Regional Operational Plan 2020

Caribbean Regional Program

Strategic Direction Summary

Table of Contents

1.0 Goal Statement.....3

2.0 Epidemic, Response, and Program Context
- **2.1 Regional Statistics, Disease Burden, and Epidemic Profile**.....4
- **2.2 Investment Profile**.....6
- **2.3 Regional Sustainability Profile Update**.....6
- **2.4 Stakeholder Engagement**.....7

3.0 Situational Analysis and Program Activities for Epidemic Control
- **3.1 Jamaica:**
  - **3.1.1 National Statistics, Disease Burden, and Country Profile**.....9
  - **3.1.2 Strategies to Address the Gaps**.....13
- **3.2 Trinidad and Tobago:**
  - **3.2.1 National Statistics, Disease Burden, and Country Profile**.....41
  - **3.2.2 Strategies to Address the Gaps**.....44

4.0 Program Support Necessary to Achieve Sustained Epidemic Control
- **4.1 Program Targets**.....49
- **4.2 Systems Strengthening**.....49

5.0 USG Management, Operations, and Staffing Plan to Achieve Stated Goals.....61

Appendix A: Budget Profile and Resource Projections.....64
Appendix B: Tables and Systems Investments for Section 6.0.....67
Appendix C: Minimum Program Requirements.....70

1.0 Goal Statement

The primary goal of the PEPFAR Caribbean Regional Program (CRP) is to support the governments of Jamaica and Trinidad and Tobago to achieve HIV epidemic control. PEPFAR's financial and technical assistance will ensure robust national HIV/AIDS interventions based on international best practices and policies, while reinforcing sustainability and country ownership. The CRP will continue to provide regional technical assistance, training opportunities, and support.

The priority country is Jamaica, where an estimated 32,617 people are living with HIV (PLHIV). An estimated 84 percent of PLHIV in Jamaica know their status, 44 percent are on life-saving antiretroviral treatment (ART), and 28 percent have achieved viral suppression. The current annual progress in each of the three pillars will not facilitate epidemic control over the next decade. For the country to reach the UNAIDS 90-90-90 targets, and subsequently 95-95-95, all stakeholders must intensify their efforts. This is outlined in Jamaica's National Strategic Plan (NSP) for HIV for 2020-2025, which envisages acceleration of the annual national achievement to reach 90-90-90 by 2025. For the 2020 Regional Operational Plan (ROP 20), PEPFAR will align its program, including targets and strategies, with the NSP, helping to unify the national response, under the leadership of the Government of Jamaica.

Trinidad and Tobago has made significant progress toward the 90-90-90 goals. Of the estimated 11,897 PLHIV, 74 percent know their status, an estimated 61 percent are on ART, and an estimated 53 percent of all PLHIV have achieved viral suppression. PEPFAR will refocus its efforts to support the T&T Ministry of Health's surge plan to achieve 90-90-90 by the end of 2020 through targeted interventions. In both countries, PEPFAR and partners will aggressively address key barriers across the cascade, with the main objectives of: 1) finding the undiagnosed persons; 2) initiating on ART those diagnosed but not on treatment; and 3) increasing the number of ART patients achieving viral suppression. International best practices and policies based on WHO recommendations will be fast-tracked, to accelerate progress. Disaggregated epidemiological and program data, combined with key survey results, will serve as the driver for targeted interventions. PEPFAR will continue to prioritize quick, evidence-based course adjustments.

Across the region, PEPFAR will enhance client-centered interventions to improve patient linkage, recovery, and retention, thereby reducing attrition due to loss-to-follow-up. PEPFAR will address disparities in the uptake of services of HIV-positive men through implementation of male-centered approaches. PEPFAR will advance strategies to improve medication adherence to sustain improvements in ART coverage and increase viral suppression. 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. Finally, the introduction of routine, action-oriented community-led monitoring will foster a culture of continual improvement based on real client needs.

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 1.2 percent of the adult population (UNAIDS, 2018). Of the 5.2 million people in the PEPFAR-supported countries, approximately 55,400 are HIV positive (Figure 1). HIV prevalence in the general population was estimated to be 1.2 percent in Trinidad and 1.8 percent in Jamaica (2018). Jamaica has the greatest burden, representing 59 percent of PLHIV between the two focus countries. In 2017, Jamaica was among four Caribbean countries where almost 90% of new infections and 87% of deaths related to HIV in the Caribbean occurred (UNAIDS 2018).

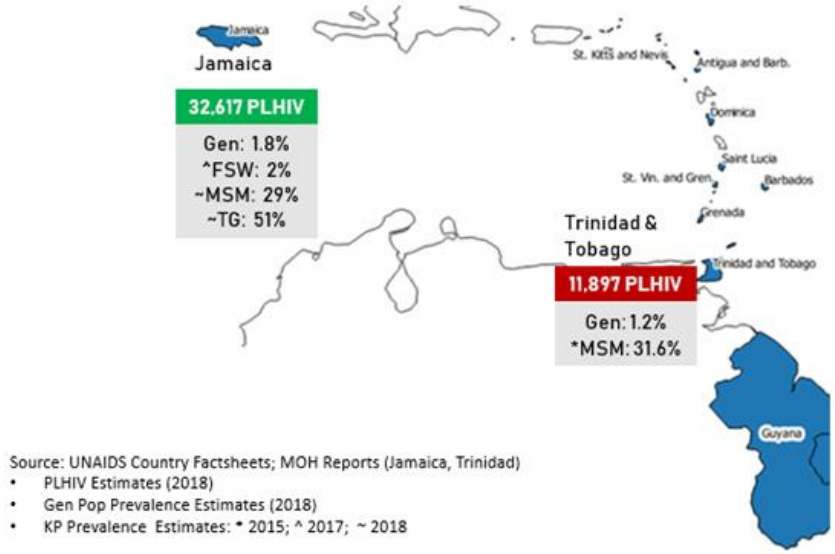

Figure 1: HIV Prevalence and Burden in Countries Supported by the PEPFAR CRP in ROP20

At the heart of the epidemic across the region is pervasive stigma and discrimination (S&D), which remains a 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 2,400 in Jamaica to less than 500 in Trinidad and Tobago (UNAIDS 2018 and 2018 Country Factsheets).

The proportion of PLHIV diagnosed is estimated to be 84% in Jamaica (Revised 2019 Spectrum estimates and 74% in Trinidad and Tobago (2019 Spectrum estimates) (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. Despite the fact that both countries have adopted Treat All, Antiretroviral Treatment (ART) coverage among PLHIV is sub-optimal with 44% percent in Jamaica, and 62% in Trinidad & Tobago. Barriers to successful achievement of 90-90-90 targets include staffing shortages, weak supply chain and logistics systems, and insufficient data collection systems.

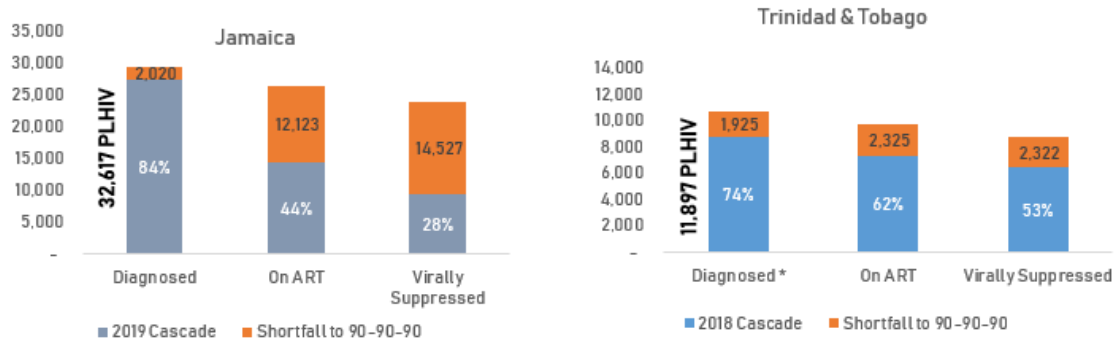

Figure 2: Clinical Cascades and 90-90-90 Coverage Gaps in Jamaica and Trinidad & Tobago

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). KP-specific data are limited but suggest lower proportions of MSM and female sex workers (FSWs) receive treatment and achieve viral suppression.

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.

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 and other MSM, including 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 28% in Jamaica and, 53% in Trinidad. The viral load (VL) testing coverage was approximately 81% in Jamaica (MOHW 2019 data), 78% in Trinidad (PEPFAR MER 2019 data). Among patients who received a VL test, 79% percent were virally suppressed in Jamaica (MOHW 2019 data). Several factors could be responsible for this relatively low level 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.

Table 1. HIV Response Contributions in Jamaica in 2019 and 2020

2019			2020		
Gov of Jam	Global Fund	PEPFAR	Gov of Jam	Global Fund	PEPFAR
$12,495,267	$4,274,303	$8,026,971	$13,164,951	$3,923,278	$9,158,706

2.3 Regional Sustainability Profile Update

Sustainability is a critical element of PEPFAR's approach to reaching and maintaining epidemic control, to ensure that the gains made over the past few 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, the Government of Jamaica contributed 56% of total funding towards HIV programming. Jamaica and Trinidad and Tobago have completed a sustainability analysis using the PEPFAR Sustainability Index Dashboard (SID) tool. With a focus on increasing domestic funding for HIV/AIDS programs,

health accounts activities were also conducted. In Jamaica, a National AIDS Spending Assessment 2015–2017 was conducted in 2018. This analysis is conducted every two years, and it provides the country with data to support decisions that ensure value for money and efficient and effective allocation of limited resources.

Jamaica conducted a review of the Legal and Regulatory Framework for Social Contracting. Discussions on Social Contracting 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 donors transition out of the Caribbean region, especially to ensure the sustainability of the HIV response for vulnerable and marginalized groups.

For FY21, the Caribbean Regional Program will provide bilateral support only to Jamaica and Trinidad and Tobago. There will continue to be resource mobilization for the engagement of CSOs in Jamaica as partners, in decision-making, service delivery and service delivery monitoring. This is a critical factor in an 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 in discussions with the Ministry of Health. Utilizing regional platforms such as PANCAP, best practices in social contracting and government subventions in Trinidad and Tobago must be shared and adopted across the region.

2.4 Stakeholder Engagement

The Caribbean Regional 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, ROP development and implementation, and will introduce Community-Led Monitoring in ROP20. 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-supported activities are solicited. Selected stakeholders representing partner governments and NGOs are also included at ROP meetings 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. Program results, feedback

from the Office of the Global AIDS Coordinator (S/GAC), 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 UNAIDS, the Pan-Caribbean Partnership Against HIV/AIDS (PANCAP) and PAHO in the development, implementation, and reporting of the HIV activities and learning programs.

6. **Community-Led Monitoring**: The PEPFAR Caribbean Regional program will work with the CSOs in Jamaica and Trinidad and Tobago to independently monitor and highlight quality of service within facilities at all service-access points in treatment sites. This will provide information on barriers, develop workable solutions, and identify enablers to access. The Community Monitoring activity will be offered to qualifying CSOs through the Small Grants program.

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 3).

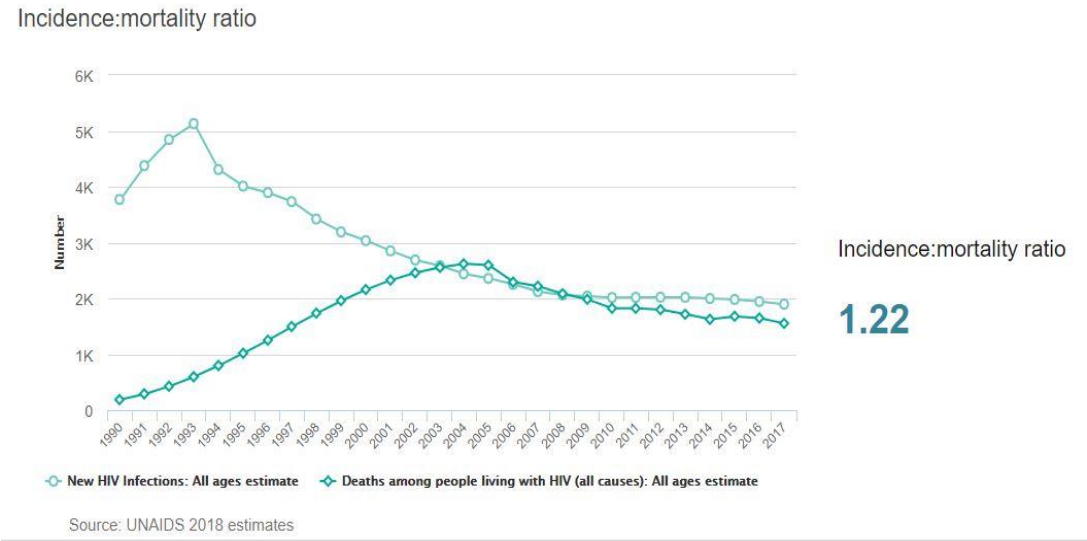

Figure 3: Trend of New Infections and Deaths among HIV Population in Jamaica

The revised UNAIDS Spectrum estimates indicate a decrease in the PLHIV population to 32,617 from the prior estimate of 39,000-40,000 for 2018. At the end of December 2019, 27,335 PLHIV were estimated to have been diagnosed; 14,297 were on ART; and 9,283 of those on ART (65%) were virally suppressed. Using the estimate of 32,617 total PLHIV, progress against the 90-90-90 targets would become: 84-52-65.

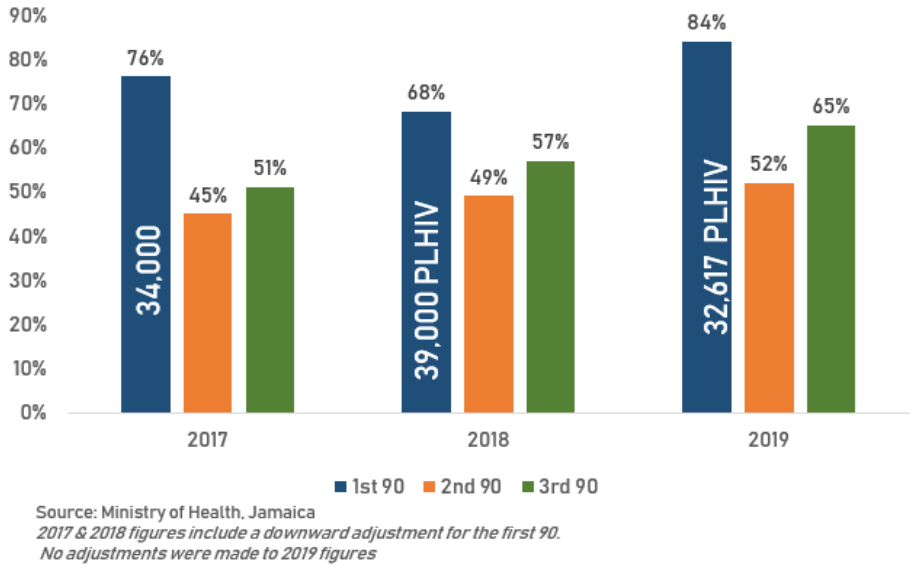

Figure 4: Progress Toward the 90-90-90 Targets in Jamaica

In quantifying the gaps in the cascade based on the estimated 32,617 PLHIV, there are 5,282 PLHIV who are undiagnosed and approximately 13,038 PLHIV diagnosed but not on ART. Of the 14,297 individuals on ART, 5,014 are not virally suppressed. Despite the recent revision to the Spectrum 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.

Decreasing the number of diagnosed but not on ART is a critical first step in improving the full clinical cascade. Closing this ART coverage gap of 13,038 individuals will require a number of tailored approaches to find, initiate and retain these PLHIV on ART.

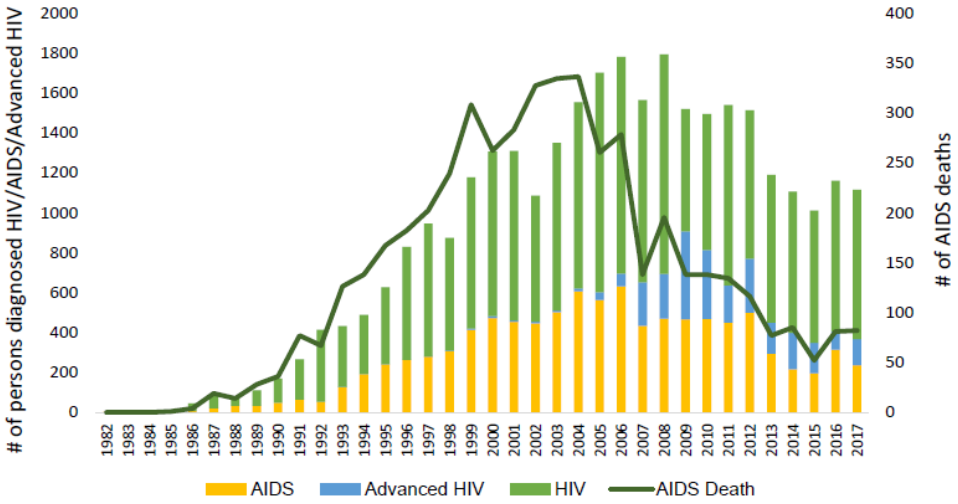

Figure 5: Newly Diagnosed Cases in Jamaica (1982-2017)
Source: MOHW, HIV Epidemiology Report

A total of 1,192 individuals were diagnosed in 2017 (Figure 6). 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%).

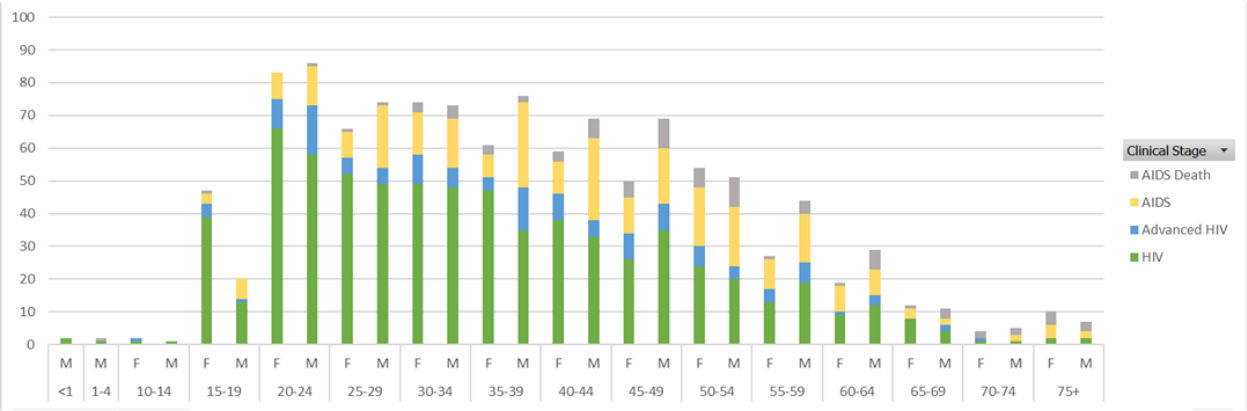

Figure 6: Clinical Stage of Newly Diagnosed PLHIV in 2017 (n=1,192)

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 diagnosis, 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 56% of males) were unlikely to have been infected recently.

Of the 568 new diagnoses 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 diagnoses 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 the need for innovative strategies to be employed to reach individuals at high risk of infection who are unwilling to disclose their sexual practices.

The 2018, "876 Stud[1]y" – An Integrated Biological and behavioral survey (IBBS) which reached 537 MSM and 102 persons of transexperience (The 876 Study) highlighted an increasing HIV prevalence amongst MSM by age group, with 10.7 percent prevalence amongst the 16-19 age group (n=103) and 23.4 percent prevalence for MSM aged 20-24 years (n=192). HIV prevalence ranges from 41 - 49% for MSM over 25 years old (Figure 7); (combined n=102). This emphasizes the need for strategies to be focused on diagnosing adolescents and implementation of HIV Prevention Strategies.

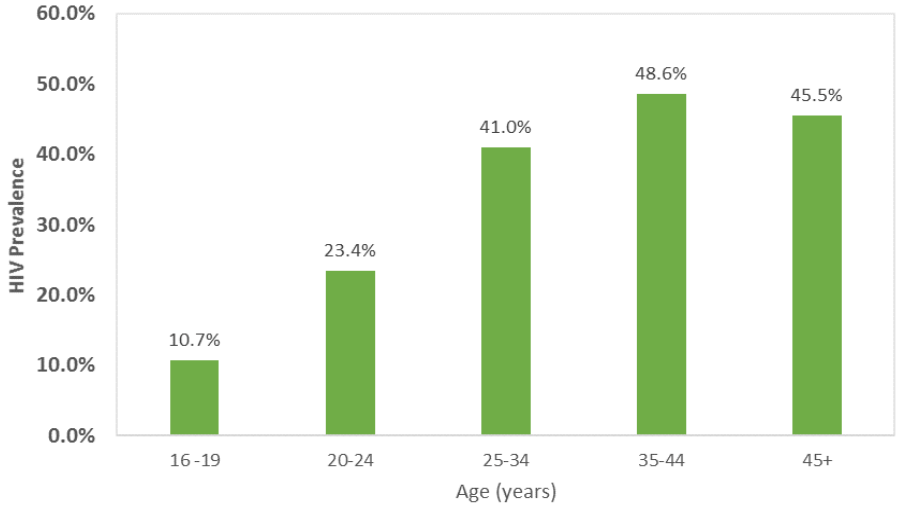

Figure 7: HIV Prevalence Amongst MSM in Jamaica 2018 (Source 876 Study)

From surveillane data, 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

[1] The 876 Study: Integrated Biological and Behavioral Surveillance Survey with Population Size Estimation Among Men who have Sex with Men and Transgender Persons in Jamaica (2018)

(Source: MOHW 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[2] also revealed that 38% of MSM (n=537) reported at least one female partner in the 12 months preceding the survey. The HIV prevalence amongst this subgroup of MSMW (n=205) 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 parishes of key focus for PEPFAR prevention interventions, which indicates that resources are being channeled to the areas of highest need.

Exploring age groups, 51.7% of MSMW (n=205) 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 in committed relationships/married to women. This shows the possibility of HIV transmission across groups. Finally, there was inconsistent condom use among 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 8) presents an overview of the gaps across the clinical cascade, as well as key strategies to overcome them.

[2] The 876 Study: Integrated Biological and Behavioral Surveillance Survey with Population Size Estimation Among Men who have Sex with Men and Transgender Persons in Jamaica (2018)

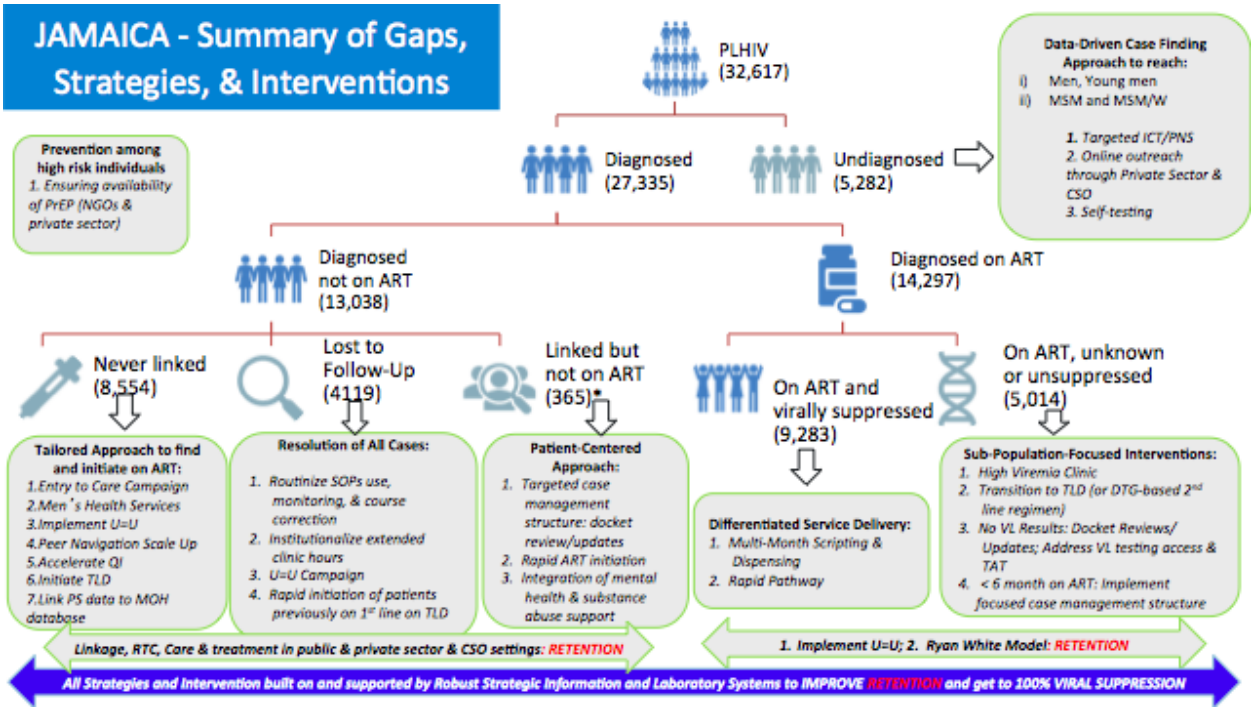

Figure 8: Summary of the Gaps and Solutions across the Clinical Cascade

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 (84-44-285) 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 close the remaining gap in the 1st 90, case-finding strategies are aligned with international best practices. Index case testing and partner notification services (ICT/PNS) coupled with robust monitoring and evaluation are implemented in both community-based and facility settings nationwide. ICT/PNS will be expanded in STI clinics for both newly diagnosed cases, LTFU patients returning to treatment, and the unsuppressed. Index case testing will be upgraded and reviewed to ensure that it is aligning with safety standards including ensuring adequate screening and plan for intimate partner violence. Social media is employed to create demand for HIV testing among MSM, MSMW, and youth. Strategies tailored to women 40 years and older will continue to be implemented. Case finding will be expanded among MSMs, high risk men as well as among sexually active youth. Recency testing will be added to the national testing policy guidelines to detect, characterize, monitor, and intervene on recent infections. The introduction 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 becoming HIV infected. This activity will be supported by Global Fund and domestic resources (non-PEPFAR funds).

Policy and program changes to improve performance along the 2nd 90, apart from the recent roll out of Tenofovir/lamivudine/dolutegravir (TLD), include 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 and the onboarding of patients in care in the private sector, will be used to find and quantify those diagnosed but not on treatment. Employing lessons from the 2019 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 and linkage to private sites that are part of an expanded PEPFAR-supported Private Sector Network. The Private Sector Network is a client-centered option that offers differentiated care, also aimed at addressing retention challenges and facilitating viral suppression. This aligns with the multisectoral strategy called for in Jamaica's HIV National Strategic Plan. 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 expanded. 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. Increased effort will be taken to link PLHIV to NGO spaces such as Jamaica AIDS Support for Life (JASL), taking advantage of available capacity and a client-centered suite of services that offer differentiated care.

Expansion of viral load testing capacity will help in achieving progress toward the 3rd 90. Pharmacy data will be linked with TSIS 2.0 to measure on-time pick up of medications by clients and to track multi-month dispensing by pharmacies. This will increase the ability to monitor patients defaulting or those at high risk of defaulting. The rapid pathway model will be expanded 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 continued expansion of the HIV Private Sector Network. This Network has begun to quantify PLHIV considered 'never linked' prior to inclusion of HIV treatment data for private patients in the Ministry of Health and Wellness's treatment database -TSIS. They will also support the optimization and standardization of HIV care and treatment between the public and private settings, help to decongest public clinics and offer a stigma-free setting that is tailored for MSM, MSM/W, and their partners. The HIV Private Sector Coordinating Unit will coordinate across private providers, pharmacies, and laboratories to ensure comprehensive and quality private sector services are available.

A.) JAMAICA: FINDING THE UNDIAGNOSED

Understanding the Target Population and the Gaps

In order to reach the 90-90-90 targets, an additional 2,020 individuals must be diagnosed in Jamaica. A full review of data on those undiagnosed has been delayed due to ongoing data gaps. Available surveillance data were reviewed to identify the most frequently reported risk factors of patients newly diagnosed with HIV infection in order to refine case finding strategies; these include history of an STI infection, multiple sexual partners, self-reports of sex with another man or engagement in sex work. 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 ofjk newly diagnosed women reported a prior STI infection, compared to 16% of males (Table 2). 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 2. Sexual Practices/Risks Reported by PLHIV Newly Diagnosed in 2017 and Cumulative Cases 1982-2017 (Excerpt Jamaica MOHW 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 2). 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 9), whereas yields amongst FSW were below two percent (data not shown). In the second half of FY19, PEPFAR's support has expanded to include index testing in community and facility settings (regardless of KP status) as a key strategy for improving case finding.

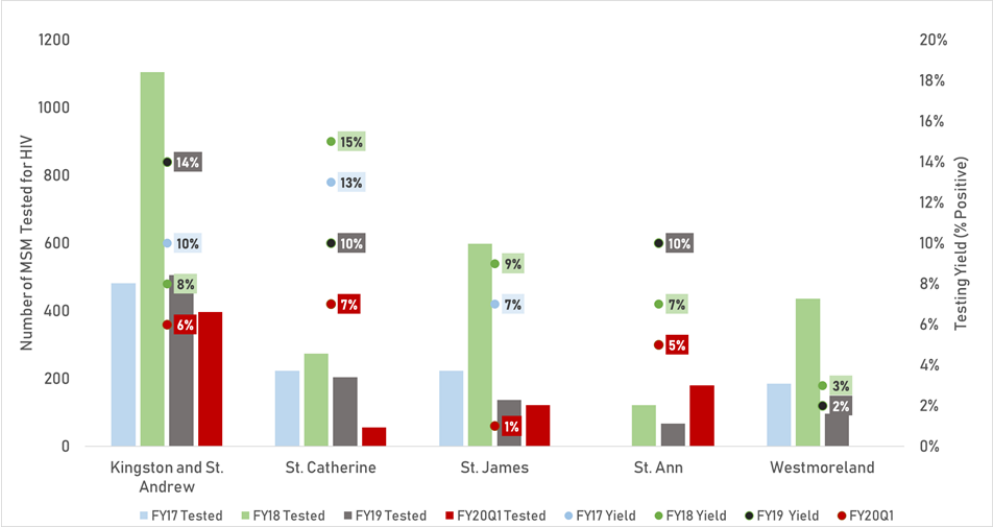

Figure 9: HIV Testing Trends and Yield amongst MSM in PEPFAR-Supported Programs in Jamaica

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 10). Existing facility-based testing in STI clinics will be strengthened and expanded to ensure robust partner notification services/index testing for newly diagnosed cases.

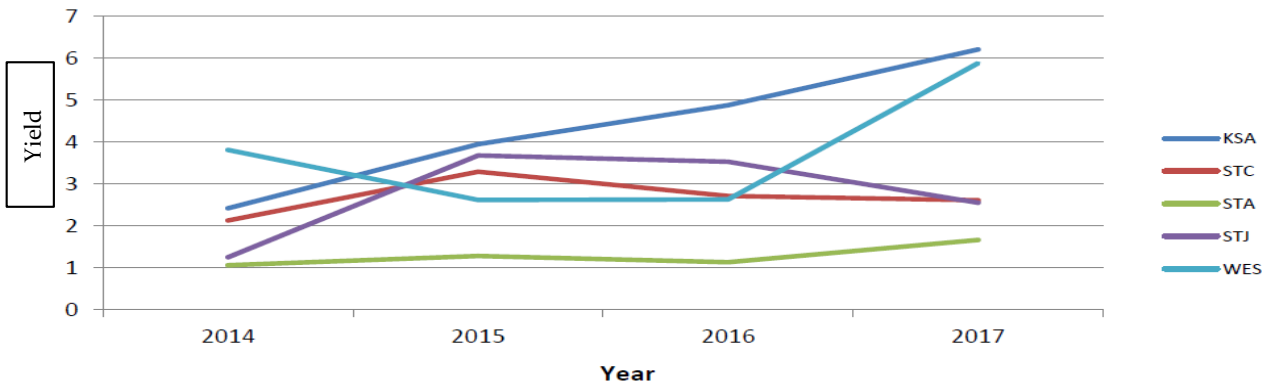

Figure 10: Parish-Level HIV Testing Yield among STI Clinic Attendees

Case-finding interventions will target sub-populations at high risk of HIV infection including MSM and partners of diagnosed PLHIV. Efficient testing strategies that include proven approaches will be implemented. These include testing of social and sexual networks of people diagnosed with HIV infection and will optimize the right mix of facility based testing, targeted community testing, and self-testing.

Priorities will include the continued use of risk screening tools, targeted index testing, and self-testing. Social-networking strategies and demand-creation activities will continue to 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 estimated to account for over 70% of the undiagnosed.

Tailored Strategies and Approaches by Sub-Population

i. <u>Reaching MSM and MSMW</u>

Effective control of the epidemic must address issues of stigma and discrimination. Psychologists and contact investigators continue to provide tailored counseling to index clients who 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 continue to 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 assumes 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, Grinder, and Jamaica's Vibesconnect).

Case-finding initiatives will continue to adapt face-to-face outreach to online and social media (Figure 11). 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 in Jamaica, partners will expand the high-impact online outreach intervention to reach high-risk MSM through the most trafficked websites and refer them for appropriate testing services. NGOs, who dominate the community space, will continue to use ICT platforms in their case finding efforts, with modifications to enhance linkage & retention as well. The Private Sector Network is also pivoted for using the ICT platform to engage newly diagnosed PLHIV. 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.

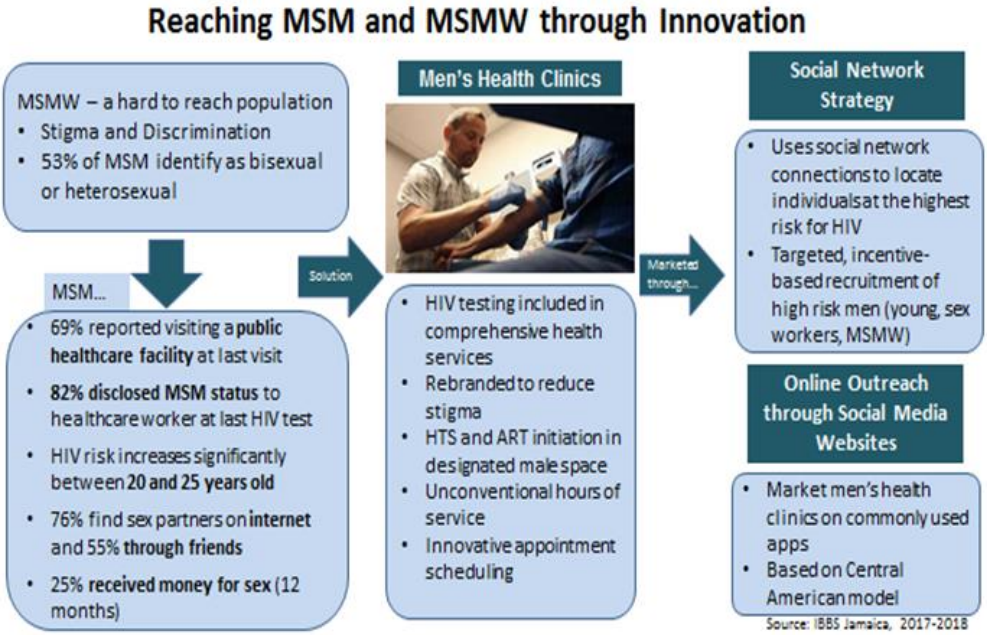

Figure 11: Reaching MSM and MSMW

ii. <u>Tailoring case-finding approaches for younger men</u>

In Jamaica, among young men ages 15-24, the average age of sexual debut is 15 (KAPB, 2017). Transactional sex is reported among 54% of boys ages 15-19 years (National HIV/STI Programme, 2012). A core set of interventions will continue 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 plays 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 intervention is accompanied with information on referral services including counseling through peer supporters and community support networks for young men.

iii. <u>Tailoring case-finding approaches for women</u>

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 therefore considers that this subpopulation includes:

1) Female partners of diagnosed HIV positive (heterosexual and bisexual) males;
2) Women of childbearing age who do not access/use family planning services[3]; and
3) Finding undiagnosed women whose family planning options are limited (e.g. aged 40 years and older)[4].

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, to reach the female partners of both heterosexual and bisexual males. There are 6,378 HIV positive men accessing HIV treatment services in Jamaica (MOHW, 2019). Of these, 4,108 are known to be suppressed; 1,005 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 and serve as a platform to diagnose new cases amongst women.

Female partners of newly diagnosed heterosexual males at early stages of HIV infection may be more recently infected. Timely implementation of index and recency testing amongst the subgroup of males may identify more recent infections. Index testing amongst diagnosed men and newly diagnosed MSMW, who are in committed relationships/married to women, are likely to contribute to case finding among women.

Strategy 2: Finding Undiagnosed Females of Reproductive Age[5]

ANC clinic-based strategies will continue to 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 gynecological services.

Based on the results of the HIV 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[6]

[3] This is not a target population for PEPFAR support; strategies to find this sub-population are not PEPFAR-supported.
[4] This is not a target population for PEPFAR support; strategies to find this sub-population are not PEPFAR-supported.
[5] This is not a target population for PEPFAR support; strategies to find this sub-population are not PEPFAR-supported.
[6] This is not a target population for PEPFAR support; strategies to find this sub-population are not PEPFAR-supported.

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 continue to include HIV testing at service delivery points beyond annual sexual health checks. Health promotion within geographic hotspots (informed by surveillance data) is used to support combination prevention and HIV/STI testing services for women over 40.

As with strategy 1 above, index testing amongst diagnosed men and newly diagnosed MSMW, who are in committed relationships/married to women, are likely to contribute to case finding among 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 (supported by Global Fund, as noted above) will 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 continue to 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 for all subgroups that remain undiagnosed As such, in public, private, and community settings, index testing continues to be the priority strategy for case finding.

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 serve as index cases. Amongst known PLHIV, the program will continue to focus on ART patients who are not virally suppressed, patients recently returning to care (RTC) and newly diagnosed cases. Strategies take into consideration the potential network of index cases and the reach within the subpopulations of undiagnosed PLHIV. For example, HIV positive males of unknown or undisclosed risk (Table 3, 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. The results from implementation of index testing (all sources) at PEPFAR-supported facilities is summarized in Figure 12.

Table 3: 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 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

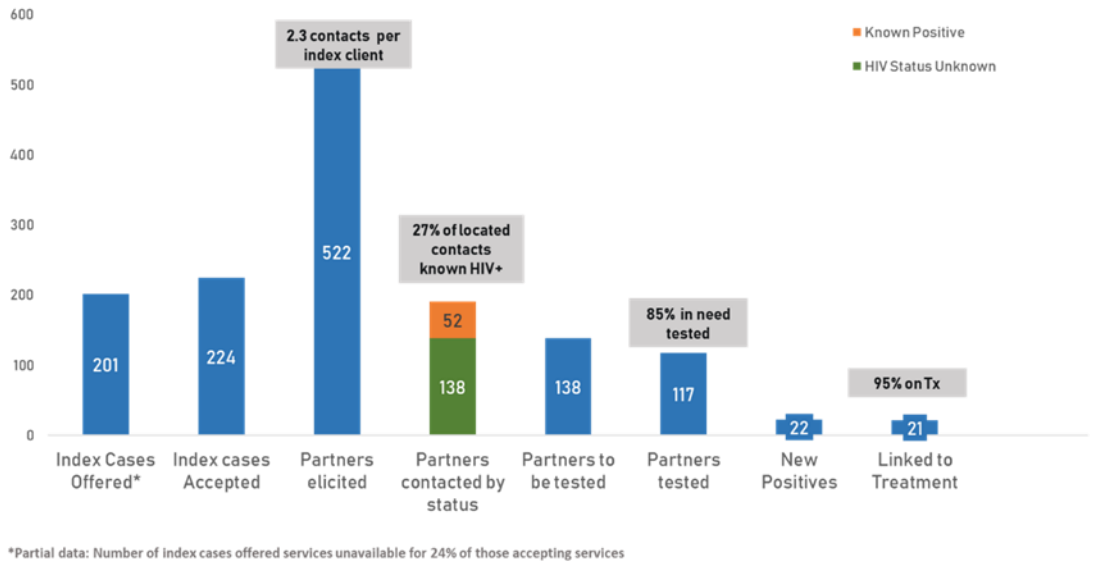

Figure 12: Index Testing Cascade for PEPFAR Supported Sites in Jamaica (FY20 Q1)

ICT/PNS is a part of the Contact Investigator (CI) Program. The following are improvements to the CI's program:

- Increasing the national cadre of CIs.
- Capacity building of non-CI healthcare workers, including peer navigators, to provide or support 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.
- Tracking and reporting of Intimate Partner Violence.

Figure 13 outlines the ICT/PNS strategies at facility, community, and above-site levels in order to reach MSMW.

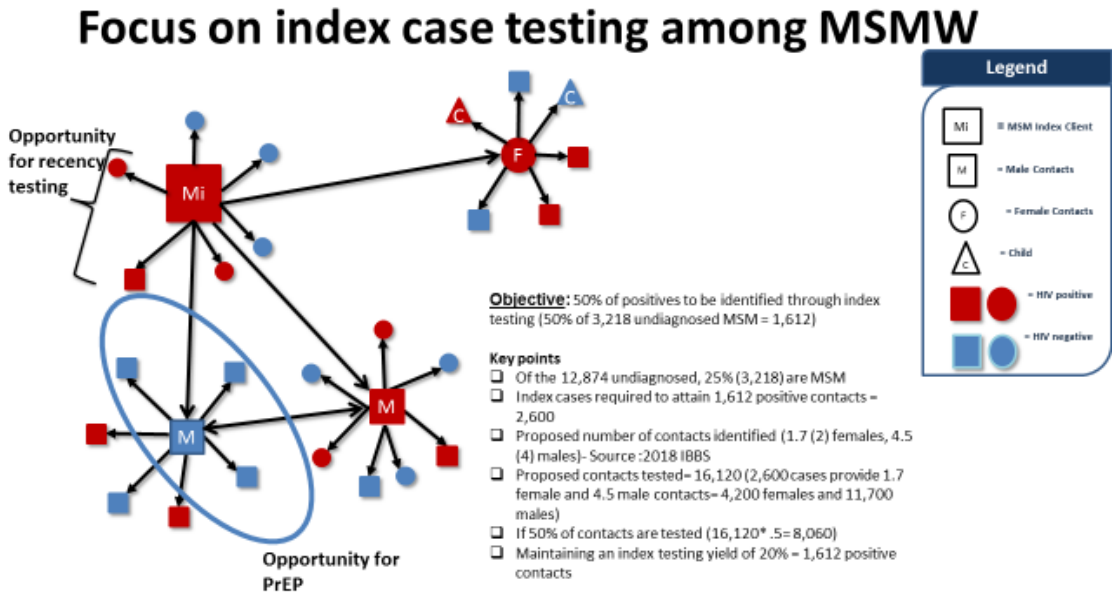

Figure 13: Index Testing among MSM/W

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

- Additional outreach workers will continue to be trained in online outreach and best practices (by the TOTs). Supervisor capacity to monitor online outreach for quality assurance and control will continue to be strengthened.
- Documentation of client contact conversion to tests is ongoing, as evidenced by the number of HIV tests done that are 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
    - Finding information related to treatment and other services.

iii. **Social Networking:** This remains an effective, feasible and recommended approach in the Community Setting for Key populations such as MSM. Outreach workers who are peers (Peer Educators/Peer Navigators) will continue to engage social contacts of KPs. This is an ideal approach to address the confidentiality issues that are paramount to members of KPs retaining their anonymity to ensure safety and decrease possible IPV as well as S&D. It is also poised for integration with new technologies through ICT and distribution of HIV self-test kits.

iv. **Self-Testing:** Self-testing helps empower individuals and enhances 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.
- Disseminate IEC materials with critical information regarding benefits of self-testing through targeted interventions and social media.
- Disseminate information packets for client contact support to increase referrals of at-risk populations and partners for self-testing.
- Conduct continuous rapid mystery shopping exercises 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[7]

The use of Pre-exposure Prophylaxis (PrEP) helps strengthen the clinical package of HIV prevention services for MSM and MSMW, their partners, and other individuals at high risk of contracting HIV:

- Mainstream PreP into HIV risk-reduction counseling and behavioral interventions.
- Disseminate 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.
- Monitor PrEP service delivery sites, including NGOs, and train clinical staff.
- Strengthen 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
- Increased yield from online outreach, with immediate initiation on treatment.
- Expanded uptake of self-testing.

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

Understanding the Target Population and the Gaps

[7] This is not a PEPFAR-supported intervention. PrEP in Jamaica is supported by Global Fund and domestic resources.

A major programmatic gap in reaching 90-90-90 is that over 13,000 PLHIV who were previously diagnosed are not presently on ART. As of December 2019, 13,038 patients were diagnosed but not on ART. The total number of patients on ART accounts for 48% of the 27,335 people who have been diagnosed, and 40% of the estimated 32,617 people living with HIV. The figure below shows the national ART coverage trend, as well as PEPFAR-supported treatment coverage (Figure 14).

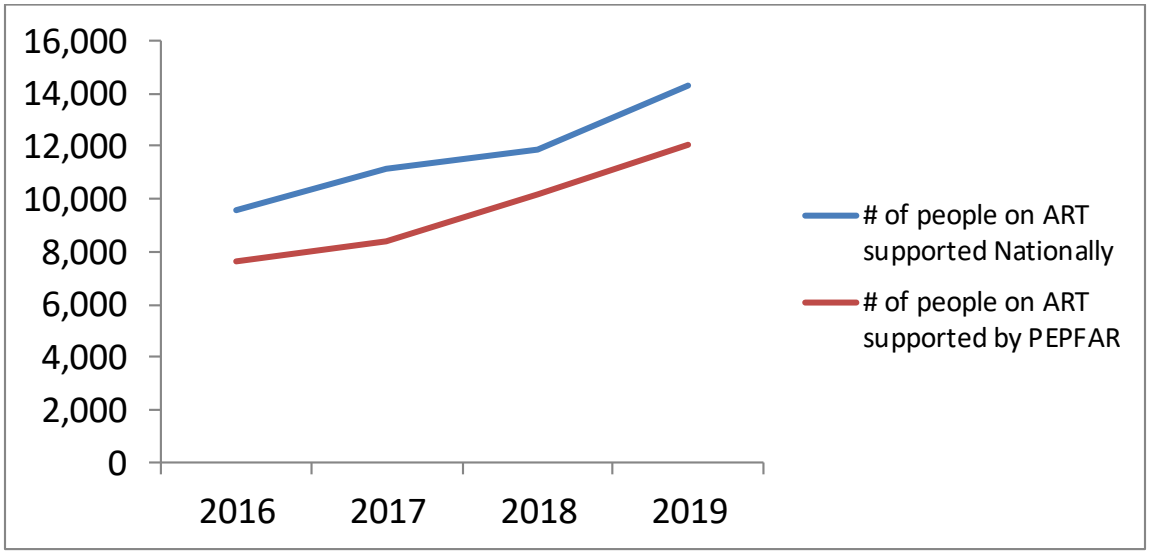

Figure 14: National ART Coverage and PEPFAR Trend for Individuals Currently on Treatment in Jamaica

Of the 13,038 people who are diagnosed but not on ART, 8,554 (66%) are never linked, 4,119 (32%) are lost to follow up, and 365 (4%) are linked but not on ART (Figure 15).

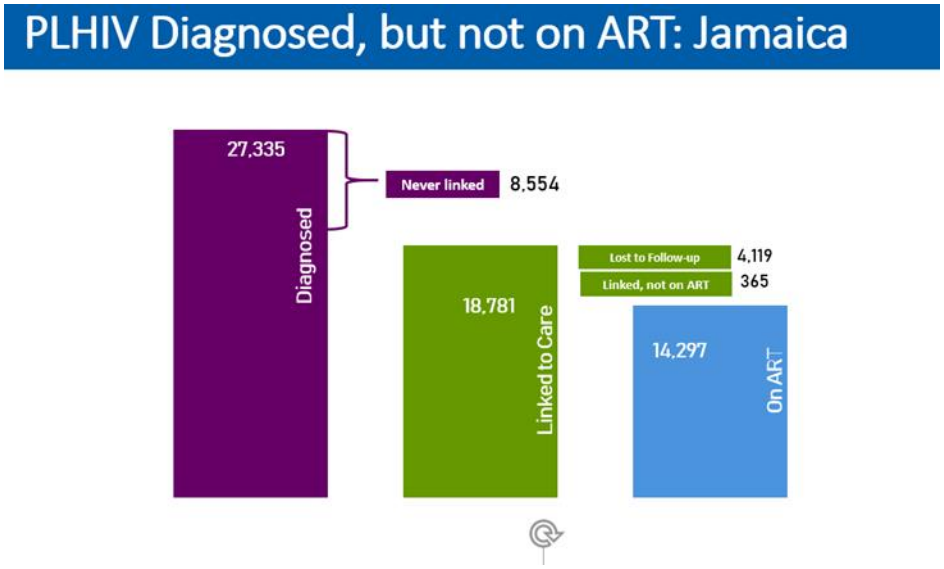

Figure 15- Gaps in Treatment Initiation & Retention (2019)

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 16).

One third of the estimated 32,617 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 17). Tailored strategies are needed to increase the number of males newly initiated and retained on ART.

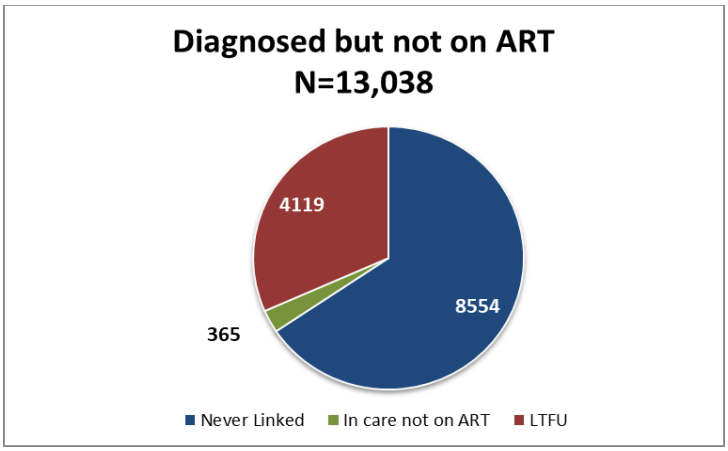

Figure 16: Subgroups of PLHIV Diagnosed but not on ART, Jamaica (2019)

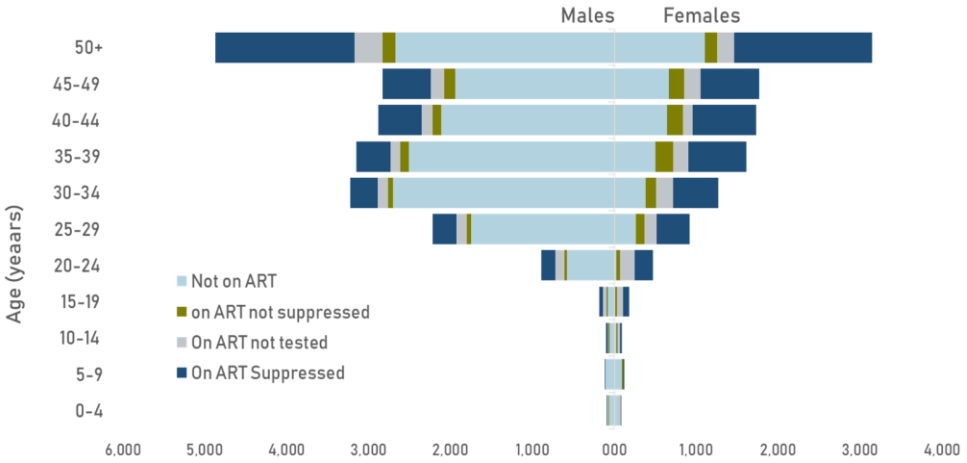

Figure 17: Jamaica HIV Population Pyramid, 2019

Tailored Strategies and Approaches by Sub-Population

i. **<u>Never linked (n=8,554)</u>:** Of the 13,038 people who are diagnosed but not on ART, 8,554 (66%) are never linked and the transmission rate among this category of patients is estimated at 6.6 per 100 person-years[8]. 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 a public clinic for a confirmatory test and treatment (Figure 18). 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.

[8] 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.

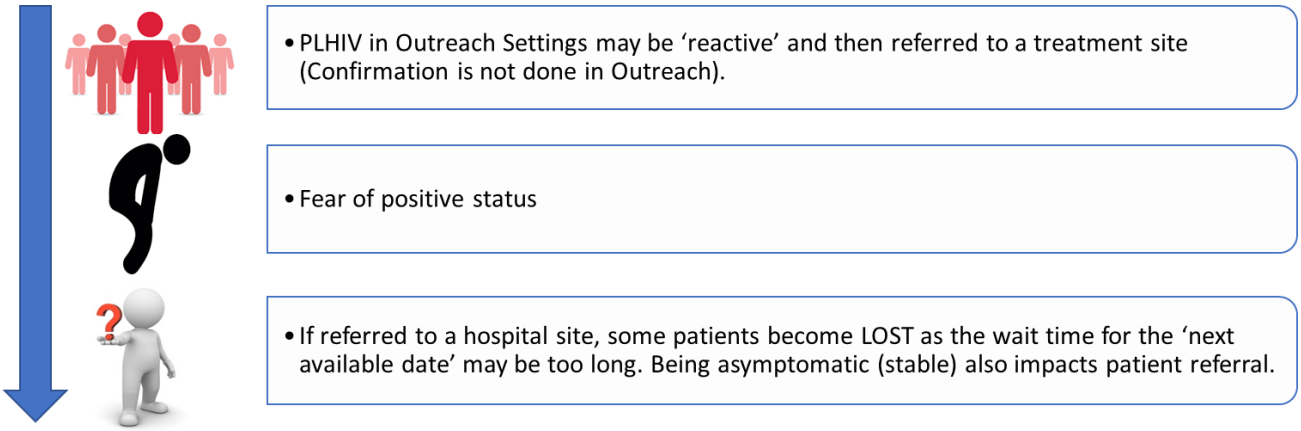

Figure 18: Reasons For Loss Between Diagnosis and Linkage

To increase the number of PLHIV in this category enrolled on ART, the following targeted interventions will be implemented:

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. 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 theses 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[9]:

- 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. Therefore the program will:

- 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 increased 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 loss-to-follow-up (LTFU), by providing support both within and outside the clinical facility. Peer navigation will be scaled up.

[9] For some of these services, PEPFAR does not support the commodities. However, PEPFAR-supported staff help to deliver the services.

- 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 MOHW, 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, QI ECHO and learning sessions.

ii. **Lost-to-Follow-Up (n=4,119):** The number of patients lost to follow-up has been reduced from approximately 10,000 in September 2018 to approximately 4,100 in December 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 most frequently reported reasons for defaulting were personal (Figure 19). Patients shared that family obligations and work interferred 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 19: Reasons Patients Became Lost to Follow Up

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

a. <u>Address Barriers to retention</u>: Building on the tools and methods deployed during the RTC campaign, the program will strengthen the following:

- 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.
- Improve client centered services at all treatments sites.

b. <u>Expand Multi-Month Scripting and Dispensing (MMSD)</u>: 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=365):** 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 365 are males and 45 percent (n=147) are females. While it is understood that some patients may have medical reasons preventing ART initiation, the following priority interventions will be implemented to address this sub-population eligible for ART and ensure their timely enrollment and retention on treatment:

a. ***Docket Review and Update:*** Regional multidisciplinary teams, or QI teams, will be tasked to prioritize review of dockets and records for this group.
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 25% of the estimated 13,038 patients who are diagnosed and not on ART will be re-initiated on ART by end of FY21. Implementation of the above strategies will also achieve the following:

- 95% linkage to ART for all people with new HIV diagnoses as a standard of care.
- Resolve 100% of diagnosed never linked (N=8,554) by June 2021.
- Close the treatment gap for those in care but not on ART (N=328) by October 2020.

Understanding the Target Population and the Gaps: The Unsuppressed

It is estimated that only 65% of ART patients are virally suppressed. Thus, there is a gap of 35 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. Higher proportions of older patients (>15 years) are more likely to be suppressed. 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 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-centered 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 21, 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 21 and results of the return to care campaigns, it is anticipated that approximately 3,000 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**

a. ***On Treatment and Virally Suppressed (n=9,283)*:** Viral suppression rates vary by facility from 69 - 90% amongst those tested at PEPFAR supported facilities; with half of the facilities with viral suppression rates of 80% or lower (PEPFAR FY19, MER results). 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 (≤ 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: The Ministry of Health and Wellness (MOHW) has started enrolling all newly diagnosed, those returning from lost to follow up and other eligible patient categories, on TLD, including child bearing aged women, with informed choice option. As of September 2019, there are 9,283 patients, who were on ART for over six months and are virally suppressed. In a second phase, this population will be considered for transitioned to TLD in a phased approach, according to the MOHW forecasting, quantification, and procurement plan.

Six-month multi-month dispensing: The MOHW has issued 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 FY21, 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 MOHW 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 20). The MOHW will provide guidance to all treatment facilities on implementation of this strategy in FY21. 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, which when combined serve over 65% of those on ART. By end of FY21, 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.

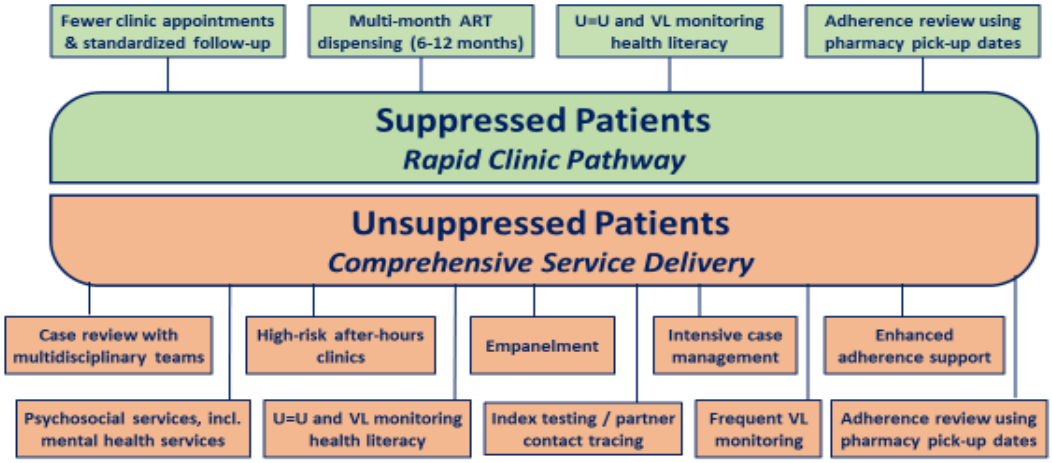

Figure 20: Differentiated Service Delivery for Suppressed v. Unsuppressed Patients

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

b.1. *On ART > 6 months and virally unsuppressed*: 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

New Interventions:

Differentiated care model for unsuppressed patients with particular focus on high viral load patients (VL >100,000 copies/ml): Since September 2019, all virally unsuppressed patients and those with high viral loads have been assigned to regional multidisciplinary teams for case review. These teams are integrated with existing site multi-disciplinary teams reviewing and formulating individualized enhanced adherence plans with assistance from clinical mentors. The teams will continue to develop plans to implement "high viremia clinics" with a package of services, including peer support, guided by the findings of the reviews and informed by other programmatic and survey data.

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.

ARV Optimization: Following the enhanced adherence counseling and monitoring, as per national guidelines, patients who remain unsuppressed will be transitioned to an appropriate 2nd line. Patients who continue to be unsuppressed while on 2nd line and having had interventions in the high viremia clinic for 3 months will have their Drug Resistance test done and their ART regime optimized based on results, to include a DTG regime if recommended. Healthcare workers will continue to follow up with patients to ensure viral suppression is attained. By end of FY 21, over 90% of the ~2,400 will be virally suppressed.

b.2. *On ART with no recent viral load test*: A total of 2,604 constitute this sub-population, representing 18% of all patients on ART. Females account for 53% of these patients, with over 60% aged 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. 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:** Per national guidelines, viral load is assessed after six months of treatment. Thus, there are at least 699 patients who are "ineligible" for a VL test, representing <10% 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.

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 Integrated Care Model:*** This model of care supports integrated healthcare services into selected HIV treatment sites and will be continued at two public facilities (one in the North East Region and one in the Western Region). 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, treatment literacy, and social support 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 also includes a Skills Sharing 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 from high-performing Ryan White sites are providing 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 is also facilitating 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 21 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 MOHW's Treatment database (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 to be accessible and provided to all eligible patients (100% coverage).
- Viral suppression among all patients on ART should improve to 95% by September 2020.

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 groups or KPs (Table 4). It is estimated that 11,897 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 bio behavioral survey conducted by the Ministry of Health and supported by PEPFAR.

Table 4. HIV Prevalence in Trinidad and Tobago (UNAIDS, 2017)

Population	Prevalence
Adult aged 15 to 49 HIV (2018)	1.2
Women aged 15 to 49 HIV	0.8
Men aged 15 to 49 HIV	1.4
Men who have sex with men	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 21 and 22).

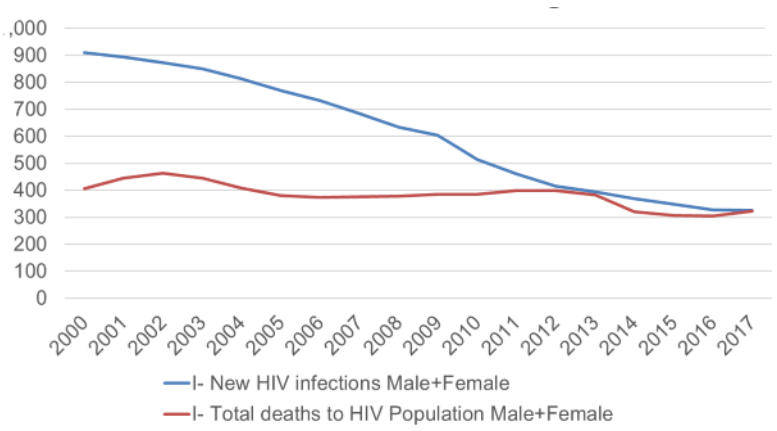

Figure 21: Trends in the number of new HIV infections and number of HIV related deaths in Trinidad and Tobago, 2000-2017

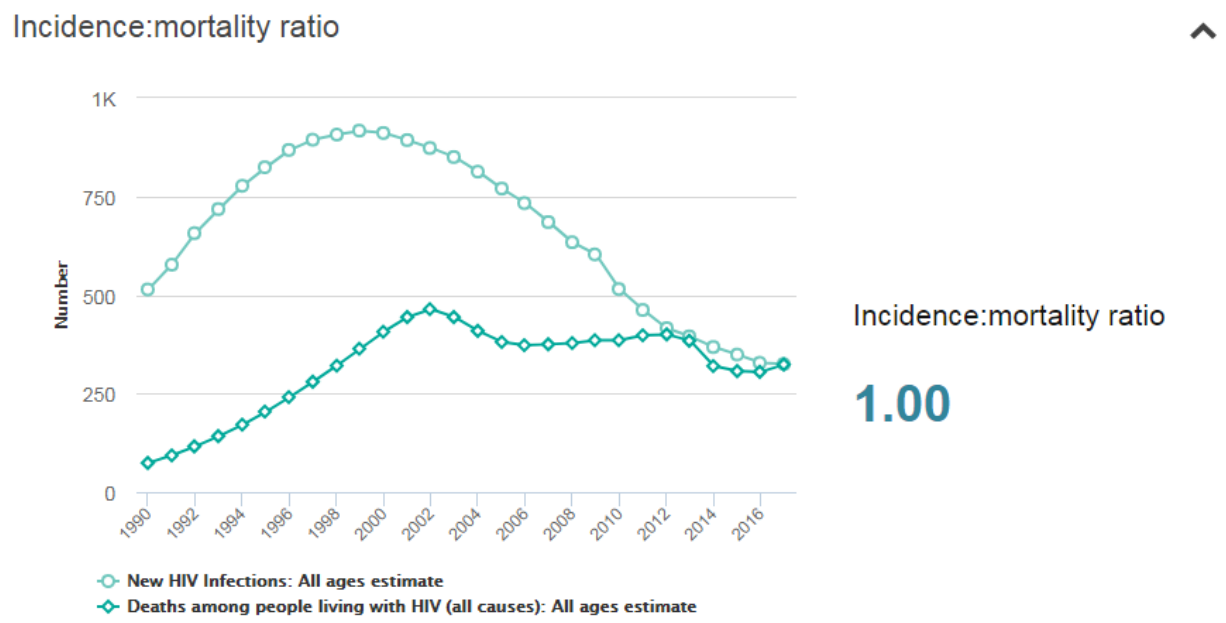

Figure 22: Trend of New Infections and Deaths among HIV Population in Trinidad and Tobago

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 21). New cases the region of Diego Martin, with the highest number of cases in the city of Port of Spain (Figure 23).of HIV are concentrated along the east-west corridor of Trinidad from the borough of Arima to

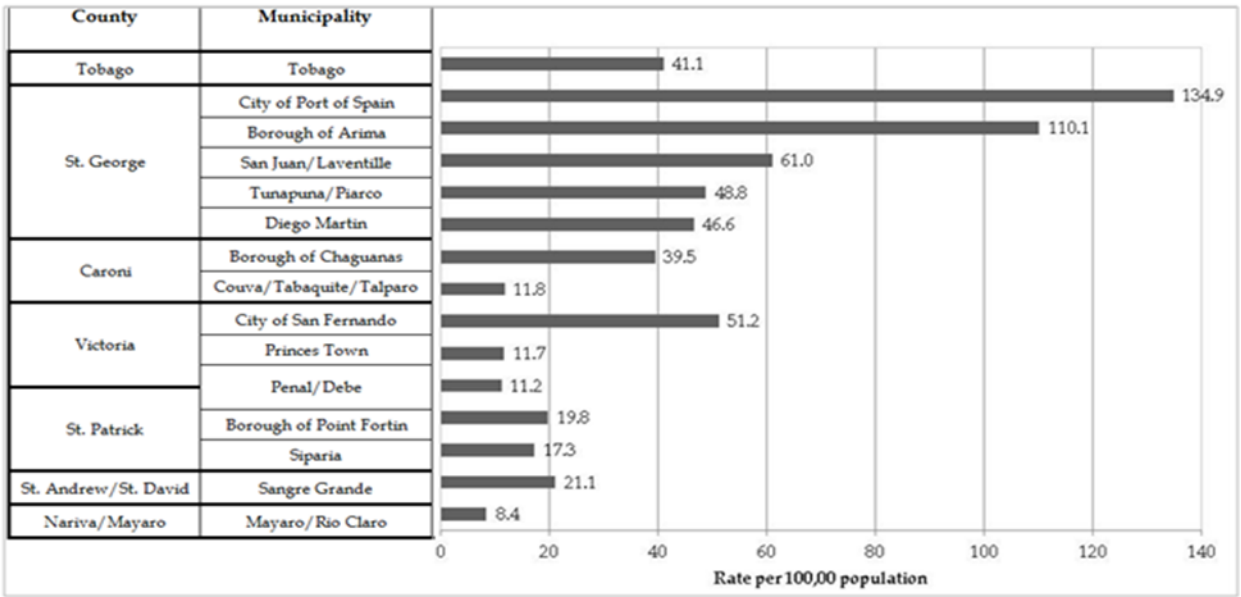

Figure 23: Rate of new HIV diagnoses by municipality and county of residence in Trinidad and Tobago, 2016 (N=500)

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 San Fernando General Hospital (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 2018, 7,312 of the 8,782 (83%) PLHIV retained in HIV care were receiving ART (Figure 24). 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 reinitiate them on treatment.

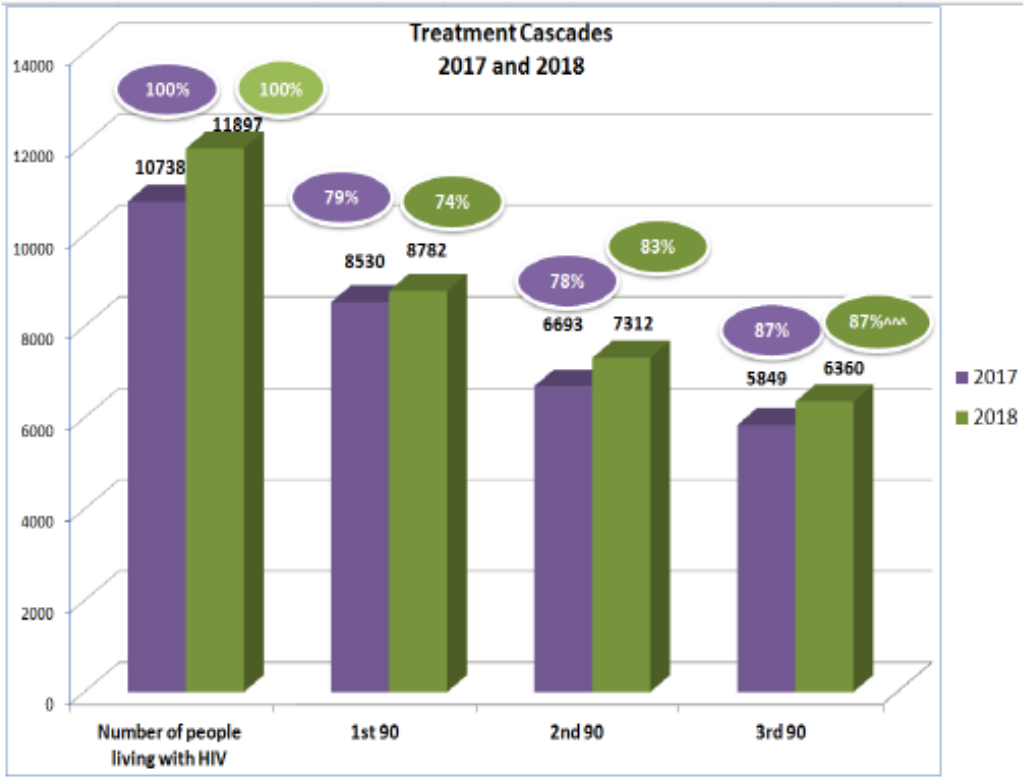

Figure 24: Trinidad and Tobago National HIV Cascade 2017 and 2018

By the end of 2018, a total of 6,360/7,312 (87%) of PLHIV on ART attained VL suppression. The national treatment cascade also shows high levels (87%) of viral load suppression among those patients on ART. PEPFAR has supported this achievement through 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 2). Based on the 2018 data, from the Ministry of Health, 74% (8,782) of the estimated 11,897 PLHIV have been diagnosed, 83% (7,321) of those diagnosed were on ART and 87% (6,360) of ART patients were virally suppressed. It therefore means that an additional 1,925 need to be diagnosed, 2,325 initiated/reinitiated on ART and equally 2,325 more have to achieve viral suppression in order to meet the 90-90-90 targets, in Trinidad and Tobago. It is worth mentioning that the current gaps may in fact, be smaller, due to accelerated efforts to achieve the 90-90-90 targets, over the last six months. The national clinical cascade is currently in the process of being updated with 2019 data. However, all strategies described below will be focused on addressing the gaps, based on the 2018 cascade, since this is the most updated data available at this time.

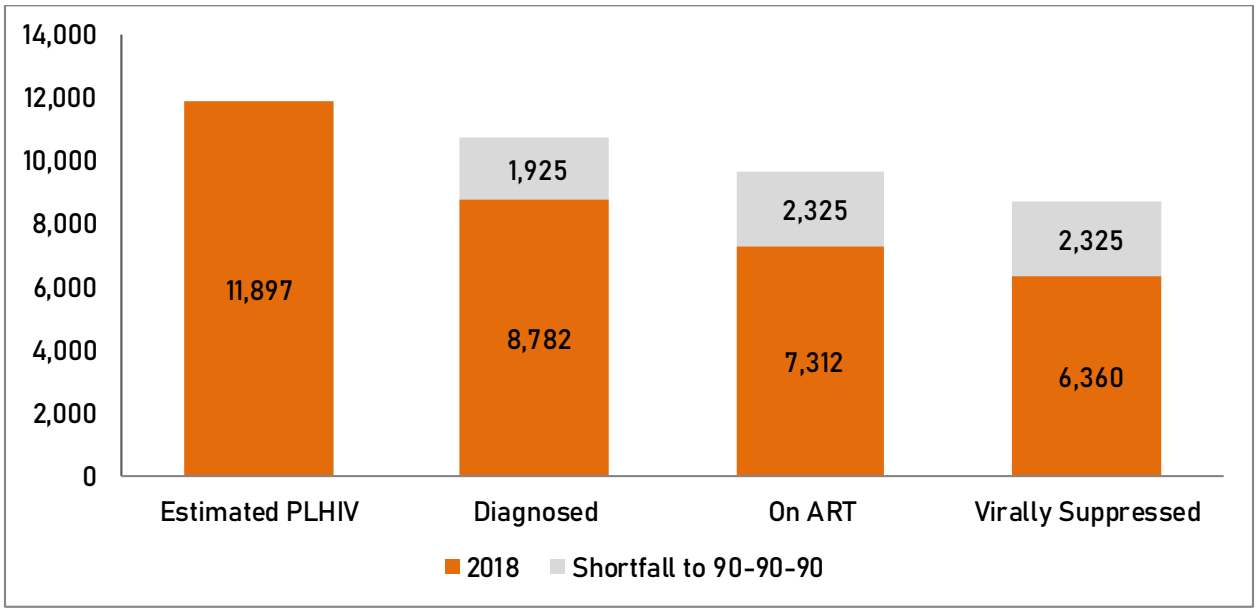

Figure 25: Progress Toward 90-90-90 in Trinidad and Tobago (MOH 2018)

Finding the Undiagnosed:

In Trinidad and Tobago, of the estimated 11,897 PLHIV, 8,782 (74%) PLHIV know their status (Figures 24,25) Using the data for patients retained in care as a proxy, 1,925 persons need to be diagnosed to achieve the first 90. Until recently, mortality data was not accessible, limiting the ability to fully quantify the number of PLHIV diagnosed and still alive since the beginning of the epidemic in 1983. As the MOH finalizes 2019 data, the team anticipates an updated estimate of the first 90 that can be used to focus case finding efforts.

To increase case finding, high impact and targeted testing interventions will be expanded. These include: index case testing, self-testing, recency testing and social network strategy (high risk men, including MSM and MSMW). 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 data validation exercises to match data from surveillance, treatment and the national death registers will ensure the alignment of the HIV surveillance register with confirmed deaths.

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

Based on the 2018 national HIV treatment cascade, an estimated 2,325 PLHIV need to initiate or re-initiate ART. Of these, an estimated 465 persons (20%) know their status but are not liked to treatment. An estimated 1,860 persons were either enrolled in care but never started on ART or were enrolled in care but became lost to follow up.

To ensure continuous linkage to treatment services, emphasis will be placed on national implementation of the revised linkage-to-care protocol, which was developed by the MOH earlier this year. Referral systems will be strengthened and Linkage Coordinators supported to ensure 95% linkage among newly diagnosed persons. With the largest 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.

An entry-to-care (ETC) campaign will be implemented to rapidly link and initiate, on ART, those 465 persons who already know their status but were never enrolled in a treatment facility. Once linked these individuals will be provided with a special package of services, inclusive of standardized treatment literacy, adherence counseling and, financial and nutritional support to those eligible. These measures will help to ensure retention among this high risk group of patients. Additionally, each person engaged will be administered a survey and the results will be used to identify and further address linkage barriers, Finally, to assess the effectiveness of the campaign, a minimum 12-month cohort analysis will be performed to evaluate retention and viral suppression.

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. Similar to the ETC campaign, patients returned to care will be surveyed to understand and, fine tune interventions to address their reasons for abandoning care and treatment. In addition, to improve retention for defaulters, extended hour clinics and viremia 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/MMD and other differentiated models of care will be employed to improve patient retention. The PEPFAR-supported treatment sites will implement satellite 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 educational 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 enhancing the data management system (to decrease turnaround time for test results); and supply chain (to ensure stock outs 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.

Site level docket reviews will be implemented to target all unsuppressed patients. The review will focus on various aspects of clinical management, such as, the length of time of ART, different ART regimens that the patient was exposed to, whether or not adherence issues were addressed, presence of comorbidities and/or psychosocial issues that could be preventing attainment of viral suppression. Based on findings, individualized strategies will be developed to assist each patient to become virally suppressed.

To support the continued scale up of viral load testing, the Government recently acquired a new Abbott viral load testing platform through a reagent rental agreement, transitioned from a manual to electronic inventory management system, strengthened the CELLMA Health Information System (HMIS), and installed a laboratory information system (LIS) at the Eric Williams Medical Sciences (EWMSC) facility Lab and the MRFTT Lab. This system now interfaces with other data systems and ensures the availability of timely and accurate data for HIV patient management and country wide laboratory surveillance. In ROP 20, PEPFAR will continue to support national roll out of these activities.

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 kits, 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 high 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. The EWMSC Diagnostic Lab which performs both VL and EID testing was accredited in December 2019. It is the first public sector clinical lab in the country to achieve this. Ongoing support will help to accredit the Public Health laboratory which performs HIV and TB testing. Technical assistance will continue 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 based 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 to be implemented in Ward 2 San Fernando Hospital, the second largest treatment site in Trinidad and Tobago.

4.0 Program Activities for Epidemic Control

4.1 Program Targets

Table 5. Expected Beneficiary Volume Receiving Minimum Package of Services

Support Volume by Group		Jamaica		Trinidad & Tobago	
		Expected result APR 20	Expected result APR 21	Expected result APR 20	Expected result APR 21
HIV testing (all populations) (includes HTS_INDEX)	HTS_TST	20,821	4,501	N/A	350
HIV positives (all populations) (includes HTS_INDEX_POS)	HTS_TST_POS	3,472	790	N/A	70
Treatment new	TX_NEW	10,650	2,004	795	1,267
Current on ART	TX_CURR	25,588	15,015	7,525	8,617
Key Populations	KP_PREV	905	1,300	N/A	N/A
Recency Testing	HTS_Recent	N/A	595	N/A	54

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 6): 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 FY21. These major activities are included in Table 6, which also address some of the most important minimum program requirements (MPRs). 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 FY21. 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 already 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 ongoing implementation of the minimum programmatic requirements, in order to achieve and sustain epidemic control in the supported Caribbean countries.

Benchmarks have been defined within Table 6 to measure progress against the current baselines in FY20, which align with the international best practices needed to achieve epidemic control based on the national targets. For example, at the systems level, the benchmarks of success for elimination of operational and systematic care and treatment barriers include updating treatment guidelines to include six (6) MD, differentiated care, TLD and retention strategies. For strategic information, benchmarks include linkages of fragmented data systems, completion of DQA assessments, establishment of HIV recency testing surveillance, and the availability of site-level dashboards and timely HIV surveillance reports. For laboratory strengthening, benchmarks include laboratory accreditation and quantitative targets for scaling up viral load testing. All of these activities serve to monitor the impact of the proposed Table 6 investments and address the identified MPRs and 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 attain agreed targets and achieve epidemic control in supported countries.

Table 6. MPRs and Key Systems Barriers identified by the Caribbean Regional Program

Minimum Program Requirements and Key systems barriers	Expected Outcomes	Related SID 3.0 Elements
Evidence of treatment and VL literacy activities regarding U=U and other updated HIV messaging to reduce stigma and encourage HIV treatment and prevention Adoption and implementation of Test and Start with demonstrable access across all age, sex, and risk groups, with direct and immediate (>95%) linkage of clients from testing to treatment across age, sex, and risk groups	• Viral load coverage at >90% by end of September 2021? • Improved access to education for health care workers to improve competency and knowledge about treatment and viral load monitoring • Entry to care campaign for improved patient linkage conducted • Systemic and operational barriers to retention are addressed using data from LTFU surveys	7. Human Resources for Health 10. Laboratory 6. Service delivery
Adoption and implementation of differentiated service delivery models, including six-month multi-month dispensing (MMD) and delivery models to improve identification and ARV coverage of men and adolescents	• 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 • National HIV Clinical Management Guidelines implemented and updated. • Training for all primary care physicians in the implementation of the guidelines.	6. Service Delivery
Scale up of index testing and self-testing, ensuring consent procedures and confidentiality are protected and assessment of intimate partner violence (IPV) is established	• HIV self-testing (HIVST) implemented to increase HTS access, demand creation and close the testing gap • Intimate Partner Violence (IPV) screening and monitoring of adverse events is incorporated for all index testing and partner services	6. Service Delivery

Rapid optimization of ART by offering TLD to all PLHIV weighing > 30 kg (including adolescents & women of childbearing potential), transition to other DTG-based regimens for children weighing > 20kg, removal of all nevirapine-based regimens	• Knowledge & Data Management, Sharing on best practices for Retention, viral suppression, and scaling up of TLD • Knowledge & Data Management on Stigma & Discrimination; identification of the loci of stigma as these affect access to health care (retention on ARVs and viral suppression)	3. Civil Society Engagement
Scale up of case-based surveillance and unique identifiers for patients across all sites	• Case reports for newly diagnosed cases completed within 6 weeks of diagnosis and summary data show improved completeness in reporting • Dedicated surveillance personnel complete routine visits to HIV testing sites as part of active surveillance strategies	14. Epidemiological and Health Data
Assure program and site standards are met by integrating effective quality assurance and Continuous Quality Improvement (CQI) practices into site and program management	• CQI plan is documented and implemented in all RHA labs • Program data shows a steady decrease in the rate of sample rejections and RT errors	10. Laboratory
Fragmented information systems, which prevent timely reporting, robust clinical cascade analysis, and use of data for strategic planning	• National and site level dashboards routinely used to inform clinical and programmatic decision making in supported countries • Review of HIV program HMIS systems/databases to identify gaps and solutions and corrective actions implemented	16. Performance data

Systems Strengthening:

i. Strategic Information Systems Strengthening

The availability of high quality strategic information (SI) to monitor the continuum of HIV prevention, care and treatment in the CRP is challenged by human resource constraints and the existence of fragmented information systems. In 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.

A technical visit by technical experts supported by PEPFAR to Jamaica in November 2019 confirmed priorities for the improvement of data management, reporting and use in Jamaica. As a follow-up to this technical visit, the PEPFAR team hosted a data analysis session with the HSTU; this is part of a larger activity to develop a comprehensive data analysis plan to monitor key metrics for the clinical cascade in Jamaica.

ROP20 SI investments will build on advances made in FY19 and planned activities in FY20. This includes a continued focus on strengthening routine health information management systems to ensure timely availability of high quality surveillance and program monitoring data to monitor the clinical cascade. These ROP20 activities will directly support addressing the PEPFAR Minimum Program Requirement (MPR) which focuses on scale-up of case-based surveillance and unique identifiers for all patients across sites. To achieve this, PEPFAR will support the implementation of active case-based surveillance in Jamaica by strengthening data management and reporting systems (digitization of paper forms), as well as strengthening human resource capacity to facilitate the routine quality improvement and use of strategic information.

An update has been provided on FY19 & FY20 activities (Table 9). The priority activities for FY21 are summarized below. These activities are aligned with addressing the data gaps for each subpopulation targeted as part of the CRP Strategy.

1. ***Strengthen/ Upgrade Data Management Systems to Improve the Timeliness & Quality of Surveillance & Program Monitoring Data:*** The CRP has demonstrated added value with digitization of paper forms in Jamaica – i.e. the digitization of the Lost to Follow-up Survey tool in FY19 and contact investigator reporting form (on track for completion by Q3 of FY20). Collection and reporting of surveillance data is currently paper-based in Jamaica. Data entry is facilitated at the national level in a single database. Support will be provided to MOHs to review the current reporting procedures to offer solutions for entry of case surveillance data at the subnational level (parish or regional) in support of timely reporting to the national level and use of data to inform subnational planning. This will be implemented to ensure interoperability with existing and nascent electronic data management systems. Support will also be provided to strengthen existing data quality improvement procedures to ensure accuracy of reported data in both patient monitoring and surveillance systems.

2. ***Support Implementation and Use of HIV Recency Testing as a Surveillance Tool:*** The PEPFAR SI team and partners will work in collaboration with the Laboratory Strengthening team to update existing HIV case surveillance protocols to incorporate the collection and use of HIV recency data. These data will be used to refine case finding efforts and provide another metric to monitor achievement of the national goals of reducing new infections.

Following protocol finalization and approval, recency surveillance is expected to start by January 2021.

3. ***Strengthen the Capacity of the MOH to Implement Active Surveillance***: Data collection for case surveillance is primarily passive in many Caribbean countries. In Jamaica, active surveillance is an integral part of data collection and reporting. A major challenge is limited human resource capacity to conduct routine visits and complete follow-up contact tracing activities. To address this (and as complement to digitization of reporting), the PEPFAR program will support the hire/retention of surveillance personnel to ensure active surveillance activities are brought to scale and timely data are available to inform program planning and monitoring.

4. ***Strengthen the Systems/ Process for Routine Analysis of Data***: ROP20 activities will build on advances made since April 2019 which have seen the PEPFAR Team collaborate with the MOHW to initiate development of a data analysis plan to prioritize key metrics for monitoring the continuum of prevention, care and treatment. The team also provided input into the finalization of the National HIV/AIDS Strategic Plan in 2020 and M&E priorities. Plans are in place to continue joint periodic review and analysis of available data with the HSTU SI team which commenced in November 2019.

   Full implementation of the ROP19 activities to link data systems (or develop an integrated repository) will provide the ability to utilize 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 PLIHV 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 national activities, including those at PEPFAR-supported facilities. This integration of national level SI data to inform site-level PCT interventions will fill gaps in treatment services across the cascade.

Table 7: Summary of Strategic Information Activities (October 2019-September 2020) – March 2020 Implementation Update

Domain	Action	March 2020 Update
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	The HSTU Jamaica has access to pharmacy data to improve patient monitoring; TSIS 2.2 was launched in Sept 2019. Cohort monitoring (e.g. RTC patients) has been integrated into TSIS 2.2 reports and used to provide patient outcomes for ROP 20 updates
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	**Jamaica:** A matching exercise was initiated in FY19. This was challenged by absence of robust patient identifiers in death data. A matching exercise between surveillance and treatment databases revealed disparities between the number of patients in both systems. MOHW teams are following up to close these data and programmatic gaps. Additional data triangulation has been ongoing. CDC and UCSF teams provided input on MOHW's case closure criteria for those out of care for more than 5 years. **Trinidad:** UCSF supported a fuzzy matching exercise in June 2019 to determine the mortality outcomes of patients diagnosed from the start of the epidemic using 2015 mortality data. This exercise will be repeated in 2020.
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	**Jamaica:** The national protocol is in the process of finalization and approval. Site level DQI activities are ongoing. This includes updating patient dispositions in TSIS 2 following the RTC campaign. These DQI updated have impacted the national cascade with downward adjustments to those linked to care and increases in the number and proportion of patients retained in care.
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	A technical visit was completed by a team from CDC HQ in November 2019; the output from this visit has informed in-country decisions to provide access to surveillance data to support entry to care campaigns. Discussions regarding other recommendations to link surveillance and program data are ongoing. Since November 2019, the CRO team has jointly reviewed national program data with the HSTU team, including inputs for the Epi and Program Update at the Annual Program Review in November 2019.

ii. Laboratory Systems Strengthening in Jamaica

a. **<u>Laboratory Key Systems Barriers</u>:** Several systems barriers existed which prevented effective laboratory workflow and monitoring of patient status in the past few years. In summary they were:

1. ***<u>Frequent Equipment Down Time</u>*:** Equipment typically experienced unplanned downtime more than once per year. There was no back up system; therefore, all

sites/patients were 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 averaged 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, inhibited rapid scale up. Interventions will lower the cost of reagents by 25%.

4. ***Limited Human Resource Capacity*:** The molecular lab is short-staffed, which affected rapid scale up. Interventions will increase productivity by 50%.

Strategies planned for FY21 that will be implemented to help eliminate the effect of the barriers are highlighted in Table8.

Table 8. 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 32,617 PLHIV in Jamaica, there are currently approx. 5,282 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), describing how data from the test will be used in surveillance to develop a public health response. By January 2021, the RITA will implemented at the National Public Health Lab to perform Recency testing and VL testing on all samples received for HIV confirmation. 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 (in development in FY20) will be upgraded in FY21 and will be 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 2020 and 2021, 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 continue using the HIV ePT database and will manage all the country PT 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 HIV 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 after 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 being upgraded to the Roche 6800, which has an annual capacity of approximately 80,000 tests, when running at full capacity with at least two technologists. In FY19, the NPHL performed between 22,000 and 24,000 VL tests and less than 1500 EID tests on samples sent from over 30 collection sites. However, there were a few periods of downtime and sample backlog, which prevented some patients from getting their test done in a timely manner. 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% in FY21 and beyond. Now that the MOHW in collaboration with the NPHL has upgraded the current testing platform, PEPFAR will focus on assisting with acquiring a backup machine, which will greatly increase available capacity and help to eliminate unplanned downtime. This upgrade will double the capacity of tests which the National Laboratory can perform, effectively supporting the increase in patient load. In FY20, support is being 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 25-50% 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 is ongoing 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, island wide. Sample collection sites will also have the ability, 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. During FY21 improvements will be made on data storage and backup systems, including expanded training for additional approved users.

5. ***HIV Drug Resistance*:** Current data shows that national viral suppression is approximately 65% 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 up to 20% 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.

Systems Strengthening in Trinidad and Tobago:

i. **Laboratory System Strengthening**: Laboratory systems strengthening activities will address key systems barriers in Trinidad. PEPFAR will support the country 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 continuous quality improvement initiative (RTCQII), 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 95% of ART patients receiving one VL test per year, and at least two labs attaining tier 3 of the Stepwise improvement process.

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.

In 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.

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 Jamaica and Trinidad, 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.

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

The PEPFAR Western Hemisphere: 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 and provided support to Jamaica (priority country), Trinidad and Tobago, Guyana, and Barbados. In FY 2019 the ROP 19 budget reduction continued to impact 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. CRP planned additional staffing reductions. The ROP 19 FTE count was reduced to 24.5 FTEs. In anticipation of the closeout in bilateral PEPFAR support to Barbados and Guyana, all positions in Guyana were abolished during ROP 19/FY 2020. ROP 20 staffing is being proposed at 23 FTEs with most staff located in Jamaica, where 84% of the CRP's notional budget is being programmed. One HIV public health specialist remains in Trinidad & Tobago. One laboratory specialist staff remains in Barbados, where PEPFAR supported the construction of a biosafety level 3 regional reference laboratory that opened in January 2018. This staff member will continue to support laboratory systems strengthening in the region. A partner & financial management analyst consultant is based out of Florida. 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. No new positions are being requested.

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 surveillance officer; leadership; and the support team. Staff listed under the Prevention, Care, and Treatment box (in Figure 26 below) will be utilized to advance and monitor site-level program requirements for linkage and retention, as well as client-centered services, and also to contribute to SIMS. The surveillance officer, who will support SI functions and SIMs, was originally approved during the 2018 regionalization discussions; however, the position was not filled given budget reductions. Given the data systems issues in the region, the HMIS position was prioritized over others that were abolished. Unfortunately, after two rounds of recruitment attempts, the program was unable to find qualified candidates and repurposed that FTE to fill the surveillance officer. The CDC IT position was updated to include HMIS work and contribution to SIMS, and training will be required to build this capacity. The IT position will also remain flexible to support administrative functions, given the significant reduction of administrative staff from 4.5 admin/IT FTEs in ROP 16 to only 2.0 (1.0 FTE CDC administrative assistant, 1.0 FTE CDC IT specialist, .5 FTE USAID administrative assistant, .5 FTE USAID IT specialist), who contribute not only to their agency work but to the greater interagency needs. The team feels the CRP is now right sized for our program and have the appropriate staff in numbers and functions to achieve our program goals, ensure proper management oversight, and provide technical support in our

priorities for HIV care and treatment (second and third 90). The PEPFAR deputy coordinator will ensure support for rapid roll-out of required small grants for community-led monitoring.

For ROP 20, PEPFAR-supported U.S. direct hire (USDH) staffing will be reduced to the requested 3. 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 & KP technical specialist).

The PEPFAR Coordinator's Office (PCO) deputy coordinator and SI positions have now been transferred to the State Department, which will now manage all HR functions for these staff. Of the interagency team, two positions are longer-term vacant positions. First is the PEPFAR deputy coordinator position. However, an offer has been made and accepted; the individual is awaiting medical and security clearances and is expected to start in May 2020. Second is the USAID regional interagency KP technical specialist. The short list has been shared by HR, but further recruitment is impacted by current COVID 19 pandemic; the process will hopefully be completed this spring. All other vacancies are more recent and short lists have been received for all. Some interviews are complete and awaiting clearances to begin. Overall, for vacant positions where interviews have not yet been conducted, they are now delayed given the COVID 19 pandemic.

Below is the proposed CRP staffing chart (Figure 26).

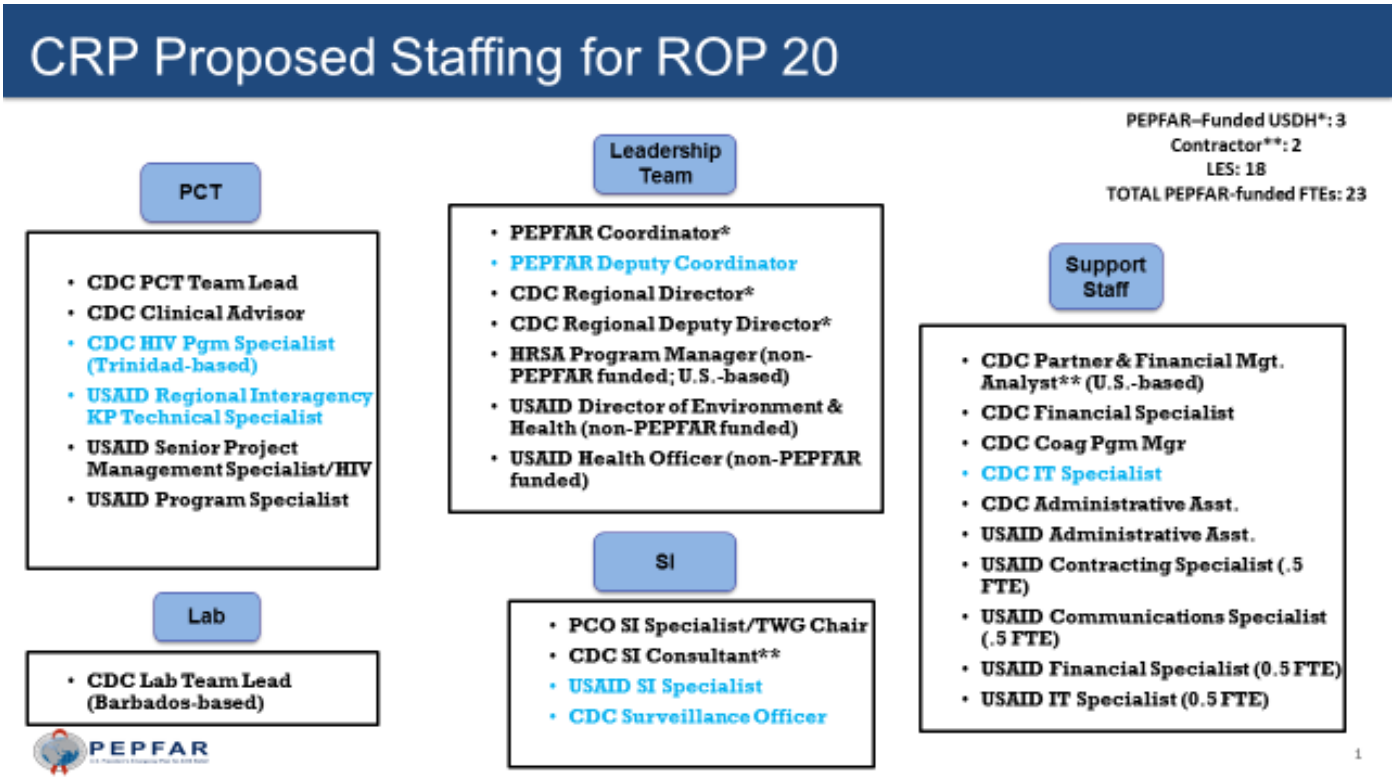

Figure 26: PEPFAR Western Hemisphere: Caribbean Regional Program Staffing Chart

There has been a corresponding decrease in CODB over the years (Table 9). These decreases result from overall staff reductions, necessary cuts given budget reductions, and reduced travel with fewer countries to support. Outside of staffing and travel, most CODB expenses are outside the program's control, including mandatory Embassy costs.

Table 9. The CRP Cost of Doing Business (CODB)

ROP 16 (FY 2017)	ROP 17 (FY 2018),	ROP 18 (FY 2019)	ROP 19 (FY 2020)	ROP 20 (FY2021)
$8,352,237	$7,909,787	$6,694,649	$5,098,580	$4,720,105M

APPENDIX A: Budget Profile and Resource Projections

ROP 20 Planned Spending

Table 10. ROP20 Budget by Program Area

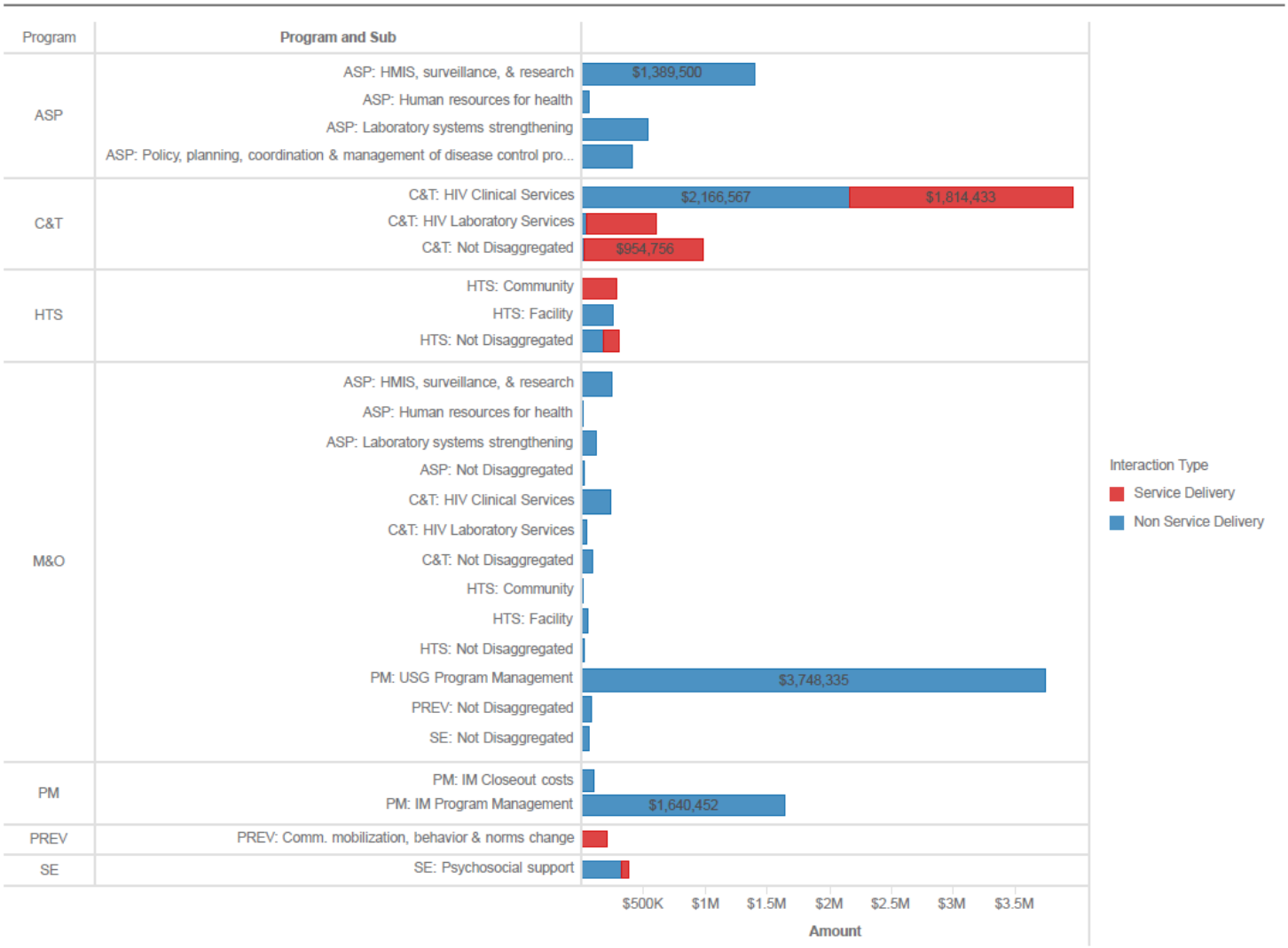

Table 11. ROP20 Total Planning Level (US$)

Applied Pipeline	New Funding	Total Spend
5,441,857	10,343,409	15,785,266

Table 12. ROP20 Budget by Agency

Agency	New Funding Sources	Applied Pipeline	Total Planned Budget
HHS/CDC	$ 6,800,474	$ 1,802,589	**$ 8,603,063**
HHS/HRSA	$ 2,722,720	$ -	**$ 2,722,720**
State/ PCO	$ 820,215	$ -	**$ 820,215**
USAID	$ -	$ 3,639,268	**$ 3,639,268**
TOTAL	**$ 10,343,409**	**$ 5,441,857**	**$ 15,785,266**

Table 13. ROP20 Funding by Budget Code

Table 22 Resource Allocation by PEPFAR Budget Code (new funds only)		
PEPFAR Budget Code	**Budget Code Description**	**Amount Allocated**
HTXS	Adult Treatment	$ 4,392,240
HVSI	Strategic Information	$ 1,643,746
HVMS	Management and Operations	$ 1,479,113
HBHC	Adult Care and Support	$ 1,080,950
HLAB	Lab	$ 718,224
HVCT	Counseling and Testing	$ 583,832
OHSS	Health Systems Strengthening	$ 366,309
HVOP	Other Sexual Prevention	$ 78,995
TOTAL		**$ 10,343,409**

<u>Program Budget Approach:</u>

- ✓ Focus on two countries - Jamaica and Trinidad & Tobago - with some support for regional policy, planning, and coordination. Direct PEPFAR support to Barbados and Guyana will be discontinued in ROP20. Limited resources have been planned to cover closeout costs.
- ✓ Reviewed cascades for Jamaica and Trinidad & Tobago, 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.
- ✓ For Jamaica, aligned PEPFAR targets with the Jamaica National Strategic Plan (NSP), after discussions with the Jamaica Ministry of Health and Wellness. In effect, this led to a decrease in proposed PEPFAR targets from ROP19 to ROP20, and subsequent $500,000 decrease in CRP ROP20 planning level.
- ✓ Prioritized countries by greatest need and least resources, and considered government commitment to reaching minimum requirements.
- ✓ Identified and prioritized key strategies and interventions for meeting targets in FY21; highest priority interventions were budgeted in FAST.

- ✓ Discussed which agencies have the comparative advantage and partners in place to implement the high priority interventions, and allocated the program budget accordingly.
- ✓ Increased planned funding to local implementing partners via new or pending mechanisms for ROP20, in line with PEPFAR goal for agencies to fund 70% or more of program budget to local organizations by end of FY20.
- ✓ Reviewed End of Fiscal Year (EOFY) tool for excess pipeline (4 months), applied pipeline to budget planning level first, and then applied new FY20 appropriations.
- ✓ Ensured Care & Treatment minimum requirement was met, by applying pipeline funds first to interventions that do not contribute to the earmark, and prioritizing new funds to interventions that do contribute to earmarks.

CODB Budget Approach:

- ✓ Staffing based on agreed positions at September 2018 regionalization meeting and further reductions given ROP19 budget cuts.
- ✓ Prioritized types of positions where need has been identified to support priority areas (fit for purpose).
- ✓ Reduced USDH footprint and increased overall proportion of local staff to ensure continuity and institutional knowledge.
- ✓ Majority of staff in Jamaica, where epidemic burden is greatest.
- ✓ Trimming CODB where possible to meet lower funding ceiling.

APPENDIX B: Tables and Systems Investments, Section 6.0

Table 14. Jamaica Table 6

Table 6-E (Entry of Above Site Programs Activities)									
Funding Agency	PrimePartner	COP20 Program Area	COP20 Beneficiary	Activity Budget	Key Systems Barrier	Intervention Start	Interventio n End	COP19 Benchmark	COP20 Benchmark
HHS/HRSA	UNIVERSITY OF WASH	ASP: Human resources for health-NSD	Non-Targeted Pop: Not disaggregated	$ 50,000	Evidence of treatment and VL literacy activities regarding U=U and other updated HIV messaging to reduce stigma	COP19	COP21	LMS is established and operational	Priority HIV care and treatment courses are offered to ensure adoption and implementation of international best practices

Table 15. Jamaica SRE

SRE Tool-E (Entry of Surveillance, Surveys, Research and Evaluation Activities)																						
SRE Tool-E (Entry of Surveillance, Surveys, Research and Evaluation Activities)																						
Funding Agency	Mech Name	Prime Partner	Mech	COP20 Program Area	COP20 Beneficiary	COP20 Activity Budget	Activity Description	Filter Here - Select Surveillance	Activity Type	Project Title	Project Lead	Primary evaluation or study questions	COP or HOP Funded?	Project Start COP Year	Project End COP Year	Current Stage of project (as of COP20)	COP20 Baseline Status (major)	COP20 Baseline Status (detail)	Primary Target Population (note that this SRE specific)	How does this project advance COP priorities?	SRE	All required fields completed?
HHS/CDC	[Placeholder - 81219 Jamai	TBD	81219	ASP: HMIS, surveilla	Non-Targeted Pop:	$ 100,000	Strengthen	Surveillance	Case surveillance	Strengthening of HIV case based surveillance in Jamaica	Martine Chase	N/A	COP	COP20	COP21	Ongoing	Reporting	Preliminary data availa	Non-Targeted Pop: Not disaggrega	This project with strengthen active data collection and reporting for HIV case- based surveillance and address MPR 15	1	SRE details entered
HHS/CDC	[Placeholder - 84399 Jamai	TBD	84399	ASP: HMIS, surveilla	Non-Targeted Pop:	$ 260,000	Strengthen	Surveillance	Case surveillance	Strengthening of HIV case based surveillance in Jamaica	Martine Chase	N/A	COP	COP20	COP21	Ongoing	Reporting	Preliminary data availa	Non-Targeted Pop: Not disaggrega	This project with strengthen active data collection and reporting for HIV case- based surveillance and address MPR 15	1	SRE details entered
HHS/CDC	[Placeholder - 84399 Jamai	TBD	84399	ASP: HMIS, surveilla	Non-Targeted Pop:	$ 90,000	Implementat	Surveillance	Recency	Implementation of HIV Recency testing	Martine Chase	Implementation of HIV Recency testing for all newly diagnosed	COP	COP19	COP21	Confirmed in COP	Protocol_Scope	Not started	Non-Targeted Pop: Not disaggrega	It is a priority activity for implementation in COP 19 and 20	1	SRE details entered

Table 16. Trinidad & Tobago Table 6

Table 6-E (Entry of Above Site Programs Activities)									
Funding Agency	PrimePartner	COP20 Program Area	COP20 Beneficiary	Activity Budget	Key Systems Barrier	Intervention Start	Intervention End	COP20 Benchmark	COP20 Benchmark
HHS/CDC	MINISTRY OF HEALTH	ASP: HMIS, surveillance, & research-NSD	Non-Targeted Pop: Not disaggregated	$ 173,500	Scale up of case based surveillance and unique identifiers for patients across all sites	COP19	COP21	Dedicated personnel conduct active surveillance , DQA activitiess and implement procedures to improve the completeness and timeliness of reporting	Strategic information personnel use national and site level dashboards to inform case finding (recency results), clinical management and programmatic decision making
HHS/CDC	MINISTRY OF HEALTH	ASP: Laboratory systems strengthening-NSD	Non-Targeted Pop: Not disaggregated	$ 30,000	Assure program and site standards are met by integrating effective assurance and Continuous Quality Improvement (CQI)	COP20	COP21	Decrease in sample rejection and RT errors by 50%	Decrease in sample rejection and RT errors by 75%
HHS/CDC	MINISTRY OF HEALTH	ASP: HMIS, surveillance, & research-NSD	Non-Targeted Pop: Not disaggregated	$ 20,000	Scale up of index testing and self-testing, ensuring consent procedures and confidentiality are protected	COP19	COP21	At least 50% of newly daignosed PLHIV received a test for recent infection	At least 75% of newly daignosed PLHIV received a test for recent infection
HHS/CDC	MINISTRY OF HEALTH	ASP: Policy, planning, coordination & management of disease control programs-NSD	Non-Targeted Pop: Not disaggregated	$ 10,000	Scale up of index testing and self-testing, ensuring consent procedures and confidentiality are protected and assessment of intimate	COP19	COP21	Self Testing and social network testing will be implemented and index testing will be scaled up	60% increase in index testing and 50% increase in self testing and social network testing
HHS/CDC	MINISTRY OF HEALTH	ASP: Policy, planning, coordination & management of disease control programs-NSD	Non-Targeted Pop: Not disaggregated	$ 10,000	Adoption and implementation of Test and Start with demonstrable access across all age,sex	COP19	COP21	Implementation of national linkage to care protocol	>95% of PHLIV successfully linked to treatment
HHS/CDC	MINISTRY OF HEALTH	ASP: Policy, planning, coordination & management of disease control programs-NSD	Non-Targeted Pop: Not disaggregated	$ 10,000	Adoption and implementation of differentiated service delivery models, including 6	COP19	COP21	25% increase in the number of stable patients receiving 6-month MMD	50% increase in the number of patients receving 6-month MMD

Table 17. Trinidad & Tobago SRE

SRE Tool-E (Entry of Surveillance, Surveys, Research and Evaluation Activities)

SRE Tool-E (Entry of Surveillance, Surveys, Research and Evaluation Activities)

Funding Agency	Mech Name	Prime Partner	Mech ID	COP20 Program Area	COP20 Beneficiary	COP20 Activity Budget	Activity Description	Filter Here - Select Surveillance	Activity Type	Project Title	Project Lead	Primary evaluation or study questions	Project Start COP Year	Project End COP Year	Current Stage of project (as of COP20)	COP20 Baseline Status (maj	COP20 Baseline Status (detail	Primary Target Population (note that this SRE specif	How does this project advance COP priorities?	SRE	All required fields completed?
HHS/CDC	Trinidad and Tobago T	MINISTRY OF HEALTH	100059	ASP: HMIS, surveilla	Non-Targeted Pop: I	$ 173,500	Strengthen a	Surveillance	Case surveillance	Support for HIV Case- Based Surveillance in Trinidad	Martine Chase	This project will continue to support HIV case-based surveillance in Trinidad during FY21. CBS is ongoing in Trinidad, but this component will add an additional capacity in the form of a database that tracks all HIV testing, ultimately linking these data to the care and treatment databases	COP19	COP20	Confirmed in COP	Protocol_Scope	Cleared	Non-Targeted Pop: Not disag	This project addresses COP19 and 20 priorities of strengthening HIV case-based surveillance	1	SRE details entered
HHS/CDC	Trinidad and Tobago T	MINISTRY OF HEALTH	100059	ASP: HMIS, surveilla	Non-Targeted Pop: I	$ 20,000	Implementat	Surveillance	Recency	Recency testing Surveillance	Martine Chase	This project will provide implementation of recency testing in Trinidad to improve surveillance data	COP19	COP20	Confirmed in COP	Protocol_Scope	Under development	Non-Targeted Pop: Not disag	This project addresses COP19 and 20 minimum requirements of implementing recency testing in	1	SRE details entered

Table 18. Western Hemisphere Table 6

Table 6-E (Entry of Above Site Programs Activities)									
Funding Agency	PrimePartner	COP20 Program Area	COP20 Beneficiary	Activity Budget	Key Systems Barrier	Intervention Start	Intervention End	COP19 Benchmark	COP20 Benchmark
USAID	U.S. Agency for Intern	ASP: Policy, planning, coordination & management of disease control programs-NSD	Non-Targeted Pop: Not disaggr	$ 147,058	Adoption & implementation of differentiated sevice models, including MMD and delivery models to improve identification and ARV	COP19	COP21	Number of joint National & Regional strategies developed and shared	Number of joint National & Regional strategies developed and shared

APPENDIX C: Minimum Program Requirements

The Governments of Jamaica and Trinidad & Tobago remain committed to the implementation of the PEPFAR minimum requirements, aligned with WHO's recommended best practices that will enable controlling the HIV epidemic. 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, in 2020, the Jamaica Ministry of Health and Wellness (MOHW) has set a target of at least 95% linkage to care of individuals diagnosed within two weeks. Both MoHs are committed to full and effective implementation of the Treat All policy, which was adopted in 2017.

In Jamaica, multi-month scripting (MMS) is implemented for up to 12 months for stable patients. ARV dispensing has not yet aligned with the scripting, but the MOHW is working to address the stocks and supply chain issues. MOHW recognizes that the need to accelerate multi-month dispensing, as highlighted by the ongoing COVID-19 pandemic where patients are being advised to stay home for as long as possible, especially if they are virally suppressed and stable. After completion of ROP19, the MOHW issued circulars with guidance empowering 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 ROP 20, efforts will continue to be made to implement this guidance. In addition, the MOHW will continue to increase 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 continue dispensing ARVs through additional private pharmacies.

In order to introduce better treatment regimens and improve health outcomes for patients, the Jamaica MOHW is currently rolling out TLD as the first-line regimen nationally. Since January 2020, a total of 325 patients have been enrolled on TLD, and the transition continues. For Trinidad and Tobago, the TLD transition has been delayed due to the patent on DTG and TLD held by GSK and the associated high cost. The Ministry continues to negotiate with GSK, and PEPFAR field and HQ teams have been engaged to support the Ministry on this issue.

In both countries, PEPFAR will continue to support implementation of differentiated service models, including the rapid pathway model to shorten wait time at clinics, and implementation of U=U. Support will be provided to strengthen CQI activities in both Jamaica and Trinidad & Tobago to improve the quality of services PLHIV are receiving at government, NGO, and private facilities.

To improve testing yields, both Jamaica and Trinidad and Tobago continue to strengthen and expand implementation of 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 continue to be a priority. In FY 2020, PEPFAR is supporting digitization of forms and training of HCWs on use of tablets to capture and manage ICT/PNS data. In order to facilitate access to testing services for certain populations, to create demand and complement existing testing modalities, the MOHW 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 Trinidad and Tobago, ICT/PNS have long been adopted and they are currently working on strengthening these interventions, including to ensure that they are reflected in the data systems. The Ministry is keen on rolling out HIV self-testing, and test kits requested from PEPFAR will help to facilitate this.

The Jamaica MOHW recognizes that PrEP is a key intervention in the prevention tool box and has made the rolling out of PrEP a priority in the current National Strategic Plan (NSP) for HIV, 2020-2025. The Ministry has already allocated resources for this activity, in addition to support from the Global Fund. In Trinidad and Tobago, PrEP is used for serodiscordant couples, and in private settings; other populations have not yet been prioritized in the public sector.

Regionally, lab systems strengthening activities are programmed to address the most important cross cutting issues and effectively support the Care and Treatment program. 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 to guide programming and interventions, as well as improve case finding. Initial training has been conducted for the National Public Health and support will be provided to MOHW for implementation in FY21.

Expansion of viral load (VL) capacity is a major focus of the laboratory and care and treatment programs in Jamaica as well as Trinidad & Tobago. Due to the increased volume of patients needing VL testing and the aging of the current machine, PEPFAR will be supporting acquisition of a second viral load testing machine through the "all-inclusive or reagent rental" process in FY 21. Several initiatives will support the scale up of VL testing, including extended sample reception times, expansion of the Laboratory Information Systems (LIS) network, high VL result alert system, and strengthening supply chain management. Several months ago, the MOH in Trinidad and Tobago acquired two new high throughput VL testing machines and currently has the necessary capacity to support expanded VL testing needs. Efforts will be placed on improving the clinic/lab interface to ensure efficient and effective VL coverage, reduce turnaround time of results, and maximize viral suppression.

Both Governments will continue to increase funding to the HIV programs in their respective countries. The planned CoAg with the MOHW in Jamaica will enhance and increase the indigenous/partner funding allocation and in Trinidad & Tobago, the vast majority of the funding is through the MOH.

Over the past several months, significant improvements have been made to the data system in Jamaica. During ROP19, the MOHW JA requested technical assistance from PEPFAR on strategic information. PEFPAR collaborated with the MOHW, conducting assessments of the surveillance and data systems, making recommendations, and assisting with implementation of those recommendations. This included significant contributions to the updated Spectrum estimates for Jamaica. Further, MOHW and PEPFAR teams conducted a joint workshop and data analyses and produced material for ROP20 presentations. In FY 21, PEPFAR will focus on addressing the following challenges and priorities: disparate systems, death data not reflected in the first 90, data quality, digitization of tools, and data use. Actions being proposed include: linking laboratory, treatment, testing, 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. Jamaica currently has an HIV case-based surveillance system in place. Procurement is underway to implement a national EMR system in a phased approached. The GoJ has secured funding for this activity and PEPFAR will supplement this effort by filling financial gaps and providing technical assistance. The aforementioned policies and strategies are codified in the recently developed NSP.

Trinidad and Tobago also has an HIV case-based surveillance system in place but has not yet implemented a national unique ID. In FY21, PEPFAR will focus on supporting the Ministry in matching death data to improve accuracy of the first 90 estimates, as well as data value completeness and concordance. Monthly meetings for site-data review and program planning will be instituted.

APPENDIX D: Epidemiological Data

Table 19. Host Country Government Results (Jamaica)

	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%									MOHW Spectrum estimates, 2018
AIDS Deaths (per year)	1500						<500				MOHW Spectrum estimates, 2018
# PLHIV	32,617		150		304						MOHW, Spectrum 2018 (revised)
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 20. 90-90-90 cascade: HIV diagnosis, treatment and viral suppression**

Epidemiologic Data					HIV Treatment and Viral Suppression			HIV Testing and Linkage to ART Within the Last Year		
	Total Population Size Estimate (#)	HIV Prevalence (%)	Estimated Total PLHIV (#)	PLHIV diagnosed (#)	On ART (#)	ART Coverage (%)	Viral Suppression (%)	Tested for HIV (#)	Diagnosed HIV Positive (#)	Initiated on ART (#)
Total population	2,728,864	1.8%	32,617	27, 335	14,297	44%	28%	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

Table 21. Host Country Government Results (Trinidad)

	Total		<15				15-24				25+				Source, Year
			F		M		F		M		F		M		
	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		34		49		HACU HIV Surveillance Report 2017
# PLHIV (2018)	11,897														MOH, 2018
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*															
MSM HIV Prevalence		31.6%													UNAIDS, 2017
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)															

Epidemiologic Data					HIV Treatment and Viral Suppression			HIV Testing and Linkage to ART Within the Last Year		
	Total Population Size Estimate (#)	HIV Prev (%)	Estimated Total PLHIV (#)	PLHIV diagnosed (#)	On ART (#)	ART Coverage (%)	Viral Suppression (%)	Tested for HIV (#)	Diagnosed HIV Positive (#)	Initiated on ART (#)
Total population	1,394,504	1.1%	11,897	8,782	7,312	61%	83%	1198	524	270
Population <15 years	296,324									
Men 15-24 years	93,634									
Men 25+ years	441,182									
Women 15-24 years	91,700									
Women 25+ years	471,365									
MSM										
FSW										
PWID										
Priority Pop (specify)										