

Cameroon

Country Operational Plan

COP 2016

Strategic Direction Summary

May 20, 2016

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Acronyms

ACT:	Accelerating Children’s HIV/AIDS Treatment Initiative
AGYW:	Adolescent Girls and Young Women
AIDS:	Acquired Immune Deficiency Syndrome
AIS:	AIDS Indicator Survey
ANC:	Antenatal Care
APR:	Annual Progress Report
ART:	Antiretroviral Therapy
ARV:	Antiretroviral
ASAD:	Association pour l’Assistance au Développement
ASLM :	African Society for Laboratory Medicine
ASRH:	Adolescent Sexual and Reproductive Health
BLIS:	Basic Laboratory Information System
C&T:	Care and Treatment
CBCTS:	Community-Based Care and Treatment Services
CBTC:	Community-Based Testing and Counselling
CBO:	Community-Based Organization
CDC:	Centers for Disease Control and Prevention
CENAME:	Central Medical Store
CHAI:	Clinton Health Access Initiative
CHW:	Community Health Workers
CIRCB:	Chantal Biya International Reference Centre for Research
CoAg:	Cooperative Agreement
COP:	Country Operational Plan
CoPT:	Combination of HIV/AIDS Prevention and Treatment
CQI:	Continuous Quality Improvement
CSO:	Civil Society Organization
CTX:	Cotrimoxazole
DataNav:	Data Navigation (Tool)
DFH:	Directorate of Family Health
DHIS2:	District Health Information System
DHS:	Demographic and Health Survey
DIC:	Drop-In Center
DMO:	(Health) District Medical Officer
DoD:	Department of Defense
DREAMS	Determined, Resilient, Empowered, AIDS-Free, Mentored, and Safe initiative for young girls
DSD:	Direct Service Delivery
DQA:	Data Quality Assessment
EA:	Expenditure Analysis

ECD:	Early Childhood Development
EID:	Early Infant Diagnosis
EQA:	External Quality Assessment
EMR:	Electronic Medical Record
ESPK:	Espace Santé et Prévention pour tous de Kribi
FBC :	Full Blood Count
FBCTS:	Facility-Based Care and Treatment Services
FBO:	Faith-Based Organization
FBS:	Fasting Blood Sugar (or Glucose) test
FP:	Family Planning
FSW:	Female Sex Workers
FTE:	Full-Time Equivalent
FY:	Fiscal Year
GBV:	Gender-Based Violence
GFATM or GF:	Global Fund to Fight AIDS, Tuberculosis and Malaria
GHSS:	Global Health System Solutions
GRC:	Government of the Republic of Cameroon
HBHC:	Adult Care and Support (budget code)
HEI:	HIV-Exposed Infants
HHS:	United States Department of Health and Human Services
HIV:	Human Immunodeficiency Virus
HLAB:	Laboratory Infrastructure (budget code)
HMBL:	Blood Safety (budget code)
HOP:	Headquarters Operational Plan
HQ:	Headquarter
HRH:	Human Resources for Health
HSS:	Health System Strengthening
HTC:	HIV Testing & Counseling
HTS:	HIV Testing Services
HTXS:	Adult Treatment (budget code)
HVSI:	Strategic Information (budget code)
HVTB:	TB/HIV (budget code)
IBBS:	Integrated Bio-Behavioral Survey
ICAP:	International Center for AIDS Care and Treatment Programs (Columbia University)
ICF:	Intensified Case Finding
IM:	Implementing Mechanism
IP:	Implementing Partner
IRB:	Institutional Review Board
IT:	Information Technology
KP:	Key Population(s)
LCI:	Local Capacity Initiative

LES:	Locally Employed Staff
LMIS:	Logistics Management Information System
LTFU:	Lost to Follow-Up
M&E:	Monitoring and Evaluation
M&O:	Management and Operations
MAT:	Medication-Assisted Treatment
MCH:	Maternal and Child Health
MNCH:	Maternal, Newborn, and Child Health
MOPH:	Ministry of Public Health
MOU:	Memorandum of Understanding
MSM:	Men who have Sex with Men
MTB:	Mycobacterium tuberculosis
NACC:	National AIDS Control Committee
NASA:	National AIDS Spending Assessment
NGO:	Non-governmental Organization
NFM:	New Funding Model
NPHL:	National Public Health Laboratory
NW:	Northwest (region)
OGAC:	Office of the Global AIDS Coordinator
OHSS:	Health System Strengthening (budget code)
OI:	Opportunistic Infection
OSPSIDA:	HIV/AIDS Commodity Management Tracking Tool for West Africa
OVC:	Orphans and Vulnerable Children
PBF:	Performance-Based Financing
PCV:	Peace Corps Volunteer
PDCS:	Pediatric Care and Support (budget code)
PDTX:	Pediatric Treatment (budget code)
PEPFAR:	United States President's Emergency Plan for AIDS Relief
PITC:	Provider-Initiated HIV Testing and Counselling
PLHIV:	People Living with HIV
PMTCT:	Prevention Mother to Child Transmission
PT:	Proficiency Testing
PWID:	People Who Inject Drugs
Q:	Quarter
QA:	Quality Assurance
QC:	Quality Control
Q-Corps:	Quality-Corps
QI:	Quality Improvement
QM:	Quality Management
QMS:	Quality Management System
RT-Corps:	Rapid Test- Quality Corps

RTK:	HIV Rapid Test Kit
RT-QII:	Rapid Test Quality Improvement Initiative
RUSF:	Ready-to-use Supplementary Food
RUTF:	Ready-to-use Therapeutic Food
SABERS:	HIV Seroprevalence and Behavioral Epidemiology Risk Survey
SBOR:	System Budget Optimization Review
SI:	Strategic Information
SID:	Sustainability Index and Dashboard
SILC:	Savings and Internal Lending Community
SIMS:	Site Improvement through Monitoring System
SMS:	Short Message Service
SNU:	Sub-National Unit
SOP:	Standard Operating Procedure
SOW:	Scope (or Statement) of Work
SQA:	Service Quality Assessment
SLIPTA:	Stepwise Laboratory Improvement Process Towards Accreditation
SLMTA:	Strengthening Laboratory Management Towards Accreditation
STI:	Sexually Transmitted Infection
SW:	Southwest (region)
TA:	Technical Assistance
TA-SDI:	Technical Assistance – Service Delivery Improvement
TB:	Tuberculosis
ToT:	Training of Trainers
UE:	Unit Expenditure
UIC:	Unique Identifier Code
UN:	United Nations
UNAIDS:	Joint United Nations Program on HIV/AIDS
UNICEF:	United Nations Children’s Fund
USAID:	United States Agency for International Development
USG:	United States Government
VCT:	Voluntary Counselling and Testing
VL:	Viral Load
VMMC:	Voluntary Medical Male Circumcision
WB:	World Bank
WHO:	World Health Organization

Goal Statement

By the end of 2017, PEPFAR/Cameroon will achieve epidemic control in scale-up districts with high HIV burden - Djoungolo and Deido - through the adoption and implementation of Test and START, innovative service delivery models, and combination prevention and treatment (CoPT) that target the most affected key and priority populations. Furthermore, twenty-eight sites in eighteen districts will serve pediatric cases, and key populations (KPs) in eleven urban “hot spot” districts will be targeted for scaled-up CoPT.

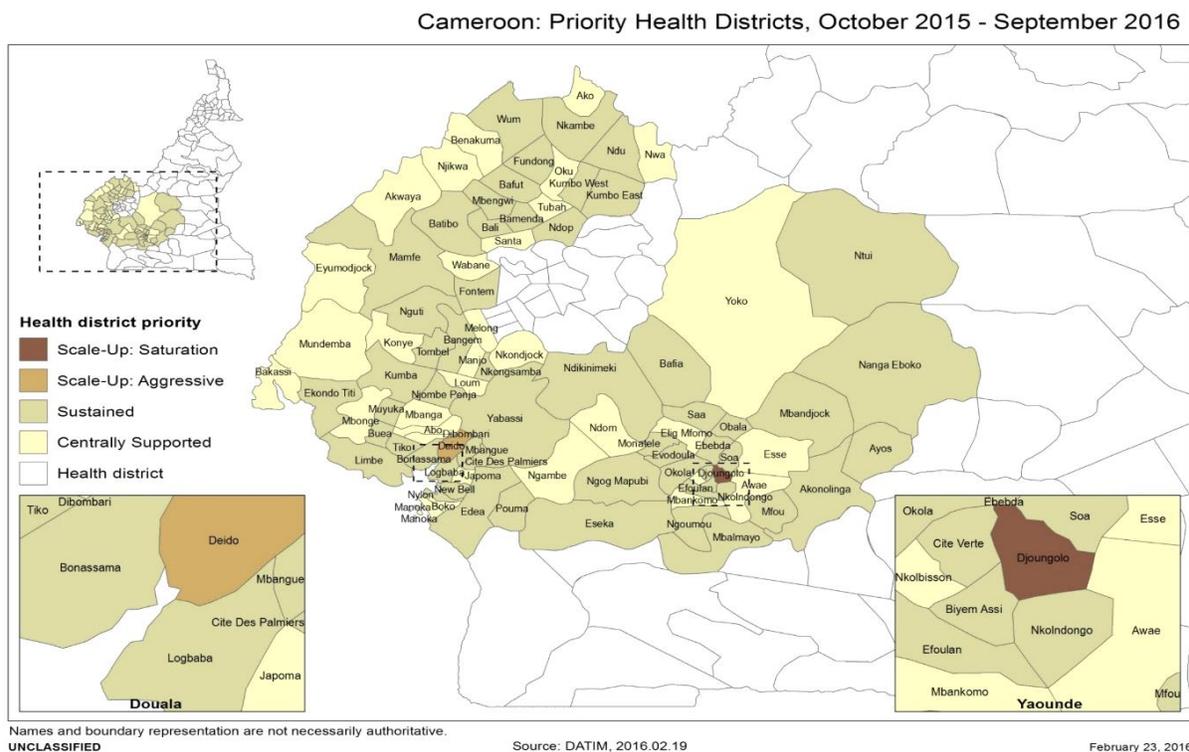
38% of the 57,000 PLHIV in Djoungolo and Deido are currently on treatment. We expect to reach 80% saturation in Djoungolo and 70% in Deido. Strategies to achieve success will include intensive demand creation and identification of PLHIV (1st 90), and improve linkage, enrollment and initiation on treatment using Test and START (2nd 90). Adherence and retention services will be intensified to achieve viral suppression (3rd 90). The key entry points for identification and treatment initiation are: TB programs, seven-day per week KP mobile testing, network testing and drop-in centers (DICs), targeted Peace Corps Volunteer (PCV) programs for adolescent girls and young women (AGYW) and orphans and vulnerable children (OVC), OVC units, antenatal care (ANC), military facilities, ART/TB clinics, contact tracing of infected persons, and inpatient/outpatient wards. To ensure early initiation of treatment and retention, intensive engagement for the reduction and/or elimination of patient charges in scale-up site will be conducted, loss to follow up campaigns will be implemented, and all pre-ART clients not previously eligible for treatment will be identified and placed on treatment. ARVs will be provided in the community and dispensed less frequently. PEPFAR will use the hub and spoke model to reduce congestion in clinical sites. Additionally, treatment and literacy campaigns; adherence counseling; and follow up through phone calls, text messages, social media, and home visits will ensure adherence and retention and achieve viral suppression. We expect 70% of all new ART clients to receive viral load testing in 2017 and 90% in 2018.

Preliminary analysis of APR and national data shows that targeting the above listed populations within the two districts will enable us to place 24,494 new PLHIV on treatment and achieve epidemic control by the end of 2017. A review of Q1 2016 results indicated the need to invest in more innovative testing strategies with a higher yield that will result in 90% of clients being linked to treatment and achieving viral suppression through effective retention strategies and scaling up VL testing, while reducing or eliminating other laboratory tests. Furthermore, systems and M&O budgets have been reduced to critical areas to allow greater investment in treatment and care; OVC reached; and military, key, and priority populations served and tested.

In order to provide high quality HIV services, PEPFAR/Cameroon will continue with the progress of the COP 2015 geographic and population pivot. Of 675 PMTCT clinics, 273 sustained sites with 0-4 HIV positives will be transitioned in 2017, while treatment sites with more than 10 patients

receiving ART will continue to be supported. The Global Fund (GFATM) and PEPFAR will coordinate geographically and by service area to avoid duplication of KP programs.

1.0 Epidemic, Response, and Program Context



1.1 Summary statistics, disease burden and country profile

Table 1.1.1 Key National Demographic and Epidemiological Data

	Total		<15				15+				Source, Year
			Female		Male		Female		Male		
	N	%	N	%	N	%	N	%	N	%	
Total Population	22,734,198		4,750,970	21%	4,911,065	22%	6,754,339	30%	6,317,825	28%	National Bureau of census, population projections, 2010
HIV Prevalence (%)		4.30%									UNAIDS, 2013
AIDS Deaths (per year)	34,000										UNAIDS, 2014
# PLHIV	683,387		30,383		21,999		365,981		265,024		Estimations et projections sur le sida au Cameroun Periode 2010 - 2020
Incidence Rate (Yr)		0.34%									UNAIDS, 2013

New Infections (Yr)	47,000										UNAIDS, 2013
Annual births	657,685										WHO, 2012
% of Pregnant Women with at least one ANC visit		84.50%									DHS, 2011
Pregnant women needing ARVs	35,602										Estimations et projections sur le sida au Cameroun Periode 2010 - 2020
Orphans (maternal, paternal, double)	316,335										Estimations et projections sur le sida au Cameroun Periode 2010 - 2020
Notified TB cases (Yr)	26517										National TB Control Program, 2014
% of TB cases that are HIV infected	9,811	37%									National TB Control Program, 2014
% of Males Circumcised	N/A	94%			ND	ND			ND	94.0%	DHS 2012
Estimated Population Size of MSM*	66,842	1.38%									Papworth, 2014
MSM HIV Prevalence	24.2%-44.3%										IBBS report, 2012
Estimated Population Size of FSW	115,562	1.96%									World Bank, 2016
FSW HIV Prevalence	36%										IBBS report, 2009
Estimated Population Size of PWID	N/A	N/A									N/A
PWID HIV Prevalence	N/A	N/A									N/A
Females 15-24 years	2,455,404	11.10%									National Bureau of census, population projections, 2010
Females 15-24 years Prevalence	2.70%										DHS 2011

**If presenting size estimate data would compromise the safety of this population, please do not enter it in this table.*

Table 1.1.2 90-90-90 cascade: HIV diagnosis, treatment and viral suppression (12 months)									
				HIV Treatment and Viral Suppression			HIV Testing and Linkage to ART		
	Total Population Size Estimate	HIV Prevalence	Total PLHIV	On ART	Retained on ART 12 Months	Viral Suppression 12 Months	Tested for HIV	Diagnosed HIV Positive	Initiated on ART
	(#)	(%)	(#)	(#)	(#)		(#)	(#)	(#)
Total population	22,179,707	4.30%	683,387	168,249	N/A	N/A	882,639	40,737	39,867
Population less than 15 years	9,426,376		54,976	7,096	N/A	N/A			2,004
Pregnant Women	845,048	7.80%	37 874	26,656	N/A	N/A	522510	27760	26,656
MSM	66,842	36%	24,063	6,016	ND	ND	30,078	10,828	6,256
FSW	115,562	36%	41,602	14,145	ND	ND	75,115	27,041	145,607
PWID									
Females 15-24 years	2,455,404	2.70%	66,296	ND	ND	ND	ND	ND	ND

Cameroon's HIV/AIDS epidemic is mixed generalized/concentrated: Adult HIV prevalence in the general population has fallen consistently (7.7% in 1999 to 4.5% in 2012), but has remained high among female sex workers (FSW) (from 25%-36%) during the same time period. HIV prevalence among men who have sex with men (MSM) was 36% in a 2012 study. Women have almost twice the HIV prevalence as men (5.6% vs. 2.9%), due in part to women's natural greater vulnerability to infection, as well as Cameroon's almost universal (97%) circumcision rate. HIV prevalence is highest among women between 35-39 years of age, but is over 7% among women from 25-35 and 40-44. For men, HIV prevalence is highest in the 45-49 age range (6.3%), but also over 5% among men between the ages of 30 and 39. Among youth, females are more affected than males: 2.0% vs. 0.4%, respectively, among adolescents 15-19 years old and 3.4% to 2.2% among young women and men from 20 to 25. Divorced and widowed women (15.7% and 17.9%) and men (11.9% and 16.9%) also have high HIV prevalence rates.

In Cameroon, HIV/AIDS is more prevalent in urban areas, which are home to slightly over 50% of the population. In particular, the economic capital, Douala and the political capital, Yaoundé together have HIV prevalence rates of 7.7% among women and 3.1% among men. Other cities combined have HIV prevalence rates of 5.5% among women and 3.0% among men, while rural areas have HIV prevalence rates of 4.2% and 2.7% among women and men, respectively. The regions with the highest prevalence are the three southeastern regions of the country (South, East, and Center) and the North-West region, all of which have higher than 6% HIV prevalence rates. However, due to population size and other factors, the burden of disease is highest in the PEPFAR-supported regions: Center (including Yaounde), Littoral (including Douala), NW, and SW.

Wealthier and middle-class Cameroonians have higher HIV prevalence rates (5.1% and higher in the two wealthier economic quintiles and 4.4% in the middle quintile) than poorer Cameroonians (4.2% in the fourth richest and 2.0% in the poorest). It is important to note, however, that most Cameroonians in the two poorest quintiles live in rural areas.

1.2 Investment Profile

National expenditures data are based on the 2013 National AIDS Spending Assessment (NASA). In order to align with the most recent national expenditure report, PEPFAR/Cameroon used data from EA 2013¹ to discuss funding of the HIV/AIDS response in Cameroon. National HIV/AIDS expenditures have increased from \$40 million in 2011 to \$42.4 million in 2012 to \$55.1 million in 2013. However, the national HIV/AIDS response is heavily funded by external sources, representing 70% of total expenditures incurred in 2013 – 29% of HIV/AIDS expenditures were incurred by domestic actors (GRC, private sector, out-of-pocket expenditures); 22% by GFATM, 23% by PEPFAR, and 26% by other bilateral (French and German governments), multilateral (UN agencies), and international NGOs.

Technical areas with the highest expenditures in 2013 were care and treatment (46.3% of total budget), with the bulk of expenditures focused on procurement of antiretroviral (ARV) medications; prevention (25%) with expenditures for KP programming making up 1.9% of total expenditures; Health System Strengthening and program management expenditures (22.2%). Areas with the lowest investments included social protection (0.12%), OVC (0.89%), and SI (1.3%).

Over the next two years, significant funders of the national HIV/AIDS response will include PEPFAR funds estimated at \$75 million and the GF-GRC New Funding Model (NFM) grant which is estimated at \$92 million. As in previous years (Table 1.2.2), the bulk of investment will focus on care and treatment, particularly procurement of ARVs (about 70% of NFM budget focused on procurement of health commodities). Because of this heavy focus on commodities, the HIV/AIDS national response will rely on PEPFAR COP FY 2016

¹ 2013 NASA indicates PEPFAR expenditure of \$10.2 million, meanwhile PEPFAR 2013 EA exercise indicates expenditure of \$12.5 million.

and 2017 investments to ensure availability and quality within the service delivery environment. Given that PEPFAR/Cameroon's site level programming will focus on a limited number of scale-up and sustained health districts (31% of 189 health districts), COP FY 2016 and 2017 also emphasize technical assistance, health systems strengthening, and collaboration with GFATM and GRC to ensure that quality of services provided are standardized across the country.

Program Area	Total Expenditure	% PEPFAR	% Host Country	% Other
Clinical Care, treatment and support	\$30,797,364.17	3%	54%	43%
Community-based care, treatment, and support	\$240,121	6%	23%	70%
PMTCT	\$8,591,391	59%	5%	36%
HTS	\$362,933	(336%**)	98%	2%
VMMC	\$0			
Priority population prevention	\$1,261,035	0%	15%	85%
Key population prevention	\$1,243,643	85%	0%	15%
Prevention (general)	\$4,169,607	8%	41%	51%
OVC	\$593,472	(100%**)	0%	100%
Laboratory	\$0	(100%**)	0%	0%
SI, Surveys, and Surveillance	\$4,632,386	13%	12%	75%
HSS	\$13,043,752	10%	5	85%
Total	\$64,935,704			

*Expenditures data from the National AIDS Control Committee was not readily available; therefore, expenditures reported in this table for Host country and Other (GF, bilateral donors, UN agencies, and international organizations) partners are based on 2013 NASA. Unfortunately, NASA does not break down donor expenditures by program area; data sets were also not readily available. 2013 exchange rate applied (is \$1 = 476.54 cfa) based on Treasury Reporting Rates of Exchange as at December 31, 2013 (www.irs.gov). The 2014 and 2015 NASA is still in planning stages. In order to align with NASA 2013 report, PEPFAR expenditures reported in this table are based on FY 2013 EA exercise, though it is worth noting that information on EA 2014 and 2015 is also available. Total expenditures match 2013 NASA, however, methodology used to allocate percentages consists of: (1) host country percentage allocation comes from NASA; (2) PEPFAR percentage allocation is based on EA expenditure divided by total expenditure for category in NASA; (3) Other percentage allocation generated by calculating balance after subtracting host country and PEPFAR percentage allocations (with exception of HTC program area).

**According to 2013 NASA, Host country (public and private) contributed towards 98% of expenditures while international partners contributed towards 2%; international partners contributed 100% for OVC activities; and there were no expenditures in lab (these expenditures may be covered under HSS). It is not possible to align PEPFAR data with these program areas as expenditures reported in EA 2013 exceed total expenditures reported in NASA for these program areas.

Commodity Category	Total Expenditure	% PEPFAR	% GF	% Host Country	% Other
ARVs	\$22,446,043.19	6%	28%	66%	
Rapid Test Kits	\$928,235.26	16%	62%	22%	
Other Drugs	\$995,660.64		56%	44%	
Lab Reagents	\$2,996,632.08	25%	63%	12%	
Condoms					
Viral Load Commodities	\$520,839.77		33%	67%	
VMMC Kits					
MAT					
Other Commodities	\$1,423,466	100%			
Total	\$29,310,876.94	\$3,674,911 (13%)	\$9,572,824.97 (33%)	\$16,063,140.97 (54%)	

² 2015 Expenditures data provided by National AIDS Control Committee for GF and Host Country on April 8, 2016. PEPFAR expenditure data based on FY 2015 EA exercise (commodities procured by Partnership for Supply Chain Management).

Table 1.2.3 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	\$730,000				
USAID Malaria	\$745,297				
USAID Family Planning	\$616,761	\$316,761	4	\$0	\$316,761.2 represents the value of condoms donated to support PEPFAR programs (military, key populations, Peace Corps, and PMTCT)
USAID (Global Health Security Agenda)	\$7,633,000				
USAID Ebola	\$1,997,200				
CDC Non PEPFAR	\$3,841,043	\$0		\$0	Other non PEPFAR programs including Ebola and Global Health Security
Peace Corps	\$1,226,917	\$0		\$0	All volunteers are encouraged to mainstream HIV/AIDS in their activities as a cross-sectoral approach.
DOD (Global Health Security Agenda)	\$2,754,000				
Total	\$19,544,218.20	\$316,761.20	4	\$0	

Table 1.2.4 PEPFAR Non-COP Resources, Central Initiatives, PPP, HOP

Funding Source	Total PEPFAR Non-COP Resources	Total Non-PEPFAR Resources	Total Non-COP Co-funding PEPFAR IMs	# Co-funded IMs	PEPFAR COP Co-Funding Contribution	Objectives
ACT	\$5,601,999					
DREAMS	N/A	N/A	N/A	N/A	N/A	N/A
DREAMS Innovations	N/A	N/A	N/A	N/A	N/A	N/A
DREAMS Test and Start Men	N/A	N/A	N/A	N/A	N/A	N/A
VMMC	N/A	N/A	N/A	N/A	N/A	N/A
Viral Load						
Other PEPFAR Central Initiatives - LCI, AIS, Impact Fund	\$950,110 - LCI \$6M - AIS \$5M - Impact Fund					
Other Public Private Partnership	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL						

1.3 National Sustainability Profile

The Sustainability Index and Dashboard (SID 2.0) was completed through a collaborative process with full engagement from PEPFAR (Cameroon field team and remote support from Headquarters), the GRC, GFATM, CSOs, and UNAIDS. PEPFAR engaged UNAIDS early in the SID 2.0 process to discuss the guidance and develop the schedule. Civil society participated in this process and provided input in areas relevant to their work. The GRC hosted the stakeholders meeting and all agreed on the final draft results of SID 2.0. The Embassy Cameroon Front Office presented the SID 2.0 to the Minister of Public Health, who recommended a revision of GRC's financial contribution to reflect current spending. The Minister of Public Health also recommended that the National AIDS Control Committee (NACC) prioritize addressing those areas with the greatest gaps.

SID 2.0 identified planning and coordination as the strongest sustainability element and quality management and laboratory as the weakest elements. Policies and governance, civil society engagement, service delivery, human resources for health, commodity security and supply chain, domestic resource mobilization, epidemiological and health data, and performance data also require strengthening and represent the bulk of PEPFAR's interventions in COP 2016. However, all stakeholders recommended that planning and coordination, identified as the greatest sustainability strength, requires support to ensure that Cameroon progresses toward implementation of Test and START. PEPFAR plans to tackle these elements by improving the quality of services provided and by providing significant technical assistance in scale-up districts, sites with high yields, and KP hotspots. The absence of a national strategy and a standardized approach to ensure access to services in communities hinders patient initiation and retention on treatment and results in a huge loss to follow up (LTFU).

Following the approval of the GFATM concept note and official signing of the GFATM NFM funds to support national TB and HIV programs, PEPFAR and GFATM will assume the lead in supporting the continuum of care for the general population and KPs. PEPFAR and GFATM are coordinating to avoid overlap and are standardizing approaches used in community strengthening. Additionally, GFATM will improve KP access to prevention and STI diagnosis and treatment. PEPFAR will prioritize quality of care to patients using centrally funded initiatives (AIS, ACT, Impact Fund), in line with PEPFAR/Cameroon's pivots in COP15. Both will continue with support to address barriers to uptake in care and treatment, with the focus placed on policies and human resources.

Stronger investments in support of Cameroon's efforts to implement Test and START in COP 2016 will improve quality management and expand coverage to newly initiated programs and crosscutting areas, including gender. These investments will focus on continuous engagement with the MOPH to translate discussions into policy. Investments will also focus on in-service training for front line human resources for health in PEPFAR-supported health districts and work with NACC to accelerate training plans in (particularly high-volume) centrally supported sites.

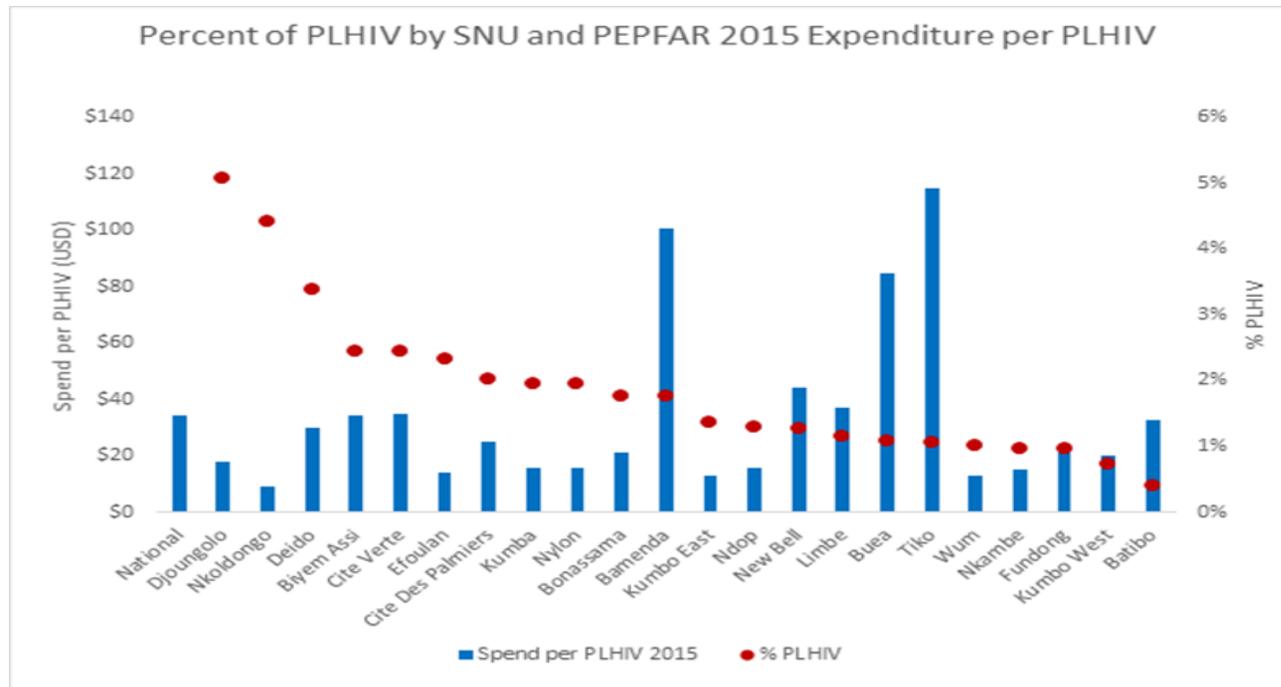
Additionally, PEPFAR will build skills of community health care workers to provide community ART dispensation services. Other areas of investment include quality management, civil society engagement, supply chain, and key and priority populations. PEPFAR/Cameroon will strengthen the implementation of GRC's task shifting policy and follow up on other policy engagement activities, including redefining the role of therapeutic committees, the reduction of the number of monitoring tests, reduction or elimination of patient charges, free VL testing in scale up sites, KP hotspots and ACT sites, piloting performance-based financing using CDC Headquarters Operational Plan (HOP) funds with guidance from HQ EA Advisor, and required parental consent to test children. Health diplomacy efforts will address corruption, promote better governance and increase transparency in the management and distribution of commodities. This will strengthen country ownership towards sustained epidemic control.

By transitioning from a mostly PMTCT program to a more comprehensive care and treatment program, PEPFAR/Cameroon is uniquely placed to help build quality services through in-service HRH training; address barriers to improve linkages, adherence, and retention on treatment; improve community strengthening; and build an impactful program that can gradually be taken over by GRC. These activities are being carried out in collaboration with GRC, GFATM, and civil society. It will take 1-2 years to transition PEPFAR/Cameroon's sustained and centrally supported sites to GRC and GFATM. However, in this time period, GFATM will provide ARVs and all other HIV commodities. Improving coordination of interventions in PEPFAR scale-up districts and sites will ensure that prioritized program beneficiaries can access prevention, care and treatment services in a timely manner.

1.4 Alignment of PEPFAR investments geographically to disease burden

Figure 1.4.1 compares PEPFAR expenditures in FY 2015 to burden of disease by prioritized district. Spending per PLHIV across the highest-burden districts varied from \$9.00 to \$115.00. The historic focus of PEPFAR/Cameroon on PMTCT in the Northwest and Southwest regions and the Expenditure Analysis (EA) time period (October 2014-September 2015) account for some of this variation in expenditure, and the lack of full alignment between total spend and highest disease burden districts. Since EA 2015 captures a portion of those historically focused activities, the new PEPFAR pivot will be more accurately reflected in EA 2016.

Figure 1.4.1 Percent of PLHIV by SNU and PEPFAR 2015 Expenditure per PLHIV



In COP 2015, facility-based care and treatment services (FBCTS) activities were initiated in clinics with a high yield of HIV-positive patients within the priority and sustained districts. COP 2016 will continue to focus FBCTS activities to clinical sites with the highest number of HIV patients (11 and above), and/or PMTCT sites with more than 5 HIV positive patients. The redirection of PEPFAR investments away from PMTCT clinics with no and/or low yield, which started in COP 2015 when 1,247 PMTCT clinics were transitioned to the GRC, will continue in COP 2016. An additional 255 PMTCT clinics will be transitioned to GRC and those resources redirected to high yield ART and/or PMTCT sites. This additional focus will reduce the number of overall sites supported by PEPFAR/Cameroon to a total of 425: 28 in the Scale-up-to-saturation district of Djoungolo; 19 in the Scale-up-aggressive district of Deido; and 378 in the remaining 56 districts in the four high burden regions. PEPFAR investments from PMTCT clinics with no and low yield will be redirected to: a) scale-up care and treatment for newly initiated patients on ART; b) intensify comprehensive prevention, care and treatment services for key populations in 11 targeted hotspot districts; c) intensify pediatric care and treatment in 9 additional ACT hotspot districts; and d) implement PITC in facility and community-based settings, including TB clinics, in-patient and outpatient wards, and KP DICs.

Table 1.4.2 below shows the total PLHIV per district and the number of patients on ART per district. It is important to note here that the prevalence rates used during EA 2015, to generate the figures, have since been revised downwards by UNAIDS to more accurately reflect the reality. Thus, the gap between the number of PLHIV and the number on ART is not as large as illustrated in Table 1.4.2. However, there is still a significant number of PLHIV who are not on treatment. Putting these PLHIV on treatment in the priority districts and targeted hotspots continues to be a PEPFAR/Cameroon COP mandate. Cameroon has very few ART clinics relative to its burden of disease, leading to some clinics being overwhelmed. Patient fees and distance are major factors contributing to low retention (52% overall in Cameroon). There is an urgent need to establish creative programs that reduce patient fees. In FY 2017, PEPFAR/Cameroon will participate in a pilot study of the World Bank's "Performance-Based Financing" initiative for select HIV indicators in order to determine its potential success to reduce (not eliminate) patient fees. Other initiatives include ending multiple and frequent patient visits for stable patients, and investigating the feasibility of communal medication pickups. PEPFAR Cameroon supported the evaluation of storage capacity in 2013; which highlighted several challenges, including regional warehouses. PEPFAR Cameroon will engage with GRC to increase or optimize storage capacity at central and regional warehouses to accommodate increased volume with the introduction of test and start and multi-month dispensation. PEPFAR, in collaboration with the World Health Organization (WHO), will support GRC to develop Standard Operating Procedures (SOPs) and job aids clearly defining stable patients and number of months of ART to be provided.

Table 1.4.2 Percent PLHIV by SNU and % PLHIV on ART

SNU	SNU Priority	PLHIV	Currently on ART	% PLHIV	ART Coverage
Djoungolo**	ScaleUp Sat	34,770	13,395	7.5%	38.5%
Deido**	ScaleUp Agg	23,132	8,491	5.0%	36.7%
Nkolndongo*	Sustained	30,146	1,760	6.5%	5.8%
Biyem Assi**	Sustained	16,741	5,188	3.6%	31.0%
Cite Verte**	Sustained	16,702	11,554	3.6%	69.2%
Efoulan**	Sustained	15,947	1,267	3.5%	7.9%
Cite Des Palmiers**	Sustained	13,809	3,232	3.0%	23.4%
Kumba ⁺	Sustained	13,370	4,392	2.9%	32.8%
Nylon**	Sustained	13,263	5,296	2.9%	39.9%
Bonassama**	Sustained	12,110	5,031	2.6%	41.5%
Bamenda**	Sustained	12,007	10,350	2.6%	86.2%
Kumbo East ⁺	Sustained	9,301	1,989	2.0%	21.4%
Ndop ⁺	Sustained	8,868	2,304	1.9%	26.0%
New Bell**	Sustained	8,738	5,795	1.9%	66.3%
Bafia	Sustained	8,223	1,068	1.8%	13.0%
Limbe ⁺	Sustained	7,876	3,377	1.7%	42.9%
Mbalmayo	Sustained	7,754	1,396	1.7%	18.0%
Buea ⁺	Sustained	7,408	1,723	1.6%	23.3%
Logbaba	Sustained	7,384	884	1.6%	12.0%
Tiko ⁺	Sustained	7,306	4,374	1.6%	59.9%
Wum ⁺	Sustained	6,828	869	1.5%	12.7%
Nkambe ⁺	Sustained	6,633	1,432	1.4%	21.6%
Fundong ⁺	Sustained	6,631	2,592	1.4%	39.1%
Ntui	Sustained	6,070	224	1.3%	3.7%
Akonolinga	Sustained	5,295	553	1.1%	10.4%
Muyuka	Sustained	5,113	655	1.1%	12.8%
Kumbo West ⁺	Sustained	5,005	2,601	1.1%	52.0%
Nkongsamba	Sustained	4,835	1,406	1.0%	29.1%
Edea	Sustained	4,636	1,169	1.0%	25.2%
Nanga Eboko	Sustained	4,474	131	1.0%	2.9%
Ndu	Sustained	4,419	963	1.0%	21.8%
Ngoumou	Sustained	4,350	352	0.9%	8.1%
Obala	Sustained	4,015	2,282	0.9%	56.8%
Eseka	Sustained	3,856	376	0.8%	9.8%
Mbangué	Sustained	3,237	295	0.7%	9.1%
Mbandjock	Sustained	3,075	38	0.7%	1.2%
Ekondo Titi	Sustained	2,755	554	0.6%	20.1%
Batibo ⁺	Sustained	2,710	850	0.6%	31.4%
Mfou	Sustained	2,583	782	0.6%	30.3%
Ayos	Sustained	2,567	425	0.6%	16.6%
Ngog Mapubi	Sustained	2,534	183	0.5%	7.2%
Saa	Sustained	2,422	78	0.5%	3.2%
Okola	Sustained	2,332	155	0.5%	6.6%
Tombel	Sustained	2,310	498	0.5%	21.6%
Bafut	Sustained	2,293	347	0.5%	15.1%
Mamfe	Sustained	2,199	1,475	0.5%	67.1%
Fontem	Sustained	2,165	363	0.5%	16.8%
Ndikinimeki	Sustained	2,129	1,145	0.5%	53.8%
Mbengwi	Sustained	1,836	576	0.4%	31.4%
Monatele	Sustained	1,681	299	0.4%	17.8%

Njombe Penja	Sustained	1,480	1,400	0.3%	94.6%
Soa	Sustained	1,477	1,003	0.3%	67.9%
Bali	Sustained	1,202	416	0.3%	34.6%
Ebebda	Sustained	973	5	0.2%	0.5%
Bangem	Sustained	922	97	0.2%	10.5%
Nguti	Sustained	822	400	0.2%	48.7%
Yabassi	Sustained	564	17	0.1%	3.0%
Pouma	Sustained	545	63	0.1%	11.6%

*KP hotspot District; ** KP hotspot & ACT site district; ⁺ACT site district

EA Outlier Analysis: To more effectively manage and utilize scarce resources, PEPFAR/Cameroon conducted a thorough outlier analysis based on 5% cutoff using EA 2015 data, and mitigation strategies have been developed for each implementing partner with outliers in one or more program areas. Key mitigation strategies include working with partners to closely monitor cost reporting for better tracking of expenditures; improving allocation reporting by partner and applying adjusted unit expenditures; shifting from capital investments in FY15 to operational expenditures in FY16; providing training to partners to improve understanding of MER indicators; and scaling up KP testing across all SNU. Additionally, monthly partner meetings will incorporate EA-related discussions. Two examples of the outlier analysis are illustrated below:

Key Population Prevention (MSM), Outlier Analysis and Mitigation Strategy

Partner	IM	SNU	UE	FY15 Exp (% of total spend)	FY15 Results (% of total volume)	List Previous years an outlier	Outlier Reasons (from DataNav)	Mitigation Strategy	COP 16 Budget
1. Care International	Continuum of Prevention, Care, and Treatment for HIV/AIDS with MARPs in Cameroon (CHAMP)	Cite Verte	\$1,161	7.69%	0.62%	NO	Cité Verte and Efoulan are sites in Yaounde served by CBO, Horizons Femmes. Low site volume in Cité Verte (appears as outlier also under HTC) and Efoulan (no HTC activity carried out) due to delay initiating activities at these sites.	Shift from capital investment in FY 15 to operational expenditures in FY 16. Furthermore, plans in place to scale up KP testing across all SNUs. IM training to improve understanding of MER indicator.	YES
2. Care International	Continuum of Prevention, Care, and Treatment for HIV/AIDS with MARPs in Cameroon (CHAMP)	Efoulan	\$1,810	6.71%	0.35%	NO			YES

Infants on Care, Outlier Analysis and Mitigation Strategy

Partner	IM	SNU	UE	FY15 Exp (% of total spend)	FY15 Results (% of total volume)	List Previous years an outlier	Outlier Reasons (from DataNav)	Mitigation Strategy	COP 16 Funding
3. Cameroon Baptist Convention Health Board	Implementation of PMTCT CoAg1	Kumba	\$8,604	5.05%	0.41%	NO	This district was implementing full package option B+. Expenditure went mainly on in-service trainings, travel and transportation and personnel with some minor renovations, building and utilities. The district also implemented some accelerated HIV treatment for children (ACT). There were data issues regarding volume as partner likely underreported	Investments have already been and the team will work with partner to divert any further initial investments. The district will continue as sustained and the adjusted UE will be applied with selected sites will implement ACT.	YES

4. Cameroon Baptist Convention Health Board	Implementation of PMTCT CoAg1	Buea	\$50,850	14.93%	0.21%	NO	The partner misreported between site level and above site expenditures, and across SNUs . The outlier UE was influenced by a low volume (n=2) and high expenditure.	Working with the partner, we will closely monitor cost reporting for better tracking of spending. The location will still be “sustained” with the adjusted UE.	YES
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1.5 Stakeholder Engagement

In order to achieve a shared understanding of program data and direction, PEPFAR Cameroon coordinates with all relevant stakeholders in the HIV/AIDS response. In the development of Cameroon’s COP 2016, under the guiding principle to think and act as one country team, PEPFAR collaborated with UNAIDS to initiate an early consultation process with a diverse range of CSOs, GFATM, NACC and MOPH in the development of SID 2.0 as a springboard for the COP16 development process.

PEPFAR/Cameroon briefed UNAIDS on the COP 2016 guidance and the SID 2.0 process in order to jointly draft a SID 2.0 schedule. PEPFAR/Cameroon briefed MOPH on the game changers and the changes in PEPFAR/Cameroon’s pivots, and reiterated the need to prioritize in partnership with GRC and GFATM to reach sustained epidemic control.

PEPFAR worked with UNAIDS to convene four meetings with CSOs. Representatives from organizations of PLHIV, KP, AGYW, OVC, PMTCT and faith based organizations (FBO) participated in the meetings. Participants learned of each other’s strengths in different areas of service delivery. CSOs shared their experiences and planned to work closely with and promote care of beneficiary populations. An outcome of this process is an improved forum with representatives of CSOs. CSOs also created a consolidated action plan and a strategy to engage their CSO colleagues, GRC, GFATM, UNAIDS, and PEPFAR at all levels to address concerns hindering access to HIV/AIDS services and to support the implementation of Test and START.

PEPFAR/Cameroon will consult and coordinate with GFATM, UNAIDS, the Government of France, and other multilateral and bilateral partners to address overlaps and ensure that key and priority populations have improved access to HIV prevention, care, and treatment. PEPFAR will work with these donors to support the revival of GRC’s efficiency working group through the development and implementation of a draft PEPFAR/GRC consultation plan. This plan will improve transparency and accountability and strengthen NACC’s coordination efforts. PEPFAR will continue to improve external consultations and dialogue in the implementation of GFATM’s NFM grants to ensure improve access to care and treatment services for all.

2.0 Core, Near-Core and Non-Core Activities

In line with the PEPFAR 3.0 strategy for epidemic control, PEPFAR/Cameroon identified core, near-core and non-core activities based on the SID, country investment profile, and programmatic gaps illustrated by SIMS data in COP 2015. Core activities included HIV testing and counseling (HTC); adult and pediatric care and treatment; scale-up of Option B+ (PMTCT) in MCH settings; targeted HIV prevention interventions reaching key and priority populations including AGYW; and linkage to ART treatment programs. Others included timely access to services in ARV treatment and adherence, care and support, and TB screening to achieve sustained epidemic control. Since PEPFAR is a principal investor in the national response, core activities started in COP 2015 will continue in 2016 and will also include health systems strengthening (HSS - HRH, laboratory strengthening, SI, supply chain management), and OVC services. Given the need to scale up combination prevention and care and treatment (C&T) programs, activities related to PMTCT Option A, general food distribution, renovation of the National Public Health Lab (NPHL), and aspects of supply chain management and KP prevention are classified as non-core and were transitioned as described in Appendix A. (See Appendix A for a full list of core, near-core, and non-core activities and transition plans.)

3.0 Geographic and Population Prioritization

In COP 2016, PEPFAR/Cameroon built on last year's data and made adjustments to account for the recent UNAIDS estimates, IBBS, and DHS data to inform prioritization decisions. The total PLHIV rose to 683,387 from 634,975. Total pediatric cases dropped from 86,552 to 52,382.

Cameroon has 168,249 PLHIV currently on treatment in all 10 regions. In order to reach 80% ART coverage nationally, 378,461 net new patients will need to be initiated on ART. In order to reach epidemic control, extensive scale-up in HTC, PMTCT, community outreach, prevention and treatment programs for KP and priority populations, and investments in HSS are needed.

In 2011, PEPFAR/Cameroon initially focused on PMTCT in two regions (NW and SW) and later, in 2013, with additional funds moved to 4 regions (Northwest, Southwest, Center, and Littoral) and 2 additional districts with KP activities (East and South). These four regions have the highest number of PLHIV in Cameroon. PEPFAR/Cameroon received its first ART funds (\$10 million) with COP 14/ FY2015. These funds were specifically earmarked for the supply chain system and one-time procurement of ARVs; therefore, PMTCT women receiving ART counted towards ART numbers since there were no HTXS funds. Within the four regions, 39 districts represent over 80% of the disease burden and 58 of those districts provide ART services, while all 91 have PMTCT sites. Therefore, in COP 2015, PEPFAR/Cameroon strategically evolved from a mostly PMTCT program to become a more comprehensive program based on burden of disease, high rate of infection among TB patients, AGYW, KPs, clinic patients and other drivers of the epidemic.

PEPFAR/Cameroon transitioned from 91 to 58 districts (56 sustained and two scale-up), while the remaining 33 districts with no ART sites (including the 2 KP districts of Kribi and Bertoua) will be transitioned to GRC and GFATM by the end of FY 16.

By making this pivot in COP 2015, PEPFAR/Cameroon focused on the highest burden populations living with HIV and was able to launch a full ART program in the two scale-up districts and provide sustained support in 56 districts and comprehensive CoPT services to KP in 11 hotspots. The program plans to achieve epidemic control in the two scale-up districts (80% saturation in Djoungolo and 70% in Deido) by 2017.

In line with the COP 2015 pivots, PEPFAR/Cameroon will continue to focus its efforts in COP 2016 on the two scale-up-districts, 11 KP hotspots, and six military facilities. There are 34 pediatric facilities: 6 in the two-2 scale-up districts, and 28 in the 20 pediatric hotspot districts (9 of these districts also have KP hotspots). Peace Corps continue will to focus on AGYW with a link to clinical districts for HTC and treatment. In addition, 255 low-yield sites within the sustained districts will be transitioned to GRC and GFATM. Cost savings will be about \$561,000 (\$2,200 per site in COP 2015), and the resources will be invested in more impactful programs, including VL testing and increased targets.

Based on spending level, the clinical cascade, and required investments in infrastructure and human resource development, PEPFAR/Cameroon calculated that it can continue its scale-up to 88,721 new on treatment in scale-up and sustained sites combined by the end of 2017. This is based on the higher PLHIV estimates and more aggressive approaches for scale-up including Test and START, differentiated service models, drug pick up every three months, and use of the hub and spoke model for service provision. Assuming this pace can be sustained, PEPFAR/Cameroon will achieve epidemic control in Djoungolo and Deido.

PEPFAR/Cameroon, in collaboration with GRC and GFATM, will provide sustained services for 378 clinical facilities in the 56 non-scale-up districts. PEPFAR/Cameroon expects a 10% increase for new on treatment in those districts. However, 28 of those sites will cater to pediatrics/OVC and 2 sites to KPs, and will offer scale-up-like services at those sites.

Based on cascade analysis and HTC testing among KP, military PITC and PMTCT enrollment targets have been set accordingly and resources will be allocated as required to achieve the rapid scale-up required for these areas to reach 80% ART coverage (Section 4.1).

PEPFAR/Cameroon has worked to follow the mandate of PEPFAR 3.0 to maximize coverage of treatment and prevention in targeted, high priority districts and to prioritize key HSS activities for sustainability. The team has cut from 91 districts in 2014 to two scale-up districts and 56 sustained districts with pockets of scale-up services. However, given budget constraints, several key activities were not included in COP16. While two districts for full scale-up and nine additional for KP and military were prioritized, large needs remain in additional districts with high numbers of PLHIV. We estimate that scale-up would cost approximately \$1.3-1.7 million per district and

allow epidemic control. Since GFATM is purchasing adequate drugs until 2017, funding for ARV procurement by PEPFAR was limited to buffering supplies.

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

4.1 Targets for scale-up locations and populations

Based on geographic and population prioritization decisions made for COP 16, PEPFAR/Cameroon used national and PEPFAR program data on current treatment coverage to calculate the total number of additional PLHIV to be initiated on treatment in order to reach 80% ART coverage in the scale-up-to-saturation district (Djoungolo) and 70% in the scale-up-aggressive district (Deido) by 2017. A total of 19,615 PLHIV net new need to be placed on treatment by FY 17 in order to achieve 80% and 70% ART coverage in the two scale-up districts, saturation and aggressive respectively. In FY 17, PEPFAR Cameroon will enroll 24,494 new patients on treatment in these two districts with the goal of 44,008 current on ART by APR 17. This represents an increase in coverage from 42% to 76% (Table 4.1.1). Using the cascade approach to setting HIV testing targets, PEPFAR/Cameroon considered several critical program streams to most efficiently identify HIV positives and effectively link them to C&T (Table 4.1.2). Given the high burden of TB/HIV co-infection (29-44%) in Cameroon, high rates of TB-related mortality among PLHIV, and the ability of these patients to access existing PEPFAR-supported care programs and GRC-supported TB clinics, PEPFAR has committed to increasing the number of TB-HIV co-infected patients identified and the percentage initiated on ART to 100% by the end of FY17. The remaining required to meet the target for PLHIV newly initiated on ART in scale-up districts will be identified and linked to treatment via provider-initiated, voluntary, and mobile counseling and testing models targeted to KP and priority populations (Section 4.5). In order to set targets for MSM and FSW and their clients and children, PEPFAR applied size estimation proportions from Papworth, 2014 (MSM and children of FSW), World Bank, 2016 (FSW) and clients of FSW (DHS, 2012) to the age-appropriate male/female census information for the 11 KP hotspot districts. Based on these estimations, PEPFAR used FY 2015 and FY 2016 Q1 achievements to set ambitious but attainable targets for 2017 for KPs reached and tested for HIV. Given yields in the data for these groups on HIV prevalence and prior knowledge of serostatus, PEPFAR set the expected yield as 25% for MSM, 20% for FSW, 10% for children of FSW and 7% for clients of FSW. Finally, PEPFAR set ambitious but attainable targets to reach the second and third 90 down the treatment and care cascade.

For OVC, PEPFAR Cameroon considered past performance, OVC size estimations, number of children exited in implementation year 2015, number of children added in implementation year 2016, and the estimated number of children that will age out at the end of the fiscal year in order to establish targets. Based on these calculations, PEPFAR/Cameroon expects to serve 11,663 OVC (18% of total estimated population in target districts), of which 11,000 are targeted for DSD and TA-SDI services; while 663 will benefit from TA-SDI services provided through a network of PCV.

Based on prior-year program data, about half of those diagnosed HIV-positive through these HTC platforms are linked to care programs, because some had high CD4 counts and are not eligible, others could not afford pre-initiation tests, the pre-therapeutic committee took time, or some of the eligible were never linked to treatment. Both linkages and positivity yield are expected to improve in FY 17, given the plans to scale up linkage and retention activities, particularly in the scale-up districts and with implementation of Test and START, removal of pre-initiation tests, and shifting therapeutic committee roles from determining eligibility for treatment to mentorship and managing complex cases. This provides an estimated 24,494 newly initiated on ART in FY 17 in adult treatment sites and will be funded primarily through strengthening adherence to testing protocols for both HIV care and TB sites, and integration of TB and HIV services (Section 4.7), as well as the implementation of the new Test and START policy PEPFAR/Cameroon plans to implement Test and Start as per National policy. Additionally, though the ACT initiative ends in FY16, PEPFAR/Cameroon plans to continue its implementation through COP16 funding to retain, at a minimum, the same number of children on treatment. By the end of 2016, a cumulative 11,260 children were expected to be on ART (an increase from a base line of 5,630), representing a net increase of 5,630 and a doubling in the national number of children receiving treatment. In FY17, PEPFAR/Cameroon will continue to implement strategies and activities targeting children and adolescents.

Uncertainties regarding population estimates as well as program data and data quality continue to be limitations in assessing the HIV epidemic. PEPFAR/Cameroon will continue to work with UNAIDS to improve estimates, as well as work closely with partners to improve quality of program data.

Table 4.1.1 ART Targets in Scale-up Sub-national Units for Epidemic Control

SNU	Total PLHIV	Expected current on ART (APR FY 16)	Additional patients required for 80% ART coverage	Target current on ART (APR FY17) <i>TX_CURR</i>	Newly initiated (APR FY 17) <i>TX_NEW</i>	ART Coverage (APR 17)
Djoungolo	34,770	14,815	13,001	27,816	15,964	80%
Deido	23,132	9,578	6,614	16,192	8,530	70%
Total	57,902	24,393	19,615	44,008	24,494	

Table 4.1.2 Entry Streams for Adults and Pediatrics Newly Initiating ART Patients in Scale-up Districts

Entry Streams for ART Enrollment	Tested for HIV (APR FY17)	Identified Positive (APR FY17)	Newly initiated (APR FY 17) <i>TX_NEW</i>
Clinical care patients not on ART		4,268	3,201
HIV+ TB Patients not on ART	6,201	2,170	2,170
HIV-positive Pregnant Women	43,967	2,637	1,760
Other priority and key populations	5,68656	1,118	1,118
Other PITC	121,311	13,769	13,769
Other (Targeted testing)	51,665	4,707	2,383
HIV Exposed Infants	2,505	93	93
Total	231,335	28,762	24,494

Table 4.1.3 is not required for Cameroon.

Table 4.1.4 Target Populations for Prevention Interventions to Facilitate Epidemic Control

Target Populations	Population Size Estimate In Scale-up districts	Coverage Goal (in FY17)	FY17 Target
AGYW			
FSW Clients	17,664	29%	5,044
KP_PREV(MSM)	4,487	56%	2,508
KP_PREV(FSW)	5,728	75%	4,296
Total	27,879		11,848

Table 4.1.4b Target Populations for Prevention Interventions to Facilitate Epidemic Control

Target Populations	Population Size Estimate In nine (9) urban KP hotspot districts	Coverage Goal (in FY17)	FY17 Target
AGYW			
FSW Clients	47,584	25%	12,036
KP_PREV(MSM)	11,216	56%	6,291
KP_PREV(FSW)	14,928	75%	11,197
Total	73,726		29,524

Table 4.1.5 Targets for OVC and Linkages to HIV Services

	Estimated # of Orphans and Vulnerable Children	Target # of active OVC (FY17 Target) OVC_SERV	Target # of active beneficiaries receiving support from PEPFAR OVC programs whose HIV status is known in program files (FY17 Target) OVC_KNOWNSTAT*
Djoungolo	23,445	2,900	TBD
Deido	11,260	2,600	TBD
TOTAL			

Table 4.1.5b Targets for OVC and Linkages to HIV Services

	Estimated # of Orphans and Vulnerable Children Sustained Districts	Target # of active OVC (FY17 Target) OVC_SERV	Target # of active beneficiaries receiving support from PEPFAR OVC programs whose HIV status is known in program files (FY17 Target) OVC_KNOWNSTAT*
Nkondongo	20,327	2,800	TBD
Bamenda	2,717	2,700	TBD
TOTAL			

*Guidance for target setting is forthcoming

4.2 Priority and Key Population Prevention Summary

In two scale-up districts and 9 additional KP hotspots, and through 26 Peace Corps Volunteers based in communities in sustained areas, PEPFAR will harmonize targeted community activities described for community-based HTC, FBCTS, and targeted prevention programs to strengthen linkages and referral networks for maximal coverage of priority and key populations. Support for national condom and lubricant forecasting and procurement will continue in FY17, largely tailored to priority and KP. Priority and key populations will be prioritized in KP referral hospitals to receive Test and START, VL monitoring, 3-month dispensing, and community dispensing of ART.

Priority Populations

In FY 2017, PEPFAR/Cameroon will provide CoPT to AGYW, FSW clients, intimate partners and the military. AGYW will be served directly by PCV and targeted services will also be offered to AGYW who are OVC/caregivers, FSW and their children, and PMTCT and ART beneficiaries.

In 2016 PEPFAR will have 1,209 Military men on ART, which is 60% coverage of those living with the virus, as per the SABERS study of 2011. Continuous combined prevention activities amongst this priority population and promotion of testing of military men will continue in order to promote awareness and avert new infection. 5,137 military men will be tested with an expected 344 positives found and put on treatment in FY17 and 80% of them maintained and virally suppressed by the end of 12 months of treatment.

To avert new infections, among priority populations, prevention activities (TB care, ART, PMTCT) will be integrated into all service delivery points in facility-based and community-based settings in the two scale-up districts, including community sites for AGYW and in military locations. PEPFAR/Cameroon will invest in integrated behavior change communication using evidence-based models specific to each population. Priority populations will be screened for STI and tested for HIV. Identified positives will serve as index cases for PITC to assure linkage to C&T. In effort to specifically reduce the risk of new infection amongst AGYW, PEPFAR/Cameroon will leverage investments from global fund partners to deliver core packages of evidence based interventions in the two scale-up districts. Additional community mobilization will create demand for free HTC and prevention services, including consistent and correct use of condoms, skills building, and HIV testing. PEPFAR support for supply chain management will ensure availability and distribution of male and female condoms and lubricant. Community-based mobilization and referrals will link individuals to health facilities. In order to more strategically identify and ensure that AGYW are reached with services, Peace Corps will integrate core prevention and risk reduction interventions for AGYW across all sector programming. Peace Corps Volunteers will target AGYW with life skills and sexual and reproductive health education, including gender equity principles for dignity promotion and harmful norms related to HIV in addition to promoting youth empowerment

to keep girls in school. While not a DREAMS program, specific DREAMS interventions will be incorporated into community programming by Peace Corps Volunteers, specifically: empowering girls and young women and reducing their risk, mobilizing the community for change, strengthening families, and decreasing risk in sex partners of AGYW. All priority populations will be tested for HIV, and HIV-positive individuals will be referred to treatment and will receive intensive retention support.

Key Populations

Since 2014, PEPFAR has provided technical leadership and innovations in the national KP program. In FY 2015, PEPFAR pivoted its KP programming to promote HIV testing, linkage to care, ART initiation and retention in care in 13 districts (including Kribi and Bertoua).

As part of its sustainability agenda, PEPFAR will work with GRC, GFATM, UNAIDS, and WB to develop national policies, tools and standardized approaches for KP program implementation, as well as monitoring and evaluation. Recent policy changes promoted by PEPFAR that will facilitate high-quality services for epidemic control for KP include Test and START, task-shifting to NGOs for community ART distribution, and use of finger-prick HIV tests to increase community-level testing. PEPFAR and GFATM are the primary donors for prevention, testing, and care and treatment services for KP in Cameroon. While GFATM is a national program that must provide a standard package of services nationwide, PEPFAR's strategy is focused and implements intensive activities for epidemic control in 11 "hotspot" districts in urban Yaoundé, Douala and Bamenda. PEPFAR and GFATM have an MOU that specifies which services are provided by whom and where, while at the same time taking advantage of the two programs' technical expertise. For instance, GFATM provides STI diagnosis and treatment and legal services for KPs while PEPFAR provides intensive retention and adherence support and medical/psychosocial services to victims of GBV.

Geographic prioritization for KP programming is based on recent (2014 and 2016) size estimation studies, which show that larger cities have higher concentrations of target populations. KP activities in Cameroon have been divided geographically and programmatically between PEPFAR and GFATM to ensure nationwide coverage of CoPT for KP activities. Data on MSM HIV-prevalence only exists for the cities of Douala and Yaoundé (2011), while prevalence estimates in eleven cities based on 2009 IBBS exist for FSW. A 2016 KP cohort study and IBBS for MSM and FSW are underway. IBBS results will be used to adjust targets and contribute to a further focusing of GFATM's program as well as the World Bank's technical support focused on sex workers (not MSM).

In the scale-up districts of Djoungolo and Deido, as well the nine additional KP "hotspot" districts, FSW and MSM will be targeted for enhanced KP CoPT activities, including community- and facility-based HTC and linkage to adult C&T programs with strong monitoring systems. PEPFAR will reach 3,368 MSM and 4,296 FSW in the scale-up districts. PEPFAR KP programs will

expand interventions (DICs, mobile and outreach activities). USG and international law define FSW under the age of 18 as being trafficked and exploited. USG will work with local authorities to assist underage FSW when they are found. The new focus on children of FSW is an innovative approach to provide services to FSW as heads of household and to offer treatment to HIV+ children in the sex work milieu.

KP (MSM and FSW) who are identified as HIV-positive are actively referred to 6 KP referral hospitals, which PEPFAR funds for HIV treatment. PEPFAR supports these hospitals through training, tools, and coordination to provide KP-friendly, non-stigmatizing, non-discriminatory services, as well as KP-specific services. Active linkages, care and retention/adherence support for these patients are provided at the community level, while facility partners provide treatment. PEPFAR has also identified other treatment facilities where KPs often prefer to get services without their KP status being known. These facilities will also be prioritized to receive KP training. As possible, community DICs will be “spokes” to the “hub” referral hospitals for testing and treatment services, both to reduce LTFU among KPs and to help de-congest facilities.

Section 4.3 (VMMC Summary) is not required for Cameroon.

4.4 PMTCT Summary

In FY16, PEPFAR/Cameroon will complete the transition from a largely PMTCT program to a comprehensive HIV care and treatment program including aggressive scale up of option B+ nationwide. The spectrum 2015 estimates for Cameroon have reduced the number of pregnant women from 5% of the population to 3.81% (845,048 resulting in an average of 43,000 HIV positive pregnant women as against 77,000 per year). Cameroon’s mother to child HIV transmission rate is 6.1% at 6 weeks and 25% by 18 months, contributing roughly 7,300 of 9,500 newly infected children annually (UNAIDS, 2014). The March 2015 NACC annual report revealed some successes, including that the proportion of expected pregnant women attending ANC had increased from 36% in 2011 to 70%. In addition, 493,510 (86%) of pregnant women received at ANC were tested nationwide, with 31,112 (6.3%) identified HIV-positive. Of the pregnant women who tested positive, 71% (22,297) initiated ART nationwide.

The beginning of FY16 marked the pivot to focus on reaching epidemic control in the 2 priority districts and the transition of low yield PMTCT sites. By September 2015, a total of 1,247 out of the 1,927 sites in the four PEPFAR-supported regions were transitioned to the GRC, while PMTCT implementation was sustained at 635 sites and scaled up at 45 sites. In COP16, an additional 258 sites in sustained districts were identified as low yield for PMTCT (<5 positive women). Of these sites, a total of 253 will be transitioned from PEPFAR support in COP16 to GFATM and GRC. Negotiations are ongoing.

The COP 2016 PMTCT package in scale-up districts includes: demand creation and PITC at all entry points; support for linkages, tracking, and retention activities; in-service training, mentorship and supportive supervision; provision of ARVs and RTKs; VL testing at 6 months after initiation and annually thereafter for stable patients; and use of Bikers for Health sample

transport. Furthermore, community services including use of Community Health Workers (CHW) to follow up with defaulters will be in place. Specifically, the role of CHWs and relay agents will be strengthened to emphasize tracking of clients in the communities and to support adherence and retention strategies. A SOW and salary structure will be developed and harmonized with key populations and the GFATM program. PEPFAR/Cameroon will continue to scale-up male partner and family testing and linkages with immediate treatment.

The package in sustained districts and low-yield health facilities includes the provision of supportive supervision and mentorship visits for on the job training and QA, continued support for women newly initiating ART and those on treatment after pregnancy, breastfeeding in existing ART sites, and use of Bikers for Health for sample pick up. No demand creation, extensive trainings, or provision of staff will be done, but PITC for pregnant women with known status in ANC will be provided through GRC support. GRC and GFATM provide ARVs, RTKs, CTX, and TB treatment at sustained sites. Finally, M&E systems and tools will be strengthened to address LTFU of mother-infant pairs in all sustained and scale-up sites, including establishing a birth cohort monitoring system starting with a pilot to track infants, assigning CHWs to follow infected mothers throughout the antenatal and postnatal period, developing peer support groups, implementing SMS reminders, and training ANC staff to ensure that they provide respectful care and effective counseling.

PEPFAR/Cameroon is currently piloting FP integration in HIV C&T in the SW region and will scale up implementation in the two scale-up districts. Program implementation will be in compliance with USG legislation and will integrate a mix of methods (short and long term FP methods) in HIV C&T. UNFPA Cameroon and other stakeholders will supply FP commodities.

All PEPFAR sites will use the Option B+ M&E Framework. Using the PMTCT/ART integration funds, registers have been updated to meet PEPFAR/GRC specifications and are available at all sites, integrated HIV guidelines have been developed and disseminated, and service providers have been trained on MNCH/ART (Option B+) to scale up service delivery and to implement task shifting. Sites with red SIMS scores will be prioritized.

4.5 HTC Summary

HTC is receiving increased attention from GRC as policy decisions are being taken by MOPH/NACC to expand and improve access by HIV infected individuals to ART, and to accomplish the first “90” of the UNAIDS 90-90-90 goals. In 2015, GRC provided HTC services to 882,639 clients, compared to 538,252 clients in 2013 (NACC 2015). Current national guidelines for HTC in Cameroon allow for PITC and for free HIV testing for pregnant women and children less than 15 years old. Payment is required for the general adult population and current policy prohibits HIV testing for minors (under 15 years) without parental consent. Nonetheless, in 2015, the GRC updated guidelines for early antiretroviral treatment when CD4 count is ≤ 500 cell/mm³ (from ≤ 350 cell/mm³) and discussions are underway to include Test and START in the guidelines.

An addendum to the recently updated National ART Guidelines is being developed with revisions to algorithms and SOPs. The operational plan is anticipated to be finalized by June 2016.

The PEPFAR/Cameroon HTC program began in FY15 in the two scale-up districts. In FY16, PEPFAR/Cameroon prioritized facility- and community-based HIV testing to identify PLHIV and link to treatment, care, and support programs. Specifically, PEPFAR started facilitating stand-alone HTC sites in priority high yield entry points including TB clinics; adult clinics (inpatient/outpatient); KP DICs; pediatric clinics; OVC services; blood centers; STI services and military recruits. Targets for HTC have been calculated based on cascade analysis to meet the target number on treatment in scale-up districts. To reach 80% treatment coverage in two districts by 2017, subnational data on HTC positivity were used as a baseline to calculate the number of new HIV diagnoses, as well as estimates of LTFU (15%) and linkage to HIV care. SIMS results were also used to address deficiencies in the quality of service, which has led to improvement in key low-scoring program domains.

In FY17, PEPFAR/Cameroon will reinforce its HTC program to ensure that HIV testing and identification of HIV infected individuals follows the best use of resources. Within the scale up districts, the KP hotspots and the ACT sites, the service delivery package for HTC will include: community mobilization and promotion of HTC; provision of counselors as needed (psychosocial workers); and a cadre of Community Health Workers including relay agents strengthening linkages to treatment, care and support; and enhanced monitoring of linkages. At facility level, PEPFAR/Cameroon will undertake demand creation in scale-up districts/sites to scale up PITC in all priority high yield entry points (yield 5-12%), including provision of HIV buffer test kits, testing clients of index cases at ART and TB services (yield 35%), testing children of HIV infected parents, and engaging men through partner testing and contact tracing. Other activities will include implementation of national laboratory policies and guidelines, as well as strengthening lab quality assurance systems to support quality testing and retesting of clients prior to ART initiation. At the community level, targeted mobile testing will be done, followed by linkages to treatment and care as well as outreach approaches using community based organizations (CBOs) and CHWs to encourage referral for HIV testing. PEPFAR/Cameroon will reinforce its HTC strategy for KP (yield 32%) through home-based testing; 7-day per week testing in DICs; network (snowball) testing; and expanded field-testing in hotspots. For OVC and AGYW, outreach and testing of families of HIV-infected individuals (including children of FSW) will be conducted. USG partners will implement continuous QA/QI strategies, while providing TA at the regional, and district levels. The planned program activities align with core activities.

In sustained districts/sites, technical assistance support to improve services for clients currently on treatment, particularly to ensure linkages and retention. The package of services will include quarterly onsite trainings, supportive supervision and mentoring. Linkages, tracking, and retention activities will be similar to those of the scale up districts with the use of relay agents and CHWs. Regarding lab related activities to ensure quality of HTC, lab activities will be implemented to strengthen laboratory systems and support uptake of PITC and Test and Start.

This will include implementation of national laboratory policies and guidelines, as well as strengthening lab quality assurance systems to support quality testing. PEPFAR support in the sustained districts will monitor competency of lab staff and support re-testing of clients to ensure that accurate test results are obtained prior to treatment. The GRC will provide test kits and necessary supplies for testing within these districts as well as support lab staff engagement to cover all lab testing services. Within the Global Fund New Funding Model for Cameroon, rapid test kits and other laboratory reagents have been budgeted to enable testing and enrollment in treatment of 112,833 new HIV+ patients across the country by 2017; 80% of these are in the four PEPFAR Regions. This includes the sustained districts for which PEPFAR will be providing support. It is worth noting that reagents for 2016 are already available and deployed to the Regional Funds for Health promotion for onward distribution.

PEPFAR will identify 24,494 PLHIV by focusing and scaling up HTC in the two scale-up districts. Additional PLHIV will be identified in 11 KP hotspots. Using EA data by mechanism and district, the team determined that the 2015 average expenditure per test was \$9.21 for PITC and \$11.21 for CBTC (Appendix B). PEPFAR/Cameroon will reinvest cost savings in HTC from centrally supported sites to scale-up districts in high priority harder-to-reach PLHIV districts and improve linkage and enrollment to C&T.

4.6 Facility- and Community-based Care and Support Summary

The number of pre-ART steps required by GRC's national ART guidelines and the fees associated with care remain challenges to retaining patients in services and achieving viral suppression. To address these challenges, PEPFAR/Cameroon will continue to support rapid implementation of Test and START for all populations in the next few months through facility and community dispensation models, pilot PBF in COP 2016 to determine its feasibility as an innovative mechanism to reduce or eliminate patient fees, and eliminate the therapeutic treatment committee review prior to initiation. In early FY16, a community mapping exercise, which will support bidirectional linkages between facilities and community service organizations, was completed through the ACT initiative.

PEPFAR Cameroon/NACC will organize a one-week workshop to harmonize and develop an operational plan on how best to implement Test and start, as well as the hub and spoke strategies. PEPFAR will obtain support from HQ and countries with successful models by July 2016. PEPFAR/Cameroon will train CBOs in the scale-up and sustained districts while working with NACC to accelerate training plans in non PEPFAR supported districts and sites. PEPFAR will support NACC to develop community data collection tools and train providers on their use by September 2016.

PEPFAR/Cameroon will continue to provide a package of care and support services within the 2 priority districts. In addition, a similar package will be provided in the sustained districts, specifically at pediatric scale-up facilities, KP hotspots, and military sites. The package will

improve adherence, track patients LTFU, support disclosure of HIV status to partners and families, screen for STIs and other OI, and provide referrals and counseling on good nutrition.

Adherence counseling activities will include trainings for CHWs, development of job aids and print materials, and development of tracking log books. CHWs, CSOs, and peer educators will use testing mobilization and tracking tools to track patients within community settings and relink patients LTFU to care. Community tracking efforts will be evaluated by the number of patients brought back into care on a monthly basis, as well as the number of patients referred from communities to facilities. Community support groups will be activated and capacitated to further enhance adherence to treatment. Support groups will promote positive health and dignity, including training PLHIV on disclosure, condom use, family planning, and alcohol and other drug use reduction. Finally, CHWs will be trained and supported in community mobilization of HTC and PMTCT service updates, basic palliative care, identification of TB suspects, and nutrition screening for referral to facilities. In addition, KP will be supported through DICs and referred to facilities for treatment while expanding the “hub and spoke” model so DICs can dispense medications and provide other treatment and care services. The same care package will be offered to KP on ART. In COP 2016, PEPFAR will no longer support commodities for creatinine, hemoglobin, CD4, and cotrimoxazole. Currently, PEPFAR is paying transportation, nutritional supplement and all user fees for OVC, KP, and any client attending military facilities. However, the majority of clients attending over 90% of facilities will have to pay these fees - which PEPFAR/Cameroon cannot afford - but which also serves as a barrier to uptake and retention. Therefore, approaches, such as PBF, which can potentially reduce patient fees will be explored .

PEPFAR/Cameroon’s implementing partners will support a package of services in sustained districts through quarterly technical assistance visits meant to improve the quality of care and linkage and retention of patients, resulting in community VL suppression. The simplified treatment package will include adherence, nutritional and FP counselling services, and screening for TB and other OIs in PLHIV. GRC-funded CHWs and CSOs already working in communities will continue to provide tracking of patients LTFU. Transition sites from COP15 planning were transitioned to GFATM funding. Standard documents and SOP for linkage and documentation of LTFU will be provided to the GFATM and GRC for use at all treatment sites in Cameroon. GRC and GFATM will provide all ARVs, RTKs, and some CD4 and VL reagents.

4.7 TB/HIV Summary

The National TB program reported a total of about 26,517 new TB cases in 2014, corresponding to a rate of 117/100,000 inhabitants. National guidelines allow for systematic HIV testing for TB patients and, in 2014, 86% of TB patients were tested with HIV positive yield of 37%. GRC is working to ensure provision of TB and HIV services in the same locations. PEPFAR/Cameroon encourages the GRC’s adoption of the consolidated WHO ART guidelines, which include ART for TB/HIV clients. Efforts are being made to enable TB clinic staff to initiate ART in addition to providing HIV testing.

Preliminary PEPFAR support for the integration of TB and HIV programs started in FY 15 with in-service capacity building for clinicians in TB, PMTCT, and ART clinics in the four PEPFAR regions, and scaled up in FY16 to saturate the two PEPFAR scale-up districts. PEPFAR/Cameroon's support also ensured TB screening (basic signs and symptoms) in PMTCT and ART centers and referral to TB diagnosis and treatment services; supported the ongoing national task-shifting policy; and started a core package to increase ART coverage of TB/HIV co-infected individuals and to accelerate planning and implementation of collaborative TB/HIV activities.

In FY17, PEPFAR/Cameroon will strengthen HIV integration in TB settings, including HIV testing, and ART for HIV positive individuals. PEPFAR/Cameroon will also strengthen TB screening in HIV care and treatment settings (ICF) including: TB symptom screening, referral to TB labs including GeneXpert, and support for enhanced TB/HIV case finding through contact tracing of index patients to ensure that 100% of all HIV patients are screened for TB, all TB patients and their contacts are screened for HIV, and 95% of all TB/HIV patients are started on ART. The approach will also include implementation of tracking of HIV/TB screening. With the existing GeneXpert machines across the country (five of which were purchased with PEPFAR funds), PEPFAR/Cameroon will support scale up of GeneXpert MTB testing and ensure GeneXpert is incorporated into the diagnostic algorithm for all PLHIV, in addition to those with suspected MDR TB. PEPFAR/Cameroon will support site level staff (psychosocial support workers) and CHWs to ensure linkages from all clinical entry points to treatment and care.

PEPFAR/Cameroon will work with GFATM and NACC to ensure provision of INH prophylaxis for HIV positive individuals who do not have TB. PEPFAR/Cameroon will also strengthen TB Infection Control in HIV services, which will include support for TB monitoring nurses and TB-adapted renovation (infection control / ventilation), cabinets, and minor equipment.

While PEPFAR TB/HIV activities will be focused in the two scale-up districts for epidemic control, screening and prevention of TB will remain part of a national GRC basic package of services across all regions of Cameroon. TB infection control activities will continue in scale-up districts but will be financially supported by GRC in the remaining districts by the end of FY16. PEPFAR will support revisions of national guidelines, TB/HIV data review meetings, TB/HIV coordinating body meetings, and technical support through mentoring of health care providers in sustained sites.

4.8 Adult Treatment Summary

GRC has supported the adult ART program since 2000 and, with GFATM support, scaled up the adult ART program from one site in 2000 to 166 sites in 2014, yielding 168,249 currently on treatment (2015). In 2016, 82 new HIV management sites were created bringing the total number to 252, with the goal of increasing ART coverage to 80% for PLHIV.

In priority districts, the PEPFAR program will focus on increasing ART coverage for patients with TB/HIV, pregnant women and their partners, children, KPs, AGYW, blood donors found to be HIV-positive, STI patients, and military recruits.

To reach the 90/90/90 goals, the scale-up package of services includes demand creation and PITC at all entry points; clinical and lab VL monitoring and CD4 tests when VL is not available; supporting linkages from all clinical entry points to treatment and care or PMTCT for treatment initiation plus provision of ART in TB treatment sites; nutritional assessment and counseling; tracking for adherence and retention of ART patients in treatment and care; trainings of health care workers and CHWs; and training Bikers for Health to ensure sample collection, return, and data collection. Community activities will include print and electronic media. CBOs and CHWs will support linkages, retention and prevention. Monitoring for quality service delivery will be ensured through supervision and mentoring; support will be provided to doctors and nurses at sites; buffer stock for RTKs, VL, ARVs, CTX, and EID reagents will be made available; and minor renovations, cabinets, and minor equipment will be supplied to improve the quality of services. PEPFAR/Cameroon will work with GRC to support robust community initiatives backed with active tracking of LTFU, adherence counselling, and a minimum package of PHDP activities to increase the current 52.9% 12-month retention rate to greater than 85% in scale-up districts. Within the sustained sites, PEPFAR/Cameroon will continue to use community systems to support adherence, linkages, and retention activities, while monitoring compliance through supportive supervision (Appendix A).

The package of services in sustained districts will include provision of quarterly supportive supervision and mentorship visits for QA, support for linkages of patients from all clinical entry points to treatment and care or PMTCT for prescription initiation, plus TB screening, tracking, and retention; nutritional assessment and counseling; and training for Bikers for Health clinical staff, pharmacists, data managers, and CHWs. Demand creation and PITC will be provided by GRC. GRC and GFATM will also provide ARVs, RTKs, CTX, and TB treatment. GFATM absorbed PEPFAR sites transitioned in FY16

PEPFAR/Cameroon will support GRC to monitor clients on ART and will fund baseline VL testing for adult clients on treatment in scale-up districts, while providing TA for VL testing in sustained districts and using GFATM VL supplies for the sustained districts. PEPFAR/Cameroon will continue to build capacity of clinicians and laboratory technicians to diagnose and interpret VL and EID tests. To ensure improved HIV testing and monitoring, QA will be strengthened for clinicians and lab technicians, including in-service training for nurses.

To reduce congestion in clinical sites and render ART services more accessible in order to improve retention. PEPFAR/Cameroon will implement the hub and spoke approach. The principle ensures selected scale up sites (hubs) offer the standard package of ART services. Additionally it will extend key services and establish a standard package of ART services at selected smaller satellite high yield ART sites (spokes). The hubs would be mother sites that are usually highly staffed and better equipped, offering comprehensive ART, PMTCT/B+, TB/HIV and lab capacity services. The spokes are smaller satellite/affiliated remote or adjacent sites that are usually less staffed, less equipped but offer the potentials for high HTC yield. The hubs provide ARV drugs and other commodities to spokes for clients and serve as centers for continuous staff capacity building, providing supervision and mentoring to the spokes. CHWs and CBOs provide

two-way linkage support for referrals and counter referrals while specimens collected from the spokes for disease monitoring and EID are transported to the hubs using bikers for health.

Following SIMS visits there is an improvement in the FY16 results for Adult Treatment, with only 15.4% of sites scoring red and 23.1% yellow, compared to 70% red scores in FY15. Sites with red scores are prioritized for mentorship and supportive supervision to address facility based issues.

In summary, innovative strategies or game changers in adult treatment and care include: implementing Test and START, differentiated service models, drug pick up every three months, promote the reduction of patient fees, and use of the hub and spoke model for service provision in order to decongest hub sites and allow more clients to be served. Hubs will mentor spoke sites, which will serve as ARV dispensation sites. Additionally, lab testing will be reduced to mostly VL, and PEPFAR will pilot the use of PBF as a way of significantly reducing user fees, which are a barrier to treatment and retention.

4.9 Pediatric Treatment Summary

In 2015, an estimated 54,976 children were living with HIV in Cameroon (National Report on HIV Projection, 2015). By the end of 2015, national pediatric ART coverage was 11% (UNAIDS 2015), compared to 16% in PEPFAR-supported districts. Cameroon's current guidelines specify treatment for all HIV-positive children less than 5 years of age or with TB. Children over 5 years of age and adolescents are being initiated on ART following WHO stage 3 or 4 or CD4 <500/mm³. However, current policy prohibits HIV testing for minors (less 15 years old) without parental consent.

PEPFAR/Cameroon's pediatric treatment program started in FY15 with the PEPFAR Accelerating Children's Treatment (ACT) initiative. Cameroon's ACT target is to provide ART to an additional 5,630 children <15 living with HIV, in order to double the number of children <15 on treatment and initiate an additional 1,000 adolescents 15-19 years old for a total target of 12,262 <20 on treatment by the end of FY16. ACT implementation is aligned with the PEPFAR geographic prioritization and pivot outlined in COP15. There are 34 ACT sites, including 6 pediatric HIV care and treatment sites in the two COP15 scale-up districts, military sites throughout the program, and 28 high volume sites in OVC and sustained districts (including 5 of 6 KP hotspot hospitals).

In FY15, PEPFAR supported the GRC's roll out of a standardized package of care at all pediatric treatment sites and its efforts to optimize the national pediatric ARV formulary. As a result, no pediatric ARV stock outs were reported in FY15. Finally, age-disaggregated data collection was improved in FY15, allowing for true age-disaggregated HTC and treatment data to be collected starting in FY16. Despite these programmatic successes, the many challenges that remain in case finding and linkages prevented the full scale-up of pediatric care and treatment in FY15. Active pediatric HIV case finding, strengthening linkages between HTC and C&T, and improved coordination between clinical and community service providers will be used to continue aggressive pediatric scale-up in Cameroon in FY17.

In FY17, PEPFAR/Cameroon's <15 HIV pediatric treatment target (TX_CURR) is 13,276 (2,983 in scale-up districts and 10,293 in sustained). Strengthening pediatric HIV case identification throughout FY17 will be essential to reach pediatric treatment goals. Historically, data on age-disaggregated HTC has been limited. Under the ACT initiative, partners began active HIV case identification at clinical entry points known to have higher yield based on broader literature and PEPFAR technical guidance. Preliminary age-disaggregated programmatic results from Q1 FY16 have demonstrated the following pediatric case finding yields from PITC: 2% from outpatient visits, 3% from pediatric inpatient wards, 1% from infant-well child (immunization, etc.) visits, 8% from TB clinics and 10% from PMTCT. In addition to scaling up PITC, testing of OVC also began in FY16. Full operationalization of these active pediatric case identification strategies will be maintained in FY17, as well as additional scale-up of testing for children of known HIV-positive adults. Age-disaggregated documentation and monitoring will also be strengthened. This will include roll out of a new HEI cohort monitoring approach to improve HEI follow up.

Continued support to the GRC for efficient roll out of Test and START, as well as reduction of user fees will help improve linkages from identification to treatment initiation among pediatrics. In addition, clinical innovations will be fully implemented in PEPFAR ACT support sites as outlined in the ACT Initiative. Innovations include developing a formal pediatric linkage strategy; implementing a linkage 'point of contact' to document linkage between maternity and infant follow up, as well as between pediatric entry points and care and treatment for positive cases; and ensuring VL tests are provided for free to all HIV positive persons ages 5-19.³

Retention in care will be strengthened through increased collaboration with community services and OVC programs, as well as through inclusion of children in the VL testing roll out. In order to strengthen coordination across clinical and community services, PEPFAR/Cameroon has completed a community service organization mapping exercise in the first half of FY16. This information will be disseminated and shared with clinical partners to enable them to better understand community services available for referral.

4.10 OVC

Approximately 319,000 children are infected with and/or affected by HIV/AIDS, representing about 25% of total OVC in Cameroon (Spectrum, 2015). There is a huge funding gap in OVC programming in Cameroon: the funding level under the GFATM Round 10 grant represented about 2% of funding needs. Meanwhile, there are no OVC activities programmed in the NFM concept note. With the COP15 pivot, PEPFAR/Cameroon transitioned out of five non-priority health districts (Manoka, Santa, Bonassama, New Bell, and Cité Verte). PEPFAR/Cameroon's FY14 funds supported the creation of Savings and Internal Lending Communities (SILC) as an exit strategy⁴ focused on increasing the assets of 230 OVC caregivers that will enable improved

³ In policy, <15 year olds should not pay for CD4 services, but this is not always operationalized in practice. In addition, they are already free for 0-4 year olds and those enrolled in PMTCT.

⁴ Vanmeenen, G. *Savings and Internal Lending Communities: A Basis for Integral Human Development*. 2006.

household well-being and ability to meet the needs of 2,100 OVC in their care. PEPFAR/Cameroon will not invest in these five health districts in FY16.

COP FY15 funds supported HTC services for 5,820 OVC in four health districts (Djoungolo, Deido, Bamenda, and Nkoldongo) identifying 155 new HIV cases and linking them to treatment. TA-SDI activities included: OVC curriculum and training for PCVs and establishing partnerships between PEPFAR OVC programs and GRC ministries for coordination of OVC activities. Finally, PEPFAR/Cameroon leveraged ACT funds for OVC service mapping, trainings for PCVs and counterparts, and community sensitization/mobilization activities.

COP FY16 programming decisions were made taking into account challenges identified during management meetings and key recommendations from an interagency consultation that occurred in February 2016. Activities will target 11,663 OVC in the two scale-up districts and nine sustained districts (to support achievement of ACT), including children of FSW who will be targeted for HTC and linkages to care and treatment. COP 2016 targets represent approximately 18% of the total estimated number of children infected with and/or affected by HIV/AIDS in target health districts. Approximately 8% of children are expected to age out of the OVC program during the implementation cycle.

PEPFAR/Cameroon's OVC package of services will focus on accompanying OVC and caregivers along the continuum of care based on individual needs assessments. PEPFAR/Cameroon will prioritize linkages to facilitate partnership between OVC programs and HIV clinical programs. Some of the key activities will include: (1) developing patient tracking tools that link community structures and health facilities; (2) using ART and PMTCT sites as entry points for identification of those in most need for OVC services; (3) programming for Early Childhood Development (ECD); (4) promoting routine data analysis and use at PEPFAR supported sites; and (5) facilitating regular meetings between OVC/Community partners and health facilities to strengthen linkages/collaboration to increase access to pediatric services at health facilities as well as social services in the community. Other key activities include: integration with key populations programs, comprehensive case management, SILCs, and parenting skills development. Appendix A of the SDS provides a detailed breakdown of OVC activities along core, near-core, and non-core classifications.

5.0 Program Activities in Sustained Support Locations and Populations

5.1 Package of services in sustained support locations and populations

Current clients on ART will be maintained in HIV care and treatment services through FY 17 in both ART and PMTCT sites. Additional lower volume health facilities (5 and less HIV+ yield in

PMTCT and HTC as well as less than 10 HIV+ clients receiving treatment in ART sites) have been identified and these will be transitioned in collaboration with GRC to become centrally supported facilities. Out of 680 sustained sites that were sustained in FY15, 255 sites will be transitioned based on the above criteria. Clients attending sustained sites within scale-up and sustained districts (see site classification in Supplemental Documents) will also be provided a minimum package of HIV care and treatment services and PMTCT provided by GRC with mentoring and supportive supervision visits by PEPFAR IPs. The PEPFAR supported package at sustained sites includes:

- Counseling support to eligible clients (where needed)
- Routine laboratory quality assurance systems for HIV and CD4 testing and use of electronic and paper based systems to monitor quality.
- Quarterly site supportive supervision, mentorship, and on the job training (as needed) to ensure quality
- EID for HEI
- Use of CHWs to:
 - Ensure linkage to community-based activities and back to clinics to reduce loss to follow-up and improve long-term outcomes
 - Follow up and track defaulters
- Use of bikers for health to pick up and drop off samples, results, data
- Monitoring and evaluation support including provision of registers, systems and processes for data collection, including using DHIS2

GRC will provide doctors and nurses at these sites. Additionally, ARVs, RTKs, VL, and CTX will be provided through GFATM and GRC via the national supply chain system. PEPFAR/Cameroon will support regional warehouses to pre-position pre-determined quantities of ARVs at low-volume PMTCT sites in anticipation of the rare cases of pregnant women testing positive. Due to fast stock rotation, RTKs will be distributed based on demand with other essential medications. While there will be no supply chain-related supervision activities conducted at medium and low-volume PMTCT sites, spot checks will be conducted for a random sample of sites if deemed necessary. Simple capacity building activities for sustained sites will include dissemination of information notes and job aids to improve ARV and RTK management, and participation in focus group discussions organized by topics. ARV and RTK stock will be monitored through existing formal reporting channels.

Passive enrollment in HIV care and treatment will occur in these districts. No patient will be denied HIV treatment, so if a person presents for PMTCT services, requests HIV testing or presents with an OI, HIV testing and treatment will be provided as needed. There will be no demand generation for testing and no active scale-up of HIV care and treatment or PMTCT services in these districts; implementing partners will ensure patients receive ARVs provided by GRC through GFATM. Pregnant and breastfeeding women newly initiated on treatment will be

provided with support related to clinical and laboratory monitoring, EID, and adherence and retention.

Outside of ANC and passive testing and linkage to care in PMTCT and ART sites, PEPFAR support for HTC will be discontinued in these districts and populations, but the GRC will likely continue testing at these sites.

The expected volume of patients needing the minimum package of services in these areas has been calculated by district and overall (Table 5.1.1). The expected number tested through PMTCT sites was derived based on the assumption that, in FY16, these sites will continue to test 95% of pregnant women and will link 85% of those identified as HIV-positive to treatment per standard of care and national guidelines. However, testing by PEPFAR will be discontinued immediately in no and low yield (0-4) sites without ART patients.

PEPFAR supports 13 Peace Corps Volunteers (PCV) each year, placed in sustained sites for a 2-year placement. Volunteers will implement activities to support AGYW and OVC at the community level.

As previously mentioned, the OVC program will be implemented in two scale-up districts and nine sustained sites (to contribute to ACT achievements). The level of investment in two high volume (OVC) sustained health districts (Nkoldongo and Bamenda) will be the same as in two scale-up districts, including the same level of activity focused on increasing access to HTC and other health and social services. The expected volume of beneficiaries at these sites is 5,500, representing almost 50 percent of COP FY 2016 OVC_SERV targets. PEPFAR Cameroon will continue setting ambitious targets in the health districts of Nkoldongo and Bamenda in support of initiatives focused on scaling up pediatric coverage.

TA-SDI activities in seven other sustained health districts (Buea, Kumbo-East, Ndop, Wum, Nkambe, Fundong, and Mamfe) will be provided through a network of PCVs providing ongoing service delivery improvement activities through two-year placements. TA-SDI OVC package of services will include activities focused on strengthening families as primary caregivers of children through economic initiatives and caregiver/parenting skills-building; building capacity of community-based organizations including associations of PLHIV and care groups to provide support to OVCs; supporting life-skills training, education and HIV prevention activities particularly for AGYW, and liaising with health personnel at the closest PEPFAR-supported facility to facilitate access to HTC and other HIV-related services. 663 OVC are expected to indirectly benefit from technical assistance provided by PCVs.

PEPFAR will provide CoPT services for KPs, clients of FSW and children and families of KPs in the two scale-up districts and in an additional nine urban sustained districts. In the nine urban “KP hotspot” districts in Yaoundé, Douala, and Bamenda, PEPFAR will provide services to 13,476 clients/intimate partners of FSW, 11,281 FSW and 6,271 MSM. The package of services will not

differ for KPs between the “scale-up” and sustained districts. PEPFAR will provide services to almost 75% of urban key populations in Cameroon.

Expected volumes for current on care and current on ART were derived using MOPH data and account for (1) differential positivity rates for PITC entry points, (2) the recent adoption of the WHO guidelines for early initiation of ART (CD4 \leq 500 cells/mm³), (3) estimated rates for linkage to care, and (4) estimated LTFU.

Resources required to support PMTCT, treatment and care in sustained sites districts are projected at \$2.5 million using adjusted EA data. These activities were budgeted for prior to setting targets for scale-up in priority districts (Appendix B).

Table 5.1.1 Expected Beneficiary Volume Receiving Minimum Package of Services in Sustained Support Districts

Sustained Support Volume by Group	Expected result APR 16	Expected result APR 17	Percent increase (decrease)
HIV testing in PMTCT sites	277,170	332,301	20 % Increase
HTS (only maintenance ART sites in FY 17)	335,778,	1,050,732	213 % Increase
Current on ART	125,166	173,738	39% Increase
OVC	7,233	12,349	71% Increase

5.2 Transition plans for redirecting PEPFAR support to scale-up locations and populations

In FY16, 45 of 1,927 sites in the four PEPFAR-supported regions were selected for scale-up, 680 for sustenance and 1,247 for transition to GFATM and GRC. In FY17, 255 additional lower volume health facilities (0-5 HIV+ yield in PMTCT and HTC and 0-10 HIV+ clients receiving treatment in ART sites) have been identified and will be transitioned to central support in collaboration with GRC. The challenge is that the GFATM, which typically absorbs transitioned sites, has already signed off on its portfolio and would prefer to transition these additional sites in 2 years’ time. PEPFAR/Cameroon is engaging in discussions with GRC, key stakeholders, and other donors on transition plans. PEPFAR expects the GRC/GF to continue providing RTKs, VL, ARVs and CTX for all sites. GRC will provide HCWs and engage District Medical Officers (DMOs) in Data Quality Assessments (DQA) and mentoring and supervision visits. DMOs received training with PEPFAR support and transitioning them to do DQA checks is a good transition step. The transition activities that may be dropped if GRC is unable to accommodate them by the beginning of FY17 are: mentoring, supervision (one DMO per district is a challenge), sample pick up using bikers, data reporting and collection, follow up and retention of those on treatment through CHWs or relay agents, on-the job training, and smooth running of the program.

In FY17, PEPFAR will continue transitioning part of the blood safety portfolio - notably, blood donor mobilization, blood collection, and –engagement with the GRC, while continuing to

support the strengthening of M&E systems and the improvement of linkages between blood banks and HTC, prevention, and care and treatment services. PEPFAR will continue to focus on four high volume blood banks which account for over 60% of all transfusion activities in the country. HIV prevalence among blood donors is about 3%, but HIV-positive blood donors are easy to identify and link to treatment. PEPFAR hopes to transition 11 other blood banks which currently receive some support from PEPFAR to GRC, as the MoPH now has a line item budget for blood safety (although it is yet to be funded). The main challenge is that PEPFAR's blood safety funds were drastically reduced from \$800,000 to \$20,000 two years ago. Having been the main donor, PEPFAR will continue to work with GRC for GRC to financially support blood safety. This is necessary to avoid reversal of the major gains made, wherein over 98% of blood is screened, and linkage to treatment and care has begun for those testing positive.

Support to 2 KP DICs (in Bertoua and in Kribi) will be transitioned to GF support at the beginning of FY17. Transitioning Kribi and Bertoua will require these sites to provide the package of services supported by GFATM. As the GFATM KP program is a national program and the USG's KP program is focused, the service package is not the same. These sites will thus need to reduce their level of effort and, consequently, will receive less funding. For Bertoua (ASAD), the yearly budget for FY 2016 is \$56,800; and for Kribi (ESPK), \$87,000. PEPFAR will provide technical assistance to GF principal recipients and national and local authorities to develop national systems and standards for service provision, QA and a supportive human rights environment to ensure quality services for KP including robust linkages into the treatment and care cascade. In addition, 1,643 children of FSW will receive OVC services, testing and linkage to treatment and care in the 9 "sustained" KP hotspot districts.

As of FY 2016 Q1, the OVC program has transitioned out of 5 health districts (Manoka, Cité Verte, Bonassama, New Bell, and Santa). Transition activities mainly focused on enrolling 52 households (260 children indirectly affected) in a savings and internal lending community (SILC). Various studies show implementation of money management interventions like SILC is an appropriate exit strategy for OVC programs since the focus of this activity is strengthening families as primary caregivers. Peace Corps volunteer placements in centrally supported sites (see OVC transition table) cannot be terminated abruptly as they have two years commitment to serve their communities. They will therefore continue to serve these communities until their placements end in order to ensure a smooth handover of activities to host institutions/counterparts as well as continuously support ACT activities in these sites.

6.0 Program Support Necessary to Achieve Sustained Epidemic Control

6.1 Critical Systems Investments for Achieving Key Programmatic Gaps

PEPFAR/Cameroon plans to implement concerted systems investments focused on: (a) addressing structural barriers to care, particularly for key populations; (b) ensuring improved quality of care and quality of data at facility and community level; (c) ensuring clearer identification of beneficiaries; (d) measuring progress toward the 90-90-90 targets; (e) ensuring uninterrupted access to HIV/AIDS commodities, particularly ARVs; and overall (e) fostering a strong healthcare system that includes formal mechanisms to bridge clinical and community-based services. PEPFAR/Cameroon prioritized its systems investments, taking into account the following considerations: SID 2.0 score; availability of documentation on the extent to which barriers and constraints greatly affect achievement of targets; current level of investment (by PEPFAR and other donors) focused on addressing systems barriers; and sufficient timeline for GRC to take on PEPFAR-funded technical assistance (TA) activities. Based on these considerations, PEPFAR/Cameroon is proposing activities that will address the following elements:

- Quality Management (SID Score: red; 2.19)
- Laboratory (SID Score: red; 3.01)
- Supply Chain Management (SID Score: yellow; 4.11)

Quality Management

Quality management is the lowest-scored element in SID 2.0 due to insufficient implementation of quality improvement methodologies in the HIV/AIDS sector. Based on PEPFAR's SIMS FY 2016 Quarter 1 data, poor results are consistently recorded for core essential elements related to patient linkage to care and support, ART patient monitoring and tracking, and adolescent support services. In order to achieve epidemic control (particularly the second 90); Cameroon must be able to retain and monitor all patients on treatment. Overall, low coverage (only 26.9 percent of estimated 660,000 people living with HIV on antiretroviral therapy – ART, amongst which 4.2 percent are children) and variable quality of services provided by facility and community structures leads to poor linkages, adherence, and retention. Consequently, an estimated 40 percent of patients are lost to follow-up each year.⁵

Key quality of care issues (systems barriers) that will be addressed by PEPFAR/Cameroon in the short to medium term in order to achieve 90-90-90 targets include:

⁵ NACC 2016-2018 Acceleration Plan

- 1. Shortage of adequately trained health and community workers to increase ART uptake in priority districts.** High attrition and vacancy rates limit access to HIV services, with continued rural-urban disparities. Cameroon's health staffing ratio is currently estimated as 1 nurse for every 1,023 patients and 1 doctor for every 10,504 patients. There are currently 449 community relay agents tasked with facilitating community-clinical linkages across three disease areas: HIV/AIDS, TB, and malaria; and 914 CHWs trained to facilitate community-clinical linkages for prevention of mother-to-child transmission (PMTCT) programming. The availability and effectiveness of community relay agents and CHWs depends on availability of external funding. In addition to quantity of healthcare staff, inadequate skills mix in the healthcare workforce poses a barrier to quality of care. There is no formal in-service training plan for healthcare workers. This barrier will be addressed in the Cameroon-Global Fund New Funding Model (NFM) concept note which includes funding for some QI components including supervision visits, in-service training, establishing a mentorship system for 200 high-volume PMTCT sites, and production of recording forms, guides, and job aids. However, the impact of these activities will not be sustainable in the absence of a comprehensive HIV/AIDS QM/QI strategy that includes a costed plan to systematically build healthcare workforce competency in QI. PEPFAR's support for most adult treatment and care is within the UEs. In Table 6.1.1, PEPFAR/Cameroon proposes limited activities to address this system barrier as the bulk of HRH systems strengthening activities are already built-in to unit expenditures for COP FY 2016.
- 2. Insufficient capacity of community-based systems to support uptake, linkage and retention.** A mid-term review of the 2011-2015 National HIV/AIDS Strategic Plan highlighted weak involvement and technical capacity of community-based structures, particularly civil society organizations, as one of the barriers to achieving improved health outcomes for PLHIV on ART. The main challenge was inadequate training of all stakeholders and lack of guidelines on community-based care and support for people infected and affected by HIV/AIDS. SID 2.0 highlights an additional challenge related to high dependence on availability of external funding due to minimal domestic funding for HIV/AIDS related CSOs and community structures. Investments in community systems strengthening will be essential to realize 90-90-90 targets, although the extent to which PEPFAR/Cameroon can influence increased mobilization of domestic resources for critical components of community systems strengthening requires further analysis. In Table 6.1.1, PEPFAR/Cameroon proposes limited activities to address this system barrier as the bulk of community systems strengthening activities are already built-in to unit expenditures for COP FY 2016.
- 3. Weak strategic information management system in place.** Access to timely and accurate data is essential to optimizing performance and quality of care. In SID 2.0, performance and epidemiological data elements both received yellow scores, although it is worth noting that there is currently no data quality assessment system in place. Furthermore, the number of skilled Monitoring and Evaluation (M&E) personnel at both facility and community level is insufficient. Finally, critical surveillance and surveys are implemented depending on

availability of funds. As part of the NFM concept note, GRC has developed activities under the “routine monitoring” rubric, including implementation of DHIS2, installation of Vindata software for patient monitoring, DQAs, and planned surveillance and survey exercises. However, there remains a need to generate additional information on key and priority populations. There is need for adoption of a unique identification of patients nationwide; there is no clear strategy for moving from a paper-based system to electronic medical records. Overall, further investment in affordable strategies for generating timely and reliable data on health systems, including enhanced alignment and harmonization of efforts, is essential to foster a sound health information system.

Laboratory

Laboratory is the second lowest-scored element in SID 2.0 due to weak lab quality management systems (QMS). Quality assured testing is critical to achieving 90-90-90, as a sound QMS will ensure that the right people are identified for treatment and monitored, and that viral suppression is accurately detected. Based on PEPFAR SIMS data and partner annual reports, most labs do not conform to Cameroon’s national testing algorithm. Furthermore, only 22% of over 3,200 laboratories in the country are enrolled in national HIV proficiency testing; of those currently enrolled, 33% are failing proficiency testing due to test kit stock out, poor adherence to the national testing algorithm, high staff turnover, and a weak sample transport system. SID 2.0 indicated that regulations do not exist to implement and monitor basic laboratory QA systems, though PEPFAR and the Chantal Biya International Reference Centre for Research (CIRCB) are supporting and coordinating panel distribution for CD4 proficiency testing in some parts of the country. VL testing is nascent; 10 laboratories have the testing platforms but limited human resource capacity to provide this. Despite significant challenges with insufficient infrastructure, the government remains committed to using VL for monitoring patients on treatment as the use of CD4 is gradually phased out. In 2015, 35% of all PLHIV were monitored with CD4 and only 20% of them received VL testing. To align with the UNAIDS 3rd 90, the government plans to phase out CD4 testing from 25%, to 15% to 5% in 2016, 2017 and 2018 respectively, as they scale-up VL from 40%, to 60% and 80%. PEPFAR will provide reagents and supplies, support trainings, sample transport and proficiency testing at supported sites. PEPFAR laboratories will support 70% VL coverage for patients in both scale-up districts. The Global Fund will provide reagents to support testing for 10% coverage for patients in the sustained districts, with a plan to fully scale-up VL testing in FY17 in scale up districts. CD4 testing will be proportionately phased out in alignment with GRC’s patient monitoring plan and to align with the 90-90-90 targets.

PEPFAR/Cameroon is the primary donor in lab systems strengthening, with some support from other stakeholders, including WHO, Expertise France, CHAI and UNICEF. This leaves PEPFAR with a significant gap to cover and, following completion of the national public health laboratory renovation project, PEPFAR’s investments will focus on strengthening the External Quality Assurance Center and key training labs to enable it to take on key technical assistance activities. No other partner supports these activities and GRC lacks the capacity and infrastructure to take

on this responsibility. A robust QA system is indispensable for Test and START to ensure that the right person is put on treatment and properly monitored for viral suppression.

Critical systems barriers that will be addressed by PEPFAR/Cameroon in the short to medium term in order to achieve 90-90-90 targets include:

1. **Weak laboratory governance within the health structure.** Public health laboratories have low visibility, which negatively impacts prioritization of resources for this sector. SID 2.0 acknowledges that domestic resources finance some lab services, but the total amount allocated to this sector is insufficient. There is no National Laboratory Strategic Plan and Policies or QA plan in place. In the absence of a national public health laboratory (which is currently under renovation with financial support from PEPFAR/Cameroon), coordination and supervision of lab activities is inadequate and implementation of the testing algorithm is poor and not monitored. Because of the challenges with governance and lack of policies, availability of competent human resources to support diagnostic laboratory services is a major challenge in the laboratory profession, compromising staff capacity to develop, be retained, and provide quality service. The current training curriculum for laboratory training institutions has not been revised for over 5 years, and is lacking critical components such as QMS processes.
2. **No accredited lab (i.e. labs that meet international standards for Continuous Quality Improvement -CQI) in the tiered system.** There are currently only 55 pathologists in Cameroon with a high attrition rate. The situation is even more acute for public sector labs that are at a competitive disadvantage (particularly in urban areas) due to an increase in private sector labs attracting new employees with better salaries and working environments. There is no QMS module in the laboratory pre-service training curriculum and an inadequate number of laboratories with basic QMS in place. Laboratory accreditation will ensure continuous and sustained quality processes, reducing discordance and error rates in diagnostic processes and reducing the chance of misdiagnosis. In order to optimize outcomes within the clinical cascade, continuous quality improvement in laboratory diagnosis is critical to ensure that the right people are diagnosed, put on treatment and virally suppressed.
3. **Poor lab infrastructure.** SID 2.0 mainly focused on VL infrastructure, but overall lab infrastructure is weak. There are no standardized sample referral systems, and referral systems are financed externally. There are no policies and guidelines on equipment standardization and maintenance, resulting in poor equipment maintenance and no equipment standardization for various monitoring assays. Labs often have insufficient space with minimal or poorly constructed work surfaces, improper storage space to secure the quality of reagents and supplies, and inadequate water supply and waste disposal systems within public health facilities. This creates biosafety hazards and compromises the quality of testing and patient monitoring. To minimize testing errors and delays, infrastructure upgrade is required.

Supply Chain Management

Supply Chain Management is the third lowest scored element in SID 2.0 due to inadequate mechanisms in place for procurement and management of HIV/AIDS commodities. Insufficient allocation of domestic resources for procurement of pharmacy and lab commodities and weak infrastructure contribute to a weak procurement and supply chain system resulting in commodity stock-outs that undermine efforts to achieve 90-90-90. 23% of 132 health facilities supported by PEPFAR/Cameroon reported stock-out in one or more priority ARV regimens in FY 2016 Q1. All PEPFAR-supported reference labs for EID reported stock outs of reagents and supplies in FY 2015. Out of 660 sites participating in proficiency testing, 39% failed due to stock out of test kits.

PEPFAR/Cameroon is the only donor with significant investment in technical assistance for national procurement and management of HIV/AIDS-related commodities. Sustainable solutions require pharmaceutical system reform with strong political commitment to redefine roles and responsibilities of the pharmaceutical institutions in order to ensure long-term access to, and lower costs associated with, distributing ARVs, essential medicines, and lab commodities. Key systems barriers to be addressed include:

- 1. Insufficient warehouse and inventory level optimization.** Warehouse capacity needs to be optimized to meet increased demand for HIV/AIDS commodities. Based on FY 2015 reports, only 36% of four regional warehouses receiving PEPFAR-funded TA are able to maintain stock within the minimum and maximum levels. There is insufficient staff with the skill set to manage HIV/AIDS commodities. The staff who dispense medicines at many public health facilities are lay workers, known as *commis*, who do not have adequate technical training. Key pharmacy personnel managing stores are either nurses or health assistants, or, in some cases, pharmacy technicians. They are responsible for ordering medicines from regional warehouses, storing them, and issuing to the *commis* for dispensing.
- 2. Insufficient institutional capacity to use HIV pharmacy information for decision-making (fragmentation between logistics and program strategic information, tools, and reports).** Several tools (VINDATA, OSPSIDA, ESOPE, paper-based tools, etc.) are currently in use for patient and ARV monitoring, resulting in collection of data that cannot be used for logistics management. A weak logistics management information system (LMIS) makes it difficult to predict frequency in stock outs or overstock. Since FY 2015, PEPFAR has been part of an initiative involving GRC, German Cooperation, CHAI (via Family Planning 2020 partnership), United Nations Population Fund, and GF to establish an electronic LMIS for pharmaceutical products at central and regional levels. This process will be completed by the end of FY 2017. There is also a need to train key decision-makers on how to analyze pharmaceutical data in order to mitigate the risk of other considerations undermining data-driven decision-making.

3. Poor governance of pharmaceutical and lab management sector at all levels. Inefficient bureaucratic procedures cause delays in the procurement and distribution processes. The process to request HIV commodities from sites to regional warehouses, and especially from regional warehouses to the central medical store is lengthy—sometimes taking over one month. Decisions on the distribution of HIV/AIDS commodities in the country are made by the National AIDS Control Committee (NACC) at the central level and by NACC regional representatives. These stringent administrative procedures for passing orders were put in place to increase the controls for ARV distribution and to avoid leakages or irrational distribution in case of shortages. However, there is no evidence that the number of signatures on orders really improves the quality and control of distribution. It takes 2 hours to 2 weeks to get health facility requisition orders approved at the regional level based on availability of NACC staff.⁶ It takes more than 30 days from requisition by the regional warehouse to delivery by the central medical store of HIV commodities.⁷ Furthermore, quantities are often limited by the availability of stock at the central/regional level and, therefore, approved requested quantities of medicines may not be delivered. In a scaling-up program in which it is unlikely to avoid emergencies, the distribution system should offer high flexibility and efficacy, while the controlling mechanisms could be implemented through other processes, without interfering with the supply of the products.

3a. A Global Fund audit released in May 2016 revealed high risk of diversion of health products in the Supply Chain due to poor governance. Inadequate storage space, equipment and other infrastructure are insufficient to ensure quality storage and the cold chain. A number of interim measures have been put in place by PEPFAR through SIAPS, or by the Global Fund to mitigate risk while ensuring achievement of programmatic targets. Mitigating governance related risks, and addressing their root causes are more challenging. In FY 2016, PEPFAR will support, Global Fund and other bilateral and multilateral partners to either continue mitigating strategies and or improve governance. PEPFAR will also work to ensure long-term retention of staff skills at the regional and facility levels.

⁶ SIAPS Report of Third Regional Feedback Meeting with ART Site Coordinators

⁷ Requisition and delivery note dates at regional warehouses in Littoral and Center regions

3b. A final major governance-related challenge is the limited number of ARV dispensation points (166 for ~166,000 people on ART) and congestion (sometimes resulting in over 4-hour wait time for monthly refills), which contributes to LTFU. Based on PEPFAR-funded TA reports and the NACC database, one pharmacy attendant may attend to on average 74 PLHIV per working day (on average 6 to 10 minutes per patient); at referral hospitals, this is estimated at approximately 300 patients per pharmacy attendant per working day.

Table 6.1.1 Key Programmatic Gap #1: Low coverage and quality of facility and community ART services leads to poor linkages, adherence and retention (2nd and 3rd gos) in priority health districts

Key Systems Barrier	Outcomes expected after 3 years of investment	Year 1 Benchmark	Proposed COP/ROP16	Budget Code(s)	Activity Budget Amount	Associated Implementing Mechanism ID	Relevant SID Element and Score (if applicable)
1. Shortage of adequately trained health and community workers to increase ART uptake in priority districts	1. 75% Increase in number of health and community workers trained in priority districts. 2. Increase coverage and retention of ART in priority districts from 26.1% & 60% respectively to 80%. ⁸	1. 100 health and community workers in priority health districts trained. 2. Implementation of test and start at 45 health facilities in PEPFAR scale-up sites.	Activity 1.1: ICAP will support MoPH to implement training of trainers (ToT) for faculty at 16 Nursing/Midwifery schools (in Yaoundé and Douala) on the topics of Test and Start and Quality Improvement Methodology.	HTXS	\$145,000	18459	9. Quality Management
			Activity 1.2: PEPFAR/Cameroon will support MoPH to print and distribute PMTCT/option B+ M&E tools (including registers, monthly reporting forms and job aids) across the country including 6 non-PEPFAR regions in order to ensure availability of standardized tools across the country.	HTXS	\$65,340	17336	9. Quality Management
			Activity 1.3: TA through supportive supervision will be provided by ICAP and will include 16 5-day supportive supervision visits on PMTCT/ART tools completion in the PEPFAR regions. Participants will include District trained staff, data managers from the regional delegation of the Public Health office, M&E staff from the DFH/MOPH	HTXS	\$29,040	17336	9. Quality Management
			Activity 1.4: PEPFAR will support the national program to develop, produce and disseminate national guidelines on quality management and also infection control and implement an infection control plan which will contribute in setting standards and reduce hospital infection during service delivery.	HVTB	\$150,672	18062	

⁸ Most HCW training and coverage and retention activities training are within the UEs, therefore less training is proposed in SBOR.

<p>2. Insufficient capacity of health and community based systems to support uptake, linkage and retention</p>	<p>1. 100% linkage to care and treatment; and < 20% loss to follow-up in priority health districts.</p> <p>2. Availability of standardized tools for cohort monitoring (Adults; adolescent; pediatric; mother-baby pair) at national level.</p>	<p>1. Implementation of test and start at 45 health facilities in PEPFAR scale-up sites.</p> <p>2. Cohort monitoring tools developed and adopted by GRC</p>	<p>Activity 2.1: Provide extended advisory support for both PEPFAR and Global Fund-financed partners to strengthen their capacity to ensure program oversight meets international best practice standards for key population guidance, quality monitoring, and oversight.</p>	<p>OHSS</p>	<p>\$50,000</p>	<p>18049</p>	<p>9. Quality Management</p>
<p>3. Weak strategic information management</p>	<p>1. 75% increase in data collection, reporting and dissemination</p>	<p>1. National DHIS User Guide developed, printed and made available in 189 health districts</p> <p>2. Availability of NACC Annual Report</p> <p>3. IRB Approval of HIV SABERS</p> <p>4. At least four NACC quarterly reports provide evidence on assessments performed and</p>	<p>Activity 3.1: PEPFAR/Cameroon will work with two partners, NACC and Columbia University's ICAP program to strengthen implementation of SQA/DQA across the country. NACC is responsible for supervising implementation of SQA/DQA activities in six non-PEPFAR regions.</p> <p>Activity 3.2: Similar to activity 3.1, ICAP will conduct quarterly regional DQA activities in collaboration with NACC SI Unit in the four PEPFAR regions.</p> <p>Activity 3.3: NACC will coordinate Monitoring and Evaluation technical working group meetings focused on addressing critical issues related to data collection on treatment and care; and developing guidance for nationwide implementation. PEPFAR funds will support technical</p>	<p>HTXS</p>	<p>\$45,000</p>	<p>18062</p>	<p>9. Quality Management</p>
				<p>HTXS</p>	<p>\$33,880</p>	<p>17336</p>	<p>9. Quality Management</p>
				<p>PDTX</p>	<p>\$7,308</p>	<p>18062</p>	

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mitigation plans.	working group meetings and also production and dissemination of the HIV/AIDS annual report for NACC to all regions.				
	Activity 3.4: NACC will coordinate nationwide implementation of DHIS2 while also making sure non-PEPFAR regions report their data via DHIS2 in order to have the same data quality standard across the country. DHIS2 review meetings will ensure gaps are identified and actions to remediate or mitigate errors addressed.	HTXS	\$100,000	18062	9. Quality Management
	Activity 3.5: PEPFAR/Cameroon will support NACC to ensure overall coordination of all data quality and reporting across the country for HIV/AIDS-related indicators. This includes performing supportive supervision for ART and Option B+ sites in six non-PEPFAR regions.	HTXS	\$37,500	18062	9. Quality Management
	Activity 3.6: In order to improve on coordination and also the ability to collect and analyze real-time data, PEPFAR funds will also support internet connectivity at NACC and its 10 Regional offices. Internet access will facilitate reporting including shortening lead time for dissemination of reports site level reports.	HTXS	\$89,178	18062	9. Quality Management
	Activity 3.7: In order to assure data security, PEPFAR/Cameroon will support NACC to recruit an IT/Data Manager to strengthen site level capacity in record keeping.	HTXS	\$15,300	18062	9. Quality Management
	Activity 3.8: In COP 2016,	HTXS	\$46,706	17336	9. Quality

	PEPFAR/Cameroon, through ICAP, will support trainings in all 189 health districts in Cameroon.				Management
	Activity 3.9: ICAP will support NACC in implementation of DHIS2 through procurement of equipment (desktop, uninterrupted power supply, surge protector strip, printer, toner, cartridge and external hard-drive) for ten regional NACC offices. Estimated cost per package is \$3,451 based on previous ICAP purchase.	HTXS	\$33,880	17336	9. Quality Management
	Activity 3.10: ICAP will also support procurement of 16 solar electricity devices for 16 health districts locates in non-PEPFAR regions which do not have any access to electricity.	HTXS	\$58,080	17336	9. Quality Management
	Activity 3.11: ICAP will support the printing of and distribution of 500 DHIS user guides to each of the 189 districts and 35 regional and central hospitals. Unit costs per user guide have been estimated at \$20.	HTXS	\$7,260	17336	9. Quality Management
	Activity 3.12: ICAP will pilot an Electronic Medical Record (EMR) – Openmrs or DHIS2 – system in scale-up districts.. In addition, the following will be purchased: 45 desktop computers and other accessories for the scale-up sites in the two scale-up districts (Deido and Djoungolo). Engagement with other partners will also be key for success.	HTXS	\$287,200	17336	9. Quality Management
	Activity 3.13: In addition to equipment procurement, ICAP will also support internet connectivity at 189 health districts (\$50 per month for 12 months for 189 health districts, 13 regional staff).	HTXS	\$103,092	17336	9. Quality Management
	Activity 3.14: Key activities in FY 2017 will include development and IRB approval of protocol for military prevalence study and other activities related to preparing for implementation of the study in FY 2018.	HVSI	\$106,483	17365	9. Quality Management
	Activity 3.15:PEPFAR/Cameroon will support NACC to meet its supportive	HLAB	\$25,000	18062	9. Quality Management

			supervision responsibilities including supporting site visits to newly-created HIV/AIDS treatment and care sites to monitor service and data quality				
			Activity 3.16: PEPFAR/Cameroon will support trainings of data clerks on the use of data collection tools and its management will contribute in strengthening the capacity of the M&E system to generate quality strategic information on TB/HIV treatment and care and option B+ for decision making.	HVTB	\$25,632	18062	9. Quality Management
TOTAL					\$1,274,396		

Table 6.1.2 Key Programmatic Gap #2: Weak Procurement and Supply Chain Management of HIV/AIDS-related commodities (1st, 2nd, and 3rd gos)

Key Systems Barrier	Outcomes expected after 3 years of investment	Year 1 Benchmark	Proposed COP/ROP 16	Budget Code (s)	Activity Budget Amount	Associated Implementing Mechanism ID	Relevant SID Element and Score (if applicable)
1. Insufficient warehouse and inventory level optimization	<ol style="list-style-type: none"> 100% (4) PEPFAR-supported regional medical stores maintain appropriate min-max levels 70% of the time for annual reporting periods. Storage capacity at 100% (4) regional warehouses capable of maintaining 3-6 months of stock in order to meet new test and treat requirements (e.g. 3 	<ol style="list-style-type: none"> During quarterly visits (4) in year 1, 100% of stock records at regional stores and 80% of stock records at health facilities correspond with physical counts for a set of indicator drugs in regional medical stores. Government issues official circular authorizing health facilities to dispense 	Activity 1.1: Develop procedures and tools for regional supply plans and monitor performance; and improve regional management of medicines including quantification of HIV/AIDS-related commodities.	OHSS	\$402,622	18195	8. Commodity Security and Supply Chain

	<p>month client refills).</p> <p>3. <10% of PEPFAR-funded health facilities report stock-out of HIV/AIDS commodities each quarter.</p> <p>4. All PEPFAR-funded health facilities maintain appropriate min-max levels 70% of the time.</p> <p>5. 50% of pharmacy attendants at PEPFAR-funded health facilities have revised job descriptions according to new regulations.</p> <p>6. 50% of pharmacy attendants at PEPFAR-funded health facilities have received training on good dispensing practices.</p> <p>7. 100% of HIV regional coordinators, health district medical officers, and pharmacy managers in PEPFAR-supported health facilities are trained in management of pharmaceutical commodities</p>	<p>3-month refills.</p> <p>3. Minor infrastructure upgrades to storage spaces at regional warehouses and health facilities completed.</p> <p>4. Revised guidelines on management (including dispensing procedures) of HIV/AIDS commodities developed.</p> <p>5. -appointment management tools developed.</p>	<p>Activity 1.2: Optimize and rationalize storage spaces available for the HIV program at central and regional warehouses and streamline warehouse space in order to optimize in- and outflows of drugs.</p>	<p>Activity 1.3: Develop national regulations for appointment, training, ongoing coaching, and retention of pharmacy attendants including specific considerations for HIV and other disease-specific programs.</p>	OHSS	\$100,000	18195	8. Commodity Security and Supply Chain	8. Commodity Security and Supply Chain
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<p>2. Insufficient institutional capacity to use HIV pharmacy information for decision making (fragmentation between logistics and program strategic information, tools, and reports)</p>	<p>1. By September 2017, there is an agreed and costed plan to integrate logistics strategic information in national HIV/AIDS M&E Plan.</p>	<p>1. By September 2017, there is an agreed and costed plan to integrate logistics strategic information in national HIV/AIDS M&E Plan.</p>	<p>Activity 2.1: Conduct a feasibility study to create interfaces between DHIS/OSPSIDA in order to improve data migration and optimization of IT tools and participate in GRC-donor initiative to automatize Logistics Management Information System.</p>	<p>OHSS</p>	<p>\$65,000</p>	<p>18195</p>	<p>8. Commodity Security and Supply Chain</p>
	<p>2. OSPSIDA is fully operational and dashboards accessible to all national and international partners.</p>	<p>2. OSPSIDA is fully operational and dashboards accessible to all national and international partners.</p>	<p>Activity 2.2: Support civil society organizations to collect key supply chain performance indicators on a monthly basis</p>	<p>OHSS</p>	<p>\$38,000</p>	<p>18195</p>	<p>8. Commodity Security and Supply Chain</p>
	<p>3. At least 3 key staff in NACC are skilled to interpret national pharmaceutical data, information and indicators from adopted reporting system and tools.</p>	<p>3. By September 2017, there is a comprehensive annual Commodity Security and Supply Plan to inform investment in supply chain.</p>	<p>Activity 2.3: Support GRC to include key pharmaceutical management indicators in routine program management.</p>	<p>OHSS</p>	<p>\$13,692</p>	<p>18195</p>	<p>8. Commodity Security and Supply Chain</p>
	<p>4. Quarterly stock monitoring reviews are conducted using reports from 100% of regional stores and from 50% of health facilities.</p>	<p>4. By end of year 1, availability of complete monthly reports per region submitted to OPSIDA or</p>					

<p>5. By September 2017, there is a comprehensive annual Commodity Security and Supply Plan to inform investment in supply chain.</p> <p>6. 90% of regional, district, and health facility staff use pharmaceutical information reported through the reporting system for decision making (approval of orders, maintenance of adequate stock levels, early detection of problems, etc.).</p>	<p>existing LMIS system for the past six months.</p>	<p>Activity 2.4: Develop an annual Commodity Security and Supply Plan based on targets, objectives and M&E plan.</p>	OHSS	\$137,082	18195	8. Commodity Security and Supply Chain
		<p>Activity 2.5: Develop guidelines for condom and lubricant importation and quality assurance.</p>	OHSS	\$50,000	18195	8. Commodity Security and Supply Chain
		<p>Activity 2.6: Develop a stock monitoring tool for lab commodities to be used at warehouse and facility level that can assist to accurately track utilization and stock levels of reagents, and inform procurement and distribution decision making.</p>	OHSS	\$113,000	18195	8. Commodity Security and Supply Chain

			Activity 2.7: Conduct regional and/or district quarterly feedback meetings involving health facilities (ART managers), local health authorities, and regional warehouses to review supervision indicators and build management skills to improve oversight performance of HIV commodities management.	OHSS	\$173,272	18195	8. Commodity Security and Supply Chain
			Activity 2.8: Developing tablet-based supervision tools to automatize supervision scores and information gathering; conduct joint supervision with district and/or regional NACC coordinators; and review reports submitted by health facilities to customize supervision and onsite technical assistance during visits; monitor health facility stocks of ARVs, RTKs, condoms, CTX, lab reagents; and liaise with Regional Medical Stores when required to avoid stock outs.	OHSS	\$338,651	18195	8. Commodity Security and Supply Chain

			Activity 2.9: Develop a joint plan with the NACC regional coordinator, the Regional Medical Stores and District Medical Officers to progressively graduate good performing health facilities, and transfer pharmacy supervision responsibilities to the government.	OHSS	\$40,934	18195	8. Commodity Security and Supply Chain
			Activity 2.10: Support NACC to develop a national training curriculum, job descriptions and coaching plan for all HIV Regional Supply Chain Advisers; including technical meeting reviews to discuss consistency and harmonization of approaches across regions and to share strategic logistics information.	OHSS	\$124,950	18195	8. Commodity Security and Supply Chain
	3. Poor governance of pharmaceutical and lab management sector at all levels	<ol style="list-style-type: none"> 1. Revised guidelines on management (including dispensing procedures) of HIV/AIDS commodities developed. 2. Patients-appointment management tools developed. 	Activity 3.1: Implementation of complementary distribution and dispensing strategies including standard distribution through the public sector, distribution through the private sector and community base distribution.	OHSS	\$30,000	18195	8. Commodity Security and Supply Chain

			Activity 3.2: Develop dispensing procedures and patients-appointment management tools for pharmacy attendants and pharmacists in the public, community and private sectors, to allow multiple-months' supply of ARVs and CTX, as per PEPFAR guidelines come July 2016.	OHSS	\$57,495	18195	8. Commodity Security and Supply Chain
			Activity 3.3: TA to NACC to troubleshoot supply chain management challenges, prepare supply chain procurement and distribution plan, and as need be, respond to Global Fund conditions precedent to disbursement of funds for procurement of commodities.	OHSS	\$72,710	18195	8. Commodity Security and Supply Chain
TOTAL					\$1,850,969		

Table 6.1.3 Key Programmatic Gap #3: Weak laboratory Quality management systems (1st, 2nd, and 3rd 90s)

Key Systems Barrier	Outcomes expected after 3 years of Investment	Year 1 Benchmark	Proposed COP/ROP16	Budget Code(s)	Activity Budget Amount	Associated Implementing Mechanism ID	Relevant SID Element and Score (if applicable)
1. Weak Laboratory Governance within the health structure	<ol style="list-style-type: none"> National Laboratory polices and strategic Plan are developed, adopted and implemented. An operational National Public Health Laboratory with an EQA coordination center. 	<ol style="list-style-type: none"> National Laboratory polices and strategic Plan are developed, adopted and implemented. EQA coordination center set-up. Laboratory Technical Working Group established and functioning. 	Activity 1.1: ASLM will provide technical assistance to create and operationalize a Laboratory Technical Working Group that will guide finalization of laboratory policies and strategic plan which are essential tools for standardizing quality practices.	HLAB	\$17,250	14118	10.Laboratory
5. No accredited laboratories (i.e. labs that meet international standard for quality) in tiered system	<ol style="list-style-type: none"> Laboratory staff in all labs within scale-up districts trained on quality management system. 100% of laboratories in PEPFAR supported districts enrolled in continuous quality improvement programs (e.g. Proficiency 	<ol style="list-style-type: none"> Lab staff in all facilities at scale-up districts trained in QMS. 44 labs (representing labs in all facilities in scale up districts) enrolled in continuous quality improvement programs. 10 facilities in scale-up districts (22%) engaged in site certification for quality testing. Revised training curriculum for lab staff developed, adopted, and 	Activity 2.1-(1):) GHSS will roll out External Quality Assessment (EQA) programs for HIV , EID,TB, Viral load and CD4 testing in all priority districts and Hot spots for Key populations. This will reduce the potential for result misclassification due to Inappropriate use and misinterpretation of rapid test results 2.1-(2) GHSS will support embedded laboratory mentorship and implementation of Continuous Quality Improvement Systems (CQI) to increase coverage and enhance sustainability of quality laboratory diagnosis for optimum patient care.	HTXS	\$350,000	13799	10.Laboratory

	<p>testing).</p> <p>3. Revised lab staff training curriculum including QMS processes implemented (i.e. all lab staff receive pre-service training on QMS).</p> <p>4. At least 2 accredited labs in tiered system supporting patient testing and monitoring.</p>	<p>made available to schools.</p>	<p>Activity 2.2-(1): GHSS will support roll out of the Rapid Test Quality Improvement Initiative (RT-QII) to all sites within all scale-up districts as well as in sustained districts where key and priority populations are located.</p> <p>2.2-(2): Implement Logbooks in all testing sites to capture testing data and monitor competence of laboratory staff as well as adherence to testing policies and guidelines</p> <p>2.2-(3) Train Q-Corps and roll-out Rapid Test Quality Improvement Initiative (RT-QII)</p> <p>2.2-(4):I conduct site supervision and corrective actions</p> <p>2.2-(5) Support certification of laboratories and lab staff engaged in HIV testing</p>	<p>HTXS</p>	<p>\$300,000</p>	<p>13799</p>	<p>10.Laboratory</p>
			<p>Activity 2.3: GHSS will support implementation and roll out of Basic Laboratory Information System (BLIS) and train designated laboratory personnel on its use and management. This activity will also provide technical assistance for direct linkage of the lab to the clinician</p>	<p>HVSI</p>	<p>\$60,000</p>	<p>13799</p>	<p>10.Laboratory</p>

			Activity 2.4: ASLM will support implementation of the revised pre-service training curriculum as well as purchase of laboratory equipment to support practicum activities in accordance with the objectives of the revised curriculum	HLAB	\$15,000	14118	10.Laboratory
			Activity 2.5: Another strategy to improve laboratory workforce and certification is to in-service trainings on quality diagnosis for all lab staff in treatment and care sites (including test and start and option B+ sites) ASLM will train faculty from 4 Laboratory Training Institutions and support certification of their training laboratories in accordance with International standards	HLAB	\$10,500	14118	10.Laboratory
			Activity 2.6: In order to meet the international standards, PEPFAR/Cameroon will support on-going curriculum revision and development and dissemination of new pedagogic tools and training guidelines	HLAB	\$32,250	14118	10.Laboratory

<p>6. Poor lab infrastructure</p>	<ol style="list-style-type: none"> 1. All trained laboratory staff are implementing biosafety standards in priority sites. 2. Increase in number of trained biomedical engineers from 21 to 50. 3. Laboratory equipment for EID and viral load testing standardized. 4. Institutionalized sample referral system as part of national lab network. 	<ol style="list-style-type: none"> 1. National sample transport system for EID, VL, and proficiency panels (for all PEPFAR supported health districts) developed. 2. All EID reference labs enrolled in EQA for EID testing. 	<p>Activity 3.1: Inadequate sample collection, storage and transportation is a major barrier for provision of quality testing. GHSS will provide training on quality assured sample collection to strengthen uptake of viral load and EID testing, and reduce TAT for returning EID and viral load results nationally.</p> <p>3.1-(2) GHSS will also support establishment of a sample transport system for EID, Viral load and Proficiency panels to cover all PEPFAR supported districts. . Training in this area will also strengthen the lab workforce and improve efficiency in service delivery to meet the increasing demand for quality service provision.</p>	<p>PDTX /HTXS</p>	<p>\$415,000</p>	<p>13799</p>	<p>10.Laboratory</p>
<p>TOTAL</p>					<p>\$1,275,440</p>		

6.2 Critical Systems Investments for Achieving Priority Policies

Test and START

In 2016, Cameroon has moved toward adopting Test and START for the general population. An addendum to ART guidelines outlining MoPH policy and also extending “test and start” to all populations is to be finalized and a national launch to inform all stakeholders about the Test and START strategy, including the new and revised ART guidelines and the new modalities of patient monitoring, is being planned for Q2 2016. There is a need to support the government in developing standards, policies and guidelines related to implementation of differentiated models of care focused on facilitating initiation, easier access to ART, retention, and reduced burden on facilities. Key policy areas to be addressed include developing a rollout plan to implement Test and START, developing SOPs on treatment and care, reducing number of clinic visits, reducing or eliminating patient service charges, dispensation of 3-months of ARVs, and transition from CD4 testing to viral load testing.

1. **Patient fees for HIV-related services.** Service charges for patients on ART currently include:
 - \$1.60 - \$3.33 Consultation fee
 - \$0.83 HTC (free for pregnant women, children <15, TB-HIV co-infection, and prisoners)
 - \$4 - \$8 for CD4 test (CD4 every semester and any other lab tests based on clinical condition)
 - \$2.5-\$3.3 for Creatinine once a year (for TDF-based regimen)
 - \$4.2-\$5 for Hemoglobin at least once a year (AZT-based regimen)
 - \$8.33 for VL (VL at 6 months after ART initiation and every 12 months)

The number of required lab tests and variable user fees applied for these tests undermines access, particularly for poor households.⁹ Evidence suggests that user fees for ART decrease adherence and treatment effectiveness, and undermine access for the poor, impacting the equity of ART programs.

2. **Therapeutic Committee approval for ART initiation.** A therapeutic committee meets to review medical files of pre-ART patients and make decisions on ART enrollment. This requires time for the committee to determine patient ART eligibility and delays the initiation of patients on ART, thereby increasing the number of patients lost to follow up. In collaboration with GRC, the role of ART Therapeutic Committees is being changed to a forum for mentorship, difficult cases, and complex patient issues rather than making decision on eligibility for ART.

⁹ NACC 2015 Acceleration Plan

- 3. Required labs for ART initiation and monitoring:** Pre-therapeutic workup tests consisting of a CD4 count, liver function tests, creatinine, FBC, and FBS are conducted to determine patient eligibility for ART initiation. This contributes to the long waiting time before initiating ART, increased cost and increased LTFU. Simplified and harmonized laboratory testing for ART initiation and monitoring have been agreed to with GRC and GF according to WHO recommendations. This will be rolled out with Test and START.

New Service Delivery Models

Adaptation of current service delivery models and introduction of innovative service delivery models to scale-up HIV treatment are in nascent stages. GRC is considering diversifying ARV distribution channels, including community ART dispensation; a number of health facilities are offering adolescent friendly services for therapeutic classes and support group activities; pediatric training centers of excellence are being established; and there is ongoing discussion on development of an integrated community-based system for TB/HIV/malaria programs. PEPFAR will focus on the following innovative strategies, or game changers: implementing Test and START, differentiated service models, drug pick up every three months, and use of the hub and spoke model for service provision in order to decongest hub sites and allow more clients to be served. PEPFAR is also exploring the use of PBF as a way of significantly reducing or eliminating user fees, which are a barrier to treatment and retention. Current barriers to delivering high quality HIV services to implement Test and Start in order to reach the 90-90-90 goals include:

- 1. Poor coverage of patients on ART and TB treatment and care:** In 2014 only 29.6% TB/HIV patients of patients were on ART, amongst whom only 6.6% were children under the age of 15 years; Some of the factors contributing to this poor coverage include stock outs of commodities, poor referral systems that lead to increased LTFU and delayed ART initiation, nascent PITC, financial barriers due to low purchasing power, poor communication, poor community and support group involvement, poor linkages, inefficient testing strategies with low yields, stigma, and absence of task shifting. HIV/TB co-infection remains a major cause of morbidity and mortality for people living with HIV. In 2014, HIV serology was offered to more than 86% of TB patients, with an HIV prevalence of 37% in all forms of TB. Despite the high proportion of TB patients tested for HIV, only 49% of TB cases were notified according to WHO targets. Service providers screen for TB during consultation or refills following the national TB algorithm, but there is not routine documentation. Strategies that will increase ART coverage and increase the number of TB cases through active case finding in index patients and PITC at all entry points to increase the yield are necessary.
- 2. Inadequate HIV services:** Out of the 189 health districts in Cameroon, only 107 (with 166 ART sites) have at least one HIV management unit, leaving a gap of 87 (46%) health districts with unmet needs. There is an unequal distribution within the 10 regions. With regards to

children, pediatric care is offered only in 143 sites covering 86% of the 166 ART sites, amongst which 56 sites provide care and treatment to less than 10 children per year. More than 75% of children on ART are found in 4 out of the 10 regions (Center, Littoral, North West and South West) covered by PEPFAR. Adolescent HIV services were offered in 41.7% of the HIV management units in 2014. This shows insufficient decentralization and adequately trained pediatric service providers. 84 new HIV management units were created in 2016 to enhance uptake of HIV services and increase coverage. PEPFAR will support the operationalization of these new units to increase coverage and enhance uptake of HIV services

- 3. Absence of an organized system in place to ensure linkages, adherence and retention of patients on ART:** In 2014 only 60.4% of patients were retained on treatment after 12 months; 40% of patients were non adherent to treatment and care; and the survival rate after 12 months in 2014 was 69%. These results show poor treatment outcomes for patients on ART due to poor adherence and retention to treatment and care explained by poor follow up of patient appointments, absence of community support systems and poor quality of patient monitoring.

Table 6.2.1 Test and Start

Key Systems Barrier	Outcomes expected after 3 years of investment	Year 1 Benchmark	Proposed COP/ROP16	Budget Code (s)	Activity Budget Amount	Associated Implementing Mechanism ID	Relevant SID Element and Score (if applicable)
1. Absence of policy document on Test and Start	Policy document developed and published	1. Policy Document on Test and Start Developed and Disseminated (available at least, in all 45 PEPFAR-funded health facilities)	Continuous engagement with the MoPH to translate discussions into policy, for the reduction of service fees and eliminate use of therapeutic committees for initiation of ART. ALL circular letters reducing patient fees and number of laboratory test before ART initiation will be disseminated to all care givers.	N/A	N/A	N/A	
2. Absence of updated guidelines and SOPs for Test and Start implementation	Addendum to guidelines, SOPs and Algorithms available for distribution	2. NACC Annual report shows 10% reduction in LTFU. 3. NACC Annual report shows 45% VL coverage 4. Therapeutic Committee Approval for ART Initiation eliminated	Update guidelines and SOPs National ART and HTC guidelines, Algorithms for Lab monitoring (VL/CD4). Re-Test HIV positives before initiating ART Workshop with HQ support to harmonize strategies on hub and spoke as well as test and start.	N/A	N/A	N/A	
3. Absence of implementation and M&E plan for Test and Start	Implementation /M&E plans available	5. Implementation of test and start at 45 health facilities in PEPFAR scale-up sites.	Develop implementation/M&E plans	N/A	N/A	N/A	
4. Patient Fees for HIV related Services	Patients do not pay for HIV/AIDS-related services. All patients tested positive immediately put on treatment. Lost to follow-up between testing and treatment is zeroed out. Viral Load testing fully implemented and scaled up		PEPFAR/Cameroon is currently in negotiation with GRC, WB, and other technical and financial partners to buy into an ongoing PBF scheme focused on reducing service charges incurred by HIV-positive patients. PEPFAR/Cameroon will use CDC/HOP funds in a PBF pilot. This initiative will determine its effectiveness in reducing HIV patient fees	N/A	N/A	N/A	

5. Therapeutic Committee Approval for ART initiation	Therapeutic Committee Approval for ART Initiation eliminated		GRC has taken a key decision to transform therapeutic committees to a forum for mentorship, to present difficult cases, and to manage complex patient issues	N/A	N/A	N/A	
6. Absence of community engagement	Develop community dispensation models		PEPFAR will support GRC to develop community dispensation models and promote NACC to do training nationwide as in the integrated community strategy	N/A	N/A	N/A	
TOTAL							

Table 6.2.2 New and efficient service delivery models

Key Systems Barrier	Outcomes expected after 3 years of investment	Year 1 Benchmark	Proposed COP/ROP16	Budget Code (s)	Activity Budget Amount	Associated Implementing Mechanism ID	Relevant SID Element and Score (if applicable)
1. Poor coverage of patients on ART and TB treatment and care	Increase coverage of adults and children on ART to about 80% by 2018	1. Implementation of test and start at 45 health facilities in PEPFAR scale-up sites.	Activity 1.1: PEPFAR/Cameroon will support counselors for Active case finding and linkage and to care and treatment and retention and improvement children’s care environment at the pediatric Centers of Excellence.	PDCS PDTX	\$97,500	16816	9. Quality Management
			Activity 1.2: PEPFAR/Cameroon will strengthen the capacity of services providers to implement active case finding for HIV/TB at various entry points in selected high volume treatment and care and option B+ (including test and start) health facilities including in the community.	HVT B	\$32,328	18062	7. Human Resources for Health
			Activity 1.3: Produce country-specific treatment literacy information (including “test and start” guidance) for PLHIV and KPs and disseminate to priority populations.	HBH C	\$50,000	18049	6. Service Delivery

2. Inadequate HIV services:	Increased the number of functional ART sites offering quality HIV / TB care and treatment to patients to about 189 by 2018	1. At least 48 staff from four district hospitals at PEPFAR-supported sites trained on pediatric HIV care and treatment.	Activity 2.1: PEPFAR/Cameroon will organize 20 two weeks didactic and practical training sessions on pediatric HIV care and treatment for groups of 12 individuals from four districts hospitals in the four PEPFAR supported regions. Furthermore PEPFAR/Cameroon will organize 8 two week didactic and practical training sessions on pediatric HIV care and treatment for groups of 12 individuals from districts hospitals in the six non-PEPFAR supported regions.	PDCS PDTX	\$315,000	16816	7. Human Resources for Health
		2. NACC hired a HIV/TB Care and Treatment Expert.					
		3. KP stigma index administered at ART sites	Activity 2.2: PEPFAR/Cameroon will improve on service delivery for HIV/TB, through the provision of cartridges for the X-pert machines which will rapidly enhance HIV/TB testing, facilitate patient follow-up and ensure positive cases are linked to treatment and care.	HVT B	\$75,440	18062	9. Quality Management
			Activity 2.3: PEPFAR/Cameroon will strengthen the integration of TB/HIV activities by supporting the recruitment of a Care and Treatment Expert at NACC. This individual will ensure effective integration and implementation of HIV/TB activities both at national and facility level and also ensure data entry and reporting for TB/HIV interventions.	HVT B	\$34,328	18062	7. Human Resources for Health
			Activity 2.4: Conduct research study among KP CSOs to estimate viral load for KPs and provide trainings and materials for government facilities to disaggregate cascade data to KPs, particularly for viral load.	OHS S	\$125,000	18049	9. Quality Management
			Activity 2.5: PEPFAR/Cameroon will support the national program to develop, produce and disseminate national guidelines on improving quality management and also guidelines on infection control and implement an infection control plan which will contribute in setting the standards and reduce hospital infection during service delivery. Quality management was	HVT B	\$150,672	18062	9. Quality Management
			Activity 2.6: Administration of the key populations (KP) stigma index at identified health facilities providing ARVs to KPs and provision of TA for trainings to health care workers for KP inclusive	HVO P	\$35,000	18049	7. 9. Quality Management

			and non-stigmatizing services.					
3. Absence of an organized system in place to ensure linkages, adherence and retention of patients on ART:	1. Increase to 80% the proportion of pregnant women, breastfeeding mothers and children retained in treat and care by 2018	1. Cohort monitoring tools developed and adopted by GRC. 2. National KP UIC developed.	Activity 3.1: Organize Post-natal services and implement Cohort monitoring to strengthen the linkage and retention of HIV positive pregnant & breastfeeding mothers to treatment & care and ensure HIV Exposed infants are Tested (EID, HTC) and children tested positive linked and retained in treatment and care. The HEI cohort monitoring will also enable us determine the outcome of children exposed to HIV after 18 months.	PDCS PDTX	\$150,000	16816	9. Quality Management	
			Activity 3.2: Develop unique identifier code (UIC) system for KP. Key activities will focus on linking UIC to national system, provision of quality control and monitoring tools, and establishing additional staff training or conducting ongoing audits to ensure compliance.	OHSS	\$100,000	18049	Quality Management	
TOTAL								

6.3 Proposed system investments outside of programmatic gaps and priority policies.

Table 6.3 Other Proposed Systems Investments								
Systems Category* (only complete for categories relevant to country context)	Activity	For each activity, indicate which of the following the activity addresses: 1) First 90; 2) Second 90; 3) Third 90; or 4) Sustained Epi Control. (Teams may select more than one.)	Outcomes expected after 3 years of investment	Year 1 Benchmark	Budget Amount	Budget Code(s)	Associated Implementing Mechanism ID	Relevant SID Element and Score (if applicable)
Inst & Org Development								
	PEPFAR will support NACC to effectively ensure coordination of the national HIV response through the	1) First 90; 2) Second 90; 3) Third 90; or 4) Sustained Epi Control.	Increased appropriation of the HIV/AIDS response and improved quality of reporting for policy making by 2018	Two national and regional coordination meetings occur and results	\$15,000	HVSI	18062	15. Planning and Coordination

	organization of National and Regional joint coordination meetings for the fight against HIV			disseminated.				
	PEFAR will support NACC to organize semestrial Coordination meetings for the Blood safety program and carryout Quarterly supportive supervision of blood safety activities while ensuring all patients testing positive in the blood banks are referred for treatment and care.	1) First 90; 2) Second 90; 3) Third 90; or 4) Sustained Epi Control.	Increased harmonization of blood safety practices in blood banks by 2018	Four quarter supervision visits conducted.	\$18,750	HMBL	18062	15. Planning and Coordination
	PEPFAR will provide support to NACC and the TB programs to effectively manage and coordinate the national program	1) First 90; 2) Second 90; 3) Third 90; or 4) Sustained Epi Control.	Improved Coordination and monitoring of the HIV Program by 2018	Full-time staff at both national HIV/AIDS and TB programs focused on strengthening management of joint HIV/AIDS and TB programs.	\$150,467	HVMS	18062	15. Planning and Coordination
Strategic Information								
	Activity 3.13: PEPFAR/Cameroon will support management and operations costs to assure effective program management by ICAP. .	1) First 90; 2) Second 90; 3) Third 90; or 4) Sustained Epi Control.	Improved Coordination and monitoring of the HIV Program by 2018	N/A	\$340,581	HTXS	17336	15. Planning and Coordination

TOTAL					\$524,798		

*Reference Appendix C for a list of activity types that fit in each category.

7.0 Staffing Plan

The PEPFAR/Cameroon team conducted an extensive staffing analysis to improve programmatic alignment of staff to facilitate and sustain HIV epidemic control, and successfully implement the new programmatic pivot and PEPFAR business model, which began in COP 2015. Core activities requiring increased focus of staff time and skill set include:

- Strategic information (SI) for data driven decision making;
- Test and START, with a particular focus on adult men, pediatric patients and TB clients;
- Improved detection, linkages and retention, particularly in key and priority populations;
- Achievement of the 90:90:90 goals from testing through VL suppression with adequate above-site investments in laboratory and supply chain management systems;
- Strengthen external consultation and community strengthening;
- Completing SIMS visits in a timely manner; and
- Improving costing projections and tracking expenditures for better resource projections.

Following are the results of the above-mentioned exercise:

1. Overall staffing situation: The total number of staff on record increased from 43 to 45. One Peace Corps position was eliminated (Staffing ID 39779). One new interim Global Fund Liaison (two-year OGAC centrally funded position), and four existing State Department positions (Chief of Mission, Deputy Chief of Mission, Small Grants Officer and Public Affairs Officer) were added to better reflect PEPFAR-related level-of-effort. Of the 45 recorded positions, 38 are fully funded by PEPFAR, one is partially funded by PEPFAR, one is centrally funded by OGAC, and four are funded by State Department.
2. Vacancy positions: There are currently 11 vacancies, of which 3 are proposed repurposed positions that, if approved, will begin recruitment in FY2017. 6 have been vacant only in COP 2015 and are currently in various stages of position classification/recruitment, and 2 (CDC Senior HIV/AIDS Technical Advisor and USAID Care and Treatment Public Health Specialist with a focus on key populations) have been vacant for over one year due to hiring challenges but are now in interview/offer stages. The remaining 3 positions are pending COP 2016 approval to be repurposed. The 11 vacancies have put a strain on current staff and their ability to effectively carry out the new business model/pivot and the many competing data calls. PEPFAR/Cameroon is optimistic that if 60-70% of these positions can be filled by the end of calendar year 2017, workload balance will greatly improve.
3. New positions: PEPFAR/Cameroon is not requesting for any new positions.
4. Other positions: To reduce costs and improve efficiencies, additional staff position changes include one CDC Laboratory Technician repurposed to an M&E Specialist position; and one CDC Fellow repurposed to a Cooperative Agreement Program Management Specialist position.
5. Distribution of technical staff: Overall, distribution of staff along technical categories aligns with the pivot and new business model. Approximately 75% FTE falls under technical

leadership and programmatic oversight (17 serve as subject matter experts with less than 50% FTE along one or several budget codes). PEPFAR/Cameroon also acknowledges that only 1 FTE program budget specialist is insufficient and will consider further repurposing of positions to hire health economist(s) to support the interagency team to improve systems in capturing financial and programmatic data, including aligning investments with the pivot across the board.

6. Future plans: PEPFAR/Cameroon acknowledges that more can be done on staffing to further improve current alignment. With OGAC support, an interagency team will visit Cameroon in summer to carry out a “Staffing for Results” exercise and a review of current position descriptions by agency to accurately reflect recommendations for both exercises mentioned.

Major changes to CODB:

The PEPFAR/Cameroon CODB budget has decreased from \$6,953,225 in COP 2016 to \$6,832,259 in COP 2017 indicating a 2% reduction. The difference of \$120,966 was due mainly to savings from one eliminated position and the conversion of international contractor positions to locally engaged staff levels. The largest shifts within agency level budgets are as follows:

- HHS: Increased travel cost for SIMS and replacement of institutional contractors with two LES positions;
- DOD: All M&O funds in COP16 are applied pipeline;
- Peace Corps has eliminated one position.

PEPFAR/Cameroon’s CODB is 18.8% of its total PEPFAR budget (down from 19.2% in COP 2015) which is higher than most countries. PEPFAR/Cameroon has explored ways to reduce the budget but any further cuts will result in negative programmatic outcomes including staff reductions, limited SIMS visits and limited travel for programmatic field support essential training.

APPENDIX A

Table A.1 Program Core, Near-core, and Non-core Activities for COP 15

Level of Implementation	Core Activities	Near-core Activities	Non-core Activities
Site level	<ul style="list-style-type: none"> • Clinical and lab monitoring (Viral load) • Provision of comprehensive community- based services (psychosocial counseling, nutritional education, management of mental health disorders, etc.) for HIV-positive clients • Adherence and retention of ART patients • Identification of HIV-positive clients and provision of ART in TB treatment and ANC settings 	<ul style="list-style-type: none"> • Nutritional assessment and counseling • Procurement and distribution of HIV rapid test kits, lab reagents, condoms, and lubricant • Integrated behavioral change communication • Family planning and HIV/AIDS integration 	<ul style="list-style-type: none"> • General food distribution • TB treatment • PMTCT Option A • Standalone mass media education and life skills • Implementation of

<ul style="list-style-type: none"> • TB screening and prevention • Early identification of children for HIV treatment, including EID • Focus on pediatric and adolescent HIV treatment initiation and retention • Adherence and retention of ART patients • Clinical and lab monitoring (Viral load) • Linkage to community-based support groups • Ensure appropriate dispensation of cotrimoxazole for children • TB screening and prevention • Scale up PMTCT Option B+ in MCH settings and linkage to ART treatment programs • Targeted HIV CoPT interventions reaching key and priority populations including AGYW, and linkage to ART treatment programs • Medical and psychosocial support to KP victims of GBV • Support community-facility linkages and systems to ensure timely access to services in ARV treatment and adherence, care and support, and PMTCT (including KP drop-in centers) • • OVC nutritional support. • OVC household economic strengthening activities. • TA to KP drop-in centers for OVC service delivery. • HIV prevention, life skills and ASRH education for OVC programming. • Activities focused on preventing and responding to violence against children. • Early Childhood Development. • Education support. • Community Case management. • Community-clinical linkages. • QA/QC and continuous QI (SLIPTA, SLMTA, PT, EQA, RT-Corps) • Biosafety • EID sample and result transportation system • CD4 and viral load monitoring • Linkage of HIV-positive identified blood donors to care, treatment and support • Forecasting, supply planning and procurement to support and ensure uninterrupted availability of ARVs, rapid test kits, and other HIV-related commodities • In-service training, mentorship and supportive supervision of biosafety infection control • In-service training, mentorship and supportive supervision of Option B+ and care, treatment and support, including Community Health Workers • Routine SIMS visits to ART and PMTCT program • Develop dispensing procedures and patients-appointment management tools for pharmacy attendants and pharmacists in the public, community and private sectors, to allow multiple-months' supply of ARVs and CTX. 	<ul style="list-style-type: none"> • Implementation of sexual and gender-based violence security plan of action for key population service providers • Research studies (IBBS for KP, PMTCT effectiveness studies) • TA to CBOs providing services to OVC. • Support civil society organizations to collect key supply chain performance indicators, including entering data in OSPSIDA. • Training to providers on KP-appropriate/KP-friendly services • 	<p>electronic dispensing tool at six high-volume health facilities</p>
<p>Sub-national level</p> <ul style="list-style-type: none"> • Early Childhood Development 	<ul style="list-style-type: none"> • Develop and implement regional HIV/AIDS commodities supply plans. • Optimize and rationalize storage spaces available for HIV commodities. 	<ul style="list-style-type: none"> • Supporting NACC to organize quarterly logistics data review meetings at national

	<ul style="list-style-type: none"> • Develop national regulations for appointment, training, ongoing coaching, and retention of pharmacy attendants • Build capacity of regional, district and health facility key staff to supervise pharmaceutical services in ART sites and jointly supervise pharmaceutical services in ART priority sites at least quarterly. • Develop a joint plan with the NACC regional coordinator, the Regional Medical Stores and District Medical Officers to progressively graduate good performing health facilities, and transfer pharmacy supervision responsibilities to the government. • Conduct regional and/or district quarterly feedback meetings to review supervision indicators and build management skills to improve oversight performance of HIV commodities management. 	<ul style="list-style-type: none"> • and regional level • Early Childhood Development •
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National level	<ul style="list-style-type: none"> • Procurement and distribution of HIV/AIDS-related commodities (ARV, cotrimoxazole, and viral load reagents, condoms, lubricant) • • Early Childhood Development • Review and implementation of complementary distribution and dispensing strategies for ARVs. • Develop dispensing procedures and patients-appointment management tools for multiple-months' supply of ARVs • 	<ul style="list-style-type: none"> • Optimize and rationalize storage spaces available for the HIV program at CENAME and regional warehouses. • Develop national regulations for appointment, training, ongoing coaching, and retention of pharmacy attendants. • Conduct feasibility study to create interfaces between DHIS/OSPSIDA in order to improve data migration and optimization of IT tools. • OVC MIS • TA for OVC workforce development plan • Support GRC to integrate key HIV commodity management performance indicators, including the strategy to collect and analyze the data in next version of national HIV/AIDS Plan. • Feasibility study to create interfaces between DHIS/OSPSIDA in order to improve data migration and optimization of IT tools. • Develop annual Commodity Security and Supply Plan based on targets, objectives and M&E plan. • Support GRC to integrate key HIV commodity management performance indicators, including the strategy to collect and analyze the data in next version of national HIV/AIDS Plan. • Develop guidelines for condom and lubricant importation and quality assurance. • Develop a stock monitoring tool for lab commodities. • Develop a national training curriculum, job descriptions and coaching plan for all HIV Regional Supply Chain Advisers. 	<ul style="list-style-type: none"> • Renovation of NPHL • • Early Childhood Development • Review and implementation of complementary distribution and dispensing strategies for ARVs. • Develop dispensing procedures and patients-appointment management tools for multiple-months' supply of ARVs
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- TA to Global Fund Principal Recipient to troubleshooting supply chain management challenges, prepare supply chain procurement and distribution plan, and as need be, respond to conditions precedent to disbursement of funds for procurement of commodities.
 - KP policy and guidance, particularly test and start and STI diagnosis and treatment.
 - Unique identifier code (UIC) tracking system for KP CoPT activities
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Table A.2 Program Area Specific Core, Near-core, and Non-core Activities for COP 15

	Core Activities	Near-core Activities	Non-core Activities
Adult Care and Treatment	<ul style="list-style-type: none"> • Test and start strategy • Implementing WHO recommended lab test especially viral load scale up • Clinical and lab monitoring • Less frequent drug pick up (e.g. 3 monthly drug dispensation) • Communal medication pick up • Provision of comprehensive community- based services (psychosocial counseling, nutritional education, management of mental health disorders, etc.) for HIV-positive clients • Adherence and retention of ART patients using various strategies (community relay agents, text/phone messaging, home visits) • Procurement and distribution of HIV/AIDS-related commodities (ARV, co-trimoxazole, and viral load reagents, condoms, lubricant) • Identification of HIV-positive clients and provision of ART in TB treatment and ANC settings • TB screening and prevention • Peer support groups 	<ul style="list-style-type: none"> • Nutritional assessment and counseling 	<ul style="list-style-type: none"> • General food distribution • TB treatment
Pediatric Care and Treatment	<ul style="list-style-type: none"> • Innovative strategies for identifying infected children • Early identification of children for HIV treatment, including EID • Focus on pediatric and adolescent HIV treatment initiation and retention • Adherence and retention of ART patients • Clinical and lab monitoring (Viral load) • Linkage to community-based support groups • Ensure appropriate dispensation of co trimoxazole for children • TB screening and prevention • Strengthening tracking of mother-baby pairs via home and community-based support; conducting routine joint case reviews to ensure defaulter tracing, Implement comprehensive case management 	<ul style="list-style-type: none"> • Nutritional assessment and counseling 	<ul style="list-style-type: none"> • TB treatment
Prevention	<p>Core Activities</p> <ul style="list-style-type: none"> • Scale up PMTCT Option B+ in MCH settings including PITC and linkage to ART treatment programs • Working with CBOs , CHWs to ensure ANC and postnatal attendance to provide HTC and other PMTCT services • Targeted HIV prevention interventions reaching key and priority populations including AGYW, and linkage to ART treatment programs • Support community-facility linkages and systems to ensure timely access to services in ARV treatment and adherence, care and support, and PMTCT • Peer support groups e.g. mother to mother to be 	<p>Near-core Activities</p> <ul style="list-style-type: none"> • Procurement and distribution of HIV rapid test kits, lab reagents, condoms, and lubricant • Integrated behavioral change communication • Family planning and HIV/AIDS integration • Implementation of sexual and gender-based violence security plan of action for key population service providers • Research studies (IBBS for KP and long distance truck drivers, PMTCT effectiveness studies) 	<p>Non-core Activities</p> <ul style="list-style-type: none"> • PMTCT Option A • Standalone mass media education and life skills
OVC	<p>Core Activities</p> <ul style="list-style-type: none"> • Nutritional support including linkages to therapeutic and supplementary feeding for acutely and moderately malnourished children, etc. • Economic strengthening (Savings and Internal 	<p>Near-core Activities</p> <ul style="list-style-type: none"> • Strengthening OVC management information systems for improved data collection, reporting, and use. • Supporting Cameroonian government to 	<p>Non-core Activities</p>

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- Lending Communities).
 - Technical assistance to Key Population drop-in centers to provide a standardized package of OVC services to children of female sex workers.
 - Provision of HIV prevention, life skills, and ASRH education for children and youth, with a focus on AGYW.
 - Facilitating access to ASRH services for adolescents and young men and women.
 - Increase access to and uptake of HTC services (for both OVC and their caregivers).
 - Strengthening capacity of communities to prevent violence against children and respond to cases of abuse and sexual violence (including improved linkages with health care services, law enforcement, and women's empowerment centers).
 - Integrating Early Childhood Development (ECD) into PMTCT services as well as supporting ECD skills-building via home visits and/or SILC platforms
 - Providing temporary consumption support (e.g. school block grants or educational subsidies) in order to improve primary school completion and transition to secondary as well as reduce HIV risk, with a focus on girls 10-17.
 - Linkage to clinical services for HIV-positive and exposed children include: - establishing agreements with PEPFAR-funded ACT sites to facilitate payment for consultation and lab services for ART initiation and monitoring (in sites where test and start is not yet implemented); strengthening tracking of mother-baby pairs via home and community-based support; conducting routine joint case reviews to ensure defaulter tracing, barrier analysis/problem solving with families, and retention in care.
 - Implement comprehensive case management, including individual child and family needs assessment, referrals, holistic service delivery (counselling, water and sanitation, basic life skills, sound nutrition, education support, and disease prevention interventions), and monitoring of child and family status including transition from pediatric to adult treatment.
 - Strengthen collaboration among OVC, PMTCT, pediatric, and care and treatment partners to operationalize an integrated, bi-directional referral system that ensures delivery of HIV care as well as social services. The integrated bi-directional referral system will include: facility- and community-based OVC identification and targeting (e.g., family tracing of index cases, identification of loss-to-follow-up cases); Referral and counter-referral tracking including standardizing case management tools.
 - elaborate a comprehensive workforce development plan that addresses gaps in pre-service education, in-service training, and supervisory functions.
 - Building technical and organizational capacity of PEPFAR-funded community-based structures including families and caregivers as well as CBOs to provide high quality care and support services to OVC.
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**Health Systems
Strengthening**

- QA/QC and continuous QI (SLIPTA, SLMTA, PT, EQA, RT-Corps)
- Biosafety
- EID sample and result transportation system
- CD4 and viral load monitoring
- Linkage of HIV-positive identified blood donors to care, treatment and support
- Forecasting, supply planning and procurement to support and ensure uninterrupted availability of ARVs, rapid test kits, and other HIV-related commodities
- In-service training, mentorship and supportive supervision of biosafety infection control
- In-service training, mentorship and supportive supervision of Option B+ and care, treatment and support, including Community Health Workers
- Routine SIMS visits to ART and PMTCT program
- Develop dispensing procedures and patients-appointment management tools for pharmacy attendants and pharmacists in the public, community and private sectors, to allow multiple-months' supply of ARVs starting July 2016 and CTX.
- Technical assistance to GRC on National Public Health Lab (NPHL) system
- Procurement and distribution of equipment and commodities
- Blood safety
- Development and implementation of regional HIV/AIDS commodities supply plans.
- Optimize and rationalize storage spaces available for the HIV program at CENAME and regional warehouses.
- Develop national regulations for appointment, training, ongoing coaching, and retention of pharmacy attendants.
- Conduct feasibility study to create interfaces between DHIS/OSPSIDA in order to improve data migration and optimization of IT tools.
- Support civil society organizations to collect key supply chain performance indicators, including entering data in OSPSIDA.
- Support GRC to integrate key HIV commodity management performance indicators, including the strategy to collect and analyze the data in next version of national HIV/AIDS Plan.
- Develop annual Commodity Security and Supply Plan based on targets, objectives and M&E plan.
- Develop guidelines for condom and lubricant importation and quality assurance.
- Develop a stock monitoring tool for lab commodities.
- Conduct regional and/or district quarterly feedback meetings to review supervision indicators and build management skills to improve oversight performance of HIV commodities management.
- Build capacity of regional, district and health facility key staff to supervise pharmaceutical services in ART sites and jointly supervise pharmaceutical services in ART priority sites at least quarterly.
- Develop a joint plan with the NACC regional coordinator, the Regional Medical Stores and District Medical Officers to progressively graduate good performing health facilities, and transfer pharmacy supervision responsibilities to the government.
- Develop a national training curriculum, job descriptions and coaching plan for all HIV Regional Supply Chain Advisers.
- TA to Global Fund Principal Recipient to
- Renovation of NPHL
- Implementation of electronic dispensing tool at six high-volume health facilities
- Supporting NACC to organize quarterly logistics data review meetings at national and regional level

troubleshooting supply chain management challenges, prepare supply chain procurement and distribution plan, and as need be, respond to conditions precedent to disbursement of funds for procurement of commodities.

Table A.3 Transition Plans for Non-core Activities

Transitioning Activities	Type of Transition	Funding in COP 15	Estimated Funding in COP 16	# of IMs	Transition End date	Notes
PMTCT Option A	Programmatic	\$0	\$0	3	2015	All PMTCT option A activities for those sites out of PEPFAR scale-up. Within sustained districts, option B+ is not yet completely rolled out.
Standalone mass media and lifeskills	Programmatic	\$0	\$0	1	April 2015	Activities will be incorporated
General food distribution(<i>moving from general food distribution for economically vulnerable KP to provision of RUTF/RUSF to clinically malnourished KP PLHIV</i>)	Programmatic	\$0	\$0	1	April 2015	USAID in discussion on feasibility of mobilizing non-PEPFAR funds to support RUSF/RUTF provision.
TB treatment	Programmatic	\$0	\$0	3	2015	Activities will be supported by Global Fund
Renovation of the NPHL		\$0	\$0	1	2016	The national EQA program for lab and EID testing once the NPHL becomes operational in 2016.
Supporting NACC to organize quarterly logistics data review meetings at national and regional level	Programmatic				September 2016	Exploring option of Global Fund financing to support this activity.
KP package of services in Kribi, Bertoua health districts	Geographic shift	\$143,800	\$0	1	FY 2017	(Global Fund service providers to take on management of these sites)
Geographic shifts of OVC activities in health districts of Manoka, Santa, Cite Verte, New Bell, and Bonassama	Geographic shift	\$16,510	0	1	November 2016	Continue implementation of community-based savings and group approach, Savings and Internal Lending (SILC).
Transition out full package of capacity and supervision at 60 HIV treatment units located in centrally supported sites	Geographic shift					Supervision activities in centrally supported districts will be absorbed by the Global Fund if budget approved. In these health facilities top priority activities will be strategically identified and addressed during COP 15 to ensure smooth transition.
Development of national-level standardized approaches to address inability to achieve 80% coverage of KP targets at national level	Programmatic	\$986,000	0	1	FY 2017	Key activities will include development of national processes, tools, and standardized approaches for KP implementation (including GBV mitigation activities)
Totals						

APPENDIX B

B.1 Planned Spending in 2016

Table B.1.1 Total Funding Level		
Applied Pipeline	New Funding	Total Spend
\$US 6,387,709	\$US 34,822,291	\$US 41,210,000

Table B.1.2 Resource Allocation by PEPFAR Budget Code		
PEPFAR Budget Code	Budget Code Description	Amount Allocated
MTCT	Mother to Child Transmission	\$US 2,156,265
HVAB	Abstinence/Be Faithful Prevention	\$US 0
HVOP	Other Sexual Prevention	\$US 2,190,790
IDUP	Injecting and Non-Injecting Drug Use	\$US 0
HMBL	Blood Safety	\$US 38,272
HMIN	Injection Safety	\$US 0
CIRC	Male Circumcision	\$US 0
HVCT	Counseling and Testing	\$US 2,820,098
HBHC	Adult Care and Support	\$US 2,404,266
PDCS	Pediatric Care and Support	\$US 1,603,590
HKID	Orphans and Vulnerable Children	\$US 1,464,815
HTXS	Adult Treatment	\$US 13,475,276
HTXD	ARV Drugs	\$US 2,069,354
PDTX	Pediatric Treatment	\$US 4,324,852
HVTB	TB/HIV Care	\$US 417,640
HLAB	Lab	\$US 218,025
HVSI	Strategic Information	\$US 437,598
OHSS	Health Systems Strengthening	\$US 2,259,035
HVMS	Management and Operations	\$US 5,330,124

TOTAL

B.2 Resource Projections

PEPFAR unit expenditures (UE) from the most recent Expenditure Analysis (EA 2015) data and the PEPFAR Budget Allocation Calculator (PBAC) were used to calculate the required resources to support targets for HTC, care and treatment, PMTCT, priority and KP prevention, and OVC. Adjustments to

UEs were made to account for anticipated changes to the program in the coming implementation year due to changes to models/packages of service delivery and support.

HTC

Overall, there was a mismatch of expenditure and indicators for HTC by modality so only the HTC UE was utilized to determine the PITC, VCT and CBTC UEs.

- PITC: Through some IPs, PEPFAR initiated PITC as part of its facility-based care and treatment services (FBCTS) in COP 2015. With this limited data, the HTC UE of \$11.21 was applied for PITC for military FBCTS, while an adjusted PITC UE of \$8.97 was applied for civilian FBCTS in scale-up districts, using a weighted average PITC UE based on proportion of scale-up and sustained sites. In sustained districts, a lump sum amount of \$304,211 will be allocated for PITC technical assistance. This amount was derived by taking 10% of the Adult ART UE for sustained districts and attributed to the Implementing Partner who provides these services.
- VCT: PEPFAR has supported voluntary counseling and testing in the community through some IPs. In COP 2016, VCT will only be supported for key populations and will have the same package of services in both scale –up and sustained sites and districts. An adjusted VCT UE of \$30.01 was used after applying a weighted average using MSM and FSW targets. The same VCT UE will be used in sustained districts as the package of VCT services will be the same as in scale-up sites/districts.
- CBTC: PEPFAR has supported CBCT through the military and some IPs. In COP 2016, the HTC UE was applied and adjusted for a CBTC UE of \$11.21. The same CBTC UE will be used in sustained districts as the package of CBTC services will be the same as in scale-up sites/districts.

Care, Treatment, and Support

PEPFAR/Cameroon began supporting care and treatment services in April 2016, as such very little data is available in the 2015 EA for this expenditure category. Additionally, “Test and Start” will be rolled out in COP 2016, thus the Pre-ART cost categories for adults and pediatrics are no longer necessary.

- Adult/Peds on Treatment – No ARV (TX_CURR): PEPFAR initiated adult and pediatric HIV treatment as part of its facility-based care and treatment services (FBCTS) halfway into COP 2015. A combination of reporting errors on TX_CURR, limited data, and a low EA 2015 UE due to the early transition into FBCTS, resulted in the decision not to apply the FBCTS UEs. As such, the PMTCT (no ARV) UE was used as a proxy for Adult/Peds on Treatment because it had a similar package of services, with adjustments for packages of services in COP 2016 reflecting optimal service delivery, and “Test and Start”. A weighted average was then applied for scale-up districts to accommodate the proportion of scale-up and sustained sites in the scale-up district, resulting in a TX_CURR UE of \$243.33. For the sustained districts, the All-Age ART UE was used as a proxy for Adult/Peds on Treatment since it represents TA (Technical Assistance) activities for FBCTS with adjustment for packages of services reflecting optimal delivery, resulting in an applied UE of \$44.01. The military program will apply a UE of \$194.34 for their scale-up sites based on the EA 2015 results from their sole military IP, and the nine ACT hotspot districts will apply a UE of \$293.16 to accommodate the specialized services being offered at ACT locations. The packages of services reflected in the UEs mentioned above do not include TB/HIV (in both scale-up and sustained districts) nor viral load (in scale-up districts) as these are new services and are reflected as a lump sum until UEs can be confidently determined.
- CBCTS: PEPFAR supports community-based care and treatment activities through some IPs. In COP 2016, the CBCTS package will only support key populations in selected communities. The UE generated from the EA 2015 report was adjusted downwards to accommodate higher initial costs and high outliers as program was in start-up phase. Thus, an adjusted CBCTS UE of \$350.64 was applied. The same CBCTS UE will be used in sustained districts as the package of CBCTS services is the same because of the KP focus. The military population will apply a UE of \$173.60 for their CBCTS activities based on the EA 2015 results from their sole military IP.

PMTCT

- PMTCT: PEPFAR started in Cameroon as a PMTCT program so has the longest and most reliable associated UEs. As stated above, the PMTCT UEs were used as a proxy for adult/pediatric treatment. PEPFAR Cameroon used the EA 2015 Pregnant Women on Care PMTCT_ARV UE, then removed the cost of ARV and applied a weighted average UE for scale-up districts for scale-up and sustained sites to obtain an adjusted PMTCT_ARV UE of \$246.91. For sustained districts, the

PMTCT_ARV UE was adjusted downwards to \$61.91 to reflect a minimum package of services. The packages of services reflected in the UEs mentioned above do not include TB/HIV (in both scale-up and sustained districts) nor viral load (in scale-up districts) as these are new services and are reflected as a lump sum until UEs can be confidently determined. Regarding Pregnant Women Tested PMTCT_STAT, due to the same error stated above under the HTC section, the EA 2015 UE generated for PITC was utilized since PMTCT testing has the same package of services as PITC. A weighted average UE was then generated for scale-up districts for scale-up and sustained sites.

- Infants: PEPFAR Cameroon used the EA 2015 Infants Tested PMTCT_EID Numerator UE and applied a weighted average for scale-up districts for scale-up and sustained sites to obtain an adjusted PMTCT_EID UE of \$349.25. For sustained districts, the PMTCT_EID UE was adjusted downwards to \$26.08 to reflect a minimum package of services. Regarding Infants on Care TX_CURR, PEPFAR Cameroon used the EA 2015 UE and applied a weighted average UE for scale-up districts as they have a combination of both scale-up and sustained sites to obtain an adjusted TX-CURR UE of \$1,096.61. For sustained districts, the Infants on Care TX-CURR was adjusted downwards to \$272.68 to reflect reduced costs in training, equipment, program management, travel, SI, personnel, vehicles and construction. In the 9 ACT sites, the EA 2015 Infants on Care TX_CURR UE of \$1,302.60 was applied.

KP: FSW

PEPFAR Cameroon applied the EA 2015 KP_FSW UE of \$42.24 in both scale-up and sustained districts.

KP: MSM

PEPFAR Cameroon applied the EA 2015 KP_MSM UE of \$130.51 in both scale-up and sustained districts.

OVC

PEPFAR Cameroon applied the EA 2015 OVC_SERV UE of \$126.29 in both scale-up and sustained districts.