REPUBLIC OF RWANDA

MINISTRY OF HEALTH

FOURTH HEALTH SECTOR STRATEGIC PLAN

July 2018 – June 2024

CONTENTS

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ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immuno-Deficiency Syndrome
ANC	Ante Natal Care
ASRH&R	Adolescent Sexual and Reproductive Health and Rights
ARI	Acute Respiratory Infections
ART	Anti-Retroviral Treatment
BCC	Behavioral Communication and Change
BTC	Belgian Technical Cooperation
CBHI	Community Based Health Insurance schemes (= Mutuelle de Santé)
CHUB	Butare University Teaching Hospital (Teaching Hospital)
CHUK	Kigali University Teaching Hospital (Teaching Hospital)
CHW	Community Health Worker
CPAF	Common Performance Assessment Framework (used for GBS and SBS Development Partners)
CPR	Contraceptive Prevalence Rate
CSO	Civil Society Organizations
CSW	Commercial Sex Worker
CVD	Cardio Vascular Disease
DHIS	District Health Information System
DHS	Demographic and Health Survey
DHU	District Health Unit
DOTS	Directly Observed Treatment Scheme / Short Course
DPAF	Development Partner Assessment Framework
EAC	East African Community
EDPRS	Economic Development and Poverty Reduction Strategy
EMR	Electronic Medical Records
EMTCT	Elimination of Mother to Child Transmission
FBO	Faith Based Organization
FP	Family Planning
GAVI	Global Alliance for Vaccines and Immunization
GBS	General Budget Support (=DBS)
GBV	Gender Based Violence
GFATM	Global Fund for AIDS, TB and Malaria (=GF)
GoR	Government of Rwanda
GP	General Practitioner
H&A	Harmonization and Alignment
HC	Health Centre
HF	Health Facilities
HF	Health Financing
HFU	Health Financing Unit
HH	Household
HIV	Human Immuno-Deficiency Virus
HMIS	Health Management Information System

HP	Health Post
HRH	Human Resources for Health
HRTT	Human Resource Tracking Tool
HSASB	Health Sector Annual Statistical Booklet
HSSP	Health Sector Strategic Plan
HSWG	Health Sector Working Group (new name for HSCG)
IEC	Information, Education and Communication
IMCI	Integrated Management of Child Illnesses (=PCIME)
IRS	Indoor Residual Spraying
JANS	Joint Assessment of National Strategies
KFH	King Faisal Hospital
KfW	Kreditanstalt für Wiederaufbau - KfW Development Bank (SBS partner of MOH)
LB	Life Births
LLIN	Long Lasting Impregnated (Bed) Nets
LMIS	Logistic Management Information System
MC	Male Circumcision
MDA	Mass Drug Administration
MDG	Millennium Development Goals
MH	Mental Health
MIGEPROF	Ministry of Gender and Family Promotion
MINALOC	Ministry of Local Administration, Community Development and Social Affairs
MINECOFIN	Ministry of Finance and Economic Planning
MINEDUC	Ministry of Education, Science, Technology and Research
MOH	Ministry of Health
MMR	Maternal Mortality Ratio (/100,000 births)
MTR	Mid Term Review
NA	Not Available
NCD	Non-Communicable Diseases
NGO	Non-Governmental Organization
NRH	National Reference / Referral Hospital
NRL	National Reference Laboratory
NTD	Neglected Tropical Diseases
NISR	National Institute of Statistics of Rwanda
NST	National Strategy for Transformation
OOP	Out of Pocket (expenditure)
PAC	Post Abortion Care
PBF	Performance Based Financing
PFM	Public Financial Management
PH	Provincial Hospital
PHAST	Participatory Hygiene and Sanitation Transformation
PHC	Primary Health Care
PHCS	Pre Hospital Care Services (ambulance etc) (= SAMU)
PHF	Private Health Facilities
PLWHA	People Living With HIV and AIDS (see PVVIH)

PMI	Presidential Malaria Initiative
PMTCT	Prevention of Mother-to-Child Transmission (of HIV)
PNC	Post Natal Care
PPCP	Public Private Community Partnership
PPP	Public Private Partnership
PS	Private Sector
PW	Pregnant Women
PWD	People with Disabilities
QA	Quality Assurance
QC	Quality Control
RBC	Rwanda Biomedical Centre
RCHC	Rwanda Centre for Health Communication
RDHS	Rwanda Demographic and Health Survey (= DHS)
RDT	Rapid Diagnostic Tests (for Malaria)
RH	Reproductive Health
RMNCAH	Reproductive Maternal, Neonatal, Child and Adolescent Health
SAMU	Service d'Aide Médicale d'Urgence / Pre-hospital care services (= PHCS)
SARA	Service Availability and Readiness Assessment
SBA	Skilled Birth Attendant
SBS	Sector Budget Support
SGBV	Sexual and Gender Based Violence
SMM	Senior Management Meeting
SOP	Standard Operating Procedures
SPIU	Single Project Implementation Unit
SSB	Rwanda Social Security Board
STH	Soil Transmitted Helminths
STI	Sexually Transmission Infections
SWAp	Sector Wide Approach
TB	Tuberculosis
TBD	To Be Determined
TCAM	Traditional, Complementary and Alternative Medicine
TWG	Technical Working Group
UN	United Nations
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
USD	US Dollars
VCT	Voluntary Counseling and Testing
WHO	World Health Organization
WISN	Workload Indicators for Staffing Needs

Conversion Rates (August 2017):
1 USD = 841 RWF (or 100 RWF = 0.118 USD)

1 Euro = 995 RWF (or 100 RWF = 0.100 Euro)
(Source: 'XE Currency Converter', date Monday 14 August 2017)

FOREWORD

The Rwanda Health Sector Strategic Plan 2018-2024 (HSSP IV) is the guiding document outlining national strategic directions to improve health standards of Rwandans over the next seven years. Its content reflects a comprehensive analysis of the Rwanda's health sector progress and situation to date. It is also based on rigorous technical inputs from key health sector stakeholders, including program managers in the Rwanda Health Sector and in other public institutions, Development Partners, as well as members of the Private Sector and Civil Society Organizations. Several consultations that were organized with all these stakeholders allowed to design appropriate and evidence-based strategic interventions that will contribute to ensuring high standards of living for all Rwandans.

HSSP IV builds on lessons learnt and important progress that were made from the implementation of Rwanda Health Sector Strategic Plan 2013-2018 (HSSP III) and is fully aligned with the Rwanda Vision 2050 and the National Strategy for Transformation 2018-2019. It has been informed by global and regional development agendas Rwanda has committed to, especially the Sustainable Development Goals (SDGs). The development of HSSP IV also considered the overall objective of the Rwanda Health Sector Policy and lays down priority areas that will be key to ensuring universal access to equitable and affordable quality health services.

All strategic interventions highlighted in HSSP IV were guided by three values and guiding principles that orient and underlie the provision of health services: people-centred services, integrated services and sustainable services. They have also been grouped into three big areas: the essential services across the life course, the coverage of essential health interventions and health systems strengthening.

For the implementation of HSSP 4 to be successful, combined efforts from different stakeholders will be needed. I call upon all stakeholders from both Government and non-state actors involved to also align their interventions to the new HSSP IV in order to achieve our target and provide the Rwandan population with high health standards.

EXECUTIVE SUMMARY

Background

Rwanda's fourth health sector strategic plan (HSSP4) is meant to provide the health sector with a Strategic Plan that will highlight its commitments and priorities for the coming 6 years. It will be fully integrated in the overall economic development plan of the Government. HSSP4 will fulfil the country's commitment expressed in the national constitution, National Strategy for Transformation (NST) and the aspirations of the Health Sector Policy 2015. The strategies herein adhere to the Universal Health Coverage (UHC) principles towards realisation of the Sustainable Development Goals (SDGs). HSSP4 therefore lays a foundation for Vision 2050 ("The Rwanda We Want"), which will transform Rwanda into a high-income country by 2050. HSSP4 anticipates the epidemiological transition of the country, the increase in population and life expectancy and the expected increase of the health needs of the elderly, notably in Non-Communicable Diseases (NCDs). HSSP4 also anticipates a decrease in external financial inflows, hence it is imperative to build secure / resilient health systems.

HSSP4 was developed through a consultative process involving all stakeholders. Consultations with actors at national and district levels, interviews with key informants and review of relevant documents (annex 5), informed the development of priorities and strategies. HSSP4 takes into consideration the significant results achieved during HSSP3, specifically improvements in impact and outcome indicators and in the country's health systems. Achievements are largely attributed to the bold and decisive leadership and strong implementation of laid-out strategies and policies. However, the sector acknowledges that sustaining these gains, tackling outstanding challenges, addressing indicators with slow progress, laying a foundation for Vision 2050 and embracing the ambitious UHC agenda requires commitment, innovation and strong management by all actors to ensure the implementation of results and attainment of the ambitious targets.

Objectives and priorities

The Overall Objective of the health sector is to ensure universal accessibility (in geographical and financial terms) of **equitable and affordable quality health services** (preventative, curative, rehabilitative and promotional services) for all Rwandans (Chapter 3). This will be attained through four Strategic Objectives with respective focus on:

1. Full implementation of the various **programs** (improve demand, access, coverage and quality)
2. Strengthening the various **health system components** (strengthen policies, resources and management)
3. Strengthening all levels of **service delivery** (organise the services effectively at all levels)
4. Ensuring effective **governance** of the sector (strengthen decentralization, partnership, coordination, aid effectiveness and financial management)

In furtherance of the Health Sector Policy aspirations, realisation of country, regional and global commitments, HSSP4 identifies priorities in four broad result areas: (i) increasing coverage of interventions along the life course; (ii) scaling-up coverage of essential services to combat communicable and non-communicable diseases; (iii) strengthening support

systems and (iv) building health security and resilient systems (chapter 7). Under the overall stewardship of the Ministry of Health (MOH) (see chart in Annex 1), implementation of the HSSP4 agenda will be through oversight structures at ministerial level; management structures at the national and district level; and service delivery structures at the national, intermediary and peripheral levels. Strong partnerships, community engagement and multi-sectoral collaboration will be core pillars in the synergistic implementation of HSSP4, given the ambitious UHC agenda and broader interventions enshrined in the SDGs.

Interventions

HSSP4 will continue to ensure that all persons in Rwanda have access to equitable and quality Maternal, Neonatal, Child & Community Health (MCCH) services (chapter 5); immunisation coverage will be consistently maintained around 95% (or more) with the Government meeting at least 30% of the full cost of vaccines; stunting will be reversed by improved inter-sectoral collaboration; uptake of long-term methods in FP services will be increased by targeted promotion activities; palliative services and health needs of the elderly are mainstreamed in the essential package of care at the different levels, including the package at household level.

In tackling communicable and non-communicable diseases (chapter 6), emphasis will be to reduce prevalence and incidence in morbidity / mortality through expanded, responsive and client centred services; improved diagnostic capacity; control of risk factors and scaling up preventive efforts related to life-style interventions (nutrition, sugar, exercise, alcohol, smoking). In health security, HSSP4 seeks to ensure that Rwanda is free of epidemic-prone diseases and public health threats through building a sustainable, effective and efficient national surveillance, response and recovery system.

Investment in Health Systems Strengthening (Chapter 9) will guarantee improved health outcomes, ensuring financial risk protection to the Rwanda people. Strengthening the health workforce will entail ensuring availability of sufficient, competent, motivated and equitably distributed health workforce, capable of addressing the challenges and consequences of the epidemiological transition. Infrastructure and equipment will detail and enforce adherence to norms and standards to support service delivery. Sustainable access to effective, safe medicines and medical products will be ensured and a strong service delivery system will guarantee access to quality services in line with population needs and the package of care (Annex 6). Effective leadership, management and governance will be ensured at all levels. Acknowledging the need for a strong evidence-base to inform responsive decision-making, as well as commitments to regional and global reporting, appropriate investments will be made to strengthen the health information and national health research systems.

Innovations

The attainment of a middle-class status as envisaged in Vision 2050, the likely increase in the cost of providing care as a result of the epidemiological transition and increased life expectancy, together, will impact on the financing demands of the country's health system and subsequently on attainment of the HSSP4 objectives. In this regard, innovative approaches to build a sustainable, equitable and efficient health financing system reliant on

resources have been identified. For each of the Strategic Objectives, some of these innovations have been summarised below:

- In MCCH, MOH will encourage women to attend early ANC, scale up post-partum FP information; expand social marketing of modern contraceptives and condom availability, harmonize and expand RMNCH mentorship program and start locally produced therapeutic packages and food supplementation
- In Health Systems, the SDG indicators are now part of the overall sector performance table; low-dose high-frequency training will be initiated; collaboration with the private sector will be reinforced and innovative financing (health bonds) will be promoted; finally, interoperability of the various information systems at national level and dash-boards at district level will be reinforced and expanded.
- In Service Delivery, the number of functioning Health Posts will be increased and e-health initiatives such as Telemedicine and EMR will be expanded nation-wide.

All these innovations will need more detail to effective implementation in the upcoming annual plans of the sector. They all are chosen with the intention to reduce future costs and ensure sustainability of the overall performance of the sector.

Costs of HSSP4 implementation

The cost of implementing HSSP4 has been computed using the One Health tool (Chapter 11). The entire plan is projected to cost **RWF 4,290,170.71** million (4.29 trillions) for the 7 years. At the end of the period, the mean per capita cost would be **44,826.92** RWF or **60 USD per capita,** up from RWF **27,415.22** per capita in 2018 or **36** USD per capita during HSSP3. This estimate will increase when more complete cost estimates become available.

The estimates include the drug and supply costs for the prioritized interventions, the health system costs estimated at *3.82 trillion RWF*, the majority of which are the human resource costs, infrastructure, and drugs and supplies.

It is important to note that the costs by level of service delivery reflect a larger expenditure at the higher levels of the system, mainly at the national level (for the programs) and hospital level. This may be due to the prioritization of curative care for NCDs, in addition to the delivery of preventive activities like immunization and the distribution of ITNs at the HC level.

A financial sustainability assessment was not possible, as it was not part of the scope of work and data was unavailable. It is critical given the high cost of the plan to determine the affordability of the plan and to assess the need for resource mobilization strategies.

Responsibilities and performance monitoring of HSSP4

Implementation, monitoring and evaluation (M&E) of HSSP4 are the responsibility of all stakeholders in the health sector, as highlighted in Annex 4. Each will play different roles and responsibilities as detailed in the implementation arrangements (chapter 4). Similarly, roles and responsibilities of the coordination and partnership arrangements have been identified against the background of endorsed policies.

Implementation of HSSP4 will be monitored through annual operational plans at all levels, based on the robust existing M&E system (chapter 10). Health system research will provide relevant and evidence-based information that will then inform policies and responsible decision-making. The Table with the performance indicators (Table 1) and the Log Frame in

Annex 7 will inform the impact and output indicators of HSSP4. Periodic health sector performance reviews - quarterly, annual, mid-term (2022) and end-term (2024) - will serve to inform health policy dialogue, priority setting, resource allocation, timely corrective action and subsequent planning cycles.

1. INTRODUCTION

1.1. Context and background of HSSP4

Rwanda's fourth HSSP is proposing a paradigm shift, linking it with Rwanda's National Constitution and Vision 2050, the Health Sector Policy 2015, NST, Universal Health Coverage (UHC) principles and the Sustainable Development Goals (SDGs). HSSP4 has been designed to be responsive to the country's aspiration to become high-income country with better quality of life of the population. Article 41 of the Rwandan Constitution amended in 2015 stipulates that health is a Human Right:
"All citizens have rights and duties relating to health. The State has the duty of mobilizing the population for activities aimed at promoting good health and to assist in the implementation of these activities. All citizens have the right of equal access to public services in accordance with their competence and abilities."

Vision 2050 ("The Rwanda We Want") will translate this health right into socio-economic development strategies in the context of transforming Rwanda into a high-income country by 2050. Through key pillars and crosscutting area, Vision 2050 will be people-centred, thereby encompassing all age cohorts to achieve its short, medium and long-term strategies. The health paragraph of Vision 2050 will address the high population growth rate (2.6% per year), Reproductive Health challenges, the importance of pre-elimination of infectious diseases (including malaria, Vaccine Preventable Diseases and mother to child transmission of HIV) and rising prevalence of Non Communicable Diseases. Relevant health indicators with their baseline (2018), mid-term targets (2020), and final targets (2024) have been included in Table 1, showing the main sector performance indicators during the HSSP4.

The HSSP4 contributes to the NST, which provides a medium-term framework for achieving Rwanda's long-term aspirations, as embodied in Vision 2050, the seven-year GOR program (7YGP), and the SDGs. NST aims at increasing the quantity and quality of human capital; increasing capacity to innovate in the economy; accelerating the rate of poverty reduction; and improving quality of life of Rwandans.

1.2. Purpose of HSSP4

The Overall Objective of the health sector is to ensure universal accessibility (in geographical and financial terms) of **equitable and affordable quality health services** (preventative, curative, rehabilitative and promotional services) for all Rwandans. Results will be measurable at 'Impact level' as presented in the Performance table (Table 1) and the Log Frame (Annex 7). In the tenure of the prevailing Health Sector Policy 2015, all interventions are guided by four Strategic Objectives:
Full implementation of the main health **programs** (improve demand, access and quality)

1. Strengthen the health **systems building blocks** (strengthen policies, resources and management)
2. Strengthen all levels of **service delivery** (organise the services effectively at all levels, referrals)

3. Ensure effective **governance** of the sector (strengthen decentralization, partnership, private sector coordination, aid effectiveness, and financial management)

These Strategic Objectives respond to the newly formulated priorities of the sector (chapter 2.2) and include in their implementation many innovations, meant to facilitate the transformation towards the Overall Objective of HSSP4 and thus to the wider objectives of the NST.

1.3. Methodology of developing HSSP4

The development of HSSP4 was done through the following process:
MOH Level preparatory meeting was held between the Consulting team and MOH to agree on the strategies the team had proposed to adopt for accomplishing the mission. The inception report outlined the timeline, the interviews with the various Key Informants, the choice of the districts to be visited and the preparation for the national consultative workshops. The team participated in a Health Sector Working Group meeting, where an outline of the work was presented and discussed.

Meeting with MINECOFIN: All team members participated in the Joint Health Sector Review meeting between stakeholders and MINECOFIN, where details about the process and content of district and sector strategic plan development were shared.

Desk Review: The team conducted analytic desk reviews to examine national and international literature that informed the HSSP formulation process. Through the various TWGs, MOH and MINECOFIN availed relevant and recent information to the team, including relevant district and thematic strategies. Some of the key documents reviewed included the HSSP III, the Health Sector Policy 2015, Rwanda Vision 2020, the EDPRS 2, and the HSSP III Mid Term Review final report, MOH Annual Reports, and other sources of information (Annex 5).

Key Informant Interviews (KIIs): The team undertook KIIs at national, district, and HF levels to get qualitative information on which strategies work and those that do not. At National level, KIIs were held with the MOH Leadership and Senior Managers in the Health Sector.

Field visits were conducted in the following districts: Nyanza, Bugesera, Gakenke and Rubavu. In each district, meetings were conducted with the Vice-Mayor in Charge of Social Affairs, and members of the District Council. Visits were made to District Hospitals and District Pharmacies.

Consultative Workshop: Two workshops were held. The first one, a three-day national consultative workshop was held in Gisenyi-Rubavu District to collect inputs and ideas from the participating stakeholders to enrich and guide the development of the HSSP4.
The second workshop was held in Kigali to receive comments and additional inputs from MOH and other stakeholders on the Zero draft of HSSP4 that had been circulated to all participants a few days earlier. This one-day workshop was held jointly with the team of consultants, the MOH officials and all stakeholders.

Submission of HSSP4 Draft 1: After that second workshop, all relevant feedbacks and comments provided by the MOH and stakeholders were included and a first draft of HSSP4 was produced and submitted to MOH. After having received comments from MINECOFIN, a second draft was made that benefitted from a final review by all stakeholders.

2. OVERVIEW OF THE HEALTH SECTOR

2.1. Policy context of the health sector

The foundation for the current health services have been laid some 15 years ago with the drafting of the first HSSP, its review and the subsequent five year plans that became each time larger, more ambitious and complete, finally culminating in this fourth National Strategic Plan (HSSP4) that now aims to broaden up further towards all other sectors of development and initiating a process towards Universal Health Coverage (UHC). An important feature of the drafting of this HSSP4 is the overall coordinating and steering role of MINECOFIN and the simultaneous process of developing Strategic Plans not only for all Ministries but also for all districts in the country through their respective District Development Plans (DDS).

HSSP4 guides the health sector in Rwanda to directly contribute to the achievement of health and other development commitments at global, regional and national levels. At the global level, the HSSP4 supports the achievement of the Sustainable Development Goals (SDGs), particularly SDG 3 to ensure healthy lives and promote well-being for all at all ages, but also supports others of the 17 total goals directly impacted by a strong health system with the ultimate objective of reaching Universal Health Coverage (UHC). At the regional level, HSSP4 will support the Africa Agenda 2063 and EAC Vision 2050.

Nationally, HSSP4 builds upon the existing foundation for the health sector's contribution towards the achievement of Vision 2050. The health sector will play a critical role in producing a healthy and productive population that will drive the Rwandan economy into a thriving upper-middle income country status by 2035 and to a high-income country by 2050. These economic transformations will engender significant changes whose implications need to be addressed now in order to lay a solid foundation for broader socio-economic development of the country. Some of the challenges that can be expected are:
As the country joins the ranks of upper-middle income countries, development assistance for health will inevitably reduce significantly or run out altogether.

Secondly, the epidemiological profile will shift from one dominated by communicable diseases to one where NCDs will be dominant, with concomitant demands on the health system for tackling such demands; this shift is already underway.

Thirdly, as the country has embraced the SDGs agenda, there is a need to reorganize the system in order to ensure UHC for needed services for all during each phase of the life-course, given the anticipated epidemiological shifts and the increase in costs that will be part of it.

Lastly, the emergent health system will be one that provides security and safety to all Rwandans by minimizing vulnerability to acute epidemiological events that endanger the collective health of populations living across geographical regions and different international boundaries.

For Rwanda to confront these challenges and public health threats, the health system must be resilient – one that is dynamic and adapting to changes where people live, the kinds of health problems they face and the social and economic factors that make it difficult for them to access the health services they need. The speed of economic, social, technological and ecological change in Rwanda will inevitably accelerate in the future as the country inches towards Vision 2050. The contribution of the health sector to social resilience will also be increasingly important and the system will need to build its capacity to adapt to change and withstand population-level shocks.

Inevitably, this implies the need to adapt to changes to the system of health finance and to changes in the roles of the Government, Private Sector and Citizens. The foundation for sustainable financing of the health system must be put in place now. The 2015 Health Financing and Sustainability Policy specified the key objectives that are required to take the health system in the directions outlined below:

- To increase efficiency for improved quality and service delivery (value for money)
- To strengthen Health Insurances and risk pooling systems
- To enhance strategies and interventions for increasing revenue for health including the community and private sector to monetize available expertise
- To strengthen the institutional environment for sustainable financing and ensure accountability in the health sector.

There are still challenges and gaps that need to be looked into and necessary adjustments need to be made in the design and implementation of each of the above components, such as the definition of health services benefit package, addressing the current financial status of CBHI schemes and how to finance subsidised health services.

This HSSP4 is confined to the health sector and outlines strategies that will enable Rwanda to build a resilient health system that it can afford and which provides the best value for the money invested. Details are articulated not only in this strategy, but also in the strategies of other sectors.
Besides the financing foundations outlined here, HSSP4 highlights strategic directions and innovations in all program and health system areas in order to build a health system that will provide value for money through implementation of strategies in other system areas, such as HRH, Infrastructure, Procurement and Supply Chain Management and Information System.
Whilst the HSSP4 focuses on the health sector, it must be emphasised that its implementation will call for collaboration with all the other development sectors, since it is evident that the third SDG (Health) interacts with and interdepends on many of the other relevant sectors.

2.2. Sector status and Achievements

A: Services: Information from the latest review of the health sector, the Mid Term Review (MTR, September 2015) showed steady improvements in the performance of the health

services. These figures were confirmed in the Demographic and Health Survey (DHS, 2014/2015) and in the MOH Annual Report (July 2015- June 2016).
According to the National Institute for Statistics of Rwanda (NISR), Impact Indicators showed important improvements: Life Expectancy increased from 55 years (DHS 2010) to 65 years (DHS 2015), Maternal Mortality Ratio decreased from 476 (DHS 2010) to 210/100,000 live births (DHS 2015 and Infant Mortality Rate went down from 50 (DHS 2010) to 32/1000 live births (DHS 2015). Also Neonatal Mortality went down from 27 (DHS 2010) to 20/1000 live births (DHS 2015).
Most key interventions mentioned in the third Health Sector Strategic Plan (HSSP3) were implemented and thus contributed to the reduction of Communicable (CDs) and Non-Communicable (NCDs) diseases. These figures provide the baseline from which the targets for HSSP4 are derived both for its mid-term in 2020 and for the end of HSSP4 in 2024 (Table 1).

The Outcome/Output indicators in the MTR 2015 showed similar improvements in services like Nutrition (Prevalence rate of Stunting down from 44 % to 38%); Maternal Health (% Births attended in health facilities from 69% to 91%); Birth control and Family Planning (CPR up from 31% to 42%); HIV/AIDS and TB Control (TB Treatment Success Rate up from 87% to 90%). One serious drawback over the last years was the upsurge of Malaria cases that started in the end of 2012 and continues till today. Experts attribute this upsurge to several factors occurring not only in Rwanda, but also wider in the sub-region, such as vector density and resistance, climate change (increase in temperature and rainfall), human behaviour and non-universal coverage of effective interventions, despite a sustained and intensive effort by the Government (in door spraying, distribution bed-nets, fast testing and treatment).

The MTR team concluded that “the Rwanda health sector has achieved all MDG targets due to high commitment of the leadership and consistent implementation of its strategies and policies. But that the sector is now at a cross-roads, as it is facing the challenge to sustain the current level of service provision, while responding to: (i) the significant reduction in external financing; (ii) the change from mainly infectious diseases in the younger age-groups towards increasing numbers of non-communicable diseases often in older age groups; (Iii) the increase in more costly secondary/ tertiary care facilities / equipment and (iv) disparity in lifestyle related morbidity and mortality patterns between urban/rural populations.

B. Systems: With regard to the performance of the various components of the health system, these have been instrumental in reaching the MDGs and achieving the HSSP3 objectives. For the HSSP4, these systems need to continue venturing innovations to face the new challenges of the sector. Below, the most important contributions of the system components to the achievements are summarised:

HRH: The sector has attained several HSSP3 targets pertaining to health professionals’ /population ratio, expansion of health professional training, instituted retention strategies and established a mandatory continuous professional development program for health professionals.
Outstanding challenges remain the gaps in skills mix; a high staff turnover and limited career development opportunities for health professionals at different levels of the health sector.

Leadership and Governance: At the national level, the strong government leadership and the restructuring of the HSWG and TWGs have improved policy dialogue and enabled effective coordination of health sector development. At the district level, DHUs have been established in all districts to coordinate the decentralized health system. Outstanding challenges include limited capacity of DHUs in ensuring effective coordination and monitoring of the decentralized health services. Although health professional councils are functional, the limited capacities, coordination and synergy in the regulation of the clinical practice has compromised the quality of health care services. The private sector has a lot to offer in the attainment of UHC, but there is need to increase its engagement with the public sector.

Medical Products and Health Technologies: Quality control of pharmaceutical products, the storage capacity and availability of essential commodities as well as rational use of medicines have greatly improved. Outstanding challenges include weak pharmaco-vigilance system and limited capacity of supply chain management at different levels. Innovations undertaken earlier have borne results, for example the introduction of drone technology has enabled quick blood distribution.

Health Financing: The country has attained the Abuja declaration of allocating 15% of the government budget allocated to health, and established a functional and affordable health insurance system for households. Coverage of health insurance currently stands at 83.6% of the population for CBHI (as of June 2017) and at 90% if all health insurance schemes are included. The introduction of performance based financing (PBF) has yielded efficiency gains for the health system. Outstanding challenges include the important external financing of the sector, which is not sustainable. The insufficient contribution of CBHI members compared to the increasing of health care cost, the limited contribution by the private sector to health insurance, as well as fluctuations in CBHI membership threaten the sustainability of the community financing schemes;

Service Delivery: A well-established network of health facilities with good geographical coverage exists with an adequate fleet of ambulances for the pre-hospital and emergencies services. Health care packages have been defined for each level (annex 6); accreditation standards developed, disseminated and implemented; and quality assurance teams established in each health facility. Future efforts need to address further expansion of the health infrastructure to sectors without health centres or cells without Health Posts; improving IT infrastructure in health facilities; provision of specialized services at secondary and tertiary levels; strengthening emergency and pre-hospital services.

Health Information Systems and Research: The HMIS collects all routine data from health facilities. Programmatic quarterly coordination meetings with the heads of health facilities have been institutionalised and are held regularly. A National Health Research Agenda has been developed to ensure alignment of all research efforts to the sector priorities. Future efforts should address improving data management and use at all levels; improving reporting rate from private health facilities; linking and ensuring interoperability of all information systems as well as strengthening the health research systems for evidence based policy and decision making.

Vision 2020 is remaining with just 3 years of implementation, while EDPRS 2 is entering its final 5th year. Similarly, HSSP3 will last for just one more year till June 2018. The HSSP 4 priorities for HSSP4 responded to the unfinished business of these two strategic plans while at the same time looking forward to each of its four strategic objectives (chapter 3.2) that address (i) the implementation of the services, programs and essential interventions; (ii) strengthen the various systems; (iii) strengthen all levels of service delivery and (iv) ensure effective governance. The numbers in the table refer to the chapters where they are presented in more detail.

2.3. Institutional overview of the health sector

The Rwandan health sector is a pyramidal structure and consists of three levels: the central level, the intermediary level, and the peripheral level (annex 1).

The Central Level (see organization chart in annex 1)

The central level comprises (i) Ministry of Health (MOH), (ii) Rwanda Biomedical Center (RBC) and the (iii) national referral and teaching hospitals.

- The responsibility of the MOH at central level is to formulate policies and strategies, ensure monitoring and evaluation, facilitate capacity building and mobilization of resources. The central level organizes and coordinates the intermediary and peripheral levels of the health system and provides them with administrative, technical and logistical support.
- The RBC's mission is to provide quality affordable and sustainable health care services to the population through innovative and evidence based interventions and practices, guided by ethics and professionalism. The core functions of the RBC include coordination and improvement of biomedical research activities, coordination of various activities geared towards the fight against communicable and non-communicable diseases, provide high level technical expertise in the health realm, ensure availability of medicines and medical supplies at all times in health facilities, and establish strategic relations with regional and international institutions, so as to achieve the strategic health goals.
- The mission of the national referral and teaching hospitals is to provide tertiary care to the population. These include King Faisal Hospital (KFH), Rwanda Military Hospital, Kigali University Hospital (CHUK), Butare University Hospital (CHUB) and Ndera Hospital for mental health and psychiatric care. King Faisal hospital was created to provide a higher level of technical expertise than that available in the national referral hospitals to both the private and public sector and to reduce the number of patients being referred abroad for complex medical interventions.

The Intermediary Level

To decrease the pressure of demand for services in the national referral hospitals, 3 district hospitals were upgraded to referral hospital level (Ruhengeri, Kibuye and Kibungo hospitals) and four other district hospital were upgraded to provincial hospital level (Rwamagana, Bushenge, Ruhango and Kinihira) in order to form an intermediary level of referral hospitals. In addition, there are private practices operating in most of these cities.

The Peripheral Level: DHs, HCs and HPs (see map of health facilities in annex 2)

The peripheral level is represented by the health district and consists of an administrative office (DHU), a district hospital (DH), and a network of health centers and health posts (HCs / HPs). As part of the decentralized structure of the GOR, the District Health Unit (DHU) is an administrative unit in charge of coordination of the provision of health services (including the private sector) and responsible for planning, monitoring and supervision of the decentralized implementing agencies. The DHU is part of the DHMT and reports to the Vice-Mayor in charge of social affairs.

The functions of the DHU include organization and coordination of health services in the Health Facilities (DH, HCs, HPs) and the Community. Health facilities deliver the approved healthcare packages (annex 6), provide administration, manage logistics supplies and supervise Community Health Workers (CHWs).

Generally, the service package at a district hospital (DH) includes inpatient / outpatient services, surgery, laboratory services, gynecology-obstetrics, radiology, mental health, dental and eye services. The HCs provide preventive services, primary health care, in-patient care, referrals, and basic maternity services, while the HPs provide services such as immunization, family planning, growth monitoring, and antenatal care.

At the village level, Community Health Workers (CHWs) provide prevention, promotion and some curative health services. Community health services are integrated into the community development services and administrative structures. There are 499 HCs spread-out all over the country (Annex 2).

Table 1. Existing administrative structures and related health facilities

S. No	Administrative level/ structures	Number	HSS Structures	Number
1.	Villages / Imidugudu	14,837	CHW	45,516
2.	Cells / Akagari	2,148	Health Posts	476
3.	Sectors / Imirenge	416	Health Centers	499
4.	Districts/Uturere	30	District Hospitals District Pharmacies	36 30
5.	Provinces (including the City of Kigali)	5	Provincial Hospitals	4
6.	National		National Referral and Teaching Hospitals	8
7.	Referral systems		Ambulances / SAMU	225
8.	Registered Private HFs	250		

Source: HMIS 2016-2017.

3. STRATEGIC FRAMEWORK

3.1. Vision, mission and objectives of HSSP4

Vision of the country:

To become an upper-middle income country in 2035 and a high income country in 2050

Vision of the Health Sector:
The Health Sector Policy (January 2015) states the overall vision of the health sector as follows: *To pursue an integrated and community-driven development process through the provision of equitable, accessible and quality health care services*.

Mission of the health sector:
The Rwanda Health Sector mission is to provide and continually improve affordable promotive, preventive, curative and rehabilitative health care services of the highest quality, thereby contributing to the reduction of poverty and enhancing the general well-being of the population.

3.2. Overall and Strategic Objectives

The Overall Objective (OO) of the health sector is to ensure universal accessibility (in geographical and financial terms) of **equitable and affordable quality health services** (preventative, curative, rehabilitative and promotional services) for all Rwandans. Results will be measurable at '**Impact level'** as presented in the Performance table (Table 1) and the Log Frame (Annex 7)

This Overall Objective will be attained through four Strategic Objectives (SO):

1. Full implementation of the main health **programs** (improve demand, access and quality)
2. Strengthen the health **systems building blocks** (strengthen policies, resources and management)
3. Strengthen all levels of **service delivery** (organise the services effectively at all levels, referrals)
4. Ensure effective **governance** of the sector (strengthen decentralization, partnership, private sector coordination, aid effectiveness, and financial management)

These four Strategic Objectives respond to the priority areas that were approved by the Ministry of Health and that have been presented earlier in chapter 2.2 and in Table 3.
Results will be visible at the '**Outcome level'** and have been detailed below in section 3.5. as part of the Result Chain. A full Log Frame for HSSP4 has been included in Annex 7. The level of outputs is reflected in the Log Frame but is considered the responsibility of the program managers to populate.

3.3. Contribution of HSSP4 to Vision 2050, SDGs and NST

3.3.1. New priorities and Innovations

Whilst the sector takes note of significant progress in a number of areas, it acknowledges that further progress to meet set targets, as well as addressing areas that are lagging behind, will call for innovation at all levels.

Improving health **across the life course** (from utero to the elderly) will encompass ensuring better pregnancy outcomes through several interventions. Early attendance of ANC (introducing urine testing, sensitization…) with increase in the number and quality of ANC visits. Training modalities will be refined from heavily loaded sessions to low-dose high frequency training in Basic Emergency Obstetric and New-born Care at health centre level and Comprehensive Emergency Obstetric and New-born Care at hospital level, to improve uptake of skills. Maternal, Neonatal and Child Death will be monitored and actions taken through a strengthened Surveillance and Response system, replacing the current Deaths Audits. The pre-service training curriculum will be revised to capture maternal, neonatal, child and adolescent sexual and reproductive health. The package of health services to be delivered at the different levels will be revised to include services for the elderly.

Uptake of **Family Planning services** has not registered significant increases in the previous years. In addressing this, integration of Family Planning in antenatal and post-natal care and expansion of social marketing for condoms, emergency and long-lasting contraceptives to improve availability and reduce the high unmet need of the last five years! Further research will be undertaken to understand factors that hinder FP uptake.

Special attention will be paid to **address stunting** through a focus on Early Childhood Development (ECD) as an entry point in delivering health interventions; inter-sectoral activities from national to the village; introduction of locally produced age-specific packages and regular food supplementation/education to the families of malnourished children. Micronutrients will be provided to pregnant women. On the other hand, overweight and obesity among children and adults, as an important risk factor for NCD will be regularly monitored and preventive activities will be expanded.

Social media platforms will be employed to **improve uptake** of health interventions. Among these, reaching the youth about sexual and reproductive health, information on prevention and management of NCDs and data collection for selected indicators will figure prominently.

The **private sector will be engaged** to support health systems development and expand specialised care and service provision such as: local production of medicines and medical products; increasing availability of medical products through social marketing; building of Health Posts, malaria control through environmental measures; health financing and support ICT for health information systems.

In planning the future **Workforce**, attention should be given to the introduction of a retention strategy for CHWs and health professionals (doctors, nurses, midwives, paramedical staff) in order to reduce the attrition rate. Further to this, keeping in pace with the epidemiological profile indicating a rise in the non-communicable diseases and the projected increase in life expectancy, investing in the management of the most common infectious and NCD at the district level will offer efficiency savings. The need for palliative care will increase for chronic conditions and in addressing this, home-based care practitioners will be trained to minimise the health facility-based care. Efficiency savings during in-service training will include more use of E-learning platforms, integration of related training modules and use of mentoring approaches.

In **Infrastructure & maintenance** special attention is needed to the further for the timely planning of effective implementation, expansion of reliable maintenance systems **that emphasizes preventive maintenance,** and the definition of strict criteria for building new HFs (esp. at national and provincial levels).

Electricity and Kerosene costs will be reduced through a **switch to solar driven cold-chain equipment.** Use of moto-ambulances will be explored to improve referral especially in remote and hard to reach areas. Finally, together with the private sector and the community, construction of Health Posts will be expanded to all cells to provide proper and adequate care as close to the village as possible.

In the area of **Health Products and Commodities**, the role of the District Pharmacies will be formalised, while work with the private sector will initiate drug production inside the country. The support to the laboratories and imaging technologies will be explored.

The **service delivery systems** have been well established in the previous years. Care must be taken not to erode the peripheral and community levels as the increased demand for specialised services tend to attract more attention (and resources). The expansion of Health Posts seems therefore a necessary priority in the coming years. Additional innovation will include improving efficiency in service delivery through use of tele-medicine to offer consultancy services; improving management of emergencies and trauma at hospital level, establishment of mental health services at community level (also including psychologists) and expansion of the clinical outreach program in peripheral health facilities.

In addition to this, the regulation of **Traditional, Complementary and Alternative Medicine (TCAM)** will be strengthened in order to mitigate any malpractice and threat to public health. MOH in collaboration with national and international stakeholders is developing a regulatory framework, which will define the spectrum, scope, entry requirements and code of conduct of TCAM practices.

As stated earlier, **Leadership and Governance** have been strong and ready to take decisions where and when needed. This bold and daring attitude should prevail in the coming years.

The important **Health Financing** system is discussed in some detail below as part of the need to prepare for the foundation of a sustainable financing system as part of the HSSP4.

Finally, the **HMIS and M&E systems** increasing move towards interoperability of the various information systems not only within the sector but also with the other development sectors in order to strengthen jointly monitoring of sector performance and progress towards the SDGs. Accountability especially at the district level will be strengthened through use of dash boards as a quick information source to inform decision making and inclusion of selected indicators in the contracts of district level administrators.

Table 2. Priorities by Services, Programs and Health Systems

Chapter 4.1. HEALTH SERVICES AND PROGRAMS ACROSS THE LIFE CYCLE	
4.1.1. MCCH (Pregnancy, Early Life and Children)	• Improve and sustain quality of MCH services/Focus on decreasing maternal and neonatal mortality • Increase ANC and Postnatal care uptake • Improve community mobilization to increase facility delivery
Nutrition	• Community education and awareness on dietary and complementary feeding practices • Establishment and using ECD as an entry point of provision health interventions (specifically nutrition) • Prevention and management of malnutrition (acute and chronic) • Improve multi-sectoral collaboration
Community Health	• Support the Capacity Building of CHWs • Ensure the sustainability of CHW Program • Ensure the availability of commodities and materials for the program
ASRH & GBV	• Integrated education on SRH (target groups: Young and Adolescents) • Scaling up management of GBV cases at health center • Support the social reintegration of the GBV cases
Family Planning	• Improve access / quality to FP services with a focus on long term methods • Scale up post-partum FP education and provision • Coordination of stakeholders on FP uptake awareness
Chapter 4.2. COVERAGE OF ESSENTIAL HEALTH INTERVENTIONS	
4.2.1. Infectious Diseases	• Sustain universal access to HIV testing and treatment • Improve prevention and management of blood borne diseases • Ensure the effective prevention and efficient management of malaria cases and other parasitic diseases • Ensure early detection and effective treatment of TB and other respiratory & lung diseases
4.2.2. NCDs and Injuries	• Ensure early detection of NCDs • Increase access to specialized NCDs treatment • Reduce premature death • Ensure prevention and management of unintentional injuries
Mental Health	• Increase Mental Health Services Coverage • Ensure access to specialized mental health services and other services to people living with disabilities
4.2.3. Health Promotion	• Ensure BCC for better health promotion and prevention • Educate population on Hygiene and sanitation
Environmental Health	• Improve Health care waste management within the Health Facilities;

	• Improve WASH services within the community- and public places • Ensure Food Safety and Hygiene in Food Establishments • Ensure Water Quality within the Community; • Ensure Community Health Clubs are functional country-wide • Improve Household sanitation and hygiene practices
5. Health Security (Epidemic Surveillance and Response)	• Ensure the implementation of International Health Regulation (IHR) and Global Health Security (Detect, Prevent, and Respond to the epidemic emergencies • Strengthen laboratory capacity for detection and diagnosis of outbreaks & emerging infectious diseases
Chapter 8. HEALTH SYSTEMS AS INPUTS & ACTIONS TO THE SECTOR	
8.1. Health Workforce (HRH)	• Improve quantity and quality of HRH to respond to health needs • Strengthen HRH management at central and decentralized level (focus on retention strategies)
8.3. Medical Products and Commodities	• Development of pharmaceutical industry plants for production of medical products, devices and commodities and also research (clinical trial & drugs development) on emerging superbugs • Ensure and sustain the availability of essential medicines (vital and non-vital), vaccines and blood components • Reinforce food and medicines regulations
8.4. Service Delivery and Quality improvements	• Ensure geographical and financial access to health care services • Establish and institutionalize quality improvement (accreditation) mechanism/framework • Ensure access to safe surgical care in HFs at secondary and tertiary levels • Strengthen the management of health care technology • Ensure availability of IT infrastructure to improve health services delivery • Support and sustain the cost of care for constant improvement of the health system (ex. access to quality treatment of cancer, kidney, CVD, drug addiction & abuse etc.) • Improve the pre-hospital and emergency services • Strengthen the Regulation of Traditional, Complementary and Alternative Medicine (TCAM)
8.5. Leadership and Governance	• Reinforce the compliance with policies, laws and regulations • Strengthen the role of coordination with the private sector and other key stakeholders in the health sector • Strengthen management of decentralized health systems by district leaders and HF managers • Improve the coordination of health professional bodies for efficiency (e.g. Establish an umbrella)
8.6. Health Information Systems	• Synchronize all HIS systems together and link them with EMR to improve patient management and data use for decision making • Promote new health care technologies to improve quality of health services (E-health initiatives)
8.7. Health Financing	• Ensure financial sustainability of Health sector (increase budget, optimization, efficiency, collaboration with the private sector and

	PPP..) • Promote new innovative financing mechanisms for high impact interventions and emerging diseases • Ensure periodic revision of health insurance package

Note: The sequence of priorities in this Table follows the respective chapters in HSSP4.

3.3.2. Contribution to the thematic areas and priorities of the SDGs

The contribution of the health sector towards achieving the Sustainable Development Goals can be seen in the following 10 of 17 goals:

- **Poverty Reduction (SDG 1):** The health sector will collaborate with other sectors to implement social protection systems for all, including expanding coverage (removing financial barriers in accessing health services & elimination of catastrophic expenditures on health) with a focus on vulnerable groups, in addition to the enhancement of promotive and preventive health interventions, reducing the risk of contracting/developing communicable and non-communicable diseases.
- **Adequate Nutrition (SDG 2):** As investments by the GOR to improve food security, consumption and production, the health sector will commit itself to supporting adequate nutrition of children, adolescents, pregnant and lactating mothers and vulnerable groups by 2030.
- **Education (SDG 4):** The health sector will also collaborate with other sectors to ensure access to early childhood development services, childcare and in the review of curricula in educational institutions to include health promotion (of pre-primary, primary, secondary and tertiary levels).
- **Gender Equality (SDG 5):** The health sector focus within this area, in collaboration with other sectors, will be on the prevention and management of all forms of gender-based violence, in public and private spheres, including trafficking, sexual and other forms of exploitation and eliminate gender barriers to receiving essential health services.
- **Clean Water and Sanitation (SDG 6):** Through HSSP4, the health sector will advocate for interventions to achieve universal access to safe water and sanitation for the reduction of water, sanitation or hygiene related diseases and for response-preparedness to ensure availability of clean water during environmental emergencies and/or disasters.
- **Economic Growth (SDG 8):** The health sector will collaborate with other sectors to target the promotion of healthy and decent employment as a driver of economic growth and enforce safety standards in all forms of employment. Additionally, the health sector will support the development, review and implementation of policies supporting the following areas; Employment, Creation of Employment, Access to Employment and a Healthy Work Environment.
- **Tackling Inequalities (SDG 10):** While improving health and productivity of citizens, the health sector in collaboration with other sectors will develop interventions and promotion activities that address social, gender and economic barriers at household levels to reduce household income disparities and improve social protections for vulnerable/marginalized individuals with respect to Universal Health Coverage.

- **Climate change & Environmental Health (SDG 13):** The health sector will collaborate in strengthening protection mechanisms for preservation and conservation in order to promote environmental health and mitigate adverse effects of climate change on the population.
- **Inclusive Societies (SDG 16):** The health sector will collaborate with other sectors to address violence and injury prevention among children and adults, Gender-Based Violence and Civil and Vital Registration of important personal and social events (like birth, death, marriage, divorce).
- **Partnership for health (SDG 17):** The Health sector will focus on Resource Mobilization, Capacity Building and Private Sector engagement, mobilizing partners to support planning, implementation, monitoring and attainment of health related SDGs in the context of mutual stakeholder responsibilities and accountabilities.

3.3.3. Contribution to thematic areas and priorities of NST

The contribution of the health sector to economic development and poverty reduction can be viewed from two angles.

- The health sector contributes to ensuring a **healthy population** that in turn is able to: stay in school (for the school going), engage in economic production, reduce time lost due to caring for the sick, reduce catastrophic expenditure as a results of seeking care when strong pre-payments mechanisms are in place. A healthy population, therefore, grows the economy and lifts itself out of poverty.
- The health sector is expected to **create more jobs and employment opportunities** given the projected increase in the number and complexity of health services, hence, requiring increase in number and skills of human resources for health. This second approach is dependent on whether other aspects of the economy are growing at the same or even faster rate so that the economy is able to accommodate the increased health sector wage bill and the new staff; or the private sector and middle class is sufficiently developed to afford payment of health services privately. This second approach is usually seen in countries that are already middle or high income.
- In the medium term, the health sector will continue to be more of a consumptive sector, requiring investment because the returns in the form of a healthy population are long-term. The Health sector requires expansion of the private sector, as well as growth of the middle class to afford the private services but these are both in the early stages. The other aspect is investing in highly specialised health services to attract clients from the region and beyond as a solid foundation for the country's rise to a future destination for medical tourism.

3.3.4. NST Cross cutting areas (CCA)

The HSSP IV will mainstream the following cross cutting areas to implement the NST: ***Capacity development, environment and climate change, disaster management, Disability & Social Inclusion, Gender & Family promotion, Regional Integration and International Positioning***. More details on the indicators and policy actions of the HSSP IV aiming at monitoring the progress towards responding to the above mentioned cross cutting areas can be found in the logical framework.

a. Capacity development

Capacity-building, needs to be considered at the sector strategy level to ensure efforts are focused on national and sector priorities (Vision 2050 and NST). Achievements and sector development targets depend on both individuals and institutions having the capacity to deliver. Better coordination of capacity development is needed to mitigate duplication, overlaps, wastage of resources, and inefficiency. A good monitoring and evaluation system is also needed to effectively measure the impact of capacity development investments.

HSSP IV capacity development will focus to improve the quality and increases the quantity of Human Resource for Health. In pre-service and in-service training of health workers and community health workers are being particularly targeted, according to needs and this goes with strengthening of health professional bodies and teaching institutions.

b. Environment and climate change

The Health Sector will collaborate in strengthening the protection mechanisms for preservation and conservation in order to promote environmental health and mitigate adverse effects of climate change on the population. The Sector will contribute to sensitization to reduce the air pollution in households. Promoting access to water, sanitation and hygiene especially in the health facilities, in the public places and in the communities will remain important for the NST.

c. Disaster management

The Sector will continue to build the capacity of health workers in disaster prevention, detection, response and recovery to reduce the risk of outbreaks and diseases.

d. Disability & Social Inclusion

The Sector will continue to facilitate the access to health services for people living with disabilities by removing any physical and communication barrier in order to promote social inclusion.

e. Gender & Family Promotion

Mainstreaming of gender equity as a crosscutting area remains a priority goal for the health sector during the six years to come. Women and men have specific health needs at all stages of life that are related to both physical differences and their societal roles. A gender approach is clearly needed for Sexual and Reproductive Health—Family Planning, general knowledge about reproductive health options and opportunities, men engagement—but also for other key health programs (Malaria, HIV, SGBV, Nutrition, Mental Health).

Among the key gender issues that affect the health sector, the following are specifically addressed in the HSSP IV:

- Teenage pregnancy and related risks such as maternal mortality
- Women fertility rate
- Gender disparities with regard to HIV/AIDS
- Nutritional disorders especially among children and women
- Gender-Based Violence

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f. Regional Integration and International Positioning

The HSSP IV framework will focus on the harmonization of policies documents at EAC and international levels. The main area to be focused on are as follows:

- Ensure the harmonization and regulation of **Pharmaceutical, traditional Complementary and alternative medicine**
- Integrate **disease surveillance** and response to prevent propagation of epidemics;
- **Build the capacity** in the health sector by harmonizing medical education to facilitate mutual recognition and the movement of health professionals throughout the region;
- Pursue a **common strategy and communication policy for behaviour change** in relation to the adoption of healthy lifestyles for the prevention of communicable and non-communicable diseases;
- **HIV:** Harmonization of guidelines for HIV prevention, mitigation and treatment for truck drivers and other mobile workers
- **Malaria**: Implement cross borders initiatives to prevent and control Malaria

3.4. Sector Crosscutting areas to be mainstreamed by other sectors: NCDs and HIV

Strategic direction of NCDs and HIV as Crosscutting Issues

By 2024, to strengthen inter-sectoral collaboration for effective prevention and control of NCDs and HIV using synergistic multi-sectoral strategies for sustainable improvement of health outcomes in the population of Rwanda

3.4.1. Key strategies of mainstreaming NCDs and HIV in Sectors

3.4.1.1. Strategies for mainstreaming NCDs in various sectors

a. Education Sector:

- Integrate NCD prevention and control in school curricula at various levels of education
- Support research to generate evidence for monitoring NCDs, NCDs risk factors control and NCD policy-making

b. Local Government:

- Integrate check-up of NCDs in the community in the Imihigo of Local leaders
- Sensitize communities / participants on prevention and control of NCD risk factors during Umuganda, various speeches and other meetings in communities)

c. Environment and Natural Resources:

- Regulate and implement the policy/laws for air/indoor pollution and other environmental factors related to NCDs

d. Infrastructure Sector:

- Reinforce the implementation of policy of accessibility that promotes physical activities
- Accelerate the removal of Asbestos from human habitats

e. Agriculture Sector:

- Ensure production of healthy food crops (fruits, vegetables, cereals and other sources of healthy foods)

f. Justice Sector

- Ensure the enforcement of laws and regulations on control of risk factors of NCDs (e.g.: Tobacco, alcohol and road traffic control laws and regulations)

g. ICT Sector:

- Support ICT innovations and creativities for health promotion in relation to NCDs Prevention

h. Trade and industry sector:

- Regulate the trade of processed foods and beverages

i. Finance and Economic planning:

- Allocate special budget for highly specialized care for Cardiac surgery, Cancer treatment, Kidney transplantation, and NCD diagnoses
- Increase direct taxes and indirect taxations on tobacco and alcoholic beverages

j. Labour sector

b. Ensure systematic annual screening of NCDs among public and private sector employees

- Promote the safety at work place (mining, industry, construction, etc.)

k. Private Sector:

- Explore actively contribution of the private sector to the country initiative for prevention and control of NCDs

l. Coordination Framework for NCDs and HIV as Crosscutting Issues

- Set up inter-ministerial or multi-sectoral committee responsible of NCDs response in the country and chaired by the PM'S Office (the committee will help to set up a sustainable national coordination mechanism for prevention and control of NCDs for the country to meet the targets set for the country).
- Set up the national mechanism aimed at streamlining all NCDs interventions across all relevant sectors.

3.4.1.2. Strategies for mainstreaming HIV in various sectors

a. Ministry of sport and culture

- Organize Sport tournaments for HIV awareness, prevention and control

b. Ministry of Infrastructure

- Promote HIV awareness, prevention and control in road construction sites and other infrastructure development sites

c. Ministry of Education

- Promote HIV awareness, prevention, control and stigma mitigation in schools and higher institutions of learning, including Universities

d. Ministry of Youth and MYICT:

- Promote HIV awareness, prevention and control interventions in youth friendly centers

e. Ministry of Local Government

- Integrate HIV messaging in the speeches of local authorities during meetings, Umuganda and various community gatherings

f. Ministry of Natural Resources

- Organize HIV awareness, prevention and control sessions in all mining sites

g. Ministry of Public Service and Labour

- Organize regular sessions on HIV awareness, prevention and control interventions in public institutions

h. Ministry of Agriculture

- To organize HIV trainings among farmers' cooperative societies

i. Ministry of Finance and Economic Planning

- Increase budget allocated to HIV Prevention programs

j. Ministry of Justice

- Include an article in the penal code on any kind of discrimination due to HIV

k. Coordination Framework for NCDs and HIV as Crosscutting Issues

- Set up inter-ministerial or multi-sectoral committee responsible of NCDs response in the country and chaired by the PM'S Office (the committee will help to set up a sustainable national coordination mechanism for prevention and control of NCDs for the country to meet the targets set for the country).
- Set up the national mechanism aimed at streamlining all NCDs interventions across all relevant sectors.

3.5. Results Chain of HSSP4.

The expected results of HSSP4 – the result chain - is part of its Overall and Strategic Objectives as has been detailed in sections 3.1 and 3.2 above. Here the outcomes of the results chain have been detailed for each of the sector priority areas. These have been detailed at the outcome and output levels with their respective targets in the Logical Framework (annex 7).

Table 3. Results chain of HSSP4

The Overall Objective of HSSP 4 is to ensure universal accessibility (in geographical and financial terms) of equitable and affordable quality health services (preventative, curative, rehabilitative and promotional services) for all Rwandans	
Overall Results of HSSP 4	**Outcomes**
Full implementation of the main health programs (improve demand, access and quality)	Increased coverage of maternal and neonatal health services
	Improved coverage of child health services
	Increased coverage of immunization services
	Increased coverage of nutrition services
	Increase coverage of ASRH services countrywide
	Increase coverage of FP services countrywide
	Increase coverage of Geriatric Services
	Increased coverage of HIV interventions
	Increased coverage of viral Hepatitis prevention and control interventions
	Increased coverage of TB/Leprosy interventions
	Increased coverage of Malaria interventions

	Increased coverage of NTD interventions
	Cancer survival rates improved
	Increased coverage of NCDs: Heart Disease; Cancers; Diabetes and chronic obstructive airways disease interventions
	Increased coverage of mental health interventions
	Increased coverage of injuries and disability interventions
Strengthen the health systems building blocks (strengthen policies, resources and management)	All levels providing the relevant package of health services
	Functional referral system and pre-hospital services
	Quality diagnostic services
	Hospitals accredited
Strengthen all levels of service delivery (organise the services effectively at all levels, referrals)	**HRH**: Availability of a competent (well-trained and licensed), motivated and equitably distributed health workforce
	Infrastructure: Infrastructure and medical equipment norms and standards strengthened
	Medicines and medical products: Sustainable access to good quality and efficacious medicines and medical products.
	Health information systems and research: Interoperable, responsive and functional information systems providing high quality data in a timely manner to inform planning and decision making
	Research: A strengthened research system providing policy relevant evidence.
	Health financing: A sustainable, equitable and efficient health financing system reliant on and private resources
Ensure effective governance of the sector: strengthen decentralization, partnership, private sector coordination and strengthened health security	Strengthened institutional capacity for leadership and management
	Strengthened accountability mechanisms
	A functional legal and regulatory framework for PP partnerships
	Increased decision space to support decentralization
	Effective community engagement
	A sustainable, effective and efficient national epidemiological surveillance, response and recovery system
	A resilient and responsive health system

4. IMPLEMENTATION ARRANGEMENTS

4.1. Sequencing of interventions

Implementation of HSSP4 will be a coordinated effort by the MOH together with the various stakeholders, other socio-economic sectors, the private sector, development partners, NGOs, FBOs, civil society organisations and others. Overall coordination will rest with senior management of the MOH to ensure that all players support the same priorities and the same interventions. These will be defined by the MOH together with MINECOFIN, MINALOC, and other relevant ministries on the basis of Vision 2020, NST and HSSP4 priorities.

The overall planning process is guided by the Planning Department of the MOH. Specific operational planning at program and health system level in the entire health sector is done annually in line with the annual planning cycle and HSSP 4 priorities. District based planning will be done annually in bottom-up fashion in line with set financial budget ceilings and the defined priorities in the HSSP4. The District Health Unit is responsible for the development of annual district plans by HCs and district hospitals that respond both to the District Development Strategies (DDS) under the responsibility of the vice-mayor, in charge of social affairs, as well as responding to the priorities of the HSSP4.

In this complex planning, implementation and monitoring process, the Planning and M&E Unit in the MOH plays a crucial role of informing the planning and budgeting entities at all levels on where they are and where they should go, thus providing inputs in the priorities for the following year. As part of this top-down and bottom-up process several milestones can be identified that together define annually the sequence of the implementation of the sector interventions:

- The signing of the performance contracts (*Imihigo)* with the president or his representatives at the various levels
- The mutual accountability sessions between MINECOFIN and the various DPs working in the sector on the basis of the CPAF indicators.
- The annual planning / budgeting process within the MOH and between MOH and DHU.
- The various (external) reviews at the national and district levels, most of which are taking place annually, but for some programs more frequently.
- The strategic plans of all programs (such as RMNCAH, HIV, Malaria, TB, NCDs, Mental Health, Environmental Health, Community Health Desk, etc.) will align their priorities and interventions to HSSP4 and develop their annual plans on the basis of the log frame and HSSP4.
- Institutions in charge of managing and allocating resources (such as HRH, infrastructure and equipment, medical products) and ensuring quality of service provision (QA, Clinical Services) will coordinate regularly with the programs that are implementing the respective services.

Finally, regular meetings between MOH and DPs through the HSWG and the various TWGs provide all stakeholders with the opportunity to raise policy-related issues and give technical inputs on the achievements and challenges met during implementation.

4.2. Stakeholders: Roles and Responsibilities

4.2.1. Roles of central versus local government

MoH provides the oversight leadership and coordination to ensure that the sector achieves its stated goals and objectives through its programs and institutions. MOH provides also technical guidance to the implementation of HSSP 4 at the various levels.

The local government ensures the provision and management of health services including financial and human resources. It also ensures the coordination, accountability, implementation and management of health activities at decentralised level in order to improve service delivery, greater coverage of health services, improved quality, cost effectiveness and ownership.

4.2.2. Role of the private sector

The private sector is only partially involved in regular consultations with the MOH. HSSP4 will reinforce this partnership through quarterly coordination meetings, where important issues of collaboration will be discussed, such as private sector tariffs, regular submission of HMIS data, inspection and access to private sector facilities, adherence to regulations and quality assurance norms (accreditation), control of laboratories and selection / opening of new private HF in districts.

4.2.3. Role of Development Partners (DPs)

DPs give development support to the entire health sector, with emphasis on institutional capacity development (especially in Policy, Governance and Infrastructure); prevention and control of infectious diseases (HIV, TB, Malaria, etc.); health security (EPI and IDSR); and health system strengthening in all the health system building blocks.

At central / policy level, DPs form part of the overarching Health Sector Working Group (HSWG), which provides oversight on implementation of sector wide approach (SWAp) health actions in the entire health sector. Implementation of the deliberations of the HSWG is effected through technical working groups (TWGs). The TWGs facilitate technical dialogue on policy and operational issues between the main stakeholders (national institutions, representatives of civil society and DPs) involved in different programmatic areas.

SWAp in the context of NST and HSSP: GOR's Aid Policy drives all development assistance in the Rwanda. SWAP (Sector-wide approach) hinges on the NST to ensure that actions in the health sector have more sustainable impacts by integrating and fundamentally incorporating them into the national development programs.
The district level equivalent of SWAp is the Joint Action Development Forum (JADF), where all important development issues are discussed and inter-sectoral collaborative interventions are designed and monitored. The District Health Unit (DHU) coordinates the different actors of the health sector. It also clarifies and allocates the tasks of the different

actors, and ensures an adequate integration of the multidimensional determinants of the health status of the population.

4.3. Mechanisms for coordination and information sharing

With stakeholders outside the MOH, the following structures have been established to ensure the involvement of all parties:

1. Health Sector Working Group (HSWG): At sector level, there is the HSWG, constituted of representatives of MOH and affiliated institutions, Development Partners (DPs), Private Sector and civil society. It meets quarterly (sometimes each semester) under the chairmanship of the Permanent Secretary. The goals of the HSWG are to improve coordination of activities and harmonization of procedures of both GoR and DPs in order to increase effectiveness and efficiency of aid in the health sector and to ensure better alignment of DPs behind the Health Sector Strategic Plan (HSSP), with an enshrined principle of mutual accountability (NHP 2015).

2. TWG: Technical Working Groups (TWGs) are operational entities where technical and policy issues are discussed by staff of the MOH with relevant representatives of Development Partners, NGOs, FBOs and CSOs working in the concerned area. (Annex 4). TWG operate under the authority of the HSWG. The objective of the TWG is to support and advise the MOH in the implementation of sub-sector strategies and policies and develop relevant guidelines and tools to be used by the implementing agencies.

3. SPIU: The establishment of a Single Project Implementation Unit (SPIU, since March 2011) aims at reducing the number of separate projects and the administrative burden of the MOH in managing and reporting on the several projects with off-budget resources.

4. There are several **inter-sectoral activities** in which MOH is actively involved, such as the inter-ministerial committee to eliminate all forms of malnutrition; disaster preparedness and response, school health programs and WASH.

National and International Cooperation: National, regional and international cooperation is in line with the activities of the health sector strategic plan set out by the Ministry of Health for implementation of the Health Sector Policy. Multilateral, bilateral and non-governmental cooperation is founded on the basis of mutual agreement between the Government and the donor country or organisation. Mechanisms for the joint management and evaluation of resources to support the functioning of health services are to be strengthened.

Regional Integration*:* GOR has adopted an active policy of orienting its various socioeconomic activities towards the integration of the countries in the East African Community (EAC). For the health sector, important integration issues are the procurement of medicines and medical / laboratory equipment, active sharing of information and training opportunities, health sector management and medical education.

WHO and International Health Regulations (IHR)*:* MOH ensured that all regulations and public health mechanisms align with International Health Regulations (IHR) designed under the authority of WHO for the following public health issues:

- National legislation, policy and financing
- Coordination, communication and advocacy related to IHR
- Surveillance for early detection, rapid response capacity and preparedness and a response plan for PH emergencies
- Risk communication to inform the population during public health emergencies
- Human resources capacity to implement IHR
- Laboratory capacity to test, diagnose and confirm public health threats
- Specific mechanisms to detect and respond to different public health events.
- Points of entry, zoonotic events, food safety, chemical events and radiation emergencies

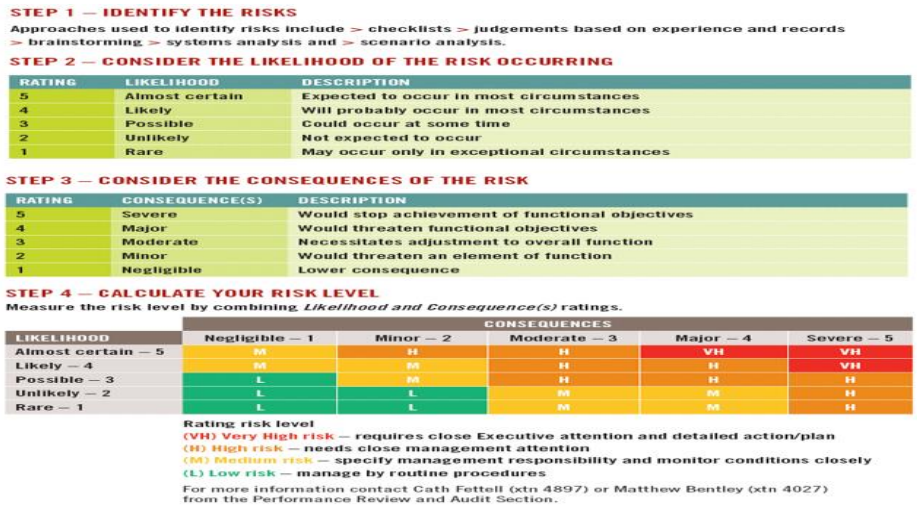
4.4. Risks analysis and risk mitigation

Table 4. Risk Identification and Risk Mitigation measures

Risk Identification	Likelihood	Consequences	Overall Risk	Risk mitigation
1. Service Delivery risks				
Highly qualified staff (doctors and nurses) leave the public sector	3	3	High	Accelerate the health professionals retention strategies in the health sector
Quality of patient care is not fully satisfying	2	3	Medium	Establish an independent accreditation body and reinforce accreditation of HF
2. Financial Management risks				
Fiscal decentralization process is stalled or remains sector bound (silos)	2	2	Low	Fiscal decentralization is being implemented by MINECOFIN
3. Decentralization risks				
Services at decentralized levels not fully coordinated	2	3	Medium	Establishment of coordination mechanism at central and decentralized levels
4. Funding related risks				
Health sector dependence on external financing	3	4	High	1. Increase domestic budget allocations to the programs heavily support by external funding 2. Adopt strategies for attracting private investors in health &

				Improve management of HF resources -
Most resources remain off-budget, H&A remains rhetoric	2	3	Medium	Negotiate with donor agencies (GAVI, GFATM, USAID) on Sector Budget Support (SBS)

Risk Matrix Calculator



STEP 1 — IDENTIFY THE RISKS

Approaches used to identify risks include > checklists > judgements based on experience and records > brainstorming > systems analysis and > scenario analysis.

STEP 2 — CONSIDER THE LIKELIHOOD OF THE RISK OCCURRING

RATING	LIKELIHOOD	DESCRIPTION
5	Almost certain	Expected to occur in most circumstances
4	Likely	Will probably occur in most circumstances
3	Possible	Could occur at some time
2	Unlikely	Not expected to occur
1	Rare	May occur only in exceptional circumstances

STEP 3 — CONSIDER THE CONSEQUENCES OF THE RISK

RATING	CONSEQUENCE(S)	DESCRIPTION
5	Severe	Would stop achievement of functional objectives
4	Major	Would threaten functional objectives
3	Moderate	Necessitates adjustment to overall function
2	Minor	Would threaten an element of function
1	Negligible	Lower consequence

STEP 4 — CALCULATE YOUR RISK LEVEL

Measure the risk level by combining *Likelihood and Consequence(s)* ratings.

	CONSEQUENCES				
LIKELIHOOD	Negligible — 1	Minor — 2	Moderate — 3	Major — 4	Severe — 5
Almost certain — 5	M	H	H	VH	VH
Likely — 4	M	M	H	H	VH
Possible — 3	L	M	H	H	H
Unlikely — 2	L	L	M	M	H
Rare — 1	L	L	M	M	H

Rating risk level
(VH) Very High risk — requires close Executive attention and detailed action/plan
(H) High risk — needs close management attention
(M) Medium risk — specify management responsibility and monitor conditions closely
(L) Low risk — manage by routine procedures

For more information contact Cath Fetell (xtn 4897) or Matthew Bentley (xtn 4027) from the Performance Review and Audit Section.

5. ESSENTIAL SERVICES ACROSS THE LIFE COURSE

The Life Course approach: In accordance with the recent WHO report (June 2016) 'Multi-sectoral action for a Life Course approach in healthy ageing", the HSSP4 has adopted an approach whereby all services will be implemented against the life course of an individual. This implies that both past and present experiences of the person are shaped by his/her wider socio-economic and cultural context. Scientifically, this approach studies the physical and social hazards of life during gestation, childhood, adolescence, young adulthood and midlife, as these experiences affect disease risk and health outcomes in later (adult) life. In the HSSP4 it is used to show the importance of the underlying biological, behavioural and psychosocial processes that operate across the life span of all of us.

According to WHO, RMNCAH interventions should be based on comprehensive quality health care throughout the life course of the individual from conception onwards with essential RMNCAH health promotion, prevention and treatment interventions integrated across continuum of care; and ensuring linkages, referral and counter referral between community and health facilities.

The overall goal of the RMNCAH Program is to eliminate preventable maternal, neonatal and child deaths and promote the well-being of women, male, children and adolescents using a multi-sectoral approach and ensure healthy ageing.

For operational reasons, HSSP4 has divided the RMNCAH in three life cycles, each with its specific interventions, as highlighted below:

5.1. Pregnancy, early life and children

5.1.1. Maternal & Neonatal and Child Health (MNCH)

Overall strategic direction

By 2024, all persons in Rwanda equitably receive quality Maternal, Neonatal and Child Health services, aligned to the economic development standards of the country.

Table 5. Baseline and targets for RMNCAH

OUTCOME/OUTPUT INDICATORS HSSP 4	BASELINE 2016	TARGETS 2020	TARGETS 2024
Outcome indicators			
Prevalence of Stunting	38	29.9	19
ANC coverage (4 standards visits)	44	47	51
% births attended by skilled health staff	91	>90	>90
% new-borns with at least one PNC visit within the first two days of birth	19	25	35
Modern contraceptive prevalence rate (mCPR)	48	54.6	60
Unmet need for Family Planning	19	17	15
Maternal mortality rate	210	168	126
Neo-natal mortality rate	20	18	15.2
Infant mortality rate	32	28	22.5
Under five mortality rate	50	48	35
% Children 12-23 months fully immunized	93	>93	>93
% Exclusive Breastfeeding < 6 months	87%	>90%	>90%
Teenage pregnancy rate (15-19 years)	7.3	<7	<7

Source: DHS & HMIS

Strategies:

- Strengthen inter-sectoral collaboration and coordination and harmonize existing policies to address the social determinants of poor RMNCAH outcomes, and conduct research to identify major obstacles and the most effective coordination mechanisms.
- Implement and monitor a harmonized, integrated and sustainable package of quality client and youth-friendly essential RMNCAH promotion, prevention and treatment interventions, commodities and innovative technologies at hospital, health centre and community levels and conduct research on the cost-effectiveness of interventions.
- Build capacity of training institutions, managers and health care providers in integrated RMNCAH care so that health staff at all levels from community upwards are able to deliver quality, integrated, client and youth-friendly RMNCAH services.
- Strengthen health systems and research towards universal coverage of RMNCAH services paying attention to the deployment and retention of health staff, financial and geographical access to services by under-served and vulnerable groups/beneficiaries and use the HMIS to monitor equity.
- Intensify health promotion efforts to increase community knowledge and skills on RMNCAH interventions and promote health seeking behaviour.

- Strengthen governance systems and accountability (joint planning, budget allocation, implementation, monitoring and evaluation) of integrated RMNCAH interventions at central, decentralised and community levels, including with public-private partnerships and through Imihigo and performance-based contracts.

Innovations:
- Expand the capacity for early detection of pregnancy in the community (urine testing of pregnant women by CHW), make more attractive the ANC (ultrasound check at HCs, introduce focused group ANC), and regular assessment / recommendations to improve quality of ANC at HFs
- Promote cost effective competence based in service training, case management and mentorship (low dose-high frequency, e-learning) on RMNCAH impact interventions
- Expand both package and coverage for ECD services at the community level as the entry point of provision of health education/services
- Strengthen use of e-Health to improve quality of RMNCAH services delivery
- Seek to utilize the strengths of the public and private sectors in fostering synergies for effective, efficient and sustainable service delivery

5.1.2.Expanded Program for Immunization (EPI)

Strategies:
- Increase the domestic budget allocated to the immunisation program
- Maintain high and effective coverage of immunisation services;

Key innovations:
- Diversify energy sources for the cold chain equipment for cost effectiveness purpose
- Integrate the EPI program further in the IMCI interventions

5.1.3. Nutrition

In Rwanda nutrition of children has been tackled through a multi-sector approach since 2013. In 2014 the GOR adopted the National Food and Nutrition Policy that has been implemented by different sectors.

The Social Cluster Ministries (composed of MINALOC, MOH, MINAGRI, MIGEPROF, MINEDUC, MYICT and MIDIMAR) through the Early Childhood Program Coordination coordinates the implementation of nutrition activities from the national to decentralised levels.

Strategies:
- To improve the coordination of different stakeholders in the nutrition program
- Use community/village based ECD as an entry point for education/provision of health services
- To ensure the uniformity and effective coverage of nutrition supplements/commodities and improve one-on-one nutrition counselling to target groups (pregnant women, adolescents and under five children).

- To increase knowledge on good nutrition practices and intensify health promotion / nutritional counselling for prevention of nutritional related conditions

Key innovations:
- Leverage on ECD program at community level to increase knowledge on good nutrition practices and provision of MNCH services
- Expand the regular monitoring of nutrition status among children and adults
- To increase the private sector engagement in the production of nutrition and food commodities

5.1.4. Community Health

Community Health Workers (CHW) play an essential role in service delivery, particularly in expanding primary health care and ensuring UHC. The *Health Sector Policy (2015)* and the evaluation of the Community Health Program (CHP) (2016) indicated that capacity building of CHWs be strengthened to improve health care services delivery at community level. It is proposed that a capacity building and an incentivation plan for CHWs be enhanced.

Strategies:
- Define service package and strengthen coordination with other community volunteers (from different sectors)
- Improve the supply chain for good quality service delivery
- Promote continuous capacity enhancement of CHWs on new knowledge and technologies.
- Strengthen the management of CHW cooperatives.

Key innovations:
- Strengthen the functionality of social cluster coordination mechanism at village level to ensure proper implementation of communities' activities including health ones.

5.2. Adolescent Sexual and Reproductive Health (ASRH)

Strategies:
- Increase the demand for ASRH services by increasing the access to services for Adolescent and youth
- Expand the coverage of ASRH services (e.g increasing youth-friendly centers and corners in appropriate settings)

Key innovations:
- Promote the use of technology messaging to youth and adolescents
- Strengthen partnership with other public and private sector in the delivery of ASRH services.

5.2.1. Sexual and Gender Based Violence (SGBV)

Strategies:

- Expand the SBGV services at the health centre level
- Increase the laboratory capacities for testing
- Establish an effective monitoring mechanism for the follow up of SGBV victims (especially in social reintegration)

Key Innovations:

- Increasing awareness by the use of technology for timely SGBV case detection and reporting.
- Establishment of DNA laboratory

5.2.2. Family Planning (FP)

Strategies:

- To increase the domestic budget for the FP program
- Promote the multi-sectoral and stakeholder's collaboration to improve the demand and delivery of FP services
- Encourage male engagement in the use of FP services
- Increase the private sector engagement in the provision of FP services
- Strengthen the use of Post-Partum FP (PPFP) and effectively integrate this into ANC and maternity and PNC services
- Increase knowledge, counselling skills and Management of side effects of contraceptives for FP providers.
- Scale up the use Medical Eligibility Criteria Wheel for contraceptive use to enhance acceptability and use of FP methods

Key innovations:

- Improve system to document and track FP users for better adherence to the program including PPFP
- Introduce a community peer education system to promote the continuous use of long-acting and permanent methods of FP services and emergency contraceptives

5.3. Healthy Ageing and Palliative Care

5.3.1. Health and ageing

The Life Course approach aims to maintain good health status and quality of life and to prevent diseases during adulthood and elderly life. All stages in the life course determine the health capital the person has acquired and thus contribute to his/her feeling of illness or well-being. As the life cycle is getting longer, people have the opportunity to be productive for a longer period of time than ever before, which will extend the period of wealth accumulation.

Strategic direction
By 2024, prevention, care, treatment and rehabilitation for NCDs are extended to all health facilities and the community; doctors, nurses and community health workers are equipped with capacity to provide appropriate care to the ageing population.

Strategies:
- Strengthen the Implementation of the national NCD policy and strategy targeting the ageing group.
- Promote community education and awareness on practices to prevent NCD risk factors.

Key innovations:
- Initiate adequate access and appointment system intended to regulate patient streams.
- Ensure rigorous application of evidence-based treatment guidelines used by the health care providers

5.3.2.Palliative care

According to WHO, Palliative care aims to improve the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and treatment of pain or other physical, psychosocial and spiritual problems.

Strategic direction
By 2024, health care providers are skilled and equipped to appropriately manage terminally ill patients.

Strategies:
- Enhance capacities for health care providers to deliver palliative care services
- Streamline the supply chain and prescription of palliative care medicines and drugs to improve access

Key innovations:
- Explore the private sector engagement in the local production of essential palliative care medicines and drugs
- Establish community group palliative care system for mutual psychosocial support

6. COVERAGE OF ESSENTIAL HEALTH INTERVENTIONS

6.1. Infectious Diseases

6.1.1.HIV/AIDS, STIs and Viral Hepatitis

Strategic direction
By 2024, the prevalence of HIV is maintained at 3% or lower, HIV incidence is reduced to less than 2/1000 population; and the burden of viral hepatitis is reduced.

Table 6. Indicators HIV/AIDS & Hepatitis: Baseline and targets

OUTCOMES / OUTPUTS INDICATORS HSSP 4	BASELINE 2016	TARGETS 2020	TARGETS 2024
Proportion of persons diagnosed with HIV infection receiving sustained ART	82.7	85	90%
HIV prevalence among people aged 15-49 years	3	3	3
HIV incidence/1000 population	2.7	2.5	2
Percentage of infants born to HIV + mothers free from HIV by 18 months	95	>95	>95
Hepatitis B incidence per 100,000 population	NA	>3	>2

Strategies HIV/AIDS and STIs

- Strengthen the "test and treat all "strategy and expand access and promote utilization of HIV prevention and treatment services to adolescents, particularly girls
- To reduce the new HIV infections targeting key populations and hot spot areas.
- To reduce the mortality attributed to HIV/AIDS infection
- To reduce stigma and discrimination in HIV/AIDS patients
- To reduce the burden of STIs and other blood borne infections

Viral Hepatitis

- Determine the burden of Viral Hepatitis (prevalence and incidence) in the population
- Scale up prevention, testing and treatment of Viral Hepatitis and improve access
- Increase capacities of HFs and care providers in testing and treatment of Viral Hepatitis
- Improve the surveillance and reporting system for Viral Hepatitis

Key innovations:

- Introduce HIV self-testing and design innovative approaches to target adolescents.
- Engage private sector for local production of ARVs, screening and vaccination against Viral Hepatitis within existing health care services

6.1.2.Tuberculosis, other respiratory communicable diseases and leprosy

Strategic direction

By 2024, TB Incidence per 100,000 population in Rwanda will be reduced by 45%.

Table 7. Baseline and targets for Tuberculosis

OUTCOMES/ OUTPUTS HSSP 4	BASELINE 2016	TARGETS 2020	TARGETS 2024
TB incidence per 100,000 population	58	45	31.8
TB treatment coverage rate	84	86	88
Treatment success rate (TSR) for all forms of TB cases (DS & DR-TB	85%	87%	≥87

cases)			
Proportion of newly diagnosed leprosy with grade 2 disability	19%	13%	10%

Source: HMIS, WHO TB Report

Strategies

- Improve case detection by conducting active case finding in High risk group and hotspot
- Improve TB diagnosis across the laboratory network and adopting progressively the use of molecular sensitive test as initial diagnosis test
- Strengthen TB surveillance by adopting use electronic individual record system and data driven policy
- Ensure access of first and second line anti TB drugs at all levels
- Ensure early detection and effective treatment of leprosy cases
- Strengthen TB/HIV collaboration activities at all levels

Key innovations

- Use of electronic individual recording system to report on TB and leprosy data
- Introduction of connectivity systems within the laboratory networks for the proper monitoring of laboratory result and ensure early initiation of TB treatment.

6.1.3.Malaria and other parasitic diseases

Strategic direction

By 2024, Malaria incidence has decreased from 308/1,000 to 122/1,000 population and the mortality due to malaria in health facilities is decreased by 40%.

Table 8. Baseline and targets for Malaria and Other Parasitic Diseases

OUTCOMES/OUTPUTS INDICATORS/ HSSP 4	BASELINE 2016	TARGETS 2020	TARGETS 2024
Proportion HH with at least one LLIN	81	84	85
Malaria incidence per 1,000 population	308	200	122
Malaria proportional mortality rate	5.7	4.5	3
Proportion of children under five years old who slept under a LLIN the previous night	80	84	85
Prevalence of soil transmitted helminthiasis (STH)	45.2%	35%	<20%
Prevalence of Schistosomiasis (SCH) (outcome)	1.9	1.0	0.5
Proportion of targeted population who received Mass Drugs Administration (MDA)	96*	97	98

Source: DHS, MOH Annual Statistical Booklet, MIS and Mapping Report

Strategies

- Improve vector control: Implement IRS in the high burden districts

- Ensure sustained universal coverage with LLINs: UHC (1 net between 2 people)
- Strengthen intersectoral collaboration for effective malaria prevention and control interventions
- Establish and strengthen partnerships with the private sector in malaria prevention and control interventions
- Reinforce the Malaria prevention and control in vulnerable group (under five children and pregnant women)

Key innovations:
- Engage the Private sector in local production of vector control commodities/materials (bed net, insecticides for IRS,) and undertake economic activities with environmental health impact on malaria prevention and control interventions
- Strengthen collaboration with national and international research institutions for informed decisions on appropriate malaria interventions

6.1.4.Neglected Tropical Diseases (NTD)

Strategic Direction

By 2024, NTDs are no longer a public health issue in Rwanda.

Strategies
- Increase the domestic budget allocated to NTDs prevention and control interventions
- Ensure community awareness, and proper diagnosis and management of NTDs in health facilities
- Strengthen multi-sectoral collaboration in NTDs prevention and control interventions
- Strengthen NTDs case surveillance and reporting systems in the region

Innovations
- Advocate for setting up surveillance systems for the prevalent NTDs in the Region

6.2. Non-Communicable Diseases (NCDs) & Injuries

6.2.1. Overall interventions for NCDs, Injuries and disabilities

Strategic direction

By 2024, the incidence of NCDs (cancer, cardio-vascular diseases, eye diseases, chronic lung diseases and diabetes) and the mortality due to NCD (cancer, HTA and diabetes) and injuries are reduced. The early identification and treatment of causes of preventable disabilities will be improved as well.

Table 9. Baseline and targets for overall NCDs

OUTCOMES / OUTPUTS Indicators HSSP 4	BASELINE 2016	TARGETS 2020	TARGETS 2024
Percentage of NCD combined high risk factors in the population aged between 15-64 years	16.4	15	12
Percentage of reduction of premature mortality (under 40 years old) due to NCDs (cancer, HTA and diabetes)	NA	50	80
Percentage of reduction of premature mortality (under 40 years old) due to NCDs due to road traffic accidents (RTA) as the leading cause in non-intentional injuries	NA	50	80
Teeth and gum diseases morbidity rate at health facility level	4%	2.07%	1,84%
Cataract Surgical Rate (number of cataract surgeries per million population per year)	400	700	1200
Eye diseases morbidity rate at health facility level	3	<2	<2

Source: DHS, Step Study & MOH Annual Statistical Booklet- Vital Statistics

Strategies

- Strengthen the NCD and injuries prevention, diagnostics and management
- Strengthen the prevention and control of eye diseases through enhancement of community and health facility service delivery towards prevention of blindness and visual impairment
- Improve the multi-sectoral collaboration in NCD prevention and control
- Increase the awareness about NCDs risk factors and early detection in the community.
- Ensure financial accessibility to NCDs services
- Strengthen private and public sector partnerships in NCDs prevention and control
- Scale up of the Home Based Care Program countrywide
- Strengthen the prevention of hearing loss through safe motherhood and immunization as well as early identification and treatment of causes of preventable hearing loss.
- Invest in specific rehabilitation services (orthopaedic prostheses, hearing devices etc..)
- Scale up NCDs surveillance and reporting system for better monitoring and evaluation

Key innovations:

- Initiate NCDs screening at the workplace
- Introduce NCDs self-screening test (Diabetes, High blood pressure…)
- Conduct massive diagnostics outreach for community NCDs, oral and eye diseases screening
- Engage private sector in local production of orthopaedic materials and prostheses.

6.2.2. Mental Health

Strategic direction

By 2024, mental health services are available up to the community level as per the defined service package at each level.

Table 10. Baseline and targets for Mental Health

OUTCOME/OUTPUTS HSSP 4	BASELINE 2016	TARGETS 2020	TARGETS 2024
Proportion of new cases treated in health facilities (HC+DH+PH+RH) for mental disorders	0.1	0.2	0.6

Strategies:

- Set up mental health services interventions in all health centres and community units in line with expected service standards
- Define mental health package for each level of service delivery
- Strengthen quality of mental health services at all levels
- Scale up case surveillance and reporting systems for better patient's follow-up and management
- Expand services for prevention / management of drug addiction and harmful use of alcohol
- To construct a National Mental Health Care Center to improve the quality of care and strengthen the referral system

Key innovations:

- Establish community mental health services
- Establishment of standardized mental health units in DH, with mental health nurses and psychologists
- Use of technology for mental health service delivery

6.3. Health Promotion, Prevention and Environmental health

6.3.1. Health Promotion and Prevention

Strategic direction

By 2024, communities are empowered with strategic information on healthy lifestyles and adopt evidence based public health measures to improve their lives.

Table 11. Baseline and targets for Health Promotion and Prevention

OUTPUTS / OUTCOMES HSSP 4	BASELINE 2016	TARGETS 2020	TARGETS 2024
Percentage of Health centres without water	16	0	0
% public Health Facilities (RH,PH,DH and HC) with effective waste management systems according to standards	76	84	100

Strategies:

- Strengthen Community Action Cycle systems / Community participation in Communicable / NCDs and environmental health prevention programs and services
- Improve the coordination of health promotion stakeholders at all levels to increase ownership and active participation
- Strengthen the M&E framework and reporting of health promotion and prevention programs at all levels;
- Increase health promotion budget across diseases program budgets

Key innovations:

- Put in place a Community Action Cycle system from district to village level
- Introduce health promotion in pre-service training curriculum

6.3.2. Environmental Health

Strategic direction

By 2024, the prevalence of diarrhoea diseases will be reduced to 9% and the nosocomial infections reduced by half.

Strategies:

- Implement the Community-Based Environmental Health Promotion Program
- Establish geographic information platform for sharing information between sectors
- Strengthen capacity of environmental health entities from the national to the village level
- Streamline the implementation of water quality surveillance and water safety Plan, food safety, and health care waste management and injection safety, school hygiene, indoor air pollution, disaster management and preparedness, and occupational health;
- Strengthen the surveillance and reporting system for environmental health

Key innovations:

- Strengthen multi-sectoral coordination on environmental health related initiatives and geographic information sharing
- Engagement of Private sector in Health Care Waste Management
- Develop and scale innovative behavior change and social marketing strategies to increase hand washing and safely managed sanitation services

7. ASSURING HEALTH SECURITY

Strategic direction

Prevent and control epidemic diseases and other public health threats in Rwanda through a sustainable, effective and efficient national epidemiological surveillance, response and recovery system.

Table 12. Baseline and targets for health security

OUTCOME /OUTPUT INDICATORS HSSP 4	BASELINE 2016	TARGETS 2020	TARGETS 2024
Proportion of outbreaks with a case fatality rate below recommended thresholds	80%	100%	100%
International Health Regulations (IHR) core capacity index **	NA	6/13 attributes attained at developed level	13/13 attributes attained at demonstrated level level

N.B. **Indicator definition: Percentage of attributes of 13 core capacities that have been attained at a specific point in time.

- Numerator: Number of attribute attained

- Denominator: Total Number of attributes

The 13 core capacities are: (1) National legislation, policy and financing; (2) Coordination and National Focal Point communications; (3) Surveillance; (4) Response; (5) Preparedness; (6) Risk communication; (7) Human resources; (8) Laboratory; (9) Points of entry; (10) Zoonotic events; (11) Food safety; (12) Chemical events; (13) Radio-nuclear emergencies.

7.1. Outbreak and disaster prevention

Strategies:

- Establish legal and regulatory capacity for emerging and re-emerging public health threats.
- Upgrade and reinforce the surveillance system for public health threats (AMR, epidemic-prone diseases, zoonotic, water-borne diseases and other public health concerns)
- Strengthen mechanisms for detection and management of cross boarder health threats
- Provide timely, high quality risk assessments and early warning to inform prevention and control of public health risks, including those that may constitute a public health emergency of international concern.
- Establish a public health emergencies risk strategy
- Strengthen community engagement in prevention, detection and response to public health threats - laboratory diagnostic capacity strengthening with an up-to-date lab supply of commodities for outbreak investigation and detection of major diseases

7.2. Outbreak and disaster detection, response and recovery

Strategies:

- Construction of National reference laboratory to avail strong diagnostic capacity and ensuring conducive environment to meet expected international standards for provision of quality diagnostic services and better management of epidemics
- Strengthen IDSR to improve timeliness, completeness and data quality
- Establish mechanisms for continuous risk mapping of public health threats
- Strengthen national workforce capacity to detect and respond to national public health threats
- Ensure adequate capacity for health emergency response through contingency plans and simulation exercises.
- Strengthen public health emergency response coordination mechanisms at different levels
- Strengthen health emergency response teams in all districts
- Develop sustainable plan for recovery following a public health event

Innovations:

- Introduce use of mentoring approaches and E learning platforms in skills enhancements
- Engage health regulatory professional bodies to provide training on response to health threats
- Accreditation of NRL to ensure avail strong diagnostic capacity to detect outbreak for emerging and non-emerging diseases of public health significance and cascade capacity from national level to all district hospital laboratories under accreditation process
- Institute events-based surveillance system to further strengthen epidemic intelligence

8. HEALTH SYSTEMS: OUTPUTS

The following outputs highlight the important interconnection and synergy between the traditional WHO building blocks that must be achieved to build a robust and cohesive health system. Further description of each of the systems is detailed in Chapter 8. The specific achievements and challenges regarding each of these outputs are described earlier in Chapter 2 (Overview of the health sector).

8.1. System Resilience

It will be the combination of the various health systems together that will ensure the absorption of the shocks (caused by outbreaks, disaster or events, financial barriers that directly influence the health system ability to deliver services), whilst at the same time guaranteeing the continued provision of essential services.

8.2. Responsiveness

Responsiveness to the needs of the population will increase confidence and utilization of essential services.

8.3. Financial risk protection

The UHC target for financial risk protection is to eliminate the incidence of catastrophic health expenditure and of impoverishment due to out-of-pocket payments (OOP) for health services by having every Rwandan optimally financially protected through prepayment mechanisms such as CBHI and any other safety net mechanisms to mitigate the impact of direct and opportunity costs as financial barriers to accessing health services.

8.4. Equitable access

Equitable access to essential services will reduce barriers that hinder people from accessing services, specifically for the vulnerable populations. The domains of equitable access to be addressed include: (i) improving the reach of the health system for people cut off by geographical barriers (ii) reducing financial barriers to improve financial risk protection particularly for the vulnerable populations and, (iii) reducing social and cultural barriers which particularly hinder women and children in some populations. This is critical in ensuring a better responsive health system.

8.5. Building community demand for health services

Building demand for essential interventions to ensure that individuals, households and communities are able to utilize available interventions will be a major focus for HSSP4. This will be through raising awareness at household, individual and community levels regarding available essential services, and ensuring that healthy behaviours and actions are practiced routinely.

8.6. Quality of care

Ensuring the highest possible quality during provision of essential health services and interventions will result in positive clients' experiences during the process of care, while reducing the backload of referrals from DH to higher levels and reducing harm to the clients / patients. In general, the aim is the provision of the most effective intervention that leads to the best possible health care outcome at the minimum cost.

Priority investments in this area will include the development and institutionalisation of a Quality Improvement and Accreditation (Q&A) program; regular response to malpractice and a continuous accreditation process for public and private health facilities. Results from both the accreditation assessment, client satisfaction survey as well as findings from Citizen's Report card will be taken into consideration to improve quality of care.

Table 13. Baseline and targets for Quality of essential services

OUTPUT Indicators for HSSP 4	BASELINE 2016	TARGETS 2020	TARGETS 2024
Existing of independent accreditation body	0	1	1
% Malpractice cases assessed and responded	N/A	>95	>95
Number of National referral and teaching Hospitals accredited	1	3	5
Number of new upgraded referral hospitals	0	2	3

achieve level three of the national accreditation process			
Number of Provincial Hospitals achieve level three of the national accreditation process	0	2	4
Number of DH that achieve level two of the national accreditation process	0	15%	50%
Number of laboratories reaching 5 stars accreditation	1	2	5
% Private HFs (polyclinics and hospitals) enrolled and pursuing level 1 of accreditation process	0	10 %	>95 %

9. HEALTH SYSTEMS: INPUTS & ACTIONS

9.1. Health Workforce (HR)

Strategic direction

By 2024, ensure availability of a qualified, competent and motivated workforce to deliver quality health services.

Table 14. Baseline and Targets for the Health Workforce

INPUT/PROCESS Indicators HSSP 4	BASELINE 2016	TARGETS 2020 (mid-term)	TARGETS 2024
Doctor/pop ratio (GP and Specialists as well)	1/10,055	1/ 9,000	1/7,000
Nurse/pop ratio	1/1,094	1/ 900	1/ 800
Midwife/pop ratio (women aged from 15-49)	1/ 4,064	1/ 3,500	1/ 2,500
Pharmacist /pop ratio	1/ 16,871	1/16,000	1/15,500
Lab Technicians /pop ratio	1/ 10,500	1/ 9,000	1/ 7,500
Doctor attrition rate	NA	>10%	>5%

Source: IPPS & Surveys and Annual Health Statistical Booklet

Strategies:

1. Improve the quality of the health workforce by strengthening a comprehensive, hands-on pre-service training, regulation of clinical practice and skills enhancement applying in-service mentorship
2. Increase quantity of the health workforce by advocating for investment in clinical and health educational opportunities for Rwandans
3. Strengthen HRH management at central and decentralized levels for enhanced leadership skills, improve retention and reduce health worker's attrition

Key Innovations

- Introduce a privileging system of GP to perform some interventions beyond the qualification based on experience.
- Establish protocols for multidisciplinary team management of NCDs (tumor board meetings at all referral hospitals, breast clinics, cancer clinics, etc.)

9.2. Service Delivery including health infrastructure

Strategic Direction

By 2024, ensure accessible, quality and efficient delivery of health services using technology, towards achieving Universal Health Coverage.

Table 15. Baseline and Targets for Service Delivery including Health Infrastructure

OUTPUT Indicators HSSP 4	Baseline 2016	Targets 2020	Targets 2024
Number of sectors without a health centre	17	8	0
Number of health posts constructed/rehabilitated in a cell without any other health post	473	593	623
Number of super specialised health facility (to reduce the abroad referrals and promote medical tourism)	4	6	8
Surgical procedures per 100,000 population	971	1,500	3,000
Perioperative mortality rate (due to surgical procedure)	3.1	2.5	2
Ratio ground ambulance / population	1/50,505	1/50,000	<1/50,000
Average time to walk to a nearby HF (in minutes)	56.5	50	45
Number of hospitals with functional basic maintenance system (trained manpower, available tools and space for operations)	8	42	50
Number of referral hospitals with functional telemedicine facilities	1	3	4
Percentage of health centres without electricity (not connected to a nearby grid)	17.2	0	0
Percentage of Health centres with functional internet and local area network connectivity	36.5	70	100

Source: EICV, HMIS & Annual Health Statistical Booklet

Strategies for service delivery:

- Review and rationalize the health service essential package by level of care (from Community to Referral Hospital) in view of the epidemiological transition and dual burden of communicable and non-communicable diseases.
- Strengthen the network of health providers, public as well as private, to ensure coverage of an integrated package of services for the population, explore possibilities of the capacity of the private sector to accept all public health insurance schemes, including CBHI
- Ensure safe transportation of patients to HPs and HC, especially on hard to reach areas
- Ensure availability and efficient use of ambulance services at health facility level using high level technologies and communication systems
- Analyse the performance of the pre-hospital and emergency/ambulance services and the overall referral system from community to national levels

- Establish a regional centre of excellence for the pre-hospital and emergencies services
- Strengthen and scale up urban health strategies to emerging cities using lessons learnt from Kigali
- Establish and institutionalize quality improvement(accreditation) mechanism/ framework at all levels of care including mentorship programs, technical and managerial supervision
- Ensure the availability of specialized health services at secondary and tertiary levels
- Ensure safe surgery in health facilities at both secondary and tertiary levels
- Regular update of clinical guidelines and building capacities of health care providers and interns through collaboration with training institutions and professional associations
- Regulate the practice of Traditional, Complementary and Alternative Medicine (TCAM) through the provision of legal frameworks for the implementation
- Reinforce medical research capabilities at all levels of health care provision
- Develop an intermediate level between Health Center and District Hospital (Medicalized Health Center) in order to reduce the waiting time for references and transfers to upper level, especially for maternal health, urgent surgeries and for chronic diseases.
- Establish national laboratory to attain the Global Health standards
- Establish Centres of Excellence for super specialized medical services (such as cancer treatment, cardiology, neurology, Traumatology)

Infrastructures

- Update infrastructure plans and designs, based on the service package to be delivered at the different levels and to facilitate decentralization of health services (task shifting)
- Support the districts to expand the construction of HPs in remote Cells (prioritise the remote and distant areas).
- Develop HF infrastructure standards and implement an infrastructure maintenance system
- Ensure that all health facilities respond to national health standards
- Strengthen the maintenance of infrastructure in all public health facilities.

Medical Equipment

- Ensure standardization/harmonisation of medical equipment in all public health facilities.
- Strengthen the maintenance of medical equipment in all public health facilities.
- To collaborate with academic institutions to train highly qualified staff (biomedical engineers) for the equipment's maintenance

IT Hardware

- Synchronize all HIS systems together and link them with EMR to improve the patient management and data use for decision making
- Promote new health care technologies to improve quality of health services (E-health initiatives)

Key innovations

- Outsourcing the maintenance of biomedical equipment
- Promote public-private partnership in the maintenance and replacement of ambulances in all public health facilities by the private sector
- Promote public-private partnership for greater coverage of specialized diagnostics and services such as dialysis, MRI, CT scan, etc.
- Expand ICT and e-Health resources and availability of web-based training and educational opportunities for the health workforce
- Diversified use of varying telemedicine efforts for improved health education, mentorship and direct clinical practice

9.3. Health Products, Medicines and Commodities

Strategic direction

By 2024 quality, affordable and efficacious medicines and medical products are available for all Rwandans.

Table 16. Baseline and Targets for Health Products

OUTPUT Indicators HSSP 4	BASELINE 2016	TARGETS 2020	TARGETS 2024
% of health products and health technologies available at the Central Medical Warehouse	55	80	90
% HFs with < 5% of medical products stock-outs	87	>95	>95

Source: MOH Annual report and Annual Health Statistical Booklet

Strategies

- Ensure sustained availability of medical products and health technologies including essential medicines (vital and non-vital), blood and blood products, vaccines, laboratory commodities and medical devices.
- Strengthen capacity for medical products quality assurance,
- Build capacity, undertake/promote research on traditional, alternative/complementary medicines
- Ensure rational use of medicines and other medical products
- Strengthen capacity in supply chain management systems (stores conditions, human resource, finance, supply systems, supply plans, supply regulations, etc.) and upgrade Information and technologies tools used
- Strengthen diagnostics and medical technology capacities
- Develop mechanisms to prevent and manage an antimicrobial resistance
- Strengthen accreditation mechanisms and procedures for medical products and health technologies

9.4. Leadership & Governance

Strategic direction

By 2024, effective leadership and governance (*oversight, coordination, organization, management, regulation and accountability*) of the health sector is ensured at all levels (public and private).

Table 17. Baseline and Targets for Leadership and Governance

OUTPUT/PROCESS Indicators HSSP 4	BASELINE 2016	TARGETS 2020	TARGETS 2024
Citizen level satisfaction rate with services	77.4	80	>85
Existing of an umbrella for all health professional regulatory bodies	0	1	1

Source: MOH Annual Reports & RGB Governance Score Card

Strategies:

- Strengthen the districts capacities through DHU and community engagement to ensure improved coordination and accountability, implementation and management of decentralised health activities.
- Establish an umbrella for the coordination of health professional councils
- Improve the coordination of health sector stakeholders (public, private, NGO's, CSO, DPs and FBO's).
- Strengthen mechanisms to ensure vertical and horizontal accountability across all levels of health system
- Strengthen the overall management of health facilities (finance, HR, logistics, assets)
- Regularly update legal frameworks, roles and responsibilities regarding central, decentralized health services and community health programs

9.5. Health Information Systems (HIS) and Research

Strategic direction

By 2024, ensure availability of interoperable, responsive and functional information systems providing high quality data in a timely manner to inform planning and decision-making. Ensure availability of a robust research system providing policy relevant evidence.

Table 18. Baseline and targets for Health Information Systems (HIS)

OUTPUT/ PROCESS Indicators HSSP 4	BASELINE 2016	TARGETS 2020	TARGETS 2024
Percentage of causes of deaths are reported according to ICD10	NA	100%	100%
Percentage of births registered according to the CRVS	NA	100	100
Percentage of public health facilities (DH,PH and RH) using EMR full package system	4%	43%	72%
Percentage of private HF (dispensaries, clinics, polyclinics and hospitals) regularly reporting through national data collection systems (DHIS-2 and e-IDSR)	54%	100%	100%

Source: MOH Annual report & Annual Health Statistical Booklet

9.5.1. Health Information Systems

Strategies

- Develop and enforce policies for personal data access and protection.
- Strengthen the use and scale up of different information systems including CRVS to improve data quality, timeliness and completeness.
- Strengthen and scale up of the verbal autopsies program to determine cause and report deaths in the community.
- Extend the deployment of EMR full package system in all public hospitals for better patient management
- Synchronize all HIS systems together and link them with EMR to improve the patient management and data-use for decision making.
- Build capacity for population based surveys and health facility assessments

Innovations:

- E-IDSR with automated outbreak alerts built on the DHIS-2 platform
- Use of connected medical devices for monitoring NCDs
- Creation of interoperability profiles between resource systems

9.5.2.Research

Strategic Direction
By 2024, research will guide new interventions, evidence-based policies and strategies by using existing data sources and improving the quality of research outputs.

Strategies
- Strengthen health research regulations
- Build capacity for research in the health sector
- Promote the culture of research at different levels of the health system
- Strengthen collaboration with international research institutions
- Enhance coordination and collaboration among academic /research institutions and policy makers in implementation of the National Health Research Agenda
- Promote seminars and scientific conferences involving academics, policy and implementation people in dissemination of research findings on health

Innovations
- Establish a common basket fund for operational research in health facilities
- Promote clinical trials and drugs development researches

9.6. Health Financing

Strategic direction
By 2024 Rwanda will ensure a sustainable, equitable and efficient health financing system through adequate resources mobilization.

Table 19. Baseline and targets of health financing

OUTCOMES /PROCESS Indicators	BASELINE 2016	TARGETS 2020	TARGETS 2024
% Household expenditure on health as a share of total household income	NA	<25	<10
Proportion of population covered by a health insurance	90	>95%	>95%

Source: EICV, HRTT Report & Annual Statistical Booklet

The following health financing strategies and interventions will be implemented in HSSP4.

Strategies
- Intensify resource mobilization in order to ensure sustainability of the Rwanda health financing system
- Strengthen the current PBF Accreditation to improve quality of care in health facilities
- Promote the Rwanda Treasury and “health bond’ as an innovative financing to attract social and philanthropic investment and thus unlocking additional funding for the health sector

- Ensure resource mobilisation and efficiency in the management of health facilities resources by improving cost recovery and cost saving plans for health products, including blood products;
- Establishment of revenue generating projects across the health system Promotion of Public Private and Community Partnerships (PPCP).
- Further consolidate the pre-payment and risk pooling arrangements
- Improve the efficiency of existing health services purchasing mechanisms

10. MONITORING AND EVALUATION HSSP 4

Strategic direction
By 2024, there is an efficient monitoring and evaluation (M&E) system that (i) provides timely and high quality evidence regarding the implementation of HSSP 4 and (ii) informs planning, policy dialogue, allows continuous learning, knowledge management and resource allocation at both national and subnational levels.

Assessing the progress and performance of the HSSP4 will be undertaken through a country led Monitoring and Evaluation (M&E) platform with strengthened structures and coordination mechanisms; a selected set of key performance indicators with defined baselines and targets; strengthened information systems; strengthened capacity for data collection, management and analysis and; well-articulated mechanisms for review and action. A unified Data Observatory will guide accessibility to and compatibility with the different data sources as well as linkages with programs or systems that have different M&E systems.

The four main components of an M&E platform to be strengthened include:

10.1. Policy and Institutional Environment

- Overall coordination of M&E in the sector is the responsibility of the Ministry of Health
- All stakeholders will be involved in M&E for the HSSP4
- An M&E plan addressing the objectives of the HSSP4 will be used to monitor the implementation of HSSP 4;
- The M&E logical framework and the performance table (Table 1) detail the selected key indicators to be monitored. These have been selected taking into consideration the SDG commitments, country priorities as well as regional reporting obligations. Additional indicators to be monitored (at national and district levels) are shown in the log-frame. These mainly relate to input/process and outputs that can provide inferences regarding the attainment of targets at outcome and impact level. Programs will have additional indicators in their respective M&E plans to inform detailed program performance.
- Quantitative indicators will be supplemented by qualitative assessments to offer explanatory information regarding observed performance.

10.2. Rwanda National Health Observatory

A single integrated and inter-operable system will be established to coordinate and link the different data sources together. In fulfilling this:

- A meta data-dictionary will be updated to establish clear definitions and ensure all data sources are aware of the required information and how it needs to be generated
- Standard operating procedures (SOPS) to guide data management and sharing at all levels will be updated and / or revised.
- Linkages with the related Ministries for data stored/managed outside of the Ministry of Health will be built to enable reporting on all indicators

- The National health observatory will be strengthened to serve as a one-stop-shop and open access platform for storage (repository), analysis and synthesis and dissemination of health data and information.
- The National data warehouse will be strengthened to serve as the health data repository, and will be linked to the government-wide data observatory held by the institute of statistics (NISR).
- The knowledge management platform will be strengthened to enable effective sharing of research initiatives and results.

10.3. Institutional Capacity for Data Collection, Management, Analysis and Use

- The research system and the different information sources will be strengthened to provide policy relevant evidence and good quality data in a timely manner.
- Capacity will be built at the different levels for analysis and synthesis of data, efficiency and equity analysis, and economic evaluations to inform value-for-money decisions.
- Efforts to improve data demand and information use will entail a review of dissemination mechanisms, away from traditional approaches to what is referred to as "effective dissemination" to stimulate dialogue and actions based on evidence. In this regard innovative approaches will be employed, such as: audience tailored dissemination, use of policy briefs, production of statistical bulletins, engaging the media to disseminate evidence and evidence sharing at community level through existing community structures including data producers. In addition, capacity in evidence-based planning will be built at all levels.

10.4. Country mechanisms for review and action.

- Regular and participatory sector performance assessments will be undertaken at the national and district level. These will involve a review of reports and experiences to inform corrective action. Bi-annual reviews will be undertaken with the former informing implementation adjustments to improve service delivery and the latter informing the subsequent planning cycle and resource allocation.
- Evaluation of the HSSP4 will be undertaken at mid-term (2021) and end-term (2024) to assess attainment of set objectives and targets. The mid-term will assess progress towards achievement of results and generate lessons learned, while the end-term will inform development of the subsequent strategic plan.
- Programs and districts specific reviews will be undertaken prior to the sector review to ensure that these feed into the overall health sector performance assessment.
- Use of dash-boards, to provide 'performance at a glance', and alert/inform targeted stakeholders will be institutionalized to promote accountability and stimulate action.

11. COSTS AND FINANCING

11.1. Costing methodology and assumptions

The Rwanda HSSP4 costs estimation was facilitated by the UN One Health tool, a unified costing tool that estimates the cost of health services and system inputs required to achieve desired health outcomes and impacts. Further details on the tool are provided in Annex XX.

The scope of the costing exercise included:

- Estimating all costs related to delivering the package of health interventions identified in the HSSP4 for the period 2018 to 2024. These included:
  - The costs of the *intervention services* prioritized in the strategic plan by each level of service delivery. This was costed using the *Delivery channel* in the health services module of the One Health tool. This implies that ideally, all programmes are costed at each delivery level. This allows the estimation of the resources needs and inputs required by delivery level. The delivery channels specified for this strategic plan were: Community, health Post, Health Centre, Hospital and National Programmes and where possible results are presented as such.
  - The costs of the *health system inputs* including Human resources, infrastructure, information systems, financing systems etc. that will need to be strengthened to deliver the expanded range and coverage of services above. These were costed using the *health system module* of the One Health tool.
  - The *program support* activities such as training, community mobilization etc. that are required to increase the uptake of services as well. These were estimated for every programme as well as health system input.

The health programs / services costed include: Reproductive Health Maternal New-born and Child Health; Immunization; Malaria; TB; HIV/AIDS; Nutrition; Environmental Health and WASH; Non-communicable diseases; Health Promotion, Mental Health and Global Health Security.

Costs related to health system investments include: Human Resource, Infrastructure, Governance, Health Information System, and Logistics.

The scope of the costing did not include:

- A scenario assessment in which different scale up plans can be costed to assess the most efficient option.
- An impact analysis to assess the effect of the planned interventions on the goals of UHC.
- An estimation of the financial sustainability of the plan given the projected cost estimates and projected commitments by all sources of financing in Rwanda.

Despite the fact that these are critical studies that should aid planning, implementation and resource mobilization strategies, they could not be undertaken as there were limitations in the timely availability of the necessary data.

Process

The Rwanda HSSP4 costing exercise is the result of a consultative and iterative process of data collection, targets setting and quality assurance to ensure alignment with Rwanda Government's strategy and accuracy of estimates. It was conducted in four phases:

(i) Calibration of the tool to specific needs of Rwanda: This included validating the population projections in *DemProj* and *FamPlan* as well as entering Health system baseline data specific to the country such as the types and numbers of health workers and health infrastructure. The calibration of the One Health tool and configuration were conducted by the Rwanda Biomedical Centre Staff with support from Future's institute. Staffs previously trained on the One Health costing tool were available to work with the costing team.

(ii) During a one-day validation meeting for the HSSPIV, the costing methodology and tool were presented to the Ministry of Health and stakeholders. The meeting sought consensus on the tool to be used and highlighted the process of costing including the data needs and the data collection process.

(iii) Meetings for data collection: Technical focal persons for programmes as well as for specific health system pillars in the Ministry were consulted. They each provided the input for the activities that were costed as above;

(iv) Data cleaning and entry into the tool was done by the two external facilitators.

(v) The quantity of services required was estimated using the target populations, population in need and the coverage rate (baseline and targeted) for each intervention prioritized. They also include the input data for the costs for program support.

Costing assumptions

It is also important to note that the HSSP cost estimate was projected using the **2017** population of **12,088,744** as baseline and currency exchange rate of Rwanda Franc **756** to the United States dollar (US$). Inflation was assumed at **5.0%** from 2017 and remained constant throughout the planning horizon. Likewise, baseline data on the Rwanda Health system was obtained from the HMIS, while coverage estimates for health service were obtained both from HMIS and opinions of key program experts.

*Deliverables: t*he products of this assessment include:

- The Projection files of the One Health Tool for the plan. These files contain the aggregate computation of the costs estimates (intervention services, health systems and program support).
  They have the input data of the interventions by service delivery level. These are defined as community level, health post level, health centre level, hospital level and national programme levels.
- In addition, a Microsoft Excel document is included. This is called "Intervention Coverage for the HSSP4. It is an extract from the One Health Tool of coverage rates and drugs and supply costs of the health interventions costed. It does not include the health system costs. It also has the program support costs that were aggregated for all the programs and units in the Ministry of Health.
- A separate excel sheet that has a summary of the programme support costs for MNCH (ARH, Maternal, Child health, Immunization, Community Health), Health System inputs like Health financing, HMIS, Human Resources for Health, Leadership and Governance

and Health Products, Global Health Security, Environmental Health and Health promotion. It is critical to note that some programmes included in the plan were not costed owing to lack of data.

The prioritization exercise enabled the development of a robust, concise yet feasible HSSP4 within reasonable anticipated resource envelope: this is the HSSP4 costing. The policy direction informing the prioritization focussed on the need to address health system gaps such as the required investments in infrastructure and human resources identified during the development of the HSSP4 as health services are scaled up. In addition, the plan focused on increasing efficiency and equity by emphasizing primary health care.

11.2. Overall costs per capita for the HSSP4 (in RWF)

The entire plan is projected to cost RWF **4,290,170.71** million (4.29 trillions) for the 7 years. At the end of the period, the mean per capita cost would be **44,826.92** RWF or **60** USD per capita, up from RWF **27,415.22** per capita in 2018 or **36** USD per capita.

Table 20. Total cost for HSSP4 in RWF (millions)

Level of Care	2018	2019	2020	2021	2022	2023	2024	Total
Community	21,092.24	22,663.17	24,276.75	26,313.44	35,091.79	34,797.20	37,065.18	201,299.76
Health post	2,161.10	2,970.61	3,568.40	4,274.96	5,102.98	6,056.14	7,145.62	31,279.81
Health center	49,025.75	80,308.88	70,514.78	102,895.55	91,059.77	129,298.00	116,732.41	639,835.14
Hospital	49,729.60	54,804.40	61,490.84	68,204.01	74,292.50	81,063.41	87,893.61	477,478.36
National Program	53,742.38	60,009.57	60,684.50	66,396.84	66,015.66	79,994.73	70,442.44	457,286.13
Health System costs	164,410.06	497,405.06	379,615.24	390,654.55	439,590.63	291,407.13	319,908.83	2,482,991.51
Grand Total	340,161.14	718,161.68	600,150.51	658,739.34	711,153.32	622,616.61	639,188.10	4,290,170.71
Total cost per capita	**27,415.22**	**56,443.76**	**46,037.36**	**49,360.32**	**52,090.69**	**44,610.04**	**44,826.92**	

The results above show that greatest expenditure is expected to occur at the highest levels of the health system rather than at the lower levels (community and health posts combined). Drivers of this may include the high costs of medications and interventions for managing chronic illness at hospital and health centre levels and the lower costs of prevention. In addition, some prevention activities such as immunization and ITN distribution are planned to take place at the health centre level. This may also contribute to the high costs.

The costs of the plan are likely to increase dramatically in the second year of implementation (almost double) before they start declining. This increase in costs is driven by the mass distribution of ITNs in 2018 and 2022.

11.2.1. Program Support Costs for HSSP4 (in million RWF)

Table 21. Summary costs for program support in RWF (millions)

Item	2018	2019	2020	2021	2022	2023	2024	Total
Program-Specific HR	753.49	8.41	8.83	9.27	9.73	10.22	10.73	810.68
Training	9,264.45	10,824.14	12,150.92	11,239.28	14,594.64	12,352.62	12,758.98	83,185.04
Supervision	937.50	1,246.62	1,322.54	1,400.45	1,471.97	1,563.75	1,641.93	9,584.77
Monitoring and Evaluation	1,404.01	1,954.06	1,806.27	1,809.77	2,379.19	1,949.72	2,016.67	13,319.69
Infrastructure and Equipment	1,354.79	9,851.90	4,787.84	9,794.40	4,777.59	12,399.85	6,443.32	49,409.69
Transport	734.48	0.00	702.88	0.00	774.93	0.00	854.36	3,066.65
Communication Media & Outreach	14,273.60	11,276.38	13,860.31	14,647.60	13,146.25	21,783.99	14,403.47	103,391.59
Advocacy	714.39	762.04	820.14	882.68	949.98	1,022.42	1,073.54	6,225.18
General Program Mgmt	5,141.96	3,728.00	3,892.07	4,092.81	4,291.11	4,505.72	4,774.27	30,425.93
TB Specific	1,959.56	2,057.53	2,160.41	2,268.43	2,381.85	2,500.94	2,625.99	15,954.72
Other	17,787.90	18,570.72	19,456.04	20,572.90	23,957.82	22,643.82	23,866.78	146,855.98
Total	***54,326.13***	***60,279.80***	***60,968.24***	***66,717.59***	***68,735.06***	***80,733.05***	***70,470.05***	***462,229.92***

The table above highlights the anticipated costs by program support activity. These are the costs that the sector will implement to improve the quality, coverage and uptake of health services by the population. The cost drivers in the table include the aggregate costs scaling-up the uptake of interventions for each program such as HIV/AIDS, TB, NCDs at all levels. These are marked “other” in the table. They increase from 17.87 billion in 2018 to 23.86 billion in 2024. These are followed by the costs of communication, media and advocacy. Lastly, the third highest costs are the costs of training of health workers for improved service delivery. These include mainly in service training costs which increase from RWF 9.2 billion in 2013 to RWF 12.76 billion in 2018. Other than this, the remaining costs represent the non-input costs of strengthening the health system such as training and program management.

The costs are expected to rise by 20% from RWF 54.3 billion in the first year to almost RWF 70.4 trillion in the 2024. In total 462 billion is required throughout the strategic period on support activities for achieving the increased service coverage.

11.2.2. Program Costs for HSSP4 by level (in million RWF)

The Table below shows the costs of the programs by level of care. The table shows that the biggest driver is the costs of the National Programs accounting for 90% of the program costs. The National Programs will cost RWF 137 billion at the end of the strategic period (2024). The driver for the high program costs is the cost of Immunization (vaccine preventable diseases) program which accounts for about 50% of the costs of the national programs.

Table 22. Summary costs of all programs by level (million RWF, excluding HS inputs)

Summary costs with drugs disaggregated by program area/delivery channel	2018	2019	2020	2021	2022	2023	2024	Total
Community								
Maternal and child health improvement	20.60	21.63	22.72	23.85	25.04	26.30	27.61	167.75
Nutrition	0.00	0.00	0.00	16.73	2,406.58	0.00	0.00	2,423.31
Total Community	20.60	21.63	22.72	40.58	2,431.62	26.30	27.61	2,591.06
Health Center								
Health promotion	563.15	248.59	261.02	280.16	287.78	712.02	-	2,352.73
Palliative care	-	-	-	-	-	-	-	-
Total Health Center	563.15	248.59	261.02	280.16	287.78	712.02	-	2,352.73
National Programs								
Maternal And Child Health Improvement	535.94	4,346.42	4,156.93	3,647.63	4,009.84	5,390.30	5,653.60	27,740.65
Malaria And Other Parasitic Diseases	183.58	192.76	202.40	212.52	223.14	234.30	246.01	1,494.71
TB	2,590.46	3,023.33	5,072.82	5,696.58	3,762.91	5,955.79	3,543.71	29,645.59
HIV/AIDS	425.48	431.29	434.66	456.39	479.21	503.17	528.33	3,258.52
Hygiene And Environmental Health	906.42	3,490.70	2,852.87	3,005.74	3,167.31	3,354.52	3,571.26	20,348.82
Vaccine Preventable Diseases	6,949.07	1,493.50	2,007.88	1,841.45	2,691.45	7,144.99	2,681.08	24,809.42
Nutrition	6,225.51	6,379.40	6,856.63	7,033.29	7,559.44	7,754.21	8,334.28	50,142.77
Non-Communicable Diseases	1,359.91	1,041.01	1,219.94	1,144.54	1,326.65	1,246.11	1,462.63	8,800.80
Mental Health	744.00	781.20	820.26	861.27	904.34	949.55	997.03	6,057.64
Family Planning And Reproductive Health	8,236.17	8,610.98	9,267.57	9,974.22	10,734.76	11,553.28	12,130.95	70,507.94
Epidemic Infections Diseases	2,553.26	1,994.57	1,431.49	1,585.24	2,022.07	1,747.73	1,739.99	13,074.35
Blood Transfusion	750.93	677.08	720.93	871.95	800.20	840.21	1,009.39	5,670.68
Quality Assurance And Accreditation	17,273.22	18,138.64	18,981.15	19,930.21	20,995.71	22,045.50	23,147.77	140,512.20
Adolescent Health	210.17	619.62	502.45	512.02	551.06	591.91	621.50	3,608.73
Community Health	4,798.24	8,789.08	6,156.54	9,623.79	6,787.58	10,683.18	4,774.91	51,613.31
Total National Programs	53,742.38	60,009.57	60,684.50	66,396.84	66,015.66	79,994.73	70,442.44	457,286.13
Grand Total Program Costs By Level	**54,326.13**	**60,279.80**	**60,968.24**	**66,717.59**	**68,735.06**	**80,733.05**	**70,470.05**	**462,229.92**

11.2.3. Cost of Health System Strengthening (HSS, in Million RWF)

The table below shows the cost estimates of the different aspects of the health system. As can be seen, the costs of infrastructure, drugs and supplies as well as the human resources are the main cost drivers, accounting for more than 70% of the estimated costs.

Table 23. Summary of cost for health systems strengthening (RWF/excluding drugs)

Input category	2018	2019	2020	2021	2022	2023	2024	Total
Health system Costs								
Human Resources								0
Staff salaries and benefits	101,521	109,497	117,998	127,104	135,621	142,402	149,523	883,667
Total in-service training costs	0	0	0	0	0	0	0	0
Pre-service Training Costs	0	0	0	0	0	0	0	0
Human Resources Administration	0	0	0	0	0	0	0	0
Total Human Resources	**101,521**	**109,497**	**117,998**	**127,104**	**135,621**	**142,402**	**149,523**	**883,667**
Infrastructure								
Construction Costs	12,840	133,534	87,799	90,183	0	0	0	324,356
Equipment, furniture and vehicles	15,299	36,943	60,164	67,248	56,371	30,489	31,307	297,821
Rehabilitation Costs	8,999	195,117	73,792	75,017	212,795	81,428	100,237	747,386
Maintenance and Operating Cost	11,775	12,364	16,197	20,382	24,932	26,313	27,628	139,592
Infrastructure Administration	108	113	15,111	27	29	30	32	15,450
Total Infrastructure	**49,022**	**378,071**	**253,063**	**252,857**	**294,127**	**138,260**	**159,205**	**1,524,605**
Logistics								
Total warehouse costs	2,314	169	178	187	196	206	216	3,466
Total vehicle costs	104	12	0	0	0	0	0	116
Total worker costs	0	0	0	0	0	0	0	0
Third party logistics contracts	0	0	0	0	0	0	0	0
Logistics Administration	1,403	781	792	861	873	949	962	6,621
Total Logistics	**3,821**	**963**	**970**	**1,048**	**1,069**	**1,155**	**1,179**	**10,203**
Medicines, commodities, and supplies								
Medicines, commodities and supplies (user defined in Logistics)	121,425	160,477	159,567	201,367	202,828	250,476	248,809	1,344,949
Safety stock purchases	0	0	0	0	0	0	0	0
Wastage	0	0	0	0	0	0	0	0
Total Medicines, commodities, and supplies	**121,425**	**160,477**	**159,567**	**201,367**	**202,828**	**250,476**	**248,809**	**1,344,949**
Health Financing								
Direct costs	2,957	3,104	3,260	3,423	3,594	3,773	3,962	24,073

Program management costs	681	942	444	335	314	238	42	2,995
Total Health Financing	**3,637**	**4,047**	**3,703**	**3,758**	**3,908**	**4,011**	**4,004**	**27,068**
Health Information Systems								
HIS dimension costs	4,640	2,890	1,715	3,424	2,153	2,541	2,597	19,960
Functional domain costs	0	0	0	0	0	0	0	0
Program management costs	125	131	137	144	151	159	167	1,015
Total Health Information Systems	**4,764**	**3,021**	**1,852**	**3,568**	**2,305**	**2,700**	**2,764**	**20,974**
Governance								
Governance activities	1,457	1,646	1,860	2,102	2,374	2,683	3,031	15,153
Administrative Costs	188	161	169	217	186	195	205	1,321
Total Governance	**1,645**	**1,807**	**2,029**	**2,319**	**2,560**	**2,878**	**3,236**	**16,474**
Grand Total	**285,835**	**657,882**	**539,182**	**592,022**	**642,418**	**541,884**	**568,718**	**3,827,941**

11.3. Discussion of the costing results

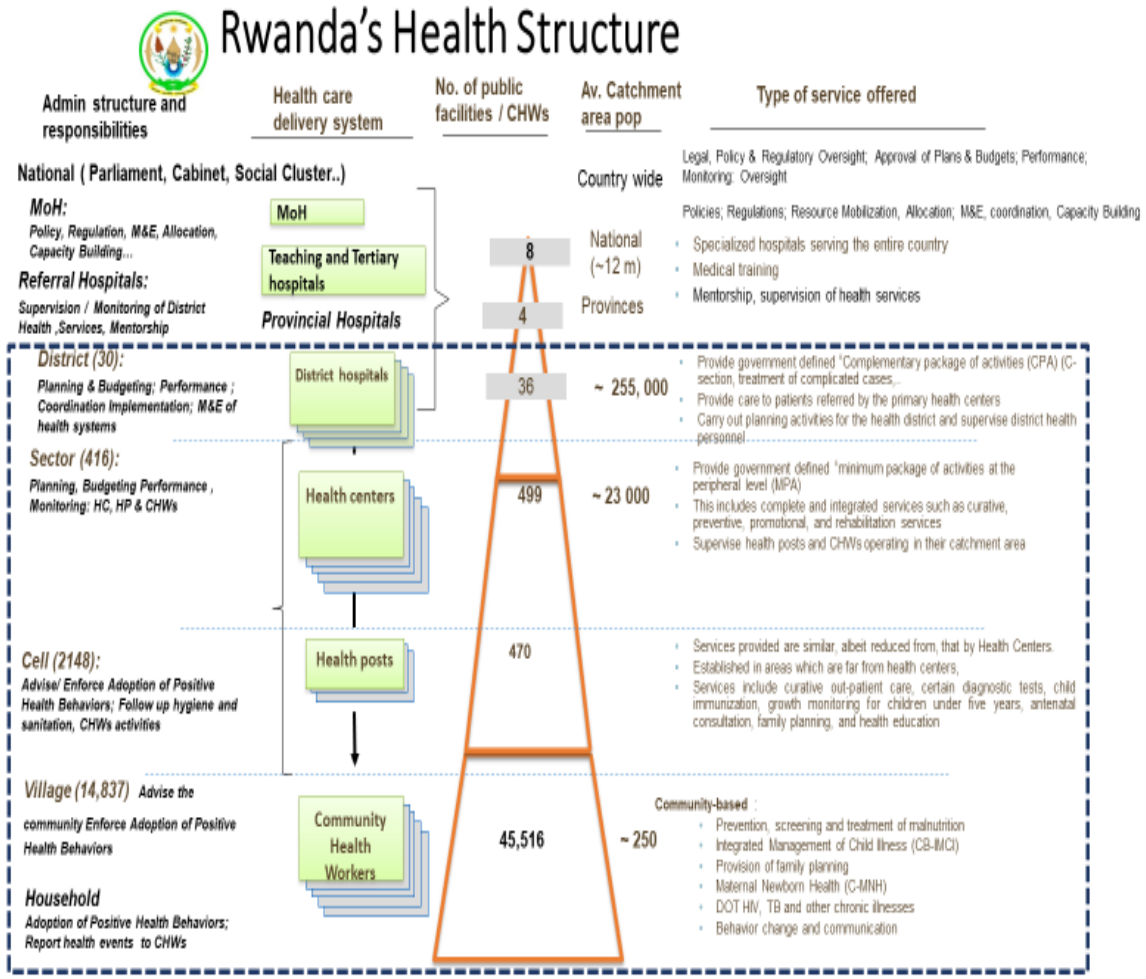
The cost estimates of the HSSP IV show that the plan will cost almost 4.4 trillion RWF for the entire strategic period. The brunt of expenditure is projected to occur mainly at the higher levels of the system due to the high cost of the national programmes and the health centre costs. This is largely driven by the costs of chronic care management such as drugs for HIV and NCDS as well as the costs of preventive interventions such as nets and vaccines at these levels. Given the focus on managing the growing burden of NCDs this is to be expected. It may, however, be prudent to see whether some activities delivered at the higher levels such as immunization and bed net distributions can be shifted to lower levels of care to increase efficiency and contain costs.

Strong and resilient health systems are critical for improved service coverage financial protection and health outcomes. The tables above show significant investments planned for Human resources for health, infrastructure and equipment, supply and access to medicines and health information systems. Underpinning this is the availability of financing. Thus, it will be critical to mobilize the necessary resources for the health systems. Given the plan to scale up the number of Health Posts for improved service coverage, the HRH and infrastructure costs are projected to be high in the strategic plan. These will need to be matched by the investments in drugs and supplies to functionalize the facilities.

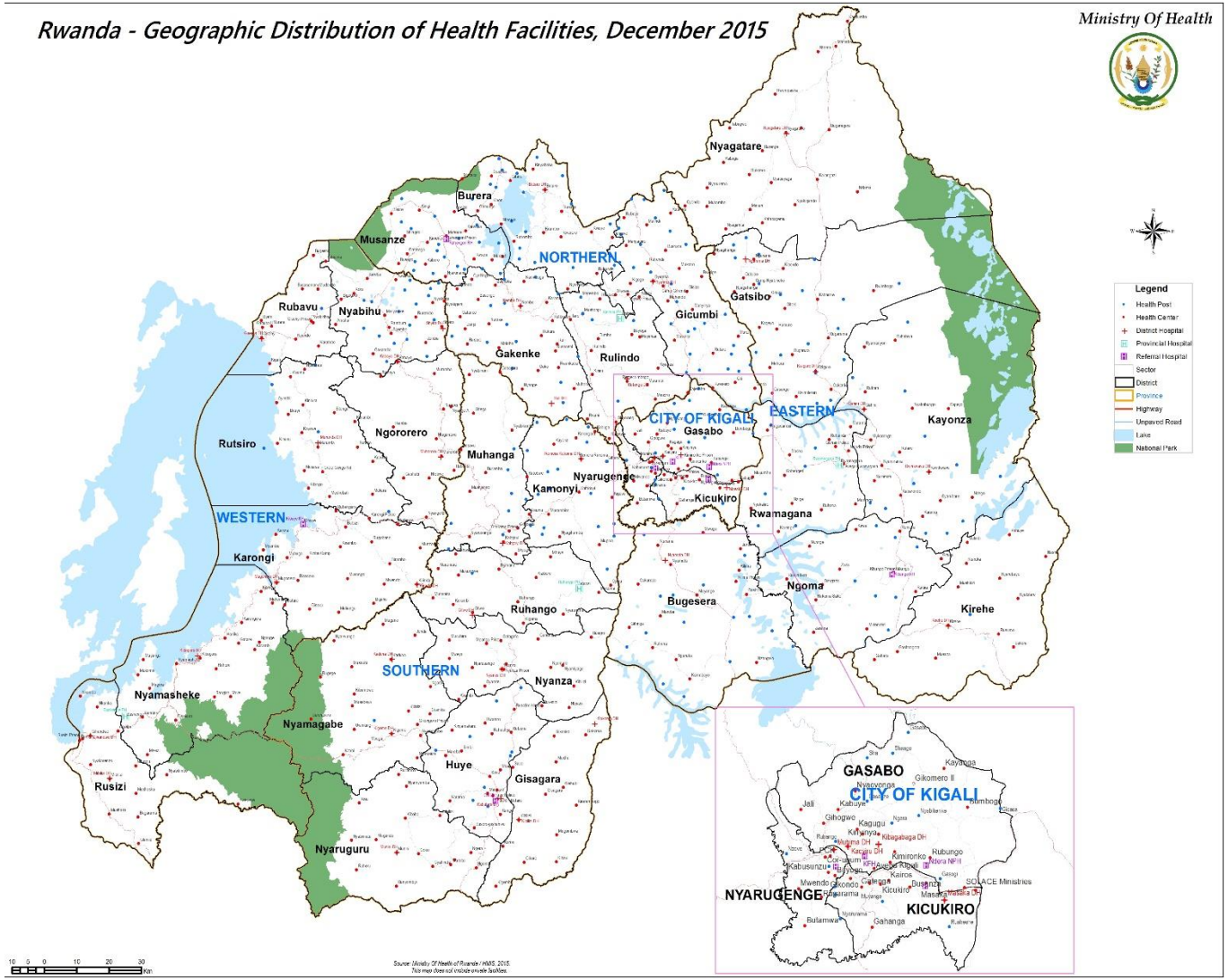
To assess the feasibility of the plan and the resource mobilization efforts required, a financial sustainability assessment would have been suitable. It was however, not included in the scope of the costing, but should be undertaken to estimate the affordability of the plan given current resources available and to institute resource mobilization strategies to fill the funding gap if it exists.

ANNEXES

11.3.1. Annex 1. Organisation chart of the health sector



Annex 2. Map of Health Facilities in Rwanda (October 2016)



11.3.2. Annex 3. List of approved policies and draft policies / @ www.moh.gov.rw

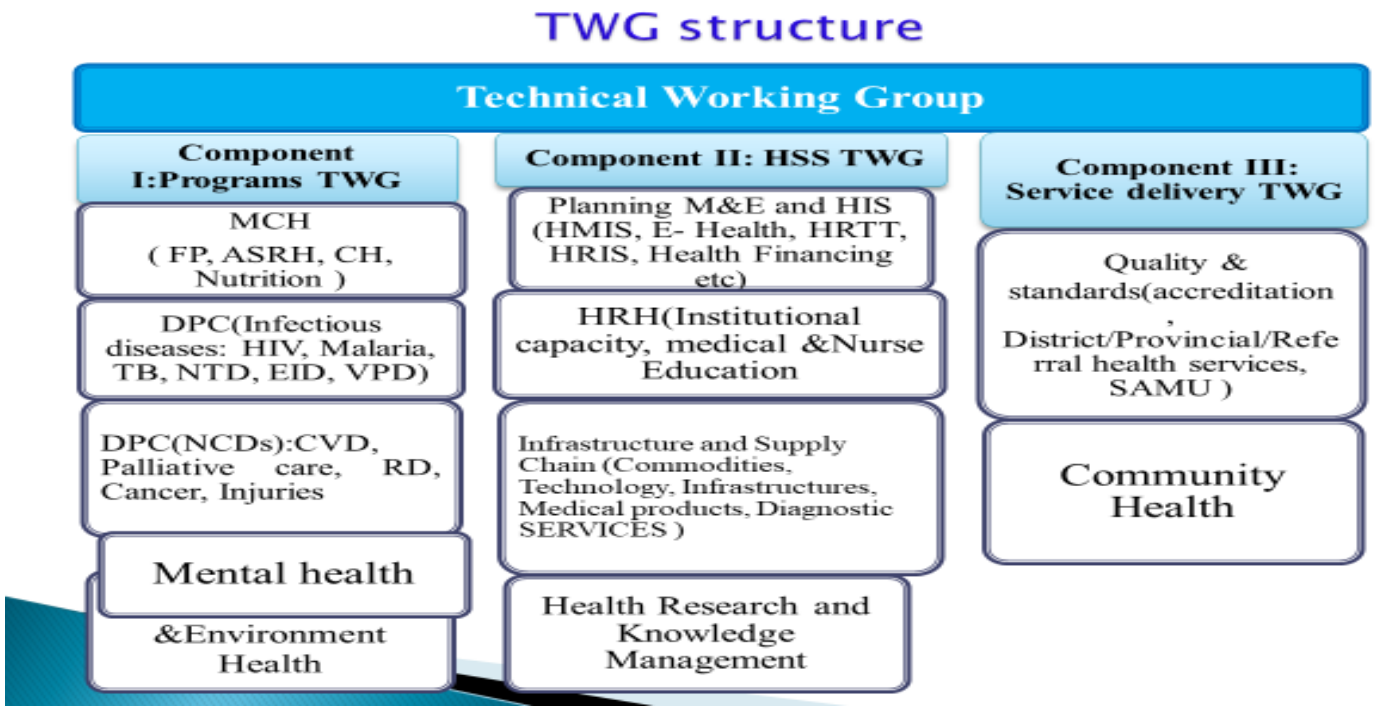
LIST OF APPROVED POLICIES

1. National Health Sector Policy
2. National Food and Nutrition Policy
3. Mental Health Policy
4. National Pharmacy Policy
5. Human Resource for Health Policy.
6. Community Health Policy
7. Health Financing Policy
8. Health Promotion Policy
9. Health Research and Information access
10. Health Sector ICT Policy
11. Non Communicable Disease Policy
12. Traditional and Complementary Medicine Policy

LIST OF DRAFT POLICIES

13. Maternal, Neonatal, Family Planning and Reproductive Health Policy
14. Infectious Diseases Policy
15. Health Care Service Access Policy

11.3.3. Annex 4. Structure and functions of Technical Working Groups and sub-groups



Functions of the TWGs (2013)

Technical Working Groups (TWG) are operational entities where technical and policy issues are discussed by MOH with its stakeholders such as Development Partners, NGOs, Private sector and Civil Society. In these fora, people participate in their technical capacity and normally represent their agencies.

The objective of the TWG is to support and advise the MOH in the implementation of sub-sector strategies and policies. All TWG operate under the authority of the Health Sector Working Group (HSWG) that is constituted of representatives of MOH, DP and civil society.
All TWG (with their desks and sub-desks) are coordinated/guided by a Chair (MOH representative) and a Co-chair (DP representative).

MOH distinguishes the following Technical Working Groups

1. **The MCH Division in RBC** is composed of several 'desks' and 'sub-desks', as follows:

- Maternal (including Fistula) and Child Health Units (with sub-desks in ASRH&R and Gender / Gender Based Violence)
- Family Planning Desk
- Nutrition Desk
- Community Health Desk
- Environmental Desk
- The Immunization Desk (This desk has recently been moved to RBC)

Most of these desks and sub-desks work with partners in Technical Working Groups', in which all the required technical expertise is brought together.

Other (operational) TWG are working in the area of:

2. **Prevention and control of Diseases**, with the following 'desks':

- HIV and other Communicable Diseases
- Non-Communicable Disease (NCDs)
- Health Promotion and BCC
- Environmental health

3. **Treatment and control of Diseases** with the desks:

- Care and Treatment
- Mental Health
- Laboratory
- Epidemic Control and Surveillance

4. **Health Systems Strengthening (HSS**), with various sub-groups:

- Planning, budgeting and M&E

- HIS
- Human Resources for Health
- Health Commodities
- Health Technology including E-Health / e-Learning.
- Health Financing
- Quality of Service Delivery
- Governance and Decentralization
- Specialized Services

5. **Social mitigation** with desks for:
- OVC and other vulnerable people
- Approbation of micro-projects

6. Health Sector Research and Knowledge Management
- Operational Research
- Clinical research
- Research in social sciences

11.3.4. Annex 5. Documents consulted

Author & Date	Title of the document
GOR/MINECOFIN, July 2000	Rwanda Vision 2020
GOR-MOH, Oct 2012	Third Health Sector Strategic Plan (HSSP, July 2012 - June 2018), final version
IHP+, June 2012	Joint Assessment of the Rwanda's Third Health Sector Strategic Plan
NISR, 2013/14	Rwanda Integrated House Hold Living Conditions Survey (EICV)
IHP+, June 2014	JANS Final TB Report and PPT Presentation
MOH 2014	MOH Procurement Plan 2014-2015
MOH, Sept 2015	Mid Term Review of the Rwanda Third Health Sector Strategic Plan (65 pages), HSSP III, July 2012 – June 2018
MOH, Jan 2015	Health Sector Policy (41 pages)
MOH, March 2015	Health Financing and Sustainability Policy (24 pages)
MOH, undated	Health Sector Annual Report July 2015 - June 2016 (38 pages)
MOH 2015	Annual Health Statistical Booklet, (90 pages)
NISR, undated	DHSS: Demographic and Health Survey 2014/15. Key findings
NISR, June 2015	DHSS Key Findings (22 slides)
RDHS, 2014/15	Key Indicators Results (KIR, vs 31), (35 slides)
GOR/MOH, July 2015	Rwanda's Performance against the MDGs, (31 slides)
MOH, March 2015	HRH Sustainability Agenda 2014-2024
MOH / MH, undated	Decentralization and Integration of Mental health care in PHC: a case study of Rwanda
USAID, April 2015	Rwanda Health Private Sector Engagement (PSE) Report
WHO undated	WISN Methodology: workload indicators of staffing needs
WHO 2016	Strategizing National Health in the 21st Century: a Handbook (720 pages)
RSSB, Jan 2016	Community Based Health Insurance Annual Report; Financial Year 2015/16
MOH CBHI Dept, undated	Action Plan CBHI 2017/2018
MOH / USAID, Dec 2016	Report of Costing of Rwanda's Community Health Workers Integrated Services
MOH/LSTM, Nov 2016	Comprehensive evaluation of the Community Health Program in Rwanda
MOH, 2016	Draft HRH Strategic Plan 2016-2021
MOH April 2016	Rwanda Health Financing and Sustainability Policy
OAG Report 2016	Office of the Auditor General of State Finance for the year ended June 2016
GOR, June 2016	Public Private Partnership Law of Rwanda
MINECOFIN, Nov 2016	EDPRS 2 Interim Mid-term Assessment Report
MINECOFIN/GIZ, Jan 2016	Study on Expenditure assignments Rwanda; Decentralization and Good Governance

	Program, Health Sector
MINECOFIN, Dec 2016 Hon. Claver Gatete (PPT)	The Rwanda we want: towards Vision 2050
MINECOFIN, Dec 2016 NDPR (PPT)	Elaboration of Vision 2050 and NST, roadmap and methodology
WHO, June 2016	Healthy Aging and Life Course
WHO, June 2016	Regional Strategy for health security and emergencies
MOH, Jan 2017	Health Service Packages for Public Health Facilities
MOH, 2017 (PPT)	Heath Sector Priorities 2017-2018
MOH, 2017 (PPT)	Health Sector Priorities for HSSP 2018-2024
MOH, June 2017 (PPT)	Various Situational Analysis (PPT and Excel files)
MOH 2017 (booklet)	Strengthening Health Systems, evidence informed approaches and Lessons Learned from Rwanda
MOH/MTI. June 2017	Infrastructure analysis and service package comparison with iceberg, complexity and equipment management presentation
MINECOFIN, 2017 (PPT)	SDG action in Rwanda
MINECOFIN, April 2017 (PPT)	SDGs action, the Rwanda context
MINECOFIN, 2017 (PPT)	Budget Framework Paper 2017-2018
MINECOFIN, June 2017	Harnessing the Demographic Dividend
MINECOFIN, 2017	Elaboration Guidelines for the health sector
MINECOFIN, undated	Revised Roadmap for elaboration of Vision 2050 and NST
MINECOFIN May 2017 Godfrey Kabera (PPT)	Updates on Vision 2050 and NST elaboration process
MOH, April 2017	RMNCAH Policy
WHO undated 2017	Menu of options (for UHC development)
WHO 2017	Executive Summary UHC framework (draft)
WHO 2015	NCD Monitoring Indicators
WHO 2013	NCDs Global Action Plan 2013-2020

11.3.5. Annex 6. Service Package interventions by level

Level of Service Delivery	Strategic Vision/ Priorities for 2024, 2035 and 2050
HOUSEHOLD **Key Stakeholders:** • Heads of Households • CHWs • Village Health Committees • Health Post Management Committee • Sector Health Committee • DHMT	**Household Service Package:** this package facilitates healthy living at household level for all age cohorts in the household. The services should include: ***Reproductive Health*** • Reproductive Health (RH) and Family Planning (FP) Services: the package should include: ▪ Adequate information to enable clients to make RH & FP choices that are appropriate to their socio-economic status, health status and socio-cultural beliefs ▪ Availability of all FP methods that facilitates choice of preferred method by well-informed FP clients ▪ Facilitating access to Cervical Cancer vaccination and screening ***Water, Environmental Sanitation& Hygiene (WASH / WATSAN)*** • Self-Care package at household level: the package should include: – Adequate information on healthy nutrition, family and personal hygiene, critical diagnostic equipment that empowers families to monitor their health at home e.g. ***Diagnostic Package*** – Weighing Machines for monitoring body weight – Pregnancy Test Kits – Electronic Glucometer for Diabetes – B.P Machine for Hypertensive Patients

	– Etc. NB: affordability of these will depend on socio-economic status of the patient / household. ***Health Promotion*** • Promotion of healthy living and lifestyles, e.g. ▪ Healthy Nutrition ▪ Healthy Sleep Habits ▪ Exercises for Physical and Mental fitness ▪ Etc. ***Promotion of health values of the following key Public Health / Public Good interventions***: ▪ Immunisation (packages for different age cohorts), e.g. EPI, HPV, HB virus, Rabies, etc. ▪ Proper waste disposal in public places ▪ Embracing of and investment in renewable and healthy energy sources ▪ Etc. ***Emergency Response:*** • Basic First-aide techniques and Self-medication / basic over-the-counter medications (e.g. burns, drowning, muscular-skeletal accidents, head injuries; wild animal bites; alcoholic comas, poisoning; etc.) ▪ Health education on emergencies, their causes and management ▪ Emergency phone contacts: Ambulance Services, Police & Closest MOH Registered Health Facilities and Health Workers ▪ Legal implications of emergencies ▪ Etc. ***Culture & Health:*** Need to focus on the positive aspects of cultures and pay attention to cultural differences and sensitivities e.g. some women in Rwanda do not want to talk about their pregnancies before it really shows (because of socio-cultural beliefs) **Note:** ***The UHC Orientation:*** This package should be tailored to different age brackets at the household level (Children, Adolescents, Youth, Adults and the Elderly)

COMMUNITY **Key Stakeholders:** • CHWs • Village Health Committees • Health Post Management Committee • Sector Health Committee • DHMT	**Community Service Package:** Review the current CHWs Package (refer to CHW study by Liverpool School of Tropical Medicine, Nov 2016) to address the following: ***Emergency Response:*** - Clear Definition of roles and responsibilities of the First Responder (e.g. in case of accidents- Contacts of Ambulance Services; contacts of Police; contacts of the nearest health facilities; contacts of CHWs and close health professionals ***HRH- Highlighting Community Based Workforce:*** - Availability of community level health workers (e.g. CHWs and Palliative Care workers of different age groups to cater for both adults / elderly and adolescents / youth) - Package should be linked to geographical areas needs and their socio-economic settings and socio-cultural sensitivities - Regularize refresher training of CHWs (based on MOH Curriculum) and supervision of CHWs - Need to create a motivation package for CHWs; a non-financial motivation package is deemed suitable and sustainable (e.g. Certification; recognition awards; etc.) ***Meaning of Community:*** - Need for clear definition of what ***community*** means (i.e. the meaning of Community) in quantitative, geographical and administrative perspectives in both rural and urban setting. Hence what definition does MOH / GoR advise? ***Scope of Community Package:*** - Community package should include a comprehensive Geriatric Group i.e. care for the elderly people in addition to the other age cohorts (pregnancy & neonatal period; child age range; adolescents & Youth and adults) ***Evaluation of Performance of the Community Health Package*** - Conduct an annual evaluation (or evaluation after every two years) of CHWs to assess their retirement options (since many drop out because of advanced age)
HEALTH POSTS (HPs) NB:	***Current service package includes preventive, consultation, ANC, promotion, basic lab services (e.g. RDT, malaria, pregnancy tests, etc.). This package needs to be adjusted to***

• There are currently 476 HPs • There are two models of HPs: one running on purely public model and another on PPCP model **Key Stakeholders:** • CHWs • Village Health Committees • Health Post Management Committee • Sector Health Committee • DHMT	***include:*** ***UHC-Oriented HP Service Package:*** - Public Private Community Partnership functions of the Health Post - Expected quality standards of services at the HP level - Need to equip health staff of HPs with basic skills for diagnosis and management of NCDs ***Essential Diagnostic Package*** - Basic Lab Diagnostic services (especially availability of microscopy, basic clinical chemistry tests and serological test kits for common diseases in the country). Hence need for MOH to define Lab Service Package for health posts. - Development of criteria for identification of a few health posts that should have in-house / in-built laboratory services (e.g. 1 out of every 3; population density based, extremely difficult-terrain related demands; etc.) ***Supervision of Health Posts*** - Strengthen the supervisory role of health centres over HPs

HEALTH CENTERS (HCs)
 	
Key Stakeholders:
• CHWs
• Village Health Committees
• Health Posts
• Sector Health Committee
• DHMT
	There is need to build on the current package for Maternal & Child Care to include;
	- ***Surgical Functions*** (availability of Minor Surgery at HCs)
	  o Improve initial management of trauma patients
	- ***Non-Communicable Diseases (NCDs) package*** i.e. improve quality of NCD services at health centres
	- ***Physiotherapy, Physical Fitness & Rehabilitation***
	  o Include in the package Physiotherapy & Rehabilitation services
	- ***FP Services***
	  o Add to the HC service package Long Term Family Planning methods for the 'medicalized' health centers
	- ***Dental Services:*** Improve the range of Dental Services provided at HC level
	- ***Diagnostic Services:***
	  o Expand the diagnostic service package to include (basic imaging services e.g. ultrasonography and basic laboratory services).

	○ ***Screening for NCDs:*** Basic screening services should be available e.g. VIA for cervical cancer; HB Virus screening; etc. - ***Medicalized Health Centers*** ○ Increase the number of medicalized health centers based on objective criteria
DISTRICT HOSPITALS (DHs) Key Stakeholders: • Senior Management Team • District Hospital Management & Advisory Board • DHMT	**Improve the package of District Hospitals to provide better Secondary Healthcare:** **HRH:** Improve the general HR capacity in DHs **Specialized Services Package:** - General Practitioners should get technical support from Visiting Specialists (by 2035) and Resident Specialists (by 2050) - Train specialist nurses, midwives and Allied Health Professionals to work in specialized wards of DHs (e.g. Obstetrics & Gynaecology, General Surgery, Internal Medicine, etc.) - Re-organize and strengthen the following hospitalization services in DHs (Neonatology and Kangaroo mother care; General Paediatrics and Gynaecology) - Improve the currently weak anaesthetic package to promote Safe Surgery and Anaesthesia **Diagnostics & Imaging Services:** - Strengthen Lab and Imaging Diagnostics - Blood transfusion services should be available in **all** DHs - Lab service should include haematology, Microbiology plus culture & sensitivity; Clinical chemistry; pathology biopsies for cytology, **Obstetrics & Gynaecology:** all DHs should be able to provide the following services: - Availability of competent staff to deal with obstetric complications e.g. managing PPH, emergency hysterectomy, ANC, ultrasound, postnatal care, FP, etc. - Increase scope of gynaecology services in DHs e.g. elective gyn surgery services (removal of breast lumps) - Diagnose and treat basic fertility related cases - Manage simple VVF (VV fistulae) - Improve quality of antenatal and postnatal care **Critical Care** - Upgrade all Emergency Service Units in DHs to competently handle referred emergencies

	- DHs should have a package for Critical Care Services which should include: - HDUs/high dependency units - EMT- (emergency medical technician/ pre hospital) emergency care packages - Safe transfer mechanisms /Specialised Ambulance care - Basic life support & Advanced cardiac support - Have competent surgical and anaesthetic team to manage critical surgical patients (e.g. Laparotomies, reduction of open fractures, etc.) **Telemedicine & Mentorship** - DHs should improve quality of care through telemedicine, including both emergency and diagnostic services - Top (Referral Hospitals)- Bottom (DH) Mentorship of staff should be augmented- including telemedicine based **Other Services to include in the package:** - Basic ENT services - Dental Services - Mental Health services - Ophthalmology services supported by Visiting Ophthalmologists - Physiotherapy & Rehabilitation services - Sports medicine & fitness mainstreaming services - Centralize sterilization of equipment, laundry, etc. - Availability of continuously updated Treatment Guidelines / Protocols
PROVINCIAL Key Stakeholders: • Senior Management Team • Provincial Hospital Management & Advisory Board • DHMT	The following (currently identified) packages should be in place in all provincial hospitals by 2024: **Paediatrics Service Package:** The paediatrics service package should be expanded to include - Advanced Diagnostics - PICU - NICU - Paediatrics Emergency **General Oncology:** - Specialised oncology care services should be instituted

	Obstetrics & Gynaecology - A general gynaecologist to handle obstetrics emergencies that need advanced care - Manage Basic Fertility - Laparoscopy - ANC & Post Natal Care **Anaesthesiology:** There should be at least 10 anaesthesiologists (at least two) at the provincial levels (by 2050) **Ophthalmology** - Specialist ophthalmology services - Ophthalmology outreach services **Other Specialist Services** Provincial Hospital Service packages should also include the following specialist level services: - Dermatology - Psychiatrist - Dental - ENT - Diagnostic laparoscopy **Critical Care** - Provincial Hospitals should provide advanced critical care services- both HDUs and ICUs **Public Health Labs** - In addition to the National Reference Lab, the country will need two additional strategically located Public Health Labs. - Meanwhile, Provincial Hospital Labs will continue to provide Public Health Lab functions (e.g. case definitions and collection and dispatch of suspected epidemic diseases e.g. cholera, meningitis, measles, etc.)
REFERRAL HOSPITAL Key Stakeholders:	Referral Hospitals will provide specialized technical services in Internal Medicine, Paediatrics, Obstetrics and Gynaecology and Surgery. **Surgery Services**

• Senior Management Team • Referral Hospital Management & Advisory Board • DHMT	Specialised surgical services will include: - General & Orthopaedic surgeons - Urology procedures - Renal services - Cardiology, Endoscopy & Colonoscopy services - Fluoroscopy, CT scan **Internal Medicine:** Specialised Internal Medicine services will include: Gastro-Enterology, oncology, cardiology, haematology, nephrology, neurology, infectious diseases, etc. **Obstetrics & Gynaecology:** Specialised Obstetrics & Gynaecology services will include: all advanced Obstetrics & Gynaecology specialised services **Paediatrics:** Specialised Paediatrics services will include: all advanced paediatrics specialist services **Dentistry and Oral Surgery** Specialised Dentistry and Oral Surgery services will include: all advanced Dentistry and Oral Surgery **Medical Specials** Specialised Medical Special services will include: Dermatology, Immunology, Endocrinology, etc. **Surgical Specials** Specialised Surgical Special services will include: ENT, Urology, Plastic Surgery, etc. **Imaging Diagnostics:** Advanced services in these areas will be provided, thus: • ***Radiology:*** Digital X-ray, U/S, CT scan • ***Ultrasonography***: Advanced Ultrasonography services **Critical Care** - They provide advanced critical care services- both HDUs and ICUs

TEACHING HOSPITAL **Key Stakeholders:** - Senior Management Team + MOH DG Clinical Services - Teaching Hospital Management & Advisory Board - DHMT	The service package in teaching hospitals will include: expanded highly specialised care in all services and provision of Private Healthcare Services. These services are outlined as below: **Surgery**: - General Surgery, Cardio-Thoracic, Vascular, Colon-Rectal, Neurosurgery, Orthopaedics, Hepato-Biliary, Paediatric, Laparoscopic, Urology, Maxillofacial, ENT, Ophthalmology, Plastic Surgery **Internal Medicine:** - Gastro-Enterology, Oncology, Cardiology, Haematology, Nephrology, Neurology, Infectious Diseases, Etc. **Obstetrics & Gynaecology:** - Advanced specialist services, teaching and research **Paediatrics:** - Advanced specialist services, teaching and research **Dentistry** - Advanced Dentistry and Oral Surgery **Medical Specials** - Dermatology, Immunology, Endocrinology, etc. **Surgical Specials** - ENT, Urology, Plastic Surgery, etc. **Imaging Diagnostics:** • ***Radiology:*** Digital X-ray, U/S, CT scan, MRI and Radiotherapy • ***Ultrasonography***: Advanced Ultrasonography services • ***Nuclear Medicine & Imaging:*** Isotopic imaging **Pathology:** Micro-biology, **C**ytological Analysis, Forensic Medicine; Cytological research **Molecular Medicine:** Molecular medicine research **Pharmacology:** Pharmacological research and medicinal product development and patenting; Advanced training in pharmacy and pharmacology

	Advanced Midwifery and Nursing education **Critical Care** - They provide advanced critical care services- both HDUs and ICUs - Teaching and research
National Reference Laboratory	The National Reference Lab is the highest lab in the country. Its service scope includes: - Provision of advanced Public Health Laboratory services - Provision of diagnostic bases of health security in the country - Supervision and recommendation for accreditation of all the lower labs- both clinical and the Regional Public Health Labs - Reception of samples from the lower level clinical and public health labs for further analysis - Referral to regional and international reference labs epidemiological specimens that need further technical analysis at more advanced reference labs

HSSP4 LOGICAL FRAMEWORK: INDICATORS & TARGETS

OVERALL OBJECTIVE Ensure universal accessibility (in geographical and financial terms) of equitable and affordable quality health services (preventative, curative, rehabilitative and promotional services) for all Rwandans.

IMPACT Improved health status of the country's population

HSSP 4 IMPACT INDICATORS

INDICATORS: Impacts	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
Population of Rwanda (estimates, in millions)	12 (2017)			13			14.5	NISR
Life expectancy at Birth	66.6			TBD			TBD	NISR
Population Growth Rate	2.4			TBD			TBD	NISR
Maternal Mortality Ratio/100, 000 Live Births (LB)	210			168			126	DHS
Neonatal Mortality Rate/1000 LB	20			18			15.2	DHS
Infant Mortality Rate/1000 LB	32			28			22.5	DHS
Under-five Mortality Rate/1000 LB	50			48			35	DHS

Premature Mortality rate attributed to cancer, diabetes and HTA	NA	-	-	50			80	HSASB/CVRS
Premature Mortality rate from road traffic accidents	NA	-	-	50			80	HSASB/CVRS

HSSP 4 OUTCOME & OUTPUT INDICATORS

COMPONENT I: SPECIFIC HEALTH SERVICE DELIVERY PROGRAMS

11.4. Essential Services across the Life Course: pregnancy, early life, children, adolescents and youth programs

Indicators Outcome / Output	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
Percentage of births attended by skilled health professionals	91	>93	>95	>95	>95	>95	>95	DHS
ANC coverage (4 standards visits)	44			47			51	DHS
% Births attended by skilled health care provider	91			>90			>90	DHS
% New-borns with at least one PNC visit within the first two days of birth	19			25			35	DHS
Modern contraceptive prevalence rate (mCPR)	48			54.6			60	DHS
Unmet need for Family Planning	19			17			15	DHS
Maternal mortality rate	210			168			126	DHS
Neo-natal mortality rate	20			16			15.2	DHS
Under five mortality rate	50			48			35	DHS
Infant Mortality Rate/1000 LB	32			28			22.5	DHS
% Children 12-23 months fully immunized	93			>93			>93	DHS

% Exclusive Breastfeeding < 6 months	87%			>90%			>90%	DHS
Prevalence of malnutrition (Stunting) among Children under 5	38			29.9			19	DHS
Teenage pregnancy rate (15-19 years)	7.3			<7			<7	DHS
Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group	5.5			>5			>5	DHS
Proportion of children with diarrhoea receiving oral rehydration solution (ORS)	12			>10			>10	DHS

11.5. Coverage of Essential Health Interventions: communicable and non-communicable diseases

11.5.1. Communicable diseases

11.5.1.1. HIV / AIDS and Viral Hepatitis

Indicator Outcome / Output	Baseline Indicator Value (2016/17)	Indicator Targets						Means of Verification
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
HIV prevalence among people aged 15–49 years	3	3	3	3	<3	<3	<3	Annual Statistical Booklet
Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	2.7						2	Annual Statistical Booklet
Proportion of persons diagnosed with HIV infection receiving sustained ART	82.7			85			90%	Annual Statistical Booklet
HIV incidence/1000 population	2.7			2.5			2	Annual Statistical Booklet
Percentage of infants born to HIV + mothers free from HIV by 18 months	95			>95			>95	Annual Statistical Booklet
Hepatitis B incidence per 100,000 population	NA			>3			>2	Survey/ Annual Statistical Booklet

11.5.1.2. Tuberculosis and other respiratory communicable diseases

Indicator Outcome / Output	Baseline Indicator Value (2016/17)	Indicator Targets						Means of Verification
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
TB incidence per 100,000 population	58			45			31.8	WHO Global TB Report
TB treatment coverage rate	84			86			88	Annual Statistical Booklet
Treatment success rate (TSR) for all forms of TB cases (DS & DR-TB cases)	85%			87%			≥87	Annual Statistical Booklet
Proportion of newly diagnosed leprosy with grade 2 disability	19%			13%			10%	Annual Statistical Booklet

11.5.1.3. Malaria, Neglected Tropical Diseases and other parasitic diseases

Indicator Outcome / Output	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
Proportion Households with at least one LLIN	81			84			85	DHS,HMIS as a proxy estimation
Malaria incidence per 1,000 population	308			200			122	HMIS, WHO Global Malaria Report
Malaria proportional mortality rate	5.7			4.5			3	Annual Statistical Booklet
Proportion of children under five years old who slept under a LLIN the previous night	80			84			85	DHS

Proportion of targeted population who received MDA	96*			97			98	Annual Statistical Booklet
Prevalence of soil transmitted helminthiasis (STH)	45.2%			35%			<20%	Mapping report
Prevalence of Schistosomiasis (SCH)	1.9			1.0			0.5	Mapping report

11.5.2. Non-Communicable Diseases & Injuries

11.5.2.1. Overall interventions for NCDs, Injuries and disabilities

Indicator Outcome / Output	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
Percentage of NCD combined high risk factors in the population aged between 15-64 years	16.4			15			12	STEP Survey
Percentage of reduction of premature mortality (under 40 years old) due to NCDs (cancer, HTA and diabetes)	NA			50			80	CVRS/Annual Statistical Booklet
Percentage of reduction of premature mortality (under 40 years old) due to NCDs due to road traffic accidents (RTA) as the leading cause in non-intentional injuries	NA			50			80	CVRS/Annual Statistical Booklet
Teeth and gum diseases morbidity rate at health facility level	4%			2.07%			1,84%	Annual Statistical Booklet
Eye diseases problem morbidity rate at health facility level	3			<2			<2	Annual Statistical Booklet
Cataract Surgical Rate (number of cataract surgeries per million	400			700			1000	Annual Statistical Booklet

population per year)								
Age-standardized prevalence of current tobacco use among persons aged 15 years and older (outcome)	12.9			9.03			6.32	DHS and STEP Study
Age-standardized prevalence of overweight and obesity in persons aged 18+ years (defined as body mass index ≥ 25 kg/m² for overweight and body mass index ≥ 30 kg/m² for obesity)	17.1%			>17.1%			>17%	STEP Survey

11.5.2.2. Mental Health services

Indicator Output	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
Proportion of new cases treated in health facilities (HC+DH+PH+RH) for mental disorders	0.1			0.2			0.6	Annual Statistical Booklet

11.6. Cross-Cutting Health Service Delivery Programs: Health promotion, environmental health, and health security

11.6.1. Health promotion and environmental health,

Indicator Output	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
Percentage of Health centres without water	16			0			0	Annual Statistical Booklet
% Public Health Facilities (RH,PH,DH and HC) with effective waste management systems according to MOH / WHO standards	76			84			100	Annual Statistical Booklet

11.6.2. Health Security

Indicator Outcome	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
Proportion of outbreaks with a case fatality rate below recommended thresholds	80%			100%			100%	Annual Statistical Booklet
International Health Regulations (IHR) core capacity index	NA			6/13 attributes attained			13/13 attributes attained	Joint External Evaluation Report (JEE)

COMPONENT II: HEALTH SYSTEMS SUPPORTING DELIVERY OF HEALTH PROGRAMS

2.1. Quality assurance and improvement programs

Indicator Outcome / Output	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
Percentage of the population satisfied with health services	74.9%	>80	>80	>80	>80	>80	>80	RGB Score Card
Independent accreditation body in place and functional	0			1			1	Annual Statistical Booklet
% Malpractice cases assessed and addressed	N/A			>95			>95	Annual Statistical Booklet
Number of National referral and teaching Hospitals accredited	1			3			5	Annual Statistical Booklet
Number of newly upgraded referral hospitals that have achieved level three of the national accreditation process	0			2			3	Annual Statistical Booklet

Number of Provincial Hospitals that have achieved level three of the national accreditation process	0			2			4	Annual Statistical Booklet
Number of DH that have achieved level two of the national accreditation process	0			15%			50%	Annual Statistical Booklet
Number of laboratories reaching 5-star (Five Star) accreditation	1			2			5	Annual Statistical Booklet
% Private HFs (polyclinics and hospitals) enrolled and pursuing level 1 of accreditation process	0			10 %			>95 %	Annual Statistical Booklet

2.2. Health Workforce (HRH)

Indicator Output	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
Doctor/pop ratio (GP and Specialists as well)	1/10,055			1/ 9,000			1/7,000	Health Professional Bodies Statistics, Report, Annual Statistical Booklet
Nurse/pop ratio	1/1,094			1/ 900			1/ 800	Health Professional Bodies Statistics, Report, Annual Statistical Booklet
Midwife/pop ratio (women aged from 15-49)	1/ 4,064			1/ 3,500			1/ 2,500	Health Professional Bodies Statistics, Report, Annual Statistical Booklet
Pharmacist /pop ratio	1/ 16,871			1/16,000			1/15,500	Health Professional Bodies Statistics, Report, Annual Statistical Booklet
Lab Technicians /pop ratio	1/ 10,500			1/ 9,000			1/ 7,500	Health Professional Bodies Statistics, Report, Annual Statistical Booklet
Doctor attrition rate	NA			>10%			>5%	Survey

2.3. Services availability and readiness (infrastructure and equipment)

Indicator Output / Outcome	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
Number of sectors without a health centre	17			8			0	Annual Statistical Booklet
Number of health posts constructed/rehabilitated in a cell previously without any other health post	473			593			623	Annual Statistical Booklet
Number of super specialised health facilities (to reduce the referrals abroad and promote medical tourism)	4			6			8	Annual Statistical Booklet
Surgical procedures per 100,000 population	971			1,500			3,000	Annual Statistical Booklet
Peri-operative mortality rate (due to surgical procedure)	3.1			2.5			2	Annual Statistical Booklet
Ratio ground ambulance / population	1/50,505			1/50,000			<1/50,000	Annual Statistical Booklet
Average time to walk to a nearby HF (in minutes)	56.5			50			45	EICV
Number of hospitals with functional basic maintenance system (trained manpower, available tools and space for operations)	8			42			50	Annual Statistical Booklet
Number of referral hospitals with functional telemedicine facilities	1			3			4	Annual Statistical Booklet
Percentage of health centres without electricity (not connected to a nearby grid)	17.2			0			0	Annual Statistical Booklet
Percentage of Health centres with functional internet and local area network connectivity	36.5			70			100	Annual Statistical Booklet
National Service availability readiness score (including emergency services)	NA			60%			80%	ISS/SARA Reports

2.4. Health Products, Medicines and Commodities

Indicator Outcome / Output	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
% of health products and health technologies available at the	55			80			90	e-LMIS Report

Central Medical Warehouse								
% HFs with < 5% of medical products stock-outs	87			>95			>95	e-LMIS Report

2.5. Health Information Systems (HIS) and Research

Indicator Output	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
% causes of deaths are reported according to ICD10	NA			100%			100%	Annual Statistical Booklet
% births registered according to the CRVS	NA			100			100	Annual Statistical Booklet
% of public health facilities (DH,PH and RH) using EMR full package system	4%			43%			72%	Annual Statistical Booklet
% private HF (dispensaries, clinics, polyclinics and hospitals) regularly reporting through national data collection systems (DHIS-2 and e-IDSR)	54%			100%			100%	Annual Statistical Booklet

2.6. Health Financing

Indicator Outcome / Output	Baseline Indicator Value (2016/17)	Indicator Targets						MEANS OF VERIFICATION
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
% Household expenditure on health as a share of total household income	NA			<25			<10	EICV, HRTT Report

Proportion of population covered by health insurance	90			>95%			>95%	EICV and HRTT Report

2.7. Crosscutting Issues indicators matrix- NCDs and HIV

Indicator	Baseline Indicator Value (2016/17)	Indicator Targets						Means of Verification
		Target 2018/19	Target 2019/20	Target 2020/21	Target 2021/22	Target 2022/23	Target 2023/24	
NCDs								
Percentage of NCD combined high risk factors in the population aged between 15-64 years	16.4		15				12	STEP Survey
Percentage of reduction of premature mortality (under 40 years old) due to NCDs (cancer, HTA and diabetes)	NA		50				80	CVRS/Annual Statistical Booklet
Percentage of reduction of premature mortality (under 40 years old) due to NCDs due to road traffic accidents (RTA) as the leading cause in non-intentional injuries	NA		50				80	CVRS/Annual Statistical Booklet
HIV								
Proportion of persons diagnosed with HIV infection receiving sustained ART	82.7		85				90%	HMIS/Annual Statistical Booklet
HIV prevalence among people aged 15-49 years	3		3				3	HMIS/Annual Statistical Booklet
HIV incidence/1000 population	2.7		2.5				2	HMIS/Annual Statistical Booklet
Percentage of infants born to HIV + mothers free from HIV by 18 months	95		>95				>95	HMIS/Annual Statistical Booklet