 Budget by Program Area**

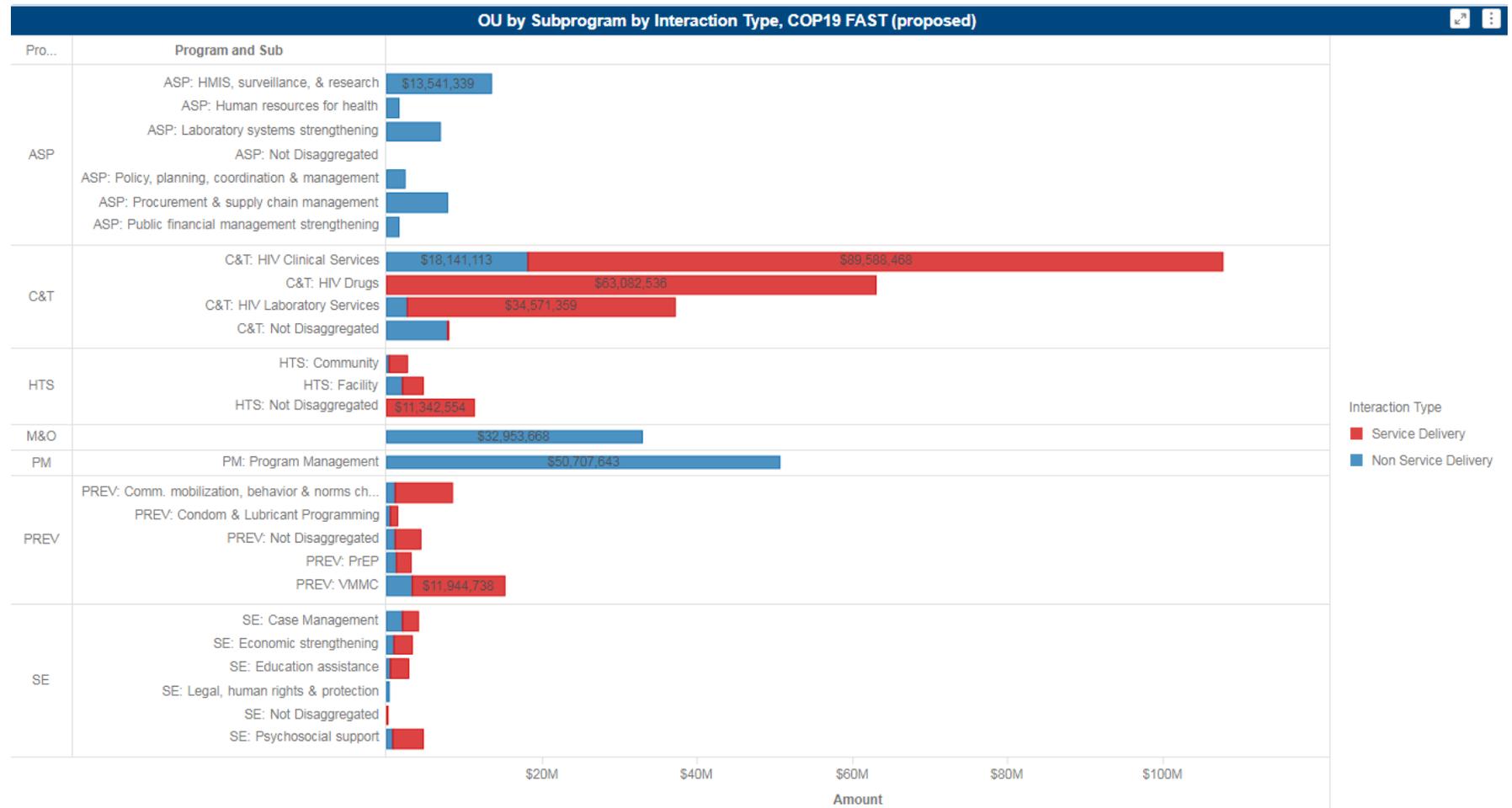


Table B.1.2 COP19 Total Planning Level		
Applied Pipeline	New Funding	Total Spend
\$70,496,199	\$329,503,801	\$400,000,000

Source COP19 FAST

Table B.1.3 Resource Allocation by PEPFAR Budget Code (new funds only)		
PEPFAR Budget Code	Budget Code Description	Amount Allocated
MTCT	Mother to Child Transmission	\$10,222,395
HVAB/Y	Abstinence/Be Faithful Prevention/Youth	\$5,280,625
HVOP	Other Sexual Prevention	\$4,698,355
IDUP	Injecting and Non-Injecting Drug Use	-
HMBL	Blood Safety	-
HMIN	Injection Safety	-
CIRC	Male Circumcision	\$19,904,001
HVCT	Counseling and Testing	\$10,845,244
HBHC	Adult Care and Support	\$18,769,185
PDCS	Pediatric Care and Support	\$10,059,340
HKID	Orphans and Vulnerable Children	\$20,126,445
HTXS	Adult Treatment	\$94,807,451
HTXD	ARV Drugs	\$64,325,884
PDTX	Pediatric Treatment	\$12,948,299
HVTB	TB/HIV Care	\$13,179,349
HLAB	Lab	\$8,689,930
HVSI	Strategic Information	\$12,566,566
OHSS	Health Systems Strengthening	\$5,237,703
HVMS	Management and Operations	\$17,843,029
<b>TOTAL</b>		<b>\$329,503,801</b>

Source COP19 FAST

## B.2 Resource Projections

Resource projections were based on an incremental budgeting methodology consistent with S/GAC guidance and the FAST process. The base for budgeting was the COP18 budget as shown in the FAST tool. Incremental budget adjustments reflected in the COP19 budget were made at the IM level based on past performance against targets and outlays; COP17 results; projected targets and outlays for COP19; 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 (formerly TBDs) prior to budget setting and for continuing IMs - changing the implementation strategy where warranted

for example, in the cervical cancer program where achievements to date demonstrated that the current approach needed to be changed.

Throughout the resource allocation process, PEPFAR Zambia engaged in thoughtful and deliberate discussions to determine the most efficient and effective use of the COP19 budget to ensure that it was leading towards epidemic control. Following a technical priority-setting process which involved getting stakeholder feedback, TWGs (prevention, community services, clinical services, health systems strengthening, and strategic information) worked together to set targets in a coordinated and multidisciplinary fashion ensuring that there was strong coordination between program areas. The TWGs triangulated program performance data and fiscal performance data from prior APRs' and COP18 Q1. 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 and KP size estimations conducted in close collaboration with the GRZ through national TWGs as well as through working closely with CSOs.

## APPENDIX C– Minimum Program Requirements

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This should be addressed in narrative in the sections above however in this section succinctly note if the program is meeting or not meeting the minimum program requirement.

The minimum requirements for continued PEPFAR support include:

1. Adoption and implementation of Test and Start with demonstrable access across all age, sex, and risk groups (required in COP16). **Met**
2. Adoption and implementation of differentiated service delivery models, including six-month multi-month scripting (MMS) and delivery models to improve identification and ARV coverage of men and adolescents (required in COP16). **Met**
3. Completion of TLD transition, including consideration for women of childbearing potential and adolescents, and removal of Nevirapine-based regimens (required in COP18). **In progress**
4. Scale up of index testing and self-testing, and enhanced pediatric and adolescent case finding, ensuring consent procedures and confidentiality are protected and monitoring of intimate partner violence (IPV) is established (required in COP18). **Met**
5. TB preventive treatment (TPT) for all PLHIV must be scaled-up as an integral and routine part of the HIV clinical care package (required in COP18). **Met**
6. Direct and immediate (>95%) linkage of clients from testing to treatment across age, sex, and risk groups. **Met**
7. Elimination of all formal and informal user fees in the public sector for access to all direct HIV services and related services, such as ANC, TB, and routine clinical services, affecting access to HIV testing and treatment and prevention (required in COP17 and COP18). **N/A**
8. Completion of VL/EID optimization activities and ongoing monitoring to ensure reductions in morbidity and mortality across age, sex, and risk groups, including >80% access to annual viral load testing and reporting. **Met**
9. Monitoring and reporting of morbidity and mortality outcomes including infectious and non-infectious morbidity (required in COP18). **Met**
10. Alignment of OVC packages of services and enrollment to provide comprehensive prevention and treatment services to OVC ages 0-17, with particular focus on adolescent girls in high HIV-burden areas, 9-14 year-old girls and boys in regard to primary prevention of sexual violence and HIV, and children and adolescents living with HIV who require socioeconomic support, including integrated case management (required in COP17 and COP18). **Met**

11. Evidence of resource commitments by host governments with year after year increases (required in COP14). **Met**
12. Clear evidence of agency progress toward local, indigenous partner prime funding (required in COP18). **Met**
13. Scale up of unique identifiers for patients across all sites. **In progress**