

Regional Operational Plan 2019

Caribbean Regional Program

Strategic Direction Summary



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1.0 Goal Statement

The goal of the PEPFAR Caribbean Regional Program is to support the governments of Barbados, Guyana, Jamaica, and Trinidad and Tobago in their respective pursuits of HIV epidemic control. PEPFAR's technical assistance will ensure robust national HIV/AIDS programs based on international best practices and policies, while reinforcing sustainability and country ownership.

The priority country is Jamaica, where an estimated 39,000 people are living with HIV (PLHIV). At present, an estimated 57 percent of PLHIV in Jamaica know their status. Of those, an estimated 58 percent are on life-saving antiretroviral treatment (ART), and an estimated 57 percent have achieved viral suppression. This signals a crisis, in terms of both individual patient outcomes and national public health. The current rates of diagnosis, ART initiation, and achievement of viral suppression will not facilitate epidemic control over the next decade. For the country to reach the UNAIDS 90-90-90 targets by 2020, and subsequently, 95-95-95 by 2025, all stakeholders must intensify their efforts and transform the response.

To reach epidemic control, PEPFAR and partners will aggressively address key barriers to linkage to care, treatment initiation, retention, and viral suppression. The main objectives are: 1) finding the undiagnosed persons; 2) initiating on antiretroviral therapy (ART) those diagnosed but not on treatment; and 3) achieving viral suppression for those on ART. International best practices and policies based on WHO recommendations will be fast-tracked in order to accelerate progress. Disaggregated epidemiological and program data, combined with key survey results, will serve as the driver for targeted interventions. The response will become more nimble, prioritizing quick, evidence-based course adjustments.

Across the region, PEPFAR aims to implement structural and client-centered interventions to improve patient linkage, recovery, and retention, thereby reducing attrition due to lost-to-follow-up. PEPFAR will address disparities in uptake of services and clinical outcomes of HIV positive men through implementation of male-centered approaches. PEPFAR will advance strategies to improve medication adherence in order to sustain improvements in ART coverage and increase viral suppression. Finally, PEPFAR will prioritize systems improvement through local adaptation of best practices and revision of procedures that govern prevention, care and treatment service delivery; supply chain management; laboratory services; and data management.

2.0 Epidemic, Response, and Program Context

2.1 Regional Statistics, Disease Burden, and Epidemic Profile:

HIV prevalence in the Caribbean Region is estimated to be 1.1 percent of the adult population (UNAIDS, 2014). Of the 5.2 million people in the PEPFAR-supported countries, approximately 60,900 are HIV positive (Figure 1). In the general population, HIV prevalence ranges from 1.1 percent in Trinidad to 1.8 percent in Jamaica. Jamaica has the greatest burden, representing 64 percent of PLHIV among PEPFAR's focus countries. In 2017, Jamaica was among four Caribbean countries where almost 90% of new infections and 87% of deaths in the Caribbean occurred (UNAIDS 2018).

At the heart of the epidemic across the region is pervasive stigma and discrimination (S&D), which remains a principal barrier to accessing prevention, care, and treatment services for all PLHIV and particularly key populations (KPs) living with HIV (KPLHIV). Other socio-cultural realities impede epidemic control including gender inequities, gender-based violence, multiple concurrent partnerships, and intergenerational sex. Additional factors that affect KPs are high cross-border mobility and an inherent tension between the role of the church in setting social norms and cultural attitudes and practices of sexual expression. In some countries in the region, high levels of poverty, unemployment, and under-employment, especially among youth and women, also impact vulnerability to HIV. These factors contribute to the marginalization of KPs, often driving them “underground” and making it harder to access HIV interventions and services.

Numbers of newly infected individuals per annum are estimated to be 1,900 in Jamaica, less than 500 in Trinidad and Tobago and Guyana each, and less than 200 in Barbados (UNAIDS 2016 and 2017 Country Factsheets). In Guyana, the highest burden of HIV is in Region 4 (PEPFAR's focus region), which accounts for 73% of the reported HIV cases (MOH, 2014) and 79% of the persons currently on treatment (MOH, 2016).

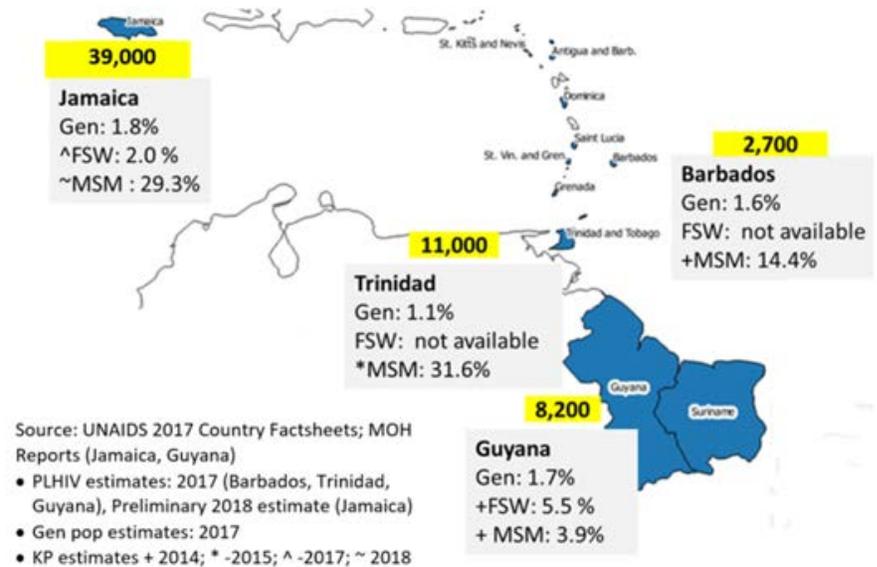


Figure 1: HIV Prevalence and Burden in Countries Supported by the PEPFAR Caribbean Regional Program

Regional estimates indicate that 64% of PLHIV in the Caribbean know their status (PAHO and UNAIDS 2017). The proportion of PLHIV diagnosed is estimated to be 57% in Jamaica (Preliminary 2019 Spectrum estimates), 87% in Guyana (MOH, 2018), 87% in Barbados (MOH 2017) and 79% in Trinidad and Tobago (MOH 2017) (Figure 2). Late diagnosis of HIV infection continues to be a problem, as evidence shows approximately 33% of PLHIV receive a concurrent HIV and AIDS diagnosis (PAHO and UNAIDS, 2017). There is additional need to strengthen early linkage to, and retention in, treatment. Antiretroviral Treatment (ART) coverage among PLHIV varies by country, with 33% percent in Jamaica, 68% in Guyana, 62% in Trinidad & Tobago, and 56% in Barbados. All countries have adopted Treat All. However, barriers to success are still considerable, including the increased costs of patient care, staffing shortages, weak and/or ill-prepared supply chain and logistics systems, and insufficient data collection systems.

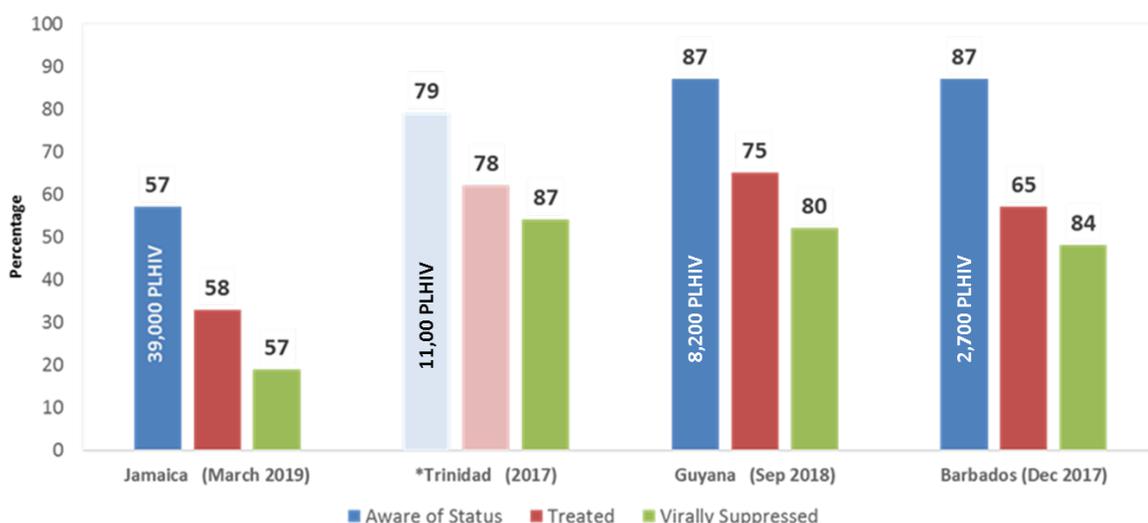


Figure 2: Progress Toward the UNAIDS Targets

New HIV infections are estimated to have declined by 18% between 2010-2017, and AIDS-related deaths have declined by 23% over the same period (UNAIDS 2018). Sexual intercourse is the predominant mode of transmission in the region. Men who have sex with men (MSM) accounted for nearly a quarter of new infections in the Caribbean in 2017. Efforts to reach men and boys, and particularly MSM, are constrained by health services insufficiently tailored to their needs, limited community-based services, and S&D. In total, KPs and their sexual partners represented two-thirds of new infections in the region (UNAIDS 2018)

Data suggest men are disproportionately affected by the epidemic; higher numbers and proportions of men test positive for HIV, and higher proportions die. Testing coverage, early initiation, and treatment rates are higher among females. KP-specific data are limited but suggest lower proportions of MSM and female sex workers (FSWs) receive treatment and achieve viral suppression.

Strengthened health systems, including improved laboratory capacity, have contributed to the ability of governments to offer comprehensive care and treatment for PLHIV. Achieving epidemic control in the Caribbean, and particularly in Jamaica, will require tailored services to reach underserved populations including gay, bisexual, MSM, and MSM who have sex with women (MSMW).

The CRP focus countries are not presently on track to achieve the third 90, with viral suppression among all PLHIV at 21% in Jamaica, 53% in Trinidad, 55% in Guyana, and 47% in Barbados. The viral load (VL) testing coverage was approximately 85% in Jamaica, 60% in Trinidad, 82% in Guyana, and 95% in Barbados (PEPFAR MER 2018 data). Among patients who received a VL test, 51% percent were virally suppressed in Jamaica (MOH 2017), 80% in Guyana (MOH 2018), and 76% in Barbados (MOH 2017). Several factors could be responsible for low levels of viral suppression including poor medication adherence and the presence of HIV drug resistance (HIVDR). Different adherence-support models are being tested to better understand and address deficiencies and ensure improved clinical outcomes of patients on ART. Systems-level gaps, including equipment failures, reagent stock-outs, and human-resource shortages, also contribute to low VL coverage rates.

2.2 Investment Profile (Jamaica)

As donor resources decline, the Government of Jamaica continues to take on more of the financing for the national HIV response. The Government of Jamaica currently funds the majority of the response, with PEPFAR and Global Fund as contributing donors. In FY 2019, more of the overall resources were spent on the first 90, compared with the second and third 90s (Figure 3).

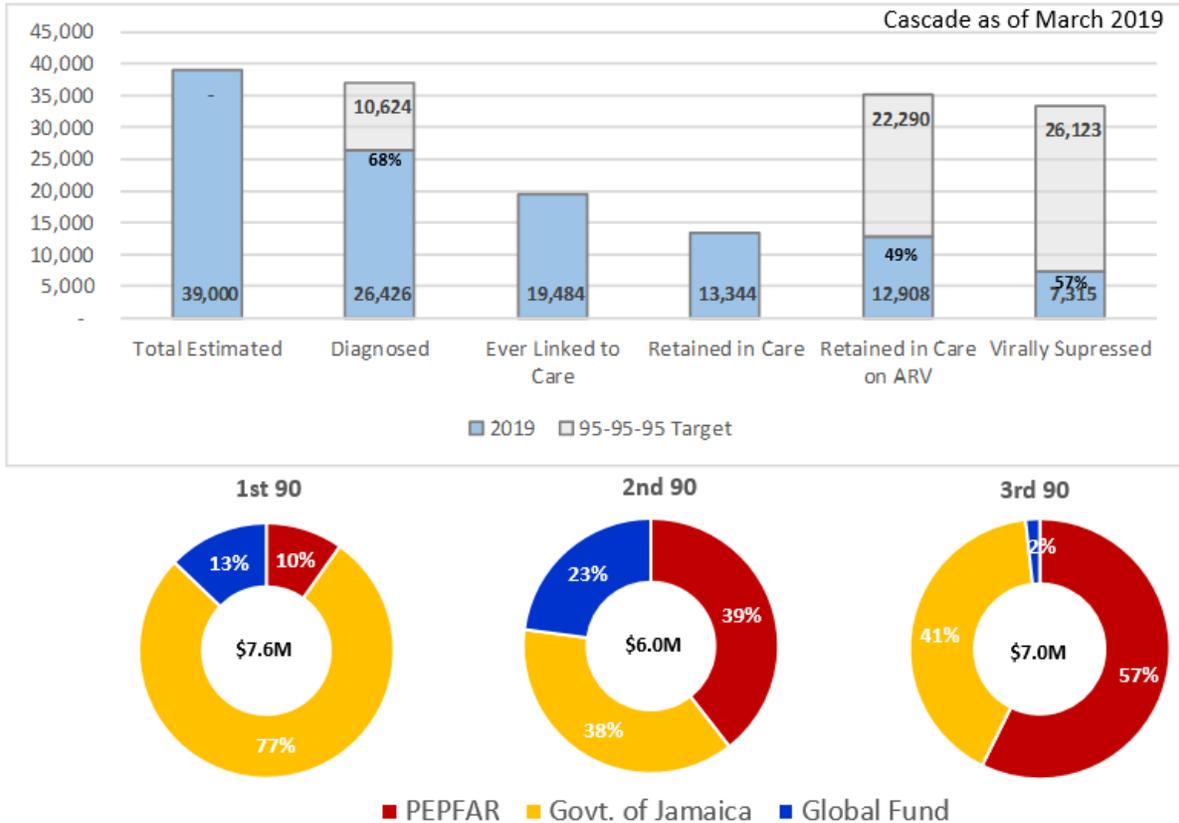


Figure 3: Estimated FY19 Spending in Jamaica by 90-90-90 Pillars
 (Sources: Jamaica Ministry of Finance, Government of Jamaica 2018 National AIDS Spending Assessment Report, Global Fund 2019 budget, and PEPFAR ROP 18 CRP budget)

Table 1. Annual Investment Profile by Program Area¹ (Jamaica)					
Program Area	Total Expenditure	% PEPFAR	% GF	% GoJ	% Other
Clinical care, treatment and support	5,220,919.64	9%	48%	43%	0
Community-based care	532,063.61	72%		28%	0
PMTCT	263,187.83	0%		100%	0
HTC	1,042,964.67	68%		32%	0
VMMC	-	0%		0%	0
Priority population prevention	223,422.65	100%		0%	0
Key population prevention	3,059,015.10	45%	53%	2%	0
OVC	-	0%		0%	0
Laboratory	-	0%			0
SI, Surveys and Surveillance	395,956.34	9%	60%	31%	0
Programme Management	1,726,275.51	16%	38%	46%	0
HSS	539,696.47	61%	-	39%	0
Total - Allocated	13,003,501.82	29	39	32	0
Monthly Financial Reports, Jan - Dec 2018					

Table 2. Procurement Profile for Key Commodities (Jamaica)					
Commodity Category	Total Expenditure	% PEPFAR	% GF	% GOJ	% Other
ARVs	1,260,178.21	0%	73%	27%	0
Rapid test kits	487,586.44	3%	50%	46%	0
Other drugs	19,064.15	0%	100%	0%	0
Lab reagents	710,111.59	0%	53%	47%	0
Condoms	279,447.00	0%	100%	0%	0
VMMC kits	-	0%	-	0%	0
Other commodities	2,926.11	0%	-	100%	0
Total	2,759,313.50	1	67	33	0
Monthly Financial Reports, Jan - Dec 2018					

2.3 Regional Sustainability Profile Update

Sustainability is a critical element of PEPFAR's approach to reaching and maintaining epidemic control, so that the gains made over the years are not lost. To this end, it is vital that all stakeholders dedicate time, energy, and resources toward program sustainability.

In the region, governments continue to play an active role in increasing their investments in the health system and for HIV programming in particular, to offset declining donor funding. In 2019, Government of Jamaica contributed 56% of total funding towards HIV programming. In 2015, the Government of Trinidad and Tobago contributed 90% to its national HIV programming, while the Government of Barbados contributed 89%. The Government of Guyana contributed 81% to the country's total HIV programming expenditure in 2016.

All of the countries within the PEPFAR Caribbean region have completed a sustainability analysis using the PEPFAR Sustainability Index Dashboard (SID) tool. The SID for Trinidad and Tobago was completed in FY 16, with a review in FY 18. The SIDs for Barbados and Guyana were completed in FY 17, followed by the SID for Jamaica in FY 19. With a focus on increasing domestic funding for HIV/AIDS programs, health accounts activities were also conducted in Barbados, Trinidad & Tobago, and Guyana. In Jamaica, a National AIDS Spending Assessment 2015–2017 was conducted in 2018. These analyses provided countries with data to support decisions that ensure value for money and efficient and effective allocation of limited resources.

Compared to the other focus countries, Guyana has advanced significantly in its sustainability efforts. Guyana benefited from a civil society organization (CSO) costing analysis, a review of the Legal and Regulatory Framework for Social Contracting in Guyana, as well as a costed national sustainability plan. Recently, the government agreed to contract the services of CSOs in Region 4 to deliver KP prevention services; funding arrangements are being finalized.

Best practices in social contracting in Guyana will be replicated in the other countries. For example, discussions have started with the Ministry of Health in Trinidad and Tobago to provide subventions to CSOs to deliver HIV services to KPs. These activities are critical as PEPFAR transitions out of the Caribbean region, especially with regard to sustaining the HIV response for vulnerable and marginalized groups.

For ROP 19, the focus for the Caribbean region will be domestic resource mobilization for the continued engagement of CSOs as partners, in both decision-making and service delivery. This is a critical factor in a sustainable and effective national HIV response. Access for KPs and PLHIV to services provided by CSOs with funding from the national budget will be a priority for PEPFAR technical assistance. Utilizing regional platforms such as PANCAP, best practices in social contracting in Guyana and government subventions in Trinidad and Tobago can be shared and adopted across the region.

2.4 Stakeholder Engagement

The Caribbean Region Program team actively engages external stakeholders, including representatives of partner governments, CSOs, and multilateral organizations. This engagement is designed to be ongoing and includes POART briefings as well as ROP development and implementation. The PEPFAR Coordinator's Office (PCO) is the designated point of contact for ongoing interagency engagement. The PCO coordinates communications and meetings and provides opportunities for civil society and other partners to actively engage with the program. In addition, PEPFAR agencies engage closely with respective implementing partners to ensure optimal program results.

Engagement opportunities include the following:

1. **ROP planning meetings:** Host governments, CSOs, and other partners are invited to participate in consultations for the regional program as well as in discussions for each respective country. During these meetings, PEPFAR's programming focus is shared and recommendations for PEPFAR activities are solicited. Selected stakeholders representing partner governments and NGOs are also included in in-person meetings in Washington DC to formulate an inclusive strategy document.
2. **Quarterly POART reporting:** PEPFAR shares quarterly reports with external partners and engages them through conference calls or in-person meetings. Data results, feedback from the Office of the Global AIDS Coordinator, and program updates are discussed. These calls and meetings allow for discussions on best practices and strategies to overcome shared challenges.
3. **Technical meetings:** Where appropriate, PEPFAR employs technical working groups to engage civil society and other partners in consultations aimed at gathering inputs specific to the technical direction and geographic focus of the overall program, as well as use the engagement as a forum for training and knowledge sharing.
4. **Multilateral partner meetings:** PEPFAR advocates for and supports the attendance of local partners, including CSO representatives, at higher level meetings whether coordinated or funded by multilateral partners or PEPFAR, including UNAIDS, the Global Fund, or the Coordinating Country Mechanism. In the region, PEPFAR liaises closely with multilateral partners to ensure an efficient division of responsibilities and agreement on strategic priorities.
5. **Regional and other partner meetings:** PEPFAR collaborates with regional partners like the Pan-Caribbean Partnership Against HIV/AIDS (PANCAP) and PAHO in the development, implementation, and reporting of the HIV activities and learning programs.

3.0 Situational Analysis and Program Activities for Epidemic Control

3.1: JAMAICA

3.1.1: National statistics, disease burden and country profile

HIV prevalence among the general population in Jamaica is 1.8%. The epidemic is concentrated in certain key populations, namely men who have sex with men, with a prevalence of 29.3 percent; and women of trans experience, with a prevalence rate of 51 percent. HIV prevalence among female sex workers (FSW) is similar to the general population prevalence at 2.0 percent. The incidence to mortality ratio is 1.22 (Figure 4).

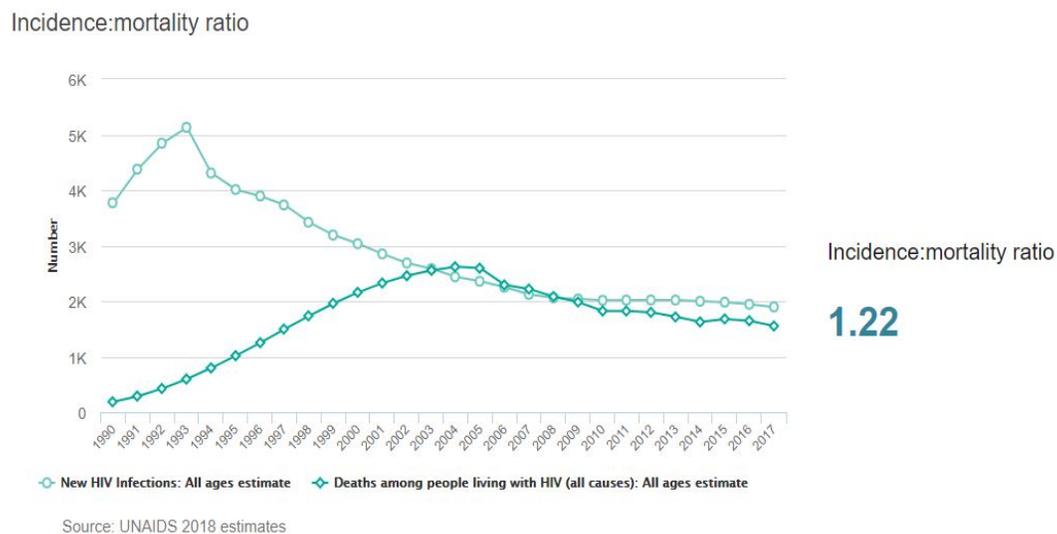


Figure 4: Trend of New Infections and Deaths among HIV Population in Jamaica

Preliminary 2019 UNAIDS Spectrum estimates indicate an increase in the PLHIV population to 39,000 from the 2018 estimate of 34,000. At the end of March 2019, 26,426 PLHIV were estimated to have been diagnosed; 12,908 were on ART; and 7,315 of those on ART (57%) were virally suppressed. Using the estimate of 39,000 total PLHIV, progress against the 90-90-90 targets would become: 68-49-57.

Data-quality activities are ongoing to improve the completeness of national surveillance and program monitoring data in Jamaica. A recently concluded data sweep to improve data quality identified duplicated records, unreported risk factor data, and unreported viral suppression outcomes. Preliminary results from a recent return to care (RTC) campaign at PEPFAR-supported HIV treatment sites indicated that 1,016 (20%) of the 5,189 resolved cases were unreported deaths.

This suggests a larger data-quality issue of unreported deaths that could overestimate data for the first 90. Therefore, the RTC campaign results were used to revise the estimated number of PLHIV diagnosed and still alive. This reduced the March 2019 estimate from 26,426 to 22,226¹ (Figure 1, second cascade), resulting in a reduction of achievement for the first 90 to 57% based on the recent estimates of 39,000 PLHIV. (Figure 5, third cascade)

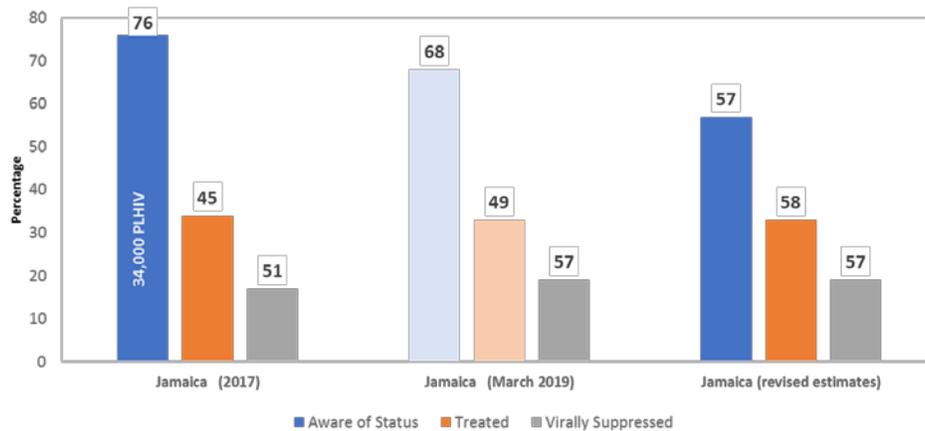


Figure 5: Progress Toward the 90-90-90 Targets in Jamaica

In quantifying the gaps in the cascade based on the estimated 39,000 PLHIV, there are 16,774 PLHIV who are undiagnosed. After accounting for unreported deaths amongst diagnosed PLHIV, approximately 9,392 are diagnosed but not on ART. Of the 12,903 individuals on ART, 5,563 are not virally suppressed. Even without the revision to the estimated number of PLHIV, significant gaps in ART coverage and viral suppression exist. All partners will work assiduously to resolve these gaps and to ensure that strategies and resources are aligned to serve the populations and groups most in need, with a major rethinking of the overall strategy for the national response.

Increasing the number of diagnoses is a critical first step in improving the full clinical cascade. Closing the gap of over 16,000 undiagnosed individuals will require a rapid scale-up in case detection since approximately 1,200 PLHIV are newly diagnosed annually (Figure 6).

¹ 16% reduction applied to previous estimate for diagnosis to represent deaths.

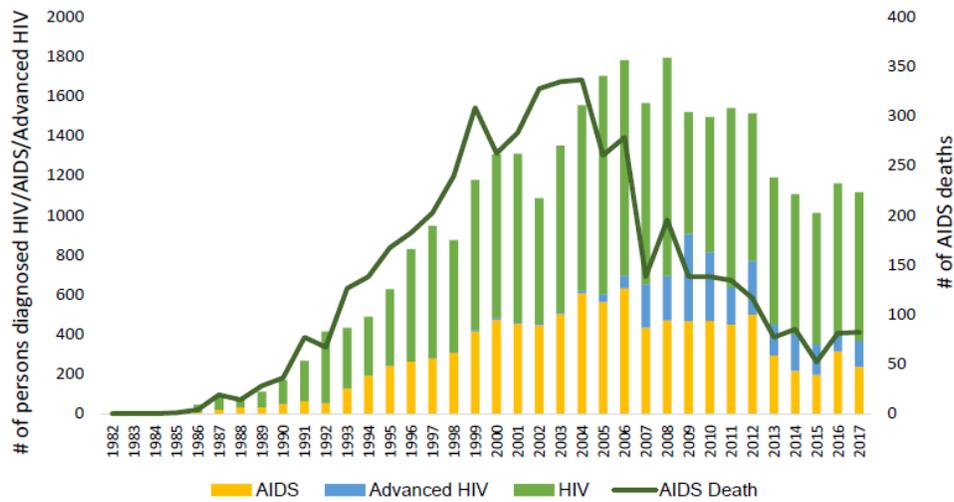


Figure 6: Newly Diagnosed Cases in Jamaica (1982- 2017)
 Source: MOH, HIV Epidemiology Report

A total of 1,192 individuals were diagnosed in 2017 (Figure 7). Of these, 48% (n=573) were females. Sixty percent of cases were classified as early diagnoses, compared to 11 percent advanced cases and 23% AIDS cases. Seven percent of new diagnoses were made at death. Overall, higher proportions of males were diagnosed with AIDS compared to females (27% vs 11%).

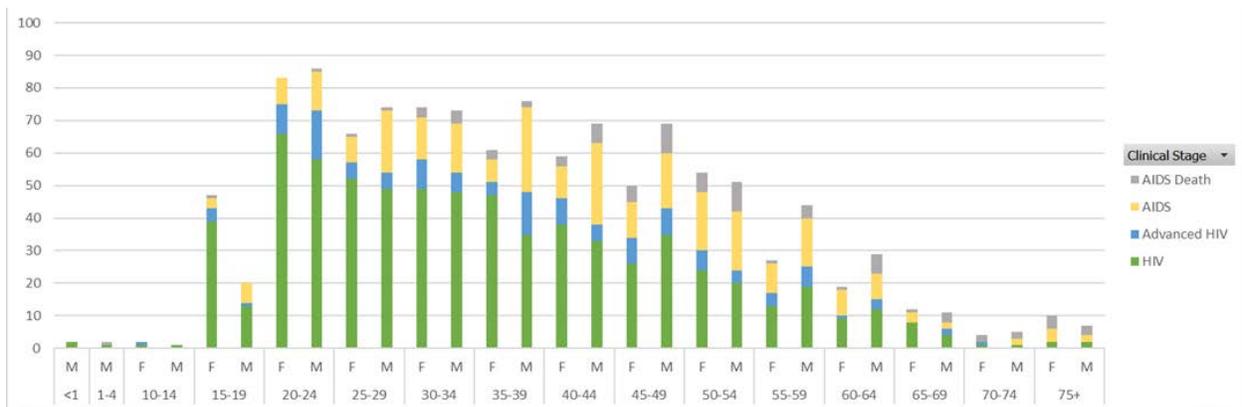


Figure 7: Clinical Stage of Newly Diagnosed PLHIV in 2017 (n= 1,192)

Higher proportions of younger PLHIV were diagnosed earlier. Seventy-six percent of females under 40 years old compared to 52% over 40 were classified as HIV cases.

Though males were diagnosed later than females, a similar age disparity is seen with 62% of males under 40 years old being classified as HIV cases at diagnoses, compared to 44% of males over 40 years old. These data suggest that approximately half of newly diagnosed individuals aged 40 years and older (i.e. 48% of females and 54% of males) were unlikely to have been infected recently.

Of the 568 new infections among women, 25% were among young adults 15-24 years, 35% among women 25-39 years, and 40% among women over 40 years. With the majority of new infections occurring in older age groups, further exploration of sexual networks and behavior is needed. Of these women, 39% were from Kingston and St. Andrew, 16% St. Catherine, and 12% from St. James, followed by other geographic locations.

Understanding the Sexual Networks

Case-finding strategies must take into account the contextual factors of each sexual network. Going forward, in order to find the undiagnosed, strategies will be tailored for each subgroup, uncovering the contributing factors to the epidemic. An important factor to note is “non-disclosure” of risk behaviors amongst target populations. In 2017, 26% of newly diagnosed males did not state their sexual practices. This highlights that innovative strategies must be employed to reach patients at high risk of infection who are unwilling to disclose their sexual practices.

The 2018 IBBS highlighted an increasing HIV prevalence by age group, with 10.7 percent prevalence amongst the 16-19 years olds and 23.4 percent prevalence for MSM aged 20- 24 years. HIV prevalence ranges from 41 - 49% for MSM over 25 years old (Figure 8). This emphasizes the need for strategies to be focused on diagnosing adolescents and implementation of strategies to prevent infection.

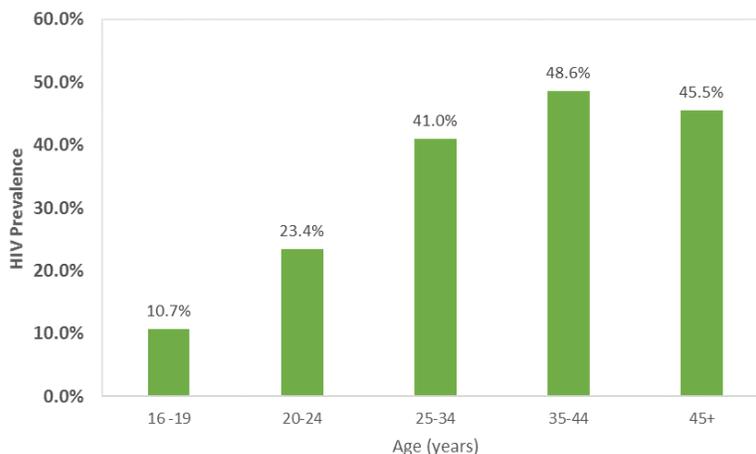


Figure 8: HIV Prevalence Amongst MSM in Jamaica 2018 (Source 876 Study)

Forty-nine percent of MSM newly diagnosed in 2017 were in the 15-24 age group. A key factor is also knowing where to target geographically; 49 percent of newly diagnosed cases for disclosed MSM were located in Kingston and St. Andrew, followed by 22% in St. Catherine (Source: MoH Epi Report, 2017). This will better inform not only the age groups to target for MSM but also the key locations of strategies for highest impact.

Findings from the 2018 876 study (IBBS) also revealed that 39% of MSM reported at least one female partner in the 12 months preceding the survey. The HIV prevalence amongst this subgroup of

MSMW is 19%. MSMW had an average of 4.5 female partners and five male partners in the previous 12 months. Among MSMW, the vast majority resided in St. Andrew (28.3%) and St. James (22.9%), St. Catherine (13.7%), Westmoreland (9.8%), St. Ann (8.8%) followed by other parishes. This mirrors the PEPFAR parishes of key focus for prevention interventions, which indicates that resources are being channeled to the areas of highest need.

Exploring age groups, 51.7% of MSMW were between the ages of 18 and 24 years, 41.5% were over the age of 25 and 6.8% under the age of 18 years. This highlights the need for youth-focused interventions and ensuring that these groups are targeted early to prevent transmission. Other demographic characteristics explored included the proportion of MSMW who were married. Findings from the study revealed that 25.5% of MSMW were in a committed relationship with a man (as if married), and 18% were committed relationships/ married to women. This shows the possibility of HIV transmission across groups. Finally, there was inconsistent condom use amongst MSMW. At last sex with a female partner, 39% of MSMW stated they had used a condom, while 71% used a condom at the last anal sex act. This inconsistent condom use highlights an area of transmission potential across sexual networks.

The data points described give us more insight into the key features of the demographic, where they may be located, the age ranges of key focus (with an emphasis on youth), and also the dynamics of sexual networks and relationships. These factors must be taken into account in designing testing approaches for reaching partners of MSM. High HIV prevalence among MSM coupled with inconsistent condom use, impact transmission dynamics for both male and female partners of MSM. Examining the data with this finer lens helps to determine that strategies to reach MSM must incorporate approaches to find the subgroup MSM/W and by extension, the women who may be their sexual partners.

Further exploration of the dynamics of sexual networks in Jamaica will help garner a deeper understanding of the nuances of transmission and will inform the strategic planning necessary for epidemic control.

3.1.2: Strategies to Address the Gaps

The following diagram (Figure 9) presents an overview of the gaps across the clinical cascade, as well as key strategies to overcome them.

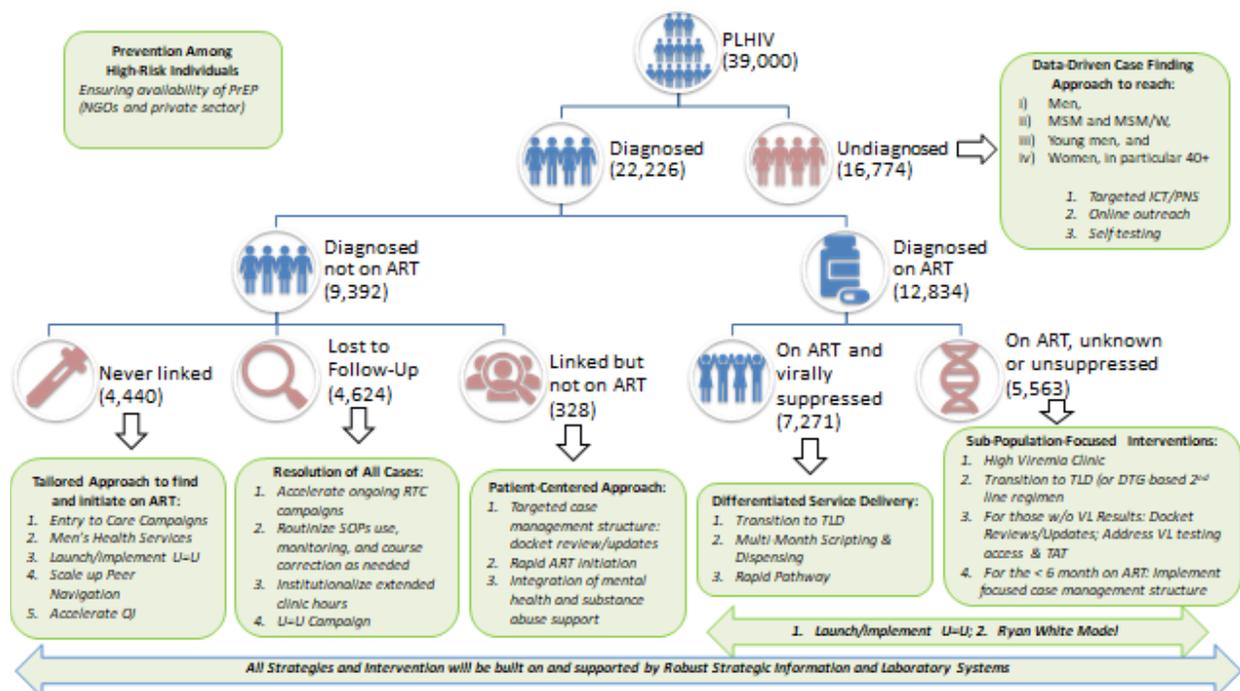


Figure 9: Summary of the Gaps and Solutions across the Clinical Cascade

Beginning in FY17, donor investment in Jamaica focused on finding HIV-positive key populations (KPs) and diagnosing PLHIV earlier, increasing treatment coverage, and improving the rate of viral suppression among those on treatment. Although the country has made progress toward the UNAIDS 90-90-90 targets, the gaps in the estimated clinical cascade (57-58-57) warrant a drastic shift in national programming. A recent review of disaggregated data illustrates the need to better align resources and services to improve health outcomes along the clinical cascade.

To impact the 1st 90, case-finding strategies will be aligned with international best practices. Index case testing and partner notification services (ICT/PNS) coupled with robust monitoring and evaluation will be implemented in both community-based and facility settings nationwide. ICT/PNS will be expanded in STI clinics for both newly diagnosed cases and the unsuppressed. Social media will be employed to create demand for HIV testing among MSM, MSMW, and youth. Strategies tailored to women 40 years and older will be implemented. Case finding will be expanded among men regardless of their sexual identity, as well as among sexually active youth. Rapid Incidence Testing will be added to the national testing policy guidelines to detect, characterize, monitor, and intervene on recent infections. The expansion of PrEP as a bio-medical option to prevent new infections will be implemented in facility and community-based settings for serodiscordant couples and negative patients at high risk of contracting HIV.

Policy and program changes to improve performance along the 2nd 90 include the roll out of Tenofovir/lamivudine/dolutegravir (TLD), multi-month dispensing, implementation of differentiated service delivery models, and the use of U=U campaigns and messaging to increase

demand for treatment. A new Entry to Care campaign will be launched to find those diagnosed but not on treatment. Employing lessons from the ongoing national return-to-care campaign, interventions will improve coordination between surveillance and case finding; strengthen data quality and use; expand clinic hours, and expand the cadres involved in linkage to care. The Ryan White HIV/AIDS Program Model, with robust assessment of client needs coupled with individualized services to mitigate barriers to retention and viral suppression, will be rolled out. Clinical skills will be bolstered via clinical mentoring and exchange, utilizing the expertise of United States-based Ryan White providers serving HIV patients from the Caribbean diaspora.

Expansion of viral load testing capacity will help in monitoring clinical progress toward the 3rd 90. Pharmacy data will be linked with TSIS 2.0 to measure on-time pick up of medications by clients. This will increase the ability to monitor patients defaulting or those at high risk of defaulting. The rapid pathway model will be introduced to expedite clinic visits. Expanded multi-month dispensing will ease the burden on clients, helping them to achieve and maintain viral suppression. Proactive review of unsuppressed cases and implementation of plans to achieve suppression at all facilities will be instituted to address the unusually low suppression rates among those on ART.

Building on this context and the known gaps across the cascade, PEPFAR will support the establishment of an HIV Private Sector Network. This Network will support the optimization and standardization of HIV care and treatment between the public and private sectors, helping to decongest public clinics and offering a stigma-free setting that is tailored for MSM, MSM/W, and their partners. Managed by the Center for HIV/AIDS Research and Education Services (CHARES) based at the University Hospital of the West Indies, the Network will coordinate across private providers, ancillary services, pharmacies, and laboratories to ensure comprehensive and quality private sector services are available. During FY20, the Network will target 50 accredited clinicians in private clinics.

A.) JAMAICA: FINDING THE UNDIAGNOSED

Understanding the Target Population and the Gaps

Of the estimated 16,774 undiagnosed PLHIV, 25% are estimated to be MSM (n=4,224), 31% are women (n=5,204), and 43% are non-MSM or “men of unconfirmed risk” (n=7,284). A small portion of the undiagnosed are estimated to be children (n=62). In order to reach the 90-90-90 targets, an additional 12,874 undiagnosed individuals must be found and initiated on treatment.

A full review of the undiagnosed population is delayed due to ongoing data gaps. Available epidemiological data were reviewed to identify correlates of HIV infection in order to refine case finding strategies. These data have also been used to focus primary prevention efforts amongst subpopulations at highest risk of infection.

Understanding Risk Factors and Determinants of HIV Infection in Jamaica

The most commonly reported risk factor amongst newly diagnosed cases (1982- 2017) is a prior sexually transmitted infection. Almost half of newly diagnosed women reported a prior STI infection, compared to 16% of males (Table 1). The gender difference in this risk factor could be influenced by differences in uptake of health services by men, who are less likely to seek treatment. Enhanced partner services for STI clinic attendees could offer a platform to diagnose unknown infection and penetrate networks of men of unknown risk.

As previously described, 2017 surveillance data indicate that higher proportions of PLHIV over 40 years old are diagnosed at later stages than their younger counterparts. A combined 48% of females and 56% of males aged 40 years and older were diagnosed with clinical stages of advanced HIV, AIDS, or AIDS at death in 2017. Strategies must therefore be targeted to use methods to find PLHIV earlier to prevent adverse clinical outcomes and interrupt transmission networks.

Table 3. Sexual Practices/Risks Reported by PLHIV Newly Diagnosed in 2017 and Cumulative Cases 1982-2017 (Excerpt Jamaica MOH HIV/STI Epi Update)

1982 - 2017		2017	
Male (%)	Female (%)	Male (%)	Female (%)
History of STI (43)	History of STI (52)	MSM (37)	History of STI (46)
Sex with CSW (16)	No risk identified/reported (18)	Multiple partners (18)	Multiple partners (23)
No risk identified/reported (15)	Multiple partners (11)	History of STI (16)	Sex Workers (10)
Multiple partners (10)		Sex with CSW (16)	

Multiple sexual partnerships were reported for 23% of females and 18% of males newly diagnosed in 2017, therefore these partners are at high risk of infection. Given the late stage of diagnosis for high proportions of PLHIV, partner elicitation strategies must be implemented to consider both recent and past partners. Strategies must also be implemented to use innovative methods that allow for improved uptake of services by partners of diagnosed PLHIV.

Fifty-four percent of newly diagnosed males identified as heterosexual. Thirty-seven percent of newly diagnosed males were MSM, 18% reported having multiple sexual partners and 16% reported sexual intercourse with a commercial sex worker (CSW) (Table 1). The vast majority of newly diagnosed females (98%) identified as heterosexual with 10% of all cases indicating that they were

sex workers. Testing strategies that reach male clients of female sex workers (and partners of these male clients) could offer a platform to find more undiagnosed males and females.

Case-Finding Approach

Since FY17, PEPFAR’s support for case finding has been limited to community-based testing for key populations. Testing yields were highest amongst MSM (Figure 10), where as yields amongst FSW were below two percent (data not shown). In the second half of FY19, PEPFAR’s support will expand to include index testing in community and facility settings (regardless of KP status) as a key strategy for improving case finding.

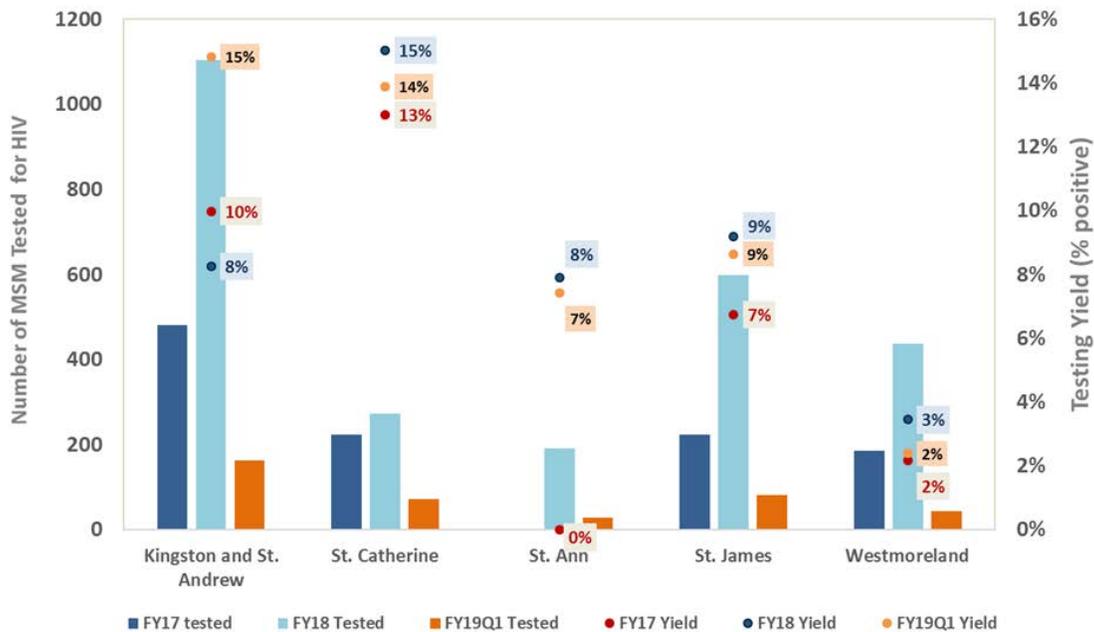


Figure 10: HIV Testing Trends and Yield amongst MSM in PEPFAR-Supported Programs

HIV testing yields vary by parish with over 6% of STI clinic attendees testing positive for HIV in Kingston and St. Andrew (KSA) in 2017, compared with rates below 2% in St. Ann (Figure 11). Existing facility-based testing in STI clinics will be strengthened and expanded to ensure robust partner notification services/index testing for newly diagnosed cases.

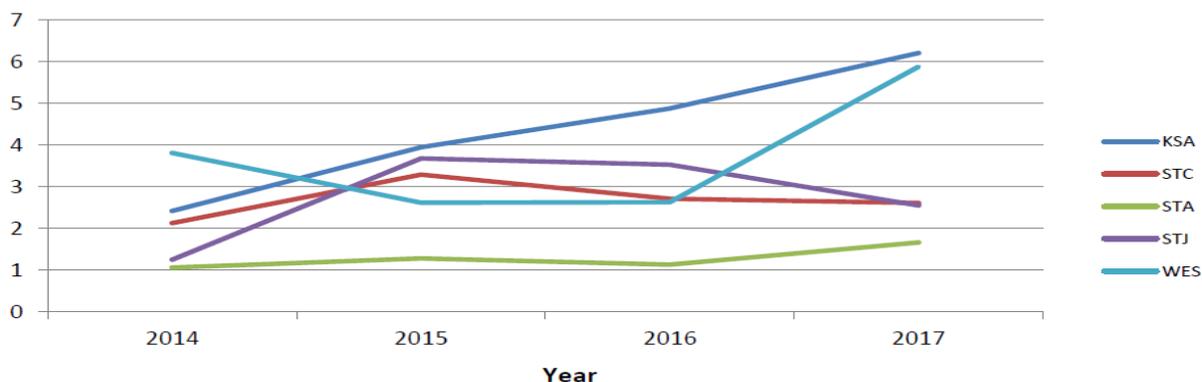


Figure 11: Parish-Level HIV Testing Yield among STI Clinic Attendees

Case-finding interventions will target sub-populations at high risk of HIV infection including MSM and partners of diagnosed PLHIV. Priorities will include the improved use of risk screening tools, a rapid scale-up of targeted index testing, and the rollout of self-testing. Social-networking strategies and demand-creation activities will be employed to help expand HIV testing services. Variations in socioeconomic and demographic characteristics will be taken into consideration to adapt information and materials to different age groups and populations.

Partners will implement both facility-based testing and community-based testing approaches. Strategies will integrate tailored men’s health services to reach and diagnose HIV-positive men and women over forty. These approaches are intended to improve case finding amongst women and men (regardless of sexual identity), with the latter accounting for over 70% of the undiagnosed.

Tailored Strategies and Approaches by Sub-Population

i. Reaching Men of Undisclosed/Unknown Risk through Expanded STI Clinic Partner Testing Strategies

The most commonly reported risk factor amongst newly diagnosed cases (1982- 2017) is a prior sexually-transmitted infection (STI). The epidemiological link and bi-directionality between HIV and other STIs, specifically ulcerative infections, is well established. STI-positive individuals are at higher risk of acquiring HIV infection, and HIV positive, STI co-infected individuals are more likely to transmit HIV to their partners. Therefore, a targeted strategy that offers partner testing for all STI-clinic attendees diagnosed with an STI (HIV-negative included) could offer inroads to finding undiagnosed HIV-positive partners, particularly heterosexual identifying men and those with both male and female partners. This strategy therefore complements index partner testing for newly diagnosed HIV-positive cases within the STI clinic setting.

In the delivery of the intervention, men’s health services will be used to increase options for men to access services to include HIV services for timely diagnosis and initiation of treatment. If high-risk individuals test negative, providers will offer these men HIV prevention services

(including PrEP) and provide information on how to prevent other sexually transmitted infections.

The proposed technical approach builds on the theoretical framework (Figure 12) and the epidemiological profile for newly diagnosed cases. It recognizes the female STI clinic attendee as the individual that is more likely to access services and will employ strategies to reach women earlier. It takes into consideration multiple sexual partnerships amongst male and females, with interconnected sexual networks of MSM and heterosexual women.

We theorize that STI-positive, HIV-negative clinic attendees are partners of undiagnosed STI-positive, HIV-co-infected individuals. Therefore, an intervention to offer partner services for HIV-negative, STI-positive individuals could offer a mechanism to diagnose PLHIV earlier (specifically men who do not routinely access health services), whilst preventing onward transmission to their partners through timely diagnosis and initiation of treatment.

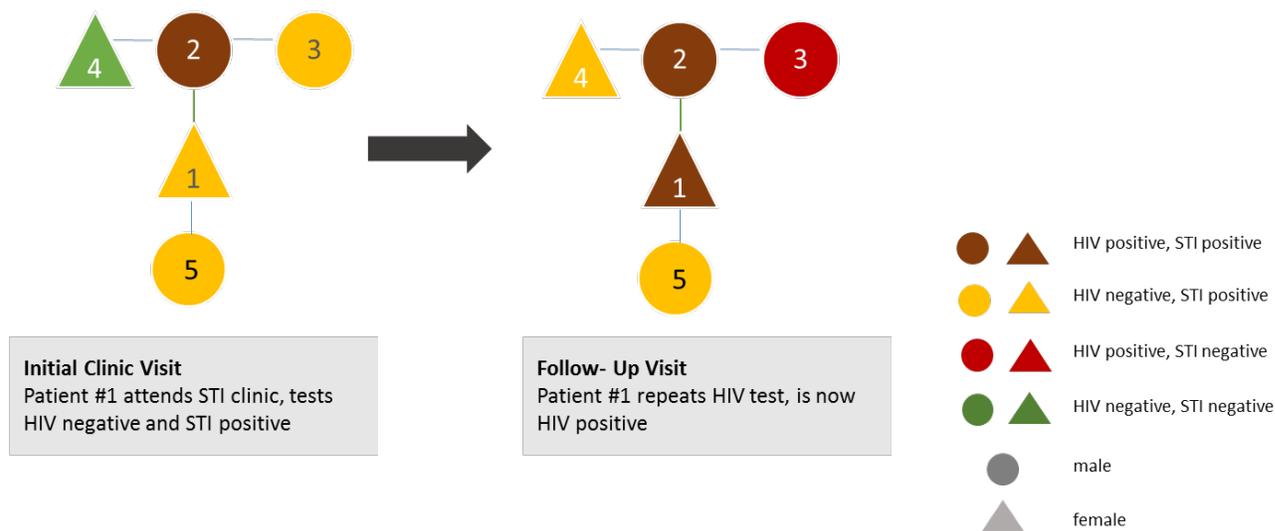


Figure 12: Theoretical Framework for STI Clinic Testing Strategy

1) Step 1: Offer Partner Services to HIV-Negative, STI-positive Clinic Attendees

HIV-positive STI clinic attendees are currently offered partner services. Under the expanded model, female and male STI-positive clinic attendees (regardless of HIV status) will also be offered partner services. Targeted testing in STI clinics will offer the opportunity for partner services for STI-positive, HIV-negative individuals, in an effort to diagnose partners who may be both STI- and HIV-positive. STI-positive, HIV-negative individuals should also be offered further risk screening to determine eligibility for PrEP based on their sexual practices. This strategy complements index testing for HIV positive, STI-coinfected individuals.

2) *Step 2: Offer Partner Services using Peer Referral/Social & Sexual Network Approach*

STI patients opting into partner services will be interviewed by a member of the clinical team to determine and elicit their contacts. The partner referral strategy will build on the peer-referral approach utilized in recently completed RDS surveys. The approach will allow for identification of sexual and social contacts that meet minimum criteria. These contacts would benefit from a free package of comprehensive services that will include testing for HIV and STIs that remain attractive to the referee. The goal of this approach is to overcome fear of disclosure by allowing the STI-positive individual to identify potential sexual contacts with the option to name them as social contacts. A number of service-delivery options will be offered to include uptake of services at another public facility, community site, or partner private facility.

The program will also include patient HIV literacy support, which encompasses a broad range of activities that combine education and other activities such as counselling and supportive interventions. Clients will receive information about treatments, symptoms, resources, and services; peer support; training to provide care and respond to disease-related problems; and problem-solving strategies for coping. The program will aim to improve health outcomes of clients accessing clinical services at public sites and through NGOs.

ii. Reaching MSM and MSMW

Effective control of the epidemic must address issues of stigma and discrimination. Psychologists and contact investigators will continue to provide tailored counseling to index clients who will emphasize enabling messages across these areas in order to elicit sexual contacts for testing and treatment initiation. Findings from the MSM IBBS reveal that 53% of these men identified as heterosexual or bisexual. This suggests a need for nuanced communication with male clients as providers need to educate men and their partners on the benefits of testing.

Case-finding strategies for MSM will cater to males of different age groups in urban and rural areas. These strategies will be aimed at men, regardless of their sexual identity, and will assume that some of them will have sex with both men and women and should also address preventing transmission to both their male and female partners. CARIMIS (2014) reported that within a month, 84% of gay and bisexual men 18 years and older in the Caribbean visited websites, including dating sites, for the purposes of dating and socializing. This establishes the internet as a primary medium for MSM engaging with partners, rather than physical spaces. In Jamaica, independent of place of residence, 76% of men from the IBBS reported meeting sexual partners online through social media sites (e.g., Facebook, Grindr, and Jamaica's Vibesconnect).

Learning from case-finding successes in the Central American Region, the "cyber-educator" initiative will be employed to adapt face-to-face outreach to online and social media (Figure 13). The intervention is specifically designed to target young MSM, bisexual men, and MSM who do

not self identify as “gay,” as well as those who were not being served by other traditional outreach activities. Further, developing on the findings from the ICT National Assessment 2017, partners will expand the high-impact online outreach intervention to reach high-risk MSM and MSMW through the most trafficked websites and refer them for appropriate testing services. With the possibility of establishing relationships with private labs, referred clients will be tracked through the cascade, via testing and linkages for PLHIV, with an expectation of high yields and successful treatment initiation from this targeted strategy for hard-to-reach MSM. Social media networking has the ability to reach men of all ages, with access to internet in Jamaica estimated at 56% and mobile phone usage rates consistently rising, with subscriptions exceeding the country’s 2.7 million population.

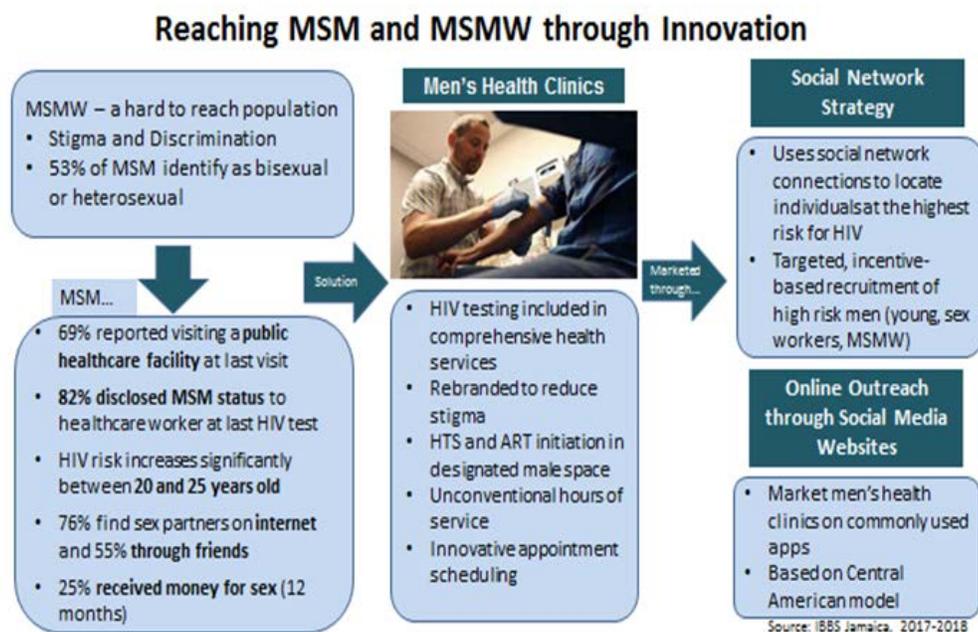


Figure 13: Reaching MSM and MSMW

iii. Tailoring case-finding approaches for younger men

In Jamaica, among young men ages 15-24, the average age of sexual debut is 15 (KAB, 2017). Transactional sex is reported among 54% of boys ages 15-19 years (National HIV/STI Programme, 2012). A core set of interventions will be implemented to reach younger segments of the population who do not know their status, including: HIV self-testing (HIVST), index testing, online outreach, partner notification, and men’s health services that include an adolescent-friendly component.

As part of the suite of interventions to find more people living with HIV (and link those who test negative to HIV prevention services), self-testing will play an important role for individuals under 30 who opt not to go to a health facility and those who may not return after a first

encounter. This new intervention will be accompanied with information and counseling through peer supporters and community support networks for young men.

iv. Tailoring case-finding approaches for women

Almost half of newly diagnosed females in 2017 reported the history of an STI at diagnosis. Additionally, 23% of cases in 2017 reported multiple sexual partners. The vast majority (98%) of newly diagnosed women identify as heterosexual. A higher than usual number (52%) of women 40 years and older are being diagnosed with early-stage infections. The remaining 48% of newly-diagnosed cases are women presenting with late-stage HIV or AIDS. Strategies to reach undiagnosed women must therefore consider that this subpopulation could include:

- 1) Female partners of diagnosed HIV positive (heterosexual and bisexual) males;
- 2) Women of childbearing age who do not access/use family planning services; and
- 3) Finding undiagnosed women whose family planning concerns are limited (e.g. aged 40 years and older).

HIV self testing, index testing, and partner notification are critical approaches that have the potential to identify women who are undiagnosed. These approaches can be applied to the respective subgroups based on their needs and access to services to increase more timely case detection.

Strategy 1: Finding Undiagnosed Female Partners of Known HIV Positive Males

Partner services will be offered to all males in order to reach female partners of both heterosexual and bisexual males. There are over 5,922 HIV positive men accessing HIV treatment services in Jamaica. Of these, 3,194 are known to be suppressed; 993 patients have viral loads exceeding 1000 copies/ml. Implementation of partner services for all male patients (prioritizing those who are unsuppressed) will identify female partners (known positive) and serve as a platform to diagnose new cases amongst women.

Female partners of newly heterosexual males at early stages of HIV infection may be more recently infected. Timely implementation of index testing amongst the subgroup of males may identify more recent infections.

Strategy 2: Finding Undiagnosed Females of Reproductive Age

ANC clinic-based strategies will reach the subpopulation of women of reproductive age who are pregnant and access services. Expanded strategies are needed to ensure uptake of services by women at high risk of infection who are not currently accessing family planning or other gynaecological services.

Online outreach to promote routine testing for females under 40, with tailored approaches for youth (16 -24 years), could serve as method to identify individuals at high risk of HIV infections

through a self-assessment tool. Activities targeting younger women will include strategies to reach unattached (out of school, unemployed) young women who may demonstrate higher need and may be more likely to be engaged in transactional sex.

Based on the results of the test, women would be referred to locations for comprehensive STI/HIV testing or partner locations to access HIV self-testing. The designated locations will include a combination of public and NGO sites with integrated testing and treatment services. With this integration, the approach will ensure that all diagnosed cases can begin treatment at the time of diagnosis.

Strategy 3: Finding Undiagnosed Women Aged 40 Years and Older

Forty-eight percent of women aged 40 and older were diagnosed at later stages in 2017. This suggests that a similar proportion may have been infected for a while (e.g. possibly 5 -10 years prior). Strategies to reach women of reproductive age who are not accessing services (as summarized in Strategy 2) could lead to earlier diagnosis amongst this subgroup.

Strategies to reach undiagnosed peri-menopausal and menopausal women will include HIV testing at service delivery points beyond annual sexual health checks. Health promotion within geographic hotspots (informed by surveillance data) will be used to support combination prevention and HIV/STI testing services for women over 40.

HIV testing amongst diagnosed men and newly diagnosed MSMW are likely to contribute to case finding amongst these group, particularly amongst MSMW who are HIV positive and in committed relationships/married to women.

Preventing Infection Amongst Women

As a complement to case finding activities, primary prevention efforts for women should focus on strategies that include negotiating for safer sex and emphasizing the importance of condom use. Biomedical strategies such as PrEP should be considered for females at higher risk of seroconversion based on their clinical history (e.g. repeat STIs, number of sexual partners, and reported condom use).

All new female STI clinics attendees will be screened to ascertain risk behaviors and offer risk reduction counselling. Furthermore, HIV testing and counseling will continue to be offered as part of a standard package for STI management for all women, including those who are pregnant or considering pregnancy.

Testing Modalities: Finding the Undiagnosed and Rapidly Initiating Them on Treatment

- i. **Index Case Testing and Partner Notification Services (ICT/PNS)**: Index testing, when implemented with fidelity, is an efficient approach for case finding. As such, in both the clinical

and community settings, index testing will be the priority strategy for case finding. It will lead to case finding for all subgroups that remain undiagnosed.

The program will apply clinical and sexual network data to focus index testing efforts to reach the targeted subgroups. All newly diagnosed and previously diagnosed PLHIV will serve as index cases. Amongst known PLHIV, the program will focus on ART patients who are not virally suppressed, patients recently returning to care (RTC) and newly diagnosed cases. Strategies will take into consideration the potential network of index cases and the reach within the subpopulations of undiagnosed PLHIV. For example, HIV positives males of unknown or undisclosed risk (Table 4, index case #1), include those who are currently on ART with unsuppressed viral loads, the dominant network of these males may be heterosexual females. Furthermore, since the risk amongst this group is unknown, there is a possibility that index testing will lead to diagnosis of MSM. The potential reach of these efforts is summarized below.

Table 4: Index Cases, Probable Network, and Reach within Undiagnosed Group

	Index Case	Source/ Stream	Probable Profile of Network (indicative based on available data)	Undiagnosed groups reached
1	Males of undisclosed or unknown risk	ART patients with unsuppressed viral loads; RTC patients Newly diagnosed men	Heterosexual females MSM/MSW (possible network)	Females MSM/MSW
2.	MSM aged 16 – 24	Online outreach Newly diagnosed PLHIV ART patients with unsuppressed viral loads	HIV positive MSM (25 years and older) HIV negative MSM (16-24 years) MSM 25 years and older paying for sex Heterosexual females (including STI positive; HIV negative women)	MSM Females
3.	MSM 25+	Online outreach ART patients with unsuppressed viral loads	HIV positive MSM (25 years and older) HIV negative MSM (16-24 years and older) MSM 16-24 years old receiving payment for sex Heterosexual females (including STI positive; HIV negative women)	MSM Females
4.	Females 16 -24	New cases all sources inc- ANC; ART patients with unsuppressed viral loads	Heterosexual males/men unknown risk Heterosexual males Bisexual men (eg. MSMW)	Males (including men of unknown risk) MSMW
5.	Females 25 - 39	New cases all sources inc. STI Clinic, in care & ART patients with unsuppressed viral loads		
6.	Females 40+	Newly diagnosed all sources; RTC; ART patients with unsuppressed viral loads		
7.	Female Sex Workers	Newly diagnosed PLHIV; ART patients with unsuppressed viral loads	Heterosexual males (clients) Heterosexual males (non-paying partners)	Males of unknown/undisclosed risk

ICT/PNS is a part of the Contact Investigator (CI) Program. However, it must be rapidly strengthened and scaled via policy and programmatic shifts to increase case finding. The following are priority activities:

- Increase the national cadre of CIs.
- Capacity building of non-CI healthcare workers, including peer navigators, to provide ICT/PNS.
- Development of comprehensive ICT and Information, Education, and Communication (IEC) content to support index testing.
- Development and implementation of a robust monitoring and evaluation framework for index testing in all sites.

Figure 14 outlines the ICT/PNS strategies at facility, community, and above-site levels to be implemented in order to reach MSMW.

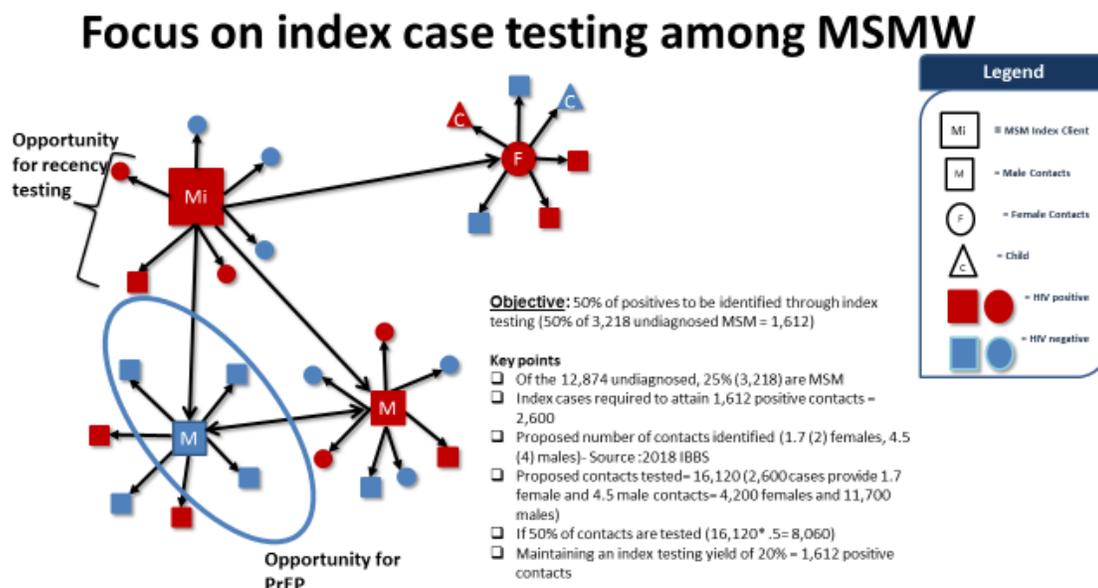


Figure 14: Index Testing among MSM/W

Based on the estimated number of newly diagnosed/enrolled, those returned through campaigns (see Mandeville RTC results in Figure 15 below), and those virally suppressed, we anticipate to increase the proportion of positives diagnosed to 50 percent from index testing.

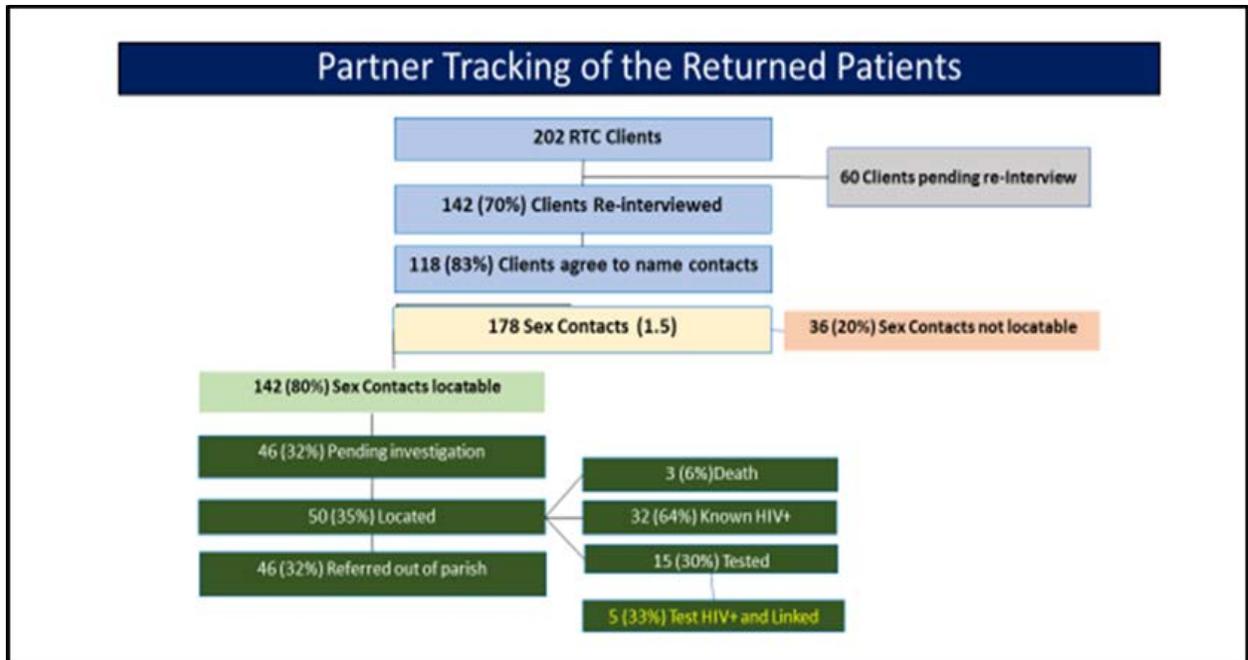


Figure 15: Index Testing Results at Mandeville Health Center

ii. **Online Outreach:** The supported use of ICT for online outreach will aim to improve reach to hidden MSM and MSMW.

- Additional outreach workers will be trained in online outreach and best practices (by the TOTs). Supervisor capacity to monitor online outreach for quality assurance and control will be strengthened.
- Documentation of client contract conversion to tests will be strengthened, as evidenced by the number of HIV tests done that were initiated and/or aided by these online outreach efforts.
- Interactive websites designed for:
 - KPs to conduct self-guided risk assessments online;
 - Booking HIV testing appointments; and
 - Finding information related to treatment and other services.

iii. **Self-Testing:** Self-testing will help empower individuals and enhance the comprehensive package of prevention efforts.

- Provide self-testing for at-risk populations, including men who have sex with men and men who have sex with men and women at designated sites to include NGOs.
- Develop IEC materials with critical information regarding benefits of self-testing for dissemination through targeted interventions and social media.
- Develop information packets for client contact support to increase referrals of at-risk populations and partners for self-testing.

- Building on findings from the private sector review, conduct rapid mystery shopping exercise to identify pharmacies and shops that stock and sell self-test kits.
- Use results to develop and deliver training to pharmacies and other providers on self-test protocols, referral forms for self-testing.

Employing PrEP to Keep High-Risk Individuals Negative

The expansion of Pre-exposure Prophylaxis (PrEP) will help strengthen the clinical package of HIV prevention services for MSM and MSMW, their partners, and other individuals at high risk of contracting HIV. Part of this effort will be the development of the framework and protocol for PrEP.

- Mainstream PrEP into HIV risk-reduction counseling and behavioral interventions.
- Develop educational materials about how to use PrEP in conjunction with other HIV and care services to help demand for PrEP.
- Provide PrEP for serodiscordant couples.
- Establish PrEP sites, including via NGOs, and train clinical staff.
- Establish referral system to drive demand for PrEP at designated sites.

Outcomes and Impact

The aforementioned strategies, when implemented to scale, will support the government with reaching the 90-90-90 targets of diagnosing an additional 12,847 PLHIV. The expected results include a shift in the national numbers with index testing accounting for a high proportion of newly diagnosed cases. Specifically, expected results will include:

- An increase in the proportion of positives diagnosed to 50 percent from index testing (Table 5).
- Increased yield from online outreach, with immediate initiation on treatment.
- Expanded uptake of self-testing.

Table 5. Reaching the First 90: The Estimated Contribution of Case Finding Strategies to Reaching the Undiagnosed

Testing Modality/ Strategy	Estimated Number of Positives Identified			
	MSM (including MSMW)	Females	Men (of unknown/ undisclosed risk)	Total
1. Index Testing	1,615	2002	2,841	6,458
2. Facility-based testing -PITC (all other clinics)	839	373	1,892	3,104
3. STI Clinic Testing & Expanded Partner Services	477	775	698	1,950

4. Antenatal Clinic		712		712
5. Community Testing (includes online recruitment)	290	148	148	586
6. Self-Testing	32	-	32	64
Total	3,253	4,010	5,611	12,874

B.) JAMAICA: INITIATING/RE-INITIATING ON TREATMENT THE DIAGNOSED BUT NOT ON ART

Understanding the Target Population and the Gaps

A major programmatic gap in reaching 90-90-90 is that over 9,000 PLHIV who were previously diagnosed are not presently on ART. As of March 2019, 9,392 patients were diagnosed but not on ART, which is 42% of the 22,226 people who have been diagnosed, and 24% of the estimated 39,000 people living with HIV. The figure below shows the national ART coverage trend, as well as PEPFAR-supported treatment coverage (Figure 16).

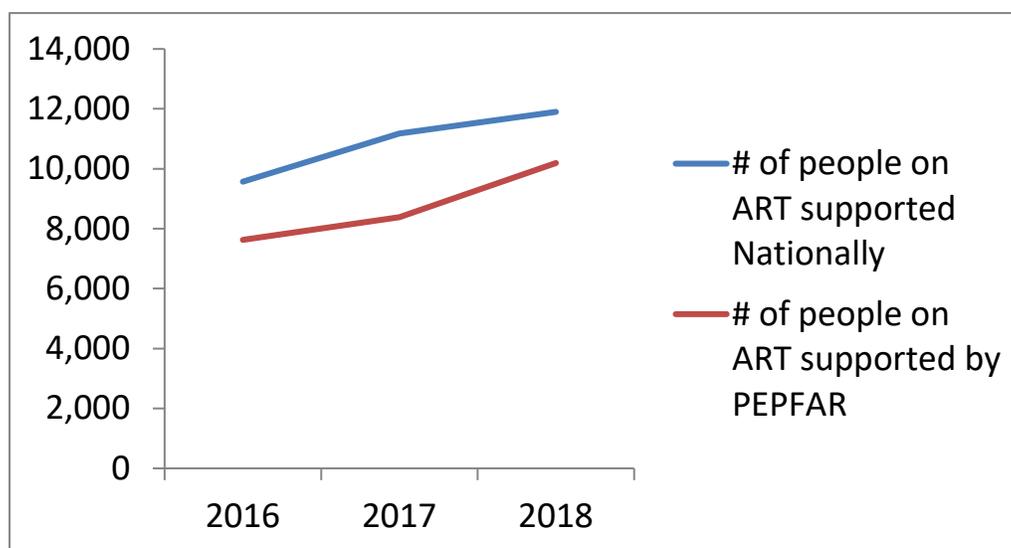


Figure 16: National ART Coverage Trend in Jamaica and PEPFAR Trend for Individuals Currently on Treatment

Of the 9,392 people who are diagnosed but not on ART, 4,440 (47%) are never linked, 4,624 (49%) are lost to follow up, and 328 (4%) are linked but not on ART (Figure 17).

PLHIV Diagnosed, but not on ART: Jamaica

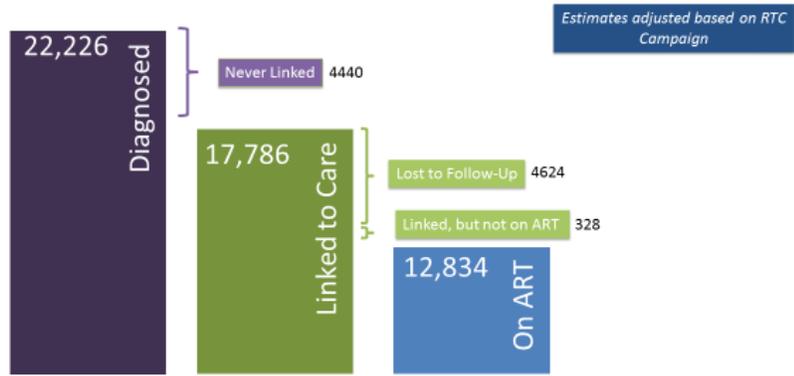


Figure 17: The Gaps in Treatment Initiation and Retention

Achieving the second 90 will require a multi-pronged approach to reach these three sub-populations who have “fallen out” at different stages of the prevention, care, and treatment continuum (Figure 18).

One third of the estimated 39,000 PLHIV in Jamaica are currently on treatment. Males account for 60 percent of estimated PLHIV but only 45 percent of ART patients. Consequently, the ART coverage gap is greater amongst males, with gender disparities consistent across all age groups (Figure 19). Tailored strategies are needed to increase the number of males newly initiated and retained on ART.

PLHIV Diagnosed, but not on ART (N=9,392)

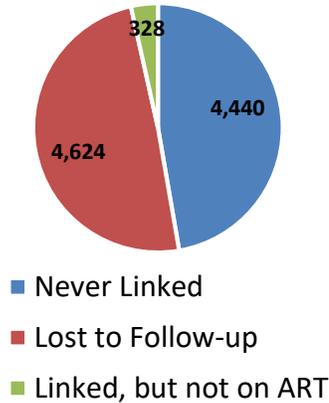


Figure 18: Who Are the Diagnosed but Not on ART?

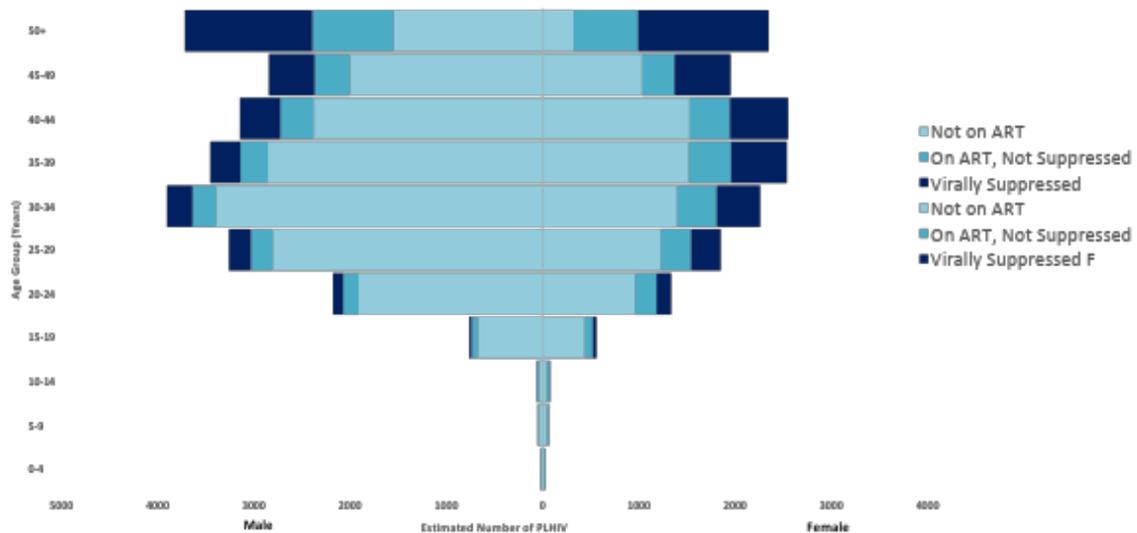


Figure 19: Jamaica HIV Population Pyramid

Tailored Strategies and Approaches by Sub-Population

- i. **Never linked (n=4,440):** Of the 9,392 people who are diagnosed but not on ART, 4,440 (47%) are never linked and the transmission rate among this category of patients is estimated at 6.6 per 100 person-years². Therefore, ART initiation plays a crucial role in improving the health of the individual as well as reducing and preventing HIV transmission. For those who were diagnosed and never linked, the first point at which they may be lost is upon referral to public clinic for a confirmatory test and treatment (Figure 20). Appointments at public facilities can be delayed but appointment scheduling and unconventional hours of service are helping to address this issue and will be expanded. There have been cases where a client may be lost even before a confirmatory test is done, as confirmatory tests are not done in outreach settings. Another issue impacting linkage relates to ongoing stigma and discrimination. Some clients are fearful of disclosing their HIV status, particularly among healthcare workers who may know them or live in their community.

² Z, Purcell DW, Sansom SL, Hayes D, Hall HI. Vital Signs: HIV Transmission Along the Continuum of Care — United States, 2016. MMWR Morb Mortal Wkly Rep 2019;68:267–272. DOI: <http://dx.doi.org/10.15585/mmwr.mm6811e1External>.

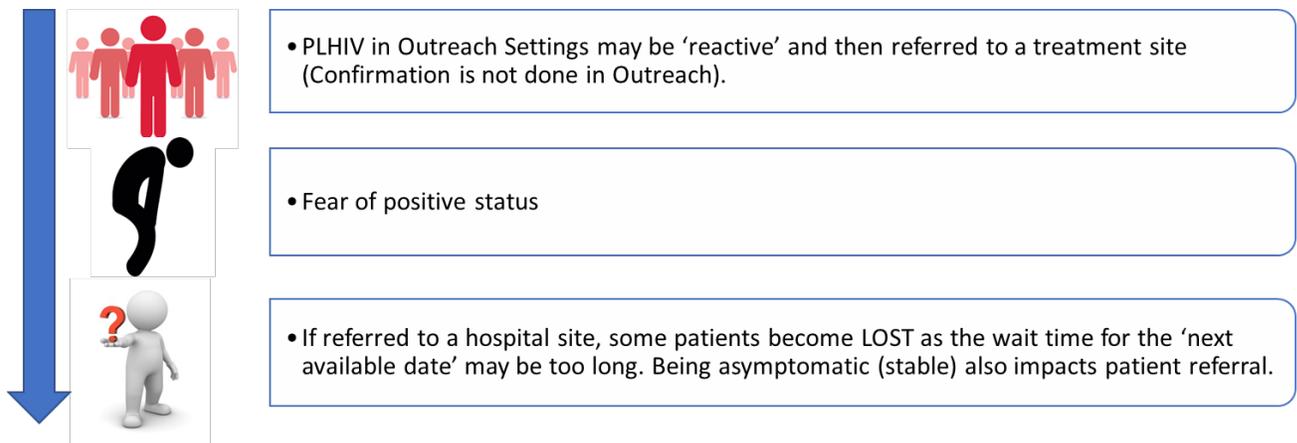


Figure 20: Reasons For Loss Between Diagnosis and Linkage

By end of FY20, at least 95% of all PLHIV in this category will be enrolled on ART. This will be achieved through the implementation of the following targeted interventions:

- a. Establish Tracing Process and Launch Entry-to-Care Campaign: A campaign, including with public messaging via the media, will be launched. The campaign will center on Treat All and U=U messaging to encourage those diagnosed to seek care. Based on the gender distribution of PLHIV, an estimated 2,664 in this sub-population are males, while 1,776 are females. The vast majority of males in this category are in the age bands of 30-34 and 35-39 years old; while among females, the majority are in the age bands of 35-39 and 40-44 years old. Findings from the Return to Care campaign survey informed the following targeted interventions to reach these patients and enroll them on ART:
 - Systematic monitoring, including the integration of multiple data sources, including surveillance data, program data, and medical clinic records.
 - Routine use of simplified tools to measure and monitor rates of retention in care. Review of retention measures (visit adherence, gaps in care, and visits per interval of time) and data sources (surveillance, medical records, and administrative databases), in accordance with national standards of care.
 - Intensive outreach and return to care campaign for individuals not engaged in medical care.
 - Use of peer patient navigators for ART initiation and retention in care. Training of additional patient navigators.
- b. Establish Men's Health Services: In most settings, multiple factors and barriers prevent or delay men, including MSM and MSMW, from engaging in HIV services, resulting in worse health outcomes than women. Providing male-friendly comprehensive clinical services will help increase access to HIV testing and treatment initiation, regardless of identity/disclosure as MSM or MSMW.

The goal is to provide comprehensive men-friendly health services for MSM and MSMW, marketed through a social network strategy (as employed in the 2018 IBBS), to: reach these sub-populations, increase uptake of HIV services; increase their access to health care; improve their clinical outcomes; reduce risk-taking behaviors; and understand the long-range implications of their health behaviors.

At both the facility and community levels, when possible, dedicated clinical spaces for male clients, including a full range of clinical, mental health, and supportive services will be offered at more convenient hours (morning, evening, and weekend). Appointment scheduling will reduce waiting times and improve client satisfaction.

The service package will include:

- HTS;
 - HIV prevention, care, and treatment;
 - Condom distribution and counseling for HIV prevention;
 - PrEP and PEP;
 - Index testing and partner services;
 - STI Screening and treatment including urinalysis;
 - General health assessment, including blood pressure, blood sugar checks, cholesterol checks, and weight management; and
 - Comprehensive reproductive exam; testicular exam.
- c. Implement "Undetectable = Untransmittable" (U=U): A substantial body of scientific evidence shows that sustained viral suppression prevents HIV transmission. The broad implications of U=U are to improve the health outcomes and self-esteem of individuals; reduce the stigma associated with HIV; and help control the HIV pandemic.
- With leadership from the JN+ NGO, launch U=U training/messaging to inform patients and providers about the benefits of treatment as prevention and PrEP.
 - Promote the impact of U=U to decrease high levels of HIV-related stigma toward PLHIV including self-stigma, resulting in increases in ART (re)initiation.
 - Promote ART adherence for achieving and maintaining undetectable viral load through U=U messaging to HIV providers and patients, including by providing real-time viral load results to patients.
- d. Scale Up Peer Navigation: Evidence has shown that peer navigation improves ART uptake and retention, as well as decreases lost-to-follow-up (LTFU), by providing support both within and outside the clinical facility. Peer navigation will be scaled up.
- Strengthen enhanced peer navigation approaches, particularly KP-focused strategies (with additional emphasis on LTFU).

- Update the peer navigator models and the national treatment guidelines to account for any contextual changes that result from returning a large number of PLHIV to care.
- e. Accelerate Quality Improvement (QI): Strengthening of the continuous quality improvement (CQI) strategy will help to rapidly and effectively respond to the changing contexts that result from bringing a substantial number of PLHIV back to care and maintaining them on ART. Based on analyses of site data, CQI activities will identify HIV service-provision gaps and health system weaknesses. The healthcare team, in collaboration with patients, will devise plans to quickly overcome these barriers. Ongoing mentorship with facility staff will be important for capacity building and transfer of knowledge and skills.
- Fast track the development and implementation of a National QI plan, Regional QI plans, and site QI plans.
 - Strengthen the monitoring and evaluation of facility, regional, and national performance of key indicators by integrating data into QI reporting and triangulating data analysis to better understand the root causes of barriers and facilitators to program quality.
 - Leverage existing indicators and establish custom indicators to monitor the progress of quality improvement processes and outcomes that demonstrate impact.
 - Intensify collaboration with MoH, Regional Health Authorities (RHAs), and site-level staff to clearly define roles and responsibilities within quality improvement plans to increase buy-in, accountability, performance, and sustainability.
 - Increase coaching and supervision of treatment site staff QI efforts to ensure quality management practices are incorporated at all levels of HIV treatment and care services, by building the capacity of QI coaches at parish, regional and national levels through webinars, a QI ECHO and learning sessions.
- ii. Lost-to-Follow-Up (n=4,624): The number of patients lost to follow-up has been reduced from approximately 10,000 in September 2018 to approximately 4,600 in March 2019. Recovery and ART (re-)initiation programs are ongoing. A review of the profile for LTFU patients who were brought back to care and the reasons for attrition show that 55% of LTFU patients are female. The majority of those who are LTFU are between the ages of 15 and 49 years. Reviewing sample characteristics by region, the percentage of clients LTFU in the 50+ age group is highest in the North-East Regional Health Authority (NERHA) (30%). Those LTFU in the 15-49 age groups ranged from 67% (NERHA) to 75% in the Western Regional Health Authority (WRHA). The majority of patients were out of care for more than a year, and the average time since the last clinic visit was 18.8 months. On average, patients who defaulted treatment had not taken ARVs for 16 months.

The most frequently reported reasons for defaulting were personal (Figure 21). Patients shared that family obligations and work interfered with attending clinic or picking-up medication. Patients reported feeling well and believing that they didn't need care, likely a legacy of pre-Treat All messaging. Insufficient money for transportation to the clinic was also an important barrier. Patients reported concerns with clinic wait time, with spending too much time at clinic ranking as a top issue within the South Eastern Region. Differences were noted by region and gender, which will be key for designing tailored interventions.



Figure 21: Reasons Patients Became Lost to Follow Up

Based on these data, the following interventions will be implemented:

- a. Accelerate the Completion of Return to Care Campaign: Building on the tools and methods deployed during the ongoing RTC campaign, the program will be able to resolve 100% of the remaining out of care HIV cases (N=4,624) by June 2019 via the following interventions:
 - Routinize clinic SOPs for reviewing and utilizing patient retention data to focus outreach efforts and implement needed course correction.
 - Implement and institutionalize extended clinic hours.
 - Strengthen patient education on adherence and routine care to reduce attrition, including via launch of U=U messaging.

- b. Expand Multi-Month Scripting and Dispensing (MMSD): MMSD is a differentiated ART delivery method that can improve patient outcomes, result in cost savings, and increase patient retention. Expansion will be possible via:
 - Implementation of differentiated service delivery models, including six-month scripting and dispensing, to decrease the patient burden at facilities, minimize patient wait times, and improve ARV coverage.
 - Providing six months of ART and six-month clinical consultations to all stable ART patients, including fast tracking for ART refills.
 - Immediately investigating late or missed pickups by individuals receiving a MM supply.
 - Immediately investigating late patients who have missed appointments, defaulted, and become LTFU.

- iii. Linked but Not on ART (n=328):** Over 95% of the patients who are retained in care are on ART. A small proportion of patients are in care but are not on ART. Fifty-five percent (n=181) of the 328 are males and 45 percent (n=147) are females; the average age is 36 years. At least 50% of this subgroup have been in care for almost two years (median=23 months), and 45% (147) had <= 2 months since last clinic visit (median time since the last visit = 5 months). The following priority interventions will be implemented to address this sub-population and ensure their timely enrollment and retention on ART:
- a. ***Docket Review and Update:*** Regional multidisciplinary teams, or QI teams, will be tasked to prioritize review of dockets and records for this group. They will develop action plans to resolve all cases by the end of October 2019.
 - b. ***Rapid ART Initiation:*** The teams will identify patients who should be initiated on ART and enroll them immediately.
 - c. ***Mental health and substance abuse services:*** Within this group of patients are patients with health conditions that require delaying ART initiation (e.g. mental health and substance abuse). Upon patient identification, individual treatment plans will be developed and implemented.
 - d. ***Treatment Literacy:*** U=U messaging will be employed to convey the importance of treatment, adherence, and viral suppression.

Outcomes and Impact

With the implementation of the above-mentioned interventions with fidelity, it is anticipated that at least 50% of the estimated 9,392 patients who are diagnosed and not on ART will be (re-)initiated on ART by end of FY20. Implementation of the above strategies will also achieve the following:

- Close linkage gap by resolving 100% of PLHIV who have never been linked (n=4,440) by September 2019.
- 95% linkage to ART for all people with new HIV diagnoses.
- Resolve 100% of out of care HIV cases (N=4,624) by June 2019.
- Close the treatment gap for those in care but not on ART (N=328) by October 2019.

C.) JAMAICA: RETAINING PATIENTS ON ART AND ACHIEVING VIRAL SUPPRESSION

Understanding the Target Population: Those on ART

As of March 2019, data showed that 12,834 patients are on ART, which is 58% of the total 22,226 people living with HIV who have been diagnosed. Of the 12,834 individuals on ART, 11,970 (93%) have been on ART for >six months. Of this group, 7,271 (61%) are virally suppressed and 4,699 (39%) are of unknown viral load or virally unsuppressed. Of the 4,699, a total of 2,423 are known unsuppressed, while the remaining 2,276 patients have been on ART for over six months with no recent viral load result. Eight hundred sixty four (864) patients are on ART <six months. As they most likely did not have a VL test, there is no data on VL suppression (Figure 20).

Of the 12,834 on ART, 55% are females and 45% are males. South East Regional Health Authority (SERHA) accounts for 49% (6,319), Western Regional Health Authority (WRHA) 23% (3,001), Northeast Regional Health Authority (NERHA) 14% (1,826), and Southern Regional Health Authority (SRHA) 13% (1,688) of ART patients. These data emphasize the importance of intensifying impactful interventions at facilities with the highest burden and volume of patients, particularly relevant for SERHA and WRHA.

The vast majority (65-68%) of patients on ART are 15-49 years old. 30-35% are over 50 years old, with slight variation amongst the four regions.

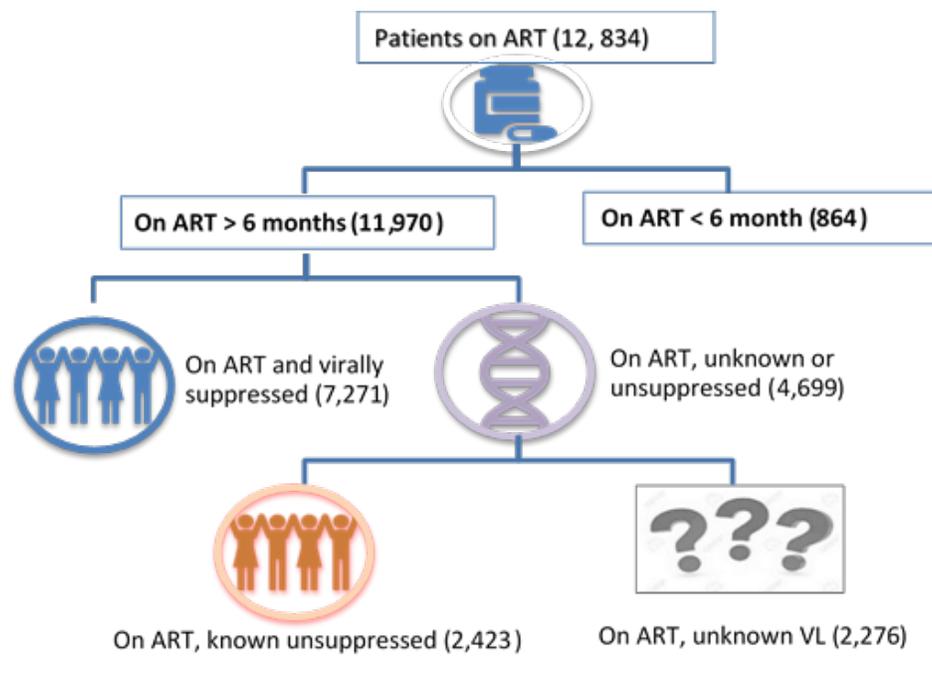


Figure 22: Categories of Patients on ART

Understanding the Target Population and the Gaps: The Unsuppressed

It is estimated that only 57% of ART patients are virally suppressed. Thus, there is a gap of 43 percent of PLHIV who are unsuppressed or with unknown viral loads.

Examining the data for those unsuppressed across age bands, there is a correlation between age and viral suppression. For children 1-4 years, the percentage of males unsuppressed slightly exceeds those for females. For females 5-9 years and males 10-14 years, the unsuppressed outnumber those suppressed. However, these findings represent a small proportion of the overall population of PLHIV, which may not warrant a targeted intervention. There is a slight improvement in the proportion within the 15-19 age group; however for groups 20 and older, those suppressed far outnumber those unsuppressed.

Of those unsuppressed, the proportion declines as the age bands increase from early adulthood onward. However, this must be analyzed within the context that an increase in population size also occurs simultaneously for the older age groups. Comparing differences between the sexes, in older age bands, there is a slightly higher proportion of males unsuppressed compared with their female counterparts in the 35-39, 45-49, and 50+ age bands.

In designing strategies for the unsuppressed population, the contextual factors within each age band should be noted. For example, the barriers to suppression for an adolescent may differ from those of an adult given general differences in resources, work/family obligations, etc. In addition, policy shifts are needed to provide an enabling environment that offers client-centred services and facilitates treatment adherence. Ensuring patients can benefit from multi-month dispensing will reduce the financial and economic costs of frequent ART pick-up, a reported barrier for remaining in care. The transition to TLD for new PLHIV, men, and women with informed consent will be significant in supporting adherence and viral suppression.

The strategies and interventions presented below are designed to address the gaps and needs that are specific to each of the distinct groups of patients on ART, namely: those on ART >6 months and suppressed; those on ART >6 months and unsuppressed; those on ART <6 months; and those on ART >6 months with no recent viral load test result.

Tailored Strategies and Approaches by Sub-Population

- i. **Patients Newly Initiated or Re-initiated on ART:** HIV surveillance report 2017 showed that of the ~1,200 newly diagnosed cases, 48% were females and 52% were males. For both females and males, the highest newly diagnosed/reported cases occurred among the 20-29 year olds, with 149 and 160 cases, respectively. The number of new cases among females <40 was 335 (59%), and among females 40 years and older, was 236 (41%). Among males <40, there were 335 cases (54%), and for men 40 years and older, there were 286 cases (46%).

These data emphasize the need to tailor interventions to address the populations at highest risk and who are likely to be enrolled on ART, such as the targeted U=U campaign, as well as differentiated models of care that meet the needs of younger people, especially 20-29 year olds.

New Interventions:

Transition to TLD: In FY 20, all patients newly initiated on or re-initiated on ART will be offered TLD as the first line regimen as recommended by WHO's December 2018 guidelines, including the informed choice option for women child-bearing age. Based on estimated new diagnoses in FY 20 and results of the return to care campaigns, it is anticipated that approximately 4,000 patients will be transitioned to TLD.

Implementation of U=U ("Undetectable = Untransmittable"): As outlined in the previous section, U=U will help to improve the health outcomes and self-esteem of individuals; reduce the stigma associated with HIV; and help control the HIV epidemic.

ii. **Patients on ART for More Than Six Months (n=11,970)**

- a. ***On Treatment and Virally Suppressed (n=7,271)***: Viral suppression rates vary from 60.8% in SERHA to 47.8% in SRHA, with both WRHA and NERHA at ~ 54%. These data highlight the immediate need to address these unusually low viral suppression rates in all regions, especially in SRHA where urgent intervention is needed to understand and resolve this critical issue. Current information from the RTC indicates that adherence may be a major factor in low suppression rates. For both males and females, suppression rates are very low ($\leq 50\%$) and similar among patients aged 29 years and below. Among patients aged 35 years and older, females consistently achieve better suppression rates than males in the same age categories. These data signal the importance of reaching men with the appropriate messaging and services to ensure they access and adhere to treatment in order to achieve viral suppression.

New Interventions:

Transition to TLD: As of March 2019, there are 7,271 patients stable on ART for over six months who are virally suppressed. This population will be transitioned to TLD in a phased approach, according to the MoH forecasting, quantification, and procurement plan. Transition to TLD will be completed by the end of 2020.

Six-month multi-month dispensing: The MoH will be issuing guidance to empower all HIV treating physicians to prescribe and request six month dispensing for patients who have been adherent and stable for over 12 months, and by the end of FY20, more than 3,000 patients will be on six-month prescription/dispensing. Quality Improvement activities will ensure close follow-up of pharmacy pick-up times with reminders for patients and pharmacy pre-packaging to reduce time. To increase efficiency, private pharmacy networks will be engaged to increase access to medication pick-up points. This will address the long wait time to pick up medication that has been identified as a common challenge by patients nationally. Additionally, the MoH is exploring the procurement and use of prescription bottles designed to hold up to six months medication rather than those with only one-month supply capacity.

The rapid pathway (RP) model: This intervention will provide expedited outpatient care for clinically stable patients (Figure 23). The MoH will provide guidance to all treatment facilities on implementation of this strategy in FY20. This is important given the findings from the recent patients return to care campaign survey, which highlighted long wait time at clinics as a barrier to retention on ART and cause of defaulting clinic attendance. This is especially important in the SERHA and WRHA, where 49.2% and 23% of patients on ART are located. By end of FY20, at least 50% of all patients on ART for >six months and suppressed (~3,600) will be receiving these fast-tracked services. Quality Improvement

activities through rapid iterative testing will ensure effective implementation and review by patients and staff.

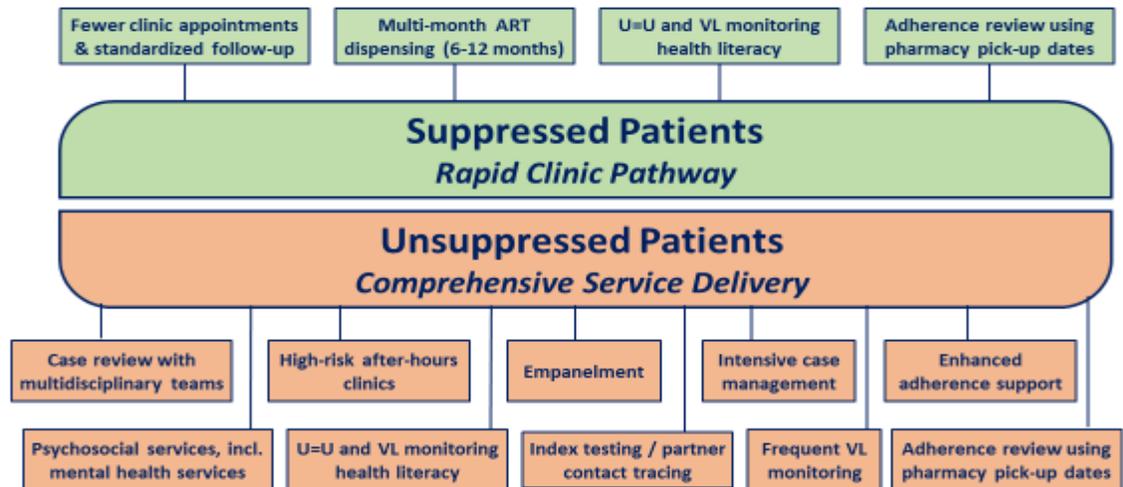


Figure 23: Differentiated Service Delivery for Suppressed v. Unsuppressed Patients

b. Patients on Treatment, Unknown Suppression or Unsuppressed (n=4,699)

b.1. On ART > 6 months and virally unsuppressed: 2,423 patients represent ~19% portion of the total population on ART of 12,834. Similar to the overall population on ART, the proportion of females vs. male is 55% (1,317) vs. 45% (1,102). Men 35 years and older and females 25 years and older constitute the vast majority of this sub-population. As such, there is a need for focused and targeted interventions for this group. Further analyses of the data showed regional differences, with SHRA having the highest rates of unsuppressed (21.6%), followed by NERHA (20.4%), WRHA (18.7%), and SERHA with 17.7%.

New Interventions:

Differentiated care model for unsuppressed patients with particular focus on high viral load patients (VL >100,000 copies/ml): By September 2019, all virally unsuppressed patients and those with high viral loads will be assigned to regional multidisciplinary teams for case review. These teams will be integrated with existing site multi-disciplinary teams reviewing and formulating individualized enhanced adherence plans with assistance from clinical mentors. The teams will develop plans to implement “high viremia clinics” with a packages of services, including peer support,

guided by the findings of the reviews and informed by other programmatic and survey data.

Of the 2,423 patients virally unsuppressed, 868 (36%) are classified as “high viremic”, with VL > 100, 000 copies/ml. Overall, 52% of the “high viremic” patients are females. Regionally, SERHA, WRHA, and SRHA reflect similar proportions of males vs. females. NERHA is the exception with females representing 48 % of the “high viremic” population.

The interventions will be part of an intensified case management, including enhanced adherence counseling and monitoring, combined with index case partner notification and testing services. For index cases who do not disclose their partners, guidance and referral for self-testing will be provided. Laboratory investigations, in particular, more frequent viral load testing services, will be made available as part of the packages of services. A high viral load register will be implemented, coupled with high VL alerts from the lab, to follow the progression of these patients toward suppression.

Transition to TLD (or DTG-based 2nd line regimen): Following the enhanced adherence counseling and monitoring, as per national guidelines, patients who remain unsuppressed will be transitioned to TLD or DTG-based 2nd line regimen. Healthcare workers will follow up to ensure viral suppression is attained. By end of FY 20, over 90% of the ~2,400 will be virally suppressed.

b.2. On ART > 6 months with no recent viral load test (n=2,276): A total of 2,276 constitute this sub-population, representing 17.7% of all patients on ART. Females account for 53% of these patients, with over 63% (841) 35 years and older; the proportions of females and males are similar to those in the total population of patients on ART. Among men in this category, two-thirds are 40 years and older.

Intervention:

Docket Review and Update: The regional multidisciplinary teams, or QI teams, referred to above will prioritize review of dockets and records to ascertain their status, develop action plans, and ultimately, resolve all cases by the end of October 2019. The teams will determine if viral load testing was completed in the last 12 months but not documented in patient dockets and the treatment database. If results are not located in the treatment database, the LIS database will be reviewed to determine if the test was performed. Once resolved, the Treatment Coordinator will follow up and ensure the results are located and patients’ information is updated with the results in TSIS.2, LIS, and the dockets.

- iii. **Patients on ART <6 months and Ineligible for viral load test (n=864):** Per national guidelines, viral load is assessed after six months of treatment. Thus, there are 864 patients who are “ineligible” for a VL test, representing 6.7% of the total population on ART.

Intervention:

Close Patient Monitoring: Treatment coordinators will be assigned to closely monitor these patients at their facilities to ensure treatment adherence and that a viral load test is given after six months. Results will be reviewed with the care team for next steps. Transition to TLD will be part of the package of services. These cases will be resolved by the end of December 2019.

Strategies to be implemented across all categories of patients on ART:

- i. **New Interventions:** In addition to the above-mentioned tailored interventions, the following approaches will be implemented across all sub-populations:

- a. **The Ryan White Model:** This model of care supports integrated healthcare services into selected HIV treatment sites and will be initiated at two public facilities (one in the North East Region and one in the Western Region), as well as two community-based sites. The aim is to provide PLHIV with easily accessible critical services that are patient centered and culturally appropriate. These services address important barriers to maintaining treatment regimens and engagement in care. Mental health, sexual and reproductive health, anal health, and transgender health services are also included. This comprehensive approach to service delivery encompasses the provision of services at the HIV treatment sites and where necessary referrals for specialist care that is closely monitored.

This intervention will also include a Clinical Capacity Exchange program aimed at sharing best practices and expertise from Ryan White Facilities that serve similar populations to help close identified gaps along the clinical cascade. United States-based providers will be chosen from Ryan White sites serving individuals from the Caribbean diaspora to provide on-site clinical mentoring initially at one site in the North East Region and one site in the Western Region, with staggered rollout to other sites. The program will also facilitate virtual technical assistance through HIV ECHO telementoring and assistance with the training of QI coaches. These interventions are expected to result in the transformation of clinical practices to improve health outcomes of PLHIV.

- b. **Treatment Literacy around U=U:** The package of interventions will support adaptation and implementation of the U=U campaign to educate and empower patients. Healthcare workers will be trained, and IEC material will be developed and disseminated.

- iv. **Ongoing Interventions to be Scaled:** The following interventions have been implemented with positive outcomes and will be expanded in FY 20 for maximum impact on retention and adherence:

- a. Extended clinic hours to address problems faced by persons who cannot attend clinic during regular working hours, which was identified by most patients interviewed during the return to care campaign.
- b. Engagement with the private pharmacy network to increase access to medication pick-up points and to alleviate the concerns of patients experiencing challenges with traveling to clinics.
- c. KP-accessible decentralized ART distribution through NGOs and community/NGO peer support program. NGOs and venues friendly to KPs will facilitate access to services for this population at higher risk of defaulting on treatment related to stigma and discrimination.
- d. Strengthening the functionality of the MoH's Treatment data base (TSIS 2.0) to include appointment reminders and close tracking of missed appointments.
- e. Support increased VL coverage to 100% for eligible PLHIV by providing TA to maximize lab capacity, and improve the electronic lab information system to reduce turn-around time (TAT).

Outcomes and Impact

Implementation of the above strategies will achieve the following:

- For patients on ART, viral load testing needs to be accessible and provided to all eligible patients (100% coverage).
- Viral suppression among all on ART should improve to 95% by September 2020.

	Total		<15				15+				Source, Year
			Female		Male		Female		Male		
	N	%	N	%	N	%	N	%	N	%	
Total Population	2,728,864	100	290,794		299,847		1,086,677		1,051,546		STATIN, 2017
HIV Prevalence (%)		1.7%									MOH Spectrum estimates, 2018
AIDS Deaths (per year)	1500						<500				MOH Spectrum estimates, 2018
# PLHIV	34,000		150		304						
Incidence Rate (Yr)							11,114		22,436		
New Infections (Yr)	1900										
Annual births							<500				
% of Pregnant Women with at least one ANC visit	<500										
Pregnant women needing ARVs											
Orphans (maternal, paternal, double)											
Notified TB cases (Yr)	119										Tuberculosis Country Profile, 2017
TB/HIV Co-infection (per year)	96	81%									Tuberculosis Country Profile, 2017
Estimated Population Size of MSM*	42,375										IBBB, 2018
MSM HIV Prevalence		29.3%									IBBS, 2018
Estimated Population Size of FSW	18,696										IBBS, 2014
FSW HIV Prevalence	370	2%									IBBS, 2017
Total Transgender Population	3,841										IBBS, 2018
Transgender prevalence		51%									IBBS, 2018

Table 7. 90-90-90 cascade: HIV diagnosis, treatment and viral suppression* (Jamaica)

Table 7. 90-90-90 cascade: HIV diagnosis, treatment and viral suppression* (Jamaica)										
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	2,728,864	1.8%	39,000	22,226	12,834	33%	57%	11,315	461 (4%)	N/A
Population <15 years	590,641		268		135	50%	20 (15%)			
Males 15-19	124,221		760		89	11%	23 (26%)			
Males 20-29	261,074		5,437		722	13%	332 (46%)			
Males 30-39	195,653		7,356		1,111	15%	576 (52%)			
Males 40+	470,598		9,731		3,780	39%	2,212 (58%)			
Females 15-19	119,594		562		124	22%	35 (28%)			
Females 20-29	256,315		3,192		1,003	31%	445 (44%)			
Females 30-39	209,593		4,836		1,882	39%	1,022 (54%)			
Females 40+	501,176		6,859		3,972	58%	2,548 (64%)			
MSM	42,375	29.3						4,993	349 (7%)	N/A
FSW	18,696	2%	542	243	56		12	6,085	65 (1%)	N/A

3.2: TRINIDAD AND TOBAGO

3.2.1: National statistics, disease burden and country profile

In Trinidad and Tobago, the HIV epidemic is both generalized and concentrated, as HIV prevalence is greater than 1% in the adult population and higher than 5% in at least one of the most at risk or KPs (Table 1). It is estimated that 11,000 persons in Trinidad and Tobago are living with HIV, equal to 1.2% of the country's population. In addition, the epidemic is concentrated among MSM, among whom there is a 27% HIV sero-prevalence, according to the results of a 2013 biobehavioral survey conducted by the Ministry of Health and supported by PEPFAR.

Table 8. HIV Prevalence in Trinidad and Tobago (UNAIDS, 2017)

Population	Prevalence Rate
Adult aged 15 to 49 HIV prevalence rate	1.1 [1.0-1.2]
Women aged 15 to 49 HIV prevalence rate	0.8 [0.8-0.9]
Men aged 15 to 49 HIV prevalence rate	1.4 [1.2-1.6]
Men who have sex with men prevalence rate	31.6

The first case of HIV was diagnosed in Trinidad in 1983. The number of new infections peaked around 2000/2003 and steadily declined to just over 500 cases in 2016 and 2017, representing a 29% decrease over the time period (Figures 24 and 25).

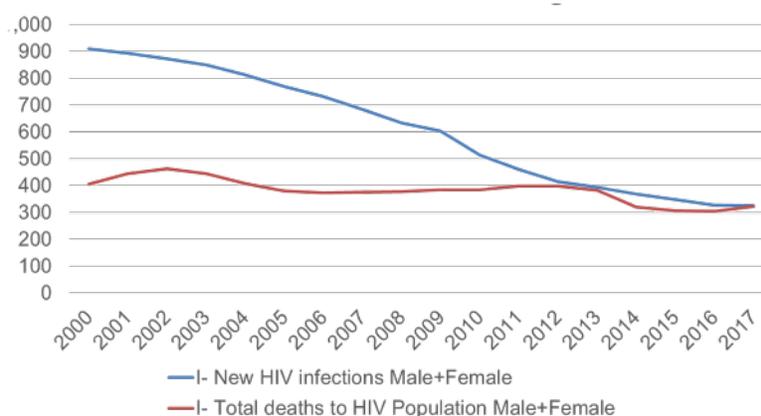


Figure 24: Trends in the number of new HIV infections and number of HIV related deaths in Trinidad and Tobago, 2000-2017

Incidence:mortality ratio

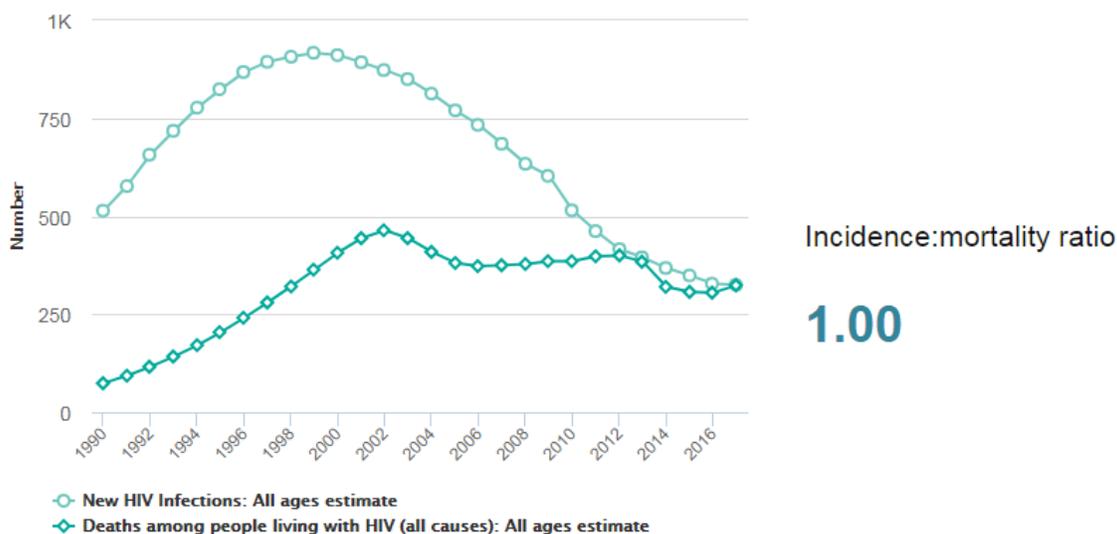


Figure 25: Trend of New Infections and Deaths among HIV Population in Trinidad and Tobago

Data reported through HIV case based surveillance at the end of 2017 show a decrease in the number of HIV-related deaths between 2012 and 2015, after which the numbers of HIV-reported deaths remained relatively unchanged (Figure 24). New cases of HIV are concentrated along the east-west corridor of Trinidad from the borough of Arima to the region of Diego Martin, with the highest number of cases in the city of Port of Spain (Figure 26).

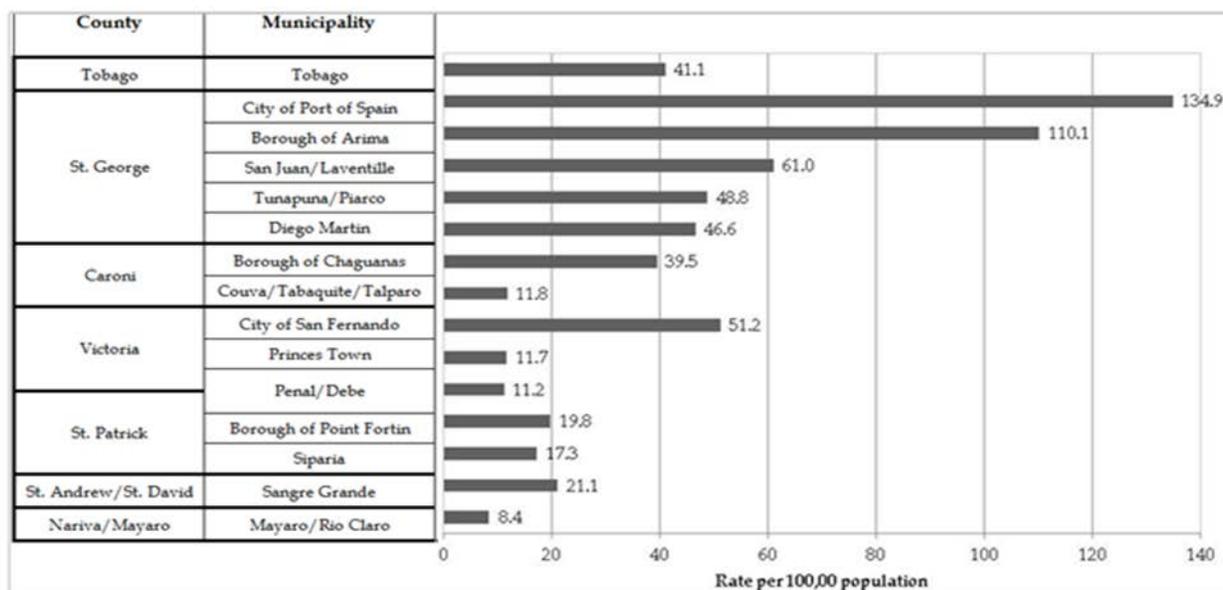


Figure 26: Rate of new HIV diagnoses by municipality and county of residence in Trinidad and Tobago, 2016 (N=500)

Approximately 80% of all new HIV diagnoses were linked to a treatment site in 2017. The coverage of HIV testing among pregnant women in the public sector was 60.6% in 2017. The national target aims for HIV testing coverage among pregnant women to be sustained at a minimum of 95%. Strengthening of the surveillance system is needed to determine the number of women seeking antenatal care in the private sector, who received a HIV test and know their status.

Ninety percent of persons linked to treatment attended Medical Research Foundation of Trinidad and Tobago (MRFTT, with 68% of national patients) or SFGH Ward 2 Clinic (22% of national patients). By September 2016, all five adult HIV treatment sites in Trinidad and Tobago had implemented Treat All. Per 2017 UNAIDS data, Trinidad and Tobago is among the countries in the Caribbean and Latin America with the highest percentage of people living with HIV on treatment who are virally suppressed (UNAIDS, Global Update, 2017). At the end of 2017, 6693 of the 8530 (78%) PLHIV retained in HIV care were receiving ART (Figure 27). The achievement of high levels of persons on ART reflects the timely adoption of Treat All, as well as the implementation of interventions to return previously diagnosed persons to care and initiate and/or reinstate them on treatment.

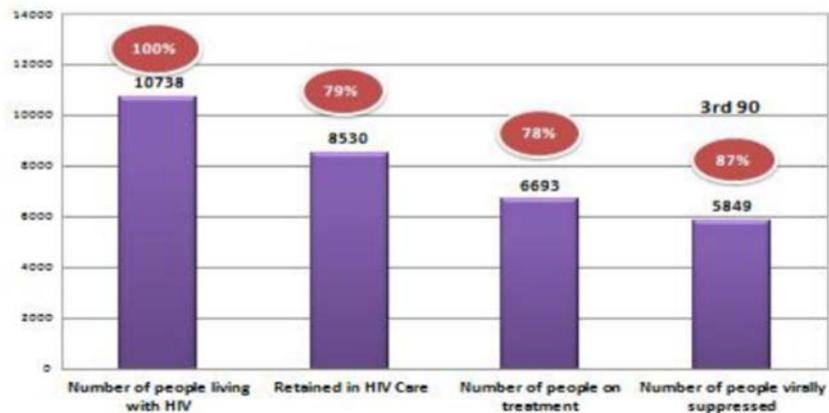


Figure 27: Trinidad and Tobago National HIV Cascade 2017

By the end of 2017, a total of 4972/6693 (74%) of PLHIV on ART attained VL suppression. This represented 87% (5849/6693) suppression attained by those on ART. For this period, a total of 6516 of the 6693 (97%) PLHIV on ART received a viral load test. The national treatment cascade also shows high levels (87%) of viral load suppression among those patients on ART. This achievement can be attributed to PEPFAR-supported interventions to improve adherence and increase retention in care, as well as the implementation of quality improvement initiatives aimed at strengthening the delivery of care at two of the largest treatment facilities.

3.2.2: Strategies to Address the Gaps

The following figure shows the progress achieved toward the UNAIDS 90-90-90 targets, as well as the corresponding gaps in the national clinical cascade, for Trinidad and Tobago (Figure 28).

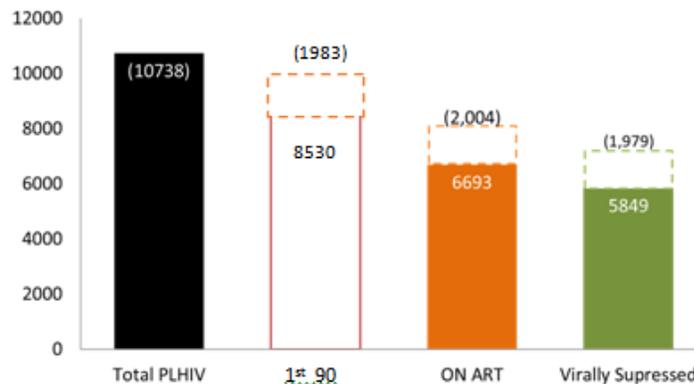


Figure 28: Progress Toward 90-90-90 in Trinidad and Tobago

Finding the Undiagnosed:

In Trinidad and Tobago, the number of PLHIV who know their status is unknown. Until recently, mortality data was not accessible, limiting the ability to quantify the number of PLHIV diagnosed and still alive since the beginning of the epidemic in 1983. Retention in care is thus used as a proxy for the number of PLHIV diagnosed. Using this proxy, 1,134 persons need to be diagnosed to achieve the first 90.

To increase case finding, high impact and targeted testing interventions will be expanded. These include: index case testing, self testing, and community-based testing (KPs, FSWs, TG). The Government will continue to focus on provider-initiated testing and counseling (PITC) offered at all points of patient contact with the healthcare system.

Improving the quality of the data will also help with achievement of the first 90. Ongoing sweeps of the national death register will ensure the alignment of the HIV surveillance register with confirmed deaths. Other strategic information priorities include the strengthening of HIV surveillance data connectivity, the linking of the electronic data systems across sites, and the implementation of sentinel surveillance in STI clinics (in the North and South).

Initiating/Re-Initiating on ART Those Not in Treatment:

Based on the national HIV treatment cascade, an estimated 2,004 PLHIV need to initiate or re-initiate ART. Of these, an estimated 401 persons (20%) know their status but are not linked to treatment. An estimated 1,603 persons were either enrolled in care but never started on ART or were enrolled in care but became lost to follow up.

To ensure linkage to treatment services, emphasis will be placed on strengthening referral systems and/or ensuring newly diagnosed persons are linked to treatment sites through linkage Linkage Coordinators. With the target number of patients linked, the MRFTT will strengthen relationships with HIV testing sites in the NWRHA and NCRHA to ensure patients newly diagnosed are accompanied to the treatment. Barriers to linkage, such as transportation costs, will be addressed.

To improve retention, PEPFAR will support the MOH in expanding interventions and strategies to reduce loss to follow up and return to care those patients previously diagnosed. Support will be provided across all treatment sites to aggressively target clients who have missed clinic appointments, those who recently dropped out of care, and pending cases. In addition, to improve retention for defaulters, extended hour clinics and viraemia clinics will be expanded.

To continue to bolster the country's implementation of Treat All, PEPFAR will work with the MOH to finalize the updated national care and treatment guidelines. Via this update, patients who are currently in care but not yet initiated on ART will be prioritized as a focus for interventions. Support will also be provided to expand patient literacy in Treat All via PLHIV peer support workers. MMS and other differentiated models of care will be employed to improve patient retention. The PEPFAR-supported treatment sites will implement statelite sites to facilitate six-month ARV supplies and enhanced viral load monitoring for stable patients.

PEPFAR will continue to expand the HIV ECHO telementoring program with the goal of providing regular clinical updates and case consultation for healthcare workers across the region. PEPFAR will continue to support the clinical preceptorship program for less experienced HCWs providing HIV care. There will also be increased technical assistance for the development and adaptation of education materials and tools based on the health literacy needs of patients, aimed at increasing retention. Finally, focus will be placed on comprehensive training for staff, including in the areas of mental health, substance use, trauma-informed care, sexual and reproductive health, and anal healthcare.

Achieving Viral Suppression:

An estimated 87% of PLHIV on ART in Trinidad and Tobago are virally suppressed. Nonetheless, there is room for fine-tuning of the: 1.) data management system (to decrease turnaround time for test results); and 2.) supply chain (to ensure stockouts do not occur). There is need to strengthen routine viral load testing, monitoring, and reporting, as well as to increase the use of viral load data to target adherence support for patients.

To support the continued scale up of viral load testing, the Government will acquire a new Abbott viral load testing platform through reagent rental, transition from manual to use of electronic inventory management system, strengthen the CELLMA Health Information System (HIM), and install the laboratory health information system (LIS) at the EWMSF facility. This

system will interface with other data systems and ensure the availability of timely and accurate data for HIV patient management and country wide laboratory surveillance.

Cross-Cutting Strategies:

i. Strengthening Procurement Processes and Supply Chain

To maintain gains in HIV and viral load testing coverage, further strengthening in the procurement and supply of commodities is critical. This will ensure a reliable and sufficient supply of pharmaceuticals, laboratory reagents, test kit, and commodity supplies.

ii. Improved Data Management Systems

The CELLMA software, which includes laboratory and pharmacy components, will be rolled out to all treatment sites. In addition, the transition of all paper-based sites to electronic forms will continue, and linking of data sources will be expanded.

iii. Building of Human Resource Capacity

Human resource capacity will be strengthened through the recruitment and training of staff at both the national and regional levels. This will enable the scale up of testing, as well as the provision of quality treatment services.

iv. Improving Quality in HIV Services

To improve the quality in the delivery of HIV testing, treatment, and care services, Quality Improvement policies, standards, and associated targets need to be established. Increased emphasis will be placed on implementing QI activities at testing and treatment facilities.

v. Laboratory Strengthening

Further strengthening of the laboratory capacity will enable universal access to quality diagnostic services, and in turn, improve HIV treatment services. The Government has embarked on a plan to strengthen the national and regional health authority laboratories by ensuring effective policies and procedures are in place and establishing functional quality committees. Ongoing support will help to accredit the laboratories performing HIV/TB/ STI and to support the expansion of HIV drug resistance testing as a referral service.

vi. Improving Strategic Information

The Government will continue to build strategic information capacity to improve the accuracy and reliability of HIV/AIDS data. This will support effective strategic planning, as well as the optimal delivery of health services. Priority will also be placed on improving the national HIV case surveillance system to better monitor progress toward epidemic control.

vii. Reducing Stigma and Discrimination

While there have been great strides, ignorance about HIV and the stigma associated with the virus remain, affecting, for example, KP access to services. KP-friendly services are being provided by the MRFTT, including during their extended hours clinics tailored to the needs

of KPs and youth. Similar clinics are be implemented in Ward 2 San Fernando Hospital, the second largest treatment site in Trinidad and Tobago.

Table 9. Host Country Government Results (Trinidad)															
	Total		<15				15-24				25+				Source, Year
			Female		Male		Female		Male		Female		Male		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Total Population	1394504														GAM 2018
HIV Prevalence (%)		1.1													UNAIDS, 2017
AIDS Deaths (2017)	88		0				2		3		3		49		HACU HIV Surveillance Report 2017
# PLHIV	11,000														UNAIDS, 2017
Incidence Rate (2017)		0.24													UNAIDS, 2017
New Infections (2017)	524														HACU HIV Surveillance Report 2017
Annual births															
% of Pregnant Women with at least one ANC visit															
Pregnant women needing ARVs	<200														UNAIDS, 2017
Orphans (maternal, paternal, double)															
Notified TB cases (Yr)	217														WHO, 2017
% of TB cases that are HIV infected	100%														WHO, 2017
% of Males Circumcised															
Estimated Population Size of MSM*															UNAIDS, 2017
MSM HIV Prevalence		31.6%													
Estimated Population Size of FSW															
FSW HIV Prevalence															
Estimated Population Size of PWID															
PWID HIV Prevalence															
Estimated Size of Priority Populations (specify)															
Estimated Size of Priority Populations Prevalence (specify)															

3.3: GUYANA

3.3.1: National statistics, disease burden and country profile

The epidemic in Guyana is mixed, with an estimated 8,200 people living with HIV, and prevalence of 1.7% in the general population. According to the BBSS 2014, higher HIV prevalence is observed among KPs (FSW: 5.5%, MSM: 3.8%, and transgender persons: 8.4%). Region 4 (PEPFAR’s focus region) continues to account for the highest burden, which with 73% of reported HIV cases (MOH 2014). At the end of 2018, Guyana’s clinical cascade was 87-75-80. National ART coverage, as well as PEPFAR-supported treatment figures, are shown below (Figure 29).

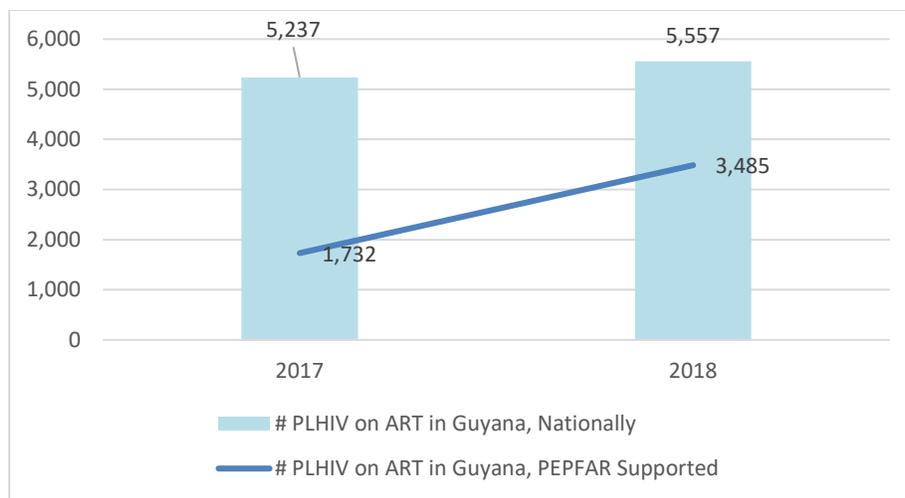


Figure 29: National ART Coverage Trend in Guyana and PEPFAR Trend for Individuals Currently on Treatment

The country’s incidence to mortality ration is 2.33 (Figure 30). Reducing HIV incidence is a critical step towards sustained epidemic control, and Guyana aims to accomplish this by interrupting ongoing transmission among highest risk groups. The existing barriers to achieving this goal are: 1.) delayed testing and entry into care; and 2.) high lost-to-follow-up for high-risk PLHIV.

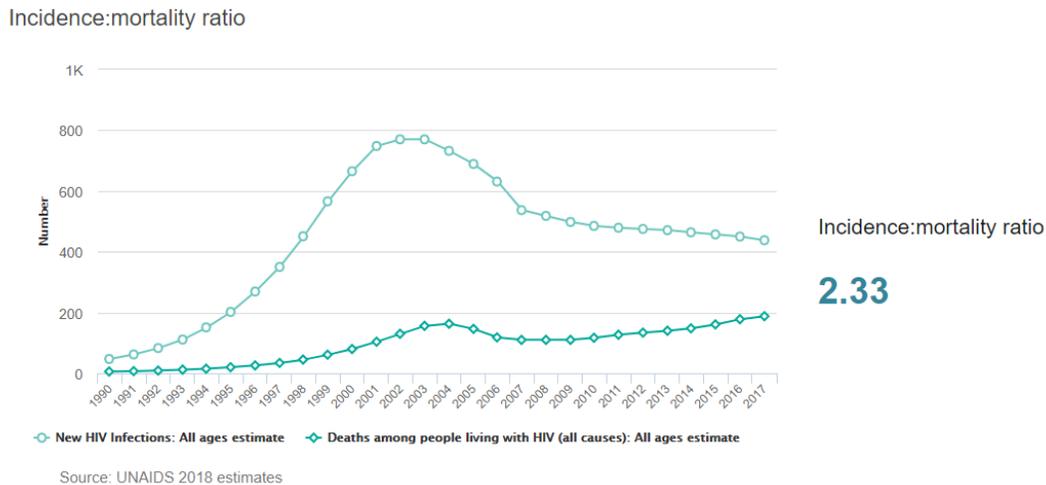


Figure 30: Trend of New Infections and Deaths among HIV Population in Guyana

The strategy seeks to address these barriers by increasing the identification and testing of higher risk individuals through index testing and enhanced partner notification services in both community and facility settings. In addition, targeted HIV screening at chronic disease clinics, STI clinics, and hospitals will be employed. Self-testing and recency testing will be implemented at the two PEPFAR-supported faith-based site. There will also be expanded outreach to men. There will be an enhanced focus on improving retention in facility-based treatment through enhanced coordination between facilities and CSOs. This will also served to decrease late diagnoses.

KPs are the target populations for the aforementioned strategy. Given their disproportionate burden of disease and disparate access to services, these groups drive ongoing transmission, and activities targeted to them stand to have the greatest impact.

3.3.2: Strategies to Address the Gaps

Finding the Undiagnosed:

- i. **Index Testing and enhanced partner notification services:** In Guyana, the proportion of PLHIV diagnosed is estimated to be 87%. Index testing will be a key strategy to obtain the first 90. In the second quarter of FY 19, index testing/partner notification services were integrated into both facility- and community-based testing. Despite the challenges experienced with partner disclosure, social workers and peer navigators will continue to counsel index clients in order to elicit sexual contacts for testing and linkage. In addition, other approaches to facilitate disclosure will be explored, such as disclosure of locations where partners can be found and tested and/or network testing without disclosure of partnership. PEPFAR will support the strengthening and expansion of index testing at community and facility sites through the

training of peer navigators and health care providers, as well as the development of IEC material. Support will also be provided to the Ministry of Public Health's (MOPH) National Care and Treatment Centre for the development of an index testing protocol, training of health care providers, and implementation.

Complementary testing modalities will include the use of social network strategies and Enhanced Peer Outreach Approaches (EPOA) for targeted case finding of both previously undiagnosed KPs and KPs who have disengaged from treatment.

At facility sites, targeted HIV screening will be conducted at chronic disease and STI clinics. HIV testing will be offered based on symptoms or risk.

- ii. Self-testing at FBO sites:** Internationally, self-testing is considered a best practice for diagnosis. Support will be provided to the two PEPFAR-supported faith-based facilities to implement the self-testing approach, which will include policy development, validation of test kits, and training of care providers.
- iii. Recency testing:** PEPFAR will facilitate the in-country validation and implementation of HIV recency testing, which will allow identification of recent transmission and provide data on the number and proportion of recent infections among the newly diagnosed cases. Timely and intensive index testing will also be performed for all who test positive.
- iv. Expanding outreach to men through demand creation:** In collaboration with the MOPH, a men's health approach will be pursued. It will employ health screening at health centers and other male-associated organisations and clubs to reach men who do not identify as gay or do not readily disclose their behaviour due to stigma. Efforts will also be made to increase demand for services through ICT-based social media approaches and via social networks, particularly to reach those reluctant to access services.

Initiating or Re-Initiating on ART Those Diagnosed but Not on Treatment:

Antiretroviral treatment coverage is 75% in Guyana, which indicates a need to strengthen linkage to and retention in treatment. Emphasis will be placed on using peer navigators across the HIV treatment sites in Region 4. The KP-led peer navigators will refer and/or accompany persons testing positive to treatment sites for confirmatory testing.

Linkage to treatment from mobile outreach is challenging due to the inability of peer navigators to link persons diagnosed positive during outreach programs at night since treatment sites are closed. Peer navigators/educators will follow up with those persons who are not enrolled through home visits, returning to the place where they were diagnosed and offering transportation reimbursement as an incentive to enroll in a treatment site. In addition, options will be explored with the MOPH to facilitate linkage during outreach at night, by referring PLHIV to a fully equipped mobile unit, staffed with a clinician and other health care providers. Global Fund is supporting the procurement

of the unit. Moreover, the MOPH will be piloting the use of KP-friendly physicians through a public-private partnership, to expand service access through the private sector.

Lengthy treatment readiness assessments, long wait times, transportation needs, and an unwelcoming environment are some of the barriers impeding retention in treatment. To improve retention, PEPFAR will support the MOPH to conduct a rapid review of the clinical cascade, determine the number of patients who are in care and not yet on treatment, and ensure they are enrolled. In addition, a patient return to care campaign will be launched, focusing on Treat All and U=U messaging, to encourage those diagnosed to seek treatment. The campaign will target clients who have missed clinic appointments, those who recently dropped out of care, and pending cases. In addition, strategies to improve the retention plan for defaulters will continue to include fast-tracking long time defaulters and scheduling appointments during extended clinic hours.

The return to care campaign will be complemented by the work of KPLHIV who are located in the MOPH's HIV care and treatment sites and the PEPFAR-supported sites in tracing and returning PLHIV who are lost to follow-up. Services such as home visits, site related navigation, and providing appointment reminders via mobile application, as well as messaging on same-day treatment initiation and U=U, will complement the aforementioned services. PEPFAR will share the tools, protocols, and experiences developed and implemented during patient return-to-care campaigns in other countries in the region, for adaptation to the Guyana context.

Treat All commenced at the two PEPFAR-supported sites in FY 16 and was adopted by the MOPH sites in May 2018. PEPFAR will support rapid implementation and expansion of Treat All at all treatment sites by the end of the fiscal year, and will continue to work with the MOPH to finalize the update of the national care and treatment guidelines. USG will also conduct a refresher training for care providers to ensure all cadres of care providers are trained and implementing Treat All. Areas of focus will include:

- Expansion of patient literacy in Treat All, especially among PLHIV outreach workers;
- Training for CSOs and health care workers to emphasize the value of treatment to prevent illness, death, and transmission; shift from “test and wait” to “test and treat”;
- Identification of innovative ways to improve access points to HIV care and treatment; and
- Shortening of the treatment readiness assessment process by offering multiple counseling sessions during the same clinic visit.

Finally, multi-month scripting (MMS) and other differentiated models of care can reduce transport needs, the frequency of clinic visits, and wait times, leading to increased patient retention. The PEPFAR-supported sites will implement differentiated models of HIV care, including MMS for stable clients.

Achieving Viral Suppression:

- i. Enhance retention and improve adherence support to increase viral suppression in facilities and communities:** Health care providers and peer navigators will support

individuals who are living with HIV to enroll and remain in clinical treatment through a proactive case management approach to improve clients' HIV treatment knowledge; adherence to clinical appointments and medication; and risk aversion through personal contact. A patient-centered approach will help to improve the quality of interventions through enhanced care coordination between facilities and CBOs.

To improve clinical outcomes of patients on ART, care and support programs will provide supportive management through: psychosocial counseling to promote healthy living; PHDP services to enable PLHIV to care for themselves while protecting themselves from reinfection and others from HIV; defaulter tracking for improved retention in care and ART adherence; appointment reminders, including need-based accompaniment; and facilitation of linkages to other social support programs. Activities will focus on:

- Dedicated case management to provide client support through regular appointment reminders, treatment literacy; and adherence support;
- Strengthened collaboration between CBOs and HIV care & treatment sites through co-facilitated support groups and case conferencing;
- Strengthened capacity of CBOs to improve the skill set for educating KPs about HIV treatment and encouraging retention on ART; and
- Enhanced adherence and retention counseling and psychosocial support for newly enrolled (PHDP services).

ii. Expand FBO support model, which has shown over 90% of patients' retention and viral suppression: The PEPFAR-supported faith-based sites have demonstrated great success with patients' retention and viral suppression, with over 90% of patients retained and virally suppressed. These sites remain key to accelerating and sustaining epidemic control in Guyana. PEPFAR will build on these achievements in the following ways:

- Reaching men and KPs, then linking and retaining them in treatment, with a focus on achieving viral suppression;
- Finding children and adolescents, linking and retaining them in treatment, with particular attention to family index testing;
- Addressing stigma and discrimination;
- Advancing and sustaining education around all aspects of HIV, via U=U messaging; and
- Expanding outreach to men through targeted demand generation.

iii. Rapid Pathway Model (fast-tracking services for stable patients): This approach will provide expedited outpatient care for clinically stable patients. In FY 20, PEPFAR will work with the MOPH to implement this strategy at all treatment sites, as well as the two faith-based facilities. This strategy is expected to reduce wait times at clinics. Quality Improvement

activities through rapid iterative testing will ensure effective implementation and review by patients and staff.

- iv. Increase viral load testing coverage to 100%:** At the PEPFAR-supported MOPH site, 1,936 clients were on ART at the end of March 2019. Of those clients, 980 eligible and unique clients received a viral load test. Of the 980 persons who received a viral load test, 750 were virally suppressed, representing 76% of persons. While at the two faith-based facilities, 1,639 clients were on ART at the end of March 2019. Of these, 1,244 eligible and unique clients received a viral load test with their result documented, representing 76% of all patients with a documented viral load test. Of the 1,244 persons who received a viral load test, 1,157 persons were virally suppressed, representing 93% viral suppression among those who had viral load testing. Systems-level gaps, including periodic reagent stock-outs, have affected VL coverage rates. VL testing is the standard for monitoring PLHIV on ART to confirm treatment success and provide early warning of treatment failure. As such, scale up requires the assurance of accurate and reliable testing services.

PEPFAR developed a VL scorecard which is used globally to assess laboratories performing VL analysis. The results help to recognize gaps and identify areas for improvement to provide high quality testing services. The audits conducted using the VL Scorecard are intended to be an effective means to: 1.) determine if the lab is providing accurate and reliable results; 2.) determine if the HIV VL and Infant Virologic testing (IVT) is well managed and adhering to quality practices; and 3.) determine if the tests are performed and returned in a reasonable time to use the results for patient management. This will be coupled with several other initiatives intended to strengthen the national VL sample referral network. The MOPH has also accessed HIV Drug Resistance testing as a referral service for patients currently failing treatment, to ensure that effective clinical decisions are made to get them to viral suppression.

PEPFAR has engaged the technical teams at both the HIV National Care and Treatment Center, to support improved adherence and retention on treatment, and the National Public Health Reference Laboratory, to support and strengthen the laboratory services and systems. Information about the importance of VL testing and adherence to treatment to achieve viral suppression will target KP and PLHIV at both the community and facility levels.

In FY 20, PEPFAR will concentrate on strengthening procurement in the supply chain system, with an overarching focus on strengthening MOPH leadership and governance. This will include advocacy for the full adoption of Treat All, transition to the new TLD ARV regimens, and increased utilization of the PAHO Strategic Fund and Global Fund WAMBO pooled procurement mechanisms. Technical assistance is aimed at ensuring optimum treatment coverage, obtaining reduced prices for ARVs, and mitigating the impact of stock outs of critical HIV commodities.

	Total		<15		15-24				25+				Source, Year		
			Female		Male		Female		Male		Female			Male	
	N	%	N	%	N	%	N	%	N	%	N	%		N	%
Total Population	740,685														CIA Factbook, 2018 (est.)
HIV Prevalence (%)		1.7%													MOPH, 2018
AIDS Deaths (per year)	<200														
# PLHIV	8,200														UNAIDS, 2017
Incidence Rate (Yr)															
New Infections (Yr)	<500														UNAIDS, 2017
Annual births															
% of Pregnant Women with at least one ANC visit															
Pregnant women needing ARVs															
Orphans (maternal, paternal, double)															
Notified TB cases (Yr)	592														WHO, 2018
% of TB cases that are HIV infected	86%														WHO, 2018
% of Males Circumcised															
Estimated Population Size of MSM*	3,327														UNAIDS, 2017
MSM HIV Prevalence	4.9%														MOPH, 2018
Estimated Population Size of FSW	5,256														IBBS, 2016
FSW HIV Prevalence	5.5%														MOPH, 2018

Table 12. 90-90-90 cascade: HIV diagnosis, treatment and viral suppression* (Guyana)

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	740,685	1.7%	8,200	~7,147	5,557	68%	80% of PLHIV on ART	49,807	789	543
Population <15 years	267,147		<500			64%	n=83			
Men 15-24 years										
Men 25+ years										
Women 15-24 years										
Women 25+ years										
MSM	3,327	4.9%						2,258 (2018)	71 (2018)	
FSW	5,256	5.5%						1,077(2018)	47 (2018)	

3.4: BARBADOS

3.4.1: National statistics, disease burden and country profile

HIV prevalence is estimated to be 1.6% amongst the general population and 14.4% amongst MSM in Barbados. There are an estimated 2,700 people living with HIV (UNAIDS, 2017); of these, 1,800 or 67% are males aged 15 years and older. The number of new infections has been estimated to be below 200 per year since 2010 (Figure 32). PMTCT coverage is high, with 100% of 18 known HIV positive pregnant women receiving ARVs in 2018.

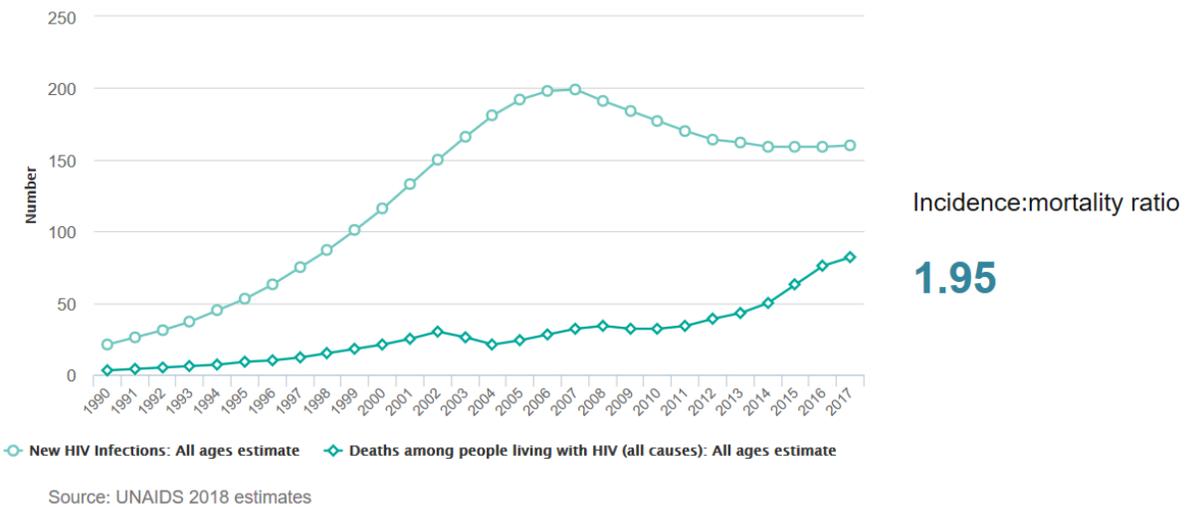


Figure 31: Trend of New Infections and Deaths among HIV Population in Barbados

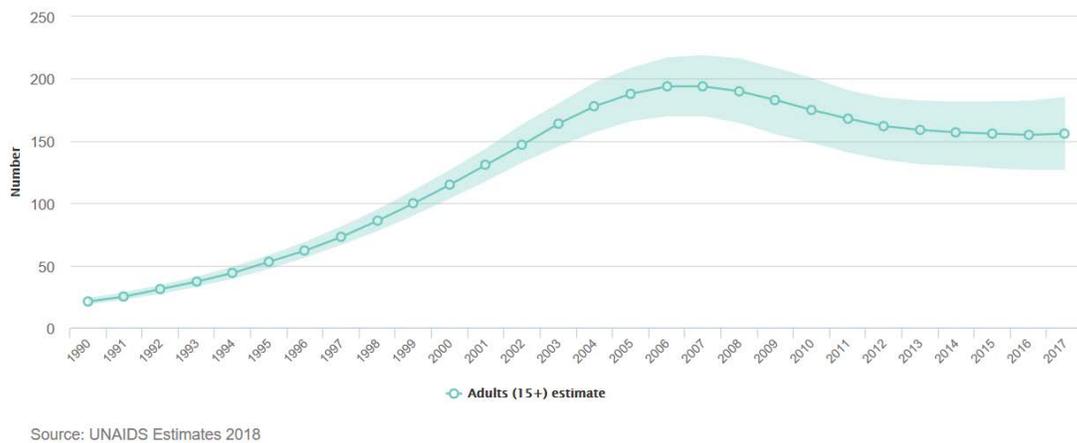


Figure 32: New infections amongst persons aged 15 years and old in Barbados

Currently, an estimated 2,700 people are living with HIV in Barbados according to the 2018 UNAIDS Spectrum estimate, which represents 1.6 percent of the general population. The epidemic is concentrated in KPs, especially MSM, among whom the prevalence is approximately 14 percent (MOHW, 2017). Barbados has made significant progress in meeting the UNAIDS 90-90-90 targets, since currently there are 87 percent of persons living with HIV who know their status (n=2,349). However, ART coverage stands at 65 percent (n=1,526) of those diagnosed, with viral suppression at 84 percent amongst those on ART (n=1,282), according to MoHW Dec 2017 data. More than one-third of PLHIV in Barbados are not on ART; this gap represents the largest opportunity for intervention. As such, PEPFAR support will enable the Ministry of Health and Wellness (MOHW) to accelerate progress towards epidemic control.

In October 2018, PEPFAR and the Government of Barbados began implementation of a two-year “surge” plan to fast track achievement of the UNAIDS 90-90-90 targets. PEPFAR’s priorities include improvement of the prevention, care, and treatment programs at facilities, the scale up of laboratory services for HIV and related testing, and strengthening strategic information, especially data quality and management. In these areas, PEPFAR provides direct technical assistance, support for staff, consumables, and interventions. PEPFAR is also focused on community-based HIV testing, including index testing, as well as the implementation of the U=U campaign, and KP outreach services.

3.4.2: Strategies to Address the Gaps

To address the main barriers to Barbados reaching the 90-90-90 goals by 2020, PEPFAR will support activities to identify the undiagnosed, especially KPs and men. Once diagnosed, these individuals will be initiated on treatment immediately, providing the necessary support for monitoring adherence and eliminating barriers to remaining on treatment in the long term. Initiatives will be implemented to seek those who know their status and have fallen out of treatment, to return them to treatment services; and ensure adherence and retention to get them virally suppressed. Some of these individuals may have never been linked, been lost to follow up or were previously linked but never initiated treatment, however the aim will be to initiate and retain them in treatment. Currently there is also a small group of patients who are on ART but either their viral suppression status is unknown or they have yet to attain suppression after several months of treatment. Interventions will be formulated to determine what issues exist and ultimately increase the proportion of persons who achieve viral suppression.

Finding the Undiagnosed:

As of 2018, 87% of people living with HIV in Barbados have been diagnosed, with an additional 351 diagnoses needed in order to reach the first 90. The Government of Barbados reports that approximately 100 new PLHIV are identified each year through existing testing modalities. To reach the first 90 by 2020, PEPFAR investments will support the aggressive scale-up of new and more effective testing strategies, including index and recency testing. PEPFAR will work with CSOs and the MoHW to further build capacity to implement services to reach and diagnose persons,

especially KPLHIV, earlier. This will include introducing and reinforcing index partner testing as routine practice in all HIV testing services. Although index partner testing services are currently conducted in country, the data collection and follow up services have not been formalized to quantify the success of the initiative. PEPFAR will support the MOHW to implement a system to capture the information, including SOPs, and follow-up mechanisms where needed, especially when a positive partner is located.

PEPFAR will work with the MOHW to promote the self-testing modality in country as a demand creation strategy, especially for persons who fear S&D associated with visiting a testing site. The current national HIV testing policy requires all HIV testing kits and facilities providing testing services to be registered with the Ministry. This was implemented to promote high quality testing services and decrease the rate of diagnostic errors. The Best Dos Santos Public Health Laboratory (BDSPHL) currently manages the Dried Tube Specimen (DTS) proficiency testing and Internal Quality Control (IQC) program for HIV testing sites. The program supports quality assurance of HIV rapid testing and index testing performed in country, and is administered at over 15 sites and distributed biannually. As a result, testing error rates have been consistently below 1%.

Support will therefore be provided by PEPFAR to implement the self-testing approach, which will include policy development, validation of test kits, IEC materials, information dissemination, training of providers, including doctors, CSOs, and pharmacies and data capture about kit use where possible.

The primary challenges that Barbados faces with meeting the first 90 is low testing among men and late diagnosis of PLHIV. In 2016, 36% of newly diagnosed PLHIV received a concurrent AIDS diagnosis. Priority will be given to prevention and testing promotion and services, which target men and address several factors contributing to the low yield of men. First, there is a disproportionately high prevalence of HIV amongst MSM, approximately 12%. Another factor is male-to-male sex among men who do not identify as homosexual or readily disclose their behavior due to the associated, pervasive S&D.

KP CSO Drop in Centers will expand community access to testing for men, incorporating and prioritizing index and partner testing, which will in turn increase testing numbers and yield, as well as identify PLHIV earlier before disease progression. PEPFAR will also expand HIV testing services near locations where men seek male sex partners, a strategy that demonstrated improved yields in FY 2018 (from 3.8% to 8.5%). PEPFAR will support multi-channel demand creation strategies, including the U=U campaign and social media content on MSM sexual networking sites, such as Grindr, and communication platforms like Facebook and WhatsApp. PEPFAR will also facilitate in-country validation and implementation of the HIV recency test, which will allow identification of recent infections and provide data on the number and proportion of such among newly diagnosed cases. The HIV Rapid recency test will be used as part of the Rapid Incidence Testing Algorithm (RITA), for surveillance and improvement of the public health program. This will support surveillance efforts and help to identify any pockets of current transmission. Therefore, by

September 2020, all approved and registered HIV testing sites will incorporate the RITA into the daily process.

To ensure that high-risk individuals who are currently negative do not seroconvert, the MOHW started a pilot in 2018, for the roll out of PrEP to key populations especially MSM, once specific criteria was met for inclusion. Currently there are over 70 persons enrolled, and in FY 20, the PrEP initiatives will be scaled up for discordant couples and men at higher risk. Information on how to prevent other sexually transmitted diseases will be included.

PEPFAR-supported services have not detected any new cases of HIV among female sex workers over the past two years. The MOHW notes very limited case detection among FSWs, however, the MOHW intends to mobilize domestic resources for HIV combination prevention for this KP group to ensure continued surveillance.

Initiating or Re-Initiating on ART Those Diagnosed but Not on Treatment:

The MOHW implemented the Treat All policy in January 2016, which resulted in a rapid scale up in the number of persons initiating treatment. At the end of March 2019, 65% of diagnosed PLHIV were on treatment, which is approximately 1,538 persons (641 Females; 897 Males). Though Treat All is national policy, barriers remain to rapid initiation on ART. Based on preliminary data from the MOHW, there are approximately 500-593 PLHIV who were previously diagnosed but have not been linked to treatment. A LTFU unit was developed and dedicated staff hired with PEPFAR support to review the list of potential defaulters, and follow up with interventions including calls, home visits, and targeted appointments to re-enroll them in treatment. Work will continue to track the LTFU patients, as the MOHW has obtained access to the immigration database, which will provide resolution for the persons who have left the island. However, the problem of insufficient contact information remains for at least half of the patients included on the list. For patients contacted, the main reasons provided for leaving care are S&D and employment demands interfering with clinic visits. PEPFAR will continue to work across both the public and private sector (particularly CSOs) to ensure retention in care and to find LTFU patients.

To enhance retention of patients returned to care, the MOHW offers treatment readiness assessments, pre-ART counselling and adherence counselling, along with partner-support activities. Early treatment initiation, adherence, and retention will be the goals of treatment scale-up investments. PEPFAR will provide technical assistance to drive demand for treatment by introducing the U=U campaign, improving patient literacy, and initiating the rapid pathway for patients initiating treatment. PEPFAR will work with the MOHW to improve quality of services delivered at treatment sites, as well as to address issues of S&D in partnership with KP CSOs. Systems strengthening activities will focus on ensuring the availability of high quality laboratory testing for clinical management of ART patients. Additionally, as the unnecessarily high cost of ARVs and reagents presents another hurdle to sustainable access to treatment for all PLHIV, PEPFAR will work to improve Barbados' supply chain with a focus on reducing costs, increasing ARV availability, ensuring sustainability, and transitioning to TLD.

Achieving Viral Suppression:

As of December 2017, viral suppression amongst PLHIV on ART was reported as 84%, which is approximately 1,282 persons. Viral load testing is readily available at the PEPFAR-supported BDSPHL, which also provides a referral service to other countries, as needed. Barbados has realized several significant accomplishments in the area of laboratory systems strengthening, which has positioned them to be a strong regional reference node. Currently Trinidad and Tobago, Guyana, Suriname, and the Eastern Caribbean states rely on them to provide complex molecular testing services, which would be very expensive to access out of the region. The referral service assists with lowering the cost of testing, as Barbados is able to negotiate for quantity discounts on reagents, using the projected testing numbers. The BDSPHL serves as the reference laboratory and provides among other services, CD4, viral load, and HIV drug resistance testing for the country. The current platform for viral load testing, is the Roche Cobas Ampliprep/Cobas Taqman 48, which has an annual capacity of approximately 17,000 tests, when running at full capacity with at least two technologists. In FY18, the BDSPHL performed approx. 3,300 VL tests and less than 60 EID tests on samples collected at treatment sites. VL coverage in Barbados is the highest in region at 95%, however stock outs due to late delivery of reagents has affected the provision of the service during 2018. The issues have been resolved and the MOHW will continue to expand access to the testing services. Of the 1,538 persons on ARTs, 1,237 had a VL test done in the last 12 months. Of these, 1,086 (88%) had a suppressed viral load, i.e. VL<1000 copies/ml, at their most recent test.

The National Treatment guidelines recommend VL testing at six months after ART initiation and again at 12 months. Once stable, patients are monitored with one test annually. To encourage retention, MMS and dispensing are practiced by doctors at the three treatment sites. Persons who do not attain viral suppression after 12 months of ART are referred to enhanced adherence counselling and monitored by clinic staff to ensure they are adherent. Patients who continue failing treatment after repeated interventions are recommended for HIV Drug Resistance testing, which is available at the public health laboratory in country. Within the Barbados HIV program, patient samples are submitted for HIV DR testing based on criteria developed by the MOHW. The database of results from the testing will inform the national treatment guidelines and be used to assist in the successful transition to TLD.

Currently there are approximately 452 persons on ART who are unsuppressed. To expand the rate of viral suppression among those on treatment, PEPFAR will prioritize adherence and retention support interventions across health facilities and the community. Support is also being provided to execute a data quality assessment to clearly determine the number and status of the unsuppressed patients, some of whom may not yet be eligible for VL monitoring. Once resolved, tailored interventions will be implemented to ensure that the remaining group is virally suppressed. The MOHW also intends to transition ART regimens to TLD, especially for patients failing treatment, which should result in an increase in the number suppressed and the risk of patients failing treatment as a result of drug resistance will steadily decrease.

In addition, PEPFAR-supported efforts to increase demand for treatment and improve patient literacy through the U=U campaign and CSO-led community education/peer navigation will help to ensure a decrease in the number of patients defaulting from treatment and an improved retention rate.

	Total		<15				15+				Source, Year
			Female		Male		Female		Male		
	N	%	N	%	N	%	N	%	N	%	
Total Population	293, 131										
HIV Prevalence (%)		1.6					1.0%		2.2%		UNAIDS, 2018 for persons aged 15-49
AIDS Deaths											
# PLHIV	2,700						1,800		<1,000		UNAIDS, 2018
Incidence Rate											
New Infections	<200										UNAIDS, 2018
Annual births	2,574										MOH, 2018
% of Pregnant Women with at least one ANC visit	97.5%										PAHO, 2016 (number with 4 visits)
Pregnant women needing ARVs	18										MOH, 2018
Orphans (maternal, paternal, double)	N/A										
Notified TB cases (Yr)	0										WHO, 2017
% of TB cases that are HIV infected	0										WHO, 2017
% of Males Circumcised	N/A										
Estimated Population Size of MSM*	2,618										MSM IBBS (2014)
MSM HIV Prevalence	14.4%										MSM IBBS (2014) -
Estimated Population Size of FSW	N/A										
FSW HIV Prevalence	N/A										

Table 14. 90-90-90 cascade: HIV diagnosis, treatment and viral suppression (Barbados) *

Table 14. 90-90-90 cascade: HIV diagnosis, treatment and viral suppression (Barbados) *										
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 of diagnosed (%)	Viral Suppression (%)	Tested for HIV (#)	Diagnosed HIV Positive (#)	Initiated on ART (#)
Total population		1.6%	2,700	2,317	1,518	56% (all PLHIV)	84%			
Population <15 years		-	-	-	-	-	-	-	-	-
Men <25 years				266	146	55%	60%			
Men 25+ years				1,039	633	61%	72%			
Women <25 years				291	152	100	66%			
Women 25+ years				708	423	60%	75%			
MSM	2618	14.4	377	295	215	73%	66%			
FSW	-	-	-	-	-	-	-	-	-	-

4.0 Program Activities for Epidemic Control

4.1 Program Targets

Support Volume by Group		Expected result APR 19	Expected result APR 20
HIV testing (all populations)	<i>HTS_TST</i>	3,441 ³	20,821
HIV positives (all populations)	<i>HTS_TST_POS</i>	161 ⁴	3,472
Treatment new	<i>TX_NEW</i>	2,000 ⁵	10,405 (NGO and Public facilities) 200 (Private sector)
Current on ART	<i>TX_CURR</i>	12,960	25,588 (NGO and Public facilities) 220 (Private sector)
Key populations	<i>KP_PREV</i> ⁶	4,119 ⁷	905

³ Based on Q2 results, NGOs accounted for 50% of HTS results for FSW and 65% of results for MSM. Keeping the YTD results constant, these percentages were applied to expected Q3 and Q4 results resulting in a total FY 19 result of 3,441. This however, excludes indexing testing for which no results for PEPFAR have been reported to date.

⁴ Based on Q2 results, NGOs accounted for 50% of HTS_POS results for FSW and 76% of results for MSM. Keeping the YTD results constant, these percentages were applied to expected Q3 and Q4 results resulting in a total FY 19 result of 161. This however, excludes indexing testing for which no results for PEPFAR have been reported to date. It is not clear however, whether this high proportion will be maintained as NGOs accounted for 50% of total PEPFAR positives in FY 18.

⁵ In order for the expected results of TX_CURR to be achieved, a minimum achievement of 2,000 is required for TX_NEW.

⁶ Based on Q2 results, NGOs accounted for 42% of KP_PREV results for FSW and 65% of results for MSM. Keeping the YTD results constant, these percentages were applied to expected Q3 and Q4 results resulting in a total FY 19 result of 4,119.

⁷ Expected results in FY 19 for prevention may differ slightly based on the shift from FSW programming in FY19 Q4

4.2 Systems Strengthening

Key Systems Barriers and Strategies to Address Them:

Key regional systems gaps identified by the CRP include the following (see also Table 16): low treatment coverage and low retention in HIV treatment services; insufficient personnel and adherence to SOPs that hamper the timeliness and quality of HIV data; the high cost of reagents, preventing the rapid scale up of viral load testing; insufficient adoption and implementation of international best practices; and fragmented information systems that prevent timely reporting and use of data.

The CRP has designed a program to address these systemic issues in FY20. These major activities are included in Table 6 of the FAST. In addition to the activities listed, technical assistance for strategic information will be provided to improve data through the review of Spectrum estimates, linking laboratory, pharmacy, and treatment data, matching death data to improve the accuracy of the first 90 estimates, data quality improvement activities through improved completeness and concordance of data, digitalization of data tools, and establishing routine site-level data reviews. These activities will ensure that treatment cascades are correctly updated and that the most accurate and highest quality data are available for analysis and use by supported countries.

For laboratory strengthening, national testing algorithms will be updated with HIV recency testing added, proficiency testing will be expanded, viral load testing will be scaled up, and rapid test continuous quality improvement will continue. These activities will help detect and characterize recent infections, minimize rapid testing errors, monitor the quality of HIV testing, and increase capacity for viral load testing while reducing turnaround time and eliminating downtime. These above-site activities are complementary and synergistic with the proposed site-level work for FY20. Specific above-site key systems gaps and activities to address the gaps in each supported country are noted in the following sections.

Table 6 investments consider input and current and planned investment from host governments and other donors (e.g., UNAIDS, Global Fund). The activities are the result of discussions with Ministries and multiple stakeholders during the ROP development process, whose input was used to ensure that PEPFAR activities are complementary to the package of activities that are being provided by Ministries and their donors. PEPFAR will leverage the proposed health systems strengthening investments to continue to engage with stakeholders to influence policy discussions for minimum programmatic requirements that have not yet been implemented, in order to achieve and sustain epidemic control in the supported Caribbean countries.

Benchmarks have been defined within Table 6 in order to measure progress against the current baselines in FY19. The benchmarks align with priorities to implement international best practices in supported countries and to achieve epidemic control based on the national targets. For example, at the systems level, the benchmarks for success for implementation of policies include the number of countries transitioning to TLD and the number of policies developed toward full implementation of Treat All. For strategic information, benchmarks include linkages of fragmented data systems,

completion of DQA assessments, establishment of HIV recency testing platforms, and the availability of site-level dashboards and timely HIV surveillance reports. For laboratory strengthening, benchmarks include laboratory accreditation and quantitative targets for viral load testing. All of these activities serve to monitor the impact of the proposed Table 6 investments and address the identified key systems gaps. The ultimate goal of the proposed PEPFAR systems investments is to complement site-level activities and other donor and host country investments to reach targets and achieve epidemic control in supported countries.

Table 16. Key Systems Gaps Identified by the Caribbean Regional Program

Key Systems Barrier or Minimum Requirement	Expected Outcomes	Related SID 3.0 Elements
Low treatment coverage, including as a result of poor retention	<ul style="list-style-type: none"> Improved availability of community and private sector services targeting key populations Decreased LTFU as a result of improved quality of care and patient tracking systems for clients of private sector services 	<p>4. Private Sector Engagement</p> <p>9. Quality Management</p>
Insufficient personnel and inadequate adherence to SOPs, hampering effective data management and affecting the timeliness and quality of HIV data	<ul style="list-style-type: none"> Supported countries have dedicated personnel to implement priority strategic information activities including active surveillance and data quality assurance by September 2019 All PEPFAR supported facilities complete DQAs and implement procedures to improve the completeness and timeliness of reporting by December 2019. 	<p>7. Human Resources for Health</p> <p>13. Epidemiological and Health Data</p>
High cost of reagents and consumables, preventing the rapid scale up of viral load testing	<ul style="list-style-type: none"> Viral load coverage >85% by end of the fiscal year Viral load coverage >90% by end of year 2 	<p>6. Service Delivery</p> <p>10. Laboratory</p>
Insufficient adoption and implementation of international best practices, affecting the policy and enabling environment	<ul style="list-style-type: none"> Improved adoption and implementation of international best practices for TLD transition, MMS and MMD, same day treatment initiation, index testing and partner referral, expanding services for men to capture non-identifying MSM 	<p>2. Policies and Governance</p> <p>6. Service Delivery</p>
Fragmented information systems, which prevent timely reporting, robust clinical cascade analysis, and use of data for strategic planning	<ul style="list-style-type: none"> Review of HIV program HMIS systems/databases to identify gaps and solutions completed by September 2019 National and site level dashboards are routinely used to inform clinical and programmatic decision making in supported countries by March 2020 	<p>13. Epidemiological and Health Data</p>

Systems Strengthening in Jamaica:

i. Strategic Information Systems Strengthening

The Jamaica HIV program and surveillance data are managed through a combination of paper-based and electronic systems. These data systems are siloed, with the National Family Planning Board managing prevention data (e.g. community-based outreach and testing data), the HIV/STI Tb Unit (HSTU) of the Ministry of Health managing clinical data (HIV treatment site data) and the National Surveillance and Epidemiology Unit managing HIV case-based surveillance data. Laboratory and pharmacy data are housed in separate information systems. This presents a challenge for the HIV/STI/Tb Unit, where data to monitor the full continuum of care are in disparate systems and are not routinely available for clinical cascade analysis. PEPFAR's technical assistance is focused on implementing solutions to overcome these systems barriers.

In FY20, PEPFAR will focus on strengthening routine data systems with the end goal of supporting site and regional platforms for data use. Activities will build on approaches used in FY19 to ensure timely data access through digitization of tools, support data use through routine (weekly meetings), and ensure the quality of data through routine quality improvement activities (Table 17). Furthermore, activities are aligned with addressing the data gaps for each subpopulation targeted as part of the CRP Strategy. The contribution of the SI activities have been aligned with the priority populations. These activities will proceed as follows in Jamaica during FY20:

1. *Measuring and improving ART pick-up and Outcomes of High-Risk Patients:*

Through TSIS 2.1, sites will have the capacity to prospectively monitor outcomes of patients on ART in FY20. This will include the capacity to monitor cohorts of patients at high risk of defaulting (e.g. patients returned to care during RTC campaign). These tools will provide a mechanism to track patient outcomes, allowing sites to design and target interventions to improve retention on ART. FY20 activities will also include linking the pharmacy data with TSIS 2.0 to measure on-time pick-up.

These data will allow for stronger measures of adherence and will further allow sites to identify patients at risk of treatment interruption due to delayed ART pick-up. Sites would therefore be able to offer appropriate interventions to avoid defaulting and support re-initiation on ART where needed.

In FY20, PEPFAR will explore options to provide patients with text message reminders for clinic appointments and ART pickup. Furthermore, patient outreach strategies will include dissemination of real-time test results by secure email or text message, including viral load results. This strategy will complement literacy efforts to ensure patients understand and use their viral load data to inform their self-management and continued adherence to ART, and as a part of the U=U initiatives.

2. *Updating National Figures for PLHIV who are Diagnosed and Still Alive:* Current available data suggest that over 26,426 PLHIV were diagnosed and are still alive (March

2019). Through the recently completed RTC campaign, more than 1,000 cases (accounting for approximately 20% of the 5,189 resolved patients) were confirmed to have died. These cases were not previously reported through the case surveillance system. This not only highlights data quality issues but points to a larger issue with the timeliness and completeness of sentinel events within the case surveillance system.

A provisional estimate for the number diagnosed and alive was developed using the data from the RTC campaign. This number will be finalized through a mortality sweep to link all historical deaths with reported cases in the HIV/AIDS Tracking System. Through this process, the team will confirm the outcome of all diagnosed cases (including those never linked to care and those previously linked and currently out of care). This exercise will be repeated on an annual basis with data exchange occurring between the National Surveillance Unit and the HSTU. The HIV case-based surveillance activities will also need to transition from passive to more active methodologies to ensure completeness of reporting from the facility to national level.

3. **Data Quality Improvement:** To improve the quality of data, PEPFAR has supported activities to identify and resolve duplicated records within the HIV databases. The process also involved a review of key variables including - demographic, risk factor (KP status), and clinical data (e.g. viral load) for records with missing data. This exercise was completed in 10 facilities with PEPFAR's support. Through this "data sweep," the HSTU has resolved duplicated records, improved completeness of risk factor data, and improved reporting on viral suppression. These PEPFAR-supported activities complement ongoing work by the MOHW's Informatics team to develop a National Electronic Health Records System. As part of the new system that will be supported in FY20, patients will have unique identifier for accessing care in public facilities. This improvement will address current challenges where some patients have duplicate records across data systems. The resolution of patient records across the systems will also facilitate the generation of national and facility-level treatment cascades through more accurate and timely monitoring of the number of PLHIV on treatment and the number PLHIV virally suppressed.
4. **Data to Improve Programs:** Jamaica's national prevention, care, and treatment programs are hindered by delayed access to current case-based surveillance data, as these data originate in paper format and because the surveillance database is not currently linked to TSIS 2.0. As linkages between the systems and data quality improve in FY20, routine meetings will provide the ability to utilize recent surveillance data to inform programs about the number of new diagnoses, the number of PLHIV linked to facilities and initiated on ART, and assist in triangulating the number of newly diagnosed PLHIV on treatment, retained, and virally suppressed. Real-time surveillance data will also inform cascade analyses and identify groups who are most in need of initiation and retention interventions based on the analyses of surveillance data by finely disaggregated sex and age bands. SI personnel will be supported at various levels within the MOHW to ensure surveillance data

can be utilized to inform PEPFAR-supported treatment activities. This integration of national level SI data to inform site-level PCT interventions will fill gaps in treatment services across the cascade.

Domain	Action	Timeline
1. Disparate data systems: Improve patient tracing and program monitoring by integrating data systems	Launch TSIS 2.2., with integrated pharmacy data to improve measurement of on time pick-up to support patient adherence	December 2019
2. Death: improve completeness of mortality data through a “mortality sweep”	PEPFAR to provide technical assistance to complete death data (development of algorithms etc.) with recommendations for routinizing the activity in FY20	Annually from FY20
3. Data Quality Improvement: assess and improve routine data review processes	PEPFAR to support implementation of routine DQA/DQI activities building on data sweep and data cleaning activities from migration of TSIS to TSIS 2.0	Routine DQI starting Sept 2019
4. Data to Inform Programs: Integration and use of SI data to inform PCT interventions	PEPFAR to support collection and use of surveillance data in to inform real-time interventions of PCT site-level activities	Ongoing starting Sept 2019

ii. Laboratory Systems Strengthening in Jamaica

- a. **Laboratory Key Systems Barriers:** Several systems barriers prevent effective laboratory workflow and monitoring of patient status.
 1. ***Frequent Equipment Down Time:*** Equipment typically experiences unplanned down time more than once per year. There is no back up system; therefore, all sites/patients are unable to access VL testing from the centralized system during these periods. Interventions aim to eliminate unplanned equipment downtime during the year.

2. **Variable Turnaround Time (TAT) for VL Results:** TAT averages between five days and one month. Initiatives are needed to standardize TAT across the country. Interventions will reduce TAT by 75% to less than seven days.
3. **High Cost of Reagents:** The high cost of all molecular tests, especially CD4, VL, and DR, inhibits rapid scale up. Interventions will lower the cost of reagents by 25%.
4. **Limited Human Resource Capacity:** The molecular lab is short-staffed, which affects rapid scale up. Interventions will increase productivity by 50%.

Strategies that will be implemented to help eliminate the effect of the barriers are highlighted in Table 18.

Table 18: Interventions to Address Key Laboratory Systems Barriers

Key systems barrier	Activity	Impact
1. High cost of reagents	Improve supply chain management by bulk procurement in collaboration with other countries	Cost effective testing scale up
2. Long Turnaround time for results	Expand LIS for real time access to results	Reduce Turnaround time by 75%, to <7 days
	Implement high VL alert system in LIS	Improve Lab-Clinic interface for more effective patient management
3. VL coverage is less than 100%	Extend sample reception time	Increase VL access and coverage
	Increase human resource capacity by recruiting more technical staff	Reduce TAT
4. Equipment Down Time	Establish VL test back up system	Eliminate testing down time

- b. **Key Interventions:** In Jamaica, laboratory systems strengthening activities are designed to address the most important cross-cutting issues and effectively support the Care and Treatment program.

1. **Recency Testing:** Implementation of recency testing is a priority area for laboratory strengthening. Based on the updated spectrum estimate of 39,000 PLHIV in Jamaica, there are currently approx. 16,774 persons still undiagnosed. Finding these persons would require targeted strategies, including locating any possible transmission hotspots or networks in country. The HIV Rapid recency testing will be used as part of the Rapid Incidence Testing Algorithm (RITA), which will be included in the updated national testing policy, describing how data from the test will be used in surveillance and improvement of the public health program. By September 2020, the RITA will be used at over 40 HIV testing sites across the country. Partners will also work with the MOHW to analyze the data obtained to further design strategies aimed at decreasing the number of new infections and locating any transmission hotspots. To store, monitor, and disseminate surveillance data from the recency testing activities, an online dashboard portal will be developed during FY20 and managed by the MOHW. The password-protected site will be continuously updated and available to stakeholders who need to use the data to inform future interventions and monitor the public health response.
2. **HIV Rapid Test Quality Improvement:** Currently there are over 40 HIV testing sites in Jamaica (both Government and NGO), offering services using the national serial rapid testing algorithm. The rapid test continuous quality improvement initiative (RTCQII) was introduced in 2015 to cover 14 sites, which increased to 20 by 2018. The other 20 sites will be included in the program during 2019, using the human resource capacity already built in country. This intervention is expected to ensure that testing error rates stay below 5%. The National Public Health Laboratory (NPHL) in Kingston, will introduce the HIV ePT database and manage all country data online; to determine when and where interventions will be needed, and ensure immediate corrective actions are performed. The program will continue to monitor the reduction in testing errors and provide quality assurance in the form of proficiency testing panels, which are distributed to sites biannually. The proficiency testing panels will also support quality assurance of the index-testing program.
3. **HIV Viral Load:** Monitoring of HIV VL results remains a key measure for PLHIV on treatment, to determine the response to medication and indicate virologic failure. The MOHW's treatment guidelines indicate that patients initiated on ART are eligible for a first VL test within six months and again at 12 months. Therefore, inventory management estimates would require forecasting to procure reagents to provide at least two VL tests annually per patient on treatment. Once stable, the virally suppressed patients receive one test per year. The NPHL serves as the reference laboratory and provides among other services, HIV confirmatory testing, CD4, VL, and HIV drug resistance testing for the country. The current platform for VL testing, is the Roche Cobas Ampliprep/Cobas Taqman 96, which has an annual capacity of approximately 30,000 tests, when running at full capacity with at least two technologists. In FY18, the

NPHL performed between 20,000 to 22,000 VL tests and less than 1500 EID tests on samples sent from over 30 collection sites. The annual number of tests is projected to increase by 15-20% within the next year, as more patients are initiated on treatment and steadily increasing thereafter.

At present, VL coverage ranges between 75-85% across the country, with differences seen in all regions. Currently clinicians in both the public and private sector use the service. Demand-creation initiatives, like text message alerts for testing results, being implemented by the MOHW and NPHL, aim to increase coverage to 100% within FY20. The MOHW in collaboration with the NPHL is currently planning to upgrade the current testing platform by the end of 2019 to the Roche Cobas 6800 on a reagent rental agreement. This upgrade will double the capacity of tests which the National Laboratory can perform, effectively supporting the increase in patient load. In FY20 support will be provided to develop an online data dashboard for VL results and sample management. The system will be password protected and provide users with real-time test data for public health and treatment program response.

The MOHW has actively moved to decrease the number of routine CD4 tests being performed by at least 25% during the current financial year, with a similar decrease in each subsequent year. Cost savings from decreased CD4 testing will be applied to supporting the scale up of VL testing nationally.

4. **Laboratory Information System:** Turnaround time for VL test results has not been standardized across the country, due to several factors including late collection of paper-based reports. Work has been ongoing to expand access to the Laboratory Information system (LIS) for 26 sites (including treatment sites, regional hospital labs and health centers) to access a web-based portal for viewing and printing of reports. Support to further expand the LIS will continue in FY20 to include all treatment sites, regional hospital labs and the MOHW treatment database, to ensure real time access to laboratory data, especially for VL results. The system will allow results to be accessible to system users within 24 hours of approval at the laboratory. Sample collection sites will also have the ability, within the coming financial year, to register samples before dispatch to the NPHL. This will guarantee notification to the Laboratory for planning of workload, reagents and human resources, as well as decrease the added burden of data entry by technical staff once samples are received at the NPHL. The LIS will also be updated with functionality to produce a high viral load result alert, to enable the laboratory staff to prioritize patient results for immediate release to clinicians, especially for viremic patients. It is expected that the expanded LIS access will reduce turnaround time for VL results to less than seven days across the country.
5. **HIV Drug Resistance:** Current data shows that national viral suppression is approximately 57% for all patients on ART. Several factors could be responsible for this

low rate of suppression, including lack of adherence and the presence of HIV drug resistance (DR) mutations. Available data previously obtained from one treatment site in Jamaica showed 12.6% primary HIV-DR (Barrow et al, 2013). In early 2019, the MOHW completed an HIV-DR Surveillance protocol among adult patients, the results of which are currently being analyzed. However, preliminary results show about 10% resistance among participants. The NPHL currently has the capacity to perform HIV drug resistance testing in country as a routine test. As a result, the MOHW convened a Drug Resistance advisory board, comprising of clinicians and the NPHL to review patient cases and manage demand creation for routine DR tests. The database of results from the testing will inform the national treatment guidelines and be used to assist in the successful transition to TLD, with patients currently failing treatment being switched to the new regimen immediately. With these interventions, the risk of patients failing treatment as a result of drug resistance will steadily decrease over the next year.

Systems Strengthening in Trinidad and Tobago, Guyana, and Barbados:

- i. Laboratory System Strengthening:** Laboratory systems strengthening activities will address key systems barriers in Trinidad, Guyana and Barbados. PEPFAR will support countries to scale up VL testing, monitor HIV drug resistance, and provide continuous quality improvement in laboratories providing critical diagnostics support throughout the continuum of care.

In Trinidad, a package of activities is proposed to improve laboratory quality and assurance, including the rapid test quality improvement initiative (RTQII), VL expansion, quality management system (QMS) activities, HIV-DR testing, and HIV recency testing. These activities will address the high cost of reagents preventing the rapid scale up of testing and access to services. The benchmarks for these activities are an increase in the number of patients receiving HIV-DR testing, at least 90% of ART patients receiving one VL test per year, and at least two labs attaining tier 3 of the Stepwise improvement process.

In Barbados, activities will include strengthening VL and HIV-DR resistance testing, which they offer as a regional service. The benchmark will be an increase from approximately 80% current VL coverage to 100% VL coverage.

In Guyana, PEPFAR will support improved lab capacity and VL expansion, whereby the outcome metric will be an increase from approximately 65% VL coverage to 90% VL coverage. These activities address the service delivery key systems barriers hindering scale up of laboratory services to support the expanded care and treatment programs in the region.

- ii. Strategic Information System Strengthening:** Strategic information activities outside of Jamaica will address fragmented information systems, which prevent timely reporting, clinical cascade analysis, and use of data for strategic planning. The above-site strategic information

activities will also address insufficient staff and adherence to SOPs, which hamper effective data management and the timeliness and quality of HIV data.

In Trinidad and Tobago, discrete databases for case-based surveillance and treatment data prevent the ability track PLHIV across the continuum of care and lead to delays in access and analysis of data. An assessment to determine how to support the link between the various HMIS will be completed, including determining how to build an HIV testing database that tracks both positives and negatives and transitions from a paper-based model to an electronic system. This activity will empower the MOH to utilize data in real time and improve the accuracy of site-level data. In Trinidad, a data quality assessment will occur with the goal of ascertaining the most accurate possible number of those newly diagnosed, on ART, and virally suppressed. This activity will plug gaps in the clinical cascade and improve programmatic understanding of the populations which are in need of interventions to be started or restarted on ART or are not receiving VL testing.

A similar data quality assessment will occur in Guyana and Barbados, per OGAC guidelines. In Barbados and Trinidad, HIV case-based surveillance (CBS) will continue to be supported via funding for staff to ensure the fundamental activities of CBS continue. These include timely collection, entry, and analysis of data, production of timely reports, and real-time use of data for programmatic feedback to inform interventions that improve service delivery. In Barbados, the Ministry will be encouraged to absorb the staff as bilateral USG support winds down. HIV recency testing will also be supported in Barbados.

iii. Supply Chain System Support: Supply chain system strengthening activities will build upon past investments in procurement and supply chain management to help countries achieve procurement efficiencies and facilitate the use of available pooled procurement mechanisms to obtain cost savings. PEPFAR will provide tailored short-term technical assistance aimed at improving specific HIV/AIDS supply chain management and logistics issues in the targeted Caribbean countries, aiming to facilitate the sourcing of ARVs at a reduced cost as countries transition to TLD, and to improve procurement capacity by addressing urgent supply gaps.

In Barbados, support will be provided to source essential HIV commodities at a lower cost, to enable the country to obtain substantial cost savings while ensuring quality and continuous supply. Furthermore, the cost savings and access available through the pooled procurement mechanisms will enable the Ministry to rapidly transition patient treatment to TLD.

System strengthening support in Guyana will concentrate on procurement strengthening in the supply chain system, with an overarching focus on strengthening the Ministry's leadership and governance. This will include advocacy for the strengthening of Treat All, full transition to TLD, implementation of the supply chain action plan, and increased utilization of the PAHO Strategic Fund and Global Fund Wambo pooled procurement mechanisms. The outcome of this work will be measured by the roll out of Treat All and TLD at all treatment sites, and the

efficient use of the forecasting and supply planning tool. The outcome metric for this activity will be an increase in the number of persons on treatment from 75% to 85%. The benchmarks for these activities are:

1. Number of countries moving to use of a pooled procurement mechanism for cost savings;
 2. Number of countries that have transitioned to TLD; and
 3. Number of countries using forecasting and supply planning tools to ensure accurate and timely quantification of TLD to support attainment of 90-90-90.
-

5.0 USG Management, Operations, and Staffing Plan to Achieve Stated Goals

The PEPFAR Caribbean Regional Program (CRP) has undergone significant shifts in country support and priorities. In 2018, the regional hub completed its transition from Barbados to Jamaica. Additionally, a more recent budget reduction has impacted the evolution of staffing, management, and operations. In ROP 16, there were 45 FTEs. Before the September 2018 regionalization discussions, CRP had about 35 FTEs, and as a result of the new regionalization plans, the CRP planned additional reductions by FY 2021. Since the receipt of the ROP 19 planning letter, further reductions are being proposed: 24.5 FTEs as of Dec 2019 and 23.5 as of June 2020. Apart from these PEPFAR-funded FTEs, three additional staff (not PEPFAR-funded) will contribute to the CRP in leadership capacities. The staff reductions are significant, but the staff will remain flexible, working across areas and agencies, to ensure the workload is shared and requirements are met.

The majority of the staff (21.5 FTEs) are now located in Jamaica, CRP's priority country and the CRP country with the highest HIV/AIDS burden. One local staff Senior HIV Program Management Specialist will remain in Guyana until December 2019 and will not be backfilled. One staff member, the local Senior HIV Program Specialist, will remain in Trinidad and Tobago. One laboratory staff member will remain in Barbados, the location of the PEPFAR-supported BSL-3 laboratory that was completed in 2018; this staff member will continue to support laboratory systems strengthening in the region. One consultant is based out of Florida.

The staffing team includes: HIV program management specialists; HIV prevention, care, and treatment specialists; clinical advisors; a key populations specialist; strategic information (SI) specialists; a health management information systems (HMIS) specialist; leadership; and the support team. Given the overwhelming data systems issues in the region, the HMIS position was prioritized over others that were abolished and is currently being recruited.

U.S. direct hire (USDH) staffing was reduced from five to four in FY19 and will be further reduced to three before the end of FY20. This limited USDH presence is the minimum required to maintain appropriate program oversight. The support team is critical to program operations, fiscal accountability, and partner management. The interagency team has prioritized coordination and collaboration and has maximized effectiveness and efficiencies to include shared staff (administrative) and interagency contributions (SI).

The PEPFAR Coordinator's Office (PCO) Deputy Coordinator and SI positions have now been transferred to State to allow the PCO to recruit and hire via the State Department. In the meantime, interagency SI needs have been filled by agency SI staff.

Below is the proposed CRP staffing chart (Figure 33).

CRP Proposed Staffing for ROP 19

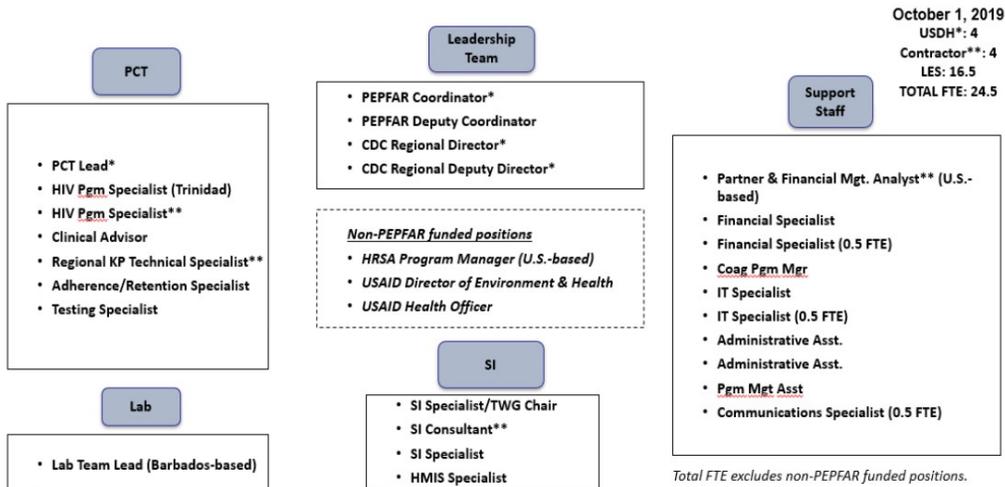


Figure 33: PEPFAR Caribbean Regional Program Staffing Chart

The CRP Cost of Doing Business (CODB) was about \$8.4M in ROP 16 (FY2017), \$7.9M in ROP 17 (FY 2018), is currently about \$6.7M, and is being proposed at \$4.9M in ROP 19 (FY2020). These changes are a direct result of overall staff reductions, necessary cuts given budget reductions, and reduced travel. Outside of staffing and travel, most of CODB expenses are outside the program’s control, as they include ICASS and other Embassy Capacity Security Cost Sharing (CSCS) expenses.

APPENDIX A: Budget Profile and Resource Projections

ROP 19 Planned Spending

Table 19. ROP19 Budget by Program Area

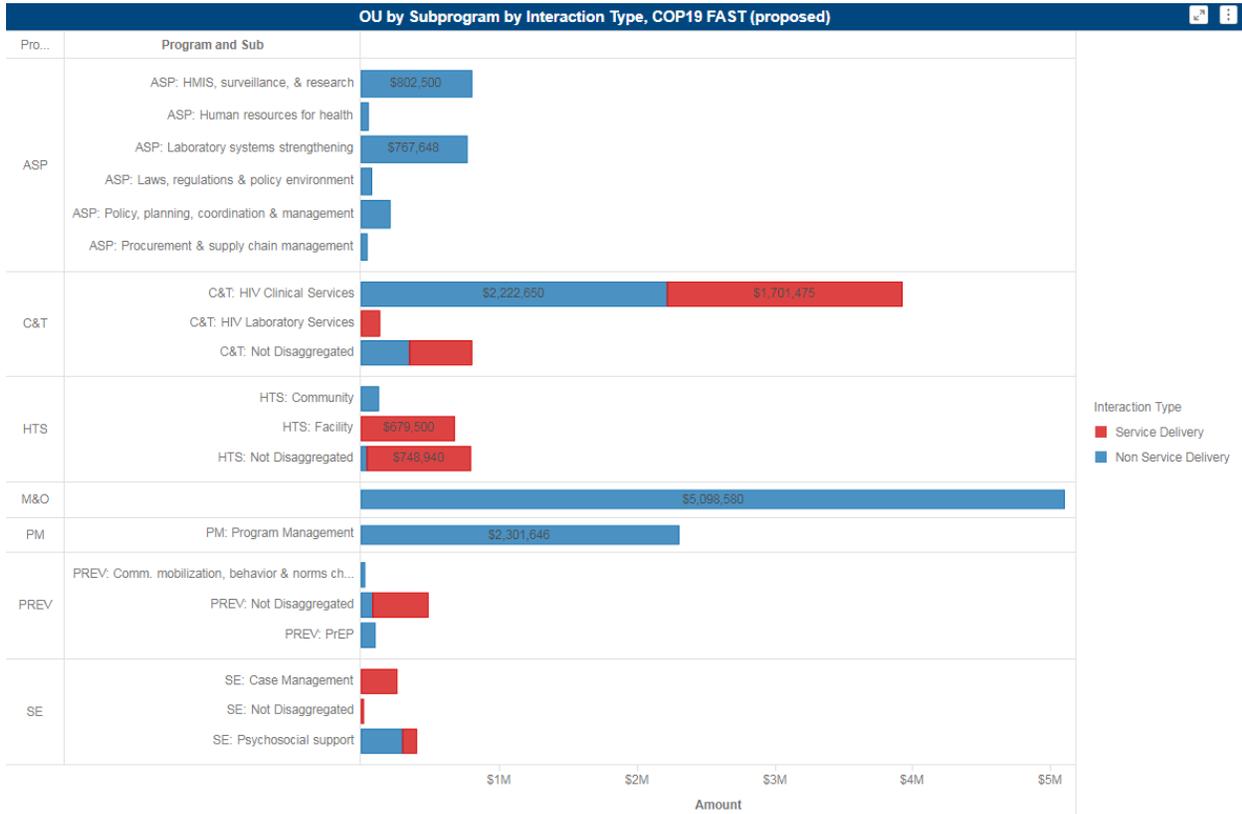


Table 20. ROP19 Total Planning Level (\$US)		
Applied Pipeline	New Funding	Total Spend
3,648,732	13,431,618	17,080,350

Table 21. ROP19 Budget by Agency

Initiative Type	Fiscal Year	2020
	Funding Agency	Amount
Planning Level	HHS/CDC	\$8,530,802
	HHS/HRSA	\$3,000,000
	State	\$771,634
	USAID	\$4,777,915

Table 22. ROP19 Funding by Budget Code

Initiative Type	Fiscal Year	2020
	Budget Code	Amount
Planning Level	APPLIED PIPELINE	\$3,648,732
	HBHC	\$3,723,639
	HLAB	\$1,033,029
	HTXS	\$2,753,268
	HVAB	\$0
	HVCT	\$2,073,380
	HVMS	\$2,025,473
	HVOP	\$532,593
	HVSI	\$1,120,687
	OHSS	\$164,550
	PDCS	\$5,000

Program Budget Approach:

- ✓ Reviewed cascades for each country as interagency team and with stakeholders
- ✓ Identified gaps to reach epidemic control in each country, based on data and discussions with countries and other stakeholders
- ✓ Prioritized countries by greatest need and least resources, considering government commitment to reaching minimum requirements
- ✓ Identified and prioritized key strategies and interventions for re-booting PEPFAR support to Jamaica; highest priority interventions budgeted in FAST
- ✓ Created wish list for priority interventions if additional funds available
- ✓ Discussed which agencies have the comparative advantage, and partners in place to implement the high priority interventions, and allocated the program budget accordingly
- ✓ Reviewed EOFY tool for excess pipeline (4 months), and applied to budget ceiling

CODB Budget Approach:

- ✓ Staffing based on agreed positions at September 2018 regionalization meeting and further reductions considering budget reductions.
- ✓ Prioritized types of positions where need has been identified (fit for purpose) to support priority areas
- ✓ Reduced USDH footprint and increased overall proportion of local staff to ensure continuity and institutional knowledge
- ✓ Majority of staff in Jamaica, where response is greatest
- ✓ Trimming CODB where possible to meet lower funding ceiling

APPENDIX B: Tables and Systems Investments, Section 6.o

Table 6-E (Entry of Above Site Programs Activities)

Funding Agency	PrimePartner	Country	COP19 Program Area	COP19 Beneficiary	Activity Budget	COP19 Activity Category	Key Systems Barrier	Intervention	Intervention	COP19 Benchmark
HHS/CDC	AFRICAN FIELD EPIDEMIOLOGY NETWORK	Jamaica	ASP: Laboratory systems strengthening	Non-Targeted Pop: Not disaggregated	\$ 361,500.00	Lab quality improvement and assurance	High cost of reagents and consumables, preventing the rapid scale up of viral load testing	COP19	COP21	90%VL Coverage
HHS/CDC	AFRICAN FIELD EPIDEMIOLOGY NETWORK	Barbados	ASP: Laboratory systems strengthening	Non-Targeted Pop: Not disaggregated	\$ 71,300.00	Lab quality improvement and assurance	High cost of reagents and consumables, preventing the rapid scale up of viral load testing	COP19	COP20	At least 90% of ART patients have at least 1 VL test per year
HHS/CDC	AFRICAN FIELD EPIDEMIOLOGY NETWORK	Guyana	ASP: Laboratory systems strengthening	Non-Targeted Pop: Not disaggregated	\$ 86,300.00	Lab accreditation	High cost of reagents and consumables, preventing the rapid scale up of viral load testing	COP19	COP20	At least 90% of ART patients have at least 1 VL test per year
HHS/CDC	AFRICAN FIELD EPIDEMIOLOGY NETWORK	Trinidad and Tobago	ASP: Laboratory systems strengthening	Non-Targeted Pop: Not disaggregated	\$ 85,298.00	Lab quality improvement and assurance	High cost of reagents and consumables, preventing the rapid scale up of viral load testing	COP19	COP20	Twenty five percent increase in the number of patients receiving HIV DR testing
HHS/CDC	TBD	Trinidad and Tobago	ASP: Laboratory systems strengthening	Non-Targeted Pop: Not disaggregated	\$ 30,000.00	Lab quality improvement and assurance	Sub-optimal uptake of services by key populations	COP19	COP20	At least 90% of ART patients have at least 1 VL test per year
HHS/CDC	MINISTRY OF HEALTH	Trinidad and Tobago	ASP: Laboratory systems strengthening	Non-Targeted Pop: Not disaggregated	\$ 93,250.00	Lab quality improvement and assurance	High cost of reagents and consumables, preventing the rapid scale up of viral load testing	COP19	COP20	At least two labs attains Tier 3 in Caribbean stepwise process
HHS/CDC	TBD	Barbados	ASP: HMIS, surveillance, & research	Non-Targeted Pop: Not disaggregated	\$ 17,000.00	Program and data quality management	Fragmented information systems, which prevent timely reporting, robust clinical cascade analysis, and use of data for strategic planning	COP19	COP19	All PEPFAR supported facilities complete DQAs and implement procedures to improve the completeness and timeliness of reporting.
HHS/CDC	TBD	Guyana	ASP: HMIS, surveillance, & research	Non-Targeted Pop: Not disaggregated	\$ 17,000.00	Program and data quality management	Fragmented information systems, which prevent timely reporting, robust clinical cascade analysis, and use of data for strategic planning	COP19	COP19	All PEPFAR supported facilities complete DQAs and implement procedures to improve the completeness and timeliness of reporting.
HHS/CDC	TBD	Jamaica	ASP: HMIS, surveillance, & research	Non-Targeted Pop: Not disaggregated	\$ 250,000.00	HMIS systems	Fragmented information systems, which prevent timely reporting, robust clinical cascade analysis, and use of data for strategic planning	COP19	COP20	Integrated database/ linked HMIS system fully operational by September 2020
HHS/CDC	TBD	Trinidad and Tobago	ASP: HMIS, surveillance, & research	Non-Targeted Pop: Not disaggregated	\$ 25,000.00	Program and data quality management	Fragmented information systems, which prevent timely reporting, robust clinical cascade analysis, and use of data for strategic planning	COP19	COP20	All PEPFAR supported facilities complete DQAs and implement procedures to improve the completeness and timeliness of reporting.
HHS/CDC	TBD	Trinidad and Tobago	ASP: HMIS, surveillance, & research	Non-Targeted Pop: Not disaggregated	\$ 65,000.00	HMIS systems	Fragmented information systems, which prevent timely reporting, robust clinical cascade analysis, and use of data for strategic planning	COP19	COP20	Review of HMIS including CBS and HTS databases (with recommendations for improvement) completed by December 2019.
HHS/CDC	Ministry of Health	Barbados	ASP: HMIS, surveillance, & research	Non-Targeted Pop: Not disaggregated	\$ 115,000.00	Surveillance	Insufficient personnel and inadequate adherence to SOPs, hampering effective data management and affecting the timeliness and quality of HIV data	COP19	COP19	Establish recency testing platform in Barbados by FY21.
HHS/CDC	MINISTRY OF HEALTH	Trinidad and Tobago	ASP: HMIS, surveillance, & research	Non-Targeted Pop: Not disaggregated	\$ 148,500.00	Surveillance	Insufficient personnel and inadequate adherence to SOPs, hampering effective data management and affecting the timeliness and quality of HIV data	COP19	COP20	HIV surveillance report available for public consumption within first 9 months of the year in FY21.
HHS/CDC	Regents of the University of California, San Francisco, The	Trinidad and Tobago	ASP: HMIS, surveillance, & research	Non-Targeted Pop: Not disaggregated	\$ 25,000.00	HMIS systems	Fragmented information systems, which prevent timely reporting, robust clinical cascade analysis, and use of data for strategic planning	COP19	COP20	Review of HMIS including CBS and HTS databases (with recommendations for improvement) completed by December 2019.
HHS/CDC	Regents of the University of California, San Francisco, The	Jamaica	ASP: HMIS, surveillance, & research	Non-Targeted Pop: Not disaggregated	\$ 100,000.00	Surveillance	Insufficient personnel, hampering effective data management and affecting the timeliness and quality of HIV data	COP19	COP20	All PEPFAR supported facilities have dedicated SI personnel to complete routine activities including DQAs and procedures to improve the completeness and timeliness of reporting.
USAID	TBD	Barbados	ASP: Policy, planning, coordination & management	Key Pops: Not disaggregated	\$ 7,500.00	Oversight, technical assistance, and supervision to subnational levels	Sub-optimal uptake of services by key populations	COP18	COP19	40% of CSO support (funding and in-kind contributions) provided by Ministry of Health and Wellness

Table 6-E (Entry of Above Site Programs Activities)

Funding Agency	PrimePartner	Country	COP19 Program Area	COP19 Beneficiary	Activity Budget	COP19 Activity Category	Key Systems Barrier	Intervention	Intervention	COP19 Benchmark
USAID	Chemonics International, Inc.	Barbados	ASP: Procurement & supply chain management	Non-Targeted Pop: Not disaggregated	\$ 19,750.00	Forecasting, supply chain plan, budget, and implementation	Insufficient adoption and implementation of international best practices, affecting the policy and enabling environment	COP18	COP19	1. Number of countries moving towards use of a pooled procurement mechanism for cost savings. 2. Number of countries that have transitioned to TLD. 3. Number of countries using forecasting and supply planning tools to ensure accurate and timely quantification of TLD to support attainment of 90-90-90.
USAID	TBD	Western Hemisphere Region	ASP: Policy, planning, coordination & management	Non-Targeted Pop: Not disaggregated	\$ 200,000.00	National strategic plans, operational plans and budgets	Insufficient adoption and implementation of international best practices, affecting the policy and enabling environment	COP16	COP19	Number of policy recommendations developed to assist countries to achieve the targets for Test and Start
USAID	TBD	Western Hemisphere Region	ASP: Laws, regulations & policy environment	Non-Targeted Pop: Not disaggregated	\$ 75,000.00	Information and sensitization for public and government officials	Insufficient adoption and implementation of international best practices, affecting the policy and enabling environment	COP16	COP19	Number of joint national and regional learning programs and strategies developed
USAID	Chemonics International, Inc.	Guyana	ASP: Procurement & supply chain management	Non-Targeted Pop: Not disaggregated	\$ 19,750.00	Forecasting, supply chain plan, budget, and implementation	Insufficient adoption and implementation of international best practices, affecting the policy and enabling environment	COP18	COP19	1. Number of countries moving towards use of a pooled procurement mechanism for cost savings. 2. Number of countries that have transitioned to TLD. 3. Number of countries using forecasting and supply planning tools to ensure accurate and timely quantification of TLD to support attainment of 90-90-90.
HHS/HRSA	UNIVERSITY OF WASHINGTON	Jamaica	ASP: Human resources for health	Non-Targeted Pop: Not disaggregated	\$ 50,000.00	Institutionalization of in-service training	Insufficient adoption and implementation of international best practices, affecting the policy and enabling environment	COP19	COP19	LMS will be established with in the MOH.
HHS/CDC	Ministry of Health	Barbados	ASP: Laboratory systems strengthening	Non-Targeted Pop: Not disaggregated	\$ 25,000.00	Lab quality improvement and assurance	High cost of reagents and consumables, preventing the rapid scale up of viral load testing	COP19	COP19	95% VL coverage
HHS/CDC	MINISTRY OF HEALTH OF GUYANA	Guyana	ASP: Laboratory systems strengthening	Non-Targeted Pop: Not disaggregated	\$ 15,000.00	Lab quality improvement and assurance	High cost of reagents and consumables, preventing the rapid scale up of viral load testing	COP19	COP19	Twenty five percent increase in the number of patients receiving HIV DR testing
HHS/CDC	MINISTRY OF HEALTH OF GUYANA	Guyana	ASP: HMIS, surveillance, & research	Non-Targeted Pop: Not disaggregated	\$ 40,000.00	Program and data quality management	Insufficient adoption and implementation of international best practices, affecting the policy and enabling environment	COP19	COP20	Close the treatment gap for men in care but not on ART by end of FY20; 95% of all men with HIV diagnoses to receive sustained antiretroviral therapy by September 2020; Viral suppression among all on ART should improve to 95% by September 2020.

APPENDIX C: Minimum Program Requirements

The Governments of Barbados, Guyana, Jamaica, and Trinidad and Tobago are fully committed to the implementation of the PEPFAR minimum requirements, aligned with WHO's recommended best practices that will enable controlling the HIV epidemic. These commitments were confirmed by the Jamaica Minister of Health during his remarks at PEPFAR's Western Hemisphere Regional Operational Planning 2019 meeting in Washington, DC on April 8, 2019. Senior MOH representatives from the three other focus countries also confirmed their governments' commitments during the closing session on April 12, 2019.

The respective Ministries of Health recognize the critical importance of adopting and implementing the policies that provide and support an enabling environment, to allow for successful and effective implementation of the strategies and interventions outlined above. To this end, and in line with the strategy of the Entry to Care Campaigns (ETC) to find and link the PLHIV who are undiagnosed and initiate them on treatment, the MoHs are committed to full and effective implementation of the Treat All policy. In fact, Barbados was among the first countries in the region to recognize and implement Treat All in 2016. Through its technical and multi-disciplinary teams, the MoHs will continue to train, guide, and monitor implementation at all treatment facilities with focus on same day/rapid ART initiation.

In Jamaica, multi-month scripting (MMS) up to six months is the norm for stable patients, with the possibility for 3-month dispensing. However, single-month dispensing remains most common. The MoH will issue guidance to empower all HIV treating physicians to prescribe and request six-month dispensing for patients who have been adherent to and stable on treatment for over 12 months. In addition, the MoH is increasing the number of access points in the public and private sector, under the National Health Fund's (NHF) Public-private partnership (PPP). As such, the NHF will begin dispensing ARVs through additional private pharmacies. MMS has long been adopted in Barbados, Guyana, and Trinidad and Tobago, though national programs will strengthen and expand this intervention.

In order to introduce better treatment regimens and improve health outcomes for patients, the MOHs in all four countries are in process of transitioning to TLD as the first-line regimen. For Jamaica, as procurement processes for 2019/2020 near completion (September/October 2019), the logistics for the introduction of TLD will be completed, including training and capacity building of health care providers. Mechanisms to monitor TLD use are already in place. As recommended in WHO's December 2018 guidelines, TLD will be offered to all patients including women of child-bearing age, with the informed choice option. For Barbados, transition to TLD as first line regimen has already been planned with GHSC and PAHO to assess current supply chain and anticipate full transition by Sept 2019. For Trinidad and Tobago, TLD transition as first line regimen will also start in Sept 2019. For Guyana, the drugs are in country and the roll out will conclude in December 2019; the ministry is currently training and rolling out TLD initiation.

To improve testing yields, the focus countries will also strengthen and expand implementation of the index case testing and partner notification services (ICT/PNS). For Jamaica, this is already part of the Contact Investigator (CI) Program. Improved capturing and monitoring of these activities will be a priority. In order to facilitate access to testing services for certain populations, to create demand and complement existing testing modalities, the MoH will partner with the private sector on self-testing. Importers of HIV self-testing (HIVST) kits will be engaged to ensure that adequate information, education, and communication (IEC) material is included in packaging to facilitate linkage to services. For Barbados, Guyana, and Trinidad and Tobago, ICT/PNS have long been adopted and they are currently working on strengthening these interventions and will continue to work to have them reflected in the data systems.

Regionally, lab systems strengthening activities are programmed to address the most important cross cutting issues and effectively support the Care and Treatment program. All activities will be implemented in each country, with special emphasis in Jamaica. Recency testing will be implemented, with updates included in the national testing policy to describe when and how the test and data will be used. This will focus on providing useful public health information, especially for the missing PLHIV once diagnosed.

Viral load (VL) capacity and access is available in all four focus countries. However, with the increase in the number of patients needing VL testing in Jamaica, capacity will have to be expanded quickly. To ensure timely access to viral load testing services, the Jamaica MoHW and National Public Health Laboratory will expand the services with the installation of a newer viral load testing platform with a higher throughput by October 2019. Several initiatives will support the scale up including extended sample reception times, expand Laboratory Information Systems (LIS) network, high VL alert system and strengthening supply chain management. In Jamaica a back-up system is also vital, to eliminate the impact of downtime which can result from a centralized system. PEPFAR will work with the MOH to find a cost effective solution and implement.

Data remains a significant challenge across the Caribbean. The PEPFAR team will focus on addressing the following challenges and priorities: denominators, disparate systems, death data not reflected in the first 90, data quality, digitization of tools and data use. Actions being proposed include: reviewing and updating Spectrum estimates and exploring alternatives for KP epidemics; linking laboratory, treatment, and pharmacy data, matching death data to improve accuracy of first 90 estimates; data value completeness and concordance; revising and digitizing data tools and establishing routine meetings for monthly site data review and program planning. Specifically for Jamaica, to increase the number of patients on ART, the MoHW expects that by the end of June 2019, over 95% of LTFU cases will be resolved. The MoHW will also conduct a review of the national death registry data in May 2019 to assist with resolving cases who have not been located (TSIS database), as well as cases reported but not linked to care (HATS database). Going forward, this review will be conducted annually. As differentiated models of care are scaled up (less frequent appointments for stable patients, evening clinics, new patient clinics, etc.), the time to linkage to care is expected to decrease. In the next 12 months, the Jamaica MoHW will develop the national Electronic Health Records (EHR) System. Inherent in this system will be a unique identifier code

for all persons accessing care in public facilities. Three hospitals and their surrounding health centers (10) have been selected for the initial roll out of the EHR. Finally, the Jamaica MoHW will undertake a national strategic review in 2019, with the planned outcome of a comprehensive, five-year plan for the country's HIV response. This process will enable the codification of the aforementioned policies and strategies.