Suriname Ministry of Health

NATIONAL STRATEGIC PLAN FOR A MULTI-SECTORAL APPROACH OF HIV IN SURINAME

2014 – 2020

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PREFACE

Globally, the HIV epidemic remains a public health challenge with over 35 million of people living with HIV, 2.1 million getting infected with HIV and 1.5 million dying of AIDS-related causes in 2013. The achievement of Universal Access has been one of the main goals of the global HIV response as in 2006 all UN Member States, including Suriname, committed themselves to achieving Universal Access to prevention, treatment and care services by 2010 as part of the Millennium Development Goals. As such, key components of countries' health sector response to HIV are monitored as countries are encouraged to overcome persisting challenges in achieving Universal Access. The 'Treatment 2.0 initiative' launched in 2010, is one of the main strategies recommended to further encourage countries in achieving and sustaining Universal Access and to maximize the preventive benefits of Anti-Retroviral Therapy.

With the adoption of the UNGASS Declaration of Commitment on HIV and AIDS in 2001. Suriname has declared its commitment to the systematic and strategic control of HIV and AIDS, as indicated by the development of the first HIV/AIDS strategic plan in 2004. To date many advances have been made in the coordination and organization of services, as shown by an increase in access to treatment for persons living with HIV, a steadfast decline to zero infants born infected with HIV. The Government has, in addition, increased its financial commitment to the HIV response and is increasingly assuming its leadership role in strengthening the HIV response throughout the health system and multi-sectoral partners.

The third HIV NSP has been developed through country dialogue and is aligned with national development and health sector strategies and based on regional and international recommendations. The focus of this NSP will remain on achieving Universal Access with 'Prevention' and 'Treatment and Care' as priority areas, while further strengthening the coordination and organization of the HIV response with the Ministry of Health in a leadership role, as described by the identified cross-cutting issues ('Multi-sectoral coordination and collaboration', 'Integration', 'Capacity Building', 'Strategic Information' and 'Human Rights and Equity'). Additional focus of planned activities will remain on targeted key populations to maximize the progress towards the set targets, community participation as one of the main strategies to effectively reach the target populations and to involve them in the response. The development process of the NSP was led by the Planning Unit of the Ministry of Health with the involvement of various stakeholders and development partners. The Ministry of Health wants to thank all who have contributed to the development of the plan, specifically the data team, counterpart team and the consultants.

The Ministry of Health hereby presents ***The National Strategic Plan for a Multi-Sectoral Approach of HIV in Suriname (2014-2020)***.

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The development of the third HIV National Strategic Plan went through thorough evidence driven, participatory and consultative process that engaged the inputs and technical expertise of several stakeholders. The process of development was led by the Ministry of Health, in close collaboration with the Country Coordinating Mechanism Suriname and in consultation with stakeholders within and outside of the health sector and key affected populations.

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- PAHO / WHO
- UNICEF
- UNFPA
- UNAIDS
- CCM Suriname

Various stakeholders have provided valuable input during individual consultations and the national consensus meeting. The stakeholders consulted were the NGO's working with the key populations (MSM, SW, TG, PLWH, Drug users and youth); the key populations themselves; healthcare providers, private sector and all relevant Ministries.

Thanks to all for their combined effort that has resulted in the third HIV National Strategic Plan 'National Strategic Plan for a Multi-Sectorial Approach of HIV in Suriname 2014 – 2020'.

ACRONYMS

ABS	General Statistics Bureau
AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral drugs
BCC	Behavior Change Communication
BGVS	Drug Supply Company Suriname
BOG	Bureau of Public Health
CARICOM	Caribbean Community
cART	Combination Antiretroviral Therapy
CCM	Country Coordinating Mechanism
CoE	Centre of Excellence
CSO	Civil Society Organization
eMTCT	Elimination of Mother to Child Transmission
FBO	Faith Based Organization
FP	Family Planning
GF	Global Fund
GIPA	Greater Involvement of People living with or affected by AIDS
GP	General Practitioner
HCW	Health Care Worker
HIV	Human Immunodeficiency Virus
IEC	Information, Education and Communication
KAPB	Knowledge, Attitude, Practice and Behavior
M&E	Monitoring and Evaluation
MCH	Maternal and Child Health
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MM	Medical Mission Primary Health Care Suriname
MoH	Ministry of Health
MSM	Men who have Sex with Men
NAP	National AIDS Program
NRL	National Reference Laboratory
NSP	National Strategic Plan for HIV/AIDS
OSS	One-Stop-Shop
PAHO	Pan-American Health Organization
PMTCT	Prevention of Mother to Child Transmission
QC	Quality Control
RGD	Regional Health Services
S&D	Stigma and Discrimination
SBC	Suriname Business Coalition
SMU	Foundation Suriname Men United
SOZAVO	Ministry of Social Affairs and Public Housing
SRH	Sexual Reproductive Health
SW	Sex Worker
SZF	State Health Fund
TFM	Transitional Funding Mechanism
TWG	Technical Work Group
UN	United Nations
UNAIDS	Joint United Nations Program on HIV/AIDS
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session
UNICEF	United Nations Children's Fund
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

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EXECUTIVE SUMMARY

In 2002 the Government initiated a process for the systematic and strategic control of HIV and AIDS, following the adoption of the UNGASS Declaration of Commitment on HIV and AIDS in 2001. Structures were established for the appropriate coordination and implementation of the HIV response with an increasing focus on a multi-sectoral approach and attention for regional and international recommendations for prevention, treatment, care and support, such as Treatment 2.0 Framework for Action, HIV Continuum of Care, WHO policy on TB/HIV collaborative activities, Elimination Mother to Child Transmission (EMTCT) and the Caribbean Regional Strategic Framework on HIV 2014 – 2018.

The Ministry of Health (MoH) led the development process of this NSP (2014-2020) in consultation with various health sector and non-health sector stakeholders. The process included the review of the NSP (2009-2013), which informed the progress, accomplishments and gaps in the HIV response. The results from this review were then used as basis for the formulation of two priority areas, 'Prevention' and 'Treatment and Care' with the accompanied main strategic objectives; the identification of 5 cross-cutting themes, 'Inter-sectoral Collaboration and Coordination', 'Integration', 'Capacity Building', 'Strategic Information' and 'Human Rights and Equity' with strategic objectives, the formulation of interventions and proposed activities, set to ensure the achievement of the goals, main objectives and expected results. Based on the formulated activities an operational plan was developed and costed with an accompanying M&E plan.

The goals, main strategic objectives and expected results of the NSP (2014-2020) are:

Goals

- Reduce New Infections
- Improve the Quality of Life of PLHIV

Main Strategic Objectives for 'Prevention' and 'Treatment and Care'

- Reduce HIV transmission among key and vulnerable populations groups (MSM, SW, Youth/Adolescents and others) and in the general population
- Expand high quality comprehensive HIV treatment, care and support
- Eliminate Mother-to-Child transmission

Strategic Objectives for the Crosscutting themes

- Facilitate the incorporation of health and HIV prevention interventions across sectors
- Ensure the multi-sectoral provision of HIV treatment and support in different sectors
- Incorporate HIV interventions into the existing health and social service delivery system
- Rational resource allocation across sectors and strategic interventions
- Ensure that prevention interventions incorporate human rights and equity principles that include gender sensitivity and reduce stigma and discrimination
- Ensure that treatment services incorporate human rights and equity principles that include gender sensitivity and reduce stigma and discrimination
- Strengthen human resource capacity for management, coordination and implementation of the HIV response
- Improve use of data and information to inform decision making

Expected Results

- 50% reduction in Sexual Transmission of HIV
- 90% of estimated persons with HIV get tested
- 90% of PLHIV in need of treatment are being treated with Lifesaving Antiretroviral Treatment
- 90% on Antiretroviral Treatment have a suppressed viral load
- Eliminate New HIV Infections Among Newborns

The review informing the way forward with this NSP (2014-2020) was executed according to the priority areas for the implementation of strategic interventions of the NSP 2009-2013 and revealed the accomplishments and gaps in the HIV response as described in the following paragraphs.

National Coordination, Policy and Capacity building

A successful governance structure was established and then altered to accommodate the necessary re-integration of the HIV response in the health system. However, the governance structure needs further adjustments to ensure an integrated and multi-sectoral execution of all necessary components of the HIV response with the MoH in a leadership position, confirmed by the sustenance of the Government investment in the HIV/TB response.

Prevention of further spread of HIV

In the past years many prevention measures have been conducted reaching the general population by means of mass media campaigns as well as an increased focus on targeted key populations by means of outreach. The prevention services were scaled up and expanded with an increase in the number and type of condom distribution outlets and HIV testing now widely available accompanied by available guidelines for rapid testing. In addition, structures were established to integrate HIV in programs for chronic diseases. Progress was shown in the eMTCT program with an increase in the percentage of HIV positive pregnant women receiving ART (92.8% in 2013) and a decline in the number of infants born infected with HIV to 0 in 2013, after systematically adjusting the structure of the eMTCT program. However, the program review revealed that the implementation of the eMTCT program does not include all 4 eMTCT prongs yet, indicating a need to re-inforce the link with the Maternal and Child Health (MCH) program and expanding the scope of Sexual Reproductive Health (SRH) and Family Planning (FP) package. Furthermore, it became apparent that with the current ad-hoc planning of prevention activities there is insufficient national coverage of prevention campaigns and no universal access to all prevention services and commodities. In addition, not all testing sites are adhering to the national Quality Control (QC) system for HIV testing. It is necessary to centrally develop and coordinate the implementation of national prevention and communication strategies as well as QC regulatory and supply and distribution policies for HIV prevention services and commodities.

Treatment, Care and Support

To improve treatment and care services, laboratory services for the clinical management of HIV have been extended over the years, while treatment strategies have been scaled up with several protocols and guidelines available, as well as trained personnel. Treatment for HIV is free of charge as well as CD4, VL, EID, and HIV testing but these laboratory tests are only centrally available. Other laboratory tests needed for clinical management are not free of charge. The treatment protocols and guidelines are not yet up to par with Treatment 2.0 recommendations and there is no joint HIV/TB protocol available. It is therefore needed to update national protocols and to have a regulatory policy in place for quality services. Structural changes were made to the treatment program as well, with the setting up of a Center of Excellence (CoE) to assist in training of PHC physicians and operational research. However, the altered structure did not fully strengthen the decentralized approach and further revision in alignment with the chosen model of care is needed. Occasional ART stock outs did occur at the dispensing facilities and patient adherence seems to be still an issue. With international changes in the eligibility criteria for ART (CD4 ≤350; CD4≤500), it will require further capacity strengthening, governance and regulation and operational research to provide ART to all eligible persons and to improve the patient adherence. The collaboration between the TB and HIV programs has been initiated, however a proper link needs to be established for the joint planning of integrated activities and to improve the screening and surveillance of HIV and TB in both programs and to better address the high mortality and morbidity among patients with a HIV/TB co-infection. In addition, psycho-social support according to the community systems approach for persons with HIV was

extended, with established structures specifically for children and to centrally coordinate the support given by CSOs and FBOs. However, with challenges in the quality, operational capacity and sustainability of support, there is a need to scale up and professionalize the support services with a centrally coordinated structure.

Reduction of stigma and discrimination of PLHIV

Stigma and Discrimination (S&D) adversely affects Universal Access to treatment and care. The Surinamese Constitution states that every citizen has the right to healthcare and article 8 of the constitution protects the rights of persons to live free from discrimination. To apply this in the HIV response, a need was felt to adjust the legal environment in a way that clearly defines S&D on a number of grounds and to make sanctioning of discriminatory acts and breaches of confidentiality possible. In this regard, the PANCAP 'Justice for All' program was introduced. Many measures were taken to reduce S&D in the workplace, including the initial planning for an installation of a Human Rights Commission with an according Human Rights Desk and the formulation of HIV workplace policies. Success further requires implementation of an S&D program according to an evidence-informed multi-faceted approach with functioning mechanisms, including a functioning HR Desk, as currently there is little to no follow up after implementation of programs and activities and therefore no sustenance of the achievements. Integration of HIV treatment in Chronic Diseases programs according to a GIPA approach and the strengthening of the network for PLHIV will further contribute to the successful implementation of an S&D program.

Strategic Information for policy development and service provision

There have been many improvements in the data system of the HIV response which included the establishment of an M&E unit, the development of a master database, the structural gathering and triangulation of program and behavioral data resulting in improved routine reporting of program indicators. However, there are further improvements necessary to the quality and quantity of data supplied by the implementation partners of the HIV response, while there are limited qualified staff available, thus resulting in a number of operational issues affecting the timeliness and real-time availability of quality program data. In addition, some supplementary data are not yet recorded, such as data on psycho-social, financial and other support to HIV positive persons, needed for the monitoring of and reporting on the program implementation and execution of funds. To guide the HIV response with quality strategic information it will be necessary to further structure, professionalize and coordinate the M&E, HIV surveillance and research agenda by means of restructuring the TWG on M&E, developing plans, operational manuals and guidelines and improving the data linkages with the master database which includes linkages with the mortality data as well as monitoring patients through the continuum of care.

The NSP is in accordance with national objectives, principles and programs and will be based on regional and international recommendations. The guiding principles are 'Universal Access', based on the right to affordable quality health care and social security, 'Inclusion' of major sectors and stakeholders, 'Evidence-based' policies, interventions and approaches, 'Sustainability' of strategies and financing of the response, 'Human Rights' as guaranteed by the Constitution and respect for diversity and 'Equity' in all health outcomes. Based on the findings and recommendations resulting from the evaluation of the previous NSP and consultations with stakeholders the Ministry of Health, decided on the Priority Areas 'Prevention' and 'Treatment and Care' with 'Inter-sectoral collaboration and coordination', 'Integration', 'Human Rights and Equity', 'Capacity Building' and 'Strategic Information' as the five Cross-Cutting Issues.

CHAPTER 1. INTRODUCTION

1.1 GEOGRAPHIC, DEMOGRAPHIC AND SOCIO-ECONOMIC CONTEXT

The Republic of Suriname, bordered by French Guiana in the east, Brazil in the south, Guyana in the west and the Atlantic Ocean in the north, is located on the northeast coast of South America. Suriname has a total area of 163,820 km2 and consists of narrow coastal plain with swamps, rolling hills and tropical rainforest. The country is divided into ten administrative districts that are subdivided into 62 administrative regions. Of the districts, two urban and six rural are located along the coastal area of Suriname, while the remaining two districts are situated in the interior of Suriname. The urban districts Paramaribo, in which the capital city Paramaribo is situated, and Wanica cover 0.5 % of the land surface and contain 70% of the total population.

The vital statistics profile for the country from 2004 to 2012 shows a population growth of 48,800 [1,2], rising from 492,829 in 2004 to 541,638 in 2012, with 49.96% males and 50.04% females. About 70% of the population lives in the urban districts. The registered live births increased from 9,000 to 10,000 to give a crude birth rate of 20 per 1,000 population and a total fertility rate of 2.5. The crude death rate has remained relatively stable at around a crude death rate of 6.5 to 7 per 1,000 population. Life expectancy at birth for males is 67.4 years and for females, 72.8 years.[3] Many ethnic backgrounds form the population, of which 27.4% are East Indian (Hindustanis), 15.7% are Creole, 21.7% are Maroon and 13.7% are Javanese, while 13.4% and 7.6% are from a 'mixed' and 'other' ethnicity, respectively. Sranan Tongo, the 'native language', is the main language spoken by the population. However, Dutch is the official language and English is widely spoken.

The 2012 GDP of Suriname was US$ 5.2 billion, reflecting a real GDP growth of 4.5% and a GDP per capita of US$ 9,010[4] The annual GDP growth rate has remained positive since 2003.[5] Similarly the gross national income per capita (current US$) has increased from 4315 in 2005 to 8650 in 2011.[6]

1.2 RATIONALE

The Government of Suriname initiated a process in 2002 for the systematic and strategic control of HIV after the adoption of the UNGASS Declaration of Commitment on HIV and AIDS in 2001.[7] As a result, the first National HIV/AIDS strategic plan 2004 -2008 was developed and placed under the newly set up National AIDS Program of the Ministry of Health, to ensure a proper coordination of the HIV response. In 2007, the second National Strategic Plan (NSP) was developed for the period 2009-2013, this time increasing the focus on a multi-sectoral approach and further building on structures for coordination, to appropriately guide the HIV response in Suriname.

The third HIV NSP will build further on the multi-sectoral approach and integration to ensure an optimal response and alignment of activities by all stakeholders. In addition, this NSP will take into account the regional and international recommendations for prevention, treatment, care and support, such as Treatment 2.0 Framework for Action, HIV continuum of Care, the 2020 Treatment cascade targets 90-90-90, the Elimination Mother to Child Transmission (EMTCT), the WHO policy on TB/HIV

1 ABS, Statistical Yearbook 2007, in Cijfers no 250-2008/09, Page 4
2 ABS, Statistical Yearbook 2008, in Cijfers no 263-2009/10, Page 4
3 ABS. 2008. Bevolkingsprojecties voor Republiek Suriname; Volume 1 Versie 1 2004 – 2024.
4 http://www.cbvs.sr/images/content/recent_articles/suriname_country-profile_may2013.pdf
5 http://www.cbvs.sr/images/content/recent_articles/suriname_country-profile_may2013.pdf
6 http://data.un.org/CountryProfile.aspx?crName=Suriname
7 United Nations. 2000. UNGASS Resolution 55/2: United Nations Millennium Declaration.

collaborative activities, and the Caribbean Regional Strategic Framework on HIV 2014 – 2018.[8 9 10 11 12 13]

The HIV response is a priority of the Government of Suriname, including all relevant ministries and departments. The NSP will be linked to national development frameworks and policy documents such as the Multi-Annual Development Plan 2012-2016; the United Nations Development Assistance Framework 2012 – 2016, the National Sexual Reproductive Health and Rights Policy 2013 - 2017, Safe Motherhood and Neonatal Health Plan.[14 15 16 17]

1.3 PROCESS FOR THE DEVELOPMENT NSP 2014 - 2020

The process for development of the NSP was led by the Ministry of Health, in close collaboration with the Country Coordinating Mechanism (CCM) Suriname and in consultation with stakeholders within and outside of the health sector and key affected populations. A team, established by the MoH, consisted of representatives of the MoH, Bureau of Public Health (BOG), CCM Suriname and United Nations (UN) agencies. This team was responsible for the analysis of available data and functioned as the counterpart for the consultant who had specific tasks in the development process. Furthermore, this team guided the national consultations and was responsible for the writing of the NSP.

The process included a review of the NSP 2009-2013; which took into account earlier conducted evaluations, such as the midterm evaluation of the NSP 2009 – 2013, conducted in 2012 by the Caribbean Health and Research Council together with MoH staff and the midterm evaluation of the HIV/AIDS Political Declaration conducted in 2013.[18 19] These evaluations provided the MoH with necessary information regarding the accomplishments and gaps and were therefore used as input to conduct a further comprehensive evaluation of the HIV response in the last five years.

The 4 main steps in the development process were:

1. A review and synthesis of all programme documentations

   During this process available documentation was reviewed for implemented HIV activities executed under the NSP 2009-2013 taking into account the international recommendations. The main questions answered during this review were: what was accomplished during the last NSP; what were the gaps, what were the obstacles and what recommendations are indicated.

2. Analysis of programme data

   For the analysis of the HIV programme data the following subjects were taken into account:
   - Testing and Counseling
   - Treatment and Care
   - PMTCT
   - Hospitalizations / Mortality

8 WHO, UNAIDS. 2011. The Treatment 2.0 Framework for Action: Catalyzing the next phase of treatment, care and support
9WHO.2013.Consolidated guidelines on the use of anti-retroviral drugs for treating and preventing HIV infection.
10 UNAIDS. 2014. 90-90-90; An ambitious treatment target to help end the AIDS epidemic.
11 PAHO/WHO. 2010. Resolution CD50.R12: Strategy and plan of action for the elimination of mother-to-child transmission of HIV and Congenital syphilis.
12 WHO. 2012. WHO policy on TB/HIV collaborative activities; Guidelines for national programmes and other stakeholders.
13 CARICOM, PANCAP. 2008. Caribbean Regional Strategic Framework on HIV and AIDS (2014-2018).
14 Government of the Republic of Suriname. 2012. Ontwikkelingsplan 2012-2016; Suriname in Transformatie.
15 Government of the Republic of Suriname, United Nations. 2012. United Nations Development Assistance Framework 2012-2016.
16 National Sexual Reproductive Health and Rights Policy 2013-2017.
17 Safe Motherhood and Neonatal Health Plan.
18 CHRC. 2013. Midterm Evaluation Report of NSP- 2012.
19 Midterm Review of Suriname – UNAIDS political targets

- Special groups (MSM, SWs, Youth/Adolescents, TB patients, STI patients)
  These subjects were analyzed looking at: coverage of activities, trends over the years, differences in sex, ethnicity, geographical location, age groups, knowledge about HIV, behaviors and attitudes related to risk of contracting HIV, Continuum of Care.

3. Individual consultations with different stakeholders.
   With the initial findings from the programmatic document review and data analysis relevant multi-sectoral stakeholders were requested to provide the necessary input on the findings.

4. National consultation
   Based on the information of the 3 steps mentioned above, the priority areas, strategic objectives, interventions and proposed activities were drafted. These were consequently discussed to reach consensus during a multi-sectoral national consultation meeting, held on July 19, 2014.

With the input of stakeholders the Priority Areas, Interventions and Activities were finalized. Based on the list of activities, an operational plan including the costing of activities was developed for the period 2014 to 2016. An M&E framework was developed with indicators that not only monitor the implemented activities on a local level, but also meet the regional and international reporting requirements. In the M&E framework the different indicators with baseline and targets are described.

The draft NSP 2014 – 2020 was also discussed during a Global Fund (GF) mission in October 2014 with PAHO, UNAIDS and the Global Fund Country Team.

CHAPTER 2. HEALTH SYSTEM

The health system of Suriname consists of several public, private and non-governmental institutions with different modes of financing, roles within the health system and delivery of health care services. The organizations tend to be specialized in specific services and particular population segments, predominantly depending on the health status and geographic location of the target population and in some instances on the employment and socio-economic status as well. For the organization of HIV, STI and TB services, this is no exception. Specific health care components crucial to the effective implementation of the relevant programs are provided by a number of organizations within the health system. In the next paragraphs an overview will be presented of the health system based on relevant program components, specifically relevant to the HIV/STI and TB programs.

2.1. HEALTH SYSTEM MANAGEMENT

The MoH is responsible for the overall management of the health system, specifically the availability, accessibility and affordability of health care. On a central level, the MoH is responsible for planning, policy development, inspection, coordination, monitoring and evaluation and the setting of standards in the health system. There are specific units at the central level, core institutions and inspectorates within the MoH that support these responsibilities. If needed, the MoH supports the implementation process of some of the public health programs by establishing particular structures with specific responsibilities, such as a multi-disease board, expertise center or the appointment of focal points within the MoH. Some of these structures serve a particular purpose within the HIV, STI and TB programs.

Supporting units within the Ministry of Health

The Research, Planning & Monitoring Unit, called the Planning Unit, is situated within the central office of the MoH and plays an important role in most of the responsibilities of the MoH. The Planning Unit houses the National Health Information System (NHIS) and the Monitoring and Evaluation (M&E) unit. The role of the NHIS in this regard, is to gather and store all official disease and program data from health care providers with the support of the core institutions and relevant units within the MoH, and to make these available to national and international counterparts for program and policy development. The M&E unit manages the development and the reporting of national indicators of the public health programs, as well as the monitoring of progress of these programs toward the national and international public health targets.

Core institutions of the Ministry of Health

As a core institution of the MoH, the Bureau of Public Health (BOG) has a wide range of responsibilities, ranging from surveillance, environmental inspection, public health laboratory services, the management of public health programs, among which the management of the Mother and Child Health (MCH) and TB programs. One of the main areas of focus of the BOG is that of primary, secondary and tertiary prevention by coordinating, supervising and executing programs that provide health information to the general public as well as specific subgroups for preventive purposes. These programs are implemented within the health care setting, by specific community based organizations to reach the target population and by means of media campaigns targeting the general public. The epidemiology department of the BOG supports the public health responsibilities of the BOG by gathering surveillance data on identified public health diseases and making these available for public health action and program development. In addition to other responsibilities the BOG manages the Central Laboratory, which is the reference Public Health Lab of the Government for malaria, TB and

HIV. The Central Laboratory meets the bio-risk international standards level II+ with upgraded technological capacity.

The Dermatology Services is another core institution of the MoH and provides services in the area of skin diseases, Sexual Transmitted Infections (STI), leprosy. This institution is part of the STI program and provides HIV and STI services to the general population and specifically to Sex Workers (those working in the clubs) with the regular screening for HIV and other STIs, amongst other services.

Additional supporting structures to the MoH are the Governmental Committee on Drug Registration, the Pharmaceutical Inspectorate and the Drug Supply Company Suriname (BGVS). While the Governmental Committee on Drug Registration must approve of all drugs, the Pharmaceutical Inspectorate is responsible for pharmaceutical policies, the setting of standards, inspection and monitoring, and program development. The government-owned BGVS operates the official medicine control lab. This laboratory is included in the regional PAHO network of medicine control labs and is responsible for quality of medicines, procurement and distribution. There are three licensed pharmaceutical manufacturers in Suriname and 26 licensed pharmaceutical importers. The largest importer is the BGVS.

Established HIV program structures supporting the Ministry of Health

To support the public health approach of the HIV program, the MoH established the Center of Excellence (COE) which functions as an expert center providing leadership in the treatment and care of HIV positive persons; responsible for making the necessary HIV treatment expertise available to primary care physicians and health workers; performing operational research that can draw lessons learnt in HIV care, guiding policy development and serving as an interface between the policy level and service delivery level in implementing the HIV program. It was also established as a reference clinic for HIV patients with complications and in need of specialist treatment.

Another supporting structure that was established is the Health Information Center 'Libi!', a center for health information to the public on HIV prevention and healthy lifestyles which also serves as a tool to integrate HIV into health promotion and healthy lifestyle initiatives.

Appointed program focal points within the Ministry of Health

The MoH further appointed a Treatment and Care Focal Point and an NGO focal point within the MoH, to coordinate the implementation of activities in HIV treatment and care and to address and streamline all support needed by the NGOs, since the latter have an important role within the HIV and TB program. In addition, the M&E Manager and the Healthy Lifestyle Coordinator have integrated HIV into their scope of work.

2.2. ORGANIZATION OF PRIMARY, SECONDARY AND TERTIARY HEALTH CARE SERVICES

The government provides health care through a number of subsidized governmental and non-governmental health care providers. On the level of primary health care these are the Regional Health Services (RGD), a state-owned foundation, and the Medical Mission Primary Health Care (Medical Mission), a faith-based foundation.

The RGD provides primary health care through 63 clinics to the population in the coastal area classified mainly as poor or near poor by the Ministry of Social Affairs and clients insured by the State Health Insurance Fund (SZF). As of October 9th, 2014, the basic health insurance act (BZSR) came into

effect.[20] All residents are obliged to have a health insurance policy under this act against predetermined insurance premiums based on age category. The Medical Mission provides primary health care through 57 clinics covering the approximately 60,000 people living in the interior. In addition, approximately 150 private General Practitioners (GPs) are providing primary care. These GPs are registered at the MoH and provide services especially in the urban districts Paramaribo and Wanica.

On the level of secondary and tertiary health care the Ministry of Health operates two general and one psychiatric hospital in Paramaribo and a district hospital in the western coastal district of Nickerie. These are the Academic Hospital (AZP), the s' Lands Hospital (s'LH), a psychiatric hospital (PCS) and district hospital Nickerie (SZN), respectively, of which s'LH is specialized in Mother and Child Care. In addition, there are 2 private hospitals, Diakonessen Hospital and St. Vincentius Hospital, in Paramaribo.

2.3. Organization of Preventive Services

As previously indicated, disease prevention and control are part of the main areas of focus of the BOG. The BOG is active in this role for both the HIV and TB programs, since it manages the TB program and the eMTCT. The eMTCT program has been well established within the Family & Community Health department [21] of the BOG, as part of the re-integration of the HIV response in the health care system. In both programs prevention activities are central and developed and executed by the respective programs in collaboration with other stakeholders.

Prevention is especially important within the eMTCT program. Suriname has committed itself to the 'Elimination of vertical transmission of HIV' and officially launched the PMTCT program nationwide in 2009, also including Hepatitis B and syphilis into this program. Apart from broader prevention aims of the PMTCT strategy (prong 1, 2 and 4), to prevent the actual mother to child transmission of HIV (prong 3), clinically the health system is set up to test all pregnant women, to treat all HIV positive pregnant women with ART, to provide all infants born from HIV positive mothers with ART prophylaxis and to monitor the condition of these infants up until the second PCR diagnostic test. To achieve this aim, the eMTCT program was structured in a specific way. A technical working group was set up with multi-stakeholder members among which service providers on the primary and secondary level of health care, that are actively involved in the planning and implementation of this program. To monitor HIV positive pregnant women and their babies, an additional PMTCT focal point system was set up within the system of the primary and secondary health care providers that ensures a successful implementation of prong 3 and 4 of the PMTCT program.

Apart from the BOG and the primary and secondary service providers, NGOs have an undeniable role within the primary, secondary and tertiary prevention of public health programs, especially within the HIV and STI program and to an increasing degree within the TB program. The specific role of NGOs in the HIV response is a good example of the applied Combination Prevention strategy. They provide a wide range of preventive services usually targeting specific groups based on age, sex, ethnicity, geography, socio-economic status as well as health status. These groups are either entitled to prevention information as part of their development, such as youth/adolescents in general, or have a particular disadvantage that makes them vulnerable to contracting HIV or suffering the consequences of an infection, such as youth/adolescents from particular neighborhoods, MSM, sex workers, prisoners, migrants and women and girls. Within the HIV and STI program preventive services for the

20 The government of the Republic of Suriname. 2014. De Wet Basiszorg Verzekering Suriname. Staatsblad van de Republiek Suriname no 114.
21 The Family and Community Health Department houses the MCH program.

key populations are focused on behavior change and are often provided by means of 'outreach'. Outreach services usually include offering VCT, counseling, HIV prevention education, condom and lubricants distribution, referral to HIV/STI services and social support. In this regard NGOs tend to use particular platforms, such as schools, neighborhood organizations, prisons, busy public spaces or spots where the target groups tend to congregate. NGOs also have close working relations with hospitals or clinics, who refer patients, if needed, and in many cases persons of the target groups are either already registered at the NGOs for services or contact the NGOs out of their own volition.

Many NGOs have personnel specialized in counseling and guiding those who received an HIV positive diagnosis through the health system. This goes from applying for social security to obtaining health insurance and treatment, if needed, to counseling and training sessions on a multitude of subjects, health or not health-related to the protection of the human rights of the patients by means of advocacy. In the HIV program this support is often given through a peer counselor and buddy system. When counseling and buddy services are needed, these NGOs are called upon by health care providers or even directly from family members or the patient his/herself to offer their support. As additional support, some NGOs have social workers employed to support with the many other socio-economic problems facing those infected with HIV.

Apart from the prevention of sexual and vertical transmission of HIV, the prevention of blood-to-blood transmission, specifically in clinical settings, is an additional important component of HIV prevention. To ensure the prevention of blood-to-blood transmission of HIV, blood safety procedures with accompanying protocols for clinical settings were developed, implemented and upgraded over time, which includes the guidelines and procedures for prick accidents and Post Exposure Prophylaxis. In addition, with the Blood Safety program in place, the National Blood Bank monitors and regulates the quality of blood for transfusion, guaranteeing 100% safe blood transfusion.

2.4. ORGANIZATION OF SERVICES FOR HIV DIAGNOSIS, TESTING AND COUNSELLING

As part of the Treatment 2.0 strategy, the HIV program aims to have all persons infected with HIV in society to know their status and to reach them with health care services to ensure a Continuum of Care. Therefore, a public health approach in HIV service provision is needed to encourage early detection of HIV and to make HIV testing and diagnosis maximally accessible for the public. HIV testing is now widely available through a variety of service providers on the primary and secondary health care levels, either through 'walk-in facilities' or by means of referral from a physician. There are two common diagnostic test methods used: the ELISA laboratory and the rapid test method. The Central Laboratory functions in this regard as the quality control and confirmation laboratory for HIV tests done in other test sites and labs. In addition, it is mandatory to additionally train all clinic personnel responsible for HIV testing in the ethical circumstances surrounding HIV testing.

The rapid test method is available through 10 'walk-in' Voluntary Counseling and Testing (VCT) sites in a number of RGD primary care clinics and low threshold SRH and STI clinics. HIV testing is further available at the 56 Medical Mission clinics, in the labs of all 5 major hospitals and in the three private laboratories located across the country (MyLab, Medilab and HealthControl). Some of the private laboratories have sites for blood extractions in the coastal area of Suriname. The preferred method is mostly the ELISA test method, although the rapid test method is not uncommon in these settings. In addition, as part of the TB strategy, Blood Safety and eMTCT program, all TB patients, blood donors and pregnant women are to be screened for HIV by means of Provider-Initiated Testing and Counseling (PITC), either on-site or through referral.

The ELISA test is commonly used to establish a diagnosis of a client's HIV status and to serve as a quality control or confirmatory test for the rapid test method or for tests performed by other labs. From 2008, the algorithm of the ELISA, as set by the Central Laboratory, consists of the Vironostika Uniform 11 Ag/Ab test and the Genscreen Ultra Ag/Ab. In case of discordant outcomes by the Central Lab, samples are sent to CARPHA for confirmation. The rapid test algorithm contains three types of rapid tests. These are the Determine, the Unigold and the Stat-pak. The Determine and the Unigold are used simultaneously, with the Stat-pak as tiebreaker in case of discordant results. As part of standard quality control for this method, blood samples of all HIV positive outcomes and 10% of the negative outcomes are collected and sent to the Central Laboratory for confirmation. In addition, in every facility where rapid tests are performed quality control sera (HIV-positive and HIV negative) are to be collected from the Central Laboratory and used to test the quality of the present batch of rapid tests.

All HIV testing is to be offered according to the UNAIDS 3C's (Confidential, with pre- and post-test Counseling and only after informed Consent; UNAIDS, 2004). Personnel trained in HIV testing is simultaneously also trained in the proper ethical conditions surrounding the testing procedure and in offering pre-and post-test counseling. Those who are referred to a laboratory for testing by a physician are to receive pre-and post-test counseling from the responsible physician or appropriate supporting staff. [22]

2.5. Organization of Treatment and Care Services

In light of treatment as prevention and improved quality of life for PLHIV the treatment program aims to have all those eligible for treatment on ART and to ultimately achieve viral suppression for all persons on ART. To achieve this, again a public health approach is opted by MoH, allowing and encouraging all GPs to treat HIV positive persons eligible for treatment. Within this approach, the CoE is responsible for making up-to-standard treatment methods available to the primary care physicians, providing coaching and mentoring to staff of other treatment sites and to treat and follow-up on patients with (treatment) complications. To enforce this continuum of care principles and treatment 2.0 principles will be applied to the treatment program.

According to the national protocols, persons who receive an HIV positive result are referred to their primary care physician to receive a complete medical work-up, including medical, some social and psychological history, physical exam, and lab screening including CD4 and VL testing. This first CD4/VL test is used as a proxy for persons being linked to care. Depending on the results of the patient work-up the national treatment protocols guide the healthcare provider as when to start treatment and which treatment. If there's no need for treatment yet, pre-ART care is provided i.e. a follow-up appointment is made and additional support is provided according to the national treatment protocol. The follow-up procedure needs to ensure that patients are 'retained in care' within the health care system. If patients are 'eligible for ART' (CD4 count < 200 according to the national HIV treatment protocol, in those with CD4 count of ≤ 350 that express motivation to start, all pregnant HIV positive women, all TB positive patients, and those with active hepatitis B and chronic kidney failure). Before each patient is started on ART he/she is counseled by a healthcare worker and an adherence profile is developed for this patient. Depending on the adherence profile the patient is ready to start or needs extra counseling before ART can be started. If necessary it is also possible to assign patient support in the form of a patient buddy or a peer counselor. The treatment guidelines provide schedules for the healthcare workers as when to follow –up on next clinic visits, next lab

22 UNAIDS, WHO. 2004. UNAIDS/WHO Policy Statement on HIV testing.

exams and exactly which lab exams to do. ARV treatment is prescribed for a particular period (starting with two weekly interval – to one month, 3 months or maximal 6 months interval) ART is dispensed by the 5 hospital pharmacies. Routinely ARV drugs are dispensed each month to each patient. The Medical Mission and PLHIV working and living in the interior are allowed longer dispensing periods (2-3 months). Regular appointments are scheduled to renew the prescription and to monitor the patient's adverse reactions, immune system (CD4) and, viral suppression (VL). Once again the follow-up procedure is crucial to achieve 'patient adherence' and to ultimately achieve 'viral suppression' for all HIV positive persons. The M&E program records patient ART pick-ups, CD4, VL testing, PMTCT, TB, morbidity and mortality data. At present, the national HIV treatment protocol is still based on initiation of ART at CD4 count of 200; this will be changed as part of the Treatment target of treating 90% of PLHIV eligible for treatment to 350 in 2015 and eventually to 500 within the next 3 years.

As is previously mentioned NGOs have an important role in providing preventive services as well as providing psychosocial support. In the HIV program this support is often given through a peer counselor and buddy system. When counseling and buddy services are needed, these NGOs are called upon by health care providers or even directly from family members or the patient his/herself to offer their support. As additional support, some NGOs have social workers employed to support with the many other socio-economic problems facing those infected with HIV. There is need for better structuring and improvement of the psychosocial services.

The Dermatology Services provides STI services to the general population and specifically to SWs (those working in the clubs) with the regular screening for HIV and other STIs, amongst other services. Comprehensive STI an SRH services are also provided by an NGO (Lobi Foundation) providing sexual and reproductive health services to the general public.

CHAPTER 3. STATUS OF HIV EPIDEMIC

3.1. INTRODUCTION

Suriname has an estimated prevalence of 0.9% for the adult population (age 15-49).[23] This estimate is in line with the HIV prevalence of 1%, found among pregnant women since more than 5 years. There are pockets of concentrated epidemics among key affected populations, such as Men having Sex with Men (MSM) and Sex Workers (SW), with a higher prevalence than the general adult population. Prevalence studies conducted in the capital city Paramaribo revealed a prevalence of 6.7% among MSM in 2005 and 5.86% among SW in 2012. [24] [25]

Table 1: HIV prevalence in key populations

Key population	Sex	Year	Prevalence (%)	Source
Pregnant women	Women	2006	1.4	National HIV test database [26]
		2007	0.9	
		2008	0.8	
		2009	1.0	
		2010	0.9	
		2011	1.1	PMTCT focal point surveillance/ Civil Registry Office [27] [28]
		2012	1.1	
		2013	1.1	
Sex workers				
Paramaribo	All	2005	24.1	BSS and Sero-prevalence among SW in Paramaribo [29] [30] [31]
		2009	7.2	
		2012	5.8	
Goldmines	Women	2012	1.0	BSS and Sero-prevalence among SW and their clients in gold mining areas [32]
MSM	Men	2005	6.7	BSS and Sero-prevalence among MSM in Paramaribo [33]
TB patients	All	2008	27.8	National TB Programme surveillance [34]
		2009	30.8	
		2010	33.5	
		2011	32.5	
		2012	28.5	
		2013	22.6	
Miners	Men	2012	0	BSS and Seroprevalence among SW and their clients in gold [35]
STI clients	All	2008	2.8	BSS and Seroprevalence among STI patients [36]
Blood donors		2008	0.025	National Blood bank surveillance [37]
		2009	0.03	
		2010	0.057	
		2011	0	
		2012	0.055	
		2013	0	

Source: M&E Unit Ministry of Health, 2014

23 UNAIDS. 2014. The GAP Report, Annex A8.

24 CAREC/PAHO and Maxi Linder Foundation. 2005. A HIV Seroprevalence and Behavioral study among Men-Who-Have-Sex-with- Men (MSM) in Suriname.

25 Behavioural Surveillance Survey & Seroprevalence study among Sex Workers in Paramaribo, Suriname 2012

26 National HIV Test Database

27 PMTCT focal point surveillance

28 Civil Registry Office

29 BSS and Seroprevalence among SW in Paramaribo 2005

30 Heemskerk, M., & Uiterloo, M. (2009). HIV/AIDS and Commercial Sex work in Paramaribo, Suriname: A Behavioral Surveillance Survey and Sero-prevalence Study among Commercial sex workers in the street, clubs, bars and salons of greater Paramaribo city.

31 BSS and Seroprevalence among SW in Paramaribo 2012

32 BSS and Sero-prevalence among SW and their clients in gold mining areas

33 Maxilinder Foundation, University of Suriname. 2005. An HIV-seroprevalence and behavioral survey among men-who-have-sex-with-men (MSM) in Suriname.

34 TB program, Ministry of Health. 2014. National TB Programme surveillance

35 BSS and Seroprevalence among SW and their clients in gold mining areas 2012

36 Caffe, I. 2009. HIV prevalence study and behavioral surveillance survey among STI patients in Suriname.

37 National Blood Bank Suriname Red Cross Society. 2014. National Blood bank surveillance

Since the first registered case of HIV in 1983, scaling-up of HIV-testing led to an increase in the number of persons tested for HIV and consequently to an increase in the number of newly registered HIV-cases. This increase continued until 2006, with a maximum of 781 newly registered cases. However, since 2007 there has been a steady decline in the number of newly registered HIV-cases; 473 in 2013 (see figure 1). [38]

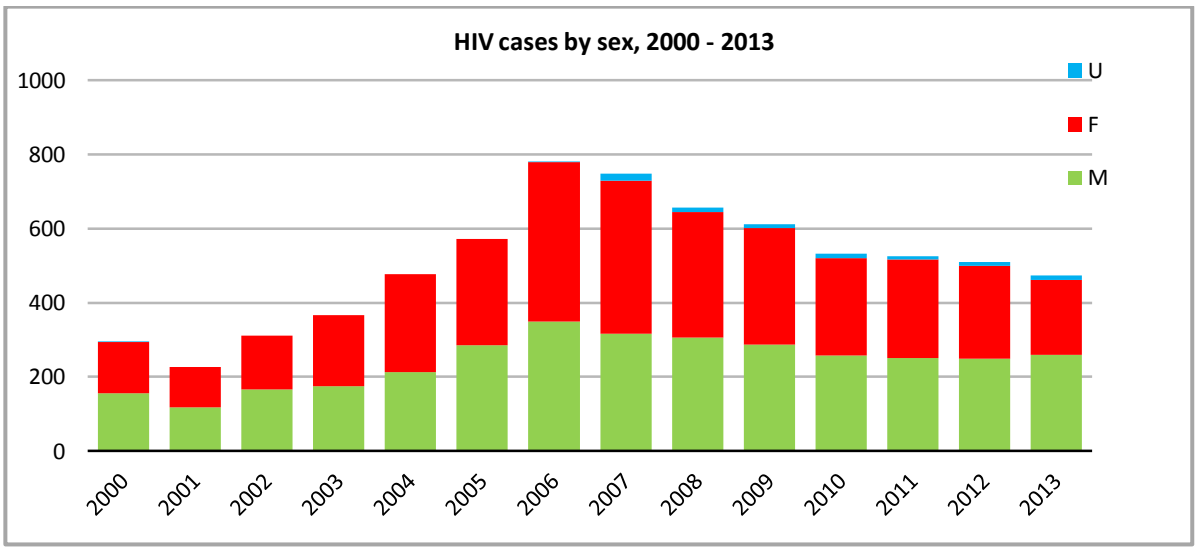


Figure 1: Number of registered HIV positive people by sex, 2000-2013
Source: HIV Master database M&E Unit MOH, 2014

Aggregated by age, the majority (86%) of HIV positive persons, enrolled in the National HIV Master Database from 2000 – 2013, were between the ages of 15 to 55 years. [39]

Age group	Men	Women	Unkn
< 5	222	192	24
6-15	20	64	12
16-25	278	869	5
26-35	948	1209	11
36-45	996	739	9
46-55	594	356	8
56-65	220	136	3
65+	115	43	2
Unk	0	0	15
Total	3393	3608	89

Table 2: Cumulative number of HIV cases by age group, 2000 - 2013

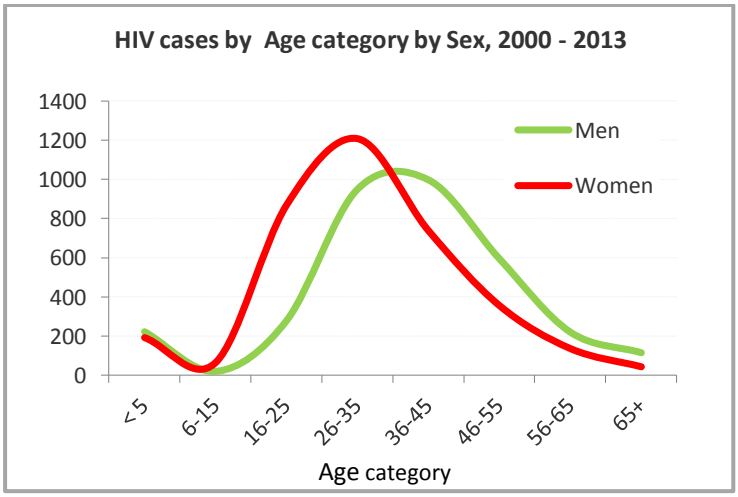


Figure 2: Cumulative number of HIV cases by Age category and Sex, 2000 - 2013
Source: National HIV Master database, M&E Unit MOH 2014

38 M&E Unit, Ministry of Health. 2014. HIV Master database.
39 M&E Unit, Ministry of Health. 2014. HIV Master database.

3.2. HIV/AIDS HOSPITALIZATIONS

3.2.1 Hospitalizations

From 2010 to 2012, a declining trend in the number of hospitalizations has been observed, re-hospitalizations excluded. Hospitalizations occur more among males than females, with 30% more males hospitalized between 2001 and 2012 than females and an according male/female ratio of 1.3 (median) (range 0.8-1.7). [40] From 2001-2012, no apparent decrease in hospitalizations was noted among men and women from different ethnic backgrounds.

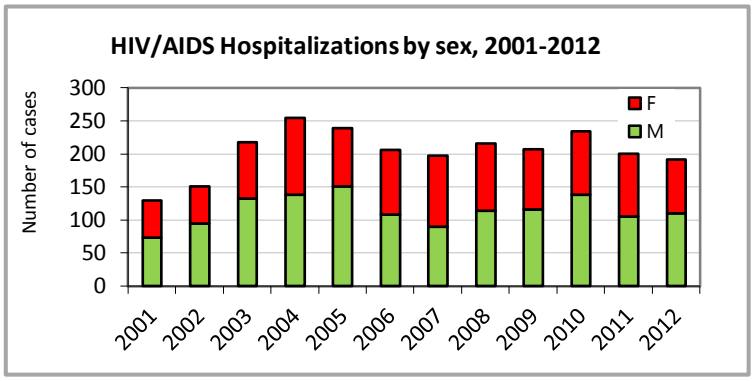
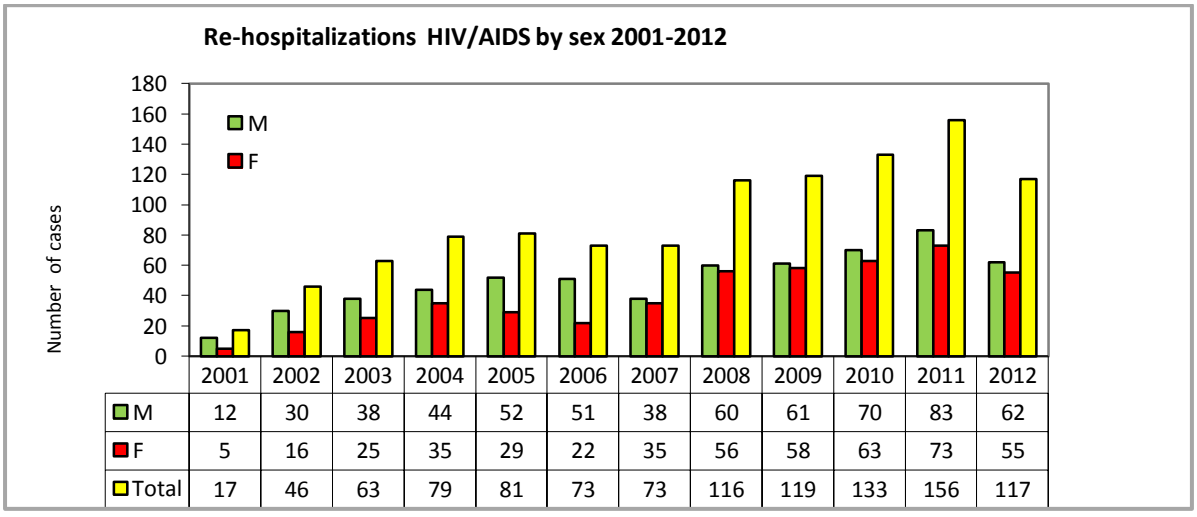


Figure 3: HIV/AIDS Hospitalizations by sex, 2001 - 2012
Source: BOG, Epidemiology department

Hospitalizations among male East Indians (Hindustani group) are a point of concern, as a 100% increase in hospitalizations is seen among these males in 2012 compared to 2001. In addition, a relatively small increasing trend is seen in general, among the creole and maroon HIV patients. [41]

3.2.2. Re-hospitalizations

Re-hospitalizations include cases that are hospitalized more than once; one case can be counted more than once in one year or over the years. An increasing trend in re-hospitalizations is observed between 2008 and 2011 with more males re-hospitalized than females. [42]



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
M	12	30	38	44	52	51	38	60	61	70	83	62
F	5	16	25	35	29	22	35	56	58	63	73	55
Total	17	46	63	79	81	73	73	116	119	133	156	117

Figure 4: HIV/AIDS Re-hospitalizations by sex, 2001-2012
Source: BOG, Epidemiology departme

40 M&E Unit, Ministry of Health. 2014. HIV Master database.
41 M&E Unit, Ministry of Health. 2014. HIV Master database.
42 M&E Unit, Ministry of Health. 2014. HIV Master database.

3.3. HIV/AIDS Mortality

AIDS mortality is reported through the anonymous so called C-forms, which state the cause of death. These forms, from all over the country, are sent to the Epidemiology unit from the BOG. Coverage of the C-forms has consistently been above 90%, with 2001 as an exception. Mortality for AIDS shows a declining trend since 2006 and this is consistent till 2013. The number of AIDS deaths from 2001-2013 is around 2.6 (median) per 10,000 population (range 1.6-3.6). [43]

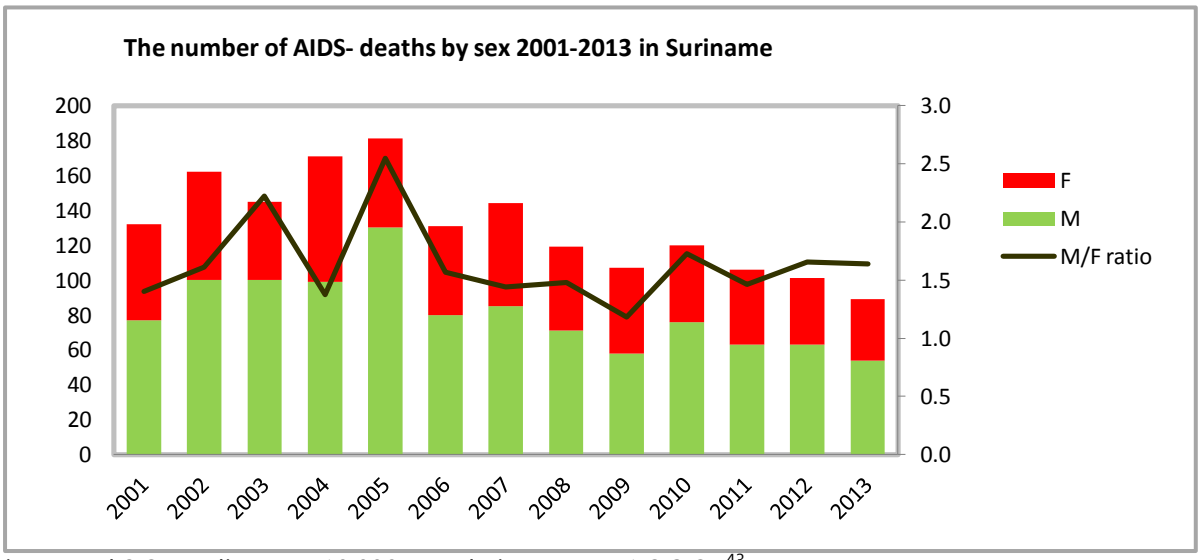


Figure 5: AIDS mortality by sex and male/female ratio, 2001-2012
Source: BOG, Epidemiology department

The impact on males is higher compared to women (up to 59% decline in males 2005 compared to 2013 which is just 31% decline in females 2005 compared to 2013). The year 2005 is chosen as a marking point as the epidemic showed the highest peak at that point for AIDS deaths. Males remain vulnerable: the male -female ratio remains around 1.5 (median) through the years 2001-2013 (range: 1.2-2.5). [44]

3.4. HIV continuum of Care

In 2013 the treatment cascade for HIV was introduced.[45] This cascade provides a way to follow persons living with HIV/AIDS through the health care system and to identify the gaps in connecting and keeping individuals living with HIV/AIDS in a sustained, quality continuum of care.

Of the 3274 adult persons (15+ years) diagnosed HIV positive in the years 2007 to 2012, 922 (28.16%) have never entered into care, based on never having done a CD4 test. Of the persons entering into care, 86% had an initial CD4 test done within 3 months of diagnosis. For 38% of those people entered into care the first CD4 was below 200. [46]

43 Bureau of Public Health, Ministry of Health. 2014. Surveillance Epidemiology department.
44 Bureau of Public Health, Ministry of Health. 2014. Surveillance Epidemiology department.
45 PAHO/WHO. 2014. HIV Continuum of Care Monitoring Framework 2014; Addendum to meeting report: Regional consultation on HIV epidemiologic information in Latin America and the Caribbean.
46 M&E Unit, Ministry of Health. 2014. HIV Master database.

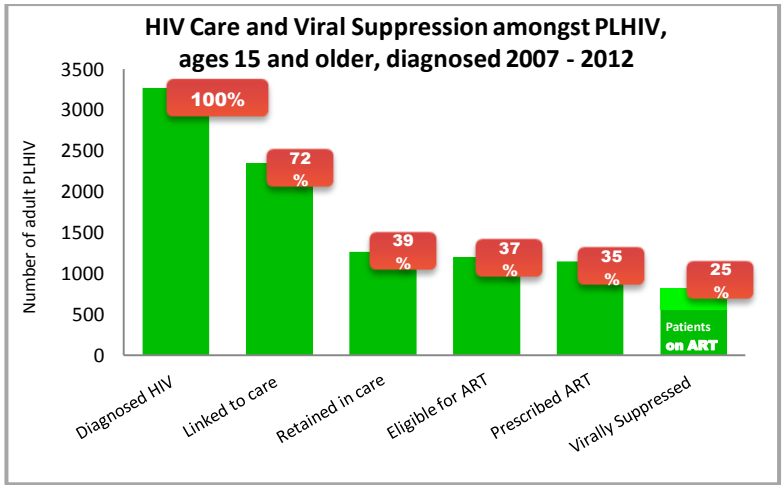


Figure 6: HIV Continuum of Care for PLHIV enrolled from 2007 - 2012
Source: National HIV Master database, M&E Unit MOH

39% of the 2007-2012 cohort were retained in care and a Kaplan-Meier survival analysis found a significant difference (p=0.019) between men and women with men having an average time of retention of 4.4 years compared to 4.7 years for women.

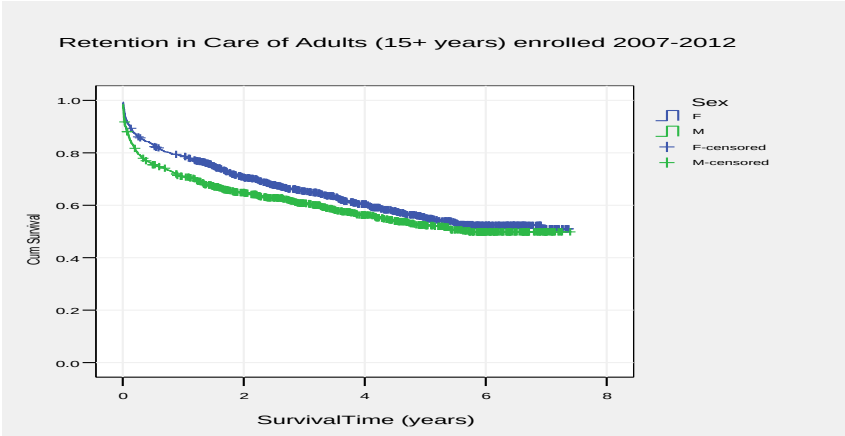


Figure 7: Retention in Care of PLHIV, aged 15 and older enrolled 2007 - 2012 by Sex
Source: National HIV Master database, M&E Unit MOH

Of the adults enrolled from 2007 to 2012 only 38.9% had a recorded viral load (VL) result of which the majority (65%) had a last recorded VL of less than 1000 copies/ml, classified as virally suppressed. This accounts for only 25% of the 2007-2012 cohort. [47]

47 M&E Unit, Ministry of Health. 2014. HIV Master database.

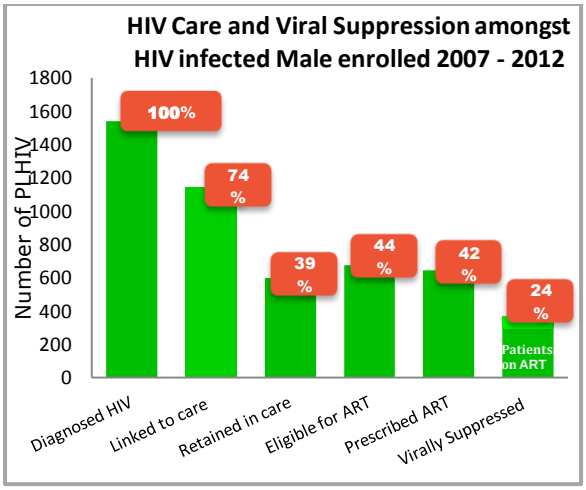


Figure 8: HIV Continuum of Care for Adult Male PLHIV enrolled from 2007 - 2012
Source: National HIV Master database, M&E Unit MOH

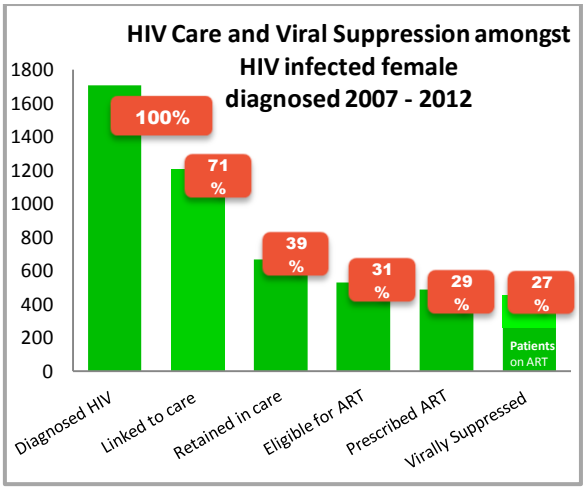


Figure 9: HIV Continuum of Care for Adult Female PLHIV enrolled from 2007 - 2012
Source: National HIV Master data base, M&E Unit MOH

Looking at the continuum of care by sex, the difference primarily lies in more men being in need of treatment and the women having a relatively better viral suppression compared to men.

CHAPTER 4. RESPONSE ANALYSIS

In this chapter the findings of the analysis of the response will be presented. The analysis of the response for HIV was done against planned activities of the 2009-2013 NSP, taking into consideration the regional and international HIV guidelines. The priority areas for the implementation of strategic interventions of the NSP 2009-2013 were:

1) National Coordination, Policy and Capacity building
2) Prevention of further spread of HIV
3) Treatment, Care and Support
4) Reduction of stigma and discrimination of PLHIV
5) Strategic Information for policy development and service provision [48]

As such, these areas will be used as guide to evaluate the HIV response and consequently to identify the program accomplishments, gaps, challenges and the future directions.

4.1. NATIONAL COORDINATION, POLICY AND CAPACITY BUILDING

In the previous NSP (2009-2013) the involvement of other ministries and all relevant sections of society were outlined and then served as the national framework for expanding and strengthening the multi-sectoral response against HIV/AIDS. To effectively achieve this purpose activities, training and other capacity building tools, were introduced to strengthen the national coordination structure, which enabled the integration of HIV strategies in other ministries and within the health sector. [49]

4.1.1. Governance structure

A multi-sectoral leadership structure, the HIV Board, was established in 2009, residing under the Director of Health, with Technical Working Groups (TWGs) on Prevention, Treatment and Care and Monitoring & Evaluation, complemented by an additional Project Monitoring Unit. This HIV Board generated an active participation of stakeholders in the HIV response and the integration of HIV-related activities in multiple sectors and successfully achieved the scaling up of HIV treatment and care under this structure. However, in the process of reintegrating HIV treatment and care into the health system, the MoH chose a more horizontal approach for the management of the HIV program, resulting in the dismantling of the HIV Board and the integration of its related TWGs and their core responsibilities into existing health structures of the MoH. This led to the current governance structure described in chapter 2 (health system). Part of the reintegration was the uptake of HIV in existing programs and structures which included the integration of HIV in NCD/Healthy Lifestyle programs, with as example the opening of a 'One Stop Shop' for chronic diseases and focus shift of the health information center 'Libi!' that now addresses HIV and NCD issues in an integrated way. Even though there have been many successes, there are still gaps and challenges that need to be addressed. In setting up the HIV Board and related TWGs, the TWG for Prevention was installed, but not activated. As a result the HIV prevention response lacked coordination, resulting in gaps in the comprehensive condom policy development, gaps in prevention M&E studies, Although integration has been initiated, the implementation has been limited.

48 Ministry of Health. 2009. National strategic plan for a multi-sectoral approach of HIV in Suriname (2009-2013).
49 Ministry of Health. 2009. National strategic plan for a multi-sectoral approach of HIV in Suriname (2009-2013).

4.1.2. Increased multi-sectoral participation

Multi-sectoral participation has long been encouraged leading to an increased involvement of the private sector and faith-based organisations in the HIV response, including the establishment of the Suriname Business Coalition (SBC) in 2004. The SBC and the government, mobilized resources for the development and implementation of HIV workplace policies and programs in some line ministries and the private sector. The SBC is still active in HIV workplace policies and has lately also started integrating HIV and NCD policies in their programs. Although the process of applying a multi-sectoral approach was started, there is still limited awareness in the non-health ministries to the concept of health in all policies in general and the importance of the critical role and responsibility they carry in the implementation of the HIV program specifically. This is confirmed by a slow and limited progress in the implementation of developed workplace policies and an apparent need to upscale prevention initiatives stemming from and/or implemented through non-health ministries.

4.1.3. Increased capacity building and financial commitment

With the integration of the HIV response in mind and the increasing demand of technical and financial skills to manage and implement donor funded projects, a capacity building plan was developed targeting both the MoH personnel as well as the executing partners. Implementation resulted in an improved financial, technical and organizational capacity of the MoH, NGOs and other civil society organizations. In addition, the Government of Suriname is continuously increasing the financial responsibility of the national HIV response and as part of the national commitment and sustainability of actions, the government is providing support through increased budget allocations for the HIV response. Since 2010, the government is financing all ARVs and is not dependent on external funding for ARVs. However, the overall coordination, financial, technical and organizational capacity of the executing partners, specifically NGOs, remains weak and needs further strengthening to ensure an equal collaboration of MoH and executing partners in the management and implementation of donor funded projects. The classification of Suriname as an upper middle-income country increases financial pressure on the government, as it challenged yearly to sustain its investment in the national strategic response.[50]

BOX 1: NATIONAL COORDINATION, POLICY AND CAPACITY BUILDING

Future Directions:

- Establishing an effective multi-sectoral governance structure for the current NSP with effective integration mechanisms that take the cross-cutting themes into consideration, including the strengthening and harmonizing the TB/HIV response through all executing partners
- Advocating for the development and implementation of policies regarding healthy lifestyle, including HIV in line ministries
- Expanding the integrated delivery of services of the educational center Libi! and the One-Stop-Shop for chronic diseases
- Sustaining the Government's investment in the national strategic HIV/TB response

50 World Bank. 2009. World Bank list of economies; July 2009.

4.2. PREVENTION OF THE FURTHER SPREADING OF HIV

The prevention of new cases of HIV is one of the main goals of the National Aids Program in Suriname.[51] Ongoing prevention programs were scaled up with a special focus on prevention strategies, targeting most at risk populations, pregnant women and the youth, while in addition ensuring an enabling environment. Prevention of HIV in a clinical setting was sustained and guidelines were developed and implemented.

4.2.1. Increased focus on outreach for key populations

During the past years primary prevention activities were implemented focusing on education and awareness of HIV. For each target population appropriate activities were planned and implemented. The general population was reached through mass media campaigns focusing on sexual behavior and knowing one's status and an information center 'Libi!' was set up to include HIV education for the public in a more holistic setting of promoting healthy lifestyles.

As part of the behavioral change strategy, key populations, such as MSM, SWs and youth were reached primarily by means of outreach services. Outreach activities for SWs and MSM are carried out by specific NGOs and include individual counseling, group sessions, HIV prevention education, the ongoing distribution of condoms and lubricants and referral to HIV/STI services. Outreach services for SWs in the gold mines are conducted in collaboration with the malaria program. Under the Global Fund's HIV Transitional Funding Mechanism project, the outreach services were expanded, a draft manual on outreach for MSM and SWs has been developed and IEC material for MSM has been developed.

To support the implementation of prevention activities targeting youth, organizations such as the Youth Advocacy Movement (YAM) and a Youth Advisory Group (YAG) and several other NGOs provide HIV prevention outreach services to schools in targeted communities. It appears that during the implementation of the first NSP 2004 - 2008 many HIV intervention activities regarding youth were executed. [52] Interventions in the form of edutainment were well received and were successful tools in increasing the participation of youth in health education activities. However, during the more recent years the number of activities targeting youth decreased. However, when observing the sexual behavior of this group, studies implemented in 2012 and 2013 among youth show that about 80% of the persons, between 15-24 years of age, were sexually active with 15 years as the average age of first sexual encounter. In some villages in the rural interior e.g. Trio indigenous village of Kwamalasamutu there is even mention of sexual initiation at the age of 9.[53] Although youth (15-24 year) from rural interior (Brokopondo and Sipaliwini) have higher percentages of sex before age 15 and sex with multiple partners, they seem to have less knowledge regarding HIV and also the use of condoms is much lower than in the urban or coastal areas (MICS 2010).

4.2.2. Initiated preventive programs specifically aimed at migrants

There are an estimated number of 20.000 Brazilian migrants active in the Surinamese gold mines [54]. From 2010 on Suriname participated in the Regional 'PANCAP Migrants Project', a cooperation between PANCAP, GIZ and seven participating countries in the Caribbean region to improve access to HIV services for mobile and migrant populations.[55] As part of this 'PANCAP migrant project' Suriname

51 Ministry of Health. 2009. National strategic plan for a multi-sectoral approach of HIV in Suriname (2009-2013).
52 NSP 2004 - 2008
53 Heemskerk, M, State of the Art Diagnosis on Comprehensive Sexuality Education Final report
54 De Ware Tijd, March 5, 2012
55 PANCAP. Final reports PANCAP Migrant project (4): component 1-4 with ppt for component 1 and 2

reported on improving legal and policy framework, implementing innovative health financing mechanisms, empowering migrant communities and making services more migrant friendly in 2012. In the implementation phase (2013-2014) IEC material specifically aimed at Brazilian migrants was developed and distributed. Surinamese governmental employees from both health and non-health sector were trained in 'Stigma and Discrimination, Cultural Sensitivity and Human Rights related to Health and Migration'. To ensure continuity of this process of sensitization to migrant specific issues under service delivery personnel, this training was concluded by a Training of Trainers. HCW will be specifically trained to improve migrant friendly services. To improve migrant friendly services the 'Malaria clinic for migrants' in Paramaribo will extend services to HIV testing and counseling. To prevent obstructive legislation impeding access to health services, supplemental laws are prepared that will be offered to Parliament for approval. The originally proposed 'Gold Levy Fee' to cover the health expenses for migrants proved not feasible at this moment. Fortunately, due to the recently instated (2014) 'Basic Health Insurance Services' migrants living and working in Suriname are now able to access more affordable health insurance. However, reaching the small scale gold miners stays a challenge as most are mobile and operate in remote areas in the interior away from established maroon and indigenous villages. 'New Chinese' migrants form another group of growing migrants in Suriname. Under the current PANCAP migrant project IEC material will be developed specifically aimed at this group. It is challenging to reach this group of migrants, because there is relatively little known about them and they don't mingle with the rest of the population.

4.2.3. Expanded condom distribution

The distribution of condoms has been expanded via a wide range of distribution points throughout the country, free of charge through the information center 'Libi!'. The number and type of distribution outlets, such as taxi stands, barber shops and particularly short stay hotels have increased over time and linkages with other programs such as the malaria and TB programme have been established to reach key populations. NGOs working with MSM, SWs, youth and other targets groups are collecting condoms on a regular basis to distribute them further and the Regional Health Services (RGD), Medical Mission and Malaria program collect condoms to distribute the condoms through their large network of clinics in the coastal area as well as in the interior and gold mining areas. In 2012 and 2013, a total of 1,193,043 and 1,236,382 (male and female) condoms have been distributed, respectively. [56]

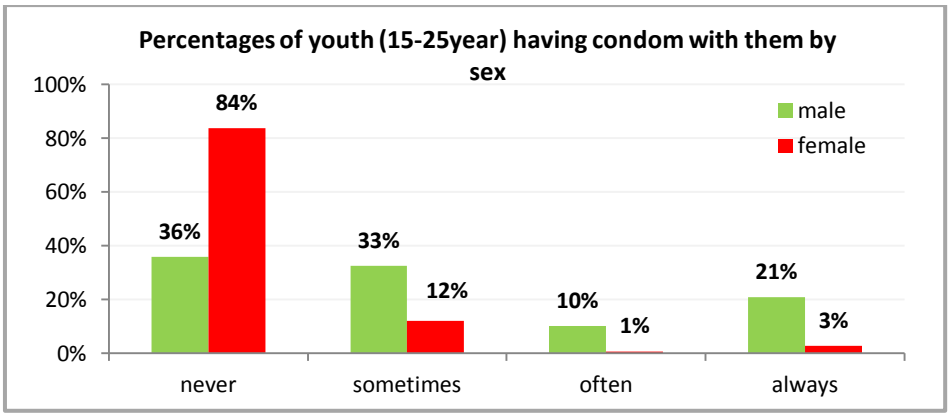


Figure 10: Percentage of Youth (15 - 25) having condom with them by sex, 2013
Source: CARISMA study, 2013

In regards to condom use, in the CARISMA study a remarkable difference between boys and girls was found. Although both seem to have equal access to condoms, boys seem to walk more frequently

56 Excel sheet condoms and lubricants: 2012 and 2013, a total of 1,193,043 and 1,236,382 (male and female) condoms have been distributed, respectively

with condoms (36% of boys compared to 84% of girls of interviewed said to never walk with condoms) and also use it more frequently (82% of boys compared to 19% of girls ever used a condoms). [57] The number of teenage pregnancies (1 in every 6 live births has a teenage mother) is an indication of the risk. Looking at the HIV cases diagnosed 14% were between the ages 15 to 24 years, with the majority being of either creole or maroon descendent. [58]

It appears that over time a decrease of the HIV prevalence of SW in Paramaribo can be noted with BSS data showing prevalence of 24.1% in 2005 to 5.8% in 2012, indicating successful implementation. [59] [60] In addition, the target group seems to have knowledge about prevention of HIV (96.5%), HIV testing behavior (82.7%) and condom use (90%), although consistent and correct use of condoms still seems to be an issue.[61] However, there is still a higher prevalence among SWs than the general population, confirming the fact that SWs should still be a priority group for targeted HIV prevention activities. For MSM the situation seems similar. The HIV prevalence among MSM is still much higher than among the general population, with a tested HIV prevalence of 6.7% in 2005 and a self-reported prevalence of 5.4% in 2014.[62] [63] As 44% of the men interviewed in 2013 (N=208) indicated being attracted to both men and women and 28% having multiple sex partners, the need to focus on this target group remains.[64]

Despite indications of success there remain some gaps and challenges in reaching the target populations effectively. In absence of a national prevention strategy and a national communication strategy, media campaigns were planned on an ad-hoc basis and there seems to be insufficient coverage of the campaigns, specifically in the interior. Reaching all target populations in need remains an additional challenge, specifically reaching SW in remote areas and 'hidden' MSM. In addition, within efforts to expand outreach services and providing all commodities for HIV prevention to the target groups, there is no finalized condom policy and although the distribution of condoms has been increased, there is no universal access of condoms, especially outside of Paramaribo.

4.2.4. Scaled-up HIV testing

As is mentioned, HIV testing is widely available throughout the health system. The revision of HIV testing and counseling guidelines and the use of rapid testing have both contributed significantly to the scaling-up and expansion of services. VCT personnel are trained regularly and there is a quality control system in place for VCT sites. The number of performed HIV tests increased from 2,535 to 26,070 yearly done in the period 2000 to 2011. The vast majority (74%) of these tests were done among women. [65]

The percentage of tests with a positive diagnosis declined between 2000 and 2011, from 16% to 4% and 10% to 2% for men and women, respectively. Of the persons tested, most were of Maroon and the Creole descent, with a combined percentage of 49% (2000-2011). Comparing the test percentage with the ethnic compositions among the general population, than except for the Maroon and Creole populations, all ethnicities appear to be underrepresented. [66]

57 2013. CARISMA study
58 M&E Unit, Ministry of Health. 2014. HIV Master database.
59 BSS and Sero-prevalence among SW in Paramaribo 2005
60 BSS and Sero-prevalence among SW in Paramaribo 2012
61 BSS and Sero-prevalence among SW in Paramaribo 2012, 40.4% of the SWs experienced a condom failure.
62 Maxilinder Foundation, University of Suriname. 2005. An HIV-seroprevalence and behavioral survey among men-who-have-sex-with-men (MSM) in Suriname.
63 MSM self-reported prevalence of 5.4% in 2014.
64 2013. 44% of the MSM interviewed in 2013 (N=208)
65 National HIV Test Database
66 National HIV Test Database

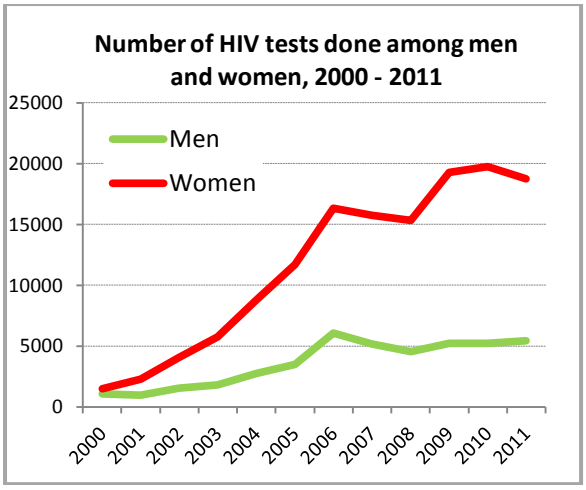


Figure 11: Number of HIV tests among men and women, 2000-2011

Source: National HIV test database, M&E Unit MOH 2014

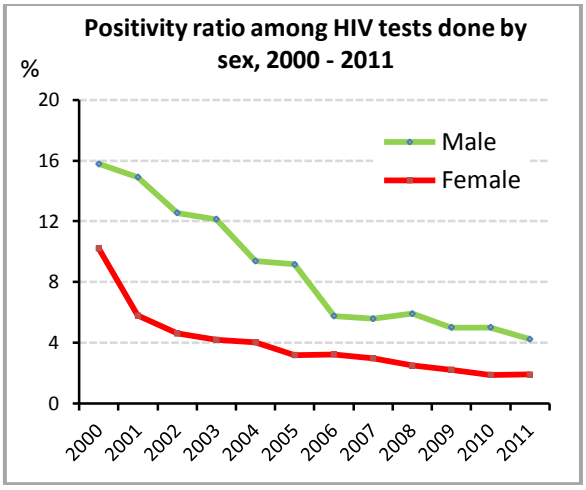


Figure 12: Positivity ratio among HIV tests done by sex, 2000-2011

Source: National HIV test database, M&E Unit MOH 2014

Table 3: HIV test percentage by ethnicity, 2000-2011

Ethnicity	Unknown	Neg	Pos	Total	Test percentage 2000-2011 (%)	Ethnic composition according to Census 2012 (%)
Caucasian		14		14	0.01	--
Chinese	5	1680	5	1690	0.90	1.5
Creole	291	49242	3107	52640	27.97	15.7
Mixed		654	5	659	0.35	13.4
East Indian	152	29121	537	29810	15.84	27.4
Amer-Indian	16	4439	206	4661	2.48	3.8
Javanese	68	15968	135	16171	8.59	13.7
Maroon	207	36960	1771	38938	20.69	21.7
Other/Unknown	554	41788	1292	43634	23.18	3.0
Total	**1293**	**179866**	**7058**	**188217**	**100.00**	**100.00**

Even though HIV testing services have been scaled up, there are still some gaps and challenges that need to be addressed if Suriname wants to reach all HIV positive persons with quality health care services. HIV testing is offered with a QC system in place. However, not all sites offering HIV rapid testing are part of this system. While HIV testing services have been expanded and the number of tests has increased over time, it is apparent that the vast majority (74%) of these tests were done among women. [67] It also appears that the percentage of tests with a positive diagnosis has declined over time, however, with a percentage still above the estimated prevalence of 1% for the general population, this suggests that people don't regularly have themselves tested, and apparently get tested when they already have symptoms or other indications of an infection. The aim of the program is to identify persons with HIV early in their infection and link them to services. It is therefore necessary for the program to increase the awareness for the necessity of HIV testing among the

67 National HIV Test Database

general population with a specific focus on men. Of the different ethnic compositions of the general populations it also appears that many are underrepresented in terms of test behavior, with the maroon and creole populations as exceptions, which is another indication to increase the awareness of the necessity of HIV testing. In addition, to increase the coverage of HIV testing and counseling (HTC), new approaches need to be explored for the delivery of HTC.

4.2.5. Programmatic integration of HIV prevention

Over the years, the structural integration of the HIV program has been apparent. This has included the increasing programmatic uptake of HIV prevention in the TB and MCH programs and the linkage with the STI program of the Dermatology Services. Since recent years, the MoH is increasingly promoting the integration of HIV prevention in healthy lifestyles initiatives as part of the chronic diseases/NCD program. This integration is taking form through the health information center Libi! and the mentioned one-stop-shop for chronic diseases. In addition there are 'men's health' initiatives promoting the strengthening of quality of services targeting men, which include HIV prevention services, with as aim to lower the threshold of this target group in accessing health services. In addition, to reach key populations in the interior, such as gold miners, SWs and migrants, a linkage was established with the Malaria program to provide HIV prevention services through this program.

The decision to integrate HIV prevention in other programs was made, among others, to effectively implement the program, to effectively reach the target populations and to decrease the stigma of an HIV infection. However, since the focus on integration of HIV prevention is quite recent, there are still some gaps and challenges hindering the intended result. So far, not all target groups are effectively reached. The Dermatology Services targets SWs with their HIV and STI activities, however only reaches a particular portion of the more visible club-based SWs. The remaining SWs who work in clubs not registered at the Dermatology Services, less visible clubs or who are home- or street-based are not part of the program, unless they visit the Dermatology Services on their own volition. So far few men wellness initiatives have been implemented, with very little response from the target group. It seems that more (promoting) efforts are needed to make these initiatives a success. In addition, as discussed in the previous paragraph, the integration of HIV prevention in healthy lifestyle initiatives through the information center Libi! and the one-stop-shop has been low scale, while HIV prevention through the malaria program seems to have been limited to the distribution of condoms. It seems that mechanisms need to be established to effectively operationalize the intended integration of HIV prevention.

4.2.6. Strengthened eMTCT program

Suriname has committed itself to the 'Elimination of Vertical Transmission of HIV' and officially launched the PMTCT programme nationwide in 2009, which also includes Hepatitis B and syphilis. To upscale the development and implementation of *e*MTCT various measures were taken in recent years. The coordination structure and focal point system were put in place, an *e*MTCT framework with the inclusion of a four prong approach and aligned with the National Safe Motherhood and Neonatal Health Action Plan was developed, protocols were revised and healthcare providers were trained in the revised protocols. [68] [69] HIV testing is provided to all pregnant women and ART for all HIV positive women and their babies. From 2002 till 2012, an increase is seen of the percentage of HIV positive pregnant women who received ART from 64% in 2006 till 92.8% in 2013. [70]

68 eMTCT framework
69 National Safe Motherhood and Neonatal Health Action Plan
70 M&E Unit, Ministry of Health. 2014. HIV Master database.

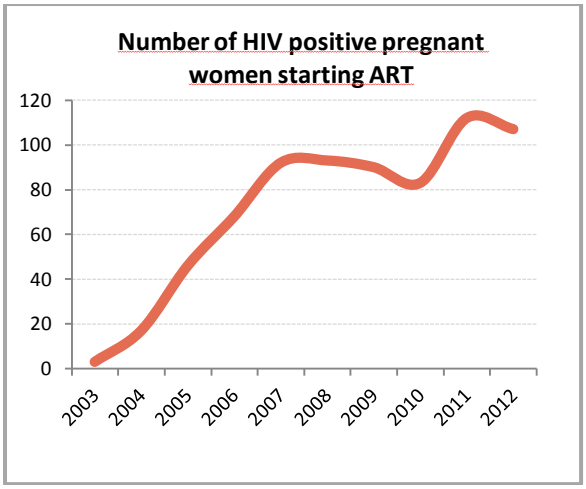


Figure 13: Number of HIV positive pregnant women, starting ART 2003-2012

Source: National HIV treatment, PMTCT Focal point surveillance

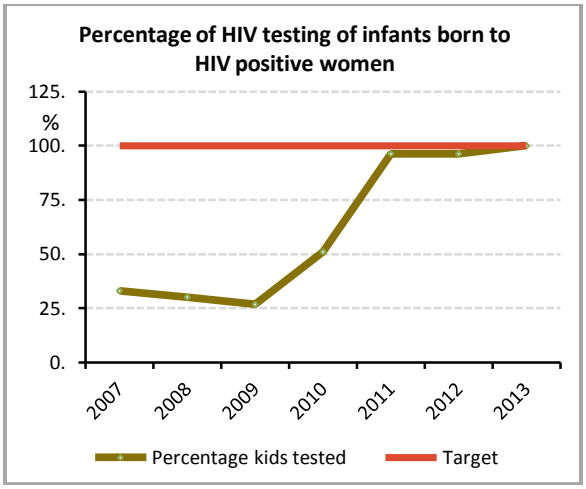


Figure 14: Percentage of HIV testing of infants born to HIV positive women, 2007-2013

Source: PMTCT database, National database, M&E Unit 2013

In 2011 and 2013 all infants born to HIV positive mothers have received ART; in 2012 there was a challenge to provide 2 infants with prophylaxis due to a system failure and they both died at the age of 3 months. HIV testing of infants born to HIV positive women has increased from 33% in 2007 to 100% in 2013, reducing the children lost to follow up / not tested enormously. [71] [72] After delivery, HIV positive women are provided with parlodel tablets and infant formula. Infants born to HIV positive women are tested for HIV according to the national protocol and are monitored by the focal point system up until the second PCR test. All these measures have resulted in a decrease in the reported rate of MTCT of HIV from 12.5% in 2007 till 1.9% in 2011. In 2012, an increase was registered to 4.6%. [73] Possible reasons observed by the HIV Focal Point System are: treatment adherence, refusal of treatment, system failure, and drug addict. For 2013, there has not been a report of an HIV infected baby born to HIV positive mothers.

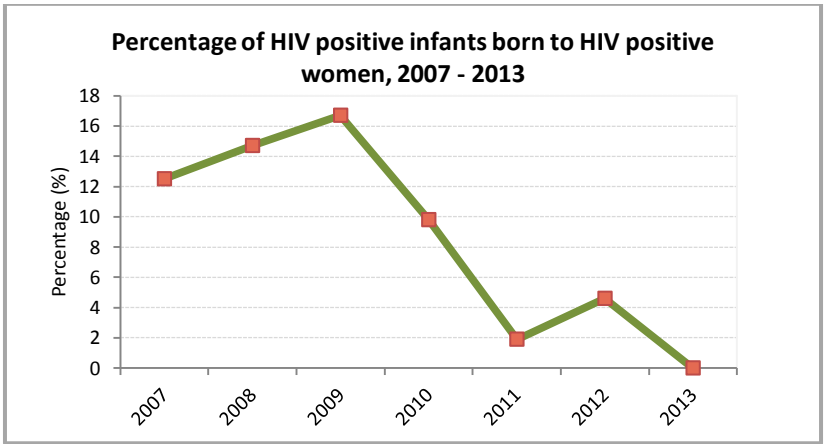


Figure 15: Reported rate of MTCT of HIV; Percentage of infants born to HIV positive mothers who tested positive for HIV, 2007-2013

Source: PMTCT database, National PMTCT focal point surveillance

However, the eMTCT strategy contains 4 prongs. So far, most of the focus of the program has been on the prevention of vertical transmission of HIV (prong 3) and somewhat on the primary prevention of

71 M&E Unit, Ministry of Health. 2014. HIV Master database.

72 PMTCT focal point surveillance.

73 PMTCT focal point surveillance.

HIV among women of reproductive age (prong 1). Prong 2 and 4 (Prevention of unintended pregnancies / family planning, and provision of ongoing care to mothers, children and families) are not yet (fully) implemented.

BOX 2: PREVENTION OF THE FURTHER SPREADING OF HIV

Future Directions:

- Developing a National Prevention Strategy, which includes a National Communication Strategy targeting the general population, identified key populations and vulnerable groups ensuring a national coverage of HIV prevention measures
- Expanding the coverage of National outreach program for identified key populations and vulnerable groups
- Finalizing the National Condom Policy and developing a system for supply and distribution
- Increasing awareness and coverage on HIV testing, especially among key populations and ensuring the linkage to care among those with an HIV positive diagnosis
- Developing and implementing measures to guarantee adherence to the quality control system for all HIV testing sites
- Maintaining the linkage between the eMTCT and MCH program with specific focus on expanding the scope and package of SRH and family planning services and strengthening the care service.

4.3 TREATMENT, CARE AND SUPPORT

As is previously mentioned, Suriname chose a decentralized HIV care model starting from 2005, meaning that in principle all physicians from the Medical Mission, RGD and private clinics and hospitals can prescribe treatment and provide other treatment services to HIV patients. In 2010, 102 health facilities provided ART with an average of 11 ART patients per facility.[74] To increase the quality of care, linkage of PLWHIV to the health care system and to retain them in this system, a Centre of Excellence (CoE) and a Platform for HIV Treatment, Care and Support were established in 2010. In addition to the decentralized model, sustainable mechanisms were introduced to ensure free access to ARVs for all HIV positive persons. ARVs were placed on the Essential Medicines List and are financed by the government. However, the decentralized approach has not been implemented as proposed, as there's still a lack of expertise in treatment and care in facilities other than the CoE.

4.3.1. Strengthened lab services

To ensure timely access to services for HIV positive persons, laboratory services for the clinical management of HIV have been extended. CD4 testing, viral load testing and HIV RNA-PCR and HIV DNA-PCR for early infant diagnosis are available in country and operational expenses are covered by the MoH. There are agreements with laboratories outside of Suriname to have them accept HIV genotype testing from Suriname against current rates. However, ARV hypersensitivity testing and drug level measuring is not available at the moment. With key laboratory services in place, persons diagnosed with HIV can access CD4 and viral load testing. However, there are still some gaps and challenges in accessing HIV related laboratory services. Although treatment for HIV is free of charge, the laboratory services (apart from CD4, VL, EID, and HIV testing) are not. Patients in remote areas don't have equal access to lab services to those in or around the capital, as there are obstacles in the transportation of samples. There is no regulation in place to ensure the accessibility of quality lab services covering the entire country that follows agreements with all stakeholders and partners with the MoH in a leadership role.

74 PAHO/WHO. 2013. Anti-Retroviral Treatment in the Spotlight: A Public Health Analysis in Latin America and the Caribbean.

4.3.2. Scaled up treatment

Up scaling treatment strategies resulted in a third revision of national treatment protocols and dietary guidelines in 2010 and 2011, with accompanying trainings for health care workers. The pre-ART protocols describe an algorithm for HIV positive persons to make sure that PLWHIV are 'retained in care' and the treatment protocol describes national criteria by which to determine 'ART eligibility'. The protocols also describe an algorithm for the current HIV treatment schemes and accompanying side effects and how to facilitate patients 'to adhere to treatment' by a follow up clinical program to ultimately achieve the desired 'viral suppression'. However, revision of the protocols is needed to be up to par with the latest WHO guidelines (2013). In addition, the national protocol on Safe Clinical Practices has not been revised, the treatment protocol for adults is not comprehensive yet and the WHO proposed joint HIV/TB protocol was not developed.

In recent years the implemented measures and changes in the structure of the program seem to have been successful. In 2006, 24.1% of eligible persons were actually receiving ART. This number increased to 74.0% in 2012, assuming initiation of treatment at CD4 count < 200. [75] [76]

Table 4: UNGASS indicator 4.1 and 4.2

Indicator	2006	2007	2008	2009	2010	2011	2012	2013*
Percentage of eligible adults and children with currently receiving antiretroviral therapy	24.1	35.8	44.1	51.2	58.5	69.9	74	
Percentage of adults and children with HIV still alive and known to be on treatment 12 months after initiation of antiretroviral treatment	81	78	62	72	79	65.2	82.2	78.7

*2013, Preliminary data, subject to change
Source: Suriname AIDS Response Progress Report 2012 - 2014

It was already recognized in the previous NSPs of '2004-2008' and '2009-2013', that treatment care and counseling are areas of priority, for which a robust HIV treatment care and counseling program is necessary to support treatment as prevention and to decrease HIV related morbidity and mortality. With the increased health system support to start ARV in Suriname, the number of persons enrolled into treatment steadily increased until 2011. After 2011 a decline was noted in the number persons enrolled into treatment each year, possibly explained by a decline in the numbers of persons testing positive for HIV. From 2000 to 2013 a cumulative number of 2139 of PLHIV (15 years and older) were enrolled into treatment. When observing the differences in the sexes, it seems that until 2011 almost as much men as women yearly enrolled into treatment, while in the last 2 years almost twice as much men compared to women yearly enrolled into treatment. [77]

75 Suriname AIDS Response Progress Report 2012-2014, table 7.
76 M&E Unit, Ministry of Health. 2014. HIV Master database.
77 M&E Unit, Ministry of Health. 2014. HIV Master database.

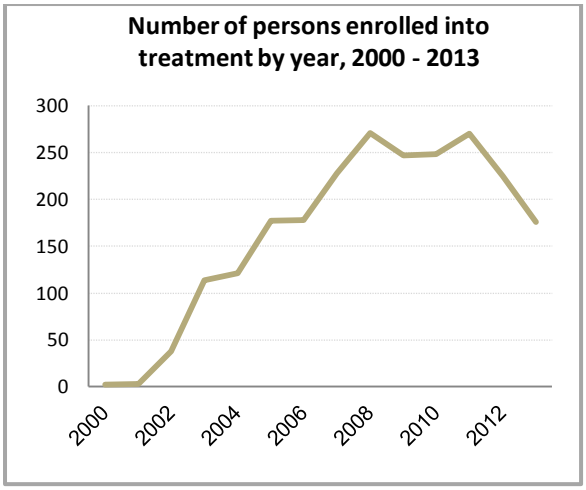


Figure 16: Number of persons enrolled into treatment, 2000-2013
Source: HIV Master database MoH, 2014

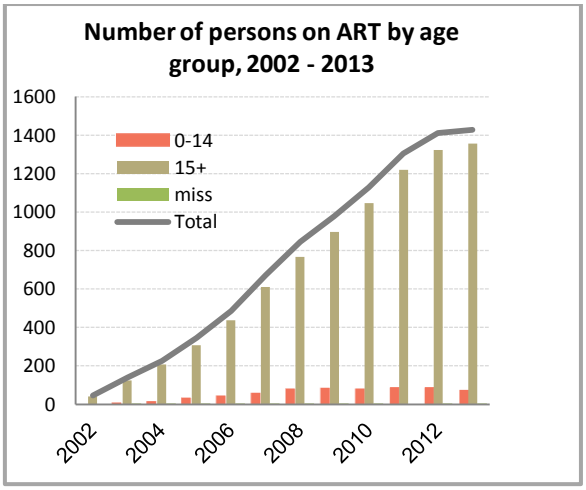


Figure 17: Number of people on ART by age group, 2002-2013
Source: HIV Master database MoH, 2014

In 2013 there were 71 children (14 and younger) on ART. As shown in figure 13, the children yearly enrolled into treatment, increased to a maximum of 26 in 2008. From 2009 on, the yearly numbers declined to only 6 children enrolled into treatment in 2013. Of children enrolled from 2001 to 2013, 83 (52%) were still on treatment in 2013. About one third of the children enrolled into treatment from 2001 to 2013, were younger than 1 year at time of the enrollment. [78]

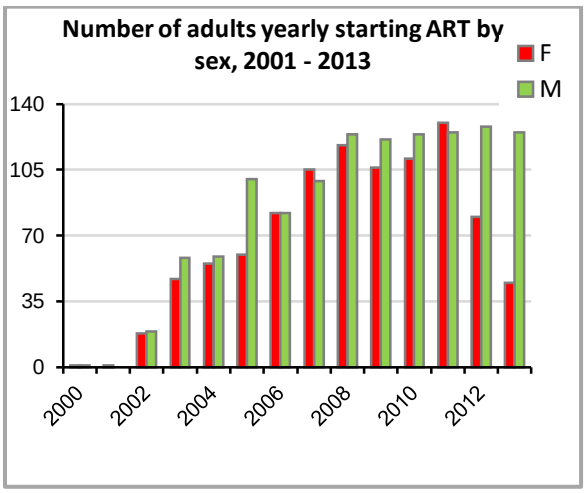


Figure 18: Number of Adults (>14 years) yearly starting ART by sex, 2000-2013
Source: HIV Master database MOH, 2014

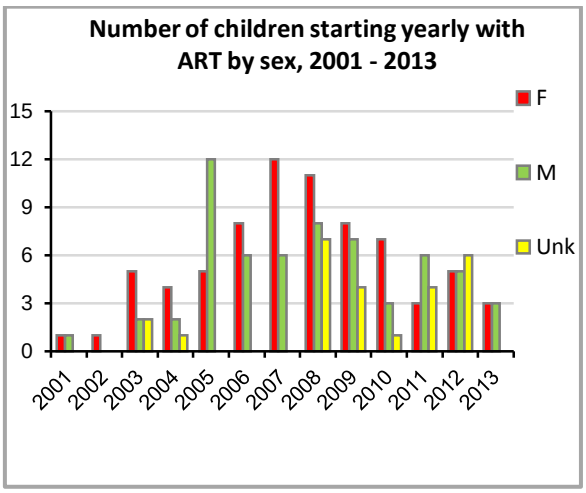


Figure 19: Number of Children (<15 years) yearly starting ART by sex, 2000-2013

While the program has had success in increasing the percentage of persons eligible for ART on ART according to the national criteria, there are still some gaps and challenges in providing ART to all eligible persons and with the patient adherence. Currently it is assessed that 60% of people eligible for treatment (CD4 < 200) are receiving ART, in addition, 87.5% of HIV positive tested persons had a CD4 count below 350 at diagnosis. [79] 65% of the cases in which VL was tested had a VL below 1000 copies/ml, while it should be noted that a high number of patients starting ART did not have a VL test

78 M&E Unit, Ministry of Health. 2014. HIV Master database.
79 M&E Unit, Ministry of Health. 2014. HIV Master database.

done.[80] [81] In addition, it seems that most of the 5 ART dispensing facilities experienced short stock outs of at least one required antiretroviral drug in the last 12 months, as the provisioning of the ART dispensing sites is demand driven and depends on accurate stock management at the level of the dispensing site. There also seems to be an issue with 'patient adherence' as data indicates that of 2139 adults enrolled into treatment between 2000 and 2013, 1343 (63%) remained on treatment in 2013, while 37% stopped with treatment for unknown reasons. [82] Unfortunately the same pattern is seen in the data for children as 52% (N=83) were still on treatment in 2013 of those enrolled in treatment between 2001 and 2013. Approximately one third of these children were younger than 1 year at the time of the enrollment. On average 25 – 30% of persons starting ART stop within one year of their enrollment into treatment. [83] Research is currently planned to evaluate the reasons why patients fail to pick up their medication.

4.3.3. Extended social support and community participation

In addition to free treatment, PLHIV are eligible for receiving social support, if needed. A psychosocial support system is in place with now a comprehensive proposed plan to upscale this system that includes professionalizing of the peer counselor and buddy system, assigning social workers, acquiring a psychologist, training of nurses to provide treatment and care to PLHIV. As part of this process, the MoH appointed a Manager Psychosocial Care for Children to specifically manage the psychosocial care for children with HIV. In addition to this, the MOH supports children's homes specialized in care for HIV affected children. All is part of the support of the MOH to NGOs that contributes to the objectives of the National Strategic for HIV treatment and care as part of a community systems approach.

As is previously mentioned, community organizations have a key role in providing individual patient support through the system of buddy help and peer counselors. In addition, the NGOs are also engaged in the organization of patient support groups and awareness activities in schools and in remote communities. NGOs also serve as advocates and spokespersons for the target populations and communities they serve and as such, participate in national, regional and international coordination mechanisms and civil society activities. NGOs are represented in the Country Coordinating Mechanism (CCM) for the Global Fund (GF) in Suriname and are, as a member of the CCM, involved and informed about all HIV GF projects. A focal point at the MOH was assigned with the responsibility for registration, supervision and coordination of all civil society activities and a monitoring and evaluation system was set up that monitors the effectiveness of civil society participation.

However there are still some gaps and challenges related to the provision of social support and the registration of support given. The NGOs make an important contribution to HIV care, however, they report several challenges for sustaining their services, such as insufficient funds, insufficient capacity in human resources (quantitative and qualitative) and insufficient law enforcement against stigma and discrimination. While social support is provided by the Ministry of Social Affairs to PLHIV in need, there is no data of undernourished PLHIV that received therapeutic or supplementary food at any point during the reporting period, as the PLHIV receiving food packages are not registered as PLHIV in the support system of the Ministry of Social Affairs.

80 This high number could partly be explained by a high number (more than 20 %) of persons who were lost to follow-up within 12 months after starting ARVs within the program.

81 M&E Unit, Ministry of Health. 2014. HIV Master database.

82 M&E Unit, Ministry of Health. 2014. HIV Master database.

83 M&E Unit, Ministry of Health. 2014. HIV Master database.

4.3.4. TB and HIV program collaboration

Collaboration between the TB and HIV program has been initiated: working relationships between the internal medicine specialists treating HIV patients and the pulmonologist treating TB patients have been established; an ad-hoc TB/HIV workgroup was formed in 2013, but is not active anymore. The head of the TB program and the HIV program acknowledge the need for a mechanism to plan and monitor the TB/HIV collaborative activities. International guidelines will be used as reference to develop national TB/HIV collaborative guidelines. One of the aims of the program is to achieve 100% screening of TB patients for HIV. In the years 2000-2013, the percentage of TB patients screened for HIV increased from 56% to 97%. The highest percentage of positive was noted in 2010 with 33.5% which decreased to 22.6% in 2013. Of the TB patients 58% received anti-retroviral therapy during TB treatment in 2013 [84]

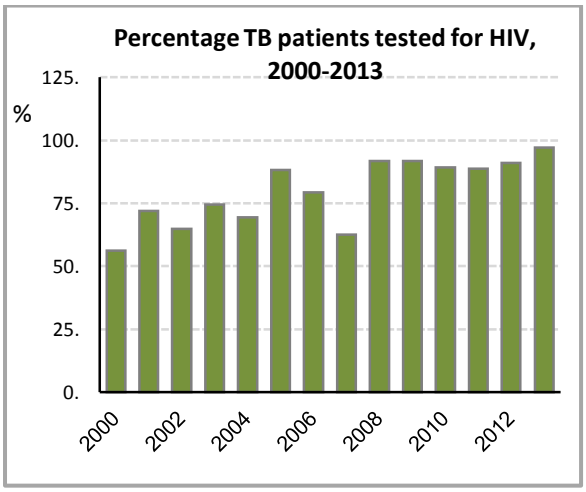


Figure 20: Percentage of TB patients tested for HIV, 2000-2013
Source: National Tuberculose Programme, BOG, 2014

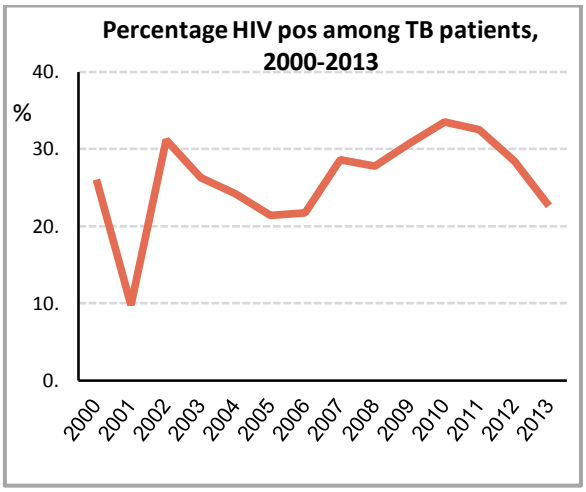


Figure 21: Percentage of HIV positives among TB patients, 2000-2013
Source: National Tuberculose Programme, BOG, 2014

There is no surveillance data available of TB screening in HIV patients. The HIV program has no data on the percentage of HIV positive patients who were screened for TB in HIV care or treatment settings. Also there are no data available on the percentage of new HIV-positive patients starting IPT over the past years. However, there are efforts being made to structurally introduce TB screening in HIV patients by a clinical algorithm containing 4 questions. This algorithm still needs to be officially introduced in the HIV and TB guidelines. Both the guidelines for HIV and TB treatment address the TB/HIV co-infection, however, there is no joint planning of TB/HIV collaborative activities. To strengthen both programs to address the high morbidity and mortality among patients with a TB/HIV co-infection, joint planning will be introduced with the re-installment of a coordinating body for TB/HIV collaborative activities.

84 MOH. 2014. National TB programme surveillance.

With respect to the implementation of the WHO recommended HIV/TB collaborative activities the status is as follows:

Table 5: Implementation status 12 TB/HIV collaborative activities

A. Establish and strengthen the mechanisms for delivering integrated TB and HIV services	**A.1.** Set up and strengthen a coordinating body for collaborative TB/HIV activities functional at all levels	Initiation started in 2013, but structure is inactive. It will be reactivated in 2015
	A.2. Determine HIV prevalence among TB patients and TB prevalence among people living with HIV	HIV prevalence among TB patients is known. No structured data collection of TB among HIV patients. This will be addressed in this Concept Note.
	A.3. Carry out joint TB/HIV planning to integrate the delivery of TB and HIV services	Currently only ad hoc planning exists. Joint planning started with the Concept Note. It will be institutionalized under a single TB/HIV manager that will be appointed.
	A.4. Monitor and evaluate collaborative TB/HIV activities.	Indirectly done by analyzing HIV and TB data separately. Will be analyzed jointly in the future. TB and HIV databases will be linked and joint frame of analysis designed
B. Reduce the burden of TB in people living with HIV and initiate early antiretroviral therapy (the Three I's for HIV/TB)	**B.1.** Intensify TB case-finding and ensure high quality anti-tuberculosis treatment	Clinical algorithm was drafted, but the monitoring of its implementation at the primary care level is not fully implemented. At secondary level; every HIV patient is actively screened for TB but the system lacks a proper tool to compile the data about the activity. It will be part of the effort to jointly analyse the data.
	B.2. Initiate TB prevention with Isoniazid preventive therapy and early antiretroviral therapy	TB guidelines address recommends early ARV treatment PLHIV and TB. This is followed by the clinicians but there is a lack of a proper tool to compile the data about the activity. Guidelines for IPT exist in the TB Guidelines but are not followed regularly.
	B.3. Ensure control of TB Infection in health-care facilities and congregate settings	No proper infection control policy in place. Will be addressed by both the TB and HIV NSPs. With technical support from PAHO. Priorities for the Sanatorium and ambulatories receiving HIV and TB patients.
C. Reduce the burden of HIV in patients with presumptive and diagnosed TB	**C.1.** Provide HIV testing and counseling to patients with presumptive and diagnosed TB	> 90% of all TB patients (confirmed and presumptive TB) are tested for HIV. Most of the patients with early dead are not being tested. This will be improved. The staff of the TB program is trained in PITC. HIV Counseling and testing of TB suspects will be conducted at the NTP according to new NSP and this Concept Note.
	C.2. Provide HIV prevention interventions for patients with presumptive and diagnosed TB	TB patients are offered condoms at the national tuberculosis program. PITC will be introduced. Currently patients with TB diagnosed and presumptive are referred for HIV testing. There is room for improvement, especially the social support aspects that will be addressed jointly with the HIV social support care system created with the support of this Concept Note.
	C.3. Provide co-trimoxazole preventive therapy for TB patients living with HIV	Only provided at CD4<200. Will be expanded to all TB/HIV patients.
	C.4. Ensure HIV prevention interventions, treatment and care for TB patients living with HIV	Needs to be better structure and strengthened. Currently it consist of HIV testing in the laboratory and condom distribution a at TB clinic for TB patients. HIV testing and counselling will be implemented at the TB clinic.
	C.5. Provide antiretroviral therapy for TB patients living with HIV	There is a lack of information and there is a need for systematic capture of the information. Another component of the joint analytical system.

BOX 3: TREATMENT, CARE AND SUPPORT

Future Directions:

- Revising the current decentralized public health approach to come to a fitting approach that will guarantee the proper execution of the Continuum of Care
- Updating national protocols in alignment with Treatment 2.0
- Establishing a regulation policy that guarantees accessibility of quality lab services in all labs as agreed between the MoH and collaborating partners as part of the continuum of care.
- Continuing to improve the sustainability and accessibility of ART by improving the procurement and stock management on the level of the dispensaries; ensuring procurement of ARVs according to national guidelines, including 2nd and 3rd line medications and drugs for opportunistic infections.
- Strengthening the joint collaboration in planning and implementation of program activities between the TB and HIV program.
- Continuing the special focus on key populations, vulnerable groups as well as remote and migrant populations and men to ensure that all persons eligible for treatment are reached and linked to the Continuum of Care
- Strengthening the central coordination of all psychosocial activities and services by means of a strategy and ensuring sustainable funding and implementation of this strategy.

4.4 PUSHING BACK THE STIGMA AND DISCRIMINATION SURROUNDING HIV

Stigma and discrimination (S&D) against the most vulnerable populations, including people living with HIV, sexual minorities, sex workers and sexually active youth/adolescents, have continued to adversely affect universal access to treatment and care during the past years. A clear example of the extent of S&D experienced is provided by a recent needs assessment among MSM and Ttransgenders. This assessment states that almost half of MSM experienced S&D based on their sexual orientation and that S&D was experienced most by the transgender group. With S&D and being shunned by family members as one of the main reasons, many MSM and transgenders experienced depression. In addition, S&D by health care workers and breaches of confidentiality were named as one of the common barriers to services.

The Constitution of Suriname states that every citizen has the right to healthcare and the article 8 of the constitution protects the rights of persons to live free from discrimination. However, to seriously push back S&D a need was felt to adjust the legal environment in such a way that it clearly defines protection from discrimination on an extensive number of grounds which include sex, gender, sexual orientation and HIV or other health status. The PANCAP 'Justice for All' program aiming of eliminating S&D in the HIV response to the Caribbean, was introduced in 2013 and currently the country is preparing the implementation of this program. As such a country consultation has taken place regarding the constitutional protection of persons living with HIV. During this consultation key measures were proposed to ensure a proper legal environment that clearly defines discrimination and states all medical information as private and subject to protection. Additional measures were proposed to adjust the legal environment in such a way that sanctions can be taken against any organization or person, including the State, in case of discriminatory acts or a breach of confidentiality. [85]

85 Mohamed, P., Ministry of Health. 2014. PANCAP Justice for all consultations; phase 2 DRAFT country report.

In the past years, some measures were already taken to halt S&D in the workplace and in clinical settings. The National Aids Program is working together with other ministries and partners to develop policies and to provide training to address S&D. Initiatives that are currently in a stage of planning include the establishment of a Human Rights desk and a Human Rights Commission. A workplace policy has been developed in the context of the 2007-2009 ILO workplace program (2007-2009) implemented jointly by the MoH and the Ministry of Labor. In addition, all health care workers take an oath to ensure the confidentiality of the persons seeking services, a network of peer counselors has been established to facilitate a peer network for PLHIV and MoH supports the activities of NGOs and Faith Based Organizations (FBOs) advocating for the human rights of the target groups. Furthermore, personnel of key organizations, such as army personnel and health care workers, have been trained in the awareness of S&D and human rights principles.

With all measures taken and initiated there are still some gaps and challenges that need to be addressed. Currently there is no national S&D response and little follow-up after activities resulting in gains not being maintained. There's still limited programmatic activity targeting S&D and implemented programs were not sustained with an apparent difficulty in mounting the required multi-faceted approach to reduce S&D. The generalized perception that HIV is a health-related problem and falls within the purview of the Ministry of Health has compromised the NAP's ability to implement a multi-sectoral response S&D in Suriname, just as a lack or absence of operational research to provide for evidence-based policy formulation and decision making. In addition the weak PLHIV network and a lack of decision on where to house the Human Right Desk/Human Rights Commission (HRC) pose obstacles for implementing S&D programs. Meanwhile there are still companies that mandate testing and fire employees who are HIV positive, insurance companies that stop the insurance of PLHIV and breeches of confidentiality of service providers as mentioned in the needs assessment among MSM and transgenders. There has also been a lack of sufficient HR and funds to implement HIV workplace education activities.

BOX 4: PUSHING BACK STIGMA AND DISCRIMINATION SURROUNDING HIV

Future Directions:

- Adopting a multi-faceted approach to S&D including an evidence-informed approach to future program development
- Implementing S&D reduction programs targeting the general population and key populations (MSM & SW) with increasing CSO/FBO involvement, using the PANCAP Justice for All model
- Establishing a functioning mechanism (HR desk/HRC) for recording and addressing S&D complaints
- Utilizing PANCAP Model Anti-Discrimination Bill to inform the creation of Suriname's anti-stigma legislation
- Enforcing law and penalties in instances of breach of confidentiality
- Increasing efforts to ensure that HIV/AIDS is treated as a chronic disease and fully integrated into Health services; explicitly incorporating social support mechanism into care and treatment protocols and procedures including the GIPA approach
- Establishing a PLHIV network and increasing PLHIV involvement in accordance with the GIPA principle – revisiting
- Promoting a stronger involvement of civil society and faith based organizations and Strengthening NGOs via capacity building efforts
- Developing and implementing a dedicated S&D training program for HCW

4.5. Strategic Information for Policy and Rendering of Services

Data collection and gathering of information has always been a part of the response for HIV. From the beginning of the epidemic minimal data was collected, but data collection has increased over the years through a growing regional and international awareness about the importance of strategic information for policy and decision-making. Suriname has increasingly worked to improve their data system. Over the past years, Suriname has put in efforts to set up a system that ensures the structural gathering of information on HIV testing, treatment, hospitalizations and mortality. To achieve this, the Monitoring & Evaluation Unit of the MOH was strengthened, specifically with regard to the collection of program data, integration of the different HIV data sources and the development of an HIV master database to support the implementation of case-based surveillance. In addition, a system has been initiated that gathers behavioral data of special groups by means of Integrated Biological and Behavioral Surveys. As a consequence, regular comprehensive reporting of routine program indicators on country progress on prevention and treatment and care, has improved. There is now a partial implementation of third generation surveillance and research as policy-preparing instrument has been strengthened, expanded and institutionalized.

However, there's a need to further improve the HIV master database, not only by improving the data quality of the data base itself, but also by working towards the improvement of the data quality supplied by the local reporting partners. There is limited staff committed to and skilled in monitoring and evaluation (M&E) with insufficient research, data analysis and triangulation of data to inform policy and program direction. This has resulted in a number of operational issues. The unique identifier is not being used properly to prevent duplicates and to improve integration of separate data sources; there's no timeliness in the data collection preventing real-time analyses of the program status, while there's a lack in quality and completeness of collected data. There's also no link between the HIV master database and the national mortality data, making it difficult to know whether there are HIV positive persons registered in the database who are deceased. This may influence the real-time calculation of the continuum of care since the numbers of registered persons with HIV will keep increasing, without taking into consideration those who are deceased. In addition, there is no system in place to monitor HIV patients for linkage in care, retention in care and adherence to treatment. Supplementary data such as psychosocial information, reasons for dropout are also not being recorded and there's no improved analysis of the testing and other operational laboratory data collected by the NAP, the Central Laboratory and the Academic Hospital.

BOX 5: STRATEGIC INFORMATION FOR POLICY AND RENDERING OF SERVICES

Future Directions:

- Restructuring the M&E TWG
- Developing and disseminating an M&E plan for collection and analysis of the data, including revising inconsistencies in key indicators and developing new indicators
- Developing an Operation Manual outlining roles and responsibilities for data collection, timeliness, data quality and developing a data management strategy with supporting tools, equipment and mechanisms to facilitate effective data collection, transfer, storage, analysis
- Establishing or reinforcing linkages between different relevant databases , including mortality database, where these exist to ensure data consistency and to avoid duplication of M&E effort
- Establishing a system to monitor HIV patients along the continuum of care
- Consolidating HIV/STI surveillance data into an annual country surveillance report using an existing template that can be updated annually.
- Developing appropriate guidelines to regulate and improve data quality, including the use of unique identifier nationwide
- Developing a national HIV evaluation and research agenda to guide research and evaluation efforts.
- Increasing staff and stakeholders trained in M&E
- Tapping into sources of technical support available to expand health research

CHAPTER 5 GUIDING PRINCIPLES

The HIV response is a priority of the entire Government of Suriname, including all relevant ministries and departments. The NSP is in accordance with national objectives, principles and programs such as the Multi-Annual Development Plan, UNDAF, Safe Motherhood & Neonatal Health Action Plan and Sexual & Reproductive Health Policy. [86] [87] [88]

The NSP will be based on regional and international recommendations such as Treatment 2.0 Framework for Action, 2020 Treatment cascade targets 90-90-90, HIV Continuum of Care, WHO policy on TB/HIV collaborative activities, Elimination Mother to Child Transmission (EMTCT) and the Caribbean Regional Strategic Framework on HIV 2014 – 2018 and the 2014 WHO guidelines on HIV Prevention, Diagnosis and Care for Key Populations. [89] [90] [91] [92] [93] [94] [95] [96]

The guiding principles are therefore:

- **Universal access**
  - The right of access to affordable and proper health care and social security.
  - HIV policy and programs must be integrated in and contribute to strengthening and improving existing health care systems.
- **Inclusion**
  - The strategic response will reflect the involvement of all major sectors and stakeholders.
- **Evidence-based**
  - Policies, interventions and approaches should be based on sound evidence or experience.
- **Sustainability**
  - The strategies and financing for the expanded response will be consistent with available resources, structures and opportunities and in keeping with what is required to reduce and mitigate the impact of the disease.
- **Human Rights**
  - Acknowledgement and protection of rights as guaranteed by the Surinamese Constitution and international agreements on human rights, including the rights of persons with HIV, their fellow human beings, persons with high-risk behavior and groups in a vulnerable position, in particular, women and children.
  - Respect for diversity in ethnic descent, language, sexual preferences and social and economic circumstances in the development of programs.
- **Equity**
  - The program should aim to achieve equitable health outcomes across all populations and settings and promote gender equity.

86 Government of the Republic of Suriname. 2012. Ontwikkelingsplan 2012-2016; Suriname in transformatie.
87 Government of the Republic of Suriname, United Nations. 2012. United Nations Development Assistance Framework (UNDAF) 2012-2016.
88 National sexual reproductive health and rights policy 2013-2017.
89 WHO, UNAIDS. 2011. The Treatment 2.0 Framework for Action: Catalyzing the next phase of treatment, care and support.
90 UNAIDS. 2014. 90-90-90; An ambitious treatment target to help end the aids epidemic.
91 WHO.2013.Consolidated guidelines on the use of anti-retroviral drugs for treating and preventing HIV infection.
92 WHO. 2012. WHO policy on TB/HIV collaborative activities; Guidelines for national programmes and other stakeholders.
93 PAHO/WHO. 2010. Resolution CD50.R12: Strategy and plan of action for the elimination of mother-to-child transmission of HIV and Congenital syphilis.
94 CARICOM, PANCAP. 2008. Caribbean Regional Strategic Framework on HIV and AIDS (2014-2018).
95 WHO. 2006. Towards universal access by 2010; How WHO is working with countries to scale-up HIV prevention, treatment, care and support.
96 WHO.2013.Consolidated guidelines on the use of anti-retroviral drugs for treating and preventing HIV infection.

CHAPTER 6 NATIONAL HIV STRATEGIC PLAN 2014 – 2020

As the findings of the response analysis indicate, there seems to be a need for a sustainable multi-sectoral approach to the HIV response in an appropriate model of care and with the government in a leadership position. In this position the government is able to centrally guide and coordinate the HIV/TB response by means of appropriate policies, plans and strategies that will professionalize prevention interventions and psychosocial services, guarantee and promote access to quality services for all in need and to integrate these services in line ministries and other health programs, such as the joint collaboration with the TB program. To reach universal access to medicines the government investment needs to be sustained as well as continues availability of medicines for all in need. In light of the human rights principle, the HIV response should include structured multi-faceted measures to reduce S&D, encourage a network of PLHIV and take the GIPA principles into account.

6.1 COORDINATION STRUCTURE

With the integration of HIV into the health sector, the multi-sectoral approach and the joint planning and implementation of the TB/HIV collaborative activities, the coordination structure is in a transitional stage. The coordination structure is depicted in figure 21.

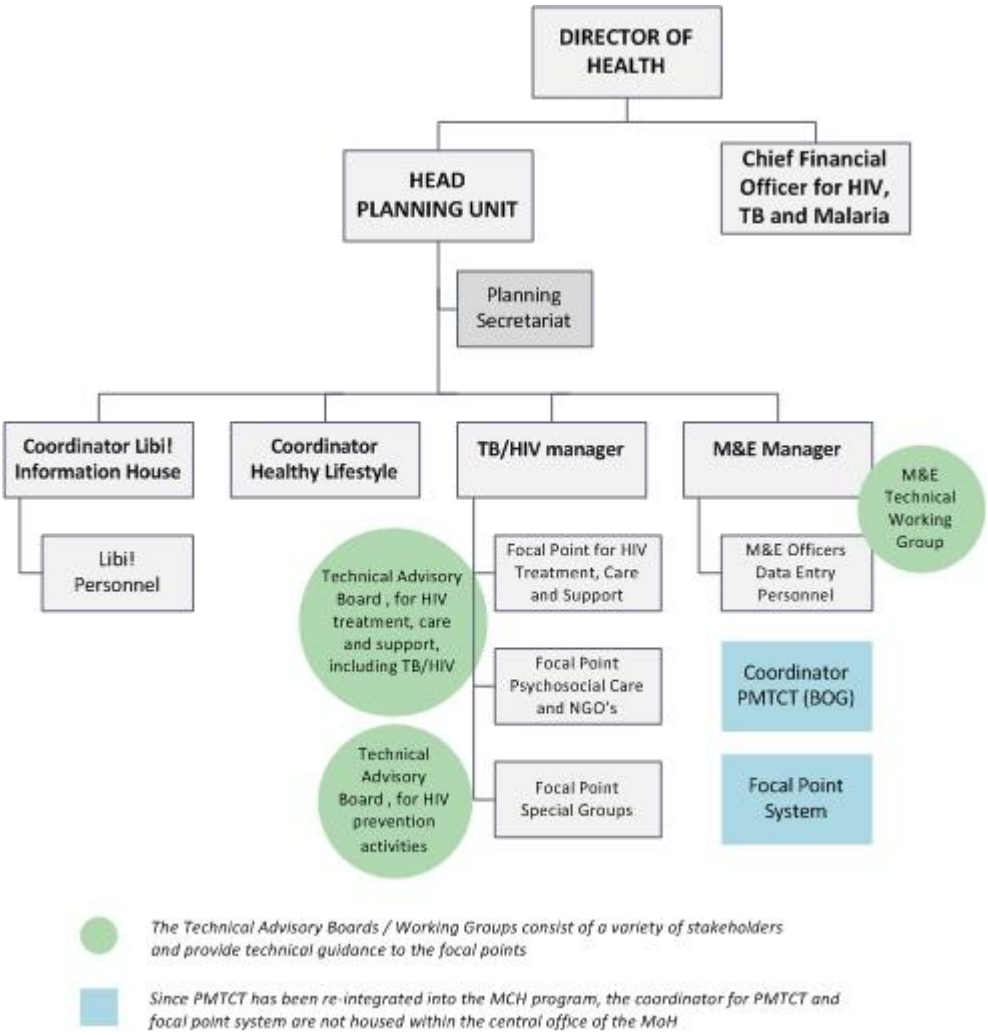
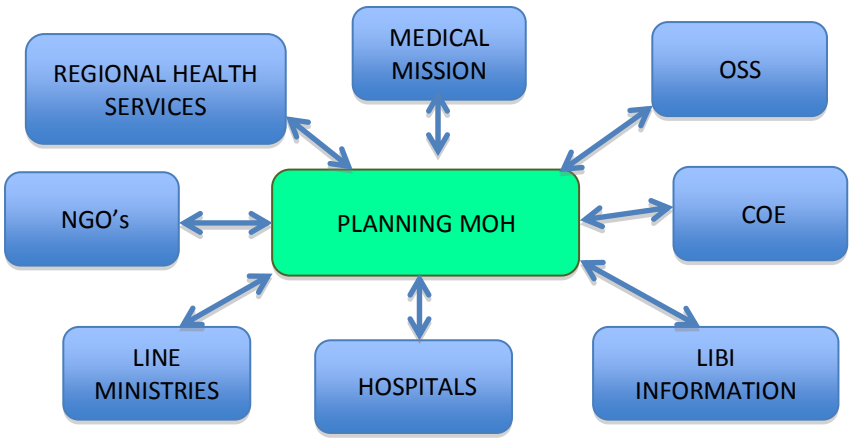


Figure 21: Coordination structure NSP 2014-2020

At the implementation level, the Planning Unit of the MoH has a daily working relationship with the different key stakeholders. These stakeholders have also relationships with each other.



6.2 Goals, Main strategic objectives and Expected Results

Based on the findings of the evaluation of the previous NSP and the recommendations going forward the Ministry of Health, after consulting with its stakeholders, decided on the Goals, Main Strategic Objectives and Expected Results for the third HIV NSP 2014 – 2020.

Goals of the NSP:

- Reduce New Infections
- Improve the Quality of Life of PLHIV

Main Strategic Objectives:

- Reduce HIV transmission among key and vulnerable populations groups (MSM, SW, Youth and others) and in the general population
- Expand high quality comprehensive HIV treatment, care and support
- Eliminate Mother-to-Child transmission

Expected Results:

- 50% reduction in Sexual Transmission of HIV
- 90% of estimated persons with HIV get tested
- 90% of PLHIV in need of treatment are being treated with Lifesaving Antiretroviral Treatment
- 90% on Antiretroviral Treatment have a suppressed viral load
- Eliminate New HIV Infections Among Newborns

6.3 Priority Areas and Crosscutting Themes

To reach the targets as set in the expected results an emphasis should be placed on the improvement of preventive services for targeted populations and to treatment services. It was therefore chosen to align the strategic objectives according to two identified priority areas. These are 'Prevention' and 'Treatment and Care'. In addition the MoH has identified five crosscutting themes that refer to the manner by which this NSP is to be organized and executed. These are 'Inter-sectoral Collaboration and Coordination', 'Integration', 'Capacity Building', 'Strategic Information' and 'Human Rights and Equity'. The identified strategic objectives will therefore reflect an emphasis on the priority areas and will, in addition, be organized according to the identified crosscutting themes.

STRATEGIC OBJECTIVES		
***Cross-cutting* Themes**	**Priority Areas**	
	Prevention	**Treatment and Care**
	✓ Reduce HIV transmission among key and vulnerable groups (MSM, SW, Youth/Adolescents, other), and the general population	✓ Improve high quality comprehensive HIV care, treatment and support ✓ Eliminate Mother-to-Child transmission
Inter-Sectoral Collaboration & Coordination	✓ Facilitate the incorporation of Health and HIV Prevention Interventions Across Sectors	✓ Ensure the multi-sectoral provision of HIV treatment and support in different sectors
Integration	✓ Incorporate HIV interventions into the existing health and social service delivery system ✓ Rational Resource Allocation Across Sectors and Strategic Interventions	
Human Rights and Equity	✓ Ensure that Prevention Interventions incorporate Human rights and equity principles that include gender sensitivity and reduce stigma and discrimination	✓ Ensure that Treatment Services incorporate Human rights and equity principles that include gender sensitivity and reduce stigma and discrimination
Capacity Building	✓ Strengthen human resource capacity (health, non-health and NGOs) for management, coordination and implementation of the HIV Response	
Strategic Information	✓ Improve use of data and information to inform decision making	

6.4 Interventions and activities per Priority Area and Cross-Cutting Themes

PRIORITY AREA: PREVENTION		
STRATEGIC OBJECTIVES	**INTERVENTIONS**	**ACTIVITIES**
1. Reduce HIV transmission among vulnerable groups (MSM, SW, Drug Users, and Prisoners, Youth, other), and the general population	1.1 Increase and maintain the availability of condoms and lubricants	1.1.1 Review/update Draft Condom Policy, and Condom Quality Control Policy 1.1.2 Implement Condom Policy
	1.2 Increase access to HIV testing and counseling	1.2.1 Review the availability of testing sites and utilization to inform decisions regarding the expansion/reduction of sites or the introduction or PITC 1.2.2 Increase community awareness to reduce S&D surrounding VCT 1.2.3 Periodically evaluate the system for the HIV testing in Surname 1.2.4 Provide information to the population (in various languages) on the availability of testing and locations 1.2.5 Develop and disseminate a policy for HIV rapid testing
	1.3 Promote behavior change and encourage healthy lifestyles	1.3.1 Setup prevention technical working group 1.3.2 Develop and implement a national prevention strategy 1.3.3 Strengthen LIBI! For health promotion and healthy lifestyle initiatives (including HIV) 1.3.4 Maintain/implement programmes for educating the general population on health and HIV issues including (S&D reduction) 1.3.5 Develop interventions for targeted groups with the aim of increasing HIV knowledge on transmission routes, testing, correct condom use and information on other STI (including S&D reduction) 1.3.6 Develop and implement innovative behavior change program, including edutainment for Youth/Adolescents 1.3.7 Expand behavior change program for MSM 1.3.8 Expand behavior change program for SW 1.3.9 Develop health promotion and HIV prevention interventions for the workplace (e.g. military, police, etc.)

	1.4 Reduce HIV transmission in medical settings	1.4.1 Ensure updated national protocol on Safe Clinical Practices (SCP) and Post-Exposure-Prophylaxes (PEP) 1.4.2 Implement further training cascade model in the health facilities regarding PEP and SCP protocol 1.4.3 Include SCP and PEP in the curricula for training health and medical personnel (e.g., physician, nurses, lab personnel, health assistants 1.4.4 Ensure correct implementation of PEP and SCP protocols in all health clinics where occupational exposure is present
	1.5 Maintain blood safety	1.5.1 Maintain blood safety

PRIORITY AREA: TREATMENT		
STRATEGIC OBJECTIVES	**INTERVENTIONS**	**ACTIVITIES**
2. Provide high quality comprehensive HIV Care, treatment and support	2.1 Improve linkages to services	2.1.1 Establish system/policy that will strengthen referral to services for newly diagnosed persons 2.1.2 Develop clear procedures for providers conducting PITC to ensure linkages to services for HIV positive persons 2.1.3 Review availability of care and services for OVCs and adolescents 2.1.4 Conduct needs assessment on number of HCWs needed (psychologist, pedagogue, fulltime manager etc.) to provide optimum psychosocial care for CLHIV/ALHIV
	2.2 Treat PLHIV in accordance with updated national guidelines	2.2.1 Revise all the national treatment protocols, based on the WHO guidelines, and dietary guidelines 2.2.2 Develop medication adherence guidelines and train providers on use 2.2.3 Review and rationalize use of Chronic (HIV) nurse
	2.3 Strengthen laboratory services	2.3.1 Maintain laboratory certification 2.3.2 Review HIV lab coordination structure 2.3.3 Periodically review and update laboratory testing protocols 2.3.4 Analyze laboratory data for internal quality control purposes 2.3.5 Strengthen external quality control 2.3.6 Implement mechanism to routinely train and update lab personnel 2.3.7 Procure HIV lab supplies 2.3.8 Structure laboratory services regarding clinical management (PCR, VL, CD4, genotyping)
	2.4 Improve retention in treatment and care and medication adherence by Enhancing the system for psychosocial care and support	2.4.1 Review existing buddy system with an aim toward formalizing and professionalizing 2.4.2 Review structure and functioning of peer counselor system 2.4.3 Expand buddy and peer counselor systems in Paramaribo 2.4.4 Expand buddy and peer counselor systems outside Paramaribo 2.4.5 Expand the psychosocial system to include support to caregivers and families
	2.5 Ensure access and availability of ARVs and drugs for OIs, and HIV-related laboratory testing	2.5.1 Maintain access to free ARV irrespective of legal or national status, based on current guidelines 2.5.2 Establish system for providing HIV-related laboratory testing for all HIV positive persons, including undocumented persons
3. Eliminate Mother-to-Child transmission	3.1 Implement all four prongs of eMTCT strategy according to the National eMTCT framework	3.1.1 Increase access to care through integration of information and prevention services within different levels of the health sector, across different sectors and non-governmental organizations and communities 3.1.2 Integrate HIV, Syphilis and hepatitis B screening and pregnancy testing with sexual reproductive health-, MCH services to reach women and their partners 3.1.3 Increase resources and capacities for counseling services and contraceptive provision to meet the unmet needs of HIV positive women and their partners 3.1.4 Expand psychosocial care within different levels of health sector, NGO's and CBO's 3.1.5 Introduce option B+ during regular antenatal and neonatal services 3.1.6 Increase the promotion of sensitized social protection measures for people living with HIV

CROSS-CUTTING THEMES		
STRATEGIC OBJECTIVES	**INTERVENTIONS**	**ACTIVITIES**
4. Facilitate the incorporation of Health and HIV Prevention Interventions Across Sectors	4.1 Provide support to non-health Ministries and sectors with developing and incorporating Health and HIV prevention interventions into their work plans and budgets	4.1.1. Conduct meetings with department heads and key personnel from non-health sectors to sensitize them on the implications of health and HIV for their sectors 4.1.2. Develop TOR for roles and functions of focal points as it relates to health and HIV responsibilities 4.1.3. Hold periodic focal point meetings of Line Ministry Health/HIV Focal points (Monthly) 4.1.4. Non-health sectors conduct prevention interventions
5. Ensure the multi-sectoral provision of HIV treatment and support in different sectors	5.1 Provide support to non-health Ministries and sectors with developing mechanisms for providing support and treatment to PLHIV	5.1.1. Lobby for the inclusion of HIV in National Health Insurance scheme 5.1.2. Line Ministries to develop and implement HIV prevention sensitization initiatives for their employees 5.1.3. Ministry of Social Affairs to provide support packages to PLHIV
6. Incorporate HIV interventions into the existing health and social service delivery system	6.1 Strengthen linkages between HIV and STIs	6.1.1 Develop HIV/STI policy 6.1.2 Implement STI media campaigns targeting the general population
	6.2 Strengthen linkages between HIV, Maternal Health, Newborn & Child Health Services	6.2.1. Strengthen linkages between PMTCT and MCH
	6.3 Integrate HIV and TB services	6.3.1. Establish and strengthen the mechanisms for integrated TB & HIV services 6.3.2. Determine HIV prevalence among TB patients & TB prevalence among PLHIV
	6.4. Integrate HIV services with Sexual & Reproductive Health Programmes	6.4.1. Expand the availability of youth-focused SRH services 6.4.2. Include HIV in information regarding SRH
7. Rational Resource Allocation Across Sectors and Strategic Interventions	7.1. Ensure the development of annual costed work plans across Ministries and sectors	7.1.1. All line Ministries develop costed annual work plans that incorporate selected Health Promotion and HIV interventions (with support from MOH Focal point as needed) 7.1.2. MOH focal point and team review annual work plans to ensure harmonization across Ministries and in accordance with national prevention and treatment strategies
8. Ensure that Prevention Interventions incorporate Human rights and equity principles that include gender sensitivity and reduce stigma and discrimination	8.1. Provide support for the development of Prevention interventions that include components to reduce stigma and discrimination and address gender disparities	8.1.1. Implement PANCAP Justice for All (JFA) Roadmap activities tailored to Surinamese needs

9. Ensure that Treatment Services incorporate Human rights and equity principles that include gender sensitivity and reduce stigma and discrimination	9.1. Provide support for the development of Treatment interventions that include components to reduce stigma and discrimination and address gender disparities	9.1.1 Include PLHIV and vulnerable groups in programme design and implementation 9.1.2 Ministry of Justice and Police to establish mechanisms to document and address human rights violations 9.1.3 Ministry of Labor to develop and disseminate national HIV workplace policies/programme 9.1.4 Provide HIV sensitization and confidentiality training to all health facility staff 9.1.5 Initiate broad-based education programme to reduce stigma and discrimination in the general population 9.1.6 Utilize PANCAP Model Anti-Discrimination Bill to inform the creation of Suriname's anti-stigma legislation 9.1.7 Systematically collecting better data on stigma and discrimination and use to develop evidenced-based interventions
10. Strengthen human resource capacity (health, non-health and NGOs) for management, coordination and implementation of the HIV Response	10.1. Strengthen the capacity to effectively manage and coordinate a multi-sectoral response	10.1.1 Systematically build the capacity of health and HIV focal points in: 1) Programme design; 2) Programme management; 3) Budgeting; 4) Monitoring and evaluation; 10.1.2 Facilitate access of Surinamese nationals to Regional and International training events as opportunities arise
	10.2.Enhance the quality of the cadre of health care providers	10.2.1. Implement care and treatment component of Capacity Development Plan (covered under treatment)
	10.3. Build the capacity of health, non-health and NGOs staff to develop and deliver effective prevention interventions	10.3.1. Implement prevention component of Capacity Development Plan (covered under Prevention):
11. Use data and information to inform decision making	11.1. Strengthen data collection, verification and analysis system	11.1.1. Develop and disseminate HIV M&E plan 11.1.2. Develop M&E operations manual for use by multi-sectoral partners 11.1.3. Provide training and supportive supervision to programme staff on data collection and verification (including PMTCT surveillance) 11.1.4. Improvement of the Patient Master Index 11.1.5. Explore data linkage and sharing with French Guiana to improve strategic information in Surinamese accessing prevention, treatment and PMTCT services in French Guiana 11.1.6. Establish PEP data collection system 11.1.7. Establish data collection system for Hep B and syphilis among pregnant women 11.1.8. Meetings of the M&E TWG
	11.2.Conduct evaluations, operational research & special studies	11.2.1. Develop a national HIV evaluation and research agenda to guide research and evaluation effort 11.2.2. Conduct mid-term evaluation of the NSP 11.2.3. Conduct end of NSP evaluation 11.2.4. Conduct operational research on aspects of the care and treatment and prevention systems to identify obstacles, bottlenecks and improve programme performance

CHAPTER 7. MONITORING AND EVALUATION FRAMEWORK

Based on the Strategic Objectives and the Activities, outcome and output indicators were classified. Most of the indicators are taken from international reporting requirements. In some instances specific Surinamese Output indicators were formulated based on activities to be realised. The table below gives an overview of division of the 74 indicators by outcome or output.

Table 6: Overview of division of 74 indicators by outcome or output per strategic objective

STRATEGIC OBJECTIVE	outcome	output
Reduce HIV transmission among key and vulnerable groups (MSM, SWs, Youth and others), and the general population	8	7
Provide high quality comprehensive HIV Care, treatment and support	6	4
Eliminate Mother-to-Child transmission	6	8
Incorporate HIV interventions into the existing health and social service delivery system	9	2
Facilitate the incorporation of Health and HIV Prevention and Treatment Interventions Across Sectors	2	3
Ensure that Prevention and Treatment Interventions incorporate a Human rights approach that include gender sensitivity and reduce stigma and discrimination	3	2
Rational Resource Allocation Across Sectors and Strategic Interventions	1	1
Strengthen human resource capacity (health, non-health and NGOs) for management, coordination and implementation of the HIV Response	2	4
Use data and information to inform decision making	2	4
TOTAL	**39**	**35**

A detailed list of outcome indicators per strategic objective is listed below in table 7.

Table 7: Impact/outcome indicators by strategic objectives

STRATEGIC OBJECTIVE: REDUCE HIV TRANSMISSION AMONG VULNERABLE GROUPS (MSM, SW, DRUG USERS, AND PRISONERS, YOUTH), AND THE GENERAL POPULATION	
Impact / outcome indicators (8):	**FREQUENCY**
▪ Percentage of young people aged 15–24 who are living with HIV **(GARP)** [97]	Annual
▪ Percentage of sex workers who are living with HIV **(GARP)**	Every 3–5 years
▪ Percentage of men who have sex with men who are living with HIV **(GARP)**	Every 3–5 years
▪ Percentage of young women and men aged 15-24 who have had sexual intercourse before the age of 15 **(GARP)**	Every 3–5 years
▪ Percentage of sex workers reporting the use of a condom with their most recent client **(GARP)**	Every 3–5 years
▪ Percentage of men reporting the use of a condom the last time they had anal sex with a male partner **(GARP)**	Every 3–5 years
▪ Percentage of women and men aged 15-49 who had more than one partner in the past 12 months who used a condom during their last sexual intercourse **(GARP)**	Every 3–5 years
▪ Percentage of women and men aged 15–49 who have had sexual intercourse with more than one partner in the past 12 months **(GARP)**	Every 3–5 years

97 UNAIDS, UNICEF, WHO. 2013. Global AIDS Response Progress Reporting 2013; Construction of Core Indicators for monitoring the 2011 UN Political Declaration on HIV/AIDS.

STRATEGIC OBJECTIVE: PROVIDE HIGH QUALITY COMPREHENSIVE HIV CARE, TREATMENT AND SUPPORT	
Impact / outcome indicators (6):	**FREQUENCY**
▪ Percentage of PLHIV on Antiretroviral Treatment that has a suppressed viral load	Annually
▪ Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy **(GARP)**	Any continuous 12-month
▪ Percentage of adults and children with HIV still alive and known to be on antiretroviral therapy (b) 24 months after initiating treatment **(UA 2011 G3b)**	Any continuous 12-month
▪ Percentage of adults and children with HIV still alive and known to be on antiretroviral therapy 60 months after initiating treatment **(UA 2011 G3c)**	Any continuous 12-month
▪ Percentage of adults and children currently receiving antiretroviral therapy among all adults and children living with HIV **(GARP)**	Continuously with annual reporting
▪ Percentage of adults and children newly enrolled in HIV care starting isoniazid preventive therapy (IPT) **(UA 2011 #E3)**	Continuously with annual reporting

STRATEGIC OBJECTIVE: ELIMINATE MOTHER-TO-CHILD TRANSMISSION	
Impact / outcome indicators (6):	**FREQUENCY**
▪ Percentage of HIV-positive pregnant women who received antiretroviral medicine to reduce the risk of mother-to-child transmission **(GARP)**	Annual or more frequently
▪ Percentage of women living with HIV who are provided with antiretroviral medicines for themselves or their infants during the breastfeeding period (formerly indicator 3.8) **(GARP)**	Annual or more frequently
▪ Percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth **(GARP)**	Annual or more frequently
▪ Estimated percentage of child HIV infections from HIV-positive women delivering in the past 12 months **(GARP)**	Annual
▪ Percentage of infants born to HIV-infected women receiving antiretroviral (ARV) prophylaxis to reduce the risk of early mother-to-child transmission in the first 6 weeks (i.e. early postpartum transmission around 6 weeks of age) **(UA 2011 #I9)**	Annual
▪ Percentage of infants born to HIV-infected women who are provided with antiretrovirals to reduce the risk of HIV transmission during breastfeeding **(NEW)**	Annual

STRATEGIC OBJECTIVE: INCORPORATE HIV INTERVENTIONS INTO THE EXISTING HEALTH AND SOCIAL SERVICE DELIVERY SYSTEM	
Impact / outcome indicators (9):	**FREQUENCY**
▪ Percentage of antenatal care attendees who were positive for syphilis **(UA 2011 #F2)**	Collected continuously; Reported Annual
▪ Percentage of women accessing antenatal care (ANC) services who were tested for syphilis at first ANC visit **(UA 2011 #F1)**	Collected continuously; Reported Annual
▪ Percentage of sex workers (SWs) with active syphilis **(UA 2011#F4)**	Annually
▪ Percentage of men who have sex with men with active syphilis **(UA 2011 #F5)**	Annually
▪ Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV (**GARP)**	Collected continuously; Reported Annual
▪ Percentage of adults and children enrolled in HIV care who had TB status assessed and recorded during their last visit **(UA 2011 #E4)**	Collected continuously; Reported Annual
▪ Current school attendance among orphans and non-orphans (10–14 years old, primary school age, secondary school age) **(GARP)**	Every 2 years
▪ Proportion of the poorest households who received external economic support in the last 3 months **(GARP)**	Every 4-5 years
▪ National Commitments and Policy Instrument (NCPI) **(GARP)**	Every 2 years

STRATEGIC OBJECTIVE: FACILITATE THE INCORPORATION OF HEALTH AND HIV PREVENTION AND TREATMENT INTERVENTIONS ACROSS SECTORS	
Impact / outcome indicators (2):	**FREQUENCY**
▪ Percentage of schools that provided life-skills based education in the last academic year **(UNAIDS).**	Biennial
▪ Number on non-health Ministries that conducted at least one HIV/AIDS-related activity in the last year	Annually

STRATEGIC OBJECTIVE: ENSURE THAT PREVENTION AND TREATMENT INTERVENTIONS INCORPORATE A HUMAN RIGHTS APPROACH THAT INCLUDE GENDER SENSITIVITY AND REDUCE STIGMA AND DISCRIMINATION	
Impact / outcome indicators (2):	**FREQUENCY**
▪ Percentage of large enterprises/companies that have HIV/AIDS workplace policies and programmes **(UNAIDS)**	Biennial
▪ Percentage of women and men aged 15–49 who report discriminatory attitudes towards people living with HIV. **(GARP)**	3-5 years

STRATEGIC OBJECTIVE: RATIONAL RESOURCE ALLOCATION ACROSS SECTORS AND STRATEGIC INTERVENTIONS	
Impact / outcome indicators (1):	**FREQUENCY**
▪ Domestic and international AIDS spending by categories and financing sources **(GARP)**	Annually

STRATEGIC OBJECTIVE: STRENGTHEN HUMAN RESOURCE CAPACITY (HEALTH, NON-HEALTH AND NGOS) FOR MANAGEMENT, COORDINATION AND IMPLEMENTATION OF THE HIV RESPONSE	
Impact / outcome indicators (2):	**FREQUENCY**
▪ Percentage of annual consolidated (health and non-health) HIV workplan completed	Annually
▪ Percentage of MOH annual approved HIV budget spent	Annually

STRATEGIC OBJECTIVE: USE DATA AND INFORMATION TO INFORM DECISION MAKING	
Impact / outcome indicators (2):	**FREQUENCY**
▪ Mid-course adjustments to NSP based on findings from Mid-Term Evaluation	Every 3 years
▪ Production and dissemination of data-driven annual HIV reports	Annual

CHAPTER 8. COSTING

The HIV NSP 2014 -2020 has been costed based upon the calculation of the costs of annual operational plans by the implementation strategies of the 2 priority areas and 5 cross-cutting themes. The calculation of the total cost amounts to US $ 29,514,855.90.[98]

Priority Area: PREVENTION	
Implementation Strategies	**Cost by Implementation Strategy (USD)**
Increase the availability of condoms and lubricants	338,987.00
Increase access to HIV testing and counseling	1,105,544.57
Promote behavior change and encourage healthy lifestyles	4,816,917.71
Reduce HIV transmission in medical settings	85,457.82
Maintain blood safety	*

Priority Area: TREATMENT	
Implementation Strategies	**Cost by Implementation Strategy (USD)**
Improve linkages to services	493,180.00
Treat PLHIV in accordance with updated national guidelines	42,050.00
Strengthen laboratory services	3,985,949.59
Improve retention in treatment and care and medication adherence by Enhancing the system for psychosocial care and support	754,205.50
Ensure access and availability of ARVs and drugs for OIs, and HIV-related laboratory testing	9,025,478.40
Implement all four prongs of eMTCT strategy according to the National eMTCT framework	3,961,788.77

Cross-cutting themes	
Implementation Strategies	**Cost by Implementation Strategy (USD)**
Provide support to non-health Ministries and sectors with developing and incorporating Health and HIV prevention interventions into their workplans and budgets	7,701.30
Provide support to non-health Ministries and sectors with developing mechanisms for providing support and treatment to PLHIV	*
Strengthen linkages between HIV and STIs	6,000.00
Strengthen linkages between HIV, Maternal Health, Newborn & Child Health Services	0.00
Integrate HIV and TB services	137,157.00
Integrate HIV services with Sexual & Reproductive Health Programmes	**
Ensure the development of annual costed workplans across Ministries and sectors	*
Provide support for the development of Prevention interventions that include components to reduce stigma and discrimination and address gender disparities	89,931.60
Provide support of the development of Treatment interventions that include components to reduce stigma and discrimination and address gender disparities	65,000.00
Strengthen the capacity to effectively manage and coordinate a multi-sectoral response	94,424.50
Enhance the quality of the cadre of health care providers	*
Build the capacity of health, non-health and NGOs staff to develop and deliver effective prevention interventions	*
Strengthen data collection, verification and analysis system	434,883.82
Conduct evaluations, operational research & special studies	1,300,000.00
HRM for implementation	2,770,198.32

* Cost is included in other Government budget lines

** Cost is already covered in other interventions

98 *This projected cost doesn't include the cost for Human Resources or cost of activities of non-health Ministries*

REFERENCES

1. Abdoel-Wahid, F. 2009. *HIV drugresistance in treatment naive HIV infected individuals in Suriname*. Institute of Graduate Studies and Research. Paramaribo: Ministry of Health Suriname.
2. ABS. 2008. *Bevolkingsprojecties voor Republiek Suriname; Volume 1 Versie 1 2004 – 2024*.
3. ABS. 2008. *Statistical Yearbook 2007*, Page 4.
4. ABS. 2009. *Statistical Yearbook 2008*, Page 4.
5. Arkel van, Z., & Sumter, T. 2013. *Public Awareness and acceptation, special confidential (health) services, HIV knowledge, multiple condom distribution points and other needs: draft report of an assessment of needs of MSM and transgenders in Suriname*. Paramaribo: De bron Centrum voor Leren en Ontwikkeling.
6. Bakboord, C. et al, 2009, *Sexual Behavior and Seroprevalence study in prisons in Suriname - Paramaribo and Nickerie*;
7. Bureau of Public Health, *eMTCT framework*
8. Caffe, I. et al, (2009). *HIV Seroprevalence study and Behavioral Surveillance Survey among STI patients in Suriname*.
9. Caffe, I., Pan American Health Organization, Ministry of Health. 2009. *HIV prevalence study and behavioral surveillance survey among STI patients in Suriname*.
10. CAREC/PAHO and Maxi Linder Foundation, 2004. *HIV/AIDS en Commercial Sex Work in Suriname*.
11. CARICOM, PANCAP. 2008. *Caribbean Regional Strategic Framework on HIV and AIDS (2014-2018)*.
12. CCM Suriname 2012, Transitional Funding Mechanism for HIV approved proposal, Available from: http://www.theglobalfund.org/en/fundingdecisions/tfmapproved/
13. Centrale Bank van Suriname. *Country Profile 2013*, Available from: http://www.cbvs.sr/images/content/recent_articles/suriname_country-profile_may2013.pdf
14. Commiesie Eric, M. M. 2014. *Analysis of risk factors associated with death in a cohort of tuberculosis patiens in Suriname*. MPH thesis, Tulane Universtity School of Public Health and Tropical Medicine, Paramaribo.
15. De Grondwet van de Republiek Suriname (S.B. 1987 no. 116)
16. Epidemiology Department. 2014.– BOG, Hospitalisation data
17. General Bureau of Statistics, Ministry of Planning and Development Cooperation and Ministry of Social Affairs and Housing. 2007. *Suriname Multiple Indicator Cluster Survey 2006*. Paramaribo, Suriname: Government of Suriname, United Nations Children's Fund.
18. General Bureau of Statistics, Ministry of Social Affairs and Housing. 2012. *Suriname Multiple Cluster Indicator Survey 2010*. Paramaribo: Government of Suriname, UNICEF.
19. Generl Bureau of Statistics. 2007. Demografische Statistieken
20. Government of the Republic of Suriname. 1987. *De Grondwet van de Republiek Suriname* (S.B. 1987 no. 116).
21. Government of the Republic of Suriname, United Nations. 2012. United Nations Development Assistance Framework (UNDAF) 2012-2016.
22. Government of the Republic of Suriname. 2012. Ontwikkelingsplan 2012-2016; Suriname in Transformatie.
23. Government of the Republic of Suriname. 2014. *De wet basiszorg verzekering Suriname*. Staatsblad van de Republiek Suriname no 114.
24. Heemskerk, M., & Uiterloo, M. 2009. *HIV/AIDS and commercial Sex work in Paramaribo, Suriname: a behavioral surveillance survey and sero-prevalence study among commercial sex workers in the street, clubs, bars and salons of greater Paramaribo city*.
25. Heemskerk, M., & Uiterloo, M. 2009. *HIV/AIDS and Commercial Sex work in Paramaribo, Suriname: A* Behavioral Surveillance Survey and Seroprevalence Study among Commercial sex workers in the street, clubs, bars and salons of greater Paramaribo city (SUR-506-G03-H). Paramaribo.
26. M&E Unit, Ministry of Health. 2014. HIV Master database.

27. Maxilinder Foundation, University of Suriname. 2005. An HIV-seroprevalence and behavioral survey among men-who-have-sex-with-men (MSM) in Suriname.
28. Ministry of Health Suriname, Midterm Review of Suriname – UNAIDS political targets
29. Ministry of Health Suriname, National Sexual Reproductive Health and Rights Policy 2013-2017.
30. Ministry of Health Suriname, Safe Motherhood and Neonatal Health Plan.
31. Ministry of Health Suriname. Caribbean Health Research Council. 2013. Midterm Evaluation Report of NSP- 2012.
32. Ministry of Health. 2009. National strategic plan for a multi-sectoral approach of HIV in Suriname (2009-2013).
33. Ministry of Health. 2014. *Suriname AIDS Response Progress Report 2012-2014*.
34. Mohamed, P., Ministry of Health. 2014. *PANCAP Justice for all consultations; phase 2 DRAFT country report*.
35. Pan American Health Organization. *Stategy and Plan of Action for the Elimination of Mother-to-Child Transmission of HIV and Congenital Syphilis*, 50th Directing Council, 62nd Session of the Regional Committee, Resolution CD50.R12. 2010; Available from: http://new.paho.org/hq/dmdocuments/2010/CD50.R12-e.pdf.
36. Pan American Health Organization/World Health Organization. 2010. *Resolution CD50.R12: Strategy and plan of action for the elimination of mother-to-child transmission of HIV and Congenital syphilis*. Available from: http://www2.paho.org/hq/dmdocuments/2010/CD50-15-e.pdf
37. Pan American Health Organization/World Health Organization. 2013. *Anti-Retroviral Treatment in the Spotlight: A Public Health Analysis in Latin America and the Caribbean*. Available from: http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=23710&Itemid
38. Pan American Health Organization/World Health Organization. 2014. *HIV Continuum of Care Monitoring Framework 2014; Addendum to meeting report: Regional consultation on HIV epidemiologic information in Latin America* and the Caribbean. Available from: http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=25746&Itemid=
39. PANCAP, Improving Access of Migrant and Mobile Populations to HIV Services in the Caribbean, Available from: http://www.pancap.org/en/projects/migrant-population.html
40. PMTCT Focal Point, Ministry of Health. 2014. PMTCT surveillance
41. Population Services International. 2013. SURINAME (2013): HIV/AIDS TRaC Study Evaluating Condom Use among Sexually Active Youth 16-24 years.
42. Punwasi, W. 2004. *Doodsoorzaken in Suriname 2003-2004*, BOG
43. Punwasi, W. 2006. *Doodsoorzaken in Suriname 2005 - 2006*, BOG
44. Punwasi, W. 2007. *Doodsoorzaken in Suriname 2007*, BOG
45. Punwasi, W. 2009. *Doodsoorzaken in Suriname 2008-2009*, BOG
46. Punwasi, W. 2011. *Doodsoorzaken in Suriname 2010-2011*, BOG
47. Schmeitz, M. et al. 2009. *Report on Behavioral Surveillance Survey and Seroprevalence study among Commercial Sex Workers in the border districts Nickerie en Marowijne*
48. Surinaamse Rode Kruis. 2014. Bloeddonoren data, Bloedbank
49. Surinaamse Rode Kruis. April 2014. *Bloed geven een daad van menslievendheid*, folder van de Nationale Bloedbank van het Surinaamse Rode Kruis, April 2014
50. Tuberculosis program, Ministry of Health. 2014. National TB Programme surveillance
51. UNAIDS, HIV and AIDS Estimates, 2013, Available from: http://www.unaids.org/en/regionscountries/countries/suriname
52. UNAIDS, March 2009. *UNGASS on HIV/AIDS: Monitoring the Declaration of Commitments on HIV/AIDS Guidelines on construction of Core indicators 2010 Reporting Geneva*, Switzerland. ISBN 978 92 9173 764
53. UNAIDS, UNICEF, WHO. 2013. *Global AIDS Response Progress Reporting 2013; Construction of core indicators for monitoring the 2011 UN political declaration on HIV/AIDS*. Available from: http://www.unaids.org/sites/default/files/media_asset/GARPR_2014_guidelines_en_0.pdf
54. UNAIDS. 2014. 90-90-90; An ambitious treatment target to help end the AIDS epidemic. Available from: http://www.unaids.org/en/resources/documents/2014/90-90-90

55. UNAIDS. 2014. *Factsheet 2014; Global statistics*. Available from: http://www.unaids.org/sites/default/files/en/media/unaids/contentassets/documents/factsheet/2014/20140716_FactSheet_en.pdf.
56. United Nations Statistics Divisions. Available from: http://data.un.org/CountryProfile.aspx?crName=Suriname
57. *United Nations, 2000*. UNGASS Resolution 55/2: United Nations Millennium Declaration. *Available from: http://www.unaids.org/sites/default/files/sub_landing/files/aidsdeclaration_en.pdf*
58. van der Helm, J. J. , Bom, R.J.M., Grunberg, A.W., Bruisten, S.M., Schim van der Loeff, M. F., Sabajo, L.O.A., de Vries, H.J.C., July 17, 2013. *Urogenital Chlamydia trachomatis Infections among Ethnic Groups in Paramaribo, Suriname; Determinants and Ethnic Sexual Mixing Patterns, PLOS one*.
59. *World Health Organization, 2006*. Towards Universal Access by 2010; How WHO is working with countries to scale-up HIV prevention, treatment, care and support. *Available from: http://www.who.int/hiv/toronto2006/towardsuniversalaccess.pdf*
60. *World Health Organization, 2011*. The Treatment 2.0 Framework for Action: Catalyzing the next phase of treatment, care and support. *Available from: http://whqlibdoc.who.int/publications/2011/9789241501934_eng.pdf?ua=1*
61. *World Health Organization. 2012*. WHO policy on TB/HIV collaborative activities; Guidelines for national programmes and other stakeholders. *Available from: http://www.who.int/tb/publications/2012/tb_hiv_policy_9789241503006/en/*
62. *World Health Organization. 2013*. Consolidated guidelines on the use of anti-retroviral drugs for treating and preventing HIV infection. *Available from: http://apps.who.int/iris/bitstream/10665/85321/1/9789241505727_eng.pdf*