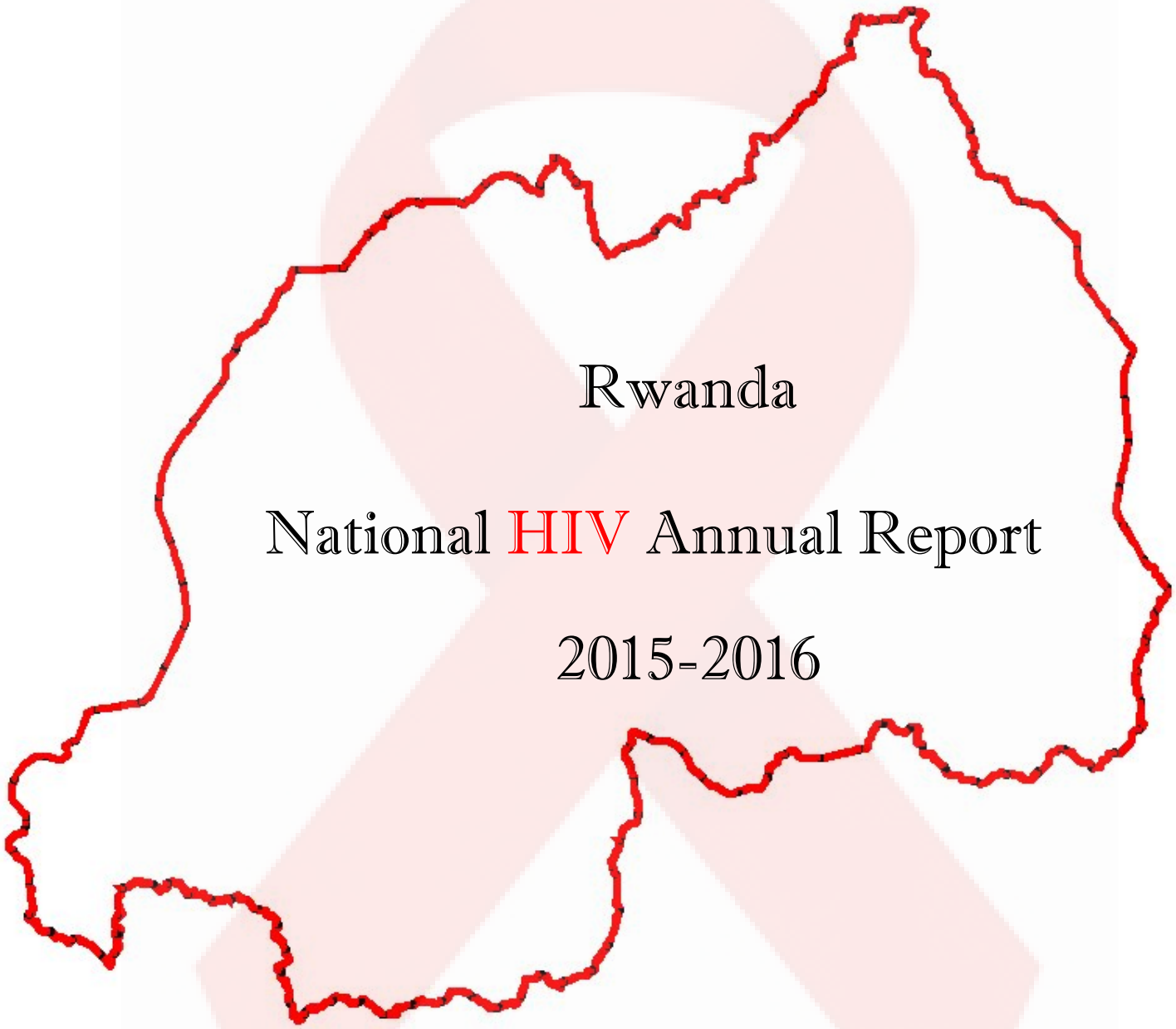

Rwanda

National HIV Annual Report

2015-2016

RWANDA BIOMEDICAL CENTER

A Healthy People. A Wealthy Nation

Outline

Acknowlegments

The Rwanda Biomedical Center (RBC) would like to take this occasion to express its deep appreciation and sincere thanks to all who contributed to the compilation of this National HIV annual report.

This report represents a collaborative effort between the Government of Rwanda and its partners. Representatives from all groups of stakeholders involved in the national HIV response participated in the production of this report.It also presents the report of the third implementation year of the NSP 2013-2018.

I would like to acknowledge the efforts of dedicated staff in the various institutions of the Government of Rwanda who worked tirelessly to complete this report. We remain entirely grateful to the inputs and support provided by our Partners. Special thanks to the members of the civil society, local and international Non-Governmental, Bilateral organizations as well as Rwandan Government institutions greatly participated in the completion of this report. I would also like to thank all members of technical working groups that reviewed and validated the content of this report.

We believe that this document provides a realistic picture of Rwanda's progress in HIV response as of 30th June 2016.

We look forward to the re-shaping and improvements in the delivery of interventions as a result of the findings presented in this report.

31/10/2016

Jeanine U. Condo, MD,PhD

Associate Professor of Public Health

Director General, Rwanda Biomedical Centre.

Executive summary

This report presents the key achievements of all actors in HIV response, during July 2015 to June 2016, referred to reporting period. It covers essential areas of interventions in fight against HIV, including prevention, care and treatment, social impact mitigation, governance mechanisms, health system strengthening, financing HIV national response and monitoring and evaluation.

Between July 2015 and June 2016, the number of health facilities offering HTC increased from 557 to 569; among them 527 are certified to provide HIV services making 91% of national geographical coverage. In total, 3,818,043 tests were performed across Rwanda with a total number of 26,497 positive cases, giving an overall HIV positivity rate of 0.7%. The achievement resulted from mobile VCT conducted among key populations, the use of finger prick as new HIV testing method as well as targeted testing for high risk groups. Regarding the prevention of HIV transmission from mother to child (MTCT) , of all exposed children, 1,76% were infected by 18 months; according to DHS 2015, 30% of Rwandan males were circumcised. The VMMC prevalence was almost doubled compared to 13% in DHS 2010. We also worked with the implementing partners working with key populations (FSWs and MSM) to facilitate them to access HIV services and income generating activities and peer education.

During this reporting period, people who were diagnosed with HIV were linked to HIV Care and treatment services. All those people linked to care and treatment were enrolled, screened for OIs and STIs, and received prophylaxis and treatment, according to the guidelines. In addition, the "Treat all" strategy, proposed by the WHO, was initiated in Rwanda, starting from the 1st July 2016. The national HIV program also worked on HIV co-infections, organized campaigns targeting youth and key populations.

The social impact mitigation was also emphasized to ensure that people infected and affected by HIV have continued maintenance or improvement of their economic status, ensure orphans and vulnerable children affected by the virus have socioeconomic protection and lastly, reduce the stigma surrounding the virus. Certain measures such as working with civil society organizations, FBOs and non-health sector public institutions as

well as government programmes have been set in place to aid in the social complication that come with being affected with HIV/AIDS. Maintaining or increasing food security as well as working towards decreasing gender based violence in regards to those affected by the virus are also problems that have been tackled.

Various actions were carried out to make sure health system is empowered. This was done through continuous capacity building, HRH program and mentorship activities for workforce involved in health sector, especially in HIV response.

Despite efforts to properly allocate financial resources to various health sectors, this area has suffered due to the unstable donor environment. Rwanda needs to strengthen public financing of its health system in order for the country to reach its goals of ownership and sustainability of its health care system.

The administrative and government aspect of the health governance of HIV/AIDS in Rwanda consists of five main stakeholders which are the state actors in the public sector (MOH, Rwanda Biomedical Centre, other ministries and local governments), health providers (public sector, private sector, NGOs, CSOs and FBOs), the civil society and professional bodies, beneficiaries and clients as well as the development partners (bilateral and multilateral) and international NGOs mainly involved in supporting national programs. CSOs are considered to be important players in the AIDS epidemic. A CSO consultation was held on Rwanda's HIV and AIDS response in aims to generate solutions to eliminate HIV/AIDS in the country.

The Rwanda biomedical centre, through HIV-AIDS, STIs and OBBI division, has also implemented various HIV interventions including routine programmatic, surveillance and research activities. Routine data systems have been strengthened during regular monitoring of quality of data and services.

Planned studies and surveys were completed and their results published, during this reporting period, including the 2015 DHS, 2013-2014 RAIHIS, 2014 HIV and syphilis surveillance among pregnant women attending ANC/PMTCT services, 2015 BSS among FSWs and MSM, etc. The key findings from these surveys were highlighted in this report.

Key indicators at glint

Indicators	Data as of June 2016
HIV PREVENTIVE INTERVENTIONS	
Health facilities providing testing and counselling services	569 (97,4%)
HIV tests conducted in the last 12 months	3,818,043
Males circumcised	168,980
Health facilities providing PMTCT services	535(97,7%)
Percentage of infants born to HIV-infected mothers who are not infected by 18 months	98,24% *(MTCT= 1,76%)*
Pregnant women coming for ANC tested for HIV	345,490(98%)
Percentage of pregnant women tested HIV positive	0.90%
HIV+ pregnant women who received antiretroviral therapy to reduce the risk of mother to child transmission	9,364 (99%)
Male Uptake in PMTCT	85%
Discordant couples followed at Heath Facility	17,752
New discordant couples registered (July 2015 – June 2016)	3,340
HIV Positive partners in discordant couples on ART	12,837
CARE AND TREATMENT SERVICES	
Health facilities offering Care and Treatment services	546(97,8%)
PLHIV enrolled in Pre-ART in the last 12 months	13,831
PLHIV currently in Pre-ART	16,533 (9.1%)
PLHIV currently receiving antiretroviral therapy	164,252 (78%)
PLWH initiating ART in the last 12 months	13,827
Hospitals and health centres offering full package of HIV services (VCT, PMTCT, ART)	524(96%)
Percentage of adults and children known HIV+ to be on treatment 12, months after initiation of antiretroviral therapy	92.6%
Percentage of viral load suppression after 12 months on treatment (< 20 copies/ml)	86.4%

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List of acronyms and abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
BCC	Behaviour Change Communication
BSS	Behavioural Surveillance Survey
CHW	Community Health Worker
DHS	Demographic and Health Survey
EDPRS	Economic Development and Poverty Reduction Strategy
EMR	Electronic Medical Recording System
EMTCT	Elimination of Mother-to-child Transmission of HIV
FSW	Female Sex Workers
GBV	Gender-Based Violence
GF	The Global Fund to Fight AIDS, Tuberculosis and Malaria
HBV	Hepatitis B Virus
HCT	HIV Counselling and Testing
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
IPT	Isoniazid Preventive Therapy
MC	Male Circumcision
M&E	Monitoring and Evaluation
MoH	Ministry of Health
MSM	Men who have Sex with Men
NCC	National Commission for Children
NGO	Non-Governmental Organization
NSP	National Strategic Plan
OVC	Orphans and Vulnerable Children
PEPFAR	President's Emergency Plan for AIDS Relief
PLHIV	People Living with HIV

PMTCT	Prevention of Mother-to-Child Transmission of HIV
RBC	Rwanda Biomedical Centre
SGBV	Sexual and gender-based violence
SRH	Sexual and Reproductive Health
TB	Tuberculosis
UNAIDS	Joint United Nations Program on HIV/AIDS
UN	United Nations
VMMC	Voluntary Medical Male Circumcision
WHO	World Health Organization

I. INTRODUCTION

This section of the HIV Annual Report 2015-2016 focuses on the HIV epidemic in Rwanda as well as the related response to achieve our national ultimate goal of having an HIV-free country.

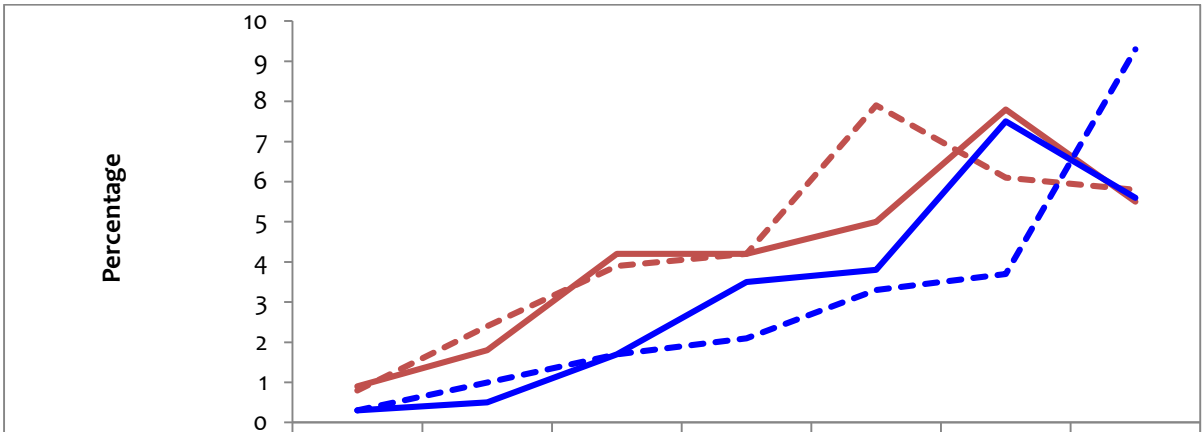
1.1. Overview of the HIV epidemic in Rwanda

According to the recent findings from the 2015 Demographic and Health Survey, the HIV prevalence in Rwanda has remained stable at 3% during the last ten years. 3.6% of women and 2.2% of men are HIV positive. The HIV prevalence in urban areas is 6.2% higher than 2.2% in rural. The lowest HIV prevalence was found in Northern Province (2.3%) and the highest in Kigali City (6.3%). For the first time, the DHS2015 included HIV prevalence among children less than 15 years old, found to be 0.2%.

In general, HIV prevalence rises with age. Among women, the HIV prevalence increases from 1% at age 15-19 to a pic of 8% at age 40-44 and down to 6% at age 45-49. Among men, the prevalence increases by less than 1% at age 15-19 to 4% at age 40-44 and reaches a pic of 9% at age 45-49.

Though the overall prevalence of HIV was maintained at 3% since the last decade, the comparison of HIV prevalence results, by sex and age groups, in 2010 and 2015, reveals that HIV epidemic in Rwanda is aging, as the pic (the highest prevalence) shifts over time to the right. The comparison of the HIV prevalence, as per DHS 2010 and 2015, is displayed in figure 1.

Figure 1: Comparison of HIV Prevalence by Age Groups and Sex, DHS 2010 and 2015



	15-19	20-24	25-29	30-34	35-39	40-44	45-49
% Women 2010	0.9	1.8	4.2	4.2	5.0	7.8	5.5
% Women 2015	0.8	2.4	3.9	4.2	7.9	6.1	5.8
% Men 2010	0.3	0.5	1.7	3.5	3.8	7.5	5.6
% Men 2015	0.3	1.0	1.7	2.1	3.3	3.7	9.3

Rwanda conducted its first population based HIV incidence survey in 2013/14. The results suggest an overall HIV incidence of 0.27 per 100 person-years. Divorcees, widows and singles were found to have a high incidence of 1.3, 0.36 and 0.35 per 100-person years respectively. Moreover, the people who have paid for sex in the last 12 months had a highest incidence of 3.67 per 100 person-years.

1.2. Response to the epidemic

Since the first case of HIV in Rwanda, in the early 1980s, the Government demonstrated efforts and commitment in fighting the HIV-AIDS epidemic. Concrete HIV interventions and services were implemented after the genocide against the Tutsis in 1994. By 1999, the Ministry of Health started expanding HIV testing facilities and laboratory capacity in preparation for the expansion of access to Antiretroviral Therapy (ART). In the same year, PMTCT program was piloted in KICUKIRO HC and later expanded in 2001. In early 2000, the universal treatment program began with a small government-created-fund to offer free ART at the Kigali Teaching Hospital. With support of Global Fund and PEPFAR, in 2004, the national ART program was established and progressively scaled up, for both adults and paediatric HIV-infected people. Later on, the PMTCT program was implemented, with hopes of reaching EMTCT; as well as other HIV prevention programs.

In order to monitor the HIV epidemic in Rwanda, various surveys and studies were conducted; including periodic surveys. Those are: The Rwanda Demographic and Health Surveys, Behavioural and Biological Surveillance Surveys among Youth and other Key populations, HIV and Syphilis Sero-surveillance surveys among pregnant women at ANC/PMTCT sentinel sites, Rwanda AIDS Indicator and HIV incidence Survey, etc. These programmes contributed to monitor the trend and magnitude of HIV, inform policy development and improvement and guide evidence-based interventions. In addition to the key responses to the HIV epidemic, other improvements worth mentioning are the development of national clinical guidelines on the management of HIV-AIDS, STIs and Other Blood Borne Infections. Since 2005, the Ministry of Health through former TRAC Plus and RBC, biennially reviewed those guidelines according to the international guidelines and scientific evidences to better manage HIV. The revision of the guidelines has been undertaken in conjunction with the training of healthcare providers, especially those in charge of HIV services.

Policy responses to the AIDS epidemic

In line with the National response to HIV-AIDS, the Government of Rwanda developed national policy documents, in which the response to the HIV epidemic is seen as a major public health concern involving all levels of government and ministries, and as a long-term development objective in Rwanda, intrinsically linked to development goals around poverty reduction and economic growth.

In 2007, as the Government of Rwanda began preparations for the development of its third HIV and AIDS NSP, it took the opportunity to redouble its efforts to understand the Rwandan epidemic and sharpen the national response. Working through national agencies and various development partners, it set out to better define the problem and understand the dynamics of the changing HIV epidemic in the country.

From 2007 to 2009, several empirical and analytic reviews were conducted to inform the development of an evidence-based and data-driven HIV response. This involved synthesizing and triangulating HIV information from multiple sources, conducting statistical modelling to understand modes of transmission, and studying the risk of HIV

among vulnerable groups such as FSW and MSM. By late 2008, through research and data analysis, the government and its partners had identified and generated new information on the important drivers of the epidemic.

Over the past years, the Government of Rwanda (GOR) demonstrated political commitment and has put in place different policies and strategies in the fight against HIV and AIDS. The following documents form the GOR's cornerstone in the fight against HIV and AIDS in Rwanda: (i) The Vision 2020 and the Second Economic Development and poverty reduction strategy (EDPRS 2) which recognizes HIV and AIDS as a cross cutting issue that should be addressed in all sectors of the economy. (ii) National Strategic Plans for HIV (NSP 2009-2012 and 2013-2018). The current NSP 2013-2018 guides the programmatic response to the HIV epidemic, which has set a target to reduce new infections by two-thirds by June 2018. The NSP was developed with broad participation from stakeholders including the community, civil society, partners, and the Government of Rwanda. The Mid-term review of this NSP was also conducted mid-2016.

The coordination of HIV services in Rwanda was scaled-up by focusing on the decentralization of care. As of June 2015, more than 500 health facilities now provide HIV services, including ART service delivery. This was achieved by making training investments in health facilities, strategic decisions on the supply chain of ART across the country, and continuously reviewing HIV protocols to keep up to date with global treatment guidelines.

1.3. National programmatic responses to HIV-AIDS, STIs and OBBI

Through a series of strategic decisions in regards to the HIV epidemic, Rwanda has made remarkable progress in HIV control. In terms of prevention, voluntary counselling and testing is available in 99% of health facilities and 96% of these health facilities provide a complete package of HIV services including, PMTCT and ART services. In order to improve and integrate HIV Testing and Counselling (HTC) services at many entry points as possible, a finger prick method for HIV testing was adopted. In addition, the related national algorithm for HIV testing was validated. The national HIV program continued scaling up voluntary medical male circumcision using both Prepex and surgical methods.

HIV Care and treatment services were established and increased over time. Prior to 2002, there were less than 100 people on ART. As of June 2016, more than 160,000 patients are on ART. This increase in treatment use occurred by incrementally raising the CD4 threshold as eligibility criteria to start ART. Rwanda first achieved universal coverage of ART at a CD4 cell count threshold of 200 cells/mm^3 in 2007, increased the threshold to ≤350 cells/mm^3 in 2008, and in 2013 guidelines raised it to ≤500 cells/mm^3, with exceptions for immediate ART initiation for key populations (FSW and MSM) and positive partners in discordant couples. The scale-up of ART in Rwanda has resulted in an increase of 25 years of the life expectancy between PLHIV and reduced 78% of AIDS related deaths. In 2015, guidelines have recommended offering immediate treatment to all patients regardless of CD4 eligibility. Since July 2016, Rwanda implemented the test and start "Treat all HIV positive", being among the first countries in Africa to implement that strategy.

Besides HIV prevention, care and treatment services, national HIV program also implemented interventions targeting STIs and other blood borne infections, namely Hepatitis B and C. Especially during this fiscal year, the clinical guidelines for Hepatitis B and C management were updated and the national policy for HCV and HBV was established. The reduction in the drug price against Hepatitis C went down from 75000$ to 1200$ which was a crucial improvement in this period and further steps towards more access to the new medications still ongoing.

The interventions mentioned above are, in details, discussed in the following paragraphs.

II. HIV PREVENTION

2.1. HIV Testing and Counselling

HIV testing and counselling (HTC) services refers to a public health intervention whereby an individual, couple, or family receives HIV testing and counselling on HIV prevention, treatment, care, and support. Although many different approaches exist for administering HTC.

In general, the intervention consists of 5 core components:

1. Pre-test counselling that outlines the testing process
2. A risk-behaviour assessment
3. Informed consent of each participant
4. Administration of the HIV test
5. Post-test counselling and announcement of the results; based on the test results, ensure linkage to HIV preventions services or care and treatment services.

The strategies made to increase HTC services include increasing geographic coverage of HIV testing services, Provider-initiated HIV testing and counselling (PITC) meant to increase HIV case finding and outreach HTC services targeting key populations. Strategies for HTC have been improved by the use of HIV testing integration using Finger Prick method.

Between July 2015 and June 2016, the number of health facilities offering HTC increased from 557 to 569 representing 97,4% national geographical coverage. 46 % of these health facilities are public and 18 are faith based or subsidized; 35% are private and 1% community owned health facilities. In total, 3,818,043 tests were performed across the country and total number of 26,497 positive cases giving an overall HIV positivity rate of 0.7%.

2.1.1. Training on finger prick

In order to improve and integrate HIV Testing and Counselling (HTC) services at many entry points as possible, HIV testing using finger prick was adopted. To ensure national coverage in the use of finger prick, in this reporting period trainings on finger prick were

scaled up and reached 280/569 health facilities with 776 health care providers certified to perform finger prick in their routine services provision.

2.1.2. Mentorship on finger prick

As part of post-training follow up, mentorship activities have been organized and conducted to assess the implementation of Finger Prick as a new method: respect of national HIV testing algorithm, respect of quality assurance, comprehensiveness of pre and post-test counselling and records keeping. In total, 85 health facilities have been mentored across the country.

2.1.3. Mobile Testing

Mobile VCT services have been promoted throughout the community targeting key populations. In order to reach the goal of national strategic plan of HIV of Reducing New Infections of HIV by 75% in 2018, female sex workers and men who have sex with men have been targeted for HIV testing as evidences show that they are the key drivers of HIV infection in the general population.

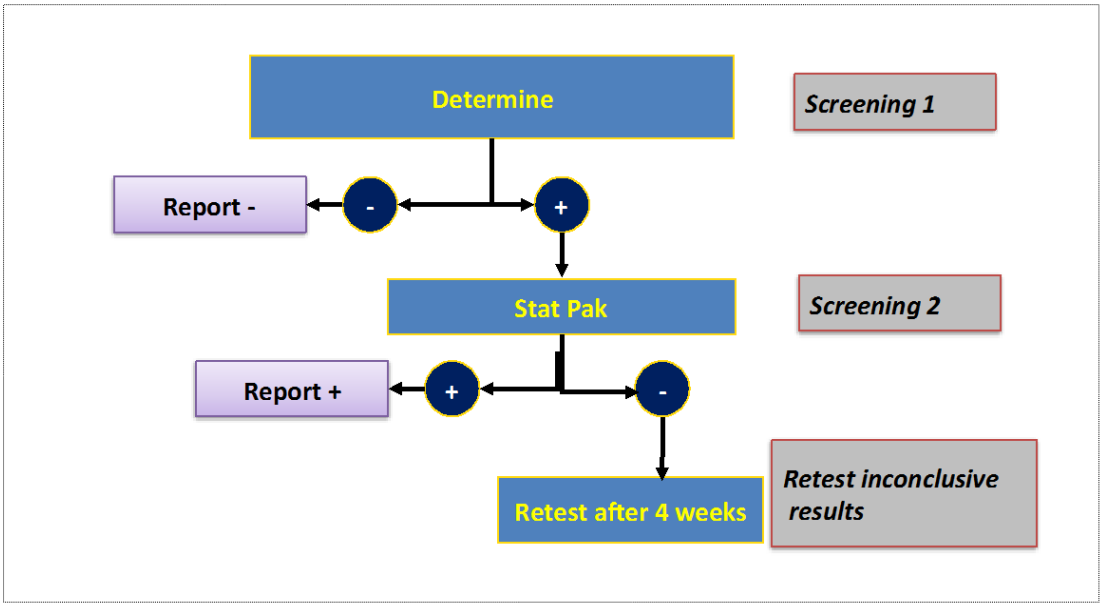
The overall objective of mobile testing activity was to ensure that key populations who live in different hotspots know their HIV status, adopt behaviours of HIV prevention and those who are HIV + are linked to HIV care and treatment.

During this period, around 1,710 clients have been tested for HIV and among them 73 clients (4.2%) were tested HIV positive and linked to the nearest health facilities for care and treatment.

2.1.4. HIV testing algorithm

During this reporting period, WHO has updated the approved list of HIV rapid tests in June 2015 removing "Shangai Kehua" that was the screening test of the national HIV testing Algorithm. The validation and approval of the new HIV testing algorithm, approved and its implementation is started at the end of this reporting period.

Figure 2: National HIV Algorithm (2016)



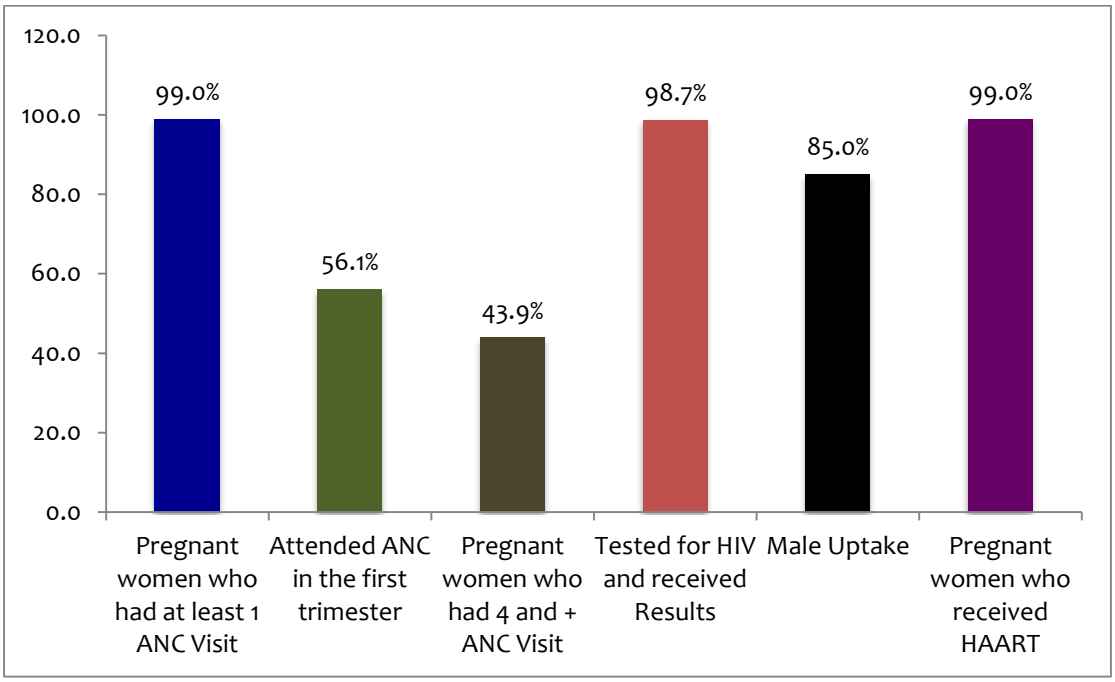
2.2. Prevention of Mother-To-Child HIV Transmission

The reduction of new HIV infections in children through the elimination of mother to child HIV transmission is a strong commitment in Rwanda. For that reason, Rwanda chose to moved rapidly to the implementation of Option B+ as a part of a large program aiming to elimination of MTCT.

A comprehensive analysis of the PMTCT program showed that PMTCT services have been integrated in 96% of public health facilities and the number of pregnant women tested for HIV in antenatal care was 345,490 in the period of 2015-2016. The positivity rate decreased from 1.0% in 2014/2015 to 0.9% in 2015/2016. Among those women tested HIV positive, 99% started ART the framework of PMTCT program.

The rate of male partners attending antenatal care services together with their wives was 85%. The HIV guidelines recommend HIV exposed to receive NVP prophylaxis at birth, during this year, 92.4% of them received it. Different surveys were conducted as well as routine program surveillance and data quality audits. The rate of mother to child HIV transmission at 18 months of age slightly decreased from 1,8% to 1.76% with no statistically significant difference.

Figure 3: PMTCT key indicators



2.2.1. Development of EMTCT Operational Plan 2016-2018

In mid-2015, five years EMTCT operational plan was developed to eliminate mother to child transmission of HIV and to keep mothers alive. The national PMTCT TWG with local partners involved in PMTCT implementation, conducted an end term review to analyse the level of achievement of the EMTCT strategy, the results are presented in this report.

The end term review of the eMTCT strategy for 2011-2015 has shown excellent level of implementation of the eMTCT strategy, which lead to the mentioned positive impact of the program. However, the review indicated an unequal level of implementation across the four prongs of the program as follows:

- ***On the primary prevention of HIV/AIDS***, we noticed gaps in accessing youth friendly services (knowledge and skills for positive behaviour, HIV testing, medical male circumcision and condom use) as strategic entry points. Limited mechanisms for linkages and referral between community based interventions and health facility for specialized HIV prevention services were identified.

– ***Prevention of unwanted pregnancy among HIV infected women***, there was a low utilization of modern family planning methods and challenges in reporting of indictors on family planning among HIV infected women.

– ***Reduction of vertical transmission from MTCT and reduction of HIV related deaths***; identified challenges were limited access to PMTCT services in private sectors the need to strengthen mechanisms for retention and adherence to treatment.

All those noticed issues were considered for the development of the EMTCT operational plan for the period of 2016-2018: with the aim to keep MTCT rate reduced to under 2%, to strengthen the primary prevention of HIV among women of reproductive age and unmet family planning, and reinforcing utilization of available PMTCT services among vulnerable women including young women, categories which count higher MTCT rates. The process to develop the new EMTCT operation plan is in its final phase.

2.2.2. Countrywide PMTCT mentorships

During the year 2015-2016, clinical mentorship was conducted to support implementation of PMTCT and option B+ program. The purpose was to identify timely, challenges faced by health care providers as well as beneficiaries toward a sustainable achievement of the elimination of mother- to- child HIV transmission.

The mentorship was conducted in 6 districts hospitals and their health centres in their cathment areas. we have also noticed a good implementation of PMTCT/Option B + by health care providers, as illustrated by a good number of HIV exposed infants receiving NVP Prophylaxis. They were 95.6% in Kibogora DH, 100% in Byumba DH, 91.5% in Nyamata DH, and 96.2% in Muhororo DH.

Some areas for improvement include:

- Low uptake of ANC, where 52.2%, 35.5%, 0.7% were attending the ANC within the first, second and third term of pregnancy respectively.

2.2.3. Trainings of health care providers

Along with the EMTCT strategy 2011-2015; trainings of health care providers focussed on knowledge of HIV prevention guidelines and quality improvement. Both public and private health facilities were targeted in 69 health facilities across the country.

2.2.4. Enhanced monitoring of PMTCT program

The current system for routine collection of data in national PMTCT program has the potential to provide information for evaluating the impact of the National PMTCT program and to take appropriate actions. However, in order to eliminate the mother to child HIV transmission, there is a necessity to address challenges in timely manner.

Enhanced monitoring of PMTCT program using prospective cohort analysis already implemented in Rwanda will help to monitor existing indicators more frequently in order to generate adequate data for impact evaluation of PMTCT program both at the central level and at the local district level. New longitudinal registers with current and new indicators have been designed for these facilities with the overall goal of collecting quality and adequate strategic information for effective routine monitoring and impact evaluation of PMTCT program.

This approach is in its initial phase in 32 selected health facilities in Kigali City with a plan for wide expansion in Rwanda.

2.3. Voluntary Medical Male Circumcision

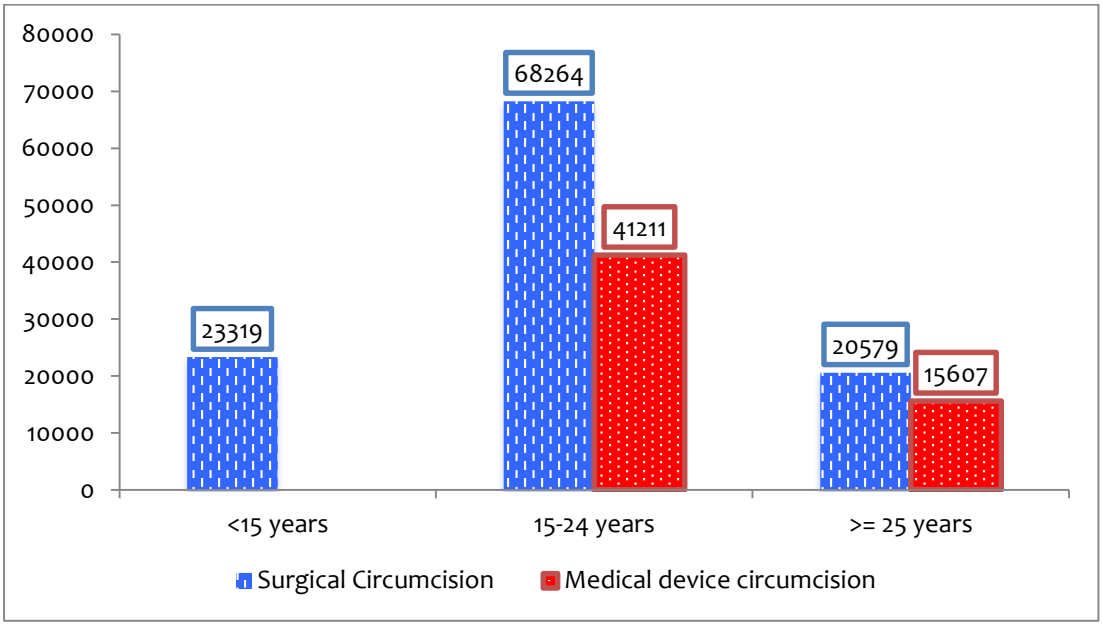
Voluntary Medical Male circumcision (VMMC) has proven its efficacy in reducing the risk of acquiring HIV infection and has been adopted by the WHO as a new HIV prevention intervention that need to be implemented along with existing HIV prevention interventions (WHO 2007). In 2010, Rwanda adopted this strategy in HIV prevention and started a large scale up.

Since the launch of national program the demand increased dramatically. The ministry of health introduced new approaches for better access of male circumcision services including week end campaigns that confirmed to be efficient in reaching a big number of people without disturbing other health services.

The introduction of the 'PrePex' device contributed to accelerate the roll out of VMMC. After WHO recommendation to extend PrePex device use among eligible adolescents aged 13-18 years old under active surveillance, 3 selected sites were identified to implement active surveillance ensuring safety of the use of PrePex among adolescents. Through this program, 319 adolescents aged 16 to 17 years old were enrolled for active surveillance between January to June 2016; 237 (74%) were circumcised using Prepex while 82 were not mainly due to the lack of small size devices. Some adverse events were reported at 0.44% rate. Data available suggest that the procedure is safe and could be expanded.

In the context of task shifting enabling nurses to perform male circumcision by surgical and non-surgical methods. Rwanda Biomedical Centre (RBC) in collaboration with implementing partners working in the area of VMMC has increased the pool of PrePex trained health providers from 200 up to 320 from July 2015 to June 2016. During this reporting period, 168,980 men were circumcised in both public and private health facilities. Among them 56,818 were circumcised using PrePex device, representing 33.6%. The graph below shows the number of VMMC performed by age group where majority of them are in the age group of 15 to 24 years old.

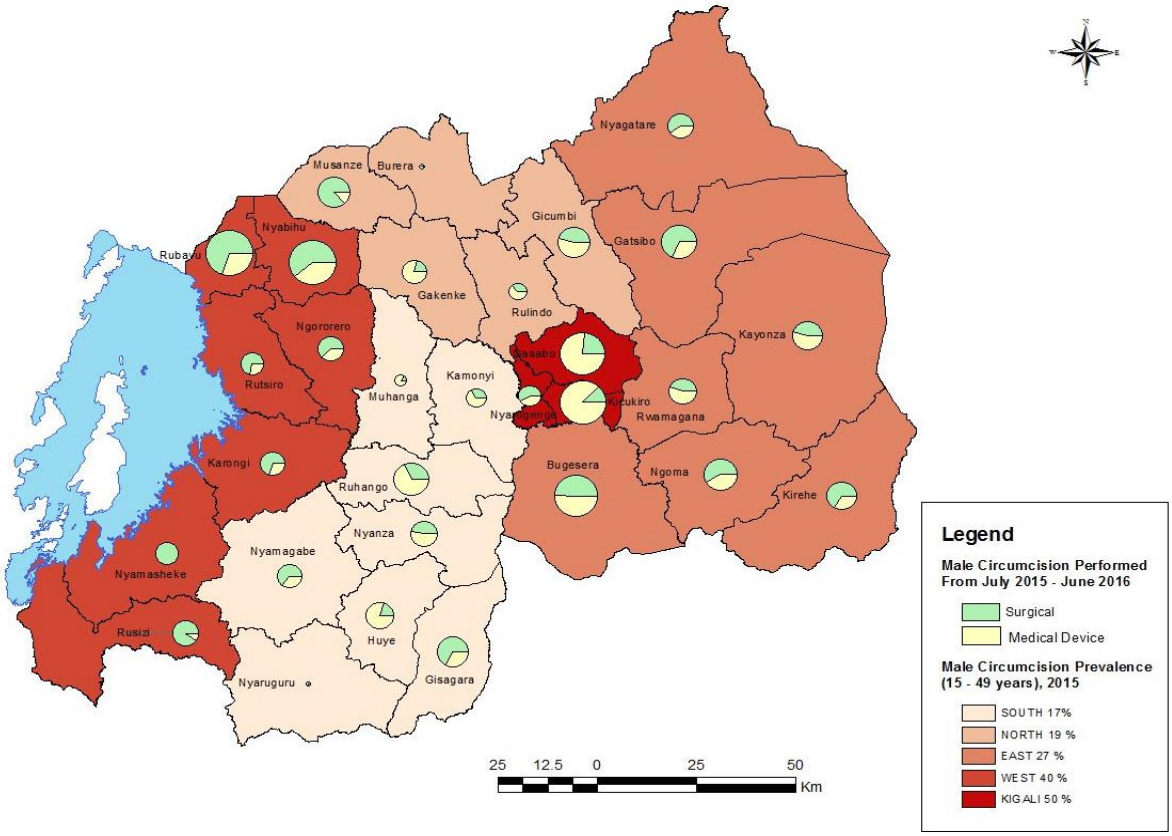
Figure 4: VMMC Performed by Age-group, July 2015-June 2016



Rwanda adopted the provision of two tetanus vaccine in the package of services for VMMC for vaccine-naive individuals or presenting no proof of prior tetanus vaccination. This was adopted following the WHO informal consultation meeting advice to mitigate tetanus risk in VMMC programs.

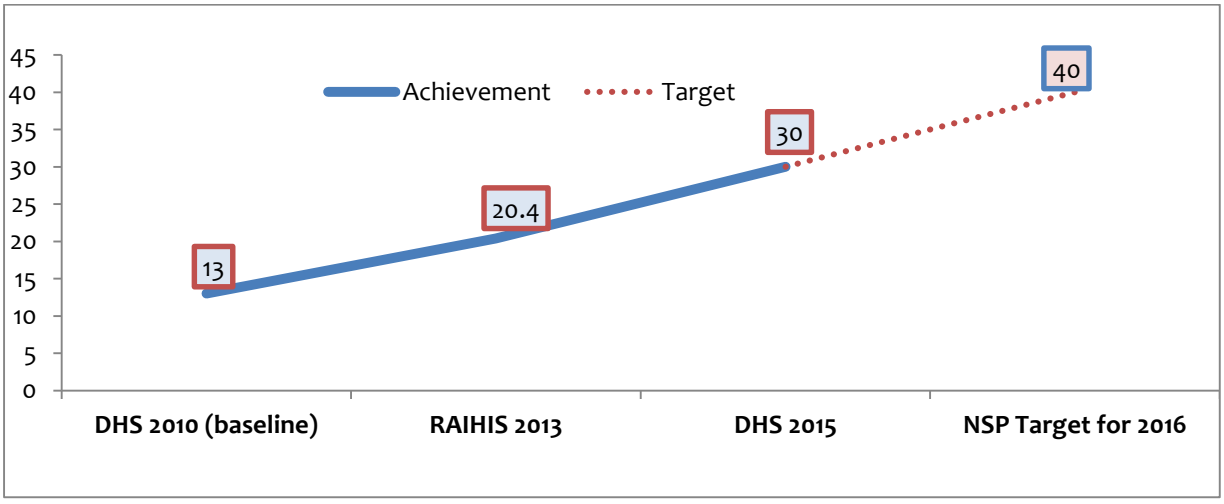
The map below shows the number of male circumcision performed using either surgical or medical device (Prepex), by District, from July 2015 to June 2016. According to DHS 2015, 30% of Rwandan men are circumcised with large disparities across the 5 provinces.

Map 1: VMMC Performed by District, July 2015-June 2016



The Ministry of Health is targeting to increase circumcision prevalence from 13% to 66% of all men between 15 and 49 of age by 2018 (NSP 2013-2018). The current circumcision prevalence is now at 30% (DHS 2015) while the NSP target for this period is 40%.

Figure 5: Uptake of VMMC services (2010-2015)



2.4. Key Populations

The Rwanda National Strategic Plan (NSP) on HIV and AIDS (2013-2018) emphasizes on reaching Key Populations as a one of key interventions to reduce incidence of HIV in general population but also to reduce the HIV related mortality in these groups. During this fiscal year 2015/2016, many activities were conducted in order to meet the needs of these people. Below are some of the activities carried out:

- RBC in collaboration with its partners developed national training manuals that serve as national reference documents and practical tools used to increase health care providers (nurses, doctors and counsellors) capacity in delivery of quality trainings of key populations. Two training session of heath care workers on sensitivity of friendly services to Key Populations, as essential intervention to ensure quality and friendly services delivery to Key Populations was organized. A total number of 86 participants (66 nurses,10 doctors and 10 implementing partners) participants working in HIV counselling & testing services and ARV care and treatment from 33 health facilities in 6 hospitals benefited from those trainings. Health facilities were selected for the training as they were all nearby hot spots which have a high volume of female sex workers.
- Provision of facility-based services package including systematic regular screening and testing for STIs and HIV, initiation of treatment as prevention. Under this program 19,553 contacts of FSWs were done by comprehensive package versus 2,324 MSM;
- Provision of community-based services such as peer education, HIV counselling and testing, STI screening, condom and lubricants distribution; from community, referrals to health facility level were made to ensure continuum of care and treatment. Between July 2015 to June 2016, a total of 1,297 females Sex Workers and 36 MSM were linked from community to health facility for ART initiation;
- Condom accessibility and availability is defined as key strategy for the prevention of new HIV infections for both key populations and general population. A combination of strategies is in place to ensure condoms are accessible among others, availability of condoms in all services delivery points within health facilities and private sectors through social marketing partnership. During this reporting

period, a new initiative of condom distribution was initiated in Kigali City "24/**7 condom distribution kiosks**". These kiosks are meant to ensure 24 hours out of 7 days' condoms accessibility free of charge together with educational materials on HIV in general and safer sex practices. All condom kiosks were strategically placed in four HIV high-risk areas within Kigali city: Gasabo-Remera, Gikondo-Magerwa, Nyarugenge-Nyamirambo and Kicukiro-Giporoso. In the long run, it is expected to contribute to the reduction of new HIV infections. In total, 14,662,424 condoms were distributed by implementing partners and 118,843 through new initiative of condom kiosks within only two months.

- As part of continuous quality improvement, mentorship and supportive supervision were conducted to support implementation of comprehensive package of services recommended in the national at both facility and community levels. The focus was put on 3 District Hospitals and their health facilities as follows:
    - **Rubavu District**: Gacuba II, Kigufi, Byahi
    - **Nyamasheke District**: Nyamasheke, Mahembe, Kajongo, Bushenge, Kagano, Ruharambuga, Bushekeri and Kirimbi
    - **Rusizi District**: Gihundwe, Nkanga and Bugarama

- Train peer educators for female sex workers on HIV and STIs, violence, life skills and referral for HIV testing;
- Conduct the mapping of sites and hot spots for FSW. The first phase of this activity was conducted in 19 Districts (RUSIZI, NYAMASHEKE, KARONGI, RUBAVU, MUSANZE, BURERA, GICUMBI, NGORORERO, BUGESERA, KAYONZA, NGOMA, KIREHE, HUYE, NYANZA, RUHANGO, MUHANGA, KICUKIRO, GASABO and NYARUGENGE). Following the allocation of the five implementing partners (IPs) working with Key Populations, as per SPIU, 19 Districts were the priority, as they were subject of GF funding. In those Districts, 738 hotspots were identified and linked to both implementing partner and to the nearest health facilities for special HIV services provision, including mobile VCT, referral to HF for ANC, STIs screening and treatment, ART, etc.

- Development of M&E tools for FSWs and MSM, including identification registers, referral form and personal medical files;
- Development of electronic data entry template comprising the information from identification to the Care and treatment services, for FSWs and MSM.
- Support group sessions organized for different categories of key populations through the peer education approach;
- Mass campaigns outreach for key populations to increase their awareness and service utilization.
- The Technical Working Group on subgroup of Key Populations were convened quarterly to monitor implementation progress and address challenges raised by both stakeholders and beneficiaries with the aim to improve implementation strategies, geographic coverage of services and coordination mechanism of HIV interventions targeting key populations.

Condom use is one of the key prevention methods promoted, especially among key populations to reduce new infections of HIV, STIs, Hepatitis and limit unwanted pregnancy. Between July 2015 and June 2016, more than 8.5 million male condoms and more than 19 thousand of female condoms were distributed.

2.5. Behaviour change communication

Behaviour change communication (BCC) interventions are used to improve individual and general population awareness of HIV and other blood bones infections, for demand creation and service utilization. During this reporting period, HIV Division in collaboration with Rwanda Health Communication Centre implemented a range of behaviour change communication interventions including national and small scale campaigns, communication materials, radio shows and spots, newsletter supplements and free hotline services.

2.5.1. 2015 World AIDS Day (WAD) Campaign

Each year, on 1st December, Rwanda joins the rest of the World to celebrate the World AIDS Day. The day gives an opportunity to commemorate people who lost their lives to

HIV, raise awareness of HIV, to cerebrate progresses made but most importantly to join efforts to address remaining gaps in HIV response at national level.

For 2015-2016, World AIDS day campaign focused on the theme: ***"It's everyone's responsibility to prevent, treat HIV among our children and adolescents"***. This theme was chosen because HIV prevention and treatment among children and adolescents show bigger gaps compared to other age groups followed in the national program. This campaign was a call for action for everyone involved in HIV prevention & treatment of children and adolescents but also a community mobilization in general. The launching was marked but a renewed commitment of various stakeholders in HIV national response from Ministry of Health, Civil society, partners and the network of people living with HIV.

Activities in line with national them included outreach campaigns in the community, local authorities' workshops and radio shows.

In partnership with radio and TV channels in Rwanda more than 500 talk shows about HIV/AIDS were produced from July 2015 to June 2016.

2.5.2. IEC/BCC materials

Materials were produced to provide to the population with Information, Education and Communication strategies as well as Behaviour Change Communication to equip the population with enough information to make a personal decision to promote positive behaviours changes. Among materials produced there are IEC materials on condoms, male circumcisions and HIV testing.

III. HIV CARE AND TREATMENT PROGRAM

3.1. Introduction

People Living with HIV are identified from different HIV testing entry points and enrolled into HIV care and treatment programs. The national guidelines defined key events from testing to linkage to HIV care services:

- Psychosocial and nutrition assessment and support;
- Clinical, biological evaluation,
- Initiation of prophylaxis against opportunistic infections,
- Initiation of Antiretroviral therapy for eligible patients.
- Monthly appointment for drug refill and followed up
- Quarterly clinical check-ups.
- Biological monitoring, comprising annual Viral Load and CD4 count, Biochemistry and Haematology follow up by healthcare providers

3.2. Care Services for PLHIV

3.2.1. Enrolment

Enrolment into care and treatment represents the step where the patient tested HIV positive is registered and constitute the beginning of follow up into HIV care services and the start of prophylaxis against opportunistic infections (OI). Enrolment in care services starts by opening a patient's personal file and identification, and documenting medical and psychosocial history into the file. Clinical and biological assessment for ART eligibility, disease progression are performed and provision of prevention and treatment of opportunistic infections (OI) that include TB, STIs, cervical cancer, Cryptococcus, and other blood borne infections. The services are provided through ART clinics across the country. Enrolment of persons diagnosed with HIV in clinical care services after diagnosis is essential to reinforce counselling, ART eligibility assessment, ART initiation, and for improving their health outcomes. The National HIV Program monitors PLHIV enrolment in HIV clinics using health management information systems (HMIS). Starting from the 1st

July 2016, enrolment into care and treatment services shifts to ARVs initiation as per the "Treat All" strategy implementation officially started on July 1st, 2016.
By end of June 2016, 13,827 patients were enrolled in care and treatment services during the current reporting period which has resulted in 16,549 patients in Pre-ART.

3.2.2. Systematic OI screening, prophylaxis and treatment (CTX, IPT)

The screening, prophylaxis, and treatment of OIs are included in the routine package of services offered to PLHIV at enrolment and during follow-up. Cotrimoxazole is the first option to prevent OIs and is given to all PLHIV regardless of their clinical or immunological stage, and Dapsone is used as alternative option to cotrimoxazole. In the reporting period, a 100% of individuals in care services received Cotrimoxazole/Dapsone prophylaxis. Tuberculosis, as one of the most prevalent opportunistic infections, is the main focus for both HIV and TB programs. All PLHIV are being screened for TB at each visit using approved TB screening tool.

STIs systematic screening in all patients who consult health facilities including all HIV-positive clients is one of the big strategy used in controlling HIV. Every client in ART and pre-ART undergo STIs screening including screening for cervical cancer included in the national HIV guideline as well as trainings and mentorship to health care providers.

In order to reduce the burden of OIs in PLHIV, the 2013 ART Guidelines recommended systematic screening for Cryptococcus infection using LFA for all pre-ART patients with CD4<200 cells per mm^3 upon enrolment; patients with symptoms that reflect meningitis should have a Cryptococcal Antigen (CrAg) performed on cerebrospinal fluid after lumbar puncture for diagnosis. Fluconazole is provided as treatment for uncomplicated cases and for secondary prophylaxis. The decision-making guide for Cryptococcal screening among PLHIV has been developed, printed, and distributed to all health facilities, along with associated SOPs, M&E tools, and supervision tools. The serum of all HIV patients, newly enrolled or in pre-ART with CD4 <200 cell/mm^3 were immediately screened for Cryptococcal infection using LFA test (CrAg) performed on the same serum sent for CD4 count.

3.2.3. Follow-up

All patients enrolled into HIV care and treatment services are followed to the clinic on monthly basis for OI prophylaxis refill, screening of OIs and assessment of eligibility for ART. Clinical and biological exams are also performed to assess both clinical, immunological and virological status of the patient.

In order to improve the adherence to treatment, thereby maximizing the benefits of ARVs, an emphasis has been put on psychosocial care with a focus on HIV status disclosure and support groups for children and adolescents, which is a great contribution to service and treatment adherence.

The linkage between HIV testing and care services as well as regular follow-up of patients in pre-ART services have contributed to early ART initiation based on CD4 cells before clinical deterioration. During July 2015 to 30 June 2016, across the country, 15,936 patients were initiated on ART. Of them 857 (5.4%) were aged bellow 15 years, 2502 (15.7%) and 12,607 (79.0%) were aged 15-24 and 25 and above respectively.

Nutritional assessment, Counselling and Support for PLHIV is integrated in Care and Treatment Package. Malnutrition and HIV/AIDS act synergistically; creating a vicious cycle that weakens the immune system of the HIV-infected person. Poor nutrition leads to rapid progression to AIDS which could be prevented by providing adequate nutrition. The National Guidelines of Care and Nutritional Support, recommend nutrition supplement of corn soya blend (CSB+) for moderately malnourished and vulnerable PLHIV. During July 2015 to June 2016, the emphasis was on procuring Specialized Nutritional Product (CSB+) for malnourished and vulnerable PLHIV at all health facilities. The amount of 1,192,380 Kg of Corn Soy Blend fortified (CSB+), was distributed in all health facilities (District Hospitals and Health Centres) with ART services across the country.

3.3. ART Services for PLHIV

3.3.1. Paediatric HIV Program

HIV infected children aged 0-14 years are identified in different entry points: postnatal care, immunization visits, family cantered approach for HIV testing and counselling at health facility level. The testing is offered either voluntary or initiated by the provide (PITC) or at community level during outreach services. For children less than 18 months, DNA PCR testing is conducted at 6 weeks, at 9 months and then at 18 months. The 2015 RDHS shows that the prevalence of HIV among children was 0.2%.

At the end of June 2016 the HIV National Program had 8,015 children on ART with national criteria to start ART irrespective of immunological (CD4 cells count level) and clinical status for all under five years. Children 5 to 14 years old living with HIV are initiated on ART if they are in WHO stage 3 and 4, have HIV-TB, HIV-HBV co-infection, or if their CD4 cells count <500 irrespective of clinical status. By end June 2016, 943 children were being followed in pre-ARV service on cotrimoxazole prophylaxis. Among children on ART, 7,115 are on 1st line while 900 remaining are on 2nd line. The retention rate of children after one year of ART initiation is 95.5% with mortality rate of 2.4% and 2.1% of lost to follow up, during July 2015-June 2016.

3.3.2. Adolescents and Adults program

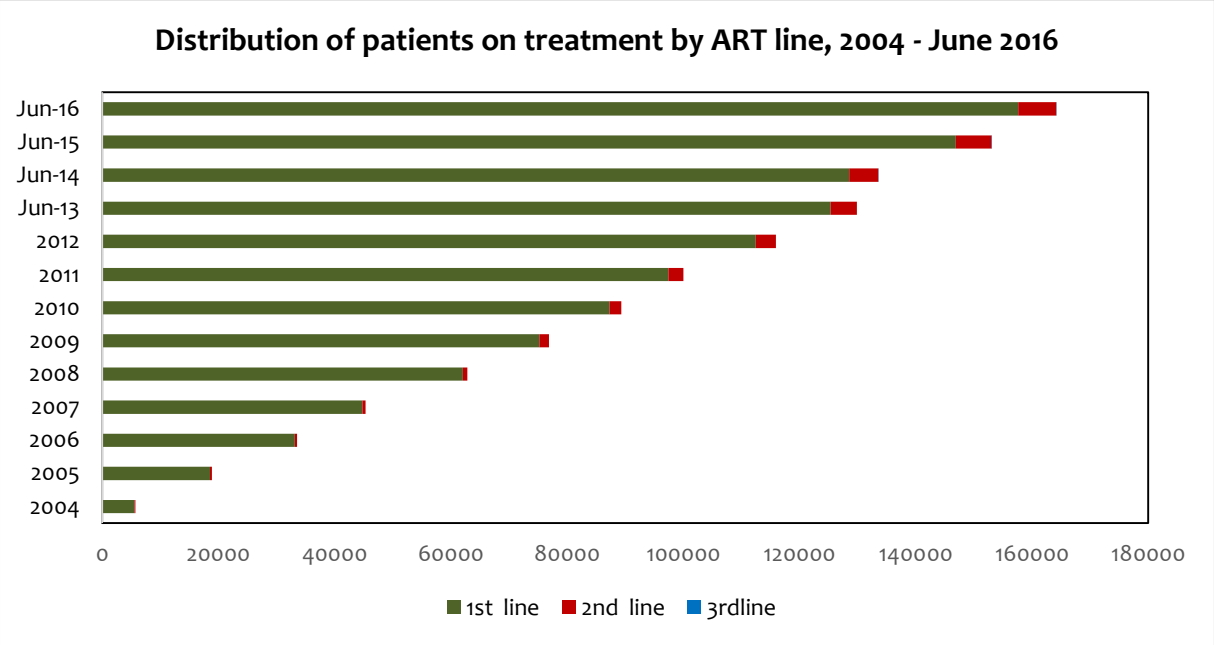
Rwanda has made significant progress in the provision of treatment, care and support services. All progress made are towards reduction of morbidity and mortality due to HIV/AIDS by preventing, early diagnosing and appropriate treatment of OIs as well as early antiretroviral treatment (ART) and follow up of PLHIV.

Adolescent program has been a challenge in past years but in this reporting year the package for adolescent has been integrated into existing package for HIV trainings and mentorship. All these achievements have been possible due to high geographic coverage in terms of HFs and universal access to treatment by treating the majority of PLHIV in need of treatment. With the increase in number of health facilities offering care and treatment services, the number of patients on treatment has also increased.

During July 2015 to June 2016, emphasis have been put to quality of services ensuring that all eligible clients enrolled into the program initiate ARVs on time as well as close follow up for good treatment outcome which is suppression. Patients on treatment have been followed based on existing national recommendation at different levels. A clinical follow up is being done on regular basis by nurses trained in task shifting with a strong support of medical doctors from district level through mentorship program.

All patients on treatment came to the ART clinic monthly for drug refills, monitoring of side effects, adherence support and screening of OIs and STIs with more emphasis on prevention, diagnosis and management of treatment failure.

Figure 6 : Evolution of patients on ART, 2004-June 2016

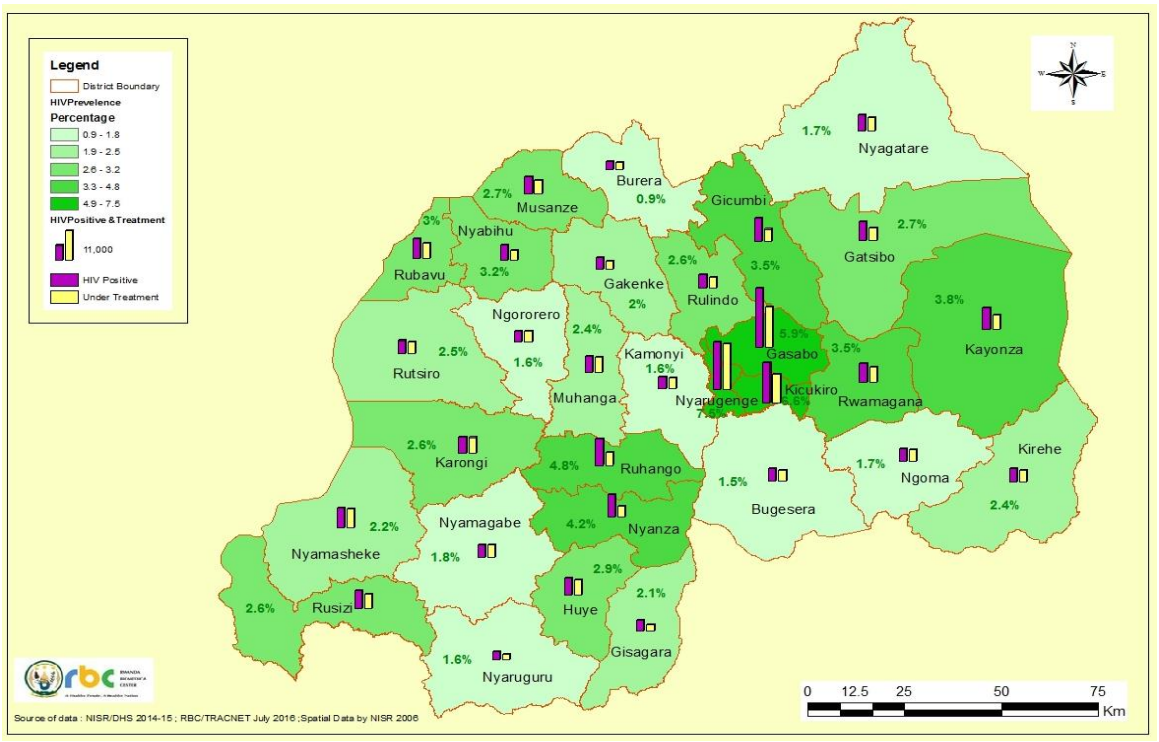


Source: HMIS, June 2016

As of June 2016, the majority of adult and adolescent patients on treatment are on 1st line regimen, 95.7% with 4.3% on 2nd line and only 41 patients on 3rd line. The retention rate of adult after one year of ART initiation is 92.4%. with mortality rate of 2.1%. and 5.5% of lost to follow up during this reporting period.

The map below shows the treatment coverage during July 2015 to June 2016.

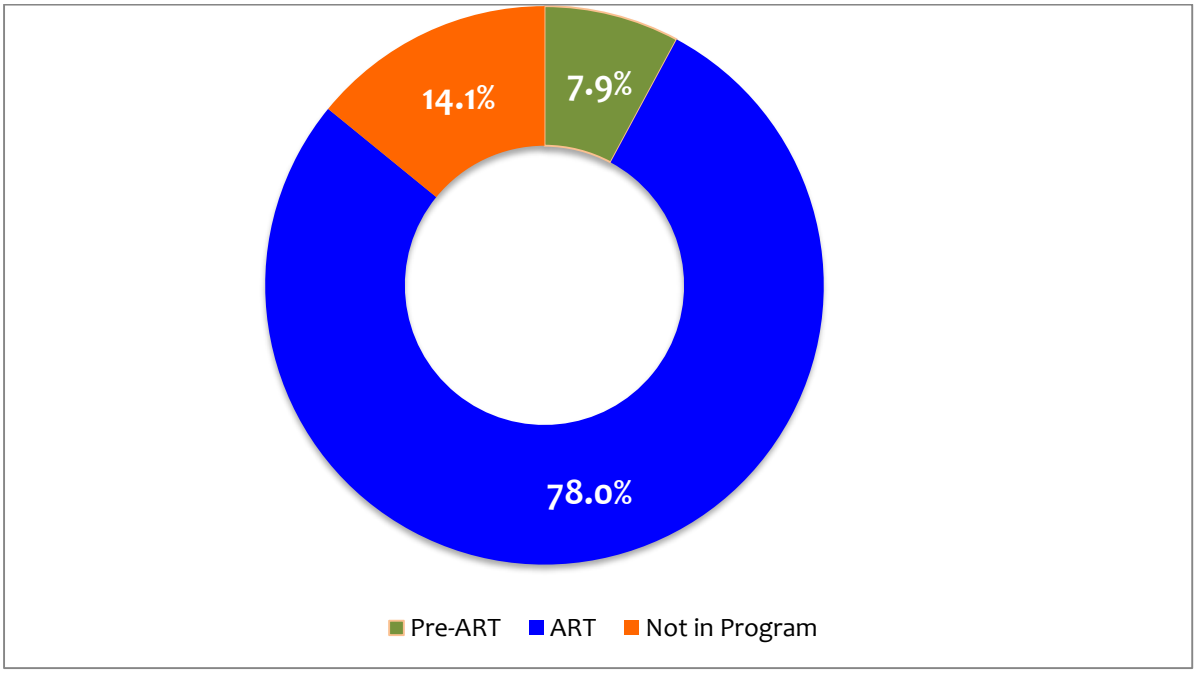
Map 2 : ART coverage and HIV prevalence, by District



Source: RHMIS, June 2016

While the map below shows the ART coverage by District, the figure below shows the ART coverage as of June 2016.

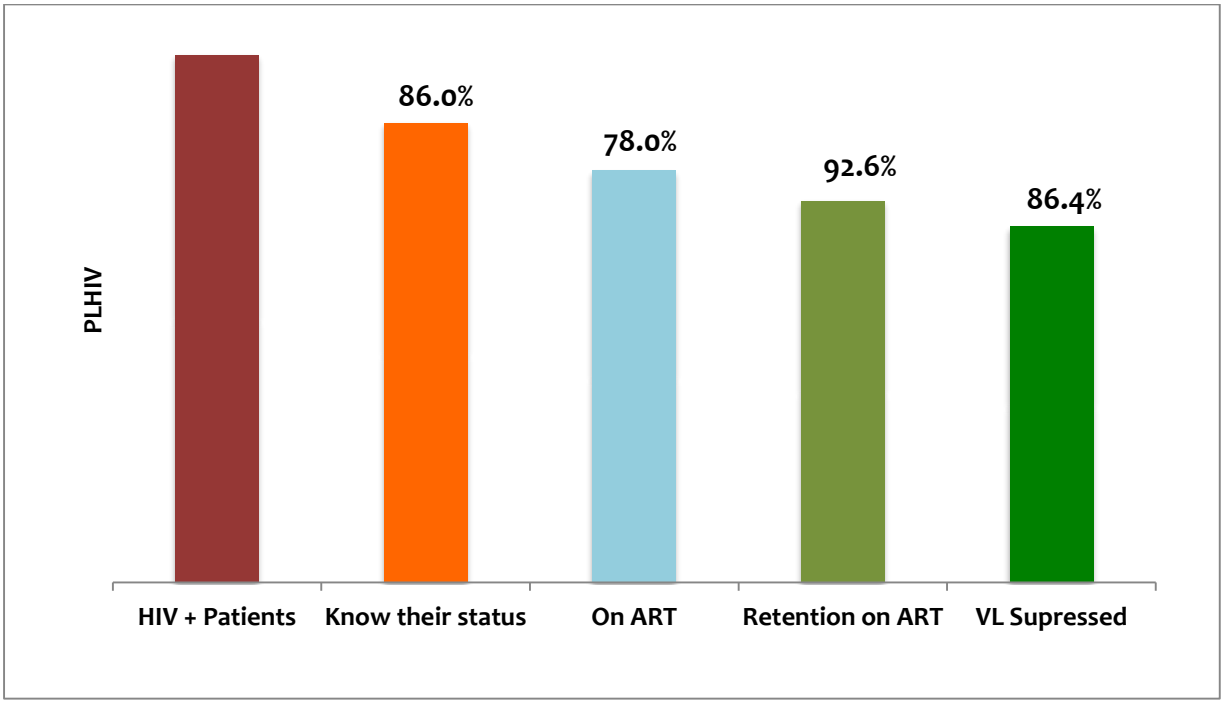
Figure 7: ART Treatment Coverage, by June 2016



3.4. Treatment Cascade

Treatment cascade considers the flow from diagnosis, ART initiation up to viral suppression on treatment. The focus of the care and treatment program is to achieve the 90-90-90 targets through continued reduction of new HIV infections and AIDS related deaths. Rwanda is on track to achieve the 90-90-90 as per the graph below showing the latest cascade of care for adults. Of estimated PLHIV (~210,000), 86% know their status, 78% of all PLHIV are on ART, 92.6% of them were retained after 12 months on ART, and 86.4% suppressed Viral Load after 1 year on treatment.

Figure 8: HIV Treatment Cascade, Rwanda June 2016



Source: RDHS 2014/15, HMIS June 2016, Health Facilities records and Drug resistance survey

3.5. ARV Drug Resistance

Results from the HIV drug resistance monitoring among patients on First Line ART found out that 86.4% of adults on first line ART had achieved Viral Load suppression (< 20 copies/ mm^3) after the first year. This increased to 91.5% after 36 months. The main focus will be

increasing the coverage of ART; with implementation of Treat All policy for all HIV infected and decrease risk of drug resistance. The same cohort will be analysed and show the occurrence of drug resistance after 5years on treatment. This monitoring will be adjusted to consider the Treat All Strategy, which was implemented since July 1st 2016.

3.6. "Treat all" implementation process

The year 2015- 2016 marks an important momentum in the health sector in Rwanda where the country has officially moved the "Treat All" strategy into the existing national HIV guidelines for people living with HIV. In 2015 the World Health Organization (WHO) proposed the "Treat All" approach as a possible mean of controlling the global HIV epidemic, which recommends voluntary testing for HIV and immediate antiretroviral therapy for anyone found to be HIV-positive. Today, there is evidence that starting eligible HIV-infected patients on ART alleviates their suffering and reduces the devastating impact of the pandemic. Two months after the WHO launched the 2015 guideline, Rwanda adopted the strategy and started preparation for its implementation at patient level.

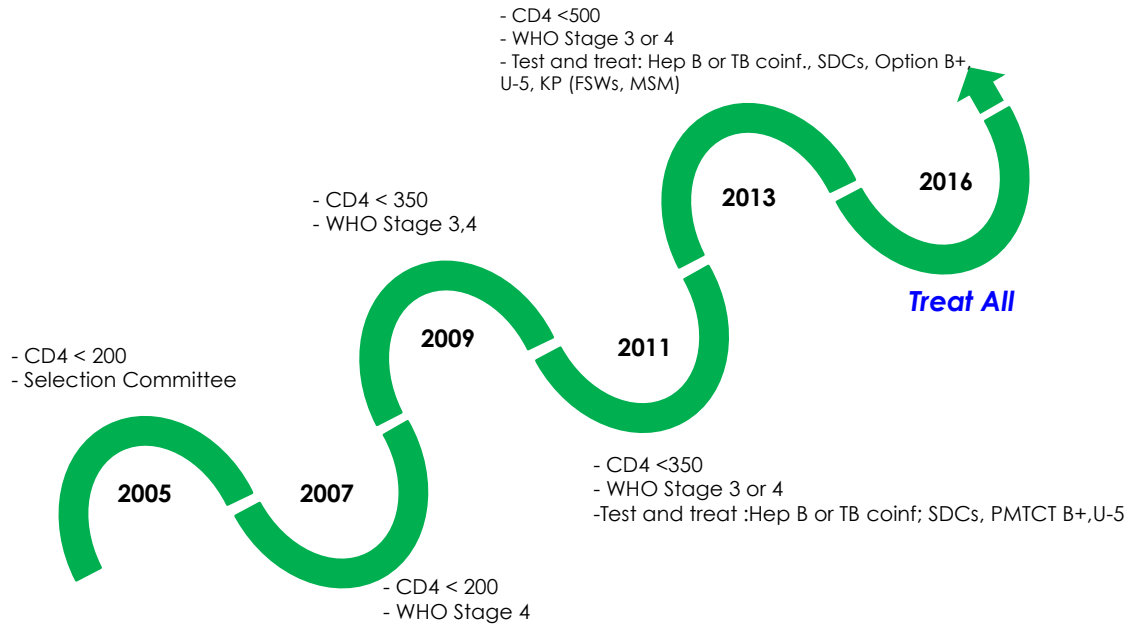
International and national consultations have been done in country since August 2015 and the Treat All has been opted as strategy to control the HIV epidemic by all stakeholders. Political, scientific, programmatic and fiscal will and commitment from across all sectors of society have been supportive in addressing the HIV epidemic issue.

After high level approval of the 2015 HIV guidelines including the big change "Treat All" strategy, technical teams have continued to make operationalize the new guidelines:

- Finalizing the guidelines to be used by health care providers countrywide.
- Quantify all needs in terms of commodities and drugs to cover the guidelines recommendation.
- Procure all related drugs and commodities.
- Train/orient health care providers at all levels, on the changes
- Update M&E tools to better monitor implementation

The Ministry of health officially launched the " Treat all" strategy on 30 June 2015 in an event attended by representatives of civil society organisations, partners, health care providers, etc. The official start of treat all implementation is 1st July 2016.

Figure 9: Evolution of Rwanda HIV treatment programme



3.7. HIV Co-infections

3.7.1. TB/HIV

One stop services were elaborated to receive all TB-positive patients with or without HIV infection, thus helping in the prevention and reduction of new TB cases among PLHIV. HIV/TB collaborative activities have been strengthened by continuing the training of health care providers and health facility managers to improve TB case finding and reporting among HIV-positive patients. With the objective of reducing the burden of TB in PLHIV through early initiation of ART, all PLHIV are systematically screened for TB at enrolment and during follow-up visits. From this active screening, all TB suspected patients are diagnosed using different para clinical exams, including sputum microscopy, culture, chest X-ray and GeneXpert.

Training of health care providers and on site mentorship activities have been intensified to strengthen active TB screening in all PLHIV, including those on treatment and those not

yet on treatment. Those on treatment who are co-infected continue their ART and start anti-TB treatment, while those not yet on treatment who test TB-positive are initiated on ART and the anti-TB treatment without waiting for any other criteria. Evaluation meetings with health care providers at district hospitals are being conducted on a quarterly basis for close monitoring and support to decentralized levels.

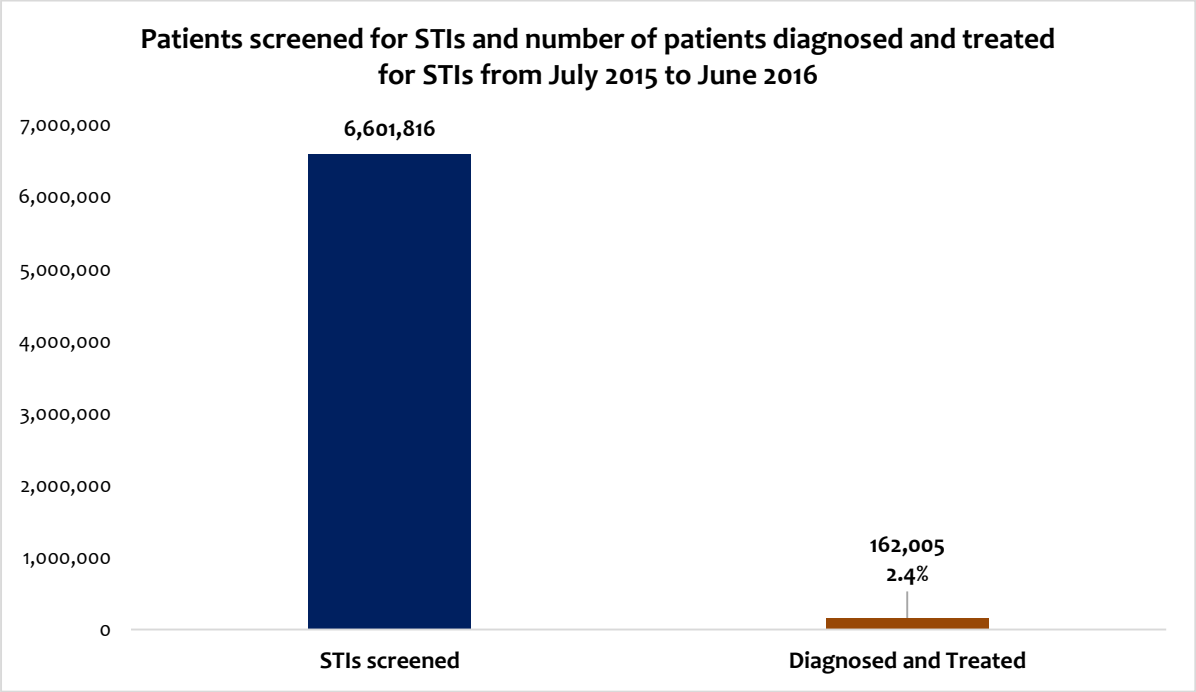
3.7.2. HIV and Other STIs

3.7.2.1. STIS screening, diagnosis and treatment

The Rwanda HIV National Strategic Plan 2013-2018 established strategies aimed at increasing systematic STI screening in all patients who consult health facilities, including all HIV-positive clients. During follow-up, the number of people screened for STIs in all health facilities increased while the proportion of STI-positive patients decreased. Number of cases reported for each indicator is not equal to the number of people. One person could be reported several times for same or different reasons. From July 2015 to June 2016, some etiological diagnoses were used in reporting and among reported cases: 6,454 were positive to syphilis test, 162,005 others were diagnosed according to syndromic approach.

The figure below illustrates the number of patients screened for STIs and number of patients diagnosed and treated for STIs from July 2015 to June 2016 (includes HIV-positive and HIV-negative population).

Figure 10: STIs Screening and Treatment, 2016



During July 2015 to June 2016 period, training of health care providers and trainers was conducted on STI prevention and management, clinical mentorship, and supervision. This training resulted in an improved treatment of positive cases and improved STI indicators reported in TRACnet as shown by the graph above. Updating the STI national guidelines according to WHO guidelines and training of healthcare providers (trainers and providers) were conducted during this year for updating clinician on new evidences.

Finally, a strong integrated clinical mentorship was implemented in all district hospitals to support clinicians in systematic STI screening and management in PLHIV.

3.7.2.2. Sensitization on STIs and HIV prevention in youth

High priority is given to the primary prevention of STIs because when untreated, STIs may result in different complications like death, sterility, still born, repetitive abortion, congenital diseases STIs, cervical cancer, pelvic inflammatory disease, and can facilitate HIV transmission. This needs multi-sectorial approach which includes implication of Ministry of Health, local government, Ministry of Youth and general population. In this context, RBC organized training of 23 health directors and in charge of education from 23

administrative districts, 34 health providers in Youth Friendly Centres (YFC) from all districts and YFCs to cover the current gaps in STIs, HIV, AIDS prevention and control. This training allowed staff who stay in contact for long time to gain knowledge which will help them to sensitize younger population on STIs, HIV. The general population was also sensitized for HIV/STI prevention using media including Rwanda radio and community radios.

3.7.3. Hepatitis B and C Program

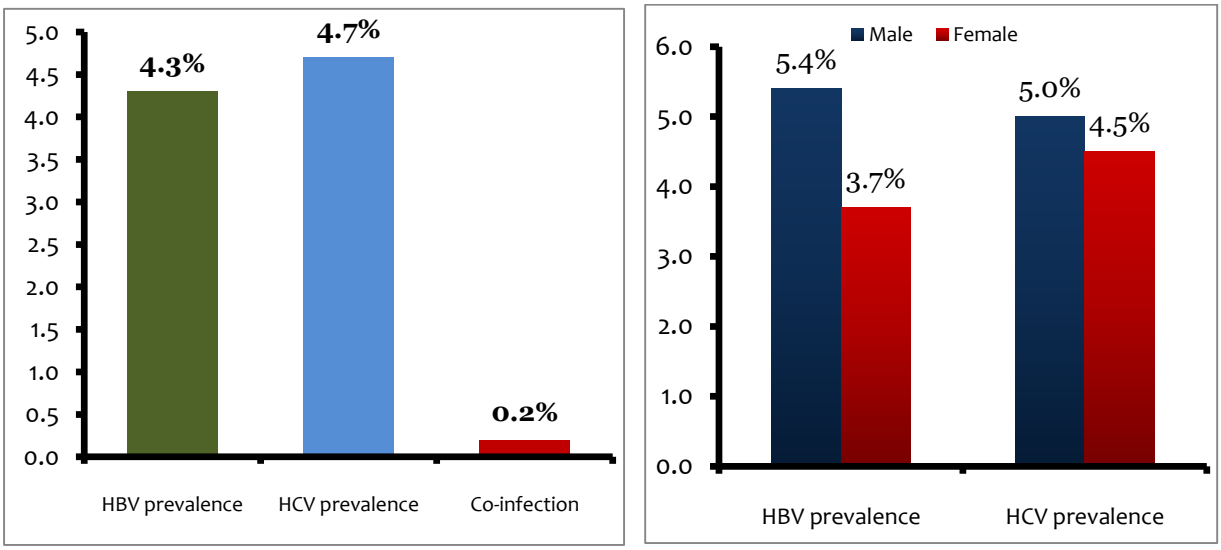
During this fiscal year, updating the Hepatitis B and C national guidelines and elaboration of national policy for HCV and HBV management continued. The access to direct active antivirals (DAAs) for Hep C changed drastically from 75000$ in 2015 to 1200$ after negotiation with the American biopharmaceutical company GILEAD. The number of patients accessing these medications raised from 2 to 800 in a period of 10 months however access to DAAs remains a real challenge that will be continue to get high attention.

Similarly, the capacity building of health care providers to manage Hep C was scaled up with aim to decentralize the services at all District Hospitals by 2017.

3.7.3.1. Hepatitis B&C screening and vaccination

The HIV NSP 2013-2018 includes a strategy focusing on systematic screening of Hepatitis B virus (HBV) and Hepatitis C virus (HCV) among HIV-positive people. The objective is for early initiation of ART to cure Hepatitis B or improve clinical evolution of liver disease due to HBV and HCV, or vaccination of those screened HBV-negative. For this purpose, around 120,000 HIV-positive people countrywide, enrolled in care and treatment services, were screened for HBV&HCV, also more than 60,000 HIV-positive people countrywide received HBV vaccine. This helped identifying people who need treatment for HCV and who need change of treatment to Tenofovir-based for HIV and HBV co-infected population. The findings from the screening done is summarized in the figures displayed below:

Figure 11: Prevalence of Hepatitis B and C



In addition to screening, HBV vaccination was provided to health workers, to health community workers, to hotel workers, to some institutions that requested this vaccine and new medical students. A mentorship of treatment in HIV and HBV co-infected people who already had HBV test results was conducted in all health facilities including prisons.

The validation process of diagnostic rapid tests (DRTs) is ongoing and will be used in very near future. Hepatitis B and hepatitis C national guidelines and policy were revised and approved by the ministry of health.

3.7.3.2. 2015 World Hepatitis Day (WHD)

The World Hepatitis Day was officially commemorated on July 2015, with a walking campaign advocating for hepatitis prevention and treatment, and owe vaccinated against Hepatitis B over 1,000 people, 500 screened for HBV and HCV and many others received awareness messages face to face, on radio, television and newspapers.

3.8. Supply chain system

The Rwanda Pharmaceutical Supply Chain (SC) for HIV commodities is composed of different levels and institutions collaboratively engaged to manage and operate the SC. They are drawn from public and private sectors with the national level supporting the health facilities to increase access to healthcare services by availing health commodities.

Information flow through the network provides data and feedback useful for decision-making at all levels of the SC.

3.8.1. HIV commodities quantification exercise

In order to both inform the Coordinated Procurement and Distribution System (CPDS) of the Country's needs and ensure adequate supply of antiretroviral and OI's drugs, it is essential to develop accurate, replicable forecasts and supply plan for future needs. To this end, the Quantification Committee operates on a yearly basis to produce 24-months forecast and one-year procurement plan for antiretroviral and OI's drugs.

To initiate the quantification, process several meetings took place early in August 2015 and a plan of activities for quantifying Anti-retroviral (ARVs)and OI's was developed and approved. Extensive data collection took place late in September 2015, data compilation followed immediately thereafter, and the data analysis in November 2015.

The Quantification exercise itself took place in November 2015. The quantification Committee reviewed and validated the collected data and formed baseline assumptions for the quantification exercise. The analysis accounted for the past rate of growth of the program, anticipated future growth and new strategies of the program. Chief among the strategies presented is the proposed implementation of the "treat all" strategy and new delivery model for differentiated care services where stable patients will be getting 3 Months ARVs supply instead of one month and spacing clinical visits from 3 to 6 months.

3.8.2. Procurement and distribution

The results of the quantification exercise have assisted the Resource Management Committee (RMC) of the CPDS to decide upon a rational allocation of resources for the procurement of the commodities identified in this report.

In addition, a procurement plan has been produced that identifies the delivery schedule for all ARVs and OI's drugs quantified in this report

The procurement and distribution was coordinated by MPPD. The contract framework has been used to increase the procurement efficiency minimizing stock outs in HIV drugs and lab commodities. The distribution has been conducted from MPPD to district pharmacies, from

district pharmacies to health facilities, and from health facilities to the patient, who is the ending point of distribution.

3.9. Continuous capacity building

3.9.1. Standards of quality of care

Strengthening the capacity of healthcare providers is a priority to improve the quality of services and to ensure optimal efficacy and efficiency of interventions. In this line, HIV care and treatment conducted different trainings targeting health care providers and clinical mentors:

- The Integrated trainings focusing on advanced task shifting, with appropriate training of nurses to fulfil responsibilities previously reserved for physicians. Mainly, advanced task shifting focused on empowering nurses to prescribe second line ART and initiate ART to children living with HIV. A total of 555 nurses from all 44 District hospitals and all health centres in their catchment area, 3 referral hospitals offering HIV services, one staff from RBC and 6 staff from partners were trained on advanced task shifting, from January to October 2015.

- From July 2015, new clinical mentors were recruited and based at DH level. RBC/HIV Division organized mentor's capacity building plan as follow:

  Firstly, a training on comprehensive HIV management, then an orientation and exposure in HIV services for all mentors where they worked on key HIV indicators known as challenges in HIV program. They were tasked to identify gaps and causes behind for these indicators predefined. A total of 126 clinical mentors and HIV supervisors from 42 DHs countrywide were trained on HIV comprehensive management. 84 clinical mentors continued the orientation and exposure in HIV services for one-month half from December 2015 to January 2016.

  Secondly, TOTs for mentors were organized jointly with STIs and OBBI Unit in February 2016 with the main purpose of preparing mentors for TOPs on the HIV guidelines 2015. A total of 84 clinical mentors were trained and 36 potential trainers were selected and thus facilitated all TOPs conducted in March 2016 in three sites.

- Every two years and based on scientific evidences, Ministry of health through RBC proceeds on the revision of the existing HIV National Guideline. From August 2015, the revision process started intending "Treat all approach" and its implementation was scheduled for July 2016. In this line, HIV Division conducted training of providers countrywide with the main focus and main change cantered on the approach of ''Treat all". 571 providers from all health facilities; publics and privates, offering HIV services attended training sessions and providers were updated on key changes of 2015 National guidelines on HIV prevention, care and treatment.

- Regarding continuous capacity building in nutritional assessment, counselling and support, during the reporting period HIV care and treatment conducted a training for 51 HCPs on nutritional care and support for PLHIV.

- In the context to enhance ART treatment adherence among HIV positive people especially Children and adolescents, RBC/HIV Division in collaboration with University of Maryland school of Medicine / Rwanda and USA, organized five-day training of trainers on disclosure and adherence to ART. This training was facilitated by two experts from UMSOM where the approach of group discussion and role play were mainly used. 28 participants (RBC Staff, nurses clinical mentors and staff from referral Hospitals) attended the training. In general, this training was successfully done as all expectations of participants were achieved and it came up with a draft training module adapted in Rwandan context. The main recommendations were to train health care providers from Health centres and district hospitals and to reinforce children and adolescents support groups at health facilities and community level.

- As per the national guidelines and policy for viral hepatitis management in Rwanda, the implementation of the minimum package of services of HCV and HBV control was disseminated to professional health providers and their partners, including national health systems, laboratory capacity, supply systems for drugs and other commodities, availability of financial resources, the organization and capacity of the health system and anticipated cost– effectiveness of the various interventions. Within its mission, the central level ensured the coordination of the guidelines implementation at all levels

through training and clinical mentorship for healthcare providers, supervision and monitoring and evaluation of programs at national level as per health facility needs to provide its minimum package of prevention, diagnosis and treatment. The following health care providers were trained on HIV and viral hepatitis: 14 clinical specialists from referral and provincial hospitals, 96 clinical mentors and general practitioners from referral, district and provincial hospitals, 550 nurses from health centres, 24 laboratory technicians, 48 hospital pharmacists, 48 nutritionists and 5 central level managers.

4. SOCIAL IMPACT MITIGATION

4.1. Introduction

The impact mitigation programme aims at ensuring that people infected with and/or affected by HIV have the same opportunities as the general population (NSP 2013-2018), by:

1. Ensuring that people infected with and/or affected by HIV have an improved economic status, by strengthening cooperatives for those people as well as ensuring their food security
2. Ensuring that orphans and vulnerable children (OVC) have improved social and economic protection through accessing a minimum package of services
3. Reducing stigma and discrimination towards people infected with and/or affected by HIV, by targeting the general population as well as people living with HIV (PLHIV).

4.1.1. Working with Civil Society Organizations and non-health sector Institutions

The HIV response is multi-sectoral in nature as outlined in the EDPRS 2, with HIV as a crosscutting issue in all economic sectors, encompassing all stakeholders in each sector, including the private sector and communities. Various stakeholders are involved in the implementation of HIV programmes, and as far as impact mitigation is concerned, the Ministry of Health (MoH) and the Rwanda Biomedical Centre (RBC) work in close collaboration with the civil society umbrella organisations, local Civil Society Organizations (CSOs) or Non-Governmental Organizations (NGOs) and non-health sector public institutions such as the Ministry of Gender and Family Promotion/National Commission for Children (MIGEPROF/NCC). Most of the impact mitigation activities are implemented at community level.

During this fiscal year, from July 2015 to June 2016, 12 local NGOs, 5 umbrella organisations and 3 non-health sector public institutions received funds from the Global Fund to implement HIV prevention and impact mitigation interventions. The 5 umbrella organisations include the following: The Private Sector Federation (PSF), the Network of PLHIV (RRP+), the Rwanda Interfaith Council for Health (RICH), the Umbrella of

Organisations of Persons with Disabilities in the Fight against HIV/AIDS and for Health Promotion (UPHLS) and the Network of Journalists in the Fight against HIV/AIDS (ABASIRWA). The 3 non-health sector public institutions are MIGEPROF/NCC, the Ministry of Youth and ICT (MYICT) and the Ministry of Internal Security (MININTER). In addition, the following organisations received US Government (USG) support: The African Evangelistic Enterprise (AEE), FXB and Caritas Rwanda.

Several local NGOs implemented activities targeting adolescent girls and young women: peer educators in and out of school were trained on sexual and reproductive health (SRH), HIV and sexually transmitted infections (STIs), sexual and gender-based violence (SGBV), life skills, referral for HIV and STI testing and on interpersonal communication on HIV and STIs. In addition, local NGOs implemented activities targeting female sex workers (FSWs) and men who have sex with men (MSM), reaching both key populations through peer educators. The five umbrellas were in charge of the coordination of HIV activities at national level while NCC was in charge of the coordination of interventions targeting OVC.

4.1.2. Government programmes for social protection

In general, it is imported to highlight the progress that has been made by the Government of Rwanda (GoR) through various social protection programmes in ensuring geographic and financial accessibility to health and HIV services for all citizens as well as improving the socio-economic status of Rwandan citizens and especially the most vulnerable (OVC, PLHIV, women-headed households and poor households). The impact mitigation component of the national HIV response continues to be linked with and benefit from broader social protection programmes by the reduction of vulnerabilities.

The following social protection programmes are currently being implemented by GoR:

- **The Vision 2020 *Umurenge* Programme (VUP):** This programme is a flagship programme of the EDPRS and provides cash grants to extremely poor households without labour capacity, community work opportunities for extremely poor households with labour capacity through public works, and financial services like investment loans to poor households. VUP has been scaled up and is currently implemented in 240 sectors reaching approximately 110,000 households as far as

public works are concerned; and in all 416 sectors reaching approximately 87,000 households as far as direct support is concerned.

- **The Genocide Survivors Support and Assistance Fund (FARG):** This Fund provides vulnerable genocide survivors with support in the form of education, health, shelter, social assistance and income generation. The social assistance cash transfer payments provide people with 5,000 RWF per month. Education scholarships and support for community-based health insurance (CBHI) payments enable people to access other social services. The Fund also supports income-generating projects.
- **The *Ubudehe* programme**: This programme financially assists poor households to invest in income-generating projects.
- **Free basic education**: This is the main social protection programme implemented by the Ministry of Education and consists of capitation grants to government and subsidized schools, bursaries to select secondary school scholars, and school feeding in around 300 schools. This greatly supports the access to education for OVC and young girls.
- The provision of **health insurance** (CBHI) to the poor;
- **Girinka, the One Cow Per Poor Family scheme**: In this scheme, poor families with more than 0.7 hectares are provided with a cow. The Ministry of Agriculture also has other programmes that provide or subsidize assets to rural households, such as the provision of small animals (goats and rabbits) to poor households with little land and the distribution of fertiliser and seeds subsidies to improve food security.

4.2. Improving the economic status of PLHIV and/or affected by HIV

4.2.1. Strengthening associations and cooperatives

The NSP aims at promoting the economic empowerment of people infected with and/or affected by HIV through the establishment of new cooperatives and the strengthening of existing ones. This is done in partnership with RBC and the Rwanda Cooperative Agency (RCA), with support from various partners.

During the reporting period, different partners such as ANSP+, RRP+, Global Communities, FHI 360, AEE, FXB and Caritas Rwanda implemented income-generating activities in the different regions of Rwanda with the purpose of improving socio-economic welfare of people infected with and/or affected by HIV. Beneficiaries are grouped in cooperatives doing livestock and agriculture as activities; these cooperatives are managed both by implementing partners and local authorities.

- In the Western and Southern Provinces, beneficiaries include cooperatives of PLHIV as well as orphans in Rusizi and Nyamagabe involved in livestock and agriculture supported by Mission of Hope. There are also cross-border trade women cooperatives in Rubavu. In Nyamasheke, Strive Foundation supports women and youth cooperatives rearing cattle, pigs and goats in addition to agriculture.
- In the Northern and Eastern Provinces, AVEGA Agahozo supports 152 cooperatives through income generating activities while NGO CREDI supports women cooperatives of farmers in Gatsibo District through trainings on better farming methods, entrepreneurship and savings for vulnerable groups. In Nyagatare District, this year, cumulatively, a number of 148 beneficiaries were supported by ANSP+.
- In Kigali City, Tubahumurize Association supports women cooperatives of traders in food, clothing, handcrafts, restaurants and animal husbandry.

Cooperative members have been trained in business and community development with a focus on income-generating activities and project management which has greatly helped their members to earn a decent living for both themselves and their families.

Some partners supported by USG provided economic strengthening services through saving and lending groups and reached 74,606 beneficiaries, including people infected with and/or affected by HIV. The number of PLHIV in the saving and lending groups is not known with accuracy because of the issue of disclosure. Through those saving and lending groups, adolescents and caregivers of OVC also received messages on family planning, positive parenting, HIV prevention and GBV prevention and response.

Also FSWs have been supported by partners such as FHI 360 to form savings and loans associations and cooperatives to reduce their socio-economic vulnerability, combined with strategies at community level.

Finally, a one-week business skills development training was organised by ILO in collaboration with UNFPA and other UN agencies, targeting young entrepreneurs living with HIV. 20 members of Kigali Hope Association, an association of young PLHIV, were empowered and equipped with business skills to develop a sound business idea and a bankable business plan. The training methods were participatory and action-oriented using real life experiences of participants and building upon these for lessons on better business management. The learning process was designed to help small entrepreneurs learn how to continuously improve their knowledge, change their attitudes and enhance their skills to develop their work practices to make their businesses more market-oriented and profitable.

4.2.2. Ensuring food security for people living with HIV

To ensure food security for PLHIV, the NSP focuses on both agriculture and nutrition. Nutrition is crucial for adherence to ART and therefore, the provision of nutritional support to malnourished and vulnerable PLHIV at all health facilities is integrated in care and treatment.

According to a recent study conducted by RBC and WFP, the Nutrition, Food Security and Vulnerability Survey among PLHIV in Rwanda, the majority of PLHIV are food insecure. Acceptable Food Consumption Score (FCS) was recorded in only 38.8% of subjects while borderline FCS and poor FCS were recorded 19.5% and 40.8% of subjects respectively. This trend was similar for dietary diversity, which was very low. Only 7% of subjects had good diet diversity while more than half (64.4%) had low diet diversity at the time of the survey. Coping strategies used by households during food shortages such as reducing food consumption quantity and quality may negatively impact the nutritional status of PLHIV because their compromised immune systems require adequate nutrients and energy to maintain good nutritional status.

In terms of food security, it is important to mention the programmes of the Ministry of Agriculture, such as the *Girinka* One Cow Per Poor Family scheme, in which poor families

with more than 0.7 hectares are provided with a cow, and other programmes such as the provision of small animals (goats and rabbits) to poor households with little land as well as the distribution of fertiliser and seeds subsidies to improve food security.

A key achievement in the reporting period was the validation of the above-mentioned study, the Nutrition, Food Security and Vulnerability Survey among PLHIV in Rwanda. The process started in 2014, when WFP provided technical and financial support to the development of a comprehensive study protocol. The study was conducted in an inclusive and participatory manner involving RBC, WFP, the One UN and other HIV stakeholders in Rwanda. As part of the process, trainings and consultation meetings were organised. The results of the study were validated by the Food and Nutrition Technical Working Group on 14 December 2015 and the final report has been disseminated to inform future interventions to improve nutrition and food security among PLHIV.

USG-supported OVC programmes contributed to strengthening food security and nutrition through the Farmer Field School (FFS) approach. Agricultural production contributes significantly to the subsistence of many vulnerable households, including PLHIV and people affected by HIV. To support livelihoods, the programme promoted improved agricultural practices through the FFS. The FFS provided a facilitated opportunity for participants to test and adopt improved agricultural production techniques and new fortified crops in order to increase incomes and improve household nutrition. In particular, the programme's FFS approach promoted the use of bio-intensive agricultural techniques and took into consideration environmental management practices.

The OVC partners through community volunteers and field officers continued the follow-up to ensure that FFS members were adopting these practices in their homes to improve their livelihood and nutrition. The food security and nutrition practices also included rearing small livestock, promoting use of high iron beans, orange flesh sweet potatoes rich in vitamin A, and soybeans. OVC partners also conducted nutrition rehabilitation sessions through Positive Deviance Hearth (PDH) approach in some selected districts such as Rwamagana, Nyanza and Ruhango. This intervention targeted the general population including PLHIV to avoid stigma and discrimination. In these locations, most economically vulnerable households were also provided with small livestock (chicken, rabbits, sheep, pigs and goats). This aimed at facilitating malnourished children (or children at risk of

malnutrition) to consume adequate proteins from eggs and meat to enable them to fight malnutrition. In addition, the livestock helped beneficiaries to get manure for their plots leading to increased household income through increased production as well as selling livestock.

Finally, OVC partners supported beneficiaries, especially PLHIV, to improve their water, sanitation and hygiene (WASH) behaviours. The WASH behaviour change is done through community mobilisation and the creation of community hygiene clubs. OVC partners trained community based volunteers on WASH practices and trained volunteers in turn reached to households. Households were monitored on use of and access to clean latrines with covers, hand washing stations, and use of soap and water to wash their hands after visiting the latrines. Finally, the OVC programmes ensured that the WASH messaging is integrated in all programme components and services.

4.3. Improving socio-economic protection for OVCs

GoR's vision and mission regarding orphans and vulnerable children (OVC) is that "OVC will be assisted to reach their full potential and have the same opportunities as all other children". The services for OVC are guided by the Integrated Child Rights Policy (ICRP). This Policy:

- Ensures that every child in Rwanda and every Rwandan child has his/her rights ensured and provided for;
- Serves as a guide for any policy, plan, legislation, or programme intervention specifically designed for children or that can impact/affect children; and
- Ensures the establishment of mechanisms by which data/information on children's issues will be collected, analysed and used.

The National Commission for Children (NCC) is the national institution mandated to implement and monitor the ICRP. NCC defines the criteria for children to be categorized as OVC, maintains the national OVC database and coordinates the provision of the minimum package of services to OVC by different partners and community-based organisations. The minimum package of services consists of the following services: health, nutrition, education, protection, psychosocial support, housing/shelter, care and socio-economic support.

Data from the 2014-2015 DHS shows that 9.3% of children under age 18 are orphans (with one or both parents dead) and that 11.9% of children under age 18 are not living with a biological parent.

NCC has been mandated by GoR to ensure that every child without parental care has a loving family and can grow up in a protective environment. In order to provide child protection services to the decentralised level and to monitor the situation of children across the country, NCC is committed to promoting decentralisation and local governance to ensure that the needs of the children and families are met at national, sub-national and local levels. Through the *Tubarerere Mu Muryango* (TMM) programme, 68 social workers and psychologists are now operational under the Social Development Unit and will be active at District level, playing a crucial liaison role between communities and the central government.

The TMM programme wants to reform the child and family protection system, aiming at strengthening child protection, prevention and response measures on community level. NCC has therefore introduced the *Inshuti z'Umuryango* ("friends of the family") volunteers who play a role of Community Child and Family Protection. Under this approach, each village (*umudugudu*) has selected 2 *Inshuti z'Umuryango*, one man and one woman, to prevent and respond to child protection issues in their community. At cell level, one person is to coordinate *Inshuti z'Umuryango* at village level, whereas at sector level, one person will be selected to oversee and coordinate *Inshuti z'Umuryango* at cell level. Nationwide, there are a total of 32,238 *Inshuti z'Umuryango* volunteers. The *Inshuti z'Umuryango* selected at cell and sector level will also play their roles of *Inshuti z'Umuryango* at village level.

The tables below show the support provided to OVC both by the Global Fund Project of NCC and by the USG-supported OVC programmes.

Table 1: Support provided to OVCs by GF Project, July 2015-June 2016

No.	Activity	Planned number of beneficiaries /activities	Actual (cumulative) number of beneficiaries /activities	Planned budget (in USD)	Spent budget (in USD)	Comments
1	Provide secondary and TVET school fees for OVC	5,646	6,556	715,100	609,218	During this reporting period, 6,556 OVC received educational support in secondary and TVET schools
2	Expand access to early childhood education for OVC by expanding training and technical support for community-based early childhood development centres (material support to ECD centres)	10	10	247,141	247,141	The funds for early childhood development (ECD) were sent to 10 districts and all 10 were supported
3	Joint planning meetings with project stakeholders	107	107	8,282	8,282	
4	Planning meetings with the representatives of foster care families	107	107	8,282	8,282	

Table 2 : Key activities under USG-supported OVC programmes

No.	Activity	Number of beneficiaries	Implementing partners
1	Number of primary school children provided with educational support	21,477	AEE, FXB, Caritas
2	Number of secondary and TVET school children served	10,234	AEE, FXB, Caritas, FHI 360
3	Number of OVC beneficiaries supported to know their HIV status (those referred for HIV testing and counselling)	13,821	AEE, FXB, Caritas, FHI 360, Global Communities
4	Number of children and adults provided with psychological, social or spiritual support	8,632	AEE, FXB, Caritas
5	Number of children supported in ECD	8,357	AEE, Global Communities

4.4. Reducing stigma and discrimination towards PLHIV and/or affected by HIV

The NSP aims to significantly reduce the level of stigma and discrimination so that people infected with and/or affected by HIV have the same opportunities as the general population. Progress has been made, but HIV-related stigma and discrimination remain prominent as documented by the Stigma Index surveys (2009 and 2013) and the DHS (2010 and 2014-2015). In 2009, the Stigma Index survey found that stigma and discrimination are a significant problem for PLHIV. The study revealed that more than half (53%) reported experiencing some form of discrimination and a high proportion (72.2%) of the PLHIV interviewed reported not being aware of national laws that protect their rights. The most recent DHS found that only 50% of women and 63% of men aged 15-49 expressed accepting attitudes[1] in relation to PLHIV.

Interventions to reduce stigma and discrimination need to target the general population as well as PLHIV themselves: the general population needs to be sensitised in order to reduce prejudice and PLHIV need to be made aware of their rights and how to claim them. In addition, the issue of self-stigma remains a concern since it can also constitute a barrier to accessing services.

Finally, to successfully address these challenges, we also need to take the **legal environment** into account. A recent analysis[2] found that, in Rwanda, a legal environment has been created that promotes the rights of PLHIV. While there is no specific HIV/AIDS law, Rwanda has adopted other laws and policies that promote a conducive environment for the HIV response. However, there are some gaps in terms of supporting vulnerable groups and addressing their needs, both in terms of service provision and social protection. A human rights based approach ensures that the rights of PLHIV are respected.

The above-mentioned Analysis of Legislation and Policies in the context of Human Rights and HIV response in Rwanda was conducted by the Centre for Human Rights &

[1] Respondents were asked a number of questions to measure their attitudes toward HIV-positive people. These questions concerned their willingness to buy fresh vegetables from an infected shopkeeper, to let others know of an infected family member, and to take care of relatives who have AIDS in their own household. They were also asked whether an HIV-positive female teacher who is not sick should be allowed to continue teaching. The respondents that expressed acceptance attitudes on all four questions are considered as having accepting attitudes toward those living with HIV.

[2] Analysis of Legislation and Policies in the context of Human Rights and HIV response in Rwanda (2015)

Development in partnership with RBC and UNAIDS. More than 100 people attended a stakeholder meeting on the linkages between HIV and human rights organised in September 2015 in Kigali, during which the analysis was presented and discussed. The stakeholder meeting brought together law enforcement officers, judges, high-level government officials from national institutions including the National Human Rights Commission, development partners and activist members of CSOs representing PLHIV, key populations, the media and faith-based organisations (FBOs).

Rwanda is currently debating the decriminalisation of sex work through a review of the provisions of the current penal code. Public health arguments support the change in legislation and CSOs and other stakeholders have been actively engaging Members of Parliament and the Rwanda Law Reform Commission on the issue. These discussions contribute to the creation of an enabling environment.

A key player in the fight against stigma and discrimination is RRP+, the **network of PLHIV**. Since its creation, RRP+ has played a key role in ensuring the involvement of PLHIV in the HIV response in terms of policy development as well as programme implementation through representation in all the decision-making bodies of the HIV response. RRP+ has furthermore contributed to the fight against stigma and discrimination and is active at both national and decentralised level.

To further strengthen the fight against stigma and discrimination, RRP+ organized a press conference on Zero Discrimination Day (1 March 2016). The theme of the press conference was the following: "Zero tolerance to stigma enables ending HIV and AIDS, for the achievement of the Sustainable Development Goals". This press conference was attended by 35 media agencies and 10 partner organisations. A documentary was produced and is publicly available at the following link: www.youtube.com/watch?v=hVFhSVwuLiA. The celebration of World AIDS Day, organised every year on 1 December, is another opportunity the country embraces to address issues related to stigma and discrimination.

As far as **key populations** are concerned, and specifically FSWs and MSM, there is an increased understanding of barriers to access to services for key populations and a lot has been done to address this from a human rights perspective (e.g. minimum package of services for key populations, peer education approaches, advocacy for the decriminalisation of sex work, the sensitisation of community leaders, security forces and

health service providers). The table below shows the key activities, conducted between July 2015 and June 2016, targeting FSWs and MSM with support of Global Funds Project.

Table 3 : Activities for FSWs and MSM, July 2015-June 2016

No.	Activity	Results for July-December 2015[3]	Results for January-March 2016	Results for April-June 2016	Cumulative results	Implementing partners
1	Number of peer educators trained for MSM on HIV/AIDS and sexual health issues	0	279	201	480	- HDI - APROFAPER - FVA - STRIVE FOUNDATION - ACCESS PROJECT
2	Number of peer educators trained on interpersonal communication on HIV and STIs	0	430	510	940	
3	Number of peer educators trained for FSWs on HIV and STIs, violence, life skills and referral for HIV testing	0	555	525	1080	

The ROADS III project, implemented by FHI 360, targets key populations that are prone to stigma and discrimination. In an effort to eliminate stigma and discrimination, the following activities were implemented during the reporting period:

- ROADS III advocated for the availability of key population friendly services at health facilities near to key populations. With support from WHO and the One UN, a workshop was organised to review and validate the national training manuals for providing friendly services to key populations in Rwanda. The work consisted of reviewing the training manual/guide, the participant workbook and the training slides.

[3] From July to December 2015, no local NGOs were funded by the Global Fund project.

- ROADS III provided technical assistance to RBC to train 62 healthcare providers on sensitivity and provision of friendly services to key populations. This training is important for sustainability as it provides the health care providers with skills addressing gaps in their knowledge, attitude and skills while providing services to key populations.
- ROADS III sensitised community members, local authorities and healthcare providers on stigma and discrimination reduction towards key populations. Other partners worked with the police to advocate for key populations that are jailed to ensure they continue to receive services, especially those on ART.

ROADS III supported health facilities to work closely with key population peer educators. This resulted in the provision of friendly services to key populations including the assignment of a key population point of contact at the health facility and the establishment of regular appointments/schedules to ensure that quality services are provided to key populations free from stigma and at the most convenient time.

4.5. Gender equality and the prevention of SGBV

Girls and women are especially vulnerable to HIV. The 2013 Gender Assessment of the HIV response in Rwanda found that key factors increasing HIV risk and vulnerability for women and girls include, among others: strict gender norms that promote unequal power relations; traditional attitudes towards sex and sexuality that limit access to information and services; limited educational attainment; economic vulnerability and dependence on men; and limited decision-making power in relationships. Cross-generational relationships and sexual and gender-based violence (SGBV) are two additional factors driving HIV transmission. Strict gender norms also impact men and boy's HIV risk and vulnerability. Traditional norms of masculinity that promote a strong, powerful man also encourage men's risk-taking behaviours, discourage health seeking and perpetuate violence against women and girls. Men's higher educational attainment and economic earning power further establish their decision-making power in relationships, limiting women and girls' ability to negotiate sex and condom use.

Overall, Rwanda, as a country, has made remarkable progress in reducing gender inequality and empowering women. Supported by political will at the highest level,

Rwanda has established a strong policy, legal and institutional framework to promote gender equality and address and prevent violence against women and children. Gender equality is highlighted as a crosscutting issue in Vision 2020 and EDPRS 2, thus offering vehicles for addressing gender-related issues. This is materialised through the National Gender Policy, which provides guidance for equality of opportunities between men and women in every sector. In addition to MIGEPROF, a number of other agencies also work to promote gender equality and reduce GBV, including the Gender Monitoring Office (GMO) and the National Women's Council with structures across the country, the National Human Rights Commission and the Ombudsman's Office. GoR's National Policy against Gender-Based Violence (2011) and the National Strategic Plan against Gender-Based Violence for 2011-2016 lay out policies and actions to address GBV.

The commitment to mainstream gender equality encompasses the national HIV response: gender equity is one of the overarching principles of the NSP. All HIV stakeholders aim to be gender-sensitive in the implementation of their activities and continue to integrate gender in their interventions to ensure the promotion of gender equality and the prevention of SGBV.

4.5.1. Gender equality

During the reporting period, a number of activities were implemented to increase gender equality in relation to HIV, such as targeting adolescent girls and young women to reduce their vulnerability to HIV, empowering women living with HIV and increasing awareness of the relation between HIV and gender.

Firstly, a number of activities targeted girls and women to reduce their vulnerability to HIV[4]. The table below lists some key activities for adolescent girls and young women; those activities were supported by the Global Fund during the reporting period.

[4] To obtain a good overview of all the activities targeting girls and women to reduce their vulnerabilities, please refer to the prevention chapter of this report.

Table 4 : Activities for Adolescent girls and young women, July 2015 - June 2016

No.	Activity	Results for July-December 2015[5]	Results for January-March 2016	Results for April-June 2016	Cumulative results	Implementing partners
1	Number of peer educators in school trained on SRH, HIV and STIs, GBV, life skills, and referral for HIV testing and STIs	0	1450	2000	3450	- IMBUTO FOUNDATION - CREDI - RDO - CARITAS RWANDA - BAMPOREZE ASSOCIATION
2	Number of peer educators out of school trained on SRH, HIV and STIs, GBV, life skills, and referral for HIV testing and STIs	0	400	2000	2400	
3	Number of peer educators trained on interpersonal communication on HIV and STIs	0	1200	4000	5200	

Another interesting programme targeting girls and young women is the **12+ programme** that aims to reduce the total fertility rate in Rwanda, reduce the risk of contracting HIV among girls aged 15-24, reduce maternal mortality for women under 20 and increase the age at first birth.

- During the last 2 years of implementation of the programme, local government was mobilised in all 30 districts of the country. Local leaders from district up to cell level have been consistently reached out to and directly engaged for the purpose of creating awareness on the needs of pre-puberty girls and the need to serve girls at that age. They collaborated in planning activities and in discussions on how to select and maintain mentors, how to engage the whole community and how to own and sustain the achievements of the programme.
- 133 sectors within 30 districts were identified to implement the 12+ programme interventions. 490 safe spaces have been identified that are used to regularly host girls' gatherings over weekends.
- The 12+ programme provided a platform to leaders to communicate key messages related to the project but also to build on other social protection programmes that

[5] From July to December 2015, no local NGOs were funded by the Global Fund project.

local government is already implementing (e.g. health insurance for all, savings and loans associations and cooperatives).

- 52,000 girls have been enrolled in the 12+ programme and 97% of them have completed the 10 month's journey, with 93% regular attendance in safe spaces recorded countrywide. All girls enrolled went through 42 learning sessions including five learning journeys to kitchen gardens in their community, lower secondary schools, financial institutions, health facilities and local markets.
- 1,603 mentors aged 18-25 were recruited and systematically trained with an initial training of 10 days, a refresher training of 5 days midway through the journey and 2 one-day refresher trainings focusing on methodology and experience sharing and learning. Mentors highly benefited from these trainings as they built their own skills, were empowered to facilitate learning sessions/gatherings and also empowered to be a liaison between the programme and the community at the grass roots level. Parents and girls appreciated this mentorship and girls identified mentors as their big sisters with whom they feel free to discuss all issues and seek guidance and advice in time of need. Mentors reinforced peer mentorship at sector level through the creation of support groups where they shared skills and experiences among themselves, advised each other on the best ways to facilitate different sessions, and also formed socio-economic clubs to develop themselves. Most mentors have also emerged as leaders elected at community level.
- The 12+ programme has greatly enabled girls to build on their knowledge, skills and behaviour changes. Some of the short-term results captured by questionnaires include the following: 83% of girls attended school more regularly and 72% had an improved academic performance; 78% of girls grow vegetables and 86% eat more nutritious food in their homes since joining the 12+ programme; 60% of the girls are now saving; 48% have an income-generating activity (individually or as a group); 34% have visited a health facility other than the one during the learning journey.

Various NGOs supported by USG, such as Caritas, FXB, AEE and Global Communities, also contributed to life skills and to sexual and reproductive health and rights (SRHR) among vulnerable adolescents. In total, they reached 20,690 adolescents and young people with individual or small group sessions addressing HIV, SRH and GBV. Adolescents and young

people, especially adolescent girls and young women, were supported in accessing SRHR services. Provider prejudices needed to be addressed to increase young people's access to SRHR information and services. Community-based volunteers were also trained on SRHR, covering topics such as youth-friendly services, the prevention of adolescent pregnancies, GBV prevention and response, prevention and management of HIV and other STIs, avoiding risky behaviours, and family planning methods for adolescents. For example, Global Communities supported the creation of SRHR groups in the Districts of Karongi, Kayonza, Huye, Musanze and Burera, reaching 2,133 adolescents with SRHR messages and services.

Other ways to reduce the vulnerability of girls and women to HIV include peer education, home visits, referrals to health facilities, and the promotion of economic empowerment for women through their participation in saving and lending groups.

Women living with HIV were empowered through capacity building. In October 2015, the network of women living with HIV (FRSL) conducted a training for women living with HIV from 30 districts of Rwanda with the support of MoH, UNAIDS and UN Women, aiming to increase the leadership of women in the HIV response and in the prevention of SGBV. Strategies to prevent new HIV infections and to address stigma and discrimination associated with HIV were discussed. Moreover, the Rwanda Chapter of the Pan African Positive Women's Coalition (PAPWC) was launched during this training. The creation of the Rwanda Chapter is expected to reinforce advocacy for addressing stigma, discrimination and poverty faced by many women living with HIV and to link them to other groups and networks in the region.

Religious leaders have also been involved in discussions on topics related to gender and HIV under the coordination of the Rwanda Interfaith Council for Health (RICH). They were informed that HIV prevalence is higher in women than men, and that HIV is driven by gender inequality but that HIV can also make gender inequality worse. In September 2015, RICH organised a training on SRH for religious leaders, in collaboration with Health Development and Performance (HDP), during which they discussed gender equality, HIV, other STIs and SRH with an emphasis on their religious perspectives. In June 2016, another meeting brought together religious leaders and FBOs to promote comprehensive sexuality education, stressing that parents should play a key role in educating their sons and daughters to help them make informed decisions.

4.5.2. Sexual and gender-based violence

According to the 2014-2015 DHS, 14% of women and 11% of men, age 15-49, have experienced physical violence within the 12 months preceding the survey. 35% of women and 39% of men have ever experienced physical violence at least once since age 15. 8% of women and 1% of men report having experienced sexual violence at least once in the past 12 months. 22% of women and 5% of men report having experienced sexual violence at least once in their lifetime. The most common perpetrators of sexual violence among ever-married women are current husbands/partners (34%), whereas the most common perpetrators among men are current/former girlfriends (20%). Overall, 4 in 10 women and 2 in 10 men age 15-49 report having experienced emotional, physical or sexual violence from a spouse. Among women and men who have ever experienced spousal physical or sexual violence, 35% and 31%, respectively, reported suffering physical injuries.

In 2009, GoR with support from the One UN piloted the **Isange One Stop Centre** (OSC) to provide holistic services to survivors of SGBV and to contribute to the prevention of SGBV and child abuse. The concept of OSC is a multi-disciplinary intervention that provides psychosocial, medical, police and legal services to adult and child survivors of SGBV and child abuse occurring in the family or in the community at large. Following the successful pilot of OSCs, Rwanda is now embarking on a full-fledged national scale-up of the model in health facilities across the country, based on the National Scaling-up Strategy for One Stop Centres in Rwanda developed in 2013. It is recognized that quality services, conviction of perpetrators and sustained community awareness-raising help build the resilience of survivors and their families as well as prevent violence and abuse.

HIV prevention is part of this strategy. As such, HIV is integrated into the curriculum of the OSC service providers as well as into the response package that is delivered to victims. Furthermore, targeted SGBV awareness and mobilisation interventions conducted at community level also address HIV prevention and referrals systematically.

The following achievements resulted from collaboration between MoH, Rwanda National Police (RNP), the Ministry of Justice, UNFPA, NGOs and local authorities:

- Isange OSCs have been renovated and are hosted by District Hospitals. Holistic support is now being provided to SGBV survivors in all District Hospitals.
- A Centre of Excellence was constructed within the RNP Headquarters in Kacyiru to serve as a learning centre on SGBV issues.
- Sensitisation campaigns on SGBV have been conducted by MIGEPROF in partnership with MoH, RNP, GMO and the Ministry of Justice.
- 7 police officers were trained in England and Germany on DNA detection for forensic investigation purposes while handling SGBV cases.
- Anti GBV Committees have been established in all administrative structures from central level up to the decentralised level.
- An international conference on GBV issues is hosted in Rwanda on an annual basis to share the tremendous achievements in the fight against GBV.

During the reporting period, the following activities concerning SGBV were also conducted by **CSOs**:

- Awareness sessions for PLHIV on their rights
- Trainings on SGBV prevention
- Assistance for SGBV victims on legal services
- Mass campaigns to sensitise the community on SGBV and the management of rape

Under the overall coordination of Pro-Femmes Twese Hamwe, 2,074 people including community members, local authorities, police, army, Anti GBV Committees, PLHIV, community health workers and the in-charge of social affairs were trained on SGBV and HIV, the rights of victims of SGBV and how to integrate communications on the fight against SGBV into other HIV initiatives.

During the reporting period, Pro-Femmes Twese Hamwe also organised awareness campaigns with the following objectives:

- To determine people's awareness of what GBV is
- To enlighten people on forms of GBV

- To ensure that Rwandans understand their role in fighting these human rights abuses and to give hope to survivors
- To help families to learn how best to address their domestic issues and report to concerned institutions in time
- To ensure that justice is served and that victims are given holistic care including psychological and legal support
- To increase community awareness on gender issues and the response by different institutions playing a crucial role in fighting against GBV
- To break the silence and bring to light challenges faced by people in their families and communities
- To educate people on what actions to take if they are victims of GBV or if they find a situation of violence

In total, about 55,700 people were reached with the campaigns. It was a means of sensitising people about GBV and educating them about the forms of GBV and which actions to take if they find themselves in such situations. The Rwandan population was asked to reduce GBV through behaviour change.

Also MSM and FSWs are at a high risk of violence. The 2015 BSS on MSM shows a high prevalence of sexual violence against MSM. Sexual violence (defined as being forced to have sex against one's will) occurred with 14.5% of participants reporting having been sexually assaulted. 5.5% of participants, that is 43 MSM, reported having ever suffered any form of violence or abuse because they had sex with other men, 35.3% of which were physically beaten while 48.2% were verbally abused through threats and insults. The 2015 BSS on FSWs found that 71.1% of participants reported having ever experienced any type of violence, among which 42.5% was physical violence while 57.5% reported sexual violence. FSWs are at a high risk of rape and sexual violence from their clients.

5. HEALTH SYSTEM STRENGTHENING

5.1. Introduction to HSS

Health system strengthening (HSS) has been at the core of the HIV program interventions in Rwanda by allocation of an important part of the budget to strengthening of all basic health system functions – human resources for health; health finance; health governance; health information; medical products, vaccines, and technology; and service delivery – that have an impact on achieving desired health outcomes. However, with the unstable donor environment and without a comprehensive, and holistic approach to improve health systems at the country level, including national, sub-national (province and district), and community levels, there is need for Rwanda to strengthen public financing of the health system to advance the goals of country ownership and sustainability and to work with stakeholders to identify how HIV/AIDS activities can contribute to broader HSS efforts.

5.2. Capacity building

Capacity building is an integral part of interventions and activities undertaken in FY 2015/16 for all technical areas covering prevention, care and treatment, and crosscutting areas of health system strengthening and integrated health services, civil society (CSO) involvement and country ownership. Continued priority is given to the recruitment and training of specialist medical doctors and nurses in order to improve the quality of services provided, meet the increasing demand for high quality and to ensure efficiency of interventions. Supportive supervision and coaching/mentorship are continuously provided to nurses for strengthening task shifting and better management of patients in need of ART services. Capacity building activities also aim at organizational and institutional strengthening to ensure appropriate oversight and informed policy and decision-making.

5.3. Human resources for health

A number of health professional training programs were supported by the HRH Program of which certain programs were introduced in 2012. Certain proposed residency programs

include emergency medicine and orthopaedic surgery. According to the mid-term review made, the enrolment of the programs doubled hence a noticeable boost in production capacity. Although Rwanda still lacks specialists, an effort was made to increase the quality of care provided by nurses, midwives and oral health professionals. In addition, the midterm review highlighted the launch of six specialty programs, which include anaesthesiology, internal medicine, paediatrics, OB/GYN, general surgery and ear nose throat (ENT) physician. Rwanda currently has twelve medical residency programs.

5.3.1. Quality improvement

Although significant investments made towards teaching hospitals have created an enabling environment for better training, more improvements are needed in areas such as an increase in medical equipment and infrastructure. Through HRH program, there was an improvement of access to and quality of health care services provided in Rwanda. However, the planning of additional QI projects should start to ensure innovative, lost cost projects that could dramatically improve clinical environments.

5.3.2. Developing a Sustainable Health Education System

Regarding health education system, the empowerment of human resources for health through HRH has been appreciated. However, there is a need to recruit more Rwandan faculty to enable long-lasting gains in the quality of education after the HRH program ends. Suggestions were the development of attractive educator career ladders with financial incentives and the calculation by the MOH department of the cost necessary to maintain the enrolment capacity in the long term. In addition, increased efforts in the retaining medical residents as faculty by possibly deploying clinical training sites for their five-year service term and awarding honorary academic appointments.

5.3.3. Successes and Challenges: Consortium Partnership

The HRH program has succeeded in attracting high-quality candidates to participate in the Rwanda HRH program and additional institutions to join academic consortium. Certain suggestions were made in order to improve the coordination and communication

between the MOH program team and consortium coordinators which include the implementation of annual review meetings for members of the consortium and the MOH HRH program team, the consistent documentation and sharing of HRH program policies and procedures among consortium coordinators as well as the investment in MOH HRH program team and the proactive communication of staffing. The recommendations suggested included the improvement of consortium faculty recruitment included the identification of funds which would allow for more effective recruitment methods and resources to attract qualified applicants as well as the consideration of regional institutions as qualified Consortium faculty candidates.

5.3.4. Successes and Challenges: Program Management and Financial Oversight

An increase in coordination and communication between the MOH HRH Program Team and Consortium coordinators has allowed for a significant improvement of the HRH program. However, the efforts made by the MOH HRH Program team continue to be challenged by the constraints of the USG/GF funding timelines. Certain suggestions to improve M&E practices include the expansion of data collection in order to capture the experiences of students and faculty as well as the identification of resources needed to conduct annual process reviews.

5.4. Integrated supervision

Supervision and data quality audits are now institutionalized to ensure that the data reported from routine systems provide the accurate picture of the national HIV response. As results, we are observing from findings in HF some great improvement in terms of data reported to HMIS versus data captured in registers as 93% of selected HFs (41/42DHs and selected HCs) are recording discrepancies below 5%.

Main areas of improvement identified in supportive supervision in the area of care and treatment are:

1. Systematic nutritional evaluation for every PLWHA enrolled in ART program as observed in selected patient files, e.g. BMI curve;
2. Psychosocial support activities (“Groupe de soutien”) for HIV infected children as observed in register/book;

3. Proper use of data collection tools e.g. HIV registers (VCT, PMTCT, Pre-RT, ART, etc.)
4. Systematic TB screening of patients enrolled in HIV C&T as observed in Pre-ART, ART register and patient file;
5. People (all) tested HIV positive being referred in HIV C&T services as observed in VCT, PIT and ANC register;
6. Systematic home visits for LTFU (lost to follow up) patients as observed in ART registers;
7. Comprehensive training of staff offering HIV services.

5.5. Infrastructure and equipment

Health infrastructure and equipment (health centers and hospitals, maternities, laboratory and pharmacies at central and decentralized levels) are crucial for provision of HIV services, but also have a larger mission to support health services in general. Regarding infrastructure: 60 ambulances are in tender process; 37 VCT centers have been renovated, 31 HC maternities have been renovated, five district pharmacies have been renovated, 2 Satellite laboratories under construction, 15 laboratories have been renovated, 5 District Pharmacies have been renovated, and the construction of 7 modern maternity wards are under construction at 7 District Hospitals. The Medical Maintenance Center has provided preventive and curative maintenance in all health centers and 44 district hospitals.

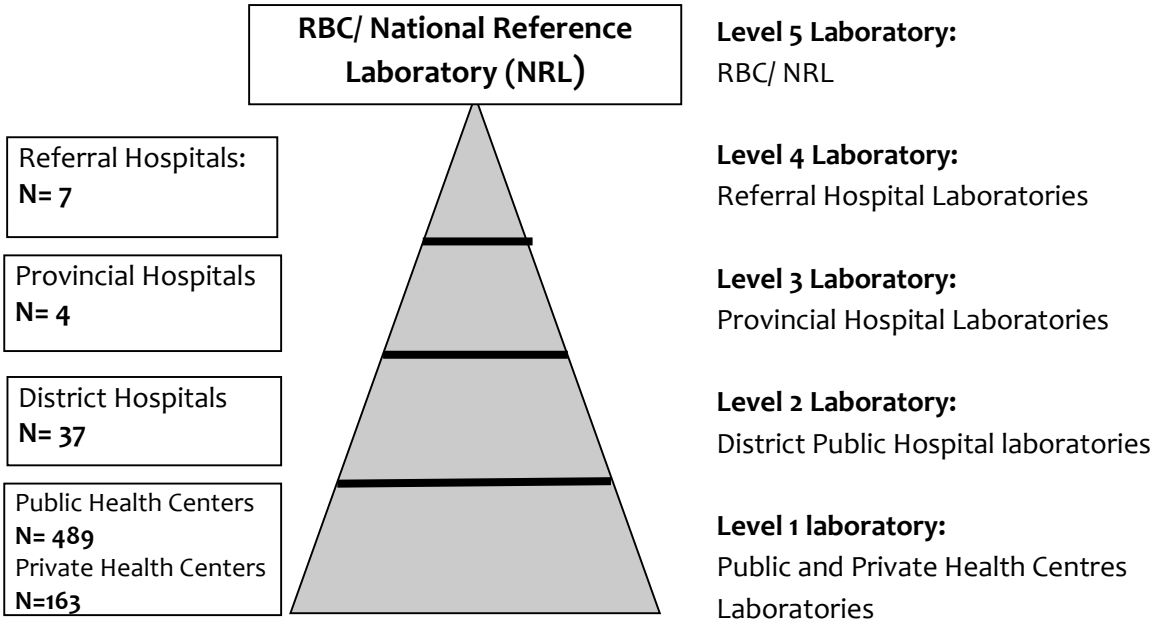
5.6. Laboratory system

5.6.1. Introduction

The laboratory network is organized in a tiered system with the National Reference Laboratory (NRL) overseeing and coordinating the network. The laboratory network comprises of 1 NRL at the 5th level, 7 Referral Hospital laboratories at the 4th level, 4 Provincial Hospital laboratories at the 3rd level, 37 District Hospital laboratories at the 2nd level and around 500 Health Centre laboratories at the 1st level; each with a specific testing

package. The NRL oversees and supervises other laboratories in Rwanda and its package of activities includes diagnosis, quality control, research, epidemic surveillance, trainings and mentorships of own and other laboratory personnel in Rwanda. The laboratory network system provides comprehensive testing for HIV diagnosis, HIV infection staging and clinical monitoring during ART, in addition to testing for TB, STIs, and OIs. The following figure summarizes the Rwanda Laboratory Network:

Figure 12: Rwanda Laboratory Network

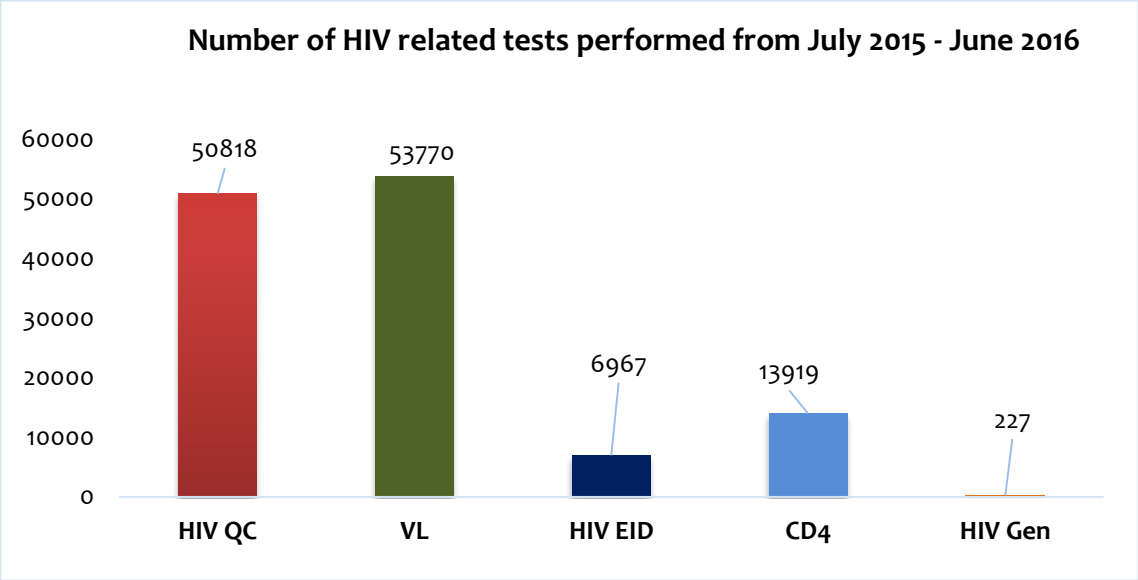


5.6.2. NRL HIV testing activities

In 2015-2016 Fiscal Year, NRL performed a total of 139,753 tests which mainly intended the diagnosis, quality control, surveillance and research. Among them 125,701 samples (89, 9%) were for HIV related testing (53,770 tests for Viral Load; 50,818 tests for HIV rapid test quality control; 6,967 tests for Early Infant Diagnosis of HIV and 13,919 CD4 count tests; 227 HIV genotyping tests). In addition, HIV testing quality control was successfully performed for CD4, VL, EID and HIV rapid test. The National HIV algorithm was reviewed and a 2-stage algorithm using determine (screening test 1) and stat-pak (screening test 2) was approved to replace a 3-stage algorithm respectively composed of Shanghai, Unigold

and Determine tests. The figure below represents the number of HIV related tests performed in NRL from July 2015 till June 2016.

Figure 13: Number of HIV-related tests performed (July 2015-June 2016)



5.6.3. Decentralized HIV testing activities

With the aim of achieving the health care accessibility for HIV related services, the NRL continued to strengthen the decentralization and the operation of existing testing sites for HIV viral load, CD4 count, HIV EID, HIV rapid test quality control as follows:

- Decentralization activities of HIV Viral Load testing were maintained operational in 9 sites (NRL, RMH, Rwamagana, Nyagatare, CHUB, Gihundwe, Gisenyi, Kibuye, Ruhengeri);
- Decentralization activities for HIV rapid test quality control were maintained operational in 5 sites (Ruhengeri, Gisenyi, Gihundwe, Nyagatare and CHUB).
- Decentralization activities of HIV EID were maintained operational in 5 sites (CHUB, Rwamagana, Nyagatare, Ruhengeri and Gihundwe);
- CD4 testing was maintained operational in 73 sites including NRL, 47 hospital laboratories and 25 health centres;
- NRL supported finger pricks workshops/ trainings for selected health professionals;
- Quarterly mentorships for 8 Viral Load and 5 EID testing sites were conducted.

- To optimize the HIV testing, 7 new sites acquired ELISA machines to have a total 12 sites with ELISA machines. These machines help as well for Viral Hepatitis testing.

5.6.4. Continual quality improvement and accreditation activities

A high priority of the laboratory network is to provide quality HIV diagnostic and monitoring tests for all patients. Accreditation process for medical laboratories launched in July 2009 was meant to strengthen the laboratory quality service delivery. This accreditation process practically started in 2010 with SLMTA (Strengthening Laboratory Management Towards Accreditation) trainings for laboratory personnel in 5 central laboratories (NRL, CHUK, CHUB, KFH and RMH). Progressively other laboratories were enrolled in the process to currently cover 43 out of 49 laboratories (NRL, 7 Referral Hospital, 4 Provincial Hospital and 37 District Hospital Laboratories). Through SLMTA process laboratory professionals are trained, assigned improvement projects and their laboratories are audited at the beginning and at the end of the process to measure the improvement achieved.

The SLIPTA (Stepwise Laboratory Quality Improvement Process Towards Accreditation) is an auditing approach using a WHO checklist established to progressively help laboratories to improve their quality towards accreditation. The improvement of service delivery may appear as a reduction in results turn-around time, effective workflow, quality management system documents development and implementation, capacity building for laboratory personnel, strengthening of laboratory infrastructure, equipment and supplies in order to improve the service delivery to meet or exceed customer expectations. Many of the enrolled laboratories have achieved palpable improvement in service delivery meeting the minimum standard requirement of 1 star and many have achieved 3 and 4 stars while NRL achieved 5 stars. Therefore, the National Reference Laboratory is in process of application for international accreditation.

The major achievements in the last 12 months include the following:

- Additional 10 laboratories were assessed and all attained the minimum standard requirement of 1 star using WHO/SLIPTA checklist;

- 10 new laboratories were enrolled and are undergoing SLMTA trainings and improvement projects and to date, a total of 43 out of 49 laboratories have been enrolled in accreditation process;
- 48 laboratory personnel were trained on Strengthening Laboratory Management Towards Accreditation (SMLTA).
- The sample transportation system has been continued and
- All the 49 laboratories have successfully participated in External Quality Assessment schemes;
- Laboratory technologists were trained on safety and security in the laboratory to raise the awareness and protection from any exposure to HIV or other blood borne infections.

5.6.5. Capacity building

To ensure sustainability of a coordinated HIV supply chain for health commodities, continuous capacity building has been implemented through mentorship, supervision, and trainings. We have conducted training for staff from district hospitals, referral hospitals, and district pharmacies to provide them with a package of updated scientific knowledge on national guidelines, health products supply chain management. The overall training objective was to provide skills on program national protocols and program commodities supply chain management, especially on logistics and patient data management. 30 district pharmacy store managers, 15 data managers and 40 health facilities attended the training.

An essential component of a robust health supply chain is the staff that implements logistics tasks. An effective health supply chain involves engaging the right people in the right quantities with the right skills in the right place at the right time to implement the procedures that direct supply chain operations and ensure the supply of health commodities. To run effectively, public health supply chains require motivated, trained and skilled staff with competency in the various essential logistics functions and who are also empowered to make decisions that positively impact health supplies and supply chains.

From 21st to 25th March 2016, 48 Pharmacists in all Districts Hospitals and referral hospitals have been trained in HIV and Hepatitis care &Treatment.

Much emphasis was put on HIV and Hepatitis supply chain management to strengthen accuracy and quality of logistic data for further planning purposes.

6. GOVERNANCE MECHANISMS

6.1. National coordination

Rwanda has launched several initiatives to fortify health governance. Government and non-government organization led programs which have aided in the strengthening of the interactions between citizens, health providers, and government agencies.

In the health sector, and particularly in the fight against HIV/AIDS, we have five different sets of actors. Together, the following groups are the stakeholders involved in governing the HIV/AIDS program:

I. State actors in the public sector (MOH, Rwanda Biomedical Centre, other ministries, and local governments);
II. Health providers (public sector, private sector, and NGOs, CSOs, FBOs);
III. Civil society and professional bodies;
IV. Beneficiaries and clients;
V. Development partners (bilateral and multilateral) and international NGOs mainly involved in supporting national programs

At the national level, RBC's Institute for HIV Disease Prevention and Control (RBC/IHDPC) provides technical oversight of the implementers. RBC overseas the (1) development of guidelines (protocols, standards, and tools), (2) the analysis of health data relevant to HIV/AIDS or service, and (3) the training and capacity building of health workers.

RBC/IHDPC, as a coordinating body, supported various technical working groups (prevention, treatment, impact mitigation, research, etc.), which ensured the harmonization and alignment of partner/stakeholder plans with national priorities and targets. The coordination mechanism supported the development of the current NSP and its operational plan. With the support of development partners, RBC/IHDPC involved various stakeholders through different workshops/meetings, which focused on 'Knowing your epidemic and knowing your response' (KYE/KYR). The process involved national institutions, EDPRS sectors, line ministries, civil society, and the private sector for the development of the new NSP and its operational development. This served as a learning opportunity in evidence-based and results-oriented programming.

The governance mechanism of the HIV response in Rwanda values input from development partners who are part of different technical working groups, which include CCM-Rwanda, PEPFAR steering committee, and the Joint Health Sector Review fora, which is just naming a few. The goal of the CCM is to contribute to the strengthening of the efforts to fight the spread of HIV/AIDS, Tuberculosis and Malaria in Rwanda. It contributes to better outcomes of GF-funded programs and projects as well as maintains effective coordination between Global Fund-related activities. The CCM-RW utilizes existing public sector mechanisms, civil society organizations, private sector and international multilateral and bilateral agencies dealing with AIDS, tuberculosis and malaria to promote effective services, prevent duplication of efforts and support coordinating mechanisms involving different stakeholders. This forum continues to be the main approval line of strategic documents for the three diseases, such as the NSP 2013–2018 and its two-year operational plan. During the FY 2015-2016, CCM meetings were organized in which one of the topics addressed was the progression of HIV progress. The updates of the disease (Programmatic and financial) were presented and discussed including the budget reallocation, the latest HIV epidemiological data, surveys' results and the Test and START strategy. PEPFAR SC also met during the FY 2015-2016 to review and prepare the Country Operational Plan 2016 (COP2016), which represents the U.S. government's (USG) annual investments and anticipated results in the global fight against HIV/AIDS. In addition, it has served as the basis for approval of annual USG bilateral HIV/AIDS funding in most partner countries, including Rwanda. With the goal of conducting more stringent follow-ups of the implementation of HIV programs, quarterly partners' coordination meetings were held. These quarterly meetings contributed to assessing achievements based on performance indicators.

Despite sustained efforts over the past years, public domestic expenditures on health have been on the rise especially on HIV/AIDS hence remaining a major challenge for the country. The high dependence of the Rwandan health sector on external assistance raises concern about the future of the financial sustainability of health improvements in the country. The Ministry of Health organized a three-day international conference on health financing in collaboration with its partners from the 29th to 31st of March 2016. The theme of the conference was "Health financing reforms in the eve of sustainable

development goals: a look at the past 15 years of health reform". The goal of the Conference was to bring together national and international experts, especially those who have contributed to the design and implementation of health financing reforms in Rwanda or in other countries. The discussion was surrounded on the current health financing policies and attendees brainstormed possible ideas for the future. The possible solutions from the meeting will be incorporated into the current procedure the government has in place in developing a health sustainability plan for the entire health sector, including HIV/AIDS.

Another meeting was organized along the World Economic Forum in May 2016 where the Government of Rwanda, the private sector and the Global Fund met to discuss the future of health financing in Rwanda.

The United Nations General Assembly held an international meeting on efforts to end of AIDS from the 8th to 10th of June 2016. Members of States adopted a new political declaration that included a set of time-bound targets to hasten the HIV and AIDS response over the next five years and end the epidemic by 2030.

6.2. Civil Society and Private Sector

Rwanda considers the involvement of civil society organizations (CSOs) an essential element in controlling the AIDS epidemic. CSOs are organized into umbrella organizations that coordinate contributions from their member organizations on program design, advocacy, capacity building, and activity implementation. Twelve CSO sub-recipients of Global Fund grants implemented interventions in HIV prevention in which 5 NGOs implemented activities targeting female sex workers and MSM; 5 NGOs implemented activities targeting adolescent girls and young women; 1 NGO implemented activities related to social marketing of health products (condoms), and rights promotion and protection for people living with HIV (PLWH); and 1 NGO implemented activities to address sexual and gender-based violence (SGBV). Other larger CSOs, such as international NGOs are able to work in many different SDAs and with different groups. We also have some NGOs implementing activities in care and treatment.

Cooperatives of PLHIV and affected people focus not only on impact mitigation with income-generating activities (IGAs), but are also involved in positive prevention programs. The existence of umbrella organizations and their advocacy efforts have led to greater participation of civil society in planning and formulating policies at community and national levels. This in turn has contributed to an increased awareness of the needs of the community, particularly the most vulnerable members. Greater involvement of PLHIV has been achieved in many ways and the needs of PLHIV and affected people have been taken into greater consideration.

In FY 2015-2016, we held a CSO consultation on Rwanda's HIV and AIDS response (The unique role that CSOs play in Rwanda), sponsored by PEPFAR Rwanda and UNAIDS, in collaboration with Rwanda's NGO Forum and Rwanda's MOH/Rwanda Biomedical Centre, HIV Division. The consultation was part of PEPFAR Rwanda's COP16 planning process, as well as UNAIDS leadership, to further discussions on the 2020 and 2030 agendas which aim to eliminate HIV and AIDS, and build upon the consultation with CSOs held in February 2015 as part of the COP15 planning process.

More than 75 local CSO members and constituents participated in the meeting; the majority of them were part of the NGO Forum on AIDS and Health Promotion (RNGOF) or the Association of Rwandan PLHIV (RRP+). Non-umbrella member participants included local and international organizations working on health and HIV/AIDS issues, stakeholders from development partners and national (Rwanda Governance Board and Private Sector Association) partners. The following infected and affected constituencies were represented: PLHIV, Youth, FSWs, and MSM/LGBTI. Discussion topics ranged from the role of civil society organizations in the national HIV/AIDS response with a focus on the previously mentioned priority key populations to the problematic situation regarding a decrease in funds and needed efficiency (i.e.: Doing much using less resources), especially in regards to the CSO sustainability.

The consultation was well attended and was an excellent opportunity to hear from civil society members on their experiences and challenges navigating the health care system.

They helped by identifying certain key areas that need to be considered in PEPFAR's next country operational plan (COP16) for Ministry of Health leadership and guidance.

7. MONITORING AND EVALUATION

7.1. Introduction

The Rwanda Biomedical Centre through HIV-AIDS, STIs and OBBI Division implements various interventions in the context of HIV response. Those interventions include routine programmatic and research activities. The monitoring and evaluation component comes in to determine the impact of all activities focusing on the eradication of HIV-AIDS, STIs and Other Blood Borne Infections. This section presents the achievements of RBC/HIV Division in terms of research activities and routine monitoring of HIV epidemic during 2015-2016. Those include surveys, surveillance and research, health information and routine data systems, and data management and reporting.

7.2. Routine data systems

In order to monitor and evaluate HIV interventions, a number of health information systems were put in place. They routinely collect data on different interventions and quality of services to support decision-making. The table below describes the routine HIV data systems currently in place and related details in terms of data area and coverage.

Table 5: Routine Health Information systems

No	System Name	Area	Geographic Coverage, June 2016	Donors /Partner(s)	Description
1	Electronic Medical Record /OpenMRS	**Patient monitoring systems**	322 health facilities. Expansion underway to all health facilities	GOR-PEPFAR-Global Fund-MSH-PIH	Standalone system that captures individual patients' data for clinical monitoring. Plans are on the way to implement additional primary health care modules in addition to the deployed HIV/AIDS module.
3	Rwanda Health Management Information System (RHMIS)	**Aggregate M&E Indicator Reporting**	Nationwide	GOR-PEPFAR-Global Fund	Web-based reporting system of health-related aggregated data using DHIS-2 platform with geospatial information capacity. It used by all health facilities (private and Public)

4	Performance-based financing (PBF)		Nationwide	GOR-PEPFAR-Global Fund- MSH	Web-based database that collects selected number of output indicators used to track progress and calculate performance based payments for community health worker cooperatives, health centres and district hospital. The system also uses data from quarterly quality evaluations to ensure that data and service quality are maintained, and to reduce the performance payment accordingly
5	TRACnet		Nationwide	GOR-PEPFAR-Voxiva Inc.	Phone and web-based reporting system that collects HIV AIDS TB OI aggregated data. The system was migrated on the RHMIS from October 2014
6	Electronic Logistical Management Information Systems (e-LMIS)	**Supply Chain Management Information System**	District pharmacists, MPPD	GOR-PEPFAR	An automated pharmaceutical management system (e-LMIS) was rolled out in March 2014 to improve quality and timely access of data. Captures basic data on ARV and TB commodities consumption, stock status, and information on stock outs at health facilities.
7	LIS	**Laboratory Information System**	National Reference Laboratory	GOR-PEPFAR	Stores laboratory data and supports laboratory management. The system will be expanded to all district level laboratories to develop a national electronic network of laboratories
8	BBIS	**Blood Bank Information System**	5 regional Centres	GOR-PEPFAR	Blood bank commodities and testing data
9	e-IDSR	**E-Integrated Disease Surveillance System**	Nationwide: All health facilities	GOR-PEPFAR	Collects aggregate data of diseases under surveillance Outbreak response data
10	Integrated Human Resource Information Systems (iHRIS)	**Human Resources, Training Information Systems**	Central database	GOR-PEPFAR	HRIS collects and aggregates data on health workforce and links to MOH principal personnel office.

11	Rwanda HIE	**Health Information Exchange Project**	Operational in One (1) District (Rwamagana)	GOR-PEPFAR-Jembi Health system	Ensure exchange of patient health records across health facilities

7.3. HIV surveillance surveys and research

7.3.1. The Rwanda Demographic and Health Survey 2014-2015

The Rwanda Demographic and Health Survey conducted in 2014-2015 was for the fifth time to be conducted in Rwanda (1992, 2000, 2005, 2010, 2015). DHS provides data to monitor the population and health situation in Rwanda in different areas including HIV-AIDS. DHS provides national, population-based trend data on HIV prevalence among women age 15-49 and men age 15-59. Particularly, for the first time, the 2014-15 RDHS included HIV testing of children age 0-14.

The proportion of eligible participants who were interviewed and tested for HIV was 99%, among both women and men. The results showed that, in Rwanda, the overall HIV prevalence among adults (15-49) did not change over the last decade; it remains at 3%. Over the ten last years, the HIV prevalence among women held steady at 4%, while the prevalence among men remained at 2%.

The lowest HIV prevalence was found in the Northern Province (2.3%) and the highest in Kigali City (6.3%). By sex, 3.6% of women and 2.2% of men are HIV positive. The HIV prevalence in urban areas was found to be slightly three times the HIV prevalence in rural areas, this is 6.2% versus 2.2%, respectively.

The DHS 2014-2015 revealed that 30% of men aged 15-49 were circumcised, an increase of 17% in the 2010. According to the age groups, the results shows that the circumcision prevalence is the highest among 20-24 (44%); by geographical residence, most of men residing in urban areas got circumcised (58%) than those living in rural areas (22%). By province, the proportion of men who are circumcised is highest in City of Kigali (50%) and West (40%) and lowest in South (17%).

7.3.2. Rwandan Paediatric ART Evaluation, 2016

In July of 2012 the Ministry of Health (MOH) in Rwanda updated their national HIV guidelines with the recommendation to initiate treatment for all HIV-infected children less than 5 years of age regardless of their clinical or immunologic status. Until then, only children less than 18 months of age were initiated on treatment immediately after diagnosis whereas older children were initiated on treatment once they were eligible based on their clinical status or on age-specific CD4 count/percentage cut offs. The recommendation to initiate treatment on all HIV infected children less than 5 years of age had the intent to more rapidly extend access to life-saving treatment to children in Rwanda and improve their health outcomes by simplifying treatment eligibility criteria.

In 2013, the World Health Organization (WHO) also included in their guidelines for paediatric HIV treatment the recommendation to treat all HIV-infected children less than five years of age. While many resource-limited countries are adapting their guidance to begin implementing this recommendation, little is known about the impact of this approach on the health outcomes for HIV-infected children aged 2-5 years in these settings. The earlier implementation of treatment for all children less than five years of age in Rwanda provides an opportunity to evaluate this approach.

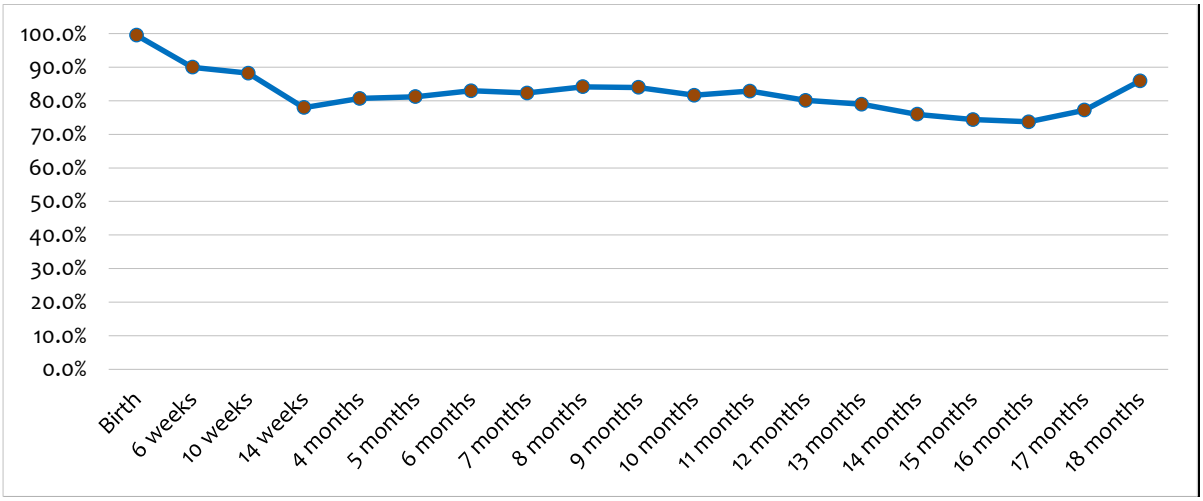
This study is a retrospective chart review that is comparing the health outcomes of HIV-infected children aged 18 months to 5 years enrolled in care prior to the implementation of Rwanda's 2012 guidelines to the health outcomes of similarly aged children after implementation of the early treatment recommendation. Primary outcomes include growth status and adverse effects in care or treatment. Data collected through this effort will be helpful to inform future paediatric treatment strategies in Rwanda and may be important for other resource-limited countries that are contemplating this approach.
The related data collection started early June 2016; and the study is planned to be completed early 2017.

7.3.3. Kabeho Study

In order to assess the impact of Option B+ program to the elimination of mother to child HIV transmission in Rwanda, an observational cohort study named 'Kabeho Study' was conducted in PMTCT sites in Kigali. The study observed HIV-positive pregnant/early postpartum women and their infants enrolled from antenatal clinics, and followed them for a period of 24 months.

Results of this study were disseminated in May 2016, and it offered a detailed picture of Option B+ implementation in our health facilities and the outcome of this program after 5 years of implementation.

Figure 14: PMCTC attendance from birth through 18 months postpartum



Among other findings, the attendance in PMTCT by 18 months of follow up showed that 81% attended satisfactory the PMTCT visits while only 4.7% of clients had a low attendance in PMTCT program. The adherence also revealed to be satisfactory.

7.3.4. Development of Research Protocol

- **HIV and syphilis Surveillance among Pregnant Women attending ANC/PMTCT services, 2016**

This survey is a cross-sectional survey from which the prevalence of HIV and syphilis screened positive will be estimated among pregnant women attending integrated ANC/ PMTCT services in a period of July to December 2015. The survey population comprises all pregnant women attending the 65 ANC/PMTCT integrated services from 1st July to 31st

December 2015. However, the surveillance population for point estimates and comparison to previous years will consist of pregnant women attending ANC/PMTCT integrated services from July to December 2015 in 30 sentinel health facilities. The months of July to December were chosen to allow the analysis of trends, because since 2007 the data were collected during the same periods of time.

All pregnant women aged 15-49 who attended ANC integrated with PMTCT services and who were screened for both HIV and syphilis for the first visit of their current pregnancy during the study period will be included in the survey.

The research protocol was approved by the Rwanda National Ethics Committee in May 2016, then submitted to CDC Atlanta for clearance. It is planned to be implemented before end of March 2017.

7.3.5. Surveys Reports writing

- **Rwanda AIDS Indicator and HIV Incidence Survey (RAIHIS 2013-2014)**

One workshop to finalize the report was organized during 2015-2016. The final report was produced and submitted for final review and validation by the investigators.

Key findings:

- The overall prevalence of HIV was 3.0% (95% CI: 2.6-3.4). The HIV prevalence was higher among women 3.5% [95%CI: 3.0-4.0] while it was 2.4% [95%CI: 2.1-2.8] among men.
- HIV prevalence in urban areas was higher (5.6%) compared to 2.6% in rural areas.
- The difference in HIV prevalence by sex was also present in both urban and rural, where it was 7.2% among women in urban areas compared to 3.0% among women in rural areas. The same is for males, where 4.0% of males in urban areas tested HIV positive compared to 2.2%.
- HIV prevalence increased with age in both sexes. This prevalence was lowest among male youth aged 20-24 (0.4%; 95% CI: 0.1-0.9), and peaked among men aged 45-49 at 7.1% (95% CI: 4.7-10.4). The similar significant difference in prevalence by age was observed among women. The HIV prevalence was

lowest among the youngest age group of 15-19 year olds at 0.4% (95% CI: 0.2-0.8) and increased steadily until peaking at 8.4% (95% CI: 6.3-11.0) among women aged 40-44 years.

- HIV prevalence was high among individuals who were divorced/separated or widowed (11.1%).
- HIV prevalence showed variation by provinces. It was highest in Kigali City (6.1%) and lowest in Northern Province (1.9%). The prevalence of HIV among women in Kigali (7.4% [5.5-9.8]) was significantly higher compared to the observed HIV prevalence in women in other provinces. Once again, the prevalence of HIV among men in Kigali (4.8% [95%CI: 4.6-7.9]) was significantly higher compared to the observed HIV prevalence in men in other provinces. One-fifth of Rwandan men aged 15-59 (20.2%) were circumcised in 2013, with an increase of 4% in 2014.
- The overall syphilis prevalence among adults was estimated at 0.9%, which was 1% among women and 0.8% among men.
- The RAIHIS 2013-2014 also showed that the HIV incidence among adults aged 15-49 (women) and 15-59 (men) was 0.27%.

- **HIV and syphilis Surveillance among Pregnant Women attending ANC/PMTCT services, 2014**

Two report writing workshops and regular working sessions were organized to finalise the report. By June 2016, the final report is available, waiting for validation and publication. However, the preliminary findings from the survey were shared in different national and international conferences.

Key findings:

- In total, 28,761 pregnant women presented for a first ANC consultation of their current pregnancy between Jul-Dec 2013 (mean age 27.7 years; 43.4% from urban areas).
- Over half of women were between the ages of 20-29 years old (56.0%) and most were married (76.1%) or cohabitating (17.3%).

- For 30.2% of women, this was their first pregnancy. Nearly all (98.2%) women were tested for HIV in their ANC visit and 3.14% tested positive (95%CI: 2.7-3.7).
- HIV prevalence rates were higher at the 30 original surveillance sites (3.6%, 95%CI: 3.0, 4.3) compared to the 35 new sites (2.3%, 95%CI: 1.9, 2.8). Older age (25-49 years, OR 1.7, p=0.018), urban residence (OR 2.0, p<0.001), having 4+ pregnancies (OR 1.1, p=0.021), and syphilis infection (OR 5.9, p<0.001) were significantly associated with HIV-infection.
- The HIV prevalence decreased from 5.2% in 2003 to 3.6% in 2014 while the Syphilis prevalence also declined from 2.1% in 2011 to 0.8% in 2014.
- Women who were married/cohabitating (OR 0.5, p=0.004) and living outside of Kigali had significantly lower odds of HIV-infection. Syphilis prevalence was 0.5% (95%CI: 0.4, 0.8) at all 65 sites. The prevalence of syphilis has decreased significantly when comparing trends at the 24 sites tracked from 2002 (4.0%) to 2013 (0.8%, p<0.001).
- The prevalence of syphilis co-infection among HIV-positive pregnant women was 3.5% (95%CI: 1.9, 6.1) at all 65 sites, a decrease from the 24 sites showing 9.2% in 2007 and 10.8% in 2011.

- **Behavioural and Biological Surveillance among Female Sex Workers in Rwanda (BBSS among FSWs, 2015)**

One report writing workshops and regular working sessions were organized to finalise the report.

Key findings:

- Majority of the FSWs (41.5%) in the survey were in the 15-to-24-year-old age group. Among the surveyed FSWs, the majority (62.2%) completed primary education. Many FSWs (33%), had no other work than sex work. A majority of FSWs (64%) had never married or cohabitated, while 30% are divorced or separated. The majority (54.2%) had between one and four years of experience into sex work and 42.8% reported recruiting clients from venues (Bars, Hotels, lodges…).

- Based on the preliminary HIV rapid tests results, the prevalence of HIV among FSWs in Rwanda was 41.4% (95% confidence interval CI: 38.2-44.6%), with variations among Provinces, 37.2% (CI: 32.2-42.7%) in North, 45.4% (CI: 38.2-52.8%) in South, 46.6% (CI:39.9 – 53.4%) in West, 34.3% (CI:28.8 -40.2%) in East and 51.2% (CI: 45.1-57.2%) in the City of Kigali. The prevalence of HIV among FSWs was higher among FSWs aged 40 and above as compared to FSWs aged 15-19 years: 60% (CI: 47.1-71.7%) versus 22.4% (CI: 17.7-29.4%). Among surveyed FSWs, confection of HIV was 1.3%, 0.5 and 16.8 with Hepatitis B, Hepatitis C and other STIs respectively.
- The BSS among FSWs showed that the overall prevalence of HIV infection among FSWs was 45.8% with variations among Provinces, 55.5% in Kigali City, and 42% in other provinces. The HIV prevalence increase with age, 24.6% in the age 15-19 compared to 66.2% in the 40 years of age or more.
- In Rwanda, 45% of FSWs sold sex for money for the first time between the ages of 15-19. In addition, 6.7% started having sex for money under the age of 15 years.
- Condoms use at last sex with a client was 83.5%, while condom was consistently used with a client by 49.5% of FSWs versus 37.6% with a non-paying partner. Consistent condom use with a client was higher among younger FSWs aged 15-19 compared to FSWs aged 40 and above: 52.3% versus 43.2%. However, it was the opposite with a non-paying sex partner (30% versus 56.5%).
- In the week preceding the survey, the majority of FSWs (50.5%) had 3-5 paying partners. Compared to other provinces, the City of Kigali and the Western Province had a higher number of FSWs receiving 6 or more paying partners in the week preceding the survey (23.1% and 22.4% respectively).
- Comprehensive knowledge of HIV among FSWs was estimated at 48.6% and 71.5% if the faithfulness is not considered. In the 12 months preceding the survey, a large number (69.7%) of FSWs had HIV test at least once and 97.8% of FSWs knew their status. Among HIV positive FSWs, 93% were enrolled into care and treatment services and 59.3% were on ART. The majority (71.1%) of FSWs

reported having ever experienced any type of violence, among which 42.5% was physical violence while 57.5% reported sexual violence.

- **Behavioural and Biological Surveillance among Men who have Sex with Men in Rwanda (BBSS among MSM, 2015)**

One report writing workshops and regular working sessions were organized to finalise the report.

Key findings:

- Between January and May 2015, 1146 invitations were sent out, and 804 men came to the research site. After screening process for eligibility, 495 men were eligible and consented to participate in the study. The majority of men were young (mean age: 24 years), 98.0% were single, 52.6% reported have ever had sex with a female partner, 51.0 % had completed at least secondary school and 75.5% were circumcised. The median age at first sex with another man was 19 years whereas the median age of the first male sexual partner was 22 years.
- Conducted for the first time in Rwanda, the 2015 BSS among MSM showed that HIV prevalence among MSM was 4% (95% CI: 1.4 – 6.6) while the syphilis prevalence was 3.4% (95% CI: 1.0 – 6.0).
- The sexual behaviours among MSM were assessed during the last 12 months. The survey respondents reported a median of four male regular partners and two casual sexual partners. The results also revealed that MSM are involved in commercial sex. The MSM reported having on average two (IQR 1-4) paying sexual partners in the last 12 months. While 42.5% reported having ever been paid with money, goods, or services for sex, 17.6 % reported sex work as their main source of income.
- Approximately 14% of MSM reported ever been forced to have sex against their will, whereas 8.3% reported having ever suffered any form of violence or abuse because they had sex with other men. Regarding condom use among MSM, 71.4% reported having used condom in the last sexual intercourse with a man, and 45.0% reported consistently use of condoms in the last 30 days prior to the survey. The overall self-reported of STIs symptoms in the last 12 months was 13.6%. The most

frequent STI symptom was genital discharge (6.5%). Most of MSM (84%) have ever had an HIV test and the HIV prevalence was 3.3% (95% CI: 2.0-5.4).

7.4. RBF indicators

The newly adopted results-based financing (RBF) model aims to track top outcome indicators in a performance contract based framework.

The Rwandan RBF model has three major components: indicators, assurance, and collaboration. The six pre-defined performance indicators are listed in the table below. Assurance mechanisms are present at the strategic, operational, and financial levels. Finally, collaboration among funding entities is encouraged.

The source of information includes: registers (Pre-ART/ART, postnatal follow-up for exposed infants, TB cases, and laboratory for TB). For three of the six indicators (MTCT, retention on ART, and HIV/TB), retrospective data was collected and analysed. Data was collected by data managers from 508 health facilities, under the supervision of district hospital data managers and mentored by staff from RBC Planning and M&E and HIV, STIs, and OBBI Divisions. Data managers filled the forms and entered the data into an Excel database. Data cleaning and merging were done by RBC staff.

Table 6: RBF Performance Indicators, July 2015-June 2016

Indicator	Data Source	Baseline	Target	Results
% of infants born to HIV+ mothers, who are not infected by 18 months (MTCT)	Cohort Data (health facility registers)	98.2% by 18 months	>95% by 18 months	>95% by 18 months *(98.2 %)*
% of adults and children with HIV known to be on treatment 12 months after initiation of ARVs (retention on ART)	Cohort Data (health facility registers)	91.7%	93.0%	92.6%
%of eligible adults & children currently receiving ARVs (ART Coverage)	TRACnet and EPP Spectrum	61.4%	76.7% (161,348/ 210,484)	78.0% (164,252/ 210,484)
% of female sex workers reporting the use of a condom during penetrative sex with their most recent client (key population)	BSS Female Sex Workers	80%	n/a	n/a
% of men reporting the use of a condom the last time they had anal sex with a male partner (key population)	BSS MSM	71.4%	n/a	n/a
Number & % of TB/HIV patients receiving ART by the end of TB treatment out of all TB/HIV patients.	Health facility registers	81.2%	90%	93.9% (1360/1449)

8. FINANCING THE HIV NATIONAL RESPONSE

8.1. Introduction

Financing the national HIV response is a subset of the Health Sector Financing strategy. The aim remains to improve the access of the population to health services, including HIV services. HIV programs continue to benefit funds from government and development partners and technical support. The major funding sources for the Rwanda HIV programs are:

- Government Revenue, which include revenues generated from taxation, loans, grants, donations – reported as Government contribution.
- Development partner contributions through general and health sector budget support and donor funds, partially on budget as seen in the development budget, and partially earmarked and project related. These include the Global Fund for HIV & AIDS, TB and Malaria, PEPFAR and contribution from One UN.
- Health insurance pooled funds (Mutuelle de Santé or Community based health insurance) from household expenditures. This is not captured in this report.
- Health related household expenditures are not yet captured in this report
- Private funds are also not captured in this report.
- Income generated from health facilities are not captured in this report

The data collection for the contribution of these sources is not conducted on a regular basis; therefore, the report will focus on funding sources where data were available as explained above.

8.2. Public and external sources of funds for HIV NSP

The Ministry of Health and the Rwanda Bio-medical Centre in collaboration with its partners worked on the design and development of the Health Resource Tracking Tool (HRTT), where all health sector actors (government institutions and development partners) report on a periodic basis. The system is designed to collect expenditures and budgets on a quarterly and annual basis. Although the system is currently operating, data of the actual financial report were generated through SMART FMIS given that HRTT captured so far budget and expenditures of 2014/2015. To facilitate the collection of

financial information for this year's report, a separate data collection process was adopted using SMART FMIS (Integrated Financial Management Information System) for Global Fund grant and Government contribution; and directly from the in-country office for PEPFAR and UN agencies (One UN) contribution.

8.3. Funding Source for HIV Expenditures in Rwanda FY 2015/16

The Global Fund for AIDS, TB and Malaria (GFATM) was budgeted to contribute the largest among all external funds with $87.9 million (45%) of the total budget, the figures considered are coming from the amendment of operational plan budget submitted to the Global Fund as per grant agreement requirement. The United States Government (USG) contribution was $82 million, representing 42% of the total HIV budget. The Government of Rwanda contributes $24.3 million, representing 12%. Lastly, the UN budget contribution was $1.7 million, representing 1% of the total budget.

Regarding expenditures, $ 75.9 million was spent through the Global Fund HIV NSP grant while $82 million is projected to be spent using PEPFAR funds. The Government of Rwanda spent $24 million while ONE UN spent up to $1.7 million.

In summary, during FY 2015/16, out of a planned $196 million budget for HIV NSP, $182.4 million was spent, representing 93% of overall budget execution rate.

Table 7 : HIV NSP source of funds

Funding Sources	Initial budget in US$ (A)	Revised Budget in US$ (B)	Share as % of Revised Budget (C)	Amount Spent in US$ (D)	Budget execution E=(D)/(B)
Global Fund for AIDS, TB and Malaria	59,411,275	87,886,347	45%	75,961,146	86%
PEPFAR	82,016,957^	82,016,957^	42%	82,016,957*	100%*
One UN	1,718,550	1,718,550	1%	1,718,550	100%
GoR	20,212,206	24,396,448	12%	24,044,910	99%
Total	163,358,988	196,018,302	100%	183,741,563	94%

^ PEPFAR budget is comprised of $80,000,000 in COP15 funding and $2,016,958 for one-time central funding for VMMC.

** Estimated spending; PEPFAR expenditure data will be available after October 1, 2016.*

** The variance is committed for ongoing rehabilitation works, laboratory and medical equipment

8.4. Government contribution to HIV NSP

The GoR funds are allocated to different health programs during the annual planning and budgeting process, which entails prioritization process by the Ministry, RBC and decentralized levels basing on HSSPIII and different disease program strategic plans serve as guiding documents. The planning phase also uses the disease burden and services utilization data from HMIS to inform an effective resource allocation. The output from this process is entirely reflected in the Mid-Term Expenditure Framework (MTEF) that becomes part of the budget law voted by the Parliament.

Apart from program specific financing, the estimation of GoR contribution takes into account all other health related programs costs, categorized as health systems strengthening costs in the categories of (i) Human resources (salaries) (ii) Infrastructures (including constructions, renovation and equipment) (iii) Quality of services (including performance based financing and accreditation programs (iv) Specialized health services (v) Health commodities (drugs, consumables…) and (vi) Health insurance for indigents.

Table 8: GoR HIV budget and expenditure per MTEF Program

MTEF Program	Budget FY 2015-2016 in US$	Revised Budget FY 2015-2016	Expenditures FY 2015 -2016 in US$	Share of expenditure	Budget execution rate	Comments
Administrative and Support Services	1,871,648	2,014,103	2,001,386	8.32%	99%	
Disease Prevention and Control	2,368,831	2,402,060	2,311,796	9.61%	96%	
Financial and Geographical Health Accessibility	5,402,860	6,532,883	6,498,701	27.03%	99%	
Health Human Resources	7,489,864	7,007,856	6,979,722	29.03%	100%	
Health Quality Improvement	563,616	4,107,080	3,915,457	16.28%	95%	In initial budget, the tax counterpart on RBF-HIV was not captured.

Health Sector Planning and Information	34,822	18,287	18,287	0.08%	100%	
Policy Development and Health Service Regulation	222,812	226,323	223,029	0.93%	99%	
Specialised Health Services	2,257,753	2,087,857	2,096,532	8.72%	100%	
Grand Total	**20,212,206**	**24,396,448**	**24,044,910**	**100.00%**	**99%**	

As the table shows, out of the total revised budget of 24.3 million for FY 2015-2016; GoR spent 24 million that is representing 99% of the budget execution rate. By Ranging per MTEF Program from the lowest to the highest, Health Sector planning and information has $ 18,287 (0.08%); Policy development and health service regulation with US$ 223,029 (0.93%); Administrative and support services with US$ 2,001,386 (8.32%); Specialized health services with US$ 2,096,532 (8.72%); Disease prevention and control with US$ 2,311,796 (9.61%); Health quality improvement with US$ 3,915,457 (16.28%); Financial and geographical health accessibility with US$ 6,498,701 (27.03%) and Health human resources with US$ 6,979,722 (29.03%). The largest portion of HIV expenditures funded by GoR is allocated to HIV spending through general health system strengthening.

Table 9: GoR HIV NSP budget and expenditure per type of budget entity FY 2015/2016

Type of Budget entity	Budget FY 2015-2016 in US$	Revised FY2015-2016 in US$	Expenditures FY 2015-2016 in US$	Share of expenditure	Budget execution rate
MINISANTE	7,181,369	8,282,798	8,232,364	34%	99%
Referral Hospitals	2,386,809	1,826,406	1,836,456	8%	101%
Rwanda Bio-Medical Centre(RBC)	4,016,560	7,170,211	6,885,124	29%	96%
District Hospitals and Health Centres	6,627,468	7,117,033	7,090,966	29%	100%
Grand Total	**20,212,206**	**24,396,448**	**24,044,910**	**100%**	**99%**

The table shows, for FY 2015-2016 GoR spent the total amount of US$ 24,044,910 out of planned budget of US$ 24,396,448 for HIV expenditures. This represents 99% of budget execution rate compared to the revised budget. By ranging HIV Expenditures by type of budget entity from the highest to the lowest, it is obvious that the highest share of HIV expenditures is held by MINISANTE with 34%; followed by District hospitals and Rwanda Biomedical Centre both with 29% and then Referral Hospitals with 8%.

Table 10 : GoR HIV NSP budget end expenditure per NSP cost category FY 2015/2016

NSP Cost Category	Budget in US$ FY 2015/2016	Revised FY 2015/2016	Expenditures in US$ FY 2015/2016	Share of expenditure	Budget execution rate
Human Resources	10,334,968	9,640,393	9,615,756	40%	100%
Technical Assistance	1,408,675	971,624	970,247	4%	100%
Training	21,129	2,536	2,495	0%	98%
Health Products and Health Equipment	501,906	214,558	184,146	1%	86%
Medicines and Pharmaceutical Products	194,609	95,499	115,483	0%	121%
Procurement and Supply Management Costs	2,020,141	6,276,439	6,019,209	25%	96%
Infrastructure and Other Equipment	2,471,110	1,888,476	1,848,850	8%	98%
Communication Materials	210,311	51,006	49,681	0%	97%
Monitoring & Evaluation	236,738	240,720	235,225	1%	98%
Living Support to Clients/Target Populations	2,116,633	4,233,383	4,233,383	18%	100%
Planning and Administration	407,889	306,017	305,450	1%	100%
Overheads	288,097	475,797	464,982	2%	98%
Grand Total	**20,212,206**	**24,396,448**	**24,044,910**	**100%**	**99%**

The top 4 NSP cost categories with the highest share of expenditure are Human resources with 40%; Procurement and Supply Management Costs with 25%; Living Support to Clients/Target Populations with 18%; infrastructure and Other Equipment with 8% and. The remaining 8 NSP cost categories are represented with 10%.

8.5. The Global Fund contribution

For the Global Fund contribution, the initial approved budget for the financial year 2015 – 2016 was US$ 59,411,275 Million. The revised budget became US$ 87.9 million after budget reallocation and reprogramming of US$ 30,313,627 (cash balance as 30th June 2015) whereby US$ 28.5 Million was allocated in FY 2015-2016 and then US$ 1.8 million allocated in FY 2016-2017.

From above budget of USD 87.9 Million, a total of US$ 75,961,146 has been effectively spent by different budget entities and this represents 86% of budget execution. The balance of USD 11,925,201 is carried over to FY 2016/2017 and committed through contracts under execution process (7 DH Maternities, 2 Satellites Laboratories, 5 VCTs, 5 District Pharmacies, 60 Ambulances, Infectious Diseases department , Equipment for Drugs Quality Control Lab, Blood bank equipment and other Lab equipment)..Through on-going consolidation of Financial accountability report , above amount of USD 11,9 million carried over will be adjusted and therefore the total HIV NSP budget 2016-2017 updated accordingly and communicated to the Global fund.

Table 11 : GF HIV NSP budget and expenditure per type of budget entity FY 2015/2016

Type of budget entity	Budget FY 2015-2016 in US$	Expenditures FY 2015-2016 in US$	Share of expenditure	Budget execution rate
Referral Hospital	**6,658,068**	**6,455,041**	8%	97%
Ministry of Health	**13,459,996**	**13,122,885**	17%	97%
Other Public Institutions	**3,462,726**	**3,339,878**	4%	96%

RBC	**64,305,558**	**53,043,342**	70%	82%
Grand Total	**87,886,347**	**75,961,146**	**100%**	**86%**

The table above shows the HIV NSP budget execution rate of 86% for GF contribution for the FY 2015-2016. The largest expenditure was done by RBC (Health facilities, NGOs and Umbrellas inclusive) with 70%; followed by MoH with 17%, then referral hospitals with 8%and lastly Other Public Institutions with 4%.

Table 12 : HIV NSP GF Grant budget execution per GF cost category as of 30th June 2016

NSP Cost Category	Budget FY 2015-2016 in US$	Expenditures FY 2015-2016 in US$	Share of expenditure	Budget execution rate
01. Human Resources	20,454,412	19,689,196	25.92%	96%
02. Technical Assistance	34,966	24,908	0.03%	71%
03. Training	1,130,962	923,883	1.22%	82%
04. Health Products and Health Equipment	16,744,065	15,337,633	20.19%	92%
05. Medicines and Pharmaceutical Products	11,331,274	11,731,947	15.44%	104%
06. Procurement and Supply Management Costs	1,941,277	1,941,171	2.56%	100%
07. Infrastructure and Other Equipment	19,605,733	10,888,062	14.33%	56%
08. Communication Materials	1,213,419	1,060,815	1.40%	87%
09. Monitoring & Evaluation	2,877,983	2,414,514	3.18%	84%
10. Living Support to Clients/Target Populations	10,459,954	10,149,239	13.36%	97%
11. Planning and Administration	372,739	190,149	0.25%	51%
12. Overheads	1,719,564	1,609,628	2.12%	94%
Grand Total	**87,886,347**	**75,961,146**	**100.00%**	**86%**

The table above shows the HIV NSP budget execution per cost category of the GF contribution for the FY 2015-2016, representing a total rate 86% of expenditures over budget. The cost category with the largest expenditure is human resources with 25.92%, followed by Health Products and Health Equipment with 20.19%; Medicines and Pharmaceutical Products with 15.44%; Infrastructure and Other Equipment with 14.33%; Living Support to Clients/Target Populations with 13.36% and finally the remaining 7 cost categories that shared 11% and include overheads (2.12%), monitoring and evaluation (3.18%), technical assistance (0.03%), communication materials (1.40%), planning and administration (0.25%), training (1.22%) and Procurement and Supply Management Costs (3%).

8.6. The USG/PEPFAR contribution

Table 13 : PEPFAR Grant budget and expenditure per PEPFAR cost category

PEPFAR Budget Category	Budget in US$ FY 2015/2016**^	Amount Spent in US$*	Budget execution rate
Mother-to-Child Transmission	2,017,624	2,017,624	100%
Other Sexual Prevention	1,940,718	1,940,718	100%
Blood Safety	500,000	500,000	100%
Voluntary Male Medical Circumcision**	2,914,172	2,914,172	100%
HIV Testing and Counselling	2,655,198	2,655,198	100%
Adult Care and Support	10,831,412	10,831,412	100%
Paediatric Care and Support	2,248,748	2,248,748	100%
TB/HIV	1,507,358	1,507,358	100%
Orphans and Vulnerable Children	5,389,373	5,389,373	100%
Adult Treatment	13,512,916	13,512,916	100%
Paediatric Treatment	1,662,759	1,662,759	100%
ARV Drugs	10,507,385	10,507,385	100%
Laboratory Infrastructure	1,920,690	1,920,690	100%

Strategic Information	932,500	932,500	100%
Health Systems Strengthening	11,865,541	11,865,541	100%
Management and Operations^	11,610,563	11,610,563	100%
TOTAL	**82,016,957**	**82,016,957**	**100%**

**USG Fiscal Year 2016 is from October 1, 2015 – September 30, 2016. Expenditure analysis is conducted after the fiscal year ends September 30, 2016. The expectation is that 100% of the budget will be spent but at the time of this report the amount spent is an estimation based on the budget.*

*** Note this figure includes one-time central funding contribution of $2,016,958 for VMMC in addition to the $897,214 in VMMC program funds in COP15*
^ Management and Operations includes funding for USG staff seconded to GOR, USG program and management staff, professional development, and technical services.

8.7. ONE UN Contribution

The One UN developed several flagship programs to fund HIV activities implemented from July 2015 to June 2016. The total budget for the flagships is USD 1,718,550. This was used as a planned funding level for ONE UN.

9. CONCLUSION

The compilation and publication of this report shows the cooperation and commitment of the national HIV program and its partners and stakeholders in HIV response. It broadly presents key achievements recorded by the national HIV program together partners and stakeholders during July 2015-June 2016. Some of the achievements presented here will be also discussed in the report of Mid-term review of NSP 2013-2018 for HIV. This is also an opportunity for all the stakeholders to evaluate their contribution to the response. It shows continuous impact interventions towards the achievement of national goals and targets.

The results achieved during 2015-2016, as presented in this report, are not the fruits of chance; they are rather due to the commitment, investment, participation and collaboration of all levels, including Development Partners, the Local Government, Private Sector and the population.

Construction of new health facilities, renovation, extension and equipment of existing, continuous professional development of human resources, supervision, clinical mentorship and monitoring of service delivery have contributed greatly to the achievement of continuous quality of care offered to PLHIV and HIV prevention services.

The "Treat all HIV positive" strategy shows how much the Government of Rwanda is committed to improve lives of its population, especially those who live with HIV-AIDS. Its implementation will not only increase the number of people on treatment but also improve health status of PLHIV and be prevention.

Given our ultimate goal to have an HIV-free country, the national HIV response will continue to focus on prevention, care and treatment and impact mitigation as per the current NSP for HIV.

By presenting the achievements of national HIV program, we're building the basis for the achievements in the coming years. We believe that the overall information summarized in this report reflects the achievements and interventions conducted by all actors in HIV response in Rwanda from 1st July 2015 until 30th June 2016.