Republic of Rwanda
Ministry of Health

Rwanda Biomedical Centre
Healthy People, Wealthy Nation

National HIV/AIDS Strategic Plan 2024-2027

April, 2024

PREFACE

In the aftermath of the Genocide against the Tutsi of 1994, Rwanda's infrastructure, human resources, and social cohesion were devastated. For the last 29 years, the country has made considerable efforts to strengthen its health system. The COVID-19 response in Rwanda has been evidence of a resilient health system to respond to the everyday health needs of its population.

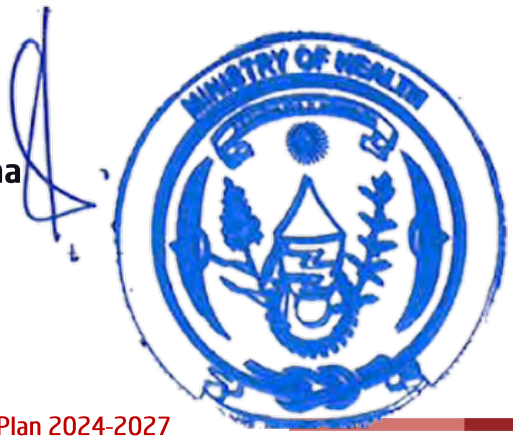
The HIV program is among the most decentralized and engages all stakeholders and partners to ensure the well-being of beneficiaries. The rapid scale-up of ART began in 2004, and it was impressive how three years later, in 2007, the country achieved universal coverage of ART at a CD4 cell count of 200 cells/mm3 and kept increasing the threshold of ART initiation of ART to 'Treat All'. As a result, the life expectancy of people living with HIV on ART has tremendously increased from 20 years to 25 years.

UNAIDS has applauded Rwanda for achieving the 95-95-95 targets and Rwanda is on the path to ending AIDS by 2030. Thus, the National Strategic Plan (NSP) 2024-2027, an extension of the 2020-2024 NSP, is a guiding document to close the gaps preventing progress towards ending AIDS. The national strategic plan aims to *(i) reduce new HIV infections, (ii) reduce AIDS-related morbidity and mortality, and (iii) end inequalities and mitigate the impact of HIV on infected and affected populations.*

The development of the NSP was evidence-based and was based on the broad participation of all actors involved in the HIV response in Rwanda. Those include community-based and civil society organizations, ministries, and development partners. Furthermore, the development of NSP is built from previous experience to cater for service integration and future pandemic preparedness.

Let us rededicate ourselves to the last mile towards ending AIDS in Rwanda.

Dr. Sabin Nsanzimana
Minister of Health



ACKNOWLEDGMENT

The Rwanda Biomedical Center (RBC) is extremely appreciative to all participants who worked tirelessly to develop the mid-term review of the current national strategic plan 2020-2024 and revised the HIV strategic plan for 2024-2027. The process progressed through various participatory stages that required input and advice from all stakeholders.

Technical working groups met regularly in working sessions and workshops under the coordination of the HIV division, which led the entire coordination, with the participation of several other divisions and units within the Ministry of Health. Various actors were involved in all phases of the development of this updated and revised NSP alongside different partners and stakeholders, including civil society organizations, private sector partners, and other government institutions.

This participatory approach led to the final extended strategies and interventions of the NSP until 2027, which are inclusive, exhaustive, and comprehensive. May all partners be commended for their active participation in the development of this new NSP and, more importantly, for their contribution to the national HIV response towards the global target to end AIDS in 2030.

Prof. Claude MAMBO MUVENYI

Director General
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EXECUTIVE SUMMARY

Introduction

The Rwanda National HIV Strategic Plan 2024–2027 lays out a comprehensive plan to fight against HIV/AIDS in the country. The priorities and approaches highlighted in this NSP are built on the successes of previous strategic plans and aim to reduce new HIV infections, improve access to treatment and care, and enhance the overall quality of life for people living with HIV. This executive summary provides an overview of the proposed goals goals, strategies addressing the highlighted gaps during the mid-term review of the current NSP towards sustainable HIV epidemic control in Rwanda.

Context and Background

Despite the effort made to control HIV epidemic in Rwanda for the past 20 years, HIV/AIDS remains a significant public health threat in Rwanda, affecting individuals, families, and communities across the country. Key populations, such as sex workers and their clients, men who have sex with men, and vulnerable groups, including youth, especially adolescent girls and young women, and people who inject drugs, continue to experience higher rates of HIV transmission despite substantial progress in reducing HIV prevalence and improving access to antiretroviral treatment (ART). In order to achieve the global targets by 2030, the Rwanda National HIV Strategic Plan 2024–2027 seeks to build on past successes and provide a strategic direction to address existing gaps.

Objectives

The ambitious goal of this National strategic plan is to create an HIV-free generation in Rwanda, where new infections are eliminated and everyone living with HIV has access to high-quality treatment, care, and support. To achieve this vision, the NSP outlines four primary objectives up to 2027:

a) Reduce new HIV infections by 15% in 2027

b) Reduce HIV-related deaths by 2027 and decrease HIV morbidity

c) Maintained viral load suppression above 95% among all PLHIV on ART

d) Increase the ART coverage among all PLHIV and maintain the retention above 95%

e) Strengthening community of people infected and affected by HIV to ensure their equal opportunities as the general population

Key Strategies

The strategic plan embraces a multi-sectoral and integrated approach to address the HIV epidemic, involving various stakeholders from the government, civil society, private sector, and development partners. Key strategies include

Increased access and use of preventive services for HIV, Hepatitis, and Syphilis.

- Reducing new HIV infections transmitted through unprotected sexual intercourse.
- Improve access to combined HIV and sexual reproductive health prevention services among most at risk populations have access.
- Provide comprehensive prevention services for HIV, STIs, Viral hepatitis, and other blood-borne infections among key and priority populations at community and facility level.
- Deliver a complete and comprehensive e-MTCT package for HIV, syphilis, and Viral Hepatitis B to ensure triple elimination among pregnant women
- Ensure the highest linkage, ART retention and VLS among PLHIV
- Provide enhanced community-based people centered support services to people affected and infected with HIV
- Advancing data-driven decision-making through enhanced monitoring, evaluation, and surveillance systems

Enablers and cross-cutting themes

The strategic plan underlines the cross-cutting enablers that will contribute to addressing the existing gaps towards sustainable HIV epidemic control. These include strategic information, health system strengthening, health security, pandemic preparedness, and governance mechanisms in HIV response.

Resource mobilization and sustainability

Recognising the importance of adequate resources for successful implementation, this NSP will describe strategies for domestic and international resource mobilisation. To maximise the impact of funding, it emphasises efficient use of resources for sustainability, cost-effectiveness, and innovative partnerships.

Conclusion

Estimates from UNAIDS show that Rwanda has reached the global 95-95-95 target in 2023. However, the national programme still faces gaps in achieving the first 95 among children, adolescents, youth, and key populations. Between 2018 and 2022, new infections declined by 34%. Biomedical and non-biomedical interventions helped reduce new infections, increase awareness, and identify undiagnosed individuals. The programme has led to an 82% decrease in new infections, an 86% decrease in AIDS-related deaths, and an additional 25.6 years of life expectancy. Addressing the remaining gaps requires tailored interventions targeting key populations, improving clinical service integration, and prioritising interventions targeting high-risk groups. This National HIV Programme (NSP) will guide future implementation and provide a roadmap for prioritisation from 2024 to 2027. Successful implementation of this NSP will require strong commitment, collaboration, and sustained efforts from all stakeholders and partners involved.

Table of Contents

List of figures

List of tables

List of Abbreviations and Acronyms

AGYW	Adolescent Girls and Young Women
AIDS	Acquired immune deficiency syndrome
ART	Anti-Retroviral Therapy
ANC	Antenatal Care
Ca	Cancer
CADRE	Cyclical Acquired HIV Drug Resistance survey
CALHIV	Children and Adolescent Living With HIV
CBO	Community-based organization
CBS	Case Based Surveillance
CDC	Centres for Disease Control and Prevention
CLIHIV	Children Living With HIV
CLM	Community Led Monitoring
COVID-19	Corona Virus Disease of 2019
CSOs	civil society organizations
DSD	Differentiated Service Delivery
DSDM	Differentiated Service Delivery Model
DH	District Hospital
DHS	Demographic and Health Survey
EDPRS	Economic Development and Poverty Reduction Strategy Female Sex Worker
EID	Early Infant Diagnosis
EMR	Electronic Medical Recording System
EMTCT	Elimination Mother-to-child Transmission of HIV
EPP	Estimation and Projection Package
ESA	Eastern and Southern Africa
FOSA	Formation Sanitaire (Health Facility)
FSW	Female Sex Workers
GBV	Gender Based Violence
GLIHD	Great Lakes Initiative for Human Rights and Development
HBV	Hepatitis B Virus
HCC	Health Communication Center
HCT	HIV Counseling and Testing
HCV	Hepatitis C Virus
HDI	Health Development Initiative
HF	Health Facility
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HSSP	Health Sector Strategic Plan
HTS	HIV Testing Services
ICAP	International Center for AIDS Programs
ICT	Information Communication Technology
ID	Identification

IEC	Information, Education, Communication
IMRO	Ihorere Munyarwanda Organization
LIS	Lab Information System
MoH	Ministry of Health
MSM	Men who have sex with men
NCBT	National Center for Blood Transfusion
NCC	National Commission on Children
NCDs	Non-Communicable Diseases
NGO	Nongovernmental organization
NSP	National Strategic Plan for HIV and AIDS
OIs	Opportunistic Infections
PEP	Post-exposure prophylaxis
PrEP	Pre-exposure prophylaxis
PEPFAR	Presidential Emergency Plan For AIDS Relief
PLWHIV	People living with HIV/AIDS
PMTCT	Prevention of mother-to-child transmission of HIV
PSF	Private Sector Federation
PWUD/PWI	People Who Use or Inject Drugs
RBC	Rwanda Biomedical Center
RRP+	Réseau Rwandais des Personnes vivant avec le VIH
SDGs	Sustainable Development Goals
SNS	Social Network testing Strategies
SRH	sexual and reproductive health
STI	Sexual Transmitted Infection
TPT	Tuberculosis Preventive Therapy
UNAIDS	Joint United Nations Program on AIDS
UNDP	United Nations Development Program
UNICEF	United Nations International Children's Emergency
UNFPA	Fund United Nations Fund for Population
UPHLS	Umbrella des Personnes Handicapées dans la Lutte contre le Sida
USAID	United States Agency for International Development
USG	United States Government
VL	Viral Load
VMMC	Voluntary Medical Male Circumcision
WHO	World Health Organization
QMS	Quality Management System

1. BACKGROUND

1.1. Global and regional HIV situation

The Joint United Nations Program on HIV/AIDS (UNAIDS) report for 2022 shows that HIV is still a global pandemic, with 38.4 million people living with the virus, 1.5 million new infections every year, and 650 thousand AIDS-related deaths in 2021 alone (UNAIDS, 2022). Despite these figures, given the disparities in many countries' healthcare systems, the true figure is likely to be even higher. The disease burden is unevenly distributed throughout the world. The African region is the most affected, accounting for more than half of all HIV-related deaths worldwide.

Globally, new HIV infections have declined by 52% since 1997. In 2021, around 1.5 million people were newly infected with HIV, compared to 3.0 million people in 1997. Women and girls accounted for 50% of all new infections in 2020, and 58% (870,000) of new infections were recorded from sub-Saharan Africa. Further, in the last ten years, new HIV infections among children have declined by 53%, from 320,000 in 2010 to 150,000 in 2020. Although, the number of new HIV infections in the general population has declined, key populations and other high-risk groups such as sex workers and their clients, men who have sex with men, people who inject drugs, transgender people, and their immediate partners, are still contributing to 40–50% of all new infections in adults.

Furthermore, AIDS-related deaths have decreased by 64% since the peak in 2004 and by 47% since 2010. In 2020, around 680,000 people died from AIDS-related illnesses worldwide, compared to 1.9 million people in 2004 and 1.3 million people in 2010 AIDS-related mortality have declined by 53% among women and girls and by 41% among men and boys since 2010. UNAIDS established 95-95-95 targets to be achieved by 2030, whereby 95% of people living with HIV are diagnosed, 95% receive ART, and 95% of those on ART have a suppressed viral load. Furthermore, 10–10–10 targets are set to remove social and legal impediments towards an enabling environment limiting access or utilization of HIV services, whereby Less than 10% of countries have punitive legal and policy environments that deny or limit access to services, less than 10% of people living with HIV and key populations experience stigma and discrimination and less than 10% of women, girls, people living with HIV and key populations experience gender inequality and violence. The Global AIDS Strategy 2021-2026 set up a framework for more transformative actions to reduce the inequalities that drive the AIDS epidemic by 2025 and get every country and every community on track to end AIDS by 2030. The strategy employs methods to identify, reduce, and eliminate inequalities that stand in the way of ending AIDS for people living with and affected by HIV, countries, and communities.

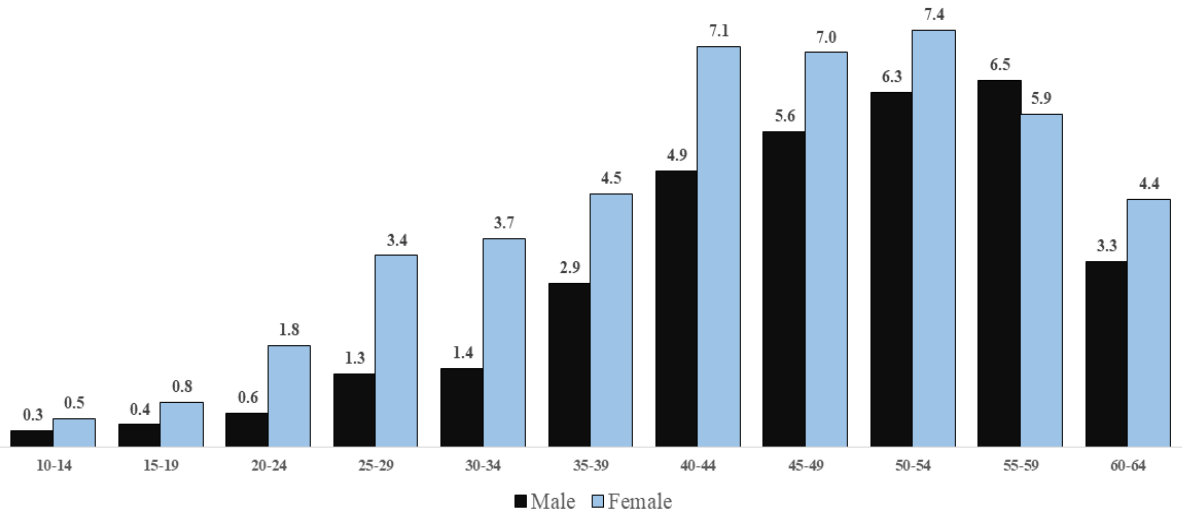
The COVID-19 pandemic has impacted global health systems and caused an unprecedented economic crisis in the last 2.5 years, putting all gains in HIV and other pandemic control at risk (UNAIDS, 2021). Other global concerns, such as wars, conflicts, and climate change, have also been exacerbated (World Health Organization, 2020). All new developments are bound to impact how pandemics are managed, particularly in Sub-Saharan Africa and other areas with fragile health systems (World Health Organization, 2020).

1.2. HIV situation in Rwanda

1.2.1. Current HIV epidemiology

Evidence shows that in Rwanda the HIV Incidence has dropped from 27 per 10,000 person years in 2013-14 to 8 per 10,000 person years in 2018-19, yielding a decline of 70%. Also, the Rwanda Population-based HIV Impact Assessment (RPHIA), a national household-based study conducted in 2018-19, found a 0.4% decline in prevalence between 2014 and 2019 among adults aged 15-49 years. However, the HIV prevalence remains at 3% among adults aged 15-64, with a high prevalence peak of 7.4% among women aged 50-54 and 6.5% among men aged 55-59 years, translating into the shift of the HIV epidemic to elders or people ageing with HIV as an impact of reduced mortality and high retention to treatment. Furthermore, the prevalence reported to be higher among women (3.7%) than among men (2.0%) in the adult population.

Figure 1: HIV Prevalence by age and gender (Source: RPHIA 2018-19)

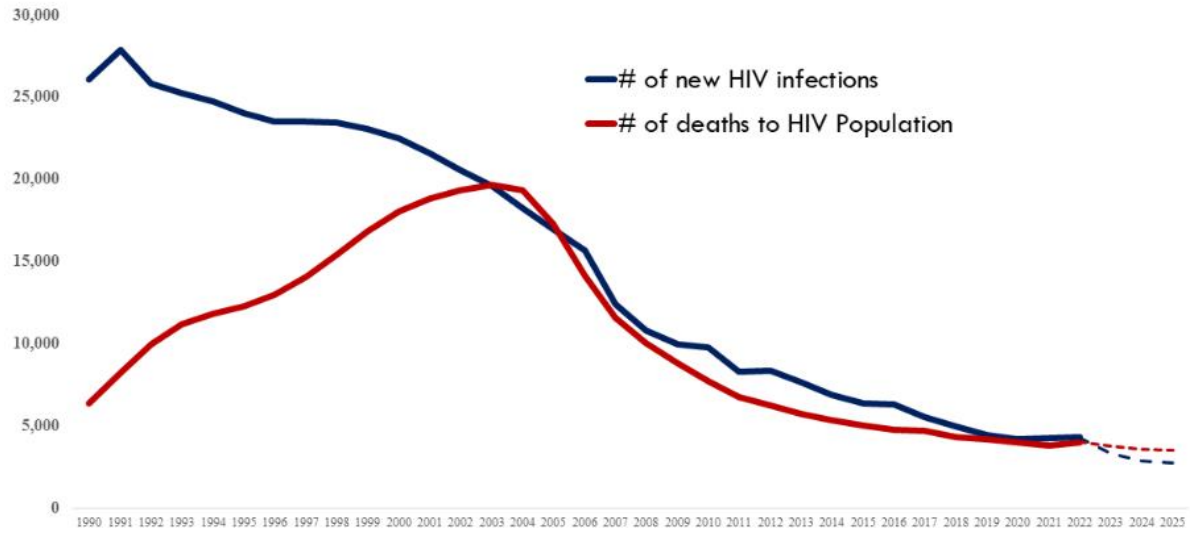


Despite the low and stabilized HIV prevalence in the general population, it remains substantially higher among key populations female sex workers (35.5%) and Men who have sex with men (6.5%). The trend of HIV prevalence among FSW shows a decrease from 51% in 2010 to 35.5% in 2019. The decrease was seen mainly from 2015 in the

city of Kigali and the southern province, as a result from the implementation of the facility based key population HIV prevention programs. Contrarily, HIV prevalence among FSW increased to almost 9% from 2010 (33%) to 2019 (42%) in the eastern province.

Since 2004, Rwanda has made remarkable progress in increasing access to antiretroviral therapy (ART). In June 2016, Rwanda launched the 'Treat All' policy, under which every person diagnosed with HIV must be initiated to ART regardless of CD4 cell count [Figure 3] Consequently, UNAIDS estimates a decline of new infections and AIDS related deaths by 82% and 86%, respectively. Further UNAIDS EPP-Spectrum model estimates that, the number of new HIV infections will be lower than the number of AIDS-related deaths in Rwanda in 2023, indicating a sustained epidemic control.

Figure 2: Trend of new infections and AIDS deaths (Source: EPP Spectrum 2022)



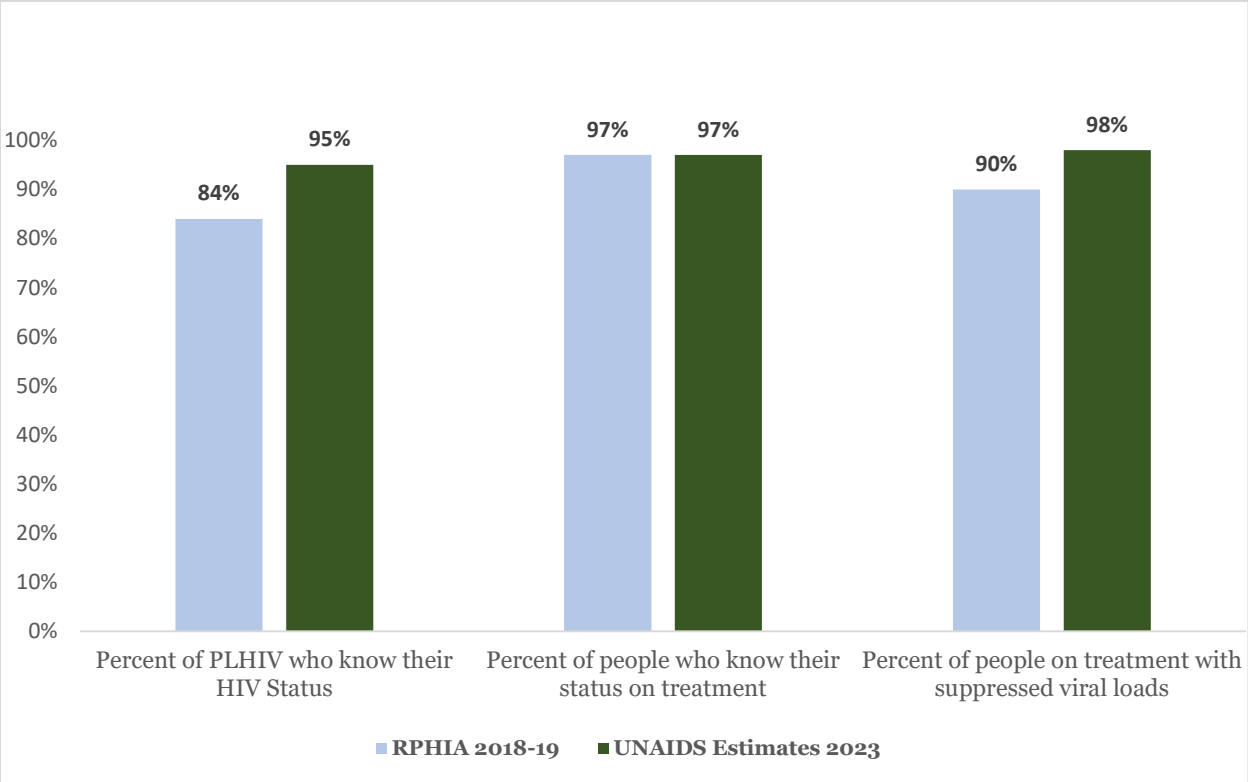
1.2.2. HIV response in Rwanda towards ending AIDS by 2030

Rwanda's HIV services have expanded significantly over the past decade, and substantial efforts have been devoted to enhancing the HIV testing approaches, in the community and at health facility level, and optimizing treatment. Almost all health facilities provide the screening for opportunistic infections (OIs) and non-communicable diseases, tuberculosis preventive therapy, psychosocial and nutrition support to those in need.

The Rwanda Population based HIV Impact assessment conducted in 2018, at the beginning of the previous National Strategic plan, estimated that eighty-four percent (84%) of adults living with HIV were aware of their HIV status; 97% of them were on antiretroviral therapy (ART); and 90% achieved viral load suppression. In the last five years, much of the efforts have been put in interventions to diagnose people living

with HIV who are not aware of their status through the active case finding through the index testing, identification the patterns and distributions of new and longstanding HIV infections through HIV Recency testing. Furthermore, the differentiated service delivery model and expanded capacities of HIV viral load (VL) testing and related systems in the laboratory network,provided more opportunities to both health facilities and community-based support through peer educators to maintain the viral load suppression among stable clients and enhance the viral load suppression among those with low adherence. As results, In June 2023, UNAIDS applauded Rwanda as well as Botswana, Eswatini, the United Republic of Tanzania and Zimbabwe to have achieved the 95-95-95 targets.

Figure 3: Change in the 95-95-95 target achievement (Source: RPHIA & EPP Spectrum 2022)



Rwanda has also put efforts in HIV prevention. The prevalence of male circumcision increased from 13% in 2010 to 56% in 2020, and higher among boys aged 15-24 years at 73.3%. Additionally, the mother to child HIV transmission rate among mothers who are followed up at health facilities across the country has stabilized below 2% in the last seven years.

The country revises the national prevention and treatment guidelines every two years to accommodate changes and updates based on scientific evidence. The HIV NSP serves as the linchpin of the effort to the last mile of ending AIDS by guiding the implementation, monitoring, and evaluation of national HIV response.

1.2.3. HIV Control in the era of pandemics preparedness

The COVID-19 epidemic has placed enormous pressure on healthcare systems, with notable effects on HIV services. As it has subsequently resulted in reducing the quality of care for HIV/AIDS clients. (World Health Organization, 2020). Due to restricted healthcare resources, people living with HIV experience many challenges globally. Once infected by the new virus, the immune response of people living with HIV and their mental health was doubly damaged (UNAIDS, 2021). For the next pandemic preparedness, there is a need to strengthen the systems to deliver HIV care and services even in emergencies (UNAIDS, 2022).

Rwanda is among the few countries in Africa to have achieved universal health coverage based on a vision of inclusiveness, equity, and comprehensive and integrated services, with a focus on primary health care (PHC). Not surprisingly, Rwanda has been ranked first in Africa and sixth globally in managing the COVID-19 pandemic and making information about the pandemic accessible to the public. The COVID-19 response was built from the HIV existing infrastructure. Following the WHO recommendations, the ministry of health developed the covid-19 and other pandemic preparedness and response plan aiming to prevent, timely detect and effectively respond to a potential outbreak and mitigate their impact on existing health services

1.3. Alignment with national and international policy

1.3.1. Global target to end AIDS by 2030

As a member of the United Nations, Rwanda is aligning its HIV control strategies with global commitments and policies to address the HIV/AIDS burden and is on track to end AIDS by 2030.

In 2023, Rwanda joined the global prevention coalition. Under the terms of this coalition, the country will benefit from the experience of other coalition members, align with existing goals, and implement a set of strategies to reduce new HIV infections. These goals are based on the Global AIDS Strategy (2021–2026) and the 2021 Political Declaration on HIV and AIDS, both of which the United Nations General Assembly adopted in June 2021. The strategy lays out the guiding principles, approaches, priority action areas, and programmatic goals for Rwanda to control HIV and end AIDS by 2030.

1.3.1.1. Global Alliance to end AIDS in children by 2030

The Global Alliance to End AIDS in Children is an alliance of multisectoral stakeholders at the national, regional, and global levels that collaborates with networks of women, children, and adolescents living with HIV, national governments, and partners to mobilize leadership, funding, and action to end AIDS in children by 2030. Rwanda, as other many African countries is experiencing a low coverage of ART uptake, poor adherence and retention and viral load suppression among children and adolescents.

By joining this alliance, Rwanda will ensure that tailored strategies to address disparities in coverage and access to antiretroviral therapy (ART) among children and adolescents are implemented based on the four pillars outlined below:

- Early testing and optimized comprehensive, high quality treatment and care for infants, children, and adolescents living with and children exposed to HIV.

- Closing the treatment gap for pregnant and breastfeeding women living with HIV and optimizing continuity of treatment towards the goal of elimination of vertical transmission

- Preventing and detecting new HIV infections among pregnant and breastfeeding adolescent girls and young women (AGWY)

- Addressing rights, gender equality and the social and structural barriers that hinder access to services, especially among vulnerable people (AGYW and people with disabilities) and key populations (FSW, MSM)

1.3.2. Triple Elimination of mother to child transmission of HIV, Syphilis and Hepatitis

As a public health priority, the international community has committed to the elimination of mother-to-child transmission (EMTCT) of HIV, syphilis, and the hepatitis B virus (HBV). The Triple EMTCT initiative emphasizes a unified strategy for improving the health of mothers and infants. The World Health Organization (WHO) published the first edition of Global Guidance on Criteria and Processes for Validation of the Elimination of Mother-to-Child Transmission of HIV and Syphilis in 2014.

In Rwanda, UNAIDS estimates a rate of mother to child HIV transmission at 6%. This rate is higher compared with the national estimate (below 2%) using the programmatic data. The discrepancy between UNAIDS and National program data may be mainly due lack of Rwanda specific data regarding mothers who drop off the ART treatment and those who get infected during pregnancy, at delivery or breastfeeding period respectively, affecting the quality of estimates. In this regard, the national program has set interventions to track mothers who may sero-convert during antenatal care and breastfeeding, aiming to reduce the transmission below 5%. Furthermore, to reach the triple elimination of HIV, Syphilis and HBV among pregnant and breastfeeding women, the program has set the following strategies:

- Primary prevention of new infections in women and girls of reproductive age and their sexual partners

- Promotion of a healthy reproductive life, including prevention of unintended pregnancies, support for safer conception among women living with HIV and access to other SRH interventions
- Control of HIV, syphilis, and HBV in general and in key populations, and a decrease in prevalence of these infections
- Access to testing and treatment for pregnant women with HIV, syphilis, or HBV for their health and to prevent vertical transmission.
- Initiate universal infant HBV vaccination: the most important intervention for reducing vertical transmission of HBV; high coverage of universal and timely HBV birth dose vaccination and completion of the infant HBV vaccine series are critical to achieving elimination goals.

1.3.3. Hepatitis Elimination plan

All WHO Member States have endorsed the WHO's global hepatitis strategy, which seeks to reduce new hepatitis infections by 90 percent and deaths by 65 percent between 2016 and 2030.
Rwanda has launched a plan to eliminate Hepatitis C by 2019. Since then, strategies to expand access to screening and treatment for both Hepatitis B and C have been implemented in all Rwandan health facilities. Under this elimination plan, individuals aged 15 years and older who are eligible will be screened, and confirmed cases will be treated. Following the achievement of this milestone in 2021, the WHO has chosen Rwanda as one of the champion countries to be validated for hepatitis elimination. The remaining final step towards validation will consist of generating the status of key impact indicators (incidence and mortality) as well as addressing all inequalities in accessing specific prevention services among high-risk populations, particularly people who inject drugs.

1.4. Overarching principles

1.4.1. National mobilization and ownership

The successful implementation of the HIV AIDS response in Rwanda continues to rely heavily on the diminishing support of Rwanda's development partners despite the steady increase of domestic HIV financing. Official donors, local and international Organizations, civic society, and the commercial sector are development partners.

Rwanda prioritizes a commitment to a sustained HIV response. To ensure better lives for Rwandans, the Rwandan government has committed to boosting the budget for the health sector and has prioritized universal access to health care to save lives. Significant investments have been made to bolster the health system, including the

enhancement of a health insurance program, investments in human resources, and investments in infrastructure as a solid foundation for all health initiatives.

Rwanda adopted the resolutions of a 2016 international health finance conference held in Rwanda (WHO, 2016). This conference's primary aim was to mobilize domestic resources through innovative health finance solutions. Rwanda has implemented many community health interventions and prioritized the delivery of integrated health services as one of the methods to safeguard the sustainability of the health system

1.4.2. Equity and human rights

The significant progress Rwanda has made in managing the HIV pandemic over the past several decades, stigma and discrimination related to the epidemic persist. Although great steps have been made to ensure that all individuals have geographic and financial access to health and HIV care, some groups of Inject drug users (IDU) and Transgenders (TGs) still face challenges to getting adequate and customized services.

Concerning the participation of PLHIV in the planning and management of the HIV program, the Rwandan network of PLHIV (RRP+) and Civil society groups in HIV response play a crucial role in lobbying and representation in all HIV response decision-making bodies. They are also involved in interventions for the economic empowerment of PLHIV (via the development and strengthening of cooperatives) and in combating HIV-related stigma and prejudice. The National HIV Program and Civil Society Organizations will continue to play a prominent and active role at the national and decentralized levels in the implementation of initiatives aimed at empowering people living with, at risk for, and affected by HIV to know their rights and to access justice and legal services to prevent and challenge human rights violations.

1.4.3. Gender equity

Considering the findings of the 2013 gender evaluation of Rwanda's national HIV response, the promotion of gender equality remains a top HIV response objective. Girls and women are especially vulnerable to HIV due to multiple factors, including, but not limited to, the following: 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.

Providing SGBV victims with access to legal services and integrating GBV messaging into existing communication channels is crucial. For survivors to receive comprehensive care, efforts will be made to strengthen connections and referral networks between the community, police authorities, and health providers. Each health facility will include SGBV services in its present health services and strengthen its one-

stop facilities. At the community level, special legal, psychological, and care packages are provided to the most vulnerable populations, such as children, young women, and those who face SGBV.

1.4.4. Integrated management of HIV and other related diseases

As HIV gradually becomes a chronic disease, it must be better integrated into the general system of healthcare provision to achieve programmatic efficiencies, particularly health programs with strong links to HIV interventions, such as sexual and reproductive health, nutrition, TB, mental healthcare, and screening and management for noncommunicable diseases such as hypertension, diabetes, and cervical cancer. In addition to the historical integration of Nutrition, Family planning, and Sexual and Reproductive Health, Rwanda is implementing innovative new approaches.

Integration of mental health and HIV is a recognized method for enhancing the quality of care for clients with HIV and mental health issues. By PLHIV mental health screening, all recipients of care with mental health issues will be treated and supported. In addition, provider-initiated testing (PIT) and HIV-specific preventive education will be offered to them. Moreover, HIV preventive strategies for individuals with mental problems will be implemented.

Given that HIV is associated with other co- infections, chronic diseases and comorbidities, a multidisciplinary approach is necessary to build patient-centered care. A first element of integration relates to the palliative care program that is necessary for end-of-life patient assistance when required. Clients receive palliative care either at a health facility or the community, depending on the patient's condition and national guidelines. A second aspect of integration is the incorporation of cervical cancer screening within the routine opportunistic infections (OIs) screening for PLHIV. This screening procedure is included in the standard training and continuing education programs for healthcare professionals.

Hepatitis B and C are crucial components of services integration. According to national viral hepatitis guidelines, screening for HBV and Hepatitis C virus (HCV) among pregnant women is conducted during antenatal care and at delivery regardless of previous Hepatitis B vaccination or negative tests. Vaccination against Hepatitis B virus is suggested for pregnant women who screen negative for the infection. Moreover, women who test positive for Hepatitis B or C are counseled and referred for care and treatment.

Awareness, sensitization, mass screening, and vaccination campaigns are the most effective approaches to lower the burden of HBV and HCV in the general population. Radio and television broadcasts were used to increase public awareness.

Regional integration of the HIV response.

Under East African Community (EAC), member countries established HIV and AIDS working mechanisms through National AIDS Control programs and the Ministries of Health of the EAC member states to achieve regional HIV/AIDS response. Through this collaboration, the citizens from this regional will have access to more socio-economic opportunities across countries, leading to higher mobility. Therefore, it is becoming relevant to establish harmonized protocols and guidelines for HIV prevention and care interventions in all member states of the region. Regular regional coordination meetings take place between the health sector and HIV decision makers to develop regional reference documents to allow standardization of prevention and treatment protocols.

1.4.5. Costed and evidence-based response.

The planning process of this NSP has been based on existing evidence, both at national and international levels, to assess progress made in the national HIV response and to select the best strategies for achieving national and global targets. The national M&E system has been central to obtaining up-to-date data through routine monitoring, surveillance and surveys, and research. One area of improvement in our M&E system during the coming period will be to strengthen the evaluation component of the system to gather data that will allow us to better assess the degree to which impact results are being achieved in terms of reducing new HIV infections and HIV-related deaths. Special emphasis will be placed on improving the quality of services, by adopting to individual level data monitoring than aggregated data. This will be achieved through the strengthening of the integrated supervision approach that will identify areas of weakness within our interventions and the associated mentoring systems designed to address and correct these weaknesses. Finally, one of the most important trends that is considered in the strategic planning process is the declining trend of external funding for the HIV response. This new NSP maintains ambitious national targets for the reduction of new HIV infections and of HIV related deaths while considering prioritizing the most cost-effective interventions. Another strategy adopted to maximize cost efficiency of HIV interventions is to increasingly integrate program implementation and promotion of civil society and private sector engagement to maximize efficiency and program ownership.

1.4.6. Capacity Building

Continued priority is given to the recruitment and training of healthcare providers including specialized medical doctors and nurses to improve the quality of services provided, meet the increasing demand for high quality health services, and the efficiency of interventions. Currently, healthcare providers receive continuing supportive supervision and coaching/mentoring to help them improve task shifting and patient management for those requiring ART treatments. Capacity building will also be extended to community health workers and peer supporters to improve the community -based interventions for comprehensive HIV management.

2. GOAL 1: REDUCING NEW HIV INFECTIONS BY 15% IN 2027

In the last two decades, the number of annual new infections has decreased by 87 percent. Further, UNAIDS EPP spectrum estimates that new infections have decreased from 7,500 in 2018 to 3,400 in 2023. Despite this tremendous achievement, new infections remain disproportionately high among adolescents and young females.

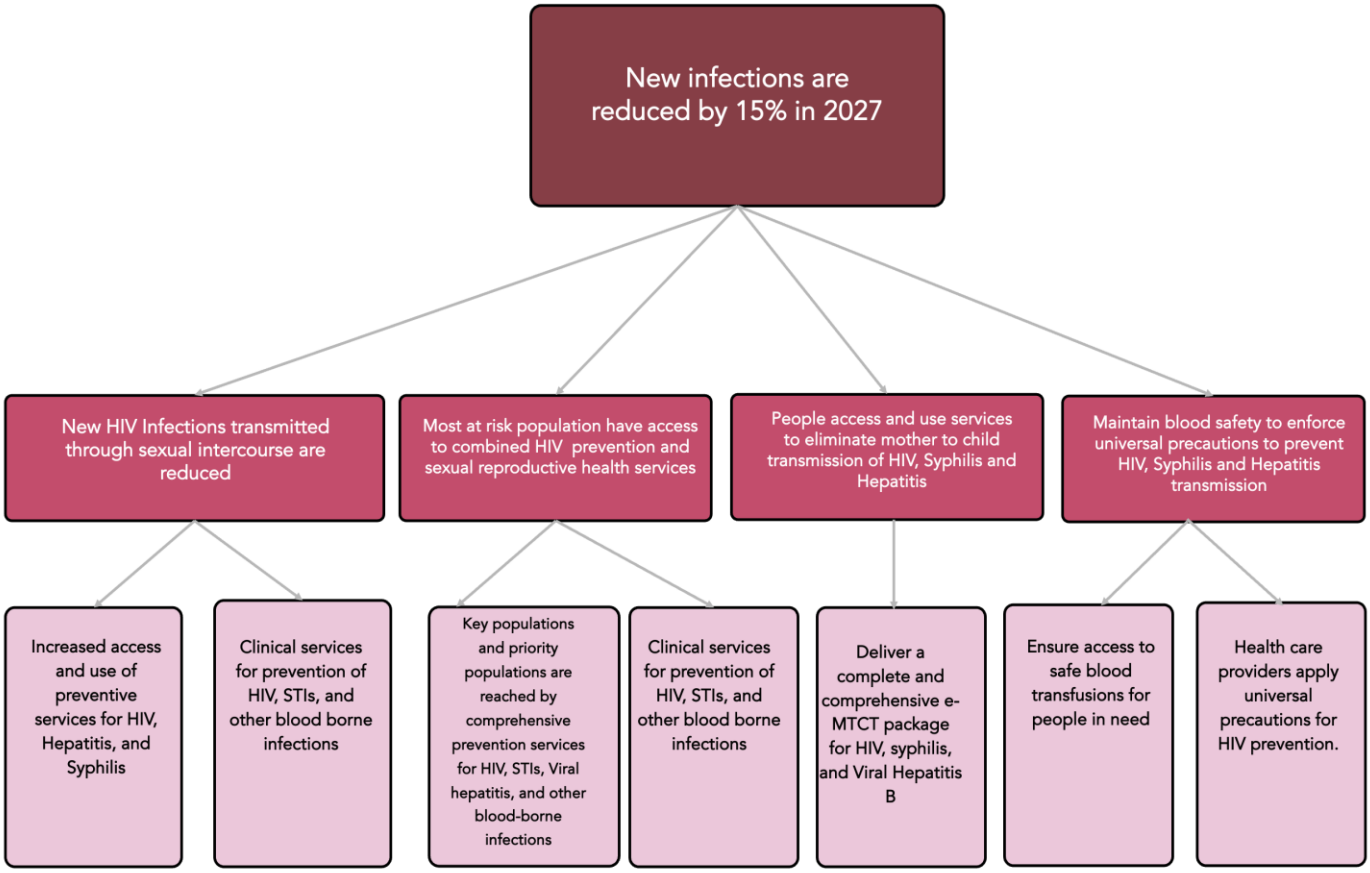
Different strategies were put in place to identify undiagnosed people living with HIV and link them to treatment. As a result, the proportion of people living with HIV with known HIV status (UNAIDS first 95% treatment cascade target) has increased from 83.8% in 2018 to 94.3% in 2023.

Therefore, this NSP aims to keep reducing the number of new infections, and to effectively diagnose people living with HIV with unknown HIV status and linking them to care and treatment. To achieve these targets, prevention interventions will focus on key drivers of new HIV infections in Rwanda, contributing to the four outcomes below:

1. *New HIV infections transmitted through sexual intercourse are reduced.*
2. *Most at-risk populations have access to combination HIV and Sexual Reproductive Health prevention services.*
3. *People access and use services to eliminate mother to child transmission of HIV, Syphilis and Hepatitis*
4. *Maintain blood safety to enforce universal precautions for HIV, Hepatitis, and Syphilis*

2.1. Logical Framework

Figure 4: Logical Framework on how to reduce new HIV infections by 15% in 2027.



Best practices and lessons learned in the last decade.

- Importance of political engagement in the HIV response
- Availability of financial support from both the Government of Rwanda and different partners
- Regular revision of guidelines to integrate the latest evidence-based programs recommended by WHO and /or other research finding
- Elaboration of EMTCT strategic and implementation plans
- Improved quality of services through clinical mentorship in HIV prevention
- Implementation of HIV prevention activities at community level
- Scaled up and integrated of recency testing into routine HTS.
- Scaled up HIV self-testing strategies to reach a hard-to-reach population.
- Scaled up Case Based Surveillance (CBS) and Partner Notification Services (PNS)
- Implement and monitor the referral system to improve linkage between HIV testing & treatment services.
- Initiated e-learning training and tele-mentorship program.
- Reinforce monitoring and evaluation of HIV services in communities by leveraging specific tools.
- Revise and update the distribution plan for condoms and set M&E strategies.
- Initiated free condom kiosk distribution points in selected hot spots.
- Available tools for specific groups (IEC tools adapted to key populations, M&E tools for FSW, and MSM and tools for sero-discordant couples)
- Initiated oral Pre-exposure prophylaxis provision to all eligible clients.
- Integrate youth-friendly services into existing services provided at health facilities and reinforce linkages between youth-friendly centers and health facilities.
- Implementation of EMTCT strategies that focus on all four prongs.
- Public-private partnership to scale PMTCT services in private and new public health facilities
- Integrate viral hepatitis prevention into HIV prevention programs by vaccinating and screening high risk groups.
- Initiation of device based male circumcision.
- VMMC Adverse events (AEs) management and monitoring
    - Establish and implementation of national HIV rapid testing algorithm, tools and continuous quality improvement strategies for provision and quality assurance of HIV testing services at all sites.
- - Establish and provision of early infant diagnosis (EID) among HIV exposed infants at near or point of care testing platforms and related systems for same day return of test results

Innovations to improve HIV Prevention program.

- Establish support group of different categories of key populations through peer education approach.
- Establish enhanced follow-up (HIV testing and linkage to care and treatment) of children born to FSWs, teen mothers and hidden KP group.
- Organize mass campaigns targeting key population groups and youth particularly AGYW to increase their HIV knowledge and HIV services utilization.
- Initiate Social Network Testing Strategies (SNS) to reach Key populations.
- Scale up PrEP provision across all Health Facilities
- Increase availability of HIV self-testing kits at community level targeting hard to reach population.
- Monitoring and evaluation of HIV prevention and sexual reproductive health activities in the community- Community Led Monitoring (CLM)
- Linkage to HIV prevention services among HIV negative individuals, focusing on Adolescent Girls and Young Women (AGYW)
- Integrate HIV and SRH services delivery to AGYW at health facility and community level.
- Strengthen VMMC friendly services provision for older men.
- Scale up of Early Infant Male Circumcision and use of MMC devices.
- Integration of PMTCT and Family Planning services delivery to FSW and AGYW
- Initiate the use of Long-acting PrEP among high-risk groups.
- Integration of HIV testing in postpartum service delivery
- Integration of Point of Care HIV testing and EID in vaccination program among children at risk
- - Develop and adopt triple HIV/HBV/Syphilis testing strategy for ANC settings and STIs clinics

2.2. Outcome 1: New HIV infections transmitted through sexual intercourse are reduced.

To reduce new HIV infections transmitted through sexual intercourse, combined HIV prevention interventions will target groups at high risk of HIV new infections including key populations (FSW, MSM, and transgenders), sero-discordant couples, and youth, particularly AGYW.

The outcome will be achieved through the following outputs:

2.2.1. Output 1: Increased access and use of preventive services for HIV, Hepatitis, and Syphilis.

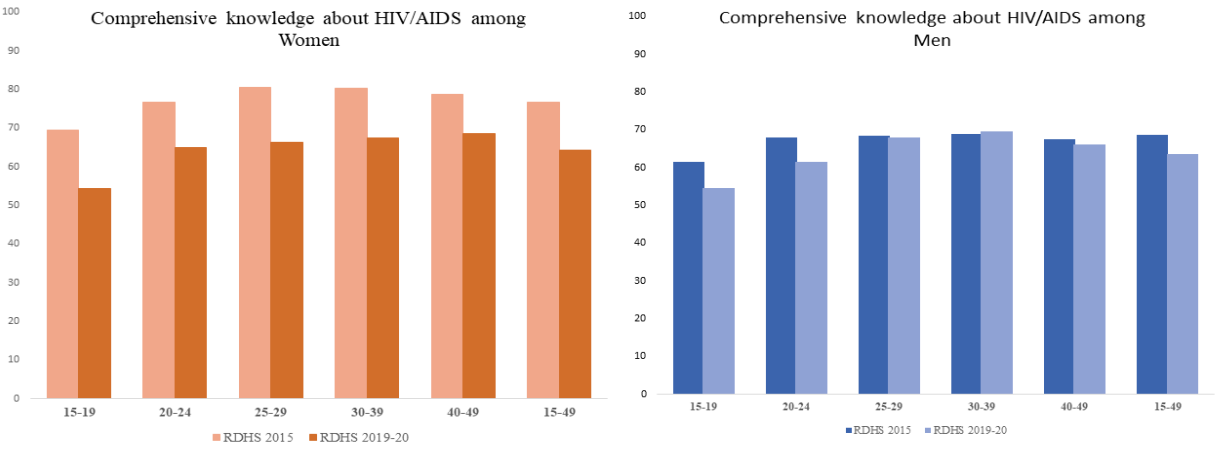
Comprehensive knowledge about HIV is seen as pivotal in combating the epidemic. The comprehensive knowledge includes knowledge about the major modes of transmission of HIV and STI, methods for HIV and STI prevention, and the existence of key services and a combination of HIV prevention interventions to help them remain HIV-negative. The latter include community events and national sensitization campaigns using

different communication channels, such as mass media campaigns and sensitization campaigns in the workplace. Furthermore, having adequate, comprehensive HIV knowledge has been shown to enhance the ability to negotiate for safer sex, thereby contributing to reducing the risk of contracting HIV.

Similarly, evidence indicates that consistent condom use is an effective and enduring method for preventing HIV, STIs, and unintended pregnancies.

Results of the RDHS 2019-20 showed a decline in comprehensive knowledge compared to 2014-15 and low comprehensive knowledge among youth.

Figure 5: HIV comprehensive knowledge (Source DHS 2019-20)



Further, the RDHS 2019-20 shows that the proportion of young women who used a condom during their last sex with a non-marital, non-cohabiting partner in urban and rural areas was 57% and 41%, respectively. The same study reveals that 5% of women aged 15-19 have begun childbearing.

To fill the gap in comprehensive knowledge about HIV and risky behavior, the national HIV program will foster the best practices from the previous NSP, which include:

- **Increase community awareness** by involving local authorities, civil society, and community health workers to increase awareness on safe sexual behavior for HIV, STI, and viral hepatitis prevention. The community sensitization will also include information, education, communication, and counseling against gender-based violence (GBV), family planning, and HIV prevention services.
- **Small- and large-scale HIV prevention campaigns through behavior change communication**, aiming to reduce stigma and discrimination against key populations and stigma around the use of HIV prevention services, to mention a few (HIV testing, PrEP, VMMC, lubricants and condom use).

- **Provide people centered awareness at workplace:**

In Rwanda, both the public and private sectors are implementing the workplace program. The private sector intervenes in private company workplaces, including agriculture, commerce, financial institutions, liberal professionals, tourism, arts and crafts, women entrepreneurs, young entrepreneurs, and ICT private institutions. Meanwhile, the public sector (MIFOTRA) intervenes in ministries, district offices, and other public institutions.

The Private Sector Federation (PSF), and other umbrellas working in HIV response will coordinate the primary interventions in this NSP, including social marketing and distribution of condoms in public areas like hotels, lodges, restaurants, and bars, as well as in the workplace and through peer education at community levels.

- **Provide tailored HIV prevention services in and out of school**

School-based sexual health and HIV, STI, and viral hepatitis education will reach adolescents and young adults in school, whereas anti-AIDS Clubs will reach youth outside of school. Although sensitization activities will target the entire youth population, the majority of HIV prevention interventions will target the most vulnerable youth, including those who are not in school.

Key interventions include:

  - Support of sexual and reproductive health and HIV prevention in schools through small scale campaigns
  - Provide a complete package of prevention education among youth outside schools through peer education, including information on sexual and reproductive health (SRH), HIV and STI, GBV, life skills, and referral for HIV, STI, and hepatitis testing.
  - Improve services for GBV survivors and PMTCT for women aged 15-24 years.
  - Target adolescent boys and young men through HIV comprehensive packages, especially VMMC services.

- **Enhance interventions for people with disabilities**

There is no conclusive and enough data at national level showing that HIV prevalence in people with disabilities is higher than in the general population in Rwanda. However, people living with disabilities remain among the vulnerable target population, and this NSP will ensure the increase in access to comprehensive and inclusive HIV services delivery.

Key interventions for people with disabilities will focus on:

- Map and characterize their specific needs and design appropriate interventions.
- Development of appropriate IEC materials customized for each specific category.
- Sensitization will be intended to reduce stigma and discrimination in the community through peer education.
- Organization of training with healthcare providers to ensure disability friendly service delivery.

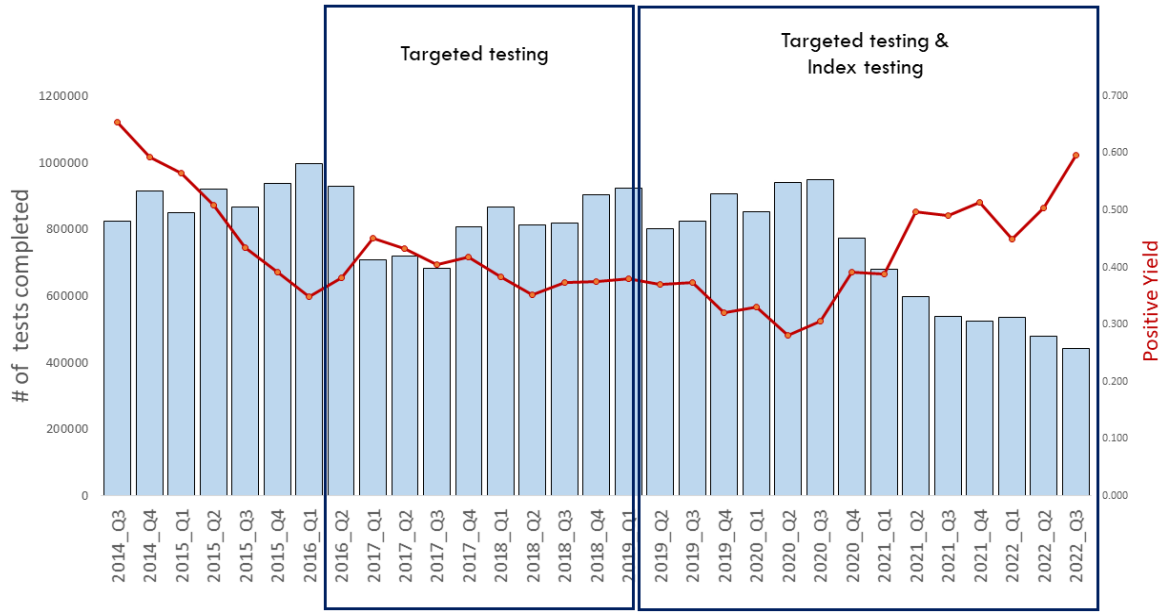
2.2.2. Output 2: Clinical services for prevention of HIV, STIs, and other blood borne infections.

Prevention of HIV is the cornerstone of the HIV national response to reduce HIV incidence and ensure that people living with HIV are early diagnosed. The government of Rwanda and its partners have implemented innovative approaches and new strategies toward ending the AIDS epidemic by 2030 as part of the Sustainable Development Goals (SDGs).

The package of prevention interventions offered in Rwanda includes: optimized HIV testing services (HTS), HIV active case-finding strategies through index testing and partner notification services, HIV recency testing, social network testing strategies, prevention of mother to child transmission (PMTCT), follow up of discordant couples, provision of pre and post exposure prophylaxis (PrEP and PEP) to most at risk populations, voluntary medical male circumcision (VMMC), condom programming and distribution, and key and priority populations tailored services.

In 2018, index testing was introduced in Rwanda; it has proven its efficacy in actively diagnosing PLHIV who aren't aware of their status. In a few years, it has been proven feasible, and it has increased positivity yield by 10 times, according to Remera et al. (2021), compared to any other testing modalities that were in place; therefore, it should be reinforced to identify new pockets of recent infections.

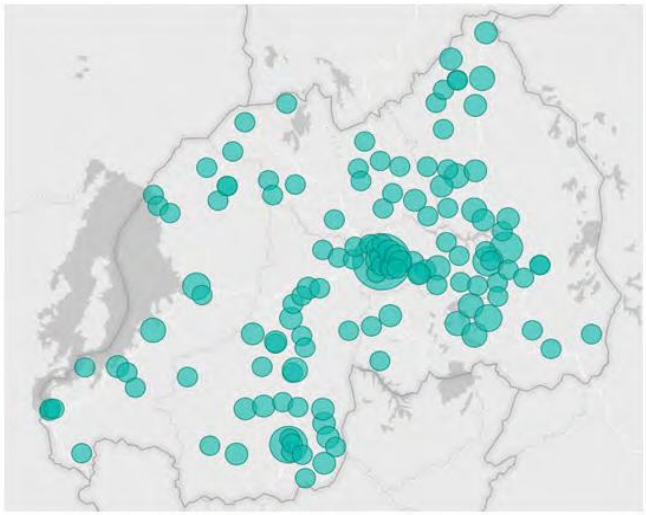
Figure 6: Trend of HIV tests done per quarter and HIV-positive yield

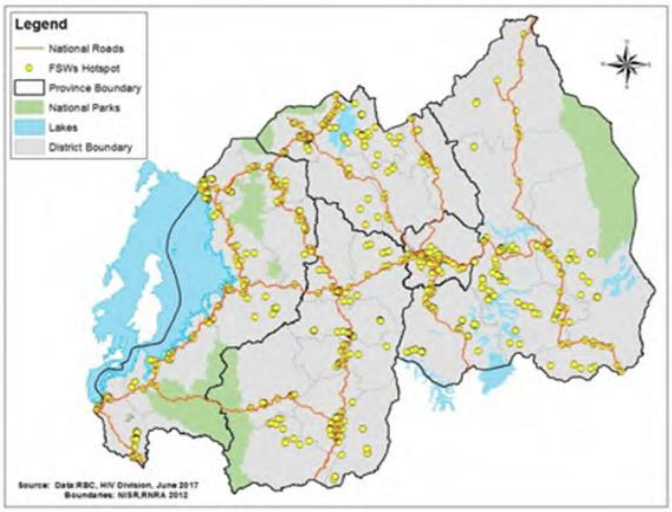


HIV Recency testing

Since 2019, the national program has initiated the HIV recency test to enable the establishment of a surveillance system to quickly detect, monitor, characterize, and intervene on recent infections among newly diagnosed HIV cases. Data collected from a recent infection surveillance system can be used to fine-tune a country's programmatic response through prioritized programming and resource allocation and to identify hotspots of recent infections. Map 2 shows that recent infection cases were identified more concentrated in the city of Kigali, the eastern, and the southern provinces following the main cross-country roads.

Figure 7: Distribution of HIV recent cases (Left) and hotspots areas (Right) across the country (source HIV recency 2019-2021)





Male circumcision

Male circumcision has been proven to reduce new infections by 60% among men (UNAIDS, Male Circumcision and HIV: The Here and Now, 2007). In the last decade, male circumcision increased from 13% in 2010 to 56% in 2019-20, with a decreasing trend by age, varying from 73% among young males aged 15-24 years to 22% among those aged 50-54 years (DHS 2019).

Prevention for Sexually Transmitted Infections (STIs)

With targeted STI screening, the program introduced a path to efficient testing with a noticeable yield increase. However, there are still huge gaps between screening results and the initiation of treatment. STIs management may necessitate special attention to the following:

- Improving STIs diagnostic accuracy and treatment capacity begins with the four curable STIs (Syphilis, Gonorrhea, Trichomonas, and Chlamydia).

- The establishment of subsequent STI surveillance systems with solid data management for the four curable STIs

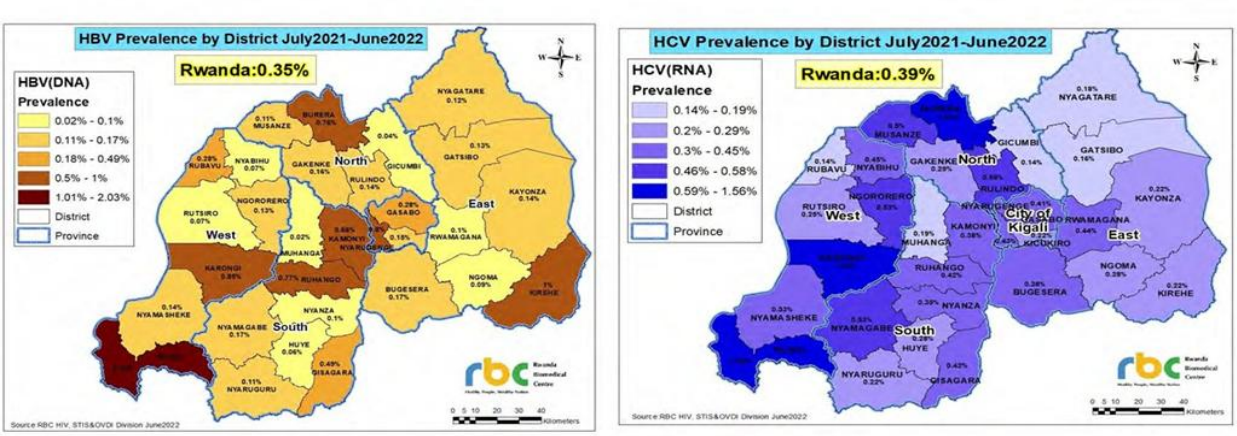
Viral Hepatitis prevention

The World Health Organization (WHO) estimates that viral hepatitis B and C are responsible for 1.1 million deaths and 3.0 million new infections yearly. Nearly 3,000 people die from hepatitis B and C every day, meaning almost one person passes every 29 seconds (WHO Global Report 2021 on HIV, Hepatitis, and STIs).

The government of Rwanda, building on its experience in rapidly expanding HIV services, has reduced the burden of viral hepatitis and was the first country in the region to launch a national viral hepatitis program by establishing a dedicated hepatitis unit in 2011. Furthermore, Rwanda implemented the first national guidelines in 2013, provided the first hepatitis C treatment in 2015, conducted catch-up HBV vaccination and mass screening in 2017, and launched the Hepatitis C elimination plan in December 2018.

Overall, districts with high HBV prevalence also reported high numbers of HBV. The reports from the national hepatitis program shows that the seroprevalence of viral hepatitis C (HCV) antibodies among adults in the general Rwandan population is estimated to be between 4%-8%. HCV cases are slightly higher in the HIV-infected population (4.7%), prisoners (6.5%), and people 45 years of age and older (15%). The data presented above (although not group specific) show a tremendous decrease in the prevalence of HCV in the general population. In 2018, Rwanda's MOH aimed to reduce the prevalence of HCV from 4.0% to 1.2% and achieve 90% treatment coverage for all people aged 15 years old and above, by 2024.

Figure 8: HBV and HCV prevalence by District July 2021 to June 2022



2.3. Outcome 2: Most at risk populations have access to combined HIV and sexual reproductive health prevention services.

The focus of prevention interventions is on priority groups identified; SDC, FSW and their clients, vulnerable youth (particularly adolescent girls and young women aged 15-24) and MSM. Each of these groups has a minimum package of services addressing their needs. Some interventions are common to all, while others are specific to certain groups.

2.3.1. Output 1: Key populations and priority populations are reached by comprehensive prevention services for HIV, STIs, Viral hepatitis, and other blood-borne infections.

Globally, new HIV infections have declined by 52% since 1997. Despite that decrease, key populations, and other high-risk groups, such as sex workers and their clients, men who have sex with men and gay men, people who inject drugs, transgender people, and their immediate partners, are still contributing up to 62% of all new infections in adults (UNAIDS 2020 Estimates).

Globally, 46% of all new HIV infections were among women and girls (all ages) in 2022. In sub-Saharan Africa, women, and girls (all ages) accounted for 63% of all new HIV infections. Every week, 4000 adolescent girls and young women aged 15–24 years become infected with HIV globally in 2022. 3100 of these infections occurred in sub-Saharan Africa (UNAIDS Fact Sheet, 2023).

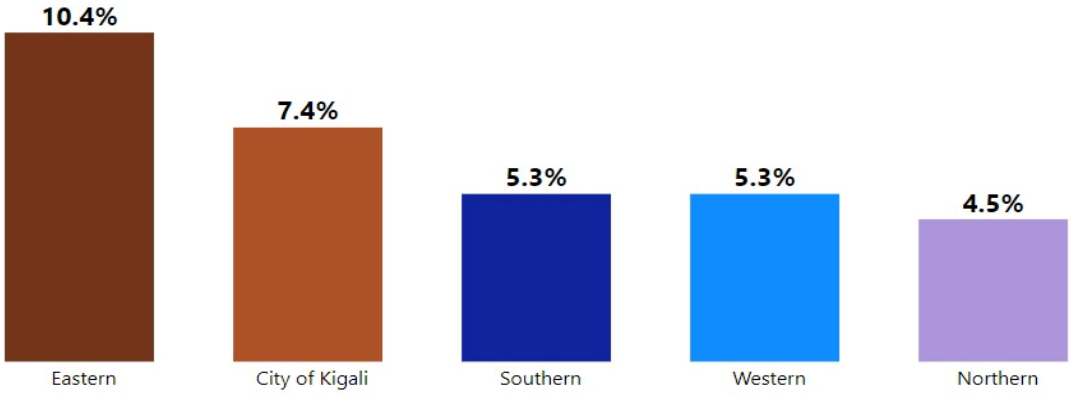
In Rwanda, key populations include female sex workers, men having sex with men (MSM) transgenders. Priority populations include adolescent girls and young women (AGYW), people with disabilities, fishermen, people in prisons and detention centers, truck drivers and high-risk groups including people who inject drugs. The national HIV program in collaboration with its partners and stakeholders will keep the regular surveillance to map and identify the needs of each population category to inform tailored interventions.

Key populations bear a disproportionate burden of HIV, with a prevalence of 35.5% among female sex workers and 6.5% among men who have sex with men (MSM), as well as 35% new infections among adolescents, with a high prevalence of HIV in Western Province (44.1%) and a lower prevalence in Southern Province (26.6%). Consistent condom use with sexually paying and non-paying partners was reported at a low rate of 55.0% and 36.0% among female sex workers, respectively. Similarly, 57.4% of MSM self-reported having consistently used a condom every time they had sex in the last 30 days prior to the survey.

Further, the last MSM survey showed that about 43% of MSM reported ever having sex with a woman, and 27.9% reported having ever been paid money, goods, or services for sex, only. The Population size estimates conducted by the Rwanda Biomedical Centre estimate 37,647 (95% CS [31,873–43,354]) female sex workers and about 18,100 men having sex with men in Rwanda in 2022 and 2021, respectively. Female sex workers' hotspots are concentrated around main roads and urban areas and close to truck drivers' stopovers.

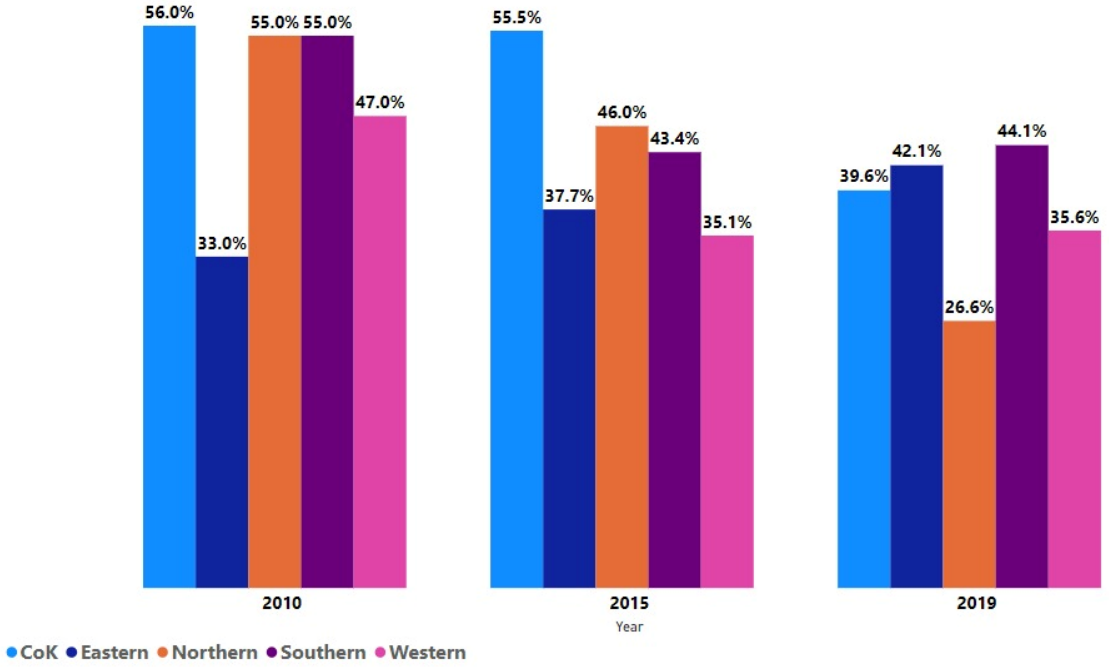
Furthermore, the IBBS conducted in 2019 and 2021, reported that 73.8% and 43.4% of female sex workers and men having sex with men living with HIV are aware of their HIV status, respectively.

Figure 9: HIV Prevalence among MSM in Rwanda (Source: IBBS among MSM 2021)



The trend of HIV prevalence among FSW shows a decrease from 51% in 2010 to 35.5% in 2019. The decrease was seen mainly in 2015 in the city of Kigali and the southern province as a result of the implementation of facility based key population HIV prevention programs. Contrarily, HIV prevalence among FSW increased by 9% from 2010 (33%) to 2019 (42%), in the eastern province. The prevalence remains substantially higher among Men who have sex with men. The overall prevalence is reported at 6.5%. The highest numbers are reported in the Eastern province, while lower numbers are seen in the Northern province.

Figure 10: Trend of HIV prevalence among Female sex workers, 2010, 2015, and 2020 (Source IBBS)



Comprehensive HIV prevention package for key populations

The comprehensive HIV prevention services to key and priority populations include condom distribution (in all public health facilities and condom kiosks, as well as social marketing through partners), peer education for behavior change, and preexposure prophylaxis for those with confirmed HIV negative status who report any history of sexually transmitted infections in the last 12 months, poor adherence to condoms, and monitor their liver enzymes and kidney function(for those on PrEP).

Comprehensive HIV prevention package services for adolescent girls and young women (AGYW):

Adolescent girls and young women (AGYW) are among the priority populations that need access to HIV prevention. Services are delivered through community and health facilities, focusing on the availability, accessibility, appropriateness, affordability, acceptability, and use of quality comprehensive HIV prevention, sexual reproductive health (SRH), and mental health services.

The services will be provided by health care providers at the facility level and by civil society organizations (CSOs), other professionals in the mental health field, HIV prevention, and sexual and reproductive health at the community level.

The core package will focus on improving knowledge on SRH, reducing HIV acquisition risk behaviors, and providing available prevention packages for high-risk groups. AGYW should be prioritized to access available prevention packages for high-risk groups. AGYW should be prioritized to access other prevention services such as PrEP, PEP, condoms, self-testing, and STI screening and treatment. All services should be offered in a non-discriminatory, non-judgmental, and friendly environment.

2.3.2. Output 2: SRH services delivery among youth and AGYW at the community and health facility level, including gender responsiveness, are integrated.

In Eastern and Southern Africa (ESA), AGYW 15-24 account for 68% and are twice as likely as their male peers to acquire HIV infection, which accounts for 26% of new HIV infections in the region, The adolescent birth rate in ESA doubles the global birth rate in the same age range, accounting for 92 births/1000 girls. (UNICEF, 2021), Youth and AGYW vulnerability has been linked to biological, behavioral, social, and structural factors, including sexual and gender-based violence (SGBV), early sexual debut, early marriage and childbearing, limited availability of and accessibility to sexual and reproductive health (SRH), HIV prevention services, some harmful discriminatory gender norms, and exclusion from economic and educational opportunities, which are affecting their health in general and mental health in particular

There is a need to strengthen routine HIV/AIDS prevention, sexual reproductive health (SRH), and mental health services for effectiveness in reaching this sub-population including youth, at a single entity level; and the integration of services as a novel approach targeting youth and AGYW. An evidence-based and comprehensive HIV prevention program is necessary to prevent new infections for an acquired immune deficiency syndrome (AIDS) free generation, as well as unwanted/unintended pregnancies, anxiety, and depression rates. The UNAIDS Model EPP spectrum estimates that from 2018 to 2022, new HIV infections declined by 34% (from 4927 to 3229). The new infection pyramid shows a disproportionate distribution of new infections across age categories and gender, with a high number of new infections among young females.

The minimum package of services for AGYW sheds light on a national synopsis of the situation regarding HIV/AIDS prevention, strengthening sexual reproductive health (SRH), mental health conditions (Anxiety, depression), and linkage services, which is the face of an increased vulnerability to HIV acquisition.

A combination of interventions will be delivered, including information about and access to condoms, Pre-Exposure Prophylaxis (PrEP), sexual and reproductive health services, GBV prevention and care, and economic empowerment activities, engaging the parents of the AGYW enrolled in the program by giving them access to positive parenting programs.

- *Recognizing the structural drivers of risk for HIV infection through a holistic, multi-sectoral strategy*
- *Convenient, adolescent-friendly service delivery*
- *Integrating family planning and HIV prevention*
- *Provision and promotion of condoms*
- *Provision of Pre-Exposure Prophylaxis (PrEP)*

Furthermore, community engagement and participation have been critical in creating an environment that supports and protects the sexual and reproductive rights of youth and AGYW. Community leaders, religious institutions, and grassroots organizations have actively promoted a culture of acceptance, understanding, and non-judgment to reduce the stigma and discrimination associated with HIV and unintended pregnancies. This approach will create safe spaces for young people to seek information, advice, and support without fear of being judged or rejected.

2.4. Outcome 3: People access and use services to eliminate mother to child transmission of HIV, Syphilis and Hepatitis

The triple elimination program has been implemented through health-care facility interventions. More emphasis will be placed on availability of commodities, enhanced monitoring community engagement, which will range from greater service utilization

to enhanced adherence of those enrolled in the program to follow-up visits. A sustainable linkage between facilities and the community will be established and correctly monitored.

2.4.1. Output 1: Deliver a complete and comprehensive e-MTCT package for HIV, syphilis, and Viral Hepatitis B.

As a public Health priority, Rwanda has pledged the *'Triple Elimination of Mother to Child Transmission of HIV, Syphilis, and Hepatitis B* **(Triple-EMTCT).** The Triple PMTCT program will promote a cohesive strategy to improve mother and child outcomes.

The government of Rwanda has made a lot of progress in eliminating mother to child HIV transmission. The 2019- 20 RDHS showed that 98% of pregnant women receive antenatal care from a skilled provider, more than 95% of HIV infected mothers receive ART to reduce the risk of vertical transmission, and 93% of mothers delivered in the health facility. The health facility-based mother to child HIV transmission rate is estimated to be below 2%, which is significantly lower than the UNAIDS modeled community based MTCT rate of 6%. Different surveys and data triangulations are ongoing to investigate the possible source of the discrepancy between both sources.

The PMTCT package of services includes primary prevention, which includes HIV prevention education, HIV testing for pregnant women in antenatal consultation and at delivery, prevention of unintended pregnancies among infected mothers, initiation of antiretroviral therapy (ART) for HIV-infected mothers, ART prophylaxis for HIV-exposed infants, and post-natal maternal and infant follow-up.

The existing PMTCT package of services and strategies has a high impact on the reduction of mother to child HIV transmission. To improve the health outcome of children born to Female sex workers (FSW) and adolescent girls and young women (AGYW), it is critical to prioritize the integration of PMTCT and Family Planning services and to incorporate HIV testing into postpartum care delivery, which will help streamline healthcare delivery. Finally, the focus will be on improving the healthcare system by leveraging on the existing services delivery to identify undiagnosed children through integrating early infant diagnosis (EID) in vaccination programs among high risk exposed infants.

2.5. Outcome 4: Maintain blood safety to enforce universal precautions for HIV, Hepatitis, and Syphilis

The estimated number of new HIV infections through blood transmission in both clinical and non-clinical settings is very low. In terms of clinical settings, the blood transfusion and quality management system screen all donated blood for most common blood borne infections (HIV, HBV, HCV, syphilis) and universal precautions are generally followed in health facilities. Therefore, the goal of this outcome is to reduce

HIV and other blood borne infections transmitted through blood and ensure all testing processes and procedures for screening are done accurately.

2.5.1. Output 1: Ensure access to safe blood transfusions for people in need

The National Center for Blood Transfusion (RBC/NCBT) is ensuring systematic screening for HIV and other blood borne infections in all donated blood. The improvements targeted are to increase the geographic accessibility of blood transfusion services by strengthening the regional blood transfusion centers and blood banks, increase the financial sustainability of the program by establishing a cost recovery system, improve the quality of services by setting up a Quality Management System (QMS), and strengthen equipment maintenance capabilities.

2.5.2. Output 2: Health care providers apply universal precautions for HIV prevention.

To maintain this high level of application of universal precautions, the main strategy is to provide sufficient equipment to health facilities and healthcare providers, including syringes and safety boxes. Medical waste management will continue to be a focus to ensure sustainable universal precautions. Further, health care providers will continue to provide and receive refresher training on safe injections and waste management.

3. GOAL 2: REDUCE HIV-RELATED DEATHS BY 2027 AND DECREASE HIV MORBIDITY

Rwanda has achieved remarkable strides in its battle against HIV/AIDS, with a substantial 86% reduction in AIDS-related fatalities over the past twenty-five years. As a result, individuals living with HIV and receiving antiretroviral therapy (ART) have experienced a notable boost in their life expectancy, gaining an additional 25.6 years.

Therefore, the current NSP aims to keep reducing AIDs-related deaths and to decrease HIV morbidity. To achieve this target, interventions will focus on key drivers of reducing AIDs-related deaths and to decrease HIV morbidity in Rwanda, contributing to the four outcomes below:

As a result, the present NSP strives to continue guide the decline in AIDS-related deaths and reduce the prevalence of HIV-related illnesses. To accomplish this objective, interventions will prioritize addressing the primary factors that contribute to a decrease in AIDS-related deaths and HIV morbidity in Rwanda. These efforts aim to yield the following four outcomes:

i. *ART coverage and retention in care among all age categories of PLHIV is increased.*
ii. *Viral Load suppression among all PLHIV on ART is maintained above 95%*
iii. *Reduced HIV morbidity and mortality related co-infections among PLHIV.*
iv. *Improved psychosocial wellbeing for optimal and effective retention to ART.*

Using the lessons learnt and best practices from the last NSP (Box 1), the following innovations to improve patients' management and well-being have been proposed, (Box 2).

Best practices

- Universal "*Treat All*" strategy is implemented since 2016.
- Same day/ accelerated ART initiation.
- Provider-initiated testing and counselling
- Improved quality of services through clinical mentorship in HIV care and treatment.
- Strengthened health system (human resources, capacity building, laboratory capacity and supply chain at all levels)
- Availability of medicines (first, second-, and third-line ART, including pediatric formulation)
- Community support of PLHIV
- Differentiated service delivery a client-centered approach that simplified and adapted HIV services across the cascade to better serve individual needs and reduce unnecessary burdens on the health system.
- Improved quality of services through clinical mentorship in HIV care and treatment
- Implementation of peer-education program as a community-based approach to support clients' adherence to treatment
- Implementation of Cyclical Acquired HIV Drug Resistance survey (CADRE)

Innovative strategies to improve patient management

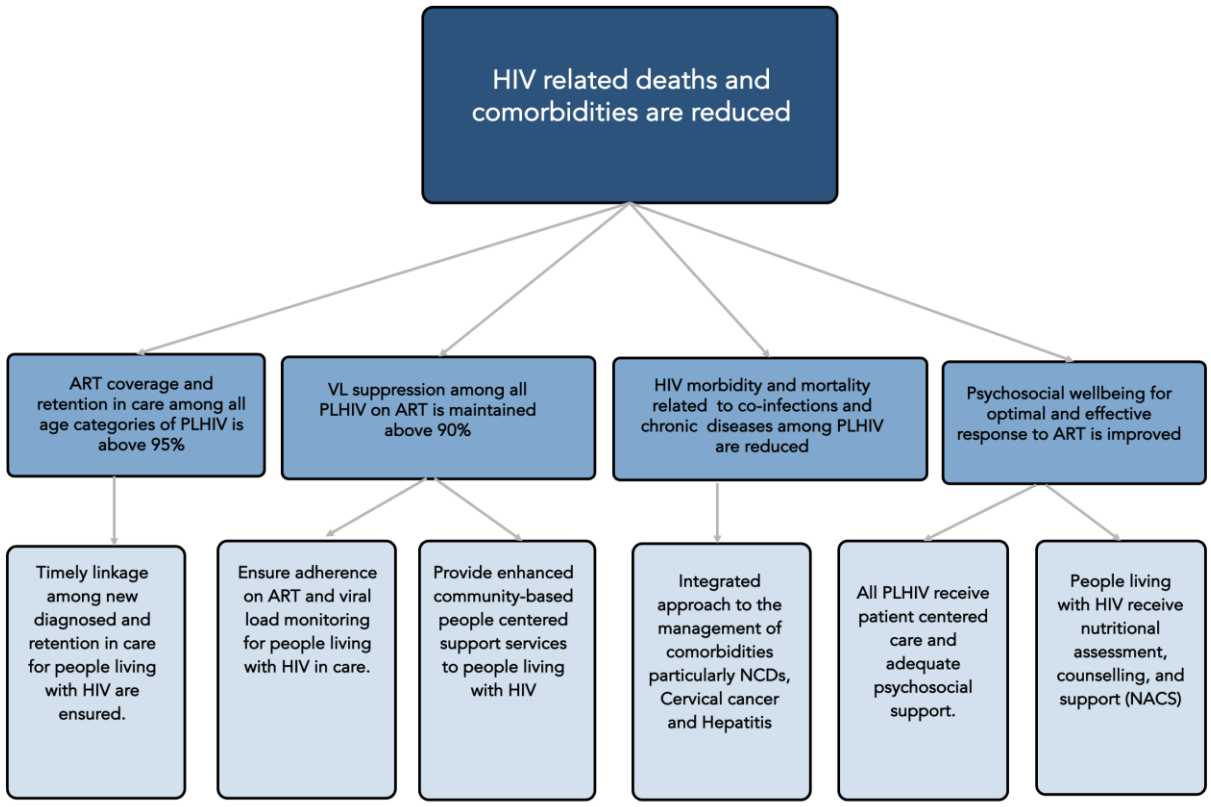
- Address inequities and disparities in access HIV services among children and adolescents by using approaches such as index case testing and identifying missed opportunities to facilitate linkage to care and treatment.
- Promote community-Led monitoring (CLM) through generation of data on HIV prevention and treatment services to empower communities of PLHIV and KP to identify and use their findings for advocacy and breakdown barriers towards high-quality HIV services.
- Enhance laboratory system by adopting the use of latest molecular sequencing techniques to ensure early detection of treatment failure and monitoring of drug resistance and side effects of ART.
- Enhance and scale-up pediatric centers of excellence to support optimal treatment outcomes of CALHIV.
- Maintain the high rate of retention on ART using safe drugs with less side effects and long-acting ART.
- Optimize support for laboratory systems and adopt new techniques and quality assurance of testing for NCDs, AMR, and opportunistic infections to ensure advanced disease management among PLHIV

Table 1: Key Indicators to reduce HIV related deaths and morbidity.

Key Indicators	Baseline		Target		
	Value	Year	2024-2025	2025-2026	2026-2027
ART Coverage	92.3%	Jun 2023	93%	94%	95%
Percent of adults and children retained on treatment 12 months after ART initiation	94.6%	Jul 2021-Jun 2022	95%	95%	95%
Percent of people living with HIV and on ART who are virologically suppressed	98.0%	Jul 2022-Jun 2023	>97%	>97%	>97%
Number of AIDS-related deaths per 100,000 population	21.95	2022	17.85	16.97	16.03

3.1. Logical Framework

Figure 11: Logical framework on how to reduce HIV-related deaths by 2027 and decrease HIV morbidity.



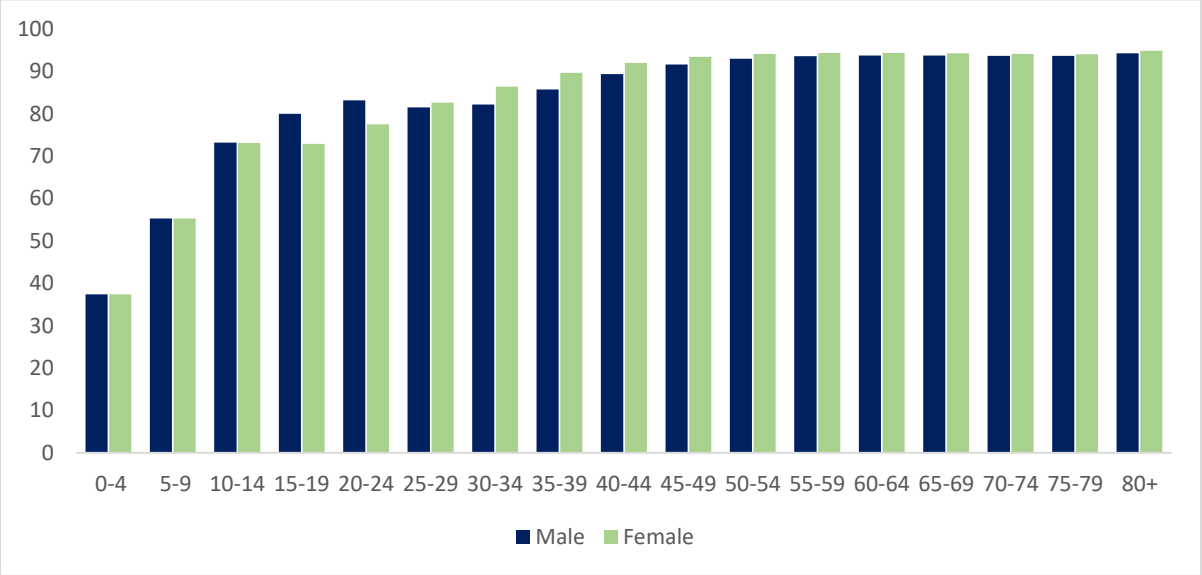
3.2. Outcome 5: ART coverage and retention in care among all age categories of PLHIV is above 95%

3.2.1. Output 5.1. Timely linkage among new diagnosed and retention in care for people living with HIV are ensured.

Since 2016, Rwanda initiated 'Treat All policy, recommending the ART initiation for all people living with HIV regardless of WHO clinical stage and at any CD4 cell count and the immediate initiation of ART to all people living with HIV following a confirmed HIV diagnosis and clinical assessment. Data from routine program suggests that the median time between HIV diagnosis and enrolment is estimated at 4 days.

Antiretroviral Therapy (ART) has been shown to reduce mortality among those infected with HIV, and efforts are being made to make it more affordable within low- and middle-income countries. With the adoption of "test and treat" strategy, all clients who test HIV-positive are linked to care enrolled and initiated on ART, preferably, on the same day (where feasible), regardless of their CD4 count. While 218,255 people living with HIV are recorded to be initiated on ART by end of June 2023, UNAIDS estimates show that ART coverage among PLHIV in Rwanda is at 92.3%. Nevertheless, the ART coverage was disproportionately distributed between adults and children living with HIV.

Figure 12: HIV Treatment coverage by age category



Evidence shows also that early linkage to care and treatment reduces HIV/AIDS-related morbidity and mortality. It effectively prevents further HIV transmission; it optimizes the health benefits of treatment and prevents secondary transmission. To improve the linkage and initiation to ART for all clients newly tested positive, the HIV care and treatment program in Rwanda has strengthened strategies to improve communication between testing entry points and ART services, by ensuring same-day enrolment,

enhanced counselling at enrolment, and mentorship of health care providers. Retention in care is a spectrum of continuum care packages, from diagnosis of HIV infection to lifelong services. Nearly, all public health facilities and private and at the community level, known as health centers, provide comprehensive antiretroviral treatment literacy allowing maximum retention to care. However, the retention after one year of ART initiation to care is lower among children and adolescents compared to adults.

3.3. Outcome 6: Viral load suppression among all PLHIV on ART is maintained above 95%.

3.3.1. Output 6.1: Ensure adherence on ART and viral load monitoring for people living with HIV in care.

The primary purpose of antiretroviral therapy is to keep PLHIV healthier. For most people living with HIV, ART can reduce the amount of HIV in the blood to levels that are undetectable by standard laboratory tests. With the right choice of ART, viral levels will decline over several months to undetectable levels and allow the immune system to begin to recover.

Compared to adults, CALHIV and young adults often have poorer rates of viral suppression and long-term immunologic recovery. They face unique developmental, psychological, and sexual challenges as they are still maturing physically, mentally, and sexually. This is in addition to common contextual challenges encountered by most PLHIV regardless of age; these may include stigma, disclosure difficulties, challenges with adherence, and social-economic hardships among others, all of which prevent attainment of optimal health outcomes.

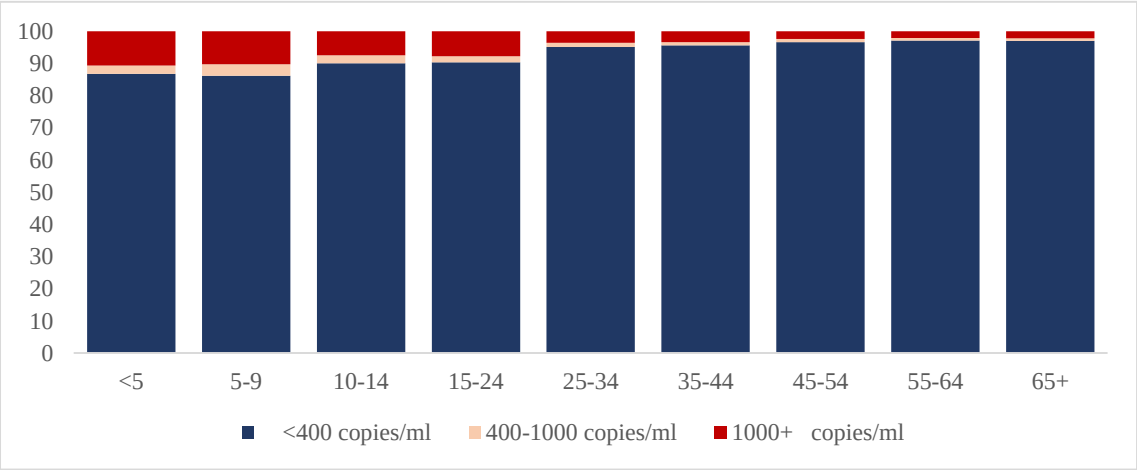
Despite the availability of effective treatment options, studies have shown that suboptimal adherence to treatment can result in insufficient viral suppression and promote the emergence of drug-resistant viral strains, resulting in regimen failure, progression to AIDS, and death. The national data from the routine viral load testing show a low percent of viral load suppression among children and adolescents. This low level of viral load suppression may be attributed to psychosocial barriers to adherence to treatment. For instance, a study conducted by Binagwaho et al, revealed that 14.2% of children (aged between 7 and 14 years) living with HIV on antiretroviral treatment were depressed. Challenges around HIV-status disclosure, financial burden, and parental-child relationships in CALHIV households have been documented to highly contribute to their adherence behavior which in turns dictates their treatment outcome.

A study that was conducted in Rwanda to assess the acquired HIV drug resistance among adults that were on first line antiretroviral therapy revealed that the prevalence of acquired HIV drug resistance (HIVDR) was high among patient failing to re-suppress VL and was associated with NNRTI based regimen at 90.4%. These findings supported

the current WHO guidelines recommending that clients on an NNRTI-based regimen should be switched based on a single viral load test result. However, WHO maintains that national HIV viral load monitoring of patients receiving ART through testing hubs and related laboratory systems strengthening such as viral specimen management system (VLSM), quality management and national specimen referral system has prevented long-term treatment failure that would result in the accumulation thymidine analog mutations (TAMs) and potential loss of efficacy of all NRTI used in second-line ART as the backbone in combination with either Dolutegravir or boosted protein inhibitors(PIs).

As different programs are working toward achieving global targets, the national HIV program will prioritize closing the gaps hindering children and adolescents to achieve the third 95. This will be done through addressing disparities and inequities to access to HIV services faced by children and adolescents, scaling up targeted support groups or age-appropriate clinical visits, youth friendly services and initiation of adolescent models to reinforce adherence, retention in care of CALHIV and most importantly implement tailored strategies addressing disparities in coverage and access to ART among children, adolescents, key population and the rest of people living with HIV recommended by different global alliances and targets to end AIDS are implemented.

Figure 13: Rate of viral load suppression among PLHIV on ART, January - December 2022 (Source: VLSMS)



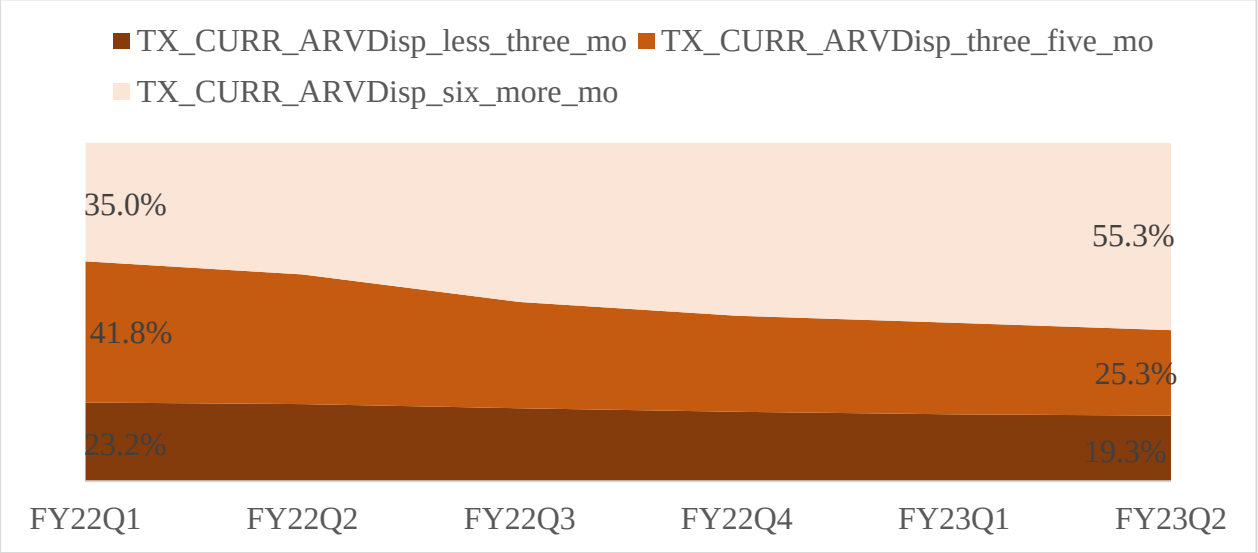
3.3.2. Output 6.2: Provide enhanced community-based people centered support services to people living with HIV.

The HIV affected communities, including key populations, play a crucial role in addressing HIV. They have advocated for their rights, expanded the knowledge on effective strategies against HIV, supported program development and implementation and improved the accessibility and quality of healthcare services. They have also

ensured that involvement of PLHIV is prioritized in HIV programs and that right-based approaches are widely embraced.

The national HIV program adopted peer education program to provide moral and psychological support to promote adherence to treatment and refer clients to a health facility when needed. Reducing number of clinic visits for stable ART clients for healthcare providers to focus on managing clients with complex clinical concerns will remain a key objective in differentiated service delivery models.

Figure 14: Trend of clients in the DSD model (Source: PEPFAR /DATIM 2022-2023)



From an HIV social impact mitigation perspective, the peer education approach has the potential to play a key role in improving referrals and linkages between the community and health facilities. During this NSP a special focus on improving community support through peer education to vulnerable communities of PLHIV will be of a priority and in turn contribute to strengthening the Rwandan healthcare system by improving efficiency and targeted quality services.

3.4. Outcome 7: HIV morbidity and mortality related to co-infections and chronic diseases among PLHIV are reduced

The WHO Health Sector Strategy 2022-2030 aims to eliminate AIDS by 2030, by reducing HIV related co-morbidities including opportunistic infections (OIs), sexually transmitted infections (STIs), viral hepatitis, and non-communicable diseases. To reach this goal, integration of services is paramount.

3.4.1. Output 7.1: Integrated approach to the management of comorbidities particularly NCDs, Cervical cancer and Hepatitis

Prevention, diagnosis, and management of OIs still remains an important strategy for management of HIV based on national recommendations. Early screening and diagnosis to recommend appropriate management of OIs is key to reducing morbidity

and mortality related to OIs. Particular attention will be paid to Cryptococcal Meningitis, Tuberculosis, and other related bacterial infections.

The national guideline recommends TB and cryptococcus screening at ART enrollment and during follow-up for TB and for the client presenting with Advanced HIV disease (CD4<200 copies/mm3). Data from the last 3 years show that about 2.3% of HIV positive clients who enrolled on ART were confirmed TB positive at enrollment. Furthermore, a new intervention, TB preventive therapy (TPT), was initiated and scaled up since 2019 and currently covers all 30 districts countrywide. Cumulatively, 80% of PLHIV on ART have been initiated on TPT as of May 2023. Enrollment on TPT services for remaining PLHIV will continue during ART appointments based on eligibility criteria. Therefore, moving forward there is a need to expand the eligibility criteria to cover the remaining population. The WHO strongly recommends a package of interventions including screening, treatment and/or prophylaxis for major opportunistic infections, rapid ART initiation and intensified adherence support interventions for everyone presenting with advanced HIV disease. Therefore, there is a need to sustain adequate availability of screening and diagnostic tools as well as sufficient commodities and necessary infrastructure to manage PLHIV presenting with OIs.

UNAIDS EPP spectrum model estimates that the proportion of PLHIV aged 50 years and above increased from 23% in 2018 to 30% in 2022. This concurs with current program data indicating that 32.7% of recipients of care (RoC) are 50 and older. Moreover, this proportion will continue to increase up to 35% in 2025 and 46% in 2030. ART reduces the risk of opportunistic infections and increases life expectancy of PLHIV. As of February 2023, 95% of PLHIV were on ART, therefore the sharp increase in aging among PLHIV is thought to be due to high retention in care resulting in better health outcomes. Aging with HIV comes with a disproportionately high risk of developing NCDs, such as diabetes, hypertension, cardiovascular disease, and cervical cancer despite the advancements in HIV care and treatment. The World Health Organization (WHO) estimates that NCDs are responsible for over 70% of global deaths, with low- and middle-income countries (LMIC) enduring the greatest burden.

To address the double burden of diseases amongst PLHIV, there is a rising need to integrate NCD and HIV services because the traditional approach to healthcare delivery which separates infectious and chronic disease services may not be sufficient to address the complex needs of PLHIV. Integration consists of the organization and management of health services so that people receive the care they need, when they need it, in ways that are user-friendly; it is a people-centered continuum of care rather than fragmented services. Therefore, to reduce HIV morbidity and mortality among PLHIV with chronic comorbidities there is an urgent need to provide an integrated approach to the management of comorbidities particularly NCDs, Cervical Cancer and Hepatitis among others. Thus, the current NSP will improve integrated service delivery,

allowing PLHIV to simultaneously access and utilize HIV and its comorbidity management services.

Outcome 8: Psychosocial wellbeing for optimal and effective response to ART is improved

3.4.2. Output 8.1: All PLHIV receive patient centered care and adequate psychosocial support.

Rwanda's HIV/AIDS situation has been described as stabilized over the years. This stability has been achieved through an improved and well-coordinated national response plan that emphasizes comprehensive HIV prevention, treatment, care, and the provision of social support services to clients. The comprehensive approach to HIV treatment in Rwanda has also meant focusing on providing psychosocial support and adherence counseling as important elements in the management of HIV/AIDS and ensuring that people living with the condition cope well.

Currently, most people who test positive for HIV agree to start their ART medication on time. However, the biggest issue remains to be PLHIV adhering to their ART medication in the long run. The major gap is mostly seen among children and adolescents. To promote ART adherence and retention in care among PLHIV a comprehensive psychosocial intervention is needed. Such psychosocial support interventions should promote HIV disclosure and communication, support adherence medication, address feelings of isolation and other emotional-related distress, and the needs associated with emerging sexuality. Studies have shown that interventions such as counselling, cognitive behavior therapy, and peer support have been applied to improve the mental health and overall well-being of people living with HIV with success, supporting the role of psychosocial support interventions in promoting adherence and retention in ART care among people living with HIV.

Psychosocial care and support will be provided through individual psychosocial consultations, as well as reinforcement of HIV disclosure and support groups especially for children and adolescents. To achieve this level of care and support, updating counselling materials and capacity building of healthcare providers through training and mentorship will be an important element for managing complicated cases and ensuring improvement of quality of life for PLHIV. Psychosocial counseling before ART initiation will strengthen same day ART initiation considering readiness.

Peer education will be established to provide moral and psychosocial support to clients, promote adherence to treatment, and refer them to a health facility when needed. This shift has the potential to reduce staff workload and improve quality of care. From a HIV social impact mitigation perspective, the peer education approach will play a key role in improving referrals and linkages between the community and health facilities.

3.4.3. Output 8.2: People living with HIV receive nutritional assessment, counselling, and support (NACS)

In low-resource settings, several studies have demonstrated that clinical undernutrition, which is characterized by a low BMI when starting ART, is a significant and separate indicator of mortality. Although uncontrolled or advanced HIV infections are commonly linked to weight loss and severe wasting, these studies highlight the importance of addressing malnutrition as a critical factor contributing to increased mortality rates. Furthermore, HIV infection is prevalent in geographical regions where non-communicable diseases such as diabetes, cancer and cardiovascular disease, food insecurity and other endemic infections (malaria, TB and diarrheal diseases) are widespread. These overlapping conditions, each with significant nutritional implications, often affect the same individuals. As a result, a comprehensive approach to nutritional evaluation and care is necessary to address the complex needs of clients facing multiple health challenges.

In order to reduce malnutrition among PLHIV, we will integrate and reinforce nutritional assessment, counselling and support (NACS) within HIV and AIDS services, particularly in care and treatment and in PMTCT services in all health facilities. Furthermore, a study will be conducted to assess the effectiveness of nutrition assessment and counselling as standalone interventions and explore various methods of food support including targeting, timing, composition, form, and duration to enhance both short-term and long-term patient retention in care and treatment, as well as improve clinical outcomes.

Nutritional assessment and counselling for all PLHIV to identify their nutritional status and act accordingly: at each health facility visit, clients will be screened for nutrition status according to the national guideline and counselling will be given accordingly.

- A family screening, index identified at HF with malnutrition, will be conducted by health care providers for case identification.
- Nutritional rehabilitation for eligible PLHIV and family members with malnutrition: the criteria for enrolment in nutritional support for PLHIV and family members are defined in the national guidelines of care and nutritional support, and all identified PLHIV eligible for support receive a defined package as per national recommendations.
- This NSP will put emphasis on training and mentorship for health care providers, community health workers, and peer educators, as well as ensuring availability of nutrition support as recommended.
- Capacity building on good nutritional practices: evidence shows that poor feeding practices are linked to malnutrition among PLHIV and affected by HIV. Efforts will focus on enhancing knowledge and skills on good nutritional practices through education and sensitization.

- This NSP will strengthen coordination and alignment with other health programmes, enhance the mainstreaming of nutritional support, and target those with the highest need based on biometric and demographic measurements.

4. GOAL 3: PEOPLE INFECTED AND AFFECTED BY HIV HAVE THE SAME OPPORTUNITIES AS THE GENERAL POPULATION

4.1. Logical Framework

Figure 15: Logical Framework showing how people infected and affected by HIV have the same opportunities as the general population.

4.2. Outcome 9: Socioeconomic status for infected and affected people living with HIV is improved.

Best practice:

- Transitioning support from orphans and vulnerable children (OVC) to most vulnerable children (MVC) to ensure most effective coverage and sustainability.
- Significant progress achieved in providing socio-economic support services to PLHIV and HIV-affected people.
- Significant progress during the implementation of the previous NSP in providing legal support services to infected and affected populations; local authorities are more involved in community-led activities to reduce stigma and discrimination and promote the human rights of PLHIV.
- HIV-related stigma and discrimination has significantly reduced over the past years.

- Significant progress in increasing the availability of services for all victims of SGBV at the community level, functional referral systems with the police and community-based organizations for SGBV survivors. One of the biggest successes was the creation of one-stop centers across the country that provide comprehensive services to survivors

New strategies:

- Ensure stability and economic resilience for PLHIV, most vulnerable children and their families to sustain the response.
- Advocate for funds to cover all eligible MVC and OVC and their families needs.
- Promote capacity building and raise awareness on HIV and SRH rights among the general population, health care providers and Recipient of Care
- Develop culturally sensitive approaches that recognize and respect cultural and religious beliefs when designing strategies for HIV disclosure.
- Regularly evaluate strategies in place to assess the effectiveness of existing strategies and interventions through collection feedback from CALHIV, families, and healthcare providers to identify areas for improvement and make necessary adjustments to ensure ongoing success.
- Tailor approaches addressing the specific needs and sensitivities of different cultural communities, ensuring that they align with local customs and practices.
- Community engagement and involvement through engagement of local communities, religious leaders, and community-based organizations to actively participate in HIV awareness and education campaigns and dissemination of accurate information about HIV, challenge misconceptions, and address cultural and religious concerns.
- Strengthen prevention and response mechanisms around abuse, exploitation, and GBV related to HIV

4.2.1. Output 9.1: Delivery of minimum package of services to all people infected and affected by HIV.

We aim to ensure stability and economic resilience for PLHIV, key population, most vulnerable children, and their families to sustain their response while availing funds to cover all eligible MVC and OVC and their families.

There are two main channels through which support has been provided to PLHIV to improve their economic status:

1) *Strengthening cooperatives for better access to credit and implementing income-generating activities,*

2) *Agricultural technical support to improve food security of households infected and affected by HIV.*

Apart from improving the quality of life of HIV infected and affected children the activities associated with this outcome also contribute to reducing new HIV infections by decreasing the vulnerability of these children. The national HIV program collaborates with the NCDA, an institution that implements and coordinates the OVC and MVC interventions through a number of civil society organizations. Furthermore, NCDA has established a minimum package of services for MVC including the following elements: health services, nutrition support, education support, shelter support, and social protection by community volunteers, psychosocial support by peer educators, and socio-economic support. Among those services, educational support is the prime component for long term impact. This component includes providing scholastic material in line with the government policy of twelve years of basic education to all and school fees for children in vocational schools. For children infected and affected by HIV, both the transition of support from OVC to MVC and the implementation of the national minimum package of MVC services to all levels will be reinforced to ensure most effective coverage and sustainability.

4.2.2. Output 9.2: Strengthen associations and network of PLHIV.

For the next three years, strategies are projected to promote economic empowerment of PLHIV through the strengthening of existing cooperatives as well as peer support groups. This will be done through:

- Providing management and governance training to cooperatives
- Create links between industries and cooperatives of people infected and affected by HIV to access markets.
- Link cooperatives with finance institutions for easier access to loan and funds
- Provide start-up capital to cooperatives and to initiatives by young PLHIV for business activities.

Cooperatives will undertake income-generating activities geared towards market needs and will develop business plan to easily access credit. Emphasis to be put on project design management and implementation and leadership skills.

4.3. Outcome 10: Ensure social and legal protection of people infected and affected by HIV and key population

4.3.1. Output 10.1: Strengthen awareness on HIV and SRH rights among the general population health care providers and Recipient of Care

Ensuring social and legal protection for people infected and affected by HIV is crucial to promote their well-being, combat stigma, and uphold their human rights. Most people affected and infected don't have knowledge on their rights and the laws that

protect them. For the next three years, the strategies will focus on strengthening the capacity of health care providers, general population, and recipient of care by:

- Providing awareness campaigns for people affected and infected by HIV. The campaigns will also focus on provision of knowledge on SRH rights, and HIV/GBV rights.
- Health care providers will be equipped with skills on confidentiality by establishing strict regulations and guidelines to protect the confidentiality and privacy of individuals living with HIV. This includes safeguarding their medical records and ensuring that their HIV status is not disclosed without their informed consent.

4.4. Outcome 11: Stigma and discrimination related to HIV is reduced.

4.4.1. Output 11.1: People living with HIV are aware of their rights and able to claim them.

Generally, in Rwanda, HIV-related stigma and discrimination has significantly reduced over the past years. The Rwanda people living with HIV stigma index survey reported that stigma and discrimination decreased to the lowest index of 13.

People infected and affected are not denied access to services or premises based on their personal or family HIV status. However, the stigma index survey report indicated that the knowledge of PLHIV on laws and policies that protect them are still low and the fear of PLHIV to disclose their status to others was still prevalent among PLHIV especially young people, women and key populations who reported to be at high risk of HIV related stigma and discrimination.

The demographic health survey 2022 collected data related to the discriminatory attitudes towards people living with HIV, defined as percent of respondents who do not think that children living with HIV should be able to attend school with children who are HIV negative and/or those who would not buy fresh vegetables from a shopkeeper who has HIV. Overall, discriminatory attitudes are similar among women (13%) and men (12%). There are urban-rural differences in discriminatory attitudes among both women (10% versus 14%) and men (7% versus 13%). Furthermore, the proportion of women and men with discriminatory attitudes decreases with increasing level of education; 19% of women and 16% of men with no education have discriminatory attitudes, as compared with 5% of women and 3% of men with more than a secondary education.

HIV-related stigma and discrimination is one of the barriers to HIV prevention and management. It limits access to existing and available HIV prevention, management services that are provided for people infected and affected with HIV.

There is still a gap in stigma and discrimination within special groups, such as adolescents, young girls, and women, PWDs, men who have sex with men, female sex workers and drug users.

The UNAIDS through of 10-10-10 target, aims to reduce at least 10% levels of stigma and discrimination faced by key populations in accessing HIV health services; reduce to less than 10% of girls and women having equal access to services compared to the general population and finally deduct to less than 10% punitive laws and creating an enabling environment, particularly to people with particular sexual orientation and gender identities.

To bridge the above gaps, the primary focus of the program will be to design community led models for peer educators who in return will serve as a bridge to psychosocial support programs reinforcement aiming at reducing HIV related stigma and discrimination. Empowering young women and girls through capacity building in transformational leadership to influence the policies and programming as well as advocating for their rights to equitable and quality services at all levels. To develop a gender strategy for the HIV sector addressing inequalities, disparities, stigma and gender-based violence related to HIV faced by this particular population. Finally, a thorough assessment of stigma and discrimination among key populations and other hard to reach people) with the goal to inform and influence existing programs and policies around social protection and human rights. Further, during the three years of this NSP, HIV program will regularly evaluate strategies in place to assess the effectiveness of existing strategies and interventions through collection feedback from different groups including: children and adolescent living with HIV, families, and healthcare providers, key populations to identify areas for improvement, make necessary adjustments and people centered services are provided to ensure ongoing success.

4.5. Outcome 12: Social harm and violence among people infected and affected by HIV and key population are halted.

4.5.1. Output 12.1: Gender inequalities (sexual, GBV, and poor knowledge of women on their rights) are addressed.

Over the years it has been seen that people who are affected and infected face different forms of abuse because of HIV. Thus, the program will consider maintaining high community engagement and involvement through local communities, religious leaders, and community-based organizations to actively participate in HIV awareness and education campaigns. Those campaigns will focus on dissemination of accurate information about HIV, challenge misconceptions, and address cultural and religious concerns.

The current NSP will keep focus on provide legal support to vulnerable groups facing GBV cases and other HIV related legal problems by implementing and enforcing comprehensive anti-discrimination laws that protect individuals living with HIV from discrimination in various areas such as employment, education, healthcare, housing, and public services.

Community engagement ensures that HIV awareness campaigns are culturally sensitive and relevant. Local communities, religious leaders, and community-based organizations have a deep understanding of the cultural and religious dynamics within their communities. They can provide valuable insights on how to effectively communicate and address HIV-related issues while considering cultural sensitivities, language preferences, and community-specific concerns. This helps to create a safe and non-judgmental environment for discussions about HIV. This engagement can be achieved through: Conducting comprehensive public education campaigns to raise awareness about HIV, its transmission, prevention, and the rights of individuals living with HIV. This can help reduce the violence faced by removing any misconceptions. Local communities, religious leaders, and community-based organizations have direct access to their respective communities and carry significant influence and trust. Involving them in HIV discussions with the public allows for the dissemination of accurate information and messages that resonate with the cultural and religious beliefs of the community. Their involvement helps to challenge misconceptions and myths surrounding HIV, increasing the credibility and acceptance of the information shared.

5. ENABLERS

5.1. ENABLER 1: STRATEGIC INFORMATION

Strategic information plays a significant role in monitoring the progress toward the NSP and the 95-95-95 UNAIDS targets by building the information systems to collect and store health data, ensuring data quality, and promoting research and surveillance for evidence.

Several health information systems have been put in place to routinely collect, store, and produce analytics on different interventions and the quality of services to support decision-making. Rwanda is moving to digitize its entire health system by 2024. In this framework, Rwanda is establishing the health information exchange and interoperability between the Electronic Medical Record (EMR), the DHIS-2, the laboratory information systems, and the national unique ID database to facilitate the electronic return of results to the health facility, deduplication of client records and to facilitate the sharing of health data across health facilities. Parallel to these efforts, it is necessary to establish community-led structures and mechanisms to be used by communities to enable community members and community-based organizations to interact, coordinate and deliver their responses to the challenges and needs affecting their communities.

Following UNAIDS recommendations, Rwanda initiated community-led monitoring (CLM), an accountability mechanism for HIV responses at different levels, led and implemented by local community-led organizations of people living with HIV, networks of key populations, other affected groups, or other community entities. Though the CLM is still in its early stages, the country has high expectations to improve the responsiveness, equity, and quality of HIV services.

Research is an important tool assisting disease control programs and aligning with national priorities. Research activities will continue to happen to inform the HIV program:

The following section describes the components of the monitoring and evaluation of the national strategic plan.

Development of the M&E plan

The M&E plan is developed to strengthen an overall system which can measure to what extent all HIV services are delivered in a high-quality manner, target the appropriate population, and ultimately contribute to the achievement of NSP output-level results in according to the NSP results framework. The system prioritizes strategies to

promote the use of data for decision making at all levels of the HIV sectors, as is the overall objective of any well-functioning M&E system.

Based on the NSP result framework for each overarching result, indicators were assigned for each result level in the NSP, with the most recent baselines available and target results provided for each indicator. These indicators constitute the list of common national indicators. The matrix of national indicators is developed with the contribution of all main stakeholders and is coherent with key national indicators, namely EDPRS 2 and the Health Sector Strategic Plan (HSSP IV). Additionally, the list refers to the most recent international guidelines (MERG Indicator Registry) and includes a key subset of indicators from SDG, GAM, PEPFAR, and Global Fund, as well as indicators for universal targets.

National and program-level indicators

National and program-level indicators (community-based and health facility-based) will be monitored regularly (depending on the indicator type) and made operational at the district level (service delivery level) to ensure adequate data collection at all levels. The activities described in the 12 components included in this chapter will ensure that high quality data to report on these national and program-level indicators are collected, managed, quality-assured, analyzed, and used, both for reporting purposes and for program improvement and strategic decision making.

Monitoring and evaluation systems in Rwanda

The HIV M&E system is primarily divided between health facility-based and community-based, components of monitoring and evaluating the national HIV response, and is decentralized from national to district levels. The health facility-based components of the M&E framework are led by MoH and RBC at the national level and district health officers at the district level. Better M&E planning and coordination have contributed to improve overall system performance at central and decentralized levels.

To make sure that all essential components were included in the final M&E plan, the monitoring and evaluation plan is organized around the twelve essential components of a functional M&E system, which outlines a comprehensive framework incorporating all M&E-related tasks.

Component 1: Organizational structures with HIV M&E functions

All organizational structures of the HIV M&E system (health facility and community-based components, at central and decentralized levels) need to be further strengthened, with more emphasis on the community-based components of the system and at the decentralized level. In general, HIV M&E is integrated and mainstreamed within the existing M&E structures of RBC.

RBC coordinates M&E for health facilities and for community-based interventions across EDPRS sectors, including public and private sector institutions and the civil society through umbrella organizations. RBC also coordinates M&E at the central level through research, studies, annual reporting, etc.

RBC is also responsible for providing guidance and capacity building to the lower levels. Districts are responsible for coordinating all M&E interventions at the district level. RBC and the districts work in close collaboration with governmental and non-governmental partners to coordinate and implement M&E activities. For example, district health system infrastructure is responsible for the collection and management of facility-level HIV data. Civil society organizations and decentralized umbrella organizations are responsible for data collection and management of community-level HIV data. Central systems at MoH, RBC, and all central-level development partner organizations are responsible for managing centralized data that is collected from various sources and disseminating this data to relevant stakeholders, including RBC and other key stakeholders.

Component 2: Human capacity for HIV M&E

To ensure the effective functioning of the M&E plan, it is essential not only to deploy the M&E staff at all levels but also to provide them with adequate training to meet the minimum job requirements and possess the necessary skills to perform the M&E task effectively. Capacity of both facility-based and community-based HIV M&E staff will be strengthened at both central and decentralized levels, including RBC, MoH staff, and EDPRS focal at both central and decentralized levels. Capacity-building support will be provided through public institutions such as the School of Public Health, which has developed M&E modules specifically for this purpose in the previous M&E plan.

Component 3: Partnerships to plan, coordinate, and manage the HIV M&E system

Activities under this component will focus on strengthening technical working groups responsible for the implementation and management of the HIV M&E plan by enhancing the linkages between the national and decentralized levels. The Planning, Monitoring and Evaluation (PME) Technical Working Group (TWG) will continue to provide comprehensive guidance and technical assistance to the implementation of the national M&E plan.

The working group will play a pivotal role in developing and implementing the integrated HIV M&E annual work plan each year (See Component 5). It convenes quarterly to assess the progress made in implementing the annual work plan and undertakes additional ad-hoc tasks as necessary.

Component 4: National multi sectoral HIV M&E plan

Adhering to the results-based planning and management approach adopted for the National Strategic Plan (NSP), planning and M&E activities are intricately interconnected. Existing M&E tools will undergo revision to align with the new NSP strategies and expected outcomes. To ensure sufficient progress towards the targets set for 2030, the NSP and the M&E plan will undergo a joint review by all stakeholders at midterm. Furthermore, at the culmination of the implementation period, a similar joint commission will evaluate the overall success of the NSP.

Component 5: Annual costed national HIV M&E work plan

To ensure the timely implementation of all HIV M&E-related activities necessary for full functionality of the M&E system, it is critical to have a national integrated HIV M&E annual work plan describing all annual activities. For each year of implementation of the M&E Plan, a national integrated HIV M&E annual work plan will be jointly developed by all HIV M&E stakeholders, including activities, implementers, timelines, and activity costs for the successful implementation of all M&E activities in the country.

Component 6: Advocacy, communications, and culture for HIV M&E

The HIV sector in Rwanda has already fostered a robust and positive culture for M&E, with most stakeholders recognizing the significance of data and evidence-based decision-making. To sustain and enhance this existing culture, endeavors will be made to integrate sessions and presentations on the importance of M&E into other meetings, workshops, and conferences. This will serve to increase awareness and further promote the value of M&E throughout the HIV sector.

Component 7: Routine HIV program monitoring

The routine monitoring of facility-based HIV services is already well established through a series of published standard operating procedures guiding the collection and management of HIV data. However, routine monitoring can be improved to document the quality-of-service delivery at health facilities. The community-based monitoring system needs to be strengthened, specifically to monitor interventions targeting key populations and vulnerable groups. Health facility information is collected through various registers daily at the time-of-service delivery. Each facility reports on monthly aggregate data to be entered into HMIS, which uses the DHIS 2 platform. Further, Electronic Medical Records (EMR) need to be scaled to cover all health facilities across the country and linked together to improve data accuracy.

Best practices

- Regular data quality control.
- Routine review of indicators, and data validation within the HMIS system at all levels
- Partners reports are harmonized and collected through HMIS.

- Regular supportive supervision
- Routine indicator forms are aligned with international M&E framework.

Key planned innovations Routine HIV program monitoring

- Enhance data literacy and utilization at both the facility and community levels. This also entails monitoring the level of data literacy and the effective utilization of generated data specifically at the facility and community level.
- Establishes community-led monitoring to enhance community participation, improve the quality of HIV programs, and strengthen accountability within the HIV response.
- Include a template for laboratory results in the HMIS (health management information system) to facilitate regular reporting, enabling the identification and resolution of gaps
- The E-learning system is established to effectively support the capacity building and literacy of data use.

Component 8: Surveys and surveillance

The surveillance system is aligned with international standards (PEPFAR, GF, WHO, UNAIDS.) During the previous decades biological and behavioral surveys are routinely conducted and will be continued. Those include the demographic health survey (DHS), integrated biological and behavior survey (IBBS) among female sex workers and men having sex with men, HIV drug resistance (Pre-treatment and acquired) as well as the Rwanda Population Based HIV Impact Assessment. Furthermore, the national program use of program data for surveillance. Those include the case-based surveillance (CBS), the cyclical acquired HIV-drug resistance (CADRE), the sero-surveillance among pregnant women and breastfeeding mothers in a national representative sample of sites will be continued to assess the trend of HIV among this group.

Key planned innovations to the survey and surveillance:

- Develop a comprehensive HIV research framework and agenda that addresses Rwanda's specific needs and challenges, while aligning with global HIV research priorities, by outlining research priorities, objectives, and methodologies.
- Introduce the observation studies and randomized control trials and cohort studies.
- Decentralize HIV surveillance to health facilities and or district, enabling timely and accurate data capture, rapid response to emerging trends, improved data quality, and enhanced capacity of health facilities for monitoring HIV-related indicators.
- Enhance the capacity of health facilities and hospitals to effectively utilize the generated data and provide findings.

Component 9: National and sub-national HIV databases

To monitor and evaluate HIV interventions, several health information systems were established. These systems routinely collect data on different interventions and quality of services to support decision-making.

Key planned innovations to the National and sub-national HIV Database include:

- Interoperability of systems and implementation of Unique Patient Identifier (UPID) to promote shared medical records.
- Building of case-based surveillance (CBS) system for: (1) active case findings, (2) monitoring status of individual clients and population level HIV treatment, and (3) adverse systems.
- Adoption of EMR to support the "Treat All" strategy.

Best Practice:

- Open-MRS roll events within their treatment regimens.
- Continued implementation of laboratory information system and linkage to EMR and implement linkage to routine data reported out in most sites.
- DHIS-2 aggregate, and e-tracker used in all sites for HIV: CBS, key pop, and Hepatitis reporting.
- Integration of the national ID as a patient's ID
- Interoperability between Open-MRS with the VL-SMS and LIS
- Health Information exchange (Ongoing)

Proposed Innovations / Changes

- Scale up of the Open-MRS to all health facilities to align with the national policy of digitalization.
- Collaborate with universities to create training modules and program on maintenance and administration of the health system.
- Enhance the systems interoperability to reduce the data entry workload and errors.
- Create system monitoring tools.
- Community health system for HIV
- Implement data triangulation and a dashboard system to facilitate rapid analysis of ongoing events or trends.
- Integrate the National ID into all individual-level data systems to enable seamless utilization of machine learning and big data techniques for gaining insights in various areas such as supply chain management and forecasting.

Component 10: Supportive supervision and data auditing

In the newly established integrated supervision system, all health services are assessed in a common supervision visit. The weaknesses identified during these visits are then addressed through targeted mentoring conducted by specialized mentors for capacity building. There are two principal levels of supervision in the facility-based system: (1) RBC conducting integrated supervision visits, employing both qualitative and quantitative data collection activities at the district level and (2) DHs conducting supervision visits to district-level HIV implementers. Other supervisory visits include visits to community- based activities. These supervisory visits are jointly conducted on a quarterly basis by RBC central level staff and district staff in charge of health monitoring. Therefore, the findings are shared for further improvement of HIV data quality reported at community level. Thus, the district is responsible for assuring data quality of district-level HIV implementers who directly report to them. Equally, the EDPRS sector district representatives and the civil society umbrella organization district representatives are responsible for assuring the quality of data reported to them by their respective constituencies, which they subsequently report to the district.

At the national level, a bi-annual data audit is conducted by RBC to assess the completeness and accuracy of district-level reporting and the degree to which national-level tools and formats are being respected both by district-level HIV implementers and districts.

Bi-annual data quality audits ensure the soundness of data that is being reported from both the service delivery level to the district level and from the district level to the national level via HMIS. Improving the quality of collected data is essential to ensure that evidence-based decision making is informed by the most accurate information.

Key planned innovations to the Supportive supervision and data auditing:

- Design the plan and tools for the supportive supervision of community-based interventions.
- Design digital tools to report findings and recommendations for the supervision done at health facility and community levels.

Component 11: HIV evaluation and research

The Research Committee on HIV and AIDS will develop a better coordination mechanism of HIV clinical research in the country to assure one national research agenda is adopted by all partners conducting research in the country and that it is linked to an overall evaluation agenda. A formal mechanism will be developed to collect and disseminate the results of research projects that have been approved by the committee.

The research agenda, defining key priority areas for research and evaluation in the country, will be based on information gaps identified in this NSP and additional identified country information needs, including HIV risk among key populations and

other vulnerable populations and information on the effectiveness of different HIV interventions, including ART adherence and resistance studies and evaluations of the effectiveness of EMTCT services. The program impact evaluations will be an important component of this research agenda.

Proposed Innovations

- Impact evaluation studies to inform 'ending AIDS' and 'Triple elimination'
- Population-based HIV Impact Assessment covering people of all ages.
- Elimination of Mother to Child HIV Transmission (EMTCT)
- Hepatitis incidence and mortality
- Cost-effectiveness of HIV prevention services

Component 12: Data dissemination and use

The M&E system needs to develop data dissemination mechanisms at all levels to ensure that all relevant stakeholders have access to the most up-to-date information available that can inform their program decisions. Information products include the following: HIV and AIDS Annual Report, dashboards, and a NSP indicator snapshot.

Focus will be put on district-level data dissemination to ensure that district-specific data is not only reported to the national level, but that it is disseminated locally to HIV stakeholders and used in decision making. In addition, the international HIV research conference is organized every two years to foster the exchange of information and experiences between all HIV stakeholders.

The three main strategies that will be implemented to strengthen data use are described below:

1) Review of national and program-level indicators and standardization of data collection tools so that data collected will be useful in informing the decision-making process.
2) Institutionalization of feedback mechanisms at all levels of reporting to address data quality issues and to improve quality of care.
3) Building the capacity of decentralized entities in analyzing and using data.

Best practices

- Monthly data review of data at health facilities
- Peer reviewed manuscripts on HIV are published
- National and district level dashboards are available

Key planned innovations to the Supportive supervision and data auditing

- Public portal for HIV data and key indicators
- Impact evaluation of HIV Program
- Stimulate the data used by staff and in high academic institutions
- Collaborate with stakeholders to Organize HIV Conference in Rwanda
- Develop policy briefs to support the decision making and policy changes

5.2. ENABLER 2: HEALTH SYSTEMS STRENGTHENING

Like in other disease areas, the HIV program is also experiencing an unstable donor environment and without a comprehensive, and holistic approach to improving health systems at the country level, including national, sub-national (province and district), and community levels. There is hence a 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.

Capacity building

Continued priority is given to the recruitment and training of specialized medical doctors and nurses in order to improve the quality of services provided, meet the increasing demand for high quality health services, and the efficiency of interventions. Currently, nurses receive continuing supportive supervision and coaching/ mentoring to help them improve task shifting and patient management for those requiring ART treatments.

Human resources

With the limited number of medical specialists, an effort was made to increase the quality of care provided by nurses, midwives, and oral health professionals.

Quality improvement

Through the HRH program, there was an improvement in access to and quality of health care services provided in Rwanda. However, the planning of additional QI projects should start to ensure innovative, low-cost projects that could dramatically improve clinical environments.

Staffing and task shifting

Capacity-building activities, in addition to improving the knowledge and skills of healthcare providers and other members of the health workforce, aim at organizational

and institutional strengthening to ensure continuity of quality service provision in the face of the frequent problem of high turnover in human resources.

Infrastructure and logistics

There has also been significant investment in equipment at all levels including health posts level, with some effort to provide equipment and diagnostics for the decentralized specialist referral services. Most hospitals appear to have functional asset management systems and others are old and in need of redesign and rehabilitation. A number of the designated specialist and referral centers may also need additional infrastructure and equipment to become effective. Another concern is that of maintenance capacity and keeping lab equipment in use and having spares available. This is also linked to previously getting equipment from various sources and therefore with difficulty to maintain and source spares for them. During the MTR, almost every health facility has also expressed the need for additional infrastructure and equipment to enhance their utility to the catchment area and expand scopes of services offered. Others indicated simple shortages of some logistics such as uninterrupted stock of HIV drugs and lab consumables.

Laboratory network infrastructure and systems strengthening

Strong laboratory systems are crucial for patient-centered care, enhancing the clinical-laboratory interface, maintaining an effective HIV response, and facilitating public health practices. Past investments in laboratory systems by the Government of Rwanda and other stakeholders have significantly impacted the overall clinical laboratory capacity for HIV response. These investments have enabled the provision of high-quality clinical diagnostics and a network of satellite laboratories for responding to outbreaks and pandemics. However, the COVID-19 pandemic exposed vulnerabilities and challenges for strengthening national integrated laboratory diagnostic systems to meet multi-disease testing demand for outbreak response, surveillance, and other essential public health functions. More support is needed to strengthen decentralized specimen referral systems, the interoperability of the laboratory and health information systems, and the optimization of diagnostic networks. Country-led stakeholder engagement through technical working groups is essential to addressing systemic challenges in the supply chain, laboratory services data collection and utilization, human resources capacity building, and delayed turn-around time. Laboratory systems serve as essential sources of data for programmatic decision-making, disease surveillance, health management, and evidence-based decision-making for HIV/AIDS, comorbidities, and emerging disease threats.

5.2.1. Sustainability of HIV Services

Achieving sustained HIV epidemic control and ending AIDS as a public health threat in Rwanda requires targeted interventions and new innovative approaches that contribute to maintaining the gains, while considering the country's context and the level of engagement of the population in HIV response. As the HIV tends to be a chronic

condition, that will require the long-term management of people living with HIV and management of HIV and aging, the government of Rwanda and its stakeholders and partners in HIV response, will need to orient the last mile of HIV epidemic control ensuring its sustainability by:

- Building technologies to facilitate digitalization of services, to allow timely data capturing and use for accuracy in decision making and planning.
- Investment in infrastructures, human resources, and capacity building to allow sustainability of services and community resilience to sustain the gains.
- Integration of NCDs, SRH and Mental health services delivery within HIV management to ensure adequate management of aging Population living with HIV
- Establish a resilient pharmacovigilant and Laboratory systems to ensure drug resistance monitoring and laying the groundwork for use of long-acting ART for prophylaxis and treatment.

5.3. ENABLER 3: HEALTH SECURITY AND PANDEMIC PREPAREDNESS

The COVID-19 pandemic has put pressure on the healthcare system and economic growth prospects. Rwanda has established a framework that is focused on accelerating economic recovery, rebuilding the most affected sectors, such as tourism, and increasing national resilience to the medium- and long-term impacts of COVID-19. In the medium term, the economy is expected to recover, with economic growth reaching 6.3% in 2021, and back to its average growth of 8% in 2022.

The effects of COVID-19 beyond challenges in access to health services impacted on how health systems inputs were affected. COVID19 enabled a strong embrace of technology that improved on communication and reporting e.g., for COVID-19 tests, admissions, vaccinations, etc. But the COVID-19 pandemic also aggravated the issue of insufficient human resources with several staff being infected with COVID-19, affecting their availability for other health services including those related to HIV.

The COVID-19 pandemic posed a great threat to the health of populations worldwide. Early data from countries shows that there may be interruptions to HIV prevention programs, such as voluntary medical male circumcision (VMMC) and pre-exposure prophylaxis (PrEP). Interruptions to supply chains for antiretroviral therapy (ART) for people living with HIV (PLHIV) remain an additional possibility, which may have a substantial effect on health outcomes for PLHIV in sub-Saharan Africa. Measuring COVID-19's impact on HIV programs will provide evidence of strong, robust, and national programs, as well as previous health-system investments. This NSP will shed light on how the National HIV Program may build a robust and resilient health system by ensuring service continuity during pandemics and natural disasters.

5.4. ENABLER 4: GOVERNANCE MECHANISM

The overall implementation framework in the Rwanda health system is based on a decentralization of services and their subsequent coordination to the lowest administrative level. Further, HIV control requires the multi sectoral approach beyond the health system. In this regard, the ministry of health works closely with the line ministries and sectors as well as the private sector to ensure the equity of services and the community outreach and engagement.

During the Mid-term review of the current NSP, the technical working groups recommended the enhancement of the HIV and other health services integration. This strategy will provide a holistic package of health services and tackle other diseases likely to affect people living with HIV, like non communicable diseases, mental health, sexual and reproductive health.

In addition to this, the HIV program will need to work on following gaps to achieve the set targets for 2024. The program ownership will range from communities of beneficiaries to the local government. Districts and sectors should be encouraged to take full responsibilities of the HIV response by: (i) enhancing community engagement, (ii) optimizing community outreaches, (iii) reinforcing private sector engagement in HIV response by supporting the government effort throughout the entire cascade of care from prevention and treatment cost. This might allow a smooth transition into sustaining achieved gains and continuity of services.

5.4.1. HIV services integration

Integration of HIV services with other health services has been proposed as an important strategy to boost the sustainability of HIV response.

HIV services linkage with other commonly used services by PLHIV, can establish unified support systems that facilitate and enable delivery of integrated services. Linked systems include health worker education and training, procurement and supply chain management, pharmacy and laboratory services, health management information and client management systems, and integrated budgeting. This can enhance coordination and support more streamlined and efficient services.

Full service-level integration has many advantages for health-care users. When clinical services (e.g., for HIV and tuberculosis, HIV and sexual and reproductive health, HIV, and mental health or for HIV and non-communicable diseases management among clients are integrated, it can favor people-centered approaches.

This NSP will set the ground for partners and stakeholders in HIV response to support the government of Rwanda to set a roadmap and define the level of engagement and milestones toward full integration, setting a monitoring and evaluation plan to ensure adequate people centered service delivery.

5.4.2. Civil society organization involvement

Civil society organizations (CSOs), governmental and non-governmental organizations, and faith-based organizations have contributed to reducing the burden of HIV for the past two decades. CSOs have been engaged in supporting impact mitigation programs that aim to ensure that (1) people infected and affected by HIV have improved socio-economic status and protection and (2) sexual gender-based violence (SGBV), HIV-related stigma, and (3) discrimination is decreased. During the current NSP, CSOs have become more involved in HIV prevention, focusing primarily on the delivery of key population services at the community level and supporting treatment outcomes among PLHIV by engaging peer support groups. This extended NSP will provide more opportunities for transformative engagement, allowing CSOs and communities to own the response, build the capacity of CSO constituents for effective support, and sustain the gains.

5.4.3. Private sector engagement

The national HIV response succeeded in bringing the private sector on board and increasing its involvement. The private sector federation established a program to support and supervise HIV committees established in private businesses and enterprise premises. In accordance with the health financing policy, which includes the involvement of the private sector in investing in health, expanding access to services through the engagement of private clinics in the delivery of HIV services. The government will continue to engage the private sector in workplace program

Section IV: CONCLUSION

6. CONCLUSION

Estimates show that Rwanda has reached the first UNAIDS target: 95% of people living with HIV who are aware of their HIV status. Nevertheless, there are still gaps in adolescent and young adults and key populations.

From 2018 to 2022, UNAIDS estimates that new infections declined by 34% (from 4927 to 3229). Various biomedical interventions are in place to reduce new infections, including increasing awareness of HIV/AIDS prevention, biomedical intervention to effectively identify undiagnosed people with HIV and to provide treatment as prevention. The cumulative effects of the implementation of the HIV program show that Rwanda is on a positive trajectory towards achieving the sustained HIV epidemic control.

The overall impact of the HIV program implementation shows a 82% decrease in new infections, a 86% decrease in AIDS related deaths, and an additional 25.6 years of life expectancy among people living with HIV.

Several actions could be taken to address identified gaps on the reduction of new infections through sexual transmission. The lead step would be the assessment of groups and geographic-specific areas that are lagging behind in terms of testing. The analysis at the granular geographic area and for different social networks of key and priority populations should provide the insight on social networks and regions that need more efforts to cover the gaps.

Addressing the remaining gaps will necessitate interventions that are tailored to key populations, including children and adolescents, youth particularly adolescent girls and young women. Moreover, this NSP will allow for the improvement of clinical service integration by involving more communities in HIV response and sustaining gains.

The interventions emphasized in this NSP will guide future implementation priorities at the community and health facility levels and provide a roadmap for prioritization over the next three years until 2027. This NSP's revised strategies and extended targets will help the National HIV Program achieve its goal of sustaining epidemic control and ending AIDS by 2030 in Rwanda.

7. ANNEX

7.1. ANNEX1: PERFORMANCE FRAMEWORK

Table 2: Performance Framework

#	Level	Indicator	Required Disaggregation		Baseline %	Baseline Year	Baseline Source	Target		
			Population/ Sex	Age				FY: 2024-2025	FY 2025-2026	FY 2026-2027
I.1	Impact	HIV Prevalence	General Population	15-24 years	0.9%	2018-19	RPHIA		0.5%	
				15-49 years	2.6%	2018-19	RPHIA		2.5%	
				15-64 years	3%	2018-19	EPP Spectrum 2022			3%
			FSW		35.2%	2023	IBBS FSW _Primary findings			32%
			MSM		6.5%	2021	IBBS among MSM		5%	
		Hepatitis Prevalence	HBV		0.35%	2018-19	RPHIA		0.35%	
			HCV		0.39%	2018-19	RPHIA		0.35%	
			FSW - HBV		2.1%	2023	IBBS FSW _Primary findings		1.5%	

			FSW-HCV		1.7%	2023	IBBS FSW _Primary findings		1.2%	
I.2	Impact	HIV Incidence rate (New HIV Infections per 1000 uninfected population)	Geneal Population	15+ years	0.08 per 100 PYRS	2018-19	RPHIA			0.06
I.3	Impact	Number of AIDS-related deaths per 100,000 population	PLHIV	All	3229	2023	EPP Spectrum 2022	3070	2900	2745
II.1	Outcome	Percentage of people living with HIV who know their HIV status	General Pop	All	93%	2023	EPP Spectrum/ Naomi			95%
			FSW	18+ years	73.8%	2021	IBBS among FSW		80%	
			MSM	15-49 years	43.4%	2019	IBBS among MSM		55%	
II.2	Outcome	Percentage of men reporting the use of a condom the last time they had anal sex with a non regular partner			71.5%	2021	IBBS among MSM		75%	

II.3	Outcome	Percentage of sex workers reporting the use of a condom with their most recent client			81.7%	2019	IBBS among FSW		85%	
II.4	Outcome	Percentage of people living with HIV and on ART who are virologically suppressed	PLHIV	< 5 years	75.3%			78%	80%	82%
				< 15 years	83%			85%	87%	90%
				≥15 years	92.6%			93%	93.5%	95%
				All	92.4%		VL SMS	≥97%	> 97%	>97%
			at 12 months after ART start	All	97%	2022-2023	HMIS	>97%	> 97%	>97%
II.5	Outcome	Proportion of people who experienced sexual violence in the past 12 months	Male	15-59 Years	0.9%	2020	DHS			0.6%
			Female	15-49 years	8.3%	2020	DHS			6%
II.6	Outcome	Index Level of related stigma and discrimination			13%		Stigma Index Study		<10%	

II.7	Outcome	Percentage of women aged 15-24 who had 2+ partners in the past 12 months			1.2%	2020	DHS			<1%
II.8	Outcome	Percentage of women aged 15-19 who have had a live birth or are currently pregnant			5.2%	2020	DHS		4.5%	
II.9	Outcome	Number of HIV related death among PLHIV			21.95 per 100,000 population			17.85 per 100,000 population	16.95 per 100,000 population	16.03per 100,000 population
II.10	Outcome	Prevalence of male circumcision			56%	2020	DHS			60%
II.11	Outcome	Percentage of exposed infants who are HIV-free by 24 months			99%	2022	HMIS	>99%	>99%	>99%
II.12	Outcome	Percentage of HIV-positive			99%	2022	HIV annual report	>98%	>98%	>98%

		women who received ART during pregnancy and/or labour and delivery								
II.13	Outcome	Comprehensive knowledge of HIV	Male		64	2020	DHS			70%
			Female		64	2020	DHS			70%
II.14	Outcome	Percent of adults and children retained on treatment 12 months after ART initiation			94.69%	2022-2023	HMIS	95%	95%	95%
II.15	Outcome	% of people confirmed with at least one STI.			5.2%	2022-2023	HMIS, Spectrum 2023			5%
II.16	Coverage	ART Coverage	All		92.3%	2022-2023	HMIS, Spectrum 2021	93%	94%	95%
			Adults		93.24%	2022-2023	HMIS, Spectrum 2023	94%	95%	96%
			Children		58%	2022-2023	HMIS, Spectrum 2023	65%	68%	70%

III.1	Output	HIV positivity rate	HTC		0.8%	2022-2023	HMIS	0.7%	0.7%	0.7%
			Index Testing		4.1%	2022-2023	HMIS	4%	4%	4%
			WOMEN IN ANC		0.4%	2022-2023	HMIS	0.3%	0.3%	0.3%
III.2	Output	Number of males circumcised according to national standards			309,822	2022-2023	HMIS	374,885	412,373	453,610
III.3	Output	Number of female sex workers followed at health facility			31,336	2022-2023	HMIS			

7.2. ANNEX 2: ESTIMATED BUDGET COST FOR THE HIV NSP 2024-2027

The cost and implementation of Rwanda's HIV National Strategic Plan (NSP) for 2024 -2027 are essential prerequisites for the strategy to have realistic goals. It is anticipated that these estimates will facilitate the prioritisation of anticipated expenditures and ensure that appropriate measures are articulated to cover emerging resource gaps. This section describes the estimation methodology used for the HIV NSP period from July 2024 to June 2027.

Approaches for the costing exercise

The data for costing the NSPs were in different phases. The phase one involved several consultations to reach out the costing outputs. First, we reach out to HIV program units to agree on strategies and activities that were proposed after the midterm review of the current NSP. Then, series of workshops were organized with different stakeholders to agree on the strategic orientations and interventions along with different proposed activities by the program. A final workshop to validate activities and align with recommendations from the consultative meetings will be organized to agree on the final interventions to be costed in this NSP. The costing of the NSP did not do rely on the prioritization, hence, it includes all the activities in form of a wish lists as proposed by the HIV program implementation units.

Costing assumptions

Under the supervision of the consultant team, the units and divisions provided most of the cost assumptions to ensure that the estimates were realistic. The finance unit of the single project implementation unit (SPIU) at the Rwanda Biomedical Centre (RBC) was used to get financial information about non-pharmaceutical goods, such as procurement, logistics, and finance. This information was used to estimate the unit cost. With regard to the cost of medical and pharmaceutical supplies, we used the prices applied to the quantification exercises. After a consultation between the Ministry of Health, Rwanda Biomedical Centre, and Rwanda Medical Supply, these prices for medical, pharmaceutical, and non-medical equipment were estimated for forecasting.

A set of well-defined assumptions is being developed to determine the unit cost for each activity. These assumptions include a variety of inputs, their frequency of occurrence, and associated costs. Official procurement procedures will guide the evaluation of prices, ensuring that they are derived from reputable and transparent sources. The Rwanda Biomedical Centre's (RBC) Corporate Service Division has provided the prices for non-pharmaceutical commodities, including procurement, logistics, and related operation costs. Rwanda Medical Supply Ltd. (RMS) will serve as the primary source of pricing information for pharmaceutical and medical supplies.

Using the Activity-Based Costing (ABC) method and tool, cost estimates for Rwanda's HIV NSP for 2024-2027 were generated.

A detailed costing template that estimates the cost of each activity from various perspectives, including the cost of delivering HIV services such as prevention, case Management, behaviour change communication, community support, and strengthening health systems, programme management, and Strategic Information.

Costing result

Table 3: HIV Total program Cost by NSP Program

NSP Program	TC FY24-25 USD	TC FY25-26 USD	TC FY26-27 USD	Total Cost 2024-2027
1. Prevention	42,416,963	41,591,699	41,747,469	125,756,131
2. Care and Treatment	49,019,922	50,708,585	49,625,249	149,353,756
3. Impact Mitigation	864,758	882,292	891,163	2,638,212
4. Strategic Information	4,073,598	3,592,052	4,976,981	12,642,631
5. Health systems	132,830,471	119,429,004	116,966,272	369,225,747
Grand Total	229,205,712	216,203,631	214,207,135	659,616,477

Health system strengthening accounts for approximately 56% of the total cost of the HIV NSP 2024-2027. The cost of HIV programmes(Prevention, Care & treatment, impact mitigation and Strategic information) accounts for 44% of the total budget.

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