REPUBLIC OF RWANDA
MINISTRY OF HEALTH

MONITORING & EVALUATION PLAN FOR THE HEALTH SECTOR STRATEGIC PLAN (HSSP III)

2014-2018

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Acronyms

CHWs	Community Health WorkerS
CSOs	Civil Society Organizations
DHMT	District Health Management Team
DHS	Demographic and Health Survey
DP	Development Partners
DPAF	Development Partners Assessment Forum
DQA	Data Quality Audit
EDPRS	Economic Development and Poverty Reduction Strategy
EICV	Integrated Household Living Conditions Survey
GIS	Geographical Information System
HC	Health Center
HH	Household
HSSP	Health Sector Strategic Plan
ICT	Information and Communications Technology
IDSR	Integrated Disease Sureillance and Response
IHRIS	Integrated Human Resource Information System
JADF	Joint Action Development Forum
JANS	Joint Assessment of the National Strategy
LabMIS	Laboratory Management Information System
LDDU	Leadership and Data Dissemination and Use
LMIS	Logistics Management Information System
LQAS	Lot quality assurance sampling techniques
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MMD	Mutuelle Membership Database
MoH	Ministry of Health
NHA	National Health Accounts
NHA	National Health Accounts
NISR	National Institute of Statistics
QA	Quality Assurance
RBC	Rwanda Biomedical Centre
RCC	Rwanda Health Communication Centre
RTT	Resource Tracking Tool
SARA	Service Availability and Readiness Assessment
SISCom	Systeme d'Information Communautaire
SWAp	SectorWide Approach
TB	Tuberculosis
TWG	Technical Working Group

FOREWORD

The focus of the present M&E plan is to provide a road map for systematic evaluation of the implementation of HSSP III.

The M&E Plan for Health Sector Strategic Plan III (HSSP III) aims at establishing a robust, comprehensive framework that is fully integrated, harmonized and well coordinated to foster and guide the monitoring of the implementation of the HSSP III and evaluate impact.

The M&E plan shall be the basis for improving the quality of routine information systems and be used to institutionalize mechanisms and tools for measuring quality of both facility and community based services. It should also strengthen dissemination and use of information at both national and decentralized levels.

The development of the M&E Plan for HSSP III has been largely informed by lessons from the Mid-Term Review of the second Health Sector Strategic Plan (HSSP II) and was in conjunction with the development of the HSSP III. The Monitoring and Evaluation Plan describes the strategic information a program needs to gather and use for decision making. It is also the fundamental document that holds the program accountable and will tell whether the strategy and its related programs have succeeded or not.

The process for the development of this M&E plan was undertaken through a consultative, participatory and transparent approach. Under the coordination of the Directorate General for Planning, M&E and Health Information Systems in the Ministry of Health (DGPME&HIS), stakeholders including Development Partners (DPs), Program implementers, and Districts were consulted during the development process.

The plan outlines strategies to monitor and measure progress achieved ensuring accountability, promoting transparency and responsibility among stakeholders, to guide implementation and promote documentation, evidence based planning and improved decision-making as well as improved public access to available health information.

I am confident that this plan provides the necessary framework for monitoring and evaluation of HSSP III and I urge all stakeholders to put all efforts into its implementation to enable the country to move towards the vision and development agenda.

Dr. Agnes BINAGWAHO
Minister of Health

1. INTRODUCTION

The Third Rwandan Health Sector Strategic Plan (HSSP III) has been developed in continuation of HSSP I and II in order to provide strategic guidance to the health sector for six (6) years (July 2012- June 2018). It has been inspired and guided by VISION 2020 (aiming at making Rwanda a lower Middle Income country by 2020), the Economic Development and Poverty Reduction Strategy (EDPRS 2008-2012) and the 7 year Government plan. Based on the lessons learnt from the Mid-Term Review of HSSP II and the JANS conducted on HSSP III, there was a strong need to develop a Monitoring and Evaluation (M&E) plan in order to provide strategic information to guide the decision making.

The M&E Plan is a fundamental document that holds the health sector and its stakeholders mutually accountable in order to ensure successful implementation of the health sector strategic plan through a more transparent and well coordinated process, and to preserve institutional memory. It is in this regard, that the process for the development of this M&E plan was undertaken by different stakeholders namely Development Partners (DPs), Program implementers, and Districts through a consultative, participatory and transparent approach.

The M&E plan will systematically support and assess progress of the implementation of HSSP III. Through M&E, program results at all levels (impact, outcome, output, process and input) are measured to provide the basis for accountability and informed decision-making at both program and policy level.

The HSSP III M&E plan outlines the processes, methods and tools that the sector will use for collection, compilation, reporting and use of data, and provide feedback as part of the national Health Sector M&E. The M&E framework translates these processes into annualized and costed activities with assigned responsibilities at relevant levels of the health system, including districts and communities. As a key component of Health Sector performance, the M&E plan will support both Government and Development Partners to track progress and achievements in health outcomes.

Progress of the implementation of the HSSP III through the M&E plan will be monitored using different data sources.

The implementation of this M&E Plan will be undertaken as outlined in the Monitoring and Evaluation section of the HSSP III[1]. To ensure consistency, the M&E plan will place emphasis on the result-based framework, the presence of a unified country-led platform and procedures for collecting, analyzing and sharing data and routine assessment of the performance of the health system to achieve its objectives.

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[1] HSSP III Chapter 8: Monitoring and evaluation arrangements

1.1 Goal and Objectives of the HSSP III M&E Plan

The goal of the HSSP III Monitoring and Evaluation plan is to establish a system that is systematic, unified, country-led, comprehensive, fully integrated, harmonized and well coordinated to guide the monitoring of the implementation and the performance of the HSSP and the evaluation of its impact on the health status of the population.

The aim of the HSSP III M&E Plan is to describe the framework and implementation process of HSSP III and to provide reliable information on progress made in the implementation and achievements of results. Detailed objectives of a national monitoring and evaluation plan can be summarized as follows:

- Track implementation progress and demonstrate results of HSSP III over the medium term.
- Assess health sector performance in accordance with the agreed objectives and performance indicators to support management for results (evidence based decision making).
- Monitor compliance with government policies (accountability), and constructive engagement with stakeholders (policy dialogue).
- Facilitate the documentation of challenges and lessons learnt during the implementation of HSSP III and share with stakeholders.
- Promote the use of available health information systems.

The Monitoring of HSSP III will serve:

- To coordinate collection, processing, analysis and management of data.
- To verify whether activities have been implemented as planned, to ensure accountability and address problems that have emerged in a timely manner.
- to provide feedback to data providers and relevant authorities to improve future planning.

The impact evaluation of HSSP III will serve:

- To measure the degree to which prevention programs and control interventions have been successfully implemented and scaled-up, as measured against targets for population coverage of services to be achieved
- To assess changes in morbidity and mortality due to diseases and other causes before and after the scale-up of prevention programs and control interventions
- To assess the plausible attribution of the prevention and control interventions to any observed decrease of morbidity and mortality in the planning period.
- To provide guidance for routine monitoring as well as on key operations research studies necessary to inform programmatic decisions.

1.2.Main tasks and activities in relation with the HSSP III M&E plan:

- Work with partners to harmonize indicators, prevention and control strategies, data collection strategies, analyses and reports.
- Strengthen the framework that guides the analysis and methods to feed into annual reviews.
- Advocate for evidence-based planning at all levels of the health system
- Review public health goals and plans at all levels of the health system to determine the monitoring and evaluation needs.
- Ensure the coordination of monitoring and evaluation processes across the Sector including relevance of data collected.
- Identify possible sources of data for selected indicators.
- Assess data quality in terms of collection, reproducibility, and quantitative and qualitative data collection techniques.
- Collect, process, and analyze data, interpret and report.
- Disseminate progress reports on a regular basis.
- Establish a secure, well managed, centralized electronic database to which data can be submitted and recovered remotely through mobile phone and internet communication networks.

2. HSSP III COMPONENTS AND INDICATORS TO BE MONITORED AND EVALUATED

Figure 1 Outline of indicators to be monitored
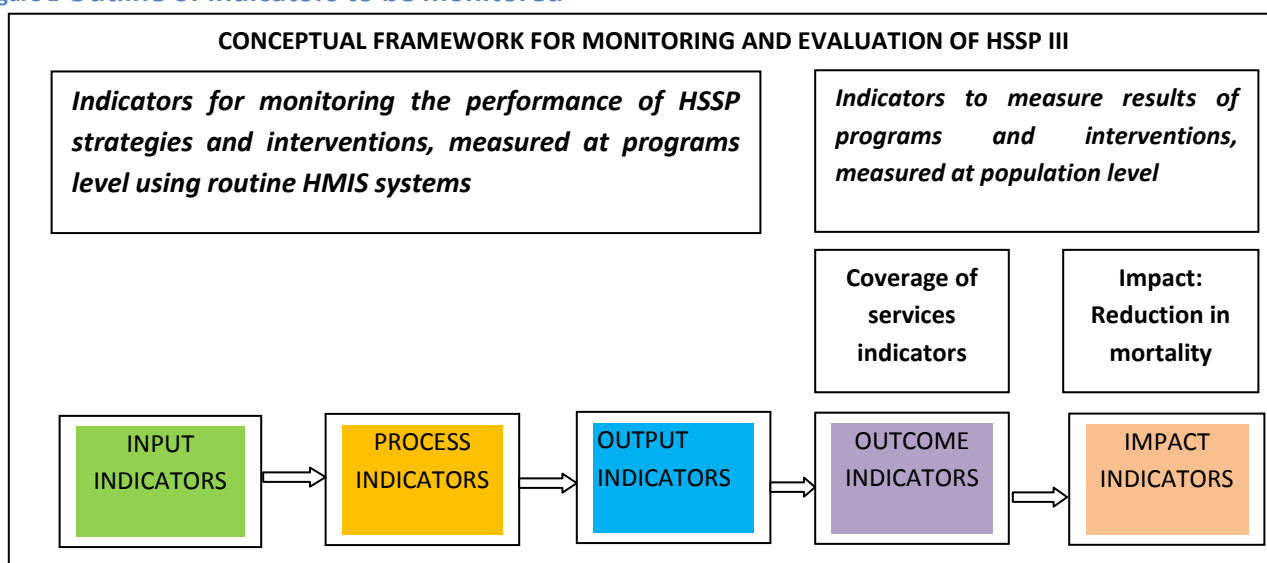
During the development of HSSP III 2012/13– 2017/18, a total of 93 performance indicators with targets (table 1) were developed covering all of the strategic interventions. The 93 indicators of the M&E plan were selected from the 96 performance indicators of HSSP III.

Performance monitoring at program level shall be based on the program specific indicators monitored within the sector M&E plan.

Table 1 : HSSIII 2012/13 – 2017/18 Core Performance Indicators and corresponding reporting commitments

GOAL/IMPACT	Indicators (Outcome, Output)	Baseline	Targets						Means of verification	Assumptions
			12-13	13-14	14-15	15-16	16-17	17-18		
1.1.MATERNAL HEALTH SERVICES										
OUTCOME/ IMPACT 1	Maternal mortality ratio/100,000	476			268			220	DHS	2015, 2018
2	Neonatal mortality rate/1000	27			12			10	DHS	2013, 2015, 2018
3	% Births attended in health facilities (HC+DH)	69			78			90	DHS	2013, 2015, 2018
4	% PW receiving 4 ANC standard visits	35			50			65	DHS	2013, 2015, 2018
5	% of newborns with at least 1 postnatal visit within the first 2 days of birth	18			40			70	DHS	2014, 2017
Outputs 1	% Births attended in health facilities (HC+DH)	63 (2011)	66	86	>86	>86	>86	>86	HMIS,DHS	Annually
2	% of deliveries with at least 1 postnatal checkup for mothers within one week	37 (2011)	40	45	50	55	66	70	HMIS	Annually
3	% CHW - ASM providing maternal and newborn health package	20	100	100	100	100	100	100	SIS COM	Annually
4	% DH with functional C-EMONC	80	90	100	100	100	100	100	Assessment report	Annual
5	% HC with functional B-EMONC	80	85	90	95	98	100	100	Assessment report	Annual

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GOAL/IMPACT	Indicators (Outcome, Output)	Baseline	Targets						Means of verification	Assumptions
			12-13	13-14	14-15	15-16	16-17	17-18		
1.2. FAMILY PLANNING SERVICES										
OUTCOME1	Total Fertility Rate	4.6			4			3.4	DHS	2013, 2015, 2018
2	Contraceptive prevalence rate among married women 15-49 years	45%			62%			72%	DHS	2013, 2015, 2018
3	Contraceptive Utilization Rate for modern methods of women 15-49 yrs	29%			36%			40%	DHS	2013, 2015, 2018
4	Unmet need for family planning	18.90%	16%		12%			6%	DHS	2013, 2015, 2018
5	Use of any modern contraceptive among married women by lowest wealth quintiles	39%			53%			65%	DHS	2013, 2015, 2018
6	Use of any modern contraceptive among married women by highest wealth quintiles	50%			68%			73%	DHS	2013, 2015, 2018
Outputs 1	Contraceptive prevalence among married women 15-49 years	45% (2011)	52%	57%	62%	66%	70%	72%	HMIS	Annually
2	Contraceptive Utilization Rate for modern methods of women 15-49 yrs	31% (2011)	33%	35%	45%	50%	55%	60%	HMIS	Annually
1.3.CHILD CARE SERVICES										
OUTCOM 1	< 5 mortality rate/1000 live births	76			50			42	DHS	2013, 2015, 2018
2	Infant mortality rate/1000 live births	50			28			22	DHS	2013, 2015, 2018
Outputs 1	Per capita U5 visits seeking treatment for ARI + Malaria + Diarrhoea at HC	0.6 (2011)	0.65	0.7	0.72	0.75	0.78	0.8	HMIS	Annual
2	Per capita U5 visits seeking treatment for ARI + Malaria + Diarrhoea C-IMCI	0.2 (2011)	0.25	0.3	0.35	0.4	0.45	0.5	HMIS, SISCom	Annual
3	Average number of U5 children seen by CHW/Month	1.1 (2011)	2	3	3.5	4	4.5	5	SISCom	Annual

GOAL/IMPACT	Indicators (Outcome, Output)	Baseline	Targets						Means of verification	Assumptions
			12-13	13-14	14-15	15-16	16-17	17-18		
1.4. IMMUNIZATIONS										
Outcome 1	% children fully immunized by age 1	90			92			95	DHS	2013, 2015, 2018
1	% children immunized for Measles <1 year	95	97	97	97	97	97	97	HMIS	Annual
1.5. GENDER-BASED VIOLENCE PREVENTION AND ADOLSCENT HEALTH SERVICES										
Outputs 1	# DH with One Stop Centre (GBV)	4	8	12	19	26	38	42	DHSST	Annual
1 Outcome	% Teenage pregnancies (below 20 years	4.7			4.1			3.3	DHS	Annual
1.6. NUTRITION SERVICES										
OUTCOME 1	Prevalence of stunting among 6-59 month children	44			24.5			18	DHS	2013, 2015, 2018
2	Prevalence of Underweight children under 5 (6-59 months)	11			8			4	DHS	2013, 2015, 2018
	Prevalence of wasting (Ht/Wt)	3			2			2	DHS	2013, 2015, 2018
Outputs 1	% children < 5 yrs screened in CBNP	70%(Jun 2012)	75%	80%	82%	84%	86%	88%	SISCOM	Annual
2	% children in nutrition rehabilitation program / total children malnourished	70 %(Jun2012)	75%	80%	82%	84%	86%	88%	HMIS	Annual

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GOAL/IMPACT	Indicators (Outcome, Output)	Baseline	Targets						Means of verification	Assumptions
			12-13	13-14	14-15	15-16	16-17	17-18		
1.7. HIV CARE AND TREATMENT										
OUTCOME 1	HIV prevalence 15-49 years	3			3			3	DHS, RAIHIS	2014, 2017
Outputs 1	Sero positivity rate of HIV among PW attending ANC	1.5	1.3	1.2	1	1	0.8	0.6	TRACnet, HMIS	Quarterly
2	% HF with VCT/ PMTCT services	94	95	96	96	96	96	96	TRACnet, HMIS	Annual
3	% HF offering ART and HIV-HBV Coinfection Treatment according to national Guidelines	83	85	87	90	92	94	95	TRACnet, HMIS	Annual
4	% of patients who need ART and receive it.	90	93	94	94	95	95	96	TRACnet, HMIS	Annual
1.8. MALARIA CONTROL AND TREATMENT										
OUTCOME1	Malaria Prevalence of Women (%)	0.7		<1			<1	<1	DHS	2014, 2017
OUTCOME 2	Malaria Prevalence of Children (%)	1.4		1.2			1	1	DHS	2014, 2017
3	% children < 5 yr sleeping under LLIN	70		80			82	82	DHS/MIS	2014, 2017
4	% of HH with at least 1 LLIN	82		85			>85	>85	DHS/MIS	2014, 2017
Outputs 1	Malaria slide positivity rate	15	13	10	8	<5	<5	<5	HMIS	Annual
2	Malaria proportional morbidity	4	4	3	3	3	3	3	HMIS	Annual

GOAL/IMPACT	Indicators (Outcome, Output)	Baseline	Targets						Means of verification	Assumptions
			12-13	13-14	14-15	15-16	16-17	17-18		
1.9.NEGLECTED TROPICAL DISEASES										
Outputs 1	% of children of 1 to 15 year old dewormed	83	84	85	86	87	88	90	HMIS	Annual
1.10. TB CONTROL AND TREATMENT										
OUTPUT 1	Treatment success rate among new smear positive TB cases (%)	87.6	87,7	88	89	90	90	90	TB annual Report	Annual
2	Percentage of TB/HIV patients receiving ART by the end of TB treatment out of all TB/HIV patients (%)."	67	80	85	90	90	90	90	TB annual Report	Annual
1.11. MENTAL HEALTH SERVICES										
Outputs 1	Proportion of health centers providing integrated mental health care.	16%	66%	100%	100%	100%	100%	100%	HMIS	Annual
1.12. NON COMMUNICABLE DISEASES										
Outputs 1	# of Health facilities who have capacity to provide NCD services according to national norms.	0	0	10	45	150	250	500	HMIS	Annual
1.13. EPIDEMIC DISEASE SURVEILLANCE										
Outputs 1	% HF and community implementing IDS	12			50			100	IDSR	Quarterly
1.14. HEALTH PROMOTION AND ENVIRONMENTAL HEALTH										
OUTCOME1	Diarrhea prevalence among the under five (% ofU5 with diarhea in last 2 weeks before survey)	13			11			9	DHS	2013, 2015, 2018
Outputs 1	% Community Health Clubs with enhanced health promotion/BCC capacity	14%			50%			70%	RHCC Annual Rpt	Annual
2	% of food establishments with satisfactory hygiene standards	0	>10%	>20%	>40%	>70%	>80%	>90%	Routine Inspection EHD	Quarterly
3	% of Villages with functional Community Hygiene Clubs (CHC)	8%	20%	40%	50%	60%	70%	80%	EHD report	Annual
5	% HF with effective medical waste management systems	55%	70%	80%	83%	86%	88%	> 90%	EHD report	Annual

GOAL/IMPACT	Indicators (Outcome, Output)	Targets							Means of verification	Assumptions
		Baseline	12-13	13-14	14-15	15-16	16-17	17-18		
1.15. IMPROVED EQUITY IN ESSENTIAL SERVICE UTILIZATION										
Outcome1	% of births attended in HF by lowest wealth quintiles	61			65			72	DHS	2014, 2017
2	% of births attended in HF by highest wealth quintiles	85.7			90			92	DHS	2014, 2017
COMPONENT 2. SUPPORT SYSTEMS										
2.1. IMPROVED HUMAN RESOURCES - DEVELOPMENT AND MANAGEMENT										
Outputs 1	Doctors per 100,000 inhabitants	6.2	6.4	6.8	7.2	7.6	8	8.3	iHRIS	Annual
2	Nurses per 100,000 inhabitants	77.4	77.4	77.4	77.4	77.4	90.9	100	iHRIS	Annual
3	Dr / Population Ratio	1 / 16001	1/15540	1/14559	1/13748	1/13068	1/12490	1/11993	iHRIS	Annual
4	Nurse / Population Ratio	1 / 1,291	1/1291	1/1291	1/1291	1/1291	1/1100	1/1000	iHRIS	Annual
5	Midwife / Population Ratio	1 / 66.749	1/66.000	1/50,000	1/45.000	1/35.000	1/30.000	1/25.000	iHRIS	Annual
6	Lab tech / Pop Ratio	1 / 10,626	NA	1/10,500	N/A	NA	1/10.000	1/10.000	iHRIS	Annual
7	% of DH / DHU preparing their annual staff census using computerized iHRIS	0	60	80	100	100	100	100	iHRIS	Annual
8	# of A2 nurses who have completed eLearning course to upgrade their skills	0	0	313	588	888	1188	1488	e-Learning system logs	Annual
2.2: SUSTAINABLE AND RESPONSIVE SYSTEM OF MEDICAL PRODUCTS IN PLACE										
Outputs 1	% HF with NO stock outs of tracer drugs.	55	80	85	90	95	98	98	HMIS & e-LMIS	Annual
2	% generic drugs locally produced	< 2%	2.5	> 6%	> 6%	> 8%	> 10%	> 11%	RBC reports & RFMA	Annual
3	% prescription with antibiotics in DH / HC	≥65%	≤62%	≤60%	≤56%	≤50%	≤45%	≤40%	Integrated supervision report.	Annual
4	% HF with online tracking system for all procuring entities (eLMIS)	0	0	20	50	80	80	100	e-LMIS reports	Annual

GOAL/IMPACT	Indicators (Outcome, Output)	Baseline	12-13	13-14	14-15	15-16	16-17	17-18	Means of verification	Assumptions
					Targets					
5	# Pharmacy regulatory legal instruments and establishments of regulatory institutions	18	23	25	30	45	45	45	PTF	Annual
6	Number of District Pharmacy with needed volume of National warehouses for storing pharmaceuticals in a good storage conditions	0	9	0	0	0	17	30	PTF	Annual
2.3. DIAGNOSTIC SERVICES (INCL IMAGING AND LABORATORIES) FUNCTIONAL										
Output 1	# of labs enrolled in accreditation	10	25	30	35	40	45	50	NRL reports	Annual
2.4: IMPROVED INFRASTRUCTURE AND MAINTENANCE										
Output 1	% Sectors without a functional HC	5% (20HC)		3.75% (5HC)	2.50% (5HC)	1.25% (5 HC)	0 (5HC)	0	MMC reports	Annual
2	# DH with effective maintenance workshops	3		14	19	23	27	31	MMC reports	Annual
2.5: HEALTH FINANCING STRENGTHENED										
Outputs 1	% of GOR budget allocated to Health Sector	11	12	13	13.5	14	14.5	15	Finance Dep't report	Annual
2	Per Capita annual expenditure on health (USD)	$ 39	$ 41	$ 42	$ 43	$ 44	$ 45	$ 45	HRTT, NHA	Annual
3	% Population covered by 'mutuelles'.	91	91	91	91	91	91	91	CBHI Database	Annual
2.6: STRENGTHENED QUALITY ASSURANCE AND SUPERVISION SYSTEMS / REGULATORY FRAMEWORKS										
Outputs 1	% HC with functional QA team	0	0	0	0.5	10	50	100	Clinical services reports	Annual
2	# HC eligible for accreditation	0			40/450			200/450	DGCS accreditation progress report	

GOAL/IMPACT	Indicators (Outcome, Output)	Baseline	Targets 12-13	13-14	14-15	15-16	16-17	17-18	Means of verification	Assumptions
4	Link Accreditation with PBF established	0				All HC	All HC	All HC	Health Financing Unit report	Annual
2.7. INFORMATION MANAGEMENT SYSTEM										
Outputs 1	% HF with functional IT infrastructure (Internet & computer, including modern)	0.84	89	93	95	100	100	100	ICT report	Annual
2	% of HC and District Hospitals using OpenEMR or other individual medical records system	8	20	35	50	65	75	80	ICT report	Annual
3	% of registered private clinics and dispensaries reporting routinely to HMIS	5	23	50	70	80	85	90	HMIS	Annual
4	# registered CHW tracking PW using RapidSMS	8.183	14837	14837	14837	14837	14837	14837	Rapid SMS	Annual
COMPONENT 3. SERVICE DELIVERY										
3.1. COMMUNITY BASED HEALTH CARE										
Output 1	% of villages reporting on locally MDGS	0	40	60	70	80	90	100	SIS Com	Annual
3.2. DISTRICT HEALTH SERVICES										
Output 1	% DH eligible for accreditation (> 70%)	0	0	0	30	40	50	60	DG CS accreditation report	Annual
3.3. PROVINCIAL AND REFERRAL HOSPITALS SERVICES										
Output 1	# Prov Hospital eligible for accreditation (>70%)	0			5	5	5	5	DG CS accreditation report	Annual
3.4 REFERRAL SYSTEMS AND PRE-HOSPITALIZATION SERVICES										
Output 1	# of ground ambulances/ district hospital	5/DH			5/DH		6/DH		SAMU,RBC /MMC	Annual
2	# of ambulance boats deployed in lake Kivu	1						2	SAMU,RBC /MMC	Annual

GOAL/IMPACT	Indicators (Outcome, Output)	Targets							Means of verification	Assumptions
		Baseline	12-13	13-14	14-15	15-16	16-17	17-18		
3	% of HFs with effective ambulance maintenance plans	40		70	80	90	100	100	SAMU database	Annual
Component 4: Governance										
4.1. **SWAP AND AID EFFECTIVENESS**										
4	% DP provide resource information	95			100			100	RTT	Annual
COMPONENT 5: M&E of HSSP III										
Component 5. Effective and timely Monitoring and Evaluation of the HSSP III										
Output 1	% of targets met from HSSP III	0			60			70	HMIS	2010, 2017

2.1 Indicators categories

Based upon the national sector performance indicators and the log frames for each of the 4 HSSP III components, a total of 93 indicators have been brought together from the primary data sources shown in Table 1 above. Most of these sources are already well established in Rwanda.

SN	Indicators	HSSPIII COMPONENTS				
		1: PROGRAMS	2. SUPPORT SYSTEMS	3. SERVICE DELIVERY	4: GOVERNANCE	Total
1	Admin reports	6	10	4	1	21
2	Facility Assessment	2	1			3
3	Routine reporting	22	15	2		39
4	Survey and studies	28	1		1	30
	Total	**58**	**27**	**6**	**2**	**93**

2.2 Indicators types

SN	Indicators Types	1: PROGRAMS	2. SUPPORT SYSTEMS	3. SERVICE DELIVERY	4: GOVERNANCE	Total
1	Impact	15				15
2	Input	7	22	4		33
3	Outcome	21	1			22
4	Output	13	1			14
5	Process	2	3	2	2	9
	Total	**58**	**27**	**6**	**2**	**93**

2.2.1 Impact Indicators

SN	Ref.	Impact Indicators (15)
		1: PROGRAMS
1	1	Maternal mortality ratio/100,000
2	11	Total Fertility Rate
3	19	< 5 mortality rate/1000 live births
4	2	Neonatal mortality rate/1000
5	20	Infant mortality rate/1000 live births
6	28	Prevalence of stunting among 6-59 month children
7	29	Prevalence of Underweight children under 5 (6-59 months)
8	30	Prevalence of wasting (Ht/Wt)
9	33	HIV prevalence 15-49 years
10	34	Seropositivity rate of HIV among PW attending ANC
11	38	Malaria Prevalence of Women (%)
12	39	Malaria Prevalence of Children (%)
13	42	Malaria slide positivity rate
14	43	Malaria proportional morbidity
15	50	Diarrhea prevalence among the under five

2.2.2 Input indicators

SN	Ref.	Input Indicators (33)
		1: PROGRAMS (7)
1	26	# DH with One Stop Centre (GBV)
2	35	% HF with VCT/ PMTCT services
3	36	% HF offering ART and HIV-HBV Coinfection Treatment according to national Guidelines
4	47	Proportion of health centers which have capacity integrated mental health care.
5	48	48. Proportion of Health facilities which have capacity to provide NCD services according to national norms.
6	53	% of Villages with functional Community Hygiene Clubs (CHC)
7	54	% HF with effective medical waste management systems
		2. SUPPORT SYSTEMS (22)
8	57	Doctors per 100,000 inhabitants
9	58	Nurses per 100,000 inhabitants
10	59	Dr / Population Ratio
11	60	Nurse / Population Ratio
12	61	Midwife / Population Ratio
13	62	Lab tech / Pop Ratio
14	64	# of A2 nurses who have completed eLearning course to upgrade their skills
15	65	% HF with NO stock outs of tracer drugs.
16	66	% generic drugs locally produced
17	67	% prescription with antibiotics in DH / HC
18	68	% HF with online tracking system for drugs and consumables (eLMIS)
19	69	# Pharmacy regulatory legal instruments and establishments of regulatory institutions
20	70	Number of District Pharmacy with needed volume of National warehouses for storing pharmaceuticals in a good storage conditions
21	71	# of labs enrolled in accreditation
22	72	% Sectors without a functional HC
23	73	# DH with effective maintenance workshops
24	74	% of GOR budget allocated to MOH budget
25	75	Per Capita annual expenditure on health (USD)
26	80	% HF with functional IT infrastructure (Internet & computer, including modem)
27	81	% of HC and District Hospitals using OpenEMR or other individual medical records system
28	82	% of registered private clinics and dispensaries reporting routinely to HMIS
29	83	# registered CHW tracking PW using RapidSMS
		3. SERVICE DELIVERY (4)
30	84	% of villages reporting on local MDGS
31	87	# of ground ambulances/district
32	88	# of ambulance boats deployed in lake Kivu
33	89	% of HFs with effective ambulance maintenance plans

2.2.3 Outcome indicators

SN	Ref	Outcome Indicators (22)
		1: PROGRAMS (21)
1	12	Contraceptive prevalence rate among married women 15-49 years
2	13	Contraceptive prevalence rate for modern methods among married women 15-49 yrs
3	14	Unmet need for family planning
4	15	Use of any modern contraceptive among married women by lowest wealth quintiles
5	16	Use of any modern contraceptive among married women by highest wealth quintiles
6	17	Contraceptive utilization rate for women 15-49 years
7	18	Contraceptive utilization rate for modern methods of women 15-49 yrs
8	24	% children fully immunized by age 1
9	25	% children immunized for Measles <1 year
10	27	% Teenage pregnancies (below 20 yrs)
11	3.a	% Births attended in health facilities (survey)
12	37	% of patients who need ART and receive it.
13	4.a	% PW receiving 4 ANC standard visits (survey)
14	40	% children < 5 yr sleeping under ITN
15	41	% of HH with at least 1 LLIN
16	45	Treatment success rate among new smear positive TB cases (%)
17	46	Percentage of TB/HIV patients receiving ART by the end of TB treatment
18	5.a	% of newborns with at least 1 postnatal visit within the first 3 days of birth (survey)
19	52	% of food establishments with satisfactory hygiene standards
20	55	% of births attended in HF by lowest wealth quintiles
21	56	% of births attended in HF by highest wealth quintiles
		2. SUPPORT SYSTEMS (1)
22	76	% Population covered by "mutuelles".

2.2.4 Output indicators

SN	Ref.	Output Indicators (14)
		1: PROGRAMS (13)
1	10	% HC with functional B-EMONC
2	21	Per capita U5 visits seeking treatment for ARI + Malaria + Diarrhoea at HC
3	22	Per capita U5 visits seeking treatment for ARI + Malaria + Diarrhoea C-IMCI
4	23	Average number of U5 children seen by CHW/Month
5	3.b	% Births attended in health facilities (routine reporting)
6	31	% children < 5 yrs screened in CBNP
7	32	% children in nutrition rehabilitation program /total children malnourished
8	4.b	% PW receiving 4 ANC standard visits (routine reporting)
9	44	% of children 6 -59 months old dewormed
10	5.b	% of newborns with at least 1 postnatal visit within the first 3 days of birth (routine reporting)
11	51	% Community Health Clubs with enhanced health promotion/BCC capacity
12	7	% of deliveries with at least 1 postnatal checkup for mothers within 3 days (routine reporting)
13	9	% DH with functional C-EMONC
		2. SUPPORT SYSTEMS (1)
14	78	# HC eligible for accreditation

2.2.5 Process indicators

SN	Ref.	Process Indicators (9)
		1: PROGRAMS (2)
1	49	% HF and community implementing IDS
2	8	% CHW - ASM providing maternal and newborn health package
		2. SUPPORT SYSTEMS (3)
3	63	% of DH / DHU preparing their annual staff census using computerized IHRIS
4	77	% HC with functional QA team
5	79	Link Accreditation with PBF established
		3. SERVICE DELIVERY (2)
6	85	% District Hospitals eligible for accreditation
7	86	# of Provincial Hospitals eligible for accreditation
		4: GOVERNANCE (2)
8	90	% DP provide resource information
9	91	% of targets met from HSSP III

Figure 2: Snapshot of issues to monitor progress

| Monitoring of HSSP implementation and performance | Evaluation of Increased coverage and Impact |

INPUTS → PROCESSES → OUTPUTS → OUTCOM → IMPACT

INPUTS
HR, Financial, Drugs, Supplies, Logistics, TA, Research, Information, Physical, structures

Input Indicators

PROCESSES
Utilization of Finances for: Planning, Trainings, Meetings, TA, Advocacy. Communication

Process indicators

OUTPUTS
Policies, Guidelines, Distribution of drugs, Trainings made, Coordination mechanisms, Services provided

Output indicators

OUTCOM
Sector performance Increased coverage Increased access Increased utilization of services, etc.

Indicators for HSSP targets

IMPACT
Health and socio-economic status of population improved and sustained Reductions in mortality sustained

Indicator for Impact

14

3. DATA SOURCES

Based upon the national sector performance indicators (presented in the Executive Summary) and the log frames for each of the HSSP III components, a total of 96 indicators have been brought together from the following primary data sources

Table 2: Number of indicators with their sources

Type	Data source	Sum of Count of Indicators
Health Facility Survey	HF Survey/SARA	18
	NHA	1
	Accreditation base	3
House Hold Survey	DHS	9
	HH Survey	3
MOH reports	DPAF	1
	MOH reports	29
Routine data	e-Learning system logs	1
	HMIS	28
	HRIS	8
	IDSR	1
	LabMIS	1
	QA database	4
	SISCom	2
Grand Total		**109**

3.1 Routine data Sources

A. **Facility based data** collected by all public and private health service delivery facilities and community. They are routine data collected through the following systems:

- **HMIS (Health Management Information System)** is the primary source of routine data on health services provided through health centers, district hospitals, and referral services. The HMIS was revised in 2011 to collect more relevant data. It has been built on a new web-based platform that will enhance data sharing and use. In addition, reporting formats have been introduced for referral hospitals and private facilities, so coverage of reports will become even higher than it was in the past.

- **SISCom (Community Health Information System)** supplies important data on the increasing contributions of CHWs to the provision of health services. The system has been operational since 2010. Both the SISCom and HMIS are managed by the Ministry's HMIS Department at the central level.

- **iHRIS (Human Resource Information System):** It now has active records of more than 16,000 health professionals. The system is managed by the Ministry's HR Department.

- **Resource Tracking Tool (RTT)** was upgraded in 2010 to a web-based platform; it provides important data related to financial resources committed to and disbursed to districts by donors and GOR.
- **Mutuelle Indicator Database** tracks key performance indicators from Community Based Health Insurance Sections and the new **Mutuelle Membership database** implemented in 2011 that helps to manage Mutuelle memberships and renewals.
- **LMIS (Logistics Management Information system** will provide data and information on the supply and distribution of medicines and commodities (Supply Management Information System). Currently paper based, It is being computerized (e-LMIS) and the rollout has start very soon and will be fully operational at national level before the end of the fiscal year 2013-2014

- **Geographical Information System GIS):** With advancement of technology, GIS enabled photographic and video recordings may be used to track changes of implementation of particular programs of the HSSP by geographical location. GIS provides a means of analyzing coverage of general or specific health services in relation to needs (e.g. disease prevalence rates) and how these services are related to communities (e.g. income level), one another and the larger health infrastructure.

B. **Administrative data** sources will provide information on health inventories, supervision, management meetings, logistics management, financial resource flows and expenditures at national and sub-national levels.

C. **Vital Registration**: Even if the National Institute of Statistics is not a source of information as such, NISR acts as the custodian of all data from **Vital registrations**, surveys and studies, develops and maintain the surveys calendar, and Conduct the general population census. Vital registration is not yet operational but a lot of efforts are being made to make it functional.

A **national data warehouse and dashboard portal** has also been configured to draw data from the HMIS, SISCom, DHS and other sources. They will become the one-stop shop for indicator data related to HSSP III. The Ministry's HMIS and M&E teams are in the process of designing specific information products (analytical reports) that can be produced annually and updated for use during each Joint Health Sector Review working group to support decision-making and course correction. The HMIS Department manages the data warehouse and centralizes requests for data across all HIS systems based on a Data Sharing and Confidentiality Policy approved in 2012.

Rwanda has also tried to institutionalize the **National Health Accounts (NHAs),** through training with the School of Public Health and through the design of resource tracking.

Finally, a certain number of data sources need to be further developed. In particular, the Ministry's desire to introduce the concept of **localized MDGs** will require the design and implementation of HH level data collection, carried out by CHW at the village level—possibly relying on lot quality assurance sampling techniques (LQAS). A significant number of

indicators are to be collected from ad hoc reports from programs and service units within the Ministry.

In addition to these primary routine data collection systems, several platforms have been established to help pull together data from a variety of sources into a single integrated view.

A **national Health Data Portal /data warehouse** has also been configured by the HMIS team. This will become the one-stop shop for indicator data related to HSSP III, drawing data from the RHMIS, SISCom, DHS and other sources. The Ministry's HMIS and M&E teams are in the process of designing specific information products (analytical reports) that can be produced annually and updated for use during each Joint Health Sector Working group to support decision making and course correction. The HMIS department manages the data warehouse and centralizes requests for data across all HIS sub-systems based on a Data Sharing and Confidentiality Policy approved in 2012.

3.2 Non-Routine data sources

Population based health surveys mainly carried out by the National Institute of Statistics (NISR) and other institutions that generate data relative to populations (population studies) like UNICEF (MICS), and MIS. Research Institutions and academia that carry out health systems research, clinical trials and longitudinal community studies are also capable to provide data for interpretation and possible use by the Health Sector. The Main population based surveys that provide data on health are:

- **DHS 2010 (Demographic and Health Surveys)**. As part of this M&E plan, an interim DHS is planned for 2014 and another full DHS is planned for 2017. In addition, the Ministry is planning on adapting the Service Availability and Readiness Assessment, together with the DHSST, to track the progress of service performance—roughly in line with the timing of the DHS.

- **EICV (Enquête Integrale des Conditions de vie des Ménages/Integrated Households Living Conditions Survey)**: this survey is designed to monitor poverty and living conditions. The last survey has been conducted in 2010 and is carried out every 5 years. The survey tracks most of indicators related to social determinants that have impact on the health status of the population. 10 thematic reports made through EICV are: (i) Economic Activity; (ii) Utilities and Amenities (water/sanitation/energy/housing/transport/ICT); (iii) Social Protection; (iv) Environment and Natural Resources; (v) Consumption; (vi) Gender; (vii) Youth; (viii) Education; (ix) Agriculture; and (x)Income

- **Rwanda National Population and Housing Census** carried out every 10 years (the latest was conducted in 2012) provides much-needed data for updating the denominators for calculating key service coverage indicators and better understanding the impact of certain equity and public health initiatives

A certain number of disease control programs have scheduled or have already carried out surveys to collect data more frequently, particularly among most at risk populations and in highly endemic areas. These include the **Malaria Indicator Survey (MIS)**, **AIDS Indicator Survey**, **HIV incidence survey**, the **TB incidence survey**, the **Behavioral Surveillance Study** (BSS) and **IBBSS** (Integrated Bio-Behavioral Surveillance Study).

4. DATA MANAGEMENT AND ICT INFRASTRUCTURE

Rwanda has made great progress in harmonizing data management across health programs and geographic areas. In addition it has benefited from investments in information and communications technology (ICT) including the: national data center, the nearly full national coverage of cell phone and internet, as well as the establishment of specific data management and M&E positions at central and peripheral levels (health facilities and community).

Most of the Health Sector's routine data collection is currently done via the web-based Rwanda Health Management Information System (R-HMIS) _ software that is set up in servers hosted at Rwanda's National Data Center. This state-of-the-art facility provides excellent environmental and data security conditions for continuous data entry and use. The DHIS-2 software also ensures secure access to data based on role-based user profiles and secure individual passwords. Backups are scheduled nightly to an off-site server in the MOH's small data center.

RHMIS currently has reporting modules that cover: health facility monthly reporting, TB quarterly reporting, Community Health Worker Information System (SIScom), and HIV prevention and care. Other web-based platforms that collect data for M&E include: Health Resource Tracking Tool (HRTT), Mutuelle Indicator Database, Mutuelle Membership System, Electronic Logistics Management Information System (eLMIS), Integrated Human Resource Information System (iHRIS), Medical Equipment Management and Maintenance system (MEMMS), Laboratory Information System (LIS), Blood Bank Information System help to ensure that data are available at any level of the health system without delays.

From 2008 onwards, Rwanda and its development partners agreed that data collection and reporting activities were becoming a burden on health workers – especially at the service delivery point – and were requiring increasingly specialized skills. As a result, data managers were recruited and trained at each health center and district hospital. This was a strategic decision that helps to improve data quality and is increasing the use of data at the

peripheral level. The ministry is now beginning to shifting data management tasks back to clinicians – especially for electronic medical records.

Ninety-six percent (96%) of all public and faith-based organizations health facilities have at least 3 functional computers. All district Hospitals have access to the internet, and among Health centers ninety-three percent (93)% have access to the internet. This has enabled data entry to be fully decentralized to service delivery point. (Source: ICT survey 2014)

4.1   Data collection methods and tools

Methods for data collection will be a combination of quantitative and qualitative methods. Standardized data collection tools and techniques will be used. Most routine data will be collected monthly or quarterly, and any survey-based indicators will be collected at baseline, mid-term where possible and in the last year of HSSP III implementation.

Specific questionnaires have been designed for surveys (baseline, mid and end term), and socio-economic studies like EICV that have been ongoing for some years. Standardized checklist will be used to collect data during ongoing monitoring field visits. Formats shall be applied for case studies, stakeholder meetings, performance review forums and management meetings. Geographical Information System (GIS) tools are built into the R-HMIS and shall be used to enhance documentation and accountability where applicable. Most of data collection tools and methods have been described above.

4.2   Other tools include:

Survey questionnaires designed and employed from time to time to collect data from beneficiaries/stakeholders in a structured manner. There are 2 major types of surveys required for this M&E plan: Facility Surveys and Household Surveys. **Registers and paper patient records: most registers and patients forms have been harmonized across all health facilities and this is documented**. **In regards to Electronic Medical Records: Over 300 facilities are using some modules of OpenMRS to manage patient records.**

4.3   Routine reporting formats:

- **Report formats** used for presentation of periodic, sector performance reviews, performance reports, monitoring, supervision, research and evaluations.
- **Case studies** used to document life states or segments of events experienced by particularly target beneficiaries or particular location
- **Field visits** using checklists will be used from time to time to obtain information that may be required to improve performance or even for obtaining insights for example the Pre-Joint Review Mission Visit and more in-depth investigations

Data collection and processing is carried out at all levels for different purposes however the following activities are necessary for all:

a. Performance data collection (i.e. data on inputs-activities-outputs).
b. Processing (aggregation and analysis) of the performance data from various service delivery points
c. Ensuring quality of reports
d. Report writing and dissemination

4.4 Data Flow

Several levels of data are collected: household, community, health facility, and special studies.

At Community level, routine data are collected by Community Health Workers and they report to Health Centers. Data collected from Health posts are currently forwarded to Health Centers, however, as the number of health posts increases they will be reporting directly into the RHMIS. Data collected from Health centers by Data Managers are entered directly into the relevant information systems. Data Managers of District Hospitals and Administrative districts monitor data quality and provide feedback and supervision to Health centers and health posts.   Administrative districts report to central level in the Ministry of Health via the Ministry of Locale Governance .

Over the past 3 years the Ministry of Health has made significant efforts to encourage the private sector to report in the different routine health information systems. This is an important initiative as the private sector is becoming a much bigger provider of health services to the population. The reporting rate has increased from 30% to nearly 60% in the past year (source: HMIS).

HMIS team at MoH coordinates all information systems, helps design feedback reports to lower levels, and provides information access to stakeholders. The team organizes the data quality audit (timeliness, completeness and accuracy) to ensure the reliability of data. RBC and health program staffs are increasingly responsible for checking data completeness and analyzing data for their programs with technical support from the HMIS team.

After analysis, reports are shared by the Ministry of Health and published in the different websites.

Data from non routine surveys are also analyzed and the findings are integrated in the different reports. Most data from population based surveys are collected and reports are made by the National Institute of Statistics Rwanda (NISR)

Data collected through health facility surveillance, including the HMIS, are reported quarterly and complied annually for production of an annual statistical yearbook. Integrated Disease Surveillance and Response data are reported weekly, complied quarterly and an annual report is produced and those reports are sent to WHO and disseminated.

Key Health indicators are usually published on the MoH website, as well as the annual statistical yearbook. The HMIS unit has begun producing quarterly RHMIS bulletins, and a National Health Data Portal is currently under development that will be used to share sector performance data with stakeholders. Dashboards of key routinely collected performance indicators from HSSP III have already been created for the district and national levels. Also, the National institute of Statistics publishes annually a year book with an important component of health data

Figure 3: Description of the flow and circuit of Health Information

Data flow chart for HMIS Reports
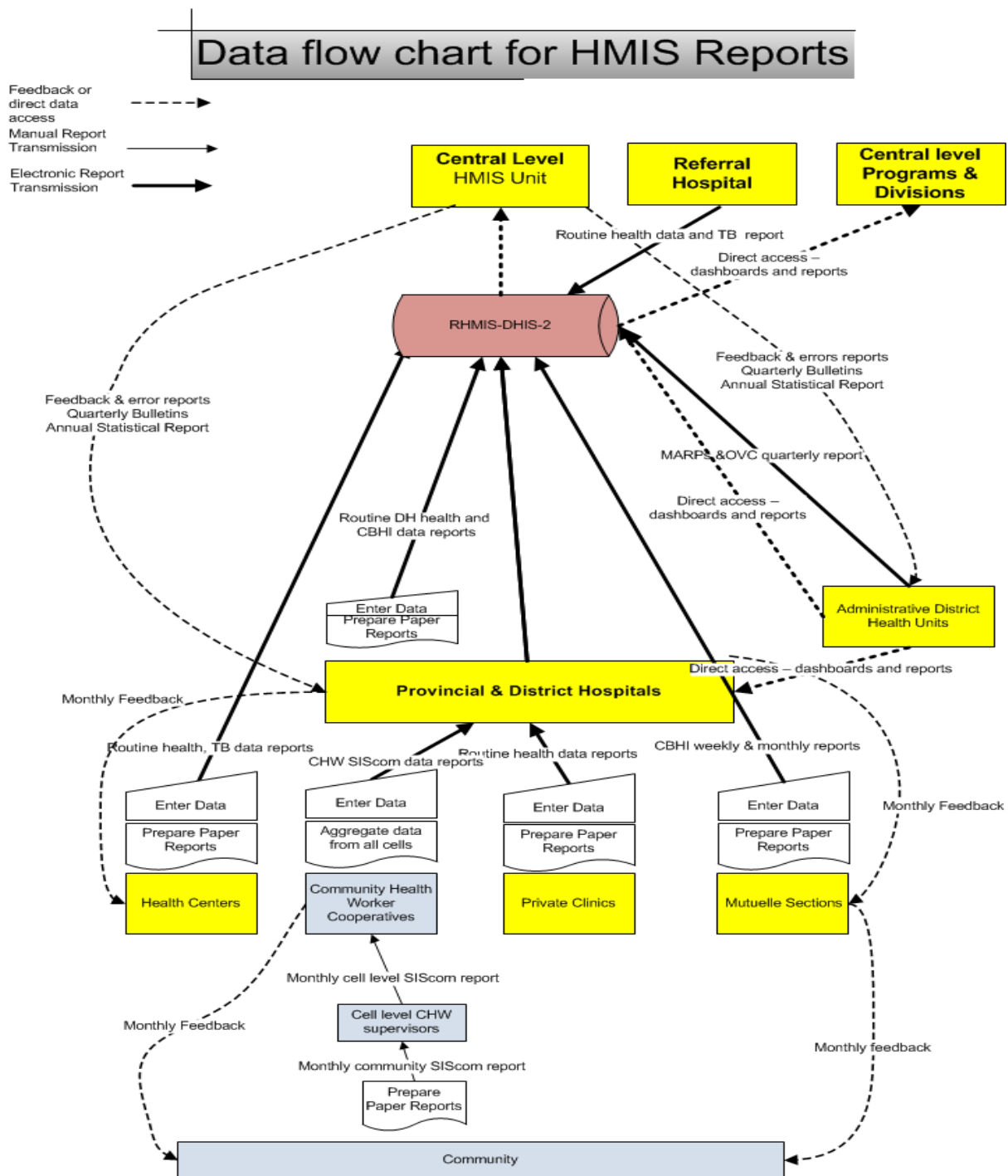
5. DATA QUALITY ASSURANCE MECHANISMS AND RELATED SUPPORTIVE SUPERVISION

Data quality has been a continuous concern of the Ministry of Health and its donors, especially for routinely collected data. Several measures have been implemented to assess and improve data quality for the HMIS and other reporting systems. These include:

- Annual data audits conducted by the Global Fund,
- Quarterly data quality audits (DQA) since 2011 is conducted by staff from district hospitals in health centers.
- RBC and Central Level Program staff conducts quarterly data audits in district hospitals and selected health centers as part of their integrated supportive supervision.
- Monthly data validation exercises that are part of the PBF data quality management system.

The results of quarterly and annual data quality audit reports **will be published on the MOH web site and discussed during joint health sector reviews** in order to maintain progress already made in this area.

PBF incentives for timely reporting have dramatically improved reporting rates and completeness, while the recent exercise to harmonize health facility registers and recording tools is expected to improve data accuracy. The PBF quality assessments of Hospitals and Health Centers include a new component that assesses data management – including data quality and indicators of data use.

In addition a Performance of Routine Information System Management Assessment (PRISM) was conducted in 2010 and will be repeated in 2014. This tool helps to identify HMIS bottlenecks and measures data use at different levels of the health system.

In order to help health sector staff improves data quality and service delivery performance two major initiatives have been undertaken:

- A program of quarterly integrated supervisory visits was established 2011. These are periodic assessments of all activities for which a particular facility is responsible. It uses a practical system of objective measures to foster improvement in procedures, personal interaction and management of health facilities. The cornerstone of supportive supervision is supporting health staff in establishing goals, monitoring performance, identifying and solving problems and proactively improving the quality of services. Special attention is focused during these supervisory visits on ensuring that data management and use activities are conducted effectively.
- A series of Data Management standard operating procedures (SOPs) and Guidelines have been developed for Health Center (HC), District Hospital and Central levels. This clarifies the functions and responsibilities of all stakeholders in data management tasks.

5.1   Data Analysis and Synthesis

Data analysis and synthesis should be done at various levels of HSSP III M&E (National level, District Level, Health Facility Level) to enhance evidence based decision making. The results obtained will be summarized into a consistent assessment of the health situation and trends, using core indicators and targets to assess progress and performance.

The focus of analysis will be on comparing planned results with actual ones, understand the reasons for divergences and compare the performance at different levels (Quarterly and Annual Progress Reports, mid and end term evaluations, thematic studies and surveys). In addition health systems research as well as qualitative data gathered through systematic processes of analyzing health systems characteristics and changes will be carried out.

Figure 4: Data transformation
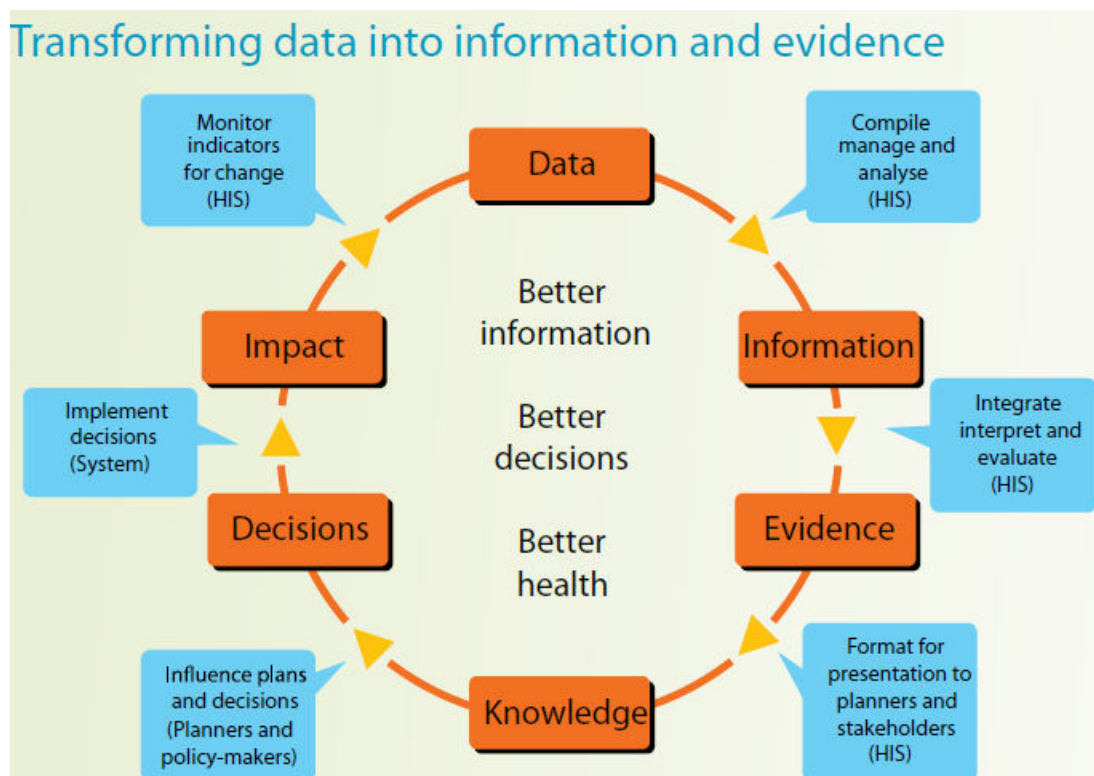
Source: WHO: Health Metrics Network: Components for a strong HIS

Basic indicator information shall be the national average achievement. This is obtained from collating all the available information from all reporting units into the national average figure. Increasingly sub-national analyses of data are being used to identify districts which are performing poorly. This shall enable better targeting of strategies to address the multi dimensional poverty issues impacting on the results being sought.

Data should be disaggregated where possible. This shall primarily apply to coverage information for health services, risk factors, and other health determinants as such; the

respective index shall also be disaggregated. The required levels of disaggregation may not be possible on an annual basis.

As a proxy, therefore, the sector will use district rankings for the different poverty dimensions to separate districts with high and low attainment of the respective index.

Data analysis reports will be validated by key stakeholders to:

i) Obtain stakeholder insight on the information generated;

ii) Mitigate bias through discussion of the information generated with key M&E strategy actors and beneficiaries;

iii) Generate consensus on the data findings and gaps; and

iv) Strengthen ownership and commitment to M&E activities.

Particular attention will be paid to strengthen capacity for data analysis and synthesis within LGs, MoH Departments, semi-autonomous Institutions, public and private health facilities and CSOs.

5.2   Information products, dissemination and use

The data generated by the M&E system is of little value to implementers if it is not broadly disseminated and used. This plan envisions the following key information and dissemination platforms:

- **MOH/RBC** web site: health sector policies, annual reports, technical working group documents, strategic plans and guidelines will be the key types of information posted here. Among the most relevant postings for the HSSP III M&E plan are the:
  - o Ministry of Health Annual Report
  - o Annual Health Statistics Booklet
  - o Quarterly Health Information Bulletins
- **Rwanda Health Data Portal/RHMIS:** this will include a public access portal with a dashboard of routinely collected HSSP III indicators and private portals for authorized users that enables them to track the performance indicators most important for their work.

This plan also envisions taking full advantage to the following existing mechanisms for dissemination:

- **Ministerial press conferences:** a monthly channel of communication to the general population through the media about the performance of the health sector and challenges that are being addressed
- **Joint Health Sector Reviews and Joint District Action Forum (JDAF):** a semi-annual activity that ensures that external assistance is coordinated in an effective manner at the sector level with a specific focus on the consideration of budget execution information and sector performance on implementation of EDPRS and coordination of national and district-level stakeholders.
- Health Sector Working Groups: a forum that brings together all the stakeholders to facilitate in deep dialogue between the government and development partners at

sector and sub-sector levels with a view towards ensuring joint planning, coordination of aid and joint M&E

- General SMM – the key decision-making entity of senior RBC and MoH staff that serves as the ultimate decision- and policy making institution in the Ministry.
- Health Sector Retreat: a semi-annual meeting that brings together senior MoH and RBC staff with all Hospitals Directors, Directors of District Pharmacies, District Mutuelle Offices and District Health Units to assess the performance of the health sector and to discuss action to be taken to resolve key issues.
- Survey and Evaluation study results dissemination workshops: the findings of each significant health-related survey or evaluation study should be broadly disseminated and discussed through publication and dissemination workshops
- Routine feedback reporting: feedback reporting needs to be much more systematic from National level to districts, from districts to health facilities and from health facilities to the community. This can be achieved by developing standard feedback reporting forms and dynamic 'dashboards' with the from the RHMIS and National Data Warehouse.

Significant efforts have already been made to strengthen data use across the Ministry and in the Districts. This has included a series of Leadership and Data Dissemination and Use (LDDU) courses for senior MOH staff and the recruitment and training of M&E officers that are a pivotal part of the District Health Management Team (DHMT) in every district. Of particular importance is the development of a standard set of district performance indicators that are analyzed and reported on quarterly to the MOH Planning Directorate. This sort of routine data use activity will help decentralize accountability for HSSP III implementation and ensure that decision makers at the local level are using the data they collect to ensure that their health services are performing well.

Figure 5: Conceptual Framework of M&E System to monitor HSSP III implementation
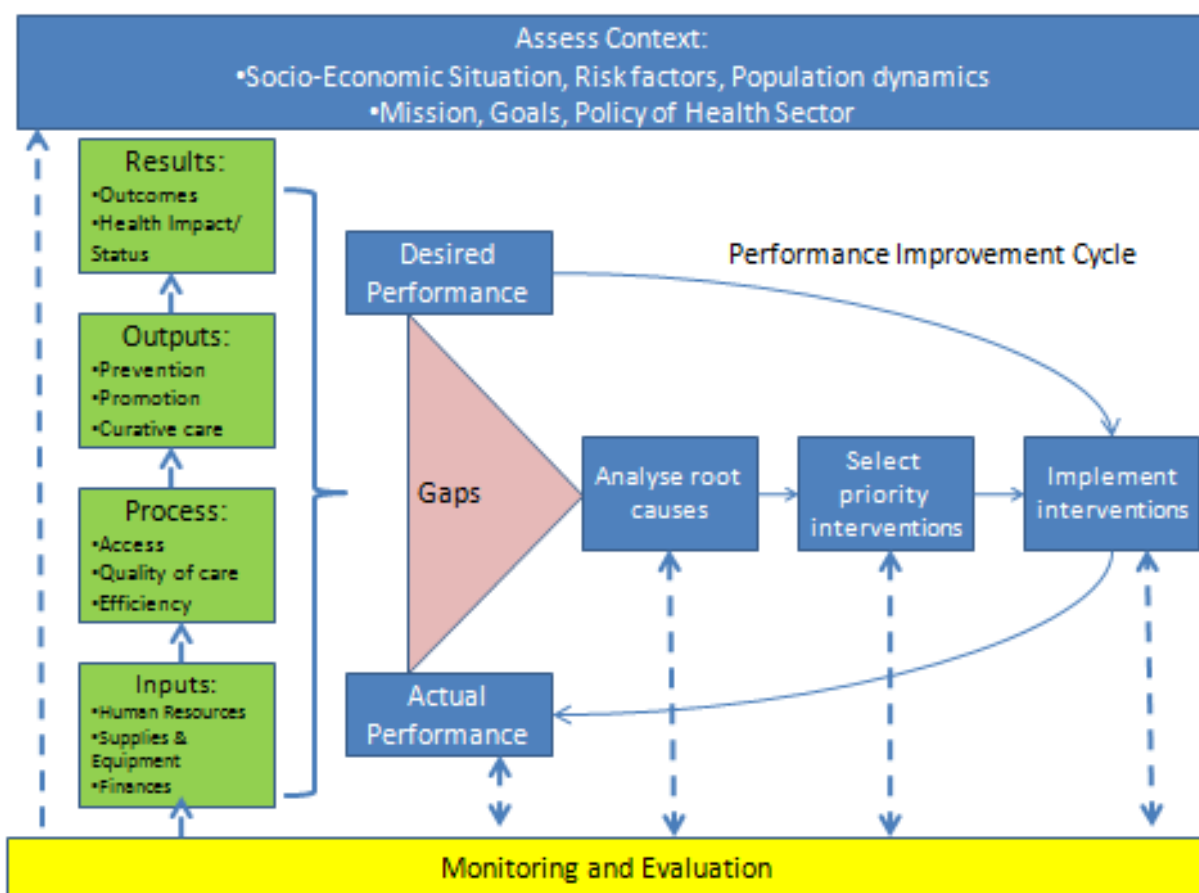
Adapted from John Hopkins Bloomberg School of Public Health, 2006

6. CAPACITY BUILDING

Aside from on-going capacity building initiatives that have been underway for several years to support data collection and use at all levels of the health system, specific capacity building is required for the implementation of this M&E plan. This includes:

6.1   Community level

At the community level there has been training of CHWs on how to report on community based activities related to programs including MCH, HIV, malaria, and, TB. Reports complied by CHWs are submitted to the health facilities. The In-charge of CHWs ensures that the reports are submitted on time and are complete.

Areas for improvement:
- CHWs are not able to use and adapt to the use of new technologies e.g. mobile reporting;
- The quality of report submitted by some CHWs is often under par owing to their level of education;

- The steering committee at the sector level has been receiving and analyzing data related to PBF. There will be a need for the steering committee to link with the health center so that they can be presented with monthly situations so as to take appropriate action.

6.2   Health Center level

Each health center now has a trained data manager reporting using DHIS, TRACnet, and other existing reporting tools and registers. The data manager enters data generated from the community level compiled by the In-charge of CHWs. The data manager also collects compiles and reports data on activities implemented by the health center.

Areas for improvement:
- The capacity of the data manager to translate data into information to present to the, management committee (COGE), the Health Committee (COSA), **in order to make decisions** (clinical or management), as well as providing regular feedback to the health center staff
- Strengthen the horizontal coordination mechanisms from the health center level to local authorities through participation presentation in the sector council so that the sector **can be involved in making decisions** based on data
- Build the capacity of the health in HRS data collection.

6.3   District level

The district level has been capacitated with regards to improving M&E systems by putting in place personnel and systems.

District hospitals have an M&E officer, data manager and IT officer. Together these oversee that data systems are functional. The district hospital data manager collects data generated by the hospital, and verifies and provides feedback on the data received from catchment health centers. The M&E officer uses generated data gathered by the data manager to produce reports for different programs. The IT officer ensures maintenance of the systems used for data management. Also, Administrative Districts have an M&E officer who links health information to the administrative districts.

Areas for improvement:
- Strengthen the capacity of the District and hospital M&E staff to translate data into information to present to their respective forums for decision making (by the hospital quality councils, hospital management, and, DHMT)
- Strengthen capacity for conducting data quality assessment for the hospital as well as health centers and share findings the with DHMT
- Strengthen the capacity of decision makers to use information generated from the health systems so that they **make decisions** based on data.
- Strengthen compliance with data management standard operating procedures (SOPs).

- Follow up with private practitioners to report on health data through the DHIS2, and ensure data quality and use in the private sector.

6.4   Referral level

Areas for improvement:
- Strengthen capacity of the referral hospital M&E staff to report regularly and translate data into information to present to their respective forums for decision making
- Strengthen capacity for conducting data quality assessment for the hospital and strengthen the capacity of decision makers to use information generated from the health systems so that they **make decisions** based on data.
- Together with MoH develop data management standard operating procedures (SOPs).

6.5   Central Level

At the central level, the planning M&E and HIS Directorate of MoH and RBC's planning and M&E division ensure data availability, analysis, feedback and presentation for decision.
Areas for improvement:
- Strengthen data analysis and validation mechanisms. This should be focused on key performance monitoring indicators and should be done on a quarterly basis and findings presented to the SMM for action
- Strengthen the capacity to design and conduct rapid quality assessment based on needs identified from the available data for both public and private health facilities
- Review existing data management SOPs for the central level to ensure that they are aligned to the current orientations
- Build the capacity of the private practitioners to report health data through the DHIS2, and ensure data quality and use in the private sector. (Legal framework needed for this).
- Build the capacity to develop articles and bulletins to publish at the regional and international levels
- Build the capacity to maintain M&E application and websites
- Building capacity to design and implement evaluations (impact evaluations), strategic plan reviews (mid and end-term)
- Build the capacity to design and implement surveys and conduct secondary analysis of survey data.
- Plan and implement capacity building at the district level in the area of M&E

Table 3: Required capacity building

Types of Capacity Required	Target of capacity building
General M&E, Survey Methodology	Central level staff MOH/RBC
Evaluation methods, scientific writing	Central & district level staff
Training in agreed facility assessment tools	Central level staff, surveyors
Web site management	HMIS, RBC/Health Communications Unit
DHIS-2 portal configurations/programming	HMIS, RBC/Health Communications Unit
Writing skills for web, Content management system	Planning DG staff
Training users in web portal/dashboards	RBC/MOH Program Managers, District Health Unit Staff
Training in mass communications	RBC/Health Communications Unit, Community Health Desk
DQA refresher training	District M&E and Supervisors
Data analysis CSPRO	Planning DG staff, RBC/MOH program staff
Training in HH survey methods	CHD staff, HC supervisors and CHW

Table 4: M&E work plan and budget

Activity No.	Title	Activity Type	Total Cost	Year 1	Year 2	Year 3	Year 4	Year 5
				Costs by year				
1	Finalize data collection mechanisms	Survey/Assessments	6,383	5,744	-	319	-	319
2	Strengthen coordination mechanisms for M&E between MOH institutions and Programs			-	-	-	-	-
2.1	Revive MOH M&E/Planning technical working group and meet monthly	Other		-	-	-	-	-
2.2	Conduct functional analysis of M&E across MOH/RBC institutions	TA - International	17,625	17,625	-	-	-	-
2.3	Rationalize roles and responsibilities for accountability between M&E and Research staff across MOH	Other		-	-	-	-	-
2.4	Training in M&E central and district level staff (evaluation methods, scientific writing, etc…)	Workshop/Conferences	15,100	-	7,550	7,550	-	-
3	Conduct facility assessment of service delivery			-	-	-	-	-
3.1	Conduct facility assemment for service delivery 1 baseline	Survey/Assessments	38,074	38,074	-	-	-	-
3.2	Conduct facility assemment for service delivery 2 mid-term	Survey/Assessments	38,074	-	-	38,074	-	-
3.3	Conduct facility assemment for service delivery 3 final	Survey/Assessments	38,074	-	-	-	-	38,074
4	Set up Rwanda Health Data Portal			-	-	-	-	-
4.1	Consultancy to develop country profile	TA - International	22,625	22,625	-	-	-	-
4.2	Set up web site	TA - In country staff	2,500	2,500	-	-	-	-
4.3	Customize DHIS dashboard to share HSSP III indicator targets and achievements	TA - International	22,750	22,750	-	-	-	-
4.4	Continuously publish updates to country profile and dashboards as data are collected	Other		-	-	-	-	-
4.5	Capacity building for Program Management staff on use of portal and dashboards	Workshop/Conferences		-	-	-	-	-
4.6	Translate HSSP III progress into community communication strategy	Workshop/Conferences						
4.7	Publication of program progress reports on the web portal	Other						
5	Semi-Annual Stakeholder meetings to share evidence on HSSP III performance	Workshop/Conferences						
6	Semi-Annual Data Quality Assessment (national level)	Survey/Assessments	684,000	136,800	136,800	136,800	136,800	136,800

Activity				Costs by year				
No.	Title	Activity Type	Total Cost	Year 1	Year 2	Year 3	Year 4	Year 5
7	Semi-Annual Health Sector Retreat	Workshop/Conferences	214,000	42,800	42,800	42,800	42,800	42,800
8	Semi-Annual Joint Health Sector Reviews	Workshop/Conferences	210,000	42,000	42,000	42,000	42,000	42,000
9	Quarterly Workplan Reviews	Other		-	-	-	-	-
10	Conduct Semi-Annual Field Visits with Development Partners	Survey/Assessments	62,100	-	15,525	15,525	15,525	15,525
11	Conduct Semi-Annual Performance Contract Review of the Sector	Other		-	-	-	-	-
12	DHS 2014 secondary data analysis	Survey/Assessments	20,000	-	-	700,000	-	-
13	Mid-term review of HSSP III	TA - International	80,750	-	-	80,750	-	-
14	DHS 2017 secondary data analysis	Survey/Assessments	20,000	-	-	-	-	1,000,000
15	Final evaluation of HSSP III	TA - International	80,750	-	-	-	-	80,750
16	Conduct national M&E stakeholder workshop to validate M&E Strategic plan	Workshop/Conferences	4,900	-	4,900	-	-	-
17	Conduct quarterly district M&E coordination meetings (capacity building + feedback + action planning)		531,200	106,240	106,240	106,240	106,240	106,240
18	Conduct annual CHW HH census for local MDGs		37,120	7,424	7,424	7,424	7,424	7,424
19	Training of CHWs for HH data collection (TOT for National, District and HC CHW coordinators)		69,650	-	69,650	-	-	-
	Total M&E plan budget		3,875,674	444,582	432,889	1,177,482	350,789	1,469,932

Annexes

Annex I: HSSPIII INDICATOR / DEFINITIONS

Indicators	Numerator	Denominator	Data sources
1.1.MATERNAL HEALTH SERVICES			
1.Maternal mortality ratio/100,000	# of maternal deaths (during pregnancy, delivery or within two months of delivery) during previous 5 years * 100,000	Total live births	**DHS**
2.Neonatal mortality rate/1000	# of neonatal deaths (<28 days) during the reference period * 1000	Total # of live births	**DHS**
3.a % Births attended in health facilities (survey)	# of live births in delivered in health facilities during the reference period *100	Total number of live births reported by women surveyed during the same period	**DHS**
3.b % Births attended in health facilities (routine reporting)	# of live births registered in health facilities *100	Expected pregnancies	**RHMIS**
4.a % PW receiving 4 ANC standard visits (survey)	# of PW who received 4 ANC Standard visits during their last pregnancy *100	Total number of women surveyed who had live births within the reference period	**DHS**
4.b % PW receiving 4 ANC standard visits (routine reporting)	# of PW who received 4 ANC Standard visits *100	Number of expected pregnancies	**RHMIS**
5.a % of newborns with at least 1 postnatal visit within the first 3 days of birth (survey)	# of infants born during the reference period with at least 1 postnatal visit < 3 days *100	Total # of infants born within the reference period	**DHS**
5.b % of newborns with at least 1 postnatal visit within the first 3 days of birth (routine reporting)	# of newborns with at least 1 postnatal visit within 3 days of birth *100	Number of expected pregnancies	**RHMIS**
7.% of deliveries with at least 1 postnatal checkup for mothers within 3 days (routine reporting)	# of mothers who had at least 1 postnatal checkup within 3 days after deliveries *100	Number of expected pregnancies	**RHMIS**
8.% CHW - ASM providing maternal and newborn health package	# of CHW – ASM reporting maternal and newborn care using RapidSMS	# of CHW –ASM	**RHMIS**
9.% DH with functional C-EMONC	# of DH with functional C-EMONC	Total # of district hospitals	Assessment report
10.% HC with functional B-EMONC	# of HC with functional B-EMONC	Total # of health centers	Assessment report

Indicators	Numerator	Denominator	Data sources
1.2. FAMILY PLANNING SERVICES			
11.Total Fertility Rate	# of Bore children according to a given fertility rate at each age	# women lived to the end of their childbearing years (15-49 years)	DHS
12.Contraceptive prevalence rate among married women 15-49 years	# of married women aged 15-49 using any contraceptive method * 100	# of married women 15-49 surveyed within the reference period	DHS
13.Contraceptive prevalence rate for modern methods among married women 15-49 yrs	# of married women aged 15-49 using modern contraceptive methods * 100	# of married women 15-49 surveyed within reference period	DHS
14.Unmet need for family planning among married women	# of married women who want to space their next birth or stop childbirth entirely but are not using contraceptives	# of married women 15-49 surveyed within reference period	DHS
15.Use of any modern contraceptive among married women by lowest wealth quintiles	# of married women 15-49 in lowest wealth quintile using any modern contraceptive method	# of married women 15-49 surveyed in lowest wealth quintile	DHS
16.Use of any modern contraceptive among married women by highest wealth quintiles	# of married women 15-49 in highest wealth quintile using any modern contraceptive method	# of married women 15-49 surveyed in highest wealth quintile	DHS
17.Contraceptive utilization rate for women 15-49 years	# of users of any contraceptive method at end of month * 100	# of women of childbearing age (15-49)[2]	RHMIS
18.Contraceptive utilization rate for modern methods of women 15-49 yrs	# of users of modern contraceptive methods at end of month * 100	# of women of childbearing age (15-49)	RHMIS
1.3.CHILD CARE SERVICES			
19.< 5 mortality rate/1000 live births	# of deaths of children < 5 years during the reference period *1000	Total # of live births among women surveyed during the reference period	DHS
20. Infant mortality rate/1000 live births	# of deaths to infants (children under one year of age) during the	Total # of live births among women surveyed during the	DHS

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[2] Women of childbearing age is estimated from census data. Currently estimated at 26.5% of population NISR 2002 census. Rwanda also estimates the contraceptive utilization rate among married women by multiplying DHS proportions of women 15-49 married to the denominator and proportion of women 15-49 married who were using contraceptives to the numerator.

Indicators	Numerator	Denominator	Data sources
	reference period *1000	reference period	
21. Per capita U5 visits seeking treatment for ARI+Malaria+Diarrhoea at HC	# of children <5 treated for ARI, Malaria or Diarrhoea at HC * 100	Total # of children <5 years[3]	RHMIS
22.Per capita U5 visits seeking treatment for ARI+Malaria+Diarrhoea C-IMCI	# of children <5 treated for ARI, Malaria or Diarrhoea by CHWs * 100	Total # of children <5 years	SISCom
23.Average number of U5 children seen by CHW/Month	# of children <5 seen by CHWs within reference period * 100	# of months within reference period	SISCom
1.4. IMMUNIZATIONS			
24.% children fully immunized by age 1	# of children fully immunized between 0 – 12 months *100	Total # of children 0 – 12 months	DHS
25.% children immunized for Measles <1 year	# of children < 1 year immunized against measles * 100	Total # of children < 1 year within the reference period	DHS
1.5. GENDER-BASED VIOLENCE PREVENTION AND ADOLSCENT HEALTH SERVICES			
26.# DH with One Stop Centre (GBV)	# of GBV One stop centers	Total # of District Hospitals	Reports, RHMIS
27.% Teenage pregnancies (below 20 yrs)	# women age 15-19 who have had a live birth or who are pregnant at the time of interview * 100	# of women ages 15-49 within the reference period	DHS
1.6. NUTRITION SERVICES			
28.Prevalence of stunting among 6-59 month children	# of children 6-59 months whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the mean of the reference population * 100	# of children 6-59 months surveyed	DHS
29.Pevalence of Underweight children under 5 (6-59 months)	# of children 6-59 months whose weight-for-age is below minus two standard deviations (-2 SD) from the mean of the reference population * 100	# of children 6-59 months surveyed	DHS

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[3] Children <5 is estimated using census data 16.2% of total population according to NISR 2002 census

Indicators	Numerator	Denominator	Data sources
30.Prevalence of wasting (Ht/Wt)	# of children 6-59 months whose weight-for-height Z-scores are below minus two standard deviations (-2 SD) from the mean of the reference population are considered thin (wasted) * 100	# of children 6-59 months surveyed	DHS
31.% children < 5 yrs screened in CBNP	# of children <5 years screened in CBNP * 100	Total # of children <5 years	SIScom
32.% children in nutrition rehabilitation programme / total children malnourished	# of children admitted for in-patient or outpatient nutrition rehabilitation *100	# of children referred from nutrition screening	RHMIS
1.7. HIV CARE AND TREATMENT			
33.HIV prevalence 15-49 years	# of individual 15-49 years old tested positive for HIV * 100	# of individuals 15-49 years old screened	DHS
34.Sero positivity rate of HIV among PW attending ANC	# of PW registered for ANC who tested positive for HIV * 100	# of PW registered for ANC who were tested for HIV	RHMIS
35.% HF with VCT/ PMTCT services	# of HF with VCT/PMTCT services * 100	# of health facilities	TracNet
36.% HF offering ART and HIV-HBV Co-infection Treatment according to national Guidelines	# of HF offering ART and HIV-HBV co-infection treatment * 100	# of health facilities (district hospitals, public & agreed health centers, private medical clinics)	TracNet
37. % of patients who need ART and receive it.	# of adults and children with HIV who are receiving ART * 100	# of people living with HIV	TracNet
1.8. MALARIA CONTROL AND TREATMENT			
38. Malaria Prevalence of Women (%)	# of women 15-49 tested positive for Malaria during screening * 100	# of women 15-49 tested for malaria during screening	DHS
39. Malaria Prevalence of Children (%)	# of children <5 tested positive for Malaria during screening * 100	# of children <5 tested for malaria during screening	DHS
40. % children < 5 yr sleeping under ITN	Number of children < 5 years slept under bednets the night before the survey * 100	Number of households with < 5 years surveyed	DHS

Indicators	Numerator	Denominator	Data sources
41. % of HH with at least 1 LLIN	Number of households with mosquito at least 1 bednet * 100	Number of households surveyed	DHS
42.Malaria slide positivity rate	# of malaria positive blood smears * 100	# of blood smears evaluated for malaria	RHMIS
43.Malaria proportional morbidity	# of confirmed new OPD cases of malaria * 100	# of new OPD cases for all morbidities	RHMIS
1.9.NEGLECTED TROPICAL DISEASES			
44.% of children 6 -59 months old dewormed	Number of children aged 6 - 59 months who received a recommended deworming drug in the past six months. * 100	Total Number of children aged 6 - 59 months surveyed	DHS
1.10. TB CONTROL AND TREATMENT			
45. Treatment success rate among new smear positive TB cases (%)	New and registered TB smear-positive (infectious) cases that were cured or in which a full course of treatment was completed over a given time period * 100	Total number of new and registered TB smear positive cases admitted during the previous period.	RHMIS
46. Percentage of TB/HIV patients receiving ART by the end of TB treatment	All HIV-positive TB patients, registered over a given time period, who receive ART (are started on or continue previously initiated ART) * 100	All HIV-positive TB patients registered over the same given time period	RHMIS
1.11. MENTAL HEALTH SERVICES			
47. Proportion of health centers which have capacity integrated mental health care.	# of health centers providing integrated mental health care * 100	Total # of health centers	RHMIS/Facility Assessment

Indicators	Numerator	Denominator	Data sources
1.12. NON COMMUNICABLE DISEASES			
48. Proportion of Health facilities which have capacity to provide NCD services according to national norms.	# of health facilities providing NCD services according to national norms * 100	# of health facilities (district hospitals, public & agree health centers, private medical clinics)	RHMIS/Facility Assessment
1.13. EPIDEMIC DISEASE SURVEILLANCE			
49.% HF and community implementing IDS	# of HF submitting IDS reports weekly * 100	# of health facilities (district hospitals, public & agree health centers, private medical clinics)	eIDSR
1.14. HEALTH PROMOTION AND ENVIRONMENTAL HEALTH			
50. Diarrhea prevalence among the under five	# of children <5 years with diarrhea in last 2 weeks before survey * 100	Total # of children <5 years surveyed	DHS
51.% Community Health Clubs with enhanced health promotion/BCC capacity	# of trained CHC on health promotion * 100	Total number of Community Health Clubs	MCH/EHD
52.% of food establishments with satisfactory hygiene standards	# of food establishments inspected and satisfied the evaluators * 100	Total # of food establishment inspected	MCH/EHD
53.% of Villages with functional Community Hygiene Clubs (CHC)	# of villages with functional Community Hygiene clubs (CHC) * 100	Total # of villages	MCH/EHD
54.% HF with effective medical waste management systems	# of HF with functional incinerators and waste pits *100	# of health facilities(district hospitals, public & agree health centers, private medical clinics)	RHMIS
1.15. IMPROVED EQUITY IN ESSENTIAL SERVICE UTILIZATION			
55.% of births attended in HF by lowest wealth quintiles	# of births in health facilities among PW surveyed in lowest wealth quintile *100	# of births among PW surveyed in lowest wealth quintile	DHS
56.% of births attended in HF by highest wealth quintiles	# of births in health facilities among PW surveyed in highest wealth quintile * 100	# of births among PW surveyed in highest wealth quintile	DHS

Indicators	Numerator	Denominator	Data sources
COMPONENT 2. SUPPORT SYSTEMS			
2.1. IMPROVED HUMAN RESOURCES - DEVELOPMENT AND MANAGEMENT			
57.Doctors per 100,000 inhabitants	# of doctors * 100,000	Total population	iHRIS/Census
58.Nurses per 100,000 inhabitants	# of nurses * 100,000	Total population	iHRIS/Census
59.Dr / Population Ratio	# of doctors	Total population	iHRIS/Census
60.Nurse / Population Ratio	# of nurses	Total population	iHRIS/Census
61.Midwife / Population Ratio	# of midwives	Total population	iHRIS/Census
62.Lab tech / Pop Ratio	# of lab technicians	Total population	iHRIS/Census
63.% of DH / DHU preparing their annual staff census using computerized IHRIS	# of DH/DHU preparing their annual staff census using iHRIS * 100	# of DH/DHU	iHRIS
64.# of A2 nurses who have completed eLearning course to upgrade their skills	# of A2 nurses who have completed eLearning course	Total # of A2 nurses working in Public health facilities	HRH reports
2.2: SUSTAINABLE AND RESPONSIVE SYSTEM OF MEDICAL PRODUCTS IN PLACE			
65.% HF with NO stock outs of tracer drugs.	# of health facilities reporting no stockouts of tracer drugs	# of health facilities reporting on tracer drugs	HMIS
66.% generic drugs locally produced	# of generic drugs locally produced	# of generic drugs on Rwanda drug formulary	RBC reports
67.% prescription with antibiotics in DH / HC	# of prescriptions filled for antibiotics in DH/HC	# of prescriptions filled	Integrated Supervision reports
68.% HF with online tracking system for drugs and consumables (eLMIS)	# of HF using eLMIS for procurement of drugs and consumables	Total # of health facilities	eLMIS
69.# Pharmacy regulatory legal instruments and establishments of regulatory institutions	# of existing regulatory legal instruments and institutions	Standards of regulatory legal instruments and regulatory institutions	PTF
70.Number of District Pharmacy with needed volume of National warehouses for storing pharmaceuticals in a good storage conditions	# of District Pharmacies with adequate storage conditions (space, security, environment)	Total # of District pharmacies	PTF
2.3. DIAGNOSTIC SERVICES (INCL IMAGING AND LABORATORIES) FUNCTIONAL			
71.# of labs enrolled in accreditation	# of labs enrolled in laboratory accreditation program	Total # of laboratory	NLR reports
2.4: IMPROVED INFRASTRUCTURE AND MAINTENANCE			

Indicators	Numerator	Denominator	Data sources
72.% Sectors without a functional HC	# of sectors without a functional HC * 100	Total # of sectors (416)	RHMIS
73.# DH with effective maintenance workshops	# district hospitals with effective maintenance workshops	Total # of DH with functional and equipped maintenance workshops	Facility Assessment
2.5: HEALTH FINANCING STRENGTHENED			
74.% of GOR budget allocated to MOH budget	GOR ordinary budget allocated to MOH	Total GOR budget	Finance Department reports
75.Per Capita annual expenditure on health (USD)	Total annual expenditure on health (USD)	Total population	HRTT, NHA
76.% Population covered by 'mutuelles'.	# of individuals enrolled in CBHI schemes	Total # of individuals eligible for CBHI schemes (people without other insurance coverage RAMA, private insurance, etc…)	CBHI database
2.6: STRENGTHENED QUALITY ASSURANCE AND SUPERVISION SYSTEMS / REGULATORY FRAMEWORKS			
77.% HC with functional QA team	# of HC with functional QA team * 100	Total # of health centers (public and agree)	Clinical services reports
78.# HC eligible for accreditation	# of HC providing HC level minimum package of services	Total # of Health Centers	DGCS Accreditation progress reports
79.Link Accreditation with PBF established	Mechanisms developed to integrate PBF and Accreditation Assessments		Health Financing Unit report
2.7. INFORMATION MANAGEMENT SYSTEM			
80.% HF with functional IT infrastructure (Internet & computer, including modem)	# of HF with functional Internet (modem or cable/wireless) and computer * 100	Total # of health facilities(referral hospitals, district hospitals, public & agree health centers, private medical clinics)	RHMIS
81.% of HC and District Hospitals using OpenEMR or other individual medical records system	# of HC and District Hospitals using OpenMRS or other individual medical records system * 100	# of health facilities(district hospitals, public & agree health centers)	RHMIS
82. % of registered private clinics and dispensaries reporting routinely to HMIS	# of registered private clinics and dispensaries reporting to HMIS * 100	# of registered private clinics and dispensaries	RHMIS

Indicators	Numerator	Denominator	Data sources
83.# registered CHW tracking PW using RapidSMS	# of CHWs sending RapidSMS reports on PW at least once a month	# of CHW ASM registered	RapidSMS
COMPONENT 3. SERVICE DELIVERY			
3.1. COMMUNITY BASED HEALTH CARE			
84.% of villages reporting on local MDGS	# of villages reporting on health MDGs	Total # of villages	SIScom
3.2. DISTRICT HEALTH SERVICES			
85.% District Hospitals eligible for accreditation	# of DH in accreditation process * 100	Total # of DH	DGCS accreditation progress reports
3.3. PROVINCIAL AND REFERRAL HOSPITALS SERVICES			
86.# of Provincial Hospitals eligible for accreditation	# of PH in accreditation process * 100	Total # of PH	DGCS accreditation progress reports
3.4 REFERRAL SYSTEMS AND PRE-HOSPITALIZATION SERVICES			
87.# of ground ambulances/district	# of functional ground ambulances	# of districts	RHMIS
88.# of ambulance boats deployed in lake Kivu	# of ambulance boats deployed in lake Kivu		SAMU
89.% of HFs with effective ambulance maintenance plans	# of HFs with effective ambulance maintenance plans * 100	Total # of HFs with ambulances	SAMU
COMPONENT 4: GOVERNANCE			
4.1. SWAP AND AID EFFECTIVENESS			
90.% DP provide resource information	# of development partners reporting in resource tracking system * 100	# of active development partners registered	HRTT
91. % of targets met from HSSP III	# of target met * 100	Total # of set target	PHIS

Annex II. HSSP III Policy Actions Log Frame (in EDPRS format)

HSSP Priority Indicator	Policy action Description	Policy action 2012/13	Policy action 2013/14	Policy action 2014/2015	Policy action2015/2016	Policy Action 2016/2017	Policy Action 2017/2018
% Births attended in health facilities increased from 62% to 90% by 2017/2018.	Scale up life saving interventions (Kangaroo Mother Care(KMC), Antenatal Care(ANC), Helping Baby to Breath(HBB), prevention of Post Partum Hemorrhage in community(PPH), Post Abortion Care(PAC), Post Natal Care(PNC), Emergency Obstetric and Neonatal Care (EmONC)	1. Elaboration and dissemination of PAC documents: Manual reference, protocol, trainee's guide and participants guide. 2. Update the roadmap to accelerate the reduction of maternal and newborn mortality and morbidity	1. Training of ASM in Community Maternal Neonatal Health Package in 30 districts 2. 1st annual confidential survey of maternal, neonatal and child death.	1.Implementation of PPH prevention in community in 30 additional districts 2.Implementation of verbal autopsy in 30 districts 3.Semesteriel Mentoring of ASM's in implementation of community neonatal Health package	1.Implementation of comprehensive PAC program in 30 districts 2.Pre-service training for the first cohort on KMC, ANC, HBB, PPH, PAC, PNC, EMONC in all medical and nursing schools.	In-service training of 2 additional health providers per health centre and one additional c-EmONC team in all district hospitals	Impact evaluation of the PPH prevention program in community and comprehensive PAC program
% of newborns with at least 1 postnatal visit within the first 2 days of birth increased from 37% to 65% by 2017/2018	Improve neonatology services in all health facilities	Conduct quarterly Supportive supervision in neonatology at all levels in all health facilities	1.Equip all health facilities in basic neonatology equipment in 30 districts	1. In service training of 2 health providers per health centre , 4 per hospital and 1 supervisor in neonatology, HBB and KMC in 30 districts	Conduct an operational research to generate evidence for improving newborn care	Review of norms, standards and protocols for neonatology services at all levels	Establishment of 5 centers of excellence in neonatology in the whole country (One per province)

HSSP Priority Indicator	Policy action Description	Policy action 2012/13	Policy action 2013/14	Policy action 2014/2015	Policy action2015/2016	Policy Action 2016/2017	Policy Action 2017/2018
Contraceptive Utilization Rate for modern methods of women 15-49 yrs increased from 31% to 40% by 2017/2018	Improve quality and access to family planning service delivery	Update, develop and disseminate FP BCC strategy and IEC materials addressing socio-cultural barriers and youth knowledge on full range of FP methods and sexual education for in and outside of school.	To equip all public health facilities with at least two IUCDs kits by June 2013	To equip all public health facilities with at least two implants kits and each public hospital with equipment for permanent methods (vasectomy and tubal ligation).	Scale up integration of FP in all services (ANC, postnatal care, IMCI, nutrition, general consultations, pre-nuptial care etc) in all health facilities.	Conduct FP Program assessment .	Free distribution of FP commodities is expended in all health facilities including the private sector .
< 5 mortality rate/1000 live births decreased from 76 to 42 by 2017/2018	Reduce neonatal and child morbidity and mortality	Mentoring health providers in 15 Districts on Clinical IMNCI(Integrated Management neonatal and Childhood illnesses)	ETAT(Emergency triage assessment and treatment) implementation in 50% of health facilities (Public and private)	Develop Child Survival Strategic plan	Scale up operational research on IMNCI in 15 Districts	IEC materials on child survival interventions	Review Child deaths Audit tools
# DH with One Stop Centre (GBV) increased from 4 to 42	Provide comprehensive services to victims of gender based violence	Develop guidelines for training of CHWs on referral and follow up mechanism for GBV victims	Develop multi disciplinary intervention and investigation protocol for service delivery	Expend comprehensive GBV services in 15 DHs	Capacity building for psycho-social staff of all DHs	Evaluation of the GBV program in DHs	Develop a new GBV strategic plan

HSSP Priority Indicator	Policy action Description	Policy action 2012/13	Policy action 2013/14	Policy action 2014/2015	Policy action2015/2016	Policy Action 2016/2017	Policy Action 2017/2018
Percentage of teenage pregnancies (below 20 yrs) decreased from	Increase awareness on prevention of teen pregnancies	School sensitization on prevention of teen pregnancies in 10 districts	Rehabilitation of 10 Health centers to initiate the youth corners .	Training of 2 health care providers in 5 rehabilitated HC and 17 Youth friendly centers	Scale up education of young adolescent girls aged 12 years in the 12+ program in 30 districts	Mass media use on prevention of teen pregnancies and fight against SGBV (1 radio show per month and 1 written article per month)	Impact research on Reproductive Health Strategic plan.
1.Prevalence of stunting among 6-59 month children. 2.Pevalence of Underweight children (6-59 months). 3.Prevalence of Wasting (Ht/Wt)	Strengthen early identification and management of under-nutrition	1.Continued identification of under nutrition in at least 90 % of villages. 2.Sufficient provision of rehabilitation commodities (F75,F100, RUTF, CSB, etc), with no stock outs in > 80% of Health facilities (every year)	1. Promotion of Growth Monitoring at village level /Expand CBNP coverage by sectors at 80% 2. Develop National strategic plan to Eliminate malnutrition	Conduct assessment on the implementation of DPEM in all Districts	1.Revise the DPEM	Scale up Home Based Food fortification in 30 districts.	Conduct impact evaluation for the nutrition programs

HSSP Priority Indicator	Policy action Description	Policy action 2012/13	Policy action 2013/14	Policy action 2014/2015	Policy action2015/2016	Policy Action 2016/2017	Policy Action 2017/2018
1.HIV prevalence 15-49 years. 2.% Prevalence of HIV among PW attending ANC.	1.Sensitization of general population and key population (sex workers, mobile population) on HIV prevention and increase the coverage of HIV counseling testing services 2.Increase the attendance of HIV positive PW to ANC services	Increase of the # of sites offering full package services at 95%	Integrate minimum package of HIV prevention for key population in all health facilities	Implement finger prick method in 90 % CT health facilities	Promote male involvement in PMTCT program	Increase accessibility of male circumcision as an additional strategy for HIV prevention	Conduct a study on HIV Indicators to measure the progress
Malaria slide positivity rate (%)	Avail all malaria diagnosis equipments and reagents	95% OF Malaria Cases at HFs are Laboratory Confirmed (HMIS)	95% of U5 Treated For Malaria by CHWs are RDT Confirmed	95% of under five children with malaria are treated by CHWs within 24h at community level (SIS COM)	Conduct Health facilty survey to assess that simple malaria cases are treated at the HFs according national policy	Implement Malaria Active Case Detectio in 2 Pilot Districts Toward Malaria Elimination	Conduct Malaria Programme Performance Review
# of Health facilities who have capacity to provide NCD services according to national norms.	Strengthening capacity for NCDs prevention and control.	Develop NCDs strategic plan.	1. Development of Health care providers training manual on NCDs. 2. Develop guidelines protocols and algorithms for NCD prevention control, care and treatment.	Training of health care providers on NCDs management.	Training of stakeholders,CHWs and Civil Society on NCDs prevention and control.	Conduct impact evaluation on NCDs management.	Organise international conference on NCDs management .
Diarrhea prevalence among the under five is decreased from 13 to 9% by 2017/2018	Promote use treatment of drinking water at Household level.	Distribute sur eau to all HH presented in MCH campaign.	Train all Community hygiene Club (on CBEHPP) on all topics in their training Manual.	Conduct baseline survey and community household hygiene and sanitation status.	Develop policy and strategic plan on Health facility sanitary infrastructure and food establishments.	Conduct assessment on the Construction of multipurpose waste pits in Health facilities	Grading more than 90% of food establishments according to Hygiene standards

HSSP Priority Indicator	Policy action Description	Policy action 2012/13	Policy action 2013/14	Policy action 2014/2015	Policy action2015/2016	Policy Action 2016/2017	Policy Action 2017/2018
Dr / Population Ratio decreased from 1/16001 to 1/11993 by 2017/2018.	Increase post graduates enrollment in residence program from 15 to 80.	Update and revise the curricula for medical education	Review medical internship program	Revise CPD (continuing Professional development) policy and guidelines	Recruit and deploy Medical doctors for specialization	1.Hiring 70 qualified foreign and national faculty members.	Increase post graduates enrollment in residence program from 15 to 80.
# of A2 nurses who have completed eLearning course to upgrade their skills increased up to 1488 by 2017/2018.	Develop and update nurses curricula for specialized service	2.Train specialized nurses.	3.To develop CPD programs for nurses and midwives	To establish Allied health professionals council	2. Create one new lab tech school	3. Provide the report for supervision of nursing and midwifery schools (public and private)	Develop and update nurses curricula for specialized service
% of HF with No stock outs for tracer drugs increased from 55 to 98 by 2017/2018.	To ensure the availability and accessibility of essential medicines and others medical supplies.	Acquisition of the e-LMIS software	1.Train users of e-LMIS software from DPhs , DHS, Referral Hospitals, Public Health Programs (PHP) and HCs. 2.Develop policy for pharmaceutical industry development 3.Establishing a functional legal and regulatory framework for pharmaceutical products, medical devices, foods and cosmetics in Rwanda	1.Put in place monitoring and evaluation framework for the rational use of medicines 2.Develop and harmonize the Good Manufacturing Practices and quality standards for medicines to be manufactured in Rwanda and EAC	Put in place quality management system for medicines regulation	Revise guidelines of pharmacovigilance and DTCs to ensure medicines safety and appropriate use	Review and Update SOPs for good storage practices for health commodities at each supply chain level

HSSP Priority Indicator	Policy action Description	Policy action 2012/13	Policy action 2013/14	Policy action 2014/2015	Policy action2015/2016	Policy Action 2016/2017	Policy Action 2017/2018
Number of Labs enrolled in accreditation process increased from 10 to 50 in 2017/2018	Ensure the improvement of laboratory network quality services towards accreditation	Train at least 2 labo technicians on accreditation process for (5 central labs and 5 satellite labs, 5 regional hospitals labs, 5 DHs labs)	Conduct assessment for the accreditation process in 20 labs (5 central labs and 5 satellite labs, 5 regional hospitals labs, 5 DHs labs)	Develop guidelines, modules, tools for mentorship.	1 Satellite lab renovated and 3 Satellite labs constructed	Conduct operational research and disseminate key findings	New NRL building constructed, and 1 satellite lab constructed.
% of the pop enrolled in CBHI schemes increased up to 91%.	Strengthen awareness in CBHI and sustain membership	Development of CBHI Financial Tool for districts	1. Review the current provider payment mechanism.	2. Review of CBHI co-payment at tertiary level	Review premium contribution rates	Conduct nationalwide client satisfaction study	Conduct HFs satisfaction Survey on CBHI
% of National RH, PH,DH and HCs eligible for accreditation increased up to >70%.	HF s reach at least 70% of quality	Development of standards and norms for health services at National RHs, PHs, DHS	Revise Policies and guidelines for National RHs, PHs, DHS	PBF evaluation tool is integrated to Accreditation evaluation tool	Development of standards and norms for health services at HC	Introduce Continuous Quality insurance in all Health Facilities	The health package of activities is revised and updated
% of HC and District Hospitals using Open EMR (full package) or other individual electronic medical records system increased from 8 to 80 by 2017/2018.	Initiate sustainable programs	Roll out Open EMR to 3% health facilities	Roll out Open EMR to 10% health facilities	Roll out Open EMR to 20% health facilities	Roll out Open EMR to 30% health facilities	Roll out Open EMR to 40% health facilities	Roll out Open EMR to 50% health facilities
% of villages reporting on localized MDGS increased up to 100%	Strengthen specific tasks of CHW through curriculum development, TOT and capacity building of health workers in various topics	Training of CHWs on CBP in 30 districts	Evaluation of CHWs knowledge on the C-IMNCI and MNH package adopted.	Training on Rapid SMS and mUbuzima	Develop integrated supervision tools for CHWs	Train CHWs in palliative care	Conduct CHWs cooperative audit

Annex III. Operational Definitions

- **Monitoring & Evaluation Plan:** Is an integral part of the component of the national health strategy that addresses all the monitoring and evaluation activities of the strategy.

- **Monitoring & Evaluation Framework:** Refers to the performance based framework for monitoring and evaluation of health systems strengthening.

- **Monitoring:** The routine tracking and reporting of priority information about a program and its intended outputs and outcomes.

- **Evaluation:** The rigorous, science-based collection of information about program activities, characteristics, outcomes and impact that determines the merit or worth of a specific program or intervention.

- **Outcome:** Actual or intended changes in use, satisfaction levels or behavior that a planned intervention seeks to support.

- **Impact:** Fundamental intended or unintended changes in the conditions of the target group, population, system or organization.

- **Review:** Is an assessment of performance or progress of a policy, sector, institution, programme or project, periodically or on an ad hoc basis. Reviews tend to emphasize operational aspects, and are therefore closely linked to the monitoring function.

- **Performance:** The extent to which relevance, effectiveness, efficiency, economy, sustainability and impact (expected and unexpected) are achieved by an initiative, programme or policy.

- **Performance management:** Reflects the extent to which the implementing institution has control, or manageable interest, over a particular initiative, programme or policy.

- **Performance measurement:** The ongoing monitoring and evaluation of the results of an initiative, programme or policy, and in particular, progress towards pre-established goals.

- **Data *Management:*** comprises all processes related to data collection, analysis, synthesis and dissemination.

- **Data Quality Assurance:** The process of profiling data to discover inconsistencies, and other anomalies in the data cleansing activities (e.g. removing outliers, missing data interpolation) to improve the data quality.

- *Civil Society Organization:* any organization except the government and the UN system.

- **Knowledge Management:** Is a set of principles, tools and practices that enable people to create knowledge, and to share, translate and apply what they know to create value and improve effectiveness.