MOZAMBIQUE

Country Operational Plan 2018

Strategic Direction Summary

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1. 0 Goal Statement

Since 2004, the President's Emergency Plan for AIDS Relief (PEPFAR) has supported the Government of the Republic of Mozambique to combat HIV/AIDS and achieve an AIDS-free generation. Mozambique will not reach epidemic control by 2020, its original target date due to insufficient progress on linkage to care and retention. PEPFAR has, therefore, revised its strategy to work to support the expansion of Mozambique's National HIV/AIDS Strategic Plan (*Plano Estratégico Nacional* de *Resposta ao HIV e SIDA-PEN IV*) to achieve epidemic control as early as possible but no later than 2022 through evidence-based policies and interventions that will save lives and prevent new infections.

Mozambique continues to make progress towards epidemic control. The country recently exceeded the one million mark for the number of people with HIV (PLHIV) currently enrolled in treatment. Yet of the nearly 450,000 new enrollments in 2017, approximately 200,000 were not retained in treatment programs and, with 130,000 new infections per year, accelerated progress will, therefore be needed, in order for Mozambique to reach epidemic control by 2022, particularly in light of the impending youth bulge. PEPFAR is making urgent and immediate changes to address the 200,000 not retained and will accelerate support to reduce new infections along with the Global Fund, the UN agencies and other bilateral programs to expand government initiatives.

PEPFAR plans to support Mozambique to improve national antiretroviral treatment (ART) coverage from 58 percent (expected in FY 2018) to 72 percent in FY 2019. To do so, PEPFAR will bring to scale index case testing, provider-initiated counseling and testing (PICT), antenatal clinic (ANC) partner testing, self-testing, and key populations (KP) testing, with same day ART initiation and stronger tracking to ensure linkage. To improve coverage and retain men on treatment, PEPFAR will support the National HIV/AIDS Control Program's Family Health approach which promotes family engagement along with three month drug distribution and the distribution of ART in the community. A key strategy to achieve epidemic control among adult men is optimized male testing through index case, ANC partner, PICT, self-testing, and male congregate setting HIV testing and counseling (HTC) with same day antiretroviral therapy (ART) initiation and tracking to ensure linkage and implementation of the national male engagement strategy.

For linkage and retention, PEPFAR will support the National HIV/AIDS Control Program's 'Five Pillars' which are: (1) differentiated service delivery, (2) quality improvement, (3) psychosocial support services to adults and children, (4) outreach to reduce stigma and address cultural norms, and (5) community outreach. PEPFAR will employ a 'no tolerance' stance to underperforming partners who do not reach linkage and retention targets. To minimize barriers to HIV service utilization, PEPFAR will increase human resources for health (HRH), and financial and technical assistance to service providers, the supply chain, and the health information and the laboratory system. The target for PLHIV on treatment by end of FY 2019 is 1,580,000.

For adolescent girls and young women (AGYW), PEPFAR will increase ART coverage within Determined, Resilient, Empowered, AIDS-Free, Mentored, and Safe (DREAMS) districts through a scale-up of youth-friendly services, expansion of peer support groups, providing support for partner disclosure among discordant couples, and incorporating community ART distribution into existing mobile service delivery teams (mobile brigades).

For women, PEPFAR will increase case finding and retention among partners of women through improving health literacy, psychosocial services and the use of tracking tools to ensure linkage into care. For retention among adult women, PEPFAR will support expansion of mentor mothers, increase the number of preventive home visits for high-risk potential defaulters, and promote savings groups, adherence support groups (GAACs), community ART distribution, and the "Family Health" approach which is a holistic health package designed to attract and male partners to and retain male partners in HIV services.

For KPs, prevention activities will focus on promoting and expanding access to pre-exposure prophylaxis (PrEP) through peer mobilizers, social media e-platforms and mobile brigades that bring bundled health services to communities where services are unavailable or are not accessed due to stigma or concerns related to trust or loss of confidentiality. Training and mentoring of providers will complement strategically placed peer navigators to improve the quality of clinical service provision for KPs in health facilities and mobile brigades. For retention among KPs, PEPFAR will utilize linkage and tracking logs into care, one-on-one follow-ups and analysis of risk groups as part of treatment failure reviews.

In addition, to achieve efficiencies, PEPFAR has realigned clinical implementing partners (IPs) in four provinces: Zambezia, Nampula, Inhambane, and Maputo. In addition, PEPFAR has consolidated IP prevention outreach and programing to KPs, voluntary medical male circumcision (VMMC) programming and commodity procurement. PEPFAR will also directly support HIV service delivery through expanded government-to-government programming (G2G).

Finally, through revitalized stakeholder engagement and continued strong oversight of IP performance through real-time data analysis and use, PEPFAR will provide routine feedback to IPs to improve program performance and achieve the goals stated herein.

In order to achieve ambitious COP18 goals, changes must begin immediately in FY18. Clear transition plans for partner shifts have already been drafted so that partners will begin moving into position in late FY18 to begin FY19 without loss of momentum. Core aspects of the FY19 retention strategy such as DSD scale up and increased emphasis on psychosocial support begin immediately in FY18.

2.0 Epidemic, Response, and Program Context

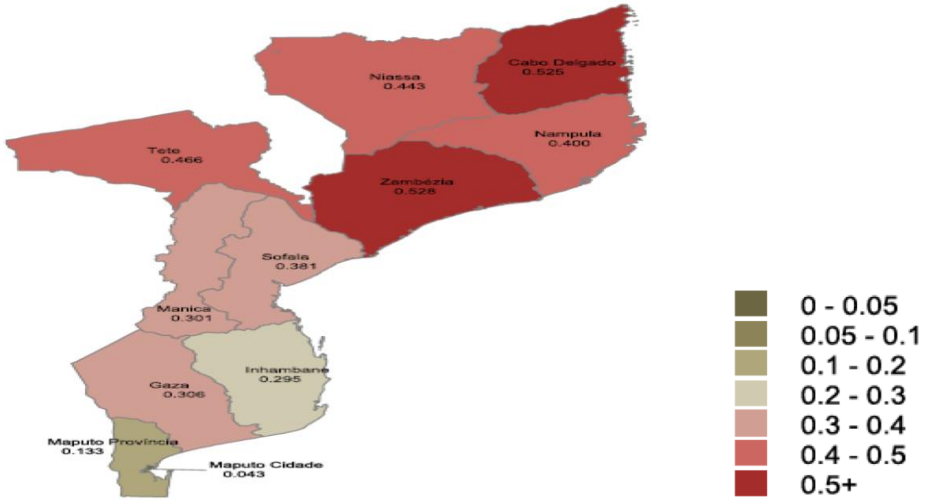
2.1 Summary statistics, disease burden and country profile[1]

Mozambique is a country of approximately 29 million people challenged by a generalized HIV epidemic. A national survey in 2015 estimated HIV prevalence at 13.2 percent, with substantial variation in provincial prevalence that ranged from 5.2 percent in Tete Province to 24.4 percent in Gaza Province (2015, IMASIDA). There were an estimated 2.16 million PLHIV (2018, Spectrum), with a higher prevalence among women, 15.1 percent versus 10.2 percent among men. Prevalence among adolescent girls 15-19 is estimated at 6.5 percent and among young women 20-24 is estimated at 13.3 percent, compared to 1.5 percent and 5.3 percent among adolescent boys and young men, respectively. As of 2017, 995,000 or 46 percent of PLHIV were estimated to be on ART. The HIV epidemic has reduced life expectancy in Mozambique to 55 years, and has resulted in an estimated 916,000 children orphaned by AIDS (Table2.1.1).

Despite encouraging economic growth in 2015 of 6.6 percent, Mozambique's economy suffered a major blow following the report of nearly $2 billion in government-backed hidden debt. This report contributed to rapid inflation and a reduced GDP falling from $16.9B in 2014 to $11.0B in 2016.[2] In 2015, the Human Development Index ranked Mozambique 180 out of 187 countries.[3] The World Bank estimated 60 percent of Mozambicans in 2014 lived on less than $1.25/day with the gross national income (GNI) falling from $620 in 2014 to $480 in 2016 per capita.[4] Seventy percent of Mozambicans are estimated to be poor and 37 percent destitute with substantial variation by region and province (see Figure 2.1.1).[5]

[1] Indicadores de Immunização, Malãria e HIV/SIDA em Moçambique – IMASIDA, 2015.
[2] World Bank, https://data.worldbank.org/country/mozambique.
[3] Human Development Report, 2015, UNDP.
[4] World Bank, 2014-2016 https://data.worldbank.org/country/mozambique.
[5] Oxford Poverty and Human Development Initiative (2016). "Mozambique Country Briefing", Multidimensional Poverty Index Data Bank. OPHI, University of Oxford. Available at: www.ophi.org.uk/multidimensional-poverty-index/mpi-country-briefings/.

Figure 2.1.1: Global Multidimensional Poverty Index* in Mozambique by Province



The MPI, developed by UNDP, is calculated by combining the incidence of poverty multiplied by the average intensity of poverty. Intensity of poverty is assessed across three dimensions: health, education and living standards.

However, several key health indicators show improvement. ANC coverage, defined as at least one ANC clinic visit, increased to 93 percent with 70 percent of women delivering in a health facility.[6] Under-five child mortality was 90/1,000 live births, declining from 103/1,000 live births in 2010.[7] Malaria, acute respiratory infections, and vaccine-preventable diseases are the main causes of child mortality, with malaria contributing to one-third of deaths. Forty-three percent of children-under-the-age of five years are stunted.

The Gender Inequality Index synthesizes gender-based inequalities in three dimensions—reproductive health, empowerment, and economic activity—on which Mozambique ranks 135 of 155 countries. Mozambique has high rates of early marriage, 60 percent of women age 25-49 were married before age 20, and 40 percent of Mozambican women become pregnant before the age of 20. The adolescent pregnancy rate is 137.8 births per 1,000 live births and the risk of death among pregnant teenagers is four times higher than for women above the age of 20. Only 1.5 percent of adult women have reached at least a secondary-level of education compared to six percent of men.[8]

Population-level data from 2009 estimated 9.6 percent of all cohabiting heterosexual couples were serodiscordant and 61 percent of PLHIV did not know their HIV status. Among women age 15-49 who had sexual intercourse in the last 12 months, 13 percent reported using a condom during last intercourse (25 percent urban, 6.5 percent rural). The proportion increased to 16 percent among

[6] IMASIDA, 2015.
[7] Mozambique DHS, 2011 & UNICEF, 2012.
[8] Human Development Report 2014, UNDP.

similar aged men (33 percent urban, seven percent rural). Male circumcision is reported at 63 percent, with geographic variations ranging from nine percent in Tete Province to 95 percent in Niassa Province.

Mozambique is facing another challenge due to the youth bulge. As of 2018, it is estimated that 13.8 million or approximately 46% of the country's population will be less than 15 years of age (6,917,547 males / 6,851,897 females). As these youth become sexually active, without comprehensive measures taken now that reduce the pool of HIV positive persons who do not know their status and who are not on ART and virally suppressed the opportunity to achieve epidemic control by 2020 will be lost. PEPFAR and GRM are acutely aware of this emerging challenge and are taking all actions with a sense of urgency.

A Modes of Transmission Model conducted in 2013 shows that 29 percent of new infections were among sex workers, their clients, and men who have sex with men (MSM), and 26 percent of new infections occur among people in stable sexual relationships, due in large part to high rates of serodiscordance and low rates of condom use among couples. People in multiple concurrent partnerships contributed to 23 percent of new adult infections. Mobile and migrant workers such as miners, agricultural workers, prison populations, the military, and truck drivers also constitute priority populations.[9]

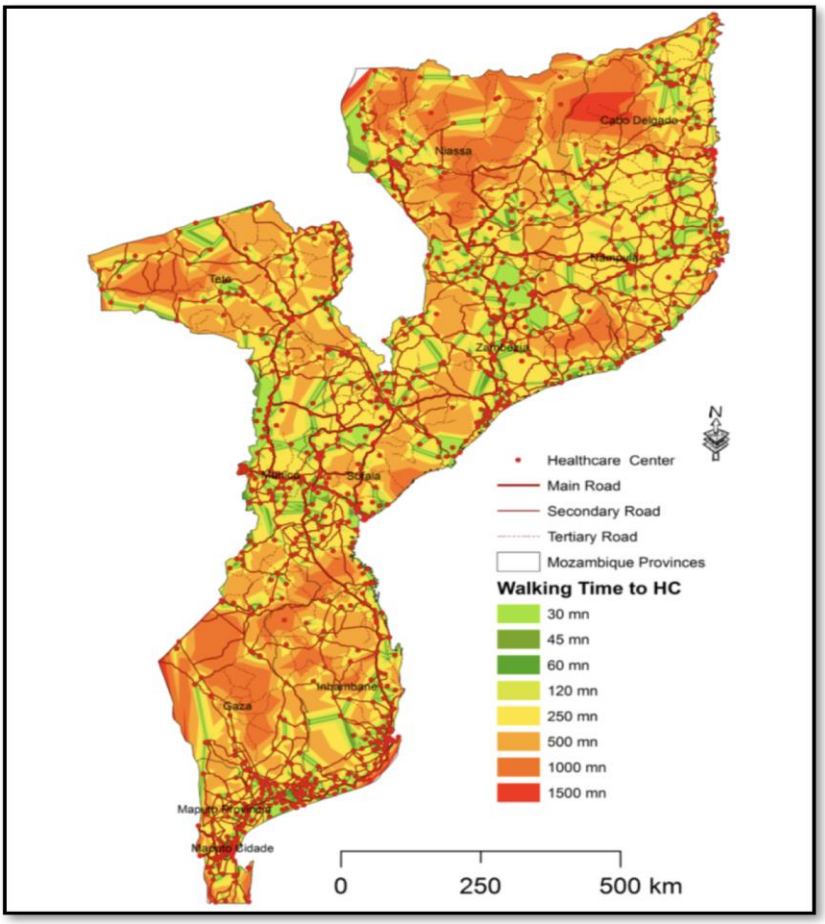
Mozambique is challenged by a low national rate of retention in care and adherence to ART. The 12 month retention among PLHIV newly initiating ART was 70 percent in 2017. Rates are even lower in pregnant women, children under 15, and adolescents 15-19 (67 percent, 68 percent, and 62 percent, respectively). Mozambique is aggressively implementing counter measures and testing innovations at the facility and community level to retain and track PLHIV on treatment (a detailed is plan is included in Appendix D).

The health system contends with substantial challenges that include stagnant domestic resource mobilization, insufficient infrastructure, and a critical shortage of human resources. In 2014, a study estimated that 90 percent of Mozambicans live in a primary health care area defined as over a one hour walk from a primary health care center (Figure 2.1.2).[10] Overall, the ratio of population per hospital bed is one bed per 1,038 persons, with substantial variation across the country.[11] HRH are severely constrained with 7.8 doctors, 26.8 nurses, and a total of 100.2 health care workers (HCW) per 100,000 people.[12] Together with uneven geographic distribution and limited supervision, there are an inadequate number of trained HCW in all cadres.

[9] Military – Seroprevalence and Behavioral Epidemiology Risk Survey in the Armed Forces of Mozambique 2010.
[10] Luis & Cabral, Geographic accessibility to primary healthcare centers in Mozambique, 2016.
[11] MOH – DRH. Relatório Anual dos Recursos Humanos. Maputo, Abril 2014.
[12] MOH/MISAU, 2016. WHO (2006) estimates 230 medical professionals per 100,000 people as a minimum threshold necessary to provide essential health interventions.

The Government of Mozambique is responsible for the bulk of HIV/AIDS-related service delivery along with the development, implementation and oversight of policies and regulations. Information systems and monitoring and evaluation (M&E) efforts are heavily supported by external funding and are challenged by fragmented components and system patches that do not regularly provide timely and accurate health data. Supply chain and commodities management is an area where PEPFAR provides substantial technical assistance (TA) to keep pace with growing ART and commodity needs. The laboratory network to support HIV care and treatment (C&T) also requires significant investment to expand diagnostic capacity; at present only 400 of 1,438 health units have laboratories (see Appendix E for more detail).

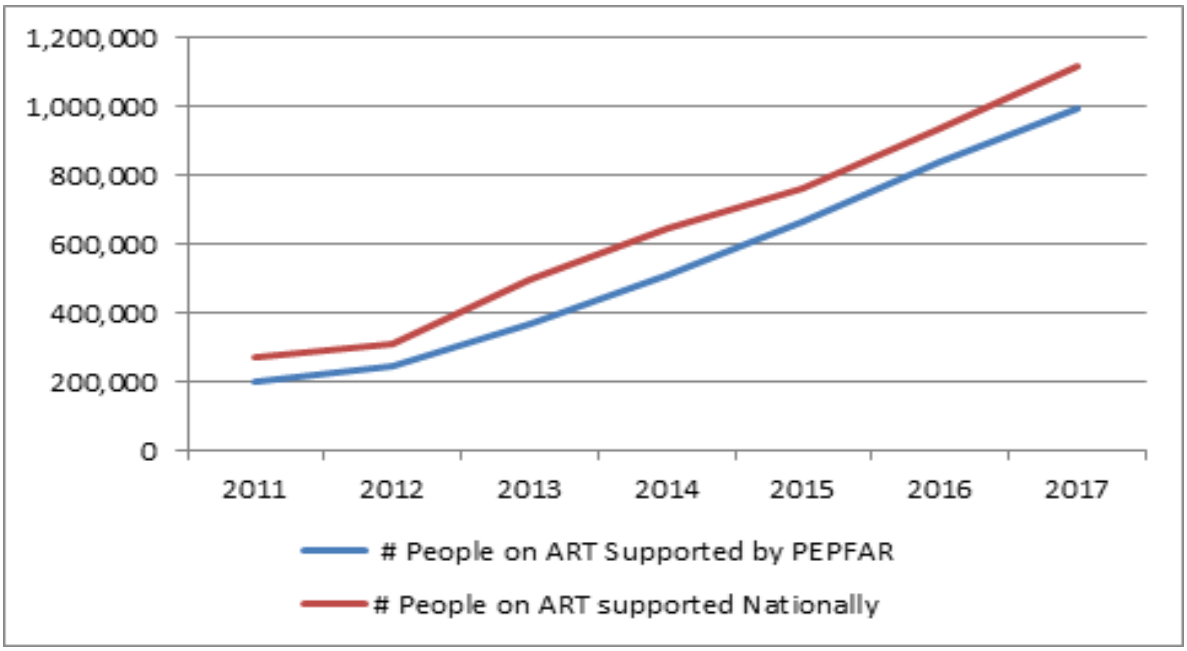
Figure 2.1.2: Walking Time (in minutes) to Primary Healthcare Centers in Mozambique (Luis & Cabral, 2016)



Despite these challenges, there has been remarkable progress. Since 2011, the number of people on ART has increased threefold, with dramatic increases following the launch of the Ministry of Health's (MISAU) national *HIV and AIDS Response – Strategic Acceleration Plan for Mozambique 2013-2017* and the introduction of Test and Start in 2016. The number of health facilities offering ART increased from 255 in 2011 to 1,149 by the end of 2017. In 2017 alone, 317,181 adults were newly

initiated on ART. Based on data from MISAU and PEPFAR, approximately 995,000 adults were estimated to be on ART at the end of 2017.[13]

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



Mozambique continues to show strong performance in the implementation of Option B+ for pregnant women attending ANC clinics. ART coverage increased from 12 percent of all HIV-infected pregnant women in 2012 to 93 percent in 2016. Progress among children has been slower. The total number of children on treatment was 62,396 at the end of 2016.

In February 2016, MISAU announced its decision to adopt the UNAIDS 90-90-90 goals and the revised WHO guidelines released in September 2015. Mozambique began a phased rollout of Test and Start in August 2016, and has committed to providing antiretrovirals (ARVs) to all PLHIV in all districts in Mozambique by August 2018.

By December of 2017, Test and Start was available in 73 districts comprising 72 percent of all people living with HIV/AIDS in Mozambique and including all PEPFAR-focus districts. Test and Start will be implemented in all remaining districts by the end of August 2018. To support the new Test and Start treatment goals, Mozambique will continue to provide three month supply of ARVs for stable patients along with increased access to viral load monitoring, and reduced frequency for clinical check-ups in an effort to decongest health facilities and accommodate the increased number of patients starting ART. In FY18, a 3-month drug distribution short term

[13] Mozambique APR17 POART.

evaluation is being conducted to assess next steps on multi-month scripting to inform national scale up plans. On-going advocacy and a focus on ensuring site preparedness and system readiness are key components of PEPFAR's strategy to accelerate introduction of this core intervention. Development of an electronic pharmacy-based platform as part of the Open MRS system is an additional priority that will further reduce the burden of paper-based tracking for patients, allowing for routine flow of data regarding ARV pick up. Primary development of the pharmacy module will be complete in Q2, with roll-out expected in Q3.

The National HIV Strategic Plan is now being implemented based on the revised national HIV treatment policies for the period 2017-2019.

Table 2.1.1: Host Country Government Results															
	Total		**<15**				**15-24**				**25+**				***Source, Year***
			Female		**Male**		**Female**		**Male**		**Female**		**Male**		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Total Population	28,861,863		6,482,747	22.5%	6,308,861	21.9%	2,969,337	10.3%	2,789,286	9.7%	5,608,922	19.4%	4,702,710	16.3%	Preliminary 2017 Census Data
HIV Prevalence (%)		13.2%*						9.8%		3.2%		18.3%		14.6%	IMASIDA 2015, brochure and data file
HIV Prevalence (%)		11.5%*		1.4%		1.6%									INSIDA 2009
AIDS Deaths (per year)	67,774		4,850		5,015		2,061		1,808		26,104		27,936		2018, Spectrum
# PLHIV	2,160,076		83,722		85,043		158,266		86,830		1,068,853		677,362		2018, Spectrum
Incidence Rate (Yr.)		0.72%**						0.89%		0.5%					2018, Spectrum
New Infections (Yr.)	120,557														2018, Spectrum
Annual births	1,091,877														2017, Spectrum
% of Pregnant Women with at least one ANC visit		81.65%													2015, IMASIDA
Pregnant women needing	123,825														2018, Spectrum

ARVs															
Orphans (maternal, paternal, double-ALL) from AIDs	916,190														2018, Spectrum
Notified TB cases (Yr.)	73,470														Global tuberculosis report 2017
% of TB cases that are HIV infected	30,673	44%***													Global tuberculosis report 2017
% of Males Circumcised		62.80%													2015, IMASIDA Report
Estimated Population Size of MSM*	Maputo City – 10,121 Beira – 2,624 Nampula/Nacala – 3,069														MSM IBBS 2011
MSM HIV Prevalence		Maputo City – 8.2% Beira – 9.1% Nampula/Nacala – 3.7%													MSM IBBS 2011

Estimated Population Size of FSW	Maputo City – 13,554 Beira – 6,802 Nampula – 6,929														FSW IBBS 2011-2
FSW HIV Prevalence		Maputo City –31.2% Beira – 23.6% Nampula – 17.8%						Maputo City –14.5% Beira – 17.4% Nampula – 8.8%				Maputo City – 60.3% Beira – 47.9% Nampula – 48.0%			FSW IBBS 2011-2 - Updated to include prevalence estimates for 5-24, 25+
Estimated Population Size of PWID	Maputo City – 1,684 Nampula – 520														PWID IBBS 2014
PWID HIV Prevalence		Maputo City – 50.1% Nampula – 19.9%													PWID IBBS 2013/2014
Estimated Size of Priority Populations - Adolescent Girls	1579620****						1,579,620*****								Census 2017
Priority Populations Prevalence - Adolesce		6.5%****						6.5%******							IMASIDA 2015, data file

nt Girls															

**15-49 year olds*
***15-24 year olds*
****% of TB-infected with known HIV status who are HIV positive*
*****15-19 year olds*
If presenting size estimate data would compromise the safety of this population, please do not enter it in this table.

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

Epidemiologic Data					HIV Treatment and Viral Suppression (MoH Preliminary Data)			HIV Testing and Linkage to ART Within the Last Year****		
	Total Population Size Estimate (2017 Data from Censo (INE 2017)) (#)	**HIV Prevalence (IMASIDA 2015)** (%)	**Estimated Total PLHIV (2018, Spectrum)** (#)	**PLHIV diagnosed (IMASIDA 2015)** (#)	**On Treatment** (#)	**ART Coverage (%)**	**Viral Suppression (%) ****	**Tested for HIV** (#)	**Diagnosed HIV Positive** (#)	**Initiated on ART** (#)
Total population	28,861,863	13.20%	2,123,936	47%	1,156,101	54%	66%	6,543,016	391,879	323,527
Population less than 15 years	12,791,607	NA	168,760	NA	86,508	51%	41%	1,073,981	19,345	22,086
15-24 year olds	5,758,623	6.90%	252,814	NA	NA	NA	NA	1,613,330	78,101	72,324
25+ year olds	10,311,633	16.73%	1,702,362	NA	NA	NA	NA	1,784,544	197,002	213,247

MSM	Maputo City – 10,121 Beira – 2,624 Nampula/Nacala – 3,069	Maputo City – 8.2% Beira – 9.1% Nampula/Nacala – 3.7%	Maputo City - 830 Beira - 239 Nampula/Nacala - 114	NA	NA	NA	NA	NA	NA	*NA*
FSW	Maputo City – 13,554 Beira – 6,802 Nampula – 6,929	Maputo City – 31.2% Beira – 23.6% Nampula – 17.8%	Maputo City – 4,229 Beira – 1,605 Nampula – 1,232	NA	NA	NA	NA	NA	NA	*NA*
PWID	Maputo City – 1,684*** Nampula – 520***	Maputo City – 50.3%*** Nampula – 36.8%***	Maputo City - 847 Nampula - 191	NA	NA	NA	NA	NA	NA	*NA*
Priority Populations Prevalence - Adolescent Girls	2844271	11.10%	134,035	NA	NA	NA	NA	NA	NA	*NA*

2.2 Investment Profile

National Health Budget: In 2017, the Government of the Republic of Mozambique's budget allocated to health was US$300.1 million. This represents 7.8 percent of the total value of the country's total budget. MISAU Central health services received the largest allocation in the 2017 budget (47 percent), followed by district health services (19 percent) and provincial health directorates (14 percent). The remaining 20 percent is allocated to specialized institutions of MISAU (central hospitals, training centers, health science institutes etc.). Donor contributions to the government's budget for the health sector have been inconsistent and declining; they currently comprise only three percent of the overall sector budget managed by MISAU. In 2014, the health sector 'basket fund' called Pro-saude financed $84 million (25 percent) of funding that went to the Ministry of Health. That level dropped to less than $23 million in 2017. Vertical donor programs that do not directly finance the public health system represent between one third and one half of total execution per annum in the health sector. The largest 'vertical'-budget donor in Mozambique is PEPFAR.

HIV expenditures: The 2017 Global AIDS monitoring report indicates that total HIV expenditures in 2016 amounted to $330 million, a slight decrease from $343 million in 2015 and $333 million in 2014. PEPFAR and the Global Fund for AIDS, Tuberculosis, and Malaria (GFATM) are the main financiers of the HIV response, accounting for approximately 88 percent of HIV expenditures in 2016. Government expenditures accounted for $8.5 million in program costs (this figure does not include salary and benefits to HIV/AIDS service delivery providers, pharmacists, laboratory technicians, or other health care staff), approximately 2.5 percent of total expenditures on HIV, a reduction from $16.2 million (five percent of HIV expenditures) in 2014.

Expenditure by cost category: 88 percent of the state health budget is dedicated to recurrent expenditures, consisting of salaries/remunerations, procurement of goods and services, operating costs, transfers and financial operations. Only 12 percent of the state health budget is spent in investment (capital expenditure) aimed at improving access to health services and quality of care. Between 2008 and 2016, internal investment showed nominal annual increases; meanwhile, over the same period, recurrent spending increased in real terms by more than 150 percent. During the same period, the investment to recurrent ratio decreased from 56 percent investment: 44 percent recurrent in 2008, to 12 percent investment: 88 percent recurrent in 2017. As such, the Mozambican health sector's capacity to improve the health system (increase access, improve infrastructure etc.) is severely constrained by the relatively high percentage of resources devoted to recurrent expenditure.

One hundred percent of ARVs over the next GFATM implementation period 2018-2020 are procured by donors, principally by the GFATM (74 percent) and PEPFAR (26 percent). These are sourced through international pooled procurement mechanisms (GHSC-PSM, GFATM Wambo). The country also relies substantially on donors, particularly the USG, for other HIV commodities such as reagents (viral load (VL) and, early infant diagnosis (EID).

The Government of the Republic of Mozambique covers HCW salaries (estimated at $140 million per annum) and costs related to implementation (facility maintenance, transport, provision of other essential commodities, operational costs). One hundred percent of ancillary health worker staff salaries (lay counselors, data clerks) are paid by donors.

Planned Government Contributions: The Government of the Republic of Mozambique has committed to increase domestic funding for health by US $25 million annually between 2018-2020 in accordance with the GFATM counterpart agreement. Its ability to meet this commitment, however, is questionable in light of decreasing government revenues and necessary fiscal strictures required in order to address substantial macroeconomic restructuring due to an excessive external debt burden. The Government of the Republic of Mozambique has also acknowledged their current limited capacity to finance additional human resources required for epidemic control (additional doctors, nurses, lab techs etc.).

Data availability and Estimations: Health sector expenditures are estimated from the annual MISAU budget execution reports (Relatório de Execução Orçamental) complemented by estimations made by the United Nations Children's Fund (health sector budget briefs). It is important to note that the health sector does not track or report spending by disease category. Reporting on HIV-specific expenditure is based on the National AIDS Spending Assessment (NASA) and the Global AIDS Monitoring Report, elaborated by the National Council to Combat AIDS (CNCS), which detail HIV funding and expenditure by source, programmatic area, and beneficiary population and geographical location. Data available cover the period running from 2004-2014. A new NASA report updated with 2017 data will be available in mid-2018.

Conclusion and Next Steps: The Government of the Republic of Mozambique will not be able to fully cover the costs of its response to HIV and will require substantial support from international partners for the medium term. This is due to two factors. First, the 2017 census and AIDS indicator survey (IMASIDA 2015) indicate that the country has significantly more people living with HIV than previously known (~2.1 million in lieu of ~1.6 million). Secondly, as stated above, the country is facing a severe fiscal crisis, which limits the Government of Mozambique's ability to increase its contribution towards the response. However, the country's longer term economic prospects are bright. The extractive industry (natural gas) is expected to significantly contribute to state revenues in the next 15-25 years, which should allow the Government of the Republic of Mozambique to increase its contribution to the HIV response. As such, it is critical that PEPFAR, GFATM, and other donors support the Government of the Republic of Mozambique to design and implement sustainable financing strategies and plans so as to allow Mozambique to gradually become the primary funder of the HIV response.

Table 2..2.1: HIV Expenditure by Programmatic Area in 2018, Mozambique					
Program Area	**Total Expenditure**	**% PEPFAR**	**% GF**	**% GRM**	**% Other**

Clinical care, treatment and support	90.6	68%	20%	2%	10%
Community-based care, treatment, and support	7.9	92%	N/A	2%	6%
PMTCT	22.1	75%	10%	4%	11%
HTC	14.2	81%	12%	4%	3%
VMMC	17.6	99%	1%	0%	0%
Priority population prevention	5.0	44%	7%	7%	43%
Key population prevention	3.5	49%	7%	N/A	45%
OVC	6.2	84%	N/A	4%	12%
Laboratory	16.1	75%	2%	9%	13%
SI, Surveys and Surveillance	24.2	90%	N/A	5%	5%
HSS	43.6	89%	N/A	7%	4%
Other	81	N/A	N/A	N/A	N/A
TOTAL	**332.5**	**N/A**	**N/A**	**N/A**	**N/A**

* Includes VCT, PIT and blood safety (PMTCT testing included under PMTCT)
** Refers to prevention for vulnerable groups, accessible population and prevention for youth
*** National M&E, operational research, surveillance, information technology, research
Source: National Aids Spending Assessment (NASA) for the period 2014 in Mozambique, Conselho Nacional de Combate ao HIV/SIDA (CNCS), September 2016.
NOTE: Updated data from NASA expected in May 2018.

Table 2.2.2: Annual Procurement Profile for Key Commodities

Commodity Category	Total Expenditure	% PEPFAR	% GF	% Host Country	% Other
ARVs	$72,394,763	19.94%	80.06%	0.00%	0.00%
Rapid test kits	$12,494,800	33.09%	66.91%	0.00%	0.00%
Other drugs	$7,218,364	13.86%	43.55%	42.59%	0.00%
Lab reagents	$14,649,106	14.17%	85.83%	0.00%	0.00%
Condoms	$4,697,046	43.56%	0.00%	4.31%	52.13%
Viral Load commodities	$9,691,233	100.00%	0.00%	0.00%	0.00%
VMMC kits	$764,682	100.00%	0.00%	0.00%	0.00%
MAT	$-	0.00%	0.00%	0.00%	0.00%
Other commodities	$-	0.00%	0.00%	0.00%	0.00%
Total	$121,909,994				

Table 2.2.3: Annual USG Non-PEPFAR Funded Investments and Integration

Funding Source	Total USG Non-PEPFAR Resources	Non-PEPFAR Resources Co-Funding PEPFAR IMs	# Co-Funded IMs	PEPFAR COP Co-Funding Contribution	Objectives
USAID MCH	$17,800,000	$2,700,000	4	$73,936,979	Supply chain strengthening and procurement of essential commodities training the expanding cadre of Community Health Workers (CHWs) to provide health promotion,

					prevention, and curative services at the community level increasing healthy behaviors for maternal, newborn, and child health; provided technical assistance to improve health sector monitoring and evaluation and strengthen country health information system; strengthen and advance national health policy priorities, with a focus on maternal and child health, family planning and reproductive health, and HIV/AIDS and; support the development and implementation of the Global Financing Facility Investment Case. Co-funded mechanisms include: PSM, UNICEF, CIHO, MEASURE
USAID TB	$4,900,000	$500,000	2	$69,224,030	Supply chain management by improving quantification, procurement and timely distribution of TB drugs. Co-funded mechanisms include: PSM, Measure
USAID Malaria	$28,600,000	$13,416,000	1	$68,834,030	Supply chain and improved systems strengthening, improved the health status for women of childbearing age, particularly pregnant and lactating women and children under five years of age and; implemented a nationwide household survey to determine progress against Presidential Malaria Initiative indicators. Co-funded mechanisms include: PSM
Family Planning	$12,900,000	$2,800,000	3	$73,546,979	Increased access to and use of voluntary FP contraceptive methods; Commodities purchased including condoms, essential

					medicines, and diagnostics; Improved maternal and child survival; Improved health behaviors; support CHWs to expand coverage and improve quality of family planning activities, including promotion and provision of modern contraceptives Co-funded mechanisms include: PSM, UNICEF, CIHO
NIH	N/A	N/A	N/A	N/A	N/A
CDC (Global Health Security)	N/A	N/A	N/A	N/A	N/A
Peace Corps	N/A	N/A	N/A	N/A	N/A
DOD Ebola	N/A	N/A	N/A	N/A	N/A
MCC	N/A	N/A	N/A	N/A	N/A
Total	**$69,600,000**	**$19,916,000**	N/A	**$358,588,997**	N/A

Table 2.2.4: Annual PEPFAR Non-COP Resources, Central Initiatives, PPP, HOP

Funding Source	**Total PEPFAR Non-COP Resources**	**Objectives**				
Cervical Cancer (Central Initiative)	5,700,000	In Mozambique, cervical cancer is the most common cause of cancer-related death in HIV+ women. Identification of HIV+ women with preclinical cervical lesions is key to reducing morbidity and mortality. This population group has been previously underserved by the broad-support approach previously utilized in country. The goal is to develop an age-band appropriate, comprehensive strategy in order to reduce cervical cancer risk by 95% in this population. This will be done by ensuring access to screen and treat approach, with both cryotherapy and LEEP, for all HIV+ women over 30 years of age. In addition, demand creation, trainings of health providers at ART clinics, appropriate M&E system and eHUB for quality assurance, and referrals and counter referrals for appropriate case management will be ensured in order to meet the goal. These activities will take place in PEPFAR scale up sites with high HIV1 prevalence among women and high volume of patients. Support of implementation will be assured in the framework of implementing partners' activities and through coordination with other stakeholders present in count.				
Total	5,700,000	N/A	N/A	N/A	N/A	N/A

2.3 National Sustainability Profile Update

The past two years have been a time of austerity for Mozambique, but in spite of economic challenges and a sizeable epidemic, Mozambique showed overall improvements in its trajectory toward sustainability, with the most positive trends in the Governance, Leadership, Accountability, and Strategic Information (SI).

Sustainability Index Dashboard (SID) Process:

The Sustainability Index Dashboard was completed via a collaborative, consultative process coordinated by UNAIDS and PEPFAR, with leadership from CNCS, the civil society platform for health (PLASOC), and MISAU. SID consultations occurred through a series of smaller meetings and one larger meeting involving over 50 participants representing government, multilateral partners, and civil society. The final product was vetted and approved by MISAU.

Sustainability Strengths:

- Program Planning and Coordination (8.62, dark green): CNCS and MISAU provide exemplary leadership in planning and coordinating the national HIV response. Challenges remain in having adequate financing to achieve objectives.
- Policies and Governance (7.27, light green): Mozambique has in place laws and policies that follow the most recent WHO guidelines that protect victims of domestic violence, and protect against discrimination. Nevertheless, there is a need to reinforce protection of key populations and of patient data and stigma.
- Performance Data (7.17, light green): MISAU, in coordination with donor partners, is strengthening its monitoring and evaluation platform, which provides critical strategic information to decision makers in a timely manner. Decision making at MISAU using data is showing improvement, particularly in areas of data interpretation and utilization.

Sustainability Vulnerabilities:

- Laboratory Services (2.83, red): The laboratory system in Mozambique is challenged at all levels, and PEPFAR will continue to support the laboratory system with a focus on viral load monitoring, quality control, increased technician capacity, data capturing, and administrative support to reduce long turnaround time of samples.
- Technical and Allocative Efficiencies (0.89, red): The GRM uses epidemiological models to define national targets and, prioritize programs and sub-national geographical areas, but the budget allocation process is not yet developed to the same granular level. PEPFAR and other donor partners will continue to provide technical assistance to identify innovative systems and mechanisms that may help to increase public investments for HIV.

In COP 18, PEPFAR plans to invest in strengthening the national laboratory network to ensure that 70 percent of PLHIV on treatment are virally suppressed. To achieve this objective, the program will invest in improving the national laboratory network to renovate or build additional laboratories, provide equipment, and also strengthen technical, administrative, and logistical abilities of staff (more information in Appendix E). Additionally, investments in pre-service training for laboratory technicians and scientists will be increased. The program has consolidated laboratory support technical assistance partners to enhance partner management and increase accountability. The Global Fund also plans to contribute to addressing SID vulnerabilities in the laboratory area, through financing of pre-service training, procurement of selected reagents and equipment, and renovations of facility based infrastructure. MSF has successfully piloted the use of GeneXpert as multi-disease platform for viral load testing and TB diagnosis. This will be discussed with MISAU for possible expansion.

To date, PEPFAR and MISAU have agreed to implement a single patient tracking information system (EPTS), as well as an expand point-of-care system electronic medical record system that functions alongside EPTS. Additionally, PEPFAR will continue to strengthen MISAU's capacity to link planning and budgeting, which will strengthen the linkages between planning, budgeting, and budget execution monitoring.

2.4 Alignment of PEPFAR investments geographically to disease burden

Overall ART coverage was 46 percent nationally (using PEFAR data only) in FY 2017, with coverage rates ranging from eight percent to 128 percent by district (**Figure 2.4.1**). Coverage of VL testing (among patients currently on treatment) was low at the end of FY17, as only 28 out of 161 districts had begun implementing Test and Start and routine VL monitoring. Since the end of September 2017, an additional 57 districts have begun routine VL testing, and all remaining districts will have begun implementation prior to the start of COP18.

Since 2014, PEPFAR has focused efforts and resources in the geographic areas with the highest burden of PLHIV. In COP 17, PEPFAR updated district prioritization based on revised national and provincial HIV prevalence estimates (IMASIDA 2015), increasing efforts in Zambezia and Inhambane. A nationwide census was completed in 2017, showing population changes that significantly increased the estimated number of PLHIV in Maputo Province and Nampula (**Figure 2.4.2**). To ensure that PEPFAR continues to focus efforts in the highest burden areas, two additional districts in Nampula will change from sustained to scale-up in COP 18. With this revised prioritization, PEPFAR will provide intensive services in 93 out of 161 districts. These districts contain 85 percent of the total estimated PLHIV and unmet need (PLHIV not yet on treatment) nationally (**Figure 2.4.1**).

Figure 2.4.1: PLHIV, Treatment Coverage, and Viral Load Monitoring Coverage

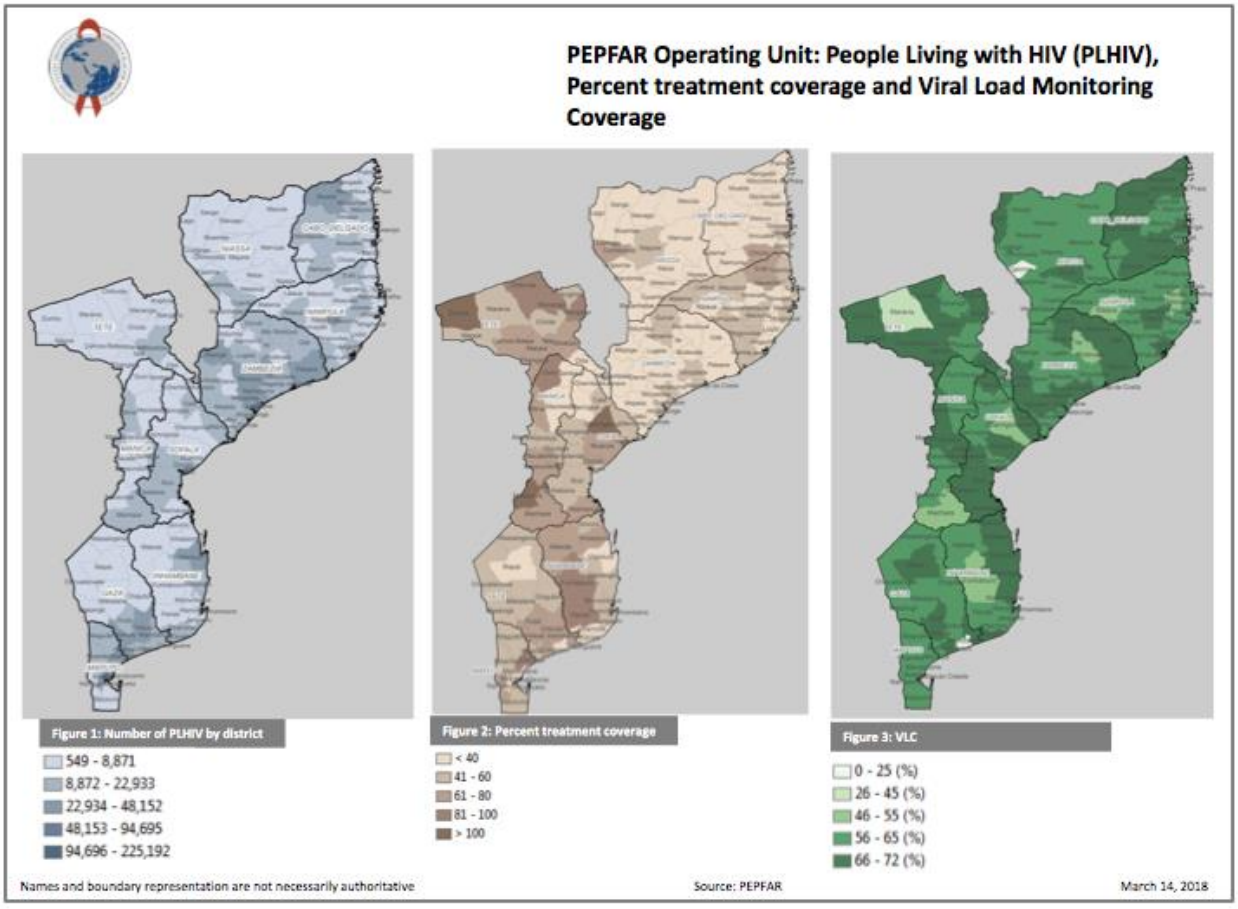
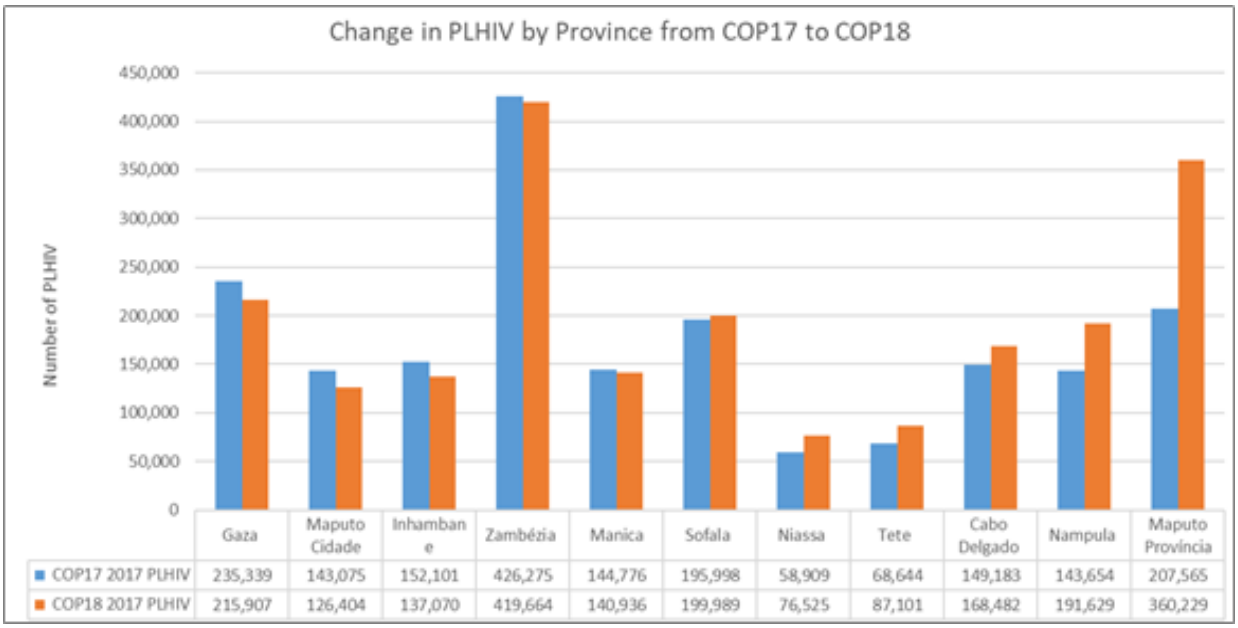


Figure 2.4.2: FY 2017 Estimated Number of PLHIV by Province COP 17 and COP 18



COP 17 Data source: Spectrum v5.4, IMASIDA 2015, Census 2007; COP 18 Data source: Spectrum v5.63, IMASIDA 2015, Census 2017

2.5 Stakeholder Engagement

PEPFAR is committed to close engagement with the Government of the Republic of Mozambique on policy issues, alignment with national priorities, joint planning and implementation, data sharing, coordination and communication with counterparts, and strategic discussion to support attainment of country goals.

PEPFAR deepened engagement with the Government of the Republic of Mozambique in 2017 with the launch of the Zambezia Action Plan (ZAP), completion of the GFATM Technical Review Panels, validation of the SID 3.0, and joint meetings with PEPFAR implementing partners. The U.S. Embassy in Mozambique hosted an Ambassador luncheon for CNCS to increase support for the national HIV response and to encourage private sector engagement, and supported the national HIV meeting on World AIDS Day 2017 chaired jointly by the President and Prime Minister of Mozambique to galvanize support to achieve UNAIDS 95-95-95 goals with stakeholders from the public sector, the private sector, and community and faith-based organizations.

In December 2017, leadership from MISAU, CNCS, and PEPFAR inaugurated a Joint Steering Committee that meets weekly to address strategic issues and assure coordination and alignment of the PEPFAR and MISAU national AIDS response, including COP planning and implementation.

In January 2018, Government of the Republic of Mozambique collaboration for COP 18 planning culminated with a two-week planning retreat, which alternated intensive technical collaboration with broader stakeholder engagement so as to finalize programmatic priorities, targets, and to clarify roles and responsibilities.

PEPFAR has national level G2G Cooperative Agreements with MISAU, the National Institute of Health (INS), six agreements with Directorates of Provincial Health (DPS), and provides district level sub-agreements and embedded technical advisors. PEPFAR staff are active participants in MISAU technical working groups, and engage with DPS to oversee program implementation and partner support through regular site visits and sharing Quality Assurance and Quality Improvement results, Site Improvement through Monitoring Systems (SIMS) reports, and program results (Semi-Annual and Annual Reports). During COP 18, regular joint supervisory visits between PEPFAR and MISAU technical and provincial staff will focus on data triangulation efforts and improved governance on implementation efforts, specifically related to retention and adherence.

PEPFAR also collaborates with the Ministries of Gender, Child, and Social Action, Education and Human Development, Defense, Foreign Affairs and Cooperation, and Economy and Finance (MINEF).

2.5.2 Global Fund and Other External Donors

PEPFAR engaged with members of the GFATM Country Coordinating Mechanism (CCM), GFATM Secretariat, UNAIDS, WHO, and the Health Partners Group (HPG), and other key multilateral partners throughout the development of COP 18,

PEPFAR contributed to the finalization of the GFATM funding request for 2018 - 2020, ensuring strategic alignment of U.S. Government resources and harmonization of programs. PEPFAR staff provided substantial technical advice to MISAU to develop the funding request, including designing of interventions and quantification of drug needs. GF resources will complement PEPFAR investments in several areas, including drugs, infrastructure, pre and in-service training, and health infrastructure improvements.

GFATM staff, including the FPM, SI advisor, and health systems strengthening (HSS) and supply chain leads regularly meet with PEPFAR in Maputo to coordinate support to MISAU in key strategic areas such as HMIS and supply chain. PEPFAR staff attend GFATM meetings in country, communicate with the Fund Portfolio Manager (FPM), coordinate technical assistance to MISAU and the CCM with the GFATM, and work to harmonize the PEPFAR and GFATM programs. In COP 18, PEPFAR will continue to engage with GFATM to ensure both programs leverage their respective comparative advantages and eliminate duplication of geographic implementation at site level. PEPFAR will continue to share information and solicit feedback before and after technical assistance visits and quarterly reporting, and to work closely with GFATM to coordinate commodities planning. Such coordination and collaboration will be further enhanced once a new GFATM Coordinator is assigned to the PEPFAR Coordination Office. The position has been vacant since June 2017.

PEPFAR works closely with UNAIDS to generate national and provincial HIV Spectrum estimates which have informed country operational planning. The US also participated in the development of hive maps of subnational estimates of HIV prevalence, numbers of PLHIV, and coverage of ART based on geospatial modeling by Oxford University and Imperial College.

The U.S. Government serves as the primary interlocutor between the Health Partners Group (HPG) and MISAU. This has deepened PEPFAR's strategic engagement with other bilateral and multilateral partners and has allowed shared responsibility for health systems support for endeavors such as emergency essential medicines procurement that work in tandem with ART.

2.5.3 Civil Society/Community

Civil society participated in all in-country consultations to prepare COP 18, beginning with the elaboration of SID 3.0. They have been engaged through technical working group meetings, the stakeholder retreat in January 2018 (which included representatives from all provinces), and dialogues leading up to the Regional Planning Meeting. PEPFAR incorporated civil society input throughout the COP 18 process.

PEPFAR is committed to assuring inclusive geographic representation, engaging faith-based leadership from a variety of religions, and increasing the presence and voice of PLHIV, youth, and other key and priority populations in all stakeholder and partner meetings.

PEPFAR meets regularly with the Civil Society Platform for Health (PLASOC), a group representing a considerable number of HIV-focused NGOs and CBOs based in all provinces of the country. PEPFAR built capacity of civil society in 2017, supporting trainings in data and Gender and Sexual Diversity (GSD). PEPFAR's Civil Society Engagement team continues to meet with PLASOC to share information, to solicit input into key programmatic issues and policy decision points, and to assure full participation in COP implementation

2.5.4 Private Sector

The U.S. Government Public-Private Partnership (PPP) Interagency Working Group, which includes all agencies operating in Mozambique, provides a forum for coordination and sharing of best practices and opportunities for leveraging private sector resources to achieve shared development goals in Mozambique. In 2017, the PPP Working Group engaged leadership from Exxon Mobile and Anadarko to discuss how they can support the HIV response. Private sector representatives were also invited to the COP retreat. Feedback from these forums and meetings was integrated into PEPFAR's program planning for COP 18. G2G support to CNCS will help coordinate and monitor private sector workplace HIV/AIDS programs.

3.0 Geographic and Population Prioritization

Voluntary Medical Male Circumcision (VMMC)

PEPFAR's VMMC program is focused on scale up districts to ensure the program maximizes its contribution to epidemic control. As mentioned earlier, it is estimated that 13.8 million or approximately 46% of the country's population will be under 15 years of age (6,917,547 males / 6,851,897 females) as of 2018. In FY 2017, PEPFAR saturated VMMC for 15-29 year-olds in the following districts: Maputo city cluster (all districts), Maputo province (Boane, Magude, Manhiça), Sofala (Dondo and Marromeu), and Zambézia (Cidade de Quelimane, Mocuba and Nicoadala). By the end of FY 2018, the PEPFAR team expects that the following districts will also

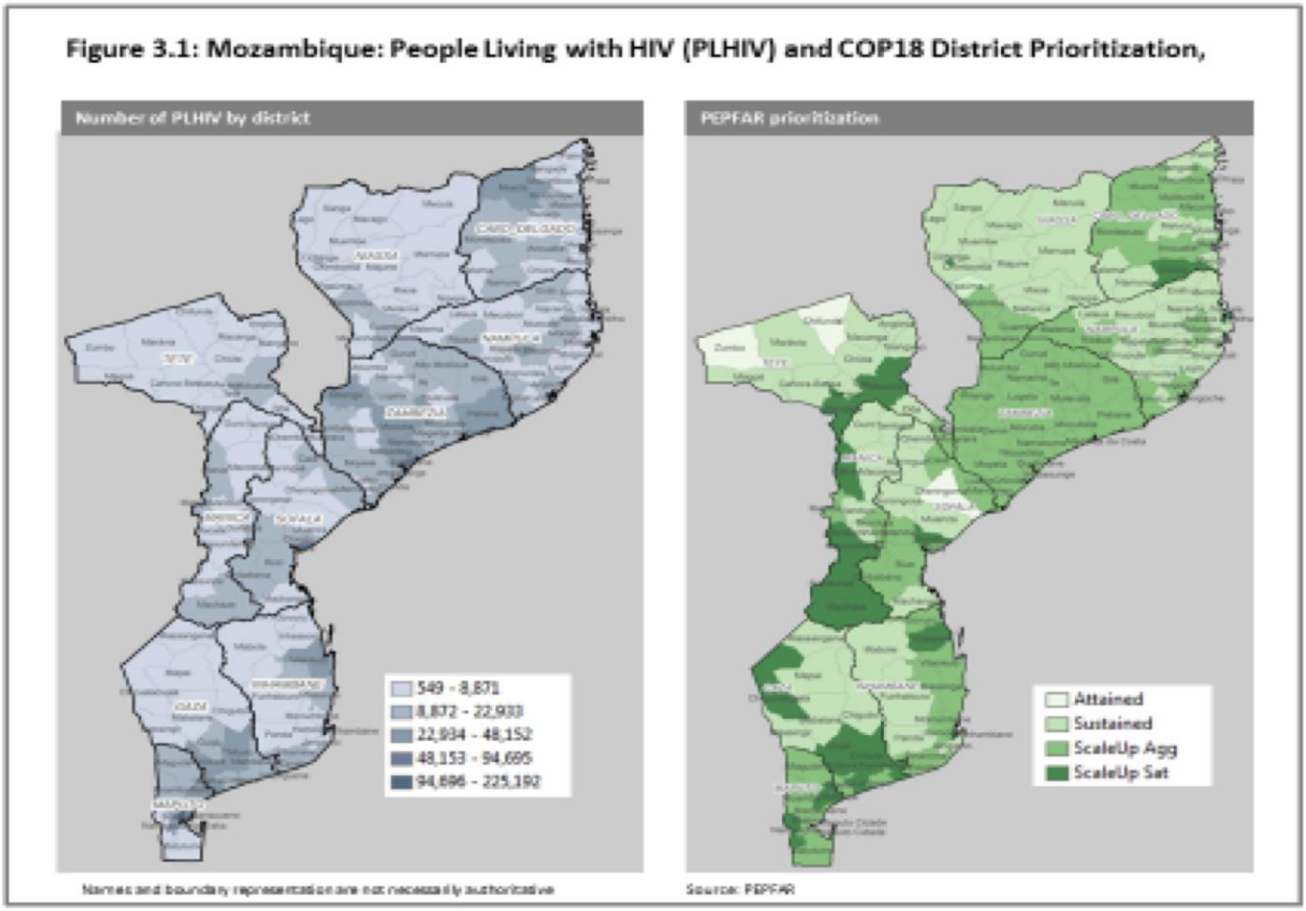
reach saturation: Gaza (Bilene, Chicualacuala, Guija, Mandlakaze), Maputo province (Moamba and Namaacha), Sofala (Buzi, Chibabava, Cidade da Beira), and Zambézia (Ile and Mopeia).

For COP 18 in provinces where modeling data suggests coverage is approaching 80 percent, the program will consolidate a maintenance program for adolescents aged 10-14 yrs. In districts that have achieved high VMMC coverage, the level of PEPFAR support will be reduced with oversight provided by MISAU.

HIV Cascade Services

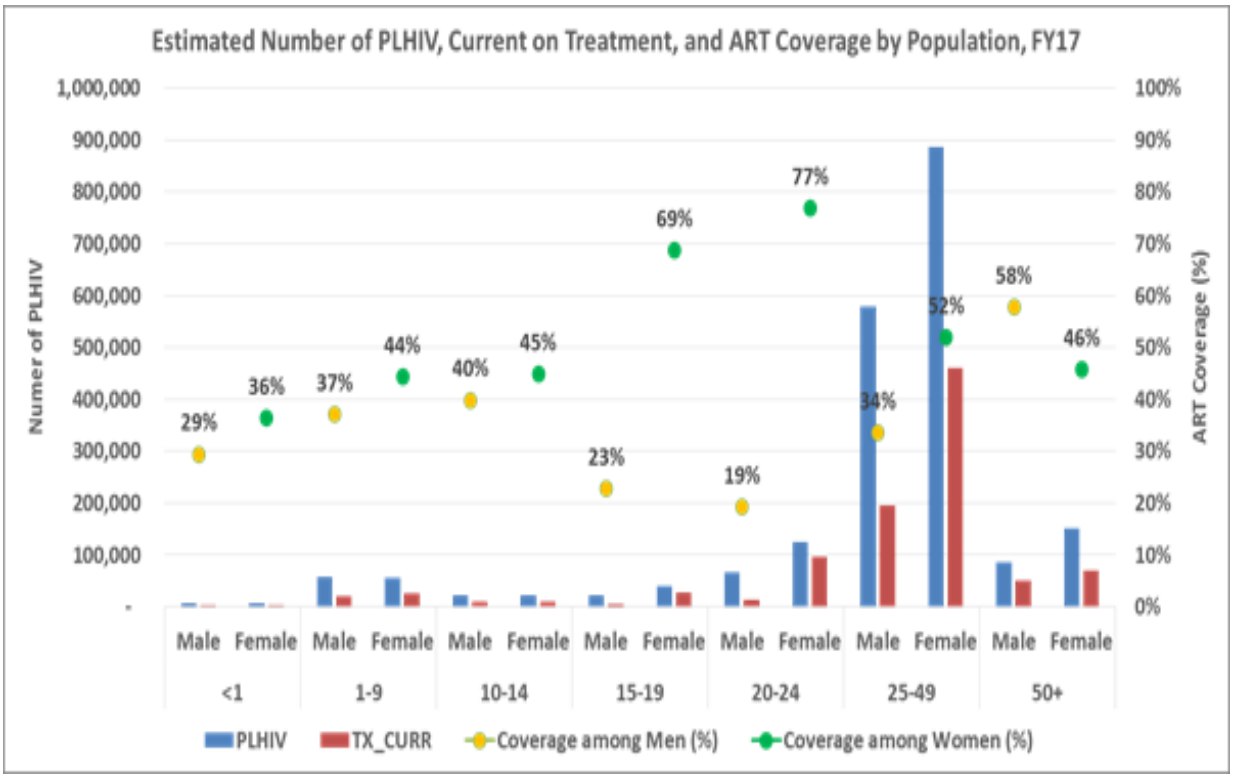
For COP 18, a comprehensive review of the latest epidemiologic data has been conducted to ensure that funds are allocated in the geographic areas with the highest unmet need. PLHIV estimates were updated to include preliminary 2017 census data as well as the revised HIV prevalence data (IMASIDA 2015). Estimated burden of PLHIV and ART coverage were calculated by district and disaggregated by age and gender in order to identify the geographic areas and populations with the greatest need. Based on these revised estimates, COP 18 will focus resources in 93 out of 161 districts. These districts include 85 percent of the current unmet need for treatment of PLHIV. (See **Figure 3.1**).

Figure 3.1: Mozambique: People Living with HIV (PLHIV) and COP18 District Prioritization,



Nationally, and across provinces, ART coverage is highest among adult females age 25-49 and low among men, children, and adolescents (**Figure 3.2**). Low ART coverage is attributed, in part, to insufficient case finding, low rates of testing, lack of knowledge of serostatus among men, and overall low retention across populations (70 percent overall 12-month retention nationally). To close the ART coverage gap between men and women, a comprehensive strategy to engage men in HIV services has been developed in collaboration with MISAU. This strategy addresses known barriers and facilitators for men accessing services, including increasing partner testing of ANC patients, facility-based PICT aimed at men, scale up of index case testing, comprehensive health services as part of outreach to men, and increasing the availability of male-friendly services at targeted clinics. The National Male Engagement Strategy will be finalized and launched during COP 17 and implementation is expected to begin in 59 priority districts during COP 17 and COP 18. These districts contain 70 percent of the overall unmet need for men. Strategies to improve both case finding and retention among children and adolescents have also been developed, and include expanded index case testing among biological children of PLHIV, further aggressive scale-up of the mentor mothers program, and providing enhanced psychosocial support to children and adolescents, as detailed in Section 4.1.

Figure 3.2: Estimated ART Coverage by Age and Population, FY17 (Using PEPFAR TX_CURR)



By focusing on the geographic areas and populations described above, PEPFAR aims to increase the ART coverage among supported sites from 46 percent at the end of FY 2017 (using PEPFAR

treatment numbers only) to 83 percent by FY 2020 (as shown in **Figure 3.3**) thus accelerating national progress towards epidemic control (as shown in **Figure 3.4**)

Table 3.1: Current Status of ART saturation				
Prioritization Area	**Total PLHIV/% of all PLHIV for COP 18**	**# Current on ART (FY17)**	**# of SNU COP 17 (FY18)**	**# of SNU COP 18 (FY19)**
Attained	0.002177603	5,437	3	3
Scale-up Saturation	0.20375653	354,023	24	28
Scale-up Aggressive	0.667055867	507559	61	65
Sustained	0	117,443	60	65
Central Support	0	0	0	0

Figure 3.3: National ART Coverage Trend (using only PEPFAR TX_CURR), FY 2017 to FY 2020

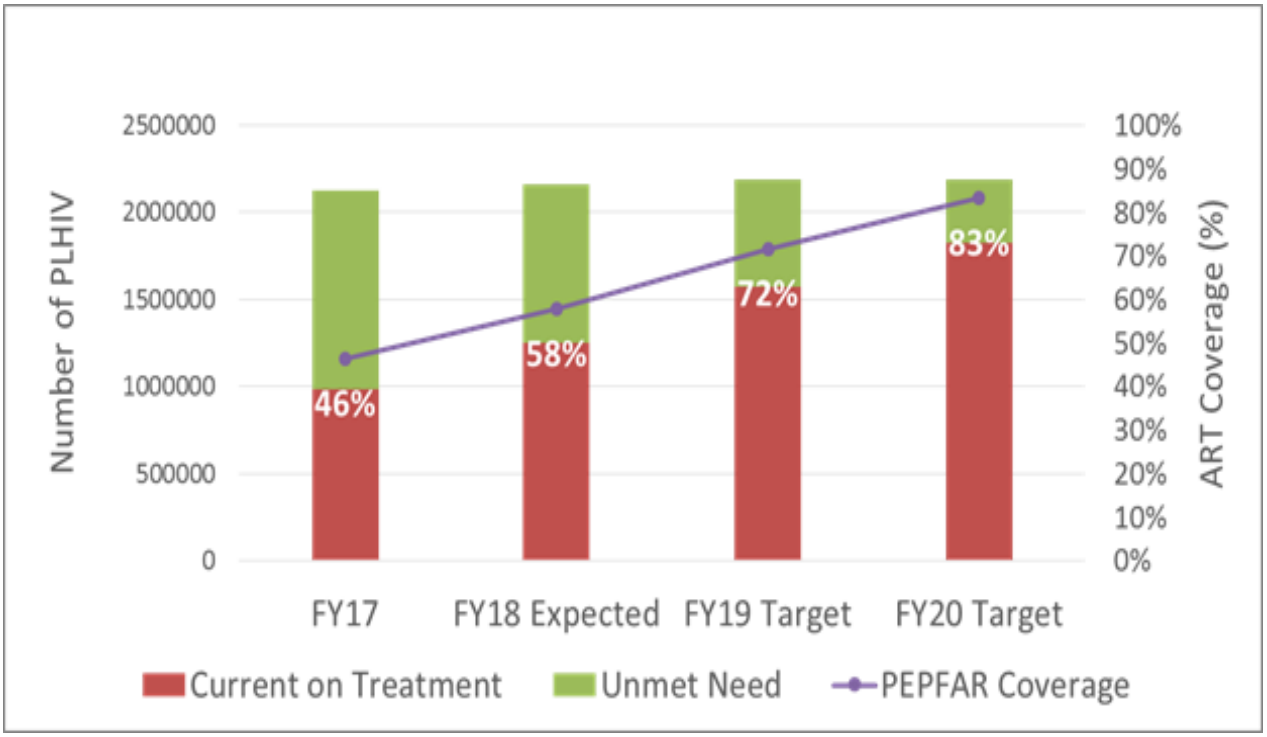
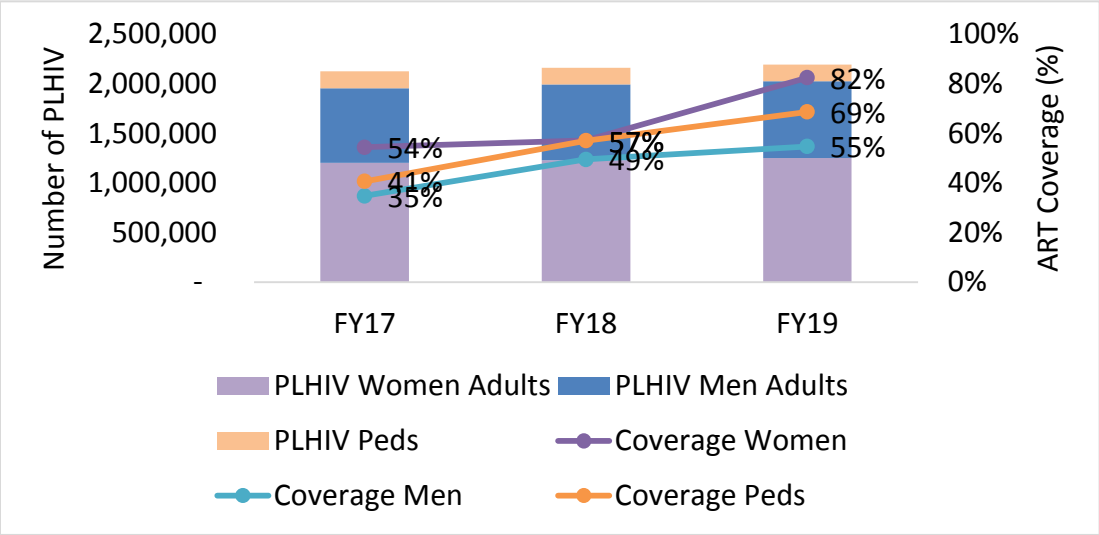


Figure 3.4: National ART Coverage Trend by Population, FY 2017 to FY 2019



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
All Populations

PEPFAR has worked closely with MISAU to develop and rapidly scale core strategies across the clinical cascade to accelerate progress towards achieving UNAIDS 95-95-95 goals in Mozambique. These strategies have further been refined to focus on identified demographic gaps in order to ensure no population segment is left behind.

For COP 18, oral self-testing will be introduced for hard to reach key populations. Active case finding will take an integrated approach to scaling-up testing at high yield and proven entry points into the care system, while maximizing linkage success through systematic client follow-up approaches. Working with community based organizations, HIV positive people will be linked with a lay worker who can provide support, treatment literacy, adherence support, and follow up.

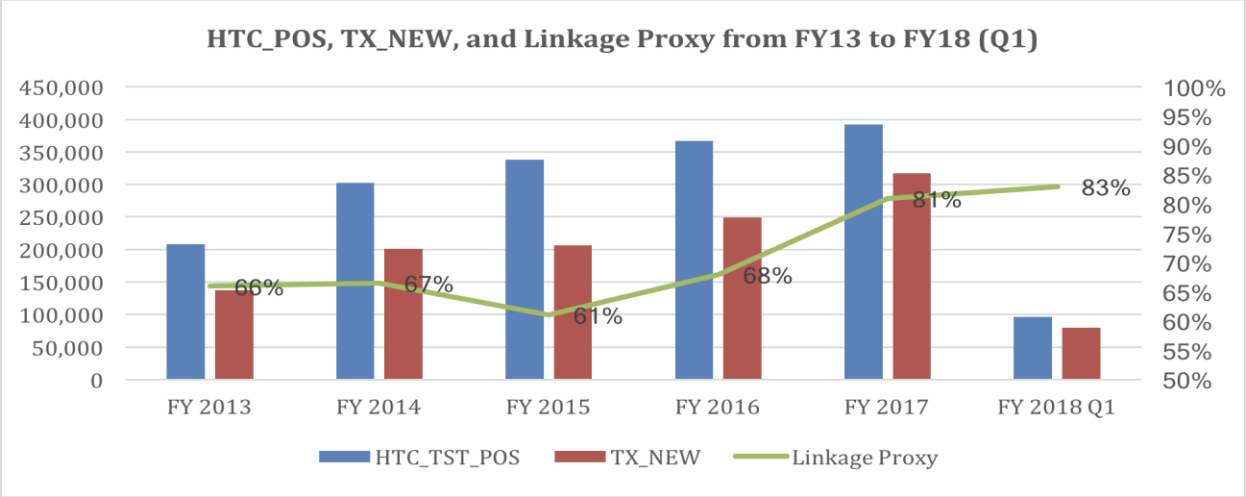
In close collaboration with MISAU, PEPFAR aims to double the number of positives identified through index case testing increasing the proportion of new positives identified through this approach up to 28.4 percent. Targets for index case testing were set based on minimum coverage benchmarks to ensure that all sexual partners and biological children of PLHIV are offered convenient options for testing and accompaniment into care and treatment. Testing of sexual partners of all pregnant women and children of HIV positive pregnant women is also a priority

activity and included in the facility-based index case testing target. The roll-out of revised national HIV testing registers will introduce standardized follow-up procedures for index case interviews to ensure either facility-based or community-based disclosure support and testing linkage. Ongoing community-based retention support and renewed efforts to return those lost-to-follow-up will also be leveraged to identify their previously undiagnosed index case contacts eligible for testing.

PEPFAR will foster more proactive, symptom-based screening and PICT within high-volume health facilities, with an emphasis on ANC male partner testing and other high-yield sectors such as emergency, urgent care, and inpatient settings. This "PICT optimization" strategy includes a combination of reinforced provider training, more efficient reallocation of peer/lay counselors, more focused supportive supervision visits and more routine facility-led monitoring of sector-level PICT data. A special "PICT boost" action plan led by MISAU will target 64 high-burden hospitals with a tailored approach to PICT optimization that includes the systematic engagement of hospital managers and clinical directors.

In COP 18, PEPFAR will also support more standardized implementation of high-quality testing and counseling, as per Mozambique's national guidelines, and linkage to treatment will be strengthened for all testing modalities. Same day clinical consultation and ensuring treatment initiation within 15 days are core components of this policy. In addition, MISAU will be implementing revised HIV-testing tools that will allow lay counselors and healthcare workers to collect patient contact information on all identified HIV-positive patients who consent to be contacted and provide active follow-up if they have not been linked to care within seven days. As noted below in Figure 4.1, the implementation of Test and Start in FY16 improved linkage rates by 13 percent from 2016 to 2017.

Figure 4.1: Improvement in Linkage Proxy/Linkage to Treatment with Implementation of Test and Start in FY 2017 and FY 2018



Beyond treatment initiation, ensuring patients are retained on and adherent to treatment is key to achieving epidemic control. With overall retention currently at 70 percent nationally, improving retention is essential to the success of the entire program. With MISAU leadership and additional collaboration with Global Fund, PEPFAR has ambitious plans to increase retention from 70 percent in FY 2017 to 90 percent in FY 2019, through focusing on five key pillars. These include: (1) expansion and implementation of differentiated service delivery models; (2) strengthening national HIV quality improvement implementation efforts; (3) expanding and strengthening psychosocial services; (4) combating stigma and discrimination of PLHIV; and (5) empowering communities to ensure sustainability.

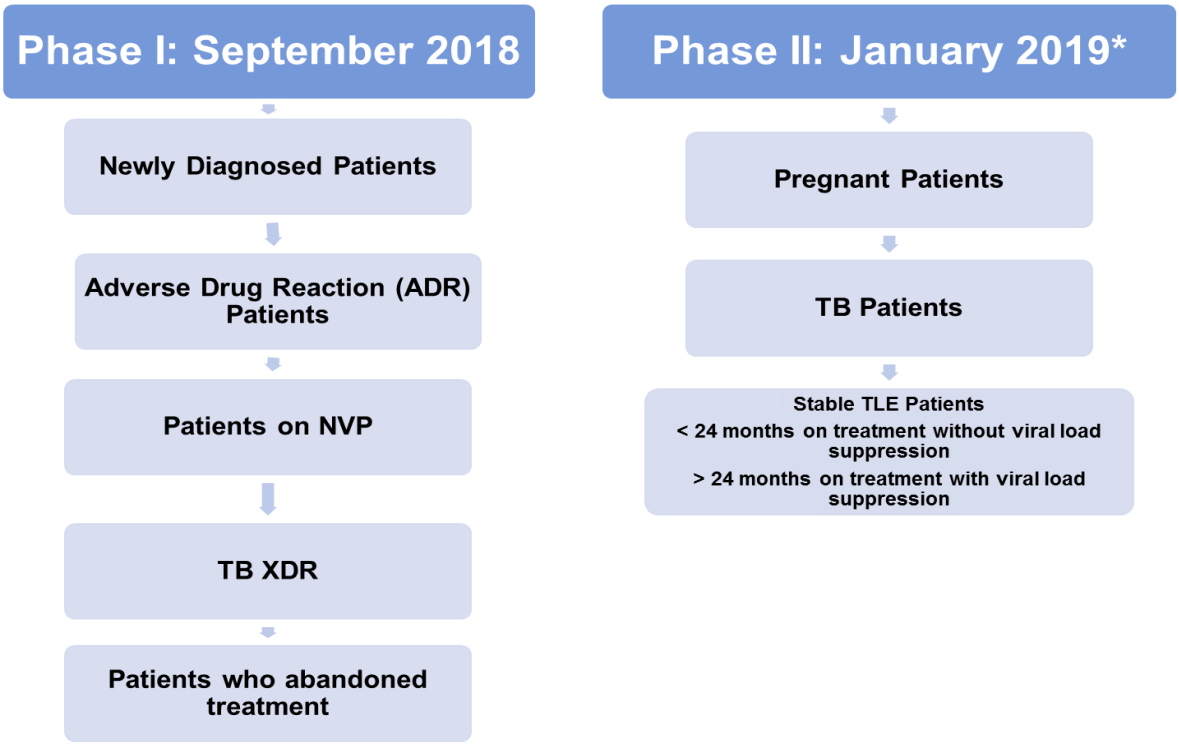
An in-depth description of these pillars is included in Appendix D, including the current status of implementation, policy updates, and COP 18 implementation plans. In COP 18, a large focus will be on working closely with MISAU and partners to oversee the fidelity of activities implemented, to ensure that expected improvements are achieved as interventions move towards large-scale implementation. The team will be working closely with MISAU to ensure that partner supported technical assistance and mentorship with a benchmark of standards is meeting the needs of the healthcare workers, and the lay workers are provided ample support and supervision to improve the quality of services provided. As the five key pillars will be the primary focus for COP 18, specific innovative activities will include: 1. Preventive home visits for high risk defaulters and 2. Community ART distribution through existing primary healthcare mobile brigades. These two new activities have been introduced in an effort to improve retention with a focus on intensive follow up for high risk defaulters to ensure closer follow up and adherence support and to bring ART services to the community. This is the first time Mozambique will be introducing community ART distribution in a phased approach and will be an opportunity to enhance drug delivery coupled with service delivery to PLHIV through a mobile platform. An evaluation component will be conducted in COP 18 to assess the impact of the community ART distribution model towards improving retention.

In addition, PEPFAR is working with MISAU to standardize and update tools used for providing psychosocial support to patients to improve both retention and adherence. These revised tools will be piloted beginning in April 2018 and will be fully implemented in COP 18. As part of this harmonization, there will be an increased focus on providing enhanced psychosocial support to patients newly initiated on ART who are at high risk for loss to follow-up (LTFU) based on a standardized risk assessment. Patients identified as having an increased risk will receive preventive/supportive home visits in addition to the current facility-based counseling and loss-to-follow-up tracing activities. PEPFAR will be working with GFATM and civil society to ensure that this service is provided as peer support by PLHIV whenever possible, and that the number of lay staff are adequate to ensure complete coverage of this intervention at all scale-up sites. The peer educator strategy which will be refined in FY 2017 will help to refine how the 1:200 ratio will be implemented and HRH modeling will guide the standards required on the specific roles for lay

cadre in different settings. PEPFAR will continue to maintain support for the harmonization of community health worker in alignment with Government of Mozambique priorities.

In addition to the activities described above, the transition from Tenofovir (TDF) to Dolutegravir (DTG)-based regimens is planned to start in COP18. As DTG is superior to TDF both in terms of side effect profile and speed of VL suppression, this is an important intervention to improve rates of VL suppression across populations. As described in the submitted DTG transition plan as part of COP 18, the Ministry of Health has developed plans to begin utilizing Tenofovir-Lamivudine-Dolutegravir (TLD) as a first-line treatment option in September 2018, starting with patients newly initiating treatment or with side-effects/contra-indications to their current regimen (excluding pregnant women and patients with drug-sensitive TB). Beginning in January 2019, patients who are either stable on treatment (VL<1000) or have been on treatment less than 24 months would also be eligible for transition to TLD (including pregnant women and TB/HIV patients). (See **Figure 4.2**)

Figure 4.2: Summary of Dolutegravir Transition Plan



Case Identification for Key Populations

Approaches to increase acceptance of HIV testing among KPs will include peer incentivized referrals, social network and index case testing, and training KPs enrolled in prevention programming as lay testing counselors. As a complement to these efforts, self-testing will be

introduced for sexual partners of MSM who are unwilling to participate in prevention programming. KP programming incorporates proactive follow-up in-person, by phone, text, and/or e-platforms in order to ensure proper linkage to care for those who test positive. Key populations work is done in complementarity with the GFARM. Additional details on KP prevention and treatment programming are in Section 4.2.

Reaching Men

For adult males unlikely to be reached via traditional testing modalities, highly targeted mobile testing approaches will be implemented and refined in Zambezia and Nampula provinces, and subsequently scaled in other provinces based on the results. PEPFAR will introduce assisted self-testing strategies to reach uniformed adult men (police and customs officials) in Zambezia and Maputo provinces. In order to improve treatment coverage, retention and adherence among men, PEPFAR has also been working intensively with MISAU to develop a comprehensive strategy for engaging men in treatment. This strategy includes core activities that support improving the availability of male-friendly services, expanding family-based care models, promoting new social norms, and enhancing communication and advocacy with male populations through male champions and community leaders. Implementation of this strategy will be focused in 59 districts that are high burden for unmet need among men in COP 17 and COP 18. M&E tools are being developed to measure impact in preparation for further expansion.

Additionally, in order to increase access to services for men, the implementing partners have incorporated weekend/evening hours into services at the community level as well as at the health facility level including the following:

- Community index case testing is often conducted off hours
- Numerous partners support expanded hours or 24-hour testing in urgent cares and emergency rooms
- Community-based testing campaigns are typically conducted on weekends

Moreover, some partners have begun negotiations with provincial authorities to offer care and treatment services during extended hours including weekends.

Prevention of Mother-to-Child Transmission (PMTCT)

While Mozambique has achieved high testing and ART coverage for pregnant and lactating women, significant retention challenges remain. In Q4 FY 2017, only 67 percent of HIV positive pregnant women were retained on care at 12 months and thus vertical transmission remains an urgent concern. PEPFAR investments in COP 18 will focus on improving retention and adherence during pregnancy and lactation via a multi-pronged strategy, which includes strengthening psychosocial support services and positive prevention, developed in collaboration with the MISAU. In fact, revisions of the national PMTCT plan are being done during COP 17 and will be disseminated and implemented during COP 18. First, PEPFAR will support the national implementation of the newly revised MISAU mentor mother strategy. Additionally, PEPFAR IPs

will identify, train and support mentor mothers at a level sufficient to provide peer based case management to 90 percent of HIV positive pregnant women in PEPFAR supported facilities. The provinces of Sofala, Manica, Nampula, and Zambezia will receive additional support in implementing high fidelity mentor mother programs in high volume facilities with historically high vertical transmission rates. Additionally, PEPFAR will support the national implementation of revised psychosocial instruments tailored to support pregnant and lactating women as well as mobile brigades to provide high quality primary care and PMTCT in remote communities in provinces with high vertical transmission. Newly diagnosed pregnant women will receive supportive home visits and phone calls, and defaulters will be identified on a weekly basis with community based follow-up. Once approved by WHO, PEPFAR will support the MISAU in extending DTG containing treatment regimens to pregnant women.

While coverage for adult, non-pregnant women exceeds coverage for adult men in Mozambique, case-finding for younger, never-pregnant women has lagged behind that of older women. As of FY 2017, 96 percent of HIV positive pregnant women in Mozambique received ART during pregnancy, but 53 started treatment upon entry to antenatal care. In COP 18, in addition to increasing the number of HIV positive pregnant women starting ARVs, PEPFAR will focus on index case partner testing for efforts on younger women who have not yet benefited from an ANC entry point.

Pediatric and Adolescent Populations

Pediatric coverage in FY 2017 is estimated at only 41 percent, and pediatric case finding, linkage, and retention remain central priorities for MISAU and PEPFAR. In COP 18, PEPFAR intends to expand ANC index case partner testing as well as to increase targeted testing of children of HIV positive women who are under ten years of age or priority groups where children and adolescents are symptomatic. PEPFAR IPs will also scale up newly revised pediatric PICT screening guidelines and implement PICT in high yield health sectors as well as implement the pediatric and adolescent ART improvement plan. Mentor mothers will provide intensive case management support for children under five years of age in linkage and retention, and peer educators will provide parallel services for children over five years of age, and adolescents. As described in Appendix D, PEPFAR will support the national quality improvement strategy, implementation of mobile brigades in targeted provinces and the national scale-up of differentiated service delivery (DSD) models for children and adolescents. PEPFAR partners will fully implement revised psychosocial support tools, including tailored counseling services, preventive home visits and defaulter tracing for pediatric and adolescent patients. PEPFAR will also support media saturation with communications tools focused on adherence and retention for children and adolescents.

4.2 Prevention, specifically detailing programs for priority programming: DREAMS programming with AGYW

PEPFAR's DREAMS team in Mozambique coordinates activities through CNCS' national platform for adolescent health programming, which provides an opportunity to harmonize planning with Global Fund grants and the Rapariga Biz program, supported by United Nations agencies. In COP 18, DREAMS will expand from six districts in three provinces to nine districts (Quelimane, Nicoadala, Beira, Chokwe, Xai-Xai, Chongoene, Limpopo, Matutuine, and Namaacha) in four provinces (Gaza, Zambezia, Sofala, and Maputo Province). Two of the new districts result from an administrative division of a former DREAMS district, Xai Xai Cidade, into two newly named districts (Limpopo and Chongoene), and the other new districts, Matutuine, and Namaacha, represent geographic expansion into Maputo province. DREAMS districts have the highest risk of incidence in Mozambique according to 2017 UNAIDS HIVE model estimates, with an estimated average of 300 new infections per year (districts ranged from 150 to 530 new infections). The two new DREAMS districts are in the top four districts with the highest modeled risk ranking for incidence. DREAMS districts also rank among the highest ANC prevalence among 15-24 year olds, ranging from 14-17 percent in FY 2017. DREAMS will cover AGYW aged 10-24, and may include nine year-olds in the girls clubs aimed at the younger age band.

PEPFAR will continue to implement the full package of community-based and clinical DREAMS services. Girl Roster will continue to be a vital tool, ensuring the most vulnerable AGYW are identified and enrolled in the new DREAMS districts. DREAMS IPs are managed with consistent oversight from the U.S. Government and the Government of Mozambique, with regular provincial level coordination meetings and quarterly national coordination meetings, where results and lessons learned are shared. Monthly or bi-monthly field visits from central-level U.S. Government staff hold partners accountable for coordination and bi-directional referrals. These visits have focused on districts where coordination has been a challenge. To improve accountability and efficiency, the implementation of community activities will be consolidated in COP 18 with four IPs. These IPs have extensive experience implementing community-based programming with these populations and are expected to achieve high performance results in the implementation, management, supervision, and monitoring of community-based activities

In COP 18, the DREAMS Layering Tool will be expanded to all DREAMS districts in order to measure the delivery of the DREAMS package, including primary and secondary interventions. The Tool will also monitor the success of bi-directional referrals between the different DREAMS partners.

New age appropriate modules will be added to existing curricula for 9-14 year olds focus on activities on preventing risk of contracting HIV before it begins and making healthy choices about sex that includes the benefits of delay sexual debut and protection once they are sexually active, healthy and unhealthy relationships and prevent sexual violence including the understanding of sexual consent.

Orphans and Vulnerable Children (OVC)
COP 18 maintains alignment between the OVC portfolio and scale up districts. The OVC portfolio adopts a comprehensive case management approach, including strong linkages between health facilities and community partners in order to identify and enroll OVC, including both children living with HIV (CLHIV) and children of HIV positive caregivers requiring home-based support. Families are offered services based on a household vulnerability assessment, which identifies the threats to physical, emotional, educational, and socio-economic well-being. Services are provided through home visits, education subsidies, and referrals to health and social services. Special emphasis is placed on identifying indicators of abuse and violence, particularly GBV, and providing appropriate referrals and follow up. A specialized package of services is offered to HIV positive OVCs and their caregivers, including adherence counseling, nutrition support, early childhood social and cognitive stimulation, monitoring frequency of health facility visits, accompaniment to health facilities, and referrals to GAACs. Disclosure counseling is offered to help OVC understand their own sero-status, and/or that of their HIV-positive caregivers.

During FY 2017, the Pediatric Department of MISAU indicated that they will proactively encourage clinicians to refer children whose health status indicates a need for OVC support to PEPFAR's community-based OVC services. A job aid is in development to remind providers of the criteria for referring to OVC services, with contact information of the relevant organization to facilitate contact.

PEPFAR convenes OVC partners on a monthly basis to review results, discuss challenges, and identify districts and sites where community-clinical linkages must be strengthened. Semi-annual meetings convene OVC IPs and counterparts from the Ministry of Gender, Children and Social Action and relevant UN agencies to share program updates and best practices in providing OVC support.

PEPFAR has two OVC IPs. Both of these partners provide monthly narrative reports and data submissions to allow PEPFAR to monitor progress. PEPFAR conducts monthly visits to OVC sites to oversee program quality and fidelity to approved interventions.

Key Populations (KPs)
PEPFAR coordinates with Global Fund to ensure a harmonized approach and wide coverage (described in Section 4.6) so that Key Populations across the country have access to high-quality prevention, linkage, care, and adherence support. PEPFAR's KP programming will continue to expand in COP 18, engaging Female Sex Workers (FSWs), MSM, prisoners and, new for COP 18, People Who Inject Drugs (PWID) throughout the prevention, treatment, and care continuum. Community-based KP services were consolidated under one implementing partner, which will now have national reach, in order to provide more intensive interventions and expand reach within the budget envelope. The partner will expand diverse recruitment techniques proven to reach KPs through peer mobilizers, social networking, e-platforms (WhatsApp, Facebook), and

using the results of the 2017 PLACE study hot spot mapping to identify and engage individuals who have not previously been reached by KP prevention programming.

The KP prevention package includes multi-session educational and behavior change interventions, access to condoms and lubricants, provision of community-based HIV testing, linkage to health facilities, referrals for STI testing, follow-up support and adherence counseling, and referrals to other services (legal, social, health, etc.) Educational outreach activities will be adapted to fit the unique needs of special sub-groups, including transgender individuals and PWID. Activities in prisons will focus on HIV and TB screening upon entry as well as supporting the continuum of education and treatment services during incarceration and referral into care and treatment after release.

COP 18 will bring a renewed focus on improving clinical service quality for KPs, ensuring that the GRM's "Package of 11 KP-Friendly Health Services" are incorporated into mobile brigades offering clinical services in community hotspots, building on the successful peer navigator experience from COP 16 and COP 17, providing KP sensitization training for health providers, including KP indicators into EPTS, and provision of ART to prisoners. Each clinical provider (CP) will train their staff in KP friendly service provision and ensure they have a KP focal point in each province in which they (CP) are active. All clinicians working in mobile brigades will receive the Government of Mozambique's approved KP sensitization training, and the brigades will offer comprehensive sexual and reproductive health services, including condoms and lubricants distribution, health promotion activities, ART monitoring, STI screening and treatment, pregnancy testing and provision of FP methods, HBV testing and vaccination, mental health services, and SGBV sensitization and case detection.

The KP community partner will engage in demand creation for PrEP, which will be offered to KPs throughout the province of Zambezia and will offer adherence counseling to support consistent PrEP utilization throughout the period when the beneficiary feels that he or she is at risk.

The partner will introduce self-testing for KPs, with special focus on MSM, in districts where MSM community-based prevention programming is implemented. Peer educators will encourage MSM program beneficiaries to deliver self-tests to sexual partners who are unwilling to be identified or otherwise seek locally available testing. Self-tests will thus serve as a mechanism to reach closeted MSMs, providing them with a private, and anonymous opportunity to determine their HIV status. Peer educators will follow up with the MSM program beneficiaries to try to ascertain whether they know if the sex partner was able to use the test, had any questions about the test, and/or would like assistance with linkage to services.

VMMC

In COP 18, the VMMC program will continue to focus on reaching at least 80 percent coverage of 15-29 year old males, employing targeted demand creation activities to increase coverage, acceptability, and priority referral to services for this age band. An outreach strategy has been

instrumental in accelerating progress in districts with slower growth and/or lower coverage; campaigns, mobile sites, and temporary sites will be expanded in COP 18 in targeted areas.

Demand creation activities include non-coercive incentives, partner-funded transportation, and intensive, on-the-ground efforts of a dedicated demand creation partner in districts with low coverage and/or performance against targets. A demonstration project is planned to evaluate VMMC acceptance rates with compensation for lost wages. The site optimization tool will be used to improve planning by allowing the reallocation of resources, including providers, surgical beds, and other items to sites that are in need of additional support and/or improved performance. In districts where modeling data suggest coverage of the target age group is at or above 80 percent, the program will consolidate a maintenance program for adolescents aged 10-14 years.

Emphasis will be placed on adverse event (AE) monitoring and reporting and strengthening of quality assurance and quality improvement activities with the leadership of MISAU. AE monitoring will ensure reporting consistency with MISAU and PEPFAR requirements, while simultaneously ensuring that clinical management of AEs remain under the purview of the MISAU.

Like many developing nations, Mozambique has a population distribution with a large proportion among the youth; indeed, 58.8% of males in the central region and 48.2% in the southern region are aged 19 or less. Population data reflecting this youth bulge were used in estimating VMMC coverage. The national VMMC program has historically circumcised a significant amount of clients aged 10-14 years old. Despite the changing demographics, we do not anticipate a need to change the program to accommodate the youth bulge given that VMMC coverage is higher among 10-19 year olds than in older age brackets. Rather, the programmatic focus will continue to be on ensuring high numbers of circumcisions among adult men.

Pre-Exposure Prophylaxis (PrEP)

In COP 17, the Government of Mozambique took a major step towards increased access to PrEP, indicating that roll-out with sero-discordant couples in Zambezia will expand, without the need for passing through a pilot study. PrEP provider training was completed in the province in early FY 18, and PrEP was rolled out to 24 facilities in Zambezia by the end of March 2018, with expansion to additional facilities planned for May 2018. For COP 18, the Government of Mozambique and PEPFAR reaffirmed their commitment to expanding access to PrEP for people at significant risk of HIV acquisition, establishing PEPFAR PrEP targets for Mozambique for the first time, to cover sero-discordant couples and KPs throughout Zambezia. Furthermore, PrEP will be offered to people at substantial risk in Nampula and Manica provinces in COP 18. To ensure demand among those most at risk, PrEP counseling will be incorporated into HIV post-test counseling of people who demonstrate elevated risk and, in particular, sexual contacts of index cases. Integration of PrEP counseling into multiple testing modalities such as community and facility-based index case partner testing, ANC, VCT and HIV clinic where couples are found

to be sero-discordant will ensure that the HIV-negative partner has the information necessary to make a decision about starting PrEP, including a referral to a site where PrEP can be initiated. Apoio Psicossocial (APSS) services will be provided to PrEP users.

To ensure PrEP adherence, a number of interventions have been put in place. There is one stop model for PrEP, which means that clients collect their medication at either ANC or HIV clinic and there is no need to pass through the pharmacy. We will also conduct monthly follow-up phone calls in order to ensure that the clients are taking the medication appropriately. Clients receiving PrEP will receive adherence counseling using a standardized PrEP toolkit whenever they show up for either consultation or medication collection. Clients will also become eligible for three months drug distribution beginning at the third clinical appointment.

4.3 Additional country-specific priorities listed in the planning level letter
Effective Partner Management

During COP 17, PEPFAR introduced a system to monitor closely and manage partner performance toward target achievement, total expenditures, and quality of services. The increased monitoring and management of partner performance has resulted in significant shifts during COP 17 implementation and COP 18 planning impacting several implementing partner's geographic and technical scopes. Many of these shifts were directly based on performance sending a clear message to partners that not meeting targets will have consequences. PEPFAR is confident that the proposed strategic shifts of funding and targets will result in improved performance and are in line with a no tolerance stance for under- performing partners. These efforts will continue during COP 18 and will include in-house data reviews within and across program areas, as well as in-depth, multi-partner review meetings to share targets and best practices. SIMS data will be triangulated with monitoring, evaluation, and reporting (MER) and systems process indicators to be used and reviewed with partners to identify site level remediation plans in order to avoid delays in service delivery and promote high quality of services. Supplemental information to the standard SIMS questions will be collected and used to enhance program management capacity. In addition to SIMS visits, targeted technical assistant by U.S. Government staff aims to introduce as needed timely IP improvement plans developed jointly with district and/or provincial government authorities. Joint supervisory visits with partners, MISAU staff, and USG staff will be prioritized to assure high volume facilities are implementing activities as intended and reported data are of expected quality while also ensuring improvement activities are scaled in vulnerable programmatic areas including retention and loss to follow up.

PEPFAR will continue to monitor key indicators, such as implementation of loss to follow up tracking to improve retention at the site level on a monthly basis to facilitate early identification of performance issues so that rapid and intensive interventions from USG staff can be deployed. PEPFAR will continue to monitor all IPs' expenditures on a quarterly basis to ensure outlays are in line with approved spending levels and are congruent with target achievements. As needed, U.S. Government partner management staff will jointly develop Partner Performance Improvement

Plans to enhance poorly performing partners' efforts in achieving goals and targets. Partner performance remediation plans will address issues with target achievement, quality of services, implementation delays, and expenditure rates.

When designing programs at the provincial level, PEPFAR assured that emphasis was placed on provinces with high HIV burden. Particular emphasis was placed on Zambezia and Maputo, which have the highest numbers of PLWH and on Nampula, which is experiencing rapid population growth (Figure 2.4.2). As discussed in section 2.4, two districts in Nampula were converted from sustained to scale-up. The Zambezia Action Plan (ZAP) established in COP17 will continue implementation through FY2018 including substantial investments in health information systems, infrastructure, and human resources. Phased implementation of important innovations were focused on these provinces; plans for additional support for high fidelity mentor mother programs, community ART distribution, male congregate setting testing, self-testing, and PrEP all involve some or all of these provinces as detailed elsewhere in this document. These provinces are also prominently featured in partner management modifications. In Nampula, where mother to child transmission rates are the highest in the country, redistribution of clinical partner portfolios will facilitate increased attention on the needs of this province. In Zambezia, where the VMMC program underachieved in FY17, increased share of the VMMC portfolio was redistributed to the partner that was on track as of FY18 Q1 to meet its targets. These re-alignments allow us to ensure that the most effective programs and partners are positioned to propel the country to epidemic control in the highest burden provinces.

4.4 Commodities

PEPFAR-Mozambique coordinates commodity investments closely with GFATM and regularly monitors commodity pipelines and funding to ensure appropriate stock levels in country to meet consumption demands. Commodity budgets are determined starting with current consumption levels and gradually working toward target achievement. Supply plans are then updated quarterly to account for actual consumption levels and adjust orders accordingly to keep stock levels between 4-9 months of stock (based on consumption) and avoid over or under stocking. While Viral Load testing in FY 2017 reached 93 percent of the target, discrepancies persist in TX_CURR and consumption data with a difference of 20-25 percent for the last three years.

The anticipated COP 18 investments in EID and viral load commodities will require particularly close monitoring in FY 2019, as they may not be sufficient to cover the full demand. While the ARV investment is likely sufficient to cover FY 2019 need, a significantly larger investment will be required in FY 2020.

A commodities data quality assessment (DQA) is planned and the objectives and next steps are outlined below. The commodities data quality assessment aims to identify sources of inaccurate consumption data reporting. A horizontal and vertical analysis of consumption data from the site to national level is planned for 3 sites in each province representing the different PEPFAR

geographies. Based on a mapping of consumption data sources, the analysis involves comparing consumption data from each source within a site and then from the site level to the central level. A deviation of greater than 10% at a given site will warrant further investigation at the site. This analysis will then take into consideration reporting rates for the site and the district in the previous six months. This analysis will be repeated twice per year and we expect that recommendations from each exercise will refine and improve the following DQA approach.

4.5 Collaboration, Integration and Monitoring

During the COP 17 implementation period, PEPFAR worked closely with external stakeholders to harmonize our technical approaches and increase the impact of program implementation across the HIV clinical cascade. PEPFAR collaborated with GFATM on retention approaches in the community, prevention activities in DREAMS districts, health information systems expansion, optimization of KP programming, strategic planning for the national laboratory system, and supply chain strengthening. PEPFAR has collaborated closely with the MISAU on technical approaches across the HIV clinical cascade, co-development of guidelines, and draft plans for the DTG transition. CNCS engagement with PEPFAR has involved co-developing a scope of work on supporting their ability and capacity to improve multi-sectoral coordination and monitoring of HIV response in Mozambique. PEPFAR is engaging with CNCS to take the lead in community systems strengthening to improve retention and adherence. Working closely with other external stakeholders, including UNAIDS and WHO, has been a priority during the COP 18 planning. This engagement has focused on aligning efforts to build capacity for CNCS and provide an external evaluation of PEPFAR, MISAU, and other national level stakeholders.

Partner performance management continues to be a priority for PEPFAR and MISAU. Ensuring fidelity for core programmatic intervention packages in both prevention and retention is a key priority for both PEPFAR and MISAU. Regular data reviews within and across technical areas as well as in-depth, multi-partner review meetings to share targets and emergent best practices have been conducted throughout the COP 17 implementation period. SIMS data have been used to identify site level remediation steps in order to avoid delays in service delivery. In addition to SIMS visits, targeted technical assistance by USG staff and additional joint supervisory visits with MISAU have created opportunities for gap analysis and development of improvement plans for timely response and in agreement with the partner, district, and/or provincial government authorities.

System priorities continue to be identified, and activities are routinely monitored by cross-cutting working groups to ensure effective resource allocation. U.S. Government technical assistance will support the analysis of MISAU data for improved site-level information on the HIV cascade system, as well as HRH and physical infrastructure needs, including HRH modeling for existing and planned service delivery expansion. A consolidated and prioritized list of system investments will maximize program achievements within a fixed funding envelope.

Another point of enhanced coordination is better integration of logistics and transportation. In the near and medium term, continued support for supply chain, stock management, and transport of laboratory samples is required. In COP 18, PEPFAR will improve the efficiency and yield on these investments by better harnessing accurate data on stock availability, including a shared e-platform on facility level stocks. Delivery routes will be optimized to allow more frequent and dependable transportation of both commodities and laboratory samples.

PEPFAR will be partnering with the MISAU to evaluate data collected during their Test and Start readiness assessments. This data, combined with other MISAU data, provides site-level information on HRH and physical infrastructure needs. A consolidated and prioritized list of system investments will allow PEPFAR to maximize its program achievements within a fixed funding envelope.

During COP 18, PEPFAR will have continued, regular coordination on laboratory-related issues, particularly those related to VL monitoring. Due to the expansion of Test and Start and increasing demand on the laboratory system, PEPFAR will monitor jointly with MISAU for potential backlogs of VL samples and implement emergency backlog action plans to capacitate VL sample processing in country. Lab site readiness and supply chain commodities -- including VL reagents, plasma implementation, and cold chain storage -- will be priorities in COP 18 to ensure a high quality, optimized laboratory network. At the laboratory site level, VL champions, who will serve to ensure a higher quality of laboratory services including VL result return into patient charts, will be expanded in COP 18 to improve coordination and promote awareness on VL testing, sample transport, and results reporting.

Regarding health information systems and alignment of data, GFTAM focuses on HMIS, DHIS, and integration of systems in SIS-MA. GFTAM will also work with PEPFAR and partners to ensure that implementation of the Community HMIS System and tools are aligned under MISAU and CNCS guidance. TB alignment issues at the community level and system related issues, i.e. the implementation of lab/specimen transportation and the results system under CCS, will be synchronized with PEPFAR/US partners' support.

Enhancing patient-friendly services, improving patient flow at the facility level, and optimizing provider workloads, are COP 18 priorities. As T&S continues to be scaled, there will continue to be an emphasis on expanding availability of three-month drug prescriptions and six-month clinic visits for stable patients. Key strategies including the family health approach to providing services and GAACs, both of which have been shown to improve retention, will be further scaled-up with a more focused attention to fidelity to the five pillars for retention and adherence (see Appendix D). In COP 18, there will be an expansion of community ARV distribution through integrated primary health care mobile brigades. Good stock management and continuous drug availability are central to expanding interventions that alter the current service delivery approach. Lay personnel charged with providing key services such as counseling, adherence support, and prioritization of LTFU will continue in COP 18.

Coordination and performance management of partner implementation across the five key pillars for retention and adherence will occur in COP 18. Close monitoring through user level dashboards including community scorecards will be primary drivers towards efficiency and ensuring a harmonized implementation approach to retention and adherence at both facility and community levels.

4.6 Targets for scale-up locations and populations

Overall Treatment Targets:
In alignment with S/GAC guidance, Mozambique began with the expectation of achieving a 20 percent increase in our number of persons newly initiated on treatment between FY 2018 and FY 2019 and a substantial improvement in our retention: 90 percent among those newly initiated on treatment during FY 2018 and 95 percent among those on treatment for >12 months in FY 2019. Current ART coverage in each district was estimated using the most recent PLHIV calculations along with our total number on treatment as reported by PEPFAR IPs. Aggressive growth was then targeted for all scale-up districts using the formula shown below.

These district-level treatment targets were developed with the aim of increasing coverage rapidly in the areas with the highest unmet need to accelerate progress towards UNAIDS 90-90-90 and 95-95-95 targets nationally.

Scale-up Saturation Districts		
FY17 ART Coverage	Targeted Growth	Number of Districts
>90%	10% increase per year	14
71-90%	15% increase per year	14
61-70%	25% increase per year	14
51-60%	30% increase per year	25
Scale-up Aggressive Districts		
FY17 ART Coverage	Targeted Growth	Number of Districts
51-60%	30% increase per year	6
41-50%	35% increase per year	3
21-40%	40% increase per year	2
<20%	50% increase per year	0

HIV Testing Services (HTS) in Scale-up Districts

Target setting for case identification in COP 18 in scale-up districts is driven by available data on treatment coverage gaps. Testing modality allocations aim for maximum case finding efficiency and thus focus on scaling-up community-based index case partner (and family) testing and optimized PICT in the highest yield sites and sectors. A linkage assumption of 85 percent of new positives into treatment is achievable and is consistent with increasing historical trends, as per

available linkage proxy data (see Figure 4.1 above). Yield assumptions were set based on historical performance, with a standard minimum yield of 28 percent set for adult index case testing based on the assumption of higher fidelity in all regions. All KP testing targets were set based on an assumption of testing 75-80 percent of all KPs reached via comprehensive prevention programming (KP_PREV).

Pediatric Targeting

Pediatric targets were developed based on the assumption that the program will continue to improve efficiencies and increase 12 month retention to 90 percent for new patients and 95 percent for patients already on treatment. All districts were expected to grow TX_NEW and TX_CURR by 10-12 percent between FY 2018 and FY 2019. More aggressive targets were allocated at the district level based on prior rates of growth; targets were additionally concentrated in districts with high numbers of HIV infected infants.

PMTCT Targeting

Targeting for COP 18 continues to demand high program performance. Ninety-five percent of women at ANC must know their status and 95 percent of the positives must be linked to ART. For EID, 95 percent of exposed infants (denominator is PMTCT_STAT_POS) must be tested by 12 months and 95 percent of the HIV positive infants linked to care. Eighty percent of exposed infants must be tested by 2 months. TX_NEW is calculated from FY 2018 Q1 EID yield (at district percentage) multiplied by number of tests targeted—PMTCT_EID-- with a 95 percent linkage assumption.

Table 4.6.1 Entry Streams for Adults and Pediatrics Newly Initiating ART Patients in Scale-up Districts

Entry Streams for ART Enrollment	Tested for HIV (APR FY19) *HTS_TST*	Newly Identified Positive (APR FY19) *HTS_TST_POS*	Newly Initiated on ART (APR FY 19) *TX_NEW*
Total Men	1,784,165	148,314	121,678
Total Women	3,053,891	234,582	225,099
Total Children (<15)	983,584	23,750	23,260
Adults			
TB Patients	59,023	4,247	6,569
Pregnant Women	976,904	46,321	45,061
VMMC clients	358,958	7,363	5,890
Key populations	36,061	-	-
Priority Populations	-	-	-

Other Testing	**3,463,580**	**325,799**	**289,257.26**
Previously diagnosed and/or in care	-	-	**11,570**
Pediatrics (<15)			
HIV Exposed Infants	**81,970**	**5,094**	**4,840**
Other pediatric testing	**901,615**	**18,656**	**18,420**
Previously diagnosed and/or in care	-	-	**930**

Table 4.6.2: VMMC Coverage and Targets by Age Bracket in Scale-up Districts

SNU	Boys 10-14 Years of Age				Men 15-29 Years of Age				VMMC_CIRC (in FY19)	
	Population Size Estimate	Coverage End FY17	Expected Coverage End FY18	Expected Coverage End FY19	Population Size Estimate	Coverage End FY17	Expected Coverage End FY18	Expected Coverage End FY19	FY19 Expected VMMC_CIRC, age 10-14	FY 19 Expected VMMC_CIRC, age 15-29
_Military Mozambique	DOD	DOD	DOD	DOD	DOD	DOD	DOD	DOD	34,343	17,858
Alto Molocue	22,427	43%	52%	53%	38,041	61%	77%	83%	5,215	3,412
Barue	12,567	37%	46%	62%	24,156	41%	63%	85%	10,324	6,441
Beira	39,355	73%	66%	71%	70,647	70%	81%	93%	17,591	10,070
Bilene	10,404	100%	100%	100%	19,217	72%	89%	95%	3,287	430
Boane	13,658	96%	81%	86%	26,966	99%	100%	100%	3,083	1,348
Buzi	12,413	60%	67%	67%	22,282	66%	91%	100%	4,118	2,469
Cahora Bassa	9,174	66%	71%	89%	17,536	43%	68%	92%	7,499	4,385

Caia	13,546	29%	36%	45%	24,317	25%	41%	67%	9,319	6,989
Changara	8,579	35%	46%	55%	16,399	35%	57%	80%	9,879	7,109
Chemba	6,099	14%	13%	34%	10,949	18%	18%	54%	6,192	4,644
Chibabava	9,001	62%	74%	76%	16,158	67%	99%	100%	4,288	2,639
Chibuto	15,377	91%	89%	85%	28,403	52%	75%	83%	3,437	1,524
Chicualacuala	1,974	88%	100%	100%	3,647	43%	100%	100%	3,694	1,214
Chimoio	26,382	41%	40%	41%	50,711	38%	49%	64%	12,299	9,224
Chinde	5,584	40%	56%	56%	9,471	50%	75%	82%	880	461
Chokwe	18,143	80%	69%	59%	33,510	57%	65%	72%	2,201	1,651
Derre	7,216	36%	46%	47%	12,239	48%	63%	69%	2,122	1,591
Dondo	13,718	93%	88%	91%	24,625	97%	100%	100%	5,433	2,463
Gile	14,726	49%	45%	50%	24,978	64%	66%	76%	5,108	3,434
Gondola	14,075	23%	35%	41%	27,055	41%	62%	84%	14,833	11,125
Gorongosa	12,907	41%	46%	52%	23,171	35%	52%	77%	8,724	6,543
Guija	6,447	100%	100%	100%	11,908	67%	90%	99%	1,573	503
Gurue	27,906	46%	45%	46%	47,335	66%	70%	76%	6,648	4,873
Ile	11,941	57%	63%	80%	20,254	61%	80%	96%	9,538	4,618
Inhassunge	5,999	39%	49%	49%	10,176	51%	69%	77%	1,501	1,126

Limpopo	10,444	82%	80%	82%	19,291	49%	70%	73%	3,068	271
Luabo	3,547	40%	56%	56%	6,016	50%	75%	82%	1,203	902
Lugela	12,161	34%	44%	46%	20,628	46%	62%	71%	3,695	2,772
Mabalane	3,107	85%	85%	100%	5,739	39%	64%	82%	2,566	939
Machaze	8,048	10%	23%	29%	15,470	15%	33%	50%	4,529	3,397
Macossa	3,292	5%	5%	25%	6,328	7%	7%	42%	3,639	2,729
Maganja Da Costa	11,653	49%	54%	61%	19,766	54%	67%	76%	4,803	2,274
Magude	3,999	100%	97%	96%	7,896	98%	100%	100%	1,252	790
Mandlakaze	9,915	100%	100%	100%	18,314	51%	84%	94%	4,136	1,156
ManhiÃ§a	13,082	100%	100%	100%	25,829	100%	100%	100%	4,555	2,583
Manica	15,612	38%	44%	48%	30,009	50%	68%	78%	10,487	6,554
Maputo City Cluster	60,304	82%	75%	83%	171,867	86%	87%	92%	20,379	7,754
Maringue	6,743	11%	11%	34%	12,104	13%	13%	54%	7,522	5,642
Marracuene	14,713	46%	48%	52%	29,049	53%	60%	73%	3,997	2,998
Marromeu	11,360	63%	66%	64%	20,393	86%	100%	100%	4,059	2,651
Massangena	1,583	18%	17%	38%	2,925	31%	30%	66%	1,543	1,157
Matola	100,769	60%	73%	79%	198,952	64%	69%	76%	17,744	7,074

Matutuine	2,935	73%	64%	70%	5,794	71%	73%	89%	1,013	702
Milange	39,405	39%	41%	41%	66,840	60%	65%	70%	6,711	4,757
Moamba	5,401	72%	65%	64%	10,663	77%	81%	87%	732	465
Moatize	22,901	38%	50%	64%	43,777	24%	50%	69%	14,658	8,558
Mocuba	26,028	74%	66%	71%	44,149	83%	88%	91%	5,817	1,816
Mocubela	7,311	49%	54%	61%	12,402	54%	67%	76%	1,984	1,488
Molumbo	21,527	39%	41%	41%	36,514	60%	65%	70%	3,895	2,921
Mopeia	9,236	42%	56%	54%	15,667	58%	81%	87%	1,873	1,405
Morrumbala	25,040	36%	46%	47%	42,473	48%	63%	69%	4,536	2,883
Mossurize	14,200	9%	24%	26%	27,295	11%	33%	42%	4,531	3,398
Mulevala	6,943	57%	63%	80%	11,777	61%	80%	96%	2,983	2,238
Mutarara	13,548	24%	38%	43%	25,899	23%	47%	67%	11,375	8,531
Namaacha	3,183	87%	93%	94%	6,283	70%	95%	100%	1,033	638
Namacurra	15,594	55%	62%	72%	26,451	53%	72%	79%	5,131	2,020
Namarroi	9,542	32%	48%	49%	16,185	44%	66%	76%	2,947	2,210
Nhamatanda	22,776	59%	57%	57%	40,886	60%	73%	88%	9,737	7,006
Nicoadala	12,118	89%	98%	100%	20,555	100%	100%	100%	12,381	7,194

Pebane	13,054	51%	57%	61%	22,142	53%	69%	75%	3,370	1,762
Quelimane	23,116	100%	99%	100%	39,210	100%	100%	100%	16,755	7,842
Sussundenga	11,439	5%	24%	37%	21,988	7%	31%	62%	11,435	8,576
Tete	20,368	17%	20%	24%	38,935	15%	25%	34%	13,060	9,795
Xai-Xai	10,184	82%	80%	82%	18,811	49%	70%	73%	2,722	773
Total	965,796				1,819,421				430,986	256,767

VMMC targets were based on Project SOAR estimates of circumcisions among adult men age 15-29 needed to reach 80 percent coverage in the minimum feasible timeframes, using updated 2017 census data and the same age band distribution used for Spectrum modeling, which incorporates the youth bulge. By the end of FY 2018, 80 percent coverage is projected for 21 out of 64 districts in which PEPFAR implements VMMC programs. With COP 18 targets, it is estimated that 32 out of the 64 districts will have reached saturation of at least 80 percent. To account for districts in which Project SOAR's model estimated high coverage but continued demand suggested otherwise, targets at the district and Provincial level were kept at a minimum of four times the expected FY 2018 Q1 achievement. The total VMMC target in most provinces was calculated using the adult male target as 70 percent of the total target.

Table 4.1.3: Target Populations for Prevention Interventions to Facilitate Epidemic Control : PP_PREV Dreams Districts

Target Populations	**District**	**Population Size Estimate- (female 10-24) (scale-up SNUs)**	**Coverage Goal (in FY18)**	**FY19 Target**
Sofala	Beira	83,541	26%	21,647
Gaza	Chokwe	37,992	23%	8,612
Gaza	Chonguene	20,823	27%	5,706
Gaza	Limpopo	26,145	27%	7,165

Maputo	Matutuine	7,121	34%	2,433
Maputo	Namaacha	7,819	32%	2,520
Zambézia	Nicoadala	28,685	41%	11,624
Zambézia	Quelimane	56,324	26%	14,666
Gaza	Xai-Xai	23,896	31%	7,392
Total		***292,346***	***28%***	***81,765***
Source: Census 2017				

For COP 18, PP_PREV focuses on supporting AGYW aged 10-24 through DREAMS with an evidence-based HIV prevention curriculum that includes content for preventing violence and reducing HIV risk. IMASIDA 2015 was used to estimate the percent of girls in the DREAMS age bands who should be covered by DREAMS based on specific risk factors, including early marriage, dropping out of school, and early pregnancy that would qualify them for DREAMS services. PP_PREV targets were set to achieve at least 30 percent coverage in DREAMS districts of all HIV-negative females aged 10-24 based on the DREAMS risk profile. In COP 18, in each district, DREAMS/PP_PREV will reach 25 percent of HIV-negative girls aged 10-14, at least 40 percent of AGYW aged 15-19, and 20 percent of AGYW aged 20-24.

In addition to the DREAMS PP_PREV targets, Peace Corps and Small Grants established 17,417 PP_PREV targets in districts in which they have programming.

Table 4.1.3a: Targets for KP_PREV Interventions to Facilitate Epidemic Control - MSM

Province	District	Population Size Estimate	Coverage Goal	FY19 Target
Sofala	Beira	3,093	30%	928
Gaza	Bilene	790	10%	395
Manica	Chimoio	2,660	20%	532
Gaza	Chokwe	1,377	10%	551
Niassa	Cuamba	1,515	20%	303
Manica	Gondola	1,153	20%	231

Niassa	Lichinga	1,226	20%	245
Maputo City Cluster	Maputo City Cluster	5,964	20%	1,312
Maputo	Matola	8,786	15%	2,197
Inhambane	Maxixe	668	40%	267
Nampula	Meconta	1,301	10%	130
Zambezia	Mocuba	2,216	5%	111
Nampula	Nacala	1,263	40%	265
Nampula	Nampula	4,238	40%	1,695
Zambezia	Pemba	1,165	50%	583
Zambezia	Quelimane	1,968	40%	787
Tete	Tete	979	60%	587
Total		***40,362***	***28%***	***11,119***

Table 4.1.3b: Targets for KP_PREV Interventions to Facilitate Epidemic Control - FSWs

Province	District	**Population Size Estimate**	**Coverage Goal**	**FY19 Target**
Zambezia	Alto Molocue	2,119	20%	424
Sofala	Beira	7,291	17%	1,267
Gaza	Bilene	1,450	289%	1,427
Tete	Changara	2,750	99%	2,712
Manica	Chimoio	5,091	30%	1,527
Cabo Delgado	Chiure	2,062	50%	1,031
Niassa	Cuamba	3,290	12%	395
Sofala	Dondo	1,099	2%	20

Zambezia	Gurue	2,593	20%	519
Inhambane	Inhambane	890	98%	868
Inhambane	Inhassoro	325	98%	318
Niassa	Lichinga	2,643	18%	476
Cabo Delgado	Macomia	753	60%	452
Tete	Magoe	564	10%	56
Nampula	Malema	1,437	60%	862
Maputo City Cluster	Maputo City Cluster	4,117	45%	1,853
Inhambane	Massinga	881	60%	529
Maputo	Matola	9,368	25%	2,342
Inhambane	Maxixe	723	100%	723
Nampula	Meconta	1,734	20%	347
Zambezia	Milange	3,960	20%	792
Maputo	Moamba	600	93%	559
Cabo Delgado	Mocimboa Da Praia	793	75%	595
Zambezia	Mocuba	2,778	20%	556
Nampula	Nacala	2,852	100%	2,852
Nampula	Nacala-A-Velha	1,560	96%	1,495
Nampula	Nampula	9,276	50%	4,638
Zambezia	Nicoadala	1,101	131%	1,439
Cabo Delgado	Palma	500	99%	495
Cabo Delgado	Pemba	2,490	40%	996
Zambezia	Quelimane	4,915	40%	1,966

Tete	Tete	4,268	25%	1,067
Inhambane	Vilankulo	737	100%	737
Total		***87,010***	***42%***	***36,332***

Population sizes for KPs were estimated using the 2011 Integrated Behavioral and Biological Survey (IBBS) and were updated in 2018 through a joint exercise with UNAIDS and Global Fund based on the 2017 national census as well as PEPFAR and GFATM program data (including the 2017 PLACE Study, which identified KP hot spots in five cities in three provinces: Maputo, Sofala, and Manica. For COP 18, PEPFAR and GFATM harmonized their targeting to ensure coordinated expansion of coverage and elimination of potential duplication of programming. To achieve this end, PEPFAR eliminated targets in ten districts and increased coverage in other districts. While PEPFAR's targets will achieve 28 percent coverage of the estimated MSM population and 44 percent of the estimated FSW population, PEPFAR and Global Fund targets were jointly set to achieve 60-90 percent coverage of the estimated population size for FSWs and MSM at the district level. Targets for PWID were set based on the 2017 PLACE Study, with coverage striving for 100 percent of those identified.

Table 4.1.3c: Target Populations for Prevention Interventions to Facilitate Epidemic Control-Prisoners

Province	District	**Population Size Estimate**	**Coverage Goal**	**FY19 Target**
Sofala	Beira	1,714	100%	1,714
Manica	Chimoio	1,406	100%	1,406
Zambezia	Gurue	500	100%	500
Inhambane	Inhambane	849	100%	849
Gaza	Mabalane	1,848	100%	1,848
Maputo City Cluster	Maputo City Cluster	285	100%	285
Maputo	Matola	3,403	100%	3,403
Zambezia	Milange	400	100%	400
Zambezia	Mocuba	1,313	100%	1,313
Cabo Delgado	Montepuez	397	100%	397

Nampula	Nacala	500	100%	500
Nampula	Nampula	2,095	100%	2,095
Cabo Delgado	Pemba	648	100%	648
Zambezia	Quelimane	1,050	100%	1,050
Tete	Tete	300	100%	300
Gaza	Xai-Xai	2,178	100%	2,178
Total		***18,883***	***100%***	***18,883***

Prison census information is not publicly available so targets were based on informal estimates and prior achievement, and are intended to cover 100 percent of population. KP district level targets were all set above historical achievement.

Table 4.6.4: Targets for OVC and Linkages to HIV Services

SNU	**Estimated # of Orphans and Vulnerable Children**	**Target # of active OVC (FY19Target) OVC_SERV**	**Target # of active beneficiaries receiving support from PEPFAR OVC programs whose HIV status is known in program files (FY19 Target) OVC***
Alto Molocue	19,352	3,956	3,956
Ancuabe	10,744	1,790	1,790
Angoche	17,986	5,588	5,588
Angonia	18,233	28	28
Barue	20,368	5,180	5,180
Beira	54,577	18,402	18,402
Bilene	16,458	3,341	3,341
Boane	18,678	3,806	3,806
Buzi	16,985	3,714	3,714
Cahora Bassa	5,492	28	28
Caia	18,122	2,566	2,566
Changara	5,382	1,615	1,615
Chibabava	13,091	2,735	2,735

Chibuto	23,076	4,712	4,712
Chimbonila	4,341	18	18
Chimoio	42,676	8,001	8,001
Chinde	5,828	1,183	1,183
Chiure	19,703	3,284	3,284
Chiuta	3,954	28	28
Chokwe	25,845	7,943	7,943
Chonguene	12,595	3,939	3,939
Cuamba	12,779	3,592	3,592
Derre	6,170	1,728	1,728
Dondo	18,308	3,987	3,987
Erati	16,563	14	14
Gile	13,285	2,725	2,725
Gondola	22,574	5,403	5,403
Guija	9,937	2,035	2,035
Guro	10,602	18	18
Gurue	23,705	4,848	4,848
Homoine	7,265	1,613	1,613
Ile	11,063	3,133	3,133
Ilha De Mocambique	2,982	18	18
Inhambane	5,160	1,563	1,563
Inharrime	7,974	1,769	1,769
Inhassoro	3,685	845	845
Inhassunge	6,171	1,253	1,253
Jangamo	6,581	18	18
Lago	7,489	36	36
Lichinga	10,060	4,046	4,046
Limpopo	15,970	4,973	4,973

Luabo	3,296	923	923
Lugela	11,740	3,287	3,287
Machaze	14,543	3,333	3,333
Macomia	7,650	1,275	1,275
Maganja Da Costa	11,971	2,466	2,466
Magoe	3,875	18	18
Magude	5,907	1,051	1,051
Majune	1,728	18	18
Malema	9,823	3,349	3,349
Mandimba	9,672	2,726	2,726
Mandlakaze	13,521	2,535	2,535
ManhiÃ§a	16,033	2,823	2,823
Manica	24,542	5,808	5,808
Maputo City Cluster	85429	17,611	17,611
Marracuene	17,789	3,980	3,980
Marromeu	14,262	2,677	2,677
Marrupa	4,521	18	18
Massinga	14,538	3,557	3,557
Matola	137,608	22,330	22,330
Matutuine	3,967	712	712
Maua	3,297	18	18
Maxixe	7,841	2,072	2,072
Mecanhelas	13,572	3,818	3,818
Meconta	11,355	18	18
Metarica	2,418	18	18
Metuge	5,756	733	733
Milange	35,307	6,196	6,196

Moamba	7,284	1,798	1,798
Moatize	13,893	3,579	3,579
Mocimboa Da Praia	8,024	1,448	1,448
Mocuba	26,094	5,314	5,314
Mocubela	7,420	2,078	2,078
Mogovolas	18,126	18	18
Molumbo	18,457	5,168	5,168
Moma	14,238	3,561	3,561
Monapo	18,606	4,179	4,179
Montepuez	16,889	2,698	2,698
Mopeia	8,420	1,709	1,709
Morrumbala	21,855	4,454	4,454
Morrumbene	8,603	1,906	1,906
Mossuril	6,301	18	18
Mossurize	23,543	2,978	2,978
Muecate	7,899	18	18
Mueda	15,339	2,148	2,148
Muidumbe	7,338	1,402	1,402
Mulevala	6,125	1,715	1,715
Murrupula	9,516	18	18
Mutarara	8,190	2,435	2,435
Nacala	10,475	7,261	7,261
Nacaroa	6,388	18	18
Namaacha	4,188	733	733
Namacurra	15,908	3,265	3,265
Namarroi	8,390	2,367	2,367
Nampula	35,166	15,227	15,227
Ngauma	5,806	18	18

Nhamatanda	30,195	7,710	7,710
Nicoadala	12,940	3,980	3,980
Panda	2,454	18	18
Pebane	13,550	2,768	2,768
Pemba	13,451	3,457	3,457
Quelimane	25,248	7,817	7,817
Ribaue	13,384	18	18
Sanga	3,548	18	18
Sussundenga	18,313	3,421	3,421
Tete	13,673	4,066	4,066
Vilankulo	13,201	3,126	3,126
Xai-Xai	15,594	5,169	5,169
Zavala	10,409	2,303	2,303

OVC target setting for the two large OVC implementing partners utilized the new 2017 census data to establish population size estimates in the 0-19 age group, with IMASIDA 2015 data used to estimate prevalence of orphan-hood and 2018 Spectrum estimates used to estimate the number of CLHIV at the district level. The denominator for OVC was established by adding together the estimated number of orphans and CLHIV at the district level. While PEPFAR recognizes that an unknown percentage of those two groups overlap, the larger denominator allows the OVC program to enroll additional at-risk youths, such as high-risk adolescents, those who have survived GBV, and children of PLHIV. In COP 18, OVC targets were reallocated between scale up districts to better align with TX_CURR for 0-19 year olds, and targets were increased by 25-50 percent over COP 17 in districts with poor pediatric retention results and high mother-to-child transmission rates, particularly in the provinces of Nampula, and Cabo Delgado. Targets were established at a level to ensure that at least 30 percent of children on ART in scale up districts can be covered by OVC programming. This allows OVC programs to serve as "wrap-around" support for the pediatric retention programming offered by mentor mothers and the pediatric adherence counselors, focusing on the vulnerabilities that impede adherence, retention and good health outcomes. Target reductions in districts affected by this realignment will occur through the reduction in recruitment of new beneficiaries in COP 18. Current beneficiaries will not be graduated unless identified as eligible by the risk assessment tool. OVC targets were increased by 25 percent in the nine DREAMS districts.

The OVC platform will continue to be used for HIV case finding through screening of OVC which do not know their status, upon enrollment. Those meeting the HIV risk assessment criteria will be

referred and/or supported to receive counselling and testing from HTC providers, and for those testing positive will be assisted for enrollment in ART. Those not meeting the criteria will be indicated and sensitized to seek HTC services.

Districts with double-digit targets in Table 4.6.4 correspond to Peace Corps and/or Small Grants.

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

5.1 COP 18 Programmatic Priorities

Moderate growth is anticipated in Sustained and Attained districts, where investments are less substantial. Employing a package of services focused on maintaining the quality of clinical services provided in health facilities, without significant demand creation or community outreach, we anticipated that Sustained districts would continue to increase the number on treatment by 10% annually, and attained districts would continue to increase at 5% annually (with a slightly higher growth in districts newly initiating Test and Start during the 2018 calendar year).

Prevention programming, including OVC, PrEP, and DREAMS will be primarily carried out in scale up districts. 4,938 OVC targets were established in Pemba because the city contends with significant challenges with pediatric retention and mother-to-child retention rates. All other OVC targets in sustained districts will be implemented by Peace Corps and Small Grants, based on the placement of their volunteers and implementing partners.

The Small Grants will focus 9% of total number of beneficiaries in one sustained district (Pemba) through family-centered approaches using case management to monitor wellness of OVC using community-based processes to increase access to Health and HIV services, schooling/education, economic strengthening and Psychosocial Support. All these activities will be done through community based organization receiving funds procured through the PE Quick Impact Small Grants. The OVCs reached will be included in the OVC_SERV indicator.

Peace Corps Volunteers will be present in about 30% of the total number of sustained sites, including sites where PC already has presence and sites currently being developed for FY19. Volunteers work with OVCs thru youth and girls clubs and other community-based health activities, focusing their support and trainings on topics including HIV prevention, testing and treatment, delayed sexual debut, sexual risk reduction strategies, nutrition, self-esteem, gender equity and violence. Many of these activities are enhanced with funding procured through Peace Corps Small Grants. The OVCs reached will be included in the OVC_SERV indicator

KP programming with FSWs and MSM will occur in five districts where population size estimates indicate at least 300 FSWs and 130 MSM can be reached with prevention programming. Two

sustained districts (Mabalane and Pemba) have prison populations of over 600, so prison programming will be implemented. VMMC programming will continue in seven districts that were reclassified within the past two years as sustained (Gorongosa, Macossa, Mabalane, Chemba, Massangena, Cahora Bassa, and Maringue) to ensure continuity of support for fixed sites where coverage is low and demand remains consistent.

5.2 Targets for attained and sustained locations and populations

Table 5.2.1: Expected Beneficiary Volume Receiving Minimum Package of Services in Attained Support Districts*			
Attained Support Volume by Group		**Expected result APR 18****	**Expected result APR 19**
HIV testing (all populations)	HTS	9,519	117,970
HIV positives (all populations)	HTS_POS	795	3,812
Treatment new	TX_NEW	479	3,410
Current on ART	TX_CURR	3,830	6,756
OVC	OVC_SERV	0	0
Key populations	KP_PREV	58	0
NOTES - FY19 HTS and HTS_POS were taken from Target calculation but HTS_POS is sum of HTS_POS and PMTCT_STAT_POS (only newly tested), VMMC (tested pos), and TB_STAT_POS (only newly tested). - FY18 HTS and HTS_POS were taken from the Key Indicator Trends Tab. - FY18 and FY19 TX, OVC and KP_PREV were taken from Target calculation tab. * Table reflects data for 3 districts identified as Attained in COP18: Cheringoma, Chifunde and Zumbu ** Represents COP17 targets for all indicators with the exception of TX_CURR, which has been adjusted to reflect expected achievement			

Table 5.2.2: Expected Beneficiary Volume Receiving Minimum Package of Services in Sustained Support Districts			
Sustained Support Volume by Group		**Expected result APR 18**	**Expected result APR 19**
HIV testing in PMTCT sites	*PMTCT_STAT*	266,378	396,536
HTS (only sustained ART sites in FY 17)	*HTS_TST/HTS_TST_POS*	449,670	1,249,792
Current on ART	*TX_CURR*	135,889	168,877
OVC	*OVC_SERV*	9,101	5,579

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

Table 5.3.1: Service Packages for Locations and Populations in Scale-Up, Sustained, and Attained Districts*		
District Category	**Saturation and Aggressive Scale-up**	**Sustained & Attained**
Visit Frequency (Health Facilities)	≥6/year (≥8 for facilities transitioning to T&S)	≥4/year
Site Supervision approach	QI , clinical mentoring and supportive supervision, enhanced monitoring visits in T&S setting	QI, clinical mentoring and supportive supervision
Priority Population Prevention	DREAMS programming in nine districts with AGYW.	Community prevention programming limited to activities carried out by Peace Corps and State Department's Small Grants program
VMMC	Demand creation, mobile clinics as well as fixed sites, transition to 10-14 year olds in districts approaching saturation in 15-29 year olds, QA/QI, strengthened systems for adverse events reporting	Continued support for VMMC at existing fixed sites in seven sustained districts (Gorongosa, Macossa, Mabalane, Chemba, Massangena, Cahora Bassa, and Maringue)
HTS	Expansion of community-based index case testing for all eligible sexual partners and biological children of newly diagnosed PLHIV. PICT optimization with special "PICT boost" action plan for all high-volume hospitals. Re-allocation of lay counselors based on HRH needs assessment (aligned with retention strategy and action plan and MOH performance based financing strategies). Targeted mobile testing strategies to reach newly tested men in congregate settings (Zambezia & Nampula). Assisted self-testing with uniformed adult men (police and customs officials) in Zambezia and Maputo. KP peer testing and MSM assisted self-testing in select districts with MSM programming.	Training and support for roll-out of new MOH ATS registers with new linkage and follow-up protocols. Support to introduce facility-based index testing protocols. Clinical mentorship and in-service training to expand efficient PITC approaches. Support to district-level MIS teams for routine HTS data analysis for decision-making.
PMTCT	In addition to core package offered for adult care and treatment, key programmatic components include: facility and community based mentor mothers focused on peer support/retention of PBFW, intensive monitoring of services for HEI and HII, support for EID POC and conventional PCR testing in alignment with national MOH strategy, expansion of mobile brigades in high VT provinces	In addition to core package offered for adult care and treatment, continued support for one stop model for PMTCT within ANC/CCR services, continued support for Option B+ implementation and continued support for national access to EID PCR testing.

	to improve access to care for women in remote communities, continued support for one stop model for PMTCT within ANC/CCR services, continued support for Option B+ implementation.	
Adult Care and Treatment	Training and mentorship support to promote implementation of National ART Guidelines, including Test and Start and introduction of Dolutegravir. Support for ensuring routine screening and improved management of sexually transmitted infections, opportunistic infections (OI), malnutrition, and gender based violence (GBV). Enhanced HR and mentoring support to improve implementation of ministry guidance on adherence and psychosocial support/positive prevention (APSS/PP). Additional support for expansion and enhanced uptake of differentiated service delivery (GAACs, 3-month drug distribution, family approach to care, adherence clubs, and ART distribution via mobile health brigades). Implementation of package of services for persons who present with advanced disease. Scale-up of VL monitoring (including early identification of suspected treatment failure & prompt transition to second line when needed); Provision of facility-based staff to ensure availability and flow of laboratory specimens and lab-results and improve use of laboratory results by clinical staff.	Support for implementation of new guidelines, OI management, and integrated retention & adherence support including facilitating implementation of ministry APSS/PP guidelines.
Pediatric Treatment	Same as Adult Treatment (included in this table), plus peer educators and M2M groups for retention support, plus support for implementation of LPR/v pellets, monthly teen clubs in all priority districts, & provincial pediatric teams	Same as Adult Treatment (see above), plus peer educators and M2M groups for retention support, plus support for implementation of LPR/v pellets
OVC	Full package of home-based interventions and referrals offered to OVC, based on household vulnerability assessment, with special emphasis on 1) HIV case identification in OVC not knowing their status through HIV risk screening; 2) CLHIV who have poor retention and family or socio-economic situations that threaten their	OVC programming offered in one sustained district (Pemba), with same package of interventions as the other districts. Other OVC implementation offered through Peace Corps or Small Grants program.

	health outcomes.	
TB/HIV	Implementation of 3Is (intensified case finding, infection control, and IPT), early ART for TB/HIV patients through one-stop shops, integrated outreach services (HIV testing & TB screening), expanded contact tracing, systematic TB screening/HIV testing in high risk groups (miners, prisoners); Additional support to follow-up and ensure treatment initiation and completion among identified MDR-TB patients	Clinical mentorship for implementation of 3Is and early ART for TB/HIV patients
Community Based Care & Support	Linkage and retention strategies (GAACs, peer groups, etc.) with community health workers including, Agentes Polivalentes Elementares de Saúde (APES), traditional healers, traditional birth attendants, and community leaders. Community-based Village Savings & Loans, index-case testing/contact tracing for HIV and TB patients in the community; expansion of male engagement to promote uptake of HIV testing and ART initiation; community dialogues facilitated by PLHIV and local community radios to broadcast key HIV prevention and adherence related messages. PLHIV to act as champions and advocates	Positive Health and Dignity Promotion (PHDP) package (APSS-PP: Apoi Psicossocial e Prevencao Positiva)/ community radios/PLHIV champions/APES where already working in sustained/attained sites
Essential Laboratory Services	National HIV- testing quality assurance, support lab infrastructure for VL/EID/TB dx and address bottlenecks, continued baseline CD4 and biannual CD4 support where VL not available, continued support for Creatinine (Cr) and Hemoglobingb (Hgb) based on treatment regimen, support for decentralized EQA	National HIV- testing quality assurance, support lab infrastructure for VL/EID/TB dx and address bottlenecks, continued baseline CD4 and biannual CD4 support where VL not available, continued support for Cr and Hgb based on treatment regimen, support for decentralized EQA
Education/ Demand Creation	Treatment literacy (adult and pediatric ART, PHDP, TB/HIV), demand creation/education for VL and T&S (where applicable), stigma reduction interventions, community/facility mobilization	N/A
M&E	Support for routine M&E activities (data clerks, registers, training, and supervision), Data quality assurance (DQA) for all quarterly indicators, support for roll-out of new HTS paper based M&E Tools, support for national site level patient file data cleaning exercise, M&E Mentorship Plan (costed) is required, provide financial support for key SI personnel to DPS and site level such as M&E	Support for routine M&E activities, continued expansion of capacity for age-gender disaggregations, Data quality assurance (DQA) for all quarterly indicators, support for roll-out of new HTS paper based M&E Tools

	Officers responsible for ART data management, enhanced monitoring of key interventions for retention	
Epidemio-logical data use	Support for routine analysis of ART, HTC and PMTCT data sets, training of data clerks on cohort analysis, site level cohort analysis to provide information on long term HIV treatment outcomes among HIV patients; TA to help health centers, hospitals and DPSs set targets and monitor their implementation for enhanced results based management at these levels	TA to help health centers, hospitals and DPSs use targets and monitor their implementation for enhanced results based management at these levels

6.0 Program Support Necessary to Achieve Sustained Epidemic Control

The transition to the new FAST tool and the Strategic Objective/Approach-based method of program planning provided an opportunity for PEPFAR to thoroughly review its program support activities. Importantly, the new method allows a more comprehensive assessment of all above-site activities, regardless of their budget code. The current Table 6 represents a mixture of activities from prior Table 6, activities that were included in COP 17 but were not included in the prior Table 6 because of differences in methods and COP guidance, and activities new to COP 18.

Overall the budget for Table 6 activities decreased significantly, from $43,712,447 in COP 17 to $28,473,864 in COP 18, as shown below. The majority of the difference is attributable to the COP 17 one-time funding for Health Information Systems and infrastructure related to the Zambézia Action Plan.

Table 6.1: COP 18 Table 6 Expenditure by Approach and Agency

Approach	DOD	HHS/CDC	HHS/HRSA	State/AF	USAID	Grand Total
Assessments, evaluation, operation research		$ 3,141,206	$ 480,000		$ 896,643	$ 4,517,849
Construction and renovation					$ 326,000	$ 326,000
Equipment procurement and maintenance	$ 119,925					$ 119,925
Financial management policies and procedures					$ 526,000	$ 526,000
Host country institutional development		$ 676,953			$ 1,549,196	$ 2,226,149
IEC and/or demand creation					$ 1,177,000	$ 1,177,000
Information systems		$ 2,274,468			$ 1,689,174	$ 3,963,642
Laboratory quality improvement and accreditation		$ 4,904,016				$ 4,904,016
Laboratory sample referral/ transportation systems		$ 922,246			$ 988,000	$ 1,910,246
Management and coordination					$ 200,000	$ 200,000
Policy and governance					$ 70,000	$ 70,000
Provision of administrative staff		$ 87,000				$ 87,000
Supply chain systems					$ 3,455,847	$ 3,455,847
Surveys and surveillance		$ 1,700,000				$ 1,700,000
Technical area guidelines and tools			$ 96,000		$ 350,000	$ 446,000
Workforce development, pre-service training		$ 326,000	$ 2,208,987	$ 30,000	$ 279,203	$ 2,844,190
Grand Total	**$ 119,925**	**$ 14,031,889**	**$ 2,784,987**	**$ 30,000**	**$ 11,507,063**	**$ 28,473,864**

The above-site activities in COP 18 provide critical support for epidemic control priorities across key areas, particularly laboratory systems, supply chain for commodities, and improvements in information systems to enhance data quality for program decision making. These investments track with both existing data and recognition of gaps in data availability and quality. Based on a growing appreciation of disparities between MER data and other data sources used by the national government in planning, we are supporting a robust data quality assurance initiative and rapid reconciliation of the data sources to ensure unified planning based on improved data. We are also focusing system investments to highest-priority sites and geographic areas, based on programmatic need, SIMS data, and supplementary sources such as the MISAU T&S Readiness Assessments. Currently, 82 percent of ART patients are captured in the Electronic Patient Tracking System (EPTS). By extending EPTS to the last facilities with >500 on treatment this number will reach 89 percent, and we hope to increase it further, both by extending the EPTS to smaller facilities and by rolling out the point-of-care electronic medical record system (POC MRS).

COP 18 will see the full national rollout of Test and Start, and this is expected to intensify the strain on supply chain, commodities, laboratories, and human resources that have affected Mozambique over the last year. The laboratory backlog that afflicted Mozambique in June-August 2017 is likely to be repeated as the number of newly eligible patients rapidly expands. Systems for managing the backlog that were developed last year have been institutionalized in anticipation of this. Even with the installation of new machines for VL and EID, the country will remain at the limit of its lab capacity, constrained by both instruments and staff. There is also a real possibility that the budget for lab commodities and reagents will be inadequate, and this will require enhanced monitoring by both the government and PEPFAR. The focus going from COP 17 to COP 18 will be on finding efficiencies, by improving sample turnaround time, by optimizing transport and referral systems to balance sample volume across labs, and by improving the

reliability of results being entered onto charts, reducing the need for repeat samples. For example, a recent trial intervention of "lab champions" at the facility nearly doubled the proportion of lab results that were recorded on the medical record to 61 percent. Although this improvement is an achievement, it needs to be both scaled and extended to ensure that lab resources are not wasted. Although an additional 604,903 are expected to be included in the final phase of test and start, PEPFAR Mozambique is supporting MISAU to rollout alternative service delivery models to reduce strain on the health system and to decongest health facilities. These include aggressively expanding 3 month scripting, placing stable patients on a 6 month visit schedule, expanding community distribution of ARV's (to reduce number of health facility visits) and leveraging private sector pharmacies (particularly in urban areas) for drug distribution. The program is also supporting targeted health infrastructure improvements to ameliorate the capacity of overburdened health facilities to attend to patients (provision of extra pre-fabricated consultation rooms). Finally, PEPFAR will work with the Government to expand implementation of approved national strategies (GAAC's (patient adherence clubs) that also reduce pressure on health facilities.

Recognizing that PEPFAR continues to have challenges in retaining those enrolled in care, we have evaluated the systems-level investments needed to support key retention interventions. Many of these investments are related to HRH at the site-level, and thus are not reflected in Table 6. Nevertheless, there are several Table 6 activities related to health information systems (HIS), technical area guidelines and tools, and workforce development that are oriented towards enhancing the ability to detect defaulting patients and track appropriate process indicators involved in locating these patients and returning them to care.

This year's COP planning was marked by a level of coordination with MISAU and other donors significantly greater than what was the case previously. A PEPFAR-MISAU planning week adjacent to a GFATM-MISAU planning week enabled key technical staff to engage key partners in detailed discussions on how to align and deconflict investments. The PEPFAR-supported POC MRS is now aligned to GFATM investments in information system hardware and connectivity. There is also now a plan to align, and possibly merge, HIS initiatives from UNICEF, GFATM, and PEPFAR into a single system for community health workers. Similarly, we have improved our ability to map donor-supported community health workers to ensure that both geographic and programmatic areas of responsibility are harmonized.

The activities in Table 6 have been developed with consideration of SMART targets and timelines. The benchmarks should be realistic and sufficient for program monitoring. In subsequent years, both progress and the benchmarks themselves will be assessed, and those activities which do not conclude will be evaluated to see whether they can be transferred sustainably.

7.0 Staffing Plan

In COP 18, the PEPFAR interagency team's staffing profile aims to support epidemic control within a limited M&O budget envelope. Agencies adjusted their "cost of doing business" to reflect expected increases in ICASS, OBO, and personnel salaries and benefits. All positions are geared towards ensuring support for the achievement of 95-95-95 and strengthened partner performance management and technical oversight. For additional details on staffing, please refer to the COP18 staffing database. Currently there are 261 positions which spend a percentage of their time working on PEPFAR activities. Of these 261 positions, 196 are PEPFAR or partially PEPFAR funded. Of the 261 positions, 220 positions are filled (84 percent), 40 are currently vacant (15 percent), and one is currently planned (one percent). From the 40 vacancies, 29 (73 percent) are slated for Host Country National positions. Of the 261 positions, 202 (77 percent) are Host Country National (HCN), 55 (21 percent) US American Direct Hire (USDH), three (one percent) Local American Citizen, and one (one percent) Third Country National (TCN).

CDC has a total of 86 PEPFAR-funded positions, with 16 vacancies. CDC is not requesting any additional staff and is not seeking to re-purpose any position in COP18. CDC's overall CODB budget increased four percent from $20.8 Million in COP17 to $21.7 Million in COP 18 due to anticipated increases in ICASS, OBO, and staff salaries/benefits.

USAID has a total of 76 PEPFAR-funded positions, with 16 vacancies. USAID is not requesting any additional staff but is proposing repurposing three positions: (1) from Provincial (ZAP) Coordinator to Senior HIV/AIDS Treatment Advisor, to support Test and Start and scale-up of treatment activities; (2) from Clinical Support Specialist to Community Care Advisor, to support retention activities; and (3) from Family Planning and Gender Advisor to Supply Systems Strengthening Advisor, to interagency supply chain and commodities. USAID's overall CODB budget reduced by 10 percent, from $15 Million in COP 17 to $13.5 Million in COP 18, reflecting conversion of several USPSC positions to USPSC resident hire, US Direct Hire positions, or locally employed staff, affecting associated ICASS and staff salaries/benefits.

DOD has a total of 4 PEPFAR-funded positions, including one new position being requested for COP 18, and no vacancies. The DoD PEPFAR program grew from three sites in COP 16 to 22 in COP 18, with a 20 percent increase in targets, so the program is requesting a Strategic Information Advisor. DoD's overall CODB increased nine percent from $346,000 in COP 17 to $376,000 in COP 18.

State Department has 10 PEPFAR-funded positions, including 2 vacancies. One vacant position, the Small Grants Assistant, is proposed to be repurposed to a Program Specialist and to be partially, rather than fully-funded by PEPFAR. This is a result of efficiencies found when the Small Grants program was consolidated from two sections to just one. The State budget CODB

decreased by 17 percent from COP 17 ($2.9 Million) to COP 18 ($2.4 Million), due to a rigorous search for efficiencies.

Peace Corps has 20 PEPFAR-funded positions in COP 18, including 8 proposed repurposed positions shifted to PEPFAR to reflect a truer cost of business. The repurposed positions include 1) Regional Program Assistant (Zambezia Province); 2) Regional Program Assistant (Tete); 3) Medical Assistant (based in Nampula); 4) Administrative Assistant (based in Nampula); 5) Safety and Security Assistant (based in Maputo); 6) Peace Corps Medical Officer (part-time); 7) General Services Assistant; and 8) IT Assistant. These re-purposed positions reflect PEPFAR Mozambique's commitment to accelerate efforts in Northern provinces to contain a burgeoning epidemic, as well as to better reflect the cost of doing business. All are existing positions being shifted to PEPFAR funding. Peace Corps' Volunteer pool has increased from 55 health volunteers in COP 14, with 10 PEPFAR-funded staff, to 86 health volunteers in COP 17 with 12 PEPFAR-funded staff, and is anticipated to reach 100 health volunteers in COP 18. The total increase from COP17 to COP18 is $199,841, equivalent to 6% of the overall budget.

APPENDIX A -- PRIORITIZATION

Table A.1: SNU Prioritization and Coverage levels

Province	District	Year	District Prioritization	Male <1	Female <1	Male 1-9	Female 1-9	Male 10-14	Female 10-14	Male 15-19	Female 15-19	Male 20-24	Female 20-24	Male 25-49	Female 25-49	Male 50+	Female 50+
Cabo Delgado	Ancuabe	FY17	ScaleUp Agg	28%	71%	18%	45%	10%	27%	12%	87%	21%	67%	25%	39%	49%	47%
		FY19	ScaleUp Agg	39%	98%	23%	56%	11%	27%	24%	183%	45%	146%	50%	77%	96%	86%
	Balama	FY17	Sustained	6%	23%	5%	19%	4%	11%	6%	42%	10%	33%	11%	14%	13%	11%
		FY19	Sustained	16%	60%	12%	43%	8%	21%	7%	56%	14%	47%	15%	17%	16%	12%
	Chiure	FY17	ScaleUp Agg	44%	34%	77%	60%	39%	31%	28%	145%	38%	119%	49%	76%	98%	115%
		FY19	ScaleUp Sat	73%	56%	115%	90%	48%	38%	41%	230%	63%	197%	74%	113%	146%	159%
	Cidade De Pemba	FY17	ScaleUp Agg	51%	55%	58%	59%	35%	35%	14%	39%	9%	42%	33%	41%	122%	113%
		FY19	Sustained	79%	85%	80%	82%	39%	39%	23%	70%	17%	79%	56%	70%	207%	179%
	Ibo	FY17	Sustained	38%	45%	23%	27%	33%	23%	0%	56%	4%	27%	16%	23%	37%	34%
		FY19	Sustained	75%	75%	40%	40%	48%	28%	0%	75%	7%	37%	23%	29%	53%	40%
	Macomia	FY17	ScaleUp Agg	16%	82%	11%	52%	3%	17%	6%	68%	20%	50%	20%	30%	34%	34%

	FY 19	ScaleUp Agg	40 %	200 %	23 %	114%	6%	30%	12 %	149 %	45 %	115%	42 %	62%	70 %	65%
Mecufi	FY 17	Sustained	11 %	38%	15 %	54%	6%	20%	10 %	45%	12 %	41%	21 %	37%	39 %	30%
	FY 19	Sustained	33 %	112%	39 %	145 %	12 %	44%	12 %	58%	17 %	56%	26 %	45%	48 %	34%
Meluco	FY 17	Sustained	0%	0%	22 %	32%	4%	11%	16 %	73%	14 %	47%	19 %	34%	40 %	26%
	FY 19	Sustained	297 %	497 %	26 %	41%	8%	23%	20 %	98%	20 %	66%	25 %	43%	51 %	31%
Mocimboa Da Praia	FY 17	ScaleUp Agg	32 %	38%	42 %	53%	21 %	28%	11 %	67%	15 %	48%	26 %	32%	46 %	50%
	FY 19	ScaleUp Agg	89 %	106 %	106%	131%	43 %	57%	21 %	134 %	31 %	100 %	50 %	60%	85 %	87%
Montepuez	FY 17	ScaleUp Agg	23 %	31%	26 %	36%	12 %	18%	16 %	80%	16 %	59%	19 %	30%	51 %	43%
	FY 19	ScaleUp Agg	42 %	58%	44 %	60%	17 %	24%	27 %	149 %	31 %	115%	34 %	52%	89 %	70%
Mueda	FY 17	ScaleUp Agg	14 %	21%	23 %	32%	12 %	17%	6%	53%	11 %	41%	18 %	25%	24 %	24%
	FY 19	ScaleUp Agg	23 %	33%	33 %	46%	15 %	20%	11 %	102 %	23 %	82%	34 %	45%	43 %	41%
Muidumbe	FY 17	ScaleUp Agg	16 %	27%	29 %	47%	8%	13%	8%	92%	14 %	50%	20 %	28%	26 %	20%
	FY 19	ScaleUp Agg	26 %	44%	41 %	68%	10 %	16%	14 %	188 %	31 %	107 %	38 %	53%	50 %	35%
Namuno	FY 17	Sustained	17 %	20%	10 %	12%	9%	9%	11 %	32%	13 %	31%	12 %	18%	17 %	16%
	FY 19	Sustained	25 %	27%	13 %	15%	9%	9%	13 %	40%	18 %	42%	14 %	22%	20 %	18%

	Nangade	FY 17	Sustained	9%	10%	34%	41%	11%	14%	0%	51%	16%	47%	23%	35%	38%	32%
		FY 19	Sustained	20%	23%	69%	85%	19%	24%	0%	70%	23%	68%	30%	45%	49%	39%
	Palma	FY 17	Sustained	56%	42%	47%	34%	28%	22%	8%	40%	11%	44%	21%	28%	36%	39%
		FY 19	Sustained	81%	61%	62%	44%	30%	23%	11%	57%	16%	65%	28%	38%	49%	49%
	Pemba	FY 17	Sustained	19%	61%	12%	43%	12%	36%	8%	67%	16%	54%	17%	24%	30%	42%
		FY 19	ScaleUp Agg	34%	105%	19%	66%	15%	46%	10%	94%	23%	80%	23%	32%	40%	52%
	Quissanga	FY 17	Sustained	20%	19%	16%	15%	4%	7%	0%	37%	9%	27%	9%	16%	16%	12%
		FY 19	Sustained	43%	44%	31%	32%	6%	12%	0%	51%	12%	40%	11%	21%	19%	15%
Gaza	Bilene	FY 17	ScaleUp Agg	32%	34%	45%	47%	42%	43%	17%	57%	12%	61%	31%	55%	93%	58%
		FY 19	ScaleUp Agg	78%	83%	120%	124%	98%	99%	27%	97%	23%	114%	50%	88%	143%	80%
	Chibuto	FY 17	ScaleUp Sat	44%	53%	57%	71%	51%	65%	40%	85%	11%	66%	38%	74%	133%	87%
		FY 19	ScaleUp Sat	58%	71%	82%	103%	64%	82%	55%	138%	18%	116%	54%	110%	184%	114%
	Chicualacuala	FY 17	ScaleUp Agg	36%	74%	50%	96%	5%	33%	35%	70%	13%	94%	38%	59%	102%	59%
		FY 19	ScaleUp Sat	84%	188%	128%	264%	11%	79%	57%	137%	24%	200%	63%	107%	162%	95%
	Chigubo	FY 17	Sustained	177%	204%	57%	74%	22%	26%	0%	97%	14%	126%	28%	66%	92%	77%

	FY 19	Sustained	150%	171%	191%	242%	12%	98%	0%	123%	19%	175%	33%	77%	104%	80%
Chokwe	FY 17	ScaleUp Sat	35%	35%	65%	66%	58%	66%	22%	70%	15%	77%	44%	70%	150%	98%
	FY 19	ScaleUp Sat	41%	43%	81%	86%	63%	74%	28%	111%	23%	133%	58%	103%	188%	127%
Chongoene	FY 17	new	52%	44%	57%	44%	31%	25%	11%	56%	10%	57%	23%	50%	66%	47%
	FY 19	ScaleUp Agg	134%	112%	157%	122%	74%	60%	18%	101%	19%	113%	38%	84%	106%	69%
Cidade De Xai-Xai	FY 17	ScaleUp Sat	59%	68%	57%	64%	72%	80%	37%	52%	11%	46%	33%	60%	158%	124%
	FY 19	ScaleUp Agg	131%	150%	144%	160%	161%	180%	51%	72%	16%	67%	44%	81%	213%	152%
Guija	FY 17	ScaleUp Agg	23%	18%	83%	66%	58%	43%	17%	68%	17%	77%	39%	80%	139%	85%
	FY 19	ScaleUp Sat	28%	22%	109%	84%	66%	48%	24%	110%	29%	134%	59%	120%	203%	111%
Limpopo	FY 17	new	97%	87%	84%	71%	70%	61%	30%	79%	15%	86%	42%	96%	141%	105%
	FY 19	ScaleUp Sat	113%	102%	106%	89%	77%	67%	40%	118%	24%	141%	59%	134%	190%	129%
Mabalane	FY 17	ScaleUp Agg	90%	70%	66%	52%	24%	26%	11%	103%	14%	81%	36%	51%	89%	55%
	FY 19	Sustained	690%	563%	547%	445%	176%	193%	7%	75%	11%	65%	25%	35%	59%	33%
Mandlakaze	FY 17	ScaleUp Sat	70%	71%	84%	87%	70%	81%	43%	103%	16%	97%	51%	101%	142%	101%
	FY 19	ScaleUp Sat	88%	91%	114%	120%	84%	98%	54%	140%	25%	145%	67%	128%	178%	113%

	Mapai	FY 17	new	66 %	68%	41 %	39%	38 %	19%	13 %	94%	12 %	65%	25 %	50%	82 %	40%
		FY 19	Sustained	80 %	71%	53 %	44%	43 %	19%	17 %	137 %	20 %	103 %	35 %	67%	109%	47%
	Massangena	FY 17	Sustained	74 %	124 %	40 %	69%	29 %	42%	5%	66%	5%	68%	25 %	48%	69 %	50%
		FY 19	Sustained	174 %	281 %	102 %	167 %	65 %	88%	6%	86%	7%	96%	31 %	57%	83 %	53%
	Massingir	FY 17	Sustained	96 %	63%	83 %	54%	37 %	28%	10 %	112%	10 %	92%	33 %	48%	89 %	43%
		FY 19	Sustained	218 %	144 %	203%	134 %	78 %	60%	12 %	144 %	15 %	128 %	42 %	58%	107 %	45%
Inhambane	Cidade De Inhambane	FY 17	Sustained	23 %	61%	34 %	82%	76 %	192 %	19 %	27%	4%	64%	16 %	24%	95 %	78%
		FY 19	ScaleUp Agg	72 %	185 %	50 %	121%	49 %	36%	36 %	179 %	29 %	115%	46 %	43%	124 %	39%
	Funhaluro	FY 17	Sustained	30 %	34%	102 %	111%	603%	671 %	20 %	52%	8%	441 %	51 %	75%	137 %	132 %
		FY 19	Sustained	465%	529 %	360%	389 %	285%	217 %	62 %	347 %	71 %	246 %	89 %	118%	154 %	45%
	Govuro	FY 17	Sustained	64 %	52%	55 %	45%	320%	257 %	12 %	23%	5%	307 %	37 %	32%	75 %	24%
		FY 19	ScaleUp Agg	303 %	249 %	228%	185 %	140%	93%	37 %	206 %	52 %	184 %	67 %	89%	142 %	42%
	Homoine	FY 17	Sustained	7%	13%	40 %	73%	139 %	257 %	14 %	30%	6%	126 %	19 %	61%	76 %	89%
		FY 19	ScaleUp Agg	131 %	237 %	91 %	166 %	85 %	64%	45 %	242 %	56 %	194 %	78 %	105 %	123 %	33%
	Inharrime	FY 17	ScaleUp Sat	21	21%	40	42%	112	114%	9%	22%	2%	78%	15	40%	53	56%

			%		%		%						%		%	
	FY 19	ScaleUp Agg	88 %	89%	63 %	64%	46 %	32%	29 %	150 %	39 %	125 %	52 %	67%	97 %	26%
Inhassoro	FY 17	Sustained	28 %	37%	67 %	95%	120 %	173 %	13 %	68%	8%	108 %	41 %	64%	145 %	105 %
	FY 19	ScaleUp Sat	163 %	216 %	106%	150 %	81 %	58%	53 %	283 %	59 %	232 %	85 %	93%	165 %	53%
Jangamo	FY 17	Attained	22 %	26%	60 %	74%	165 %	200 %	12 %	33%	2%	149 %	29 %	71%	109%	115%
	FY 19	Sustained	251 %	298 %	176 %	215 %	137 %	96%	35 %	177 %	40 %	152 %	63 %	82%	107 %	28%
Mabote	FY 17	Attained	22 %	24%	65 %	69%	385%	403 %	7%	39%	9%	322 %	38 %	52%	112 %	78%
	FY 19	Sustained	168 %	183 %	146 %	156 %	103 %	74%	41 %	211%	54 %	191 %	63 %	94%	124 %	32%
Massinga	FY 17	ScaleUp Sat	21 %	23%	37 %	41%	287%	317 %	8%	23%	3%	250 %	23 %	39%	59 %	67%
	FY 19	ScaleUp Agg	197 %	216 %	140%	154 %	98 %	73%	43 %	211%	48 %	150 %	61 %	82%	118 %	34%
Maxixe	FY 17	ScaleUp Sat	37 %	38%	105 %	108 %	288%	295 %	31 %	54%	3%	108 %	28 %	54%	142 %	148 %
	FY 19	ScaleUp Sat	500%	510 %	320%	329 %	183 %	133 %	41 %	207 %	38 %	136 %	52 %	55%	126 %	36%
Morrumbene	FY 17	Sustained	30 %	28%	63 %	63%	213 %	216 %	23 %	34%	6%	191 %	23 %	53%	67 %	70%
	FY 19	ScaleUp Agg	182 %	168 %	125 %	123 %	80 %	59%	46 %	247 %	59 %	191 %	78 %	107 %	123 %	35%
Panda	FY 17	Sustained	29 %	28%	61 %	62%	447%	475 %	6%	39%	2%	544 %	51 %	59%	69 %	65%

		FY 19	Sustained	234%	228%	182%	185%	131%	93%	58%	293%	75%	241%	87%	126%	133%	33%
	Vilankulo	FY 17	ScaleUp Sat	7%	8%	21%	24%	88%	102%	6%	21%	2%	67%	14%	19%	42%	34%
		FY 19	ScaleUp Agg	56%	68%	40%	46%	29%	20%	23%	110%	22%	81%	32%	34%	66%	19%
	Zavala	FY 17	ScaleUp Sat	7%	8%	23%	25%	76%	84%	5%	19%	3%	70%	12%	26%	41%	41%
		FY 19	ScaleUp Agg	91%	97%	70%	75%	46%	36%	17%	100%	27%	90%	36%	47%	59%	16%
Manica	Barue	FY 17	ScaleUp Agg	53%	55%	74%	75%	45%	46%	23%	111%	34%	138%	62%	84%	94%	52%
		FY 19	ScaleUp Sat	63%	65%	161%	164%	67%	100%	20%	214%	60%	222%	78%	101%	108%	87%
	Cidade De Chimoio	FY 17	ScaleUp Sat	43%	48%	47%	51%	38%	43%	23%	59%	17%	71%	40%	48%	76%	56%
		FY 19	ScaleUp Agg	58%	65%	64%	70%	48%	53%	37%	102%	30%	129%	65%	77%	115%	78%
	Gondola	FY 17	ScaleUp Agg	58%	56%	47%	46%	40%	36%	15%	85%	27%	101%	42%	60%	55%	40%
		FY 19	ScaleUp Agg	88%	83%	71%	68%	55%	48%	25%	143%	50%	178%	71%	94%	86%	54%
	Guro	FY 17	Sustained	66%	81%	95%	107%	59%	70%	27%	135%	46%	170%	80%	112%	124%	53%
		FY 19	Sustained	224%	275%	130%	146%	73%	77%	41%	124%	32%	165%	80%	157%	205%	128%
	Macate	FY 17	New	65%	56%	100%	85%	28%	34%	16%	198%	76%	174%	74%	76%	69%	47%
		FY 19	Sustained	96	86%	147	131%	37	48%	20	266	105	244	93	95%	80	51%

				%		%		%		%	%	%	%	%		%	
	Machaze	FY 17	ScaleUp Agg	64 %	50%	79 %	59%	49 %	37%	18 %	111%	37 %	132 %	34 %	100 %	56 %	31%
		FY 19	ScaleUp Sat	326 %	250 %	126 %	93%	16 %	25%	40 %	92%	14 %	316 %	49 %	174 %	125 %	119 %
	Macossa	FY 17	Sustained	32 %	17%	40 %	22%	28 %	16%	6%	34%	11 %	41%	15 %	23%	24 %	16%
		FY 19	Sustained	141 %	74%	52 %	28%	12 %	12%	0%	71%	19 %	70%	17 %	32%	28 %	18%
	Manica	FY 17	ScaleUp Sat	29 %	29%	36 %	36%	25 %	23%	21 %	58%	14 %	77%	36 %	48%	52 %	36%
		FY 19	ScaleUp Agg	60 %	58%	76 %	73%	48 %	42%	34 %	101 %	26 %	142 %	57 %	78%	78 %	51%
	Mossurize	FY 17	ScaleUp Sat	58 %	75%	65 %	86%	42 %	57%	36 %	176 %	57 %	169 %	75 %	137 %	119 %	61%
		FY 19	ScaleUp Sat	42 %	54%	75 %	99%	149 %	153 %	66 %	183 %	143 %	246 %	92 %	200 %	10 6%	58%
	Sussundenga	FY 17	ScaleUp Agg	23 %	23%	75 %	76%	20 %	27%	35 %	131%	36 %	160 %	67 %	86%	82 %	50%
		FY 19	ScaleUp Sat	60 %	62%	193 %	203 %	47 %	66%	48 %	177 %	55 %	227 %	92 %	109 %	105 %	54%
	Tambara	FY 17	Sustained	31 %	33%	41 %	42%	28 %	29%	13 %	64%	24 %	75%	30 %	43%	50 %	23%
		FY 19	Sustained	235 %	246 %	105 %	108 %	46 %	71%	7%	118%	62 %	125 %	35 %	46%	44 %	25%
	Vanduzi	FY 17	New	60 %	75%	50 %	62%	38 %	41%	5%	85%	19 %	107 %	47 %	68%	85 %	43%
		FY 19	Sustained	182 %	217 %	152 %	180 %	105 %	108 %	8%	146 %	34 %	193 %	74 %	108 %	124 %	60%

Maputo Cidade	Maputo City Cluster	FY 17	ScaleUp Sat	34 %	37%	74 %	81%	191 %	205 %	107%	129 %	35 %	127 %	92 %	136 %	91 %	73%
		FY 19	ScaleUp Sat	51 %	22%	104%	110 %	181 %	193 %	97 %	212 %	59 %	264 %	96 %	148 %	95 %	79%
Maputo Província	Boane	FY 17	ScaleUp Agg	10 %	13%	23 %	30%	46 %	57%	24 %	45%	9%	47%	30 %	50%	47 %	42%
		FY 19	ScaleUp Agg	13 %	17%	31 %	39%	51 %	64%	45 %	90%	19 %	101 %	57 %	93%	87 %	73%
	Cidade Da Matola	FY 17	ScaleUp Sat	8%	9%	18 %	19%	27 %	30%	15 %	23%	5%	21%	15 %	26%	36 %	32%
		FY 19	ScaleUp Agg	12 %	13%	26 %	28%	33 %	36%	26 %	45%	10 %	44%	27 %	46%	63 %	53%
	Magude	FY 17	ScaleUp Sat	9%	10%	31 %	34%	44 %	51%	26 %	49%	7%	64%	28 %	69%	43 %	46%
		FY 19	ScaleUp Agg	11 %	12%	39 %	43%	47 %	53%	48 %	99%	15 %	139 %	53 %	130 %	79 %	79%
	Manhiça	FY 17	ScaleUp Agg	16 %	19%	66 %	78%	91 %	111%	51 %	101 %	20 %	104 %	62 %	124 %	94 %	73%
		FY 19	ScaleUp Sat	59 %	71%	245%	288 %	285%	345 %	55 %	119 %	26 %	132 %	69 %	136 %	101 %	73%
	Marracuene	FY 17	ScaleUp Agg	12 %	10%	27 %	22%	53 %	44%	23 %	50%	9%	42%	29 %	48%	45 %	35%
		FY 19	ScaleUp Agg	15 %	13%	34 %	28%	58 %	47%	46 %	105 %	20 %	96%	57 %	95%	86 %	63%
	Matutuine	FY 17	ScaleUp Sat	12 %	12%	36 %	39%	77 %	90%	34 %	83%	19 %	65%	47 %	63%	61 %	48%
		FY 19	ScaleUp Agg	28 %	30%	88 %	97%	160%	187 %	59 %	154 %	39 %	129 %	82 %	109 %	103 %	77%
	Moamba	FY 17	ScaleUp Sat	20 %	23%	45 %	49%	68 %	82%	28 %	81%	13 %	72%	38 %	65%	51 %	51%

		FY 19	ScaleUp Agg	52 %	58%	115 %	124 %	146 %	177 %	45 %	142 %	24 %	137 %	62 %	107 %	82 %	77%
	Namaacha	FY 17	ScaleUp Agg	17 %	14%	54 %	46%	114 %	92%	35 %	85%	15 %	77%	46 %	75%	98 %	87%
		FY 19	ScaleUp Sat	21 %	18%	68 %	58%	120 %	97%	58 %	153 %	29 %	150 %	78 %	125 %	162 %	134 %
Nampula	Angoche	FY 17	ScaleUp Agg	26 %	43%	17 %	27%	12 %	21%	8%	59%	16 %	49%	16 %	19%	16 %	14%
		FY 19	ScaleUp Agg	29 %	48%	22 %	36%	14 %	24%	14 %	120 %	35 %	109 %	32 %	37%	28 %	23%
	Cidade De Nampula	FY 17	ScaleUp Sat	47 %	67%	46 %	64%	37 %	51%	27 %	96%	30 %	45%	42 %	59%	56 %	51%
		FY 19	ScaleUp Agg	50 %	72%	68 %	94%	48 %	28%	22 %	151%	61 %	189 %	71 %	80%	79 %	74%
	Erati	FY 17	Sustained	89 %	223 %	28 %	76%	20 %	54%	81 %	231 %	96 %	158 %	60 %	63%	65 %	33%
		FY 19	Sustained	103 %	259 %	39 %	108 %	24 %	66%	102%	325 %	146%	243 %	81 %	84%	81 %	38%
	Ilha De Moçambique	FY 17	Sustained	99 %	112%	76 %	89%	31 %	38%	53 %	109 %	43 %	112%	45 %	64%	44 %	36%
		FY 19	Sustained	123 %	139 %	115 %	134 %	41 %	50%	67 %	152 %	65 %	171%	61 %	84%	54 %	41%
	Lalaua	FY 17	Sustained	28 %	50%	39 %	69%	19 %	37%	60 %	90%	76 %	79%	71 %	43%	28 %	26%
		FY 19	Sustained	44 %	79%	76 %	134 %	33 %	61%	72 %	122 %	112 %	117%	93 %	56%	34 %	30%
	Larde	FY 17	New	262%	250 %	88 %	82%	30 %	28%	27 %	249 %	55 %	174 %	36 %	53%	35 %	27%
		FY 19	Sustained	362	346	148	137	44	41%	34	339	81	260	47	68%	42	31%

			%	%	%	%	%		%	%	%	%	%		%	
Liupo	FY 17	New	31 %	16%	24 %	12%	9%	4%	0%	20%	2%	18%	6%	10%	11 %	9%
	FY 19	Sustained	40 %	20%	37 %	19%	12 %	6%	0%	28%	3%	27%	8%	14%	13 %	10%
Malema	FY 17	ScaleUp Sat	41 %	68%	29 %	47%	13 %	21%	27 %	107 %	30 %	110 %	37 %	51%	54 %	29%
	FY 19	ScaleUp Agg	39 %	66%	34 %	55%	13 %	21%	51 %	224 %	68 %	251 %	74 %	100 %	99 %	50%
Meconta	FY 17	Sustained	70 %	73%	44 %	44%	16 %	16%	24 %	89%	36 %	94%	29 %	45%	36 %	29%
	FY 19	Sustained	159 %	165 %	121 %	121%	39 %	39%	28 %	115%	50 %	132 %	36 %	55%	41 %	31%
Mecuburi	FY 17	ScaleUp Agg	141 %	115%	49 %	39%	26 %	20%	35 %	163 %	67 %	133 %	50 %	56%	48 %	27%
	FY 19	Sustained	186 %	152 %	78 %	62%	36 %	27%	43 %	226 %	101 %	202 %	67 %	74%	59 %	31%
Memba	FY 17	Sustained	51 %	84%	32 %	51%	11 %	18%	31 %	110 %	66 %	106 %	48 %	46%	41 %	22%
	FY 19	Sustained	51 %	84%	39 %	62%	12 %	19%	39 %	156 %	103 %	164 %	66 %	62%	52 %	26%
Mogincual	FY 17	Sustained	4%	33%	3%	26%	2%	16%	7%	40%	5%	31%	11 %	11%	11 %	6%
	FY 19	Sustained	9%	75%	9%	73%	5%	39%	8%	50%	6%	43%	13 %	13%	12 %	6%
Mogovolas	FY 17	Sustained	114 %	136 %	42 %	49%	18 %	22%	47 %	138 %	39 %	84%	34 %	33%	31 %	25%
	FY 19	Sustained	125 %	150 %	56 %	65%	21 %	25%	59 %	195 %	59 %	131%	46 %	44%	39 %	29%

Moma	FY 17	ScaleUp Agg	99 %	160 %	48 %	76%	12 %	19%	38 %	176 %	54 %	120 %	40 %	43%	25 %	19%
	FY 19	ScaleUp Agg	119 %	194 %	71 %	112%	16 %	25%	65 %	330 %	110 %	247 %	72 %	76%	42 %	30%
Monapo	FY 17	ScaleUp Agg	54 %	57%	30 %	31%	10 %	11%	7%	64%	18 %	62%	25 %	28%	28 %	20%
	FY 19	ScaleUp Agg	70 %	74%	48 %	49%	14 %	15%	13 %	143 %	43 %	151%	55 %	60%	55 %	36%
Mossuril	FY 17	Sustained	53 %	42%	38 %	31%	32 %	27%	30 %	135 %	51 %	92%	35 %	42%	23 %	29%
	FY 19	Sustained	60 %	48%	52 %	42%	38 %	33%	38 %	189 %	78 %	143 %	48 %	56%	28 %	34%
Muecate	FY 17	ScaleUp Agg	34 %	50%	33 %	46%	18 %	24%	32 %	130 %	56 %	98%	38 %	36%	28 %	31%
	FY 19	Sustained	41 %	60%	48 %	67%	23 %	31%	40 %	181%	86 %	151%	52 %	47%	35 %	36%
Murrupula	FY 17	Sustained	33 %	62%	30 %	53%	14 %	25%	41 %	162 %	60 %	112%	34 %	39%	41 %	21%
	FY 19	Sustained	31 %	59%	34 %	61%	14 %	25%	53 %	232 %	94 %	175 %	47 %	52%	52 %	25%
Nacala	FY 17	ScaleUp Agg	70 %	79%	53 %	58%	34 %	35%	19 %	99%	24 %	103 %	39 %	55%	65 %	44%
	FY 19	ScaleUp Sat	75 %	85%	68 %	75%	38 %	40%	29 %	173 %	46 %	197 %	66 %	91%	100%	63%
Nacala-A-Velha	FY 17	Sustained	60 %	132 %	21 %	44%	6%	13%	15 %	70%	24 %	73%	25 %	32%	20 %	12%
	FY 19	Sustained	74 %	162 %	32 %	66%	8%	16%	19 %	98%	37 %	112%	34 %	42%	25 %	14%
Nacaroa	FY 17	Sustained	90 %	173 %	48 %	84%	19 %	34%	152 %	312 %	118 %	180 %	49 %	50%	54 %	38%

		FY 19	Sustained	188%	360%	122%	212%	42%	75%	176%	404%	167%	256%	61%	61%	62%	40%
	Rapale	FY 17	ScaleUp Agg	49%	43%	47%	41%	21%	19%	8%	110%	41%	90%	31%	36%	33%	29%
		FY 19	Sustained	53%	48%	63%	55%	25%	22%	11%	155%	63%	139%	43%	47%	41%	34%
	Ribaue	FY 17	Sustained	21%	29%	12%	17%	8%	11%	4%	51%	12%	45%	14%	21%	18%	10%
		FY 19	ScaleUp Agg	28%	39%	20%	27%	11%	15%	12%	157%	40%	151%	41%	62%	48%	26%
Niassa	Cidade de Lichinga	FY 17	ScaleUp Sat	26%	28%	52%	53%	55%	56%	25%	54%	17%	82%	43%	65%	100%	72%
		FY 19	ScaleUp Sat	27%	28%	67%	68%	64%	65%	38%	84%	27%	127%	66%	96%	146%	96%
	Cuamba	FY 17	ScaleUp Agg	16%	13%	22%	18%	15%	15%	4%	32%	8%	48%	18%	32%	36%	24%
		FY 19	ScaleUp Agg	18%	15%	31%	27%	20%	20%	8%	62%	17%	95%	35%	60%	66%	39%
	Lago	FY 17	Sustained	24%	24%	42%	39%	46%	35%	15%	34%	19%	65%	30%	41%	33%	21%
		FY 19	Sustained	23%	21%	50%	45%	51%	36%	20%	47%	26%	91%	40%	55%	42%	25%
	Lichinga	FY 17	Sustained	24%	24%	39%	40%	44%	43%	27%	83%	34%	112%	49%	71%	65%	30%
		FY 19	Sustained	72%	74%	74%	75%	11%	81%	38%	69%	27%	103%	48%	87%	77%	39%
	Majune	FY 17	Sustained	27%	38%	39%	54%	39%	53%	14%	71%	20%	81%	32%	51%	38%	23%
		FY 19	Sustained	70	101	65	90%	16	32%	0%	142	31	106	36	66%	53	36%

			%	%	%		%			%	%	%	%		%	
Mandimba	FY 17	Sustained	6%	10%	9%	16%	6%	19%	5%	17%	4%	27%	9%	16%	11%	10%
	FY 19	ScaleUp Agg	6%	12%	12%	24%	7%	26%	15%	37%	10%	65%	24%	37%	29%	21%
Marrupa	FY 17	Sustained	5%	9%	8%	15%	9%	16%	4%	35%	6%	43%	9%	24%	11%	12%
	FY 19	Sustained	7%	14%	13%	24%	2%	3%	12%	56%	11%	43%	16%	28%	28%	15%
Maua	FY 17	Sustained	13%	10%	21%	15%	33%	27%	0%	86%	24%	81%	22%	29%	26%	10%
	FY 19	Sustained	20%	16%	41%	31%	59%	48%	0%	118%	28%	111%	25%	38%	29%	11%
Mavago	FY 17	Sustained	4%	6%	6%	8%	6%	8%	4%	10%	6%	13%	10%	9%	11%	4%
	FY 19	Sustained	21%	28%	16%	22%	9%	5%	0%	17%	2%	17%	8%	14%	12%	8%
Mecanhelas	FY 17	Sustained	13%	18%	27%	35%	21%	7%	14%	62%	14%	63%	25%	34%	21%	15%
	FY 19	ScaleUp Agg	14%	16%	35%	38%	25%	7%	30%	134%	33%	136%	56%	70%	45%	28%
Mecula	FY 17	Sustained	9%	6%	13%	10%	12%	8%	3%	13%	4%	17%	7%	9%	7%	5%
	FY 19	Sustained	26%	17%	22%	17%	7%	4%	0%	19%	1%	20%	7%	12%	12%	9%
Metarica	FY 17	Sustained	3%	12%	5%	21%	5%	22%	14%	62%	21%	80%	33%	44%	44%	26%
	FY 19	Sustained	14%	67%	15%	69%	19%	10%	0%	125%	28%	105%	33%	58%	54%	41%

	Muembe	FY 17	Sustained	34%	30%	58%	53%	61%	52%	10%	50%	16%	71%	27%	42%	32%	21%
		FY 19	Sustained	62%	55%	116%	106%	31%	10%	0%	96%	24%	89%	31%	53%	44%	31%
	Ngauma	FY 17	Sustained	8%	7%	15%	12%	16%	13%	7%	28%	11%	37%	15%	23%	19%	11%
		FY 19	Sustained	86%	76%	12%	10%	11%	32%	13%	27%	11%	39%	19%	31%	27%	16%
	Nipepe	FY 17	Sustained	9%	10%	18%	21%	18%	19%	12%	53%	20%	62%	26%	34%	36%	19%
		FY 19	Sustained	139%	149%	22%	25%	21%	63%	17%	100%	20%	73%	26%	47%	46%	27%
	Sanga	FY 17	Sustained	18%	14%	33%	26%	32%	26%	10%	43%	15%	59%	24%	37%	31%	18%
		FY 19	Sustained	191%	150%	27%	21%	21%	67%	32%	53%	17%	60%	35%	48%	45%	21%
Sofala	Buzi	FY 17	ScaleUp Agg	18%	24%	56%	72%	28%	43%	19%	105%	32%	141%	41%	80%	42%	28%
		FY 19	ScaleUp Agg	56%	78%	152%	201%	70%	111%	30%	164%	58%	231%	68%	116%	65%	35%
	Caia	FY 17	Attained	25%	26%	44%	48%	44%	37%	20%	91%	31%	125%	32%	68%	44%	36%
		FY 19	ScaleUp Agg	78%	78%	126%	129%	64%	49%	23%	124%	62%	235%	63%	114%	63%	28%
	Chemba	FY 17	Sustained	25%	35%	48%	68%	52%	60%	11%	70%	17%	93%	19%	67%	28%	27%
		FY 19	Sustained	208%	275%	64%	85%	25%	24%	14%	135%	51%	155%	51%	68%	36%	16%
	Cheringoma	FY 17	Sustained	39%	121%	74%	206%	75%	174%	66%	275%	67%	285%	80%	156%	135%	136%

	FY 19	Attained	170 %	480 %	178 %	468 %	71 %	99%	42 %	128 %	14 %	521 %	66 %	163 %	150 %	266 %
Chibabava	FY 17	ScaleUp Sat	22 %	27%	39 %	45%	40 %	37%	21 %	86%	29 %	96%	25 %	73%	42 %	27%
	FY 19	ScaleUp Agg	209%	239 %	53 %	58%	16 %	45%	58 %	164 %	62 %	168 %	59 %	117%	82 %	32%
Cidade Da Beira	FY 17	ScaleUp Sat	20 %	47%	29 %	65%	36 %	44%	19 %	42%	15 %	53%	25 %	33%	48 %	32%
	FY 19	ScaleUp Agg	34 %	65%	41 %	78%	48 %	48%	36 %	84%	33 %	111%	49 %	61%	88 %	53%
Dondo	FY 17	ScaleUp Agg	41 %	42%	73 %	72%	55 %	43%	28 %	120 %	29 %	154 %	56 %	87%	67 %	62%
	FY 19	ScaleUp Sat	267 %	257 %	197 %	183 %	145 %	154 %	62 %	81%	22 %	98%	108%	147 %	151 %	120 %
Gorongosa	FY 17	Attained	25 %	36%	46 %	65%	48 %	56%	27 %	82%	35 %	103 %	42 %	61%	65 %	37%
	FY 19	Sustained	220%	287 %	58 %	77%	20 %	56%	28 %	141%	68 %	186 %	53 %	80%	60 %	38%
Machanga	FY 17	Attained	59 %	80%	103 %	147 %	80 %	91%	19 %	90%	31 %	130 %	38 %	107 %	46 %	32%
	FY 19	Sustained	123 %	153 %	191 %	257 %	86 %	71%	35 %	200 %	131 %	241 %	87 %	143 %	71 %	24%
Maringue	FY 17	Sustained	16 %	8%	34 %	15%	38 %	15%	24 %	54%	40 %	73%	34 %	50%	56 %	23%
	FY 19	Sustained	62 %	27%	89 %	37%	18 %	7%	24 %	112%	41 %	109 %	32 %	73%	56 %	23%
Marromeu	FY 17	ScaleUp Sat	32 %	31%	61 %	54%	61 %	46%	23 %	94%	28 %	115%	36 %	61%	52 %	52%
	FY 19	ScaleUp Agg	26 %	23%	57 %	47%	124 %	153 %	34 %	221 %	70 %	219 %	64 %	90%	100%	70%

	Muanza	FY 17	Sustained	45%	63%	92%	113%	94%	92%	48%	175%	56%	172%	70%	89%	111%	112%
		FY 19	Sustained	497%	640%	248%	285%	71%	131%	30%	192%	49%	182%	80%	109%	126%	129%
	Nhamatanda	FY 17	ScaleUp Sat	22%	30%	35%	47%	24%	28%	19%	71%	25%	104%	36%	63%	40%	33%
		FY 19	ScaleUp Agg	76%	100%	106%	137%	67%	74%	30%	117%	45%	181%	59%	97%	62%	44%
Tete	Angonia	FY 17	Sustained	7%	9%	22%	26%	24%	51%	41%	52%	29%	56%	51%	79%	61%	53%
		FY 19	Sustained	9%	14%	28%	41%	29%	79%	68%	65%	48%	73%	82%	95%	89%	54%
	Cahora Bassa	FY 17	Sustained	8%	7%	42%	38%	46%	42%	35%	120%	37%	157%	68%	80%	55%	42%
		FY 19	Sustained	12%	10%	60%	54%	63%	58%	62%	226%	67%	303%	119%	142%	87%	64%
	Changara	FY 17	ScaleUp Agg	17%	16%	64%	56%	27%	41%	36%	190%	80%	210%	74%	79%	36%	45%
		FY 19	ScaleUp Sat	40%	40%	141%	138%	58%	97%	45%	233%	99%	265%	89%	92%	39%	45%
	Chifunde	FY 17	Sustained	12%	11%	59%	52%	56%	61%	67%	172%	68%	185%	108%	112%	98%	69%
		FY 19	Attained	384%	355%	192%	177%	62%	65%	87%	157%	174%	204%	174%	96%	43%	44%
	Chiuta	FY 17	Attained	13%	18%	32%	42%	27%	44%	30%	117%	63%	172%	57%	83%	43%	19%
		FY 19	Sustained	21%	29%	48%	67%	39%	68%	43%	161%	90%	244%	79%	109%	55%	21%
	Cidade De Tete	FY 17	ScaleUp Sat	7%	8%	40%	44%	36%	39%	47%	93%	30%	126%	60%	73%	69%	42%

	FY 19	ScaleUp Sat	19 %	21%	104%	114%	90 %	96%	66 %	133 %	43 %	185 %	83 %	99%	86 %	49%
Doa	FY 17	New	0%	0%	7%	13%	5%	13%	3%	33%	11 %	42%	18 %	27%	16 %	9%
	FY 19	Sustained	81 %	165 %	10 %	20%	12 %	37%	7%	81%	28 %	106 %	44 %	62%	35 %	17%
Macanga	FY 17	Sustained	10 %	10%	56 %	56%	52 %	62%	61 %	148 %	66 %	189 %	105 %	107 %	89 %	58%
	FY 19	Sustained	73 %	77%	91 %	95%	55 %	45%	35 %	141%	53 %	246 %	121 %	148 %	136 %	103 %
Magoe	FY 17	Sustained	6%	6%	38 %	35%	26 %	27%	35 %	73%	24 %	76%	49 %	51%	38 %	23%
	FY 19	Sustained	8%	8%	47 %	45%	31 %	34%	74 %	153 %	50 %	162 %	100%	101 %	70 %	40%
Marara	FY 17	New	11 %	9%	56 %	46%	48 %	47%	40 %	101 %	48 %	135 %	68 %	78%	61 %	36%
	FY 19	Sustained	39 %	34%	104%	89%	131 %	166 %	11 %	174 %	59 %	234 %	56 %	86%	42 %	26%
Maravia	FY 17	Sustained	5%	6%	30 %	32%	29 %	37%	29 %	84%	35 %	109 %	49 %	55%	42 %	31%
	FY 19	Sustained	60 %	68%	70 %	78%	19 %	57%	30 %	120 %	65 %	179 %	62 %	70%	38 %	19%
Moatize	FY 17	ScaleUp Sat	7%	11%	33 %	55%	44 %	51%	46 %	100 %	44 %	171%	70 %	100 %	66 %	53%
	FY 19	ScaleUp Sat	11 %	16%	50 %	74%	64 %	67%	82 %	167 %	80 %	293 %	123 %	158 %	104%	72%
Mutarara	FY 17	ScaleUp Agg	4%	3%	31 %	26%	20 %	18%	18 %	50%	19 %	98%	31 %	49%	37 %	20%
	FY 19	ScaleUp Agg	6%	6%	52 %	44%	33 %	30%	34 %	106 %	36 %	213 %	56 %	98%	61 %	34%

	Tsangano	FY 17	Sustained	7%	5%	36%	27%	30%	27%	53%	127%	62%	172%	94%	99%	80%	46%
		FY 19	Sustained	31%	24%	60%	48%	7%	27%	85%	176%	65%	266%	121%	148%	87%	49%
	Zumbu	FY 17	Sustained	11%	19%	62%	95%	59%	115%	82%	180%	94%	235%	126%	124%	133%	72%
		FY 19	Attained	125%	212%	154%	246%	124%	103%	18%	320%	173%	411%	119%	133%	97%	82%
Zambézia	Alto Molocue	FY 17	ScaleUp Agg	25%	34%	28%	40%	14%	19%	15%	54%	16%	73%	27%	41%	46%	23%
		FY 19	ScaleUp Agg	32%	45%	40%	56%	17%	23%	26%	101%	30%	144%	47%	71%	78%	36%
	Chinde	FY 17	ScaleUp Agg	27%	37%	16%	22%	5%	7%	5%	39%	16%	34%	14%	20%	21%	10%
		FY 19	ScaleUp Agg	60%	83%	40%	54%	11%	14%	11%	88%	37%	81%	30%	41%	43%	18%
	Cidade De Quelimane	FY 17	ScaleUp Agg	22%	29%	28%	36%	24%	31%	17%	72%	31%	86%	34%	50%	63%	42%
		FY 19	ScaleUp Agg	32%	43%	45%	59%	33%	43%	26%	128%	55%	161%	55%	82%	98%	62%
	Derre	FY 17	New	0%	23%	0%	29%	0%	3%	5%	52%	22%	55%	16%	19%	17%	8%
		FY 19	ScaleUp Agg	0%	26%	0%	36%	2%	2%	11%	120%	54%	134%	35%	41%	36%	15%
	Gile	FY 17	ScaleUp Agg	26%	32%	27%	33%	6%	8%	12%	100%	31%	99%	23%	29%	32%	20%
		FY 19	ScaleUp Agg	68%	85%	78%	97%	15%	19%	19%	175%	56%	182%	39%	47%	51%	28%
	Gurue	FY 17	Sustained	50	53%	28	30%	19	20%	19	83%	23	85%	33	44%	47	24%

			%		%		%		%		%		%		%	
	FY 19	ScaleUp Agg	62 %	66%	38 %	40%	22 %	23%	33 %	155 %	45 %	166 %	59 %	77%	79 %	38%
Ile	FY 17	Sustain ed	22 %	36%	23 %	38%	13 %	20%	11 %	46%	17 %	69%	28 %	47%	43 %	20%
	FY 19	ScaleUp Agg	56 %	90%	65 %	103 %	31 %	48%	22 %	104 %	39 %	163 %	59 %	99%	86 %	38%
Inhassu nge	FY 17	ScaleUp Agg	41 %	52%	36 %	46%	20 %	26%	15 %	42%	27 %	68%	30 %	57%	30 %	22%
	FY 19	ScaleUp Agg	53 %	66%	51 %	64%	24 %	32%	25 %	78%	53 %	134 %	53 %	99%	50 %	35%
Luabo	FY 17	New	23 %	8%	30 %	10%	5%	2%	13 %	51%	35 %	44%	18 %	21%	25 %	9%
	FY 19	ScaleUp Agg	46 %	16%	67 %	23%	10 %	3%	24 %	98%	70 %	91%	34 %	38%	44 %	15%
Lugela	FY 17	Sustain ed	150 %	145 %	12 %	11%	7%	6%	8%	74%	18 %	59%	19 %	31%	30 %	16%
	FY 19	ScaleUp Agg	20 8%	200 %	18 %	17%	9%	8%	14 %	149 %	38 %	123 %	37 %	57%	54 %	27%
Maganj a Da Costa	FY 17	ScaleUp Agg	48 %	44%	32 %	30%	13 %	13%	10 %	55%	22 %	69%	23 %	50%	35 %	23%
	FY 19	ScaleUp Agg	55 %	52%	41 %	38%	14 %	15%	17 %	103 %	42 %	138 %	39 %	89%	57 %	37%
Milange	FY 17	ScaleUp Sat	14 %	22%	24 %	36%	16 %	25%	13 %	50%	15 %	69%	29 %	46%	51 %	24%
	FY 19	ScaleUp Agg	17 %	26%	31 %	47%	19 %	28%	22 %	88%	28 %	129 %	49 %	76%	83 %	36%
Mocuba	FY 17	ScaleUp Sat	20 %	30%	25 %	37%	15 %	22%	15 %	78%	27 %	88%	28 %	42%	55 %	31%

	FY 19	ScaleUp Agg	29 %	43%	39 %	57%	21 %	30%	25 %	144 %	52 %	172 %	49 %	73%	92 %	47%
Mocubela	FY 17	New	44 %	48%	25 %	27%	4%	8%	23 %	124 %	43 %	106 %	29 %	43%	42 %	34%
	FY 19	ScaleUp Agg	75 %	86%	46 %	53%	6%	13%	37 %	230 %	78 %	208 %	48 %	74%	66 %	53%
Molumbo	FY 17	New	66 %	48%	33 %	23%	13 %	9%	12 %	74%	20 %	73%	30 %	37%	44 %	20%
	FY 19	ScaleUp Agg	97 %	70%	52 %	37%	17 %	13%	20 %	137 %	39 %	141%	52 %	64%	74 %	31%
Mopeia	FY 17	ScaleUp Agg	25 %	18%	22 %	16%	16 %	11%	7%	71%	25 %	70%	21 %	28%	24 %	15%
	FY 19	ScaleUp Agg	64 %	45%	61 %	43%	37 %	25%	12 %	135 %	49 %	141%	38 %	50%	42 %	23%
Morrumbala	FY 17	ScaleUp Agg	23 %	34%	20 %	30%	16 %	21%	15 %	58%	27 %	57%	26 %	38%	40 %	18%
	FY 19	ScaleUp Agg	64 %	93%	61 %	89%	41 %	54%	26 %	107 %	52 %	112%	47 %	67%	67 %	27%
Mulevala	FY 17	New	8%	8%	20 %	20%	7%	9%	12 %	31%	15 %	44%	23 %	24%	26 %	16%
	FY 19	ScaleUp Agg	18 %	18%	51 %	52%	15 %	20%	35 %	93%	49 %	138 %	66 %	66%	70 %	40%
Namacurra	FY 17	ScaleUp Agg	33 %	47%	34 %	46%	14 %	20%	12 %	75%	31 %	87%	24 %	50%	38 %	27%
	FY 19	ScaleUp Agg	46 %	67%	52 %	70%	19 %	27%	21 %	139 %	60 %	169 %	43 %	86%	63 %	42%
Namarroi	FY 17	Sustained	183 %	253 %	20 %	28%	5%	7%	30 %	145 %	45 %	113%	38 %	46%	58 %	23%
	FY 19	ScaleUp Agg	238 %	328 %	29 %	40%	6%	9%	62 %	319 %	104%	263 %	81 %	95%	117 %	42%

	Nicoadala	**FY 17**	**ScaleUp Agg**	**31 %**	**37%**	**22 %**	**26%**	**13 %**	**16%**	**17 %**	**103 %**	**30 %**	**85%**	**21 %**	**30%**	**27 %**	**19%**
		FY 19	**ScaleUp Agg**	**46 %**	**55%**	**34 %**	**41%**	**18 %**	**22%**	**28 %**	**189 %**	**59 %**	**166 %**	**37 %**	**52%**	**44 %**	**29%**
	Pebane	**FY 17**	**ScaleUp Agg**	**20 %**	**32%**	**27 %**	**43%**	**10 %**	**16%**	**12 %**	**86%**	**37 %**	**105 %**	**29 %**	**35%**	**41 %**	**33%**
		FY 19	**ScaleUp Agg**	**56 %**	**91%**	**85 %**	**134 %**	**28 %**	**44%**	**20 %**	**149 %**	**66 %**	**192 %**	**47 %**	**57%**	**65 %**	**48%**

Sources:
Coverage numerator – TX_CURR data, targets
FY17, MER results
FY18, midpoint between FY17 and FY19
FY19, COP18 FY19 targets
***age bands are imputed for FY17 for sites that do not have an EPTS based on overall distribution of district (or province if not EPTS sites in district)**
Coverage denominator = PLHIV estimates from Spectrum
Spectrum v5.63, same version and files projected for 2017, 2018, 2019
***14 new districts added in COP18**

Table A.2: ART Targets by Prioritization for Epidemic Control						
Prioritization Area	**Total PLHIV (FY19)**	**Expected current on ART (APR FY 18)**	**Additional patients required for 80% ART coverage**	**Target current on ART (APR FY19) *TX_CURR***	**Newly initiated (APR FY 19) *TX_NEW***	**ART Coverage (APR 19)**
Attained	**4,774**	**3,830**	**0**	**6,756**	**3,410**	**142%**
Scale-Up Saturation	**445,812**	**409,091**	**0**	**480,109**	**98,574**	**108%**
Scale-Up Aggressive	**1,463,173**	**699,404**	**241,882**	**913,867**	**270,879**	**62%**
Sustained	**277,955**	**135,889**	**53,335**	**168,877**	**43,082**	**61%**
Central Support	***$61,680,111**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Commodities (if not included in previous categories) * Amount spent to support PLHIV	**$61,680,111** This figure includes support for diagnostics (tests, reagents, equipment rental and maintenance), medicines	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

	(ARV's, OI drugs), and nutritional commodities.					
Total	**2,191,714**	**1,248,214**	**295217**	**1,569,609**	**415,945**	**N/A**

APPENDIX B -- Budget Profile and Resource Projections

B.1. COP 18 Planned Spending

Table B.1.1: COP 18 Budget by Approach and Program Area

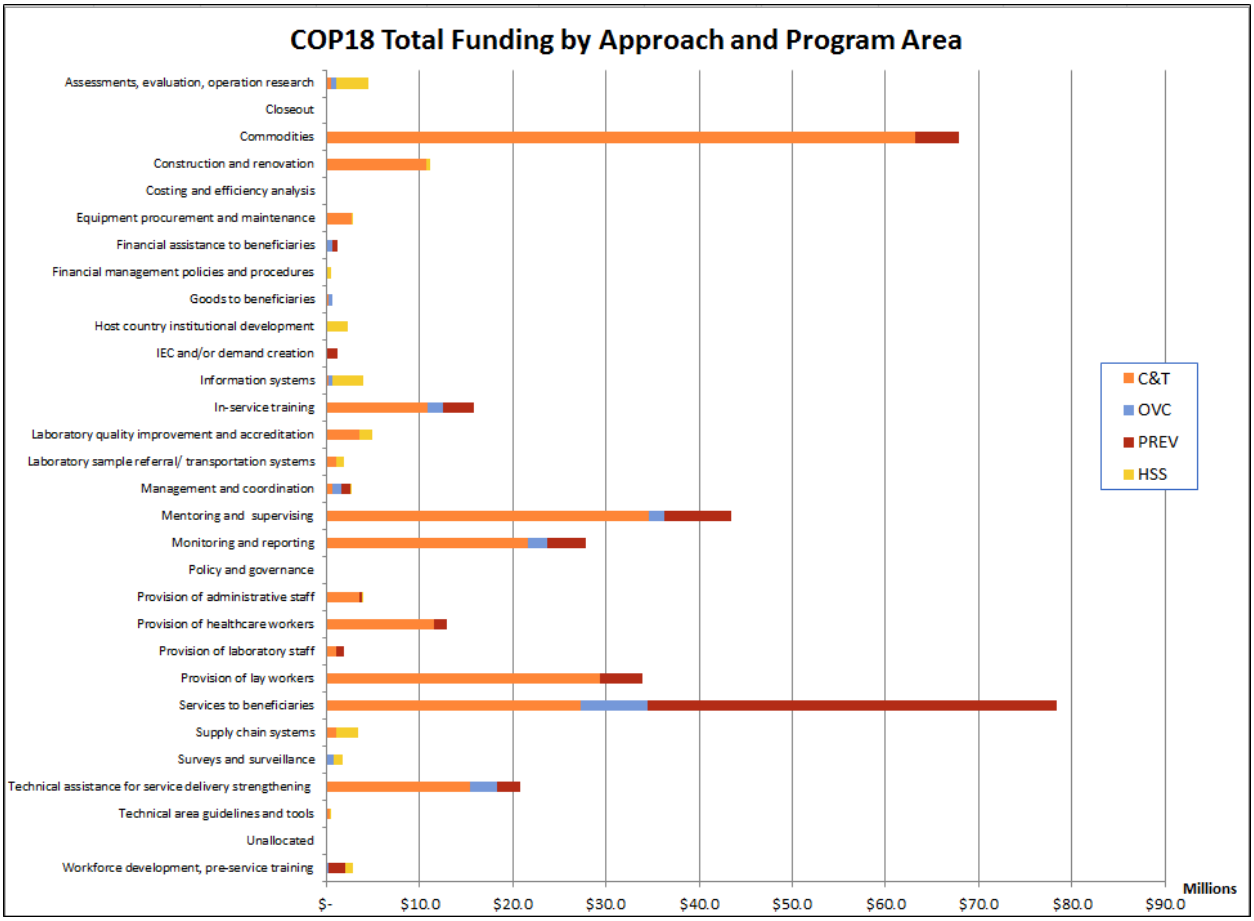


Table B.1.2: COP 18 Total Planning Level		
Applied Pipeline	**New Funding**	**Total Spend**
$US 10,319,582	**$US 383,865,418**	**$US 394,185,000**

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	$16,429,506

HVAB/Y	Abstinence/Be Faithful Prevention/Youth	$2,884,997
HVOP	Other Sexual Prevention	$14,663,374
IDUP	Injecting and Non-Injecting Drug Use	$0
HMBL	Blood Safety	$410,077
HMIN	Injection Safety	$0
CIRC	Male Circumcision	$43,018,686
HVCT	Counseling and Testing	$29,280367
HBHC	Adult Care and Support	$20,483,619
PDCS	Pediatric Care and Support	$9,488,001
HKID	Orphans and Vulnerable Children	$18,404,750
HTXS	Adult Treatment	$129,720,600
HTXD	ARV Drugs	$24,557,881
PDTX	Pediatric Treatment	$16,389,116
HVTB	TB/HIV Care	$14,070,225
HLAB	Lab	$3,332,710
HVSI	Strategic Information	$6,535,347
OHSS	Health Systems Strengthening	$7,438,987
HVMS	Management and Operations	$26,757,175
TOTAL		**$383,865,418**

B.2 Resource Projections

Our methodology of using the FAST tool involved an interagency and iterative process, working with partners, as well as strategic information and programmatic technical experts.

The first iteration involved orientating partners on the high-level parameters (flat-lined budget, increase in target %, introduction/scale-up of activities, de-prioritization of activities, etc.) for COP18 planning. Our next ask involved requesting from partners their initial thoughts on how programmatic shifts would impact their COP18 budgeting. The goal with the first iteration was to

familiarize partners with how COP17 budgets were broken out using the FAST format and to help partners begin absorbing this new approach. The PEPFAR budget team received feedback from partners that helped determine if there were specific programmatic shifts where we should be directing our partners, in an effort to standardize budgeting approaches across partners.

The second iteration involved detailed information from TWGs and SI to help provide specific IM parameters regarding target increases, programmatic shifts, and increases/decreases in IM level budgets. During the second iteration, many programmatic shifts were made amongst partners and these shifts were agreed upon by agency leadership, based on priorities.

APPENDIX C -- Tables and Systems Investments for Section 6.0

Please see separate Table 6 Excel workbook.

APPENDIX D -- Retention and Adherence Strategy

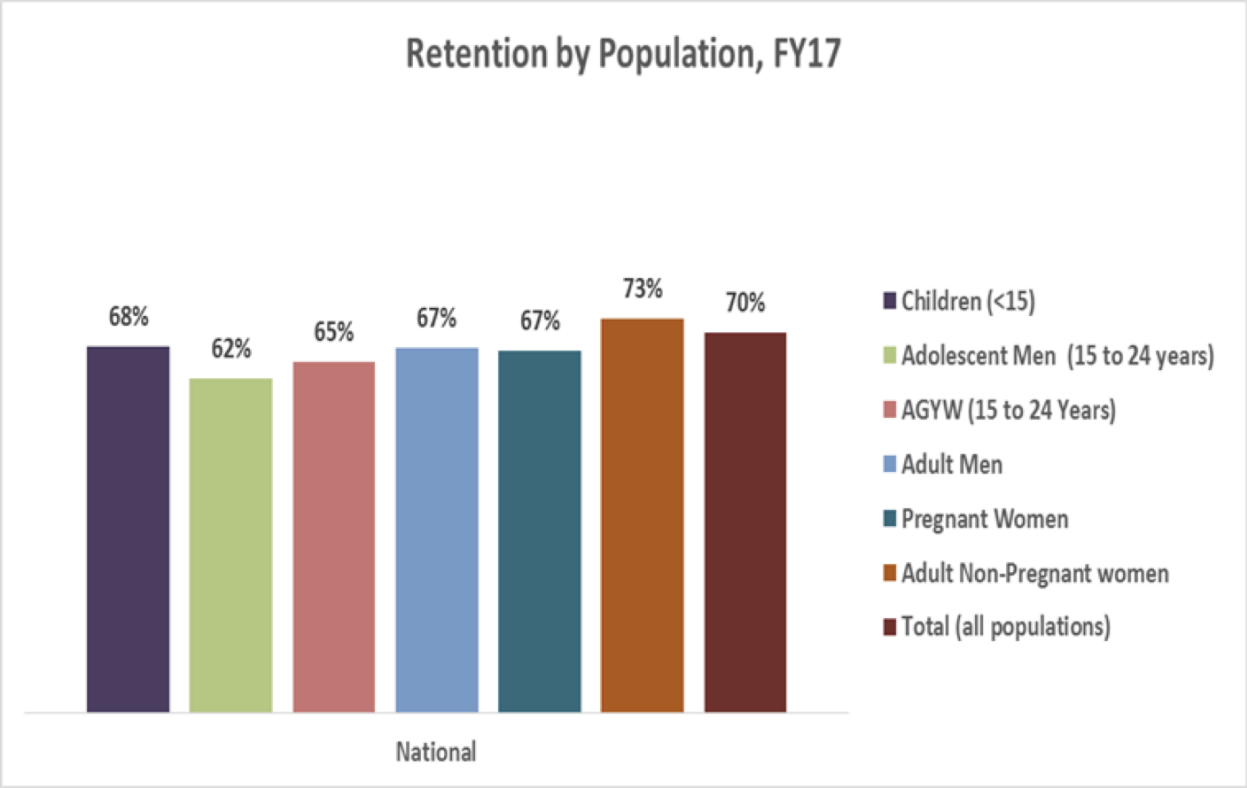
Introduction

PEPFAR recognizes that retention and adherence for PLHIV remains a key issue for COP 18. In FY 2017, overall national retention in HIV treatment services was 70 percent, and retention and adherence remains challenging across populations. There is a critical need to understand the barriers for PLHIV being retained in ART and the facilitators for adherence support with a focused approach towards achieving retention targets.

Through its national leadership, MISAU's 5 core pillars for retention and adherence include: (1) expansion and implementation of differentiated service delivery models; (2) strengthening national HIV quality improvement implementation efforts; (3) expanding and strengthening psychosocial services; (4) combating stigma and discrimination of PLHIV; and (5) empowering communities to ensure sustainability. More detail on investments for these pillars will be addressed further below. Challenges around implementation of these core pillars continue to be an area of concern and will be a primary focus during COP 18. Context and epidemiology provides a snapshot of the current state of retention and adherence based on population-specific data.

As implementation of retention activities are scaled, a focus on tailored approaches for patients with low VL suppression will also be implemented. The third pillar, focusing on psychosocial services and positive prevention, includes scaling the use of intensive adherence support tools which will include VL results. Patients identified as high risk for defaulting from ART services, will receive intensive adherence counseling on a more frequent basis (3 patient-centered sessions quarterly) and during these sessions, trained providers will identify barriers to individual care and implement counseling support. These sessions will include tools that will be placed in charts to track the quality of counseling and interventions with inclusion of VL results. These psychosocial support services are providing a platform for intensive adherence counseling and identify high risk defaulters by documenting VL suppression. This platform will be the first step towards unpacking services being supported to patients not virally suppressed similar to the viremia clubs model in Kenya. As test and start continues to scale in Mozambique with increasing numbers of patients seeking services, dedicated days for patients without VL suppression similar to the Kenya model will be discussed with GRM which can be incorporated into the psychosocial support services and positive prevention platform.

Figure D.1: National Retention Statistics by Population, FY 2017



Context & Epidemiology, by Population

Adult Men

Men lag behind women along the entire clinical cascade in all provinces in Mozambique, with an overall retention rate of 67 percent and viral load suppression rate of 69 percent. This indicates a clear need to improve retention and adherence strategies focused on men, especially early after treatment initiation. The retention rate is 70 percent after three months and late initiation leads to poorer outcomes. Poor health seeking behaviors among men, along with stigma, cultural norms, and an arguably lack of male-friendly health services all contribute to low retention in this population.

Adolescent Males

Similar barriers affect young males, age 15-24, whereby retention rates of 62 percent for FY 2017 are the lowest of all included cohorts. Retention among this group is particularly low in Zambezia (55 percent), Nampula (55 percent), and Inhambane (51 percent). Adolescent boys in FY 2017 had a viral suppression rate of only 55 percent. Among adolescent males, 24 percent have had sex before age 15, highlighting the need to support services for this population.

Children <15

Retention in children in FY 2017 was 68 percent, far below the COP 17 target. Test and Start implementation has yielded a very modest improvement, to 70 percent. The barriers to pediatric retention are well documented, and include limited child-friendly services and counseling. Many

sites are simply not equipped to offer the additional psychosocial support children and families need for retention and adherence in this age group.

PMTCT

Retention rates among pregnant and breastfeeding women has improved from 61 percent in FY 2016 to 67 percent in FY 2017, but still remains low. Too few women initiate ART before becoming pregnant, and those initiating during pregnancy do so too late. The average gestational age for first ANC visit is around 20 weeks. The suboptimal retention rate combined with late initiation has resulted in vertical transmission as high as 20 percent in Nampula and 18 percent in Sofala, of which poor implementation of psychosocial support services in pregnancy and poor monitoring of viral suppression are key factors. Long distances to health facilities (on average 11.8 km), along with poor roads and transportation systems, have adversely impacted patient access to ART and retention in care.

AGYW

Adolescent girls and young women is another population in need of strategic interventions to improve retention and adherence on ART. At a national retention rate of 68 percent, AGYW are a key focus for COP 18 and DREAMS. Incomplete coverage or insufficient implementation of adolescent-friendly services at health facilities, schools, and community sites contribute to the low retention rate, and many patients and their caregivers have low treatment literacy. This population is especially vulnerable given the frequency of early marriage (48 percent of females married before age 18), early sexual debut (25 percent have had sex for the first time before age 15), and older partners (11 percent of females had sex with a partner 10+ years older).

Retention programming: Five areas of focus

As described above, the 5 core pillars for retention and adherence remain the primary driver towards programmatic improvement for ensuring PLHIV are retained in care and adherent with ART. See also, "Summary Table of Key Challenges & Activities" for list of specific COP 18 activities by population.

1) Expansion and implementation of differentiated service delivery (DSD)

In COP 18, PEPFAR will continue to emphasize DSD as an important part of retaining PLHIV. Appropriate DSD is an effective method for improving retention and adherence, and in COP 18 DSD strategies in Mozambique will fall into three general categories: (a) visit spacing and multi-month prescribing; (b) family-based approaches; (c) community ART distribution; and (d) adherence clubs. PEPFAR will ensure prioritization of adherence support services involving PLHIV and other CHWs, who are remunerated and trained to provide high quality comprehensive, community-based retention strategies.

(a) Visit spacing and Multi-month prescribing (MMP)

Current national guidelines indicate that patients should be seen every one to three months for their first year of treatment, but visits can be spaced to every 6-months after six months on

treatment if the patient is clinically stable (CD4>200 on two separate occasions, or VL <1000). In addition, MISAU began implementing three-month drug dispensing in FY 2017 at select high-volume sites, and has included this as a key component of their guidelines on differentiated service delivery. This has the potential to reduce the number of treatment visits (and financial burden) for PLHIV and further decongest clinics. Ongoing support to both the HIV program and Mozambique's Central Medical Store (CMAM) is occurring to ensure that adequate systems are in place to permit a much more rapid scale-up of visit spacing and MMP in COP 18. This includes the co-development of plans with commodity and HIS stakeholders to ensure a robust supply chain system and monitoring and the integration of HIV and TB commodities.

(b) Family-based approach

Family-based, one-stop-shop models allow clients to have families' broader health concerns and priorities addressed alongside ART. There is clear evidence in Mozambique that the use of the family-based approach shows improvement in retention among men and children. Expansion of this approach is just beginning in COP 17; ensuring national scale-up of this package of services will be critical in COP 18.

(c) Community ARV distribution

Community level support is central to Mozambique's COP 18 retention programming. Multiple studies in Mozambique have demonstrated that patients who participate in Community Adherence Support Groups (CAAGs) have significantly higher retention than patients who do not. In FY 2017, PEPFAR implementing partners were providing support for CAAG's in 542 scale-up facilities, which represent 87% percent of all facilities with >500 patients and 61% percent of all scale-up facilities. Unfortunately participation in CAAGs likely remains low at around eight percent nationally. Roll-out of recently approved demand creation tools and reinforcement of community support are expected to have a positive impact on CAAG participation in COP 18.

In addition, in COP 18, PEPFAR will begin to implement ART distribution through mobile brigades (clinical providers that provide intermittent services in targeted communities) in four provinces. This service will be available for adults, pregnant and breastfeeding women (PBFW), and children within primary care context for communities with poor access to facilities. Key populations are included in this service provision. The team will monitor closely the costs and success of this intervention to ensure rapid scale-up if demonstrated to be a cost-effective approach.

2) Strengthen national HIV quality improvement implementation efforts

Partnership with MISAU is paramount to improving the quality of HIV care and treatment in Mozambique. Robust data monitoring and data use with a quality improvement lens will remain a key focus and will be used to inform and drive programmatic improvements. Tools are being developed in COP 17 to support monthly review of retention performance by partners and providers

at provincial, district, and site levels. In addition, joint reviews of the data with PEPFAR and MISAU will ensure that appropriate actions are being taken in response to the findings. Routine joint supervisory visits with PEPFAR alongside MISAU will further ensure data triangulation and improve governance at the facility and regional levels with DPS staff.

3) Expand and strengthen psychosocial services

In order to improve the quality of psychosocial services, PEPFAR seeks to improve continually mentoring and human resources support, as well as disseminate relevant tools that give a standard operating procedure for partners, such as preventive services and defaulter tracing protocols.

In COP 18, partners will begin providing preventive/supportive home visits for patients newly started on treatment who are identified as high-risk for being LTFU. Previously community health workers provided facility-based counseling and outreach after patients missed appointments. This is expected to be a critical intervention, as data has shown that most patients who abandon treatment in Mozambique do so in their first three-six months of treatment. Providing these services will require close collaboration with both GFATM and Civil Society to ensure that peer support can be provided by PLHIV in accordance with evidence-based best practices.

In COP 18, PEPFAR will also continue to scale up Mothers to Mothers (M2M) in the high incidence provinces of Manica, Nampula, Zambezia, and Sofala. The M2M model is an evidence-based, peer-to-peer approach to provide support for HIV education, care, and treatment. Under this model, women living with HIV with recent PMTCT experience are recruited, trained, and employed to work as "Mentor Mothers" within their communities. Under the standard model, each mentor mother is based at a health facility, where she works alongside the doctors and nurses at the maternal child health clinic and at the comprehensive care center. The mentor mothers will work with case managers and patient advocates to enhance and strengthen linkages between community and health facilities. In COP 18, mentor mothers will be scaled-up nationally to ensure that HIV positive PBFW who miss appointments are promptly traced and returned to continue with care.

4) Combat stigma and discrimination

Stigma and discrimination remain among the biggest deterrents to initiation of care, impending knowledge of status, treatment initiation, and treatment retention. In order to reduce the impact of stigma and discrimination on overall treatment goals, PEPFAR will continue to support community dialogues and co-management committees in an effort to sensitize communities about PLHIV and ART. PEPFAR will also raise community awareness about HIV, including treatment options, which will also present an opportunity to inform patients about their rights and empower them to take ownership over their care. Peer support for children, adolescents, and pregnant women will be scaled up. Community support, as outlined in the next section, will also contribute to the fight against stigma and discrimination.

5) Empower communities to ensure sustainability
Sustainability of the PEPFAR program efforts is dependent upon uptake by the community. In COP 18, PEPFAR will implement focused community dialogues to improve communities' health-seeking behaviors and services. These dialogues engage the community as a whole, but with a special focus on capacitating and engaging traditional healers, community, religious/spiritual leaders, and traditional birth attendants to support retention interventions. The dialogues will continue to be led by women with participation of community leadership, PLHIV, and their families.

Community engagement will maximize the use of the existing structures such as community health committees and support groups to improve collaborate and support linkages to health services. Populations where adherence clubs have demonstrable results—stable breastfeeding women, children, and adolescents—will be an important COP 18 component, as will relevant male-focused adherence services, both at the community and facility level.

Community dialogues will also capitalize on the influence of traditional healers and religious leaders to ensure PLHIV arrive at health facilities and have adequate follow up within their communities. PEPFAR is engaged with implementing partners on building community performance indicators that can measure how community interventions contribute to retention.

Finally, lack of food and money for transportation to a clinic represent key barriers to retention and adherence. In COP 18, PEPFAR will also focus on improving the economic conditions of PLHIV. In conjunction with community stakeholders, PEPFAR will encourage integration of savings groups, and CAAGs. In FY 2017, 5,755 PLHIV were integrated into savings and loans groups.

Community systems strengthening coupled with a focus on improving the quality of services at health facilities will be a primary area of focus in COP 18 to promote community-facility linkages and ensuring PLHIV have choices in their care which are tailored to their needs.

Performance Monitoring Plan
PEPFAR will shift greater attention towards retention performance and monitoring during COP 17 implementation and COP 18. PEPFAR will conduct retention-focused site visits with a particular focus on sites with a high number of non-retained patients and will implement performance improvement plans for improving retention and adherence.

In COP 18, the impact of these site-specific plans as well as the retention promotion activities summarized above will be monitored using existing data sources, including:

1. SIMS
2. Quarterly MER indicators
3. Enhanced retention indicators
4. Provincial MISAU supportive supervision visit reports

Data use to inform programmatic improvement with a quality improvement approach will be prioritized in COP 18 to ensure fidelity of the five key pillars for retention and adherence. Dashboards used at the community, facility, provincial, and national levels will be tailored to the performance improvement activities at each level in an effort to ensure data analysis drives programmatic efficiencies and effectiveness. The primary driver for improving retention and adherence will be reaching scale up of evidence-based best practices from the five pillars for retention and adherence, while simultaneously implementing innovative models of care to meet the needs of families affected by HIV.

Summary Table of Key Challenges & Activities

Target Population for Retention & Adherence	Key Challenges	Proposed Activities
Children (<15)	• Gaps in service quality for children • Counseling training/materials not tailored to children • Insufficient LTFU tracking & support to families • Providers not comfortable treating children • Poverty & stigma	• PSS and adherence counseling specific for children using new tools • Mentor Mother support for new on ART < 5 years of age • High impact ratio peer educators to support older age band children • DSD that is child-friendly • Wrap around support for vulnerable children by OVC partner • Training mentorship for providers
Adolescent Men	• Incomplete coverage of adolescent-friendly services at HFs, schools, and community sites • Lack of implementation of MISAU adolescent-specific services • Stigma and lack of fidelity to disclosure algorithms • Difficulty with identifying treatment failure • Low treatment literacy amongst patients and caregivers • Transport difficulties	• Expand family health approach • Expand one-stop-shop models (YFS) • ART in the community (through mobile brigades) • Improve mentoring/technical assistance for psychosocial services and support for adolescents • Strengthen HIV peer support for adolescents • Community dialogues for adolescents living with HIV • Preventive home visits for high risk defaulters

Adolescent Girls and Young Women (AGYW)	• Incomplete coverage of adolescent-friendly services at HFs, schools, and community sites • Lack of implementation of MISAU adolescent-specific services • Stigma and lack of fidelity to disclosure algorithms • Difficulty with identifying treatment failure • Low treatment literacy amongst patients and caregivers • Transport difficulties	• Patient literacy & empowerment • Implement adolescent psychosocial services and PP packages at YFS • Implement age-appropriate DSD models and teen clubs • Community drug distribution through mobile brigades • HRH training in AGYW-specific services and GBV including identification of treatment failure and 2nd line regimens • Implement home support visits • Age appropriate mentor mothers for PB AGYW • Mobilization and training of community and religious leaders on stigma and discrimination
Adult Men	• Poor health seeking behavior • Health care system not male-friendly • Challenges accessing services • Stigma/cultural norms lead to low patient adherence • Late initiation leads to poorer outcomes	• Differentiated Service Delivery • Improving quality of services • Improve psychosocial services available to men • Increased outreach to reduce stigma & address cultural norms • Community outreach to improve linkages to service
Pregnant Women	• Low percent of PBFW HIV+ already on treatment at ANC entry • Late initiation of ART (1st ANC average 20 weeks) • Low viral suppression rates	• M2M directly implementing high fidelity model in provinces of concern • Improved service delivery models for PBFW: One stop shop, Mobile brigades, TLD roll-out for PBFW once approved by WHO

APPENDIX E -- Lab Optimization

Introduction

With the introduction of Test and Start beginning in August 2016, the need for viral load monitoring has increased exponentially in Mozambique. In FY 2017, 277,495 VL tests were performed, and the FY 2019 target for VL testing is 1,327,653. This drastic increase in demand for VL testing has put a strain on a still-developing laboratory system. In addition to VL, EID and TB testing are also expanding rapidly, which together highlight the need for optimized laboratory operations, in order to maximize the use of available personnel and equipment.

Some of the specific challenges faced by Mozambique are: the need to support labs from the ground-up as opposed to strengthening already functional labs; the rapid pace of Test and Start scale up; HRH gaps in both lab and at the facility; increasing budget demands for laboratories; long turn-around times; and the need to improve results reporting. The results of being unable to address these challenges is a strained molecular biology laboratory system that struggles to ensure patients receive critical clinical information.

There has been marked improvement recently in VL performance, coordination, and cooperation in the laboratory sphere, between the interagency and with the Government of the Republic of Mozambique. All involved parties are aware of the challenges, and we are taking a one team approach to improving laboratory service delivery within Mozambique. The main activities being pursued are described below.

VL scale-up activities

a. Increasing physical space for VL testing- renovations/new labs

As the number of VL equipment increases, it is becoming clear that finding space for new machines is critical. In FY 2018, two new molecular biology labs are being brought online, in Tete and Manica. Each of these new labs will be able to house three VL machines. In addition, two labs are being renovated to increase space for VL testing. In FY 2019, we estimate that we will need to renovate and expand four labs to hold the equipment needed to keep pace with demand.

b. Strategic increase of number of instruments in country

The Government of the Republic of Mozambique is leading the development of a VL instrument deployment plan in order to finalize the strategic placement of additional VL machines, guided by testing demands and existing capacity. It is estimated that in FY 2018 an additional seven VL machines will be installed within the country. In FY 2019, we expect to install 8-12 additional VL machines, including between one and three high-throughput machines.

c. Increasing reach of DISA Link System

Currently, there are 12 laboratories with the DISA laboratory system and 56 DISALink sites throughout the country. By the end of FY 2018, there will be 16 laboratories using DISA Lab and

152 total DISALink sites. This will provide improved monitoring of turnaround times and facilitate faster return of results.

d. Introduction of plasma use for VL testing/ high-throughput machines

A plasma strategy is being finalized. Under the strategy, laboratories in high demand areas, starting with Maputo and Zambezia, will transition to the use of plasma for VL testing. Additionally, we hope to install high throughput VL machines in Zambezia and Maputo city in FY 2019, which will greatly increase the VL testing capacity in country.

e. HRH increases for technicians and data entry clerks

The rapid expansion of molecular biology laboratories has highlighted challenges in the hiring of qualified lab techs to perform quality testing. Due to the current economic crisis, MISAU reduced dramatically the number of health workers hired in recent years. Therefore, PEPFAR has to continue supporting in-service training and payment of salaries of molecular biology lab techs during their first one-to-two years of employment. .

f. Training/Mentorship in labs

In order to ensure that rapid expansion does not compromise the quality of testing, several quality strategies have been put in place including the allocation of mentors to provide technical assistance to labs. Mentorship priority is given to newly opened labs and problematic ones. Normally operating labs are visited on a regular basis for a few days/weeks to ensure quality is maintained. PEPFAR will expand on the job direct supervision and support to lab technicians and will look to augment the number of lab technicians to improve turn-around time for viral load sample processing. In addition, at each facility in high volume sites, PEPFAR will explore the recruitment of a lay worker to ensure results are returned and explained in a timely manner to people living with HIV, and to ensure linkage to appropriate counseling and clinical action. PEPFAR will explore opportunities to collaborate with people living with HIV to support demand creation and an understanding of the role of viral load in HIV management, and PEPFAR will work to ensure sufficient technical staff in labs to ensure maximum volumes of viral load tests are done.

g. Results Reporting – "Laboratory champions"

A particular challenge for Mozambique has been ensuring that results are returned to health facilities and appropriately sorted into clinical files. In order to facilitate result availability in clinical files, administrative staff have been allocated to some facilities and are responsible for receiving lab results and filing these results into clinical charts. This approach greatly increased result availability to patients and their use by clinicians. This activity will be expanded in FY 2018 and 2019.

Lab Optimization activities

a. Infrastructure

Public health efforts to control HIV and TB have led to rapid expansion of VL/EID and TB testing in recent years. Several provincial capital laboratories were upgraded for installation of molecular biology instruments. Likewise, several district laboratories benefited from minor renovations and installation of air-conditioning to allow for installation of TB and EID POC.

b. VL/EID Instruments

In summary, there was a rapid expansion of testing technologies with similar testing menus. The current VL/EID testing fleet is composed of 20 instruments. In FY 2017, 390,139 VL samples were tested, which is just close to the maximum capacity. In order to respond to expected demand, an additional 19 instruments will be installed during FY 2018. Conversely, EID testing capacity (conventional and POC) is well above the current needs, approximately 121,000 per year. EID testing is performed in 2.5 Roche and 45 AlereQ devices, and by the end of FY 2018 there will be 130 countrywide. On the other hand, the country is expanding GeneXpert instruments for TB testing. In FY 2017, 76 instruments (304) modules were available countrywide and an additional 96 will be installed in FY 2018.

c. Multiplexing EID/TB

GeneXpert technology was first introduced in Mozambique in 2011. From the very beginning, the utilization rates have been very low and are currently estimated at around 53 percent countrywide. Although GeneXpert is considered a near POC device, most of the instruments are located in remote health facilities where the turnaround time for EID is well above 28 days. For this reason, the country is considering using GeneXpert for EID to maximize its usage rate and save more lives. Another advantage of GeneXpert includes the low price of the devices and cartridges. The GeneXpert multiplexing strategy particularly for EID will include criteria for rural regions, highly mobile populations, and other critical factors to ensure optimization of the laboratory network. PEPFAR will consider a package focused on the management of advanced HIV (including CD4, CrAg and GeneXpert).

d. Integrated Specimen Referral Network

Several stakeholders have been working to improve specimen referral systems, including clinical partners and provincial health authorities. Different strategies aimed at the reduction of rejection rates and turn-around times have been put in place. Training in sample collection, storage, and transport to processing laboratories has been delivered and will be continued.

Performance Monitoring Activities

a. Improved governance for communication and coordination

The success of the implementation plan will depend on the effective engagement of and coordination with key stakeholders. With regards to governance, stakeholders are dedicated to the development and compliance of the following: policies outlining VL processes and procedures, clinical guidelines, standard operating procedures (SOPs) and job aids including

human resource training plans for national guideline compliance, laboratory viral load testing capacity (specimen collection, processing, results return, training), commodities forecasting plans, guidance and activities for viral load testing demand creation, guidance for viral load M&E (clinical, laboratory, commodities), and process and outcome evaluations standards and processes for the management of patients with virologic failure.

In addition to improved governance, key to this process is coordination with the clear understanding and division of roles and responsibilities (Table E.1). The following table summarizes the stakeholders' expectations and priority activities:

Table E.1: Division of Stakeholders Roles and Responsibilities

Stakeholders	Responsibilities	Priorities
MISAU-DCL	• Collaborate with the ART program during planning, implementation and monitoring of routine VL monitoring scale up • Oversee the development of laboratory capacity for routine viral load monitoring (specimen collection, accessioning, processing, results return) • Strengthen the national specimen transport system	• Increase the number of VL tests through work flow optimization • Improve VL test result delivery to facilities by strengthening the transport system • Lead proficiency testing (PT), and laboratory mentorship and supportive supervision as part of lab quality management system.
MISAU-DNSP	• Provide national guidance and coordinate oversight of systems and processes for site implementation compliance and quality clinical management of patients who receive viral load testing	• Lead establishment/revision of patient level files, registers, forms to ensure proper documentation of VL test orders, results, and patient management • Coordinate training of health care providers on viral load testing and results interpretation • Monitor the process and outcomes of routine VL monitoring at site, regional and national levels • Approve, lead planning and coordination of clinical mentoring and supervision
Lab Partner	• Provide technical assistance and resources to support routine VL monitoring across clinical, laboratory and monitoring and evaluation areas	• Support facility clinical and lab mentorship and supportive supervision activities • Provide guidance on quality of clinical services incorporating VL monitoring in PEPFAR supported facilities • Support the increased responsibilities in VL testing, planning, implementation, and M&E • Collaborate with CDC Atlanta for continued clinical and technical assistance for VL scale up

PSM	• Provide technical assistance and resources to support routine VL monitoring across clinical, laboratory and monitoring and evaluation areas	• Procure VL machine and fill VL testing reagents' gap • Improve the quantification and procurement of VL laboratory commodities
PEPFAR Clinical Partners	• Provide technical assistance to ensure quality implementation of all components of the VL cascade (lab ordering, results documentation, interpretation, utilization, M&E) for improved clinical care quality.	• Support training of health care providers on VL algorithms, enhanced adherence counselling, virologic failure management, M&E • Monitor the outcomes of individuals with VL results >1000 copies/mL.

b. Partner performance monitoring - Adequate strategic planning and accountability of partner performance of implementation is a critical component of successful implementation and scale up of viral load testing so as to reach everyone receiving ART. The strategy has been described in previous sections. A partner performance monitoring framework for VL Scale up and lab optimization implementation provides a methodology through which key elements of performance can be monitored and rapidly addressed during implementation and scale-up.

c. Weekly interagency meetings

Regular review of viral load-specific activities has started in COP17, and ongoing weekly interagency meetings have improved coordination of laboratory activities. Weekly interagency meetings with bi-monthly inclusion of laboratory MISAU stakeholders will continue in COP 18. These meetings will include the following activities: 1. Review of weekly VL updates including sample backlogs and VL machine breakdowns**;** 2. Review of laboratory site readiness status updates; 3. Key partner performance gaps including VL results reporting; and 4. Review of recent and upcoming senior level stakeholder meetings to identify levers for change management.

d. Viral Load M&E Plan

The following M&E plan describes the flow of information and the types of data to be collected and reported to monitor the performance of viral load testing and monitoring in Mozambique. The purpose of this M&E plan is to outline the steps that need to be taken to establish an M&E system for the program; delineate responsibilities for data collection, reporting, analysis and dissemination; outline performance indicators and data collection tools; and discuss implementation and follow-up activities.

Program process monitoring, also referred to as monitoring, investigates the extent to which the logical framework building blocks -- inputs, activities, and outputs -- were available, carried out, and delivered as intended.

Coordination of the M&E plan

This M&E plan will be implemented as part of the national roll out of routine viral load testing. Key MISAU programs are involved in the planning, implementation, and monitoring.

Monitoring

Data will be collected at various sources as outlined in the performance framework. The implementing partners will work together to develop new M&E tools, or update existing ones. This process will depend on the levels of data and systems in use in different facilities

Evaluation

Process evaluation will focus on describing how the VL implementation activities are being carried out and will assess dose, fidelity, and reach of VL monitoring activities. The process evaluation will consist of two components: 1) review of documents and project data and 2) stakeholder analysis. These data sources will be used to assess if technical assistance was delivered and received, implemented as designed with fidelity, and available and accessed by the intended patient beneficiaries.

Table E.2: Key VL implementation Process and Outcome Evaluation Questions

Outcome	**Process**
Are there observed good/best practices to ensure patients receive VL testing and results in a timely fashion, understand VL results, receive adherence counseling that improves ART adherence and subsequent documentation of viral suppression?	Was VL testing scaled-up and implemented as planned? Why? What worked? What did not work? How are M&E, program/clinical, and lab staff working closely together to review viral load performance?
Was VL testing more successful with certain groups of people than with others? Were there significant differences in VL test results between different populations? Why or why not?	Were staff trained or educated to the right level for implementing VL testing? Was there adequate support for VL testing (includes the service providers at sites, lab transporters, lab technicians, and M&E staff)?
How has quality of HIV services, particularly adherence counseling and support changed as a result of routine VL testing?	Which models of sample transport result in more people receiving VL tests and results?

APPENDIX F – Data Quality

The need for quality health data cannot be overemphasized. Routine electronic patient tracking system data quality assessments (EPTS DQA) are a crucial step towards improving data quality particularly in a setting where data recording is still done manually using paper based forms and registers. IPs may be requested to undertake an independent data quality audit. Over, and above, the districts routine data quality assessment reports and improvement plans, IPs should provide technical assistance to consolidate one report that highlights overall data quality findings and intended remedial solutions from all districts to give a national picture and share the report widely with various stakeholders. The report and the improvement plan should be shared with the U.S. Government, as well as, the facility managers, including the data clerks, to encourage ownership and improvement on overall data management.

Implementing partners should also ensure the routine data quality at site level. An M&E Mentorship Plan (costed) is required to be submitted to U.S. Government at the time of work plan development. PEPFAR and IPs hold a responsibility to ensure the quality of results reported. DQA involves performing on-site data verifications at the service delivery points for key service delivery indicators and re-aggregating data from primary records and comparing re-counted numbers with results contained in summary reports up to the national level.

Medical Records Management

The IP should support the hospital, clinic or other health care facility to provide quality patient care to all patients, whether an inpatient, outpatient or emergency patient. Responsibility for direct patient care and documentation in the patient's medical record is delegated to doctors, nurses and other health care professionals. The IP should provide on-going HR support, M&E mentorship, and training to ensure the accuracy and completeness of this documentation to those who are recording the data. A major responsibility is seeing that the medical record is available at all times when needed for the continuing care of the patient. This support includes the following functions for the management of patient health care data on a daily continuing basis:

A. All forms related to the care of a particular patient are in that patient's medical record;
B. Staff are trained and understand the value of the medical record and importance of its availability at all times;
C. The medical record has been completed by the clinician;
D. All information produced for statistics is accurate and readily available when required by the administration, MISAU, or other government agency;
E. The health facility has adequate supplies and equipment for medical records management such as having adequate filing cabinets stationery (medical record forms, folders, and office stationery) available to enable basic medical record functions to be carried out; and
F. Management of the paper-based system and EPTS at expected international standards (e.g., WHO) to protect their integrity and to ensure complete case ascertainment.

Technical Assistance and Human Resource

The partner is expected to provide technical assistance in M&E and SI in order to improve capacity related to the HIV/AIDS response in Mozambique. This M&E technical assistance is provided to the central ministry of health, provincial and district government health offices. IPs may be asked to provide financial support for key SI personnel to DPS and at site level such as M&E Officers responsible for ART data management. The IP is expected to assist sites and districts to improve the rate and timeliness of report submission from health facilities, analyze the data that is submitted to the central level, report and share the data with the relevant stakeholders, and carry out required PEPFAR reporting.

Activities should include but not be limited to:

- EPTS DQA on all PEPFAR quarterly indicators.
- Training of both central staff and district personnel on the use of the DQA tool.
- Routine and documented data verification at district and site level.
- Production of data quality reports; district specific reports, and a consolidated report to reflect national picture.
- Production of data quality improvement plans for all districts, district specific reports, and a consolidated report to reflect the national picture.
- Data quality assurance for all quarterly indicators.
- Support for SI personnel at central, provincial, district, and facility levels.
- Quantification of M&E necessary for primary data collection (i.e. staff, paper, storage cabinets, registers, clinical forms, etc.).
- Assurance of routine data management and reporting procedures at all facilities.
- Medical record filing procedure and Filing systems and Methods according to WHO Medical Record Manual http://www.wpro.who.int/publications/docs/MedicalRecordsManual.pdf and national policies for medical records

EPTS to SIS-MA Data Reporting

The reporting of indicator data is needed to monitor program performance. Data reported to different systems from different sources (including paper based) causes misalignment making it challenging to monitor program performance and to determine where resources should be allocated. In March, MISAU agreed to an EPTS to synchronize data reporting for the National HIV Program and PEPFAR so as to strengthen data quality and ensure PEPFAR and the Government of the Republic of Mozambique use same data for decision making. Having data reported to monitoring systems (i.e., DATIM, SIS-MA) from the same source system (EPTS) will allow higher quality data to monitor program performance and allocated resources effectivity for achieving epidemic control and 90-90-90 by 2022.

EPTS

In 2016, the EPTS, a retrospective HIV database, developed on the OpenMRS platform, was introduced to health facilities in Mozambique. EPTS captures patients on antiretroviral therapy. It was successfully scaled over time and is expected to be fully deployed to all high volume facilities by the end of CY 2018. The EPTS system was developed and supported by PEPFAR and is currently being scaled in supported health facilities with 500 or more patients on ART.

SIS-MA

The SIS-MA system is a system used by the MISAU to capture aggregate patient data to monitor program performance at the health facility, district, and province level. The SIS-MA system was developed and supported by MISAU. PEPFAR provides minimal support of SIS-MA. The SIS-MA system captures many program indicators related to HIV, TB, and other programs

EPTS to SIS-MA Reporting

A project charter has been drafted. The EPTS to SIS-MA Reporting project charter documents and tracks the necessary information required by decision maker(s) to approve the project for funding and execution. The project charter should include the needs, scope, justification, and resource commitments, as well as the project's sponsor(s) decision to proceed or not to proceed with the project. It is created during the Initiating Phase of the project.

The intended audience of the EPTS to SIS-MA Data Transfer project charter is the project sponsor and senior leadership. This includes PEPFAR and the MISAU HIV Program and the MISAU *Sistemas de Informaçõe*s *pare Saúd*e (SIS) Program (e.g., Health Information Systems).

In the past, PEPFAR clinical partners used various systems to capture patient information. Some of these systems were paper based and some were electronic based. These systems were different based on the needs of the partners. They were not interoperable and it was a challenge to monitor patient and program performance as well as report information to MISAU and PEPFAR.

To date, the flow of current reporting from EPTS to DATIM and from EPTS/ or paper systems to SIS-MA has been documented (Figure F.1). A next step of the plan is to create a method for EPTS to generate indicators for reporting to SIS-MA over the next two months (Figure F.2). The method should be the same method used for PEPFAR MER reporting to DATIM as users are familiar with the process for generating indicators for reporting to DATIM which like SIS-MA is a DHIS2 based system.

Figure F.1: Current Data Flow for EPTS Reporting

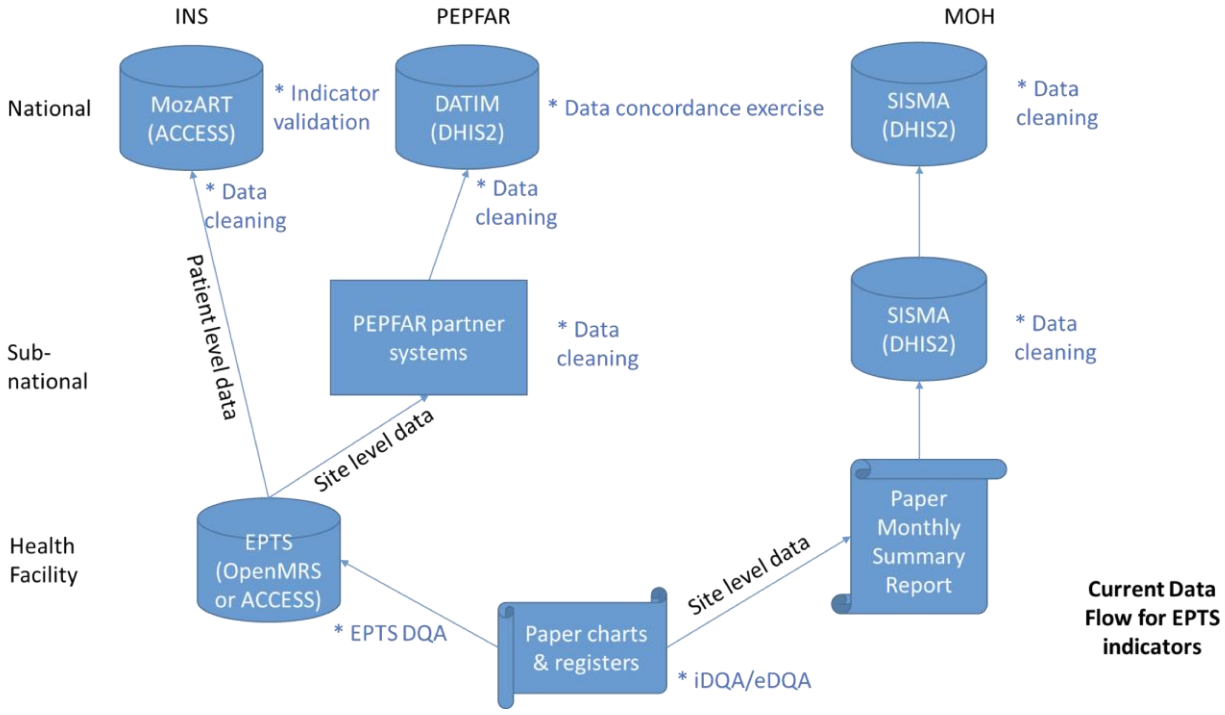
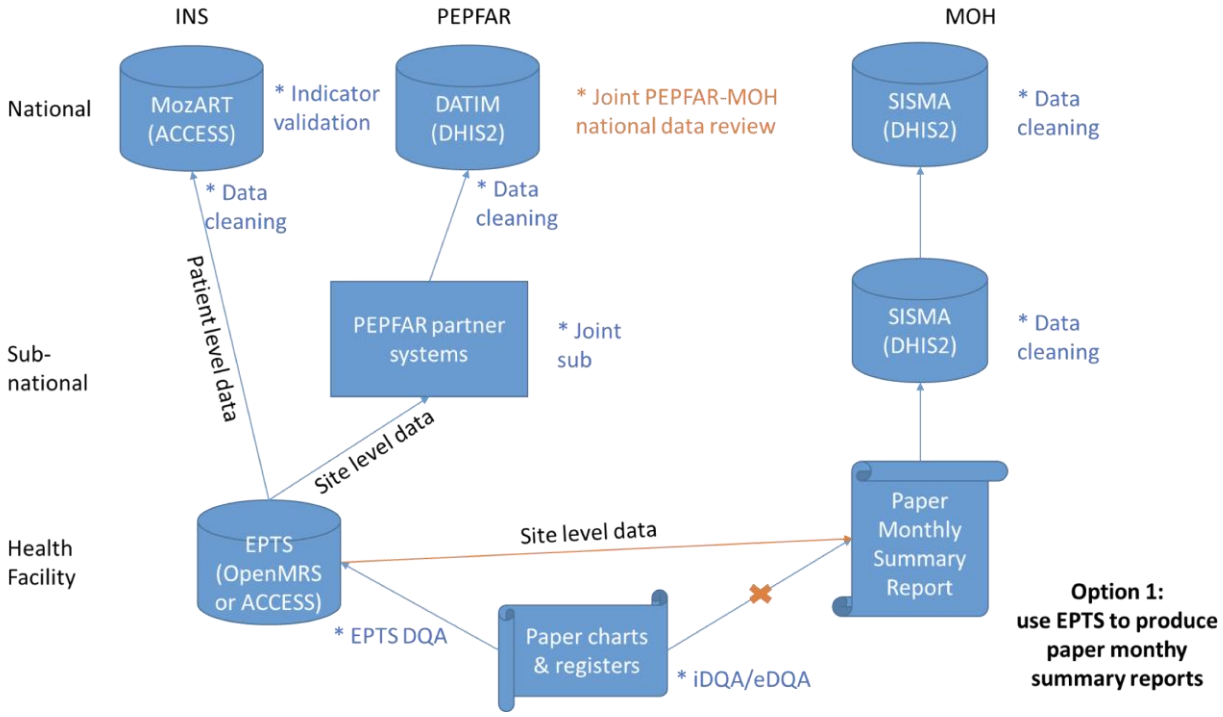


Figure F.2: Proposed Data Flow for EPTS to SIS-MA Reporting in the next 2 months (short-term).



APPENDIX G -- Acronyms

AE	Adverse Event
AGYW	Adolescent Girls and Young Women
ANC	Antenatal Clinic
APSS	Apoio Psicossocial
ART	Anti-Retroviral Therapy
ARV	Anti-Retroviral
CDC	Centers for Disease Control
CLHIV	children living with HIV
CNCS	Conselho Nacional de Combate ao HIV/SIDA /National Council to Combat AIDS
COP	Country Operation Plan
CY	Calendar Year
DOD	Department of Defense
DPS	Directorates of Provincial Health
DQA	Data Quality Assurance
DREAMS	Determined, Resilient, Empowered, AIDS-Free, Mentored, and Safe
DSD	Direct Service Delivery
EID	Early Infant Diagnosis
EPTS	Electronic Patient Tracking Systems
FSW	Female Sex Workers
G2G	Government-to-Government
GAACs	Grupos de Apoio a Adesão Comunitária / Community ART Support Groups
GBV	Gender-Based Violence
GFATM	Global Fund for AIDS, Tuberculosis, and Malaria
HCWs	Healthcare Workers
HPG	Health Partners Group
HRH	Human Resources for Health
HTC	HIV Testing and Counseling
HTS	HIV Testing Services
IBBS	Integrated Behavioral and Biological Survey
INS	National Institute of Health
INSIDA	Inquérito Nacional de Prevalência, Riscos Comportamentais e Informação sobre o HIV e SIDS / AIDS Indicator Survey
IPs	Implementing Partners
KP	Key Populations
LTFU	Loss to Follow-Up
M&E	Monitoring and Evaluation
M2M	Mães para Mães / Mothers to Mother
MER	Monitoring, Evaluation, and Reporting
MINEF	Ministério da Economia e Finanças/Ministry of Finance
MISAU	Ministério da Saúde / Ministry of Health
MSM	Men Who Have Sex With Men
OVC	Orphans and Vulnerable Children

PEPFAR	President's Emergency Plan for AIDS Relief
PICT	Provider-initiated counseling and testing
PLASCO	Plataforma da Sociedade Civil / Civil Society Platform for Health
PLHIV	People Living with HIV
PMTCT	Prevention of Mother-to-Child Transmission
PPP	Public-Private Partnership
PrEP	Pre-Exposure Prophylaxis
PWID	People Who Inject Drugs
SI	Strategic Information
SID	Sustainability Index Dashboard
SIMS	Site Improvement through Monitoring Systems
SNU	Sub-National Unit
STI	Sexually Transmitted Infection
TA	Technical Assistance
TLD	Tenofovir/Lamivudine/Dolutegravir
UNAIDS	Joint United Nations Programme on HIV and AIDS
USAID	United States Agency for International Development
VL	Viral Load
VMMC	Volunteer Medical Male Circumcision
WHO	World Health Organization
ZAP	Zambezia Action Plan

Table 6 Attachment

Table6 ID	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Related SID 3.0 Element
	USAID	Oversight for 16 Type II RHC & 3 Warehouses	HSS	Provide Oversight to Construction of Nampula Regional Pharmaceutical Warehouse Construction	Construction and renovation	This partner will provide post construction oversight services for the USG funded Nampula regional warehouse, which will be inaugurated in June 2018. This provides a mechanism to verify the construction warranty. The warehouse will serve 4 provinces in the northern region of Mozambique.	Supply chain	8. Commodity Security and Supply Chain
1	HHS/CDC	ASCP	HSS	To strengthen laboratory workforce capacity and laboratory quality improvement of Viral Load, EID, HIV Drug resistance, and other HIV-related molecular diagnostics	Laboratory quality improvement and accreditation	Provide technical assistance for implementation of SLMTA and mentorship program to VL/EID labs	weak implementation of quality management systems at molecular biology labs	10. Laboratory
2	HHS/CDC	ASM	C&T	To strengthen TB diagnostic capacity, quality, and bio-safety practices.	Laboratory quality improvement and accreditation	Provide TA to strengthen TB diagnostic, specimen referral and proficiency testing programs	weak implementation of quality management systems at molecular biology labs	10. Laboratory
3	HHS/CDC	ASM	HSS	To expand EQA and specimen handing and transportation to assure reliable and timely HIV-related test results	Laboratory sample referral/ transportation systems	Improved lab EQA and tools for laboratory sample optimization	Inefficient transport of lab specimens	10. Laboratory
4	HHS/CDC	APHL	C&T	To strengthen the laboratory information, results reporting and M&E systems to guarantee timely availability of patient results and laboratory data for effective HIV related diagnosis and treatment	Laboratory quality improvement and accreditation	Provide TA for implementation of electronic laboratory information system in PEPFAR supported sites	High TAT for HIV related diagnostic due to low coverage of laboratory information system	10. Laboratory
5	HHS/CDC	Johns Hopkins	HSS	To strengthen MoH capacity to increase the use of HRH Strategic information, planning, and M&E	Information systems	To support the expansion of HRIS to the private sectors (clinics, pharmacies, NGOs, etc.)	Lack of HRH data for private and community level staff	7. Human Resources for Health
6	HHS/CDC	Johns Hopkins	HSS	To strengthen MoH capacity to increase the use of HRH Strategic information,	Information systems	To support the implementation on human resource information system (HRIS) life cycle to strengthen management at all levels.	Lack of HRH data for private and community level staff	7. Human Resources for Health

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
	6.18	Implementation of 100% of planned oversight visits	1 year	Number of planned oversight visits conducted	0
1	*2.83*	Close Out	1 year		
2	*2.83*	Close Out	1 year		
3	*2.83*	Close Out	1 year		
4	*2.83*	Close Out	1 year		
5	*6.74*	Obtain complete data on Human Resources for Health in Mozambique (including public and private sector data).	2 years	HRIS	0%
6	*6.74*	Fully functional HRIS	1 year	HRIS	0%

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	4					
1						
2						
3						
4						
5	30% private sector data register in HRIS		100% private sector data register in HRIS			
6	100% of Districts with function life cycle modules installed					

Table6 ID	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Related SID 3.0 Element
7	HHS/CDC	Johns Hopkins	HSS	To strengthen MoH capacity to increase the use of HRH Strategic information, planning, and M&E	Information systems	Provide technical assistance for the operations of the human resource observatory.	Lack of HRH data for private and community level staff	7. Human Resources for Health
8	HHS/CDC	Johns Hopkins	HSS	To strengthen MoH capacity to increase the use of HRH Strategic information,	Workforce development, pre-service training	Provide technical support to MOH HR training department to continue to catalog standardized in-service trainings in the SIFO	Lack of standardized system for tracking in-service training	7. Human Resources for Health
9	HHS/CDC	Johns Hopkins	HSS	To strengthen MoH capacity to increase the use of HRH Strategic information, planning, and M&E	Workforce development, pre-service training	Provide technical assistance to the training department and technological management of tele-education, teleconsulting and telediagnosis services, and appraisal of the infrastructure, organization and activities carried out in the delivery of Telessaúde	Poor access to distance learning for health professionals	7. Human Resources for Health
10	HHS/CDC	JEMBI	HSS	To strengthen national health information systems	Information systems	Deployment of the POC EMRS including related HIS infrastructure to one hundred health facilities within the year.	Facilities having different levels of infrastructure.	6. Service Delivery
11	HHS/CDC	JEMBI	HSS	To strengthen national health information systems	Information systems	Deployment of POC EMRS including the development of training materials and the training of health facility staff in the use of the system with a minimum of POC EMRS 250 users trained by the end of the year.	Lack of staff knowledge working with EMRS systems-risk of acceptance.	6. Service Delivery
12	HHS/CDC	JEMBI	HSS	To strengthen national health information systems	Information systems	Delivery of a prototype interoperability platform to test POC with pharmacy data exchange (via Open MRS EPTS and SIGLUS)	Systems being available for data exchange.	6. Service Delivery
13	HHS/CDC	JEMBI	HSS	To strengthen national health information systems	Information systems	Support for SISMA and other critical national HIS	Poor domestic support for critical HIS	15. Performance Data
14	HHS/CDC	JEMBI	HSS	To strengthen national health information systems	Information systems	Delivery of a prototype interoperability platform to test data exchange between site level and national level systems (via Open MRS EPTS and SIS-MA)	Systems being available for data exchange.	15. Performance Data

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
7	*6.74*	Consistent use of HRH data in program planning	1 year	HRH data availability and use	NA
8	*6.74*	Completion of a catalog of in-service trainings offered to health workers	1 year	SIFO Catalog	NA
9	*6.74*	Full implementation of distance learning strategy for health professionals.	2 years	Telesaude trainings held	NA
10	*5.83*	Timely and quality data for clinical decision making.	3 years	100 test and start facilities having infrastructure to run a EMRS system by the end of the year.	0
11	*5.83*	Timely and quality data for clinical decision making.	3 years	250 end users at fifty facilities using an EMRS system for clinical management by the end of the year.	0
12	*5.83*	Timely and quality data for clinical decision making.	2 years	Connectivity between Open MRS at SIGLUS (the pharmacy stock management tool) with an established connection and one test message sent.	0
13	*7.17*	Timely and quality data for national M&E.	3 years	Data requests from MoH addressed in a timely manner.	0
14	*7.17*	Timely and quality data for national M&E.	2 years	Connectivity between Open MRS at one facility and SIS-MA established and one test message sent.	0

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7	HRH data routinely available to partners and used in MOH program reports (production of annual HRH statistical compendium)					
8	In-service training SIFO and SIFIN system. 30% SIFIN system used by private sector					
9	50 % of Tele-Health trainings held		100 % of Tele-Health trainings held			
10	100		100 new (cumulative 200)		150 new (cumulative 350)	
11	250		250 new (500 cumulative)		375 new (875 cumulative)	
12	1 Connection from one system (i.e., pharmacy) to POC EMRS		3 Connection from three system (i.e., pharmacy) to POC EMRS			
13	24 data requests within a year will be resolved within three business days		24 data requests within a year will be resolved within three business days		24 data requests within a year will be resolved within three business days	
14	1 connection from one health facility system (i.e., POC EMRS) to the national system SIS-MA.		5 connection from five health facility system (i.e., POC EMRS) to the national system SIS-MA.			

Table6 ID	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Related SID 3.0 Element
15	HHS/CDC	UCSF	HSS	To build institutional capacity for management, analysis, triangulation and use of HIV epidemiological and program data to guide programming for epidemic control	Assessments, evaluation, operation research	For HIV Drug Resistance, Integrated Biological and Behavioral Survey studies in Key Populations provide technical assistance (e.g. commodities needed for testing)	Host government laboratory challenges with procurement and management commodities for surveillance	13. Epidemiological and Health Data
16	HHS/CDC	UCSF	HSS	To build institutional capacity for management, analysis, triangulation and use of HIV epidemiological and program data to guide programming for epidemic control	Assessments, evaluation, operation research	Data Analysis and mapping and size estimation for HIV; Improved analysis, visualization, and use of surveillance data available at the health facility, district, provincial and national levels.	Host government capacity to perform data triangulations for planning to HIV response is limited	13. Epidemiological and Health Data
77	USAID	Clinical Services System Strenghening (CHASS)	HSS	Strengthen Community-based HIV services - Access, Quality and Retention	Host country institutional development	Strengthen capacity of Provincial Goverenment to oversee HIV response to ensure the delivery of high quality HIV & AIDS services	Weak Provincial Coordination and Delivery of HIV & AIDS Services	6. Service Delivery
17	HHS/CDC	CISM - Manhica Research Center - Follow On	C&T	To assess, pilot, and implement strategies for improving treatment at the clinic and community level	Assessments, evaluation, operation research	assess strategies to increase HTC, linkage and retention in HIV care in the Manhiça district	Inadequate data to support improvement in HTC linkage and retention	13. Epidemiological and Health Data
18	HHS/CDC	INS	HSS	Strengthening national surveillance and reporting systems including national laboratory networks	Surveys and surveillance	Strengthen INS capacity to implement HIV/TB surveillance	Lack of domestic capacity for disease surveillance	13. Epidemiological and Health Data
19	HHS/CDC	INS	HSS	Strengthen national surveillance and reporting systems including national laboratory networks	Laboratory quality improvement and accreditation	Increase competency of laboratory workforce and train at least 200 staff in HIV/TB related diagnostic services.	Lack of adequate and well trained lab staff	10. Laboratory

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
15	*4.90*	Host government administrative and logistical capabilities for survey implementation improves. HIVDR and IBBS Female Sex workers Round II and Prisoners completed with testing results data available	1 year	Surveillance Study Reports in DATIM ESOP with Status of Complete. ; Capacity Building and Training Plan	Surveillance Study Reports in DATIM ESOP with Status of On-going
16	*4.90*	Data Management Unit Established; National Health Data Observatory Established and Managed by Host government with minimal TA	1 year	Evaluations and Research Study Reports in DATIM ESOP with Status of Complete. ; Capacity Building and Training Plan	Evaluations and Research Study Reports in DATIM ESOP with Status of On-going
77	5.83	Improved Host Country Goverenment Provincial Level Coordination and Delivery of High Quality HIV & AIDS Servcies	3 years	Quarterly Improvement Reports of Provincial Organizational and Technical Capacity	Host Country Goverenment Organizational Assessments
17	*4.90*	Analysis of HTC, linkage and retention strategies	2 years	Approval of protocol, training of personnel on good clinical practice and methods, Number of participants recruited in the study.	protocol being written
18	*4.90*	At least 4 National Surveillance Systems maintained by INS staff	3 years	MMWR Surveillance System Attributes	0
19	*2.83*	450 laboratorians in-service training	3 years	# of laboratorians trained/year	0

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15	HIVDR and IBBS FSW II Data Analysis Complete; MozART quarterly report; National HIV 5 year Strategic Plan		N/A		N/A	
16	Test & Start Evaluation Data Analysis Complete; MozART quarterly report;		N/A		N/A	
77						
17	Protocol approved. Starting implementation of the protocol		Ending the evaluation and analysis of the data. Production and sharing of reports and manuscripts.			
18	4 MMWR like reports		4 MMWR like reports		4 MMWR like reports	
19	150		150		150	

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20	HHS/CDC	INS	HSS	Strengthening national surveillance and reporting systems including national laboratory networks	Surveys and surveillance	Increase capacity of INS to monitor and evaluate HIV programs for improvement by funding surveillance Staff salary support, Travel support for surveillance staff	Lack of domestic capacity for monitoring and evaluation of programs	13. Epidemiological and Health Data
21	HHS/CDC	INS	HSS	Strengthening national surveillance and reporting systems including national laboratory networks	Surveys and surveillance	Increase capacity of INS to gather, analyze, disseminate, and use timely data by funding staff salary for Data Management Unit, Equipment Hardware/Software for Data Management Unit, Travel and training costs for INS surveillance staff.	Lack of domestic capacity for data analysis and use	13. Epidemiological and Health Data
22	HHS/CDC	INS	C&T	Strengthen national surveillance and reporting systems including national laboratory networks	Laboratory quality improvement and accreditation	Support implementation of laboratory quality improvement program (SLMTA) in PEPFAR supported labs including training, site supervision, mentoring and auditing.	Inadequate implementation of quality management system in PEPFAR supported labs	10. Laboratory
23	HHS/CDC	INS	C&T	Strengthen national surveillance and reporting systems including national laboratory networks	Laboratory quality improvement and accreditation	Support implementation and expansion of proficiency testing program for HIV related testing (HIV, EID, VL, TB and CD4) -and it includes production of proficiency testing panels, report writing and dissemination of PT results	Low coverage of proficiency testing program in PEPFAR supported labs - poor performance of PEPFAR supported labs on PT programs	10. Laboratory
24	USAID	DevResults	HSS	APR/SAPR/DATIM/MER indicator reporting	Assessments, evaluation, operation research	Quarterly/Semi_annual/Annual for specific(non MER) and DREAM indicators reporting	1.Managemnet of historical data 2.Convertion to MER indicators for data analysis	15. Performance Data
26	USAID	Learning Capacity Development Task Order 1	HSS	Strengthened organizational performance by partner CSOs	Management and coordination	Development of Strategic Plan	Lack of Strategic Plan	3. Civil Society Engagement

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
20	*4.90*	At least 4 National evaluations managed by INS staff	3 years	Evaluation Reports	0
21	*4.90*	National reports to guide practice, research, and learning	3 years	# of National Reports	0
22	*2.83*	3 HIV VL lab 3 star SLIPTA certification	2 years	LAB PT CQI	
23	*2.83*	Increased # PEPFAR supported lab and testing sites enrolled PT program	2 years	LAB PT CQI	60% of PEPFAR supported and testing sites enrolled on a PT program
24	*7.17*	Strengthened data collection and report for non-MER and custom indicators for health partners and Mission staff	3 years	Improve monitoring and evaluation system through more accurate and better consolidated data	100% of non-MER and custom indicators reported.
26	4.00	Develop strategic plan as a resource mobilization tool.	1 year	Strategic Plan developed and used as a resource mobilization tool	Lack of Strategic Plan

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20	4		4		4	
21	5		10		20	
22	2		1			
23	80% of PEPFAR supported labs enrolled on a PT program		100% of PEPFAR supported labs enrolled on proficiency testing program			
24	Collection of 100% non-MER and custom indicators reported.		Collection of 100% non-MER and custom indicators reported.		Collection of 100% non-MER and custom indicators reported.	
26	Strategic Plan finalized and decimated		N/A		N/A	

Table6 ID	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Related SID 3.0 Element
27	USAID	Design and Build of Nampula Regional Pharmaceutical Warehouse	HSS	Design and build a Nampula Regional Pharmaceutical Warehouse	Construction and renovation	Complete the warranty period of the Nampula Regional Warehouse construction.	Strain on warehousing space and quality given the increased commodity need to achieve 90-90-90 and Test and Start.	8. Commodity Security and Supply Chain
28	USAID	UNICEF MCH Umbrella Grant	OVC	Strengthened families' communities and local stakeholders capacities to address social and economic vulnerabilities of most the vulnerable children and their families	Information systems	Develop, standardize, and harmonize indicators, data collection tools, workflows, and data collection methods among community- based actors to ensure full integration with SI-MA as well as with existing case management systems.	MGCAS capacity to operate the MA system; qualified human resources at district level	15. Performance Data
29	State/AF	P/E Quick Impact Program	HSS	To increase capacity of Small Grants recipient CBO through finance and program trainings	Workforce Development, pre-service training	Support CBOs through funding and training	Weak funding channels for direct support to Community Based Organizations to respond to HIV/AIDS	3. Civil Society Engagement
31	HHS/HRSA	I-TECH	HSS	Provide necessary TA for revision of pre-service curricula, development of practitioner scopes of work, drafting of policies for key cadres of health workers, and	Workforce development, pre-service training	Use distance education infrastructure and distance consultation telephone line to clinicians to promote and support continuous medical education for clinicians in order to achieve adequate clinical management and good clinical outcomes for patients on care and treatment for HIV	Lack of capacity of HCW	7. Human Resources for Health
32	HHS/HRSA	I-TECH	HSS	To Support MOH by development of key policies and guidelines to support the national health information strategy	Technical area guidelines and tools	Support the development of health informatics standards, service level agreements	Lack of national Health information strategy	13. Epidemiological and Health Data

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
27	*6.18*	Increased availability of commodities in the northern region of Mozambique	1 year	Warehouse transition completion percentage	0
28	*7.17*	Increased the quality and availability of information related to OVC; More accurateOVC information; MGCAS SI_MA functional	1 year	SIMS visits; # of district level monitoring systems linked to MGCAS SI_MA;	0 districts
29	*4.00*	42 staff from CBOs trained	1 year	# of CBO staff trained through Small Grants program	58 staff from CBO trained that supported 342 community activists in service delivery in priority districts
31	*6.74*	In-service Training curriculum developed and approved by MOH and where appropriate integrated into pre-service training curricula.	1 year	Number of HRH that graduated with updated curricula	0%
32	*4.90*	Health informatics standards, service level agreements developed and approved by the MOH	1 year	NA	NA

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27	100%					
28	10 districts					
29	42 staff from CBOs trained		42 staff from Civil society Community-Based organizations on PEPFAR approaches, reporting cycles and Monitoring and evaluation		N/A	
31	100% pre-service training curricle with KP content		N/A		N/A	
32	the national health information strategy developed and approved		N/A		N/A	

Table6 ID	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Related SID 3.0 Element
81	HHS/HRSA	ITECH - Follow On	PREV	Provide technical assistance to the MoH and implementing partners to improve the quality, safety, and productivity of the national VMMC program.	Workforce development, pre-service training	Conduct regular site level visit for External Quality Assessments intercalated by Continuous Quality Improvement activities to assure and improve the safety productivity of VMMC services.	Data quality	9. Quality Management
82	HHS/HRSA	ITECH - Follow On	PREV	Provide technical assistance to the MoH and implementing partners to improve the quality, safety, and productivity of the national VMMC program.	Workforce development, pre-service training	Support VMMC Demand Creation Activities	Deacreace access to service	6. Service Delivery
83	HHS/HRSA	ITECH - Follow On	PREV	Provide technical assistance to the MoH and implementing partners to improve the quality, safety, and productivity of the national VMMC program.	Workforce development, pre-service training	Support National VMMC Monitoring and Evaluation system in the Ministry of Health to assure the normal functioning of the VMMC National M&E System including efforts towards integration into the National M&E System DHIS –SISMA to promote transparency, access and use of data for decision making.	Data quality	15. Performance Data
	HHS/HRSA	ITECH - Follow On	HSS	To Support MOH in the PHSCP (Primary Health Care Strengthening Program-for-Results)	Assessments, evaluation, operation research	Develop guidelines for including program's goals and objectives in the existing PESOD and PESOP models and support their consistent use by district and provincial planners	Lack og guideline for PHCSP	2. Policies and Governance
87	HHS/HRSA	ITECH - Follow On	HSS	To evaluate issues critical to improving HIV care and treatment in Mozambique related to service delivery models	Assessments, evaluation, operation research	Support, directly or thorugh a subaward, a range of health evaluation activites designed to improve hurman resource allocation, enhance retention activities, and other specirfic projects to be defined	Lack of data for key program decisionmaking	2. Policies and Governance
76	HHS/CDC	Ministry of Health (MISAU)	HSS	To strengthen the capacity at MISAU to collect and use data to manage national HIV/AIDS program	Provision of administrative staff	Provide Staff and trainings, and funding for consultants to develop SOPs	Technical Assistance needed to host governmentto collect and use data to manage national HIV/AIDS program	13. Epidemiological and Health Data

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
81	6.76	Increase the frequency of EQA to monthly reports for decision making including use of formation to routine data analysis to predict risk of adverse events	3 years	Number of Bi-annual EQA site level assessments to all the 46 VMMC fixed sites conducted and additional temporary sites to measure site performances.	Currently just one EQA per year is performed as a integrated with the general EQA
82	5.83	Increase coverage of VMMC	3 years	Periodic Demand Creation reports developed to inform on effective interventions.	0
83	7.17	Increase coverage of VMMC	3 years	Routine report of adverse events.	Database is vertical just VMMV using ODK software
	7.27	HCSP related objectives and activities in the PESOD's to all 11 DPS and 130 SDSGA	1 year	PHCSO material and guidelines develped	0
87	7.27	Completed evaluations of promising clinical practices and strategies for system improvement	2 years	Study protocols, data bases, and associated publications	0
76	4.90	Host government capacity to collect data and perform data reviews for planning to HIV response is improved	1 year	At least 4 National data reviews managed by MISAU staff; National HIV Program reports to guide practice, research, and learning	Protocol and Dissemination SOP developed

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81	Increase to 2 EQA visits per 30 Health Facility		Increase to 2 EQA visits per 45 Health Facility		Increase to 2 EQA visits per 62 Health Facility an d temporary sites and mobile units	
82	Completed demand creation programatic VMMMC data collection and provide regulare report to inform more efficient interventions		Completed demand creation programatic VMMMC data collection and provide regulare report to inform more efficient interventions		Completed demand creation programatic VMMMC data collection and provide regulare report to inform more efficient interventions	
83	Integrated VMMC and SISMA system		50% Increase data use at provincial and district levels		100% Increase data use at provincial and district levels	
	guidelines for including PHCSP related objectives and activities in the PESOD's to all 11 DPS and 130 SDSGAS		PHCSO material and guidelines develped			
87	Study priorities defined and protocols developed		Studies intiated			
76	HIV Reports in DATIM ESOP with Status of Complete					

Table6 ID	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Related SID 3.0 Element
88	HHS/CDC	Ministry of Health (MISAU)	HSS	To increase the quality of HRH programs	Workforce development, pre-service training	Strengthen pedagogical capacity of the faculty according to the national professional training authority (ANEP) requirement (3 weeks, 3 months and Masters) and ensure professionalization of faculty.	Lack f HRH capacity	7. Human Resources for Health
89	HHS/CDC	Ministry of Health (MISAU)	HSS	To increase capacity of laboratory systems in Mozambique.	Laboratory quality improvement and accreditation	Support implementation of laboratory (SLMTA) and rapid test quality improvement program (RTQII) in PEPFAR supported labs including training, site supervision, mentoring and auditing.	Lack of laboratory quality management systems in PEPFRA supported labs	10. Laboratory
33	HHS/CDC	NASTAD	HSS	Improve local and MoH management skills related to strengthening HIV programs including the ability to strategically plan, target, monitor and implement quality HIV services and resources to the areas of the greatest needs (high-prevalence districts, high-priority sites, key, and priority populations) - to control the HIV epidemic	Host country institutional development	Provide support for provincial organization capacity assessments and action planning process and tool integrated within the DPS panning structures to identify ongoing capacity challenges	Lack of managerial capacity at provincial level	1. Planning and Coordination

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
88	6.74	Imptoved qualily of in-service and pre-service training	2 years	Deacrese fail rate at MOH traiing instituitions	15.8 % fail rate
89	2.83	3. Quality management systems implemented in EID/VL, GeneXpert and CD4 lab 4. Reference laboratories accredited; 100% of VL/EID laboratories enrolled in stepwise quality management certification program using standardized checklists to assess performance over time	3 years	LAB PTCI	Three Reference Laboratories internationally accredited by international standards; 70% of VL/EID and 10% of Gene Xpert laboratories enrolled in stepwise quality management certification program using standardized checklists to assess performance over time
33	*8.62*	Increase managerial capacity at DPS has demonstrated by improved scores on the capacity tool	1 year	capacity tool	Results of baseline capacity tool

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88	Decrease the failing rate to 11% in MOH Trainins institution		Decrease the failing rate to 5% in MOH Trainins institution			
89	2 Reference Laboratories and at least 2 VL/EID laboratories accredited to international standards. 80% of VL/EID and 20% laboratories enrolled in stepwise quality management certification program using standardized checklists to assess performance over time		5 VL/EID laboratories accredited to international standards. 90% of VL/EID and 30% laboratories enrolled in stepwise quality management certification program using standardized checklists to assess performance over time		14 VL/EID laboratories accredited to international standards. 100% of VL/EID and 50% laboratories enrolled in stepwise quality management certification program using standardized checklists to assess performance over time	
33	The subnational managers will demonstrated improved ability to oversee, support as manage priority sites, ensuring quality HIV services are reaching target populations		N/A		N/A	

Table6 ID	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Related SID 3.0 Element
34	HHS/CDC	NASTAD	HSS	Improve local and MoH management skills related to strengthening HIV programs including the ability to strategically plan, target, monitor and implement quality HIV services and resources to the areas of the greatest needs (high-prevalence districts, high-priority sites, key, and priority populations) - to control the HIV epidemic	Host country institutional development	Support thru Roll out of the Applied Public Health Program Management training (APHPMT) in in the provinces of Cabo Delgado, Gaza and Zambezia to address the capacity gaps in the areas of leadership and management, planning and coordination, and M&E and QI.	Lack of managerial capacity at provincial level	1. Planning and Coordination
35	HHS/CDC	NASTAD	HSS	Improve local and MoH management skills related to strengthening HIV programs including the ability to strategically plan, target, monitor and implement quality HIV services and resources to the areas of the greatest needs (high-prevalence districts, high-priority sites, key, and priority populations) - to control the HIV epidemic	Host country institutional development	Support the integration and transition of the APHPMT into MISAU and DPS structures	Lack of managerial capacity at provincial level	1. Planning and Coordination
36	USAID	Food Security Innovation Lab: Collaborative Research on Assets and Market Access	OVC	Impact Evaluation of the Girls Education activity	Assessments, evaluation, operation research	Endline data collection and analysis of data for impact evaluation of FCC OVC program	What is the impact of OVC FCC program on HIV and educational outcomes	15. Performance Data

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
34	*8.62*	Training rolled to district level	1 year	SIFO Training	0
35	*8.62*	APHPMT integrated in HRD training for Managerial as part of HR development plan	1 year	Curricula approved by MOH	NA
36	*7.17*	Completed OVC impact evaluation	2 years	Completed evaluation	Baseline data already collected, endline data collection planned to begin late FY18 - early FY19

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34	Districts trained in all 3 provinces		N/A		N/A	
35	Curricula approved		N/A		N/A	
36	Completed endline data collection		N/A		N/A	

Table6 ID	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Related SID 3.0 Element
37	USAID	Communication for Improved Health Outcomes (CIHO)	PREV	Development of communication strategies and tools to increase the number of men's in VMMC	IEC and/or demand creation	Develop messages and communication materials for men's to attend the VMMC services	Low adherence of target men in the VMMC services	6. Service Delivery
38	USAID	Service Delivery and Support for Orphans and Vulnerable Children	OVC	Increased Utilization of Quality Social, Health and Nutritional Services	Assessments, evaluation, operation research	Collection of COVida MER Level 2 Indicator Survey endline data.	Funding level	6. Service Delivery
39	DOD	FADM HIV Treatment Scale-Up Program	HSS	FADM clinical laboratories in selected military sites will have adequate equipment and supplies to provide laboratory services for people living with HIV and TB clients	Equipment procurement and maintenance	Procure auxiliary lab equipment to ensure continues performance of the Viral load equipment	Lack of auxiliary lab materials for the Military hospital molecular biology laboratory	10. Laboratory
40	USAID	Parceria Civica para Boa Governacao	HSS	More effective advocacy by partner CSOs in target sectors	Policy and governance	Revised organizational capacity development plan	Inadequate policies, guidelines that address the needs of HIV positive people living with disabilities	3. Civil Society Engagement
41	USAID	Parceria Civica para Boa Governacao	HSS	More effective advocacy by partner CSOs in target sectors	Financial management policies and procedures	Provision of technical assistance to local organizations to increase evidence -based advocacy expertise	Weak capacity from local organizations to conduct advocacy at policy level	3. Civil Society Engagement
79	USAID	Parceria Civica para Boa Governacao	HSS	More effective advocacy by partner CSOs in target sectors	Host country institutional development	Organizational Development and Capacity Building for Mozambique CSO to advocate for Accessible High Quality HIV & AIDS Services	Weak Civil Society Capacity for Advocacy and Demand of Accessible Quality HIV & AIDS services	3. Civil Society Engagement

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
37	*5.83*	Increased the # new men in VMMC	3 years	VVM_CIRC; Number of males circumcised as part of the voluntary medical male circumcision (VMMC) for HIV prevention program	100.000 males (10-29 yrs old) reached by the demand creation activities arrive at site and accept the VMMC service in sofala and manica.
38	*5.83*	Availability of data on the wellbeing of children and their households who are active beneficiaries of the COVida project	1 year	Final report and PowerPoint presentation	Baseline data collection completed, waiting for report dissemination
39	*2.83*	Increase Viral load coverage	1 year	SIMS visits to facilities	0
40	*4.00*	Advocacy plan revised	1 year	Advocacy plan implemented	
41	*4.00*	Prime reports	1 year	100%	
79	4.00	Improved CSO Advocay Efforts for Improved Quality and Access for HIV & AIDS Services	1 year		

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37	At least 200.000 (10-29 yrs old) males reached by the demand creation activities arrive at site and accept the VMMC service.		N/A		N/A	
38	Data collection, data analysis, report writing and dissemination					
39	100%		N/A		N/A	
40						
41						
79						

Table6 ID	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Related SID 3.0 Element
42	USAID	Global Health Supply Chain Program	HSS	Accelerate epidemic control through greater impact, accountability and sustainability and help the MOH to reach the PEPFAR goals of 90-90-90 by the end of 2020	Supply chain systems	Secure central warehouse availability, support warehouse volume management strategies, and support the operationalization of the new central warehouse space.	Strain on warehousing space and quality given the increased commodity need to achieve 90-90-90 and Test and Start.	8. Commodity Security and Supply Chain
43	USAID	Global Health Supply Chain Program	C&T	Accelerate epidemic control through greater impact, accountability and sustainability and help the MOH to reach the PEPFAR goals of 90-90-90 by the end of 2020	Information systems	Support activities and build capacity in MoH staff in quantification, forecasting, and supply planning, and national level stock monitoring including annual quantifications and quarterly supply plan updates and donor coordination (e.g. Global Fund) for medicines, tests, and lab commodities.	Insufficient capacity to manage increasingly complex quantification, supply planning, and distribution needs.	8. Commodity Security and Supply Chain
44	USAID	Global Health Supply Chain Program	HSS	Accelerate epidemic control through greater impact, accountability and sustainability and help the MOH to reach the PEPFAR goals of 90-90-90 by the end of 2020	Information systems	Support laboratory logistics via monitoring and refining of the lab logistics system given viral load scale-up, coordinated VL and EID supply plans, VL & EID data analysis, VL & EID stock planning, and monitoring VL equipment downtime and maintenance.	Insufficient capacity to manage increasingly complex quantification, supply planning, and distribution needs.	8. Commodity Security and Supply Chain
45	USAID	Global Health Supply Chain Program	HSS	Accelerate epidemic control through greater impact, accountability and	Supply chain systems	Strengthen last mile logistics through the coordination of logistics reporting and distribution at provincial level with provincial MoH authorities	Insufficient capacity to manage increasingly complex quantification,	8. Commodity Security and Supply Chain
46	USAID	Global Health Supply Chain Program	C&T	Accelerate epidemic control through greater impact, accountability and	Information systems	Provide site level supervision of electronic and paper based Logistics Management Information System (LMIS) use.	LMIS and data use inadequate to identify and resolve stock problems.	8. Commodity Security and Supply Chain
47	USAID	Global Health Supply Chain Program	HSS	Accelerate epidemic control through greater impact, accountability and sustainability and help the MOH to reach the PEPFAR goals of 90-90-90 by the end of 2020	Information systems	Support the maintenance and expansion of electronic LMIS at the central level including SIGLUS expansion, OpenLMIS development, SIGLUS interoperability with OpenMRS, and the inclusion of PrEP in LMIS tools.	LMIS and data use inadequate to identify and resolve stock problems.	8. Commodity Security and Supply Chain

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
42	*6.18*	Sufficient warehousing space is available at the central level.	3 years	Central and regional warehouse occupancy level (WHO guidelines of 80%)	173%
43	*6.18*	Updated quarterly forecasts and supply plans for ARVs, RTKs, viral load, and EID are available.	3 years	Number of quarterly forecasts and supply plans are available for ARVs, RTKs, viral load, and EID	4
44	*6.18*	EID and VL reagents are available at site level within budget constraints	3 years	ARV, RTK, EID, and Viral Load tracer stock out rate is below 5%	2%
45	*6.18*	ARVs, RTKs, EID, and VL reagents are available at site level within budget constraints	3 years	ARV, RTK, EID, and Viral Load tracer stock out rate is below 5%	2%
46	*6.18*	Sufficient reporting of stock data through appropriate means from facilities	3 years	Service Delivery Point reporting rate to the LMIS maintained at least 90%	90%
47	*6.18*	Expansion of SIGLUS to all sites in the country	3 years	Number of sites with SIGLUS implemented	150

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42	100%		110%		120%	
43	4		4		4	
44	5%		5%		5%	
45	5%		5%		5%	
46	90%		90%		90%	
47	450		900		1350	

Table6 ID	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Related SID 3.0 Element
48	USAID	4 Children (Coordinating Comprehensive Care for Children)	OVC	Social worker technical training programs are strengthened and supported for MGCAS and civil society workforce	Workforce development, pre-service training	Train 56 MGCAS Social Assistant Technicians (TAS) Level 5 courses in Beira and Lichinga	Reduced GRM funding level to support MGCAS training activities	7. Human Resources for Health
49	USAID	4 Children (Coordinating Comprehensive Care for Children)	OVC	Social worker technical training programs are strengthened and supported for MGCAS and civil society workforce	Host country institutional development	support and advocacy for the MGCAS to transition to the fee based training model	Reduced GRM funding level to support MGCAS training activities	11. Domestic Resource Mobilization
50	USAID	EQUIP	C&T	Viral Load Scale Up in Sofala	Assessments, evaluation, operation research	Mentorship/supervisory support for lab staff in Beira	Lack of laboratory technical staff capacity; lack of quality assurance for laboratory services	10. Laboratory
51	USAID	EQUIP	C&T	Test and Start Roll out and Evaluation TA	Assessments, evaluation, operation research	Evaluation of successes and challenges of Test & Start rollout	Lack of knowledge of barriers and enablers to uptake of Test & Start	13. Epidemiological and Health Data
52	USAID	CMAM Agreement	HSS	Accelerate epidemic control through greater impact, accountability and sustainability and help the MOH to reach the PEPFAR goals of 90-90-90 by the end of 2020	Host country institutional development	Complete a Fixed Amount Reimbursement Agreement with CMAM aimed to realize sustainable change by leveraging the capacity of the supply chain built in recent years.	Supply chain is too slow, fragmented, and inefficient to manage commodity volume required for 90-90-90 and VL expansion	8. Commodity Security and Supply Chain
55	USAID	Zambezia Action Plan	C&T	Accelerate epidemic control through greater impact, accountability and sustainability and help the MOH to reach the PEPFAR goals of 90-90-90 by the end of 2020	Supply chain systems	Establish and efficient and effective transportation system for ARVs, RTKs, and condoms from the province to the service delivery point.	Insufficient capacity to manage increasingly complex distribution needs	8. Commodity Security and Supply Chain

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
48	*6.74*	56 MGCAS personnel graduated as TAS in Beira and Lichinga	1 year	# of social welfare personnel trained on TAS and TEI curriculum; # of new health workers who are enrolled in a in service training institution or program as a result of PEPFAR supported strengthening efforts	0
49	*5.97*	Implementation of a fee based training model in two pre-service training institutions.	1 year	# of fee based courses implemented.	0
50	*2.83*	Increased viral load testing capacity in Beira lab; Improved viral load results reporting	1 year	Increased viral load tests performed by Beira lab	0
51	*4.90*	Improved knowledge of barriers for T&S scale-up	1 year	Qualitative survey for patient satisfaction	0
52	*6.18*	More effective and efficient supply chain	2 years	Number of districts ordering commodities from an intermediary warehouse	0
55	*6.18*	Improved availability of key HIV commodity supplies at the site level	3 years	Percent of sites receiving an on-time delivery	N/A

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48	56					
49	2 courses					
50						
51	publication of evolution in peer-reviewed journal					
52	3		9			
55	90%		90%		90%	

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56	USAID	Zambezia Action Plan	C&T	Accelerate epidemic control in Zambezia	Laboratory sample referral/ transportation systems	Consolidate sample transport management and standardize sample transport practices.	Fragmented specimen referral network, lack of transportation efficiency	10. Laboratory
57	HHS/CDC	<Placeholder - 70197 Mozambique HHS/CDC>	HSS	Strengthen country capacity to generate national and sub-national HIV incidence and prevalence estimates enabling the identification of high incidence locations and populations, programmatic gaps, and the burden of disease by age, sex and geographic area.	Host country institutional development	Conduct 11 Provincial workshops to capacitate sub-national staff to generate provincial AIM and GOALS files, establish sub-national targets for HIV prevention and model the impact of the HIV response at local level	Lack of subnational capacity to generate and use epidemiologic data for planning	13. Epidemiological and Health Data
58	HHS/CDC	<Placeholder - 70197 Mozambique HHS/CDC>	HSS	Strengthen country capacity to generate national and sub-national HIV incidence and prevalence estimates enabling the identification of high incidence locations and populations, programmatic gaps, and the burden of disease by age, sex and geographic area.	Host country institutional development	Enhanced visualization of data to improve data use in planning processes by the implementation of the Situation Room	Lack of standardized national tool for monitoring HIV program progress	15. Performance Data
59	HHS/CDC	<Placeholder - 70198 Mozambique HHS/CDC>	HSS	Strengthen laboratory network through workforce capacity development, laboratory improvement of Viral Load, EID, lab quality improvement, and lab sample referral systems	Information systems	Expand electronic laboratory information system and provide TA for implementation of GxAlert in all PEPFAR supported sites and ensure interface between eLIS and OpenMRS	High TAT for HIV related diagnostic due to low coverage of laboratory information system	10. Laboratory

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
56	*2.83*	Improved sample turn around time; patients receiving status more quickly	3 years	Average time from specimen collection to arrival at testing laboratory	16 days
57	*4.90*	11 Provinces trained on AIM and GOALS, 11 Provincial GOALS files produced, Prevention targets produced for 6 high burden cities, epi profiles produced for 11 Provinces and 6 high burden cities	1 year	Epi profiles available on the MOH website.	N/A
58	*7.17*	HIV Situation Room operational and CNCS staff trained to manage it	1 year	Site visit to HIV Situation Room at CNCS	N/A
59	*2.83*	Dysa lab installed in all molecular biology labs. Dysa link installed and operational in all district specimens hubs and sites with 2000 patients or more	3 years	Lab TAT; lab test statistics TX_UNDECTED; PMTCT_EID; TB_STAT	TAT for VL (Minimum 40 days - maximum 60 days)

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56	10 days		8 days		7 days	
57	11 Provinces trained on AIM and GOALS, 11 Provincial GOALS files produced, Prevention targets produced for 6 high burden cities, epi profiles produced for 11 Provinces and 6 high burden cities		N/A		N/A	
58	HIV Situation Room operational and CNCS staff trained to manage it		N/A		N/A	
59	15 days		Electronic laboratory information system expanded to 13 new molecular biology equipment; TAT for VL reduced from 30 days to 20 days		100% of VL/EID laboratories with a functional electronic laboratory information system installed and efficient results return systems implemented in 100% of priority sites	

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60	HHS/CDC	<Placeholder - 70198 Mozambique HHS/CDC>	HSS	Strengthen laboratory network through workforce capacity development, laboratory improvement of Viral Load, EID, lab quality improvement, and lab sample referral systems	Information systems	Support implementation Laboratory Information System in lower tier labs	High TAT for HIV related diagnostic due to low coverage of laboratory information system	10. Laboratory
61	HHS/CDC	<Placeholder - 70198 Mozambique HHS/CDC>	HSS	Strengthen laboratory network through workforce capacity development, laboratory improvement of Viral Load, EID, lab quality improvement, and lab sample referral systems	Information systems	Provide TA for expansion of DISA link to all viral/EID specimens hubs and to all health facilities with ≥2000 patients	High TAT for HIV related diagnostic due to low coverage of laboratory information system	10. Laboratory
62	HHS/CDC	<Placeholder - 70198 Mozambique HHS/CDC>	C&T	Strengthen laboratory network through workforce capacity development, laboratory improvement of	Laboratory quality improvement and accreditation	Support implementation of SLMTA and RTQII and expansion of proficiency testing program for HIV, CD4, VL/EID, Xpert MTB RIF and TB Smear microscopy	Low coverage of proficiency testing program in PEPFAR supported labs - poor performance of PEPFAR	10. Laboratory
63	HHS/CDC	<Placeholder - 70198 Mozambique HHS/CDC>	C&T	Strengthen laboratory network through workforce capacity development, laboratory improvement of Viral Load, EID, lab quality improvement, and lab sample referral systems	Laboratory quality improvement and accreditation	Implement a laboratory biosafety program and develop a laboratory waste management program with emphasis on VL/EID waste management	Inadequate waste management systems in PEPFAR supported lab including management of molecular toxic waste generated by VL/EID labs	10. Laboratory
64	HHS/CDC	<Placeholder - 70198 Mozambique HHS/CDC>	C&T	Strengthen laboratory network through workforce capacity development, laboratory improvement of Viral Load, EID, lab quality improvement, and lab sample referral systems	Laboratory quality improvement and accreditation	Provide technical assistance for revision of Mozambique's Laboratory policy and strategic plan; build in country capacity to audit laboratories to assure PEPFAR supported labs meet quality standards	Improved coordination and management of laboratory services	10. Laboratory

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
60	*2.83*	LIS implemented in lower tier labs	3 years	% low tier labs with LIS	0
61	*2.83*	TAT for VL reduced	3 years	TAT	VL TAT (Min 40 days - maximum 60 days)
62	*2.83*	Improved performance on EQA in all PEPFAR supported lab. Increased number of labs reached ASLM certification	3 years	SIMS _AS_SF-13.8 Percentage of enrolled laboratories demonstrating progress improvement on WHO_SLIPTA checklist scores on an annual basis or achieving international	50%
63	*2.83*	National Biosafety Policy and National Biosafety manual developed; Guideline and standard operating procedures for management molecular biology toxic developed and implemented	2 years	National biosafety policy developed and implemented manual; Guideline for management of molecular biology toxic waste developed and implemented	No National biosafety policy and guidelines.
64	*2.83*	National Lab policy and strategic plan revised and disseminated	1 year	Laboratory policy and strategic plan developed	0

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60	50%		Laboratory information system implemented in 80% of PEPFAR supported lower tier labs		Laboratory information system implemented in 100% of PEPFAR supported lower tier labs	
61	15 days		TAT for VL reduce from 30 days to 20 days		Turn around for VL reduced from 20 days to 15 days	
62	95%		70 % of HIV testing sites and testers from scale up and test and start districts certified to conduct HIV rapid testing; Five Reference Laboratories and at least 2		100 % of HIV testing sites and testers from scale up and test and start districts certified to conduct HIV	
63	National biosafety policy and guideline for management of molecular biology waste developed and implemented		National biosafety policy and guidelines disseminated and health professional trained			
64	1					

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65	HHS/CDC	<Placeholder - 70198 Mozambique HHS/CDC>	HSS	Strengthen laboratory network through workforce capacity development, laboratory improvement of Viral Load, EID, lab quality improvement, and lab sample referral systems	Laboratory sample referral/ transportation systems	Training health care professionals on sample collection, storage , packaging and shipping	High TAT for HIV related diagnostic due inefficiencies on specimen referral systems	10. Laboratory
66	HHS/CDC	<Placeholder - 70198 Mozambique HHS/CDC>	HSS	Strengthen laboratory network through workforce capacity development, laboratory improvement of Viral Load, EID, lab quality improvement, and lab sample referral systems	Laboratory sample referral/ transportation systems	Developing guidelines, training materials and capacity for implementation of an integrated specimen referral system including district hubs for EID, VL and TB samples.	High TAT for HIV related diagnostic due inefficiencies on specimen referral systems	10. Laboratory
67	HHS/CDC	<Placeholder - 70198 Mozambique HHS/CDC>	HSS	Strengthen laboratory network through workforce capacity development, laboratory improvement of Viral Load, EID, lab quality improvement, and lab sample referral systems	Laboratory sample referral/ transportation systems	Provide TA for implementation of an integrated specimen referral system for EID, VL and TB samples; including district hubs to conduct barcode labelling, manage and track specimens and results	High TAT for HIV related diagnostic due inefficiencies on specimen referral systems	10. Laboratory
68	HHS/CDC	<Placeholder - 70199 Mozambique HHS/CDC>	C&T	Ensure the MOH-run HIV program is conducted according to the best international practices	Assessments, evaluation, operation research	Support/organize HIV program review to evaluate and develop key recommendations on improving above-site support & management of the HIV program	Program management/ oversight	10. Laboratory
72	USAID	<Placeholder - 70209 Mozambique USAID>	HSS	Strengthened public financial management, including procurement, for improved Tete health services to ensure program resources are sufficient, and accomplishing and validating targets	Financial management policies and procedures	Provide direct support to Tete province to improve oversight and performance of provincial HIV portfolio, including training, supervision and distribution of selected commodities in selected districts	Weak financial and program management systems	1. Planning and Coordination
80	USAID	<Placeholder - 70212 Mozambique USAID>	HSS	Strengthen Community-based HIV services - Access, Quality and Retention	Host country institutional development	Strengthen capacity of Provincial Goverenment to oversee HIV response to ensure the delivery of high quality HIV & AIDS services	Weak Provincial Coordination and Delivery of HIV & AIDS Services	6. Service Delivery

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
65	*2.83*	Improved specimens referral systems - reduce TAT for HIV related tests	2 years	Sample rejection rates and TAT	0
66	*2.83*	Improved sample quality. Decrease rejection rates. Decrease turnaround times of lab results; Specimen referral guideline and specimen referral training manual developed	1 year	Specimens rejection rates and TAT	5%
67	*2.83*	TAT for HIV related diagnostic reduced and meet country defined TAT	1 year	Specimens rejection rates and TAT	EID/VL Sample rejections reduced
68	*2.83*	Maximized efficiency and coordination in terms of the national HIV program response	1 year	National Program Review Held	NA
72	*8.62*	More efficient use and better value for money of HIV funding, Increased sustainability	3 years	Number of districts receiving technical assistance exclusively from host country government institutions	0
80	5.83	Improved Host Country Goverenment Provincial Level Coordination and Delivery of High Quality HIV & AIDS Servcies	3 years	Quarterly Improvement Reports of Provincial Organizational and Technical Capacity	Host Country Goverenment Organizational Assessments

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65	EID/VL Sample rejections reduced to less than 7 %		EID/VL Sample rejections reduced to less than 5 %			
66	1%					
67	EID/VL Sample rejections reduced to less than 7 %		EID/VL Sample rejections reduced to less than 5 %		EID/VL Sample rejections reduced to less than 1%	
68	Review completed and key recommendations shared with MISAU/stakeholders					
72	1		3		4	
80						

Table6 ID	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Related SID 3.0 Element
73	USAID	<Placeholder - 70213 Mozambique USAID>	HSS	Strengthened strategy, policy framework and platforms for a more effective and coordinated multi-sectoral response to the HIV/AIDS epidemic	Host country institutional development	Strengthen capacity of NAC to oversee HIV response at central, provincial and district level through provision of institutional development support	Weak capacity to coordinate and monitor HIV response, including oversight of civil society, multispectral, and private sector actors at central,	2. Policies and Governance
74	USAID	<Placeholder - 70213 Mozambique USAID>	HSS	Strengthened strategy, policy framework and platforms for a more effective and coordinated multi-sectoral response to the HIV/AIDS epidemic	Information systems	Support NAC to develop and implement an information system to monitor the civil society and multi-sectoral components of the national HIV response	Lack of information system to monitor civil society and multispectral response	1. Planning and Coordination
75	USAID	<Placeholder - 70214 Mozambique USAID>	C&T	Develop guidelines and tools for DTG rollout	Technical area guidelines and tools	Support the implementation of TLD based on previous transitions lessons learned and an aggressive transition through development of tools and guidelines and development of training materials.	Weak capacity to manage a complex and aggressive transition	1. Planning and Coordination
	USAID	<Placeholder - 70216 Mozambique USAID>	HSS	Provide technical assistance to the Departments of Finance and Planning and Cooperation of the Ministry of Health	Financial management policies and procedures	The partner will support the MOH to finalize and develop an implementation plan for the HIV and Health financing strategy	Financing of Health services	11. Domestic Resource Mobilization
84	HHS/CDC	TBD SI	HSS	GDATA SI - MOVE to CDC	Assessments, evaluation, operation research	Establish and Manage Data Management Unit Increased integration of datasets at INS and ONS; governance of data management, sharing, and use; technological capacity and improved IT infrastructure at INS; uptime of servers with sufficient backups	Significant Technical Assistance needed to host government on IT polocies and governance, planning and maintaining HIS data systems for HIV program data	13. Epidemiological and Health Data
85	HHS/CDC	TBD Health Analytics	HSS	Health Systems Evaluation - MOVE to CDC	Assessments, evaluation, operation research	Develop a shared national agenda for HIV/TB evaluation	Limited health systems information to guide programmatic approaches	13. Epidemiological and Health Data

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
73	*7.27*	Strengthened National AIDS council capable of coordination and oversight of HIV response.	3 years	Number of provincial and district level supervision and monitoring reports	0
74	*8.62*	Availability of information on multi-sectoral and civil society contributions to the HIV response	3 years	Functional information system	0
75	*8.62*	Successful transition of TLD	1 year	Transition for stable patients begins according to plan in January 2019	0
	5.97	Finalization and implementation of health financing policy and law	2 years	Availability of national health financing strategy and law	0
84	4.90	Data Management Unit Established; National Health Data Observatory Established and Managed by Host government with minimal TA	1 year	Data Management Unit Terms of Reference	Data Management Unit managed and coordinated 80% by USG Ips
85	4.90	National Agenda	3 years	National Agenda	0

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73	10		20		30	
74	Design of information system completed		Prototype tested and implemented with 50%		Information system rollout completed	
75	Transition begun					
	1		Availabilty of legal instrument for implementation of health financing law		Increase of 5% in domestic resource contribution for HIV response (using 2018 benchmark)	
84	Data Management Unit managed and coordinated 30% by USG Ips					
85	one completed agenda		projects identified in national agenda funded and initiated		Project identified in national agenda beginning to produce data which is used by government and all partners	

Table6 ID	Funding Agency	Implementing Mechanism Name	Program Area	COP18 Strategic Objective	Approach	COP18 Activity (above-site, above-service delivery)	Key Systems Barrier	Related SID 3.0 Element
86	HHS/CDC	VACS TBD	OVC	VACS Survey - MOVE TO CDC	Surveys and surveillance	Trainings and Implementation of VACS	VACS is the first national survey examining Violence and the Impact on health among children. There are cultural sensitivies and lack of capacity for this type of survey	13. Epidemiological and Health Data
87	HHS/CDC	UNICEF	OVC	To implement VACS survey	Surveys and surveillance	Trainings and Implementation of VACS	VACS is the first national survey examining Violence and the Impact on health among children. There are cultural sensitivies and lack of capacity for this type of survey	13. Epidemiological and Health Data

Table6 ID	SID 3.0 Element Score	Expected Outcome	Expected Timeline for Achievement of Outcome (1, 2, or 3 years)	Relevant Indicator or Measurement Tool	COP18 Baseline Data
86	4.90	VACS study implemented	1 year	Evaluations and Research Study Reports in DATIM ESOP with Status of Complete. ; Capcity Building and Training Plan	Protocol developed
87	4.90	VACS study implemented	1 year	Evaluations and Research Study Reports in DATIM ESOP with Status of Complete. ; Capcity Building and Training Plan	Protocol developed

Table6 ID	Year One (COP18) Annual Benchmark (Planned)	Note: FY19 Q2 and Q4 results will be recorded here for monitoring.	Year Two (COP19) Annual Benchmark	Note: FY20 Q2 and Q4 results will be recorded here for monitoring.	Year Three (COP20) Annual Benchmark	Note: FY21 Q2 and Q4 results will be recorded here for monitoring.
86	Protocol Approved and Data collection Complete					
87	Protocol Approved and Data collection Complete					