



Dominican Republic Country Report

Transition Readiness Assessment

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This Country Report is based on the Guidance that Aceso Global and APMG Health developed to guide Transition Readiness Assessments in Latin America and beyond. For a detailed description of the methodology of the report please refer to the Guidance, which can be accessed [here](#).

The Guidance builds on the work of various organizations highlighting the tremendous value of cross-institutional collaboration. We especially benefitted from Curatio's Transition Preparedness Assessment Framework, PEPFAR/HPP's Readiness Assessment for Key Populations, the World Bank's Checklist for Transition Planning, Eurasian Harm Reduction Network's Transition Readiness Tool and PEPFAR's Sustainability Index and Dashboard.

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List of Abbreviations

ARS	Administradoras de Riesgos de Salud
ART	Antiretroviral therapy
CCM	Country Coordinating Mechanism
CNS	Consejo Nacional de Salud
CNSS	Consejo Nacional de la Seguridad Social
CONACO	Comité Nacional de Confección TB-VIH
CONAVIHSIDA	Consejo Nacional para el VIH y SIDA
CSO	Civil Society Organization
DIGECITSS	Dirección General para el Control de la Infecciones de Transmisión Sexual y SIDA
DIGEPI	Dirección General de Epidemiología
DOTS	Directly Observed Treatment Short Course (for TB)
DPS	Direcciones Provinciales de Salud
DR	Dominican Republic
END	Estrategia Nacional de Desarrollo
FSW	Female Sex Workers
GF	The Global Fund to Fight AIDS, Tuberculosis and Malaria
GoDR	Government of the Dominican Republic
HIV/TB	HIV/Tuberculosis
HR	Human resources
IBBS	Integrated Biological and Behavioural Surveillance
IDCP	Instituto Dermatológico y de Cirugía de la Piel
IPT	Isoniazid Preventive Therapy
KP	Key Populations
LAC	Latin American and Caribbean
LGBT	Lesbian, Gay, Bisexual and Trans
MDR-TB	Multidrug-Resistant Tuberculosis
M&E	Monitoring and evaluation
MEGAS	La Medición del Gasto en VIH/SIDA
MEPyD	Ministerio de Economía, Planificación y Desarrollo
MdH	Ministerio de Hacienda
MoT	Modes of Transmission
MSM	Men who have Sex with Men
MSP	Ministerio de Salud Pública
MTCT	Mother-to-Child Transmission
NGOs	Non-Governmental organizations
NSP	National Strategic Plan
ONE	Oficina Nacional de Estadísticas

PAHO	Pan-American Health Organization
PBS	Plan Básico de Salud
PDSS	Plan de Servicios de Salud
PDL	People deprived of liberty
PEFA	Public Expenditure and Financial Accountability
PEPFAR	President's Emergency Plan for AIDS Relief
PFM	Public Financial Management
PLHIV	People Living with HIV
PNCT	Programa Nacional Contra la Tuberculosis
PNPSP	Plan Nacional Plurianual del Sector Público
PORTIA	Performance-Oriented Resources Tracking and Investment Assessment
PR	Principal Recipient
PROMESE/CAL	Programa de Medicamentos Esenciales y Central de Apoyo Logístico
PrEP	Pre-Exposure Prophylaxis
RBF	Results-Based Financing
RCC	Rolling Continuation Channel
RR-TB	Rifampicin-Resistant Tuberculosis
SAI	Servicio de Atención Integral
SDSS	Sistema Dominicano de Seguro Social
SENASA	Seguro Nacional de Salud
SESPAS	Secretaria de Estado de Salud Pública y Asistencia Social
SFS	Seguro Familiar de Salud
SIOE	Sistema Operacional y Epidemiológico
SINAVE	Sistema Nacional de Vigilancia Epidemiológica
SISALRIL	Superintendencia de Salud y Riesgos Laborales
SIUBEN	Sistema Único de Beneficiarios
SNS	Sistema Nacional de Salud
SR	Sub-Recipient
SRS	Servicios Regionales de Salud
STI	Sexually Transmitted Infection
SUGEMI	Sistema Único de Gestión de Medicamentos e Insumos
SW	Sex Workers
TB	Tuberculosis
TRANS	Transgender
TSS	Tesorería de la Seguridad Social
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNAP	Unidad de Atención Primaria
WHO	World Health Organization

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1. Introduction

This report summarizes the findings of the Transition Readiness Assessment for the Dominican Republic (DR). It is based on a Guidance document developed by Aceso Global and APMG Health, with financial and technical support from the Global Fund (GF), to support countries to undertake transition analysis and planning.

The DR is a small, upper-middle income Caribbean country comprising the eastern two-thirds of the island of Hispaniola, which it shares with Haiti. While the country is divided into ten administrative regions, the population of over 10.5 million is concentrated in urban areas along the coastal regions, with less development and fewer inhabitants in the interior. Migration from Haiti contributes significantly to the DR population, and an estimated 7 percent of people living in the DR of Haitian descent.

Table 1 contains key indicators for the DR, comparing data from 2004, when the first GF grant was issued, to most recent data. After a severe financial crisis in the early 2000s, economic growth rebounded considerably over the next decade driven largely by construction, mining, financial services, local manufacturing, commerce, transport and tourism. Average annual growth between 2004 and 2015 was 5.6 percent, and GDP per capita more than doubled over this period. Social spending has risen in parallel with economic growth, with per capita health expenditure at purchasing power parity (PPP) increasing from US\$304 in 2004 to US\$580 in 2014. Out-of-pocket payments for healthcare have fallen during the same period, from 52.1 to 21.1 percent of total expenditure on health, and are now below the regional average (31.7 percent).

Table 1: Key Indicators for the DR, 2004 and most recent available data

Indicator	2004 (year of first GF grant)	Latest year available
UN Human Development Index Ranking	98 of 177	99 of 188 [2016]
Population	9,102,997	10,528,391 [2015]
Urban Population	6,007,523	8,315,323 [2015]
Poverty headcount ratio at national poverty lines (% of population)	50%	32.4% [2015]
GINI Index	52.0	47.1 [2013]
GDP per capita (current US\$)	\$2,421.10	\$6,468.47 [2015]
Literacy rate, adult total (% of people ages 15 and above)*	87.0% [2002]	92.5% [2015]

Sources: World Bank DataBank (2017) and UN Human Development Reports (2004/2016)

*The adult literacy rate is not available for 2004. The figure given is for the closest year with available data.

Despite these gains, the DR still lags far behind the Latin America and Caribbean (LAC) region as a whole in terms of growth and social spending, in part due to weak state capacity to generate revenue. In 2014, average LAC per capita health expenditure was over 2.5 times higher than in the DR, at US\$714; perhaps more tellingly, public spending on health in LAC was on average 3.8 percent of GDP, compared to just 2.9

percent in the DR. Domestically, growth has also not been equitable. While national poverty rates have declined, almost one-third of Dominicans still lived below the poverty line in 2015, and the unemployment rate remains stubbornly high. Specific populations, including the sizeable number of Haitian migrants, are particularly disadvantaged due to additional challenges such as language barriers, lack of legal status and persistent discrimination, all of which affect access to social services including healthcare.

Health sector reforms passed in 2001 paved the way for the separation of functions in the Dominican health system. As a result, the functions of health policy making, provision, funding and purchasing have been divided among various institutions including the Ministry of Public Health (MSP), the Social Security System (SDSS) and the Essential Medicines Program (PROMESE/CAL). Like in many upper-middle income countries, rates of non-communicable diseases (NCDs) in the DR have increased over the last decade, and in 2015 the leading cause of death were ischemic heart disease and cerebrovascular disease. However, infectious diseases are still common. Lower respiratory infections were the third leading cause of death in 2015, and HIV the 7th. The Dominican health system has to therefore cater to the increase in NCDs while still prioritizing infectious disease control, which has traditionally been managed through parallel disease programs. HIV and TB are primarily concentrated in key populations. Insufficient service outreach to these populations as well as the porous border with Haiti have prevented successful containment or elimination of either disease.

The GF has worked in the DR since 2004. Throughout its involvement, it has dedicated substantial financial and technical resources to improving the malaria, TB and HIV disease responses. In 2015, the country's GF TB component was moved into the transition phase given its classification as an upper-middle income country and a change in the TB disease burden classification from "high" in the 2014 GF Eligibility List to "moderate" in the 2015 GF Eligibility List. The DR continues to have a "moderate" TB disease burden as classified by the GF and will therefore be eligible for a final allocation of Transition Funding. While the current 2016-2018 grant is of US\$8.37 million, the allocation for the transition grant is almost halved to US\$4.49 million. The purpose of the transition grant is to fund activities in support of transition to full domestic financing of activities currently financed by the GF.

The DR's HIV component is still eligible for GF funding. However, as for all the upper middle income countries (regardless of disease burden) and low middle income countries with low/moderate disease burden, the GF recommends that DR begins planning for this process in advance to facilitate a smooth transition. Currently, the 2016-2018 HIV signed grant budget totals US\$18.3 million and the new allocation is approximately US\$16 million for the 2019-2021 grant cycle.

This document aims to help the DR to identify: a) financial, programmatic and governance gaps, bottlenecks and risks that need to be addressed to promote a smooth transition; and b) priorities and options for solutions that could be incorporated in a transition plan and implemented with the support of the transition grant and other available funding. Boxes 1 and 2 outline the GF's definitions of sustainability and transition.

To achieve these objectives, the report is structured as follows:

Section 2 summarizes the GF’s financial and non-financial support to the country. Section 3 describes the epidemiological situation as well as the national response in the DR and Section 4 provides background on the institutional and enabling environments, human rights and gender situation. Section 5 provides an overview of the Dominican health system and analyzes healthcare financing and fiscal space issues. Section 6 considers delivery system enablers and barriers to transition, including supply chain, information systems and the health workforce, and Section 7 assesses the current and future role of Civil Society Organizations (CSOs). Recommendations on the way forward are summarized in Section 8. Aceso Global is responsible for Sections 2, 3, 5, 6, and 8 of this report and APMG Health produced Sections 4 and 7.

Box 1: GF Definition of Sustainability

Ability of a health program or country to both maintain and scale up services coverage to a level, in line with epidemiological context, that will support efforts for elimination of the three diseases, even after the removal of funding by the GF and other donors.

Box 2: GF Definition of Transition

The process by which a country, or a country disease component, moves towards fully funding and implementing its health program, independent of GF support while continuing to sustain the gains and scaling up as appropriate.

GF considers a transition to be **successful** where national health programs are able to maintain or improve equitable coverage and uptake of services through resilient and sustainable systems for health after GF support has ended.

2. Summary of GF Support

2.1 GF financial and non-financial support

The GF has invested heavily in the HIV and TB responses in the DR.¹ To-date, the GF has disbursed over US\$130.9 million for HIV, distributed through four grants including the two ongoing HIV grants, with efforts aimed primarily at increasing access to HIV prevention, testing and treatment, especially among key and vulnerable populations. The GF's support for TB has included five grants with a cumulative disbursement of over US\$27.4 million to-date. Program objectives have sought to strengthen program management and improve TB control, detection and treatment, with a special focus on vulnerable populations.

Table 2: List of all TB and HIV Global Fund grants to the DR

Component	Round	Grant	Principal Recipient	Grant Start Date	End Date	Total Grant Amount (US\$)	Latest FPM Rating	Status
HIV/AIDS	2	DMR-202-G01-H-00	CONAVIHSIDA	1-Jun-04	31-Dec-15*	103,329,052	A1	Administratively Closed
HIV/AIDS	2	DMR-202-G04-H-00	IDCP	1-Jun-09	31-Dec-15*	18,664,954	A1	Administratively Closed
TB	3	DMR-304-G02-T	PROFAMILIA	1-Oct-04	30-Sep-09	4,603,398	B1	Administratively Closed
TB	3	DMR-309-G07-T**	MSP	1-Oct-09	31-Dec-15	10,630,744	A2	Financially Closed
TB	7	DMR-708-G03-T	PROFAMILIA	1-Oct-08	30-Sep-10	2,945,772	B1	Administratively Closed
TB	7	DMR-708-G08-T***	MSP	1-Oct-08	30-Sep-13	6,300,354	A2	Administratively Closed
HIV/AIDS	13	DOM-H-CONAVIH	CONAVIHSIDA	1-Jan-16	31-Dec-18	8,659,346	A2	Active
HIV/AIDS	13	DOM-H-IDCP	IDCP	1-Jan-16	31-Dec-18	9,668,208	A1	Active
TB	13	DOM-T-MSPAS	MSP	1-Jan-16	31-Dec-18	8,373,610	B1	Active

Source: The Global Fund (2017)

*Grants extended through the Rolling Continuation Channel (RCC).

**RCC Grant, a continuation of previous TB grant DMR-304-G02-T with a new government PR.

***MSP took over as PR for Phase II of grant DMR-708-G03-T in October 2010; grant number was reissued.

The GF has helped to strengthen and expand the two disease responses, with a focus on key and vulnerable populations. Throughout its involvement in the DR, the GF has financed the provision of condoms, purchasing of ARVs and second line TB drugs, as well as equipment and supplies for TB drug sensitivity testing including eight GeneXpert machines procured in 2016.² It has also supported innovations in treatment, including a pilot to introduce recently approved TB drugs recommended by the WHO in order

¹ The GF also contributed over US\$7.1 million to the national malaria response. The country is no longer eligible for malaria funding, however, and the gains from these investments are not a subject of this report.

² While the GF significantly contributed to the purchasing of pharmaceuticals in the past, it currently does not finance ARVs or first or second line TB drugs, though it continues to provide 100 percent of the funds for national laboratory supplies for TB and MDR-TB diagnosis (see Section 2.2 for information on the GoDR's record of financial absorption).

to evaluate their impact on reducing treatment time and increasing adherence. Further, GF investment supported upgraded health facility infrastructure, especially related to improved MDR-TB management.

The GF has supported improved program management and treatment practices through trainings and technical assistance. The first TB grant expanded DOTS in 18 provinces, and subsequent grants have helped consolidate these gains and expand treatment in other provinces. Trainings related to technical and managerial capacity building, proper management of MDR-TB (including support for the expansion and decentralization of MDR-TB treatment), voluntary testing and counselling, and sensitization to reduce stigma have improved health workers' and program personnel's ability to manage the two diseases. Further, trainings for non-professional health workers (e.g. health promoters and volunteers for TB prevention and control activities, and local peer educators for HIV prevention) have bolstered prevention efforts. The GF has also financially supported evaluations and studies to strengthen the disease programs, for example by providing funding for an Integrated Biological and Behavioural Surveillance (IBBS) Study, as well as to the Regional Green Light Committee to assess MDR-TB management and control.

The ongoing HIV grant implemented through the government PR *Consejo Nacional para el VIH y SIDA* (CONAVIHSIDA) seeks to sustainably reduce new infections in key populations (KP) and increase the life expectancy of people living with HIV (PLHIV). Activities are distributed across eight modules, with the highest funding for treatment, care and support (39.5 percent), monitoring and evaluation (14.7 percent) and prevention among vulnerable populations, including migrant, women living in bateyes (9.8 percent). When broken down by cost category, the largest portion of funding is for living support to client/target populations (27.2 percent), human resources (20.6 percent) and travel-related costs (18 percent). See Appendix 2 Tables A2.1-A2.3 for detailed breakdowns of the grant budget by module, cost category and recipient.

The complementary HIV grant is administered by the CSO *Instituto Dermatológico y Cirugía de la Piel* (IDCP) and has the same overarching goals. The grant covers the same eight modules as that implemented by CONAVIHSIDA, but the bulk of expenditure (67.9 percent) is targeted at three modules covering prevention among vulnerable populations, including among others MSM, trans populations, and SWs and their clients. By cost category, spending is concentrated in travel-related costs (32.8 percent), human resources (31.7 percent) and to a lesser extent non-pharmaceutical health products (14.5 percent). See Appendix 2 Tables A2.4-A2.6 for detailed breakdowns of the grant budget by module, cost category and recipient.

Given the targeted nature of GF investments, there is a risk that a funding shortfall in certain areas may emerge upon GF exit. The most pressing risk appears to be in the funding of prevention activities. In 2016, GF investments ensured coverage with a minimum prevention package for various KP as shown in Appendix 2 Table A2.7. The GF accounted for 100 percent of prevention coverage of SW and socially vulnerable women in bateyes, and contributed significantly to prevention coverage of MSM, TRANS, and Haitian migrants. During the 2016-2018, period the GF will provide approximately US\$910,000 annually for prevention for MSM and TRANS and US\$690,000 for prevention for SW to further extend coverage.

As further analyzed in Section 6.3, international contributions to the national disease program currently finance the majority of prevention activities. Meanwhile, the MSP only provides 10.8 percent of public and international expenditure on prevention and education, indicating that there is a need for increased absorption. In order to maintain the gains that have been achieved over the last years and that are anticipated to result from the investments under the current grant, domestic prevention efforts should not subsidize.

In 2017, the GF was projected to finance 9.5 percent of the overall TB response (see Section 6.3). The ongoing TB grant, implemented through MSP as the PR, seeks to reduce TB incidence and mortality, with a focus on key and at-risk populations. Grant activities are broken into five modules, with the majority of funding going towards TB prevention and care (63.8 percent), followed distantly by MDR-TB (14.7 percent) and program management (13.1 percent). In terms of cost categories, travel-related costs and external professional services together comprise over 65 percent of the budget. The majority of funds are being channeled through government sub-recipients, with 14.3 percent designated for NGOs. See Appendix 2 Tables A2.8-A2.10 for detailed breakdowns of the grant budget by module, cost category and recipient.

The other main area of risk relates to GF investments in TB. The current grant allocates about US\$2.7 million annually to TB. Withdrawing this support could imply a widening of the funding gap, estimated at US\$2,679,990 for fiscal year 2016 (see Section 6.3), unless the government decides to fill the gap with domestic resources.

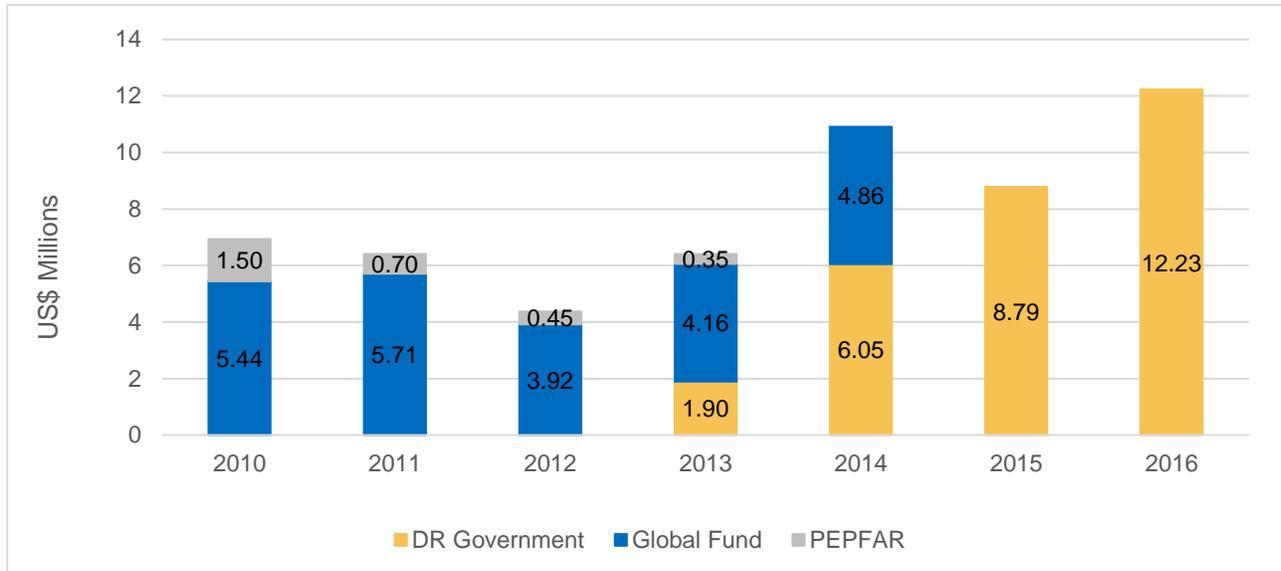
2.2 Record of Absorption

During the application process under the New Funding Model, the GoDR met the counterpart co-financing requirement of 60 percent for both HIV and TB. Under the willingness to pay (WTP) commitments, DR agreed to provide additional US\$ 14.94 million for HIV and TB in order to be able to access US\$7.47 million.

For HIV, the WTP commitments are expected to be met through the absorption of the costs of ARVs. From 2004 through 2013, the GF was the primary funder of ARVs, with PEPFAR contributing smaller amounts to cover frequent stock-outs. However, as shown in Figure 1, by 2014, domestic resources provided for over half of the necessary ARV funds and by 2015 the GoDR became the sole funder of these products.

Figure 1: Allocated (2010-2015) and Planned (2016)³ Budget for ARVs and Supplies

³ The PEPFAR Dominican Republic Strategic Directional Summary (2016) reports that the GoDR originally budgeted roughly US\$8.8 million for 2016, but an emergency funding request was submitted and approved to meet the funding need of US\$12.2 million.



Source: Valdez et al. (2015)

However, despite these gains, the most recent *Medición del Gasto en SIDA* (MEGAS) report as well as a preliminary Performance-Oriented Resources Tracking and Investment Assessment (PORTIA) show that the response remains highly dependent on external funding, with the GF the largest external contributor (see Section 6.3).

On TB, the GoDR has proven historically more adept at incorporating TB program costs into the domestic budget. Some of the interventions that are now being supported by the GoDR and were previously (under the round-based model) funded through GF include: central level management personnel related to monitoring and evaluation; supervision; MDR-TB care; finance and administration; second line drugs; reagents for MGIT 960 culture sensitivity tests (to cover 100 percent of need by 2017); and upgraded TB and MDR-TB service infrastructure in specialized care centers.

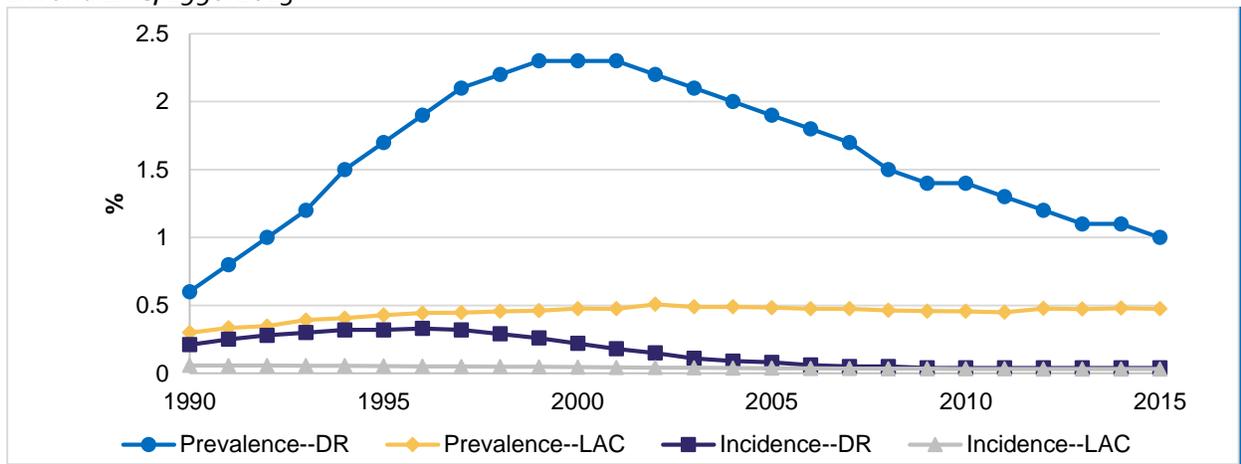
The government has planned to increase its share of funding for the National TB Strategic Plan over time, although it is still unclear what the share of the total need will be covered by domestic resources and the details of how DR will meet its willingness to pay commitments.

3. Epidemiological Situation and National Response

3.1 HIV⁴

HIV prevalence in the DR is almost double that in the LAC region, at an estimated 1.0 percent in 2015 compared to the LAC average of 0.48 percent. Nonetheless, prevalence in the country has fallen considerably over the last 15 years after reaching a peak of 2.3 percent in 1999-2001. The incidence rate declined substantially throughout the 1990s and early 2000s, and in 2015 was estimated to be 0.04 percent. This rate is on par with the LAC average of 0.03 percent. Figure 2 illustrates the trends in HIV prevalence and incidence in the DR and LAC over time. The estimated number of AIDS-related deaths has fallen alongside incidence, from 7,360 in 2005 to 2,229 in 2016 (MSP, National Estimates and Projections of HIV Prevalence and Disease Burden, 2016).

Figure 2: HIV Prevalence (% of population, 15-49) and Incidence (% of uninfected population, 15-49) in DR and LAC, 1990-2015



Source: World Bank Databank (2017)

UNAIDS estimates that in 2016 there were roughly 67,126 PLHIV in the DR of all ages, with 32,380 cases corresponding to men aged 15 and older and 33,040 to women in the same age range (MSP, National Estimates and Projections of HIV Prevalence and Disease Burden, 2016). It is calculated that in 2016 there were 2,394 new infections in adults aged 15 and over in 2015 (MSP, National Estimates and Projections of HIV Prevalence and Disease Burden, 2016). The highest prevalence is found in men aged 45-49 and women aged 30-34 (Concept Note to Global Fund 2015f).

Prevalence varies considerably across provinces. In 2016, the provinces with the highest HIV prevalence were Monte Cristi, Dajabón, Santiago Rodríguez, Valverde, Hermanas Mirabal, María Trinidad Sánchez, Duarte and Samaná. That same year, the provinces with the highest number of PLHIV were Santo Domingo and the Distrito Nacional, Santiago, Puerto Plata, Duarte, La Vega, La Romana and Valverde. Figures A3.1 and A3.2 in Appendix 3 detail these regional variations.

⁴ While the DR has not implemented Optima to assess allocative efficiency in the HIV response, it does employ Spectrum (including Goals) and the Epidemic Projection Package, the core tools supported by UNAIDS and used by countries to generate national HIV estimates and related indicators.

The HIV epidemic has a disproportionate effect on certain KP, including MSM, TRANS populations and female sex workers (FSW). Haitian migrants and socially vulnerable women living in bateyes are also considered KP for HIV in the DR. Data on population size estimates for these groups as well as HIV prevalence rates are dated and in some cases findings are not consistent across available studies due to methodological differences, precluding comparison. Further, challenges associated with the collection of KP data—such as small sample sizes as well as certain populations, like MSM and TRANS populations, self-identifying as part of the general population to avoid stigma/discrimination—mean that even where data are available, they have inherent limitations. Bearing these qualifications in mind, Table 3 presents the most recent data available on KP size estimates, while Figure 3 presents most recent HIV prevalence figures. A new Integrated Biological and Behavioral Surveillance (IBBS) Study is set to be completed in 2017,⁵ however, which should help provide a more unified and accurate assessment of the current HIV burden in these populations. The IBBS utilized Respond Driven Sampling (RDS), a specialized methodology for hard-to-reach populations. The new study will use the same methodology.

Haitian migrants are by far the largest KP, comprising roughly 7 percent of the total Dominican population, though estimates vary considerably. Size estimates of the MSM population also range widely, from roughly 32,000 to 124,000. The official statistic is 124,472 at the national level. However, the latter is most likely an overestimation as pointed out by the authors of the most recent study (MEASURE Evaluation 2017). They cast doubt on the figure used in the National HIV Strategic Plan 2015-2018—which estimates that there are 124,472 gay and other MSM—as the methodology did not utilize a geographically representative sample⁶. Estimates for the number of SW and TRANS persons are more consistent across sources.

Table 3: KP Size Estimates

Key Population	Estimated Size	Source
TRANS population	5,169	MEASURE Evaluation (2017)
	8,891	IDCP (2014)
MSM	32,416	MEASURE Evaluation (2017)
	124,472	IDCP (2014)
Haitian migrants	458,233	IDCP (2014)
	718,041-773,856	Concept Note to the Global Fund (2014)
	87,782	MEASURE Evaluation (2017)
FSW	91,171	CONAVIHSIDA Experts Focus Group 2000 (updated 2014), from PEPFAR (2016b)
Residents of bateyes (ages 15-49)	108,995	IDCP (2014)
Drug users (reported use of illegal drugs in the last 6 months) ⁷	59,632	IDCP (2014)
People deprived of liberty	25,935	WHO/PAHO (2016b)

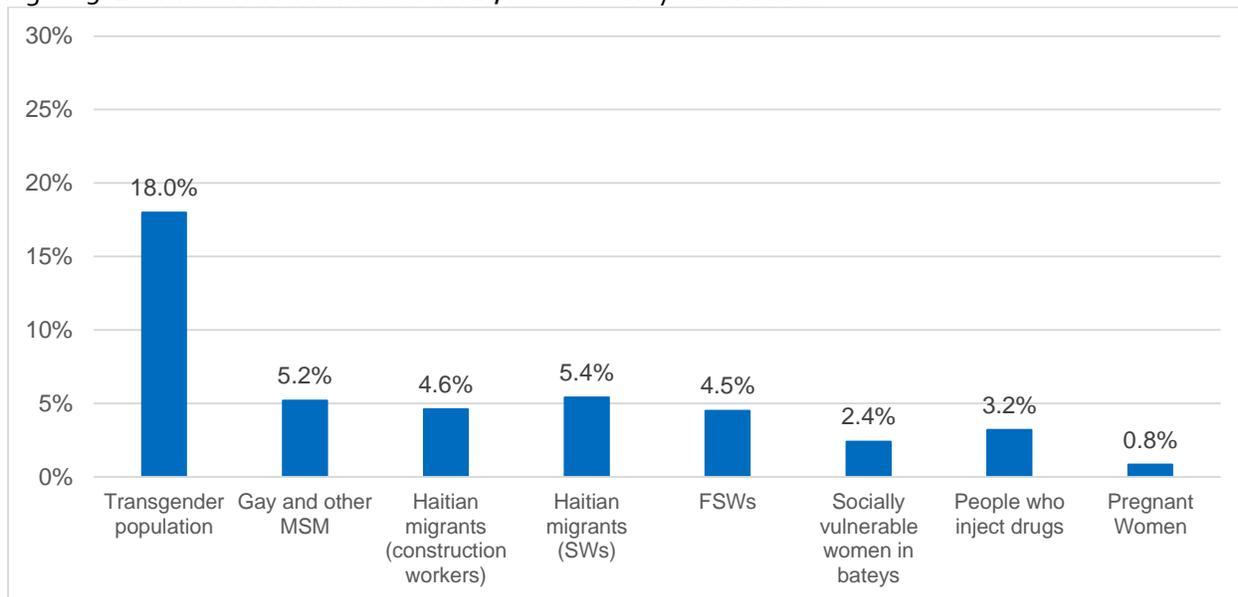
⁵ The IBBS, which is financed by the current GF grant, was initially planned for 2016 but has been delayed to this year.

⁶ From the MEASURE evaluation PLACE study: “It should be noted that figures in the PEN relied on a different method of estimation for each population, and that those methods did not benefit from data from a geographically representative sample.”

⁷ Use of injectable drugs is not common in the DR (Miller 2014); The Global Fund Database (2016) estimates that there were 900 people who inject drugs in 2014. However, the use of non-injectable drugs is relatively common and although this activity in itself does not expose users to HIV, it is known to influence condom use.

The HIV-positive rate is highest in the TRANS population, at 18 percent. Prevalence is significantly elevated, at close to 5 percent, in three KP (MSM, Haitian migrants and FSW). Prevalence is lowest among socially vulnerable women living in bateyes, though these women still experience prevalence rates over double the national average.

Figure 3: Estimated HIV Prevalence in KP, most recent year available⁸



Source: TRANS, gay and other MSM, Haitian migrants (construction workers), FSWs and socially vulnerable women in bateyes from Concept Note to the Global Fund (2015f); pregnant women from CONAVIHSIDA (2014); and Haitian migrants (sex workers) and people who inject drugs from CONAVIHSIDA (2015)

There is limited up-to-date data regarding incidence by population type, largely due to limitations in data collection and reporting by health facilities. A specific breakdown of new cases by type was not available for 2016⁹. The most recent Modes of Transmission (MoT) study available is from 2010 and was completed by the National HIV Program with support from UNAIDS. The findings reveal that in 2010, the groups comprising the majority of new HIV infections were gay, trans and other MSM (33.3 percent of new infections) and the “low risk” population, referring to those who only reported sexual relations with a partner with whom they live (31.0 percent of new infections). In terms of other KP, 9.1 percent of new infections were in residents of bateyes, 5.6 percent were in FSW and 0.8 percent were in people who inject drugs. However, 8.3 percent of cases were found in those practicing casual heterosexual sex, with 3.7 percent of cases reported in their partners. Figure A3.3 in Appendix 3 illustrates these results. Based on these results, the report concludes that sexual contact in the general population is also likely to continue to be a significant driver of the epidemic.

National Response to HIV

⁸ Source years are as follows: TRANS population-2014; Gay and other MSM-2012; Haitian migrants (construction workers)-2013; Haitian migrants (SW)-2013; FSW-2012; Socially vulnerable women in bateyes-2013; People who inject drugs-2012; Pregnant women-2014.

⁹ Efforts to start collecting information on KP are currently under way as discussed in Section 7.4.

Building on the strengths, weaknesses and lessons learned from the National Strategic Plan (NSP) for HIV 2007-2015, the ongoing NSP for HIV 2015-2018 was developed through a participatory approach and seeks to facilitate a national response that ensures universal access to HIV/AIDS and STI education, prevention and care. It emphasizes quality, elimination of stigma and discrimination, human rights and gender equality, with a focus on specific KP. Sustainability and multi-sectoral participation are additional core concepts. To guide activities towards these broad goals, the plan includes detailed matrices with specific monitoring and evaluation (M&E) indicators and annual targets, as well as baseline measures that were absent in the previous plan, which hindered effective monitoring. The high-level indicators related to sustainability of the national response include: percentage of spending on the HIV response financed by domestic public resources; percentage of ministries and institutions that execute STI and/or HIV interventions with their own budgets; percentage of spending on the HIV response executed by civil society organizations (CSOs); and percentage of CSOs with management capacities to implement STI and HIV prevention activities. Notably, the plan is costed.

The DR has adopted the Treatment 2.0 Strategy promoted by WHO/PAHO and UNAIDS. As of 2015, the threshold for initiation of ART was 350 cells/mm³; the country raised this threshold to 500 cells/mm³ from 2016 onward. However, national guidelines allow for key populations, pregnant women and people with chronic illnesses to begin ART regardless of cell count. PEPFAR is carrying out a pilot in 9 SAIs (Servicio de Atención Integral) and two mobile units, and is working for the adoption of Test and Treat in the country, but current funding levels would be insufficient to provide for the expanded ART coverage necessary under this strategy.

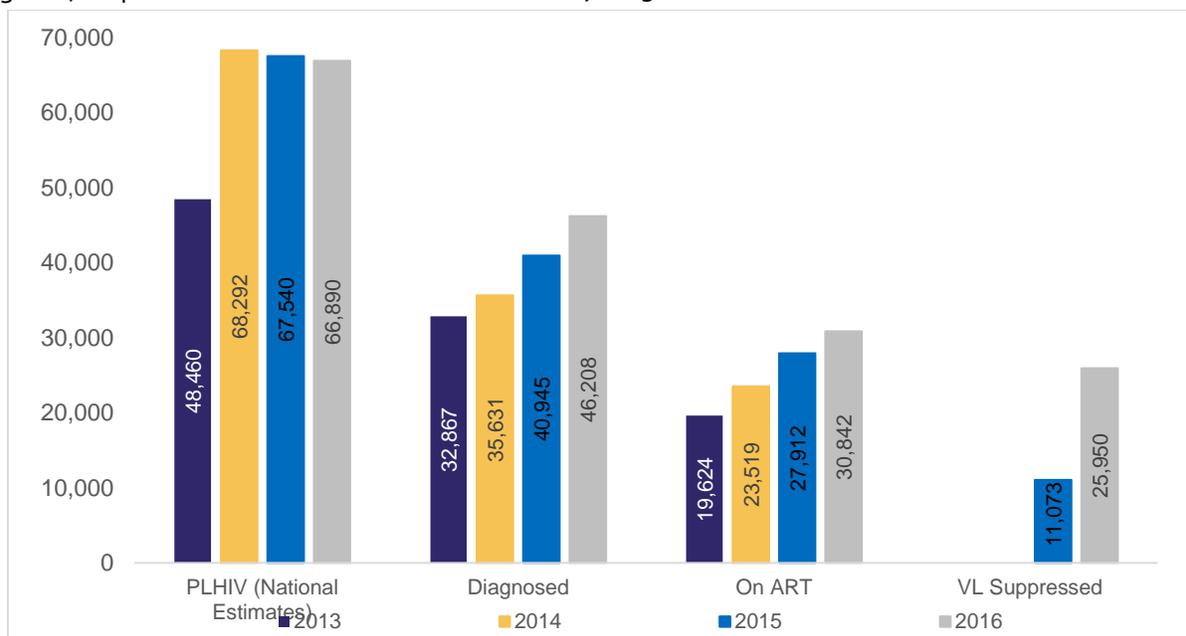
The DR has also signed onto the UNAIDS 90-90-90 goals¹⁰ and has made progress towards these targets, as illustrated in Figure 4. MSP appears committed to their achievement. The goals are referenced in the National Strategic Plan for HIV 2015-2018, and MSP has calculated 90-90-90 targets through 2018 based on national projections of the number of PLHIV (see Appendix 3 Figure A3.4).

Despite this commitment and recent improvements in diagnosis and linkage to care, however, in 2016 only 69.1 percent (46,208 of 66,890) of the estimated PLHIV were diagnosed. The bottlenecks appear to mainly be at testing and from testing to ART. The drop from ART to viral suppression is smaller. Furthermore, it is also worth noting that retention at 12 months is estimated by UNAIDS to be 84 percent among adults and children living with HIV (GAM 2016). In the same year, there were also marked gender differences in the treatment cascade with fewer males diagnosed, on ART and virally suppressed.¹¹ Figure 5 presents these gaps numerically. Clinical cascades specific to KP are not known at this time as facilities do not have the ability to classify clients by population.

¹⁰ 90-90-90 targets: to have 90 percent of PLHIV aware of their status, 90 percent of people diagnosed with HIV on sustained ART and 90 percent of all people on ART achieving viral suppression, by 2020

¹¹ Note: Currently, national programs only collect data by two gender categories—male and female.

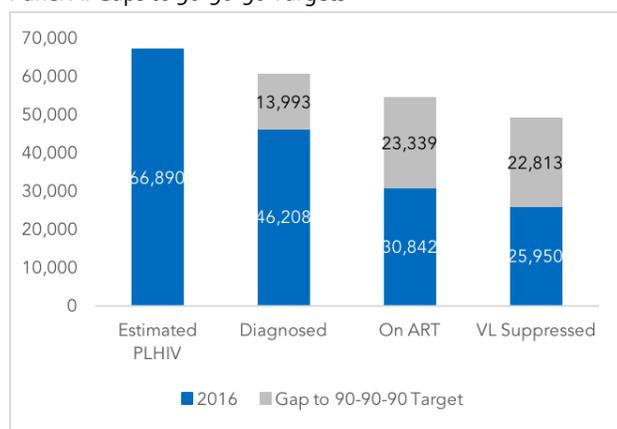
Figure 4: Improvements in HIV Treatment Cascade, 2013-2016



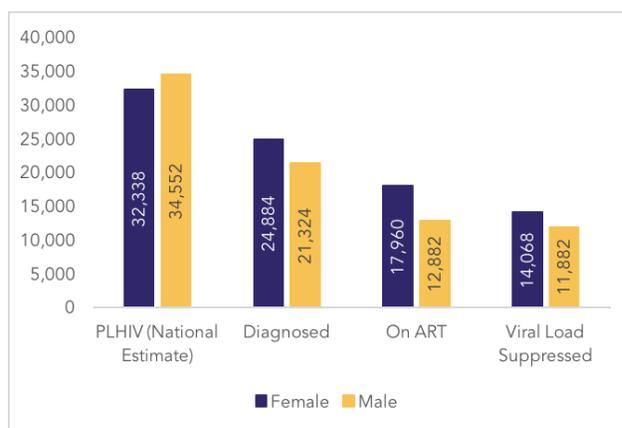
Source: MSP (2017f)

Figure 5: 2016 Treatment Cascade

Panel A: Gaps to 90-90-90 Targets



Panel B: Gender Differences



Source: Modified from MSP (2017f) and data received from Mesa Técnica de M&E

Since 2000, the DR has supported the *Programa Nacional para la Reducción de la Transmisión Vertical* (National Program to Reduce Vertical Transmission), which offers services in 133 health centers and implements a strategy to eliminate mother-to-child transmission (MTCT) of HIV. In 2016, 83 percent of HIV-positive pregnant women received ART (GAM 2016). 61 percent of infants born to HIV-positive mothers received a virological test for HIV in the first two months of life (Gin 2016 (GAM 2016)). Despite these targeted efforts, the vertical transmission rate is high, at 6.94 percent according to national estimates. In 2016, the National HIV Program reports that there were 1,094 HIV-positive pregnant women (MSP 2017f). Thus, while the GoDR has exerted efforts to reduce MTCT of HIV, these efforts have proven insufficient and major gaps in outreach, screening and proper treatment of both mother and child persist.

3.2 Tuberculosis

In 2000, the incidence of TB in the DR was almost double that in the LAC region, at 100 per 100,000 people compared to 55. Over the next decade, the DR made significant gains in TB control and by 2013 incidence had fallen to 60 per 100,000 people, where it has remained since. This figure is still considerably above the LAC average of 40 per 100,000 people, but the trend is encouraging as it indicates consistent improvement. A recent evaluation of the TB program by the WHO Regional Green Light Committee notes that recent stagnation is potentially attributable to improvements in the TB registration system coupled with intensified searching for TB cases among key and high risk populations. Further research would be needed to ascertain the exact cause, however. Figure 6 illustrates the trend in the DR and LAC. Despite its downward trend, TB continues to be a public health problem requiring bilateral cooperation with neighboring Haiti (see discussion below).

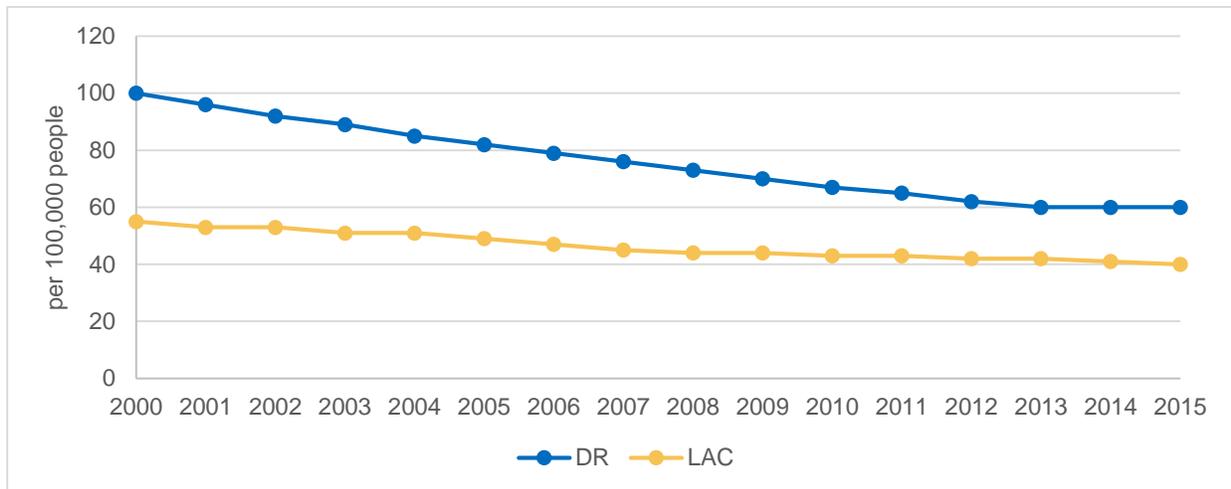
Based on WHO estimates, the case detection rate for all forms of TB fluctuated considerably from 2000 through 2015, falling to a low of 50 percent in 2002 and peaking at 72 percent in 2013. The case detection rate in 2015 was 71 percent, 10 percentage points below the LAC average (WB 2017). In 2016 the National TB Program (*Programa Nacional Contra la Tuberculosis* - PNCT) reported a total of 4,460 TB cases, of which 4,263 (95 percent) were new cases and 51 percent were bacteriologically confirmed (MSP 2017d). That same year there were an estimated 6,300 new TB cases, however, meaning almost one-third of suspected cases went undiagnosed (MSP 2017d). MSP assumes the bulk of the responsibility for TB testing and diagnosis, having registered over 93 percent of new cases in 2016 (see Table A3.1 in Appendix 3). Low levels of detection are in part due to an under-investigation of respiratory symptoms.

With regards to improving contact tracing, an active and georeferenced search has been systematically initiated as a mechanism to ensure that 100% of new cases are diagnosed. After the confirmation of the diagnosis, bacteriologically confirmed cases are registered in the Sistema Nacional de Vigilancia Epidemiológica (SINAVE) and in the Sistema Operacional y Epidemiológico (SIOE). The epidemiology department conducts home visits to study contacts and complete a census of cases; it also georeferences all cases in order to identify transmission hotspots.

Contacts are sent to be evaluated in one of the health centers of the public network and treated if the contact is infected. Individuals under 15 years old receive Isoniazid Preventive Therapy (IPT) even without any evidence of TB infection. Despite these efforts, contact tracing continues to be a challenge, mainly because contact tracing heavily depends on the active involvement of health workers.

In 2016, the PNCT reports that 74 percent of estimated persons with respiratory symptoms were captured; this is a decrease from the peak of 95 percent in 2014. Of those captured, only 91 percent were investigated (MSP 2017d).

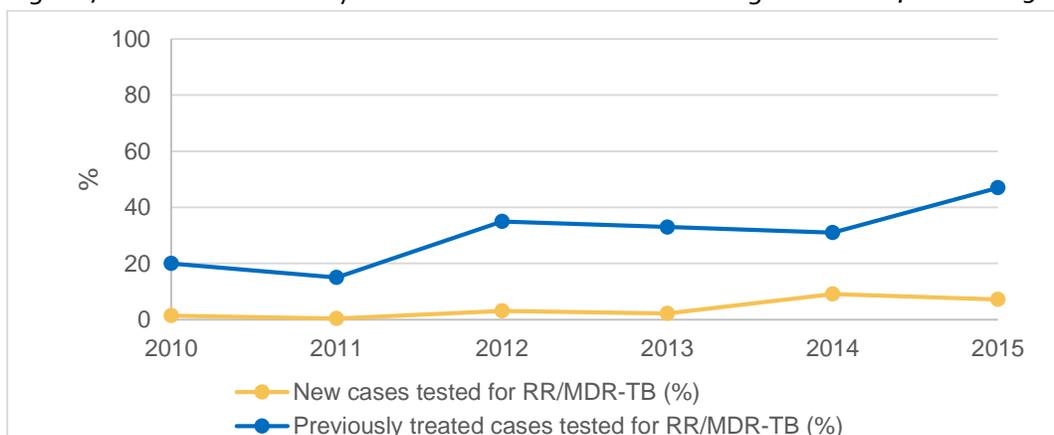
Figure 6: Estimated Incidence of TB in DR and LAC, 2000-2015



Source: World Bank DataBank (2017)

Estimates of the burden of drug-resistant TB vary, largely due to limited testing for drug resistance among new and previously treated TB cases. While testing has become more widespread over time, as shown in Figure 7, nonetheless only an estimated 7.2 percent of new TB cases and 47 percent of previously treated TB cases were tested for drug resistance in 2015. Low levels of testing hinder both accurate epidemiological analysis as well as effective treatment. Taking into account these data limitations, the WHO estimates that RR/MDR-TB incidence was 2.7 per 100,000 people in 2015, with 170 estimated cases among notified pulmonary TB cases. RR/MDR-TB was estimated to be present in 3 percent of new TB cases and 12 percent of previously treated cases. The PNCT states that in 2016 199 cases were evaluated. The number of notified MDR-TB cases was 107 in 2016.

Figure 7: New and Previously Treated TB Cases Tested for Drug Resistance, 2010-2015



Source: WHO (2017)

The treatment success rate for new cases has not been stable. After increasing in the early 2000s, it plummeted to just 46 percent in 2008. It has since rebounded, and has been at or above 80 percent since 2010. In 2014, the most recent year for which data is available, the treatment success rate was 83 percent, above the LAC average of 75 percent (World Bank DataBank 2017). However, these success figures should

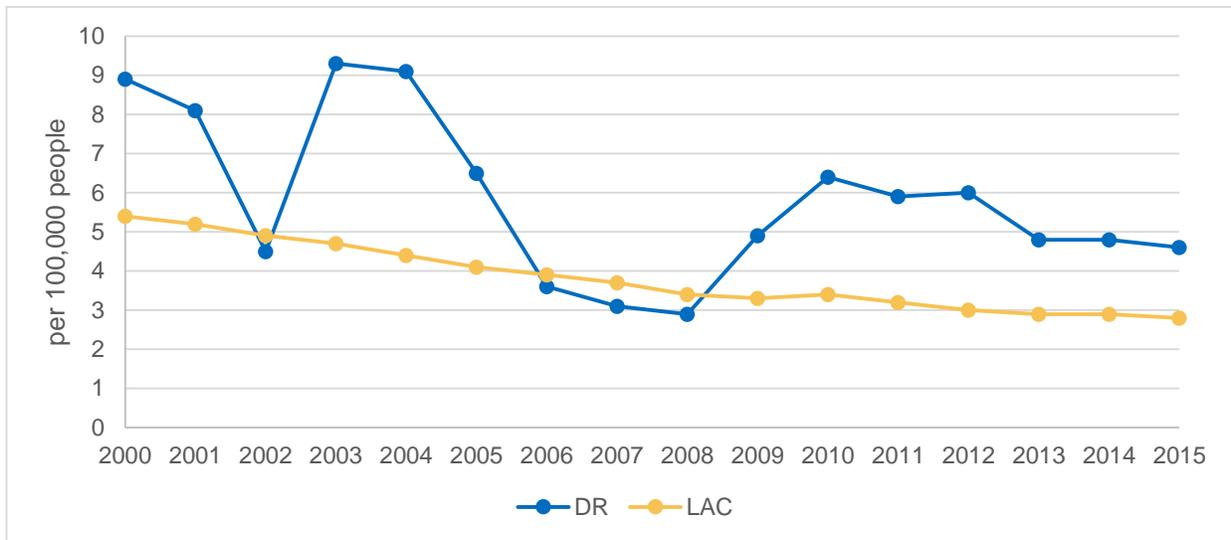
be interpreted with the gaps in detection of both drug-sensitive and drug-resistant TB in mind, as they indicate that there is significant room for improvement. Figure A3.6 in Appendix 3 presents detailed treatment outcomes over time.

Treatment outcomes for RR/MDR-TB patients are poorer, though the exact success level is less clear. The PNCT reports that the treatment success rate for the 2014 cohort of drug-resistant TB patients was just 50 percent, as shown in Figure A3.7 in Appendix 3. The TB Concept Note produced for the ongoing GF TB grant states that MDR-TB treatment success has stagnated between 54 and 65 percent in recent years (Dominican Republic Concept Note to the Global Fund 2014). Meanwhile, the WHO data is more encouraging, showing a 73 percent treatment success rate for the RR/MDR-TB cohort that began treatment in 2013 (WHO 2016a). Despite these variations, all reported figures indicate that treatment success for drug-resistant TB is considerably lower than that for drug-sensitive TB. The Regional Green Light Committee notes that low success rates are in part attributable to high numbers of patients lost to follow-up, as well as high rate of death among HIV/TB patients, many of whom receive late diagnoses when the disease is already at an advanced stage, are delayed in starting ARV or TB treatment and/or are not tested for drug resistance. Indirect costs of treatment remain high (see National Response section below), which might also contribute to high numbers of treatment dropouts, especially among those living in poverty. Therefore, the Green Light Committee recommends expanding, strengthening and evaluating existing efforts to link patients to social programs and Social Security.

In 2016, 141 cases began second line drug treatment, including 107 RR/MDR-TB cases. However, not all of these cases were diagnosed in 2016. Treatment coverage for those diagnosed in 2016 (107 cases) was 82 percent. The main reason for failure to initiate treatment was that 12 cases (11 percent) had died by the time the results of the sensitivity test were received, reflecting lack of timely diagnosis.

The TB death rate among HIV-negative persons has fluctuated considerably since 2000 as shown in Figure 8. After peaking in 2003 at 9.3 deaths per 100,000 people, it dropped to a low of 2.9 in 2008 before jumping back up again. In 2015, the death rate was estimated at 4.6 per 100,000 people. In contrast, the LAC death rate has been steadily falling over the past 15 years and was 2.8 per 100,000 in 2015. Notably, the Regional Green Light Committee has questioned the validity of some of the past mortality data reported by the country. Specifically, it notes that the apparent drop in mortality from 2006 to 2008 as recorded in WHO estimates is due to the fact that the DR based its calculations on TB program data, rather than vital statistics. Even with this discrepancy, however, it can be concluded that while the TB death rate has improved from 2000 to 2015, it is still above the regional average and the rate of improvement has stalled over the past three years. The PNCT states that high death rates are primarily due to delays in diagnosis among high risk populations. Additional causes of reduced success and treatment drop-out are stigma and discrimination as well challenges related to living conditions that cause patients to prioritize other activities over taking medications.

Figure 8: Estimated TB Death Rate (HIV-negative) in DR and LAC, 2000-2015



Source: World Bank Databank (2017)

The provinces registering a higher incidence than the national average are: Azua, Peravia, La Romana, El Seibo, San Pedro De Macoris, Santiago Rodríguez, Puerto Plata, Dajabón, La Altagracia y el Distrito Nacional. In Appendix 3, Table A3.2 lists the number of notified TB cases by health region in 2016 while Figure A3.8 depicts incidence by province.

TB incidence varies significantly by sex. The WHO estimates that in 2015, incidence (in thousands) was 4.1 in males compared to 2.3 in females (WHO 2016a). The PNCT reports that in 2016, the gender ratio was 2 to 1, male to female (see Appendix 3 Figure A3.9). According to the Concept Note produced for the ongoing GF TB grant, one potential cause of this gender disparity could be the high incidence of cases in PDL (all cases recorded in males) and Haitian migrants (60 percent of cases are in males) (DR Concept Note to the Global Fund 2014).

The NSP for TB 2015-2020 prioritizes four KP: people deprived of liberty (PDL), Haitian migrants, children under 15 and people living in extreme poverty in large cities.

First, PDL are at significantly elevated risk, largely due to inadequate conditions in some prison facilities (see Section 7.1). In 2016, PDL comprised 5 percent (216) of new cases, about the same as in the past four years (see Appendix 3, Figure A3.10). Gains have been made in these settings, however. From 2010 to 2013, the TB treatment success rate rose from 77 percent to 86 percent due largely to a reduced percentage of patients lost to monitoring (from 18 percent to 10 percent over the same period) (DR Concept Note to the Global Fund 2014). Additionally, the PNCT has established a referral system for patients to be referred to health centers for outpatient treatment once they have been released from prison if their treatment is not complete.

Haitian migrants, who made up 8 percent (351) of new cases in 2016 (MSP 2017d), are another significant KP and face numerous barriers when accessing TB services, including frequent exclusion from social support programs, limited operating hours of health facilities, language barriers in service delivery and

education/communication materials, and widespread and persistent stigma and discrimination. Notably, the percentage of patients lost to follow up among this population is considerably higher than the national average (29 percent in 2012, two to three times higher than the national average), indicating problems with retaining patients even once they have initially accessed care (DR Concept Note to the Global Fund 2014). While efforts to improve cross-border care have been introduced, such as using the same forms for case registration and follow-up, ensuring uninterrupted care for this mobile population remains a challenge. Figure A3.11 in Appendix 3 illustrates the number of new TB cases in this population over time.

In 2016, PNCT reports that 152 cases of TB were registered among children under 15 years of age, representing 3 percent of all cases. This marks a slight increase from 2015, when 138 cases were registered among this population (MSP 2017d). The ten-year trend shows a significant decrease, however, as illustrated in Figure A3.12 in Appendix 3. Of these 152 cases, 47 percent were in children under the age of five (MSP 2017d). PNCT reports that in 2016 incidence in males under the age of 15 was 5.6 per 100,000 and in females in the same age range it was 5.0 (MSP 2017e).

The fourth key population is people living in extreme poverty. They are predominately living in large cities, which is why the PNCT focuses its efforts in these settings. Currently, 11 provinces contribute to 81 percent of cases (see Appendix 3 Table A3.3). These provinces have been prioritized by the PNCT. Generally, the provinces with highest incidence suffer from rapid—and disorganized—urbanization and limited access to services which, when coupled with increased numbers of residents living in poverty and rapid development of densely-populated slums, are conducive to TB infection and transmission.

The NSP 2015-2020 also identifies high risk groups, including case contacts, diabetics, PLHIV, health workers and those at-risk of treatment dropout due to their conditions or behaviors

PLHIV comprised 21 percent (946) of all new TB cases in 2016 (MSP 2017d). HIV/TB co-infection is discussed in detail below in Section 3.3. Other co-morbidities associated with TB are less well known. In 2016, the PNCT reported that 5 percent of patients had diabetes at the time of TB diagnosis (MSP 2017d). However, limitations in access to registers and clinical histories through routine information systems prevent accurate analysis of the true magnitude of other potential comorbidities.

Health workers are also considered to have elevated risk for TB. In 2016, there were 62 TB cases reported in health workers, with 44 (71 percent) reported in female (MSP 2017d). While it is not clear that these workers were infected in the work place, the high numbers suggest that infection control in health facilities could be weak. To better control infections in health facilities, the government produced infection prevention and control standards for health facilities and also established hospital surveillance committees. The PNCT notes that there is little will on the part of physicians to participate in tuberculosis control, and so nurses have largely led these efforts.

Finally, TB case contacts are a primary risk group for TB. According to the PNT, 2 percent of cases are detected by examining case contacts. In 2016 there was a gap of 26 percent of contacts who were not evaluated, potentially contributing to further transmission (MSP 2017d). For children under the age of five

specifically, the PNCT reports that there was a 22 percent gap in the number of children who were in contact with BK+ TB patients but did not begin isoniazid preventive treatment (IPT) (MSP 2017d).

National Response to TB

The overarching objective of the NSP for TB 2015-2020 is to reduce the incidence and mortality of TB and to intensify interventions focused on KP and at-risk groups. The four prioritized KP, as listed above, are: people deprived of liberty (PDL), Haitian migrants, children under 15 and people living in extreme poverty in large cities. Identified high-risk groups include case contacts, diabetics, health workers, PLHIV and those at-risk of dropout due to their condition or behaviors. Drug-resistant TB and HIV/TB co-infection are specifically addressed in the plan, as is the need for improved support systems for TB patients. To facilitate monitoring and evaluation, the plan has specific measurable indicators with corresponding targets and baseline figures. There is a separate monitoring and evaluation plan based on these indicators (see Appendix 7 for the 2015 and 2016 results). The plan is costed and includes detailed breakdowns by strategic objective/module and anticipated funding sources (e.g. government, private, GF, PEPFAR, etc.) as well as funding gaps.

The DR's TB approach centers on the implementation of the End TB and DOTS strategies. In 2016, roughly 94 percent of the population had access to a health facility offering TB prevention and control services through a network of over 1,600 facilities that offer diagnosis and treatment free-of-charge (MSP 2017d). The Armed Forces, private sector and NGOs also participate in diagnosing patients and referring them to MSP facilities, though on a much smaller scale: over 90 percent of TB patients are first diagnosed at MSP facilities (see Appendix 3 Table A3.1).

To ensure community involvement and participation of CSOs in the TB response, programmatic networks called *Comités Alto a la TB* have been established. Currently, 24 of the 32 provinces have at least one *Comité Alto a la TB*. However, their operation has been limited mainly to commemorating the fight against TB and some case detection efforts in communities (MSP 2017d). In terms of contact tracing, in some communities there are interventions to search for contacts in coordination with the Epidemiological Surveillance. There are no documented interventions for linking and retaining patients in all cases. For key populations, the PNCT is developing a community intervention in order to link cases diagnosed in Haitian migrants with primary care services. PNCT is also developing outreach days for active searching and follow-up among the PDL population in prisons.

Finally, despite the fact that MSP provides free TB treatment and diagnosis, the indirect costs associated with TB—such as having to forgo work opportunities to attend clinics daily to receive TB treatment—are concerning and contribute to treatment dropout, as people prioritize other activities above their treatment. In 2016, 82 percent of people with TB lived in conditions of poverty or extreme poverty, and 84 percent were in need of social assistance but had not been prioritized to receive social protection benefits from the state (MSP 2017d). While some programs are in place to reduce drop-out due to poverty, such as the Early Warning System for Low Adherence, inclusion of at-risk patient in social programs—such

as *Progresando con Solidaridad*—and registration of patients with the Social Security Institute¹², these interventions are thus far of insufficient scale to effectively tackle the problem. The challenge remains to enroll TB patients at the beginning of their treatment to support adherence to treatment. Further efforts in this regard are needed.

3.3 HIV/TB co-Infection

The DR is classified as a country with a high rate of HIV/TB co-infection. In 2016, the PNCT reported that 85 percent of registered TB cases underwent an HIV test, 25 percent of whom were HIV-positive. In other words, over one-fifth of registered TB cases (946 out of 4460) were HIV-positive (MSP 2017d). Given that HIV testing coverage was not universal, the actual rate could be even higher.

Collecting information and reporting on TB testing within HIV clinics continues to be a challenge. While HIV testing among TB patients is relatively high, the PNCT reports that there is a major gap in ART coverage: in 2016, 48 percent of TB patients who tested positive for HIV did not receive ART (MSP 2017d). This gap is considerable and indicates that there are challenges coordinating patient care between the two disease programs. However, it is worth noting that the WHO estimates that for 2015, 97 percent of HIV-positive TB patients who knew their status had been started on ART (WHO 2016a). There was therefore either a major drop in ART coverage from 2015 to 2016, or there is an inaccuracy within the TB program data and/or the WHO estimates. In 2016, an audit of HIV/TB co-infected cases was carried out, due to the high mortality rate in 2015, which did not correspond to ARV access. Therefore, only cases that began ART in a timely manner (within 2-8 weeks) were registered in 2016. Even so, there continues to be a problem with the information system and updating the data from admission to treatment.

Regardless of discrepancies in ART coverage data, the low treatment success rate for HIV/TB indicates that there are major challenges in co-treatment of these diseases. The treatment success rate for a cohort of HIV-positive TB cases registered in 2014 was just 69 percent as shown in Appendix 3 Figure A3.13. Further, the PNCT reported that of the 411 TB-related deaths registered in 2015, 49 percent had HIV/TB co-infection (MSP 2017d). Delays in diagnosis among high risk populations are a major cause of high mortality in this group.

There is low uptake of prevention measures to prevent TB in PLHIV despite their known risk for TB. Only 18 percent of HIV-positive people newly enrolled in care were on TB preventative treatment in 2015 according to the WHO (MSP 2017d); the PNCT corroborates this finding, identifying limited isoniazid preventive treatment (IPT) coverage as a major challenge.

National Response to HIV/TB

¹² In 2016, 70 percent were designated for National Health Insurance and in the first quarter of 2017, 75 percent had health insurance.

The GoDR has made efforts to specifically address HIV/TB co-infection, such as establishing targets for HIV/TB management and developing a National Guide for Caring for HIV/TB co-infection to be used by healthcare providers. Further, in 2014 a pilot project to implement interventions aimed at improving access to diagnosis and treatment for HIV/TB co-infection was initiated in Puerto Plata (see Section 7.1). The pilot site consisted of a network of services based primarily at the PHC level, though it included some hospitals and an NGO working with PLHIV. The pilot was evaluated and is set to be rolled out in several other prioritized provinces in 2017.

4. Institutional and Enabling Environment, Human Rights and Gender

4.1 Institutional Environment

Responses to HIV and TB in DR have different forms of coordination, due to the historical impact and visibility of each disease and continuing community pressure.

In the case of HIV, the response is led by CONAVIHSIDA, the National Council for HIV and AIDS¹³. CONAVIHSIDA provides strategic guidance to all actors involved in the HIV response, including public and private institutions and organizations from different sectors. Initially set up in 2001 as a presidential commission (COPRESIDA) to address the HIV epidemic, the body was recreated through Law 135-11 in 2010, establishing it as an autonomous, collegial, multi-sectoral and strategic entity and attached to MSP. This differentiated its role from DIGECITSS which remains responsible for the government's response to HIV, while CONAVIHSIDA is now the guiding body for the multi-sectoral response.

Throughout its history, CONAVIHSIDA has played an important role in fostering the engagement of different actors in the response, which is critical for sustainability purposes and should be further strengthened. While CONAVIHSIDA has one private sector representative, private sector clinics and organizations generally do not report to CONAVIHSIDA, which constitutes a challenge for coordination and data collection. Another weakness of CONAVIHSIDA is the limited frequency of meetings. Due to the high rank of its representatives, meetings usually do not occur at the planned frequency. For this reason, some stakeholders indicated that they see the need for a different format which could expedite the decision-making process, including more streamlined processes for the participation of the community sector; and for enhancing CSOs representation to assure that civil society has opportunity for effective participation in decision-making.

For the TB response, the PNCT is responsible for the national response and is coordinated by the MSP. Unlike the HIV response, there is no council similar to CONAVIHSIDA where institutions and the community sector participate in a multi-sectoral manner. Community participation is achieved through the STOP TB committees in most of the provinces, but this is not mandated. For the elaboration of the NSP, the network of people affected by TB and civil society was consulted and a dialogue was carried out only with those affected by TB. However, the participation of people affected by TB is weak, requiring a process of capacity building to influence and carry out advocacy.

CSOs which currently include the TB response in their scopes of work are limited, and most were developed with the financial resources of the GF – e.g. MOSCTHA, a Haitian migrant organization, and ADOPLAFAM, which works with key populations and also provides TB-related medical services. To effectively cope with transition, the TB program will require strengthening both financially and in its strategic planning

¹³ Membership includes eight community representatives, the network of PLHIV representation, non-profit organizations from/working with KP, women, girls, boys, adolescents and young people, and representation of the NGO Coalition. Remaining delegates come from the labor sector and the Medical College.

processes, to ensure a more effective response and continued engagement of civil society. Strategic planning should include the coordination with different sectors participating in the response: public, private, and in particular the community sector, to identify the most effective approaches for increased collaboration.

The Country Coordinating Mechanism (CCM) has played an important role in facilitating the national dialogue between parties involved in the TB and HIV response, and promoting the establishment of a network of organizations (NGO Coalition) enabling community engagement with government agencies. Given the nascent nature of the GF transition process, discussions about the future of the CCM have not yet taken place; however, a decision is made to maintain this body after GF exit, it will be necessary to identify a legal niche so that its deliberations will have the effects of coordination and decision-making, carve out funding options, and potentially other well-defined functions to avoid duplication with other mechanisms, particularly CONAVIHSIDA. If the CCM were to be dissolved, one option would be to extend the scope of CONAVIHSIDA, to include coordination with PNCT, and add seats for TB civil society representation. This, however, will come with all the challenges involved in achieving a legal change or a new decree so that these adjustments can be included. Another option would be to create a technical advisory body attached to CONAVIHSIDA that includes multi-sectoral coordination with PNCT, where the activities currently carried out by the CCM are maintained.

Currently, multiple international partners continue to provide assistance to the DR, and are effectively part of the institutional environment which defines the HIV and TB responses. These partners include PEPFAR, USAID, CDC, WHO/PAHO, UNFPA, UNAIDS, UNICEF, UNDP and the GF. The GF and PEPFAR have signed a memorandum of understanding between the two organizations clarifying each donor's roles and responsibilities, which includes technical assistance from PEPFAR to GF principal recipients, as well as sharing of work plans, targets and results. The GF and PEPFAR have collaborated to reduce duplication of efforts and as a result have complementary strategies, with the GF focused mainly on community-based prevention and HIV testing and counseling, and PEPFAR on interventions targeting the latter pillars of the treatment cascade (PEPFAR 2016b). Given the focus of PEPFAR in supporting the sustainability of the HIV response in DR, continuing the collaboration with the GF on supporting the country in its preparedness for transition would be highly recommended.

4.2 Enabling environment

The Constitution of the DR, established in 2015, recognizes equality before the law and without discrimination on the grounds of gender, color, age, disability, nationality, family ties, language, religion, political or philosophical opinion, social or personal status. The State must therefore promote the legal and administrative conditions for equality to be genuinely and effectively realized, and take measures to prevent and combat discrimination, marginalization, vulnerability and exclusion¹⁴.

¹⁴ Constitución de República Dominicana, Art. 39

Additional legislation and regulations address discrimination of specific protected classes, including Law 24-97 for the prevention and punishment of violence against women, and the General Youth Law (Law 49-00) which includes discrimination based on sexual orientation. The new Penal Code also establishes penalties against discrimination (Article 174), murder (Article 99, item i) and torture (Article 117, item 9) due to the victim's sexual orientation. However, although homosexuality is not prohibited by any law, CSOs report evidence of continued discrimination against LGBT populations, as well as arbitrary detentions based on accused disruption of public order and lack of respect for good manners; there are violations of the dignity of persons in the process of imparting justice as well as negligence in cases of hate crimes (a crime not defined in Dominican legislation), which key informants attribute to the political and social weight of the Catholic Church and conservatism.

Sex work is also not criminalized in the law, but rather is considered an administrative offense; on the other hand, pimping and trafficking are considered criminal offenses. Law 550-14 criminalizes pimping, forced prostitution, punishes those who pay for sex work as well as trafficking in persons¹⁵. However, even in a setting of decriminalization, the environment in which sex work is conducted is also significant cause for concern. While there are no compulsory HIV or STI regulations for SW, and hotels and motels are obliged to deliver condoms free of charge, women who engage in sex work are still vulnerable to exploitation and extortion by law enforcement officers and pimps. In addition, male SW may be even more vulnerable, as they are excluded from outreach strategies targeting SW, and do not work in an organized manner to engage pimps or other networks of SW for protection. A high number of male SW are reported by key informants to be performing “survival” or transactional sex work as economic migrants from other countries, particularly Venezuela. Informants report high use of drugs, both inhalants and cocaine, which have been associated in other settings with increased risk practices during sex amongst both male and female SW.

Activists and KP organizations interviewed shared that in terms of protecting and promoting the safety of KP on the basis of sexuality, gender identity or employment choices (e.g. sex work) the Catholic Church has an important role in decision-making and has stopped many social initiatives that affect the rights of key and vulnerable populations. There is a strong and visible movement fighting for sensitization of public opinion to sexual diversity rights in Santo Domingo. However, internal stigma is still reported to be strong, and LGBT populations report avoiding services, including health services, which they fear will expose them to risk of discrimination, involuntary disclosure to their families/communities, and/or violence. Because of such high levels of stigma, key informants report, sex between men is frequent but highly hidden, which complicates the ability to reach many MSM with safe sex and HIV prevention strategies; this effect is heightened outside of Santo Domingo and tourist centers, where religious conservatism is even more pronounced.

Stigma and discrimination continue to remain a significant issue for PLHIV, as well. Breaches of confidentiality are an issue in the medical setting and contribute to low uptake of services, as reported in the most recent Stigma Index (Profamilia 2009) and confirmed by civil society informants. While Law 55-

¹⁵ ig.cepal.org/sites/default/files/251865974-ley-no-550-14-que-establece-el-codigo-penal-de-la-republica-dominicana.pdf

93 Article 6¹⁶ and Law 135-11¹⁷ Chapter II Article 3.6 theoretically protect breaches of confidentiality of HIV status, the laws are not well-enforced and patients surveyed in the Stigma Index in 2009 had low awareness of their legal rights. Recently, CONAVIHSIDA carried out a study on “Stigma and Discrimination towards Key populations in Health Services and the General Population” in 15 prioritized SAIs reflecting these bottlenecks as well.

PLHIV also experience significant stigma within their communities, reporting verbal harassment, exclusion from families and physical violence. These factors not only contribute to poor quality of life for PLHIV who have been diagnosed, but may also discourage those at risk of HIV from being tested, for fear of reprisal for a positive result. Employment-related discrimination exists as well, as many companies demand compulsory HIV testing; this is not only a violation of privacy, but provides grounds for intimidation and discrimination of PLHIV.

There is no legal redress for discrimination against PLHIV outside of the medical setting, where Laws 55-93 and 135-11 are theoretically enforceable through the Penal Code. However, these laws refer to PLHIV, and not to other vulnerable or key populations. A broader anti-discrimination law has been previously proposed but was rejected by Congress in its latest form; there are currently no efforts to revive or reformulate this proposal.

The existence of a broader anti-discrimination law, say of some of the CSOs interviewed, would force a revision of other legislation which reinforces inequality of rights on the basis of sexual orientation. It would also require revision to the current HIV-related legislations, both of which includes various articles that violate the human rights of PLHIV¹⁸, by criminalizing transmission and lack of disclosure of HIV status to sexual partners. Such violations come with the penalty of up to 20 years’ imprisonment. This is problematic because the compulsory disclosure about HIV status promotes isolation, discrimination and internal stigma of PL HIV, and in stark contradiction to the Oslo Declaration on Criminalization of HIV¹⁹. In addition to driving stigma and discrimination, criminalization also drives high-risk practices to become more clandestine, making more difficult to reduce harms through outreach and education. Therefore, the insistence of the activists to have a law that sanctions all forms of discrimination and that requires a revision of other legislation to be reconciled is urgent, and requires a response based on the human rights framework and congruence with the positive health, dignity and prevention approach²⁰.

Because of a shared land border with Haiti and economic and social differences between the two countries – including poverty and the strong impact of the HIV epidemic – migration is part of the complex reality of DR. Healthcare for HIV and TB for Haitian migrants is part of the guarantees of the Dominican health

¹⁶ Law No. 55-93 of 31 December 1993 establishing the notification of public health authorities of all matters relating to living or deceased persons who have been infected with the AIDS virus. (*Gaceta Oficial*, Vol. 143, No. 9875, 31 January 1994, pp. 55-65.)

¹⁷ Law No. 135-11: http://www.msp.gob.do/oai/Documentos/Leyes/LEY_135-11_MarcoJuridicoVIHSida_20141008.pdf

¹⁸ HIV/AIDS Alliance. (2012) Controversial HIV Law Passed in Dominican Republic. http://www.dominicanwatchdog.org/page-Controversial_HIV_law_passed_in_the_Dominican_Republic

¹⁹ The Oslo Declaration on Criminalization of HIV: http://www.hivjustice.net/wp-content/uploads/2012/03/declaracion_de_oslo_spanish.pdf

²⁰ http://www.gnpplus.net/assets/wbb_file_updown/2090/PHDP_Policy_Framework_SP.pdf

system, however discrimination, xenophobia, economic and cultural differences drive discriminatory attitudes, and KPs consider stigma and discrimination a major barrier to prevention and healthcare. As part of the implementation of the National Plan for Naturalization of Foreigners from 2013 to 2015, implemented by the Dominican State to provide documentation to foreign populations in an irregular situation, in early 2016, the Dominican Government took the first steps to include foreign workers in the social security system through the issuance of Decree 96-16 and Resolution 377 of the National Social Security Council. This affirms the right to Social Security of all migrants in the DR with regular immigration status, the modification of the internal regulations in the matter of social security was enabled to allow the access of the foreign population in regular migratory conditions. Despite this, discriminatory practices persist in different contexts, including some health services.

The DR is also country of origin, transit and destination for human trafficking, with some of the world's highest rates of women victims of trafficking. Haitian women are particularly vulnerable to becoming trafficked to the DR or third countries according to the Observatory of trafficking coordinated by OBMICA²¹; according to some press releases, DR has the third-highest trafficking of persons in the world²².

Stigma and discrimination related to TB is far less documented, but reported to be common, while overlapping with related factors including poverty, ethnicity (e.g. Haitian descent), and residence in bateyes. People affected by TB have gained some capacity for organizing and reducing stigma that prevents access to treatment thanks to GF support, which has funded a network of TB health promoters in 13 prioritized provinces since 2008. However, it is unclear whether any of these efforts will be sustained after funding from the GF ceases. This is an issue that should be promptly discussed and addressed.

There is no doubt that an improved normative framework could facilitate the reduction of barriers and effectively address some challenges, but it is necessary to combat homophobia, discrimination against sex work, towards migrants and other populations effectively, as this discrimination culture has permeated institutions and society in general. In addition, religious conservatism and its power in decision-making and prejudice are complex challenges to overcome.

4.3 Human rights and gender

As noted above, the Constitution of the DR Article 39 guarantees the right to equality, including on the basis of gender, and determines that the State will take the necessary actions to guarantee equity, and eradicate inequalities and discrimination. It is defined that the State will promote and guarantee the balanced participation of women and men in the candidacies to the positions of popular election for the instances of direction and decision in the public sphere, and in the administration of justice and in the control organisms of the State. However, as noted above, this does not consider discrimination based on sexual orientation or gender identity.

²¹ <http://www.obmica.org/index.php/ejes-de-trabajo/trata-de-personas>

²² <http://www.hispantv.com/noticias/dominicana/344895/estadisticas-trata-personas-pena-culpables>

To ensure the constitutional mandate, the DR has a Ministry of Women. In addition, recently the Senate of the Republic approved the law that creates a Comprehensive System for the Prevention, Attention, Sanction and Eradication of Violence Against Women, which defines as discrimination against women "any distinction, exclusion or restriction based on gender," and commits the Dominican State to define, promote and evaluate public policies against violence against women in order to ensure "the effective exercise of their right to a life without violence." The Board of Directors of the Comprehensive System for Prevention, Attention, Sanction and Eradication of Violence Against Women will be headed by the Ministry of Women, and composed of the Ministry of Public Health, the Attorney General's Office, the Ministry of Education, The National Council for Children and Adolescents, and the Ministry of Labor.

Despite these constitutional protections, women remain at increased risk of human rights violations, including violence, which has been linked internationally to increase risk of HIV transmission²³. Domestic and gender-based violence is widespread, permeating culture, institutions and society at-large. According to the DR Demographic and Health Survey, performed by the MSP in 2013²⁴, 26% of women aged 15-49 have experienced physical violence at some point in their lives, while 16% of women between the ages of 15 and 19 experience physical violence from the age of 15; this percentage doubles among women aged 30 to 39 years (32%). Overall, one in ten women have been victims of sexual violence at some point in their lives. These continuing levels of gender-based violence leave women unnecessarily vulnerable to HIV. LGBT Dominicans also face a variety of human rights problems, including violence, hate crimes, lack of access to justice and health services, impunity for perpetrators of human rights violations, as well as stigma and discrimination in society.

These realities have strong implications for financing of the HIV response: with a reduction in violence would come a reduction in HIV risk, which could generate significant cost-savings within the HIV response (among other areas of health and social wellbeing). Therefore, increased political commitment to addressing gender-based violence should be seen as a critical investment for a sustainable, affordable HIV response.

TRANS people do not have legal protection regarding gender identity, and there are no protocols for the application of justice around discrimination or violence related to gender identity. Because there is no access to hormone therapy for transsexual individuals, sources interviewed reported use of dangerous, unregulated substances for informal hormone therapy, resulting in significant health risks. As in many settings, due to social exclusion and lack of opportunities to work in other sectors, there are high levels of engagement in sex work among TRANS and transsexual individuals, and these individuals are more likely to be extorted because of lack of acceptance by or access to law enforcement. Similar to the financial burden created by unchecked violence against women, the ongoing discrimination against TRANS people is a silent driver of the epidemic, and the protection of TRANS rights could translate into real cost-savings in the HIV response.

²³ The Links Between Violence Against Women and HIV and AIDS. <http://www.hivpolicy.org/Library/HPP001388.pdf>

²⁴ <http://countryoffice.unfpa.org/dominicanrepublic/drive/DRDHS2013-Final02-10-2013.pdf>

Finally, impoverished populations, including residents of bateyes and Haitian immigrants, are also particularly at risk of violation of rights, due to discrimination and limited access to justice. Furthermore, social spending in the DR remains low compared to the rest of the region²⁵, which, in combination with the impact of discrimination, affects key populations, particularly migrants.

While the DR has been working to broadly advance the protection of human rights over the last several decades, lack of anti-discrimination legislation still leaves many, including key populations, vulnerable to rights violations without any opportunity for redress. The NGO Coalition maintains a Human Rights Observatory to identify instances of discrimination and stigma related to HIV and TB, as well as broader human rights violations related to key population issues including sexuality and gender identity. In order to effectively reduce the isolation that comes with rights violations and drives risk-taking, the DR will need strong political leadership to commit to addressing these specific rights violations in order to support a more sustainable response to the HIV and TB epidemics.

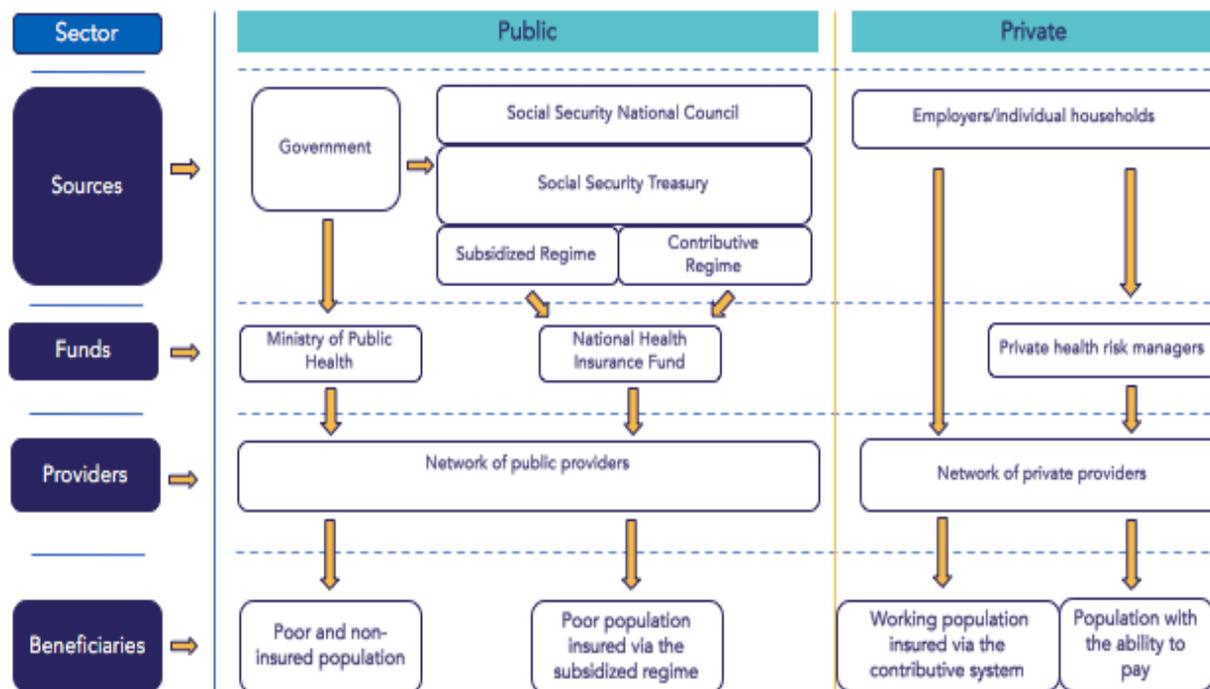
²⁵ <http://www.bancomundial.org/es/country/dominicanrepublic/overview>

5. Health System Overview and Health Financing Transition

5.1 The health system in the Dominican Republic

The DR has embarked on an extensive reform process to overhaul the functioning of its health system with the overarching goal of achieving Universal Health Coverage. In 2001 the General Health Law 42-01 created the *Sistema Nacional de Salud* (SNS) stipulating the separation of functions of leadership, financing and healthcare delivery. MSP serves as the leadership body, setting policy direction and overseeing health system governance. In parallel, Law 87-01 created the Dominican Social Security System (*Sistema Dominicana de Seguridad Social* - SDSS). Jointly, these two laws aimed to: formally redefine the health system; separate functions; create a national insurance plan; and establish demand-based financing. Implementation of the reform has been slow and to date has only been partially achieved. While the separation of functions is the stated goal of the health system reform, in practice there is still significant overlap of responsibility. Effectively, the health system continues to be in transition with many roles and responsibilities still evolving. The resulting complexity in law, policy and implementation have a bearing on the subsequent discussion of transition and sustainability of the HIV and TB response because an unevenly implemented system impacts the ability of these programs to perform well and ensure a focus on HIV and TB. Figure 9 illustrates the aspirational structure of the health system once the reform process is fully implemented.

Figure 9: The Health System in the DR



Source: Adapted from Rathe and Moliné (2011)

The SDSS established the *Seguro Familiar de Salud (SFS)*, which is universal and mandatory insurance. The SFS has two modalities, the subsidiary and the contributory scheme. SFS can be understood as the strategy to achieve UHC, whereas the subsidiary and the contributory schemes serve as the instruments.

In theory SFS guarantees access to health services for the most vulnerable populations. SFS affiliates receive benefits through the Basic Health Plan (*Plan Básico de Salud – PBS*), which covers a comprehensive package of services including health promotion, prevention, treatment, rehabilitation, pregnancy and childbirth.

The contributory scheme is financed by contributions from salaried employees and their employers. These payroll deductions are centrally collected by *Tesorería de la Seguridad Social (TSS)*. Collected funds are then distributed to 28 different *Aseguradoras de Riesgos de Salud (ARS)*²⁶, one public and the rest private entities. ARSs assume and manage the risk in the provision of services under the PBS to a certain number of affiliates and their dependents based on an established per capita payment. In Figure 9 the ARSs are grouped under the National Health Insurance Fund.

The subsidized scheme, which is financed through general government revenue, covers the unemployed, disabled and poor. The *Seguro Nacional de Salud (SENASA)* is the only public and the largest ARS and covers all affiliates of the subsidized scheme as well as a small portion of members of the contributive scheme who choose SENASA as their ARS.

In addition to different sources of funding, the two schemes also differ in terms of service delivery. While the subsidiary scheme relies predominantly on public facilities for service delivery, beneficiaries of the contributory scheme mainly use private providers.

The *Superintendencia de Salud y Riesgos Laborales (SISALRIL)*, the regulatory body overseeing the ARS, plays a key role in the Dominican health care system. Its highest body is the *Consejo Nacional de la Seguridad Social (CNSS)*, which is responsible for defining the benefit package and authorizing any changes, among other functions. The CNSS consists of employers, trade unionists, and MSP officials and plays a leading role in defining health coverage.

As indicated in Figure 10, as of December 2016, 68.9 percent of the total population was affiliated with the SFS, up from 27.9 percent in 2007. Of this total, 51.8 percent are affiliated with the contributory scheme and 48.2 percent with the subsidized scheme. The jump in participation in the subsidized scheme in 2013 is due to a recent revision of the data. In December 2016, around 18,000 PLHIV were in the Dominican Social Security System.

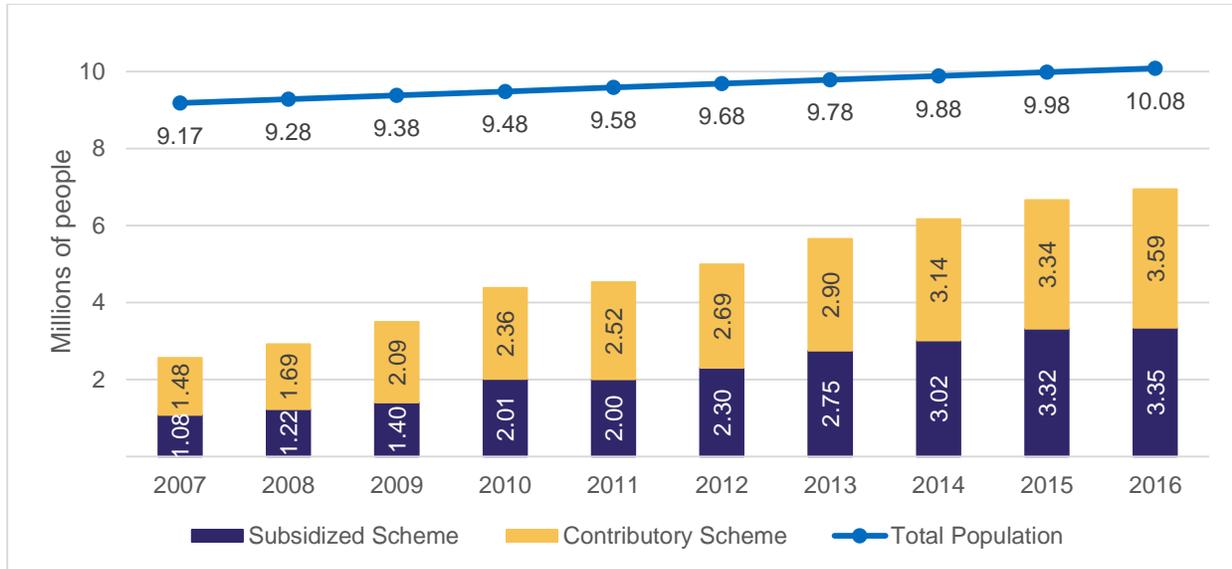
Despite the expansion of the two existing schemes over the past decade, a significant percentage of the total population remains uninsured and, consequently, pays out-of-pocket for healthcare²⁷. These

²⁶ According to Administrative Resolution No.00102-2007

²⁷ SFS regulations also established a contributory-subsidized scheme intended to protect independent professionals and technicians, and self-employed workers with average income equal to or above the national minimum wage. It is to be financed

coverage gaps, particularly in the case of the subsidized regime, can in part be attributed to insufficient funding for program expansion as well as to challenges in implementing the necessary structural reforms in the public provider network (Rathe et al. 2014).

Figure 10: Growth in SFS Coverage, 2007-2016



Sources: SISALRIL (2017)

HIV services are part of the SFS, but since the beginning there has been a distinction between preventive care (public health interventions, mainly provided by the public sector), treatment (both public and private ARSs) and provision of ARVs. Based on the literature, at the beginning ARSs excluded ARVs, but recent material shows that they have been incorporated (Hernandez 2015).

Hence, while several promotion and prevention activities across different providers are covered under the PBS (Article 23 of Resolution No. 48-13 of 2002 on the SFS and PBS), HIV services originally did not fall under this category. In contrast, early detection, control and surveillance of HIV were integrated since the beginning into general preventive services (Article 5), and therefore not explicitly included in the PBS. The same resolution (Article 17) establishes that the PBS will have exclusions and limitations, including “ARVs, except in cases of prevention of vertical (mother-to-child) transmission”. Therefore, the provision of ARVs in the Social Security system used to be the main barrier to ensure a sustainable national response to HIV. The stakeholders of the national response to HIV have advocated for the modification of this article.

Recent policy shifts indicate growing support for inclusion of ARVs under the PBS, and efforts to ensure universal treatment for PLHIV. Specifically, the PDSS drug catalog based on CNSS Resolution No. 375-02 of 2015 includes ARVs. This list is also published by SISALRIL. In addition, Resolution No. 204 of 2016 stipulates (Article 12) that: “Drugs that are part of special public health programs of the MSP, will be covered by ARSs

by obligatory contributions from beneficiaries and a subsidy provided by the State to compensate for the lack of employer contributions. The scheme has yet to be implemented, however. Given that this scheme is expected to cover about three million individuals it constitutes an important gap towards achieving UHC in the country.

[...]. These special programs include ARVs, TB drugs, and vaccines under the national immunization scheme, all of them included in Article 5 of the regulation on the SFS and PBS, as well as others as defined by the MSP.” However, this resolution has been rejected by the CNSS as of June 2016 through Resolution No. 395. This suspension would have to be lifted before any mechanism could start operating.

Apart from these legal challenges, the social security system faces a number of administrative and technical difficulties to operationalize provision of ARVs. Section 5.5 discusses the ongoing challenges to include ARVs into the PBS.

5.2 Macroeconomic and fiscal overview

Over the last three decades, the DR has been among the fastest growing economies in LAC. From 2000-2015, the average annual growth rate was 5.0 percent compared to 2.9 percent for LAC. Over the same period, GDP per capita approached the regional average: in 2000 the Dominican GDP per capita was 65.1 percent of the regional average, but by 2015 it had more than doubled to US\$6,468, compared to the LAC average of US\$8,450 (76 percent of the regional average). Industries including construction, mining, financial services, local manufacturing, commerce, transportation and tourism have driven recent economic expansion (Economist Intelligence Unit 2016), as have strong domestic demand, lower oil prices and continued U.S. economic recovery (IMF 2016).

Despite these improvements in average income, benefits from national growth have not been inclusive and widespread poverty persists. A severe banking crisis in 2003/4 caused half of the population to fall into moderate poverty, and while poverty rates slowly declined as the economy recovered, in 2016 32.4 percent of the population was estimated to be living below the national poverty line. The severely limited level of upward economic mobility in the DR compared to the region as a whole is also cause for concern. Reasons for inequity despite national growth include a decline in real wages despite gains in productivity, high levels of labor market informality, job growth in low value-added sectors rather than more lucrative, high-value added sectors, and a regulatory and legal environment that impairs global competitiveness (World Bank 2016).

Dominican social spending also lags behind the regional average. The banking crisis of 2004 triggered a number of fiscal reforms (World Bank 2016) but revenue generating capacity remains weak and limits fiscal space for government spending. Despite a series of tax reforms between 2004 and 2012, tax revenue as a percentage of GDP experienced marginal growth between 2004 and 2015, increasing from 12.9 to 13.4 percent, with a peak of 14.9 percent in 2007. A large number of exemptions as well as high informal employment and flawed collection methods have hindered progress towards a broader tax base. The current government has indicated interest in continued fiscal reform to address this issue (Economist Intelligence Unit 2016).

From 2005-2016, the average estimated unemployment rate in the DR was almost double the LAC average: 14.9 percent compared to 7.7 percent. Inflation, at 5.4 percent, was slightly higher than the LAC average

of 4.7 percent. While the DR’s level of government revenue and expenditure as a percentage of GDP is lower than the LAC average, its level of debt is also considerably lower, placing it in a relatively stable fiscal position. Stability is also aided by a relatively nonvolatile Dominican peso. Analysis by the Economist Intelligence Unit suggests that growth will soften in the medium-term, and the fiscal deficit will narrow as the government remains focused on fiscal management (Economist Intelligence Unit 2016).

5.3 Health spending and public financial management

This section reviews health spending patterns across the public and private sectors in the DR, and then turns to a regional comparative analysis. Finally, the effectiveness of budget execution and public financial management is discussed.

Public spending on health experienced a positive and significant increase over the last 25 years. As shown in Figure 11, MSP’s budget grew at a faster rate than GDP and its budget as a percentage of central government budget and GDP grew steadily until 2003, and has remained relatively constant since 2004. It is not uniform in terms of total public expenditure, as shown in Figure 12, with periods of growth, such as 1991-2000 and 2008-2012, and some significant downturns during 2000-2003 or slight drops such as during 2004-2008 and 2012-2015.

Figure 11: MSP Budget and GDP Growth, 2004-2015

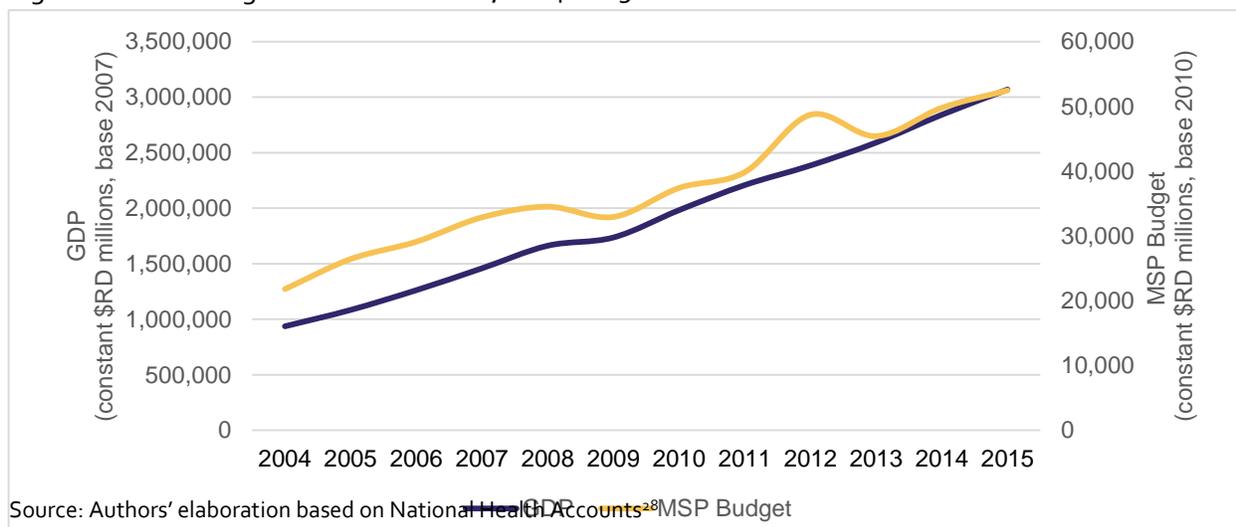
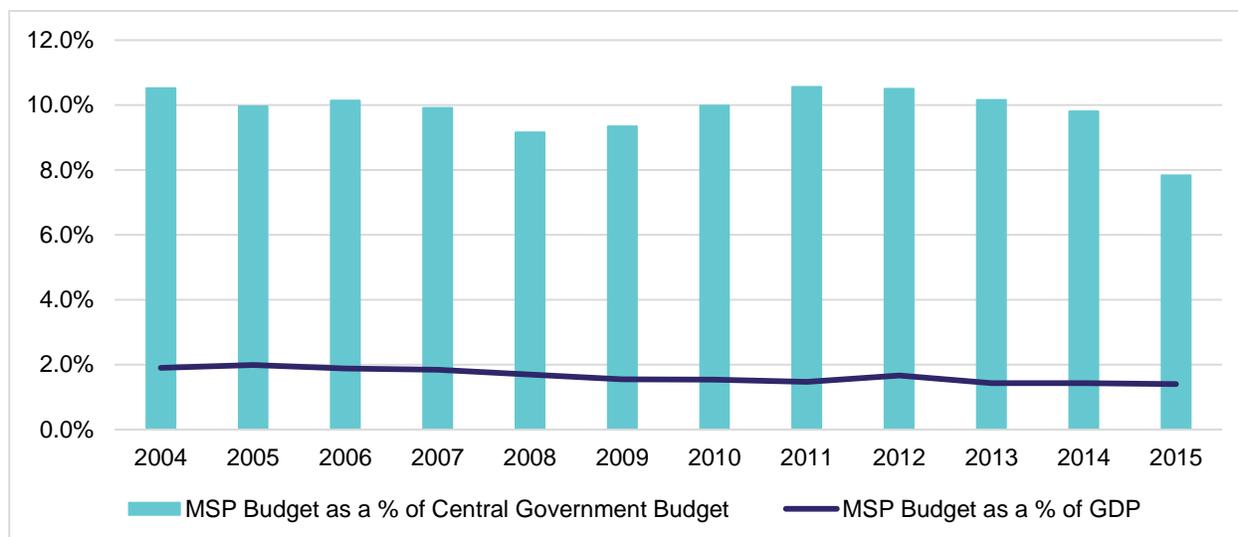


Figure 12: MSP Budget as % of GDP and Central Government Budget, 2004-2015

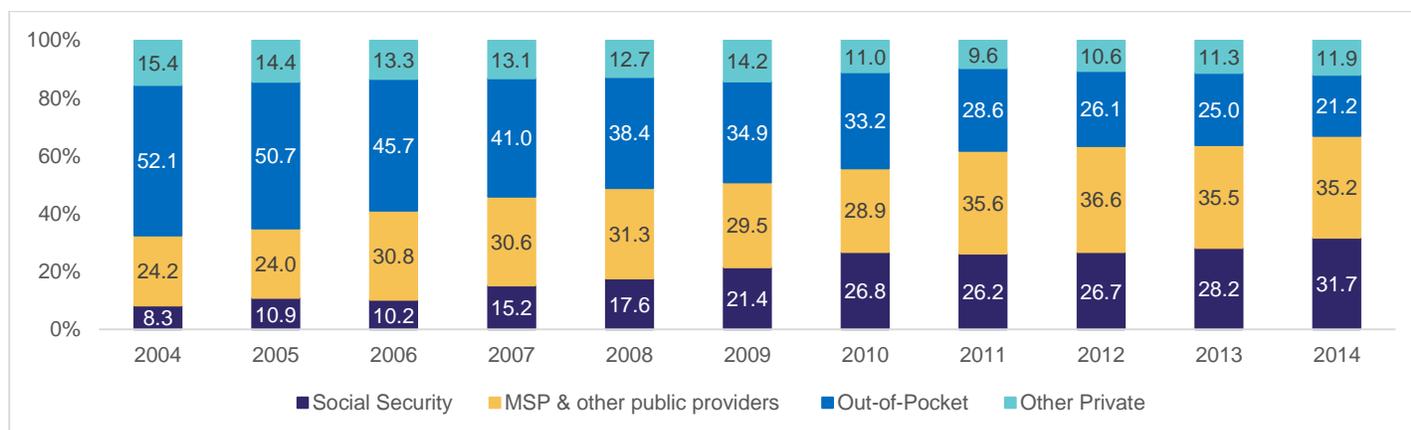
²⁸The Figure charts the MSP budget. The data is sourced from the *División de Cuentas Nacionales de Salud, Dirección de Planificación Institucional del Ministerio de Salud Pública*, August 2016. Table: *Evolución del presupuesto* from Chapter 0207 – MSP, 1990-2013.



Source: Authors' elaboration based on National Health Accounts

From 2004-2014, public health expenditure increased and private payments decreased as a portion of total expenditure. In 2014, public expenditure on health comprised 66.9 percent of total health spending, while household out-of-pocket payments made up 21.2 percent, as shown in Figure 13. In 2002, these categories comprised 32.5 percent and 52.1 percent of total health expenditure, respectively.

Figure 13: Evolution of Total Health Financing by source, 2004-2014



Source: WHO National Health Accounts (2017)

This evolution in spending patterns coincided with the expansion of the SFS. However, this change is largely attributable to the fact that existing private health insurance plans, mainly offered by companies and public entities, were incorporated into the compulsory SFS. In other words, these plans, which were previously classified as private spending, were now grouped into the public sector (Rathe and Moliné 2011)

Regional Comparative Analysis

Table 4 compares basic economic and health financing indicators from the DR and select LAC countries of a similar income level. Yet despite similar GDP per capita, the DR spends the least amount on health

compared to the rest of the group. Further, it has the lowest public spending on health as a percentage of GDP, reaching just 2.9 percent in 2014. This relatively lower public expenditure on health has not translated to high out-of-pocket (OOP) costs for patients, indeed, OOP spending on health in the DR is among the lowest in the group.

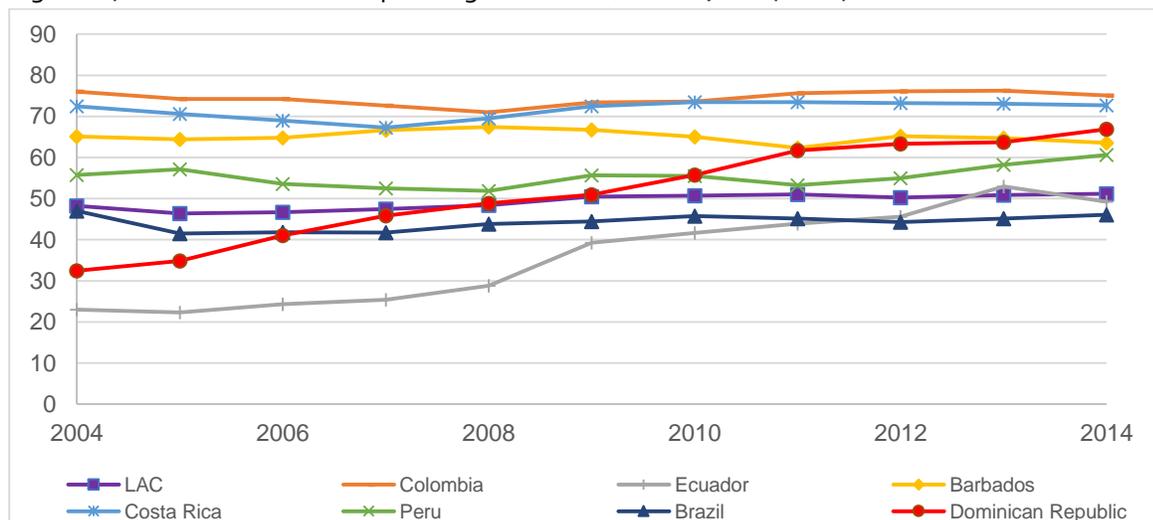
Table 4: Basic Economic and Health Financing Indicators in Select LAC Countries

	Barbados	Costa Rica	Brazil	DR	Colombia	Peru	Ecuador	LAC
GDP per capita, PPP [2015]	15,408	14,647	14,533	13,372	12,988	11,768	10,777	14,638
Total Health Expenditure per capita, PPP [2014]	1,014	1,389	1,318	580	962	656	1,040	1,112
Public Expenditure on Health (% of GDP) [2014]	4.7	6.8	3.8	2.9	5.4	3.3	4.5	3.8
Public Expenditure on Health (% of THE) [2014]	63.5	72.7	46	66.9	75.1	60.6	49.2	51.2
Out-of-pocket Expenditure on Health (% of THE) [2014]	29.9	24.9	25.5	21.1	15.4	28.6	48.4	31.7

Source: World Bank DataBank (2017)

Figure 14 similar shows that the DR has experienced strong growth in public spending, while the other countries, with the exception of Ecuador, have shown a more stable evolution. Public spending on health in the DR now surpasses the LAC average.

Figure 14: Evolution of Public Spending on Health (% THE), 2004-2014



Source: World Bank DataBank (2017)

Table 5 compares health performance indicators across the different countries. The DR is still lagging behind in terms of health outcomes in comparison to both the LAC regional average (last column) and the reference group. The country has the lowest life expectancy of the group, and the second lowest DPT

immunization rate (Ecuador has the lowest). Further, the DR has considerably higher rates of both maternal and infant mortality.

Table 5: Health Indicators in Select LAC Countries

	Barbados	Costa Rica	Brazil	DR	Colombia	Peru	Ecuador	LAC
Life expectancy at birth [2015]	75.66	79.59	74.68	73.68	74.18	74.78	76.10	75.17
Incidence of HIV (% uninfected population, ages 15-49) [2015]	0.12	0.02	0.04	0.04	0.04	0.02	0.01	0.03
Incidence of malaria (per 1,000 people at risk) [2015]	...	0.00	7.90	0.30	12.30	21.20	0.10	10.03
Incidence of TB (per 100,000 people) [2015]	0.00	11.00	41.00	60.00	31.00	119.00	52.00	40.00
ART Coverage (% PLHIV) [2014]	43.00	56.00	55.00	46.00	...	56.00	54.00	54.72
TB Detection Rate (% all forms) [2015]	...	80.00	87.00	71.00	80.00	80.00	60.00	81.00
TB treatment success rate (% of new cases) [2014]	...	89.00	71.00	83.00	76.00	87.00	77.00	75.00
Infant mortality rate (per 1,000 live births) [2015]	12.0	8.5	14.6	25.7	13.6	13.1	18.4	15.2
Maternal mortality ratio (modeled estimate, per 100,000 live births) [2015]	27.0	25.0	44.0	92.0	64.0	68.0	64.0	67.0
Immunization, DPT (% children ages 12-23 months) [2015]	97.0	92.0	96.0	85.0	91.0	90.0	78.0	89.9

Source: World Bank DataBank (2017)

Public Financial Management

Quality of social spending remains an issue of concern. The good news is existing resources are spent; in fact, MSP budget execution rates are exceptionally high, averaging 94 percent over the last four years. However, public investments do not always yield the desired results - as evidenced by the low quality of public health services (see Section 7.1). Efficiency and cost-effectiveness of health sector spending are curtailed by challenges with regard to effective public finance management. Several factors related to the budgetary process, fiscal and financial management, procurement and audit systems contribute to lower outcomes.

To address these shortcomings, the DR has embarked on an ambitious reform process. Since 2006, a set of 14 laws has overhauled public management including aspects of the planning system, public investment, and human resources management. As a result, the credibility of the budget has improved significantly.

Planning was enhanced significantly, best evidenced by the existence of a national development framework. The country's overall planning framework for the next two decades is the *Estrategia Nacional de Desarrollo* (END) 2030. It outlines the country's long-term development vision and pertinent public

policies. Importantly, the END 2030 recommends increasing public health spending to up to 4 percent of GDP in 2020 and 5 percent in 2030. The policies outlined in the END 2030 are operationalized through medium-term plans that align priority public plans with targets and expected results. The *Plan Nacional Plurianual del Sector Público 2013-2016* prioritizes 37 programs to reach the development goals of END 2030. There are 13 prioritized health programs, among them (i) prevention and control of TB, and (ii) treatment and care of PLVIH. According to the Plan, the purpose of this “prioritization” is to guarantee the provision of budgetary resources to them.

Furthermore, Law 176-07 (2007) requests local governments to invest 4 percent of their budgets into health, education and gender. It is unclear to what extent this provision is fulfilled.

Health sector spending remains largely based on historical budgeting limiting options to strengthen the focus on quality. Recent efforts to shift the focus to outcomes show promise but are still insular and do not yet meet their potential. For example, a RBF mechanisms piloted in nine regions led to the increased use of a Clinical Management System to register and monitor physician adherence to protocols during PHC consultations (World Bank 2016). Despite this and other initiatives, the country’s overall budgeting system still largely aims for products and outputs rather than outcomes and results. Additionally, flexibility in spending is an issue as budget rigidities can limit the ability to redirect allocations. While there is a policy/system to allow for funding cycle reprogramming, it is rarely used (PEPFAR 2016). Challenges also persist at the local level where the quality of municipal expenditure is low (Giussani et al. 2016).

The PEFA 2016 assessment also identified important remaining gaps with regard to government transparency and accountability (see Table 6). Transparency of public finances has slowly improved, but from very low levels. The Open Budget Index, an indicator of government transparency, increased from 14 in 2008 to 29 in 2012 to 51 in 2015. Among other factors, the quality and comprehensiveness of information provided via the web portal contributed to the higher ranking of the DR.

According to the 2016 PEFA assessment, public procurement largely follows international best practice. The introduction of centralized procurement mechanism for the health sector has introduced economies of scale and improved affordability of drugs (World Bank 2016). Since 2012, the Program of Essential Medicines/Center for Logistical Support (PROMESE/CAL) is the sole public purchaser for medicines (see Section 7.2). Large scale acquisitions through this mechanism have saved the health system significant resources. Improving the transparency and efficiency of management of public resources remains a priority for the government and will support the health reform process as well as the transition process.

Table 6: Highlights of 2016 PEFA Assessment for the DR

I. Credibility of the budget	PEFA Rating
Composition of the deviations from the budget expenditure compared to approved original budget	B+
Revenue outturn	B+
II. Transparency of public finances	

Government operations not included in budget reports	D+
Supervision of aggregate fiscal risk caused by other public sector entities	C
IV. Policy-based fiscal strategy and budgeting	
Budget preparation process	C+
Medium term perspective in expenditure budgeting	C
V. Predictability and control of budget execution	
Payroll controls	C+
Procurement	B
Internal controls on non-salary expenditures	B
Internal audit effectiveness	D
VI. Accountability and reporting	
In-year budget reports	C+
VII. Scrutiny and external audit	
External audit	D+

Source: Giussani et al. (2016)

5.4 Financing of the HIV and TB Responses

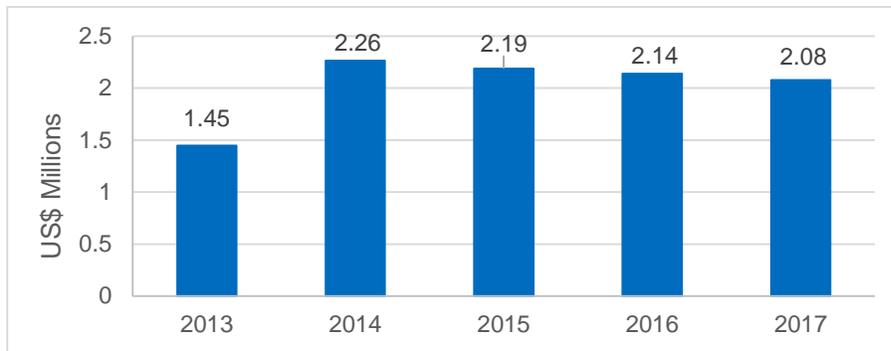
The fight against TB and HIV is a public priority. In the national budget, both the TB and HIV programs are considered “protected budget items”, meaning that the initial level of funding cannot be changed by subsequent budget modifications. While assigning this status to the program indicates laudable central government commitment to the responses, it falls short of ensuring a sustainable response to both diseases and it does not prevent the programs to have to make strong efforts to ensure the disbursement of those funds. Instead, it only stipulates that a minimum threshold for the disease response be reserved in the budget, without consideration for how the budget is actually spent or the broader implications that stem from the functionality—or lack thereof—of the overall delivery system. Further, only the protected part is not subject to annual fluctuations and the overall effectiveness of program spending may be impacted by cuts to other expenditure categories within the MSP’s budget envelope.

Tuberculosis

The national response to TB is funded by GoDR (through MSP), household spending, and international donors. Public funding for TB has remained stagnant in recent years: since 2014, the program has received the same annual amount of RD\$98,645,439. Figure 15 shows government allocations to the PNCT over time. These figures are not deflated, however, obscuring the fact that the actual purchasing power (value of the budget allocation) has been decreasing since 2014. These implicit budget cuts have had repercussions for the effective implementation of the PNCT, such as understaffing.

Figure 15: Government Budget Allocations to PNCT, 2013-2017²⁹

²⁹ In nominal terms. The corresponding MSP budget line is called “Prevención y Control de la Tuberculosis”.



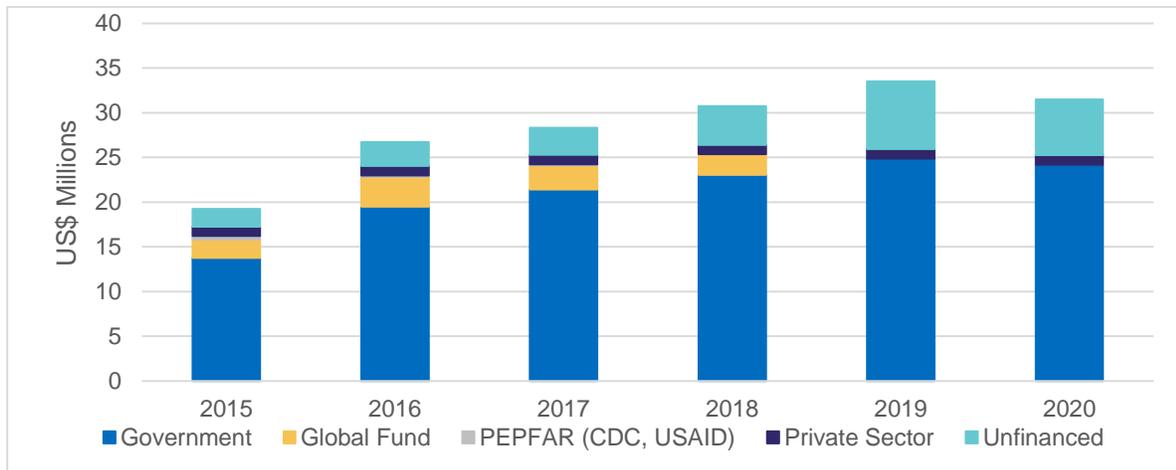
Source: MSP Annual Budgets (2017)

The PNCT budget covers cost of purchasing first and second-line drugs as well as reagents for sputum tests, cultures and sensitivity tests, HIV tests and all tests needed for case evaluation and monitoring. In addition, it covers travel costs of central and intermediate level staff. According to the TB Concept Note, it is currently not possible to assess government spending on TB given “major limitations of the budget structure established in the current Constitutional Law.” No studies have been undertaken of national TB spending and national accounts containing direct expenditure on the TB response (human resources, operating health centers, guidance and management at intermediate and local levels) are not listed as such in the existing budget areas submission mechanism for PNCT.

In preparation for its 2015-2020 NSP, the country underwent a planning exercise to gauge available funding sources to meet the needs identified in the plan. As shown in Figure 16 roughly three quarters of the national response is financed by government funds. The category “Unfinanced” in this figure refers to the gap between available funding and funding needed to implement the interventions as outlined in the NSP. According to the PNCT, the activities that are particularly reliant on donor funding are currently rapid molecular testing, training, supervision and implementation of the information system.

Figure 16: Projected Source of TB Funding, 2015-2020³⁰

³⁰ The projected funding table from the TB National Strategic Plan has been updated to include funding from the ongoing GF TB Grant DOM-T-MSPAS, covering years 2016-2018. Note that in its latest report, the Regional Green Light Committee presents a slightly different table. The reasons for the incongruences are unknown to the authors.



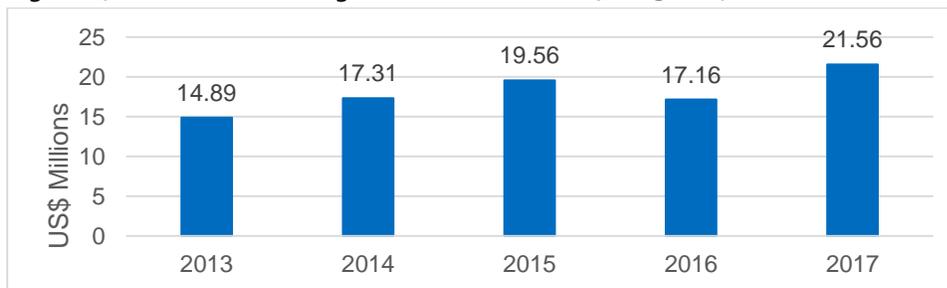
Source: DR Concept Note to the Global Fund (2014)

HIV

The national response to HIV is funded by GoDR (through MSP and other ministries), social security, household spending, international donors and private sector companies through social responsibility programs. To analyze HIV financing, this section first presents the MSP budget dedicated to HIV, then draws on MEGAS 2012 for a comprehensive overview of spending sources and categories, and finally highlights the findings of Valdez et al. (2017b) who recently conducted a financial gap analysis offering updated data, though without the same depth as the MEGAS reports.

The government’s contributions to the HIV response have fluctuated over the last five years, as shown in Figure 17. In addition to three explicit lines in the budget, the HIV response also benefits from indirect contributions from MSP (infrastructure, personnel, etc.) as part of the overall MSP service delivery system and allocations from other line ministries (Labor, Education).

Figure 17: Government Budget Allocations to HIV, 2013-2017³¹



Source: MSP Annual Budgets (2017)

In real terms, according to MEGAS report which includes private spending, after reaching peak funding at US\$47.3 million in 2009, total spending on the HIV response somewhat declined over the next three years. International funds provided the bulk of funding each year, and financed 50 percent of the response in

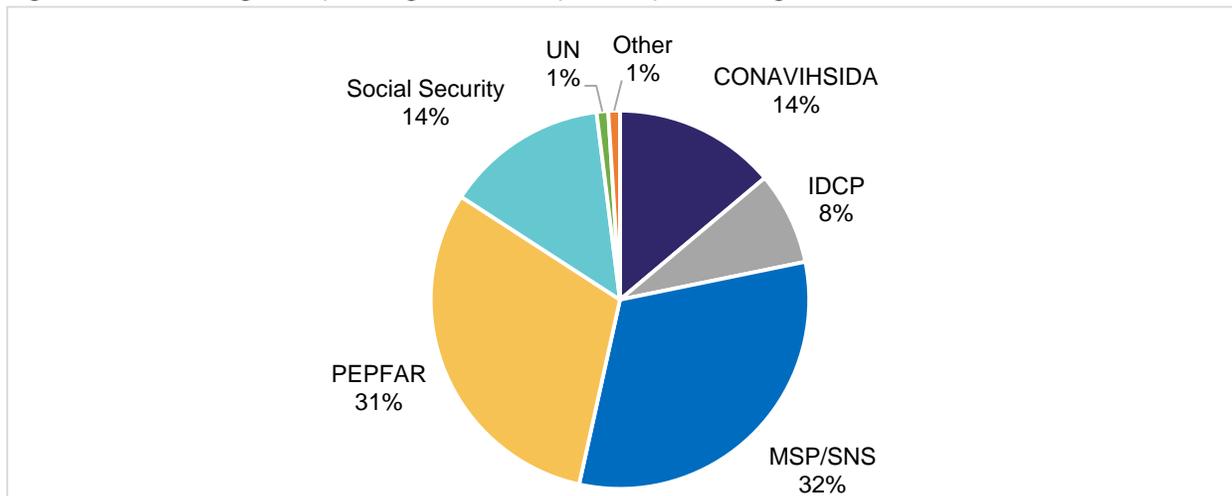
³¹ In nominal terms. The corresponding MSP budget lines are called “Prevencion, Control del VIH/SIDA”, “Prevencion, Control y Atención del VIH/SIDA” and “Prevencion y Control de Infecciones de Transmisión Sexual”. It is unclear what each of these cover, and whether there is overlap.

2012. Public spending has hovered around 25 percent and private funding has also remained relatively steady at about 25 percent. Public funds went primarily to prevention (42.3 percent), medical attention and treatment (40.6 percent), and program management and administration (14.2 percent). The vast majority of private funds (71.2 percent) went to prevention—largely towards blood security and condoms—with the remainder spent on attention and treatment, primarily ART.

Recently, USAID commissioned a financing gap analysis (Valdez et al. 2017b) to determine the gap between investments necessary to meet the targets outlined in the NSP and the projected available funding for 2015-2018. *Importantly, this study only takes into account public and international financing; any private flows are not considered.* As of 2016, the GF contributions, implemented through its local PRs (CONAVIHSIDA and IDCP), made up 22 percent of the total spending on the national HIV response as shown in Figure 18. MSP and Social Security contributed 45 percent, followed by PEPFAR with 31 percent. The remaining 2 percent are shared by various donors including UNAIDS, UNFPA, UNICEF and UNDP.

To reflect the strategic pillars of the NSP, the spending overview for 2016 was divided into different categories. Specifically, 61 percent of the expenditure went towards treatment and care services, including the delivery of drugs and diagnostic tests, 21 percent to strengthening response, 16 percent education and prevention and 1 percent human rights.

Figure 18: Percentage of Spending on HIV Response by Financing Source in 2016³²



Source: Valdez et al. (2017b)

As shown in Figure 19, MSP continues to shoulder the main share of treatment and care services costs. This is largely due to the government's financing of drug purchasing costs. The government has provided ARVs free of charge since 2004; however, funding for these drugs primarily came from outside sources, mainly the GF and, to a lesser extent, PEPFAR. The government decided to step in and bridge the financial gap for ARVs in 2013 after resources allocated by these agencies to purchase ARVs started falling. Not only did it pitch in with more funding but it also managed to achieve price reductions in negotiations with

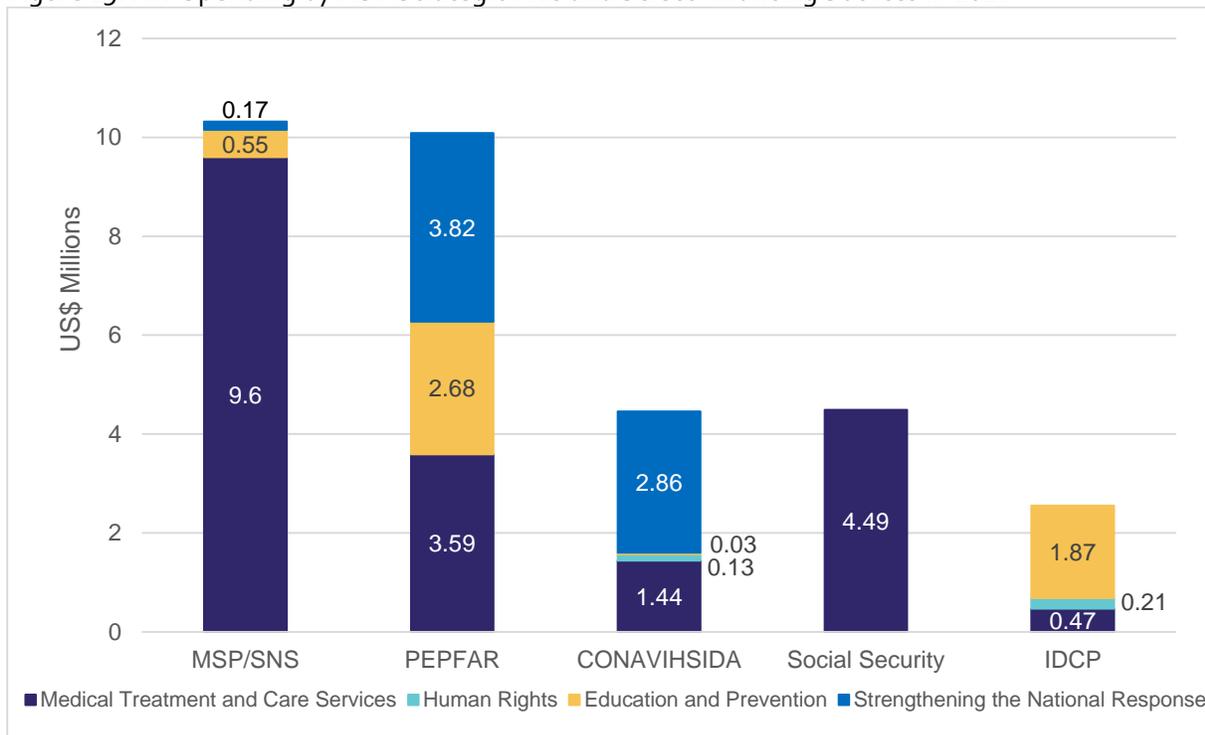
³² Excluding private sector

bidders. Since 2015, the government has been solely responsible for the purchasing and provision of ARVs, showing that gradual transfer of financial responsibility is possible. As a next step to ensure the sustainability of the national HIV response, the financial burden sharing across different domestic sources needs to be addressed (see Section 5.5).

Figure 19 highlights that education and prevention are currently mostly funded by PEPFAR and GF (IDCP), eliciting concern over future availability of funding for prevention. Social Security System spending focuses exclusively on medical care service; no prevention services are included. MSP currently covers only 10.8 percent of prevention and education. Thus, national public funds are almost exclusively used to purchase ARVs, for diagnosis at the clinical level and to acquire monitoring tests (CD4 and viral load). In contrast, international funding has focused on screening of KP, access for KP and treatment adherence.

According to estimates in Valdez et al. (2017b), public and international expenditure is expected to increase approximately 30 percent in 2017 and 25 percent in 2018 compared to 2016 (see Figure 20). Despite these projected increases, a funding gap will remain, estimated at US\$14.2 million for 2017 and US\$17.9 million for 2018. Their analysis finds the largest financing gaps are in education/prevention and medical treatment.

Figure 19: HIV Spending by NSP Strategic Axis and Select Financing Sources in 2016



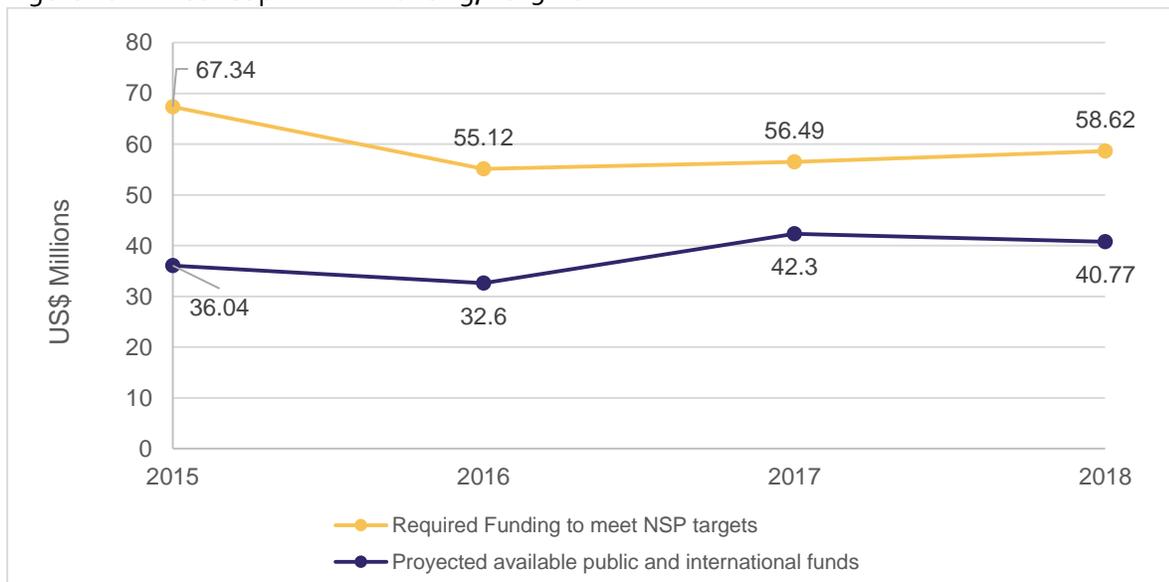
Source: Valdez et al. (2017b) and Valdez et al. (2017c)

Based on this gap analysis, the authors recommend four key interventions to move forward. First, ensure that the NSP 2019-2025 is developed under realistic assumptions including consideration of the financial landscape and budget trajectories, KP-specific approaches, epidemiological and demographic situation,

and national targets and new international commitments such as the 90-90-90 targets. Second, the authors highlight that better alignment of programmatic interventions and the NSP are needed. They recommend using dissemination and monitoring of the 2019-2025 NSP as a tool to coordinate all financing agents and other decision-makers. Currently, the NSP is clearly underutilized as a guide for internal programming of the various government institutions and international organizations involved in the HIV response.

Third, the authors note that the contributions of Social Security System and PROMESE/CAL are difficult to quantify, preventing measures of the distribution of the financial burden across patients. They call for an expansion of Social Security System’s contributions to the national response, especially with regards to financing of ARVs, otherwise the MSP will continue to subsidize the Social Security system. Finally, they strongly recommend prioritizing investments in proven, cost-effective interventions, in particular timely diagnosis and strict adherence to treatment, to achieve viral suppression, i.e. treatment as prevention. This agenda aligns with our concerns regarding transition and sustainability of the HIV and TB programs.

Figure 20: Annual Gap in HIV Financing, 2015-2018



Source: Valdez et al. (2017b)

5.5 Future financing of the health sector

As mentioned previously, national health spending has increased steadily over the past few years, with an average annual growth of approximately 3 percent over 2002-2013. In 2014, the latest year for which data are available, national health spending totaled US\$6.4 billion³³, representing 4.4 percent of GDP. The same year, national health spending increased 6 percent from the previous year, the largest gain in the period under consideration. For its part, the national expenditure on health per capita was US\$580.

³³ PPP (at constant international prices in 2011)

While the government has shown a strong commitment to fighting HIV, certain factors threaten its ability to respond to the requirements of the HIV program. Costs are rising due to (1) an increase in the number of patients who should be on ARVs, needed to comply with updated treatment protocols and to meet the 90-90-90 targets (2) the high number of PLHIV (the second highest after Haiti in LAC), and (3) the increase in the costs of treatment and care at the global level (Nakhimovsky et al. 2017b). It is estimated that the DR will have 64,613 PLVIH on ARV with an average annual patient increase of 3.1 percent. Based on these figures, projected spending on ARVs between 2015 and 2020 will grow at approximately 10 percent annually (Hernández, 2015).

Nakhimovsky et al. (2017b) find important sources of inefficiency and higher than necessary costs in HIV/AIDS spending. These include: (1) the duplication of services in some communities and shortages in others due to lack of coordination between the public sector and NGOs; (2) lack of adherence to HIV treatment guidelines by providers; (3) inefficiencies in the management of pharmaceutical supplies for the storage and purchasing of drugs; and (4) inefficiencies in the HIV testing and diagnostic process.

Increasing involvement of the Social Security System in the national response could help lessen overall dependence on international financial resources. As discussed, currently, the lion's share of financing for comprehensive and quality care and access to ARVs and laboratory tests for PLHIV still falls on MSP and CONAVIHSIDA (see Section 5.4). The classification of ART as a high-cost drug has historically impeded its inclusion in the Basic Health Plan, limiting the Social Security System's ability to fund and provide this service. Although some efforts have been made to lift this restriction, several implementation issues have thus far limited the ARSs contribution to treatment costs for PLHIV.

In 2013, several stakeholders including CONAVIHSIDA, the NGO Coalition, IDCP, the networks of people living with HIV and international agencies such as UNAIDS, PAHO and UNICEF, asked CNSS to define a mechanism for ARV drug procurement and management. In response, CNSS issued Resolution 292-01, which creates a subcommittee responsible for analyzing the technical, financial and operational aspects of such mechanism. CONAVIHSIDA also created an inter-institutional working group on the inclusion of ARVs in the Social Security System in 2013 to support preparation of technical proposals to the CNSS.

Two cost studies were conducted in 2013 and 2015 to aid this process. They show that the average cost per patient would be manageable and that by avoiding future expenses the ARSs could offset the additional costs incurred.

According to the COPPFAN study, covering ARVs would require a 1 percent increase in health spending and could be financed with a 0.2 percent increase of the per capita transfer to each ARS under the contributory scheme and a 3.8 percent increase under the subsidized scheme (COPPFAN 2014). The same study estimated that in the case of the contributory scheme, including ARVs in the SFS would require RD\$61.2 million annually. The other study estimates that the delivery of comprehensive care services would imply an increase of 0.9 percent in the per capita transfer to each ARS under the contributory regime and 18 percent under the subsidized regime. Including ARVs (of all three lines) would require an increase

of 0.27 percent in the per capita transfer to each ARS to the contributory regime and 3.3 percent to the subsidized regime, under a baseline scenario in which 80 percent of PLVIH fall under the subsidized scheme and 20 percent under the contributory regime (Hernández 2013).

These encouraging findings notwithstanding, a number of operational, financial and administrative challenges remain as evidenced by discussions with CNSS and SISALRIL.

First, while the average cost of ARV treatment per patient is known, it is currently not possible to calculate the actual costs for each individual ARS because information on the number of PLHIV across enrollees and their respective state of illness are not available. As discussed in Section 5.1, SENASA and ARS are the entities authorized by SISALRIL to assume and manage the risk in the provision of the Basic Health Plan under the Social Security System.

As long as the distribution of PLHIV across ARSs is unclear, it will be difficult to assess the level of and how the financial burden will be shared among ARSs. Furthermore, uncertainty about the number of PLHIV in their beneficiary populations may reduce the ARSs' willingness to contribute to covering ARVs. While average cost may not be high, financial liability facing each ARS depends on the respective number of PLHIV in their pool and their level of illness.

Second, confidentiality concerns impede the collection of data necessary to set up a functional burden sharing system. There are still no mechanisms in place to enable service providers to verify the affiliation status—i.e. whether they belong to the subsidized, contributory or no scheme at all—of patients affected by HIV and TB. This implies that it is currently not possible to determine who—MSP or the ARSs of the Social Security System—should finance services for these patients. Consequently, a strong adverse selection element exists, as PLHIV can access services under PBS but not under their Social Security affiliation, leading to excess reliance on MSP.

Third, there is a risk of rising cost of ARVs if ARSs started procuring drugs individually. The average cost cited in the cost studies are low because they are the costs incurred by CONAVIHSIDA. Procuring HIV drugs individually on the open market would be much more expensive than the bulk purchases currently administered by CONAVIHSIDA. A joint procurement mechanism could maintain drug costs at their current low level.

Fourth, both legal standing and participation of the Social Security System in ARV purchases is currently lacking. Resolution No. 204-2016 stipulates in Article 12 that: “Drugs that are part of special public health programs of the MSP, will be covered by ARSs [...]. These special programs include ARVs, TB drugs, and vaccines under the national immunization scheme, all of them included in Article 5 of the regulation on the SFS and PBS, as well as others as defined by the MSP.” However, this resolution has been suspended by the CNSS as of June 2016. This suspension would have to be lifted before any mechanism could start operating.

Establishing a joint equalization fund for all ARSs to fund ARVs could address the aforementioned issues. Funds pooled under this fund could be used to reimburse MSP/CONAVIHSIDA for services provided in the public health system. A proposal for such a fund has already been developed but needs to be operationalized. This measure would have a positive impact in ensuring the financial sustainability of the national HIV response.

6. Service Delivery, Procurement, Information Systems and Human Resources

6.1 Service delivery

Health services are mainly provided through the public network of health facilities, which includes NGOs and private health centers. All public facilities are organized in a decentralized network under so-called Regional Health Services (*Servicios Regionales de Salud* - SRS). There are nine SRS and as autonomous agencies they are responsible for the provision of health services at all three levels of care. The first level consists of rural and urban clinics, where the Primary Care Units (UNAP) are located.

For diagnostic services, both the TB and HIV programs rely on the laboratory network and secondary and/or tertiary hospitals. When it comes to treatment, however, the approaches differ: while DOTS is effectively mainstreamed through the country's network of primary care clinics (UNAPs), HIV treatment is concentrated in specialized units, called Comprehensive Care Services (*Servicios de Atención Integral* - SAIs), that are primarily located in secondary and tertiary hospitals. In 1,620 of the 1,803 health centers in the public network interventions for the prevention and treatment of TB are carried out.

The majority (55 of 72) of SAIs are public, while the remainder are operated by NGOs in collaboration with MSP (Valdez et al. 2016). Although all SAIs have capacity to diagnose HIV and provide virological and immunological follow-up, access to HIV tests and laboratory services at these points of care can be limited, leading to late diagnosis and delays in starting ARV treatment (CONAVIHSIDA 2015). Other limitations of this model include limited hours of operation (typically 8am to 2pm on weekdays) and difficulties of access in some areas that do not have SAIs. For those attending a SAI, stigmatization is a risk as other patients and/or community members may become aware of one's HIV status, so patients who can afford to use private sector clinics often do.

While the SAIs are supposed to be integrated into the overall health system, they appear to operate in a fairly isolated manner. While national guidelines map out a referral system, in practice there are problems with information sharing between primary health centers and SAIs. In addition, each SAI tends to follow its own referral procedures (CONAVIHSIDA 2015). HIV service provision on the tertiary level is invariably expensive and will not be a sustainable option for the future. Once diagnosed and on the right treatment regime, HIV patients could be more cost-effectively served in a primary care setting, lowering costs, reducing travel distances and enabling better integration with other co-morbidities including TB. Improving early diagnosis at the primary care level also reduces use and associated cost of hospital emergency departments. Capturing HIV and TB patients early, therefore, is important to ensure the long-term financial sustainability of the health system.

However, significant barriers to mainstreaming HIV services into the UNAP system need to be addressed for this option to be viable. It requires the system's mentality to shift to perceive HIV as a chronic condition that can be addressed with similar methods to those used to manage diabetes and other non-

communicable diseases. It further requires a functioning referral system, adequate supply systems and acknowledgement that the fear of experiencing stigma can act as a deterrent for patients to use UNAPs. There is legitimate concern about patient confidentiality at primary care centers as well. Another hurdle in the DR is Law 135-11 (HIV Law), which dictates that HIV testing can only be carried out by bioanalysts (see Box 3 for a discussion)³⁴.

Box 3: HIV Testing by Lay Providers

The WHO Consolidated Guidelines on HIV Testing Services (2015) support increased task sharing with lay providers in order to expand access to HIV testing, especially among KP. Current HIV testing technology—including rapid testing—can be administered safely and effectively by trained laypeople, and employing laypeople is generally more cost-effective than testing in health facilities. Further, lay providers are often better positioned to reach communities, including KP, that are wary of traditional medical institutions, and to deliver post-test counseling reliably and sensitively. Community-based rapid testing is not a substitute for provider-initiated testing and counseling (PITC); rather, the peer approach can complement existing health facility efforts to more effectively reach a broader population. Integral to this approach is strong collaboration between the civil society actors carrying out the rapid testing and government so that CSOs can report positive results, link patients to care and potentially assist in providing follow-up and support.

Source: WHO (2015)

The parallel organization of service delivery for HIV and TB currently exacerbates the elevated rates of HIV/TB co-infection. The fact that TB and HIV services are often offered at different facilities adds extra time—and costs—for co-infected patients, as they have to travel to multiple health facilities for their treatments. Currently, 60 out of 72 SAIs offer TB services, allowing for the provision of HIV and TB care in the same location. While both disease programs have attempted to improve collaboration in recent years to address this co-morbidity, difficulties regarding logistics, referral and coordination between the two disease responses persist, which is evidenced by suboptimal rates of HIV testing among TB patients and even lower rates of screening of HIV patients with respiratory symptoms for TB (see Section 3.3).

Beginning in 2015, the DR worked with WHO/PAHO³⁵ to implement a pilot project to promote the integration of TB and HIV services across provider levels and facilities. Puerto Plata, which accounts for roughly half of all registered cases of HIV/TB co-infection, was chosen as the pilot site. The initial results demonstrate that better integration of TB and HIV services is possible, and also point to specific barriers to further integration (see Box 4). The pilot was evaluated and is set to be rolled out in several other prioritized provinces in 2017. Given that the same integration challenges are faced throughout the country, the lessons learned from this pilot program are valuable beyond the Puerto Plata context.

Beyond challenges with design of the service delivery system, quality of care in the public sector is still reason for concern. Poor quality of public health services is evidenced by the heavy use of private facilities. In 2013, only 59 percent of the population utilized public facilities for outpatient consultations, and 51

³⁴ A Ministerial Order was issued on August 17, 2017 (after this report was closed) stipulating that community-based rapid HIV testing can be carried out by non-medical personnel previously trained by the MSP.

³⁵ The project received financial and technical support from WHO/PAHO and the GF, but the bulk of funding came from national resources.

percent for inpatient services, well below the rates of use in other upper-middle income LAC countries: at least 70 percent in Panama and at least 80 percent in Costa Rica (World Bank 2016). Quality considerations have a bearing on the HIV and TB response as both heavily depend on the public system and are therefore impacted by its shortcomings. For example, private sector patients in the DR tend to be diagnosed with HIV at an earlier stage because testing is routinely included in patient evaluations prior to any intervention (Valladares and Valdez 2016). The public sector could adopt similar protocol to reduce late detection and treatment of HIV and to close the significant HIV testing gaps which persist among certain groups (see Appendix 5).

Box 4: Integration of HIV and TB services - The Puerto Plata Pilot Project

The pilot introduced a network of services based primarily at the PHC level, though it included some hospitals, as well as an NGO working with PLHIV to address the high HIV/TB co-infection rates in the catchment area. The pilot produced improvements in the referral system, including the proportion of timely and complete referrals, allowing for earlier diagnosis. Communication between different providers and across the two disease programs has also improved and the information generated by the monitoring system is being utilized for decision-making. Moreover, adherence to national treatment guidelines seems to have improved. From August to November 2016 there was an increase in the number of: TB patients tested for HIV; TB patients diagnosed with HIV who began ART; PLHIV who continued on IPT for six months; and co-infected patients receiving CPT along with TB treatment and ART. Further evaluation would be needed to link these preliminary findings to improvements in treatment outcomes, but the initial results are promising.

However, several challenges also emerged during implementation of the pilot. A lack of integrated information systems lead to duplication and weakened coordination. To comply with the law, two bioanalysts had to be hired to perform HIV testing in the clinics which added costs. While communication improved between the disease programs, it was because of personal relationships rather than institutionalized channels.

Source: MSP (2017c)

Quality of public service provision is further lowered by a significant “Know-Do Gap”. Most providers working at SAIs are knowledgeable of national treatment guidelines, but fail to employ them in practice, which results in the unanticipated consumption of drugs that renders planning less effective, raises costs, leads to stock-outs and/or overstocks and restricts future therapeutic options for patients (Valdez et al. 2016). Meanwhile, the lack of consistent and free condom distribution at service delivery sites as well as sites frequented by KP hinders prevention efforts (Miller 2014). Adherence to national HIV treatment guidelines and consistent condom provision at service delivery sites are basic prerequisites to affordably and successfully tackling the HIV epidemic.

The demand for health services is also shaped by the complex relationship between the DR and Haiti. Many Haitians seek care in health services throughout the DR, including HIV and TB services, which puts additional pressure on the Dominican health system. For example, a significant number of individuals travel from Haiti to get TB treatment in the DR, because they have heard about it in information campaigns in Haiti.

Laboratory network

Service delivery is weakened by the sluggish performance of the national laboratory network. Inadequate

transport arrangements, deficiencies in information sharing between the lab and service providers and infrastructure shortcomings all impede timely delivery of lab results. Both the HIV and TB programs are negatively affected by the low performance of the laboratory network. There is a reported 40 percent gap in the number of programmed and executed laboratory analyses for HIV (CONAVIHSIDA 2015). SAIs report lost and damaged blood samples, as well as major delays in receiving results, indicating problems with sample collection and transportation. They also report delays in receiving lab reagents. Similar problems are faced by the TB program. Lack of an efficient system to transport samples results in delays that cause delayed diagnosis, as well as reduction in sample quality, contamination and less reliable test results (WHO/PAHO 2016b). The Regional Green Light Committee recommends that a *Sistema único de transporte de muestras y envío de resultados* (SUTMER) be implemented.

No binding regulations exist to monitor minimum quality of laboratories, but the National Laboratory has strengthened its efforts to supervise and accredit an increasing number of laboratories over the last few years. Performance of those laboratories enrolled in the quality program is very satisfactory, but there is a strong self-selection factor as enrollment in the quality program is voluntary. Only about 10 percent of all laboratories participate currently.

Limited use of new technologies further affects the DR's ability to maintain effective epidemic control. Even though the PNCT purchased 8 GeneXpert machines with GF support to address this problem, none of these is currently operational due to delays in upgrading facility infrastructure to accommodate this kind of high-tech equipment. While four laboratories are now in the condition to start operating the machines, the emergence of legal issues further deferred the anticipated start of operations. The PNCT acknowledged that these legal issues needed to be resolved urgently, especially given that the accompanying reagents are expiring in May 2018.

Many of these issues could be addressed by stronger leadership of the National Laboratory but its decision-making power is currently limited. While low budget allocations appear to be part of the issue, the National Laboratory's lack of autonomy over its budget and over hiring and firing exacerbate the problem. Addressing these impediments could strengthen the laboratory performance for both HIV and TB.

Prison system

PDL accounted for 5 percent of TB cases last year (see Section 3.2). Prisons are considered a place of high risk of transmission to the general public as well, given the volume of people entering and leaving prisons regularly (60,000 to 70,000 visitors monthly). The prison system is therefore recognized as an indispensable component of the national strategy to curtail new infections.

While a reform of the prison system is underway attempting to address the systemic causes of overcrowding and poor living conditions, the situation in most facilities continues to be inadequate. For example, La Victoria, the country's largest facility, has a capacity for 1,500 PDL but currently serves more than 8,200 - or a third of the country's entire PDL population (MSP 2017d). This degree of overcrowding

and inability to isolate PDL with communicable diseases from the general prison population increases risk of infection and transmission. In 2016, the risk of TB infection was estimated to be 24 higher for PDL compared to the general population (MSP 2017d). Apart from lack of physical space and insufficient hygienic conditions, many prisons have limited access to health services, and lack properly qualified prison staff. Currently, only 17 of 37 prisons have health staff on-site.

During 2016, PNCT started implementing an intervention aimed at treating and preventing TB amongst PDL populations consisting of case detection and treatment of latent infections in PDL in 19 prioritized prison facilities in 16 provinces that account for 92 percent of TB cases among PDL. Following WHO's recommendation, the intervention focuses on TB prevention for PDL with IPT. To this end, capacity building was carried out for the health workers in the detention centers where this strategy will be implemented. The trainings included the training in diagnostic support services, however, effective use of new technology was undermined by delayed or postponed installation of this type of equipment due to unmet technical and safety requirements in prison facilities.

According to PNCT, during 2014-2015, better coordination between the *Dirección General de Prisiones* and MSP has helped to reduce the number of patients lost to follow-up, and increase the number of detected cases of TB-RR, TB-MDR and co-infection TB-HIV (MSP 2017d). Furthermore, the NTCP established a referral system for patients to be referred to health centers for outpatient treatment once they have been released from prison if their treatment is not complete. However, patient follow-up continues to be weak, and many patients are lost to treatment once released.

6.2 Procurement and supply chain management

Procurement for HIV and TB drugs and supplies is centralized and as of 2012 carried out through the Essential Medicines Program/Logistical Support Center (PROMESE/CAL)³⁶. This centralization of purchasing has helped to rationalize acquisition and reduce prices, as orders can now be made in bulk leveraging economies of scale. However, a significant proportion of MSP purchases—both for hospitals and for certain vertical programs—are still performed directly, rather than using the centralized mechanism.

The DR participates in several joint procurement mechanisms for TB and HIV that have helped lower drug costs. The government has assumed the costs of first and second line drugs, and of supplies for existing diagnostic technologies (MSP 2017d). First and second line drugs are procured through the Strategic Fund and Global Drug Facility (WHO/PAHO 2016b). ARVs are procured with national funds using the long-term agreements of the GF. The cost per patient treated with ARVs has more than halved, from US\$371 per year per patient in 2011 to US\$ 164 (PEPFAR 2016b).

³⁶ The logistic management of drugs and supplies is defined in Ministerial Resolution 000019 of July 27, 2010 and Presidential Decree 168-13 in 2013. All institutions in the public health system are mandated to procure drugs through PROMESE/CAL, which uses a formal bidding process in line with international best practice to make purchases (CONAVIHSIDA 2015).

Planning and distribution have likewise been improved by the implementation of the Integrated Management System for Pharmaceuticals and Medical Supplies (SUGEMI). Previously, fragmentation of supply systems into multiple vertical chains organized around disease programs, including those for TB and HIV, created inefficiencies that contributed to frequent stock-outs (Barillas and Valdez 2014). Developed with technical assistance from the USAID-funded program Systems for Improved Access to Pharmaceuticals and Services (SIAPS), SUGEMI aimed to overcome this fragmentation by integrating elements of the supply cycle into a single system, including programming, transportation, storage, quality assurance and, critically, the associated information system (SIAPS 2014). SUGEMI now serves as the institutional mechanism for organizing the public health network supply system for drugs (Barillas and Valdez 2014). In 2011, PNCT medicines and inputs management were integrated into SUGEMI; HIV drugs and supplies followed suit the following year.

Implementation of SUGEMI has led to new operational efficiencies, including streamlined processes for facilities to report on drug consumption, availability and restocking needs. This information is consolidated and analyzed at the regional level and used to submit monthly regional restocking requests to PROMESE/CAL (Barillas et al. 2016). The data is also distributed in a quarterly bulletin to officials in the different institutions involved in the supply chain to enable more accurate planning. Following the implementation of SUGEMI, drug availability has increased and stabilized due to better estimation of needs and annual purchases are now more aligned with established need. Consequently, availability of adult ARVs specifically expanded dramatically, from 71 percent in 2012 to 96 percent in 2016 (Barillas et al. 2016).

As far as distribution, a central warehouse works with a network of regional warehouses to distribute supplies. The regional warehouses recently received infrastructural improvements and the Regional Green Light Committee reports that TB drugs are stored properly in temperature and humidity controlled facilities (PAHO 2016b). Unlike the regional warehouses, the central warehouse is privately managed; while no evaluation has been conducted to determine whether it is more or less efficient, it is safe to assume that its performance is not affected by public sector inefficiencies that might plague the regional publically-managed facilities.

6.3 Information systems

Timely and quality information is an indispensable tool for monitoring health system governance and performance and for facilitating overall management of the health system. MSP has improved its collection and use of data but some systemic challenges remain. Specifically, the DR revamped its vital statistics, including the death registry, enabling a more accurate estimation of mortality rates. The use of a joint record for TB in health centers in the DR and Haiti has greatly improved patient follow-up across borders. Further, a KP registry that will allow officials to track KP members throughout the HIV treatment cascade is being refined. While currently only used by GF-supported NGOs, it was designed for national use, and will be an important tool going forward.

Both the HIV and TB programs have monitoring and evaluation systems designed to generate data for decision-making. However, MSP officials highlighted several data collection issues across the different vertical programs. Information is collected using a unified record, but health centers often fail to fill out forms correctly and there is no guarantee that all data is uploaded to the online system. A notable improvement was the introduction of an electronic TB information system in 2015 that connected 278 health centers (primarily provincial, regional and national hospitals as well as some high-volume primary care centers). Their data can now be instantaneously retrieved at the central level and information coordination between these providers has improved.

However, since this system relies on internet connectivity, it currently cannot be rolled out to cover all DOTS-administering health centers (more than 1,600). In most health centers, therefore, information continues to be gathered manually. The need to digitalize this information at the central level hinders timely processing and evaluation of data. The continuous use of paper files also impairs smooth coordination between different care levels and providers because it requires providers to access physical patient files. Data collection methods that meet the needs of primary care centers with no or limited internet access could enable timely processing and complete digitalization of records. Other countries have successfully adopted the use of cellphones in similar settings, a model that may prove worthwhile for areas with limited connectivity in the DR as well.

Importantly, the information system is not linked to the lab registries, and as a result of this and other issues there are difficulties regarding accuracy of number of new and recurring TB cases that underwent a drug sensitivity test (WHO/PAHO 2016b).

Finally, there is a scarcity of studies analyzing the cost-effectiveness and impacts of HIV and TB services. Since resources are limited, interventions have to be carefully selected, often involving difficult trade-offs. Without rigorous evaluation, officials and providers are unable to prioritize their efforts successfully.

6.4 Human resources

The DR faces difficulties with planning and distribution of HR. The geographic distribution of the health workforce is highly concentrated in urban areas due to difficulties recruiting staff for rural areas. While the Ley de Pasantías mandates young doctors to spend two years at the start of their professional career in rural setting, the ongoing rotation of new doctors is an important barrier to better service delivery at the local level because it interrupts continuity of care and doesn't allow for a relationship of trust between doctor and patient. Financial incentives to attract public sector workers to work in rural areas could help mitigate the shortage.

According to the SID, inefficient use of human resources leads to challenges with intervention scale-up. For example, the MSP currently lacks a bonus system and has no way to penalize or reward performance financially. While there have been discussions to introduce a pay-for-performance element in remuneration these are yet to be implemented. The SID further point out that there is a shortage of

qualified laboratory personnel to achieve sustained epidemic control.

Currently, there is no inventory or plan for transition of donor-supported health workers” (for PEPFAR or other donors); however, the DR already funds “all or almost all (approx. 90+ percent health worker salaries)” (PEPFAR 2016a).

Finally, there is still a lack of sensitization training for health workers. Stigmatizing health provider attitudes towards key populations and PLHIV are still prevalent, despite actual laws and policies in place. Health center and prevention staff are often not trained or properly supervised to work with vulnerable groups. The fact that the government current does not invest in this area—it implements minimal (1-9 percent) of HIV-related in-service training according to the SID—could contribute to this drawback.

7. Civil Society Organizations

7.1 Current state of civil society strengthening

The community response to HIV in the Dominican Republic was one of the first to be developed in the region. The country's legislative framework, Law No. 122-05 on Regulation and Promotion of Non-Profit Associations, promotes citizen engagement in the formulation, monitoring, execution and evaluation of social development policies through the promotion of the actions by non-profit associations (*Asociaciones sin fines de lucro* - ASFL).

Law No.122-05 specifies the involvement of the Center for the Development and Promotion of Non-Profit Associations (*Centro para el Desarrollo y Promoción de Asociaciones sin Fines de Lucro*, hereinafter called "the Center"), which is attached to the Technical Secretariat of the Presidency and coordinated through the National Planning Office under the Ministry of Economy, Planning and Development. The law provides that the Center consists of a president, a first vice-president, a second vice-president, an executive secretary, a minute secretary and six members, three of which from the private sector. The Center is responsible for registering, enabling and promoting actions from the community sector through the transfer of resources aimed at the implementation of actions deriving from development policies, as well as ensuring these are used adequately.

The registration process is mandatory by law and includes the compliance review of legal, tax and other obligations of non-profit associations. Being registered is a prerequisite for accessing government resources.

Likewise, the Center enables the organizations it considers to be in capacity of implementing actions defined by the government. The Center enables on two levels: of a general nature, when it verifies that the CSO is enabled for actions that are defined by the national government and whose funding source is the national budget; and specific nature, according to the parameters and requirements required by the different ministries and other governmental institutions and whose funding source are the budgets assigned to these ministries or institutions. The Ministry of Health is one of the few ministries that have specific requirements for enabling a ASFL. Some organizations perceive it as excessively bureaucratic, with long and complex paperwork processes.

The Center now has a virtual platform, developed with support from the World Bank, for the remote implementation of all registration and authorization processes. As of May 2017, the Center was working to update of all the CSOs databases in the country.

With regard to the transfer of resources to an ASFL, the Center has different mechanisms for allocating resources: public calls for organizations working on certain issues, on specific projects, or as required by Ministries and other governmental bodies. It also has the authority to supervise the use and accountability

of public resources. One of the criticisms by some CSOs is the lack of transparency in accessing government resources. The current Government is making efforts to increase transparency throughout the process.

There were no ASFLs with HIV and TB work identified as currently receiving resources through the Center; this is despite several having participated in the processes in previous years and, from their perspective, meeting the requirements. Therefore, it is necessary to support ASFLs with HIV and TB work so that they can better understand the requirements to register and obtain the corresponding qualifications, as well as to motivate their engagements in the processes tendered by the Center.

Law 122-05 also provides for the option of signing service contracts and management agreements, contributing to transparency in resource management and in relations between the State and the non-profit private sector.

The MSP can carry out agreements with ASFLs that meet the requirements established in the current legislation, including the authorization under the parameters defined by the MSP itself for each type of service. The agreements establish cooperation formats between CSOs and other bodies defined by the MSP, including provincial governments, health jurisdictions, primary health care centers or services that are implemented within the facilities of the organizations themselves; they may include the transfer of resources in kind (e.g., prevention supplies, screening tests, reagents for laboratory tests, among others), or the allocation of MSP staff for the provision of health services or laboratory staff to perform their duties at ASFL facilities.

There are several organizations working in HIV and TB which are currently enabled to provide health services and to which the MSP, through co-management agreements, provides medical personnel, laboratory staff and in-kind support, such as reagents and rapid tests that are acquired through GF funding. One of these organizations is COIN, which has its own premises, a 5-level building located in the industrial area of Santo Domingo, where KP assemble, mainly female sex workers (FSW), MSM and male sex workers. COIN is equipped with its own laboratory, and offers comprehensive medical, psychological and dental care services, as well as a hotline for information and complaints registration for the Human Rights Observatory. Its facilities include work meeting spaces and a recreation room. Similarly, Adoplafam, another CSO that started working on HIV for KP difficult to reach, has currently developed the TB response component and has a similar level of development as COIN.

In the case of the Dominican Republic, alongside Law 122-05, Law No. 34006 on Procurements and Contracts of Goods, Services, Works and Concessions, with amendments to Law 449-06³⁷, must also be considered. This law's Article 4 defines a Consultant as the proponent or contractor of services, and includes ASFL, among other actors. This allows ASFLs to compete in public tenders through the General Directorate of Public Contracts, a Central Government institution under the Ministry of Finance, which is responsible for the management of the National System of Public Contracts.

³⁷ http://www.comprasdominicana.gov.do/documents/10180/13765/Ley_No_340_06_y_449_06.pdf

ASFLs registered as state suppliers can participate in this public bidding processes as long as their benefits are not distributed among their partners, in other words, they maintain their non-profit principle. To this end, ASFLs must register as suppliers of the State, a procedure that is carried out on-line and requires general data of the CSO and certifications of the Ministry of Industry and Commerce, among others, as well as being updated in their tax obligations³⁸. Should they be awardees of bidding processes, they will be required to account for the use of public resources.

This option allows competition through the use of the comparative advantages of ASFLs, which include experience in providing services in the implementation of outreach strategies to KP, the broad knowledge of the dynamics of populations at greater risk and/or vulnerability, or experiences developed during the implementation of the projects emanating from Global Fund subsidies, among others.

Finally, it is important to note that Article 47 of the General Health Law³⁹ establishes that the Public Services of People's Care (*Servicios Públicos de Atención a las Personas*) will be organized, as far as the MSP and the IDSS are concerned, in regional networks of multi-sectoral public health services (public and private, under the State's guardianship) which, to functional effects, will be called Regional Health Services (*Servicios Regionales de Salud*). This is the reason for requiring strong links among the different sectors involved in health care, that is, the public, private and community sectors, and given that the Dominican government acknowledges the significant role civil society plays in the promotion of health and primary health care, and that CSOs provide critical services not covered by the public and private sectors, it is essential to understand the challenges before the next change of context and have a strategy with a view to sustainability.

7.2 Sustainability and resilience of civil society beyond transition

The community response in DR for HIV and TB is diverse, with different levels of development and strengthening coexisting with organizations with almost 30 years of experience that have led to organizations specialized in KP, and others in the provision of community-based services and organizations in the early stages of development. The organized civil response includes national networks of people living with HIV, Haitian migrant's organizations that have included HIV and TB, women's associations, youth associations, a coalition of organizations, among others. However, among the organizations contributing to HIV responses, especially those engaged in prevention activities and outreach to key populations, a significant number lack the resources and infrastructure to operate sustainably. They often have limited capacity for the entire spectrum of project planning, implementation and monitoring. Organizational management within these CSOs tends to be weak.

In view of the challenges for the sustainability of responses, the country's economic development, the policy changes of the various cooperation agencies, and the diversity in the community response, and in

³⁸http://www.dgcp.gob.do/new_dgcp/documentos/registro_de_proveedores/como_inscribirse/FORMULARIO%20REGISTRO%20PROVEEDORES.PDF

³⁹ <https://www.dol.gov/ilab/submissions/pdf/20100408-10.pdf>

the absence of a diagnosis to understand the real situation related to sustainability, a consultancy was conducted under the auspices of the United Nations Development Program (UNDP) and the National Institute of Health with the objective of designing an organizational model of ASFL that allows sustainable development at all levels, that is integrated into their economic, social and environmental aspects, and acknowledging the links of network cooperation.

In the report *Informe: Términos de referencias para diagnosticar la situación de las ASFL para su permanencia de cara a la sostenibilidad* (Report: Terms of reference to diagnose the situation of the ASFL for their permanence facing sustainability), the link between MSP and CSOs with HIV work is analyzed taking into consideration that it took place at an operational level to support the achievement of project indicators goals with external funding source, without involving the contractor's financial resources. With regard to the targeted experiences of ASFL contracting, it mentions that they are restricted solely and exclusively to the contracted service and, although it was intended to build bridges between the entities, this has not happened in practice. One of the weaknesses for which this does not occur is that the framework instrument for creating links with the MSP is the management agreements for the achievement of goals, and that ASFLs have not been taken into account as part of such agreements.

The role of civil society in the response to HIV and TB has been critically strengthened by the GF's support, and currently CSOs provide services and support to PLHIV, implement outreach strategies for KP, offer various prevention services, early diagnosis, linkage and retention in health services for people with positive results, among others. There is also a national PLHIV network and various KP organizations and regional networks. With the support of the Global Fund, the NGO Coalition was formed, creating a network of civil society organizations working on HIV and TB, representing 47 different CSOs and facilitating the dialogue between the community sector and other sectors through its participation, for example, in CONAVIHSIDA.

The NGO Coalition has had several positive effects, including the facilitation of conflict processes between organizations through the promotion of communication and collaboration between CSOs – a unique process in this region, particularly in linking organizations dedicated to HIV and TB and working with KP. Members of the NGO Coalition have also become aware of the need for strengthening the TB response by integrating some interventions in their work that otherwise would focus only on HIV. The Coalition participates in different decision-making bodies, facilitating dialogue between sectors and ensuring community participation in them.

The community sector has received technical and financial support from various agencies and foundations, including HIVOS, GTZ, PEPFAR/USAID, among others, which have collaborated in strengthening of ASFLs' capacity. There are CSOs involved in regional and/or sub-regional responses, allowing a global and regional understanding of health responses and providing opportunities for training and participation in projects supported by different funders, including the Global Fund. These networks include ICW, Redtrasex, LACCASO, GayLatino, CVC and other Caribbean networks.

Under Global Fund funding, these organizations have been encouraged to work in groups to access financing and reduce competition, as well as to mitigate operational risk. In this context, a leading organization with sound management and accountability standards is the primary responsible for fund management and reporting. While this has been effective in enabling weaker organizations to provide outreach services to KP, this procedure has not addressed the strengthening and capacity needs of the organizations involved, since there is no mandate for peer-learning approaches or other guarantees for the strengthening of community systems.

It is unclear whether these community-based organizations (CBOs) will continue to be viable in the absence of the external funding and of the donor-driven clustering structure. CBOs and some CSOs rely primarily on the GF's resources; however, some of them obtain resources from other international foundations, donations and others through fees for services.

Organizations working in the response to TB are particularly vulnerable, as they were fully developed based on the resources provided by the GF, and therefore their sustainability urgently requires further funding mechanisms and actions that encourage other organizations to include the issue. These organizations also require better advocacy skills, so that they can exercise community leadership on the issue and be able to influence in order to improve the response in this regard.

Beyond the state or local government funding, during the interviews, some community sector leaders expressed their interest in exploring the diversification of funding sources. They recognize that the government may be most interested in maintaining the provision of CSO-led services to key and vulnerable populations, but certain critical CSO activities and functions are unlikely or impossible to meet through government funding, such as the development of political advocacy skills, promotion, legal counselling and monitoring of human rights compliance by government agencies, or other activities related to sexual rights, reproductive rights, sexual health and other sensitive issues such as advocacy for a law that sanctions stigma and discrimination, and promotes equal marriage and gender identity.

Regarding the diversification of funding sources and sustainability, some CSOs have identified intersectionalities of issues and populations they work with and other issues affecting these populations, such as human trafficking and trade, or the use of and dependence on recreational drugs, and are exploring opportunities to expand their services and expertise in this regard, as well as to identify funding sources to cover these issues. CSO leaders recognize the need to diversify programming, and some of them are working towards creating new links in order to build bridges with other programs with related issues, such as gender equity or working with youth. In these, they are seeking to interact with other private and public bodies, with other ministries and even with other social movements within the country, which shows the communities' resilience to barriers - an effort that ultimately also helps support the integration of HIV with other key services and targets, in accordance with the spirit of the Sustainable Development Goals.

8. Conclusions and Recommendations

The GoDR has taken steps to strengthen its financial commitment to HIV and the government is refining its strategy to ensure a sustained national response to HIV and TB. These efforts notwithstanding, the HIV response remains highly dependent on external funding, with the GF the largest external contributor. The GoDR's absorbing the costs of ARVs in a relatively short period of time is reason for cautious optimism. While the concept of protected budget lines is helpful to ensure availability of ARVs and other drugs and commodities, it is not sufficient given that HIV and TB responses rely to a great degree on other parts of the health care system. Increases in the dedicated budget lines for the HIV and TB programs therefore cannot substitute for a functional overall health system. The following recommendations summarize areas in need of attention in preparation for the transition process. With technical assistance to address outstanding challenges and a close coordination of all international actors, the DR stands a good chance to move away from GF support without any major disruptions to program financing and delivery.

1. Health system reform: The current reorganization of the health system has reassigned roles and responsibilities, but implementation is lagging potentially leading to duplication of efforts, gaps and lack of accountability. Division of health system functions offers exciting opportunities for improvement in planning, strategy and implementation, but also implies challenges for the country's transition process. Fully implemented, the health sector reform could improve outcomes and raise quality of care, including for HIV and TB services. To ensure a sustainable response to diseases such as TB and HIV, a clear definition of roles and responsibilities is needed for all aspects of health finance and delivery, including the responsibilities at the local level where most of TB and HIV care takes place.

***Transition work plan opportunities:** Ensuring definition of functions and their implications for HIV and TB programs in written documentation would provide a strong basis for addressing both diseases. Pilots that test delivery modalities that touch on TB and HIV could help strengthen the health care services generally and for those specific diseases. Supporting pilots that facilitate implementation and highlight areas for attention to improve performance.*

2. Health Financing: There is currently a considerable degree of uncertainty surrounding future financing of HIV and TB programs. The withdrawal of the GF from the TB program, and in the medium term from the HIV/AIDS program, requires defining a road map to reduce the uncertainty faced by patients and providers regarding coverage responsibilities, specifically between MSP and the Social Security system. To ensure the sustainability of the HIV and TB responses it is imperative that:

- a. A clear funding formula be put in place to ensure that the financial burden be shared between MSP and the Social Security institutions according to the needs of their constituents. An important part of these efforts involves reaching an agreement between MSP, CNSS, and SISALRIL regarding the financing and management of diseases including HIV and TB, particularly when social security beneficiaries use public facilities.

***Transition work plan opportunities:** Establishing a joint equalization fund for all ARSs to fund ARVs ensuring that no single ARS incurs catastrophic costs by taking on the financial responsibility for HIV treatment of PLHIV in their beneficiary population. In the short term, this would require*

clarification on the administration of the fund, establishing the annual contributions payable by each ARS, and instituting an independent oversight mechanism. In the long term, efforts should be directed at managing the confidentiality issues so as to allow for exact quantification and distribution of PLHIV affiliated with social security. Other countries such as Colombia and Brazil have successfully tackled confidentiality challenges. There may be models that could be considered.

- b. In addition, putting the TB and HIV on a path of sustainability requires the explicit incorporation of treatments and drugs into the Social Security system's (ARSs) package of services. Together, these requirements will help to align financial capacities with utilization across individuals across subsystems.

Transition work plan opportunities: *Advocating for full implementation of Resolution 204-2016 that allows the explicit incorporation of treatments and drugs is currently suspended by CNSS.*

- c. Joint efforts made by SISALRIL and the Ministry of Health are required to ensure the adequacy of pertinent regulations, including authorizing NGOs as certified providers of primary care and prevention services in HIV care.

Transition work plan opportunities: *Ensuring that contracting NGOs as service providers for ARS is a possibility under the current legal framework.*

Overall, such initiatives make straightforward the establishment of a single framework of rights to access to health accompanied by the appropriate financing and delivery of needed services. In the long term, this can enable cost-effective services, reduce out-of-pocket payments, avoid undesirable cross-subsidies, align resources to needs, and minimize the risks of legal disputes over services provided by the Dominican social insurance model.

3. Public Financial Management: The health sector has benefitted from gradually increasing budget allocations, but health sector outcomes remain lower than among regional peers with fewer or equal resources. The quality of spending could be improved. Strengthening existing RBF mechanisms – such as the pilot in nine regions to increase the use of a Clinical Management System mentioned in Section 6.2, that relied on meeting performance indicators prior to unlocking additional funding – could help to make better use of available resources.

Transition work plan opportunities: *Introducing RBF elements into transition grants.*

4. Integration: Coordination across different levels of care needs to be improved to successfully deliver HIV and TB services. While reference and counter-referral mechanisms between the primary level and the rest of the public network are in place, they are often disregarded, both for HIV and particularly for TB. The lack of coordination leads to delays in diagnosis and treatment. It also exacerbates addressing the high HIV/TB co-infection rates. Better integrating HIV and TB services is difficult, but possible as evidenced by the Puerto Plata pilot that achieved just that. Incorporating lessons learned from the HIV/TB integration project in Puerto Plata could help implementation for rolling out the pilot into other prioritized regions.

There have also been discussions to move HIV service delivery down to the primary care level, but these efforts are in nascent stages. At the primary level, HIV could be treated jointly with other chronic diseases and infectious diseases such as TB, saving costs and reducing travel time for patients with co-morbidities.

However, a prerequisite for doing so would be to ensure that HIV care in primary care setting would meet basic conditions for confidentiality, including data protection, ways to lodge complaints and access redress mechanisms. It would also need adequate oversight and training of frontline health workers.

Transition work plan opportunities: *Scaling up Puerto Plata pilot model adopting it in other region(s) with high HIV/TB co-morbidity burden.*

5. Service Delivery: the sustainability of the HIV and TB response in the future hinges on improvements in the quality of health services. A series of service delivery issues persist:

- a. Low adherence by physicians to national treatment guidelines hamper effective diagnosis and treatment of both TB and HIV, raising costs and lowering quality. Improving adherence to national guidelines will be critical.

Transition work plan opportunities: *Contribute to the definition of performance payments for the planned Servicios Provinciales de Salud, specifically for HIV and TB. The would be based on fulfilling the protocols defined by MSP and could help to enforce common rules across the country.*

- b. The National Laboratory would benefit from greater autonomy, so that it can more effectively carry out its oversight functions, including the implementation of a reliable transportation system for lab samples.

Transition work plan opportunities: *Providing funding for the Central Laboratory to test and implement alternative transportation arrangements for lab samples. Highlight the need for greater Central Laboratory autonomy at the highest political levels to raise performance.*

- c. High treatment drop-out could be mitigated by linking a larger share of those TB patients below the poverty line to social programs. Even though these individuals are currently prioritized, enrollment in the national program for low income families, *Progresando con Solidaridad*, is backlogged.

Transition work plan opportunities: *Providing training on reaching low-income individuals and linking them to social programs (joint initiative with the Vice Presidency).*

- d. Logistical and legal problems that currently prevent the PNCT from using the new GeneXpert machines need to be resolved.

Transition work plan opportunities: *Efforts are needed to ensure that these are installed and ready for use. Developing contingency plans for soon expiring cartridges also needs attention.*

In addition to quality, further attention should be placed in addressing inefficiencies as per the recommendations described in section 5.5.

6. Prevention: Public investment in prevention measures is currently very low. Both the TB and HIV programs rely heavily on GF investments to cover their prevention programs. Prevention strategies to promote healthy behaviors, provide information, and foster early detection and treatment are the most effective interventions to curb the impact of HIV and TB in the long term. Care for individuals in advanced stages of either disease affects their quality of life while demanding expenditures significantly higher than those intended for prevention tasks. The high dependence on GF monies for prevention, therefore requires a gradual and effective substitution plan to ensure that prevention activities remain fully financed. Increased government investment in supplies (including condoms) and prevention activities will help support a swift transition, strengthen the prevention efforts, and raise the viability of a sustainable future

for both diseases. In this regard, provision of condoms in all public hospitals and clinics is straightforward and deserves to be acted on immediately. Finally, bearing a larger share of the financial responsibility for treatment and care would also increase the incentives for the Social Security institutions to invest more in prevention in the future.

Transition work plan opportunities: *Developing a gradual and effective substitution plan to ensure that prevention activities remain fully financed, in particular, increasing funding for public condom provision. This substitution plan should be fully incorporated in the new National Strategic Plan.*

7. Procurement and Supply Chain: Important efficiency gains and cost savings have been realized drawing on pooled procurement mechanisms - using PROMESE-CAL - and by improving needs estimation through SUGEMI. Going forward, it would be important to (i) ensure that HIV drugs and supplies continue to be procured jointly even once ARS take on financial responsibility for PLHIV in their beneficiary populations; (ii) invest in building and strengthening institutional capacities in procurement, distribution, and management of HIV and TB drugs; (iii) consider using PROMESE-CAL for all HIV-related products; and (iv) continue using SUGEMI as a planning tool.

Transition work plan opportunities: *Structure an intra-institutional agreement on how ARVs for the Social Security system could be procured in the future. To avoid splitting purchases with associated rising costs procuring through CONAVIHSIDA/MSP offers a good option. ARSs could reimburse MSP using funds collected in the joint equalization fund.*

8. Data systems and usage: Improving data systems and the use of outputs would help strengthen services as it provides a stronger basis for management, oversight and coordination across the health care system. Specifically, the following could provide a range of benefits:

- a. Strengthening the data collection system and facilitate data upload on the local level to reduce processing times. Consider cellphone usage in rural settings.
- b. Aligning data collection between MSP and Social Security institutions to improve coordination and allow better management and financing.
- c. Identifying critical research areas that measure results and outcomes instead of processes and inputs.
- d. Using monitoring data for strategic decision making.
- e. Extending the use of key population registry beyond NGO use to generate better data on KP and facilitate tracking their progress towards 90-90-90.
- f. Linking information systems to laboratories to ensure timely access to test results.

Transition work plan opportunities: *Investing in laboratory information systems to enable connecting SAIs with laboratories.*

9. Assessing the options for continuation of the CCM's contribution to the national disease responses.

With the GF support gradually ending, the future of the CCM is uncertain. The CCM has been effective in assuring that service delivery CSOs and individuals representing key populations have a formal voice in decision-making within the HIV and TB response. If stakeholders decide to maintain this body after GF exit, funding options need to be identified. If the CCM were to be dissolved, one option would be to give CONAVIHSIDA additional funding and add seats for civil society. To address the issue of competition for inclusion into this body, CONAVIHSIDA could adopt the Mexican model where civil society participants

rotate on a regular basis ensuring participation of all interested parties without overwhelming the size of the coordinating body.

Transition work plan opportunities: *Assessing different options for future role of CCM and identifying alternative sources of funding.*

10. Social contracting: Enhance collaboration between The Center and MSP to activate the existing social contracting policy for use in HIV prevention. The following specific steps are recommended for implementation:

- a. Conduct joint work between The Center and Ministry of Public Health to establish a streamlined mechanism for registering CSOs.
- b. Define and budget the activities and projects that will be implemented by the CSOs, and assure allocations in budget of the Ministry of Public Health.
- c. Train the personnel in charge of the TB and HIV programs on The Center's process for development of public calls, and supervision of contracts.
- d. Conduct a round of pilot public calls, and monitor process. Refine as needed.

These steps will need to be complemented by CSO capacity building, as further described below.

11. CSO capacity: Train CSOs on how to participate in the contracting process. CSOs will need to be trained by government officials (hopefully a collaborative effort between The Center and MSP officials) to participate in understand the tender process, participate in successful proposal development, undergo the contracting process, and successfully monitor and report on results. Depending on the complexity of the system and the capacity of both the CSOs and the trainers, some outside assistance may be required to assure that basic elements such as proposal development and reliable monitoring and reporting are adequately covered. It should be expected that this training should be made available at least once per tender cycle, in order for new organizations (or new staff members) to take part in calls.

12. CSO capacity: Support smaller CSOs to build basic capacity for project planning, management and monitoring. While the GF's clustering approach has been beneficial for collaboration within the CSO community, it has left some CSOs under-capacitated in their ability for basic project management as well as costing of services. While it is not necessarily the case that all existing organizations must be sustained and brought to the level of being able to independently manage projects, it is clear that some organizations will require additional capacity building in order to assure that they can appropriately develop proposals for, implement, and monitor projects with domestic funding. Special attention should be given to assure that a range of CSOs working with different populations is included in any capacity building efforts. Co-management agreements already exist with some CSOs, to provide community service centers with personnel and inputs, so that the organizations expand service provision; these agreements are a basis for a social contracting processes that include transfer of resources and not only in kind.

13. NGO financing: Assist CSOs in exploring alternative income generation and resource diversification models. The DR is a country with significant tourism and natural resources to draw on, and as such may be an ideal place to explore social enterprise models. In addition, organizations may need to form stronger ties to regional networks and umbrella organizations, which may have funding opportunities available.

These diversified opportunities should be seen not as a primary way of funding services, but rather as a way to obtain complementary funding for advocacy, communications, experimental programming (e.g. new or innovative support services) and many of the core functions which are often not able to be funded through government funding. It is recommended that the NGO Coalition be a primary focus of this capacity-building, as the Coalition is a space of articulation of CSOs, which includes networks of people, youth organizations of national scope, among others; however other networks or associations of CSO can be considered for inclusion in this process.

14. Combatting stigma and discrimination: Develop a comprehensive, multi-sectoral plan to address stigma and discrimination and enforce Law 135-11 about HIV-AIDS. MSP must take responsibility for enforcing this law, including developing and applying appropriate sanctions for violations. However, civil society must also be engaged in this process; ideally, civil society actors would be both part of developing an official, government-owned incident reporting system, and also in helping to sensitize MSP staff through training and supportive supervision. This will need to be an ongoing effort, which will require designated funding for MSP, and may also be a service to be specifically contracted to CSOs through social contracting.

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10. Appendix

Appendix 1. List of Stakeholders consulted

- Mecanismo de Coordinación del País
- Fondo Mundial
- PNUD
- MSP
- ONUSIDA
- PNCT-MSP
- CONAVIHSIDA
- IDCP
- UEP-MSP
- USAID
- COALICION ONG-SIDA
- MCP-RD
- Mesa Técnica de M&E (VIH)
- Mesa Técnica de M&E (TB)
- DIGECITSS
- SNS
- Departamento de Formulación y Evaluación de Presupuesto y Proyectos de Inversión y Finanzas del Ministerio de Salud
- Ministerio de Economía, Planificación y Desarrollo (MEPyD)
- Centro Nacional de Fomento y Promoción de las Asociaciones sin fines de lucro.
- PROGRAMA NACIONAL VIH
- Ministro de Hacienda.
- Red Jóvenes
- TRANSSA
- COOVIDA
- MOSTCHA
- CIAC
- ASODENAT
- ASOLSIDA
- MODEMU
- PEPFAR
- CDC
- PNUD
- OPS
- Dirección de Prisiones
- Dirección de compras y suministros de Salud
- Dirección del Seguro Nacional de Salud (SENASA),
- Superintendencia de Salud y Riesgos Laborales (SISALRIL)
- Laboratorio Nacional de Salud Pública "Dr. Defilló" (LNSPDD)
- Tesorería Nacional
- Contraloría General de la República
- Comisión Salud Cámara Diputados
- Ministerio de Trabajo
- Grupo de auto ayuda Amigos Siempre Amigos (ASA)
- Centro de Promoción y Solidaridad Humana (CEPROSH)
- Progresando con Solidaridad (PROSOLY)
- Red Dominicana de Personas que viven VIH (REDOVIH+)
- Colectiva Mujer y Salud)
- Hospital Santo Socorro
- Agente Local del Fondo Mundial – Price waterhouse Coopers

Appendix 2: Current HIV and TB Grants (Signed grant agreements budgets)

Table A2.1: Financial Details of HIV Grant DOM-H-CONAVIH - Budget by Module

Module	Amount Allocated (\$US)			
	Year 1	Year 2	Year 3	Total
Prevention: MSM, Transgender	123,734	175,966	191,265	490,965 [5.7%]
Prevention: Sex Workers & Clients	142,196	146,955	161,987	451,139 [5.2%]
Prevention: Other Vulnerable Populations	259,523	290,814	306,596	856,933 [9.8%]
Treatment, Care & Support	1,320,022	1,096,858	999,087	3,415,967 [39.5%]
Monitoring & Evaluation	583,574	318,596	376,515	1,278,686 [14.7%]
Eliminating Legal Barriers to Access	189,730	89,205	97,655	376,590 [4.4%]
Strengthening Community Systems	113,715	100,975	104,335	319,025 [3.7%]
Program Management	290,013	250,635	289,847	830,495 [9.6%]
Other	639,548	0	0	629,458 [7.4%]
Total	3,662,056	2,470,003	2,527,288	8,659,346 [100%]

Table A2.2: Financial Details of HIV Grant DOM-H-CONAVIH - Budget by Cost Category

Cost Grouping	Amount Allocated (\$US)			
	Year 1	Year 2	Year 3	Total
1.0 Human Resources	558,423	566,799	659,300	1,784,522 [20.6%]
2.0 Travel Related Costs	493,340	534,666	537,658	1,565,664 [18%]
3.0 External Professional Services	598,228	128,931	91,442	818,601 [9.4%]
4.0 Health Products - Pharmaceutical Products	639,548	0	0	639,548 [7.4%]
5.0 Health Products - Non-Pharmaceuticals	294,965	330,234	351,413	976,612 [11.2%]
6.0 Health Products - Equipment	151,375	26,491	5,233	183,099 [2.1%]
7.0 Procurement & Supply-Chain Management costs	16,913	14,729	18,435	50,077 [0.7%]
8.0 Infrastructure	9,496	264	268	10,028 [0.1%]
9.0 Non-Health Equipment	58,211	10,765	10,924	79,901 [0.8%]
10.0 Communication Material & Publications (CMP)	47,058	33,850	34,312	115,221 [1.4%]
11.0 Program Administration costs	30,672	31,132	31,592	93,395 [1.1%]
12.0 Living Support to Client/Target Population	763,827	792,142	786,710	2,342,679 [27.2%]
Total	3,662,056	2,470,003	2,527,288	8,659,346 [100%]

Table A2.3: Financial Details of HIV Grant DOM-H-CONAVIH - Budget by Recipient

PR/Sub-Recipient	Amount Allocated (\$US)
Consejo Nacional para el VIH y el SIDA	4,639,364
Grupo De Auto Ayuda Amigos Siempre Amigos (ASA)	813,410
Cicatelli Associates Incorporated (CAI)	145,425
Centro De Promoción Y Solidaridad Humana (CEPROSH)	82,565
C. De Orientación E Investigación Integral (COIN)	177,641
Movimiento Socio-Cultural Para Los Trabajadores Haitianos (MOSCTHA)	220,366
Fundación Sur Futuro	57,641
Gabinete de Coordinación de Políticas Sociales (GCPS)	66,810
Asociación Dominicana Pro-Bienestar De La Familia (PROFAMILIA)	268,928
Red Dominicana De Personas Que Viven Con VIH/SIDA (REDOVIH+)	495,129
Instituto Nacional De La Salud (INSALUD)	27,940
Servicio Nacional de Salud (SNS)	937,746
Laboratorio Nacional de Referencia	339,950
Dirección General de Control de Infecciones de Transmisión Sexual y SIDA (DIGECITSS)	187,692
Asociación De Mujeres Para El Desarrollo De San Juan De La Maguana (ASODEMUSA)	198,740

Table A2.4: Financial Details of HIV Grant DOM-H-IDCP - Budget by Module

Module	Amount Allocated (\$US)			
	Year 1	Year 2	Year 3	Total
Prevention: MSM, Transgender	592,635	806,450	870,011	2,269,096 [23.5%]
Prevention: Sex Workers & Clients	572,219	588,863	604,662	1,765,744 [18.3%]
Prevention: Other Vulnerable Populations	712,134	884,733	929,152	2,526,019 [26.1%]
Treatment, Care & Support	511,738	525,140	531,635	1,568,513 [16.2%]
Monitoring & Evaluation	50,528	51,286	61,303	163,118 [1.7%]
Eliminating Legal Barriers to Access	0	0	0	0 [0%]
Strengthening Community Systems	184,047	191,075	201,279	576,401 [5.9%]
Program Management	254,134	253,320	291,863	799,317 [8.3%]
Total	2,877,435	3,300,867	3,489,906	9,668,208 [100%]

Table A2.5: Financial Details of HIV Grant DOM-H-IDCP - Budget by Cost Category

Cost Grouping	Amount Allocated (\$US)			
	Year 1	Year 2	Year 3	Total
1.0 Human Resources (HR)	895,754	1,023,611	1,141,232	3,060,597 [31.7%]
2.0 Travel Related Costs	919,970	1,103,677	1,149,557	3,173,205 [32.8%]
3.0 External Professional Services	221,039	224,355	227,670	673,064 [7.0%]
4.0 Health Products - Pharmaceutical Products	0	0	0	0 [0%]

5.o Health Products - Non-Pharmaceuticals	404,388	489,939	509,593	1,403,920 [14.5%]
6.o Health Products - Equipment	0	0	0	0 [0%]
7.o Procurement & Supply-Chain Management costs	95,458	115,657	120,297	331,413 [3.4%]
8.o Infrastructure	0	0	0	0 [0%]
9.o Non-Health Equipment	20,618	16,300	16,541	53,459 [0.6%]
10.o Communication Material & Publications	83,044	94,541	95,883	273,467 [2.8%]
11.o Program Administration costs	106,191	107,784	109,377	323,351 [3.3%]
12.o Living Support to Client/Target Population	130,973	125,003	119,755	375,731 3.9%
13.o Results-Based Financing (RBF)	0	0	0	0 [0%]
Total	2,877,435	3,300,867	3,489,906	9,668,208 [100%]

Table A2.6: Financial Details of HIV Grant DOM-H-IDCP - Budget by Recipient

PR/Sub-Recipient	Amount Allocated (\$US)
Instituto Dermatológico y Cirugía de Piel	4,072,171
Grupo De Auto Ayuda Amigos Siempre Amigos (ASA)	1,057,916
Cicatelli Associates Incorporated (CAI)	122,600
Centro De Promoción Y Solidaridad Humana (CEPROSH)	283,341
C. De Orientación E Investigación Integral (COIN)	973,177
Movimiento Socio-Cultural Para Los Trabajadores Haitianos (MOSCTHA)	1,063,982
Fundación Sur Futuro	452,457
Gabinete de Coordinación de Políticas Sociales (GCPS)	233,330
Asociación Dominicana Pro-Bienestar De La Familia (PROFAMILIA)	299,201
Red Dominicana De Personas Que Viven Con VIH/SIDA (REDOVIH+)	550,855
Instituto Nacional De La Salud (INSALUD)	428,488
Servicio Nacional de Salud (SNS)	118,213
Laboratorio Nacional de Referencia	8,137
Dirección General de Control de Infecciones de Transmisión Sexual y SIDA (DIGECITSS)	4,340

Table A2.7: Estimated Coverage of Populations with Minimum Prevention Package and by the GF

Population	Estimated Population Size	Covered by Minimum Prevention Package	% Coverage	Covered by the GF	% Coverage
MSM	129,099	75,112	58.2%	62,701	48.6%
TG	3,900	3,404	87.3%	2,488	63.8%
SWs	97,758	58,493	59.8%	58,493	59.8%
Haitian Migrants	94,504	61,272	64.8%	42,898	45.4%
Socially Vulnerable Women in Bateyes	52,582	40,197	76.4%	40,197	76.4%
PDL	18,679	5,065	27.1%	0	0%
Drug Users	59,632	4,252	7.1%	0	0%
Pregnant Women	198,072	175,116	88.4%	0	0%
General Population	5,520,512	506,794	9.18%	0	0%

Source: MSP (2017f)

Table A2.8: Financial Details of TB Grant DOM-T-MSPAS - Budget by Module

Module	Amount Allocated (\$US)			
	Year 1	Year 2	Year 3	Total
TB Prevention & Care	2,121,577	1,672,564	1,544,080	5,338,221 [63.8%]
HIV/TB	113,800	180,367	162,420	456,587 [5.5%]
MDR-TB Packet	752,183	229,673	246,986	1,228,842 [14.7%]
Monitoring & Evaluation	0	250,000	0	250,000 [2.9%]
Program Management	376,312	369,454	354,194	1,099,960 [13.1%]
Total	3,363,872	2,702,058	2,307,680	8,373,610 [100%]

Table A2.9: Financial Details of TB Grant DOM-T-MSPAS - Budget by Cost Category

Cost Grouping	Amount Allocated (\$US)			
	Year 1	Year 2	Year 3	Total
1.0 Human Resources	352,963	370,359	358,991	1,082,312 [13.0%]
2.0 Travel Related Costs	1,084,035	1,047,668	984,531	3,116,234 [37.2%]
3.0 External Professional Services	769,477	955,609	680,339	2,405,426 [28.7%]
4.0 Health Products - Pharmaceutical Products	0	0	0	0 [0%]
5.0 Health Products - Non-Pharmaceuticals	118,002	75,718	84,950	278,670 [3.3%]
6.0 Health Products - Equipment (HPE)	375,263	7,222	7,222	389,707 [4.7%]
7.0 Procurement & Supply-Chain Management costs	49,473	8,715	9,656	67,844 [0.8%]
8.0 Infrastructure	216,036	0	0	216,036 [2.6%]
9.0 Non-Health Equipment	251,822	63,287	42,214	357,322 [4.3%]
10.0 Communication Material & Publications	51,613	74,648	39,463	165,725 [2.0%]
11.0 Program Administration costs	26,816	24,916	25,290	77,021 [0.9%]
12.0 Living Support to Client/ Target Population	68,373	73,916	75,024	217,314 [2.6%]
13.0 Results-Based Financing (RBF)	0	0	0	0 [0%]
Total	3,363,872	2,702,058	2,307,680	8,373,610 [100%]

Table A2.10: Financial Details of TB Grant DOM-T-MSPAS - Budget by Recipient

PR/Sub-Recipient	Amount Allocated (\$US)
Sub-Secretaria de Estado de Salud Colectiva, MSP	0
UEP-FM/PNCT	5,342,131
SRS	619,407
DPS/DMS	541,384

DIGECITSS	341,951
DIGEPI	199,269
LNSPDD	133,107
NGO	1,196,361

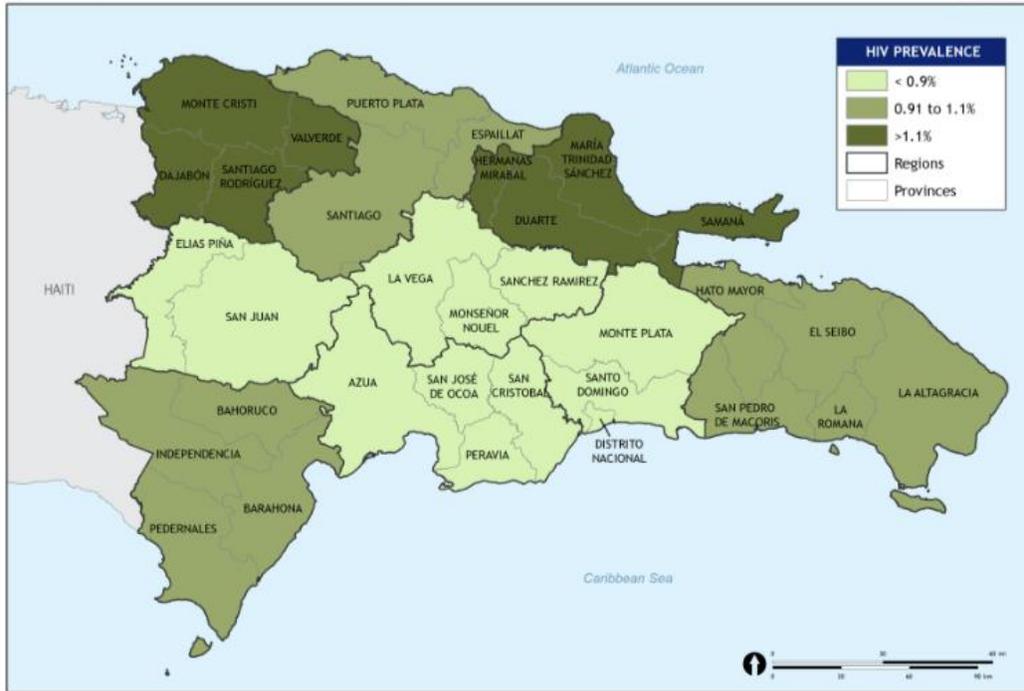
Table A2.11: GF Funding for Essential Services for HIV and TB: Percent Contribution and 3 Year Funding Projections (US\$)

	Annual average investment	3-Year funding projections	% GF contribution/total
HIV			
ARVs	0	0	0%
Viral Load	N/A	N/A	N/A
CD4	0	0	0%
TB			
LAB TB & MDR TB diagnosis	130,326	390,978	100%
First line drugs	0	0	0%
Second line drugs	0	0	0%

Source: GF List of Essential Services in LAC

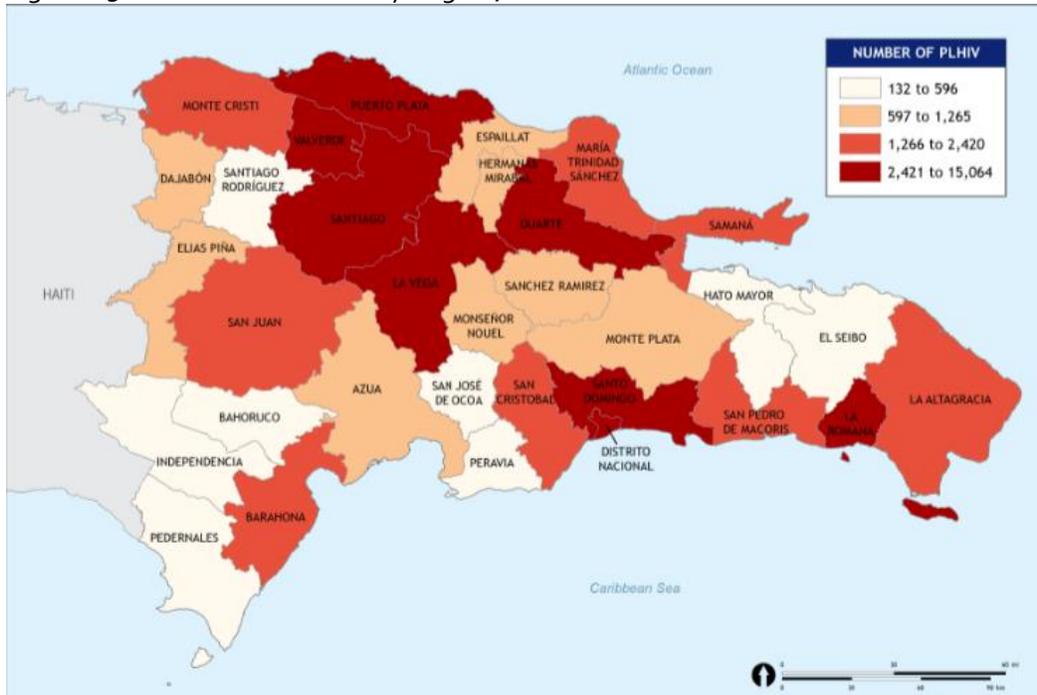
Appendix 3: Additional Epidemiological Data

Figure A3.1: HIV Prevalence by Region, 2016



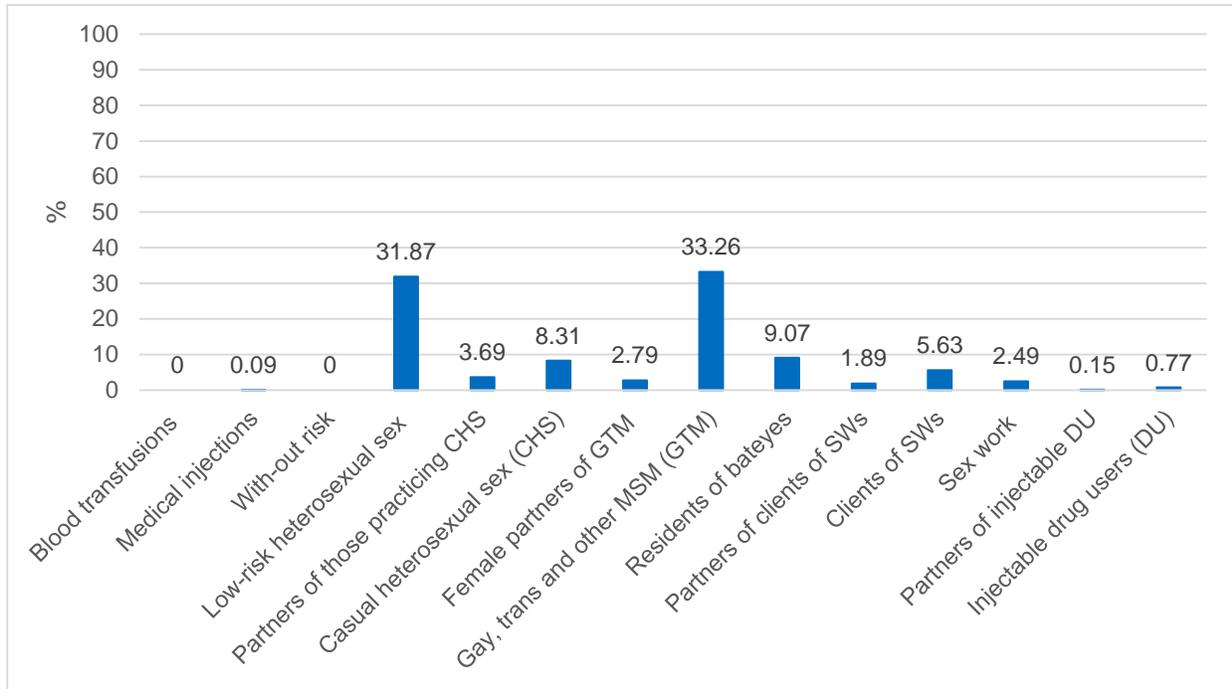
Source: PEPFAR (2016b)

Figure A3.2: Number of PLHIV by Region, 2016



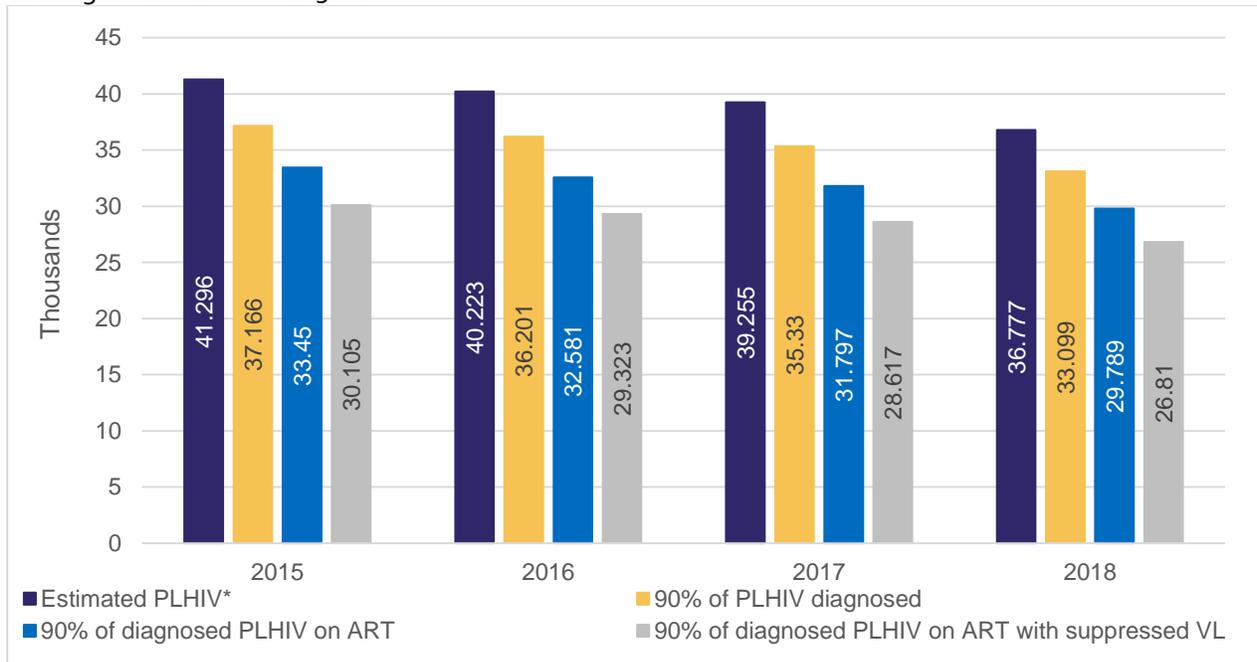
Source: PEPFAR (2016b)

Figure A3.3: Results of the 2010 Modes of Transmission (MOT) Study



Source: COPRESIDA (2010)

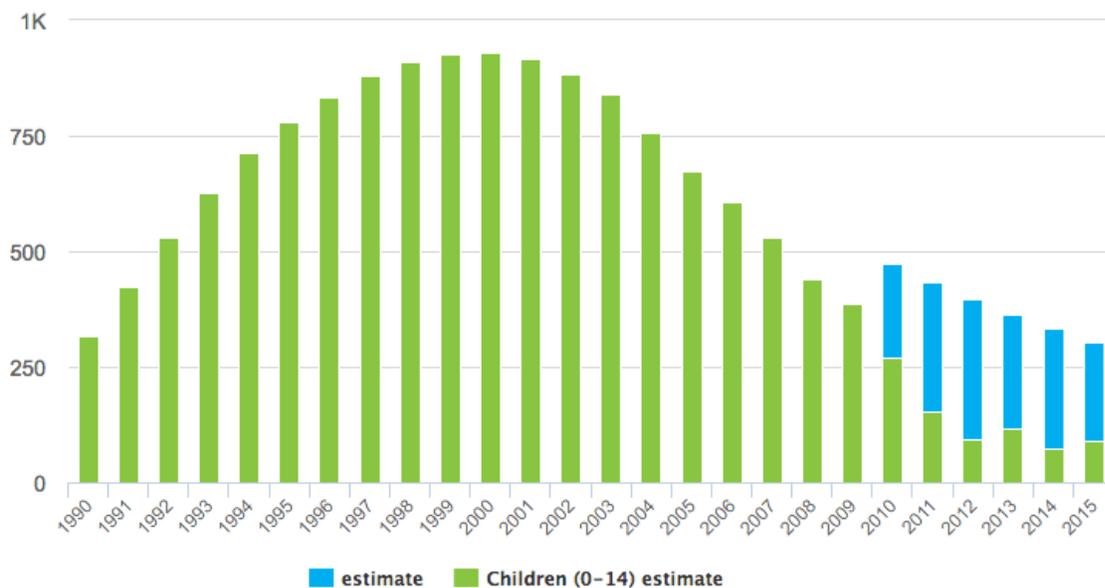
Figure A3.4: MSP 90-90-90 Targets based on Projections of Estimated PLHIV as Reflected in National Strategic Plan for HIV 2015-2018*



Source: Valdez et al. (2017b)

*Note: These estimates for number of PLHIV do not match numbers from other government sources, indicating issues with data verification and coherence across sources.

Figure A3.5: Number of New HIV Child Infections vs. Number of Infections Averted due to Prevention of MTCT



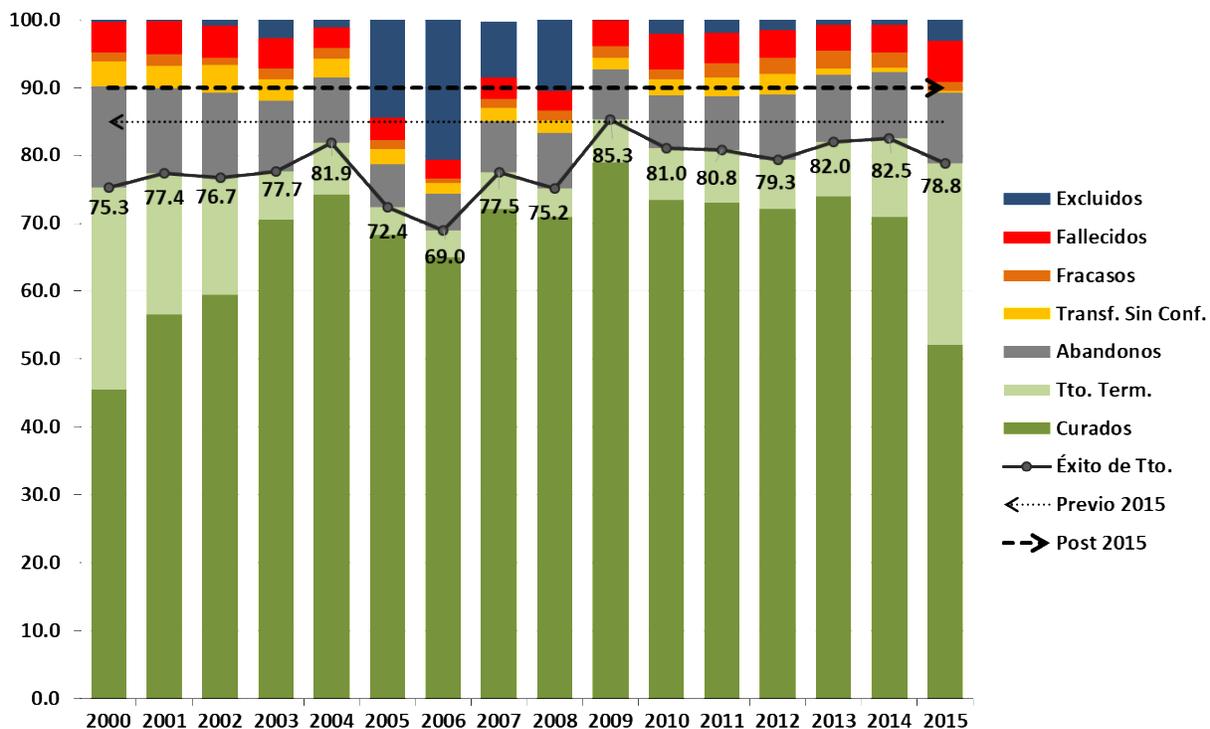
Source: UNAIDS Aidsinfo Online Database (2017)

Table A3.1: Number of Notified TB Cases by Health Service Provider, 2012-2016

Institution	2012		2013		2014		2015		2016	
	Cases	%								
MSP	3,706	83.5%	3,821	81.9%	3,803	82.6%	4,394	93.8%	4,169	93.5%
NGO	498	11.2%	547	11.7%	480	10.4%	49	1.0%	42	0.9%
Prisons	207	4.7%	268	5.7%	272	5.9%	222	4.7%	216	4.8%
Fuerzas Armadas	12	0.3%	11	0.2%	18	0.4%	2	0.0%	4	0.1%
Private	9	0.2%	12	0.3%	30	0.7%	15	0.3%	29	0.7%
IDSS	6	0.1%	4	0.1%	2	0.0%	0	0.0%	0	0.0%
Total	4,438	100.0%	4,663	100.0%	4,605	100.0%	4,682	100.0%	4,446	100.0%

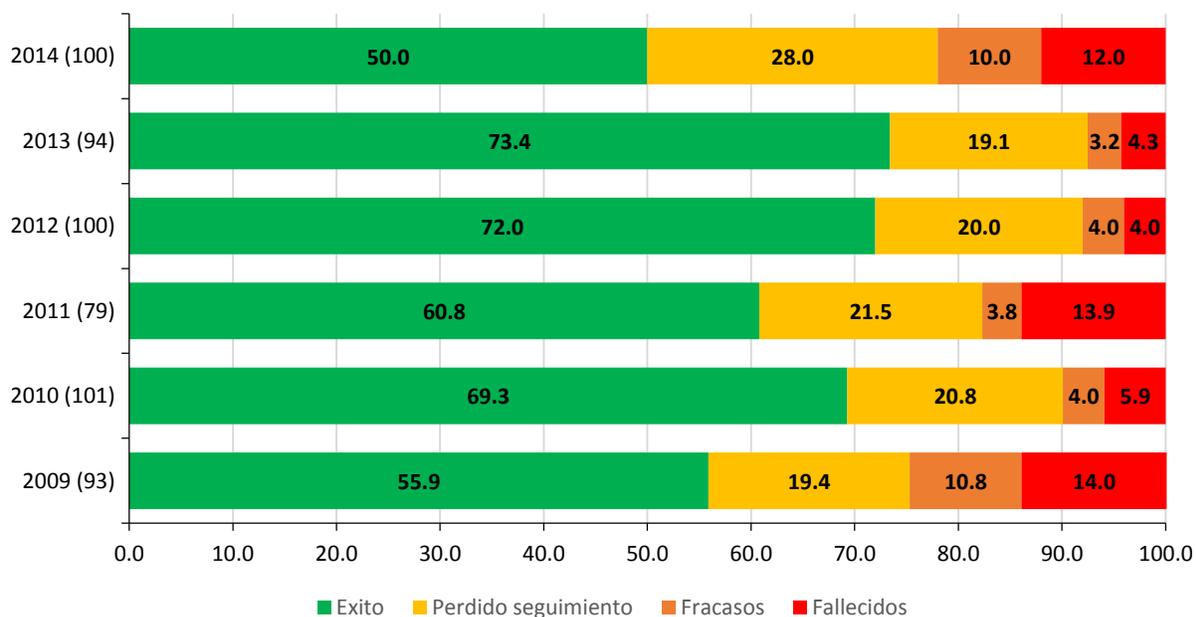
Source: MSP (2017e)

Figure A3.6: Treatment Outcomes for New TB BK+ Cases, 2010-2015



Source: MSP (2017e)

Figure A3.7: Treatment Results for RR/MDR-TB Cohorts, 2009-2014



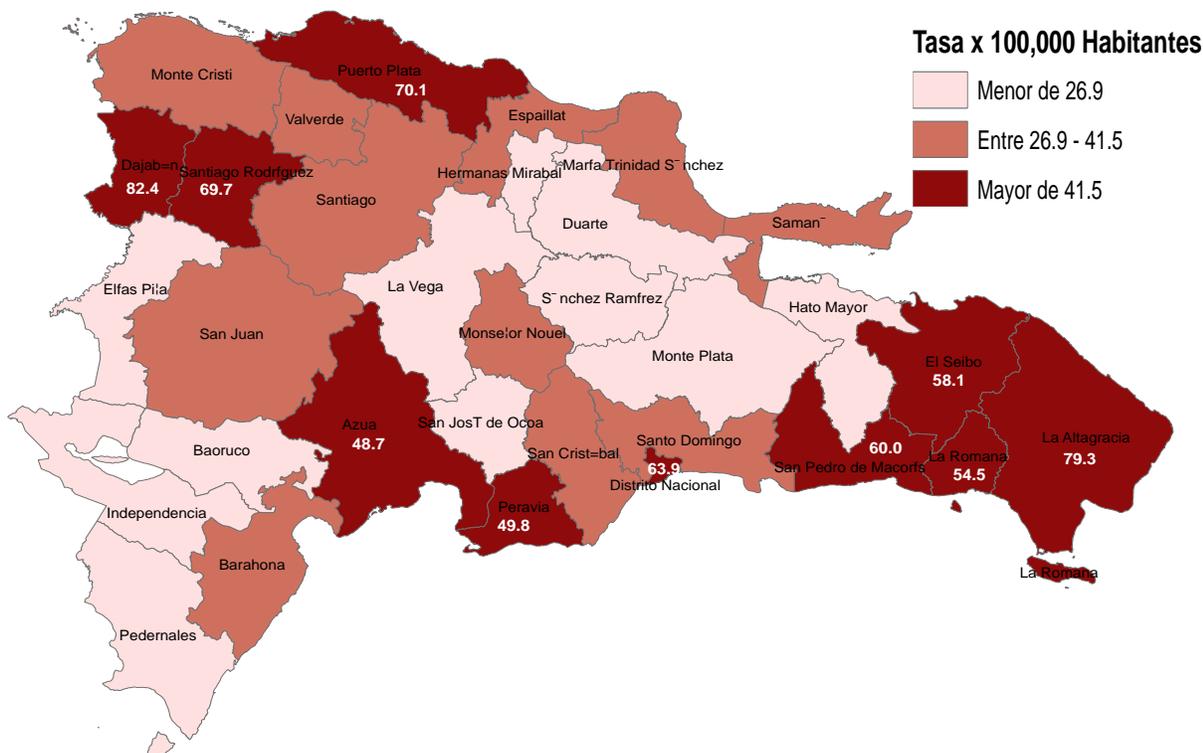
Source: MSP (2017e)

Table A3.2: TB Cases Notified through the SIOE, by SRS, 2016

Region	TB Cases Reported	%
SRS—Región 0 Metropolitano	1,928	43.2%
SRS—Región 1 Valdesia	318	7.1%
SRS—Región 2 Norcentral	668	15.0%
SRS—Región 3 Nordeste	147	3.3%
SRS—Región 4 Enriquillo	109	2.4%
SRS—Región 5 Este	692	15.5%
SRS—Región 6 El Valle	203	4.5%
SRS—Región 7 Cibao Occidental	211	4.7%
SRS—Región 8 Cibao Central	186	4.2%
Total	4,462	100.0%

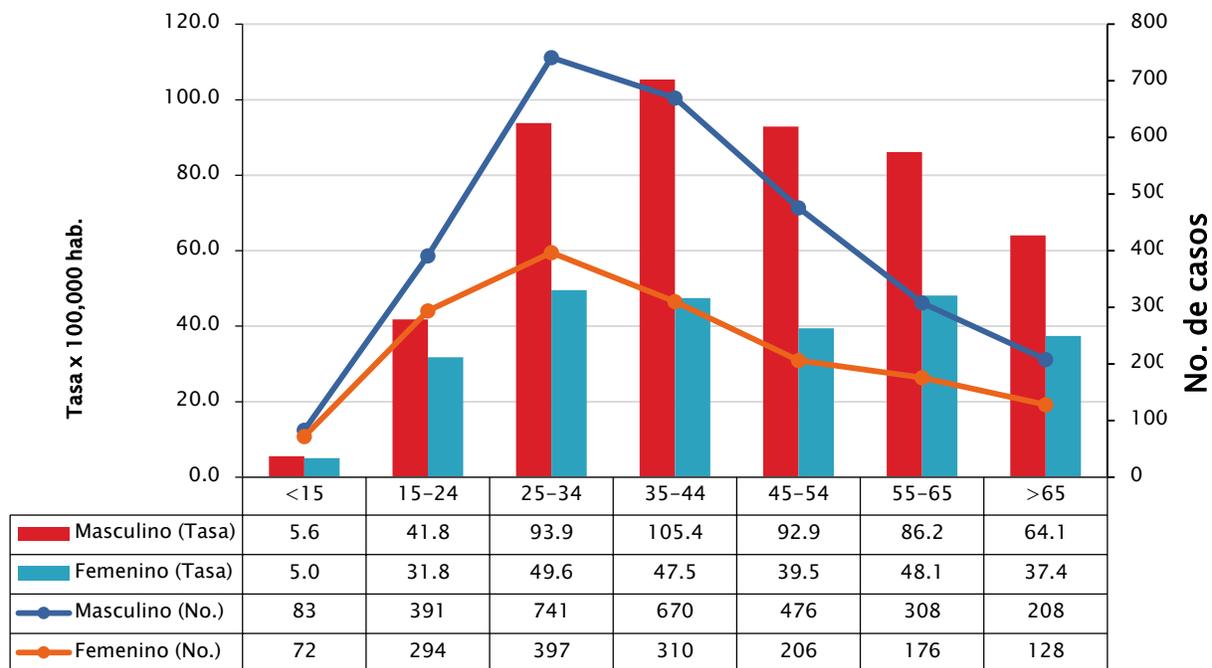
Source: MSP (2017d)

Figure A3.8: Incidence of TB by Province, 2016



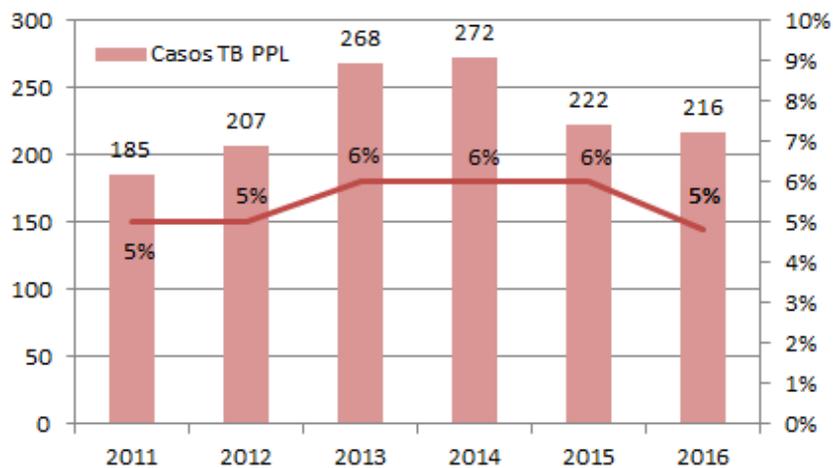
Source: MSP (2017e)

Figure A3.9: Rate of TB by Age and Sex (all forms), 2016



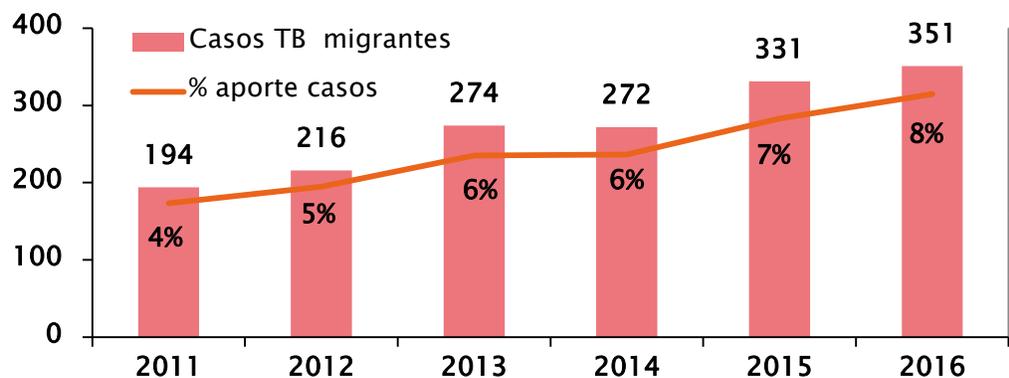
Source: MSP (2017e)

Figure A3.10: Number of New TB Cases in PDL and as a Percentage of Total New Cases, 2011-2016



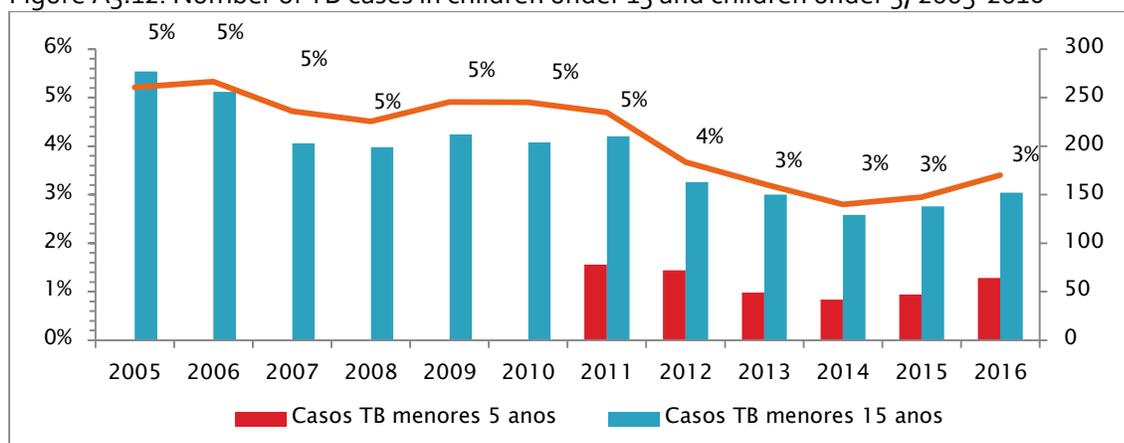
Source: MSP (2017e)

Figure A3.11: Number of New TB Cases in Haitian Migrants and as a Percentage of Total New Cases, 2011-2016



Source: MSP (2017e)

Figure A3.12: Number of TB cases in children under 15 and children under 5, 2005-2016



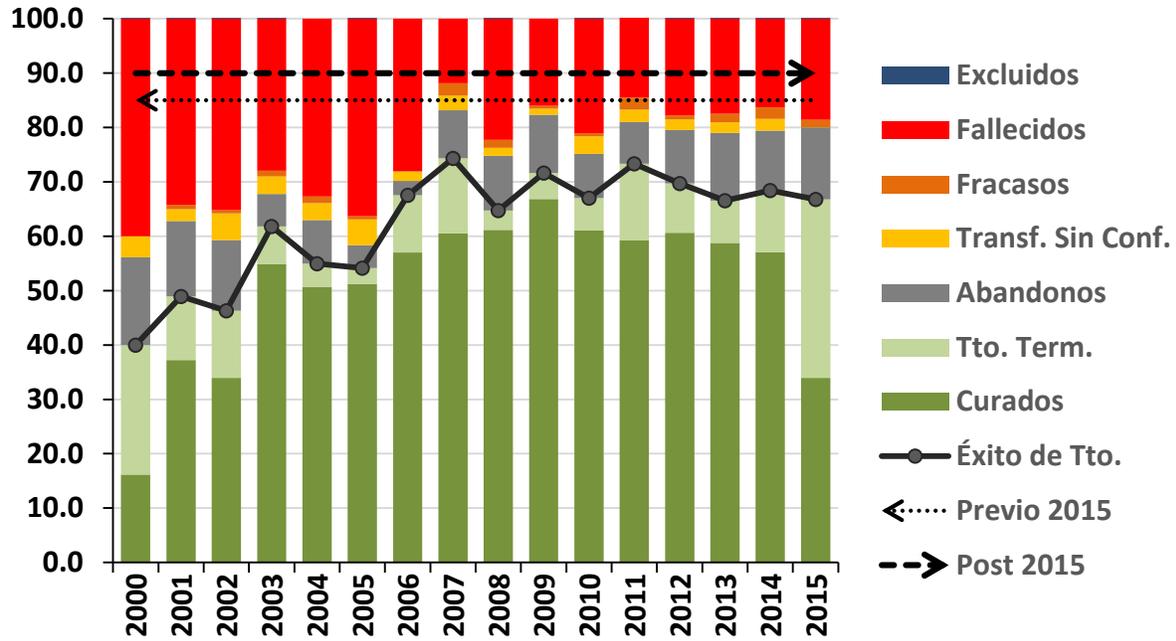
Source: MSP (2017e)

Table A3.3 Number of Incident TB Cases in Prioritized Provinces, 2016

#	Province	Number of cases	% of all cases	Cumulative %
1	SANTO DOMINGO	1198	27%	27%
2	DISTRITO NACIONAL	692	16%	42%
3	SANTIAGO	360	8%	50%
4	LA ALTAGRACIA	278	6%	57%
5	PUERTO PLATA	239	5%	62%
6	SAN CRISTOBAL	205	5%	67%
7	SAN PEDRO DE MACORIS	188	4%	71%
8	LA ROMANA	149	3%	74%
9	LA VEGA	109	2%	77%
10	AZUA	108	2%	79%
11	PERAVIA	99	2%	81%
	PRIORITIZED PROVINCES	3625	81%	
	OTHER PROVINCES	835	19%	19%
	TOTAL	4460	100%	100%

Source: MSP (2017e)

Figure A3.13: Treatment Outcomes for Cohorts with HIV/TB Co-infection, 2000-2015



Source: MSP (2017e)

Appendix 4: 2016 PEFA Results for the Dominican Republic

I. Credibility of the budget		
ID-1	Aggregate expenditure outturn	A
ID-2	Composition of the deviations from the budget expenditure compared to approved original budget	B+
ID-3	Revenue outturn	B+
II. Transparency of public finances		
ID-4	Budget classification	A
ID-5	Budget documentation	B
ID-6	Government operations not included in budget reports.	D+
ID-7	Transfers to subnational governments	A
ID-8	Supervision of aggregate fiscal risk caused by other public sector entities	C
ID-9	Public access to fiscal Information	A
III. Management of assets and liabilities		
ID-10	Fiscal risk reporting	D
ID-11	Public investment management	C+
ID-12	Public asset management	D+
ID-13	Debt management	B+
IV. Policy-based fiscal strategy and budgeting		
ID-14	Macroeconomic and fiscal forecasting	C
ID-15	Fiscal strategy	C
ID-16	Medium term perspective in expenditure budgeting	C
ID-17	Budget preparation process	C+
ID-18	Legislative scrutiny of budgets	D+
V. Predictability and control of budget execution		
ID-19	Revenue administration	C+
ID-20	Accounting for revenues	C+
ID-21	Predictability of in-year resource allocation	B+
ID-22	Expenditure arrears	D+
ID-23	Payroll controls	C+
ID-24	Procurement	B
ID-25	Internal controls on non-salary expenditure	B
ID-26	Internal audit effectiveness	D
VI. Accountability and reporting		
ID-27	Financial data integrity	B
ID-28	In-year budget reports	C+
ID-29	Annual financial reports	B+
VII. Scrutiny and external audit		
ID-30	External audit	D+
ID-31	Legislative scrutiny of audit reports	D

Appendix 5: Gaps in HIV Testing Coverage 2013-2016

Population Group	Achievement 2013	% of Target 2013	Achievement 2014	% of Target 2014	Achievement 2015	% of Target 2015	Achievement 2016	% of Target 2016
General Population	244,535	87.3%	320,964	91.7%	279,007	93.0%	315,814	70.2%
Pregnant women	159,472	93.8%	146,954	98.0%	105,299	100.3%	126,478	70.3%
MSM	-	-	-	-	7,264	116.1%	62,701	98.1%
TG	-	-	-	-	983	186.9%	2,488	100.6%
SWs	12,672	-	16,022	-	43,011	113.2%	57,615	99.1%
Haitian migrants	-	-	-	-	17,955	114.0%	41,830	98.0%
Socially vulnerable women in bateyes	-	-	-	-	4,269	246.5%	40,197	101.9%
Residents of bateyes	27,398	91.3%	28,211	80.6%	28,292	108.8%	15,422	77.1%
Drug users	6,282	104.7%	6,682	111.4%	6,481	129.6%	3,011	75.3%
PDL	10,007	105.3%	10,045	100.5%	8,102	108.0%	4,982	76.6%
Women with little education	14,143	94.3%	15,805	105.4%	2,144	107.2%	1,875	37.5%

Source: Programa Nacional de VIH 2017 (an excel sheet provided by the PNVIH to consultants); they sourced data from "Reportes administrativos ONGs"; "Productividad de los Servicios de Salud de la Red Pública"; "Reportes administrativos Dirección General de Prisiones

Appendix 6: Overview of Analysis of Social Contracting

No.	Question	Analysis/Recommendations
Section 6. Analysis and Prioritization		
1	What is going well in terms of government funding of CSOs? What precedents are in place for social contracting or similar mechanisms? What are the possibilities for replication or scale-up?	<p>There is existing legislation to allow government funding of non-profit, non-governmental organizations to provide services. However, this legislation was developed 9 years ago, and has not been adequately implemented; the current government has the will to implement and it's strengthening the responsible entity.</p> <p>The National Center for Development and Promotion of Non-Profit Associations (Centro para el fomento de actividades de las asociaciones sin fines de lucro) is attached to the Ministry of Economy, Planning and Development, so it is oriented around the appropriate and planned use of public resources, with a focus on the development and contribution of the community sector. The Center has previous social contracting experiences, however, all previous funding was awarded from general government budget funds (not through specific ministries), in response to CSO proposals. No open-call processes, with designated ministerial funds, have been conducted to date. The Center is currently undertaking the necessary processes to update its database to be able to carry out the process of registration of organizations to carry out public calls based on the needs of various Ministries.</p> <p>The Center maintains a virtual platform supported by the World Bank, which allows them to modernize and scale-up their procedures in an expeditious and transparent way.</p>
2	What specific barriers have been found to full and/or effective implementation of social contracting?	
2a	By category:	
	o Legal	The legal framework is adequate, and has been previously used in other fields to implement social contracts.
	o Structural (administrative, bureaucracy, lack of momentum/inertia)	CSOs report difficulties in obtaining the necessary documentation to be authorized by the Center, and thus struggle to comply with current legislation and participate in public calls. Therefore, it is necessary to support the Center in streamlining this bureaucratic process. A process of reduction of procedures and dialogue with the authorities of government responsible for issuing the documentation may facilitate this processes.

	<ul style="list-style-type: none"> o Political will 	<p>The primary challenge for social contracting implementation is to maintain the current political will and promote the support and vigilance of the community sector so that the processes are participatory and transparent. Compliance with CONAVIHSIDA regulations is also important, because it is the lead agency for HIV, but because of the high rank of its constituents (Ministers) it does not meet in full with the frequency that the law requires; meetings are regularly convened with Representatives with no capacity for decision-making. Therefore, social contracting processes can be hampered if CONAVIHSIDA does not operate proactively in collaboration with The Center to resolve coordination issues.</p>
	<ul style="list-style-type: none"> o Technical/capacity 	<p>The Center has no experience or technical capacity regarding specific calls for responses to TB and HIV, and the corresponding programs require the development of call for processes that include technical supervision to promote effective and cost-effective projects. For this, close collaboration with CONAVIHSIDA will be needed, as noted above.</p> <p>In addition, many CSOs - particularly smaller and newer CSOs currently engaged in grassroots outreach through clustering with GF funding - will need to enhance their capacity to design, implement and monitor projects through the full cycle.</p>
	<ul style="list-style-type: none"> o Resources (financing, human resources, etc) 	<p>To date, there have been no Ministry of Public Health funds which have been budgeted, allocated or disbursed specifically for CSOs serving key populations with HIV services. While there appears to be political will to do so, this will need to be realized first during the budget planning process, in order to make it possible for these funds to be activated.</p>
2b	<p>Are there specific populations which are affected more than others by these barriers?</p>	<p>There is no legal reason for specific populations, or CSOs working with them, to be more affected by any barriers. However, given the strong role of conservative society, it will be imperative to assure that CSOs serving particularly politically- or socially-unpopular populations (especially MSM and TRANS) are not quietly excluded from participation through disproportionate bureaucracy or refusal of officials to process their paperwork.</p>

2c	Which parties are involved in these barriers? Who needs to be targeted for change?	Government entities that issue necessary documentation for both the registration and the habilitation of the CSOs to reduce the procedures in this regard; The TB and HIV programs so that they can improve their capacities to issue public calls and perform the necessary supervision and the Center to develop the necessary procedures for the specific response to these diseases; CSOs so that they can be enabled (habilitated) by both the Center and the Ministry of Health as well as improve their technical capacities, as well as to advocate to maintain the political will.
2d	What needs to change to remove those barriers?	<p>The primary task is to reduce or simplify the process of registering CSOs with The Center and the appropriate Ministry. This will require The Center and at least the Ministry of Public Health working closely to establish a minimally-burdensome process; a single-window filing process would be ideal.</p> <p>In addition, The Center will need to build some capacity for understanding the specificities of social contracting in relation to TB and HIV; however, this may be done quite simply by hiring or training one designated staff member.</p> <p>CONAVIHSIDA will also need to develop bureaucratic capacity in developing TB and HIV programs to develop public calls and monitor project implementation. Likewise, many CSOs funded under GF will need to build significant project planning, implementation and monitoring capacity; and all CSOs will need to become familiar with tender and contracting process.</p>
2e	What assistance is needed to make those changes? Who needs this assistance?	<p>Technical assistance will be needed targeting three different bodies/groups: The Center, the Ministry of Public Health, and civil society - all as described above.</p> <p>For CSO assistance, there should be two tracks of technical assistance: one that focuses simply on building familiarity with the contracting system, so that larger, more established CSOs such as COIN can use their significant capacity to apply for new streams of funding; and a second track which focuses on building the basic project management capacity of smaller, more outreach-oriented CSO.</p>

3	What recommendations can be made to improve social contracting?	
3a	What concrete changes should be made?	<p>Provide technical support as described in detail above.</p> <p>In addition, there will need to be an effort to initiate the process of registering CSOs providing TB and HIV services with both the Ministry of Public Health and The Center. CONAVIHSIDA and CONACO will need to work to define activities which will be funded, and secure budgetary support for these activities.</p>
3b	What could be the motivations for the government to make these changes?*	<p>In the short term, the country will no longer have the GF resource for TB and, in a longer period of time, HIV will be in transition, so that in order to make the response to diseases sustainable, the government needs to include the community response. The government is aware of these motivations and displays the necessary political will.</p>
3c	What could be the motivations for civil society to make these changes?*	<p>Similar to government motivations, awareness of limited funding from external sources should be sufficient motivation to move forward with these steps.</p>
4	What activities will be required to implement the recommended changes? How should those activities be prioritized? How will progress be monitored and evaluated?	
4a	Which activities should be prioritized over the next year?	<ol style="list-style-type: none"> 1. Joint work between The Center and Ministry of Public Health to establish a streamlined mechanism for registering CSOs. 2. Define and budget the activities and projects that will be implemented by the CSOs, and assure allocations in budget of the Ministry of Public Health. 3. Train the personnel in charge of the TB and HIV programs on The Center's process for development of public calls, and supervision of contracts. 4. Train CSOs in navigation of tender and contracting system; for some CSOs, provide further training and mentorship on project management, design and implementation of projects and services. 5. Conduct a round of pilot public calls, and monitor process. Refine as needed. 6. Train CSOs in advocacy strategies to ensure that political will and budgetary support remain steady and expand to new topics and services, as needed. <p>Activities #1 through #3 should be prioritized over the next year. Depending on speed of these activities, #4 may also be initiated within the year.</p>

4b	Which activities will need to be done over the next 1-3 years?	Activity #3 may need to continue, and activities #4 through #6 should be undertaken within the next three years.
4c	Which activities will need to be done over the next 3-6 years?	Activities #4 and #6 are likely to need to be repeated periodically/continuously, for as long as funds remain available.
4d	Which activities will need a longer timeline (+6 years)?	All activities should be able to be initiated within this timeframe. However, political will and budgetary support will need to be maintained regularly, and so advocacy will need to continue regularly. In addition, as new CSOs (or simply new staff members) come on line, CSO capacity may need to be supported continuously, as funds allow.

Appendix 7: M&E Plan for the National TB Response - 2015 and 2016 Results

Tipo Indicador	No	Indicador	Fuente	Línea de base	Meta 2015	Resultado 2015	Alcance en %	Meta 2016	Resultado 2016	Alcance en %
Impacto	1	1-Tasa de Incidencia Estimada OMS/PEN Por 100,000	WHO REPORT 2017	60	56	60	93%	54	60	93%
	2	2-Prevalencia estimada por 100,000	WHO REPORT 2017	73	70	72	97%	68	72	97%
	3	3-Mortalidad estimada por 100,000	WHO REPORT 2017	5.7	5.1	4.7	92%	4.8	5.2	108%
	4	Incidencia de TB-VIH en población general por 100,000	WHO REPORT 2017	16	16	16	100%	15	14	107%
Tipo Indicador	No	Indicador	Fuente	Línea de base	Meta 2015	Resultado 2015	Alcance en %	Meta 2016	Resultado 2016	Alcance en %
Resultado	1	Tasa de notificación de casos en todas sus formas	SIOE	45.5	47.0	47.0	100%	47.0	42	89%
	2	Tasa de detección de casos de TB de todas las formas	SIOE	72%	80%	75%	94%	83%	80%	96%
	3	Índice de éxito de tratamiento en todos los casos nuevos de TB. (Éxito de Tratamiento Cohorte Casos Nuevos bacteriológicamente confirmados BK+)	SIOE	83%	84%	80%	95%	85%	82%	97%
	4	Proporción de perdidos en seguimiento (abandono + transferencias sin confirmar)	SIOE	10%	9%		89%	8%	10%	89%
	5	Tasa de detección de TBDR: Casos notificados de tuberculosis farmacorresistente (resistente a rifampicina y/o TB DR) confirmados bacteriológicamente como proporción del número de casos estimados de TBDR.	SIOE	30%	45%	45%	100%	50%	63%	126%

	6	Tasa Éxito tratamiento TB MDR/RR	SIOE	61%	63%	72%	114%	65%	50%	77%
	7	Proporción TB MDR/RR perdidos en seguimiento	SIOE	22%	20%	20%	100%	18%	28%	(-56%)
	8	Tasa de detección de TB/VIH global	WHO REPORT 2017	50%	50%	50%	100%	55%	55%	100%
	9	Proporción de fallecidos coinfectados TB/VIH durante el tratamiento de TB (letalidad) en cohorte BK+	SIOE	18%	17%	17%	100%	15%	20%	(-33%)
Tipo Indicador	No	Indicador	Fuente	Línea de base	Meta 2015	Resultado 2015	Alcance en %	Meta 2016	Resultado 2016	Alcance en %
Producto y proceso	1	Numero de SR captados totales y desglosado por poblaciones de alto riesgo: personas privadas de libertad, diabetes, nacionales haitianos.	SIOE	76,145	90,690	82,041	90%	95,088	75312	79%
	2	Porcentaje de SR examinados.	SIOE	90%	93%	92%	99%	94%	91%	97%
	3	Número de casos de tuberculosis en todas sus formas notificados. Desglosado por forma y poblaciones de riesgo (Privados de Libertad y nacionales haitianos)	SIOE	Total: 4663, PPL 282 y haitianos 329	Total: 4993, PPL 282 y haitianos 329	Total: 4646 PPL 288 y haitianos 338	93%	Total: 4993, PPL 285 y haitianos 357	Total: 4465 PPL: 216 Migrante: 351	89%
	4	Porcentaje de contactos de casos de TB evaluados.	SIOE	74%	77%	77%	100%	80%	75%	94%
	5	Cobertura de PS a DPL a todos los casos nuevos de TBP	SIOE	9%	33%	33%	100%	50%	30%	60.0%
	6	Porcentaje Laboratorios de apoyo diagnostico a la TB sensible y TBDR que muestran un desempeño adecuado en lo que se refiere al aseguramiento externo de la calidad.	SIOE	63%	66%	66%	100%	70%	72%	103%

7	Porcentaje de casos de TB BK+ tratados exitosamente	SIOE	83%	84%	82%	98%	85%	80%	95%
8	Porcentaje de casos de TB MDR que inician tratamiento con DSL.	SIOE	88%	90%	90%	100%	91%	91%	100%
9	Porcentaje de pacientes con TB MDR/RR que son tratados exitosamente.	SIOE	71%	72%	72%	100%	72%	50%	69%
10	Porcentaje acumulado de PVV que acuden a los servicios de atención de VIH y reciben TPI de acuerdo a su condición, entre aquellos que son elegibles.	SIOE	0%	18%	ND		32%	ND	
11	Porcentaje de coinfectados TB/VIH con TMP/SMX.	SIOE	35%	60%	47%	78%	70%	32%	45%
12	Porcentaje de coinfectados TB/VIH en ARV.	SIOE	82%	82%	82%	100%	85%	52%	61%
13	Porcentaje de PVV que son tamizados para TB de acuerdo a la guía de coinfección TB/VIH.	SIOE	ND	20%	ND	ND	35%	ND	ND
14	Porcentaje de casos TB diagnosticados con resultado de prueba de VIH.	SIOE	67%	75%	77%	103%	80%	86%	108%
No	Indicador		Línea de base	Meta 2015	Resultado 2015	Alcance en %	Meta 2016	Resultado 2016	Alcance en %
15	Porcentaje de niños menores de 5 años en contacto con pacientes de tuberculosis BK(+) que empezaron a recibir TPI.	SIOE	61%	70%	70%	100%	75%	59%	79%
16	Porcentaje acumulado de contactos censados de casos de TB detectados en centros penitenciarios que empezaron a recibir TPI.	SIOE	0%	0%	0%	100%	20%	NA	ND
17	Proporción de presupuesto para la respuesta nacional a la tuberculosis financiado por fuentes nacionales.	DIGEPRE	85%	85%	85%	100%	85%	85%	100%

	18	Porcentaje de servicios en los que no se ha producido desabastecimiento de medicamentos antituberculosos, reactivos e insumos trazadores el último trimestre	SUGEMI	100%	100%	100%	100%	100%	100%	100%
	19	Número de municipios con Comités Alto a la Tuberculosis (redes programáticas).	SIOE	19%	30%	30%	100%	40%	40%	100%
	20	Porcentaje de casos de TB que son referidos a los servicios de TB en la red pública desde los centros de salud no públicos.	SIOE	7%	7%	7%	100%	8%	1.70%	21%
	21	Proporción de establecimientos que prestan servicios integrales de atención a la TB, cumplen con los estándares de calidad establecidos en las guías.	SIOE	74%	75%	75%	100%	78%	75%	96%
	22	Porcentaje de Centros Especializados de Atención en Salud (CEAS) regionales y provinciales que implementan actividades de control de TB establecidas en planes de control de infecciones.	SIOE	28%	28%	28%	100%	40%	28%	70%
	23	Porcentaje de casos de TB de los que tienen documentación legal que están afiliados al Sistema Dominicano de Seguridad Social y/o los programas de protección social y reducción de la pobreza.	SIOE	14%	20%	20%	100%	30%	23%	77%
	24	Número de proyectos pilotos implementados para la introducción de nuevas tecnologías para diagnóstico	SIOE	0	1	1	100%	1	1	100%

		y tratamiento recomendadas por la OMS.								
	25	Porcentaje de investigaciones operacionales del PNCT realizadas de las incluidas dentro del plan nacional.	SIOE	100%	100%	100%	100%	100%	100	100%