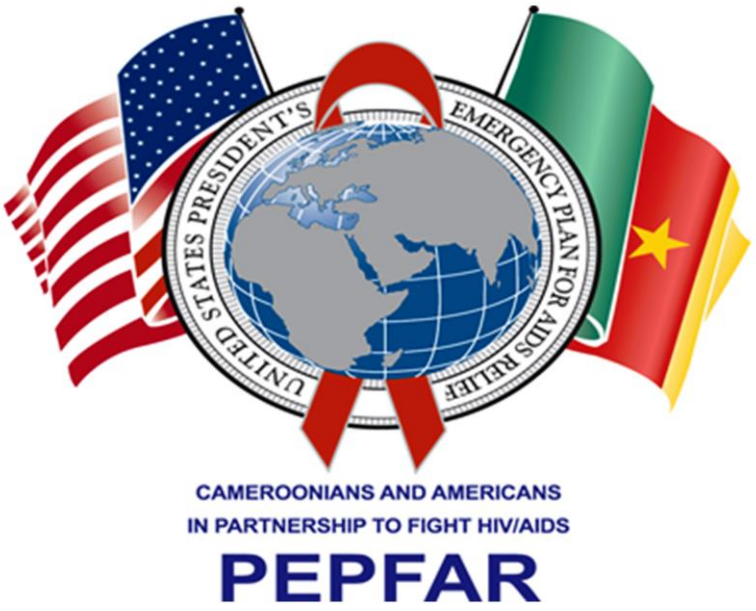


CAMEROON

Country Operational Plan

(COP) 2021

Strategic Direction Summary

May 10, 2021

Contents

***Military PSNU data are non-public**

A portion of PEPFAR data relates to foreign military sites, such as bases, barracks, or military hospitals. Data originating at these sites are aggregated to each respective OU's Military PSNU and are non-public. When developing graphics for the SDS, do not include the Military PSNU, which you can find in PSNU dropdowns in Panorama.

ACRONYMS

3PL	Third Party Logistics
AGYW	Adolescent Girls and Young Women
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
APR	Annual Performance Report
ARPA	American Rescue Plan Act
ART	Antiretroviral Therapy
ARV	Antiretroviral
CAD	Community ART Dispensation
CAMPHIA	Cameroon Population HIV Impact Assessment
CBA	Childbearing age
CBO	Community-Based Organization
CCM	Country Coordinating Mechanism
CDC	U.S. Centers for Disease Control and Prevention
CHW	Community Health Workers
CLHIV	Children Living with HIV
CODB	Cost of Doing Business
COP	Country Operational Plan
C19RM	COVID19 Response Mechanism
CSO	Civil Society Organization
DHIS2	District Health Information System
DHS	Demographic and Health Survey
DIC	Drop-in Center
DoD	Department of Defense
DQA	Data Quality Assessment
DREAMS	Determined, Resilient, Empowered, AIDS-Free, Mentored, and Safe initiative for young girls
DSD	Direct Service Delivery
DTC	Diagnosis and Treatment Centers
DTG	Dolutegravir
EA	Expenditure Analysis
ECD	Early Childhood Development
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
EID	Early Infant Diagnosis
EMR	Electronic Medical Record
FSW	Female Sex Workers
FY	Fiscal Year
GBV	Gender-Based Violence
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GSM	Granular Site Management
GRC	Government of the Republic of Cameroon
HBHC	Adult Care and Support (budget code)
HCW	Healthcare Workers
HEI	HIV-Exposed Infants
HIS	Health Information System

HIV	Human Immunodeficiency Virus
HKID	Orphans and Vulnerable Children (budget code)
HLAB	Laboratory Infrastructure (budget code)
HMBL	Blood Safety (budget code)
HSS	Health System Strengthening
HTC	HIV Testing and Counseling
HTS	HIV Testing Services
HTXD	ARV Drugs
HTXS	Adult Treatment (budget code)
HVCT	HIV Testing and Counseling (budget code)
HVMS	Management and Operations (budget code)
HVOP	Sexual Prevention – Other Sexual Prevention (budget code)
HVSI	Strategic Information (budget code)
HVTB	TB/HIV (budget code)
IBBS	Integrated Bio-Behavioral Survey
IDP	Internally Displaced Persons
IP	Implementing Partner
IPT	Isoniazid Preventive Therapy
KP	Key Population(s)
KPLHIV	Key Population (s) living with HIV
LCM	Linkage Case Management
LDTD	Long Distance Truck Drivers
LE	Locally-engaged
LPV/r	Lopinavir/ritonavir
LRA	Linkage and Retention Agent
LTFU	Lost to Follow-Up
LTWG	Laboratory Technical Working Group
M and E	Monitoring and Evaluation
MCH	Maternal and Child Health
MDR	Multi-Drug Resistance
MER	Monitoring, Evaluation, and Reporting
MMP	Multi-Month Prescription
MOH	Ministry of Health
MSM	Men who have Sex with Men
MTCT	Prevention of Mother to Child Transmission (budget code)
NACC	National AIDS Control Committee
NASA	National AIDS Spending Assessment
NFM	New Funding Model
NSP	National Strategic Plan
NTD	Neglected Tropical Disease
OGAC	Office of the Global AIDS Coordinator
OHSS	Health System Strengthening (budget code)
OVC	Orphans and Vulnerable Children
PBFW	Pregnant and Breastfeeding Women
PCR	Polymerase Chain Reaction
PDCS	Pediatric Care and Support (budget code)
PDTX	Pediatric Treatment (budget code)

PE	Peer Educator
PEPFAR	United States President's Emergency Plan for AIDS Relief
PITC	Provider-Initiated HIV Testing and Counseling
PL	Peer Leader
PLH	Parenting for Lifelong Health
PLHIV	People Living with HIV
PLH	Parenting for Lifelong Health
PMTCT	Prevention Mother to Child Transmission
PN	Peer Navigator
POART	PEPFAR Oversight Accountability and Review Team
PR	Principal Recipient
PrEP	Pre-Exposure Prophylaxis
PT	Proficiency Testing
PWID	People Who Inject Drugs
QA	Quality Assurance
QI	Quality Improvement
QIC	Quality Improvement Collaborative
QMS	Quality Management System
RTC	Return to Care
RTK	HIV Rapid Test Kit
SABERS	HIV Seroprevalence and Behavioral Epidemiology Risk Survey
SI	Strategic Information
SID	Sustainability Index and Dashboard
SIMS	Site Improvement through Monitoring System
SMS	Short Message Service
SNU	Sub-National Unit
SOP	Standard Operating Procedure
SQA	Service Quality Assessment
STI	Sexually Transmitted Infection
TA	Technical Assistance
TAT	Turnaround Time
TAW	Treatment Access Watch
TB	Tuberculosis
TBIC	TB Infection Prevention and Control
TLD	Tenofovir/Lamivudine/Dolutegravir
TLD	Tenofovir/Lamivudine/Dolutegravir
TPT	TB preventive treatment
UNAIDS	Joint United Nations Program on HIV/AIDS
USAID	United States Agency for International Development
USG	United States Government
VCT	Voluntary Counseling and Testing
VL	Viral Load
WHO	World Health Organization

1.0 Goal Statement

The first confirmed COVID-19 case in Cameroon was reported on March 6, 2020. As of May 2021, Cameroon remains in a prolonged second wave of the epidemic with an exponential increase in cases and deaths. Throughout Country Operational Plan (COP) 20, the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) team in Cameroon implemented new and innovative strategies and activities to support the Government of Cameroon (GRC) to respond to the epidemic as well as maintain PEPFAR program gains. This COP21 submission details the strategies and programming that the USG will implement to support Cameroon in controlling the COVID-19 epidemic as well as reach epidemic control of HIV by the end of 2022.

The COVID-19 epidemic significantly impacted Cameroon's PEPFAR program, slowing progress toward epidemic control. In COP21, $89.1 million has been allocated for HIV programming, with an additional allocation of $4.275 million USD in American Rescue Plan Act (ARPA) funding to repair program injuries in both COP20 and COP21. PEPFAR Cameroon will utilize these funds for restoration of targeted community testing in the general population, retain patients in care, support infection prevention and control in health facilities so patients can safely access services as well as support supply chain systems and surveillance activities. The USG and multi-lateral partners will continue to support the GRC in development of the Global Fund COVID19 Response Mechanism (C19RM) that will reinforce the country's response to the COVID-19 epidemic.

In order to sustain the gains maintained in COP20 and to effectively respond to directives in the Planning Level Letter, **COP21 will intensify strategies on**:

- **Improving supply chain** and commodities procurement and distribution
- **Boosting retention and viral load suppression** and improving loss to follow up
- **Improving pediatric** performance across the cascade spectrum.
- **Prevention by scaling up PrEP and condom programming**

Cameroon has an estimated 491,834 People Living with HIV (PLHIV). As of December 2020, 350,934 PLHIV were on treatment nationally and national projections expect that 403,854 will be on antiretroviral treatment (ART) by the end of COP21. In COP21, PEPFAR will add 86,394 additional people to treatment. PEPFAR Cameroon will also improve access to viral load (VL) testing to reach 72% of PLHIV (89% of TX_CURR), and 95% of those initiated on treatment prior to COP21 Additionally, 89,537 key populations, including men who have sex with men (MSM), female sex workers (FSW), prisoners and injection drug users (IDU), will be reached with prevention activities, among whom all will be tested for HIV if not already known to be positive. Prevention activities will also target 31,555 priority populations, specifically adolescent girls and young women (AGYW), adolescent boys and young men (ABYM), clients of sex workers, internally displaced persons (IDPs) and military personnel. PEPFAR will provide a core package of services to 65,055 orphans and vulnerable children (OVC) and offer enrollment to 90% of the children and adolescents living with HIV (CLHIV/ALHIV) reached in PEPFAR supported health facilities and living in areas of implementation of the OVC program.

This COP submission reflects PEPFAR's shared commitment to achieving epidemic control of HIV in Cameroon by 2022 while also supporting efforts to mitigate and end the COVID-19 epidemic.

2.0 Epidemic, Response, and Program Context

2.1 Summary statistics, disease burden and country profile

Cameroon's total population was estimated at 27,060,096 and the total projected number of PLHIV for 2021 is 491,834 (SPECTRUM, 2021). Cameroon has a mixed HIV/AIDS epidemic (i.e., one or more concentrated epidemics within a generalized epidemic). National HIV incidence is 0.27% among the population aged 15-64. Four out of five new infections are among women aged 15-64. Overall adult HIV prevalence continues to decrease, moving from 5.4% in 2004 (DHS, 2004) to 4.3% in 2011 (DHS, 2011), 3.4% in 2017 (CAMPHIA, 2017) and recently 2.7% in 2018 (DHS, 2018). Prevalence among women is nearly twice that of men (3.4% vs. 1.9%, DHS 2018).

HIV prevalence is highest among women between 35-39 years of age (6.5%), and 40-44 years of age (6.4%); and close to 5% among women aged 45-49 and 50-64. For men, HIV prevalence is highest in the 35-39 age range (5.1%), and over 4.8% among men in the age group 40-44. Adolescent girls and young women (AGYW) are equally affected compared to their male counterparts in the 15-19 age range (0.8%) but have a higher burden in the 20-24 age range (2.4% vs. 1.5%). HIV prevalence remains high among key populations (KP) at 24.3% for FSWs and 20.7% for MSM (IBBS, 2016).

From DHS 2018, prevalence is higher in urban areas (2.9%) compared to rural areas (2.4%). The South and East regions remain the highest in prevalence with 5.8% and 5.6%, respectively, and the lowest prevalence regions are the Far North (1.1%), West (1.6%) and North (1.7%). The HIV prevalence ratio between women and men shows different patterns from one region to another, with only one region in which men have a higher prevalence than women (South, 5.5% among women versus 6.1% for men), and other regions where prevalence in women is 3.6 and 3.5 times higher than men (North West and Littoral respectively). The economic capital, Douala, and the political capital, Yaoundé, both have a 2.4% prevalence, with 3.2% among women and 1.5% among men. Other urban areas have an overall HIV prevalence of 3.4% with 4.3% among women and 2.3% among men.

KP overall present with significantly higher HIV prevalence compared to the national average. Disparities in prevalence amongst FSWs vary significantly by age, according to the 2016 Integrated Bio-Behavioral Survey (IBBS). Though they represent a significant majority of FSWs, those below the age of 30 (20-24: 8.7%, 25-29: 16.1%) have a lower prevalence compared to those above the age of 30 (30-34: 33.8%, 35-39: 42.2%, 40-44: 46.3%, 45-49: 48.8%, 50-54:40.0% and 55+: 26.3%). Similarly, amongst MSM, HIV prevalence is higher amongst older MSMs (20-24: 15.2%, 25-29: 29.4%, 30-34: 33%, 35-39: 40%, 40-44: 45% and 45+:57.1%).

The number of People Living with HIV on antiretroviral treatment was 350,934 in December 2020, representing 71% coverage, nationally.

Standard Table 2.1.1

Table 2.1.1 Host Country Government Results															
	Total		<15				15-24				25+				*Source, Year*
			Female		Male		Female		Male		Female		Male		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Total Population	27,060,096	100	5,595,744	20.7%	5,695,686	21.0%	2,687,694	9.9%	2,711,965	10.0%	5,235,515	19.3%	5,133,492	19.0%	2020 Spectrum estimates
HIV Prevalence (%)		2.7%		0.10%		0.30%		1.10%		0.90%		4.70%		2.20%	DHS 2018, CAMPHIA 2018 SPECTRUM 2021
AIDS Deaths (per year)	11,624		1,457		1,495		490		369		4,438		3,375		2021 Spectrum estimates
# PLHIV	491,834		15,385		15,743		33,134		14,874		279,161		133,537		2021 Spectrum estimates
Incidence Rate (Yr)		0.43						0.11		0.03					2021 Spectrum estimates
New Infections (Yr)	11,175		1,194		1,230		2,713		728		3,552		1,758		2021 Spectrum estimates
Annual births	913,800														2021 Spectrum estimates
% of Pregnant Women with at least one ANC visit		87%													DHS 2018
Pregnant women needing ARVs	25,420														2020 Spectrum estimates
AIDS Orphans (maternal, paternal, double)	369,524														2021 Spectrum estimates
Notified TB cases (Yr)	23,757														WHO 2019, Global Tuberculosis Report
% of TB cases that are HIV infected	5,118	25%													WHO 2019, Global Tuberculosis Report
% of Males Circumcised		93%													DHS 2018
Estimated Population Size of MSM*	66,842														Papworth, 2014
MSM HIV Prevalence		20.70%													2016 IBBS report
Estimated Population Size of FSW	112,580														World Bank, 2016
FSW HIV Prevalence		24.30%													2016 IBBS report

Estimated Population Size of PWID	N/A														N/A
PWID HIV Prevalence	N/A														N/A
Estimated Size of Priority Populations (Military)	50,000														SABERS 2018
Estimated Size of Priority Populations Prevalence (specify)		3.30%													SABERS 2018

Standard Table 2.1.2

Table 2.1.2 95-95-95 cascade: HIV diagnosis, treatment and viral suppression*										
Epidemiologic Data					HIV Treatment and Viral Suppression			HIV Testing and Linkage to ART Within the Last Year		
	*Total Population Size Estimate (#)	**HIV Prevalence (%)	*Estimated Total PLHIV (#)	*PLHIV diagnosed (#)	*On ART (#)	ART Coverage (%)	Viral Suppression (%)	***Tested for HIV (#)	***Diagnosed HIV Positive (#)	***Initiated on ART (#)
Total population	27,060,096	2.7%*	491,834	403,790	350,934	71.4%	84.5%	3,101,348	90,580	75,715
Population <15 years	11,291,430		30,456	11,509	11,219	37%	68%	207,396	3,434	2,783
Men 15-24 years	2,711,965	1.1%*	24,961	15,906	5,335	21.4%	77%	327,697	4,429	2,008
Men 25+ years	5,133,492		123,150	105,977	94,816	77%	88%	682,776	25,417	22,243
Women 15-24 years	2,687,694	1.5%*	30,933	22,581	19,522	63%	81%	817,499	16,319	9,294
Women 25+ years	5,235,515		281,467	247,817	220,042	78%	99%	1,065,980	40,981	39,387
+MSM	66,842	20.7%**	13,836					38,261	8,991	2,108
+FSW	112,580	24.3%**	27,357					69,361	8,062	5,167
PWID										
++Priority Pop	50,000	3.3%	1650		1,290	78%	67%	108,874	13,313	

*Data source is Spectrum 2021**NACC annual report 2020 ***Data source is DHIS2 National Data for 2020
+ Data Source is IBBS World Bank Report 2016 and PEPFAR APR results 2019
++ Data Source is SABERS Report 2018 and PEPFAR APR results 2019

Figure 2.1.1 Updated National and PEPFAR Trend for Individuals currently on Treatment Among PLHIV

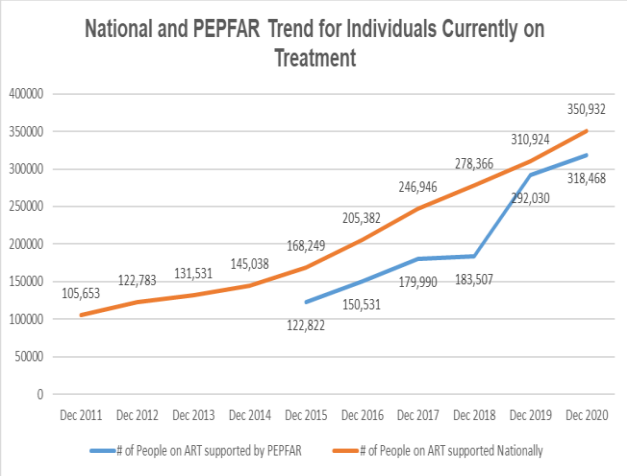


Figure 2.1.2 Updated Trend of New Infections and All-Cause Mortality

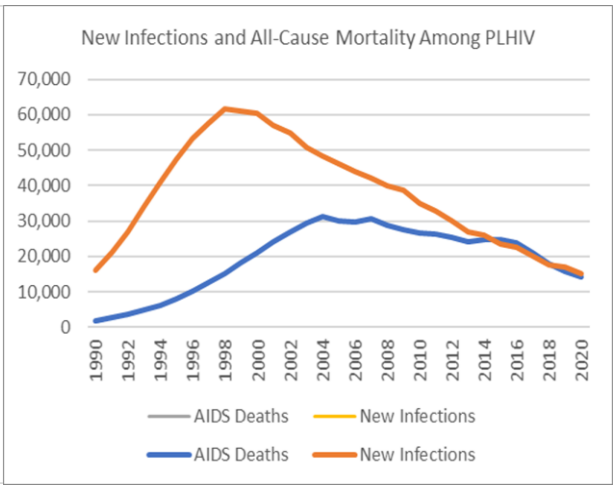


Figure 2.1.3 Progress Retaining Individuals in Lifelong ART in FY20

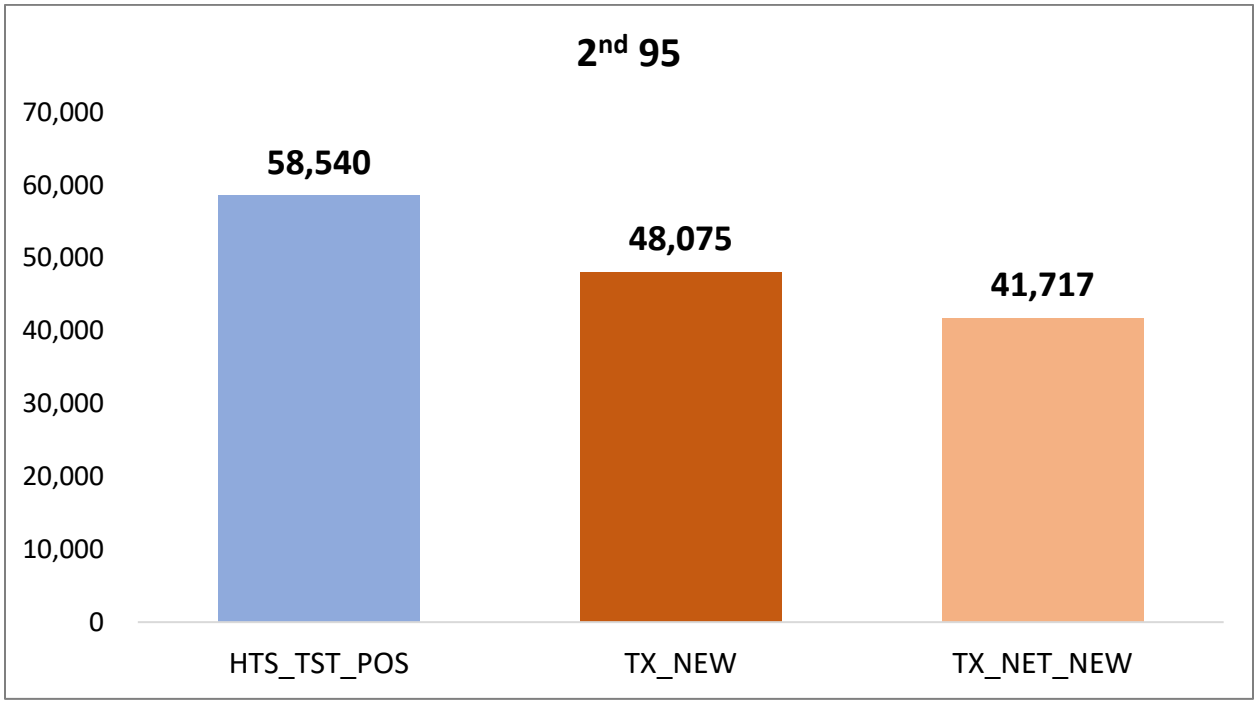
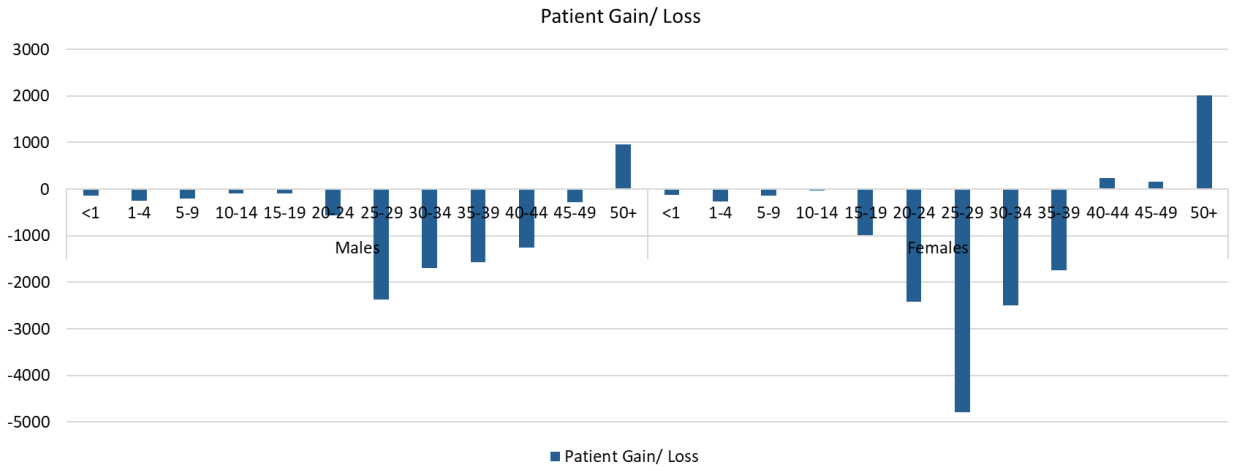


Figure 2.1.4 Clients Gained/Lost from ART by Age/Sex, FY20 Q4



FY20 Q1 is the starting point instead of FY19 Q4 due to program pivot and considering program growth between the 3 quarters.

Figure 2.1.5 Epidemiologic Trends and Program Response for Cameroon

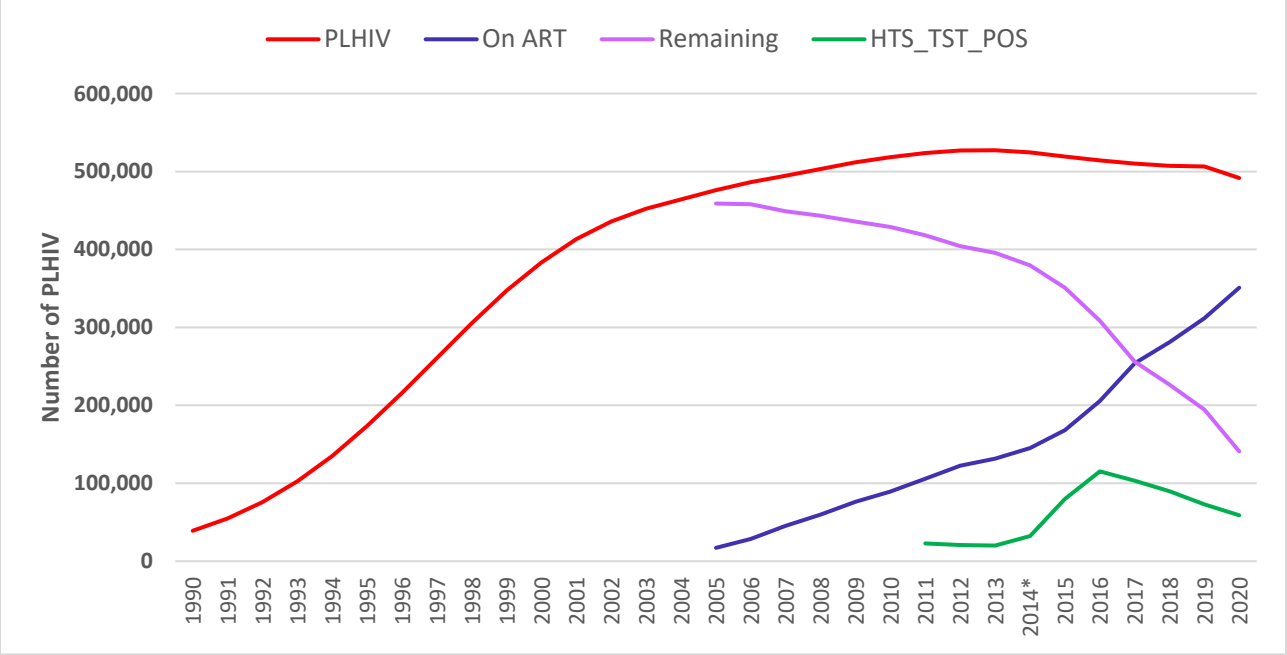
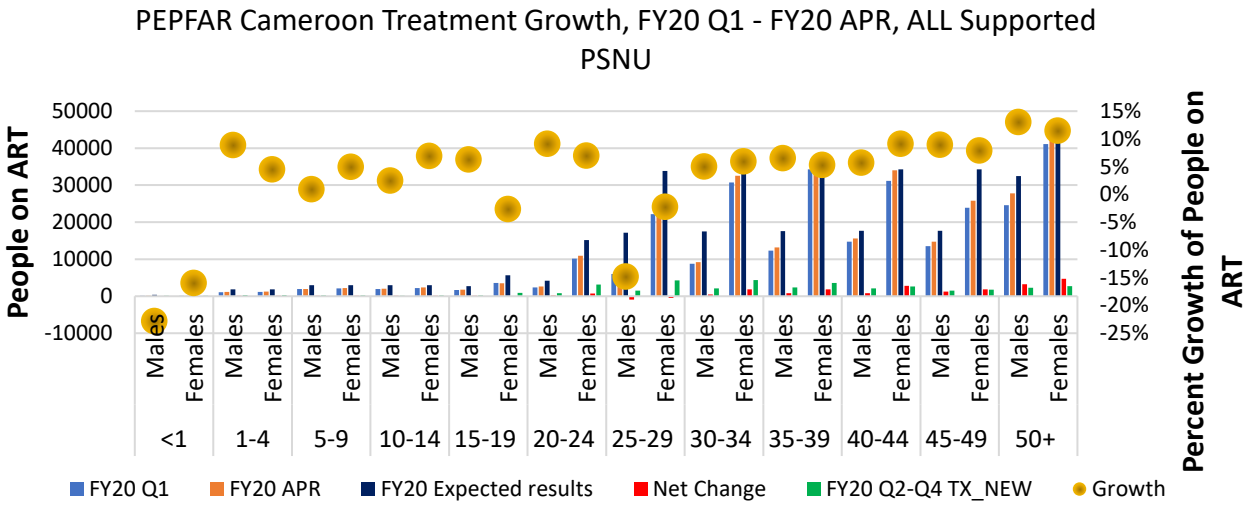


Figure 2.1.6 shows the HIV treatment growth by age/sex in order to pinpoint where there are specific areas of intervention needed to maintain and grow the HIV treatment population.

Figure 2.1.6 Net change in HIV treatment by sex and age bands 2019 Q4 to 2020 Q4



2.2 New Activities and Areas of Focus for COP21, Including Focus on Client ART Continuity

In COP 21, pediatrics will be a major focus for the PEPFAR program in Cameroon. At least 95% of Children and Adolescents Living with HIV (C/ALHIV) in PEPFAR-supported SNUs will benefit from the PEPFAR-supported OVC program to improve their retention to care and viral load suppression. These OVC-supported SNU's encompass patients on treatment at the highest burden PEPFAR-supported clinical sites as well as those receiving treatment in smaller, non-PEPFAR sites co-located in the same health district. Community and clinical partners will sign memoranda of understanding (MOUs) to structure and formalize their relationship. Through these MOUs, the community and clinical partners will continue to improve the bidirectional referrals and case conferencing, conduct joint data review, monthly coordination meetings, and joint site visits in order to strengthen the collaboration platform that began in the last quarter of FY19.

In COP21, to optimize ART for C/ALHIV and reduce morbidity and mortality across this subpopulation, the country will roll out a pediatric DTG-based regimen (DTG-10) to complement the TLD transition already underway for adolescents and adults (including WCBA) following WHO updated guidelines for care and treatment. COP21 will target that 80-85% of all adult and adolescent men and women transition to TLD, and for children, TLD for all who weigh at least 30kg and other DTG-containing regimens for those weighing <30kgAdditionally, to mitigate COVID-19 impact on programming, PEPFAR Cameroon will scale up the implementation of decentralized drug distribution via satellite sites across the 10 regions. To improve on HCW capacity, the program will collaborate with MOH to set up a free e-learning platform on HIV & TB care and

treatment. The program will ensure and monitor switching of all children to optimized ARV regimens to improve on VL suppression rates among C/ALHIV.

With poor facility attendance in the current COVID-19 context, health facilities will be supported in COP21 to implement facility-led outreach interventions in the community to improve on case finding, linkage and continuity of treatment. More attention will be paid to identify and address stigma and discrimination in all PEPFAR supported sites. FY20 data shows that some of our regions are approaching epidemic control, hence the need to introduce recency testing to better understand epidemiologic trends and better target case finding efforts to reach those most likely to be positive in these regions. To provide an appropriate response to the COVID-19 pandemic, PEPFAR will benefit from ARP funding to mitigate the impact of COVID-19 across the clinical cascade. Additionally, clinical IPs will roll out key interventions for community-led monitoring. Finally, the program will focus on improving the TB/HIV integration for C/ALHIV.

COP21 will also prioritize supply chain optimization, which will be achieved by improved supply chain coordination among key actors, eliminating commodities shortages and stock outs, optimizing national procurement strategies, improving site-level order fulfillment, and correcting distribution inefficiencies, especially last mile inefficiencies.

Finally, prevention activities in COP21 will include an emphasis on the scale-up of pre-exposure prophyalxis (PrEP) and an overall increase in prevention funding in COP21, which will primarily be directed at key populations and priority populations with heightened risk of infection. PEPFAR continues to strive for PrEP access for all populations with an increased risk for HIV, especially adolescent girls and young women. COP21 also will include $500,000 of new funding for condom programming, one of the most effective prevention strategies. The OVC program will also engage in prevention activities among those enrolled in its program, as will Peace Corps, providing prevention services to both OVC and to adolescent girls and young women. Prevention activities in the key populations program will continue in COP21, though the KP partner is currently under investigation by a 3rd party contracted by PEPFAR, since some data that was reported by the KP community partner was shown to have been falsified in a recent interagency assessment. The outcome of this investigation will determine COP21 targets and budget for KP program including the prevention and testing targets.

2.3 Investment Profile

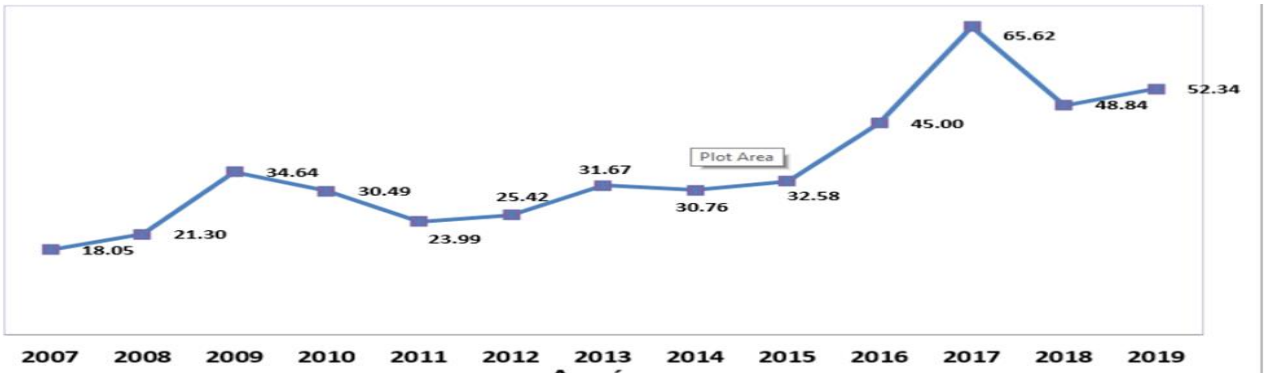
This investment profile will focus on the last approved national and external expenditure data for 2018 – 2019. In order to align with the 2018-2019 national expenditure report, PEPFAR Cameroon used data from the 2018 Expenditure Reporting for analysis.

National HIV/AIDS expenditures slightly increased by 7% between 2018 and 2019, from 48,839,658,551 FCFA to 52,340,515,482 FCFA respectively. Even with this increase, domestic spending remained low with 12.0% in 2018 and 10.4% in 2019, leaving the response to be heavily reliant on external funding: 88.0% in 2018 and 89.6% in 2019.

Although HIV/AIDS expenditures showed a general upward trend between 2007 and 2019, progression has been uneven. Between 2007 and 2009, allocated resources increased as seen in the graph below. In 2010 and 2011, funding declined due to the global economic and financial crisis. Funding started increasing between 2011 and 2013, from 23.99 billion Fcfa in 2011 to 31.67

billion fcfa in 2013, an increase of 32%. This increase was due to the implementation of the R10 program of the Global Fund, with 2013 representing a pivotal year and the growing involvement of bilateral partners such as the USG through the PEPFAR program. The continued support of the Global Fund through the new funding model and the increasing funding from the US government to Cameroon showed a steady increase in HIV funding from 2014 onwards.

Figure 2.3.1: Trends in HIV/AIDS spending between 2007 and 2019 in Cameroon



Source: 2018-2019 NASA/REDES report

Standard Table 2.3.1: Investment Profile for HIV Program

Table S1. Investment Profile (Budget Allocation) for HIV Programs, 2021

	Total	Domestic Gov't	Global Fund	PEPFAR	Other Funders	Trend
	$	%	%	%	%	2018-2021
Care and Treatment	$93,222,551	0%	44%	56%	0%	
HIV Care and Clinical Services	$83,135,471	0%	46%	54%	0%	
Laboratory Services incl. Treatment Monitoring	$7,902,955	0%	2%	98%	0%	
Care and Treatment (Not Disaggregated)	$2,184,125	0%	95%	5%	0%	
HIV Testing Services	$9,940,270	0%	26%	74%	0%	
Facility-Based Testing	$5,525,986	0%	14%	86%	0%	
Community-Based Testing	$1,891,868	0%	56%	44%	0%	
HIV Testing Services (Not Disaggregated)	$2,522,416	0%	29%	71%	0%	
Prevention	$5,278,638	0%	48%	52%	0%	
Community mobilization, behavior and norms change	$1,874,859	0%	89%	11%	0%	
Voluntary Medical Male Circumcision	$0					
Pre-Exposure Prophylaxis	$937,962	0%	3%	97%	0%	
Condom and Lubricant Programming	$639,567	0%	100%	0%	0%	
Opioid Substitution Therapy	$33,748	0%	100%	0%	0%	
Primary Prevention of HIV & Sexual Violence	$108,583	0%	100%	0%	0%	
Prevention (Not Disaggregated)	$1,683,919	0%	5%	95%	0%	
Orphans and Vulnerable Children	$6,780,032	0%	23%	77%	0%	
Case Management	$0					
Economic Strengthening	$0					
Education Assistance	$0					
Psychosocial Support	$0					
Legal, Human Rights, and Protection	$1,401,326	0%	83%	17%	0%	
OVC (Not Disaggregated)	$5,378,706	0%	8%	92%	0%	
Above Site Programs	$74,877,898	0%	22%	78%	0%	
Human Resources for Health	$2,788,271	0%	100%	0%	0%	
Institutional Prevention	$0					
Procurement and Supply Chain Management	$2,651,659	0%	35%	65%	0%	
Health Mgmt Info Systems, Surveillance, and Research	$3,050,325	0%	68%	32%	0%	
Laboratory Systems Strengthening	$245,578	0%	31%	69%	0%	
Public Financial Management Strengthening	$0					
Policy, Planning, Coordination and Management of Disease Ctrl Programs	$55,756,826	0%	2%	98%	0%	
Laws, Regulations and Policy Environment	$543,000	0%	0%	100%	0%	
Above Site Programs (Not Disaggregated)	$9,842,239	0%	95%	5%	0%	
Program Management	$18,806,937	0%	27%	73%	0%	
Implementation Level	$18,806,937	0%	27%	73%	0%	
Total (incl. Commodities)	**$208,906,326**	**0%**	**33%**	**67%**	**0%**	
Commodities Only	**$55,178,543**	**0%**	**90%**	**10%**	**0%**	
% of Total Budget	*26%*					

Source: HIV Resource Alignment

Standard Table 2.3.2: Investment Profile for HIV Commodities

Table S2. Investment Profile (Budget Allocation) for HIV Commodities, 2021 Budget						
	Total	Domestic Gov't	Global Fund	PEPFAR	Other Funders	Trend
	$	%	%	%	%	2018-2021
Antiretroviral Drugs	$30,352,470	0%	99%	1%	0%	
Condoms and Lubricants	$571,463	0%	100%	0%	0%	
Female Condoms	$161,685	0%	100%	0%	0%	
Male Condoms	$99,580	0%	100%	0%	0%	
Other Condoms and Lubricants	$310,198	0%	100%	0%	0%	
Rapid Test Kits	$3,655,650	0%	67%	33%	0%	
Laboratory Supplies and Reagents	$3,497,522	0%	100%	0%	0%	
CD4	$0					
Viral Load	$0					
Other Laboratory Supplies and Reagents	$3,497,522	0%	100%	0%	0%	
Laboratory (Not Disaggregated)	$0					
Medicines	$518,658	0%	2%	98%	0%	
Essential Medicines	$0					
Tuberculosis Medicines	$507,932	0%	0%	100%	0%	
Other Medicines	$10,726	0%	100%	0%	0%	
Consumables	$0					
VMMC Kits and Supplies	$0					
Other Consumables	$0					
Health Equipment	$6,008,182	0%	60%	40%	0%	
Health Equipment	$3,617,695	0%	100%	0%	0%	
Service and Maintenance	$2,390,487	0%	0%	100%	0%	
PSM Costs	$10,574,597	0%	88%	12%	0%	
Total Commodities Only	**$55,178,543**	**0%**	**90%**	**10%**	**0%**	

Source: HIV Resource Alignment

Standard Table 2.3.3

Table 2.3.3 Annual USG Non-PEPFAR Funded Investments and Integration					
Funding Source	**Total USG Non-PEPFAR Resources**	**Non-PEPFAR Resources Co-Funding PEPFAR IMs**	**# Co-Funded IMs**	**PEPFAR COP Co-Funding Contribution**	**Objectives**
USAID Malaria	$23,500,000				President's Malaria Initiative
USAID NTD	$3,500,000				Neglected Tropical Diseases
USAID (Global Health Security)	$4,000,000				
USAID Fast Track Cities Initiative	$250,000				
CDC (Global Health Security)	$ 1,565,573			$513,511	CDC GHSA funds support activities to strengthen laboratory capacity; prepare for, detect and respond to emergencies; improve disease surveillance capacity; develop a public health workforce through the Cameroon Field Epidemiology Training Program; provide technical assistance for immunizations and zoonotic diseases; and respond to the COVID-19 pandemic
Other (ARP Funding)	$3,352,190				American Rescue Plan Act (ARPA) Funds programmed in COP21 to repair program injuries across the entire clinical cascade due to COVID19 impact.
Total	**$36,167,763**			**$513,511**	

2.4 National Sustainability Profile Update

Cameroon's HIV/AIDS epidemic is mixed (i.e., one or more concentrated epidemics within a generalized epidemic). National HIV incidence is 0.27% among the population aged 15-64. Four out of five new infections are among women aged 15-64. The national HIV/AIDS response continues to rely heavily on donor funding and the GRC has difficulty in meeting Global Fund co-financing obligations. Like many West and Central African countries, Cameroon also faced the challenge of historically charging user fees to finance health services including HIV and TB services, creating a barrier for people to access HIV services. Following advocacy from key stakeholders including the U.S. Office of the Global AIDS Coordinator, on April 5, 2019, the Cameroonian government made public a Ministerial Decision and Circular on the immediate

elimination of informal HIV user fees and the elimination of all formal fees for HIV services by January 2020. In preparation for the January 2020 milestone, PEPFAR Cameroon, UNAIDS, and other stakeholders supported the government to raise awareness about elimination of fees for HIV services, put in place measures to eliminate HIV user fees at the point of service delivery and also supported the government in the monitoring of health facilities on compliance with the new directive. As of January 1, 2020, the HIV user fee elimination went into effect and the roll out across health facilities in country has continued to be impressive. The GRC has continued to maintain a line in the health budget to accommodate for the HIV user fee elimination.

SID Process: The last SID conducted in Cameroon was in 2019. PEPFAR Cameroon began the process by undertaking a desk review of all required documentation with follow up consultations of the various constituencies. PEPFAR staff met with internal and external stakeholders to facilitate the SID 2019 tool development; input was gathered from civil society representatives, private sector entities, parliamentarians, multi-lateral partners, USG and the GRC. A final review session was cohosted by the USG and UNAIDS with stakeholders on September 4th and 5th, 2019, with participants providing consensus on the final review, further discussing the findings, and identifying priorities and providing any additional input. The next SID will be completed in 2021.

Sustainability Strengths: Out of the 17 elements counted, Cameroon counted four dark green and four light green scores, an increase in both scores from the SID 3.0. The strongest elements were found in the Governance, Leadership and Accountability Domain.

> **Planning and coordination (10.00 – dark green):** The Government of Cameroon performs a strong leadership role in the process of development and policy guidelines. This leadership has resulted in the adoption of best practices and global technical policies. The processes are inclusive and well-structured in terms of shared responsibility and accountability, accounting for the diversity and comparative advantage of key stakeholders in the country. It was noted that more focus should be given to further engaging the private sector in the national response.

Sustainability Vulnerabilities: Cameroon did not achieve any red scores in SID 2019. However, within the nine elements that scored yellow, four were in the National Health System and Service Delivery domains, down from five in the SID 3.0.

> **Commodity Security and Supply Chain (5.57 - yellow):** Insufficient funding for procurement and supply chain management of HIV/AIDS-related commodities continues to negatively affect supply chain performance and the attainment of the 95-95-95 goals. There is insufficient warehouse and inventory level optimization, insufficient institutional capacity to use HIV pharmacy information for decision making, and an inadequate supply of commodities to meet demand for new strategies such as provider-initiated HIV testing and counselling (PITC), index case testing, retesting for verification, and proficiency testing (PT) panels. MMD has been progressively rolled out, but at a rate lower than anticipated partially due to COVID-19 related challenges and difficulties

reaching remote sites. There is a national committee for the quantification of all health products and a sub-committee for quantifying and monitoring the supply of HIV products. In 2018, a high-level technical working group with multi- sectoral ministerial members, members from development partners notably GFATM, PEPFAR, UNITAID, the private sector and the civil society was created to develop a complete transformation plan of the supply chain, and this group continues to meet to strengthen these systems across the national program. In 2019, an interagency working group meeting was equally created to hold weekly discussions on commodity management and its impact on service provision at the facility level. This meeting has been moved to a monthly meeting to accommodate updates from both the clinical and supply chain implementing partners.

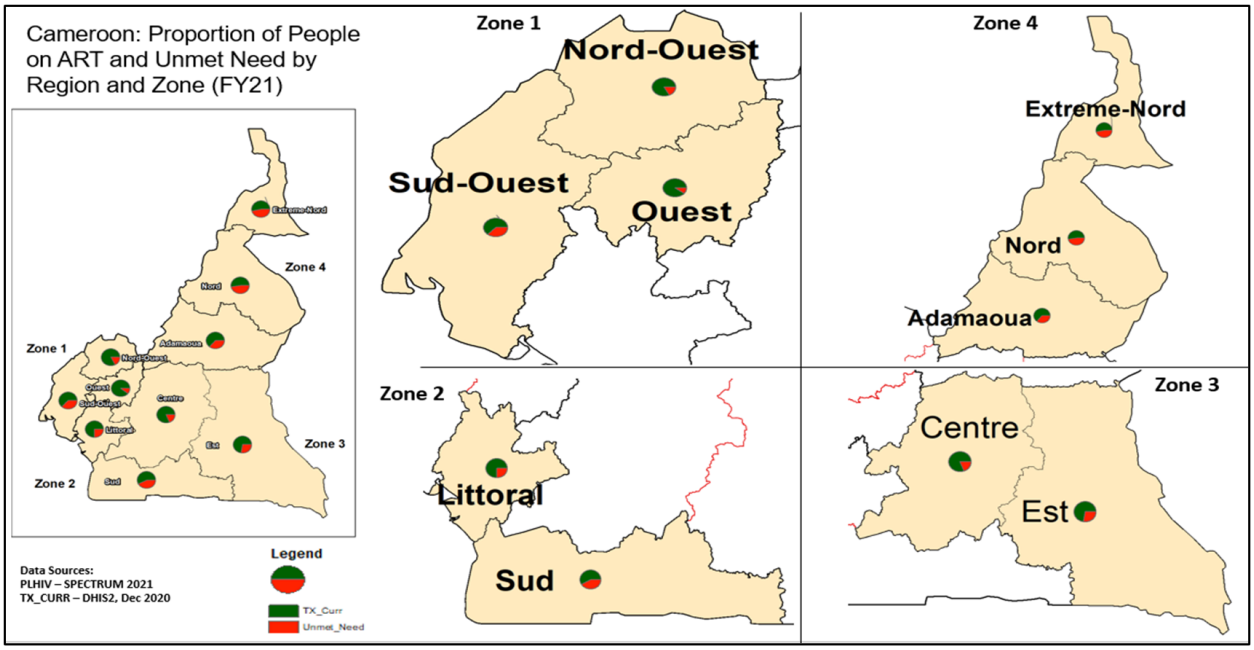
Laboratory (6.29 - yellow): Cameroon continues to make progress in laboratory systems strengthening with the National Public Health Laboratory taking the lead in coordinating activities in-country and building capacity across the lab tier system. Due to COVID -19 related challenges, we were unable to fully implement the NSP for the Development of Cameroon Laboratories 2016-2020, but the pandemic also gave us an opportunity to identify gaps within the lab systems which must be addressed to meet testing gaps within the clinical cascade and to plan mitigation strategies to address possible challenges during a pandemic. In view of this, diagnostic laboratory optimization (DLO) will be prioritized to avoid activity overlap and to leverage on existing platforms and POC resources from other stakeholders. The use of multiplex assays will also be considered in addressing some of the gaps identified. We now have six ISO-15189 accredited laboratories (National EID Reference Laboratory Mutengene, Buea Regional Hospital Laboratory, Bamenda Regional Hospital Laboratory and the TB Reference Laboratory Bamenda, Limbe Regional Hospital Laboratory and Centre Pasteur du Cameroon). ECHO platforms were used for remote mentoring and supervisions during this COVID-19 related era, and will be continued, especially in supporting the VL/EID reference laboratories. PEPAR will continue supporting quality testing for HIV, EID, VL and TB, ensuring engagement and continuous participation in External Quality Assessments (EQA) as well as site and personnel certification for all reference laboratories and facility testing laboratories or sites. The lab will also support Proficiency Testing for Recency Infection to ensure quality testing for HIV and viral load across facilities.

2.5 Alignment of PEPFAR investments geographically to disease burden

The map and inserts presented in figure 2.5.1 show areas where PEPFAR will provide support in FY2022, with focus on 146 health districts across all 10 regions of Cameroon. All PEPFAR supported health districts have been distributed into 4 zones. Zone 1 is targeting the West, South West and North West regions; Zone 2 the Littoral and South regions; Zone 3 the Center and East regions and Zone 4 the northern regions of Cameroon (Adamaoua, North and Far North). The map helps visualize not only the large unmet need in terms of PLHIV on ART in some of the regions with new targeted districts, but also that ART coverage exceeds 80% in some districts such as the previous clustered ones (Cité Verte, Djoungolo, Deido, Bangue, New Bell, etc.) and in new targeted districts in the northern regions of Cameroon, as well as North West.

Beginning FY20, all support provided by PEPFAR to selected sites wasDirect Service Delivery (DSD), such as same-day ART initiation, multi-month scripting, community ART dispensation and differentiated schedules or flexible hours at health facilities. There is longer a sustained package. All interventions will be focused on rapid acceleration towards epidemic control in 298 scale-up health facilities and 21 military sites.

Figure 2.5.1 ART coverage of PLHIV by SNU



2.6 Stakeholder Engagement

PEPFAR Cameroon has been building and maintaining strong coordination and collaboration with all key stakeholders including the GRC, Civil Society Organizations (CSO) core groups, and other key stakeholders in the HIV/AIDS response. All key stakeholders are involved in strategic discussions from the pre-COP process through COP planning and approval. They also provide resources where needed and guidance to support implementation and accelerating the response towards HIV epidemic control in Cameroon. PEPFAR has been following up on the elimination of all formal and informal HIV user fees in line with the ministerial decision that was signed and released on April 4th, 2019 instituting HIV user fees elimination beginning on January 1st, 2020. This decision is the result of strong advocacy by PEPFAR at the highest level of government during COP19. A PEPFAR supported workshop led by MOH-DLMEP and NACC was held in November 2020, in Douala to assess the evolution of HIV user fees elimination implementation across the country. Specifically, during this workshop, challenges in user fees elimination were discussed and solutions commonly found; reports on supervision and lessons learned in the first year of implementation; budget and fund recovery flow; the role of community-based organizations (CBOs) in user fees elimination; clarifications provided on user fees elimination and universal health coverage; and the role of partners in the implementation of the user fees elimination policy. PEPFAR and other stakeholders will continue to support the GRC in meeting milestones and ensuring implementation and adequate controls. Throughout 2020, PEPFAR and

the US Embassy Front Office continued engaging in extensive advocacy to ensure that sufficient funding was allocated in the 2021 national budget to cover health facility reimbursements. During the virtual COP21 planning meeting, the permanent Secretary of MOH-National AIDS Control Committee presented the GRC's continuous engagement in the HIV user fees elimination process which has led to an improvement in service uptake since its implementation on January 1st ,2020. A situation report for the period of 1st Jan – 31st Dec 2020 on the implementation of the ministerial decision to eliminate formal and informal HIV service fees shows the level of implementation across the 10 regions as indicated in figure 2.6.1 below:

Figure 2.6.1: Level of implementation of user fees elimination in the 10 regions of the country Source: National Situation Report of 01/01/2020 to 31/12/2020

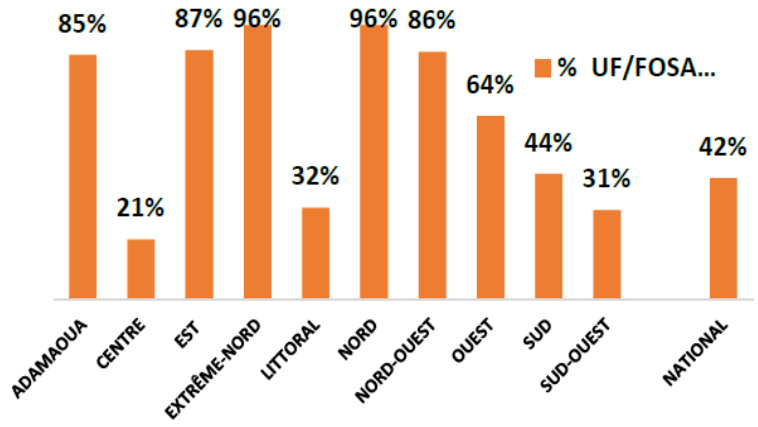


Table 2.5.1: Implementation of User Fees Elimination in all PEPFAR supported sites across the 10 regions as of the end of FY20 Q4

FY20 Q4

HIV Service	Region									
	West	NW	SW	Lit.	South	Centr.	East	Ad.	North	Far. N
HIV consultation	80%	75%	84%	76%	100%	72%	100%	88%	100%	38%
Antenatal consultation (ANC 1)	30%	4%	60%	31%	90%	52%	89%	86%	79%	86%
Antenatal consultation (ANC 2,3 & 4)	57%	25%	60%	19%	90%	52%	100%	86%	90%	86%
Medical booklet	40%	4%	68%	41%	57%	63%	100%	28%	33%	33%
Medical file	77%	92%	100%	92%	100%	100%	100%	100%	93%	86%
HIV tests	60%	63%	96%	78%	95%	80%	100%	100%	100%	90%
CBC (pregnant women)	43%	33%	64%	33%	43%	26%	53%	59%	25%	86%
Uranalysis (Albumin)(Pregnant women)	40%	21%	64%	37%	67%	26%	53%	59%	25%	38%
Creatinine (pregnant women)	37%	13%	64%			26%	53%	59%	25%	38%
Blood glucose (pregnant women)	37%	21%	64%	33%	71%	26%	53%	59%	25%	86%
Viral load test (VL)	100%	100%	100%	90%	100%	98%	100%	100%	100%	100%
CD4 count	60%	0%	56%	51%	100%	63%	100%	0%	100%	0%
Sputum smear (TB)	90%	54%	80%	71%	76%	70%	63%	100%	97%	100

PEPFAR has played a key role in the TLD transition process including consideration for women of childbearing potential and adolescents, removal of nevirapine-based regimens, updating the national ART treatment guidelines, printing and distribution at the health facilities. Continuous virtual and in-person refresher trainings on ART Optimization have been supported and delivered

throughout 2021 across the 10 regions of the country. PEPFAR has also played a key role in ensuring the availability of optimized ARVs by strengthening collaboration and coordination with the MOH/NACC and GFATM.

Collaborating with key stakeholders including CSOs is crucial to help reinforce the implementation of the user fees elimination policy as well as to create demand and improve uptake of HIV services across all age bands, sex and populations, to support adherence and retention efforts and to strengthen referrals and linkages to rapid ART initiation, and viral load monitoring. PEPFAR Cameroon, through its IPs will strengthen ongoing strategies to implement community led monitoring activities through which HIV service delivery is monitored by the communities which they serve. Feedback from the community/CSOs on the quality of PEPFAR supported services provides opportunities for improvement. While PEPFAR support is guided by the 2018-2022 Cameroon National Strategic Plan and the revised ART Treatment guidelines, PEPFAR gives importance to different perspectives on what will be considered credible evidence of outcomes and impact from all key stakeholders. In that light, PEPFAR began the COP 21 planning process with a virtual retreat on January 25th - 29th ,2021 with representatives from the MOH-NACC-NTCP, CSOs, multilateral organizations (UNAIDS, WHO, GIZ, UNFPA, UNICEF, Islamic Development Bank), CAMNAFAW, the CCM and PEPFAR implementing partners who were convened to review progress and set expectations and provide sound recommendations for COP21.

Prior to the retreat, PEPFAR shared the COP19 (FY20) Annual Performance Report (APR) with the stakeholders to ensure the formulation of informed and meaningful recommendations for COP 21. During the COP21 virtual retreat, there were presentations from the GRC-NACC-NTCP-DPML, Civil Society Organizations (CSO) groups, CAMNAFAW, PEPFAR agencies and other key stakeholders to attain better understanding, to avoid duplication and strengthen collaborative efforts towards reaching epidemic control by September 2022. Representatives of GRC, CSO core groups, Global Fund, UN agencies and other key stakeholders were also present at the virtual COP21 planning meeting that took place on April 27 and 28, 2021

Recent stakeholder engagements leading up to and including the COP21 development include:

- **January 25 – 29, 2021:** PEPFAR hosted a stakeholder retreat to kick off the Country Operational Planning 2021 (COP21) planning process. Participants included Ministry of Public Health, multilateral partners, and CSOs. The objective was to review critical progress to reach epidemic control, COP21 policy directives, and technical approaches.
- **April 22, 2021:** PEPFAR hosted a CSO meeting to hear from CSO's about their priorities for COP21.
- **April 21 and 26, 2021:** PEPFAR team, including in-country and HQ staff, met with the Global fund team to review high level targets, supply plan and commodity.
- **April 27 - 28, 2021**: PEPFAR held extensive planning discussions (NACC, Global Fund's Country Team, Project Implementation Unit and writing teams) to inform prioritization of TB-HIV activities, assure adequate ARV commodities funding in allocation and build consensus on key revisions to HIV testing approaches and budget, AGYW and KP-related targets in non-PEPFAR districts with high burden of disease.

PEPFAR Cameroon has strong collaboration and coordination with the GFATM to avoid duplication, address procurement and commodities challenges, and ensure that key and priority populations have improved access to quality patient-centered HIV prevention, care, and treatment services. A mapping of GFATM and PEPFAR investments in AGYW (a new focus for the GFATM) has been done to avoid any duplication of effort.

Additionally, PEPFAR Cameroon will continue strengthening collaboration with MOH, NACC and the NTCP and all other key stakeholders for the effective and efficient coordination of the HIV/TB response and management efforts across all 10 regions of the country, through regular coordination meetings to review progress, identify challenges and provide corrective actions for overall program improvement towards achieving epidemic control. At the level of the NACC, PEPFAR Cameroon will advocate to have not only PEPFAR focal persons for each Region, but also to get at least one staff member from NACC's team to have site level oversight and participate in site level supportive activities such as SIMS/GSM/DQA per zone tracking best practices for replication and gaps for remediation.

PEPFAR Cameroon has continued maintaining a strong working relationship and coordination of the national response with multiple stakeholders with PEPFAR funding. UNAIDS has principally been providing TA to NACC and MOH for the coordination of CLM activities and the introduction of CLM indicators in DHIS2. The World Health Organization (WHO) through PEPFAR funds has been supporting NACC on key advocacy efforts including the Case-based Surveillance System, the Unique Identifier, 'Test and Treat', and TLD transitioning, etc.

There has also been strong collaboration with other stakeholders like UNICEF and the Islamic Bank towards achieving elimination of mother-to-child transmission of HIV. We are hoping this collaboration will contribute towards improving POC platforms, availability of commodities (EID and VL reagents) and pediatric ARVs in the Northern and Eastern zones. Community led monitoring (CLM) is a critical aspect of the PEPFAR program, having made significant investment in CLM funding since COP20. PEPFAR works with local community-based organizations and other civil society groups, networks of key populations (KP), people living with HIV (PLHIV), and other affected groups, or community entities to gather quantitative and qualitative data about HIV services and activities focused on HIV programming. CLM is key to ensuring availability, access to, and delivery of quality HIV prevention, care and treatment services. CLM empowers patients and communities to seek out this information, increase health literacy, expand engagement with health service delivery, support demand creation, and demand accountability from the health system to improve and deliver these services. With the elimination of user fees for HIV services in January 2020, CLM in Cameroon also focuses on reporting any user fees for HIV services. The following table shows the levels of funding requested under COP21.

Table 2.6.2 Proposed COP 21 CSO Funding

Amount	Activities
$50,000	**COP20 CSO Community-led Monitoring Mechanism: State Small Grants** PEPFAR Cameroon will make COP21 funding available to support tool development for community-led monitoring and coordination grants through the Embassy Small Grants Mechanism.
$350,000	**COP21 CSO Community-led Monitoring Mechanism: RECAP+, USAID CSO Prime** PEPFAR Cameroon will support monitoring of HIV User fees elimination, clinical and laboratory services are free of charge, quality of care, integration with other diseases, in 10 regions, 148 districts, 400 sites, and strategic coordination at national level.

PEPFAR Cameroon sits on the Health Sector Partners group which brings together all major donors engaged in the health sector to coordinate programming, encourage collaboration, and avoid duplication; and exchange information on any issues or initiatives coming from the government.

2.7 Stigma and Discrimination

The PEPFAR program will continue to align with the 2018-2022 National HIV Strategic Plan to reduce stigma and discrimination by half among PLHIV, as well as for key and vulnerable populations (MSM, CSW, PWID, TG) with the aim of improving their quality of life. This will be done through advocacy to improve the legal protection of the rights of PLHIV and the key and priority populations; training of healthcare workers and community health workers to provide HIV stigma free services at service delivery points of health clinics, drop-in-centers and other community settings; the fight against self-stigmatization among PLHIV through the promotion of the U=U message, the strengthening of community organizations of PLHIV and KP, the support of the implementation of the stigma index 2.0. Through the community-led monitoring initiative, the PEPFAR program will continue to monitor the effectiveness of the reduction of cost barriers to accessing HIV services and will also ensure that beneficiaries in general, and patients in particular, are placed at the center of health service delivery.

Despite significant progress in educating the population and training providers, stigma and discrimination of PLHIV in Cameroon continues to be high. In a survey conducted by RECAP+ between October 2010 and February 2011 with the principal objective of assessing stigma and discrimination as experienced by PLHIV it was revealed that loss of employment (23%), exclusion from certain activities (81%), physical aggression and intimate partner violence, verbal insults, refusal or poor access to services of family planning and other services were some of the forms of stigma and discrimination experienced by PLHIV in past 12 months before the study. Self-stigmatization, self-blame, shame, and lack of knowledge about their rights were also experiences revealed by the study.

The legal framework in the Country remains hostile especially to KPs (MSM, FSW, TG and PWID) whose activities remain illegal and make them vulnerable to gender-based violence. For example, the 2016 key populations IBBS results revealed that FSW persistently face violence, with most recurrent being blackmail (45%), arrest on charges related to sex work (34%) and forced to have sex against will (33%). Similarly, for MSM, the study documented recurrent blackmail (23%), forced to have sex against will (17%), and arrested on charges related to homosexuality (15%). For example, on February 8 2021, two transgender women were arrested at a restaurant in Douala for wearing typically female clothing. They have been in custody since then until May 11 2021, that they were both sentenced to five years in prison and fines of 200.000CFA (USD $370) on the grounds of “attempted homosexuality”.

Stigma and discrimination had an impact on the first 95 with refusal to access HIV testing services and denial of HIV-positive status by some clients. It equally impacts the second and third 95 with non-disclosure of HIV-positive status, low adherence, interruption in treatment, poor retention and low viral load suppression. The situation is again worse for key populations who face double stigma as a result of their sexual orientation/practice and their HIV status. The 2016 key populations IBBS revealed that these key population subgroups experience discriminatory remarks by family members in relation to their sexual orientation or sex work (FSW 12%, MSM 14%), feel afraid seeking health services (FSW 6%, MSM 14%) or avoid seeking health services (FSW 5%).

The PEPFAR Cameroon program plans to continue implementing mitigation strategies to stigma and discrimination are as follows:

- Continue to fund minor repairs and rearrangements of counselling space for privacy and confidentiality
- Training and retraining of providers on client-centered and friendly services that are adapted to meet the specific needs of different population subgroups that access HIV services
- Ensure clients are educated on their rights and that clients rights are pasted in all health facilities in visible areas. Equally educate providers on clients’ rights
- Ensure all facilities providing HTS respect the WHO 5Cs (counseling, consent, confidentiality, correct test results and connection to treatment).
- Ensure all PEPFAR supported facilities and community based service providers meet and maintain the minimum standards of safe and ethical index testing with special considerations for key and priority populations to limit coercion and potential intimate partner violence
- Put in place systems for clients to anonymously report cases of stigma and discrimination
- Build systems for monitoring, evaluation and reporting of stigma and discrimination at facility and community level
- Implement DSD models for HIV testing, care and treatment so the client receives care where and when he/she is most convenient. We shall scale-up MMD to limit the number of visits, family model, support groups, community ARV dispensation, extended hours and weekend services etc. These services shall be smart, effective, efficient, confidential and client centered.

- Assist clients with partner notification and disclosure of HIV status. Provide age-appropriate education to C/ALHIV and assist their parents with disclosure to minimize stigma and discrimination
- Support MOH led communication to limit stigma and discrimination
- Discourage care models that place clients in different socio-economic classes like the "VIP" model.

3.0 Geographic and Population Prioritization

In COP21, PEPFAR geographic coverage in Cameroon continues in all ten regions, implementing a scale-up package at the 307 highest volume clinical sites and 21 military clinical sites across the country to achieve 90% ART coverage nationwide by 2022.

The ART gap is very big (Less than 60% ART coverage) for children, adolescents and young boys and girls and males in general across all regions. Our case finding, linkage and retention strategies on these sub-populations will be scaled up and intensified and will be the same for all zones and regions.

In the West region (Zone 1) where the ART coverage is the highest (89%) and unmet need the lowest, case finding strategy will prioritize index testing, focusing on newly initiated on ART and old patients on ART who are virally unsuppressed and Key Populations as indexes cases We will also be focusing on improving retention to make sure we do not lose patients who are in care. For the North West and the South West regions that have been greatly affected by the crisis, systems will be adapted to respond to the increasing number of internally displaced persons (IDPs). Multidisciplinary teams will be put in place to reach out with HIV prevention, care and treatment services to locations where IDPs are found. For the South West region, we shall also be especially focusing on reaching out to AGYW to improve ANC attendance.

Zone 2 (Littoral and South) and Zone 3 (Center and East) have similar ART coverages (75% in zone 2 and 81% in zone 3) and both zones represent 42% of the total unmet need. While the Littoral and Center regions that have been receiving PEPFAR support will continue to focus on intensifying different strategies for case finding, linkage and retention in different sub-populations, the East and South regions that just started to receiving PEPFAR support to scale up these strategies.

Zone 4 (North, Far North and Adamawa) has the lowest ART coverage (59%) and represents 46% of the total ART gap. This situation is similar in all three regions and across age and sex. This zone has a peculiarity that health seeking behaviors is not pronounced. Focus will first be on sensitization of the importance of getting to health facilities to seek health care in addition to providing a full package of differentiated services for different sub-populations (children, adolescents, young men, young women and men and adults) across the entire cascade.

PEPFAR Cameroon will add 86,394 patients on ART by the end of COP21 (FY 2022). Clinical and Community Partners will implement COP21 activities in each of the four zones in the different program areas. Above-site activities will be supported by other implementing partners. The current ART coverage is reflected in table 3.1.

Table 3.1: Current status of ART saturation and progress towards 95/95/95 across all SNUs

Table 3.1 Current Status of ART saturation				
Prioritization Area	**Total PLHIV/% of all PLHIV for COP20**	**# Current on ART (FY20)**	**# of SNU COP20 (FY21)**	**# of SNU COP21 (FY22)**
Attained	-	-	-	-
Scale-up Saturation	467,261/95%	311,524	142	146
Scale-up Aggressive	-	-	-	-
Sustained	-	-	-	-
Central Support	23,707/5%	-	-	-

Key and Priority Populations

PEPFAR Cameroon will continue to focus on current priority and key populations, with an increased focus on reaching men including clients and regular non-buyer partners of FSW through the "Sex, Test and Treat" strategy using prevention education, self-test kits, and referrals to testing where available. Overall, in the absence of reliable population size estimates, PEPFAR Cameroon's program data shows consistent upward trends in the number of KP reached with prevention services with a downward trend for case finding in line with the downward trend for the OU. PEPFAR will continue to collaborate with other partners (Global Fund and UNAIDS) for the integrated bio-behavioral surveillance (IBBS) planned to be conducted in FY22 for the KP and the Priority Population by the end of 2021.

PEPFAR Cameroon's KP community program will continue to prioritize KP, including FSW and MSM in seven cities (Yaoundé, Douala, Bamenda, Bertoua, Bafoussam, Ngaoundere, and Kribi). In addition, the program will continue emphasizing outreach to injection drug users and transgender women that began in COP18, although the numbers are expected to remain small.

Meanwhile, the KP clinical program will continue to primarily focus on providing HIV/TB prevention, care and treatment services to prisoners in all PEPFAR-supported catchment areas or health districts across all four zones. This will be achieved by strengthening and bringing to scale health facility-prisons collaboration for systems strengthening (provision of tools, guidelines, SOPs, trainings), prison community engagement (peer educators, expert clients, prison health care providers and administrative staff) quality care, supportive supervision and minor repairs at prison ART clinics to make the clinic conducive for both service providers and clients. The KP clinical program will also target and reach FSW who opt to access services directly from the health facilities or reach and provide prevention, testing and treatment services to FSW in underserved FSW communities (no KP community program – USAID, Global Fund) through the facility-led outreach approach.

Additionally, the clinical program will continue targeting pregnant and breastfeeding adolescent girls and young women (AGYW) who access health care services including ANC, delivery and vaccination with prevention services as its main priority population subgroup. Their partners who can either be adolescent boys and young men or adult men will also be targeted with services through AGYW received at various entry points at the facilities.

The geographic focus targets the seven largest and highest burden cities nationally, several of which include large universities which have proven to be an emerging area for case finding among MSM and AGYW engaging in transactional sex or seasonal sex work. The program will continue to grow the number of beneficiaries of its DREAMS-lite package of services for AGYW around the universities, regardless of their engagement in transactional sex. Prioritization criteria also included the presence of Kribi (a beach resort and seaport) and major sex work hotspots along key transport corridors, as well as the presence of refugees, Internally Displaced Persons (IDPs) and the associated humanitarian response (Bertoua and Bafoussam) that can increase vulnerability and sex work. In addition, coordination with the Cameroon National Association for Family Welfare (CAMNAFAW), the GFATM KP community Principal Recipient, helped determine and address existing geographic and programmatic gaps.

Throughout COP18, despite a stock out of RTKs, average yields of approximately 14% were recorded for FSW and MSM, due to improved risk screening and scale up of index testing. This trend continued into COP19. Yields for those aged 30 and above remain consistently higher and strategies are in place to target older KP. Based on this and the intensive case finding strategies implemented in the previous years, it is expected that yields will decrease in FY22.

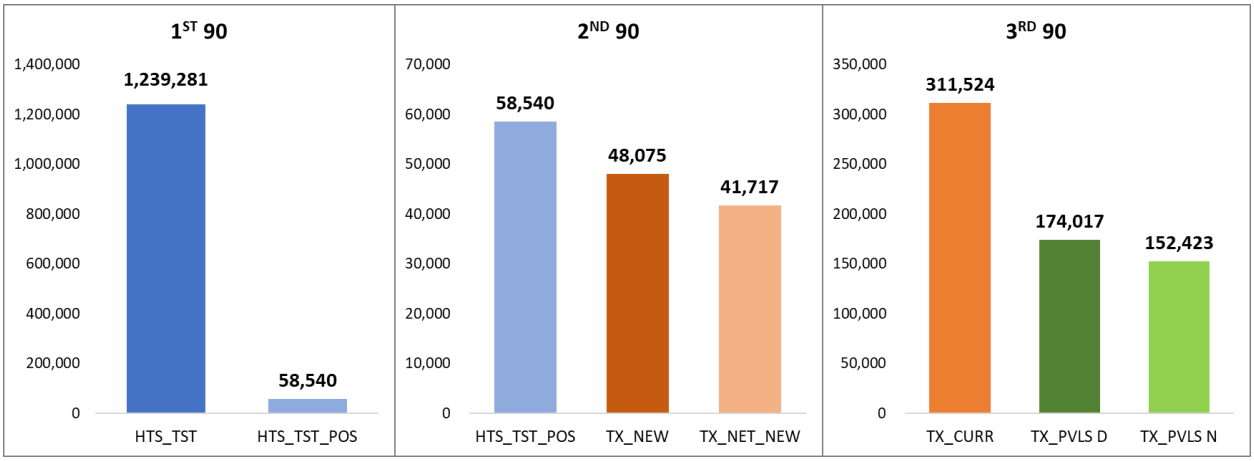
Orphans and Vulnerable Children

Regarding OVC, the PEPFAR program will expand from 40 to 44 health districts in 10 regions to wrap around the clinical program and achieve directives laid out in the PLL. Geographic prioritization is based on the ART sites in OVC-covered SNUs irrespective of the residential location of beneficiaries thereby enabling the program to offer enrollment at least 95% of all A/CLHIV that are enrolled in the ART sites within the OVC SNUs. Primary target beneficiaries include A/CLHIV and their families, children of PLHIV, HIV-positive pregnant and breastfeeding women (PBFW) and HIV-exposed infants (HEI), children of FSW, survivors of violence against children, adolescent boys and girls.

PEPFAR Cameroon will continue to leverage the OVC and Peace Corps platforms to provide primary prevention services to OVC 9-14 years. Additional prevention interventions for children and adolescents between the age of 9 and 17 years will focus on risk avoidance, risk reduction, and gender-based violence (GBV) prevention and response. Illustrative activities include school scholarships, vocational training, SRH education and referrals to other high impact services, parenting, and household economic strengthening. Peace Corps volunteer placement and community engagement will be in four of the ten regions (South, East, Littoral and Center). This will continue in COP 21 with priority given to PEPFAR Supported ART facilities and CSOs. In these facilities, their role will be focused on providing treatment literacy and adherence education and primary prevention services to ALHIV where possible. In the community they'll provide community and household level adherence support to adolescents living with HIV, PLHIV and their households. At the community level, OVC, particularly older OVC in the 10-18 years range, will be reached through the Peace Corps with a comprehensive package of layered primary prevention interventions through DSD. Sexual and GBV prevention will be systematically integrated into interventions.

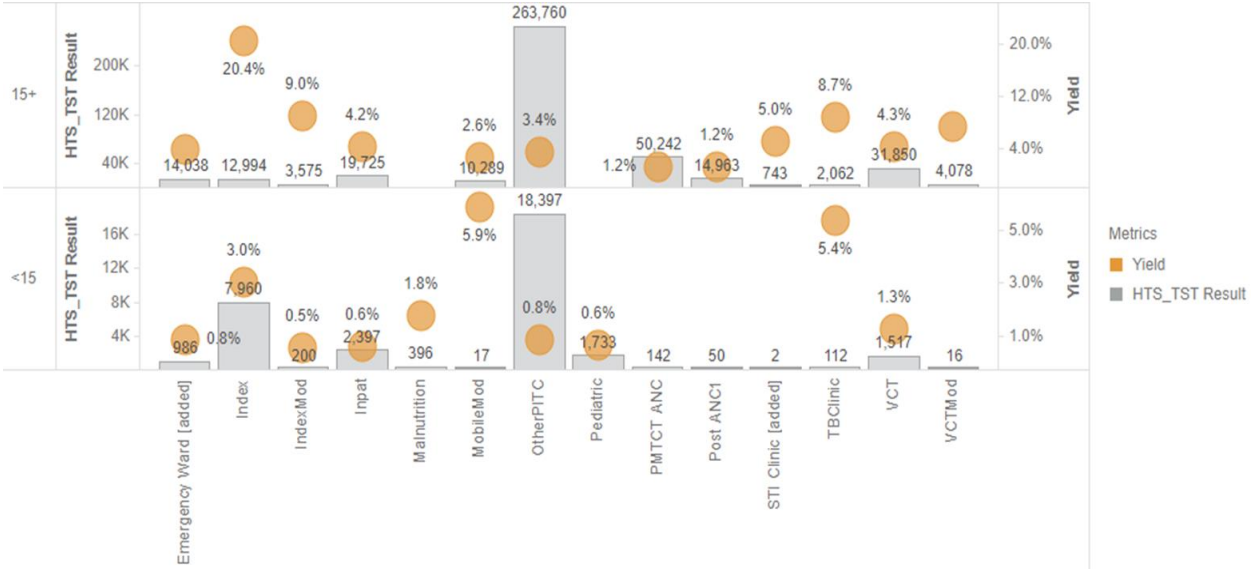
4.0 Client-Centered Program Activities for Epidemic Control

Figure 4.0.1 Overview of 90/90/90 Cascade, FY20



4.1 Finding the missing and getting them on treatment

Figure 4.1.1 Testing Volume and Yield by Modality and Age/Sex, FY20



CAMPHIA showed the HIV prevalence for populations ages 0-14, 15-49, 15-64 are 0.2%, 3.4% and 3.7%, respectively. Among adults age 15-64 years, the HIV prevalence varies by region, ranging from 1.5% in the Far North Region to 6.3% in the South Region. The survey also revealed that 56% of PLHIV in Cameroon were aware of their HIV status, 93% of whom are on treatment and 80% of whom were virally suppressed. Age disaggregation shows an increase for higher age bands across the three 90s: Among the 15-29, 30-49 and 50-64 age groups, the 1st 90 was 29%, 61% and 69% respectively; the 2nd 90 was 92%, 92% and 97% respectively; and the 3rd 90 was 74%, 78% and 89% respectively.

Further disaggregation by sex shows higher awareness of HIV status among females in the 15-29, 30-49 and 50-64 age groups (31%, 63%, and 75% respectively) relative to males in the same age groups (22%, 55%, and 61% respectively). For the 2nd 90, we observe better trends among males (100%, 93%, and 97% respectively) compared to females (90%, 91%, and 97% respectively). For the 3rd 90, viral suppression among females on ART are 76%, 78%, and 85% respectively for the above age groups, and 67%, 76%, and 96% respectively for males. In order to reach epidemic control by FY21, PEPFAR Cameroon expanded the clinical and military programs to cover 319 high volume sites to achieve 91% ART coverage across the 10 regions.

Spectrum 2020 estimates also identify population gaps by age group and sex, which need to be addressed in order to achieve HIV epidemic control. Table 4.1.3 shows major gaps in reaching all subpopulations, especially children, AGYW, and men. Strategies to address these gaps are detailed in following paragraphs.

FY20 Performance and Achievements

In COP19 (FY20), PEPFAR Cameroon provided HTS to 1,237,614 clients, compared to a target of 2,014,569 clients, with an HIV positive yield of 5%. There were 58,760 HIV positive clients identified of the target of 133,691. 62.2% of the newly diagnosed PLHIV were females and 37.8% were males. The data for FY20 indicate achievement of 61.4% of testing targets and 44.0% of case finding targets. Achievement is still suboptimal, especially among children, adolescent girls and young women (AGYW), and men. Age disaggregation of FY20 results showed that 6.6% of PLHIV were below 19 years of age, 10.9% in the 20-24 age group, 69.8% were within the 25-49 age group and 12.7% were in the >50 age group.

The number of HIV positive clients identified through other PITC modality has consistently increased across the quarters in FY20. All PEPFAR supported facilities are currently using the register form of the screening tool and efforts are in place to further optimize other PITC using the risk-based screening tool to further target testing and increase yields.

We observe growing positives trends from ICT over the past 4 quarters (1267 in Q1FY20 to 2890 in Q4FY20),and yields from ICT have remained high (12.1% in Q1FY20, 11.9% in Q4FY20). This has been achieved by scaling ICT innovative strategies such as anonymous elicitation where index clients anonymously list contacts, 1 by 2 strategy includes confidentially providing HIV testing to the contacts as well as their neighboring household and pairing of testers with experienced peers/Doctors and nurses while supervising closely through virtual GSM. We are not yet where we intend to be in terms of index testing and efforts are being doubled to get there.

HIV case identification is a key step in the clinical cascade in achieving epidemic control, therefore strategies and approaches are needed to address this gap.

Outstanding Gaps and Challenges

Table 4.1.1 Finding the missing by age and sex and getting them on treatment (Spectrum 2020)

Age	PLHIV		Current on ART		ART Coverage			ART Gap	
	Female	Male	Female	Male	Female	Male	Total	Female	Male
<01	629	505	135	121	21%	24%	23%	494	384
01-04	3,173	2,524	1362	1302	43%	52%	47%	1,811	1,222
05-09	4,613	4,954	1955	1840	42%	37%	40%	2,658	3,114
10-14	6,630	7,428	2396	2108	36%	28%	32%	4,234	5,320
15-19	9,982	10,929	4502	1861	45%	17%	30%	5,480	9,068
20-24	20,951	14,032	15020	3474	72%	25%	53%	5,931	10,558
25-29	31,236	19,374	24,389	5,896	78%	30%	60%	6,847	13,478
30-34	37,283	22,137	36,209	10,399	97%	47%	78%	1,074	11,738
35-39	39,339	22,448	41,172	14,619	105%	65%	90%	-1,833	7,829
40-44	34,168	19,358	38,914	17,428	114%	90%	105%	-4,746	1,930
45-49	22,577	12,374	30,013	16,728	133%	135%	134%	-7,436	-4,354
50+	116,864	27,459	49345	29746	42%	108%	55%	67,519	-2,287
Grand Total	**327,445**	**163,522**	**245,412**	**105,522**	75%	65%	71%	**82,033**	**58,000**

In the table above (Table 4.1.1), we observed 71% overall coverage, however, we observe gaps in first 95 in the pediatric and adolescent ages for both males and females. For all child and adolescent age groups there was a less than 50% coverage, with coverage being the lowest in those <1 year (23%). This is significantly lower compared to the older subpopulation (30+) which had coverages approaching 100%. Overall, we see higher gaps in case finding for men compared to their female counterparts. These gaps have been analyzed and strategies outlined below to cover the gaps.

Table 4.1.2 Finding the missing and getting them on treatment by Region (Spectrum 2020)

Region	PLHIV		Current on ART		ART Coverage			ART Gap	
	Female	Male	Female	Male	Female	Male	Total	Female	Male
Adamawa	16,896	8,800	11,140	5,219	66%	59%	64%	5,756	3,581
Centre	75,225	37,592	63,180	27,685	84%	74%	81%	12,045	9,907
East	24,356	11,652	18,203	7,924	75%	68%	73%	6,153	3,728
Far North	25,712	14,058	14,012	7,240	54%	52%	53%	11,700	6,818
Littoral	55,516	26,605	43,495	18,123	78%	68%	75%	12,021	8,482
North	26,674	13,748	14,673	6,583	55%	48%	53%	12,001	7,165
North West	33,525	15,480	28,853	11,608	86%	75%	83%	4,672	3,872
South	16,997	8,622	10,732	4,097	63%	48%	58%	6,265	4,525
South West	31,205	16,905	21,226	8,857	68%	52%	63%	9,979	8,048
West	21,339	10,060	19,898	8,186	93%	81%	89%	1,441	1,874
Grand Total	327,445	163,522	245,412	105,522	75%	65%	71%	82,033	58,000

The table above shows the current gaps in ART coverage by Region. We observe outstanding gaps in coverage in the North, Far North, and Adamawa (Zone 4). We also observe gaps in the South, South-West and East. The Centre and Littoral Regions, which carry the highest number of

PLHIV, still have gaps in case identification. The West and North-West are the two Regions approaching epidemic control in Cameroon. Much still needs to be done to close the remaining gaps in case finding.

In FY20 the child and adolescent age group (0-19) has a high percent achievement towards their FY20 tests-given goals, with children <15 achieving over 100% of their goals, and adolescents 15-19 achieving 99% of their goals. Although having high achievement towards tests-given goals, there were still gaps in goals towards numbers of positive cases identified, being as low as 21% in children 10-14. In those 25+, achievement towards FY20 goals were between 34% and 63%, with achievements towards FY20 positive cases identified goals between 26% and 53%.

The PEPFAR Cameroon program suffered various challenges in case finding. There was low realization of HTS targets, especially for the children and adolescent age groups, AGYW and men as seen above. There was equally low case finding in the 3 Northern Regions, South, South-West and East Regions as seen above. The COVID-19 pandemic continues to impact the first 95 by causing reduction in facility visits by clients, restricting of community case finding activities, repurposing of some clinical facilities for COVID-19 care, quarantine of exposed and infected facility staff. We also observed a decrease in index testing as some notified contacts refused to come to facilities due to fear of COVID-19. COVID-19 pandemic also led to limitation of CDC in-person site visits to provide technical support for case finding. The PEPFAR Cameroon program also suffered HTS access challenges in conflict affected areas such as the ongoing socio-political anglophone crisis in the North-West and South-West as well as the Boko-Haram terrorist insurgency in the Extreme-North Region. The program also experienced challenges with access to services in remote and hard to reach populations in many Regions like the East, South, North and Adamaoua. Furthermore, limited stocks and periodic stock out of RTKs occurred, and led to the centralization of HTS. Early infant diagnosis also noticed challenges of stockout of EID sample collection material and test kits, with equally low access to EID POC in some regions.

Strategies to improve HIV case finding

Based on analysis of PEPFAR's FY20 performance described above, PEPFAR Cameroon will continue to scale up case finding strategies along with innovative strategies. PEPFAR Cameroon will continue to prioritize HTS for the following populations which showed remarkable gaps in case finding; children at risk for HIV, adolescents aged 10-19 who meet defined risk criteria, men (particularly in the 15-34 age groups), and women in the 15 -25 age group. Using the calculation of the number of adults or infants needed to test to identify one positive, the key entry points the program will focus on will be Index Case Testing (facility and community), Optimized Provider Initiated Counseling and Testing using the screening tool (PITC), Voluntary Counseling and Testing and TB clinics. In order to address these gaps, PEPFAR Cameroon will scale up approaches proven to improve case finding such as quality index testing and will discontinue non-targeted testing.

Scale-up Index Testing at both Facility & Community levels

Index testing will target sexual partners of adult index cases, parents of pediatric index cases and children exposed to HIV in facilities and in the community. Index testing will be systematically

offered to sexual partners of all newly initiated ART clients and old ART patients who are not virally suppressed or were LTFU and returned to care, biological children of clients who are at high risk for HIV through use of a screening tool to identify those children at risk of MTCT, and parents of all newly diagnosed pediatric patients. Health care providers and IPs will be trained or retrained on eliciting and testing sexual contacts, biological children and parents of index cases. PEPFAR will ensure the availability of various models of partner notification such as client, provider, contract, and dual notifications and will screen all named partners for intimate partner violence (IPV) and refer for services. Different client-centered models of index testing will be provided such as self-testing, facility based or community testing. The contacts will be offered HIV testing services where they are most convenient be it at homes, offices, facility etc.

In addition, the program will implement “targeted testing in index case testing” and will pair index testers with nurses and doctors to improve partner elicitation and testing. In high coverage regions, index testing will be emphasized, though due to limitation on M&E as well as strong stigma, some clients may still prefer PITC and VCT, so high coverage regions will still receive these targets. Best practices in index testing like anonymous contact elicitation will be extended to other zones. In this strategy, index clients who do not feel comfortable sharing sexual contact information with the counselor or index tester are given the opportunity to anonymously line-list these contacts to drop in a box.

Detailed documentation of index testing services by contact type down to treatment initiation shall continue in COP21. This helps to refocus interventions, monitor yields per contact type and redirect efforts in case finding.

Safe and ethical Index Testing

An assessment of all PEPFAR supported facilities was conducted using the REDCap tool. This was to ensure that the following minimum standards were being met by all sites implementing index testing; 1. Counseling, 2. Informed consent, 3. Confidentiality, 4. Connection to Services, 5. Intimate Partner Violence (IPV) Risk Assessment, 6. Training and Supportive Supervision and 7. Adverse Events Monitoring and Response. The program will continue engaging with the community through sharing of findings and jointly seeking solutions, while taking into account specific needs of KP and Young People. A time-bound and actionable corrective action plan was elaborated for sites that did not meet these minimum standards and the IPs accompanied the sites in implementation of actions. All PEPFAR supported sites currently meet the minimum standards for safe and ethical ICT. The PEPFAR team shall continue to technically support them to maintain these standards.

Optimized Provider Initiated Testing and Counseling (PITC)

Targeted PITC using the register form of the screening tool to identify at-risk adults, adolescents and children will be offered at low yield entry points, including the community. On February 19th, 2020, the Minister of Health of the Government of Cameroon signed a circular note giving directives on the correct use of the HIV screening tool in all facilities to ensure effective implementation and scale up of targeted testing.

Optimized PITC using the screening tool will occur at all high yield entry points such as TB clinics, in-patient services, emergency, malnutrition, pediatric, PMTCT and VCT including mobile testing for clients of FSWs including long distance truck drivers.

To improve other PITC yield among those reached by the program, PEPFAR Cameroon will close non-productive entry points and strategies such as ENT, radiology and testing of care givers. The program shall train and mentor consultants/providers on the use of the screening tool, document testing coverage at high yield entry points, monitor yields, monitor the use of the screening tool as a prerequisite for reimbursement of user fees for HTS, and continuously mentor health facility staff on using targeted testing registers. All entry points shall be saturated with APS testers to ensure the screening tool is effectively used.

Scale-up Self-testing

HIV self-testing was introduced in COP20 and in FY21 we conducted a webinar on demand creation to boost implementation. An advocacy meeting was held with NACC to uplift barriers to implementation like in Adamawa Region and to circulate National Directives on self-testing

Self-testing will continue in FY22 to reach partners of KPs who refuse other testing modalities or are unwilling to come to the health facilities, drop-in centers (DICs) or KP community events. In FY22, HIV Self-testing will continue to be accelerated in the groups authorized by the MOH including KPs, partners of key populations, partners of PLHIV (screening around index cases) from the age of 18, young women (from 18 years old) in a vulnerable situation, men in vulnerable situations and partners of HIV+ pregnant women.

The directly assisted strategy shall be prioritized and the unassisted strategy shall equally be used for clients not reached directly. Distribution shall be directly done by care providers and community health workers at both facility and community levels. Indirect distribution shall be done through sexual contacts in index testing and also in KP social networks.

The IPs have printed HIV-ST registers which are now available in all facilities. We shall continue to strengthen the M&E process for HIV-ST.

All distribution approaches shall be accompanied by active follow-up of beneficiaries by appointments for beneficiaries to bring results, by phone, home visits etc. to provide support before, during and after conducting the HIV self-test. Clients with reactive results shall be followed up actively and linked to confirmatory testing and treatment. Those with negative results shall be provided preventive services like health education on adopting risk reduction behaviors, condoms, PrEP etc.

We shall continue advocacy with MOH to extend access to HIV self-testing to at risk adolescent and young girls and boys below 18 years of age.

Community Case Finding Strategies

Given the drastic drop in facility attendance due to COVID19, community case finding strategies shall be intensified in COP21. Targeted facility-led community case finding shall be implemented

in homes, offices, gold mines, carpentry/tailoring workshops etc. where clients are most conveniently located. The “1 by 2”, or suspect case strategy shall be intensified to confidentially provide HIV testing to index contacts and suspected cases in the community as well as their neighboring household to avoid stigma.

Another community strategy that was successfully implemented in COP20 in the Northern Zone which shall be extended is Chefferie testing. This is a context specific strategy adopted in the Northern Zone characterized by very low health seeking behavior and where Traditional Authorities are highly respected. The Traditional Ruler mobilizes his population at his residence who benefit from HIV testing, Blood Pressure, Blood Sugar and STI screening.

An additional strategy shall be testing at Satellite Sites. The IPs shall continue putting testers at satellite health facilities (small facilities which are not HIV testing and treatment sites) for screening of clients who consult there. Those screened reactive will be actively linked to PEPFAR supported sites for confirmatory diagnosis and treatment initiation. All community HIV testing strategies shall be accompanied by strong linkage systems to confirmatory diagnosis, care and treatment.

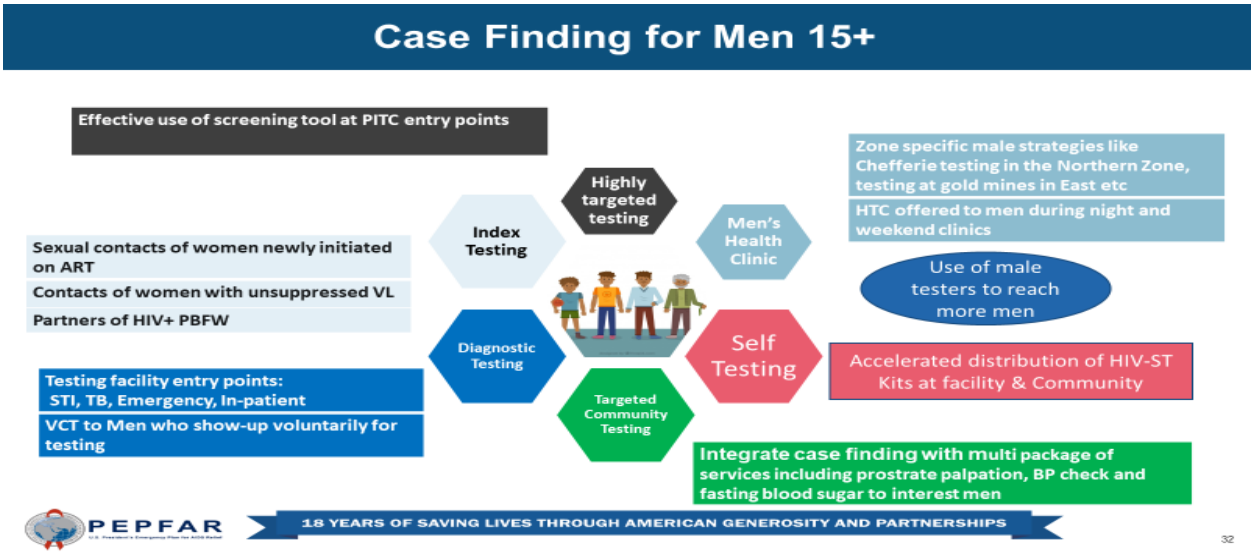
Figure 4.1.2 Community Case Finding Strategies

Strategies to reach men

In COP21, PEPFAR Cameroon will use index testing to reach husbands and sexual partners of HIV-positive women, sexual partners of MSM, clients and regular non-transactional partners of FSWs. Other strategies will include highly targeted testing in health facilities and community settings and self-testing for partners of pregnant women, partners of index cases and clients and

non-transactional partners of FSWs who do not wish to access HTS in health facilities and DICs. In military settings, targets for self-testing will include non-commissioned officers, index partners who are military but do not wish to come to health facilities, and officers returning from deployments longer than six months. Diagnostic testing will also be implemented at critical service delivery entry points and VCT. The program shall equally have more male testers to reach the men and implement integrated package of services such as BP, diabetes and STI screening to attract the men. We will continue to implement and adapt zone specific and client centered strategies to find more men like Chefferie testing, index testing to partners of positive women, targeted testing and other community strategies.

Figure 4.1.3: COP21 Strategies to Identify Men 15+



For men in the 15-24 age group, PEPFAR Cameroon will support health facilities to extend clinic hours and provide weekend services to accommodate working men and young men in school. Out-of-school young men will be targeted and mobilized for HIV prevention, care and treatment through youth associations, among internally displaced persons (IDP), through support groups of ALHIV and PLHIV (parents) and the use of social and print media such as WhatsApp, Facebook, Instagram, Tik-Tok etc. HIV testing for adolescents and young men will be highly targeted based on risk mapping and behavioral analysis with the effective use of the screening tool at facility and community levels. Index testing will be offered to sexual contacts of adolescent young boys and men who are newly diagnosed with HIV or virally unsuppressed. Diagnostic testing will also be offered to adolescent boys and young men at high yield service delivery entry points and VCT. PEPFAR Cameroon will also identify “adolescent champions” to mobilize their peers and link them to adolescent friendly HTS services.

Men aged >25 years will be reached through a package of modalities including index testing for sexual contacts of women newly initiated on ART, contacts of women with unsuppressed VL, partners of HIV-positive PBFW and partners of KPs. Men who are biological parents of HIV-positive children, will also be reached through index testing in all clinical settings. Options for HIV

self-testing will be offered to partners of KPs receiving care at the facility and community level. Targeted PITC will be offered to men with the effective use of the screening tool to assess risk and diagnostic testing at key service delivery entry points (sexually transmitted infections - STI, TB, emergency, in-patient) and VCT. HIV self-test kits will also be proposed to harder-to-reach men (KPs, partners of PBFW and index contacts) who will not be reached through traditional approaches either at facility or community levels. In addition to HTS on men's health clinic days, male-friendly services will be scaled up to reach military and civilian men with a multi-service package including prostate palpation, mental health evaluation, blood pressure screening, fasting blood sugar assessment. Extended clinic hours including night and weekend shifts will provide an opportunity to offer HTS to more men. Health education and literacy materials tailored to men's health will be scaled up to reach men aged 25 years and above in facilities and communities. The military program will provide health messaging (including the importance of testing at least once a year) and information on availability and location of HTS during morning assembly of military personnel. HIV testing information and health messaging will also be promoted on social media, at social events at drop-in centers for KPs and for men accompanying their families to facilities. Outreach activities to find high-risk men in communities, especially during events that attract men (drinking spots, sporting events, resting spots for truck drivers, barber saloons, carpentry workshops, gold mines, fishing areas, KP chill-ins, officers' mess halls, training centers for non-commissioned officers) will be used as opportunities to offer testing. Other innovative approaches to find men will be through targeted community testing activities in collaboration with community partners to include testing in medicine stores, markets, satellite sites, private laboratories and other busy areas. PEPFAR Cameroon will continue reaching regular partners and non-transactional partners of FSW through a voucher referral system and self-testing. PEPFAR Cameroon will also make use of trained male expert clients to reach and link their peers to male-friendly HIV testing services.

Strategies to reach women

PEPFAR Cameroon will offer index testing to wives and partners of HIV-positive men and mothers of HIV-positive biological children in clinic settings. Targeted testing will be offered to at-risk women based on risk assessments with the effective use of the screening tool to achieve higher HIV yields. Routine HTS will be offered to all pregnant and breastfeeding women (PBFW) at antenatal care (ANC) services and to PBFW during delivery, in case they did not attend ANC in the course of their pregnancy. Retesting of pregnant women who initially tested negative at their first ANC visit and retesting for verification within the context of the test and start strategy will be offered. Diagnostic testing will be offered to women at critical high yield service delivery entry points (STI, TB, emergency, in-patient) and VCT. For all pregnant women, PEPFAR Cameroon will extend the 'Catch-Up Strategy" to reach pregnant women in hard-to-reach localities for ANC and PMTCT services in all PEPFAR-supported sites in the 10 regions, as this is the second highest modality through which HIV positive women are identified. Self-testing will be offered to female partners of HIV-positive MSM. HIV testing among FSW will be prioritized and outreach testing for widows will be intensified within existing informal associations and gatherings of widows.

Figure 4.1.4: Strategies for Achieving Epidemic Control among AGYW

PEPFAR Cameroon will offer index testing to AGYW who are sexual partners of HIV-positive men, AGYW who are biological children of index parents and AGYW who are teenage mothers of index children. Targeted testing will be offered to at-risk out-of-school AGYW, including teenage mothers, based on risk mapping and behavioral analysis with the effective use of the screening tool at facility and community levels. Diagnostic testing will also be available for AGYW at all high yield entry points. Out-of-school AGYW will also be targeted and mobilized for HIV prevention, treatment and care through youth associations and social and print media. Community testing opportunities will be made available for AGYW. Routine HTS and re-testing will be offered to AGYW who previously tested negative at their first ANC visit. Post-GBV care package including HTS will be offered to AGYW who are victims of violence. PEPFAR Cameroon will also identify "AGYW and teenage mother champions" to mobilize their peers and link them to adolescent-friendly services to ease access to prevention material, reproductive health care and HIV services. Service delivery will be adapted for AGYW working or in school to include extended working hours and weekends. PEPFAR Cameroon will apply a screening tool to identify and offer HTS to at-risk AGYW, particularly those who are already sexually active (including teenage mothers); those living in or around sex work settings; adolescent daughters of FSWs, those living in or around military barracks, AGYW who are widows, and presumptive TB cases.

PEPFAR Cameroon will support minor repairs and rearrangement of counseling space to ensure privacy and confidentiality for clients. Monitoring and supervision will be intensified to ensure improved quality of services and linkage to treatment for clients.

Strategies to reach Key Populations

The PEPFAR KP program will continue to expand targeted community and facility based HTS to KPs. Community strategies such as peer-to-peer referrals, peer testing for triage using the rapid finger prick test, third party including medicine vendors in hotspots and referrals of harder-to-reach KPs reached online and through social media will continuously be used. HTS will be provided to the community DICs, hotspots or KP meeting and sex work venues. PEPFAR Cameroon will principally use risk/social network mapping to provide testing to key populations

including MSM and FSW as a differentiated testing approach. HTS will be mainstreamed during MSM community social events (chill-ins, grins).

PEPFAR Cameroon will strengthen health facilities to provide KP-friendly services (stigma free, nonjudgmental, extended and weekend hours) to KPs who prefer to seek HTS at the health facility. Walk-ins and HTS will be provided based on results of a risk assessment tool that will systematically be used. Additionally, through a facility-led outreach approach, health care providers will reach, recruit and test KPs in underserved communities (in the absence of a KP community program). FSW will additionally be reached in the facilities during ANC and post-natal services for PBFW. HIV self-tests use will be brought to scale as a tool to improve access to HTS among KPs that are harder-to-reach including MSM and FSW.

Index testing and social/sexual network-based HIV testing will be used to reach husbands and sexual partners of HIV-positive women, sexual partners of MSM, clients and regular non-transactional partners of FSWs. Index testing will be implemented in a manner that takes into account human rights concerns and consistently assesses and addresses the risk of intimate partner violence (IPV). To that effect, amongst KPs, PEPFAR programs will routinely screen for IPV risk prior to offering index testing services and use a differentiated approach to testing that includes distribution of self-test kits or social/sexual network approaches such as organizing community events where partner can be tested without partner disclosure/notification. Other strategies will include highly targeted testing in health facilities and community settings and self-testing for partners of pregnant women, partners of index cases and clients and non-transactional partners of FSWs who do not wish to access HTS in health facilities and DICs. In military settings, targets for self-testing will include non-commissioned officers, index partners who are in the military but do not wish to come to health facilities, and officers returning from deployments longer than six months. Diagnostic testing will also be implemented at critical service delivery entry points and VCT. HIV testing counselors will be extended to the new PEPFAR sites and will be responsible for counseling, testing and linkage of HIV positive clients at various entry points. In addition to screening for IPV risk, PEPFAR supported community and clinical sites will also ensure provision or referral to GBV services for victims or potential victims.

Prisoners will be reached with targeted testing services within the prisons. During COP21, PEPFAR Cameroon will scale up training of prison peer educators to offer routine tests for triage to their peers (existing inmates). Systematic HTS services using the screening tool will be offered to incoming (new) prisoners. Incarcerated persons accessing the prison's health facility for other medical conditions, including presumptive TB cases will be offered risk-based HTS.

Strategies to reach Orphans and Vulnerable Children (OVC)

PEPFAR Cameroon will expand the pediatric package of services and support the GRC to complete the rollout of Test and Treat for pediatric cases.

The OVC program plays a key role in ensuring community support for linkage to care, retention, and adherence among children and adolescents living with HIV. More specifically, the program will provide the following services to target beneficiaries:

- A/CLHIV and their families. Trained case workers will carry out monthly home visits to provide early childhood development (ECD) for children under 8 years of age focused on positive parenting interventions and early stimulation; adherence counselling; age and stage appropriate disclosure support, education progress monitoring; nutritional assessment and counselling; violence screening; transportation support to access health services and medical coverage for other health conditions; and other services as needs arise. Additional services for adolescents living with HIV will include screening for drug, alcohol, and sexual risk behavior and providing counselling to reduce identified risk practices, as well community adolescent clubs for treatment literacy and support. The program will strengthen bidirectional referral between community-based organizations and health facilities, including MOUs for referral and counter referral with supported facilities, organizing case conferencing, and monthly coordination meetings. In addition, the program will leverage other donors and governmental institutions investments by referring beneficiaries to access services PEPFAR is unable to provide.

- HIV-positive PBFW and children living in their care. Trained case workers will conduct monthly home visits to provide ECD focused on positive parenting and early stimulation; adherence monitoring; and accompanied referrals to health facilities to ensure confirmatory testing among HEI.

- Other children at risk (children of female sex workers, GBV cases reported to the program, AGYW in or at risk of entering sex work, internally displaced children/adolescents). See section 4.3 for primary prevention program targeting AGYW and OVC.

The OVC program will provide wrap-around services such as household economic strengthening activities and education support for formal schooling and vocational training to help mitigate the negative impact of HIV on households. Finally, the program will seek to leverage existing programs such as USAID's Food for Peace program (targeting refugees and IDPs), President's Malaria Initiative (in health districts in the North and Far North regions), German Corporation for International Cooperation GmbH (GIZ) programs in the North and the World Bank's Social Safety Net program to improve the living conditions of OVC and their families.

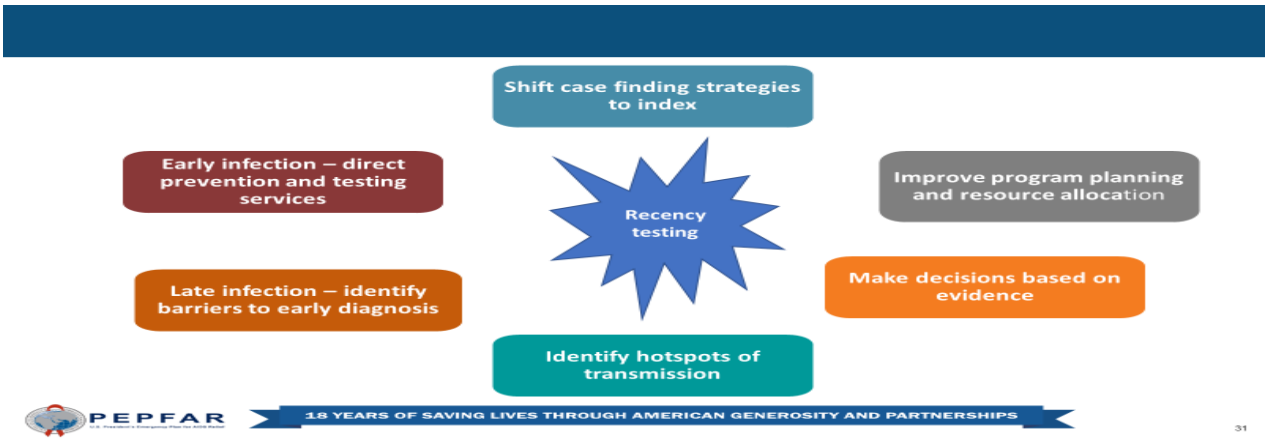
PEPFAR Cameroon in FY20 began to see an improvement in the enrollment of Children and adolescents living with HIV (C/ALHIV) in the OVC Program by Region. This improvement was greatly due to increased collaboration and bidirectional referrals between the Clinical and OVC programs. Health Care providers and Psychosocial Support Staff have been working in close collaboration with Case Workers of the OVC program to support key activities in case identification, linkage to care, retention and viral load suppression through accompany children and adolescents living with HIV at both facility and community levels for better psychosocial outcomes. The OVC Partners from the community Level will continue to provide basic psychosocial support for C/ALHIV such as financial subsidies for Advanced Disease, nutritional support, resources to access health facility to reduce missed appointments rates /LTFU, treatment education to ensure children return for appointments and are retained into care, educational scholarships and PPE to OVC Families during the COVID19 Outbreak. At the facility level PSS in collaboration with the OVC Partners will offer community outreach testing to OVCs and their household based on risk assessment, treatment initiation/Monitoring, EID sample

collection from HIV exposed infants for PCR, VL sample collection in the community for children who are not willing to come to the facility due to fear of COVID, age appropriate Therapeutic education and community ARV dispensation. PEPFAR Cameroon will continue to enhance enrollment of C/ALHIV into the OVC Program through bidirectional referral in the OVC and clinical programs to ensure improved outcomes for our children and adolescents living with HIV on treatment.

Introducing Recency Testing in PEPFAR Cameroon Program

In COP 21, Cameroon plans to implement a recency infection surveillance program to identify hotspots of HIV transmission, target prevention efforts, interrupt further transmission to reduce overall new infection and HIV incidence. Strategies for implementation including protocol development and implementation plans will be developed in consultation with CDC HQ and IPs. Recency testing will be introduced into routine HIV testing services (HTS) at 30 pilot sites, as a supplementary test for clients diagnosed HIV-positive, with viral load testing included to improve accuracy of recent infection. A hybrid virtual and in-person (lab component) recency training of trainers (TOT) and step-down trainings will be completed prior to activation of sites. Development of a recency specific dashboard summarizing trends over time, geography, and subpopulations will be developed to facilitate data use. The national certification of sites and testers will resume for both HIV diagnosis and recency testing to ensure high quality results.

Figure 4.1.5 Recency Testing Considerations



Continuous Quality Improvement (CQI) and Quality Assurance (QA) in HIV testing

To improve the quality of testing, mentorship and site supervision will be intensified at all sites. The laboratory and clinic interface will be strengthened by reinforced collaboration between the lab partner (GHSS) and the clinical partners to ensure quality HIV testing. For all target populations and geographical areas, PEPFAR Cameroon will continue to use site level data by age and sex and will continue tracking performance at the site level by modality to identify high, medium, and low performing sites. Weekly data collection and reporting of program indicators and test kits will be strengthened. IPs will work with high performing sites to identify and adapt

best practices to mentor and to support low performing sites to improve performance. The CQI process will be used to drive case finding performances, especially for low performing sites.
In the context of COVID19, the program will continue to mitigate the impact by providing PPEs to testers, virtual GSM and Tele-mentoring and taking ICT services to contacts who are unable to come to health facilities.

4.2 ART continuity and ensuring viral suppression

4.2.1 Getting PLHIV on treatment

Based on National DHIS2 and 2020 SPECTRUM estimates, 71% of PLHIV in Cameroon were on treatment at the end of December 2020, leaving a gap of 29%. At the regional level, the initiation rate was highest in the West (89%), North West (83%) and Center (81%), followed by Littoral (75%), East (72%), Adamaoua (64%), and South West (62%), and was lowest in the South (58%), North and Far North (53%)[1].

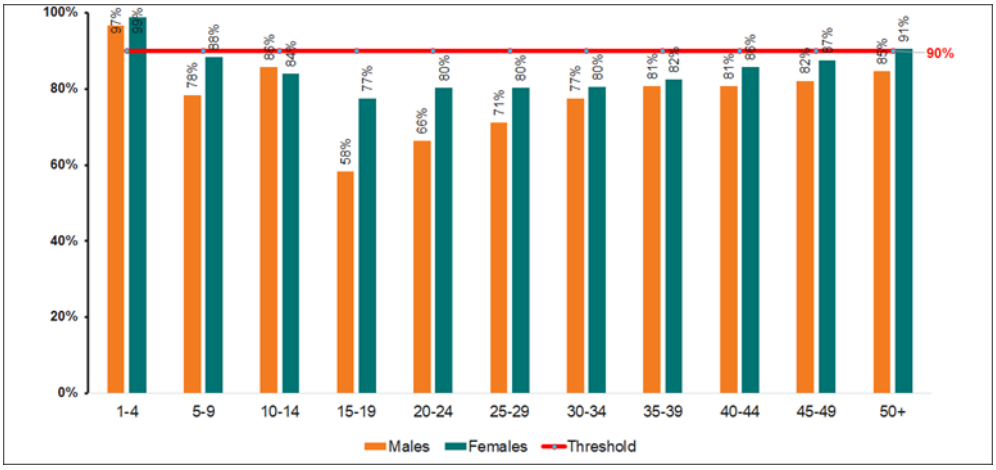
In FY20, disaggregated data by age shows that only 47% of PLHIV ages 1-4 year, 40% of 5-9, 32% of 10-14-year-olds, 30% of 15-19-year-olds, and 55% of PLHIV above 50 years were estimated to be on treatment. Treatment coverage is higher among women (75%) compared to men (64%). ART coverage by zone was respectively 77%, 71%, 79% and 56% for Zones 1 - 4. PEPFAR data show that of the 58,540 patients who tested positive in FY20, 48,057 were initiated on ART, reflecting an overall linkage rate of 82%. This linkage rate for the OU may be artificially low due to the falsification of KP data, discovered during an interagency assessment of the KP Handshake Model. Excluding this data, the clinical linkage rate is >90%. Age and sex disaggregation reveal that among the 48,057 patients linked to treatment, 64% were female and 36% were male. PEPFAR Cameroon assesses site level data for linkage with all the disaggregation and subpopulation for all supported site across the 10 regions.

Outstanding gaps

FY20 programmatic results show a linkage rate of 82%. However, there are still some outstanding gaps among certain subpopulations, particularly among males 5-9 and 20-35 years (78% & 66-77%) and adolescent males & females 15-19 years (58% & 77% respectively). Overall, suboptimal linkage to care and treatment remains an issue in Zone 4 and among the pediatric population and for males relative to females. Linking PLHIV to treatment is a key step in achieving epidemic control, therefore strategies and approaches are needed to address these gaps. DHIS2 2020 data indicates similar linkage gaps.

Figure 4.2.1. FY20 Initiation by age and sex

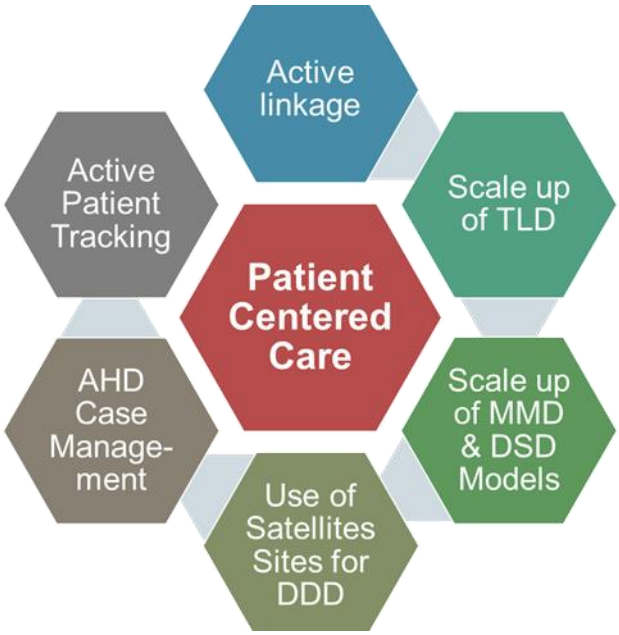
[1] *Data sources: PLHIVP SPECTRUM estimates February 2021; On ART: National DHIS2 as of December 2020*



Strategies to improve on linkage and retention to C&T

PEPFAR Cameroon will continue to implement a patient-centered care approach across the 10 regions in COP21. This includes scale up of active linkage activities; scale up of TLD rollout; scale up of multi-month dispensation of ART; extension of differentiated service delivery models; use of satellite sites to aid in the implementation of decentralized drug distribution; improved management of advanced HIV disease; and active patient tracking. To support treatment outcomes, PEPFAR Cameroon will work to ensure that 80-85% of all patients: pediatrics, adolescents and adults are placed on dolutegravir-based treatment regimens by the end of COP21 (TLD for adult and DTG10 for children).

Figure 4.2.2. COP21 Patient-centered care approach



Strategies to improve linkage to C&T

PEPFAR Cameroon will continue to scale up active linkage of patients using peer navigator programs based on an existing linkage agent model with highly experienced expert client counselors and case managers. This initiative will include training and mentoring healthcare workers (HCWs, e.g. doctors, nurses, psychosocial agents (PSA), case managers, index tracers, testing counselors) to develop competency in counseling, supporting HCWs to build a relationship of confidence with their clients, accompanying patients to develop and implement personalized treatment plans, identifying and addressing key barriers to treatment adherence, addressing issues of disclosure during counseling, and addressing patient rights. As part of the linkage strategy, HCWs will identify and link patients to their preferred facility for ART treatment initiation and management. The patient-centered care model also consists of assessing patient readiness and preparing them for treatment through proper therapeutic education and effective counseling before ART initiation.

In COP21, all PEPFAR supported sites will continue to implement same day ART initiation (SDAI) to ensure all PLHIV identified are linked to C&T services. This facility-based linkage model will reinforce physical referrals through peer support agents who are expert client counselors to target young people, adolescents and men. PEPFAR will continue to support the GRC's decentralization of ART to PMTCT, TB, and HTS stand-alone sites to accommodate men and children through task shifting and promote the family care model. The program will provide support to extend the community-based linkage model in association with civil society organizations (CSO) in all ten regions. This will entail a strong collaboration between the facility and the community to support the referral of patients identified positives in the community to the facility for initiation.

In COP21, PEPFAR Cameroon will continue supporting the MOH in the scale up of the fixed dose combination of TDF/3TC/DTG (TLD), which is the preferred 1st line ARV for all eligible PLHIV. The PEPFAR Cameroon team is targeting that 80-85% of all patients: pediatrics, adolescents and adults be placed on dolutegravir-based treatment regimens by the end of COP21 (TLD for adult and DTG10 for children). The transition to TLD has accelerated since its initial rollout in January 2020, especially in Zones 1, 2, and 3. As of FY20, 35% of clients enrolled on ART at PEPFAR supported sites have been transitioned to TLD. For COP21, PEPFAR Cameroon will focus on scaling up TLD across all 10 regions, with a special focus on those within Zones 4. New government policy advises the scaling up to 80% of all adults to TLD (vs 20% TLE 400mg), including women of childbearing age (WCBA) and pregnant & breastfeeding women (PBFW) through training and mentorship of HCWs, provision of Job Aids/SOPs, data collection tools for documentation and reporting, and ensuring the availability of commodities at site level. Providing optimized ART regimens will be critical for C/ALHIV, as pediatric DTG (pDTG) has been approved for use in children and adolescents as per the National Guidelines (2020)[2]; specifically, TLD (children >30kg), DTG 50mg-based regimen (children 20-30 kg), and DTG 10mg-based regimen (children >3kg and <20kg). Additionally, in collaboration with NACC, PEPFAR Cameroon will set up a free e-learning platform on HIV & TB care and treatment to ensure continuous capacity building through training and mentoring. This tool will ensure the dissemination of up-to-date guidelines on patient case management (thus promoting the transition to TLD) and help mitigate health care provider turnover, and its virtual format will ensure accessibility during the COVID-19 epidemic.

***Strategies to improve linkage among men 15+ years of age*:** PEPFAR Cameroon will implement several strategies based on "Men Star approaches" throughout COP21. In addition to providing optimal ART regimens such as TLD, the program will promote universal entry points and holistic care for men, integrating men's health into HIV services to allow for routine assessment and response to gender disparities in HIV services and HIV-related outcomes. A variety of patient support mechanisms will be implemented to help newly diagnosed men navigate the treatment experience, including the use of case managers and/or peer navigators to orient men to navigate the services at both community and clinic settings; a service referral and linkage system that seeks to identify and address patients' particular barriers and challenges; and support for disclosure to partners.

***Strategies to improve linkage of adolescent girls and young women (AGYW)*:** PEPFAR Cameroon will continue to extend its tailored package of services to this population. Namely, the program will ensure that all identified positive AGYW are receiving services promoting treatment literacy. PEPFAR Cameroon will also strengthen bi-directional referrals between health facilities and community AGYW service providers to ensure effective linkage to treatment and a comprehensive follow-up of HIV-positive adolescents in need. The program will continue to identify and train at the facility level AGYW/ABYM focal points and teenage mother champions who are expert clients to ensure active linkage of newly identified HIV positive peers to C&T and adolescent-friendly services.

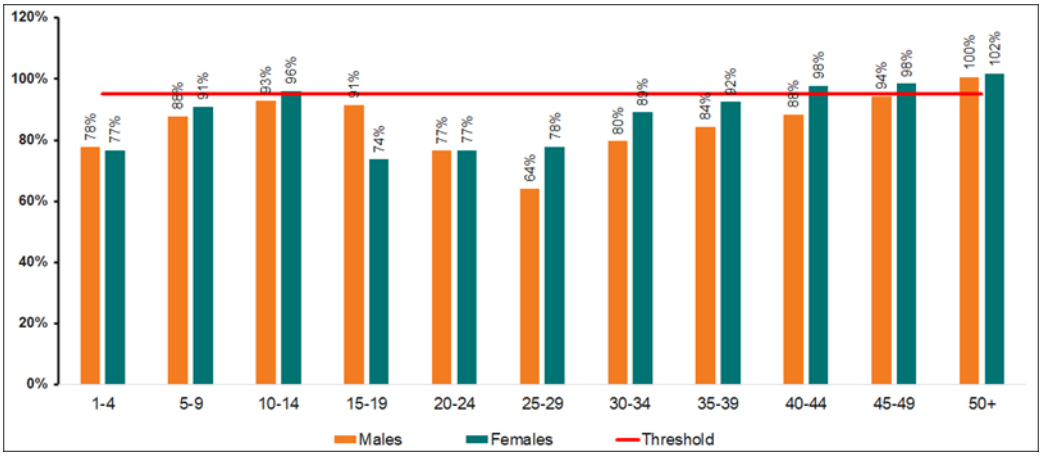
[2] Cameroon HIV national guidelines 2020

***Strategies to improve linkage amongst adolescents and children**:* In addition to optimizing pediatric ART regimens in COP21, PEPFAR Cameroon will strengthen linkage by promoting SDAI for adolescents and youth, reinforcing bi-directional coordination between health facilities and community OVC service providers to ensure effective linkage to treatment, and a comprehensive follow-up of C/ALHIV. PEPFAR Cameroon will also identify "adolescent champions" to mobilize their peers and link them to adolescent friendly services.

4.2.3 Ensuring PLHIV retention and Viral Load suppression

FY20 program data indicate that the overall retention rate of PLHIV on ART is 97%, with 311,524 PLHIV currently on treatment at PEPFAR-supported sites. Despite the COVID-19 outbreak, programmatic results demonstrate great performance in retention for patients aged 10-14 and 40+, especially among females compared to males. Retention is suboptimal (<90%) for children <10 years and for young adults aged 15-34 across both sexes (see Figure 4.2.3). PEPFAR Cameroon plans to intensify efforts to improve retention among adolescents and young men to ensure peak performance. COVID-19 restrictions put in place during FY20 facilitated the scale up of MMD across Cameroon and particularly for C/ALHIV, resulting in 56% of all patients receiving 3+ month dispensation and 3% of patients receiving 6-month dispensation by the end of FY20. Disaggregated by age, 36% of patients <15 years received MMD (3+ months), versus 59% of patients 15+ years, with similar rates across sexes.

Figure 4.2.3: FY20 Retention by age and sex



In FY20, viral load (VL) coverage was approximately 58% of 294,796 PLHIV eligible for VL testing. The overall VL suppression rate increased from 78% to 88% (see Figure 4.2.4 for VL outcomes). VL suppression rates have increased throughout FY20 for both <15 (59% in FY20Q1 to 68% in Q4) and 15+ (79% in FY20Q1 to 88% in Q4) age groups, but greater focus is needed to accelerate VL suppression rates among the PLHIV <15 years. VL coverage was highest in the West (90%) and North West (74%), followed by South West (71%), military (69%) and Center (64%), and lowest in the Littoral, South, Far North, North, Adamaoua and East regions respectively (45%, 43%, 41%, 37%, 35% & 30%). VL suppression varied from 72% in the East to 91% in the West

region, with Adamaoua (75%) and Far North (78%), having the lowest suppression rate compare to the rest of the regions with suppression rates above 80%. The West and North West regions had greater rates >90%.

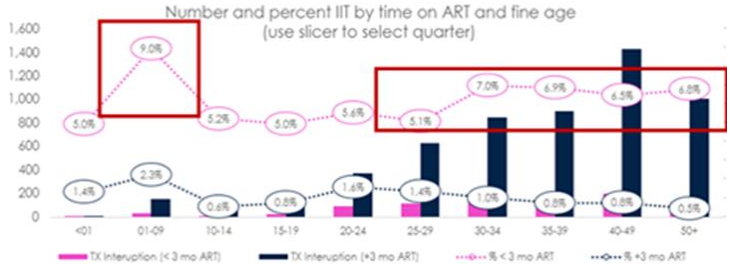
Figure 4.2.4: Viral Load Outcomes, FY20

According to programmatic data, the adult mortality rate among all PLHIV was 2.1% in FY20 and was higher for adult males (3.1%) than for adult females (1.7%). Among adults, the highest rates of mortality occurred in the 15-19 (2.5% overall, 3.5% males, 1.9% females) and 50+ (2.4% overall, 3.2% males, 1.9% females) age categories.

Outstanding gaps

Despite significant gains during FY20, retention rates were suboptimal among children and adolescents overall, and among adult men when compared to adult women. FY21Q1 data also indicates that PLHIV who are newly initiated on ART (<3 months) are more likely to experience interruption in treatment (IIT) than those who have been on ART 3+ months (6.4% vs. 1.8%). The percentage of IIT for those on ART <3 months is highest among 1–9-year-olds (9.0%) and 30+ year-old (6.5-7.0%). Additionally, percent IIT for females on ART <3 months is greater (6.6%) than for males (5.9%). Comparing trends in IIT and return to treatment (RTT), FY21Q1 data indicates that patients in the 20-34 age categories have more treatment interruptions than are returned to care, whereas the opposite phenomenon occurs in the 35-50+ age bands. In addition, MMD scale up was limited by the insufficient availability of ARVs, DSD models are currently implemented only in 36% (90/298) of all PEPFAR supported sites across the country.

Figure 4.2.5: Number and % IIT by age and sex, FY21Q1



FY20 programmatic results also demonstrated a suboptimal VL suppression rate of 88% overall, with significantly lower rates among children and adolescents. Key gaps affecting VL coverage and suppression rates include frequent stockouts of VL reagents, inadequate systems for sample transport and return of results, weak systems to monitor patients with high VL, resistance of some HCW to use VL management tools, weak ART transition efforts for pediatric and adolescent due to limited stocks of optimized ARVs, and inadequate EAC cascade.

Strategies to improve retention among PLHIV

To reach the FY22 treatment targets and maintain 97% of PLHIV on treatment, PEPFAR Cameroon will ensure all PLHIV initiated on ART benefit from a patient-centered care approach as described in the previous section. This will consist of assessing patient knowledge of the advantage of early treatment and the importance of lifelong ART and barriers to care through proper therapeutic education and effective counseling during follow up visit and calls. This will also prioritize the transition of patients to TLD and MMD dispensation, which will allow patients to access better drugs in more convenient ways. To support treatment, expert clients will assist newly initiated patients with practical issues related to ARV medications during the first six months of ART, strengthening relationships with patients and therefore enhance retention in care. IPs will also continue to support health facilities to set up counseling space for therapeutic education and enhanced adherence counselling. The expert client/counselors/PSA will work closely with the community relay agent to undertake home visits and actively escort patients to the facility when needed. PEPFAR Cameroon will continue supporting health facility retention committees to address issues related to retention and resistance.

PEPFAR Cameroon will work with IPs to ensure oversight of patient management and quality service delivery following the national standard operating procedures (SOP). Support will be provided to GRC to update existing SOPs and other job aides to successfully implement and monitor care and treatment activities. The program will support revision of ART tools to ensure documentation of ART side effects. Site mentorship will be intensified to improve quality of service delivery. This mentorship model will consist of onsite training, mentoring provided by expert physicians, nurses, expert client counselors, linkage and retention case managers from high performing ART sites to support low performing sites.

The program will continue to engage regional delegations of health and district health services to provide TA through mentorship and supervision to support adherence and retention interventions in all 10 regions, including availability of commodities, documentation, and reporting to ensure quality HIV services to PLHIV. With IPs, the program will conduct regular focus group discussions among PLHIV with emphasis on clients newly initiated on ARV and harder to reach populations (such as men, AGYW, KP, youth) in order to continue to identify barriers to care, receive feedback on service quality, and continuously improve services that will increase access to HIV care and treatment.

PEPFAR Cameroon will maintain the assignment of clinical program staff to each clinical zone and specific sites to closely monitor site level performance on a weekly basis by tracking missed appointments and accounting for site level retention. IPs will support sites to develop systems in place for daily data triangulation and use. Data use will be enhanced at sites to improve quality of service delivery. IPs will work with facilities to track retention in care by service delivery model, sex, and age, and will improve strategies to track, document and report IIT outcomes more accurately.

During COP21, PEPFAR Cameroon will expand the implementation of multi-month dispensation (MMD) and other differentiated service delivery (DSD) models for patients who are stable with suppressed VL, and exceptionally for hard-to-reach patients who are unsuppressed, to enhance adherence and retention. The program will scale up MMD for C/ALHIV and implement a phased approach to increase 6-monthly MMD to 20% in selected sites by region with specific patient selection criteria **such as** military-affiliated patients; internally displaced patients; difficult to reach patients; long-distance travelers; and long-distance truck drivers (depending on the availability of commodities). Poor adherence can lead to the development of HIVDR, hence compromising effectiveness of ARV treatment with low VL suppression. We plan to conduct an HIVDR survey beginning with a few regions to identify reasons for this stagnation in suppression numbers among patients on treatment over 12 months. As we scale up MMD and transition to TLD regimen, we will continue monitoring trends in VL suppression and detect emergence of HIVDR.

Figure 4.2.6: Number and Percent Contribution of Clients Receiving MMD by Age/Sex, FY20

Different DSD models include fast tracking, extended hours, support groups, and adherence clubs at the facility level, and community ART dispensation (CAD) through CBOs, family/home dispensation, and client-managed groups at the community level. Currently, CAD through CBOs is the most common model implemented across the OU, followed by support groups and extended hour dispensation. Throughout FY22, PEPFAR Cameroon will scale up the implementation of DSD models in all supported sites, focusing especially in Zone 4 and 2 and increasing the data collection and reporting of all the models. The country will continue to implement these models by leveraging on peer mentorship and champion/expert client/ mother mentors' programs who provide tailored support to patients. The use of polyvalent community relay agents to work with patients facing issues impacting retention, including mental health conditions and relationship problems will be expanded. PEPFAR Cameroon will also continue supporting PLHIV support groups and community adherence clubs including adapting group meetings at clinics to coincide with drug pickup and other clinical assessments.

PEPFAR Cameroon will continue routine RTC efforts to ensure rapid tracking of defaulters and patients experiencing IIT. Cohorts of patients will continue to be assigned to linkage and retention case managers who will be responsible for monitoring patient appointments in harmonized logbooks, ensuring timely ART pick-up as scheduled, identifying defaulters and encouraging their return through phone calls, short message services (SMS), home visits, etc. To address the gap, identify on the IIT and RTT data, the program will make a special focus on newly initiated patient (<3 months) and on younger patients to tailored strategies to retain them including dedicated peer navigators/expert clients, enhanced patient follow up, specific support group for them and adapted DSD models.

During the COVID-19 outbreak in FY20 many PEPFAR supported high-volume health facilities were designated as COVID-19 care and treatment centers, resulting in their stigmatization and subsequently experienced drops in attendance and pill pick up by PLHIV. In response, the program rolled out the use of decentralized drug distribution (DDD) via satellite sites not currently supported by PEPFAR and not reporting in the DHIS2. These sites did receive patients and were mentored by a PEPFAR-supported site to provide HIV screening and ARV dispensation. To improve overall adherence and retention during COP21, PEPFAR Cameroon will scale up DDD through the use of satellite sites as well as other strategies such as ARV dispensation at CBOs. Family/home dispensation for disabled and/or bed-ridden patients will be strengthened.

To reduce morbidity and mortality associated with Advanced HIV disease (AHD), in COP21 PEPFAR Cameroon will improve on case management through providing a comprehensive package of service to all people presenting with AHD, including those who are re-engaging with care after a period of ART interruption. This package will follow WHO guidelines which includes screening (CrAg, Toxoplasmosis serology, CD4), treatment (Tuberculosis, Cryptococcosis & Toxoplasmosis) and prophylaxis for major opportunistic infections (Cotrimoxazole, fluconazole, INH), rapid initiation of ART and intensified treatment adherence support. The program will also promote capacity building of HCP through training and mentorship; strong collaboration with the MOH and other stakeholders to ensure the availability of commodities; close follow-up on user fee elimination for patients affected by AHD; implementation of express treatment triage programs (during consultation, and identify client with low CD4); close monitoring at the facility and frequent follow up home visits; and setting up a symptom checklist review and screening for opportunistic infections (OIs) during clinic or home visits. In addition, the program will enhance AHD monitoring through enforcement on reporting and training and mentorship on data collection tools.

Strategies to improve retention among men

In COP21, PEPFAR Cameroon will continue to implement strategies to increase the convenience and responsiveness of health facilities to men's needs in order to improve retention among this group. Expedited services/fast-tracking for working men, extended clinic hours, transportation support when needed, facilitated access to tailored DSD models, and integrated HIV care and treatment services packaged with other services such as TB and STDs will be intensified and expanded to all PEPFAR-supported sites. Fostering welcoming environments at health facilities that are responsive to men's needs will involve the redesigning of clinics to include male-only spaces/corners, waiting areas, specific male-only hours, and more male imagery in clinics (e.g., posters). PEPFAR will continue to mentor HCW in order to ensure enhanced focus on confidentiality and privacy, as well as the provision of consistent, affirmative "Welcome Back" messaging that avoids the negative consequences of IIT and provide positive reinforcement for reengagement. Efforts to hire and train male nurses, counselors, peer outreach workers, case managers, and other staff remains a key strategy to facilitating a more responsive environment to men's needs and thus improving retention among this demographic.

Fast track mechanisms will be put in place to ensure men who attend clinics only for pickups are served in a timely manner. Improved documentation of MMD and CAD through DICs and other

CBOs will be ensured to avoid misclassification of some patients as IIT. This includes military on deployment who sometimes receive 6-month ART packs or are served in the community and are misclassified as IIT. Health education and literacy materials tailored to men's health will be developed and made available to all men including KP and PP, with peer linkage and retention agents available to address male, KP, and PP specific issues. Peer support groups and male-friendly clinics will be scaled up in all PEPFAR-supported sites.

***Strategies to improve linkage of adolescent girls and young women (AGYW)*:**
Despite the focus on men, we cannot forget the women who also have suboptimal retention. As described in the AGYW Conceptual Model (Figure 4.3.3) introduced in Section 4.3, PEPFAR Cameroon will continue to improve services in COP21 on linkage and retention among this subpopulation who are vulnerable and at high risk. All the services included under this conceptual model, such as treatment literacy, education on GBV and PrEP, and adherence support groups, will be offered across the entire HIV cascade. The program will also continue to support tailored DSD services for AGYW.

Strategies to improve retention among children and adolescents
PEPFAR Cameroon will continue to implement strategies to improve retention among younger cohorts through optimized pDTG for all eligible C/ALHIV, a client- and family-centered care approach, integrated TB/HIV activities, scale up DSD and MMD, and strengthen management of AHD. In addition, the program will leverage adolescent/youth multi-functional centers and associations as dispensation sites to improve adherence and retention amongst ALHIV.

Strategies to improve retention of patients aged 50+

Based on FY21Q1 IIT and RTT programmatic data, retention among newly initiated patients (< 3 months on ART) 50 years and older is suboptimal compared to some younger age groups. PEPFAR Cameroon will carry out focus group discussions in order to understand the unique needs of this subpopulation and to guide the development of tailored strategies to improve retention. At the same time, the program will roll out a series of strategies, such as age-appropriate peer mentors/expert clients, DSD models adapted to their context (e.g., for retirees, home-bound patients, etc.), engagement of caregivers, support for transportation, additional psychosocial support, and an integrated package of services (BP, blood sugar, cancer screening, etc.).

Strategies to improve VL Suppression among PLHIV
In order to reach 95% VL coverage and suppression among PLHIV, PEPFAR Cameroon will continue implementing several strategies across all 10 regions. These strategies will include the following: continue support for TLD transition, strengthening the sample transport system, ensuring availability of VL commodities and increasing VL demand creation. The program will continue to emphasize the use of Undetectable = Untransmittable (U=U) messaging as a key component of adherence & counseling for patients. PEPFAR Cameroon will ensure improved management and enhanced monitoring of patients with high VL to increase number of patients eligible for MMD and CAD once virally suppressed. For PLHIV with unsuppressed VL, the program will support the monitoring of VL outcomes following the implementation of U=U, the

provision of tools for monitoring patients with high VL and low-level viremia, and ensuring adequate documentation and reporting using a national EID/VL data system and dashboard. Furthermore, PEPFAR will support the systematic implementation and monitoring of all HVL patients to ensure the completion of three consecutive EAC sessions through the use of VL registers and monitoring of EAC sessions through Excel tracking tools. The use of viral load champions and viremia/adherence clubs in health facilities to improve uptake of VL will be extended throughout the 10 regions, and the creation and rollout of viremia clinics with multidisciplinary teams will be strengthened. Given the regional and zonal specificities of the country, Government of Cameroon recently set up a decentralized transport system to meet the sample referral needs of the population. PEPFAR will continue to leverage this opportunity to optimize the sample referral system and improve turn-around-time for viral load and EID results. PEPFAR will also implement patient-centered approaches like positive parenting to improve VL coverage and retention for children and adolescents and will monitor the quality of testing services by ensuring all VL reference labs are enrolled in a quality assurance program towards accreditation.

PEPFAR Cameroon will ensure that HCW are continuing to receive coaching in VL literacy, VL results interpretation and use for clinical decision making, and adjustment/switching of ART regimen. Facilitative supervision will also be reinforced through the scale up of joint granular site Management (GSM)/Site Improvement through Monitoring Systems (SIMS), ongoing supervision and continuous quality improvement initiatives to identify and address gaps in a timely manner.

PEPFAR Cameroon will support the continuous mentorship of HCW in the use of VL management tools such as unsuppressed VL registers and VL dashboards, especially in new regions, as well as ensure the availability of such registers for EAC monitoring and tracking. Best practices reported at top performing sites will be promoted and adapted at low performing sites. IPs will closely monitor use and report on facility charges of HIV user fees to ensure elimination of financial barriers to HIV care and treatment.

4.3 Prevention, specifically detailing programs for priority programming:

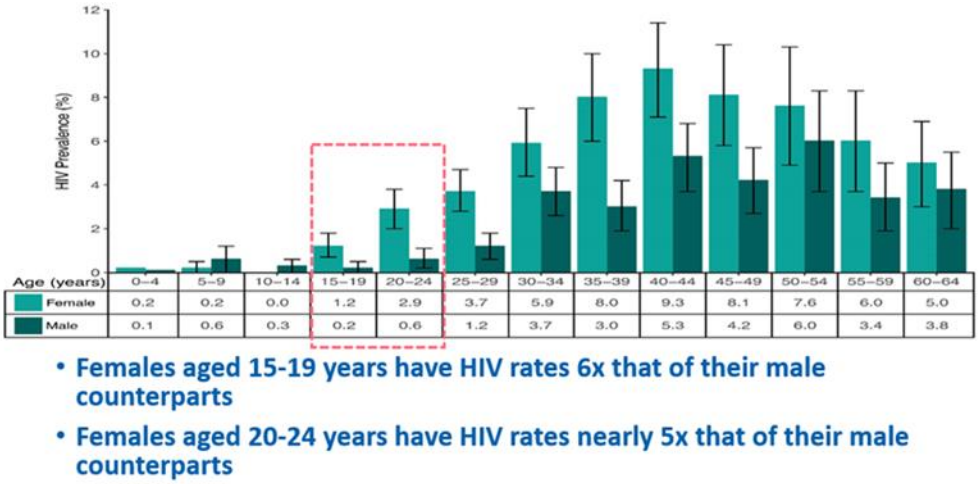
AGYW

AGYW face significant barriers in accessing health services or protecting their own health. Lack of access to comprehensive and accurate information on sexual and reproductive health means that adolescent girls and young women are not equipped to manage their sexual health or to reduce potential health risks. Furthermore, AGYW are less able to negotiate condom use, have low economic status, have limited access to HIV testing, modern contraception and family planning and are less able to adhere to HIV treatment. The current guidelines for HIV Self-testing limits access to persons above 18 years and constitutes a barrier to case finding in AGYW.

Low risk perception (about 45% awareness), early sexual debut, age-disparate partnerships drive sexual transmission hence the need to reach men. Violence against women in the context of HIV, low retention rates and low rates of viral load suppression among all HIV-positive AGYW are some of the key factors that have affected the HIV cascade among AGYW. Sustained efforts to

prevent and to diagnose HIV infection in AGYW as early as possible and to ensure rapid initiation of ART should help achieve epidemic control. CAMPHIA 2018 data showed higher HIV prevalence rates among the 15-19 and 20-24 age groups compared to their male counterparts.

Figure 4.3.1 show AGYW are Vulnerable to HIV (CAMPHIA, 2018)



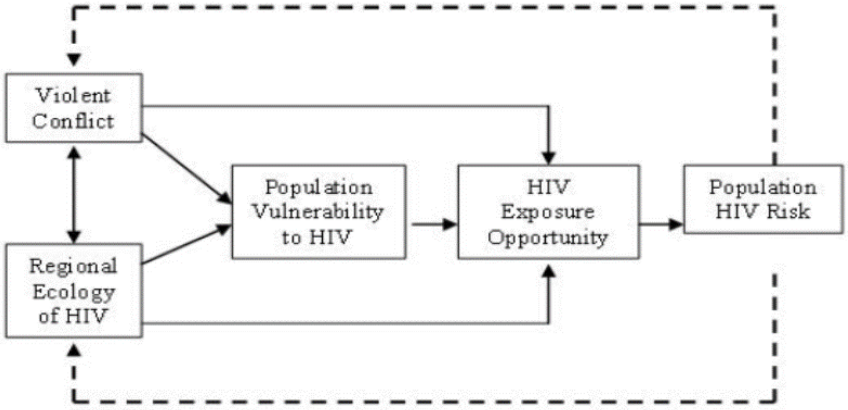
Age (years)	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64
Female	0.2	0.2	0.0	1.2	2.9	3.7	5.9	8.0	9.3	8.1	7.6	6.0	5.0
Male	0.1	0.6	0.3	0.2	0.6	1.2	3.7	3.0	5.3	4.2	6.0	3.4	3.8

- **Females aged 15-19 years have HIV rates 6x that of their male counterparts**
- **Females aged 20-24 years have HIV rates nearly 5x that of their male counterparts**

PEPFAR FY20 GBV data showed 78.9% of all reported victims of GBV were females among whom 61.3% were victims of sexual violence. In FY20, PEPFAR Cameroon PMTCT data showed that 41.3% of all pregnant women received and tested in PEPFAR supported health facilities were AGYW aged 10-24 years. This population constituted 20.2% of all the HIV positive pregnant women identified; in the 10-14 age band, all positives were newly initiated on ART showing recent infections in this age group. FY20 PEPFAR data also show low case finding results, low retention rates, low viral load uptake and low suppression rates among adolescents and young people.

The sociopolitical crisis in the North West and South West regions has resulted in the displacement of over 700,000 Cameroonians to other urban cities and neighboring countries among whom the majority are women and children. The Religious insurgency of Boko-Haram in the Extreme-North of Cameroon has also caused population displacement. AGYW have been subjected to human rights abuses including sexual violence and are left in conditions that interrupt social networks and increase economic vulnerability; poverty has forced young people to use commercial sex to survive. This conflict and displacement have been associated with increased risk of HIV transmission as reported in the Bonnassama Health District where HIV yields of 10% among the displaced populations are seen.

Figure 4.3.2: Conceptual Framework of Principal Causes of HIV Risk in Conflict-Affected Populations



Strategies to reach AGYW and ABYM with HIV prevention and risk avoidance

At the facility level, PEPFAR Cameroon will target adolescents and young people living with HIV aged 10-24, IDPs, GBV survivors, teenage mothers, partners of AGYW, ABYM and AGYW seen through ICT. Prevention activities will focus around the principal areas of risk and vulnerability mapping, life skills building; sexual and reproductive health (SRH) education; contraception, condom education, promotion, risk reduction education and counselling, positive parenting, treatment literacy and adherence for Adolescents Living with HIV (ALHIV). PEPFAR Cameroon will also identify "AGYW and teenage mother champions" through peer education to mobilize their peers and link them to adolescent-friendly services to ease access to prevention materials, reproductive health care and HIV services. Service delivery will be adapted for AGYW in and out of school to include extended working hours and weekends.

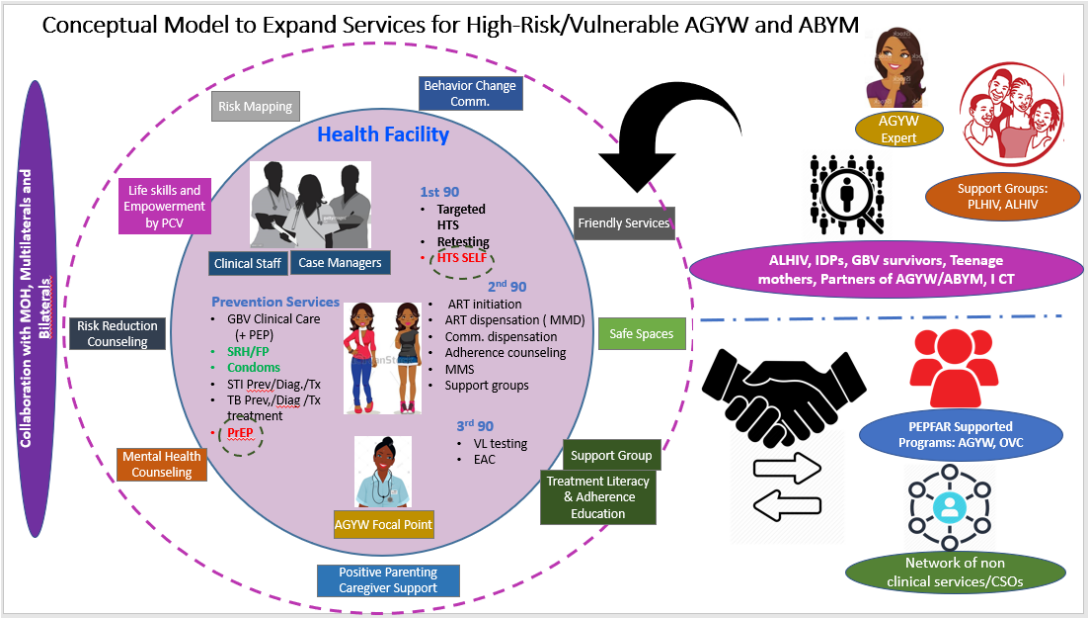
HIV self-test kits will be made available to at-risk hard-to-reach AGYW who might face geographical, security-related or socio-cultural barriers in accessing HIV testing services. Diagnostic testing will also be available for AGYW at all high yield entry points. Out-of-school AGYW will also be targeted and mobilized for HIV prevention, treatment and care through youth associations, among internally displaced persons (IDP), support groups of ALHIV and PLHIV (their adolescent daughters), and social and print media. Community testing opportunities will be made available for AGYW.

The post-GBV clinical care package including counseling and testing, PEP, diagnosis and management of STIs contraception and referral to other support services will be offered to AGYW who are survivors of violence.

PEPFAR Cameroon will scale up adolescent-friendly ART and reproductive health services through training of health care providers on optimizing engagement of adolescents in care, positive living and how to address their specific health needs. Health facilities will designate safe space for provision of age-appropriate services to adolescents and young people. PEPFAR Cameroon will also strengthen bi-directional referrals between health facilities and community AGYW and OVC service providers to ensure effective linkage to treatment and a comprehensive follow-up of HIV-positive children and adolescents in need. To improve linkage to care and

treatment among AGYW and ABYM, expert clients (AGYW/ABYM focal point) in this sub-population will be identified, trained and recruited to ensure active linkage and retention of newly identified HIV positive peers to treatment and care.

Figure 4.3.3: Conceptual Model to expand services for high-risk AGYW and ABYM



During COP21, the clinical program will continue targeting AGYW as its main priority population subgroup who will access various health care services at clinical settings including ANC, delivery and vaccination with prevention services. PEPFAR Cameroon will continue to foster and bring to scale adolescent friendly clinical services - weekend hours, adolescent corners, Wednesday after school hours. At clinical sites, there will be an adolescent focal person who will be responsible for running a special program for the promotion of youth friendly prevention and clinical services and demand creation to increase awareness, acceptability and uptake of these services and run support group tailored to meet specific needs of AGYW/ABYM. Within the facility, the adolescent focal person will put in place a system and connect with major facility entry points where adolescents are received for referral to the AGYW program run at the facility. PEPFAR Cameroon AGYW clinical program will also recruit expert clients among adolescents, who will serve as advocates for the program in their various communities and will be responsible for expanding reach to other AGYW in community through peer education and referral to the facility for uptake of prevention, care and treatment services as needed.

For HIV prevention services offered through this facility based program targeting AGYW, the package of services that must be offered in addition to HIV testing services to document and report PP_PREV include: behavior change communication including information, education, communication and life skills development through individual or small group talks; peer education by clinic AGYW expert clients; risk assessment and risk reduction counseling; condom and lubricant use promotion and distribution; prevention and management of comorbidities (TB, STIs

and other OIs); reproductive health services/family planning; positive parenting; post Exposure prophylaxis (PEP) and Pre exposure prophylaxis (PrEP) as applicable.

With regards to PrEP implementation for AGYW, PEPFAR Cameroon has started in FY21 to work with NACC and the PrEP TWG to revise the protocol, policies and tools to include the clinical site model, expand the program nationwide and include PrEP access to other high-risk groups in need, including AGYW. Though the clinical program will lobby to expand PrEP implementation across the country (all four zones), PrEP rollout will follow a stepwise approach. This will be done in such a way that, PrEP implementation will primarily be done in tier one and two sites, with the largest number of PLHIV in their treatment cohorts to maximize service uptake among targeted groups and AGYW. Clinics with smaller treatment cohorts but that are recognized and preferred by AGYW will also be enrolled in PrEP implementation. In COP21, PEPFAR Cameroon will continue assessing the gaps in PrEP implementation and working with NACC and other key stakeholders towards closing these gaps.

HIV prevention services offered through this facility-based program targeting ABYM, the package of services that must be offered in addition to HIV testing services to document and report PP_PREV are the same as those for AGYW, except family planning and PrEP.

For adult men reached and mobilized through AGYW, the HIV prevention package of services that must be offered in addition to HTS in order to document and report PP_PREV for this subgroup category include: behavior change communication including information, education, communication and life skills development through individual or small group talks; risk assessment and risk reduction counseling; condom and lubricant use promotion and distribution; prevention and management of comorbidities (TB, STIs and other OIs); post Exposure prophylaxis (PEP) as applicable.

Through the AGYW program run at the facility, adolescent girls and young women will be used as a point of contact to reach and mobilize their sexual partners who will either be adolescent boys and young men (**ABYM**), **adult men** or both. Once in contact with the health care provider at the clinic, ABYM and adult men, who are also priority populations subgroups for the clinical program, will be offered HIV prevention, care and treatment services as well and as needed.

A similar model to the AGYW program at facilities will be rolled out during COP21 to target and reach **adult female** internally displaced persons (**IDPs**) and the HIV prevention package of service will be the same as those of AGYW, except PrEP.

Post Clinical Gender Based Violence

Gender based violence (GBV) and HIV/AIDS are mutually reinforcing epidemics. Experiencing GBV can contribute to HIV transmission in a variety of ways, including biological vulnerability, lack of communication and inability to access clinical services, and lack of condom use. Being HIV positive can also increase one's vulnerability and risk of experiencing GBV.

GBV is any form of violence that is directed at an individual based on his or her biological sex, gender identity or expression, or his or her perceived adherence to socially defined expectations of what it means to be a man or woman, boy or girl. It includes physical, sexual, and psychological abuse; threats; coercion; arbitrary deprivation of liberty; and economic deprivation, whether

occurring in public or private life. The GEND_GBV indicator captures who PEPFAR is reaching through clinical post GBV care.

PEPFAR Cameroon began implementing its Post Clinical GBV Care in four PEPFAR supported regions in FY19 and is currently scaling up to cover the 10 regions of its program.

Results and Achievement

In FY20, PEPFAR Cameroon offered Post GBV clinical care to 692 survivors out of the 462 targeted with an achievement of 149.8%. Among all survivors who received post GBV Clinical Care 38.7% (268) suffered from either physical or emotional violence while the majority 61.3% suffered from Sexual Violence. The comprehensive package of services offered in PEPFAR supported sites includes provision of clinical services, such as rapid HIV testing with referral to care and treatment as appropriate, Post exposure prophylaxis (PEP) for HIV -- if person reached within the first 72 hours and the person has reported sexual violence, STI screening/testing and treatment, counseling and referral for emergency contraception social and legal support services.

Table 4.3.1: FY20 GEND_GBV Clinical Cascade

Operating Unit	Indicator	FY20 Cum.	FY20 Target	FY20 %
Cameroon	GEND_GBV	692	462	149.8%
	GEN_GBV Physical Emotional Violence	268 (38.7%)		
	GEND_GBV_Sexual Violence	424 (61.3%)		

Outstanding gaps

Scale up of the program has been a little bit slow in the new PEPFAR supported regions. Non-availability of commodities to offer the most comprehensive package of post GBV Clinical services.

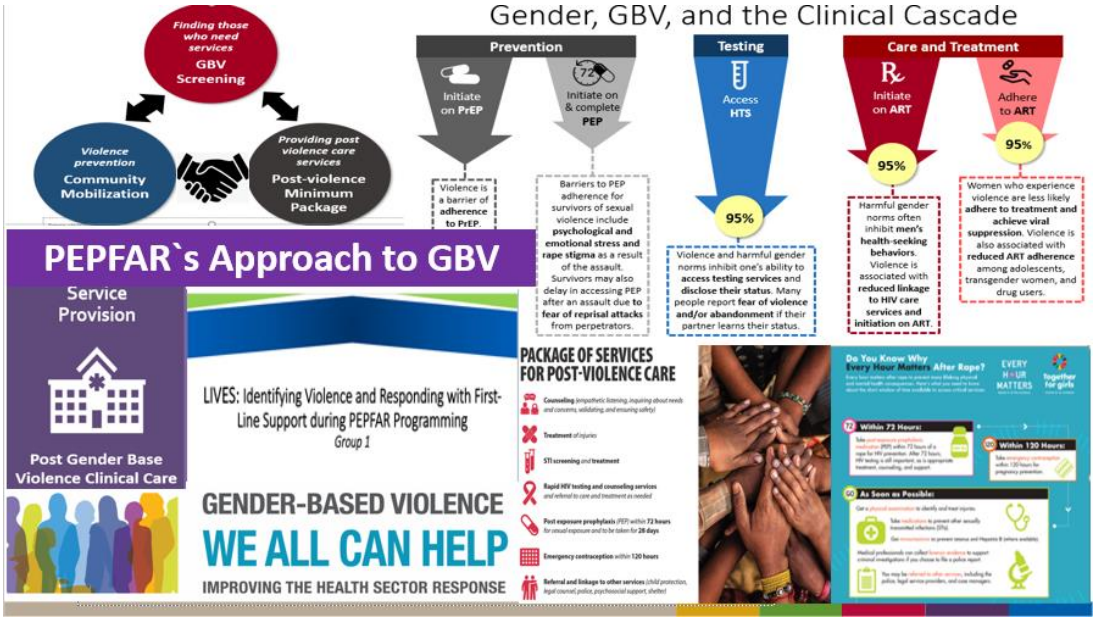
Strategies to Improve Uptake of Post GBV clinical care

In COP21, PEPFAR Cameroon plans to work in collaboration with DSF/MOH and UNFPA to scale up Post GBV Clinical Services across PEPFAR Supported Health Districts in the 10 regions through training and mentorship of service providers and ensuring the availability of appropriate commodities to offer a comprehensive package of post clinical GBV Care.

The clinical IPs will work with the sites to build Post GBV Clinical care around a One-Stop shop Comprehensive Model and strengthen the continuum of response between GBV prevention and clinical post-violence response services and ensure its integration into the HIV cascade at key entry points, including HIV prevention interventions, HIV testing (particularly index testing, recency testing, and partner notification), HIV care and treatment, PMTCT, ANC, and OVC services." PEPFAR Cameroon will ensure provision of GBV Clinical response package which

comprises of the clinical, legal, psychosocial, police services while ensure linkages to Psychosocial Network systems as needed including active referrals to other clinical and community care and support services. Trained expert advocates and case managers will be supported to organize and implement post GBV clinical services in the facilities.

Figure 4.3.4: GBV Approach



DREAMS-like Programming for AGYW

At Community-level, PEPFAR Cameroon will leverage on the KP and OVC programs to continue to reach AGYW and scale up its DREAMS-lite package. The KP program will be reaching AGYW in high HIV burdened areas such as around the universities, within the hotspots and at the concessions around the hotspots, as well as in the drop-in-centers. Three categories of AGYW will be targeted by the KP program: sexually active AGYW, those not sexually active, and those engaged in transactional sex. The intervention program will consist of a differentiated package of services for each category of AGYW including prevention messages, referral for HTS services, distribution of condoms and lubricants, STI syndromic diagnosis and treatment, sexual and reproductive health, family planning, positive parenting, GBV and IPV prevention and referral to post-GBV services, first aid care, and educational counseling.

The community program will continue to work with KP-led organizations to provide interventions aiming at reducing the incidence of HIV and STIs among the key and priority populations. The program will continue to engage its network of peer leaders, gatekeepers, previously enrolled beneficiaries, as well as non-traditional providers like informal health facilities and informal street drug vendors to reach old and new beneficiaries with prevention services such as education and counseling, the distribution of condom and lubricants.

PrEP

The PEPFAR program has been working alongside the Government of Cameroon to develop systems and tools for the implementation of PrEP for key populations in Cameroon. With the close monitoring of the NACC and PrEP Task Force, the program has recorded an important growth of the PrEP uptake among key populations, moving from 208 newly initiated on PrEP in FY19 to 940 in FY20, and 1,075 at SAPR of FY21. PrEP implementations have been currently approved in the four large cities of Douala, Yaounde, Bafoussam, and Bertoua, among which two were added in COP20. Event-driven PrEP was also launched in COP19 but still does not have the expected impact on the uptake of PrEP services. Given the satisfactory results obtained, the PEPFAR program will continue to advocate towards the NACC for an increased footprint to two additional cities of Ngaoundere and Kribi. The program will continue to advocate for the reduction of the age barrier that restricts eligibility for KPs that are below 21 years old. The program will also continue to provide quality training and mentorship to the providers at community-level, improve the quality of SOPs and job aids, as well as M&E systems around PrEP service delivery. PrEP services will continue to be coupled with an evaluation of GBV and IPV risk among beneficiaries in order to provide an appropriate response. The demand-creation for PrEP services is currently limited by the inability of the program to widely communicate on PrEP services, except in networks of beneficiaries, which has an impact on the credibility of the information provided. This will be mitigated through a large-scale implementation of PrEP services to HIV sero-discordant couples and partners of pregnant and breastfeeding women.

OVC

The OVC program is focused on providing the Comprehensive program interventions to the following priority subpopulations: A/CLHIV, children of PLHIV, HIV-positive pregnant and breastfeeding women (PBFW) and HIV-exposed infants (HEI), children of FSW, and survivors of violence against children.

The program will continue to provide the OVC comprehensive package with its four components to maintain the beneficiaries in general and the A/CLHIV in particular: healthy, safe, economically stable, and schooled. Most importantly, the program will pivot towards collaboration with the clinical partners to support strengthen the HIV pediatric cascade through prevention, case finding, linkage to ART services for OVC diagnosed with HIV, community support for adherence and retention, as well as VL uptake and suppression among A/CLHIV and treatment literacy for them and their caregivers. Through comprehensive case management, the OVC program also aims to improve MMD, TB case finding and support to linkage to/and completion of TB treatment, and viral load suppression outcomes for pediatrics. OVC staff placed in clinics (e.g., case workers and HIV Care, Support & Linkage (HIV CSL) Officers) will assess child and family needs (including food and economic security) and offer appropriate referrals.

The Comprehensive OVC Program aims to offer enrollment to 95% of all C/ALHIV (<age 19) in OVC supported SNUs. A strong collaboration platform will be instituted among clinical and OVC partners. To this end, MOUs defining roles and responsibilities of each party will be signed by OVC partners and PEPFAR supported sites to improve bi-directional referrals and comprehensive case management of children on ART as well as PBFW living with HIV and their children. The OVC program will recruit and embed trained case workers at health facilities to facilitate the

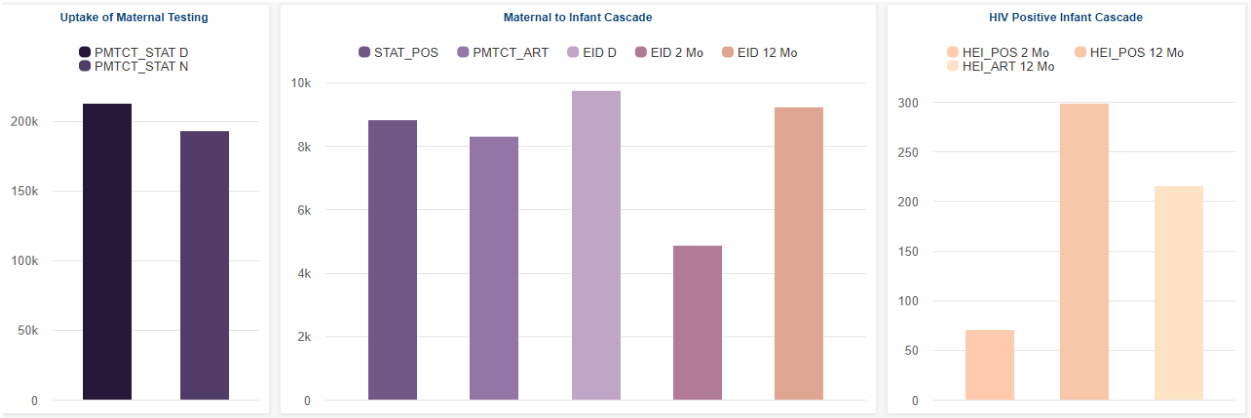
systematic enrollment of eligible A/CLHIV in the OVC program, as well as strengthen bidirectional referrals between the facility and the community. The program will also work with the clinical program to support the HIV status disclosure among A/CLHIV as well as their transition to adult care and treatment program. These MOUs strengthen bi-directional referral protocols, pediatric case finding, case conferencing, viral load (VL) coverage and suppression rates, shared confidentiality, joint case identification, and data sharing. (See additional details in 4.7 Collaboration, Integration and Monitoring). This pivot will be monitored closely by the community partner through the strengthening of the monitoring, evaluation and learning systems.

The OVC program will continue to offer a prevention package of services to adolescent girls and boys aged 10-14 years including HIV prevention education using S/GAC evidence informed modules such as the “healthy and unhealthy relationships”, the “making decision about sex”, and the “obtaining sexual consent”. In addition, they will benefit from parenting and violence prevention using nationally adapted and validated modules such as the “my changing body” and the “Wetti I go become when I grow”. The adolescents aged 15-17 years will also continue to benefit from HIV prevention and reproductive health education, as well as parenting and violence prevention.

Children / PMTCT

PMTCT

Figure 4.3.5 FY20 PMTCT – HEI Cascade



PMTCT_STAT D	PMTCT_STAT N
212,936	193,184

STAT_POS	PMTCT_ART	EID D	EID 2 Mo	EID 12 Mo
8,852	8,310	9,770	4,887	9,248

HEI_POS 2 Mo	HEI_POS 12 Mo	HEI_ART 12 Mo
71	299	216

PMTCT_STAT Total Coverage
90.7%

% STAT Positive	PMTCT_ART Coverage	Proxy EID 2mo coverage	Proxy EID 12mo Coverage
4.58%	93.88%	50.02%	94.66%

2 Mo EID positivity	12 Mo EID positivity	HEI 12 Mo Linkage
1.45%	3.23%	72%

PMTCT/Pediatrics

The prevalence of HIV in Pregnant women following the serosentinel survey in 2016 and DHIS V in 2018 stood at 5.75% with the East 9.7%, the Center 9.51%, the South West 9.07%, the North West 6.36% and the South 5.08% recording the highest prevalence rates. In 2019, the national ANC coverage rate stood at 78.5%, with the South West (40.5%), North West (48.5%), Far North (68.3%), North (77.9%), West (76.4%) and South (73.2%) having the lowest coverage rates. 83.5% of pregnant women received at ANC knew their HIV status of which 3.3% were positive

and of those 84.5% received antiretrovirals. During the same period only 3.8% of Partners of pregnant women were tested for HIV. (NACC 2019 PMTCT Progress Report).

In FY20, PEPFAR Cameroon scaled up its clinical program to cover the 298 sites in the ten regions of Cameroon. Through the implementation of optimized PMTCT strategies implemented by its four clinical implementing Partners, PEPFAR Cameroon saw an improvement in the overall PMTCT Service uptake from 84% in FY19 to 90.7 % in FY20. The implementation of the Facility Led outreach community catch-up strategy to reach pregnant women with PMTCT services in underserved and hard-to-reach populations contributed to improving the coverage for pregnant women accessing ANC and PMTCT services. There was a steady increase of pregnant women received at PEPFAR supported facilities who knew their status across the quarters from 78% in FY20 Q1 to 99% in FY20 Q4 as a result of improvement in the quality of PMTCT services offered to pregnant women. Also, 93.88% of those who were positive were linked to antiretroviral treatment. In addition, cohort monitoring for PBFW on ART was scaled up to cover the 10 regions in FY20 to improve retention to care and reduce mother to child transmission of HIV. Index testing was also scaled up for partners of HIV-positive PBFW. Following the implementation of the new viral load testing algorithm for pregnant and breastfeed women in the new national HIV management guidelines approved in FY19, we also saw a slight improvement in the Viral load coverage for pregnant women moving from 7% in FY20 Q1 to 26% in FY20 Q4, though progress still remains nascent, there is great room in our program for improvement as we continue to scale up optimized interventions to improve on viral load coverage. On the other hand, the viral load suppression rate has improved among both pregnant and breastfeeding women from 76% in FY20 Q1 to 91% in FY20 Q4. The PEPFAR program will continue to support the GRC decision memo to decentralize ART to all PMTCT, HTS, and TB stand-alone sites for a more holistic family approach and to reach the elimination of Mother to Child transmission of HIV by 2023.

Results and achievements

In FY20, PEPFAR Cameroon received 212,936 at ANC1 of the expected 653,268 pregnant women targeted to be received in 298 PEPFAR supported sites showing a coverage of 32,6%. It is worth noting that in 2019 Cameroon had a national coverage of 82,6% of the 939,055 pregnant women expected throughout the country from 5,143 sites. This shows a mismatch in the number of pregnant women expected in PEPFAR supported sites. An advocacy will be done to ensure harmonization in the targets for expected pregnant women at ANC1 for PEPFAR Supported sites and Global fund supported sites. Of all the pregnant women received at ANC1, 193,184 knew their HIV status or were tested HIV positive representing 90,7%, among whom 8,852 were positive, representing 51.5% of the expected positive target of 17,189, with a positivity rate of 4.58% for both known and new and 1.4% (2,551) for the newly tested positives. 38% of all pregnant women received and tested were adolescent girls and young women 10-24 years of age. Of the 8,852 known and new positive pregnant women, 8,310 (93.88%) received ART among whom 20% were AGYW. PEPFAR Cameroon regularly analyzes the clinical cascade for pregnant women to inform program improvement strategies. Additionally, IPs continue to work with facilities to identify and address key barriers to PMTCT uptake such as decentralizing PMTCT services to informal health facilities that are providing limited HIV services to PBFW with no documentation or reporting.

Outstanding gaps

Taking a deeper dive into the PEPFAR Cameroon PMTCT program we notice a low coverage of 32.6% for pregnant women expected at ANC1 compared to 82.6% at national level in FY20 down from 84% in FY19, substantial efforts still have to be made to reach the 90% target for ANC coverage in the PEPFAR supported sites with focus on PBFW who are IDPs in the conflict-affected regions, those in underserved and hard to reach communities, AGYW and prioritizing those regions that have the lowest coverage rates. TLD Transitioning for women of childbearing age living with HIV with their consent still not convincing for service providers. Limited implementation of Differentiated Service Delivery Models, Disclosure to partners and inadequate transitioning. Stock outs of test kits remain a challenge, and VL coverage for PBFW is suboptimal (26%) with 91% suppression rates.

Cohort Monitoring results in concordance with findings during the NACC midterm review of the national strategic plan for the fight against HIV in 2019, showed that among women who begin ART before pregnancy and women who start ART during pregnancy 25% stop their treatment at one point and approximately 20% pregnant women start ART late in the third trimester of pregnancy, and another 10% that are not virally suppressed represent and additional risk for mother to child transmission of HIV

It will be challenging to achieve eMTCT with an overall ANC coverage at 82.6%, an assisted delivery rate at 70%, coupled with challenges in reaching the mother-baby pair with PMTCT services that constitutes a high risk of MTCT rate if mothers are not treated with ARVs

The impact of supply chain problems on the availability of tests (RDT, PCR) and pediatric ARVs for prophylaxis also remains a major problem. The proportion of pregnant women screened for syphilis is also low (57% in 2016) but may likely also be due to poor documentation.

Deficit in linkage to treatment, particularly accentuated in rural areas (prioritization in Adamaoua, East and Far North).

Prioritization of interventions in districts with lower performance: SD ≤ 80% in ANC and/or ≤ 80% in screening

Strategies to improve PMTCT Uptake

PEPFAR Cameroon will support the development and implementation of the national EMTCT plan. To increase ANC coverage in COP21, PEPFAR Cameroon will expand implementation of integrated Facility led community outreach interventions through the catch-up strategy by community health workers (CHWs) to find pregnant women in underserved and hard-to-reach populations who have difficulties accessing health care, with active linkage to health facilities using the dialogue structures in all PEPFAR supported sites in the ten regions. IPs will continue to work with regional and district health services to map out areas with low ANC uptake and provide targeted community outreach services. Reinforce capacity building of midwives, community health care workers traditional birth attendants and community leaders to improve linkage and referral of pregnant women to health facilities for HIV/TB services.

Routine HTS will be offered to all PBFW at ANC services. Support the rollout of the Dual HIV/syphilis testing to enhance the dual elimination of HIV/Syphilis. All pregnant women who initially tested negative at first ANC visit will be retested and retesting for verification within the context of the test and start strategy will be offered according to national guidelines. Maternal retesting in late pregnancy with option to test 14 weeks and retest at 6 or 9 months & at post-partum at various service delivery areas, ANC, FP, EPI, MCNH will be reinforced. "Age-appropriate risk & vulnerability screening interventions to address disparities" for PBF AGYW will be implemented and scaled up in all PEPFAR supported sites. Services offered for this target population will include active screening of young mothers for risk-factors and seroconversion at multiple care points (i.e., infant immunization visits, FP visits), adolescent-friendly PMTCT services including peer-led activities, flexible ANC schedules, trained staff and POCs/champions for AGYW in ANC to provide adolescent and youth friendly services.

PEPFAR Cameroon will institutionalize comprehensive family HIV prevention, care and treatment programming by supporting decentralization of ART to PMTCT stand-alone sites and intensifying same day ART initiation for pregnant women who test positive.

PEPFAR Cameroon will support the GRC to ensure effective implementation of the decision to eliminate user fees for ANC. PEPFAR Cameroon will continue to implement the catch-up strategy in priority districts with low coverage in the ten regions to find pregnant women in the community and link them to the facility. CHWs will empower women through home visits and community-based action groups to improve their awareness of ANC services and facilitate trust in health care workers. Mobile health technologies, SMS reminders and encouraging messages through social and print media will be used to increase community mobilization for ANC services. The mother-mentor program will be expanded to all PEPFAR-supported sites. Community-facility linkage through CHWs will be expanded across the 10 regions.

Partner notification will be scaled up routinely in ANC when partner is eligible for testing. HIV self-testing (HIVST) for mothers or male partners of ANC clients in combination with other strategies such as SMS, community follow-up, incentives to return the results for linkage to care will be scaled up in all PEPFAR supported sites. Index case testing will be scaled up for all sexual partners and biological children of HIV-positive PBFW. Site level performance data across the clinical cascade for PMTCT will be monitored and used for performance improvement.

Strategies to improve retention of pregnant and breastfeeding women on ART

PEPFAR Cameroon will expand the implementation of the ANC and postpartum care package during the ANC and postnatal period, which includes vaccination, ART, VL, and family planning services for PBFW to improve retention in the PMTCT program. PEPFAR Cameroon will ensure women know their status, start ART & are virally suppressed prior to conception at PMTCT service, ART Clinics & the community. Services for Prevention and detection of incident infections in PBFW through provision of HTS and PrEP to vulnerable populations will be made available. Rollout HIV prevention services, including PrEP, with a focus on reaching AGYW, in high HIV prevalence settings. PEPFAR Cameroon will promote TLD Transition as the preferred 1st line for all PLHIV ≥ 30 kg, including AGYW & all women following informed consent in replacement of Efavirenz & ensure the complete removal of Nevirapine based regimens except

in case of intolerance to dolutegravir, TLE (300/300/400 mg) may be offered as an alternative." Specific DSD strategies for PBFW such as 3-6 MMD for stable PBFW will be scaled up through the Mother -to-mother Mentoring program in PEPFAR supported sites. Women's access to FP will be scaled up by ensuring all WLHIV have access to voluntary contraception, and safer conception education and counseling.

PEPFAR Cameroon will scale up and expand viral load testing for pregnant and breastfeeding women following the new VL algorithm and improve on the documentation of viral load testing and viral suppression for PBFW in all PEPAR-supported sites to ensure appropriate monitoring, with training and mentorship of HCWs to ensure effective implementation. Viral Load coverage for PBFW will also be improved through intensified patient education, demand creation and service provision. PEPFAR Clinical IPs will be leveraging on the U=U messaging to attain near zero risk of MTCT.

Cohort monitoring for the mother/baby pair will be reinforced to ensure mothers and infants are better retained in care and ensure reporting on the Final Outcome (FO). Cohort monitoring tools and SOPs will be produced and made available to all health facilities to monitor outcomes for HEIs and the mother-baby pair on ART and service providers trained on their use. Linkage and retention case managers will strengthen community-facility linkages through active defaulter tracking programs, home visits, and psychosocial support group programs. Support group activities for PBFW will be expanded to improve their retention in care.

PEPFAR Cameroon will engage regional delegations of health and district health services to support ANC and PMTCT interventions and reporting in informal health facilities to ensure provision of quality ANC and PMTCT interventions in line with national guidelines, access to PMTCT commodities, linkage of HIV-positive PBFW to established health facilities for continuum of care as needed, and documentation and reporting on PMTCT interventions. PEPFAR will work with IPs to ensure a continuum of care to IDPs by using multidisciplinary teams, case managers and CBOs to reach out to PBFW and their partners with HIV services.

In 2018, GRC signed a ministerial decision reorganizing the ART management structures in Cameroon with the goal of decentralizing ART services to 5th and 6th category health facilities that initially provided standalone prevention of mother to child transmission of HIV (PMTCT) services to pregnant and breastfeeding women (PBFW) including their HIV exposed infants (HEI), but operationalization remained a challenge. Cameroon has further decentralized point of care (POC) EID for HEI to a number of references, regional, and district hospitals to reduce turnaround time (TAT) and accelerate early management of children infected with HIV.

In 2019, out of the 15,172 HEI identified, only 68.4% received an EID-PRC test at 12 months through the existing national POC network put in place through Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), Clinton Health Access Initiative (CHAI) and UNICEF, with support from UNITAID. In FY20, PEPFAR Cameroon had a low EID coverage of 50% at 2 months with an increase to 94.7% at 12 months, representing 60% of the national target (15,172). Prophylactic ART coverage for HEI within 6 weeks was 87% in 2019 (NACC Annual Report, 2019).

In FY20, PEPFAR Cameroon supported the implementation of several strategies to improve uptake of HIV services for pediatric populations, including decentralization of pediatric ART in health facilities through task shifting. Service providers were trained to offer quality ART services to children and adolescents, PITC was offered at all pediatric entry points in health facilities and in the community, index testing of biological children of adult index cases was rolled out and reported as the highest yield in identifying children, and cohort monitoring for HEI was implemented in about 50% of sites and contributed to the improved EID for HEI. Bi-directional referral of children and adolescents between the OVC and clinical programs is currently being reinforced, and HTS has been offered free for children and adolescents since January 2020. VL testing is currently being scaled up for monitoring of patients, including children and adolescents on ART, but scale up remains a major challenge. Monitoring of children on ART was also reinforced with the hiring of pediatric psychosocial support staff specifically for linking and retaining children in care.

Results and achievements

In 2019, Cameroon registered 14,970 HEI born to HIV-positive pregnant mothers who underwent PCR testing, among whom 724 tested positive, giving a positivity rate of 4.8%. In FY20, PEPFAR Cameroon reported 9,248 HEI who had a PCR test at twelve months, representing 94.7% of all children born to HIV positive pregnant women who delivered during the reporting period at PEPFAR supported sites (9,248/9,770) and 60% of the country coverage, with a positivity rate of 3.2%. In FY20, 72% (216/299) of HIV-positive infants <1-year-old were enrolled on ART, down from 78% (262/317) in FY19.

At the end of FY20, PEPFAR Cameroon provided ART to 11,120 CLHIV <15, accounting for 67.1% of PEPFAR FY19 pediatric target (16,577), an increase from 45.7% in FY19. Only 38.5% of the expected HIV positive children <15 (2,003/5209) were identified, with a linkage rate of 102.5% (2,053/ 2,003) and a TX_NEW of 36.4% (2,053/5,647)

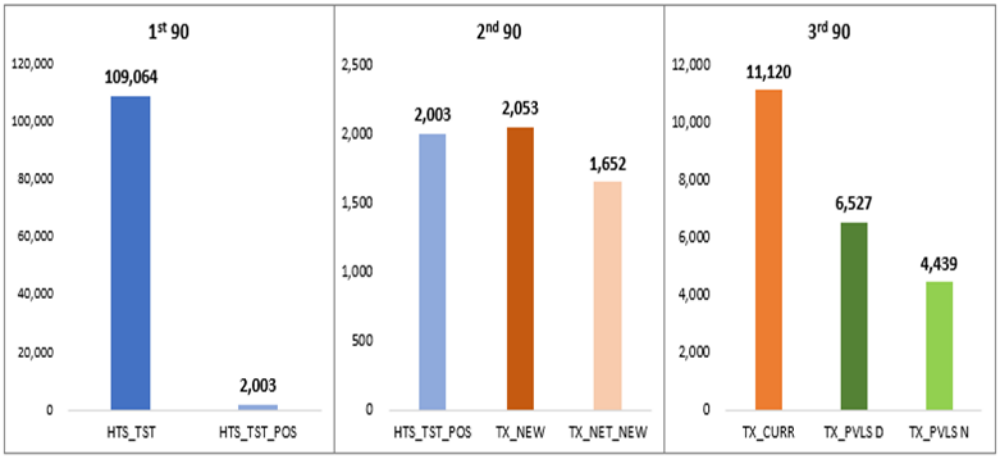
PEPFAR Cameroon provided ART to 5,275 adolescents aged 15-19 out of the 8,385 planned, achieving 62.9% of the target. Only 66.9% of adolescents aged 15-19 (1,881/2811) were identified, with a lower linkage of 74.5% (1,402/1,881), compared to the children aged <15 years, and a TX_NEW of 50.2% (1,402/2,792).

In FY20, PEPFAR Cameroon made progress in retaining children and adolescents in care, moving from 9% in FY19 to 80% in FY20 for children aged <15 (1,652/2,063), and 39% for adolescents (550/1,402). Efforts will be made to improve on retention for adolescents in care in COP21.

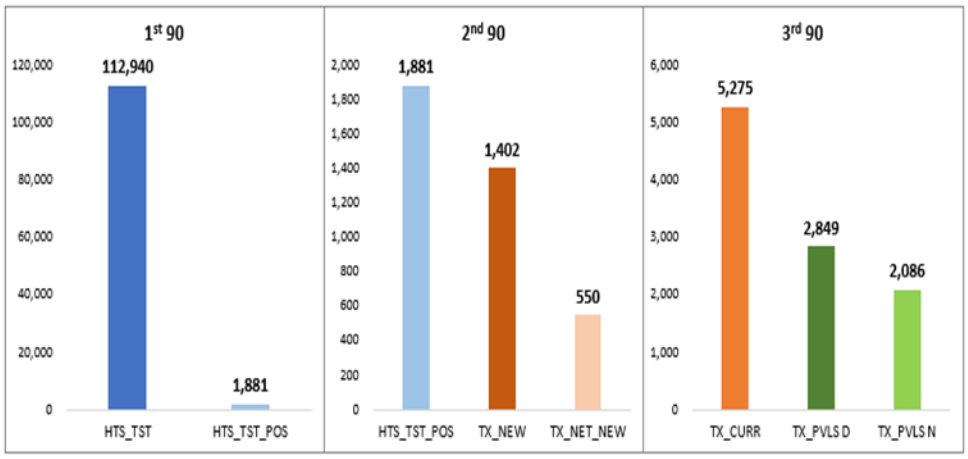
Viral load (VL) coverage for children aged <15 on treatment was 59% (6,527/11,120), and of those with a recorded test result, 68% were virally suppressed (4,439/6,527). Of the 5,275 adolescents aged 15-19 on treatment, VL coverage was 54% (2,849/5,275), with 73% suppression (2,086/2,849). Overall VL coverage in FY20 for children and adolescents was 57%. This is an improvement of 15 percentage-points above FY19's VL coverage of 42%. The overall VL suppression in FY20 for children and adolescents was 70%, a slight decrease of 1.75 percentage-points form FY19's suppression of 71.75%.

Figure 4.3.6 FY20 Cascade for Children 0-14 years and Adolescents 15-19 years of age

Children 0 – 14



Adolescents 15 - 19



In FY20, only 46.4% of children aged <15 (619/1,333) and 18.5% of adolescents (587/3,178) with TB infection knew their HIV status. Eighty five percent of children aged <15 (166/195) and only 20% of adolescents (103/516) with TB coinfection were linked to ART. We observed good TB screening rates of above 95% among children aged <15 years, with a positive TB screening rate of 2.3%, compared to 1.7% in the 15-year age group. However, this rate remains suboptimal compared to the expected 5%. INH uptake for children <15 years is low at 4% (451/11,120), with a low completion rate of 49% (221/451).

Outstanding gaps

Pediatric care has been scaled up in 95% (284/298) of PEPFAR supported facilities, though some sites report very few children receiving comprehensive care to children and adolescents, while 98 (293/298) provide PMTCT services. Despite the progress made since FY19, there remain a

number of challenges, including suboptimal case finding in pediatric and adolescent populations, low access to EID POC due to poor distribution of EID/POC platforms, inadequate sample transport systems to transport EID/VL samples to the reference laboratories, and frequent stock outs of EID commodities.

Closure of key pediatric entry points with centralization of HTS due to limited stocks of RTKs and the onset of COVID19. Limited targeted testing due to suboptimal use of the pediatric screening tool has resulted in the excessive testing of children with very low yields. Index case testing has not been fully scaled in all PEPFAR supported sites. Other key gaps include inconsistent availability of optimized pediatric ART regimens, poor adjustment of pediatric ART dosage with weight and age according to guidelines, and increased death rates of up to 17.9 for children <5 years due to poor identification and management of children with advanced HIV disease in pediatric services remain obstacles.

In FY20 there was poor linkage for adolescents aged 15-19 (74.5%), with linkage rates in males (58%) being much lower than the 90% threshold; linkage rates among females were only slightly better (77%). Although linkage rates have improved in FY21Q1, males are still not reaching the 90% threshold from ages 5-19.

Retention across the pediatric cascade among HIV-positive children and adolescents on ART continues to be a challenge for C/ALHIV. In FY20 retention rates among patients <1 years old were 36% for males and 33% for females. Retention rates improved with age for both males and females, although they were still below 90% for those aged 1-4 and 5-9. Retention rates in males and females passed 90% for the 10-14 age group, however, decreased in those 15-19. Only 39% of adolescents were retained on treatment in FY20. Not only did retention rates decrease for the age group, but the disparity between the two age groups increased significantly, with males at 91% and females at 75%. Retention rates have improved in FY21Q1 but remain low for patients <1 and 1-4 years of age. C/ALHIV have seen interruption in treatment (IIT), with the 1-9 age group having the highest percentage with interruption (9%).

In FY20 there was limited implementation of differentiated service delivery models, disclosure, and inadequate transitioning. Supply chain tension persists as an outstanding gap in FY20. In FY20 we saw an overall increase in multi-month dispensation (MMD) for C/ALHIV from 12% in FY20Q1 to 31% in FY20 Q4, with disparities across the zones in Q4 ranging from 20% for Zone 3, 26% for Zone 2, 29% for Zone 1, and 56% for Zone 4. Trends continue to improve in MMD throughout FY20 as it is scaled up throughout the 10 regions, however, limited stock of some pediatric ARVs continues to be an issue. Further, there has been a limited availability of optimized ARVs, leaving some C/ALHIV on suboptimal regimens.

FY20 saw suboptimal management of children with AHD with xx% mortality rate at the end of the year. With 17% mortality rate in 2019 based on NACC midterm NSP review. Tuberculosis and malnutrition are the most common causes of deaths. Only 50 out of 298 PEPFAR supported sites have the capacity to manage C/A with AHD.

Regarding TB/HIV coinfection, less than 50% of children and adolescents with TB infection knew their HIV status and only 20% of adolescents with coinfection were linked to ART. There was a

low positive TB screening rate of 2.3% compared to the expected 5%. There was also a low pediatric TPT uptake of 4% and a low completion rate of 49% for children.

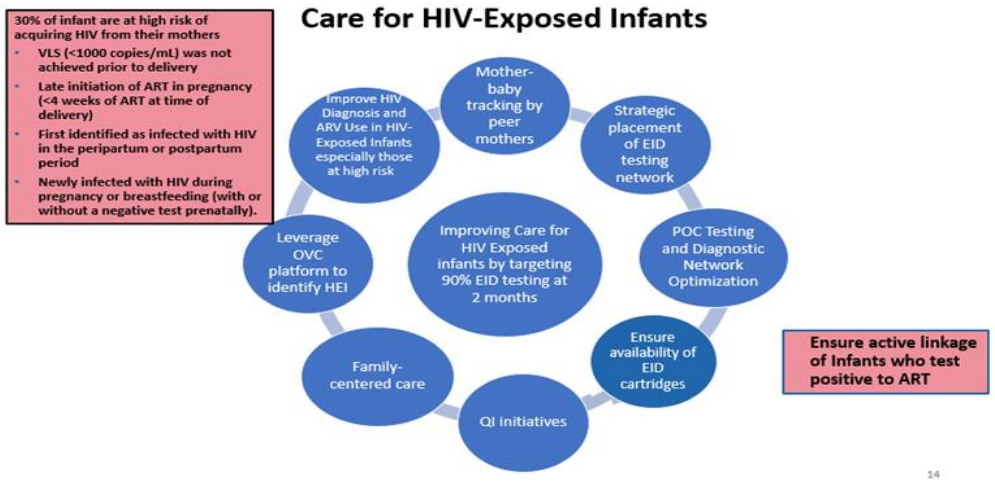
VL suppression among C/ALHIV was also low in FY20 (70%), which is a decrease of 1.75 percentage-points from FY19. VL coverage has increased by 15 percentage-points from FY19, the drop in overall VL suppression of C/ALHIV is possibly a result of suboptimal availability of optimized ARV formulations for children, socioeconomic factors that contribute to poor adherence and poor ART clinic attendance, resistance of some HCW to use VL management tools, and parent or caregiver reticence to disclose HIV status to children and adolescents. Furthermore, VL samples are not systematically requested as there is no integrated sample collection system, and viral load reagents are frequently stocked out. Weak documentation of pediatric and adolescent ART transition efforts and poor communication of commodity issues between health facilities (HF) and the Regional Fund for Health Promotion (RFHP) also negatively impact VL outcomes for C/ALHIV.

Bidirectional referral and support for C/ALHIV between the PEPFAR clinical and community OVC package of services effectively started in FY20, but <50% of OVCs have been reached across the PEPAR supported facilities in OVC SNU's. This activity needs to be brought to scale with at least 95% of children and adolescents (<19 years of age) in PEPFAR supported treatment sites offered enrollment in OVC programs.

Strategies to reach children and adolescents

In COP21, PEPFAR Cameroon will expand key strategies to improve pediatric and adolescent HIV prevention, care, and treatment to all 298 sites in the ten regions. PEPFAR Cameroon will support the decentralization of pediatric and adolescent HIV services to PMTCT standalone sites to improve on case finding and linkage of positive HIV children identified through PMTCT and the family centered care.

Figure 4.3.7: HEI



PEPFAR Cameroon will continue to advocate and support the expansion of POC testing for EID in hard-to-reach districts and will continue to ensure the creation of networks of HF around existing

POC platforms to maximize use and enhance uptake of EID for HEI while ensuring the availability of EID test kits. Sample transport systems will be set up and/or strengthened to support EID and VL uptake and testing TAT through a hub and spoke model (e.g., use of bikers). Linkage and retention case managers assigned to postnatal services will capture all mothers on ART who deliver and will enroll the mother-baby pair in the cohort register for monitoring until 18 months postpartum, when the final HIV status of the HEI is known. Cohort monitoring for HEI will be expanded for the mother-baby pair to enhance EID uptake for all HEI across all 10 regions.

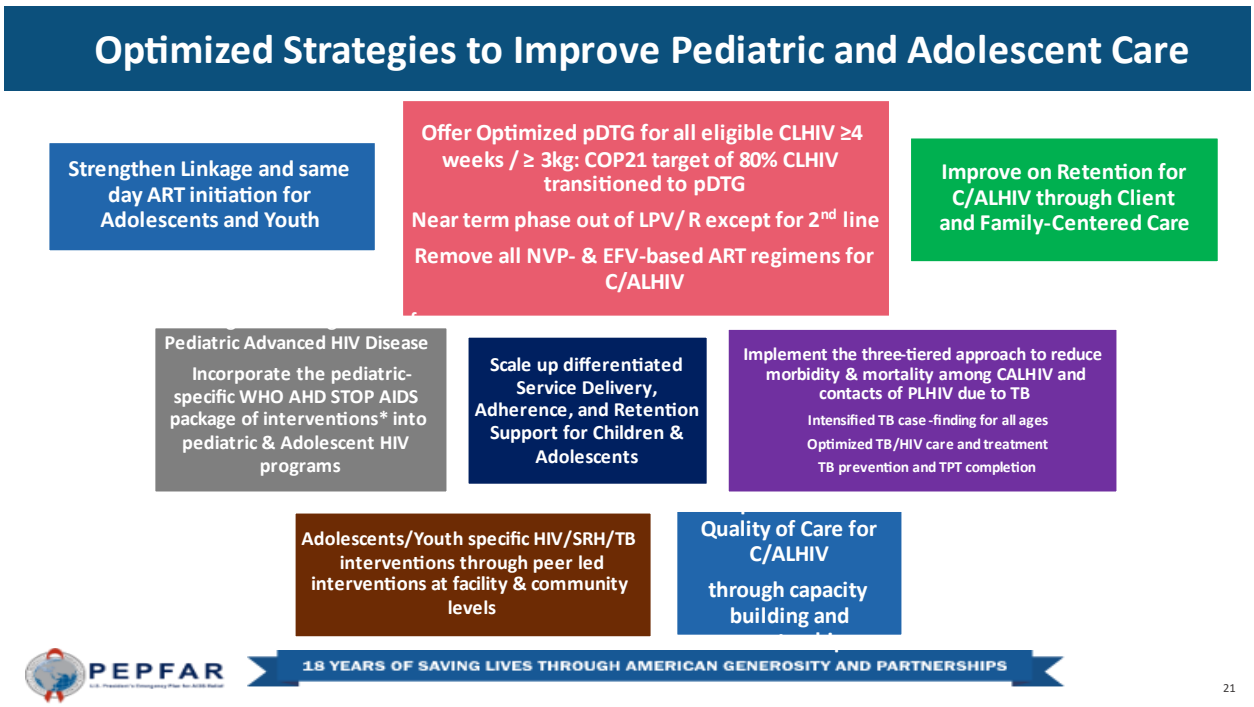
IPs will work with facilities to monitor EID uptake, HEI tracking, and TAT. Community partners will be empowered to actively search for HEI in the community and link them to the facilities for EID services. PEPFAR Cameroon will leverage the OVC program to help link PBFW and HEI who have experienced IIT in the community to EID services. PEPFAR will support the linkage of EID services for HEI to a standard package of ANC and postpartum care for mothers and infants. Pediatric linkage and retention case managers will also ensure linkage of infants who test positive for HIV and provide comprehensive counseling and support to the mother or caregiver to ensure the infant stays in care. IPs will work with facilities to share best practices from high performing sites with low performing sites. Routine review of PMTCT status among HEI in EPI, maternity and OPD will be ensured monitoring the child welfare card to identify the need for EID.

Figure 4.3.8: Strategies to Optimize Pediatric and Adolescent HIV Testing Services

PEPFAR Cameroon will expand the pediatric package of services and support GRC to complete the rollout of Test and Treat for pediatric and adolescents in the 10 regions. PITC will be reestablished at all high yield pediatric and adolescent entry points in facilities with availability of rapid test kits. Targeted testing will be intensified using the screening tool to assess for risk and identify the most at risk and vulnerable adolescents for testing at both facility and community levels. Index case testing for biological children will be expanded to all sites in the new regions. Index testing will be offered to biological children of newly tested HIV-positive women or to men who test positive, but the wife's status is unknown or died of an unknown cause, who are deemed

to be at high risk for HIV. HIV testing will be offered to children with malnutrition, presumptive or confirmed TB, emergency patients, and inpatients for those with unknown status at admission and are at high risk for HIV.

Figure 4.3.9: Strategies to Improve on Pediatric & Adolescent Care



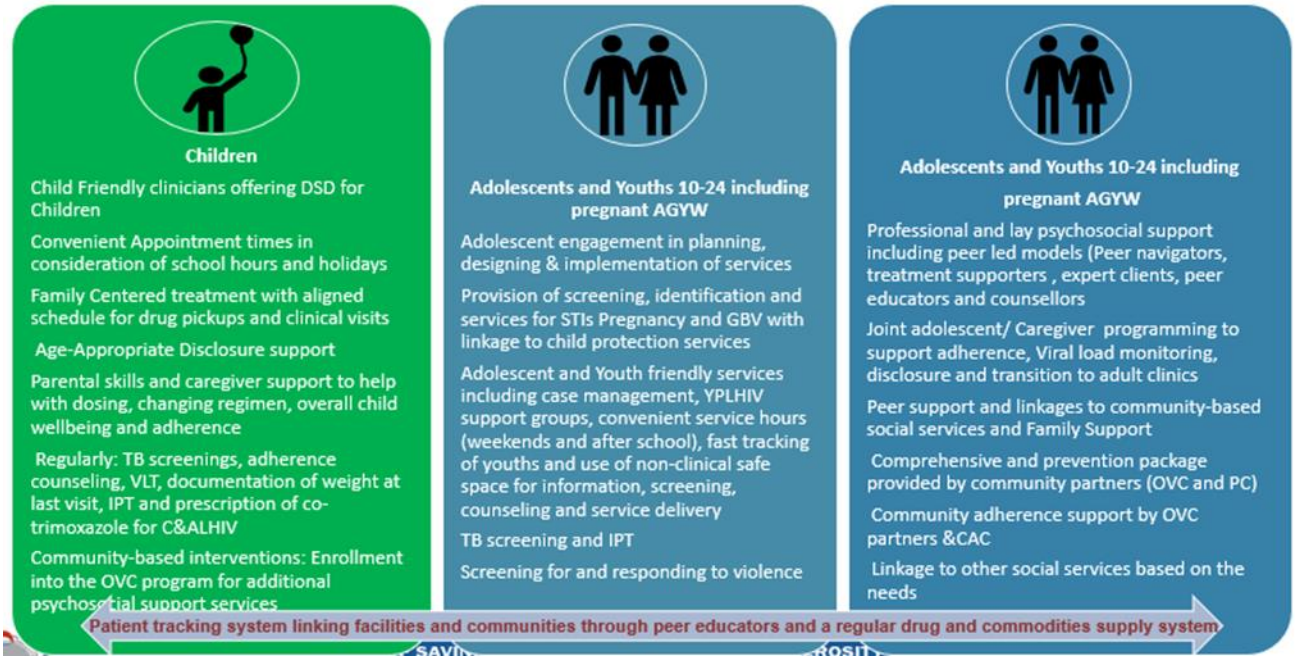
PEPFAR Cameroon will improve retention of C/ALHIV through client and family-centered care such as use of pediatric linkage case management experts to accompany children and adolescents who test positive at facility and community levels for ART initiation. Community-level adolescent/youth peer led interventions will implement specific HIV/SRH/TB interventions. To improve retention among children, family-center care will include child friendly clinicians offering DSD to children, convenient appointment times in consideration of school hours, age-appropriate disclosure support, parental skills and caregiver support, and regular screenings. Adolescents will be targeted through support groups, convenient service hours, use of non-clinical safe space for information, screening, and counseling.

Health care providers will be trained and mentored on pediatric HIV management including counseling and testing, pediatric ART optimization, VL, advanced HIV disease and enhanced adherence counseling and retention to provide quality HIV services to children and adolescents. The program will continue to support health care providers to adhere to the national ART guidelines and optimization regarding 1st, 2nd, and 3rd line ART. PEPFAR will pursue a progressive transition to pediatric dolutegravir (pDTG or DTG10) for all children <20kg in COP21. The transition will take a phased approach, starting in August 2021 (COP20), for all newly identified positive CLHIV in 20 selected sites (≥20 C/ALHIV in TX_CURR) for 6 months. The second phase will take place from January to December 2022 for sites with 10-19 C/ALHIV in TX_CURR. The third phase will start in January 2023 for remaining sites (<10 C/ALHIV in TX_CURR). Nonetheless, the transition can be accelerate depending on the availability of pDTG in the

country.In FY20 PEPFAR programs line listed all children currently on inappropriate regimens and switched them to optimized pediatric ART regimens. PEPFAR will continue supporting IPs to ensure the availability of dosing charts at sites, the appropriate prescription of optimized pediatric ART, removal of all NVP- EFV-based ART regimens, and the availability and timely request of pediatric DTG drugs. Appropriate weight and height scales will be provided to ensure weight appropriate ART prescriptions. In FY21 PEPFAR will strengthen linkage and same day ART initiation for adolescents and youths. Pediatric-specific WHO AHD STOP AIDS packages of intervention will be incorporated into pediatric and adolescent HIV programs to strengthen management of pediatric advanced HIV disease. The AHD package for C/ALHIV include thorough screening and treatment for TB, cryptococcus and malnutrition, ensure early treatment within seven days using Optimized rapid ART initiation and for children who screen negative, ensure availability of Cotrimoxazole to prevent bacterial infection, TPT and fluconazole while ensuring routine vaccine. Strengthen collaboration with OVC partners to ensure support for all C/A with AHD.

The three-tiered approach to reduce morbidity and mortality among C/ALHIV due to TB will be implemented through intensify TB case finding for all ages, optimized TB HIV C&T and provision of TB prevention while ensuring TPT completion.

Figure 4.310: Improve Retention for C/ALHIV through Client & Family-Centered Care

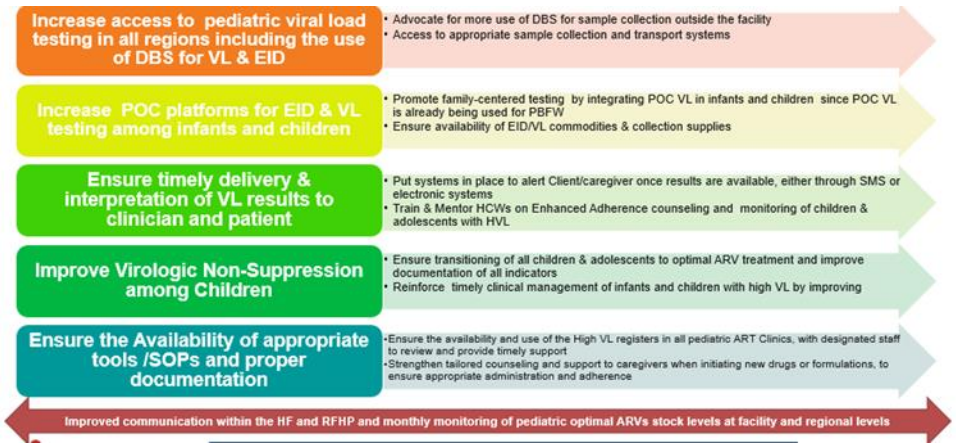


VL testing will be scaled up for children and adolescents living with HIV. In FY20 to improve on viral load coverage, health care providers were mentored to line list all children eligible for viral load testing and ensure VL prescriptions are provided with samples collected and referred to the reference laboratories for VL testing. The results once available are presented for interpretation and decision making according to national guidelines. These efforts will continue in FY22.

Enhanced transition of stable children to pediatric Dolutegravir will be prioritized in COP21. Pediatric viral load testing in all regions will be increased through advocacy for more use of DBS for sample collection outside the facility, and access to appropriate sample collection and transport systems. Enhanced adherence counseling will be intensified through training and mentorship for children and adolescents with high viral load to improve on viral suppression. Child friendly corners and support groups for children will also be implemented. Tailored counseling and support to caregivers when initiating new drugs or formulations will be strengthened to ensure appropriate administration and adherence. The capacity of HCWs will be strengthened to facilitate disclosure and documentation for the transitioning of adolescents to adult ART services and for the adult health care providers to receive adolescents transitioned from other pediatric services. Family-centered testing will be promoted by integrating POC VL in infants and children since POC VL is already being used for PBFW. Tools adapted for pediatric counselling and disclosure in use since FY18 will be produced and made available at all PEPFAR-supported sites. Support group activities for children, adolescents and their parents will be intensified, and sites will be strengthened to use these sessions to provide integrated services. Create a network for C&T including adolescents, caregivers, and their HCP to facilitate sharing of information and support. The program will expand DSD models at both facility and community level and continue to scale up the implementation of MMD and improve the capacity of youths multifunctional center and association to provide a comprehensive package of HIV/STI/SRH services including decentralized drug distribution (DDD) for all eligible C/ALHIV.

PEPFAR Cameroon will support IPs to reinforce the alignment of drug pick-ups for children with appointments for vaccination, mother's drug pick-up or support group activities. However, children will have to be brought to the facility at least once in a quarter for anthropometric measurement in order to adjust ART dosage if necessary. Providers and case managers will also be trained to provide parenting caregiver support. PEPFAR Cameroon will also support the identification of "adolescent champions" to lead age-appropriate therapeutic education and foster retention. The "Enhanced Adherence Counseling" program will be implemented in clinical settings, which includes provision of tailored messaging to caregivers of children and adolescents and establishing a system for timely return and management of high VL results in pediatric clinics. Additionally, PEPFAR will put systems in place in FY22 to alert client/caregivers once VL results are available, either through SMS or electronic systems.

Figure 4.3.11: Optimized Strategies to Improve on VLC and VLS for Children & Adolescents



PEPFAR Cameroon implements a bi-directional referral system for CLHIV between clinical sites and the OVC program. The clinical service providers receive OVCs at health facilities and provide HIV prevention, treatment, and care services, while the OVC service providers conduct monthly home visits to provide community-based care and support and other wraparound services in core areas identified in individual case plans of HIV-positive children and adolescents (see OVC program section). PEPFAR Cameroon will expand this strategy across the 10 regions to enhance uptake of HIV services and retention of children in care.

In COP21, PEPFAR will work at the facility and community levels to strengthen the bidirectional referral of children and adolescents between the Clinical and OVC program. Clinical service providers will receive OVCs at health facilities and provide them with HIV prevention, treatment, and care services, while the OVC program will play a key role in ensuring community support for linkage to care, retention, and adherence among children and adolescents living with HIV. More specifically, the program will provide the following services to target beneficiaries:

- *CLHIV and their families*. Trained case workers will carry out monthly home visits to provide early childhood development (ECD) activities for children below 8 years of age focused on positive parenting interventions and early stimulation; adherence counselling; age and stage appropriate disclosure support, education progress monitoring; nutritional assessment and counselling; violence screening; transportation support to access health services and medical coverage for other health conditions; and other services as needs arise. Additional services for adolescents living with HIV will include screening for drug, alcohol, and sexual risk behavior and providing counseling to reduce identified risk behaviors. The program will strengthen bidirectional referral between community-based organizations and health facilities including organizing case conferencing, and monthly coordination meetings.

- *HIV-positive PBFW and children living in their care*. Trained case workers will conduct monthly home visits to provide ECD focused on positive parenting and early stimulation; adherence monitoring; and accompanied referrals to health facilities to ensure confirmatory testing among HEI.

- *Other children at risk (children of female sex workers, GBV cases reported to the program, AGYW in or at risk of entering sex work, internally displaced children/adolescents).* See section 4.XX for primary prevention program targeting AGYW and OVC.

The OVC program will provide wrap-around services such as household economic strengthening activities and education support for formal schooling and vocational training to help mitigate the negative impact of HIV on households. Finally, the program will seek to leverage existing programs such as USAID's Food for Peace program (targeting refugees and IDPs), the President's Malaria Initiative (in health districts in the North and Far North regions), and the World Bank's Social Safety Net program to improve the living conditions of OVC and their families.

TB/HIV

Cameroon is one of 30 countries with the highest burden of TB/HIV co-infection. In 2019, the estimated number of new TB cases expected was 28,550 of which 24,582 (86%) cases were notified; representing a 3% increase compared to 2018 (NTCP, 2019). There was an improvement in the incidence of TB which decreased from 186 - 179/100,000 of the population from 2018 to 2019. Among all TB cases notified in 2019, the majority (61%) were males and 5.2% were children, with the detection rate among children less than the 7-12% expected target. The most affected age group was 25-44 years old and the therapeutic success rate for new and relapsed TB cases was 83%. The North and North-West regions had the best rates of therapeutic success while the Center region had the lowest rate. Among all TB cases infected with HIV, 99% were on ART.

In 2019, 195 cases of an estimated 273 multidrug-resistant (MDR)/rifampicin resistant (RR) TB patients were diagnosed and 169 (87%) received second line treatment from the 11 specialized treatment centers in the country, with a therapeutic success rate of 81%. In the same year, 133 prisoners were diagnosed with TB. Cameroon has adhered to the Sustainable Development Goals and the World Health Organization (WHO)'s Strategy to END-TB and has implemented various short and long-term TB and HIV strategic plans to reduce the burden of TB.

Despite being preventable and curable, TB remains the leading cause of infectious disease morbidity and mortality for PLHIV, with the urban cities of Yaoundé (15.4%) and Douala (17.6%) accounting for one third (33%) of all TB patients in Cameroon (National TB Control Program, 2017). In 2019, 91% of TB patients were tested for HIV, with 27% TB/HIV co-infection. Among all HIV/TB co-infected cases identified, 98% were linked to ART. The incidence of TB was 1.5% among PLHIV on ART and 11.3% among PLHIV not on ART. TB/HIV co-infection was highest in the Northwest region (45%) while the North (14%) and the Far North (11%) were the least affected. Although the MOH recommends the provision of IPT to all PLHIV without active TB, implementation of this policy is still limited.

To support GRC in the scale up of TB prevention and treatment, CDC implemented a Cooperative Agreement with Cameroon's National TB Control Program (NTCP) in FY18 to 'Decrease the

TB/HIV Burden and Develop Systems to Achieve and Sustain TB/HIV Epidemic Control in Cameroon under the President's Emergency Plan for AIDS Relief (PEPFAR)'. This award will contribute to strengthening prevention, diagnosis, and treatment of TB in PLHIV through screening and case identification; TB infection prevention and control; HIV testing, monitoring and clinical care for TB clients; and health system strengthening.

Results and achievements

In FY 20, 90% of new and relapsed TB cases in PEPFAR supported sites knew their HIV status, 34% of TB patients were co-infected with HIV, and 90% of HIV positive TB cases were initiated on ART. In ART clinics, only 83% of all PLHIV were screened for TB, and 2% had a positive TB symptom screen – lower than the 5% expected target. Seventy three percent of specimens were sent to the laboratory for confirmation and 39% were confirmed positive, of which 97% were initiated on treatment. PEPFAR continues to support the integration of TB and HIV services at facility level with focus on in-service capacity building for service providers to provide quality HIV/TB services to co-infected patients. Among 83% of PLHIV screened for TB in FY20, 98% had a negative TB symptom screen, of which 5% were initiated on TB preventive therapy and 60% completed their 6 months treatment.

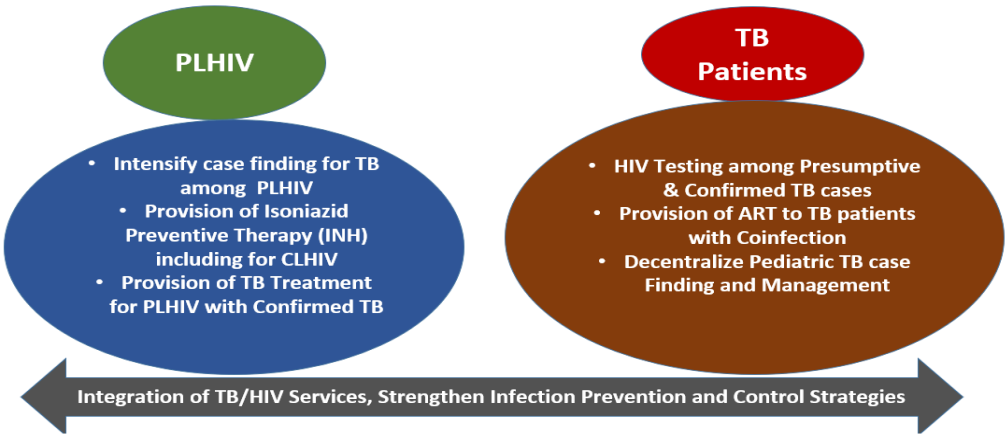
Outstanding gaps

Despite implementation of TB/HIV integrated activities in Cameroon, TB/HIV prevalence remains high at 27%. TB case finding, diagnosis and treatment remains suboptimal, especially among children. TB diagnosis continues to rely on microscopy for most diagnosed cases despite increased roll out of molecular technology (55 GeneXpert, 28 TB Lamp). The number of Diagnosis and Treatment Centers (DTCs) increased from 256 in 2018 to 261 in 2019, but not all DTCs offer microscopy. IPT implementation is limited by drug availability, insufficient staff capacity and training. The diagnosis of TB patients remains a challenge especially in the two big cities of Yaoundé (15%) and Douala (68.5%), with only about 40% of all TB patients notified, and the sample transport system not yet well established. Several DTCs do not offer TB diagnostic tests to patients onsite and instead refer them to other facilities for testing due to unavailability of personnel, inappropriate space, and unavailability of microscopes, which has resulted to patients being lost to follow up between the referral and the testing sites. The TB diagnostic capacity for PLHIV, prisoners, children, contacts of confirmed Pulmonary TB and other at-risk populations remain suboptimal. There is limited integration of ART and TB services in health facilities, poor coordination at all levels of the health sector, and limited sharing of TB and HIV data. The ongoing COVID-19 pandemic has negatively impacted TB/HIV service delivery as the fear of the pandemic led to significant reduction in hospital attendance across all regions. In addition, the unstable socio-political context in the Far North, North West and South West regions have caused the displacement of many clients within and out of the country and has greatly limited community interventions.

Strategies to expand uptake of TB/HIV services

In COP21, PEPFAR Cameroon will continue expanded TB/HIV service provision in all PEPFAR supported sites.

Figure 4.3.12: Strategies to Improve Management of TB/HIV Coinfection



To reach the COP21 targets and decrease the burden of TB among PLHIV, PEPFAR Cameroon will continue to support collaboration between NACC and the NTCP to promote integrated TB/HIV services in facilities through the 'one-stop-shop model', which is highly recommended by WHO for HIV/TB prevention, care, and treatment. Under the one-stop-shop model, HIV, TB, and HIV/TB co-infected patients can access a full package of services in one location managed by one trained healthcare provider or team. A TB patient coming for TB treatment is provided with HIV testing services; an HIV positive client coming for ART is screened for TB at every visit, and an HIV/TB co-infected client receives both ART and TB treatment from the same staff who can monitor both treatment outcomes and provide comprehensive care and adherence support. In addition, patient data, registers, monitoring, and reporting tools are managed by the same staff for better quality. HIV/TB co-infected clients will benefit from optimized and client-centered care through aligning TB treatment refills with ART, reminder phone calls, peer support, and home-based adherence support during the active phase of TB treatment. PEPFAR Cameroon will continue decentralizing TB case finding and management in Pediatric, PMTCT clinics and in prisons.

Active TB case finding will be implemented by using the WHO TB symptoms-based screening tool for adults and children at various facility entry points and in the community through various DSD models. PEPFAR Cameroon will support the National TB program and health districts to strengthen active TB case finding in the community-by-community health workers and ensure that all presumptive cases identified are referred for TB and HIV testing services. CBOs will be trained to carry out routine TB screening during community ART dispensation. Prisoners will be systematically screened for TB at entry, annually and on exit. Thanks to the ongoing Diagnostic Network Optimization (DNO), 100% of sites will be linked for TB molecular testing of PLHIV with TB symptoms. TB samples will be fully integrated in the specimen transport system for VL/EID, in the integrated multiplexing diagnostic platforms for VL/EID/MTB, and turnaround time/result return will be significantly expedited by the integrated Lab information management system (LIMS) currently in progress.

In addition, PEPFAR Cameroon through its clinical IPs will build and strengthen a client-centered integrated community sample referral system for TB/HIV(VL/EID) to ensure that the samples of all eligible clients are collected and sent to the Lab. To improve TB testing of presumptive children,

Pediatric focal persons will be trained in alternative sample collection techniques including gastric and nasopharyngeal aspiration. Child household contacts of PLHIV confirmed with TB will be systematically screened for TB and children enrolled in the OVC program will also be offered routine TB screening.

IPT will be provided to PLHIV who screen negative for TB in all PEPFAR-supported sites. PEPFAR will be working closely with the National TB program to advocate for a shorter TPT regimen that could significantly increase adherence and completion rates. Support will be provided to the NTCP to organize meetings/seminars with key stakeholders and experts to determine and approve the most efficient and adapted short TPT regimen for an eventual quantification, procurement, and phased introduction by COP 22. The current national guidelines recommend daily Isoniazid for 6 months to all PLHIV who screen negative for TB and to children below 5 years without TB symptoms who are household contacts of bacteriologically confirmed pulmonary TB cases. Although guidelines allow for daily Rifampicin plus Isoniazid combination for 3 months (3RH), there are concerns regarding drug-drug interactions between Rifampicin and ARVs (DTG and PIs) requiring ART dose adjustments. The TB program is also relying on data that will be available by the end of FY 21 from the Unitaid-funded CaP TB study implemented by EGPAF where contacts of TB cases below 5 years are being provided with the 3RH regimen. In addition, the NTCP has been reluctant to approve weekly Isoniazid plus Rifapentin for 3 months (3-HP) because of its higher cost, hence only Isoniazid preventive therapy is currently being implemented and is planned for procurement in COP 21.

To mitigate the impact of COVID-19, multi-month dispensation and differentiated service delivery models (CBOs and home-based services) will be scaled up for dispensation of INH and adherence support. PEPFAR Cameroon will continue to work with the MOH and all stakeholders in ensuring availability, timely and enough quantities of INH. GRC will also be supported to produce and make available data collection tools for IPT and train/mentor service providers (Doctors, nurses, and Psychosocial agents) to provide IPT to PLHIV without active TB and document services offered in the registers.

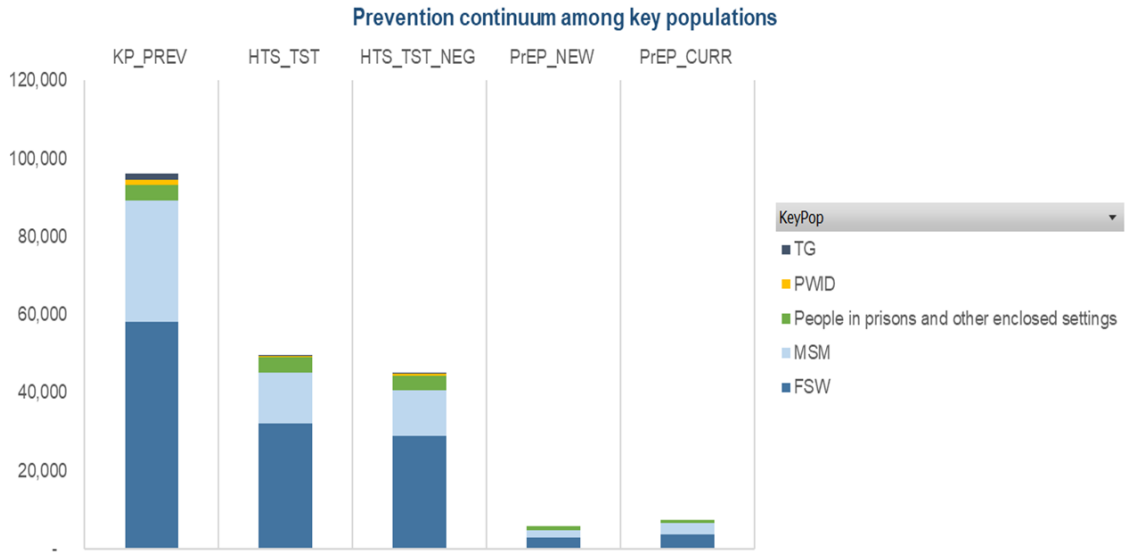
To strengthen TB infection prevention and control (TBIC) procedures in health facilities, PEPFAR Cameroon will continue to support the National TB Program to develop SOPs and IPC tools, build the capacity of HCWs and auxiliary staff on basic infection prevention and control strategies and biosafety. Systematic TB screening of health and related staff in all the sites will also be implemented according to national guidelines. In the current COVID-19 context, clinical IPs will scale up integrated COVID-19/TB screening to ensure that all suspected cases of COVID-19 are systematically screened for TB and those presenting with TB-like symptoms will be provided with TB and HIV testing.

PEPFAR Cameroon will strengthen the health system by building monitoring and evaluation capacity through implementation of an online data service for the management of network communications, reinforce the capacity of NTCP central and regional level staff to get real time data on TB and TB/HIV, and digitalize data collection, transmission, and analysis by integration and harmonization in the District Health Information System (DHIS2). In COP21, PEPFAR

Cameroon will continue to support revisions of national guidelines,such as the introduction of a shorter TPT regimen like 3-HP for adolescents and adults, TB/HIV data review meetings, TB/HIV coordinating body meetings. Mentorship, supervision, monitoring and evaluation will be strengthened through TA, site visits, partner management and monitoring. Clinical sites will receive continuous coaching through weekly virtual GSMs and CQI projects. The National AIDS Control Committee and the National TB Control Program will actively participate in these sessions to foster collaboration and provide timely solutions to challenges on the ground.

Key Populations

Figure 4.3.13 Prevention Continuum by Key Population Group



Key Populations Clinical Program

FY21 midterm results and achievement

The KP clinical program while continuing to ensure KPs have access to HIV care and treatment services, started during FY21, providing HIV prevention services to key populations. FY21 Q1 preliminary results of the KP clinical program results show a total of 4,905 key population have been individually reached with prevention services. Of these numbers, Zone 1 reported 714, Zone 2 2174, Zone 3 1456, and Zone 4 561. Of the total number of KPs reached by the clinical program, prisoners made up 68% (3344), FSW 21% (1041), MSM 8% (413), PWID 3% (160) and transgender <1% (1).

Looking at clinical service provision and the key populations clinical program cascade, same FY21 Q1 preliminary results show that, of the 4,905 Of those who tested for HIV, 286 tested positive (6% overall yield). Of those who tested positive, 272 were put on treatment, giving an overall linkage rate of 95%.

Table 4.3.2: Key populations clinical program cascade, preliminary midterm FY21

Pop	KP_PREV	HTS_TST	HTS_TST POS	Yield	TX_NEW (%)	TX_CURR	VL Done	VL Supp.	% Suppressed
MSM	413	267	43	**16%**	41 (95%)	1660	295	279	**95%**
TG	1					43	4	3	**75%**
FSW	1041	739	73	**10%**	70 (96%)	1822	696	644	**93%**
People in prisons	3344	3454	164	**5%**	156 (95%)	818	137	132	**96%**
PWID	160	145	6	**4%**	5 (83%)	57	9	7	**78%**

These were principally achieved by strengthening health facility-prisons collaboration for systems strengthening (provision of tools, guidelines, SOPs, trainings), prison community engagement (peer educators, expert clients, prison health care providers and administrative staff) quality care, supportive supervision, and minor repairs at prisons ART clinics to make the clinic conducive for both service providers and clients. The KP clinical program also targeted and reached FSW and other KP subgroups such as MSM, TG, PWID who opted to access services directly from the health facilities. Through the facility-led outreach approach, KPs in underserved communities (no KP community program – USAID, Global Fund) were reached and provided prevention, testing and treatment services.

Clinical Program's KP Targeted Subgroups and Strategies

The clinical KP program has as principal KP target are prisoners. Through a facility-led outreach approach and close collaboration with prison administrators and health staff under the supervision of the Regional Technical Group Coordinator, clinical IPs will expand and support HIV service delivery at prisons in PEPFAR-supported health districts. Clinical IPs will expand support to build a sustainable HIV/TB program in prisons that will provide quality HIV services across the cascade. A peer education program will be established or strengthened in such a way that there will be ongoing behavior change communication (BCC) activities (individual or small groups) led by

trained peer educators (inmates). Apart from BCC activities, peer educators will also be trained to conduct risk assessment, risk reduction counseling, and provide testing for routine triage based on risk assessment results to existing prison inmates. As concerns the package of prevention services for persons in prisons, this will include targeted behavior change communications, tailored to prisoners' specific needs be it individual or in small groups; provision of STI screening, prevention, or treatment; GBV screening and management, Post Exposure Prophylaxis, TB prevention screening and treatment; provision of family planning services or PMTCT for female and or pregnant inmates and HIV testing services. PEPFAR Cameroon will align with the government of Cameroon's policy for limited prevention interventions in prison settings including prohibition of condom/lubricant distribution or other biomedical prevention interventions such as PrEP.

In addition to strengthening provision of HIV prevention, testing, care and treatment for prisons, PEPFAR Cameroon through its clinical IPs will work with prison administrators and health staff for prison systems strengthening including continuous staff capacity building; provision and training on use of various tools, registers, guidelines, SOPs etc; establish prison support group(s), recruit and train inmates LWHIV and successful on their treatment as expert clients to run support group activities, supportive supervision, provision of working material, renovation and minor repairs of the prisons ART clinics to make the environment conducive for both staff and clients.

Apart from prisoners, the clinical program will also target FSW with services who will opt to seek services directly at the facilities. With the use of the risk assessment and KP categorization tools, FSW and other KP population sub groups who access various services at different entry points of the facility will be reached with tailored risk reduction messages, counseling, HIV testing and other prevention messages and services as applicable including STI diagnosis and treatment, TB prevention, screening and management (INH or TB treatment), sexual, reproductive health services/family planning, condom/lubricant provision, GBV screening and management, Post Exposure Prophylaxis - PEP, and Pre-Exposure Prophylaxis - PrEP.

It is also important to highlight that in the context where a PEPFAR-supported health facility is found in a health district that is not covered or reached with services for KPs by the KP community program (USAID or Global Fund supported), the health facilities in such context through a facility-led outreach approach will meet the prevention and testing needs of KPs in such underserved communities.

With regards to PrEP implementation during FY21 at clinical sites, the clinical program has experienced delays in kick off as the clinical model was not initially a model in PrEP implementation protocol. PEPFAR Cameroon is working closely with NACC and the PrEP TWG to revise the protocol, policies and tools to include the clinical site model, expand the program nationwide and include PrEP access to key populations and other high risk in need, including AGYW, partners of pregnant women and partners of sero-discordant couples. It is worth noting that PrEP as a prevention option, just as condoms and lubricants will not be offered to prisoners – as per the government of Cameroon (Ministry of Justice) policy on prohibition of these categories of interventions in the prison milieu. Though the clinical program will lobby to expand PrEP implementation across the country (all four zones), PrEP rollout will follow a stepwise

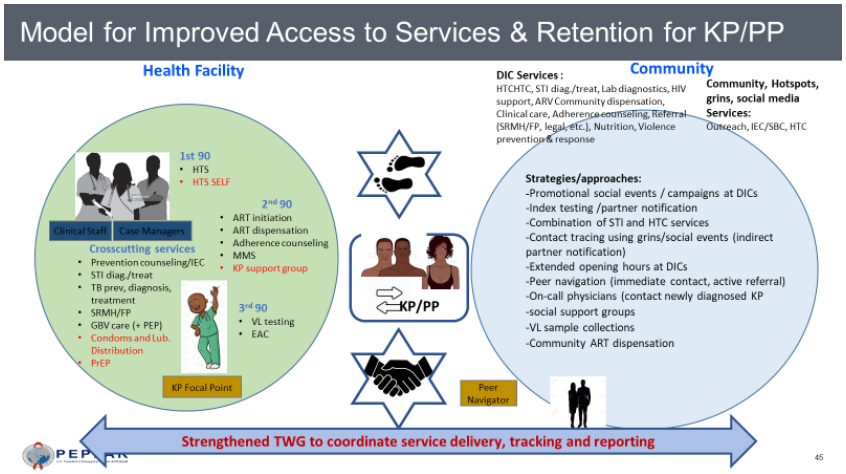
approach. This will be done in such a way that, PrEP implementation will primarily be done in tier one and two sites, with the largest number of PLHIV in their treatment cohorts to maximize service uptake among KPs, newly diagnosed sero-discordant couples and AGYW. Clinics with smaller treatment cohorts but that are recognized and preferred by KPs will also be enrolled in PrEP implementation. In COP21, PEPFAR Cameroon will continue assessing the gaps in PrEP implementation and working with NACC and other key holders towards closing these gaps.

The role of the Clinical Program in the Handshake Model

When members of key populations test positive at the community, a peer navigator (PN) of the community program physically accompany their clients to health facilities and present them with a referral slip to the designated KP-friendly provider in what is known as the “handshake” between the community and facility provider. Once received at the facility for ART initiation, the facility KP focal person will navigate the referred client and ensure every other clinical service is provided prior to treatment initiation. These other services include confirmation of HIV status (as per national guidelines); screening, diagnosis and management of co-morbidities including TB, STIs, other OIs; sexual and reproductive health services/family planning need assessment and provision (FSW), GBV screening and management. Upon initiation at the facility, the KP client will be counter-referred to the community program (with a filled and signed counter referral slip). The newly initiated KP will continue clinic visits for ART dispensation, other clinical services as needed. ART dispensation will continue at the clinic till the newly initiated KP becomes virally suppressed and will be given options for differentiated ART dispensation, including dispensation at KP CBO. If he/she carries, the KP client stable on treatment will be enrolled in community ART dispensation.

PEPFAR Cameroon acknowledges that the implementation of the handshake model has been sub optimal at both community and facility levels. While there will be a more in-depth assessment of the weaknesses of the handshake model prior to COP21, preliminary inquiries have revealed a few key challenges, notably, , weak systems for KP referral, counter referral and documentation, which leads to a disconnect in linkage data between the community and facility partners. The handshake assessment will look into this, and other challenges, and once complete, both clinical and community programs will work together to improve processes and establish SOPs and roles and responsibilities that address the activities and role of community and clinical actors and at every stage of the model. The SOPs should contain roles and responsibilities of various actors, as well as guidelines for reporting, monitoring and evaluation. On a second note, training and retraining of key actors on these SOPs will be continued during COP21 and follow up assessments organized by PEPFAR agencies and sustained by IPs will be done. CBO/Health Facility relationships will be standardized to be between institutions and not individuals and all sites will have established MoUs with CBOs that refer clients to the sites. On another note, there is going to be the reintroduction and expansion of collaborative work that existed with previous partners (in Littoral and Center regions) where the clinical and community partners met monthly and quarterly to review, triangulate, validate and sign off KP testing, linkage, retention, and viral load data and ensured alignment of reported referrals by community partner(s).

Figure 4.3.14: Model for improved access to services and retention for KP



4.4 Additional country-specific priorities listed in the planning level letter

Cameroon had country-specific priorities from the COP20 planning level letter, shown in the chart below. Strategies to address these directives are described in detail throughout section 4.

OU –Specific Directives
HIV Testing Treatment
1. The Supply Chain in Cameroon must be optimized through improved planning, coordination, communication, logistics, information management, data sharing and quantification among all partners. This improvement will affect testing and treatment outcomes nationally. Specific directives are outlined below.
2. MMD, DDD and TLD must rapidly scale up in COP21. All policy barriers to their successful implementation must be resolved. This will be the main solution for retention and viral load suppression problems, but specific approaches for younger cohorts, and specifically men, must be engaged as well. We recommend utilizing MenStar approaches to address linkage and retention challenges among young adult men.
3. Index testing and viral load coverage must continue to increase with viral load coverage achieving 90% in COP21. Viral load suppression must also show improvement and target 90% suppression in COP21.
4. Weak pediatric testing yields, retention, TB screening and completion, MMD enrollment and viral load suppression must be addressed, and should be the focus of OVC activities in COP21.
HIV Prevention
1. PrEP must be scaled up and made available to all population with elevated risk of HIV. Policy barriers to PrEP scale up for any vulnerable population, including adolescent girls and young women must, be removed.
Other Government Policy or Programming Changes Needed
1. The Government of Cameroon must be a reliable partner and meet all of its co-financing requirements to ensure the constant availability of HIV commodities at sites. PEPFAR looks to the government to assist in the improvement of the Supply Chain in Cameroon, as detailed in the guidance below. 2. The Government of Cameroon must continue to make progress on implementing policies for informal and formal user fee elimination across all sites.

4.5 Additional Program Priorities

TLD transition for adults has been updated to 80% of the TX_CURR, currently at about 56%. Pediatric DTG 10mg will alsobe rolled out for Peds in a phased approach. PEPFAR Cameroon will advocate to MoH to pursue a target of 80% of CLHIV on pDTG, depending on availability of commodities. MMD has been extended to C/ALHIV in the context of COVID-19.

All PEPFAR supported sites currently meet the minimum standards for safe and ethical ICT. The PEPFAR team shall continue to technically support them to maintain these standards. We shall continue to build on these minimum standards to drive performance in index testing. Another aspect we are working to improve is sharing of findings from adverse event monitoring with all stake holders for joint solutions. There are no other major decisions beyond what has been discussed in the main program areas.

Development of work plans to track activity implementation during monthly activity review calls. We hold weekly budget calls and quarterly activity management meetings. To continuously track performance of IPs in the context of COVID-19, we hold weekly virtual GSM with PEPFAR supported Health Facilities. We equally conduct DQA to ensure good data quality.

4.6 Commodities

After experiencing a period of stock tensions, the Cameroon supply chain outlook is more promising for COP21. At the central, regional, district and health facility level, antiretroviral treatment, rapid test kit, viral load reagent and consumable stock levels are stabilizing, and occurrence rates of stock outs are declining. In order to maintain the trend and ensure a responsive supply chain that can sustainably serve patients in need of commodities, PEPFAR will continue investing in innovative supply chain strategies that contribute in the short, medium, and long term to ensuring the establishment of a resilient supply chain for health commodities. In COP21, PEPFAR will also invest in commodities procurement, contributing $3,953,662 for the acquisition of HIV self-tests ($114,048), viral load reagents and consumables ($2,055,234), commodities for PreP ($624,147) and Isoniazid ($660,233) for tuberculosis prevention among people living with HIV as well as condom (male and female: $500,000).

COP21, PEPFAR will also align its supply chain strategies to Government of Cameroon’s national supply chain transformation plan (NSCT) priorities and will leverage other supply chain resources from other in-country partners such as the Global Fund. Synergies among partners will eliminate duplication and support the country’s efforts to achieve HIV epidemic control (see section 5.0).

The total national cost of commodities procurement in FY22 is estimated at $59,926,886 (all costs), including antiretrovirals, viral load reagents and rapid test kits, PrEP, Condoms and Isoniazid. All USAID’s procurements were delivered in full in Q1 (RTK Kits) and viral load orders staggered as per the supply chain plan to fulfill regional laboratories' needs. The USAID initiated Emergency Commodity Funding (ECF) TLD90 order was instrumental in averting an anticipated stock out for most patients in the 1st line. There are however concerns to replenish the country stock as materialization of counterpart funding by the Government of Cameroon continues to be challenging, resulting in commodity shortages and stock out. While this situation is currently improving, PEPFAR Cameroon will continue to monitor consumption data for risk of stock out and

will request early release of COP 21 funding to ensure reception of shipments of key commodities by December 2021. It is important to note that ARV needs for COP21 are mostly under the NFM3 funding. PEPFAR contributing to VL Abbott will need to be complemented by other funding sources to ensure constant availability of Abbott reagents and consumables throughout COP21. Any delays on the part of the Government of Cameroon to execute NFM3 orders for ARVs may affect the program's ability to meet its treatment targets.

To mitigate COVID-19 effects on treatment and support MMD implementation, a Decentralized Drug Delivery strategy will be deployed in specific sites to allow patients to pick their treatment more conveniently. USAID will continue to deploy the Last Mile Delivery to PEPFAR supported sites in COP21 and will work to transition to a local partner by the end of COP21, and to 5 local partners by COP22. Additional TA support at the regional level will be supplied to two larger regions by the supply chain partner in additional human resources to assist in order requisition and review as well as in the development of distribution plans and route optimization. National quantification exercises with quarterly updates will take place with participation from the government of Cameroon, the Global Fund and other key stakeholders.

To ensure proper ordering of optimal regimens, the capacity of pharmacy staff will be strengthened. Clinical Implementing Partners will also continue to provide support at the site level to ensure proper commodity inventory monitoring and storage practices (including the use of stock cards). Furthermore, the clinical program will provide verification when commodities are received, and send notifications when stocks are low at the facilities. Because facility-level information on consumption and service provision is critical for national quantification, clinical partners will strengthen data collection practices at sites, and ensure that this information is transmitted from sites to regional and central levels.

4.7 Collaboration, Integration and Monitoring

In COP21, PEPFAR Cameroon will improve collaboration and leverage technical strengths and competencies across all agencies to ensure efficiencies in addressing gaps identified in COP19/20 and development of COP21 in order to meet the program goals of achieving epidemic control by sex and across different age groups and populations by Sept 2022. To address these gaps, the team through a collaborative effort, will build on their technical strengths and expertise to guide implementation of innovative strategies for achieving epidemic control among children, OVC, AGYW, KP, adolescents, adult women, and men in all four zones across the national territory. Agencies will continue to collaborate in conducting GSM/SIMS/DQA/SQA, implementing CQI activities and supporting CSOs, Community-Led Monitoring and other community outreach programs to ensure the provision of quality patient-centered HIV/TB services. PEPFAR Cameroon agencies will collaborate in implementing a single model of self-testing as an innovative strategy for finding men and will also leverage on this collaborative effort and their different clinical, pharmaceutical and supply chain expertise to support the GRC to complete the TLD transition process which started during COP19 implementation. PEPFAR Cameroon agencies will implement PrEP for key and priority populations and sero-discordant couples and reinforce the U=U messaging. PEPFAR Cameroon agencies will improve collaboration with CSOs.

To address specific gaps identified in COP19/COP20, PEPFAR Cameroon's key interventions in COP21 towards achieving epidemic control in all four zones across the ten regions of the country will focus on knowing who to target, where and how to find PLHIV, finding those we are missing (men and adolescents), finding the drivers of the epidemic and improving on strategies to link positives to rapid ART initiation, retain patients in ART treatment, improve viral load coverage and keep them virally suppressed. To ensure success and sustainability, PEPFAR Cameroon will continue to leverage and strengthen existing collaboration with the GRC, CSOs and other key stakeholders such as GFATM, UNAIDS, Unitaid, GIZ, UNICEF and WHO. In COP21, PEPFAR Cameroon will fund UNAIDS to support the GRC in coordinating efforts towards ensuring the availability of HIV data at district, regional and national level for decision making.

PEPFAR Cameroon has intensified partner management by investing in new approaches like GSM/SIMS integrated site visits and weekly virtual GSMs in the context of COVID-19 to enhance site level granular management coupled with CQI activities, implementation of the remediation tracker and will continue to implement those that improved efficiencies of partner/site performance in COP19/COP20. Across all PEPFAR Cameroon agencies, improved strategies include weekly data reporting by the IPs, and the provision of review/feedback on data reported by USG staff. The frequency of site visits either weekly, biweekly, or monthly for program performance reviews depends on the gap identified. This review and reporting of activities are done by budget code and by site with immediate follow-up on required corrective actions for remediation. Routine DQA and corrective action by agency and by IP at site level, trainings on the most recent version of PEPFAR's Monitoring, Evaluation and Reporting (MER) guidance and indicators. Regular Check-In at site level to track progress with the implementation of the remediation tracker following each site visit and ensuring remediation is not just a change in color code but a reflection in the site performance with respect to their targets.

The PEPFAR Cameroon program conducts quarterly mini-POART with the IPs to review data for oversight, accountability, performance, and corrective actions for overall program quality improvements. Additionally, an annual review of IP work plans is done to ensure that COP strategies are accurately captured with activities that are appropriately aligned to PEPFAR objectives. The program also plans to implement peer review meetings to ensure CQI activities to exchange challenges and share best practices within the zones and across program areas are rolled out.

The Minister of Health signed a service note on March 2, 2020 on activation of the EOC and implementation of the Cameroon surge activities in COP19 in collaboration with MOH-NACC, DGHP and the implementing partners to accelerate progress towards epidemic control by Sept 2021. Surge tools and systems have been put in place at the facility level, which will be used to fast-track activities in COP21 to achieve epidemic control by 2022.

Concerning KP activities, a TWG within the PEPFAR inter-agency will be instituted and meetings held at least every month to discuss site implementation and areas of improvement. In addition, monthly meetings will be conducted between PEPFAR community and clinical IPs to share ART unique identifier codes (UIC) and community UIC of clients reached to avoid double counting

when reporting in DATIM. Ongoing collaboration between PEPFAR KP community partners and the Global Fund community Principal Recipient (CAMNAFAW) will continue with each partner leveraging another's resources, ad hoc and monthly meetings held at central and regional levels.

To improve on pediatric outcomes, an inter-agency PEPFAR TWG on A/CLHIV-OVC will discuss on a monthly basis all related issues about strengthening collaboration of the various programs in the field. Also, a strong collaboration platform will be instituted among clinical and OVC partners. MOU defining roles and responsibilities of each party will be signed by OVC partners and PEPFAR supported sites for referral and counter referral of children on ART. Monthly meetings will take place at the district level involving community, clinical partners, and health facilities to review all data and address gaps identified by either community actors or clinicians. At the national level, bimonthly meetings will be convened by the MOH (NACC) to follow up on the integration of the community and clinical case management model that will have been adopted.

In order to monitor access to services in health facilities, PEPFAR Cameroon will continue to support community-led monitoring systems. Reports generated by CBOs reporting on access to and quality of services provided at health facilities will continue to be shared through weekly scorecards and other avenues bringing together government, partners, and community actors (see section 5.0). At the national level, quarterly review of the findings of community actors, IPs and MOH Inspectors generals will be presented, and remediation plans adopted to improve access to care for beneficiaries.

4.8 Targets by population

Table 4.8.1

Table 4.8.1 ART Targets by Prioritization for Epidemic Control						
Prioritization Area	**Total PLHIV**	**Expected current on ART (APR FY21)**	**Additional patients required for 80% ART coverage**	**Target current on ART (APR FY22) *TX_CURR***	**Newly initiated (APR FY22) *TX_NEW***	**ART Coverage (APR 22)**
Attained						
Scale-Up Saturation	**467,261**	**338,316**	**35,493**	**403,854**	**86,117**	**86%**
Scale-Up Aggressive						
Sustained						
Central Support	**17,220**					
Not PEPFAR supported	**6,486**					
Commodities (if not included in previous categories)						
Total	**490,967**					

Table 4.8.2

Table 4.8.2 Target Populations for Prevention Interventions to Facilitate Epidemic Control			
Target Populations	**Population Size Estimate* (SNUs)**	**Disease Burden***	**FY22 Target**
PP_PREV	-	-	***31,555***
AGYW	-	-	**13,757**
ABYM	-	-	**3,310**
CFSW	-	-	**7,562**
Other Priority Populations	-	-	**6,926**
KP_PREV	-	-	***89,537***
FSW	-	-	**61,024**
MSM	-	-	**23,521**
People in prisons and other enclosed settings	-	-	**4,000**
PWID	-	-	**863**
TG	-	-	**1129**
TOTAL	-	-	**121,092**

Table 4.8.3

Table 4.8.4 Targets for OVC and Linkages to HIV Services						
Zone	**Region**	**Estimated # of Orphans and Vulnerable Children**	**Target # of active OVC (FY22Target) OVC_SERV Comprehensive**	**Target # of OVC (FY22Target) OVC_SERV Preventative**	**Target # of active OVC (FY22Target) OVC_SERV DREAMS**	**Target # of active beneficiaries receiving support from PEPFAR OVC programs whose HIV status is known in program files (FY22 Target) OVC***
Zone 1	Nord Ouest	-	3,957		-	2,565
	Ouest	-	4,141		-	2,696
	Sud Ouest	-	2,980		-	1,926
Zone 2	Littoral	-	15,150	50	-	9,769
	Sud	-	1,124	326	-	828
Zone 3	Centre	-	23,363	451	-	15,692
	Est	-	4,412	152	-	2,860
Zone 4	Adamaoua	-	2,962		-	1,848
	Extreme Nord	-	3,707		-	2,344
	Nord	-	2,280		-	1,483
Total		-	-	**979**	-	**42,011**

4.9 Viral Load and Early Infant Diagnosis Optimization

At the end of 2019 a total of 16 356 children and adolescents were on ART, and the national ART coverage was as follows; 23.1% for children age <10 years, 34.5% for children aged <15 years, 27.2% in adolescents aged 15-19 years and 45.9% in young adults aged 20-24 years however, identification and management of HIV infection among this population remains weak, often compounded by other challenges such as frequent stock out of ARVs, ART related-commodities and prolonged turnaround times for return of DNA/RNA PCR results to caregiver of over 30-60 days, well above the WHO recommended standard of a maximum of 30 days. In FY17, viral suppression among pregnant women in the PEPFAR-supported sites was significantly low at 77% and although there was an increase to 90%in FY20 Q4, VL coverage for PBFW was suboptimal (25%). Frequent stock out of VL reagents and samples backlog in the Reference Labs, Low hospital attendance due to fear of contracting COVID-19. Supply chain challenges associated with border closures and global flight restrictions, further led to reagent stock outs and sample backlogs. The repurposing of instruments and staff originally procured for HIV (VL/EID) and TB

testing to support COVID-19 has also impacted the program. VL sample collection supplies, long distances, high transport cost for clients to come to the facility, poor patient tracking systems, pick up of ARVs by other family members, displaced clients, are key challenges contributing to this gap, resulting in missed opportunities to offer quality PMTCT/EID and VL monitoring services as well as low retention on ART for pregnant and breastfeeding women (especially for breastfeeding women who are usually LTFU post-partum). Although user fees elimination for HIV services which started in January 2020 following the Ministerial circular of April 2019 has led to improved demand creation, service uptake and scale up of VL for HIV positive PBFW, children, and adolescents, there are still some challenges as mentioned above to be addressed.

Cameroon has a high burden of TB/HIV co-infection and TB remains the leading cause of infectious disease morbidity and mortality for PLHIV (National TB Control Program, 2017). The 2018-2022 National Strategic Plan midterm review from NACC indicates an ART active file of 312213 at the end of December 2019 among whom were 10 403 children aged <15 years and 210 029 were women. This report also indicated that in 2019, 95% of PLHIV were screened for TB. In 2018, 23741 cases were diagnosed with TB among whom 22550 were tested for HIV given a 95% coverage. Of the 22 550 TB cases tested for HIV, 6457 tested HIV positive giving a TB/HIV Co-infection rate of 28.63% which is less than 30.7% reported in 2017. Achieving 100% TB screening remains a challenge because of clients who don't come in-person at the facility but send relatives to pick up their medication. TB diagnosis remains a challenge, due in part to a lack of well-established and appropriate sample referral and transport systems, easy access to efficient diagnostic capacity and inadequate infrastructure to support quality processes in TB diagnosis. Some facilities resort to referring patients to other sites for testing, resulting in patients being lost along the TB/HIV testing cascade. There is also the need to strengthen systems in place for the follow-up of presumptive TB cases through the TB evaluation cascade to determine and document outcome.

In FY16, Cameroon initiated a decentralized phased approach for introducing and integrating near POC and POC testing to improve efficiencies in EID for HEI and VL testing for HIV positive PBFW and C/ALHIV into HIV and/or TB laboratory-clinical facility network. These POCs include the two WHO prequalified platforms for decentralized HIV infant testing and VL testing: the m-PIMA POC (previously Alere q) and the GeneXpert near POC, which were introduced in country by Clinton Health Access Initiative, EGPAF, and United Nations Children's Fund in a UNITAID-supported project. Initial introduction was in a few references, regional, and district hospitals, but has since been expanded to 162 sites across all 10 regions and the number of platforms have also increased from 8 in 2017 to 6 50 in 2020 and include 20 m-PIMAs and 30GeneXperts. The use of POC platforms improved turnaround time for return of results which reduced from >30days to same day (within 2hours), hence more children living with HIV being quickly identified and immediately put-on treatment by clinicians. POC implementation in the PEPFAR-supported sites has demonstrated overwhelmingly positive results as shown in the table below:

Table 4.9.1: POC EID for PEPFAR-Supported Sites

	2016	2017	2018	2019	Total
Number of Platforms 50 (XX 20m-PIMA; 30GeneXpert	5	8	20	10	**43**
Number of Tests Performed	0	2,544	7,716	606	**10,866**
Number of HIV Positive children identified	0	191	312	22	**525**
Number of Positive Children Initiated on ART	0	176	272	16	**464**

POC EID testing is currently facing challenges with stock outs of cartridges because the UNITAID-supported project was completed in July 2019. POC testing has proven to be an impactful intervention to achieve the first and third 95 for HEIs and the 2019 NACC national annual report indicates as shown below that, in 2019 15195 HEIs were documented born of HIV positive pregnant women, 13250 of these HEIs were given nevirapine for prophylaxis given a coverage rate of 87.2%. 98.5% (14970/15195) were tested for HIV amongst which 724 (4.8%) of them tested HIV positive and 46.1% (334/724) were initiated on ART.

Figure 4.9.1:

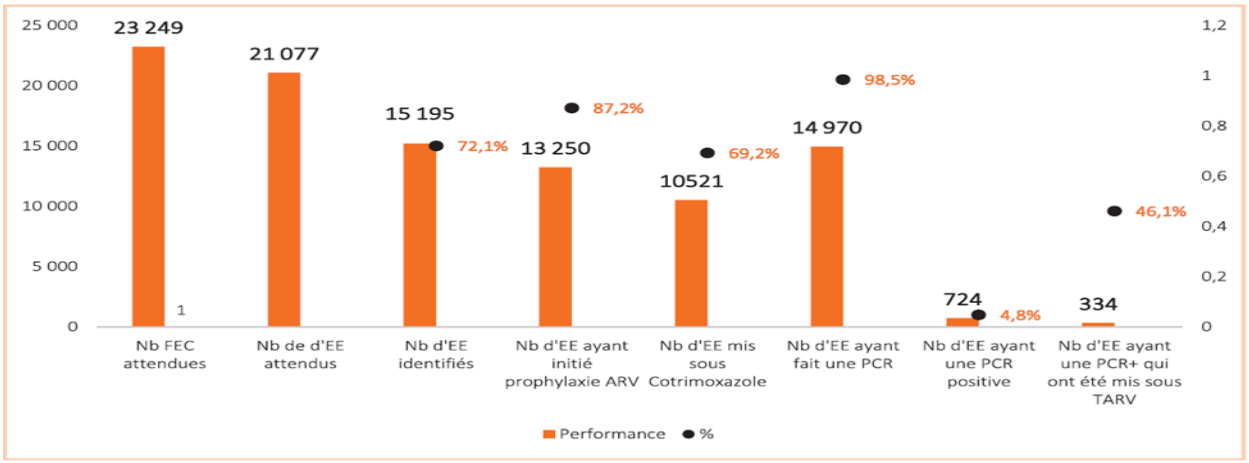
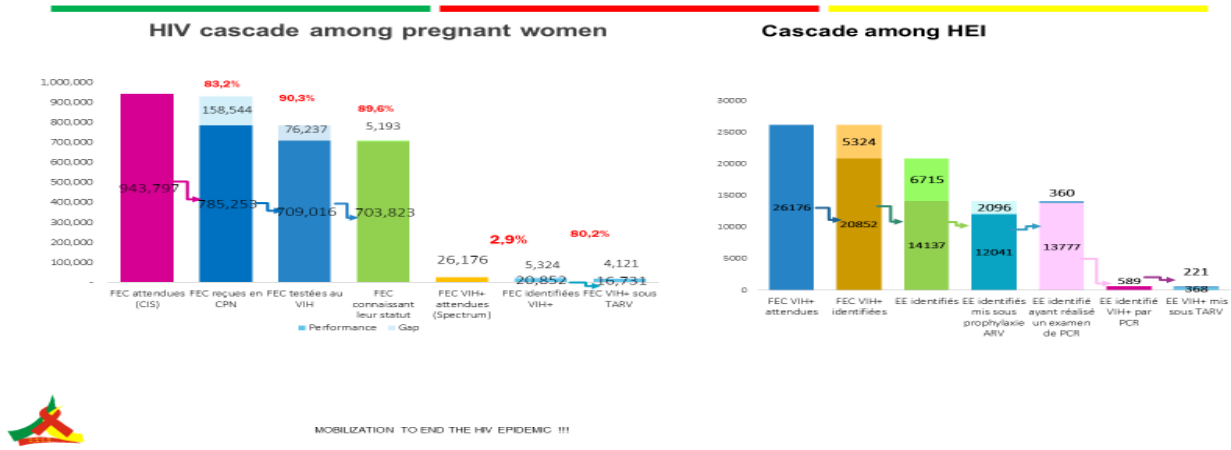


Figure 36: Cascade de prise en charge des enfants exposés. Source : Base de données DHIS2, 2019.

Source: NACC Annual report 2019

Also shown below is the PMTCT and EID cascades for 2020 presented by NACC during the COP21 panning meeting in April 2021

Figure 4.9.2:



Of the 78 POC platforms distributed across the 10 regions, 30 of these platforms are currently being used for integrated TB/HIV (EID) testing.

In COP21, PEPFAR Cameroon will leverage existing conventional and POC platforms for VL, EID and TB to strategically scale up and expand POC VL testing for PBFW in hard-to-reach sites and populations in all PEPFAR-supported zones. UNICEF also plans to increase the number of POC machines especially in the Northern and East regions, and PEPFAR will also leverage on this. This will ensure availability of commodities, efficient and impactful use of POC instruments to support VL testing among PBFW and EID testing for HEIs. As part of the strategy to enhance TB/HIV integration and optimization of both conventional and POC instrument capacities, PEPFAR Cameroon will invest in strengthening coordination of the network of health facilities around existing point of care hubs to optimize use and enhance uptake of EID and POC VL for PBFW. In 2022. PEPFAR collaborated with GRC, GFATM and other partners to lead the effort on conventional and POC EID and VL platform mapping and instrument capacity utilization which is being used to identify appropriate networks for platform integration based on geographical location, type of platforms and volume of tests required. PEPFAR Cameroon will continue to coordinate with GFATM, GRC, and other partners to define efficient strategies to monitor and address supply chain challenges such as harmonizing the cost of EID and VL testing commodities and improving quantification systems to prevent frequent stock outs and ensure systems in place for diagnostic network optimization (DNO). This collaboration continues to be strengthened over the years and as a result, the country now benefits from a significant reduction in the cost of VL test kits from $56 to $16 including equipment maintenance applicable to GRC, GFATM, all other stakeholder in country and negotiations are ongoing for further reductions.

Once finalized, this will enable PEPFAR Cameroon to leverage commodities from GFATM and other partners to increase coverage for EID and VL testing for PBFW in 2022. PEPFAR Cameroon will continue to work with GRC to strengthen implementation of MOH directives on the elimination of user fees for HIV services (e.g., VL testing) and against unauthorized ANC service fees and other malpractices which serve as a barrier to accessing other care and treatment services. PEPFAR Cameroon will scale up strategies to take these services to meet clients in the

community who can't come to the facility to scale up service uptake and improve client-centered services. PEPFAR Cameroon will leverage on existing POC platforms from the UNITAID project and will support efforts to strengthen sample transportation within the network of facilities to continue to improve access to EID and POC VL for PBFW and C/ALHIV in the same light, PEPFAR Cameroon will collaborate with and leverage GFATM-funded TB program to facilitate network optimization of polyvalent platforms at all levels using existing and new platforms. PEPFAR will also provide TA to encourage coordination of platform mapping and continuous networking through the existing EID and VL technical working group.

As the COVID-19 situation improves, PEPFAR Cameroon will work with country MOH and other stakeholders to ensure routine and uninterrupted VL, EID and TB testing. In doing this, COVID-19 mitigation options will be deployed within the facilities that allow for social distancing. These include reduction in waiting times for sample collection, avoiding crowded waiting rooms, scheduling, and staggering appointments, streamlining clinic flow so that patients for sample collection do not interact with multiple clinic providers, and reactivating safe sample transport systems. These will be implemented to ensure improved sample collection and testing. More use of DBS for sample collection outside of the facilities to avoid many patients coming to the facility for sample collection will be encouraged. The use of point of care platforms in the interim to test and deliver quick results to avoid patient or sample movement will be considered as well.

To avoid supply chain issues, orders for laboratory test kits and consumables will be placed at least one month earlier than baseline to account for potential shipping delays. There will be routine review and update of stock levels at national and subnational levels and forecast for additional consumable needs. PEPFAR Cameroon will provide technical support to MOH and develop standard operating procedures (SOPs) to ensure laboratories running COVID-19 and HIV-related tests on the same instrument provide testing concomitantly. Issues to be considered and agreed upon will include consumable use, sample transport, data systems, space and time allocation, and HRH.

Projected new sites or geographic areas in FY22 for EID and VL among PBFW only and funds allocated in the FAST; (including commodity procurement, trainings, or TA etc.)

PEPFAR will prioritize support to expand POC EID and VL for PBFW in hard-to-reach regions within Zone 4 (Northern Zone) as well as well as conflict-affected regions within Zone 1 (Western Zone). Although the unmet need within Zone 4 (Northern Zone) is significantly lower than within Zones 1 (Western), 2 (Southern) and 3 (Eastern), HEIs and PBFW remain a vulnerable population in these regions, added to the challenges with access to facilities and sample transport. PEPFAR funding has been allocated in the FAST to support External Quality Assessment for the different assays and testers, trainings required to support near POC implementation, strengthening sample transport, and TA to support waste management especially for the GeneXpert platforms. PEPFAR funds will also support implementation of CQI which has been successfully implemented in Cameroon and will be used to enhance POC EID and POC VL for PBFW uptake through improved sample collection and reduced turnaround time for getting results back to patients. CQI will focus on EID and linkage of HIV positive infants to ART treatment services, VL testing for PBFW and

C/ALHIV, and increasing ANC attendance for pregnant women through mobile ANC, active finding of PW/HEIs in the community and linking them to ANC/EID services at the facility

Transition arrangements for existing POC platforms owned by other stakeholders and located within PEPFAR supported sites

As previously mentioned, the UNITAID Point-of-Care Diagnosis of HIV Project was launched in nine sub-Saharan African countries in August 2015 and was completed in July 2019 in Cameroon. In collaboration with the MOH, relevant national TWGs and key partners, the UNITAID POC EID Project procured and placed POC EID technologies at strategically selected health facilities, and developed capacity at national, sub-national and facility levels to ensure uninterrupted, high-quality, and sustainable POC EID/VL testing services. The UNITAID implementing partners supported the project through forecasting, procurement, and distribution of POC platforms, test cartridges, and associated supplies as well as the development or strengthening of systems, process and tools needed to select, enroll and operate POC sites. The gradual, phased implementation model ensured local leadership and ownership of project decision-making, with the MOH and/or relevant national authority taking full responsibility for specific aspects of the project, in order to enable smooth transition of POC EID activities to the MOH by the end of the project. The process of developing this transition plan was coordinated by the Ministry of Public Health through the Department for Control of Diseases, Epidemics and Pandemics that has the mandate for the health response in the fight against HIV, STIs, Viral Hepatitis and TB. In addition, the contributions of other GRC stakeholders in the control of HIV were taken into consideration, including other partners involved in the drive towards HIV epidemic control. The transition of these POCs to MOH has been completed and the existing platforms now constitute a network of platforms available for POC testing for TB/HIV VL and EID. This forms a part of the Diagnostic Network Optimization (DNO) which is currently being revised to improve on testing capacity/coverage.

PEPFAR will support GRC and partners with the following planned core activities to ensure GRC ownership and sustainability of POC platforms:

- Complete a stakeholder mapping in order to identify the partners who are supporting pediatric HIV activities in country, including partners who may support future POC EID operations.
- Assemble information about the results achieved by the project and the level of financial and technical support needed to sustain and expand access to POC testing for EID/TB and VL.
- Share with key stakeholders' information about the project achievements and projected future needs (financial and technical), and advocate for their support to sustain POC EID/TB/VL procurement and operations.
- Advocate for the integration of POC testing into domestic budgets and donor funding proposals, such as PEPFAR COP's CDC continuation applications, and GFATM proposals, as well as into the reprogramming of budgets for existing GFATM grants.
- Build MOH and/or partner capacity to support and sustain POC EID/VL operations and linkage.
- Identify and prepare partner(s) to take over responsibility for POC EID commodities procurement, customs clearance, warehousing and distribution.

- Review the diagnostic network optimization strategy and/or map for the integration of POC EID/TB/VL into the current conventional EID/VL laboratory network.
- Gradual transfer of ownership of POC assets, including service and maintenance agreements, to the government and/or appropriate partners.
- Support the implementation and roll out of the VL/EID dashboard for efficient monitoring and evaluation and program coordination.
- Rollout External Quality Assurance (EQA) for POC EID/TB and VL
- Leverage on completed project report shared to identify action items in the transition plan to ensure uninterrupted activities

For Viral load reagents and commodities, PEPFAR Cameroon will engage with a 3PL to ensure transportation down to the testing laboratories and will continue to engage equipment manufacturers to benefit from the negotiated all-inclusive price per test for viral load reagents, commodities and maintenance contracts.

5.0 Program Support Necessary to Achieve Sustained Epidemic Control

Improving supply chain systems

Improved governance and a sense of supply chain ownership and accountability are gaining momentum and the Government of Cameroon is currently developing a National Supply Chain Transformation plan that would guide investments in the supply chain. The Global Fund plans to fund the implementation of the plan. A supply chain coordination unit has been established within the Directorate of Pharmacy, Medicines and Laboratories to lead on all supply chain initiatives under the leadership of the Supply Chain Steering Committee, chaired by the Minister of Public Health. The Ministry of Public Health has released an ambitious agenda for the transformation of the health sector, and it stresses the need to reinforce the supply chain and develop a national strategic plan. The GF is also working on reinforcing data reporting, collaborating with the UNFPA on developing an electronic logistics management information system that will ensure a strong linkage between regional warehouses and the central level.

In COP 21, PEPFAR supply chain strategies are built on the planning level letter directives and the recommendations of the multilateral supply chain visit.

No.	Strategic Directives	Key Activities
1	PEPFAR clinical partners working at sites should provide monthly reports on stock levels and consumption rates of key HIV commodity items at sites, including testing, treatment, viral load, and TB commodities. This data should be disaggregated by age and posted to PEPFAR SharePoint each month and will be leveraged by the supply chain partner and other key stakeholders for planning purposes.	• Monthly consumption data reporting on HIV testing and treatment for PEPFAR supported sites by commodity type disaggregated by age

		• Capacity building of site level staff on stock management, documentation and reporting of HIV/TB commodities
2	National annual quantification exercises with quarterly updates should take place, with participation from the Government of Cameroon, the Global Fund, and other key stakeholders. A central tenet of these exercises must be the sharing of data on both procurement and stock levels at the national and regional level.	• Monthly stock assessment and review meetings as well as pipeline management and monitoring • DPML coordinated quarterly supply plan review meetings • Build capacity of personnel in quantification techniques and training on NextGen tools (QAT, For LAB Plus) • Annual quantification exercise
3	Coordination between the USAID Supply Chain partner, and PEPFAR's clinical partners must continue to improve. Recently established weekly clinical/SC partner meetings, monthly meetings at the regional level between clinical IP and SC partner POCs, and quarterly interagency clinical/SC partner coordination meetings must all continue through COP21.	• Monthly meeting between the supply chain and the clinical partner • Monthly meetings at the regional level between clinical IP and SC POCs • Quarterly coordination meetings at the regional level • Quarterly regional review meetings on LMD
4	Additional TA support at the regional level should be supplied to larger regions by the Supply Chain partner to assist in order requisition and review as well as in the development of distribution plans and route optimization.	• Hire additional personnel for 2 larger regions • Provide alternate source of power to support good warehousing practice • Provide material handling equipment for warehouse
5	USAID Supply Chain partner will continue to provide LMD to sites in COP21, however transition to local partner must be complete in at least 5 regions by the end of COP21.	• Implement the LMD • Transition of the LMD activity to 1 region
6	PEPFAR-led Diagnostic Network Optimization exercises must be prioritized and accelerated in COP21, with a priority placed on network optimization of laboratory-based approaches for Viral Load and EID. Opportunities may exist for TB as well as other coinfections, and the PEPFAR team should engage with all relevant stakeholders to explore these, while ensuring the optimization around VL/EID is taking place. The PEPFAR team should plan to report progress on this work during COP21 POARTs, including progress on assessing the current	• Strengthen coordination among stakeholders • Review of equipment/lab mapping to inform the placement of new equipment as they arrive

	network structure, laboratory capacity, and testing coverage and efficiency by laboratory catchment area.	• Strengthen sample transport network • Completion of a national dashboard and functional LIS system for data capture and reportingRemote mentorship and supervision through the use of ECHO platforms • Integration of multiplex assays

PEPFAR Cameroon will continue working with GRC, GFATM, and other stakeholders to scale up TLD use in all health facilities and introduce DTG 10mg for children. Supply chain TA will contribute to the minimum program requirements through ensuring availability of MMD friendly commodities and ensuring quantification and procurement of optimal antiretroviral formulations such as TLD for all patients including women of childbearing age and disposing NVP regimen will continue in COP 20. For pediatrics, availability of DTG 50mg for children weighing between 30kg and 20kg will also be prioritized.

From the table above, to improve supply chain management and reporting at the site level, the Clinical IPs will continue to build capacity of pharmacy and site staff on proper documentation of supply chain information, placement of timely request orders, and reporting and the use of supply chain information to inform service delivery. Supply chain management and reporting tools will be reviewed and harmonized, and service providers will be mentored on its completion and reporting. Clinical IPs will continue to strengthen the capacity of designated supply chain focal persons to ensure availability and tracking of commodities at facility level as well as providing data on monthly consumption of HIV testing and treatment by commodity type, disaggregated by age.

Improving health service delivery through community monitoring

PEPFAR Cameroon will continue strengthening community engagement in health service delivery in recognition of the important role of civil society in holding governments to account for commitments made. Through existing civil society organizations that implement PEPFAR-funded programs as sub-partners and clinical IPs, PEPFAR Cameroon will continue collecting data on client experience accessing HIV services at health facilities, including barriers that could affect health outcomes (e.g., application of user fees, availability of service, quality of service, etc.). PEPFAR Cameroon will also continue supporting the national civil society watchdog, Treatment Access Watch (TAW), to gather data along key indicators that measure access to, and quality of services provided at health facilities for both HIV and TB interventions. This data will be collated into scorecards that are disseminated on a weekly basis to support decision-making processes. In addition, PEPFAR Cameroon will use the Ambassador's small grants to reinforce community

led monitoring of quality of services, user fee elimination practices and accessibility of services. These grants will ensure monitoring of key elements of access to services by CBOs allowing for a vast triangulation of information that will help NACC and its inspector generals to ensure adequate service delivery within public facilities. Finally, PEPFAR Cameroon will fund the NACC under an existing cooperative agreement with HHS/CDC and the Inspector General for health's office to ensure they can respond to findings from their own site visits and reports/findings from CSOs and Implementing partners.

Though the clinical program does not lead community led monitoring efforts it plays a key role by supporting the process through its implementing partners (IPs) and UNAIDS to ensure community participation and feedback are got in order to improve the quality of HIV services delivered by health care providers. This is achieved through two main strategies: the facility-led (with IPs' support) and an oversight cooperative agreement with UNAIDS. During COP21, PEPFAR Cameroon's clinical program will continue to make use of these two strategies cited above to strengthen and bring to scale community-led monitoring efforts. PEPFAR Cameroon will make use of the following facility approaches to get community's feedback including: The use of suggestion boxes placed at discrete corners where users can provide feedback or make suggestions on service delivery or any other issues; the use of anonymous phone calls, with telephone number pasted at strategic areas in the facility that clients can use to call and provide feedback on any incident including fraud, abuse etc.; the involvement of trusted community members as CHW in service delivery is a way to boost trust in health care providers so that clients can feel comfortable to provide feedback through them; work with the dialogue structures – hospital management committees, health management committees are principally made of community members to ensure community participation in health planning, implementation and monitoring of health care service delivery, including HIV services. PEPFAR Cameroon through its clinical IPs will bring to scale collaboration between CBOs, clinical IPs, and other stakeholders to strengthen participation and action in the CML process at health district levels. To this effect, at a first level, advocacy meetings led by the CBOs will be held to discuss the process with all actors. Additionally, during district coordination meetings CBOs will provide feedback on findings and seek solutions together to improve quality of services.

Again, moving forward into COP21, PEPFAR Cameroon's clinical program will continue to support the CLM process through a Cooperative Agreement with UNAIDS which has as objective to monitor the quality and access of HIV prevention and treatment services at health facilities and the surrounding communities. This CoAG with UNAIDS will continue implementing various activities that include: Providing technical assistance to NACC and MOH for coordination of CLM activities and for the introduction of CLM indicators in DHIS2; providing TA to network of PLHIV to apply and implement CLM grant; identifying and contracting CBOs to monitor availability and access to HIV services, especially tracking services that are not supposed to be paid and strengthening CSOs' capacities to lead and own the CLM process.

Supporting the sustainability of user fee elimination on the path toward UHC

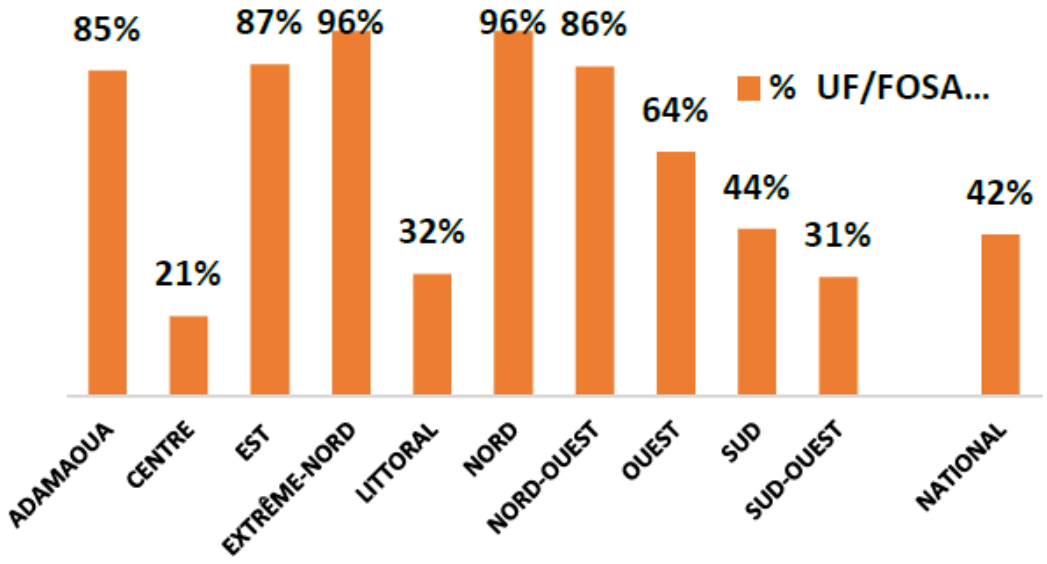
To ensure that the elimination of user fees for HIV/AIDS services is sustained and that HIV remains a focus as Cameroon seeks to expand access and move toward universal health coverage (UHC), PEPFAR Cameroon will continue to provide targeted technical assistance to the

Ministry of Health in the development of its UHC service package. Key elements of this assistance will include supporting the development of systems for classification and enrollment of patients into potential insurance mechanisms and the application of robust financial and data management systems to ensure timely and accurate reimbursements to health facilities and minimize the risks of fraud and abuse. PEPFAR Cameroon support will also focus on coordinated advocacy, involving the Ministry of Health, the US Embassy, and other bilateral and multilateral donors, to the highest levels of the Government of Cameroon for increased domestic revenue allocations to the health sector. This will ensure that Cameroon is able to develop and implement a sustainable health financing strategy and to expand health facilities enrolment to the user fee elimination scheme to include confessional and private health facilities, who also have significant numbers of PLHIV in their treatment cohorts. This work addresses issues around Policies and Governance (SID 2019 score of 6.18) specifically contributing to the following key systems barriers: user fees charged at health service delivery points impede ART uptake and retention, and host country government has not developed a long-term financing strategy for HIV/AIDS. Additionally, PEPFAR Cameroon will continue supporting MOH and NACC towards assessing the evolution of user fees implementation across the country, including tracking, and addressing challenges with implementation, sharing best practices and lessons learned, budget and fund recovery process and adequate information, education and communication with CSOs/beneficiaries and service providers on the user fee elimination.

Supporting the sustainability of user fee elimination on the path toward UHC

To ensure that the elimination of user fees for HIV/AIDS services is sustained and that HIV remains a focus as Cameroon seeks to expand access and move toward universal health coverage (UHC), PEPFAR Cameroon will continue to provide targeted technical assistance to the Ministry of Health in the development of its UHC service package. Key elements of this assistance will include supporting the development of systems for classification and enrollment of patients into potential insurance mechanisms and the application of robust financial and data management systems to ensure timely and accurate reimbursements to health facilities and minimize the risks of fraud and abuse. PEPFAR Cameroon support will also focus on coordinated advocacy, involving the Ministry of Health, the US Embassy, and other bilateral and multilateral donors, to the highest levels of the Government of Cameroon for increased domestic revenue allocations to the health sector to ensure that Cameroon is able to develop and implement a sustainable health financing strategy. This work addresses issues around Policies and Governance (SID 2019 score of 6.18) specifically contributing to the following key systems barriers: user fees charged at health service delivery points impede ART uptake and retention, and host country government has not developed a long-term financing strategy for HIV/AIDS.

Figure 5.1.1: Level of Implementation of User fees elimination in the 10 regions of the country



Source: Situation Report of 01/01/2020 to 31/12/2020

Improving Laboratory and Quality Management Systems

A strong laboratory QMS is critical in ensuring the quality of testing, as a weak QMS may result in laboratory errors that can lead to over and under diagnosis. PEPFAR Cameroon has changed the laboratory landscape in Cameroon considerably. Through PEPFAR support, 17 laboratories are enrolled in the "Stepwise Laboratory Improvement Process Towards Accreditation", nine have at least one star and six are ISO 15189 accredited, which now serve as Viral Load EID reference labs. Most laboratories in the PEPFAR supported regions are enrolled in the HIV dried-tube specimen PT scheme with a participation rate of 100% and a PT pass rate of 67.1% (April 2021 session) Weak performance rate is due to the stockout of 2nd test kit. We now have over one thousand two hundred and seventy-four testing sites trained and enrolled in HIV PT program within the 10 PEPFAR supported regions. PEPFAR Cameroon is a major partner in supporting laboratory quality assurance programs, especially the PT program.

Despite the improvements made, there is still a significant gap to attain sustainability. With reduced funding and concomitant expansion for PEPFAR supported laboratory activities in Cameroon, the laboratory program had to improve efficiencies through reduction in the cost of doing business by maintaining one implementing partner in COP20 and to leverage support from other stakeholders such as GFATM. PEPFAR continues to advocate for MOH and other stakeholders to provide support for complimentary laboratory programs. To align with required site-level reporting, PEPFAR Cameroon laboratory support reduced its above site funding to focus more at site level where activities are implemented with direct impact on the beneficiaries. These activities include building systems for continuous quality improvement to support quality testing, sample transport, equipment maintenance and reduce turn-around time to the recommended 5 days for EID and 2 weeks for VL. Laboratory-strengthening activities will continue to focus on providing support to MOH to finalize and implement laboratory quality manuals and tools on VL

and HIV RDT. Policy, planning, management, and coordination activities will include support to the LTWG, and the roll out of the revised national curriculum for training of laboratory personnel.

Improving Strategic Information

SI is critical in determining the effect of health systems strengthening interventions on service delivery targets and overall system goals. Updating regional and district HIV estimates will provide an accurate picture of Cameroon's progress toward HIV Epidemic control. Health information systems (HIS) such as DAMA, Electronic Medical Record (EMR) and DHIS2 are critical to program monitoring and performance improvement planning. Despite progress made, there is still a need for high-level involvement, coordination and utilization of data generated by different stakeholders. During data review meetings, the SIMS, MER, DHIS2 and other data sources have revealed discrepancies that need to be addressed. PEPFAR Cameroon is working with NACC under an existing cooperative agreement with CDC to reinforce MOH's HIS by developing and strengthening SI system tools, establishing systems, and intensifying coordination, mentorship and supervision to ensure implementation and quality service delivery in accordance with national guidelines and policies. PEPFAR Cameroon is also working with the government around issues of data governance, confidentiality, access, and use. PEPFAR Cameroon will also organize national conferences to share best practices, challenges and lessons learnt to come up with recommendations to be adopted nationally. Through NACC, PEPFAR will continue to support GRC in training, coordination, and harmonization of data to ensure the scale up of new prevention, treatment, and care strategies.

PEPFAR Cameroon has made significant progress towards addressing some of the systems barriers identified, but PEPFAR reporting system (DATIM) and MOH reporting systems (DAMA, DHIS2, EMR) show that there are still challenges particularly with the collection and use of data, standards, and governance. In COP21, PEPFAR Cameroon will continue to make critical systems investment to close gaps and support activities to meet the well-defined benchmarks. Each benchmark will be monitored over a set timeline with measurement and outcome indicators clearly defined; however, progress made will be reported during the quarterly POART calls. PEPFAR will support the GRC to conduct DQA and/or service quality assessments at both regional and district levels with the involvement of high-level MOH staff. The policies, tools, SOPs, and guidelines developed will also be used to monitor progress made. The impact of these activities will lead to better-harmonized data with fewer discrepancies and optimal program implementation.

6.0 USG Operations and Staffing Plan to Achieve Stated Goals

The PEPFAR Cameroon team conducted a staffing analysis in COP19 to improve programmatic alignment of staff to facilitate and sustain HIV epidemic control and successfully implement the national programmatic scale up. Core activities required increased focus of staff time and skill sets on specific program components such as intensified programmatic management and strategic information analysis and meeting SIMS targets.

CDC

In COP19 planning, CDC Cameroon was guided by S/GAC to expand the clinical program from 56 scale up sites in four regions to 298 scale up sites in ten regions across the entire country. In COP21, CDC requested and will receive a small increase in the agency's CODB budget in order to provide sufficient technical and programmatic oversight to PEPFAR supported partners and sites. CDC seeks additional LE technical and operations staff necessary to accomplish these increased oversight responsibilities. In COP21, CDC is approved to continue funding the Global Health Security Agenda (GHSA) Program Director position.

DOD

DOD program will maintain its footprint in the ten regions and in 21 sites from Cop 19 to COP20. The staffing will remain the same as COP19 levels, that is two LES.

Peace Corps

The hiring process is ongoing for two LE Staff approved in Peace Corp's COP 19 CODB. Therefore, Peace Corp will be operating at a full staffing level in COP21. As a result, additional staff won't be requested in COP21.

State

The PEPFAR Coordination Office staffing levels remain constant with one Direct Hire and two LES positions. The hiring process is ongoing for one Strategic Information Advisor. CODB had a slight increase from COP20 due to increase in ICASS costs.

USAID

USAID's overall staffing budget has reduced by 8% to reflect decreased travel due to increased use of virtual platforms; and reduction in non-ICASS related costs (e.g., start-up costs). USAID will hire one country cooperating national to serve as Supply Chain Specialist to support the implementation of the country's overall supply chain improvement strategy. The estimated LoE for PEPFAR-specific activities is 30%.

APPENDIX A -- PRIORITIZATION

Table A.1

NU	COP	Prioritization	Results Reported	Attained 90 – 90 – 90 (81%) by Each Age and Sex Band to Reach 95 – 95 -95 (90%) Overall																								Overall TX Coverage
				Treatment Coverage by APR by Age and Sex																								
				<1		01-04		05-09		10-14		15-19		20-24		25-29		30-34		35-39		40-44		45-49		50+		
				F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	
Abong Mbang	COP19	Scale-up Saturation	APR20	60%	60%	70%	67%	62%	59%	45%	43%	42%	34%	57%	42%	90%	114%	73%	82%	65%	68%	72%	68%	100%	81%	78%	98%	75%
Abong Mbang	COP20	Scale-up Saturation	APR21	80%	80%	90%	86%	86%	82%	82%	76%	77%	74%	80%	73%	90%	114%	86%	88%	86%	84%	90%	85%	100%	91%	91%	98%	89%
Abong Mbang	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	94%	88%	95%	88%	96%	90%	97%	92%	97%	92%	95%	92%	91%
Ako	COP19	Scale-up Saturation	APR20	100%	100%	25%	20%	38%	38%	30%	30%	21%	30%	31%	20%	41%	56%	33%	40%	31%	36%	38%	40%	55%	48%	42%	59%	39%
Ako	COP20	Scale-up Saturation	APR21	100%	100%	50%	40%	63%	50%	50%	40%	42%	40%	48%	27%	54%	60%	48%	46%	48%	41%	53%	46%	67%	55%	57%	63%	52%
Ako	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Akonolinga	COP18	Sustained	APR19			33%	40%	35%	29%	17%	27%	30%	13%	54%	17%	51%	26%	44%	23%	55%	44%	55%	58%	70%	63%	83%	73%	54%
Akonolinga	COP19	Scale-up Saturation	APR20	67%	50%	53%	53%	54%	50%	39%	38%	36%	33%	49%	38%	71%	92%	57%	67%	56%	62%	69%	67%	93%	78%	54%	73%	63%
Akonolinga	COP20	Scale-up Saturation	APR21	100%	75%	73%	73%	77%	75%	69%	68%	63%	64%	69%	63%	82%	92%	75%	78%	76%	77%	84%	81%	93%	87%	76%	85%	79%
Akonolinga	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	90%	88%	90%	88%	88%	88%	88%
Ambam	COP19	Scale-up Saturation	APR20	33%	25%	79%	73%	71%	63%	50%	45%	60%	42%	82%	54%	110%	130%	77%	83%	66%	67%	76%	69%	106%	82%	71%	85%	79%
Ambam	COP20	Scale-up Saturation	APR21	100%	75%	93%	87%	88%	85%	82%	82%	83%	79%	89%	80%	110%	130%	88%	89%	86%	84%	91%	87%	106%	93%	89%	94%	92%
Ambam	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Ayos	COP18	Sustained	APR19		33%	110%	73%	32%	60%	15%	33%	39%	21%	62%	17%	54%	39%	48%	36%	56%	48%	73%	48%	94%	55%	87%	69%	59%
Ayos	COP19	Scale-up Saturation	APR20	100%	67%	80%	73%	74%	70%	54%	52%	51%	39%	68%	50%	99%	125%	81%	92%	80%	85%	99%	94%	134%	108%	78%	101%	88%
Ayos	COP20	Scale-up Saturation	APR21	100%	67%	80%	73%	74%	70%	54%	52%	51%	39%	68%	50%	99%	125%	81%	92%	80%	85%	99%	94%	134%	108%	78%	101%	88%
Ayos	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	91%	88%	91%	88%	88%	88%	89%
Bafang	COP19	Scale-up Saturation	APR20	100%	100%	89%	89%	65%	68%	50%	54%	53%	50%	68%	60%	101%	152%	93%	129%	111%	142%	147%	167%	185%	179%	99%	150%	112%
Bafang	COP20	Scale-up Saturation	APR21	100%	100%	89%	89%	65%	68%	50%	54%	53%	50%	68%	60%	101%	152%	93%	129%	111%	142%	147%	167%	185%	179%	99%	150%	112%
Bafang	COP21	Scale-up Saturation	ARP22	200%	200%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	95%	94%	95%	94%	94%	94%	103%
Bafia	COP18	Sustained	APR19			76%	61%	74%	30%	24%	32%	37%	11%	48%	11%	62%	25%	66%	38%	66%	47%	77%	63%	85%	65%	121%	85%	69%
Bafia	COP19	Scale-up Saturation	APR20	50%	50%	65%	61%	55%	52%	40%	39%	39%	33%	52%	39%	73%	95%	58%	69%	57%	62%	68%	68%	91%	78%	56%	73%	64%
Bafia	COP20	Scale-up Saturation	APR21	75%	75%	82%	78%	77%	73%	71%	68%	65%	64%	71%	64%	82%	95%	75%	79%	76%	76%	83%	81%	91%	88%	76%	85%	79%
Bafia	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	93%	88%	94%	88%	90%	88%	89%
Bafut	COP18	Sustained	APR19			36%	18%	50%	56%	33%	26%	17%	17%	14%	9%	23%	5%	41%	14%	43%	41%	51%	65%	57%	95%	66%	79%	44%
Bafut	COP19	Scale-up Saturation	APR20	100%	67%	55%	55%	56%	56%	42%	43%	39%	35%	48%	38%	65%	91%	54%	66%	53%	60%	65%	66%	93%	82%	70%	100%	65%
Bafut	COP20	Scale-up Saturation	APR21	100%	67%	64%	64%	67%	61%	58%	52%	54%	43%	59%	44%	72%	91%	64%	69%	64%	64%	73%	69%	93%	83%	77%	100%	71%
Bafut	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	88%	88%	89%
Bali	COP18	Sustained	APR19			50%	29%	45%	36%	20%	57%	15%	36%	26%	5%	36%	6%	51%	20%	77%	40%	79%	69%	92%	79%	132%	119%	65%
Bali	COP19	Scale-up Saturation	APR20			67%	57%	64%	64%	47%	50%	48%	43%	52%	40%	74%	106%	59%	78%	58%	72%	72%	78%	103%	97%	78%	110%	73%
Bali	COP20	Scale-up Saturation	APR21			83%	71%	73%	73%	60%	57%	63%	50%	64%	45%	79%	106%	67%	80%	67%	74%	78%	80%	103%	97%	83%	110%	78%
Bali	COP21	Scale-up Saturation	ARP22			88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	90%	88%	88%	88%	88%
Bamenda	COP18	Sustained	APR19	13%	18%	49%	45%	93%	92%	109%	97%	60%	85%	47%	35%	67%	30%	95%	44%	123%	72%	160%	121%	174%	170%	166%	216%	115%
Bamenda	COP19	Scale-up Saturation	APR20	69%	65%	132%	128%	118%	122%	89%	94%	94%	84%	111%	90%	152%	219%	124%	158%	121%	143%	148%	156%	212%	192%	159%	225%	149%
Bamenda	COP20	Scale-up Saturation	APR21	69%	65%	132%	128%	118%	122%	89%	94%	94%	84%	111%	90%	152%	219%	124%	158%	121%	143%	148%	156%	212%	192%	159%	225%	149%
Bamenda	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	93%	88%	94%	88%	95%	88%	95%	88%	92%	88%	90%
Bandjoun	COP19	Scale-up Saturation	APR20	50%	50%	43%	43%	25%	27%	19%	21%	19%	17%	27%	24%	39%	53%	35%	48%	42%	52%	56%	62%	70%	68%	36%	54%	42%
Bandjoun	COP20	Scale-up Saturation	APR21	100%	50%	86%	43%	69%	27%	67%	21%	64%	17%	64%	24%	68%	53%	66%	48%	71%	52%	80%	62%	87%	68%	70%	54%	64%
Bandjoun	COP21	Scale-up Saturation	ARP22	100%	100%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	95%
Bangangte	COP19	Scale-up Saturation	APR20	100%	100%	89%	89%	65%	68%	50%	54%	51%	48%	65%	55%	97%	144%	90%	122%	108%	135%	143%	159%	179%	174%	96%	145%	108%
Bangangte	COP20	Scale-up Saturation	APR21	100%	100%	89%	89%	65%	68%	50%	54%	51%	48%	65%	55%	97%	144%	90%	122%	108%	135%	143%	159%	179%	174%	96%	145%	108%
Bangangte	COP21	Scale-up Saturation	ARP22	94%	100%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	95%	94%	95%	94%	94%	94%	95%

Bangem	COP18	Sustained	APR19									33%		58%	20%	49%	24%	49%	12%	34%	18%	31%	38%	56%	43%	60%	37%	38%
Bangem	COP19	Scale-up Saturation	APR20			33%	33%	75%	60%	60%	50%	33%	17%	42%	30%	61%	76%	49%	50%	40%	39%	42%	38%	60%	46%	56%	71%	49%
Bangem	COP20	Scale-up Saturation	APR21			100%	100%	100%	100%	120%	100%	83%	100%	85%	80%	88%	88%	89%	88%	90%	85%	92%	91%	96%	93%	94%	97%	91%
Bangem	COP21	Scale-up Saturation	ARP22			88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	93%	88%	93%	88%	89%	88%	89%
Bangourain	COP19	Scale-up Saturation	APR20	100%	100%	33%	33%	14%	17%	11%	13%	25%	13%	30%	27%	42%	65%	39%	52%	47%	58%	62%	69%	75%	73%	44%	66%	47%
Bangourain	COP20	Scale-up Saturation	APR21	100%	100%	100%	33%	71%	17%	67%	13%	69%	13%	67%	27%	72%	65%	70%	52%	76%	58%	85%	69%	93%	73%	76%	66%	69%
Bangourain	COP21	Scale-up Saturation	ARP22	200%	200%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	103%
Bankim	COP19	Scale-up Saturation	APR20	33%	33%	25%	25%	19%	19%	15%	15%	13%	10%	18%	15%	27%	38%	22%	27%	20%	23%	23%	24%	33%	30%	27%	38%	25%
Bankim	COP20	Scale-up Saturation	APR21	67%	67%	75%	67%	71%	71%	74%	67%	66%	66%	67%	63%	70%	70%	70%	66%	72%	66%	75%	69%	78%	71%	75%	75%	71%
Bankim	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Banyo	COP19	Scale-up Saturation	APR20	100%	100%	46%	46%	45%	43%	34%	34%	30%	26%	40%	33%	60%	79%	49%	59%	45%	50%	51%	52%	74%	65%	63%	87%	55%
Banyo	COP20	Scale-up Saturation	APR21	100%	100%	85%	85%	86%	78%	79%	76%	74%	74%	76%	72%	83%	87%	81%	80%	81%	78%	86%	81%	93%	87%	88%	96%	83%
Banyo	COP21	Scale-up Saturation	ARP22	150%	150%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	88%	88%	93%
Batibo	COP18	Sustained	APR19			30%	10%		19%	9%		15%	10%	15%		17%	6%	14%	3%	22%	14%	28%	18%	21%	32%	26%	20%	18%
Batibo	COP19	Scale-up Saturation	APR20	100%	100%	70%	70%	76%	81%	59%	62%	58%	52%	67%	57%	93%	131%	76%	96%	74%	86%	89%	95%	128%	117%	96%	136%	91%
Batibo	COP20	Scale-up Saturation	APR21	100%	100%	80%	70%	82%	81%	73%	62%	70%	52%	75%	57%	93%	131%	81%	96%	80%	86%	92%	95%	128%	117%	96%	136%	93%
Batibo	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Batouri	COP19	Scale-up Saturation	APR20	67%	50%	71%	67%	56%	52%	41%	39%	38%	33%	51%	38%	82%	106%	66%	76%	58%	63%	64%	63%	88%	74%	71%	92%	68%
Batouri	COP20	Scale-up Saturation	APR21	100%	75%	93%	87%	88%	85%	85%	83%	74%	80%	78%	75%	89%	106%	85%	87%	85%	85%	88%	87%	97%	93%	90%	92%	88%
Batouri	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	93%	89%	94%	90%	90%	89%	90%
Bertoua	COP19	Scale-up Saturation	APR20	60%	55%	89%	83%	76%	72%	55%	52%	52%	43%	73%	53%	116%	144%	93%	103%	82%	85%	91%	85%	125%	100%	100%	123%	94%
Bertoua	COP20	Scale-up Saturation	APR21	60%	55%	89%	83%	76%	72%	55%	52%	52%	43%	73%	53%	116%	144%	93%	103%	82%	85%	91%	85%	125%	100%	100%	123%	94%
Bertoua	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	92%	88%	94%	89%	95%	91%	96%	92%	96%	93%	94%	92%	91%
Betare Oya	COP19	Scale-up Saturation	APR20	33%	25%	29%	27%	28%	26%	21%	19%	17%	15%	22%	15%	36%	46%	29%	33%	26%	27%	28%	27%	39%	32%	31%	39%	30%
Betare Oya	COP20	Scale-up Saturation	APR21	100%	75%	71%	73%	76%	74%	76%	72%	64%	68%	66%	63%	71%	73%	71%	69%	72%	69%	74%	71%	78%	75%	75%	77%	72%
Betare Oya	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Bibemi	COP19	Scale-up Saturation	APR20	100%	100%	13%	13%	20%	19%	16%	15%	16%	14%	20%	15%	31%	38%	26%	26%	22%	22%	24%	21%	34%	26%	31%	36%	26%
Bibemi	COP20	Scale-up Saturation	APR21	100%	100%	63%	63%	67%	56%	63%	55%	55%	57%	56%	52%	62%	60%	60%	56%	61%	55%	63%	56%	67%	59%	65%	65%	61%
Bibemi	COP21	Scale-up Saturation	ARP22	200%	200%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	98%
Biyem Assi	COP18	Scale-up Saturation	APR19	30%		56%	42%	90%	77%	71%	65%	55%	60%	67%	45%	122%	54%	135%	60%	120%	69%	110%	93%	111%	103%	132%	147%	106%
Biyem Assi	COP19	Scale-up Saturation	APR20	90%	82%	133%	127%	153%	144%	115%	107%	116%	92%	155%	110%	207%	251%	130%	138%	93%	95%	98%	91%	146%	115%	147%	177%	129%
Biyem Assi	COP20	Scale-up Saturation	APR21	90%	82%	133%	127%	153%	144%	115%	107%	116%	92%	155%	110%	207%	251%	130%	138%	93%	95%	98%	91%	146%	115%	147%	177%	129%
Biyem Assi	COP21	Scale-up Saturation	ARP22	88%	140%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	91%	88%	93%	88%	94%	88%	94%	88%	91%	88%	91%
Bogo	COP19	Scale-up Saturation	APR20	100%	100%	80%	80%	60%	60%	46%	46%	42%	43%	63%	44%	103%	131%	92%	109%	89%	97%	99%	97%	140%	121%	115%	143%	97%
Bogo	COP20	Scale-up Saturation	APR21	100%	100%	80%	80%	60%	60%	46%	46%	42%	43%	63%	44%	103%	131%	92%	109%	89%	97%	99%	97%	140%	121%	115%	143%	97%
Bogo	COP21	Scale-up Saturation	ARP22	87%	200%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	92%
Bonassama	COP18	Scale-up Saturation	APR19	27%	9%	39%	27%	41%	44%	61%	39%	43%	30%	51%	29%	81%	41%	85%	38%	73%	49%	70%	54%	65%	60%	73%	80%	65%
Bonassama	COP19	Scale-up Saturation	APR20	55%	55%	89%	84%	102%	94%	76%	71%	82%	62%	106%	76%	139%	173%	87%	94%	62%	64%	62%	59%	88%	71%	83%	103%	82%
Bonassama	COP20	Scale-up Saturation	APR21	64%	64%	89%	84%	102%	94%	80%	73%	84%	66%	106%	78%	139%	173%	87%	94%	65%	66%	66%	61%	89%	73%	85%	103%	84%
Bonassama	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	94%	88%	95%	88%	95%	88%	92%	88%	90%
Bourha	COP19	Scale-up Saturation	APR20			400%	400%	300%	300%	200%	200%	183%	200%	273%	200%	420%	533%	406%	425%	382%	378%	433%	378%	591%	486%	483%	545%	408%
Bourha	COP20	Scale-up Saturation	APR21			400%	400%	300%	300%	200%	200%	183%	200%	273%	200%	420%	533%	406%	425%	382%	378%	433%	378%	591%	486%	483%	545%	408%
Bourha	COP21	Scale-up Saturation	ARP22	100%	100%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	88%
Buea	COP18	Sustained	APR19	13%	22%	25%	26%	30%	32%	28%	38%	26%	22%	34%	16%	51%	33%	58%	24%	53%	29%	49%	44%	54%	51%	63%	61%	47%
Buea	COP19	Scale-up Saturation	APR20	38%	33%	50%	47%	57%	53%	44%	41%	39%	35%	49%	35%	67%	84%	50%	55%	41%	43%	44%	41%	63%	50%	60%	75%	52%
Buea	COP20	Scale-up Saturation	APR21	88%	89%	86%	87%	91%	89%	91%	90%	88%	91%	87%	88%	89%	84%	88%	87%	89%	86%	91%	88%	94%	90%	92%	94%	90%
Buea	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	93%	88%	94%	88%	90%	88%	89%

Cité Des Palmiers	COP18	Scale-up Saturation	APR19	10%		34%	32%	43%	36%	39%	37%	30%	37%	37%	21%	60%	27%	65%	27%	47%	33%	53%	44%	57%	49%	67%	86%	52%
Cité Des Palmiers	COP19	Scale-up Saturation	APR20	50%	50%	78%	73%	91%	84%	67%	63%	72%	56%	94%	69%	122%	153%	76%	84%	54%	57%	55%	53%	77%	63%	74%	93%	73%
Cité Des Palmiers	COP20	Scale-up Saturation	APR21	60%	60%	80%	75%	91%	85%	71%	67%	75%	59%	94%	72%	122%	153%	78%	84%	59%	60%	60%	56%	80%	66%	76%	93%	76%
Cité Des Palmiers	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	88%	88%	88%
Cité Verte	COP18	Scale-up Saturation	APR19	31%	57%	187%	136%	258%	233%	242%	179%	116%	165%	92%	73%	135%	63%	148%	78%	130%	88%	132%	109%	151%	132%	233%	263%	147%
Cité Verte	COP19	Scale-up Saturation	APR20	108%	100%	189%	176%	224%	208%	168%	155%	159%	133%	210%	155%	281%	357%	176%	198%	127%	137%	134%	131%	200%	167%	200%	257%	180%
Cité Verte	COP20	Scale-up Saturation	APR21	108%	100%	189%	176%	224%	208%	168%	155%	159%	133%	210%	155%	281%	357%	176%	198%	127%	137%	134%	131%	200%	167%	200%	257%	180%
Cité Verte	COP21	Scale-up Saturation	ARP22	88%	88%	96%	96%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	92%	88%	93%	88%	94%	88%	95%	88%	91%	88%	90%
Deido	COP18	Scale-up Saturation	APR19	28%	25%	63%	65%	134%	108%	158%	105%	105%	127%	84%	113%	135%	101%	132%	87%	123%	75%	127%	92%	128%	113%	164%	194%	126%
Deido	COP19	Scale-up Saturation	APR20	100%	92%	182%	172%	214%	197%	159%	149%	167%	133%	220%	159%	288%	356%	178%	195%	126%	133%	127%	121%	179%	146%	171%	212%	170%
Deido	COP20	Scale-up Saturation	APR21	100%	92%	182%	172%	214%	197%	159%	149%	167%	133%	220%	159%	288%	356%	178%	195%	126%	133%	127%	121%	179%	146%	171%	212%	170%
Deido	COP21	Scale-up Saturation	ARP22	0%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	93%	88%	95%	88%	95%	88%	96%	88%	93%	88%	86%
Djohong	COP19	Scale-up Saturation	APR20	100%	100%	50%	50%	55%	55%	43%	43%	34%	27%	43%	33%	65%	88%	54%	67%	49%	58%	30%	112%	82%	75%	71%	93%	61%
Djohong	COP20	Scale-up Saturation	APR21	100%	100%	100%	83%	91%	82%	86%	79%	76%	73%	76%	71%	85%	88%	82%	82%	82%	81%	79%	112%	96%	90%	91%	93%	85%
Djohong	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Djoum	COP19	Scale-up Saturation	APR20	50%	50%	38%	33%	31%	27%	21%	19%	20%	14%	30%	23%	40%	50%	28%	32%	24%	26%	28%	27%	39%	32%	26%	34%	30%
Djoum	COP20	Scale-up Saturation	APR21	100%	100%	75%	78%	77%	80%	79%	81%	71%	76%	75%	73%	79%	78%	76%	74%	78%	74%	80%	76%	84%	80%	79%	80%	78%
Djoum	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Djoungolo	COP18	Scale-up Saturation	APR19	18%	17%	29%	40%	57%	38%	40%	33%	43%	40%	67%	75%	92%	65%	88%	53%	75%	55%	77%	66%	90%	76%	127%	142%	82%
Djoungolo	COP19	Scale-up Saturation	APR20	58%	54%	106%	100%	123%	114%	92%	85%	92%	73%	121%	88%	162%	200%	101%	110%	73%	76%	78%	73%	115%	92%	115%	142%	102%
Djoungolo	COP20	Scale-up Saturation	APR21	58%	54%	106%	100%	123%	114%	92%	85%	92%	73%	121%	88%	162%	200%	101%	110%	73%	76%	78%	73%	115%	92%	115%	142%	102%
Djoungolo	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	92%	88%	94%	88%	95%	88%	96%	89%	96%	89%	93%	89%	90%
Doume	COP19	Scale-up Saturation	APR20	50%	33%	27%	27%	21%	20%	15%	15%	15%	13%	20%	16%	31%	41%	25%	30%	22%	25%	25%	25%	34%	29%	26%	36%	26%
Doume	COP20	Scale-up Saturation	APR21	100%	67%	73%	73%	74%	70%	73%	74%	65%	70%	66%	66%	71%	72%	70%	69%	71%	70%	74%	71%	78%	74%	73%	77%	72%
Doume	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Dschang	COP19	Scale-up Saturation	APR20	100%	100%	111%	111%	82%	89%	63%	69%	66%	64%	86%	74%	125%	187%	115%	157%	137%	171%	181%	202%	224%	218%	122%	185%	138%
Dschang	COP20	Scale-up Saturation	APR21	100%	100%	111%	111%	82%	89%	63%	69%	66%	64%	86%	74%	125%	187%	115%	157%	137%	171%	181%	202%	224%	218%	122%	185%	138%
Dschang	COP21	Scale-up Saturation	ARP22	133%	133%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	96%	94%	96%	94%	96%	94%	94%	94%	98%
Ebolowa	COP19	Scale-up Saturation	APR20	56%	50%	63%	58%	61%	54%	42%	38%	45%	33%	63%	43%	85%	101%	61%	64%	53%	52%	60%	54%	84%	65%	56%	68%	62%
Ebolowa	COP20	Scale-up Saturation	APR21	89%	80%	85%	81%	89%	86%	86%	83%	79%	79%	83%	78%	85%	101%	85%	83%	85%	81%	89%	84%	96%	89%	87%	90%	87%
Ebolowa	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	90%	88%	88%	88%	88%
Edea	COP18	Sustained	APR19	52%	23%	39%	59%	57%	44%	28%	17%	23%	12%	47%	11%	61%	23%	67%	36%	69%	53%	77%	59%	71%	68%	72%	73%	61%
Edea	COP19	Scale-up Saturation	APR20	50%	40%	83%	79%	77%	72%	58%	55%	52%	43%	66%	48%	89%	112%	69%	79%	67%	71%	75%	72%	96%	79%	59%	76%	73%
Edea	COP20	Scale-up Saturation	APR21	75%	60%	89%	84%	80%	75%	65%	60%	58%	50%	70%	52%	89%	112%	73%	80%	71%	73%	79%	74%	96%	81%	64%	78%	76%
Edea	COP21	Scale-up Saturation	ARP22	150%	200%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	91%	88%	92%	88%	93%	88%	88%	88%	96%
Efoulan	COP18	Scale-up Saturation	APR19		15%	46%	26%	27%	21%	16%	8%	16%	5%	49%	14%	66%	30%	56%	31%	40%	28%	30%	25%	29%	24%	38%	33%	35%
Efoulan	COP19	Scale-up Saturation	APR20	23%	23%	44%	42%	50%	46%	37%	35%	39%	31%	50%	36%	67%	83%	42%	46%	30%	31%	32%	30%	47%	38%	47%	59%	42%
Efoulan	COP20	Scale-up Saturation	APR21	54%	54%	67%	65%	73%	69%	68%	64%	66%	63%	71%	64%	80%	89%	67%	67%	62%	60%	63%	60%	72%	65%	71%	76%	67%
Efoulan	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	93%	88%	95%	88%	96%	89%	96%	89%	93%	89%	90%
Ekondo Titi	COP18	Sustained	APR19			30%	9%	25%	18%	10%	19%	21%	17%	14%	3%	15%	10%	23%	12%	23%	14%	26%	23%	37%	34%	74%	47%	29%
Ekondo Titi	COP19	Scale-up Saturation	APR20	50%	33%	30%	27%	38%	35%	30%	29%	24%	17%	30%	19%	41%	52%	31%	34%	25%	26%	27%	25%	38%	31%	38%	47%	32%
Ekondo Titi	COP20	Scale-up Saturation	APR21	100%	67%	90%	82%	88%	88%	90%	95%	83%	87%	83%	83%	85%	83%	85%	84%	87%	83%	89%	86%	91%	89%	90%	91%	87%
Ekondo Titi	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	90%	88%	88%	88%	88%
Eseka	COP18	Sustained	APR19			23%	7%	13%		22%	3%	11%	9%	18%	2%	16%	10%	25%	11%	24%	18%	29%	35%	32%	17%	28%	26%	22%
Eseka	COP19	Scale-up Saturation	APR20	33%	33%	23%	21%	25%	24%	19%	18%	16%	11%	20%	15%	27%	36%	23%	26%	22%	24%	27%	26%	36%	30%	22%	28%	25%
Eseka	COP20	Scale-up Saturation	APR21	67%	67%	62%	57%	63%	60%	59%	56%	53%	51%	53%	51%	57%	60%	56%	55%	57%	55%	61%	57%	67%	61%	58%	60%	58%
Eseka	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Figuil	COP19	Scale-up Saturation	APR20	100%	100%	100%	100%	86%	75%	67%	67%	58%	60%	80%	62%	129%	168%	103%	126%	89%	103%	95%	100%	134%	121%	126%	167%	109%
Figuil	COP20	Scale-up Saturation	APR21	100%	100%	100%	100%	86%	75%	67%	67%	58%	60%	80%	62%	129%	168%	103%	126%	89%	103%	95%	100%	134%	121%	126%	167%	109%
Figuil	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	90%	88%	90%	88%	88%	88%	88%
Fontem	COP18	Sustained	APR19						20%	9%	8%	8%	8%	6%	10%	6%	3%	7%	4%	10%	10%	12%	10%	14%	32%	13%	20%	11%
Fontem	COP19	Scale-up Saturation	APR20	100%	50%	17%	14%	33%	30%	27%	25%	17%	23%	24%	14%	33%	40%	24%	26%	19%	20%	20%	19%	28%	23%	28%	36%	25%
Fontem	COP20	Scale-up Saturation	APR21	100%	50%	100%	86%	89%	80%	91%	92%	83%	92%	81%	81%	83%	83%	82%	81%	84%	83%	87%	84%	88%	85%	87%	88%	85%
Fontem	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Foumban	COP19	Scale-up Saturation	APR20	80%	80%	77%	77%	58%	62%	45%	49%	46%	44%	61%	51%	89%	132%	82%	112%	98%	124%	130%	147%	162%	158%	88%	133%	99%
Foumban	COP20	Scale-up Saturation	APR21	80%	80%	77%	77%	58%	62%	45%	49%	46%	44%	61%	51%	89%	132%	82%	112%	98%	124%	130%	147%	162%	158%	88%	133%	99%
Foumban	COP21	Scale-up Saturation	APR22	94%	100%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	95%	94%	95%	94%	94%	94%	95%
Foumbot	COP19	Scale-up Saturation	APR20	67%	67%	108%	108%	74%	80%	57%	63%	60%	57%	77%	66%	114%	164%	106%	141%	127%	157%	168%	188%	211%	202%	113%	167%	127%
Foumbot	COP20	Scale-up Saturation	APR21	67%	67%	108%	108%	74%	80%	57%	63%	60%	57%	77%	66%	114%	164%	106%	141%	127%	157%	168%	188%	211%	202%	113%	167%	127%
Foumbot	COP21	Scale-up Saturation	ARP22	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	95%	94%	95%	94%	94%	94%	95%
Fundong	COP18	Sustained	APR19			72%	42%	105%	79%	78%	78%	37%	30%	21%	11%	35%	13%	56%	24%	82%	46%	114%	79%	115%	108%	110%	140%	74%
Fundong	COP19	Scale-up Saturation	APR20	67%	67%	92%	88%	86%	88%	64%	67%	61%	57%	73%	60%	101%	145%	83%	107%	82%	99%	100%	108%	144%	134%	109%	158%	101%
Fundong	COP20	Scale-up Saturation	APR21	67%	67%	92%	88%	86%	88%	64%	67%	61%	57%	73%	60%	101%	145%	83%	107%	82%	99%	100%	108%	144%	134%	109%	158%	101%
Fundong	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	92%	88%	88%	88%	89%

Galim	COP19	Scale-up Saturation	APR20	100%	100%	17%	17%	23%	25%	18%	20%	13%	7%	18%	15%	27%	41%	25%	34%	30%	37%	40%	45%	50%	48%	27%	41%	30%
Galim	COP20	Scale-up Saturation	APR21	100%	100%	67%	17%	69%	25%	65%	20%	57%	7%	59%	15%	63%	41%	62%	34%	66%	37%	73%	45%	78%	48%	67%	41%	56%
Galim	COP21	Scale-up Saturation	ARP22	100%	100%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	95%
Garoua Boulai	COP19	Scale-up Saturation	APR20	150%	150%	140%	127%	128%	121%	92%	88%	81%	69%	114%	84%	182%	223%	147%	162%	130%	135%	144%	133%	198%	158%	156%	194%	149%
Garoua Boulai	COP20	Scale-up Saturation	APR21	150%	150%	140%	127%	128%	121%	92%	88%	81%	69%	114%	84%	182%	223%	147%	162%	130%	135%	144%	133%	198%	158%	156%	194%	149%
Garoua Boulai	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Garoua I	COP19	Scale-up Saturation	APR20	100%	100%	128%	121%	107%	103%	84%	82%	84%	69%	114%	87%	182%	244%	146%	172%	126%	140%	136%	137%	194%	168%	178%	233%	152%
Garoua I	COP20	Scale-up Saturation	APR21	100%	100%	128%	121%	107%	103%	84%	82%	84%	69%	114%	87%	182%	244%	146%	172%	126%	140%	136%	137%	194%	168%	178%	233%	152%
Garoua I	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Garoua II	COP19	Scale-up Saturation	APR20	38%	38%	9%	9%	10%	9%	8%	7%	7%	6%	11%	7%	17%	22%	14%	16%	12%	13%	13%	13%	18%	16%	17%	21%	14%
Garoua II	COP20	Scale-up Saturation	APR21	75%	63%	55%	46%	54%	49%	56%	49%	50%	49%	51%	46%	55%	52%	54%	50%	55%	49%	57%	51%	60%	53%	58%	56%	54%
Garoua II	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	91%	88%	93%	88%	94%	89%	94%	89%	91%	89%	89%
Gaschiga	COP19	Scale-up Saturation	APR20	100%	50%	17%	17%	25%	25%	21%	20%	21%	20%	25%	20%	41%	52%	32%	36%	28%	29%	30%	28%	42%	34%	39%	52%	33%
Gaschiga	COP20	Scale-up Saturation	APR21	100%	50%	67%	67%	67%	67%	64%	60%	59%	60%	60%	55%	67%	72%	64%	62%	63%	60%	65%	59%	71%	64%	70%	74%	65%
Gaschiga	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Guider	COP19	Scale-up Saturation	APR20	150%	150%	80%	73%	74%	74%	61%	58%	59%	52%	81%	63%	127%	170%	101%	121%	86%	98%	92%	94%	132%	115%	122%	162%	105%
Guider	COP20	Scale-up Saturation	APR21	150%	150%	80%	73%	74%	74%	61%	58%	59%	52%	81%	63%	127%	170%	101%	121%	86%	98%	92%	94%	132%	115%	122%	162%	105%
Guider	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	92%	88%	93%	88%	93%	88%	89%	88%	90%
Hina	COP19	Scale-up Saturation	APR20	200%	200%	133%	133%	100%	100%	75%	75%	73%	75%	107%	73%	178%	227%	157%	175%	153%	159%	169%	159%	244%	194%	196%	233%	164%
Hina	COP20	Scale-up Saturation	APR21	200%	200%	133%	133%	100%	100%	75%	75%	73%	75%	107%	73%	178%	227%	157%	175%	153%	159%	169%	159%	244%	194%	196%	233%	164%
Hina	COP21	Scale-up Saturation	ARP22	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	89%	87%	91%	87%	93%	87%	93%	87%	89%	87%	88%
Japoma	COP19	Scale-up Saturation	APR20	25%	20%	16%	15%	12%	11%	9%	8%	11%	8%	13%	8%	18%	22%	11%	12%	8%	8%	8%	8%	11%	9%	11%	14%	11%
Japoma	COP20	Scale-up Saturation	APR21	50%	40%	26%	25%	23%	21%	21%	16%	22%	16%	23%	16%	27%	29%	21%	20%	19%	16%	19%	16%	22%	17%	21%	21%	20%
Japoma	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Kaele	COP19	Scale-up Saturation	APR20	200%	100%	100%	86%	62%	62%	50%	47%	52%	44%	71%	54%	120%	155%	108%	124%	103%	113%	115%	113%	164%	141%	130%	168%	112%
Kaele	COP20	Scale-up Saturation	APR21	200%	100%	100%	86%	62%	62%	50%	47%	52%	44%	71%	54%	120%	155%	108%	124%	103%	113%	115%	113%	164%	141%	130%	168%	112%
Kaele	COP21	Scale-up Saturation	ARP22	100%	200%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	92%
Kar Hay	COP19	Scale-up Saturation	APR20	100%	100%	25%	20%	33%	30%	25%	25%	17%	8%	25%	18%	46%	54%	41%	47%	40%	41%	44%	42%	63%	52%	48%	61%	42%
Kar Hay	COP20	Scale-up Saturation	APR21	100%	100%	100%	80%	89%	90%	92%	83%	78%	85%	80%	76%	83%	83%	83%	83%	87%	82%	90%	88%	95%	89%	90%	93%	86%
Kar Hay	COP21	Scale-up Saturation	ARP22	100%	100%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	89%	87%	90%	87%	91%	87%	87%	87%	89%
Kette	COP19	Scale-up Saturation	APR20	100%	100%	20%	20%	38%	33%	27%	25%	25%	23%	33%	24%	58%	69%	46%	49%	40%	41%	44%	40%	60%	47%	47%	60%	45%
Kette	COP20	Scale-up Saturation	APR21	100%	100%	60%	80%	88%	78%	82%	75%	71%	77%	70%	71%	81%	85%	78%	78%	77%	77%	81%	78%	87%	82%	81%	86%	79%
Kette	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	90%	88%	90%	88%	88%	88%	89%
Kolofata	COP19	Scale-up Saturation	APR20	50%	50%	43%	43%	29%	27%	22%	21%	19%	16%	26%	15%	43%	56%	41%	46%	39%	41%	44%	42%	62%	51%	48%	61%	42%
Kolofata	COP20	Scale-up Saturation	APR21	100%	50%	100%	100%	93%	87%	89%	84%	81%	84%	81%	77%	84%	83%	85%	80%	88%	82%	91%	86%	94%	90%	92%	92%	87%
Kolofata	COP21	Scale-up Saturation	ARP22	100%	100%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	88%
Kouoptamo	COP19	Scale-up Saturation	APR20	50%	50%	11%	11%	16%	17%	12%	13%	9%	5%	12%	10%	19%	27%	18%	25%	22%	27%	29%	33%	36%	36%	19%	29%	22%
Kouoptamo	COP20	Scale-up Saturation	APR21	100%	50%	56%	11%	63%	17%	60%	13%	58%	5%	57%	10%	60%	27%	59%	25%	62%	27%	69%	33%	72%	36%	63%	29%	51%
Kouoptamo	COP21	Scale-up Saturation	ARP22	200%	200%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	103%
Kousseri	COP19	Scale-up Saturation	APR20	83%	71%	27%	25%	21%	20%	16%	16%	17%	14%	22%	17%	38%	48%	34%	39%	33%	36%	37%	36%	53%	44%	41%	54%	36%
Kousseri	COP20	Scale-up Saturation	APR21	100%	86%	85%	79%	87%	82%	87%	83%	78%	82%	78%	76%	82%	80%	83%	79%	85%	81%	89%	84%	91%	86%	89%	90%	84%
Kousseri	COP21	Scale-up Saturation	ARP22	87%	100%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	88%
Kribi	COP19	Scale-up Saturation	APR20	60%	60%	81%	74%	77%	69%	54%	49%	58%	42%	80%	55%	106%	126%	74%	80%	64%	65%	73%	67%	101%	80%	68%	82%	76%
Kribi	COP20	Scale-up Saturation	APR21	80%	100%	95%	87%	94%	90%	90%	87%	85%	84%	90%	84%	106%	126%	89%	89%	88%	86%	93%	88%	101%	94%	91%	95%	93%
Kribi	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	91%	88%	92%	88%	92%	88%	88%	88%	89%
Kumba	COP18	Sustained	APR19	11%	10%	46%	41%	70%	74%	62%	70%	44%	39%	53%	33%	93%	34%	119%	56%	110%	73%	110%	94%	110%	96%	136%	134%	98%
Kumba	COP19	Scale-up Saturation	APR20	67%	60%	115%	110%	126%	118%	99%	94%	94%	72%	110%	78%	150%	190%	110%	123%	89%	94%	93%	89%	133%	109%	129%	162%	114%
Kumba	COP20	Scale-up Saturation	APR21	67%	60%	115%	110%	126%	118%	99%	94%	94%	72%	110%	78%	150%	190%	110%	123%	89%	94%	93%	89%	133%	109%	129%	162%	114%
Kumba	COP21	Scale-up Saturation	ARP22	88%	120%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	93%	88%	94%	88%	95%	88%	95%	88%	92%	88%	91%
Kumbo East	COP18	Sustained	APR19			33%	29%	50%	54%	63%	50%	33%	43%	17%	15%	25%	7%	36%	22%	54%	30%	91%	65%	96%	99%	78%	104%	55%
Kumbo East	COP19	Scale-up Saturation	APR20	60%	60%	71%	71%	67%	69%	50%	52%	51%	46%	60%	52%	82%	120%	67%	87%	65%	79%	79%	87%	114%	106%	86%	125%	81%
Kumbo East	COP20	Scale-up Saturation	APR21	80%	60%	81%	71%	75%	69%	63%	52%	63%	46%	69%	52%	85%	120%	73%	87%	73%	79%	84%	87%	114%	106%	89%	125%	85%
Kumbo East	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	93%	88%	93%	88%	90%	88%	89%
Kumbo West	COP18	Sustained	APR19	33%	67%	136%	67%	124%	79%	109%	100%	44%	100%	20%	20%	28%	28%	56%	39%	100%	80%	126%	141%	159%	174%	95%	165%	89%
Kumbo West	COP19	Scale-up Saturation	APR20	100%	100%	121%	113%	108%	113%	82%	87%	82%	75%	99%	80%	134%	192%	109%	142%	106%	129%	129%	141%	186%	174%	141%	201%	132%
Kumbo West	COP20	Scale-up Saturation	APR21	100%	100%	121%	113%	108%	113%	82%	87%	82%	75%	99%	80%	134%	192%	109%	142%	106%	129%	129%	141%	186%	174%	141%	201%	132%
Kumbo West	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	93%	88%	95%	88%	95%	89%	96%	89%	93%	89%	90%

Lagdo	COP19	Scale-up Saturation	APR20	150%	150%	67%	60%	59%	59%	48%	45%	42%	35%	62%	47%	97%	125%	78%	90%	68%	74%	72%	71%	103%	88%	95%	127%	81%
Lagdo	COP20	Scale-up Saturation	APR21	150%	150%	89%	70%	82%	76%	81%	64%	70%	57%	78%	63%	97%	125%	88%	90%	83%	82%	87%	80%	103%	92%	95%	127%	90%
Lagdo	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Limbe	COP18	Sustained	APR19		22%	20%	51%	54%	38%	58%	54%	33%	53%	39%	20%	68%	37%	83%	41%	77%	53%	85%	63%	81%	74%	106%	113%	73%
Limbe	COP19	Scale-up Saturation	APR20	63%	56%	89%	84%	92%	87%	73%	68%	68%	56%	82%	58%	113%	141%	84%	92%	69%	71%	73%	68%	105%	84%	100%	124%	88%
Limbe	COP20	Scale-up Saturation	APR21	88%	56%	89%	84%	92%	87%	94%	68%	90%	56%	92%	58%	113%	141%	93%	92%	91%	71%	94%	68%	105%	84%	100%	124%	94%
Limbe	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	91%	88%	92%	88%	88%	88%	89%
Logbaba	COP18	Scale-up Saturation	APR19	68%		50%	42%	28%	37%	12%	15%	20%	9%	64%	13%	103%	24%	91%	43%	58%	28%	39%	32%	28%	22%	36%	38%	45%
Logbaba	COP19	Scale-up Saturation	APR20	33%	33%	58%	54%	66%	60%	49%	45%	51%	39%	67%	48%	87%	110%	54%	60%	39%	41%	39%	37%	55%	45%	52%	66%	52%
Logbaba	COP20	Scale-up Saturation	APR21	50%	50%	63%	58%	72%	66%	56%	51%	58%	46%	71%	52%	87%	110%	59%	63%	46%	46%	46%	43%	60%	50%	58%	69%	57%
Logbaba	COP21	Scale-up Saturation	ARP22	100%	150%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	93%	88%	94%	88%	94%	88%	91%	88%	92%
Lolodorf	COP19	Scale-up Saturation	APR20			20%	20%	38%	33%	25%	23%	29%	23%	34%	25%	47%	59%	33%	37%	28%	30%	32%	31%	44%	37%	31%	38%	34%
Lolodorf	COP20	Scale-up Saturation	APR21			80%	80%	88%	89%	83%	85%	76%	85%	76%	75%	79%	83%	77%	78%	78%	75%	81%	78%	85%	83%	81%	84%	80%
Lolodorf	COP21	Scale-up Saturation	ARP22			88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Lomie	COP19	Scale-up Saturation	APR20			67%	67%	60%	60%	46%	43%	38%	40%	55%	40%	82%	107%	66%	79%	58%	67%	64%	67%	88%	79%	72%	92%	69%
Lomie	COP20	Scale-up Saturation	APR21			83%	83%	80%	90%	85%	79%	72%	80%	78%	75%	88%	107%	83%	88%	83%	84%	86%	86%	94%	93%	88%	92%	86%
Lomie	COP21	Scale-up Saturation	ARP22			88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Loum	COP19	Scale-up Saturation	APR20	100%	100%	75%	60%	43%	38%	33%	30%	39%	30%	45%	29%	60%	77%	46%	53%	44%	47%	49%	48%	62%	53%	39%	50%	48%
Loum	COP20	Scale-up Saturation	APR21	100%	100%	100%	80%	57%	50%	44%	40%	50%	40%	53%	36%	65%	81%	52%	58%	51%	51%	55%	52%	67%	58%	46%	55%	55%
Loum	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	94%	88%	95%	88%	95%	88%	91%	88%	90%
Mada	COP19	Scale-up Saturation	APR20	67%	67%	23%	23%	24%	22%	19%	18%	15%	11%	19%	15%	33%	46%	29%	37%	28%	33%	31%	33%	45%	41%	36%	48%	32%
Mada	COP20	Scale-up Saturation	APR21	100%	100%	85%	85%	88%	81%	88%	85%	79%	83%	79%	77%	82%	80%	83%	79%	85%	81%	89%	83%	91%	86%	89%	88%	85%
Mada	COP21	Scale-up Saturation	ARP22	100%	100%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	88%
Maga	COP19	Scale-up Saturation	APR20	100%	100%	11%	11%	17%	16%	14%	13%	13%	12%	15%	12%	27%	33%	24%	26%	23%	23%	26%	23%	37%	29%	28%	36%	25%
Maga	COP20	Scale-up Saturation	APR21	100%	100%	78%	78%	83%	79%	91%	83%	74%	80%	76%	73%	79%	76%	80%	76%	83%	78%	86%	80%	88%	83%	86%	86%	81%
Maga	COP21	Scale-up Saturation	ARP22	150%	800%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	119%
Malantouen	COP19	Scale-up Saturation	APR20	100%	100%	36%	36%	30%	33%	23%	26%	26%	27%	35%	28%	51%	72%	48%	64%	57%	71%	75%	85%	95%	90%	51%	75%	57%
Malantouen	COP20	Scale-up Saturation	APR21	100%	100%	73%	36%	70%	33%	67%	26%	63%	27%	66%	28%	73%	72%	72%	64%	78%	71%	89%	85%	95%	90%	77%	75%	73%
Malantouen	COP21	Scale-up Saturation	ARP22	150%	150%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	95%	94%	95%	94%	96%	94%	94%	94%	99%
Mamfe	COP18	Sustained	APR19			33%	40%	69%	29%	19%	35%	23%	32%	40%	37%	51%	24%	69%	25%	61%	48%	85%	74%	97%	89%	190%	178%	82%
Mamfe	COP19	Scale-up Saturation	APR20	50%	50%	122%	110%	131%	121%	106%	100%	91%	79%	110%	80%	151%	194%	113%	129%	91%	99%	97%	95%	138%	117%	132%	172%	119%
Mamfe	COP20	Scale-up Saturation	APR21	50%	50%	122%	110%	131%	121%	106%	100%	91%	79%	110%	80%	151%	194%	113%	129%	91%	99%	97%	95%	138%	117%	132%	172%	119%
Mamfe	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Manjo	COP19	Scale-up Saturation	APR20			33%	33%	20%	20%	14%	14%	23%	14%	25%	27%	37%	42%	28%	30%	27%	27%	30%	27%	38%	30%	24%	33%	29%
Manjo	COP20	Scale-up Saturation	APR21			67%	67%	40%	40%	29%	29%	38%	29%	36%	36%	46%	47%	36%	37%	36%	33%	39%	33%	47%	37%	33%	40%	38%
Manjo	COP21	Scale-up Saturation	ARP22			88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	88%	88%	88%
Maroua 1	COP19	Scale-up Saturation	APR20	60%	60%	30%	29%	24%	23%	19%	19%	17%	14%	24%	17%	42%	50%	38%	42%	37%	38%	41%	38%	59%	47%	46%	58%	39%
Maroua 1	COP20	Scale-up Saturation	APR21	80%	80%	80%	76%	85%	81%	88%	83%	77%	82%	77%	75%	81%	80%	82%	79%	85%	81%	88%	84%	91%	87%	88%	90%	84%
Maroua 1	COP21	Scale-up Saturation	ARP22	87%	100%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	88%	87%	87%	87%	88%
Maroua 2	COP19	Scale-up Saturation	APR20	167%	167%	207%	193%	157%	147%	122%	119%	112%	100%	153%	111%	258%	339%	235%	277%	227%	250%	253%	252%	361%	311%	284%	377%	247%
Maroua 2	COP20	Scale-up Saturation	APR21	167%	167%	207%	193%	157%	147%	122%	119%	112%	100%	153%	111%	258%	339%	235%	277%	227%	250%	253%	252%	361%	311%	284%	377%	247%
Maroua 2	COP21	Scale-up Saturation	ARP22	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	89%	87%	91%	87%	92%	87%	93%	87%	89%	87%	88%
Maroua 3	COP19	Scale-up Saturation	APR20	100%	67%			5%	4%	4%	4%	2%	3%	6%	3%	9%	11%	8%	9%	8%	8%	9%	8%	13%	10%	10%	12%	8%
Maroua 3	COP20	Scale-up Saturation	APR21	100%	67%			86%	74%	85%	82%	74%	77%	74%	73%	76%	70%	77%	71%	80%	73%	83%	78%	83%	77%	83%	79%	77%
Maroua 3	COP21	Scale-up Saturation	ARP22	500%	500%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	122%
Massangam	COP19	Scale-up Saturation	APR20			50%	50%	75%	75%	50%	60%	60%	60%	70%	57%	100%	136%	94%	115%	111%	125%	148%	150%	182%	167%	98%	150%	110%
Massangam	COP20	Scale-up Saturation	APR21			50%	50%	75%	75%	50%	60%	60%	60%	70%	57%	100%	136%	94%	115%	111%	125%	148%	150%	182%	167%	98%	150%	110%
Massangam	COP21	Scale-up Saturation	ARP22	100%	100%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	95%
Mayo Oulo	COP19	Scale-up Saturation	APR20	100%	100%	25%	25%	38%	38%	33%	30%	30%	30%	45%	29%	71%	90%	58%	69%	51%	57%	54%	56%	78%	69%	72%	92%	60%
Mayo Oulo	COP20	Scale-up Saturation	APR21	100%	100%	75%	75%	75%	75%	89%	70%	70%	80%	74%	64%	87%	95%	82%	86%	80%	80%	83%	81%	96%	90%	92%	103%	84%
Mayo Oulo	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%

Mbalmayo	COP18	Sustained	APR19	50%	50%	54%	46%	33%	33%	18%	16%	28%	10%	59%	12%	59%	34%	71%	42%	73%	50%	75%	67%	76%	63%	82%	79%	63%
Mbalmayo	COP19	Scale-up Saturation	APR20	50%	50%	54%	50%	48%	45%	35%	34%	34%	29%	46%	34%	66%	83%	54%	61%	53%	56%	65%	61%	87%	71%	51%	66%	58%
Mbalmayo	COP20	Scale-up Saturation	APR21	67%	83%	73%	68%	73%	69%	66%	63%	62%	61%	67%	61%	78%	83%	72%	74%	73%	72%	81%	77%	93%	83%	73%	81%	75%
Mbalmayo	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	91%	89%	93%	93%	94%	95%	95%	96%	96%	96%	97%	97%	97%	94%	97%	93%
Mbang	COP19	Scale-up Saturation	APR20			17%	14%	27%	25%	19%	18%	12%	17%	21%	13%	32%	39%	26%	28%	23%	23%	26%	23%	35%	27%	29%	36%	26%
Mbang	COP20	Scale-up Saturation	APR21			83%	71%	82%	75%	75%	71%	64%	72%	65%	67%	71%	69%	69%	70%	71%	68%	73%	70%	77%	73%	75%	76%	72%
Mbang	COP21	Scale-up Saturation	ARP22			88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Mbanga	COP19	Scale-up Saturation	APR20	50%	33%	30%	27%	18%	17%	14%	13%	16%	12%	18%	11%	25%	31%	20%	22%	19%	20%	21%	20%	27%	22%	17%	21%	21%
Mbanga	COP20	Scale-up Saturation	APR21	100%	67%	40%	36%	29%	28%	27%	21%	27%	20%	28%	19%	33%	38%	29%	29%	28%	27%	31%	27%	37%	29%	27%	28%	29%
Mbanga	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	93%	88%	94%	88%	94%	88%	90%	88%	90%
Mbangue	COP18	Scale-up Saturation	APR19	1%	15%	15%	17%	16%	25%	24%	11%	18%	11%	41%	29%	70%	28%	58%	23%	42%	32%	28%	33%	35%	25%	36%	37%	37%
Mbangue	COP19	Scale-up Saturation	APR20	57%	57%	75%	70%	82%	76%	61%	57%	59%	50%	79%	60%	104%	131%	64%	72%	46%	49%	46%	45%	64%	54%	62%	80%	62%
Mbangue	COP20	Scale-up Saturation	APR21	71%	71%	79%	73%	84%	78%	67%	61%	63%	56%	80%	64%	104%	131%	68%	74%	52%	53%	52%	49%	69%	58%	66%	81%	66%
Mbangue	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Mbengwi	COP18	Sustained	APR19			25%		54%	92%	44%	35%	16%	29%	20%		24%	27%	37%	22%	56%	25%	50%	37%	77%	71%	93%	89%	49%
Mbengwi	COP19	Scale-up Saturation	APR20	50%	50%	38%	38%	46%	46%	33%	35%	32%	24%	38%	29%	50%	76%	40%	53%	39%	48%	48%	53%	69%	65%	54%	74%	50%
Mbengwi	COP20	Scale-up Saturation	APR21	100%	100%	50%	50%	62%	54%	50%	41%	52%	35%	54%	38%	61%	78%	54%	57%	53%	53%	60%	58%	77%	69%	65%	76%	60%
Mbengwi	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	95%	88%	96%	88%	97%	89%	97%	91%	98%	91%	96%	91%	92%
Mbouda	COP19	Scale-up Saturation	APR20	80%	80%	74%	74%	55%	58%	42%	46%	46%	43%	58%	48%	85%	125%	78%	106%	94%	117%	125%	139%	155%	148%	83%	126%	94%
Mbouda	COP20	Scale-up Saturation	APR21	80%	80%	84%	74%	74%	58%	65%	46%	66%	43%	72%	48%	89%	125%	85%	106%	94%	117%	125%	139%	155%	148%	90%	126%	98%
Mbouda	COP21	Scale-up Saturation	ARP22	94%	100%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	95%	94%	96%	94%	96%	94%	94%	94%	95%
Meiganga	COP19	Scale-up Saturation	APR20	43%	43%	34%	32%	31%	30%	24%	24%	21%	18%	28%	21%	44%	56%	36%	41%	33%	36%	39%	38%	56%	47%	48%	61%	40%
Meiganga	COP20	Scale-up Saturation	APR21	86%	71%	76%	68%	78%	71%	76%	70%	66%	67%	68%	63%	75%	74%	73%	70%	75%	70%	78%	72%	84%	77%	81%	84%	75%
Meiganga	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Melong	COP19	Scale-up Saturation	APR20	100%	100%	20%	20%	38%	38%	30%	27%	30%	27%	33%	25%	43%	54%	33%	37%	31%	32%	35%	33%	44%	36%	28%	37%	35%
Melong	COP20	Scale-up Saturation	APR21	100%	100%	40%	40%	50%	50%	40%	36%	40%	36%	42%	38%	50%	61%	41%	44%	40%	38%	44%	39%	51%	43%	37%	43%	43%
Melong	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	90%	88%	91%	88%	88%	88%	89%
Messamena	COP19	Scale-up Saturation	APR20			50%	50%	36%	36%	27%	27%	25%	24%	39%	32%	60%	82%	49%	59%	44%	49%	49%	49%	68%	57%	53%	70%	51%
Messamena	COP20	Scale-up Saturation	APR21			83%	83%	82%	82%	80%	80%	69%	76%	74%	73%	83%	88%	79%	83%	80%	80%	82%	82%	90%	85%	84%	90%	82%
Messamena	COP21	Scale-up Saturation	ARP22			88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Meyomessala	COP19	Scale-up Saturation	APR20			45%	42%	42%	38%	30%	27%	28%	17%	40%	28%	53%	63%	39%	39%	33%	32%	38%	33%	53%	40%	36%	43%	39%
Meyomessala	COP20	Scale-up Saturation	APR21			82%	83%	84%	81%	81%	80%	76%	80%	77%	78%	82%	83%	79%	77%	80%	78%	83%	79%	87%	83%	82%	84%	81%
Meyomessala	COP21	Scale-up Saturation	ARP22		88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Mfou	COP18	Sustained	APR19					14%	10%	10%	4%	10%	4%	19%	11%	26%	14%	38%	24%	41%	29%	48%	38%	54%	42%	55%	39%	35%
Mfou	COP19	Scale-up Saturation	APR20	40%	40%	40%	38%	35%	33%	27%	25%	26%	21%	32%	24%	47%	59%	38%	44%	38%	40%	46%	44%	62%	51%	36%	47%	41%
Mfou	COP20	Scale-up Saturation	APR21	60%	60%	65%	62%	65%	62%	61%	58%	56%	57%	59%	54%	67%	73%	63%	64%	64%	63%	70%	66%	79%	71%	65%	69%	66%
Mfou	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	93%	88%	94%	88%	94%	88%	90%	88%	89%
Mifi	COP19	Scale-up Saturation	APR20	113%	113%	133%	133%	103%	111%	79%	87%	85%	78%	110%	93%	158%	238%	146%	201%	174%	221%	230%	263%	287%	280%	156%	236%	176%
Mifi	COP20	Scale-up Saturation	APR21	113%	113%	133%	133%	103%	111%	79%	87%	85%	78%	110%	93%	158%	238%	146%	201%	174%	221%	230%	263%	287%	280%	156%	236%	176%
Mifi	COP21	Scale-up Saturation	ARP22	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	95%	94%	96%	94%	97%	94%	97%	94%	95%	94%	95%
Mokolo	COP19	Scale-up Saturation	APR20	200%	200%	138%	138%	113%	113%	90%	86%	88%	81%	122%	89%	204%	263%	183%	212%	176%	193%	194%	193%	278%	235%	219%	287%	191%
Mokolo	COP20	Scale-up Saturation	APR21	200%	200%	138%	138%	113%	113%	90%	86%	88%	81%	122%	89%	204%	263%	183%	212%	176%	193%	194%	193%	278%	235%	219%	287%	191%
Mokolo	COP21	Scale-up Saturation	ARP22	133%	133%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	88%	87%	88%	87%	87%	87%	91%
Moloundou	COP19	Scale-up Saturation	APR20	50%	50%	14%	14%	25%	23%	18%	17%	11%	16%	19%	12%	29%	37%	23%	26%	20%	22%	22%	22%	31%	25%	25%	33%	24%
Moloundou	COP20	Scale-up Saturation	APR21	100%	50%	71%	71%	75%	77%	76%	72%	64%	74%	67%	64%	70%	71%	69%	69%	70%	68%	73%	71%	76%	73%	73%	76%	71%
Moloundou	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Monatele	COP18	Sustained	APR19		100%		100%		10%	50%	31%	9%		33%	24%	37%	14%	37%	29%	69%	29%	49%	44%	49%	50%	102%	65%	50%
Monatele	COP19	Scale-up Saturation	APR20	100%	100%	60%	60%	44%	40%	33%	31%	35%	31%	50%	35%	70%	86%	55%	66%	54%	60%	65%	66%	86%	75%	50%	67%	60%
Monatele	COP20	Scale-up Saturation	APR21	100%	100%	80%	80%	78%	70%	67%	62%	65%	62%	70%	65%	81%	86%	73%	78%	74%	76%	81%	80%	93%	86%	73%	82%	77%
Monatele	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	89%	88%	88%	88%	89%
Mora	COP19	Scale-up Saturation	APR20	133%	100%	27%	25%	23%	22%	18%	18%	18%	15%	25%	18%	41%	53%	37%	43%	36%	39%	40%	39%	57%	48%	45%	58%	39%
Mora	COP20	Scale-up Saturation	APR21	133%	100%	87%	81%	87%	81%	89%	83%	78%	83%	78%	76%	83%	81%	84%	82%	86%	82%	90%	86%	92%	89%	90%	91%	85%
Mora	COP21	Scale-up Saturation	ARP22	125%	167%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	92%
Moulvoudaye	COP19	Scale-up Saturation	APR20	200%	200%	25%	20%	11%	10%	8%	8%	13%	8%	16%	6%	29%	33%	26%	27%	25%	24%	28%	24%	40%	30%	32%	37%	26%
Moulvoudaye	COP20	Scale-up Saturation	APR21	200%	200%	100%	80%	89%	80%	83%	83%	75%	85%	73%	71%	78%	75%	80%	77%	82%	76%	85%	82%	86%	81%	85%	85%	81%
Moulvoudaye	COP21	Scale-up Saturation	ARP22	300%	300%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	105%
Muyuka	COP18	Sustained	APR19	25%		13%	6%	21%	31%	23%	12%	14%	17%	21%	6%	26%	12%	34%	17%	33%	22%	39%	25%	34%	30%	62%	40%	32%
Muyuka	COP19	Scale-up Saturation	APR20	50%	50%	38%	35%	42%	38%	32%	30%	27%	23%	33%	24%	46%	58%	34%	38%	28%	29%	29%	28%	42%	34%	41%	52%	36%
Muyuka	COP20	Scale-up Saturation	APR21	75%	100%	88%	88%	88%	88%	90%	88%	84%	89%	84%	83%	85%	86%	85%	82%	87%	83%	89%	85%	90%	86%	89%	90%	87%
Muyuka	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	91%	88%	91%	88%	88%	88%	89%
Mvangan	COP19	Scale-up Saturation	APR20					13%	11%	8%	8%	5%	8%	15%	6%	20%	21%	14%	13%	6%	23%	14%	11%	19%	13%	13%	14%	13%
Mvangan	COP20	Scale-up Saturation	APR21					88%	78%	75%	77%	75%	77%	72%	75%	75%	71%	73%	71%	72%	75%	76%	74%	78%	78%	76%	76%	74%
Mvangan	COP21	Scale-up Saturation	ARP22			88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	90%	88%	88%	88%	88%

Nanga Eboko	COP18	Sustained	APR19			63%	78%	67%	88%	25%	33%	33%	33%	53%	24%	67%	31%	63%	42%	59%	47%	89%	43%	86%	71%	102%	103%	69%
Nanga Eboko	COP19	Scale-up Saturation	APR20	100%	100%	88%	78%	67%	63%	50%	48%	51%	48%	66%	48%	94%	121%	75%	88%	73%	81%	89%	88%	119%	102%	71%	97%	82%
Nanga Eboko	COP20	Scale-up Saturation	APR21	100%	100%	100%	89%	80%	75%	75%	71%	72%	71%	77%	66%	94%	121%	83%	88%	83%	86%	89%	93%	119%	102%	84%	97%	89%
Nanga Eboko	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	93%	88%	95%	88%	95%	88%	96%	88%	93%	88%	91%
Ndelele	COP19	Scale-up Saturation	APR20	50%	50%	38%	38%	29%	27%	20%	19%	19%	17%	29%	20%	45%	56%	36%	39%	32%	32%	35%	32%	48%	38%	38%	47%	36%
Ndelele	COP20	Scale-up Saturation	APR21	100%	100%	88%	88%	79%	73%	80%	76%	67%	74%	70%	67%	75%	80%	74%	73%	75%	73%	78%	75%	83%	78%	78%	82%	76%
Ndelele	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	90%	88%	88%	88%	89%
Ndikinimeki	COP18	Sustained	APR19			14%		50%	50%	22%	21%	17%	10%	30%		32%	7%	41%	27%	48%	60%	49%	44%	71%	55%	65%	48%	44%
Ndikinimeki	COP19	Scale-up Saturation	APR20	50%	50%	57%	50%	43%	43%	33%	32%	31%	30%	42%	30%	59%	76%	48%	55%	47%	51%	57%	56%	78%	64%	47%	59%	52%
Ndikinimeki	COP20	Scale-up Saturation	APR21	100%	100%	86%	75%	71%	71%	67%	63%	58%	65%	65%	56%	74%	82%	69%	71%	70%	70%	77%	74%	88%	79%	71%	77%	73%
Ndikinimeki	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	93%	88%	94%	88%	95%	88%	95%	88%	93%	88%	91%
Ndop	COP18	Sustained	APR19	11%	11%	53%	38%	51%	52%	38%	54%	28%	25%	32%	8%	36%	20%	51%	26%	57%	34%	52%	48%	54%	46%	62%	48%	46%
Ndop	COP19	Scale-up Saturation	APR20	33%	33%	53%	51%	46%	48%	35%	37%	37%	34%	46%	36%	62%	88%	50%	63%	49%	57%	59%	62%	85%	76%	64%	89%	60%
Ndop	COP20	Scale-up Saturation	APR21	56%	44%	63%	56%	60%	52%	52%	43%	54%	41%	59%	42%	70%	88%	61%	66%	61%	60%	69%	65%	89%	78%	73%	90%	68%
Ndop	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	93%	88%	94%	88%	95%	88%	95%	88%	92%	88%	90%
Ndu	COP18	Sustained	APR19	25%	25%	42%	58%	100%	50%	44%	41%	24%	29%	12%	8%	26%	15%	48%	20%	56%	39%	63%	60%	71%	62%	56%	69%	47%
Ndu	COP19	Scale-up Saturation	APR20	50%	50%	53%	53%	45%	47%	35%	37%	35%	32%	42%	35%	57%	82%	46%	61%	46%	55%	56%	61%	81%	75%	61%	88%	57%
Ndu	COP20	Scale-up Saturation	APR21	75%	75%	63%	58%	61%	53%	53%	44%	51%	39%	55%	42%	66%	84%	59%	63%	59%	59%	67%	65%	86%	78%	71%	89%	66%
Ndu	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	93%	88%	95%	88%	96%	88%	96%	90%	97%	90%	94%	90%	91%
New Bell	COP18	Sustained	APR19	9%	17%	49%	28%	74%	55%	55%	58%	63%	51%	79%	52%	150%	57%	145%	73%	116%	85%	90%	91%	93%	78%	97%	100%	98%
New Bell	COP19	Scale-up Saturation	APR20	91%	83%	140%	132%	169%	157%	127%	118%	128%	106%	164%	125%	215%	282%	134%	156%	96%	107%	97%	98%	137%	118%	129%	173%	131%
New Bell	COP20	Scale-up Saturation	APR21	91%	83%	140%	132%	169%	157%	127%	118%	128%	106%	164%	125%	215%	282%	134%	156%	96%	107%	97%	98%	137%	118%	129%	173%	131%
New Bell	COP21	Scale-up Saturation	ARP22	88%	0%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	92%	88%	93%	88%	93%	88%	89%	88%	85%
Ngaoundal	COP19	Scale-up Saturation	APR20	50%	50%	35%	33%	26%	25%	20%	20%	18%	16%	25%	19%	39%	53%	33%	39%	30%	33%	35%	35%	51%	44%	43%	57%	36%
Ngaoundal	COP20	Scale-up Saturation	APR21	100%	100%	76%	72%	74%	69%	75%	70%	69%	67%	69%	64%	75%	76%	73%	71%	75%	69%	78%	72%	83%	77%	80%	83%	75%
Ngaoundal	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	91%	88%	92%	88%	93%	88%	88%	88%	90%
Ngaoundere Rural	COP19	Scale-up Saturation	APR20	75%	75%	18%	17%	13%	13%	10%	10%	9%	9%	14%	11%	22%	29%	18%	21%	16%	18%	18%	19%	27%	23%	23%	31%	20%
Ngaoundere Rural	COP20	Scale-up Saturation	APR21	100%	100%	71%	67%	74%	66%	73%	66%	63%	66%	65%	60%	69%	66%	68%	63%	70%	64%	73%	66%	75%	69%	74%	73%	69%
Ngaoundere Rural	COP21	Scale-up Saturation	ARP22	100%	150%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%
Ngaoundere Urbain	COP19	Scale-up Saturation	APR20	67%	67%	98%	94%	89%	87%	70%	69%	62%	55%	81%	64%	125%	169%	102%	123%	94%	106%	108%	110%	158%	138%	132%	181%	114%
Ngaoundere Urbain	COP20	Scale-up Saturation	APR21	67%	67%	98%	94%	89%	87%	70%	69%	62%	55%	81%	64%	125%	169%	102%	123%	94%	106%	108%	110%	158%	138%	132%	181%	114%
Ngaoundere Urbain	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	93%	88%	94%	88%	95%	90%	95%	90%	92%	90%	91%
Ngog Mapubi	COP18	Sustained	APR19			20%	20%	6%	6%		4%	4%		22%	3%	15%	11%	15%	6%	19%	21%	21%	19%	27%	15%	24%	19%	17%
Ngog Mapubi	COP19	Scale-up Saturation	APR20	50%	50%	10%	10%	18%	17%	13%	12%	13%	12%	15%	12%	22%	27%	18%	22%	18%	20%	21%	22%	29%	25%	17%	22%	20%
Ngog Mapubi	COP20	Scale-up Saturation	APR21	100%	100%	50%	50%	59%	56%	54%	52%	53%	52%	52%	52%	55%	55%	54%	53%	55%	53%	58%	55%	62%	58%	55%	57%	55%
Ngog Mapubi	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Ngong	COP19	Scale-up Saturation	APR20	100%	100%	50%	46%	43%	42%	34%	34%	31%	26%	44%	35%	72%	93%	57%	67%	49%	54%	52%	53%	74%	64%	69%	92%	59%
Ngong	COP20	Scale-up Saturation	APR21	100%	100%	83%	69%	74%	71%	69%	69%	64%	65%	68%	65%	83%	93%	76%	80%	74%	73%	77%	75%	87%	82%	84%	92%	78%
Ngong	COP21	Scale-up Saturation	ARP22	133%	200%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	90%	88%	88%	88%	95%
Ngoumou	COP18	Sustained	APR19			22%	33%	63%	56%	52%	32%	20%	13%	30%	27%	49%	22%	63%	24%	54%	50%	84%	72%	89%	63%	112%	86%	64%
Ngoumou	COP19	Scale-up Saturation	APR20	100%	100%	89%	89%	81%	81%	62%	59%	59%	48%	77%	60%	114%	143%	92%	107%	91%	99%	111%	109%	151%	125%	87%	116%	100%
Ngoumou	COP20	Scale-up Saturation	APR21	100%	100%	89%	89%	81%	81%	62%	59%	59%	48%	77%	60%	114%	143%	92%	107%	91%	99%	111%	109%	151%	125%	87%	116%	100%
Ngoumou	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	90%	88%	88%	88%	89%
Nguelemendouka	COP19	Scale-up Saturation	APR20			27%	25%	19%	18%	14%	13%	14%	12%	21%	14%	33%	40%	27%	28%	24%	24%	27%	24%	38%	29%	29%	36%	27%
Nguelemendouka	COP20	Scale-up Saturation	APR21			73%	75%	76%	73%	72%	71%	66%	70%	67%	64%	72%	73%	70%	69%	72%	69%	75%	71%	79%	74%	74%	77%	72%
Nguelemendouka	COP21	Scale-up Saturation	ARP22			88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Nguti	COP18	Sustained	APR19			60%	20%	83%	43%	63%	33%	17%	10%	10%	7%	19%	4%	35%	15%	30%	18%	38%	31%	58%	50%	74%	57%	37%
Nguti	COP19	Scale-up Saturation	APR20			60%	60%	67%	57%	50%	44%	39%	30%	50%	40%	70%	92%	52%	59%	42%	46%	44%	44%	64%	55%	58%	77%	54%
Nguti	COP20	Scale-up Saturation	APR21			80%	80%	100%	100%	100%	100%	83%	90%	85%	87%	89%	92%	88%	85%	89%	84%	91%	88%	96%	90%	92%	94%	90%
Nguti	COP21	Scale-up Saturation	ARP22			88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	88%	88%	88%
Njombe Penja	COP18	Sustained	APR19	100%		200%	150%	133%	50%	113%	163%	73%	125%	47%	58%	106%	29%	183%	103%	258%	166%	287%	206%	353%	472%	297%	248%	220%
Njombe Penja	COP19	Scale-up Saturation	APR20	200%	200%	275%	275%	300%	300%	225%	225%	227%	188%	278%	200%	361%	476%	274%	326%	259%	289%	290%	289%	372%	316%	232%	300%	290%
Njombe Penja	COP20	Scale-up Saturation	APR21	200%	200%	275%	275%	300%	300%	225%	225%	227%	188%	278%	200%	361%	476%	274%	326%	259%	289%	290%	289%	372%	316%	232%	300%	290%
Njombe Penja	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	93%	88%	94%	88%	95%	88%	95%	88%	93%	88%	91%
Nkambe	COP18	Sustained	APR19		17%	75%	64%	79%	68%	61%	57%	38%	26%	33%	11%	43%	24%	58%	26%	60%	40%	64%	62%	74%	64%	66%	61%	54%
Nkambe	COP19	Scale-up Saturation	APR20	33%	33%	54%	52%	48%	49%	36%	38%	35%	33%	42%	35%	59%	85%	49%	63%	48%	58%	59%	64%	84%	79%	63%	92%	59%
Nkambe	COP20	Scale-up Saturation	APR21	50%	50%	67%	56%	62%	54%	52%	43%	51%	41%	55%	41%	68%	85%	60%	66%	60%	61%	69%	67%	88%	81%	72%	92%	67%
Nkambe	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	93%	88%	94%	88%	94%	88%	91%	88%	89%
Nkolbisson	COP19	Scale-up Saturation	APR20	20%	17%	13%	13%	13%	12%	10%	9%	8%	7%	11%	6%	14%	18%	9%	10%	7%	7%	7%	7%	11%	9%	10%	13%	9%
Nkolbisson	COP20	Scale-up Saturation	APR21	60%	50%	52%	50%	55%	53%	55%	51%	48%	50%	49%	46%	51%	51%	50%	48%	50%	47%	51%	48%	53%	49%	52%	52%	50%
Nkolbisson	COP21	Scale-up Saturation	ARP22	100%	200%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	93%
Nkolndongo	COP18	Scale-up Saturation	APR19		7%	21%	17%	22%	14%	13%	9%	18%	7%	39%	19%	56%	25%	45%	24%	28%	20%	21%	19%	19%	16%	20%	23%	26%
Nkolndongo	COP19	Scale-up Saturation	APR20	30%	28%	30%	29%	34%	32%	25%	24%	24%	20%	32%	23%	43%	54%	27%	30%	20%	21%	21%	20%	31%	25%	31%	39%	28%
Nkolndongo	COP20	Scale-up Saturation	APR21	59%	55%	59%	57%	64%	61%	61%	58%	56%	56%	60%	55%	66%	70%	58%	58%	56%	53%	57%	54%	62%	57%	62%	65%	59%
Nkolndongo	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	92%	88%	88%	88%	89%
Nkongsamba	COP18	Sustained	APR19		100%	133%	50%	80%	50%	70%	43%	25%	55%	42%	13%	48%	23%	47%	17%	100%	44%	120%	76%	146%	94%	149%	121%	88%
Nkongsamba	COP19	Scale-up Saturation	APR20	100%	100%	122%	110%	120%	113%	90%	86%	85%	73%	110%	81%	144%	184%	111%	130%	106%	117%	119%	118%	152%	130%	94%	123%	117%
Nkongsamba	COP20	Scale-up Saturation	APR21	100%	100%	122%	110%	120%	113%	90%	86%	85%	73%	110%	81%	144%	184%	111%	130%	106%	117%	119%	118%	152%	130%	94%	123%	117%
Nkongsamba	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	92%	88%	93%	88%	95%	88%	96%	88%	96%	88%	93%	88%	91%
Ntui	COP18	Sustained	APR19		25%	39%	16%		24%	2%	9%	21%	4%	33%	9%	33%	20%	24%	26%	27%	19%	25%	25%	30%	25%	23%	23%	24%
Ntui	COP19	Scale-up Saturation	APR20	25%	25%	17%	16%	13%	12%	9%	9%	9%	9%	14%	9%	18%	24%	15%	17%	14%	16%	18%	17%	24%	20%	14%	19%	16%
Ntui	COP20	Scale-up Saturation	APR21	75%	75%	50%	53%	53%	52%	51%	49%	47%	49%	49%	45%	52%	52%	51%	49%	52%	50%	55%	52%	59%	54%	53%	54%	52%
Ntui	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	91%	88%	92%	88%	88%	88%	90%
Nylon	COP18	Scale-up Saturation	APR19	45%	42%	51%	44%	76%	58%	67%	44%	35%	49%	66%	33%	96%	38%	108%	44%	94%	52%	93%	66%	93%	77%	101%	102%	84%
Nylon	COP19	Scale-up Saturation	APR20	91%	83%	114%	108%	142%	131%	106%	99%	109%	84%	142%	104%	184%	231%	114%	127%	81%	87%	82%	79%	115%	95%	110%	139%	110%
Nylon	COP20	Scale-up Saturation	APR21	91%	83%	114%	108%	142%	131%	106%	99%	109%	84%	142%	104%	184%	231%	114%	127%	81%	87%	82%	79%	115%	95%	110%	139%	110%
Nylon	COP21	Scale-up Saturation	ARP22	390%	257%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	91%	88%	92%	88%	92%	88%	88%	88%	108%

Obala	COP18	Sustained	APR19	25%	25%	50%	68%	41%	18%	21%	27%	31%	11%	36%	10%	62%	25%	67%	45%	73%	54%	87%	77%	92%	80%	103%	100%	70%
Obala	COP19	Scale-up Saturation	APR20	75%	75%	78%	74%	75%	71%	56%	53%	52%	46%	70%	52%	99%	127%	79%	92%	77%	84%	93%	92%	125%	106%	75%	100%	86%
Obala	COP20	Scale-up Saturation	APR21	100%	75%	89%	74%	88%	71%	77%	53%	71%	46%	80%	52%	99%	127%	86%	92%	86%	84%	93%	92%	125%	106%	86%	100%	91%
Obala	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	90%	88%	88%	88%	89%
Okola	COP18	Sustained	APR19					33%		6%		13%	6%	42%	8%	39%	10%	41%	27%	26%	31%	42%	41%	49%	35%	41%	31%	33%
Okola	COP19	Scale-up Saturation	APR20	50%	50%	14%	14%	25%	23%	18%	18%	19%	17%	23%	17%	34%	43%	27%	30%	26%	28%	32%	30%	43%	35%	25%	32%	29%
Okola	COP20	Scale-up Saturation	APR21	50%	50%	57%	57%	67%	62%	59%	59%	56%	56%	56%	54%	62%	65%	57%	57%	58%	57%	64%	61%	70%	63%	60%	62%	60%
Okola	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	91%	88%	92%	88%	88%	88%	90%
Oku	COP19	Scale-up Saturation	APR20	33%	33%	23%	23%	18%	19%	14%	15%	13%	15%	18%	15%	23%	34%	19%	25%	18%	23%	22%	25%	32%	31%	24%	36%	23%
Oku	COP20	Scale-up Saturation	APR21	67%	67%	46%	31%	41%	29%	36%	22%	35%	26%	38%	23%	41%	40%	38%	32%	38%	30%	42%	31%	49%	37%	42%	41%	38%
Oku	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	93%	88%	94%	88%	90%	88%	90%
Pette	COP19	Scale-up Saturation	APR20	200%	200%	500%	333%	300%	300%	250%	214%	250%	200%	321%	233%	531%	669%	478%	556%	465%	494%	506%	494%	748%	636%	578%	736%	499%
Pette	COP20	Scale-up Saturation	APR21	200%	200%	500%	333%	300%	300%	250%	214%	250%	200%	321%	233%	531%	669%	478%	556%	465%	494%	506%	494%	748%	636%	578%	736%	499%
Pette	COP21	Scale-up Saturation	ARP22	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%
Pitoa	COP19	Scale-up Saturation	APR20	200%	200%	67%	67%	70%	64%	54%	54%	46%	43%	62%	42%	101%	136%	83%	97%	72%	79%	77%	78%	110%	95%	99%	132%	86%
Pitoa	COP20	Scale-up Saturation	APR21	200%	200%	83%	67%	90%	64%	85%	54%	68%	43%	77%	42%	101%	136%	89%	97%	85%	79%	89%	78%	110%	95%	99%	132%	92%
Pitoa	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%
Poli	COP19	Scale-up Saturation	APR20	100%	100%	60%	60%	44%	40%	33%	33%	33%	33%	53%	44%	84%	113%	67%	82%	58%	67%	62%	65%	87%	80%	82%	111%	70%
Poli	COP20	Scale-up Saturation	APR21	100%	100%	100%	80%	78%	70%	75%	67%	67%	67%	76%	69%	90%	113%	84%	91%	80%	81%	84%	81%	95%	91%	93%	111%	86%
Poli	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	89%	88%	88%	88%	89%
Pouma	COP18	Sustained	APR19			150%	50%	75%	125%	20%	40%	20%		73%		61%	33%	126%	33%	128%	65%	140%	127%	138%	130%	182%	136%	111%
Pouma	COP19	Scale-up Saturation	APR20			150%	150%	150%	150%	120%	120%	100%	67%	32%	313%	156%	200%	122%	143%	64%	243%	133%	136%	175%	150%	108%	136%	131%
Pouma	COP20	Scale-up Saturation	APR21			150%	150%	150%	150%	120%	120%	100%	67%	32%	313%	156%	200%	122%	143%	64%	243%	133%	136%	175%	150%	108%	136%	131%
Pouma	COP21	Scale-up Saturation	ARP22			88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Rey Bouba	COP19	Scale-up Saturation	APR20	67%	67%	27%	25%	19%	18%	15%	15%	13%	11%	20%	17%	32%	43%	25%	30%	22%	24%	24%	23%	34%	29%	29%	39%	26%
Rey Bouba	COP20	Scale-up Saturation	APR21	67%	67%	73%	58%	62%	59%	62%	56%	56%	54%	58%	53%	63%	67%	61%	60%	61%	57%	63%	58%	68%	61%	65%	68%	62%
Rey Bouba	COP21	Scale-up Saturation	ARP22	150%	150%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	93%
Saa	COP18	Sustained	APR19		50%	44%	33%	25%	12%	10%	23%	15%	4%	22%	7%	23%	6%	37%	18%	46%	24%	56%	51%	65%	60%	54%	67%	41%
Saa	COP19	Scale-up Saturation	APR20	100%	100%	67%	67%	50%	47%	38%	36%	43%	30%	54%	43%	77%	98%	61%	72%	59%	65%	72%	71%	96%	82%	58%	76%	66%
Saa	COP20	Scale-up Saturation	APR21	100%	100%	78%	78%	75%	71%	71%	64%	68%	61%	72%	67%	84%	98%	76%	80%	77%	78%	85%	82%	96%	90%	77%	86%	80%
Saa	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	91%	88%	91%	88%	88%	88%	89%
Sangmelima	COP19	Scale-up Saturation	APR20	50%	50%	100%	94%	104%	93%	71%	64%	73%	62%	104%	71%	139%	167%	98%	108%	84%	88%	97%	91%	135%	109%	91%	114%	102%
Sangmelima	COP20	Scale-up Saturation	APR21	50%	50%	100%	94%	104%	93%	71%	64%	73%	62%	104%	71%	139%	167%	98%	108%	84%	88%	97%	91%	135%	109%	91%	114%	102%
Sangmelima	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	89%	88%	88%	88%	88%
Santa	COP19	Scale-up Saturation	APR20	67%	67%	50%	50%	46%	48%	34%	37%	40%	33%	45%	34%	62%	87%	50%	63%	49%	57%	59%	63%	85%	77%	64%	92%	60%
Santa	COP20	Scale-up Saturation	APR21	100%	100%	64%	57%	58%	52%	53%	43%	55%	40%	57%	41%	70%	87%	60%	66%	60%	61%	69%	67%	88%	79%	72%	92%	68%
Santa	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	93%	88%	95%	88%	96%	88%	96%	88%	93%	88%	90%
Santchou	COP19	Scale-up Saturation	APR20			50%	50%	20%	20%	14%	17%	33%	17%	42%	38%	62%	85%	60%	73%	71%	79%	92%	92%	114%	100%	62%	96%	67%
Santchou	COP20	Scale-up Saturation	APR21			100%	50%	80%	20%	71%	17%	67%	17%	71%	38%	78%	85%	78%	73%	85%	79%	92%	92%	114%	100%	82%	96%	80%
Santchou	COP21	Scale-up Saturation	ARP22			94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	95%	94%	95%	94%	94%	94%	94%
Soa	COP18	Sustained	APR19	100%		33%	17%		18%		7%	42%		69%	25%	75%	52%	66%	39%	55%	50%	50%	52%	43%	38%	44%	47%	49%
Soa	COP19	Scale-up Saturation	APR20	100%	100%	50%	50%	40%	36%	29%	29%	31%	27%	40%	30%	59%	73%	47%	52%	46%	48%	56%	52%	74%	60%	44%	57%	50%
Soa	COP20	Scale-up Saturation	APR21	100%	100%	67%	67%	70%	64%	64%	64%	62%	60%	65%	60%	75%	82%	70%	70%	70%	70%	77%	74%	86%	78%	70%	77%	72%
Soa	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	94%	88%	95%	88%	95%	88%	92%	88%	90%

Tchollire	COP19	Scale-up Saturation	APR20	133%	133%	55%	55%	35%	33%	27%	27%	32%	25%	45%	36%	72%	96%	59%	68%	51%	56%	55%	55%	78%	67%	71%	95%	61%
Tchollire	COP20	Scale-up Saturation	APR21	133%	133%	82%	82%	75%	67%	69%	65%	64%	61%	70%	64%	83%	96%	77%	82%	76%	75%	79%	76%	90%	83%	86%	95%	80%
Tchollire	COP21	Scale-up Saturation	ARP22	133%	200%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	95%
Tibati	COP19	Scale-up Saturation	APR20	50%	50%	33%	32%	30%	30%	24%	24%	21%	18%	28%	22%	44%	55%	36%	41%	33%	35%	38%	37%	56%	46%	47%	62%	40%
Tibati	COP20	Scale-up Saturation	APR21	100%	100%	78%	68%	76%	73%	76%	71%	69%	69%	71%	65%	76%	76%	75%	71%	76%	70%	80%	73%	85%	77%	82%	84%	76%
Tibati	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	88%	88%	88%
Tignere	COP19	Scale-up Saturation	APR20	33%	33%	45%	42%	30%	29%	23%	23%	22%	21%	27%	20%	40%	51%	33%	41%	30%	35%	35%	36%	50%	45%	43%	56%	37%
Tignere	COP20	Scale-up Saturation	APR21	67%	100%	91%	75%	80%	71%	81%	73%	71%	71%	71%	65%	76%	75%	76%	72%	76%	71%	80%	74%	85%	79%	82%	83%	77%
Tignere	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Tiko	COP18	Sustained	APR19		17%	56%	48%	124%	95%	155%	138%	59%	42%	49%	33%	100%	40%	173%	67%	184%	109%	153%	138%	155%	162%	138%	172%	133%
Tiko	COP19	Scale-up Saturation	APR20	100%	100%	164%	152%	170%	158%	134%	126%	129%	102%	152%	111%	210%	271%	156%	177%	126%	135%	134%	129%	192%	159%	184%	234%	163%
Tiko	COP20	Scale-up Saturation	APR21	100%	100%	164%	152%	170%	158%	134%	126%	129%	102%	152%	111%	210%	271%	156%	177%	126%	135%	134%	129%	192%	159%	184%	234%	163%
Tiko	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	90%	88%	92%	88%	93%	88%	94%	88%	90%	88%	89%
Tokombere	COP19	Scale-up Saturation	APR20	300%	300%	80%	67%	64%	58%	50%	47%	46%	40%	66%	50%	111%	139%	101%	114%	96%	103%	107%	103%	154%	124%	122%	152%	104%
Tokombere	COP20	Scale-up Saturation	APR21	300%	300%	80%	67%	64%	58%	50%	47%	46%	40%	66%	50%	111%	139%	101%	114%	96%	103%	107%	103%	154%	124%	122%	152%	104%
Tokombere	COP21	Scale-up Saturation	ARP22	300%	300%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	88%	87%	90%	87%	90%	87%	87%	87%	105%
Tombel	COP18	Sustained	APR19			25%	17%	53%	39%	18%	13%	23%	20%	13%	3%	18%	12%	22%	13%	27%	23%	30%	17%	42%	27%	76%	63%	32%
Tombel	COP19	Scale-up Saturation	APR20	67%	67%	50%	50%	47%	44%	36%	35%	32%	28%	41%	28%	56%	73%	42%	48%	35%	37%	37%	36%	53%	44%	50%	64%	45%
Tombel	COP20	Scale-up Saturation	APR21	100%	67%	92%	92%	88%	94%	91%	91%	83%	88%	83%	83%	87%	88%	86%	84%	88%	85%	90%	87%	92%	89%	91%	93%	88%
Tombel	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Touboro	COP19	Scale-up Saturation	APR20	100%	100%	63%	59%	53%	52%	43%	42%	38%	33%	52%	40%	81%	112%	66%	79%	57%	65%	61%	63%	87%	77%	80%	108%	69%
Touboro	COP20	Scale-up Saturation	APR21	100%	100%	81%	76%	77%	71%	76%	68%	68%	63%	72%	63%	87%	112%	81%	85%	78%	78%	81%	78%	93%	87%	89%	108%	83%
Touboro	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Tubah	COP19	Scale-up Saturation	APR20	50%	50%	43%	43%	25%	25%	19%	20%	25%	20%	27%	19%	37%	54%	30%	38%	29%	34%	35%	38%	50%	47%	38%	54%	36%
Tubah	COP20	Scale-up Saturation	APR21	50%	50%	57%	57%	50%	33%	44%	33%	46%	33%	45%	29%	52%	59%	47%	44%	47%	41%	52%	43%	63%	53%	54%	59%	50%
Tubah	COP21	Scale-up Saturation	ARP22	100%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	91%	88%	92%	88%	92%	88%	88%	88%	90%
Wum	COP18	Sustained	APR19	20%	20%	29%	29%	51%	79%	38%	23%	11%	18%	16%	6%	27%	12%	40%	18%	51%	33%	46%	35%	55%	48%	50%	62%	39%
Wum	COP19	Scale-up Saturation	APR20	40%	40%	38%	38%	40%	41%	30%	32%	31%	29%	35%	31%	48%	71%	39%	52%	39%	47%	47%	52%	68%	63%	50%	75%	48%
Wum	COP20	Scale-up Saturation	APR21	60%	60%	52%	48%	57%	47%	49%	39%	49%	36%	51%	37%	60%	74%	53%	56%	54%	51%	60%	56%	76%	67%	63%	78%	59%
Wum	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	89%	88%	92%	88%	95%	88%	96%	88%	97%	89%	97%	91%	97%	91%	96%	91%	91%
Yabassi	COP18	Sustained	APR19				33%	75%		20%		10%	33%	14%		14%	7%	11%	19%	22%	4%	23%	26%	24%	24%	38%	25%	21%
Yabassi	COP19	Scale-up Saturation	APR20			50%	33%	25%	25%	20%	17%	30%	17%	27%	13%	36%	50%	28%	33%	27%	30%	30%	30%	38%	33%	23%	33%	30%
Yabassi	COP20	Scale-up Saturation	APR21			100%	67%	50%	50%	40%	33%	40%	33%	36%	25%	44%	57%	36%	43%	37%	39%	39%	39%	47%	43%	34%	40%	40%
Yabassi	COP21	Scale-up Saturation	ARP22			88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%
Yagoua	COP19	Scale-up Saturation	APR20	75%	75%	69%	65%	61%	59%	49%	47%	42%	39%	60%	46%	99%	129%	90%	105%	86%	95%	96%	96%	137%	117%	108%	140%	94%
Yagoua	COP20	Scale-up Saturation	APR21	75%	75%	69%	65%	61%	59%	49%	47%	42%	39%	60%	46%	99%	129%	90%	105%	86%	95%	96%	96%	137%	117%	108%	140%	94%
Yagoua	COP21	Scale-up Saturation	ARP22	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	87%	89%	87%	91%	87%	91%	87%	87%	87%	88%
Yokadouma	COP19	Scale-up Saturation	APR20	67%	67%	54%	50%	48%	46%	35%	33%	31%	27%	44%	31%	72%	88%	58%	64%	51%	53%	56%	53%	77%	63%	61%	79%	58%
Yokadouma	COP20	Scale-up Saturation	APR21	100%	100%	85%	79%	83%	83%	81%	79%	70%	76%	75%	71%	85%	88%	82%	82%	81%	80%	85%	82%	92%	87%	86%	94%	84%
Yokadouma	COP21	Scale-up Saturation	ARP22	88%	100%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	89%	88%	89%	88%	88%	88%	89%
Zoetele	COP19	Scale-up Saturation	APR20	100%	100%	67%	67%	78%	70%	54%	47%	54%	40%	72%	42%	97%	115%	68%	72%	58%	58%	66%	60%	93%	73%	62%	76%	70%
Zoetele	COP20	Scale-up Saturation	APR21	100%	100%	83%	83%	100%	90%	92%	80%	79%	80%	85%	74%	97%	115%	84%	83%	84%	80%	88%	83%	93%	88%	86%	89%	87%
Zoetele	COP21	Scale-up Saturation	ARP22	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%

APPENDIX B – Budget Profile and Resource Projections

B1. COP21 Planned Spending in alignment with planning level letter guidance

Table B.1.1 COP21 Budget by Program Area

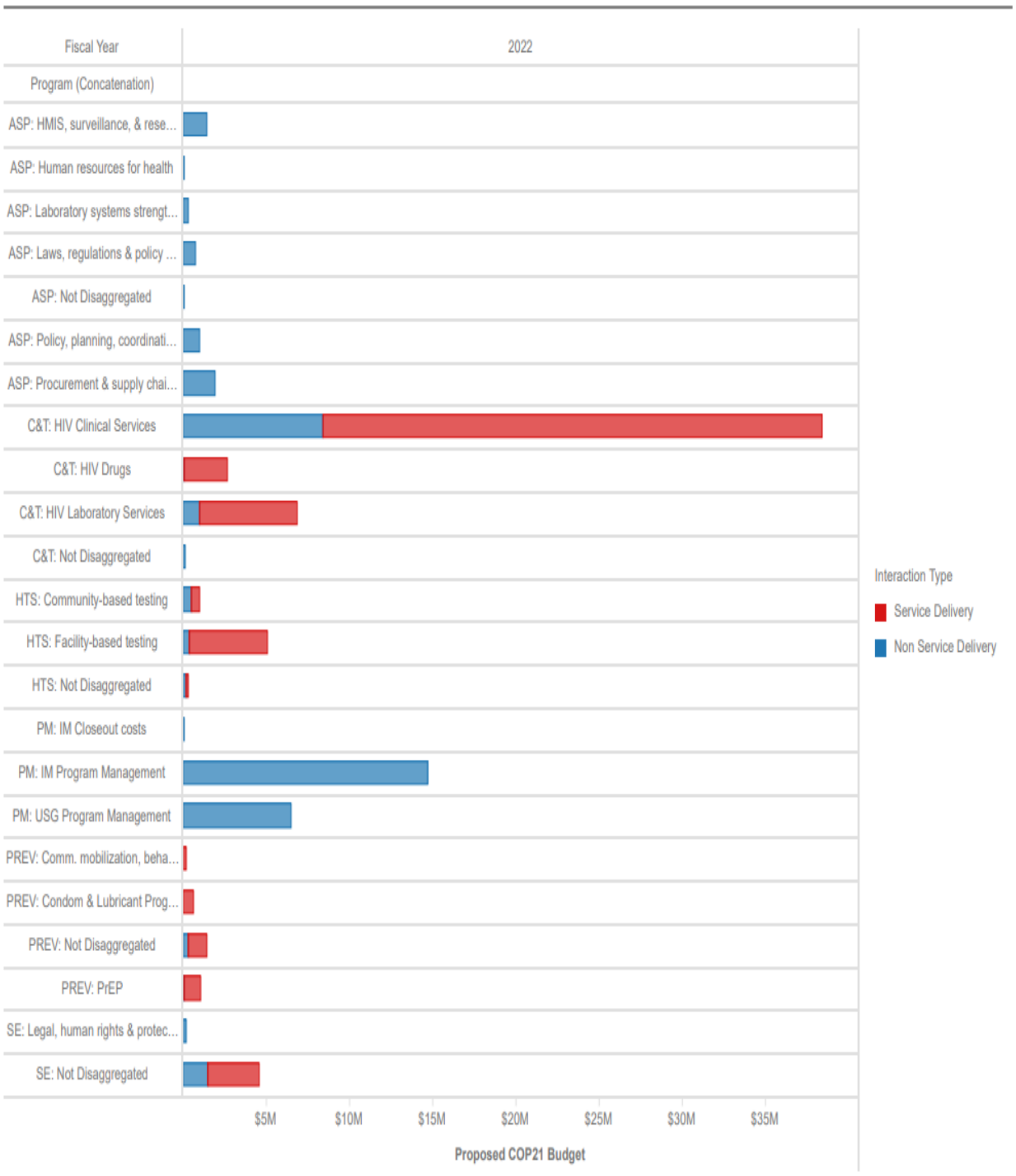


Table B.1.2 COP21 Budget by Program Area

Program	Fiscal Year	2022					
	Metrics	Proposed COP21 Budget			Percent of COP 21 Proposed Budget		
	Subprogram	Non Service Delivery	Service Delivery	Total	Non Service Delivery	Service Delivery	Total
Total		**$39,448,535**	**$49,686,500**	**$89,135,035**	**44.26%**	**55.74%**	**100.00%**
C&T	**Total**	**$9,603,816**	**$38,412,178**	**$48,015,994**	**20.00%**	**80.00%**	**100.00%**
	HIV Clinical Services	$8,425,419	$29,974,170	**$38,399,589**	21.94%	78.06%	**100.00%**
	HIV Drugs	$74,348	$2,575,489	**$2,649,837**	2.81%	97.19%	**100.00%**
	HIV Laboratory Services	$1,001,276	$5,862,519	**$6,863,795**	14.59%	85.41%	**100.00%**
	Not Disaggregated	$102,773		**$102,773**	100.00%		**100.00%**
HTS	**Total**	**$1,041,020**	**$5,298,897**	**$6,339,917**	**16.42%**	**83.58%**	**100.00%**
	Community-based testing	$503,078	$465,154	**$968,232**	51.96%	48.04%	**100.00%**
	Facility-based testing	$355,613	$4,693,695	**$5,049,308**	7.04%	92.96%	**100.00%**
	Not Disaggregated	$182,329	$140,048	**$322,377**	56.56%	43.44%	**100.00%**
PREV	**Total**	**$397,284**	**$2,868,566**	**$3,265,850**	**12.16%**	**87.84%**	**100.00%**
	Comm. mobilization, behavior & norms change		$201,773	**$201,773**		100.00%	**100.00%**
	Condom & Lubricant Programming		$588,000	**$588,000**		100.00%	**100.00%**
	Not Disaggregated	$304,944	$1,105,459	**$1,410,403**	21.62%	78.38%	**100.00%**
	PrEP	$92,340	$973,334	**$1,065,674**	8.66%	91.34%	**100.00%**
SE	**Total**	**$1,662,857**	**$3,106,859**	**$4,769,716**	**34.86%**	**65.14%**	**100.00%**
	Legal, human rights & protection	$204,333		**$204,333**	100.00%		**100.00%**
	Not Disaggregated	$1,458,524	$3,106,859	**$4,565,383**	31.95%	68.05%	**100.00%**
ASP	**Total**	**$5,553,946**		**$5,553,946**	**100.00%**		**100.00%**
	HMIS, surveillance, & research	$1,446,031		**$1,446,031**	100.00%		**100.00%**
	Human resources for health	$43,615		**$43,615**	100.00%		**100.00%**
	Laboratory systems strengthening	$327,500		**$327,500**	100.00%		**100.00%**
	Laws, regulations & policy environment	$746,500		**$746,500**	100.00%		**100.00%**

Program	Fiscal Year	2022					
	Metrics	Proposed COP21 Budget			Percent of COP 21 Proposed Budget		
	Subprogram	Non Service Delivery	Service Delivery	Total	Non Service Delivery	Service Delivery	Total
	Not Disaggregated	$82,536		**$82,536**	100.00%		**100.00%**
	Policy, planning, coordination & management of disease control programs	$1,018,094		**$1,018,094**	100.00%		**100.00%**
	Procurement & supply chain management	$1,889,670		**$1,889,670**	100.00%		**100.00%**
PM	**Total**	**$21,189,612**		**$21,189,612**	**100.00%**		**100.00%**
	IM Closeout costs	$5,000		**$5,000**	100.00%		**100.00%**
	IM Program Management	$14,710,686		**$14,710,686**	100.00%		**100.00%**
	USG Program Management	$6,473,926		**$6,473,926**	100.00%		**100.00%**

Table B.1.3 COP21 Total Planning Level

Fiscal Year	2022	2022	2022
Metrics	Proposed COP21 Budget		
Operating Unit	Applied Pipeline	New	Total
Total	**$2,729,229**	**$86,405,806**	**$89,135,035**
Cameroon	$2,729,229	$86,405,806	**$89,135,035**

Table B.1.4 COP21 Resource Allocation by Program and Beneficiary

Fiscal Year	2022													
Program	C&T		HTS		PREV		SE		ASP		PM		Total	
Beneficiary	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total	Proposed COP21 Budget	Percent to Total
Total	**$48,015,994**	**100%**	**$6,339,917**	**100%**	**$3,265,850**	**100%**	**$4,769,716**	**100%**	**$5,553,946**	**100%**	**$21,189,612**	**100%**	**$89,135,035**	**100%**
Females	$3,332,300	7%											**$3,332,300**	**4%**
Key Pops	$3,628,645	8%	$748,232	12%	$1,538,143	47%	$235,680	5%					**$6,150,700**	**7%**
Males	$3,264,490	7%											**$3,264,490**	**4%**
Non-Targeted Pop	$35,175,213	73%	$5,452,667	86%	$1,284,255	39%	$19,672	0%	$5,511,694	99%	$21,150,031	100%	**$68,593,532**	**77%**
OVC	$1,200,387	2%			$201,773	6%	$4,514,364	95%					**$5,916,524**	**7%**
Priority Pops	$1,414,959	3%	$139,018	2%	$241,679	7%			$42,252	1%	$39,581	0%	**$1,877,489**	**2%**

B.2 Resource Projections

Care and Treatment

The commodities budget is a result of agreement between PEPFAR Cameroon, GRC, and the Global Fund for AIDS, TB, and Malaria during the COP20 Regional Planning Meeting (April 27 – 28, 2021). PEPFAR Cameroon will fund the National TB Control Program to procure INH under CDC's cooperative agreement with the NTCP and VL reagents and the data source for unit prices is the 2021 product e-catalogue produced by USAID's Global Health Supply Chain – Procurement Supply Management (GHSC-PSM) implementing mechanism. Furthermore, global freight estimates, in-country logistics, etc. are based on GHSC-PSM's previous experience procuring commodities for the Cameroon operating unit.

PEPFAR Cameroon will also implement a third-party logistics (3PL) model for direct delivery of VL/EID reagents to VL/EID reference laboratories, and for delivery of ARVs and other HIV from regional warehouses to PEPFAR-supported health facilities. The program considered USAID's experience implementing 3PL with PMI funding to estimate resources required to implement a similar model in the HIV sector.

Costs associated with community-based care and support use historic expenditure data from the key populations and OVC programs to project resource needs for COP21. The KP program's (IM#16743) investment in the care and treatment program area remains steady from COP19 through COP20. The OVC program (IM#16744) has allocated resources within the care and treatment program area based on the estimated resources required to provide services that are specifically focused on HIV-positive pregnant and breastfeeding women, children and adolescents living with HIV within its portfolio. This includes adherence monitoring, age-appropriate disclosure, prevention with positives, comprehensive risk reduction interventions for adolescents living with HIV, etc. Budgeting takes into account the projected number of HIV-positive beneficiaries that will be supported by the program, staff salaries and benefits (including estimating human resource needs based on number of HIV-positive beneficiaries), medical coverage for treatment of noncommunicable and other infectious diseases that are not covered under the user fee policy, transportation support to health facilities, etc. Activities targeting HIV-positive OVC represent 20% of all activities targeting OVC in PEPFAR Cameroon's budget.

HTS

Costs associated with community-based testing reflect the actual costs incurred by the key populations program to identify, test, counsel, and link those diagnosed HIV-positive to treatment. The budget includes costs associated with offering HTS at drop-in centers and hot spots, counselling, and distribution of self-test kits, assisted administration of self-test kits, follow-up of unassisted HIV self-testing, and accompanied referrals to health facilities to access HTS and/or to link those diagnosed HIV-positive to treatment. Key cost inputs include partial to full salaries/stipends of staff providing HTS such as laboratory technicians, counselors, peer leaders, etc. Other inputs include travel and transportation associated with providing onsite supervision and mentoring.

PEPFAR Cameroon will procure Rapid test kits. The data source for unit prices is the 2010 product e-catalogue produced by USAID's Global Health Supply Chain – Procurement Supply Management (GHSC-PSM) implementing mechanism. Global freight estimates, in-country logistics, etc. are based on GHSC-PSM's previous experience procuring commodities for the Cameroon operating unit.

The HTS budget also includes resource projections for implementing the 3PL model for direct delivery of RTKs procured by both PEPFAR and the Global Fund for AIDS, TB, and Malaria to PEPFAR-support health facilities.

SE

Socioeconomic activities target key populations, OVC and their caregivers. KP activities are primarily focused on creating an enabling environment (e.g., sensitizing law enforcement, health personnel, etc.). Key inputs include staff salaries, travel and transportation, and logistics costs associated with organizing meetings or training.

Activities targeting OVC and their caregivers considers the actual cost of providing community-based services to OVC across the country using FY20 Q1 and partial Q2 expenditure data. As

FY20Q1 was primarily focused on expansion and startup at new sites, the program used expenditure data from existing sites to project resource estimates required to implement the program nationwide while also considering specificities of each zone (e.g. target, poverty index; projected household size; distance from household to OVC service provider's location, nearest health facility and other high impact services; significant population of refugees and internally displaced persons; existence of other high impact programs; etc.). Key inputs include personnel salaries and benefits, travel, and transportation, projected direct financial support to beneficiaries (through education grants, transportation, startup capital), legal services, etc. The program also used historical data to project resources required to implement NSD activities including staff salaries and benefits; historic costs of travel for monthly data verification and quality improvement visits; monthly coordination meetings; cost of refresher training, cost associated with placement of Peace Corps volunteers, etc.

PREV

Prevention activities target key and priority populations, particularly adolescents and young people. Resource projections consider historic costs of running a KP drop-in center to provide a range of prevention services to KP and the procurement of PrEP. Primary inputs include site level personnel salaries/stipends and benefits, production of IEC materials, travel, and transportation.

Clinical implementing partners will procure PrEP for key, priority, and at-risk populations in COP21. GHSC-PSM will procure PrEP ($159,089) on behalf of the key populations program. The data source for unit prices is the 2020 product e-catalogue produced by USAID's Global Health Supply Chain – Procurement Supply Management (GHSC-PSM) implementing mechanism. Global freight estimates, in-country logistics, etc. are based on GHSC-PSM's previous experience procuring commodities for the Cameroon operating unit.

Resource projections under the Prevention program area also consider the cost of providing primary prevention services to adolescents and young people through Peace Corps volunteers and the OVC platform. Key cost inputs include costs associated with Peace Corps volunteer placement, staff salaries and benefits at implementing partner and sub-partner level, production of IEC materials, refreshments during group activities, transportation support to beneficiaries, etc.

ASP

The ASP budget supports lab, strategic information, supply chain TA, and interventions focused on achieving universal health coverage.

The supply chain budget leverages other funding from the PMI program to strengthen PEPFAR investments in service delivery strengthening across the country. PMI-funded TA is implemented at national level and in two regions while PEPFAR-funded TA is country-wide. Primary inputs include operational costs associated with placing regional advisors at each warehouse; salaries and benefits of staff supporting central level systems; costs coordination meetings; estimated costs of trainings (including international consultants providing short-term TA); district-led supportive supervision visits to health facilities; and regional travel for general supervision.

Resource projections for ASP activities focused on universal health coverage consider historic expenditures incurred by field support mechanism and local partner. ASP activities focused on supporting GRC (70037) implement its universal health coverage strategy include the following key inputs: costs associated with logistics for in-country trainings, production and dissemination of materials, and costs associated with hiring international consultants to provide short-term TA.

Resource projections for ASP activities focused on supporting community monitoring of health service delivery (IM# 81586) includes the following inputs: salaries and benefits of personnel, stipends to community animators and secret shoppers, costs associated with maintaining/updating mobile app, logistics to organize training of community animators and secret shoppers, logistics to organize sensitization meetings with PLHIV associations, and development of IEC materials. The resource projections have been developed through the co-creation process which essentially involves working directly with the local partner to estimate resource needs.

APPENDIX C – American Rescue Plan Funding

On March 18, 2020, the Cameroonian Prime Minister announced that all land, sea, and air borders would be closed until further notice due to COVID-19. Cameroon's Ministry of Public Health has been responding to the COVID-19 outbreak through active surveillance, screening at points of entry, laboratory testing, and case management at designated isolation and treatment centers. The U.S. Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) are providing technical support to control the outbreak in Cameroon.

The COVID-19 pandemic significantly impacted Cameroon's PEPFAR program, slowing progress toward epidemic control. Through ARPA funding, Cameroon has been allocated $4.275 million USD to repair program injuries, with $772,810 to be expended during Country Operational Plan 20 and $3,502,190 to for Country Operational Plan 21. PEPFAR Cameroon will use the funds for restoration of targeted community testing in the general population, particularly for men and adolescents, retain patients in care, support infection prevention and control in health facilities so patients can safely access services, and reach a viral load coverage and scale up of early infant diagnosis of HIV of 90%. At the community level, infection prevention and control will be implemented for maximal safety for staff and beneficiaries, and enhancement of services to orphans and vulnerable children and key populations. Additionally, ARPA funds will support program repair of the supply chain systems in country as well as surveillance activities.

Category (from list above: eg, I-A for IPC)	**Brief description of how support will be used**	**Brief description of how support will be used**	**Relevant estimated targets (n/a if appropriate)**	**Proposed Agency**	**Proposed IM**	**Requested budget**	**Brief budget justification (Brief description of gap or need)**	**Explanation of how this activity supports and complementary to COVID-19 plans**
I-A1	COVID-19 prevention programming in hotspots and community health staff		n.a.	USAID	CHAMP	$100,000	This is to provide prevention materials including PPE, Communication/community sensitization, vaccination for program staff/beneficiaries.)	- Strategic axis #7: Risk Communication and Community Engagement - Strategic axis #9: Infection Prevention Control

II-A2	Acceleration to reach more beneficiaries at community (case finding, PrEP, HTS_SELF)		n.a.	USAID	CHAMP	$50,000	To reach the AGYW that are away from hospitals because of Covid19 with prevention services in the communities. This should help reach the HIVST and PrEP.	Strategic axis #10: Continuity of Essential health services
II-A2	Strengthen disaggregated data reporting and availability (per regimen) to support MMD uptake and accelerate ART optimization, especially for children. Build capacity of supply chain actors in in reviewing, capturing and validating MMD consumption data		n.a.	USAID		$100,000	Reporting MMD consumption and determining the right quantity in order to adequately replenish stock for multi month scripting requires new tools and techniques for health personnel.	Strategic axis #10: Continuity of Essential health services
II-C1	ASAP to provide intensive support to local partners with in-presence support during Covid19		n.a.	USAID	ASAP	$150,000	This activity aims at reinforcing the capacity of ASAP to provide in-country support to the local partner, given the request of PEPFAR to rapidly transition our programs to local partners for CHAMP and KIDSS as well as the in-coming of the new local partner for Community-Led Monitoring.	Strategic axis #10: Continuity of Essential health services
II-C	OVC home delivery of ART, support to Index case testing, IPC for case workers, beneficiaries and their households, livelihood support to mitigate the needs of covid19 on affected households		n.a.	USAID	CRS	$200,000	Efforts to catch up on some OVC program indicators affected by Covid19	-Strategic axis #10: Continuity of Essential health services -Strategic axis #9: Infection Prevention Control
II-C	Viral load commodity procurement to support the clinical viral load mitigation and repair work being done by clinical partners		n.a	USAID	Chemonics	$150,000	Procurement of viral load commodities.	Strategic axis #10: Continuity of Essential health services

I-A	Support of one-way flow within two large volume ART sites facilities. This will include provision of an outdoor waiting area; reorganizing patient circuit for PLHIV picking up medications to ensure one-way flow; and improvement of consultation rooms ventilation systems.	Two high volume sites (Yaounde and Douala Military Hospitals)		DOD	17365	$40,000	Budget will be used to set up an outdoor tent with chairs for waiting clients, expansion of windows in consultation rooms and provision of standing vans to improve ventilation	Currently, clients at sites which receive above 50 clients a day need to wait in indoor spaces with poor ventilation. Consultation and ART rooms are humid, tiny with little ability for social distancing
I-A	Provision of PPE Materials to health staff at ART dispensation points, and also disinfection materials to clean health unit each time a suspected/confirmed covid-19 client uses the unit or a health staff is infected.	21 sites and over 500 health staff		DOD	17365	$105,000	Budget will be used to procure face masks, hand sanitizers, and handwashing equipment to IPC. Also, cleaning detergents, rainboots and gloves	Considering that HIV services are free, health staff at ART sites do not receive funds from hospital cost recovery revenue for provision of PPE to staff.
I-B	Support logistics of moving military health personnel to covid-19 vaccination posts	500		DOD	17365	$5,000	Transportation cost of military health personnel to the nearest MOH vaccination posts.	Military barracks are usually located at the outskirts and border communities. Moving health staff working at these barracks to the nearest vaccination post will return rural transportation mechanisms.
II-A	Expansion of MMD and DDD to 80% of PLHIV on ART at Military health facilities	8,000 PLHIV		DOD	17365	$25,000	Transportation cost for staff during community ART delivery, expansion of ART storage space at 4 military ART sites	High cost and effort of community ART dispensation currently

								discourages DDD practices. 4 out of 21 supported military sites do not have the storage capacity to keep 3-months of ART hence limiting MMD implementation
II-B	Support the Military Reference Laboratory lab with a backup power supply system and rotatory staff shift system for HIV VL and COVID-19.	NA		DOD	17365	$10,000	Power back up system (Generator and power accumulator device). Meals and safe transportation for staff working overtime especially late nights	Currently, HIV VL testing is slow at the Military Reference lab because of prioritization COVID-19 PCR testing. Also, frequent power cuts mean that its testing capacity is not fully used.
II-C	Return to Care (RTC) Campaign	4		DOD	17365	$10,000	Airtime to call defaulters and lost to follow up clients (LTFU), costs of home visits by health staff to trace LTFU clients without phone contacts	Retention rates have dropped with covid-19 and pause on MMD in-country due to stock tensions. With increase stock expected from May 2021, return to care campaigns will be organized from Jun e 2021 along with MMD dispensation

II-C	Acceleration of DSD implementation, targeted community testing, viral load, access to services displaced from health facilities, basic supplies, repair of health facilities to ensure patient privacy, expanded tele -mentoring and DAMA. The proposal aims to expand community activities by increasing facility led outreach testing services in new settings; which will need additional APS, training, and mentoring, material for targeted testing (also providing BP, glucose machines); then linking new cases to treatment, and ensuring retention (purchase of equipment for stethoscopes, length measurement board for kids, examination tables, chairs), and viral load services (small ancillary equipment such as centrifuges). At the facility level, the impact of COVID-19 will be mitigated through enhanced IPC (includes use of face mask, hand washing), fast tracking and triage of patients during visits to reduce time spent at HFs, upgrading testing infrastructure to ensure confidentiality for counselling and testing (consultation boxes). Will also scale up services at satellite sites (for CAD and reduce congestion at HFs and hence spread of COVID), and enhancement of liaison with CBOs			CDC	81580	$1,018,000	Estimated costs per activity: $200,000 for targeted community-based testing; $270,000 for basic medical supplies; $200,000 for health facility repairs to ensure privacy and confidentiality; $300,000 for tele -mentoring and DAMA expansion; $48,000 for trainings. Zone 4 was heavily impacted by COVID-19 with numerous health facilities closed, health workers became ill, and patients reduced attendance. Testing, treatment, and viral load objectives were heavily impacted by reduced service availability. Additionally, since their deployment in the new region, the IP was still rolling out activities, and because of COVID-19, was not able to fully complete activities related to basic service provision and ensuring standards of care.	These activities are well aligned with the government overall strategy to mitigate the impact of COVID-19, to ensure continuity of all health services. At health facilities, in the Northern Zone, HIV/TB and COVID-19 committees are being set up to spearhead integrated efforts of HIV/TB and COVID-19 infection prevention and control.

	The proposal will also cover telemonitoring and tele mentoring infrastructure, through the establishment of hubs and spokes with video conferencing (zoom) equipment. This will also require power solutions to support equipment and infrastructure. Expansion of EMR system/equipment to tier 4 sites, including support for data clerks These activities will bridge the gap in unmet program needs and better position Cameroon to achieve epidemic control by the end of COP 21.							
II-C	Acceleration of DSD implementation, targeted community testing, viral load, access to services displaced from health facilities, basic supplies, repair of health facilities to ensure patient privacy, expanded tele -mentoring and DAMA. Case identification activities mainly targeted community activities, mainly to find men and adolescents. Retention activities, especially because of COVID-19, many patients are reluctant to come to the facility and this has led to many			CDC	81581	$812,000	1. Case identification activities mainly targeted community activities: $250K 2. Retention activities: $387K 3. Data systems: $175K Zone 3 includes the urban center of Yaounde, one of the epicenters for the covid-19 pandemic in Cameroon. Additionally, zone 3 partner experienced infections and outbreaks amongst staff and	These activities are well aligned with the government overall strategy to mitigate the impact of COVID-19, to ensure continuity of all health services.

	missed appointments - to mitigate this we are doing a lot of community dispensations and obviously a lot of tracking of those that have missed their appointments. We are also taking advantage of these activities to conduct viral load activities particularly sample collections in communities. To do this, we have had to increase the number of community agents and APS and we have had to buy more personal protective equipment to ensure the COVID-19 measures are adhered to. Strengthening data systems to ensure all these community activities are captured. The proposal will also cover telemonitoring and tele mentoring infrastructure, through the establishment of hubs and spokes with video conferencing (zoom) equipment. This will also require power solutions to support equipment and infrastructure. Expansion of EMR system in the East region including support for data clerks These activities will be focused around the 19 facilities in the East and 53 facilities in the Center.						offices were closed due to illness and quarantine requirements. COVID-19 negative impact on testing also resulted in significant negative impact on the rest of the clinical cascade	

II-B	Enhanced surveillance through recency testing will help identify geographic locations and/or demographic groups most associated with recent infection, and implement strategies for targeted testing and to reduce transmission Ultimately, the generated surveillance data will be used to inform HIV program (e.g., prioritization of HIV prevention interventions) and monitor progress towards epidemic control.			CDC	160097	$400,000	Recency specific reagents and supplies: $250K Data collection and management: system: $50K Logistics: $50K Training and mentoring: $50K Identify individuals with new infections so that treatment can be commenced early and break the chain of HIV transmission. Due to COVID-19, there was a decrease in case finding activities. To accelerate and fast track case finding to catch up with the gap, we will be using surveillance for recent infections to guide prevention strategies and enhance ICT, including partner notification.	These activities are well aligned with the government overall strategy to mitigate the impact of COVID-19, to ensure continuity of all health services.
II-C	To reach VL coverage of 90% and EID scale-up, additional funding support to accelerate lab activities is urgently needed additional funds are being requested to fill the gap in sample transport, timely result transmission, equipment repair.			CDC	18230	$500,000	The clinical laboratory services have been seriously impacted by COVID-19 as the VL laboratories were designated for COVID-19 testing; some laboratory supplies were also diverted to support the COVID-19 testing. This funding will support QA activities (HIV rapid testing, VL, EID), and sample transport across all 10 regions, for the clinical and KP programs: $300K VL and EID scale up: $100K	These activities are well aligned with the government overall strategy to mitigate the impact of COVID-19, to ensure continuity of all health services.

							Operationalization of the SMS system, connectivity for result transmission: $50K Equipment repair: $50K	
II-C	Acceleration of DSD implementation, viral load, access to services displaced from health facilities Acceleration of DSD implementation, viral load and EID Targeted community testing COVID-19 negative impact on testing also resulted in significant negative impact on the rest of the clinical cascade, boost community testing, case identification and linkage to treatment bridge the gap in unmet program needs and better position Cameroon to achieve epidemic control by the end of COP 21.			CDC	70031	$300,000	Estimated cost per activity Case identification activities mainly targeted community activities: $75K Retention activities: 150K Data systems: $75K Zone 2 was heavily impacted by COVID-19 with numerous health facilities closed, health workers became ill, and patients reduced attendance. Testing, treatment and viral load objectives were heavily impacted by reduced service availability.	These activities, designed to restore access to services at health facilities, are well aligned with the government overall strategy to mitigate the impact of COVID-19, to ensure continuity of all health services.
II-C	Acceleration of DSD implementation, viral load, access to services displaced from health facilities Acceleration of DSD implementation, viral load and EID Targeted community testing COVID-19 negative impact on testing also resulted in significant			CDC	18667	$300,000	Estimated cost per activity Case identification activities mainly targeted community activities: $75K Retention activities: 150K	These activities, designed to restore access to services at health facilities, are well aligned with the government overall strategy to mitigate the impact of

	negative impact on the rest of the clinical cascade, boost community testing, case identification and linkage to treatment bridge the gap in unmet program needs and better position Cameroon to achieve epidemic control by the end of COP 21						Data systems: $75K Zone 1 was heavily impacted by COVID-19 with numerous health facilities closed, health workers became ill, and patients reduced attendance. Testing, treatment and viral load objectives were heavily impacted by reduced service availability.	COVID-19, to ensure continuity of all health services.
	Total Budget					**$4,275,000**		

APPENDIX D– Minimum Program Requirements

This should be addressed in narrative in the sections above however in this section succinctly note if the program is meeting or not meeting the minimum program requirement. The minimum requirements for continued PEPFAR support include:

Care and Treatment	Status
1. Adoption and implementation of Test and Start, with demonstrable access across all age, sex, and risk groups, and with direct and immediate (>95%) linkage of clients from testing to treatment across age, sex, and risk groups.	Linkage rates declined overall in COP19, driven in part by challenges in the KP handshake model (which may be resolved with data quality improvement) and challenges in Zone 3 and 4 and with young adult men. Coordination and data reporting practices between KP and clinical partners in the handshake model must be improved during COP21. If the KP partner initiates patients on treatment, they must receive TX_CURR and TX_NEW targets. Improvements to immediate test and start must be implemented at clinical partners in Zones 3 and 4 and specific strategies, like MenStar, must be employed to address the particularly weak linkage numbers among young adult men, especially ages 15-34.
2. Rapid optimization of ART by offering TLD to all PLHIV weighing ≥30 kg (including adolescents and women of childbearing potential), transition to other DTG-based regimens for children who are ≥4 weeks of age and weigh ≥3 kg, and removal of all NVP- and EFV-based ART regimens.	All policy barriers to transitioning children, adolescents and women of childbearing potential to TLD must be removed, and TLD transition must rapidly scale up in COP21 such that TLD is offered as the first line treatment for all PLHIV. Any remaining NVP-based regimens for children must be completely eliminated now.
3. Adoption and implementation of differentiated service delivery models for all clients with HIV, including six-month multi-month dispensing (MMD), decentralized drug distribution (DDD), and services designed to improve identification and ART coverage and continuity for different demographic and risk groups.	Six-month dispensation must be scaled rapidly and policy requiring undetectable viral loads in order to be eligible for MMD must also be removed. 6 month and 3-month dispensation must be rapidly scaled up at all clinical and military sites. DDD must also be scaled up in Zones 2-4 where it is currently extremely limited.
4. All eligible PLHIV, including children and adolescents, should complete TB preventive treatment (TPT) by the end of COP21, and cotrimoxazole, where indicated, must be fully integrated into the HIV clinical care package at no cost to the patient.	TB_PREV target achievement was perhaps the weakest result in all of COP19 in Cameroon, at 6% achievement for the year. Though this was largely due to INH stock not being available at sites, this nevertheless represents a failure of the program to meet this minimum program requirement. In addition, for those patients who were initiated on TPT, completion rates were quite low, at 61% for adults in Q4 of FY20 and 49% for pediatrics. TPT must scale rapidly in COP21, completion rates must improve and TB screening

	rates (at 84% of PLHIV) must also improve, especially in the South and Littoral.
5. Completion of Diagnostic Network Optimization activities for VL/EID, TB, and other coinfections, and ongoing monitoring to ensure reductions in morbidity and mortality across age, sex, and risk groups, including 100% access to EID and annual viral load testing and results delivered to caregiver within 4 weeks.	PEPFAR-led Diagnostic Network Optimization exercises must be prioritized and accelerated in COP21, with a priority placed on network optimization of laboratory-based approaches for Viral Load and EID. Opportunities may exist for TB as well as other coinfections, and the PEPFAR team should engage with all relevant stakeholders to explore these, while ensuring the optimization around VL/EID is taking place. The PEPFAR team should plan to report progress on this work during COP21 POARTs, including progress on assessing the current network structure, laboratory capacity, and testing coverage and efficiency by laboratory catchment area.
Case Finding	
1. Scale-up of index testing and self-testing, ensuring consent procedures and confidentiality are protected and assessment of intimate partner violence (IPV) is established. All children under age 19 with an HIV positive biological parent should be offered testing for HIV.	Continue to scale index testing, especially in Zones 2-4 to increase proportion of positives coming from index testing at all partners. Continue to prioritize training of HCW and innovative approaches like anonymous contacting and KP self-testing. Continue to emphasize confidentiality and safety in the implementation of index testing.
Prevention and OVC	
1. Direct and immediate assessment for and offer of prevention services, including pre-exposure prophylaxis (PrEP), to HIV-negative clients found through testing in populations at elevated risk of HIV acquisition (PBFW and AGYW in high HIV-burden areas, high-risk HIV-negative partners of index cases, key populations and adult men engaged in high-risk sex practices)	While the limited COP19 PrEP roll out showed positive progress, we look to COP20 to ensure that PrEP is reaching all populations at elevated risk of HIV. Current MOH policy limiting PrEP eligibility to those 21 and over should be revised so that PrEP is made available to all desired populations, including AGYW.
2. Alignment of OVC packages of services and enrollment to provide comprehensive prevention and treatment services to OVC ages 0-17, with particular focus on 1) actively facilitating testing for all children at risk of HIV infection, 2) facilitating linkage to treatment and providing support and case management for vulnerable children and adolescents living with HIV, 3) reducing risk for adolescent girls in high HIV-burden areas and for 9-14 year-old girls and boys in regard to primary prevention of sexual violence and HIV.	OVC_SERV results have been positive, however, the OVC program in COP19 did not effectively wraparound the clinical program to deliver strong PLHIV results across the cascade. COP21 must be about refocusing the OVC program to improve testing, treatment, MMD, TB, and viral load suppression outcomes for pediatrics.

Policy & Public Health Systems Support	
1. Elimination of all formal and informal user fees in the public sector for access to all direct HIV services and medications, and related services, such as ANC, TB, cervical cancer, PrEP and routine clinical services affecting access to HIV testing and treatment and prevention.	User fee elimination, which went into effect in COP19, has been mostly successful, however some work remains to achieve complete elimination of both formal and informal user fees at all sites for all HIV and related services. Community-led monitoring of this implementation should continue.
2. OUs assure program and site standards are met by integrating effective quality assurance and Continuous Quality Improvement (CQI) practices into site and program management. CQI is supported by IP work plans, Agency agreements, and national policy.	Site-level CQI practices have been active in COP18 and COP19 must continue to Prep ensure proper data reporting, and patient tracking. CQI approaches must also be implemented in commodities data reporting, ordering and fulfillment practices and coordination between clinical partners and the SC partner.
3. Evidence of treatment and viral load literacy activities supported by Ministries of Health, National AIDS Councils and other host country leadership offices with the general population and health care providers regarding U=U and other updated HIV messaging to reduce stigma and encourage HIV treatment and prevention.	These activities should expand in COP21. U=U messaging has been rolled out but must continue to be emphasized by KP, OVC and clinical partners.
4. Clear evidence of agency progress toward local, indigenous partner direct funding.	USAID, DOD and CDC Cameroon must all dramatically improve in the transition to local partners. All three agencies are very far from 70% target at the agency level and must demonstrate progress in COP21. USAID's transition to local partners for KP and OVC services must be complete by COP21.
5. Evidence of host government assuming greater responsibility of the HIV response including demonstrable evidence of year after year increased resources expended	The Government of Cameroon showed a strong commitment in eliminating user fees; however, they have not met their counterpart financing at Global Fund, which has resulted in wide-spread stockouts and interruption of HIV services to patients. PEPFAR looks to the Government of Cameroon to be a financial partner in the HIV epidemic response and to commit to meeting all of their financial commitments in COP21.
6. Monitoring and reporting of morbidity and mortality outcomes including infectious and non-infectious morbidity.	Monitoring that began in COP18 should continue to scale with systems to monitor morbidity and mortality prioritized.
7. Scale-up of case surveillance and unique identifiers for patients across all sites.	Health information systems are not currently in place in to enable case- based surveillance or implement unique identifiers for the general treatment population.

PEPFAR Cameroon expects to fully implement retention-related PEPFAR Minimum Program Requirements at every PEPFAR-supported site, as these have a known impact on continuity of ART. Implementing partners will be assessed on site level implementation of the below four elements:

Site Level Continuity-Related Performance Standards

Direct and immediate (>95%) linkage of clients from testing to treatment across age, sex, and risk groups.
Rapid optimization of ART by offering TLD to all PLHIV weighing ≥30 kg (including adolescents and women of childbearing potential), transition to other DTG-based regimens for children who are ≥4 weeks of age and weigh ≥3 kg, and removal of all NVP- and EFV-based ART regimens.
Elimination of all formal and informal user fees affecting access to HIV testing and treatment and prevention in the public sector for access to all direct HIV services and medications, and related services, such as ANC, TB, Cotrimoxazole, cervical cancer, PrEP and routine clinical services.
Adoption and implementation of differentiated service delivery and MMD models for ART clients that provide choices between facility and community ART refill pick-up location and between individual and group ART refill models. All models should consider a family-based approach and offer patients the opportunity to get 6 months of medication at a time without requiring repeat appointments or visits. with alignment with other family members' visit schedule, as feasible.