REPUBLIC OF MOZAMBIQUE
Ministry of Health

HEALTH SECTOR STRATEGIC PLAN

2014 - 2019

REPUBLIC OF MOZAMBIQUE

Preface

Medical and health care are enshrined as a right in the Constitution of the Republic of Mozambique. Every Mozambican has the right to public health.

The Health Sector Strategic Plan (PESS, Plano Estratégico do Sector da Saúde) 2014-2019 outlines implementation strategies to promote on-going and sustained improvements to the health status of the Mozambican people while taking into account the challenges associated with current demographic and epidemiologic changes. The PESS is the main instrument guiding the Government of Mozambique and the Ministry of Health (MoH, Ministério da Saúde) towards the achievement of health sector targets for key health indicators, and contributing to equitable and sustainable socio-economic development in Mozambique. The document is based on existing policies and seeks to materialize the strategic vision to enable all Mozambicans, whatever their socio-economic status, to access health services at affordable and reasonable prices and live in health. The PESS therefore aligns with Government of Mozambique commitments to poverty alleviation, the promotion of sustainable social and economic development and the progressive reduction of existing social inequities.

The sustainability of the National Health System (NHS) is based on this strategic plan, and on two specific strategic pillars: "more and better health services" and a "reform and decentralisation agenda", encouraging us to accelerate on-going interventions. In fact, the attention the plan places on women, adolescents, youth, children – and for the first time, older people – deserves special mention. The document considers the main public health challenges faced by each of these groups, including degenerative diseases, whilst also increasingly responding to newly emerging conditions that are exerting considerable influence on the country´s overall epidemiological and non-communicable disease profiles.

As Government of Mozambique Plan, the PESS 2014-2019 should inspire us all and lays the foundations for the day-to-day efforts to improve the health of each Mozambican citizen, of our families and of the people of Mozambique as a whole.

The Prime Minister
Dr. Alberto Clementino António Vaquina

Table of Contents

Preface 2
List of Tables 5
List of Figures 5
Technical Contributions 6
Abbreviations and Acronyms 7
Acknowledgements 12
Introductory Note 13
Executive Summary 14
1. Introduction 19
1.1 Objectives 19
1.2 PESS Development Process 19
1.3 Document Structure 20
2. Background 22
2.1 Situation Analysis and Context 22
2.1.1 Country Profile 22
2.1.2 Health Status 24
2.1.3 Health Determinants and Health Inequities....26
2.1.4 Provision of Health Care Services 30
2.1.4.1 The National Health Service.... 30
2.1.4.1.1 Health Network and Human Resources 30
2.1.4.1.2 Coverage of Key Health Programmes 30
2.1.4.1.3 Quality and Efficiency of Health Programmes and Services 34
2.1.4.2 The Private Sector.... 34
2.1.4.3 Community Health.... 34
2.1.4.4 Traditional and Alternative Medicine 35
2.1.5 Support Systems 35
2.1.5.1 Financing and Financial Management 36
2.1.5.2 Human Resources 36
2.1.5.3 Medical Supplies, Equipment and Technology 38
2.1.5.4 Information System, Monitoring and Evaluation 39
2.1.5.5 Health Sector Governance Structure 39
2.2 Summary of Health Sector Problems and Priorities 40
2.2.1 SWOT Analysis Summary 42
3. PESS Vision, Mission, Guiding Principles and Priorities 43
3.1 Vision 43
3.2 Mission.... 43
3.3 Guiding Principles 44
3.3.1 Primary Health Care Services 44
3.3.2 Equity 44
3.3.3 Quality 44
3.3.4 Partnerships 45
3.3.5 Community Involvement 45
3.3.6 Research and Technological Innovation 45
3.3.7 Integrity, Transparency and Accountability 45
3.4 Health Priorities and PESS Strategic Goals 45
3.4.1 Strategic Goal 1: Increase Access and Utilization of Health Care Services 46
3.4.2 Strategic Goal 2: Improve Quality and Humanization 46
3.4.3 Strategic Goal 3: Reduce Inequalities 47
3.4.4 Strategic Goal 4: Improve the Efficiency 47
3.4.5 Strategic Goal 5: Strengthen Partnerships 48
3.4.6 Strategic Goal 6: Increase Transparency and Accountability 48
3.4.7 Strategic Goal 7: Strengthen the Mozambican Health System 48

4. PESS Approach 49
4.1 More and Better Quality Health Services 51
4.1.1 Access to Routine Health Services 51
4.1.2 Quality of Service 51
4.1.3 Use of Services 51
4.1.4 Equity 51
4.1.5 Efficiency in Routine Health Care Services 51
4.2 Health Sector Reform Agenda 51
5. Health Programmes and Corresponding Support Systems 53
5.1 Health Programmes 54
5.2 Systems Supporting the Provision of Services 85
5.2.1 Service Provision 85
5.2.2 Human Resources for Health 86
5.2.3 Health Information System, Monitoring & Evaluation and Vital Statistics 89
5.2.4 Medical Products and Equipment 90
5.2.5 Basic Diagnostic Aids 93
5.2.6 Health Financing and Financial Management 94
5.2.7 Governance and Leadership 96
6. Health System Strengthening Reform Agenda 100
6.1 Health Services 101
6.2 Infrastructure 102
6.3 Leadership and Governance 102
6.4 Financing 103
6.5 Human Resources 104
6.6 Logistics and Medical Technology 105
6.6.1 Logistics and Availability of Medical Products 105
6.6.2 Pharmaceutical Regulations and Supervision 106
6.6.3 Medical Technologies and Basic Diagnostic Aids 106
6.7 Information for Health, Monitoring & Evaluation 107
7. Implementation Mechanisms 110
7.1 Planning and Budgeting Process 110
7.2 Implementation Instruments 111
7.3 Planning and Implementation Roles and Responsibilities 111
8. PESS 2014-19 Resource Envelope and Costs 112
8.1 Costing Methodology 112
8.2 Resource Envelope 113
8.3 Costing Results 115
8.4 Conclusion 119
9. Monitoring & Evaluation 121
9.1 Main PESS III Indicators 123
9.2 Revision Process 123
10. Assumptions, Risks and Mitigation Measures 125
Annexes 130
11. Bibliographic References 144

List of Tables

Table 1. Health Status Indicators of Mozambique 14
Table 2. PESS 2014-2019 Health Sector Indicator Framework and Targets 17
Table 3. Theoretical Coverage of the NHS Primary Health Care Network 15
Table 4. Timeline for Reform Agenda 108
Table 5. Full-time Equivalents of Required vs. Actual Staff 119
Table 6. Risk Analysis 126

List of Figures

Figure 1. Historical Trend of Natural Disasters 1956-2008 22
Figure 2. Age Pyramid, Census 2007, Mozambique 00
Figure 3. PESS 2014-2019 Conceptual Framework 00
Figure 4. Conceptual Framework for Sector Reforms 53
Figure 5. Financing Trends 2007-2012 113
Figure 6. Potential Funding Scenarios 114
Figure 7. General Cost Distribution 2014-2019 116
Figure 8. Costs Summary for Public Health & Medical Care Programmes 2014-19 117
Figure 9. Cost Distribution for Public Health & Medical Care Programmes 2014-19 117
Figure 10. Costs Summary by Level of Health Care 118
Figure 11. PESS Costs vs. Funding Available 120
Figure 12. Linkages Between Key Strategic Plans and the Monitoring and Evaluation System Strengthening Plan 121
Figure 13. Linkages Between Health Sector National M&E Plan and Programmes 122
Figure 14. PESS M&E Framework 122

Technical Contributions

PESS: Overall Coordination
Dr Célia Gonçalves, National Director DPC
Dr Moisés Ernesto Mazivila, Deputy National Director DPC

Technical Working Group
Dr Elias Mangujo Cuambe, Coordinator (USAID)
Dr Daniel Simone Nhachengo, Head of DPES
Dr Nelson Cuamba, Consultant (WHO)
Dr Laia Cirera-Crivillé, Advisor DPC
Dr Leopoldina Massingue, Head of M&E Department
Dr Cidália Baloi, Head of DIS
Dr Vânia Tembe, Advisor DPES (FORSSAS)
Dr Kevin Pilz, Advisor DPC / CMAM (USAID)
Dr Tânia Matsinhe (DANIDA)
Dr Nana Enyimayew, Consultant (WHO)
Dr João Costa, Consultant (SDC)
Dr Eduardo Celades (WHO)
Dr Silvia Bignamini, Advisor M&E Department (FORSSAS)
Dr Humberto Muquingue (JHPIEGO)
Ms Anilde Munguambe (MoH Secretariat)
Ms Francina Nhantole (WHO Secretariat)
OneHealth focal points in National Directorates and subordinate institutions

Printing financed by: World Health Organization; the Government of Flanders, the Canadian High Commissioner; the Commission on Information and Accountability (COIA) for Women´s and Children´s Health.

Abbreviations and Acronyms

ACA	Annual Joint Assessment
ACS	Community Health Agents / *Agentes Comunitários de Saúde*
ANC	Anti-Natal Care
APE	Community Health Worker / *Agente Polivalente Elementar*
ART	Antiretroviral Treatment
BEmOC	Basic Emergency Obstetric Care
BES	Weekly Epidemiological Bulletin
BES	Weekly Epidemiological Bulletin
CCC	Joint Coordination Committee / *Comité de Coordenação Conjunta*
CE	Continuing Education
CEmOC	Complete Emergency Obstetric Care
CMAM	Central Medical Stores / *Central de Medicamentos e Artigos Médicos*
COIA	Commission on Information and Accountability (for Women's and Children's Health)
CRDS	Regional Centre for Health Development / *Centro Regional de Desenvolvimento da Saúde*
CRC	Child at Risk Clinic
CSO	Civil Society Organization
DAF	Directorate of Administration and Finance / *Direcção de Administração e Finanças*
DEPROS	Health Promotion Department / *Departamento de Promoção da Saúde*
DF	Pharmacy Department / *Departamento de Farmácia*
DFID	(British Government) Department for International Development
DHS	Demographic Health Survey
DIS	Health Information Department / *Departamento de Informação para a Saúde*
DNAM	National Directorate for Medical Care / *Direcção Nacional de Assistência Médica*
DNSP	National Directorate for Public Health / *Direcção Nacional de Saúde Pública*
DOT	Directly Observed Treatment
DPC	National Directorate for Planning and Cooperation / *Direcção Nacional de Planificação e Cooperação*
DPES	Department of Planning and Health Economics / *Departamento de Planificação e Economía da Saúde*
DPS	Provincial Health Directorate / *Direcção Provincial de Saúde*
DQS	Data Quality System
DRH	Human Resource Directorate / *Direcção de Recursos Humanos*
DTP-3	Diphtheria-Tetanus-Pertussis (vaccine)
e-SIP	e-Personnel Information System / *Sistema de Informação do Pessoal*
e-SISTAFE	e-SISTAFE Electronic State financial administration system / *Sistema Electrónico de Administração Financeira do Estado*
EFS	External Funds Survey
EPI	Expanded Programme on Immunization
EPTS	Electronic Patient Tracking System
EU	European Union
FNM	National Drugs Form / *Formulário Nacional de Medicamentos*

FORSSAS	Strengthening Health Systems and Social Action / *Fortalecimento dos Sistemas de Saúde e Acção Social*
FP	Family Planning
GDP	Gross Domestic Product
GML	Medical-Legal Units / *Gabinetes de Medicina Legal*
GoM	Government of Mozambique
GTAF	Administration and Finance Working Group / *Grupo de Trabalho de Administração e Finanças*
HC	Health Centre
HCC	Healthy Child Consultation
HCM	Maputo Central Hospital / *Hospital Central de Maputo*
HCT(-C)	Health Counselling and Testing (at Community Level)
HEP	Hepatitis
HF	Health Facility
HIA	Health Impact Assessment
HIS	Health Information System
HIV/AIDS	Human Immunodeficiency Virus / *Acquired Immunodeficiency Syndrome*
HPV	Human Papilloma Virus
HR	Human Resources
HRH	Human Resources for Health
HSR	Health Sector Review
ICD	International Classification of Disease
ICS	Health Sciences Institute / *Instituto de Ciências da Saúde*
ICT	Information and Communication Technology
IEC	Information, Education and Communication
IGS	General Health Inspectorate / *Inspeção Geral de Saúde*
IMCI	Integrated Management of Childhood Illnesses
IMF	International Monetary Fund
IMT	Traditional Medicine Institute / *Instituto de Medicina Tradicional*
INADE	National Institute for the Development of Education / *Instituto Nacional para o Desenvolvimento da Educação*
INE	National Statistics Institute / *Instituto Nacional de Estatística*
InfoFlash	Information on Mozambique´s Food and Nutrition Security
INGC	National Institute for the Management of Natural Calamities / *Instituto Nacional de Gestão das Calamidades*
INS	National Health Institute / *Instituto Nacional de Saúde*
INSIDA	National Survey on Prevalence, Behavioural. Risks and Information about HIV and AIDS in Mozambique / *Inquérito Nacional do SIDA*
IPT	Intermittent Preventive Treatment
IRS	Indoor Residual Spraying
ITN	Insecticide Treated Nets
JANS	Joint Assessment of National Strategies
LNCQ	National Quality Control Laboratory / *Laboratório Nacional de Control de Qualidade*
LNCQM	National Laboratory for Drug Quality Control / *Laboratório Nacional de Control de Qualidade de Medicamentos*

LNHAA	National Laboratory for Water and Food / *Laboratório Nacional de Água e Alimentos*
LOLE	Local Government Act / *Lei dos Órgãos Locais do Estado*
M&E	Monitoring and Evaluation
MC	Male Circumcision
MCH	Maternal and Child Health
MDG	Millennium Development Goals
MDR(-TB)	Multi-drug Resistant TB
MF	Ministry of Finance / *Ministério de Finanças*
MICS	Multiple Indicator Cluster Survey
MoE	Ministry of Education / *Ministério de Educação*
MoH	Ministry of Health / *Ministério da Saúde*
MJD	Ministry of Youth and Sports / *Ministério de Juventude e Desporto*
MoU	Memorandum of Understanding
MPD	Ministry of Planning and Development / *Ministério de Plano e Desenvolvimento*
MTEF	Medium Term Expenditure Framework / *Cenário Fiscal de Despesa e* Financiamento a Médio Prazo
NCD	Non-communicable Diseases
NDF	National Drugs Formulary
NGO	Non-governmental Organization
NHS	National Health Service
NNA	National Needs Assessment
NTD	Neglected Tropical Diseases
OHM	OneHealth Model
ORT	Oral Rehydration Therapy
PAF	Performance Assessment Framework
PAF I & II	Accelerated Training Plans I & II / *Plano Acelerado de Formação I e II*
PARI	Institutional Reform Acceleration Plan / *Plano Accelerado de Reformas Institucionais*
PARP / (PARPA)	Poverty Reduction Strategy Paper / *Plano de Acção para a Redução da Pobreza (Absoluta)*
PCV	Pneumococcal Conjugate Vaccine
PELF	Pharmacy & Logistics Strategic Plan / *Plano Estratégico de Logística e Farmácia*
PES	Social and Economic Plan / *Plano Económico e Social*
PESOD	District Economic and Social Plan and Budget / *Plano Económico e Social e Orçamento do Distrito*
PESOE	Economic and Social Plan and State Budget / *Plano Económico e Social e Orçamento do Estado*
PESOP	Provincial Economic and Social Plan and Budget / *Plano Económico e Social e Orçamento da Província*
PESS	Health Sector Strategic Plan / *Plano Estratégico do Sector de Saúde*
PFM	Public Financial Management
PHC	Primary Health Care
PICT	Provider Initiated Counselling and Testing
PIMA	Technical Working Group: Planning, Infrastructure and Monitoring & Evaluation / *Grupo de Trabalho: Planificação, Infra-estrutura, Monitoria e Avaliação*

PIREP	Vocational Training Integrated Reform Programme / *Programa Integrado da Reforma de Educação Técnico Profissional*
PMTCT	Prevention of Mother to Child Transmission
PNCL	National Leprosy Control Programme / *Programa Nacional de Controlo da Lepra*
PNCM	National Malaria Control Programme / *Programa Nacional de Controlo da Malária*
PNCT	National Tuberculosis Control Programme / *Programa Nacional de Controlo da Tuberculose*
PNDRHS	Human Resources for Health National Development Plan / *Plano de Nacional de Desenvolvimento de Recursos Humanos de Saúde*
PPC	Post-partum Consultation
PPP	Private Public Partnerships
RED	Reach Every District
REO	Budget Execution Report / *Relatório de Execução Orçamental*
SAAJ	Youth Friendly Health Services / *Serviços Amigos dos Adolescentes e Jovens*
SB	State Budget
SC	Supply Centre
SDC	Swiss Agency for Development and Cooperation
SDSMAS	District Services for Health, Women and Social Action / *Serviços Distritais de Saúde, Mulher e Acção Social*
SIFO	Training Information System / *Sistema de Informação sobre as Formações*
SIGEDAP	Public Administration Performance & Management System / *Sistema de Gestão e Desempenho na Administração Pública*
SIMAM	Drug Management Information System / *Sistema de Informação para a Gestão de Medicamentos*
SIS-H	Health Information System for Hospital Admissions / *Sistema de Informação de Saúde para Hospitais*
SIS-MA	Monitoring and Evaluation Health information System / *Sistema de Informação de Saúde para Monitoria e Avaliação*
SIS-ROH	Mortality Surveillance System / *Sistema de Informação em Saúde – Registro dos Óbitos Hospitalares*
SPML	Provincial Level Legal Medicine Services / *Serviços Provinciais de Medicina Legal*
SRH	Sexual and Reproductive Health
SSRAJ	Sexual and Reproductive Health Services for Adolescents and Youth / *Serviços de Saúde Reprodutiva para Adolescentes e Jovens*
STEPS	STEPwise approach to surveillance
STI	Sexually Transmitted Infection
SWAp	Sector Wide Approach
SWOT	Strengths, Weaknesses, Opportunities and Threats
TATE	Emergency Screening, Assessment and Treatment / *Triagem, Avaliação e Tratamento de Emergência*
TB	Tuberculosis
TBA	Traditional Birth Attendants
THA	Human African Trypanosomiasis / *Tripanosomiasis Humana Africana*
TMP	Traditional Medicine Practitioner
ToR	Terms of Reference

TT	Tetanus Toxin (Vaccine)
TWG	Technical Working Group (in Charge of Producing the PESS)
UEM	Eduardo Mondlane University / *Universidade Eduardo Mondlane*
UGB	Beneficiary Management Unit / *Unidade de Gestão Beneficiária*
UGEA	Procurement Management Unit / *Unidade Gestora Executora das Aquisições*
UNICEF	United Nations Children´s Fund
USAID	United States Agency for International Development
WHO	World Health Organization
XDR	Extensively Drug-resistant Tuberculosis

Acknowledgements

This Health Sector Strategic Plan (PESS, Plano Estratégico do Sector de Saúde) 2014-2019 is the result of a comprehensive process that involved institutions, individuals and working groups without whose contributions this document could not have been written. The Ministry of Health (MoH, Ministério da Saúde) wishes to express its profound thanks to the Technical Working Group (TWG) that coordinated the process for developing this PESS, under the leadership of the Directorate of Planning and Cooperation (DPC, Direcção de Planificação e Cooperação). We extend our gratitude to all National Directorates, whose technical staff actively participated in the process and provided timely and valuable contributions.

In its leadership role, the DPC relied on the Sector Wide Approach (SWAp) group via the Planning, Investment and Monitoring & Evaluation working group, also known as the PIMA working group. The MoH acknowledges the valuable contribution of this working group, which frequently provided strategic guidance and technical assistance.

The Ministry of Health would also like to thank USAID for making two of its technical staff available to support the process on an almost full-time basis, as well as for financing the PESS costing exercise. Equally, thanks are extended to the WHO representative, Dr Daniel Kertesz, for assistance in the Joint Assessment of National Strategies (JANS) exercise, active participation in the Technical Working Group: Planning, Infrastructure and Monitoring & Evaluation (PIMA Grupo de Trabalho: Planificação, Infra-estrutura, Monitoria e Avaliação), provision of technical assistance for the PESS, for making consultants available for the costing exercise and logistical support provided. We also wish to thank the Swiss Cooperation and DANIDA for their financial support; and JHPIEGO for providing consultants for provincial consultations and reviewing the PESS. Lastly, we thank Deloitte Consulting, LLP which, through the Strengthening Health Systems and Social Action (FORSSAS Fortalecimento dos Sistemas de Saúde e Acção Social) project financed by the United States Agency for International Development (USAID), supplied us with equipment and material for TWG operations and provided direct technical support.

The quality of this PESS stems from the MoH's broad consultation process at different levels. Thanks are therefore extended to a wide range of sectors and levels of the Government of the Republic of Mozambique (GoM), civil society organizations, national and international non-governmental organizations, and once more, to cooperation partners. The MoH also thanks the DPC logistics team for their prompt and effective organization of consultative meetings, for their efforts in building consensus, disseminating information and other responsibilities assumed during the process.

Clearly it is not possible, in just a few words, to provide individual thanks for each contribution received in such a complex process. For this reason, the MoH wishes to thank all of those who directly or indirectly contributed to this ambitious exercise. Our sincere thanks!

REPUBLIC OF MOZAMBIQUE

Introductory Note

The Health Sector Strategic Plan 2014–2019 (PESS, Plano Estratégico do Sector de Saúde) plays an important strategic role in the coordination of health sector policies and programmes in Mozambique.

This Strategic Plan is the result of a comprehensive participatory process that started in 2011, engaging health professionals, partners and other stakeholders in its development through the review of key documents, which formed the basis of the plan, a broad consultative process at central and provincial level, and the involved different interest groups.

The Strategic Plan is based on two strategic pillars: (a) more and better health care services, and a (b) reform and decentralization agenda, used to set the following strategic objectives:

1. Increase access and use of health care services;
2. Improve the quality of services provided;
3. Reduce geographic disparities between social groups in terms of access and use of services;
4. Increase efficiency in the provision of services and resource use;
5. Strengthen sector partnerships on the basis of mutual respect;
6. Increase transparency and accountability in public resource use;
7. Strengthen the Mozambican health system.

These objectives reflect the values and long-term aspirations of the Mozambican people in achieving universal access to health care, especially for vulnerable groups, thus contributing to poverty alleviation and the promotion of national development.

The Health Sector Strategic Plan is divided into 10 chapters, and includes a situational analysis, presentation of the vision, mission and approaches, a description of sector programmes and the reform agenda, costing, and presentation of the monitoring and evaluation approach the sector will use.

It is impossible to personalise the invaluable contributions received during the development of this important guiding document, however, The Minister of Health would like to express his deep gratitude to all who participated in its development, including national and international partners and civil society organisations, among others. To all of you our heartfelt thanks!

Minister of Health

Dr Alexandre Lourenco Jaime Manguele

Executive Summary

The Ministry of Health has developed Health Sector Strategic Plans (PESS) since 2000, to guide the development of the Mozambican Health System, particularly the National Health Service (NHS) and improve the health status of the population. The first sector strategic plan covered the period 2000-2005, the second 2007-2012 and the third 2014-2019, with projections to 2023. The socio-economic and political context in which the current plan was developed was marked by natural disasters, which significantly impacted health services; by increased demand from citizens for quality services, particularly among youth – who represent the majority of an increasingly urbanised population; in addition to an increase in the number of actors in the sector. However, the health system still does not have the capacity to address these additional challenges.

Table 1: Health Status Indicators of Mozambique

INDICATOR	DHS 1997	DHS 2003	MICS 2008	DHS 2011
Life expectancy at birth*	42	50.9	-	53.1**
General Fertility rate (Children)	5.6	5.5	-	5.9
Maternal Mortality rate (100,000 live births)	690	408	-	408
Mortality rate <5 years old (live births)	201	178	138	97
Infant Mortality rate (1,000 live births)	135	124	93	64
New born Mortality rate (1,000 live births)	54	48	-	30
Prevalence of Chronic Malnutrition (%)	35.9	41	-	43

* Source: INE, II RGPH 97, III RGPH 2007, Population Projections 2007-2040; ** Projections for 2013; *** Census 2007.

Despite significant achievements over the last few decades, improvements to the health status of Mozambicans have not been uniform: under-five mortality rates have substantially decreased, especially infant mortality, with rates almost reaching MDG targets. However, slower progress has been registered in relation to neonatal mortality, responsible for 16% of deaths in this age group, and high and stable maternal mortality rate, which is also influenced by high fertility rates. Mozambican life expectancy has improved slightly, but remains affected by an epidemiological profile dominated by malaria, HIV, tuberculosis and Non-communicable Diseases (NCD). Factors such as high poverty levels, chronic malnutrition and high levels of food insecurity, low schooling among women, limited access to potable water and poor environmental sanitation, as well as limited access to quality health services are the major determinants for health and disease burden in Mozambique. These problems mainly affect women, households in rural areas and provinces in the north of the country.

The capacity of the health system to address these enormous challenges remains limited for a number of reasons:

- The health facility network only reaches approximately half of the population and some health facilities lack the conditions to provide quality health care, whether in terms of human resources, equipment, drugs or other inputs;
- The continuum of care is compromised by the poorly functioning referral system, in turn affected by a shortage of referral centres at district level;
- The (formal) participation of communities and the private sector in health service provision remains negligible;
- The sector is systematically under-financed and dependant on external resources – a reduction in external resources and the inefficient allocation and use of scarce resources have exacerbated this situation over the last few years;
- Governance and efforts to increase human resources are being decentralised within the public sector reform agenda;

- Human resources still fail to meet the need for quality health professionals, in addition they are unequally distributed and under performing;
- The logistics systems is unequal to the task of supplying drugs and other medical supplies, resulting in frequent stock outs and compromising the quality of care provided;
- Poor coverage and inadequate equipping of imaging and radiology services and clinical laboratories, as well as of a lack of other medical technology, all contribute to shortcomings in the quality of services provided;
- The architecture of the current health information system (HIS, sistema de information da saúde) and under-development of monitoring and evaluation (M&E) systems across the institution seriously affect the timely production of reliable data and limit the ability for evidence-based decision-making.

T he complexity of internal and external factors results in the need for dynamic and holistic approaches that take into account the multi-faceted and interconnected components of the health system (health services, governance, financing, human resources, medical supplies, technology and information systems), as well as the role of different sector players. In this context, the MoH's mission over the coming years is to:

Lead the production and provision of more and better essential health services, universally accessible, through a decentralized system that favours partnerships to maximize the health and well-being of all Mozambicans, so as to lead a productive life course towards personal and national development.

This mission is based on two pillars at the core of the PESS: the first pillar, called "More and Better Quality Services" basically aims to speed up progress to realise commitments in areas such as maternal and neonatal mortality, malnutrition, reducing the burden of malaria, HIV, TB and Neglected Tropical Diseases (NTD). This is to be achieved through increasing health promotion activities and improving access to quality, key interventions, including quick wins. The second pillar comprises a holistic reform agenda focusing on decentralization that aims to strengthen the health system, sustaining current and future gains and promoting equity in health.

As the health sector expects to produce profound changes, there is a need for an extensive and inclusive participatory process for decision-making. Priorities and decisions on how to implement reforms will be defined in the first years of the PESS, with their implementation beginning in the second half of the plan. It is expected that these pillars will lead to achievement of the PESS strategic goals, namely, improved access and quality of priority health programmes and services, reduction of inequities in the allocation and distribution of resources and increased efficiency in their use, along with successful partnerships. Lastly, it is expected that general progress in sector performance will result from reforms implemented. It is understood that by achieving these objectives the sector will achieve its long-term mission and vision, contributing to universal health coverage and, consequently, to the national development agenda, as illustrated in the diagram below.

PESS 2014-2019 Conceptual Framework

POVERTY REDUCTION AND PROMOTION OF NATIONAL DEVELOPMENT

Vision: Progressively achieve Universal Health Coverage enabling all Mozambicans, especially the most vulnerable groups, to enjoy the best health possible, at an affordable cost (to the country and its citizens), thus contributing to fight against poverty and the promotion of national development

Mission: Lead the production and provision of more and better essential health services, universally accessible, through a decentralized system that favours partnerships to maximize the health and well-being of all Mozambicans, so as to lead a productive life course towards personal and national development.

PRINCIPLES / STRATEGIC GOALS

Objective 1: Increase access and utilization	Objective 2: Improve the quality and humanization	Objective 3: Reduce inequalities	Objective 4: Improve the efficiency	Objective 5: Strengthen partnerships	Objective 6: Increase transparency and accountability	Objective 7: Strengthen the health system

PILLAR 1 MORE & BETTER HEALTH SERVICES	KEY STRATEGIES	PILLAR 2 REFORM AGENDA decentralization
Inadequate health services: Quantity, Quality, Utilization	*Poor support systems:* Inequities Inefficiency and waste Poor quality	*Elevated burden of health determinants:* Poor partnerships: Intersectorial, CSOs, NGOs, private sector, etc.

KEY ISSUES
Poor health state

Successful implementation of the PESS will be ensured within the annual Government planning cycle and through strengthening the planning system, including: equity-based resource allocation instruments; development and effective use of the medium-term fiscal scenario and expenditure framework; definition of annual planning guidelines which integrate existing policies; implementation of the PESS and related costing exercise; and sector coordination meetings at different levels. Specific roles and responsibilities will be defined for key stakeholders with a view to ensuring contributions are aligned and harmonized.

A costing exercise was carried out for the current PESS using the OneHealth Model, which determines associated essential financial needs to achieve health service coverage and system targets. The costing exercise results showed that in order to implement the PESS 2014-2019 over US$7.81 billion is required, distributed as follows: Medical Assistance Programmes require US$2.7 billion (35% of the total value) comprising a significant proportion of the costs due mainly to the HIV/AIDS programme which requires US$1.35 billion (17% of total PESS costs); Public Health Programmes requiring 18% of overall costs; health worker salary costs at US$2.1 billion (27% of the total); Health Systems Strengthening related to infrastructure and equipment at a total of US$887 million (11%). Logistics for drugs and consumables (including waste), together with the costs related to governance systems total US$566 million (7.2%) and US$106 million (1.4%), respectively. Nonetheless, full implementation of the PESS is dependent

on the availability of resources for the sector. Internal and external financing scenarios for the PESS period, based on the Ministry's main planning documents (State Budget and Medium-Term Expenditure Framework, MTEF) and information shared by partners through the External Funds Survey (EFS), indicate a financial deficit of US$1.47 billion for the entire PESS period.

The PESS will be effectively monitored using a system harmonized with existing monitoring processes (Performance Assessment Framework - PAF, Annual Joint Evaluation, and Social and Economic Plan (PES, Plano Económico e Social) reports). This system will generate timely data and information on the progress made in PESS implementation and the results or impact of interventions related to the two core PESS pillars. It encompasses a summary matrix (see table 2 below) for macro-level monitoring and dialogue between the MoH and sector partners in the context of the Annual Joint Evaluation. A more detailed plan for day-to-day sector management will be produced to monitor the achievement of expected results and to inform regular reporting on the plan. A mid-term review is planned for 2016, with a final impact evaluation of the PESS planned for 2019/20. Data quality control tools will be used, as will mechanisms for sharing and using indicators in order to guarantee access to and use of reliable information.

Table 2. Health Sector Indicator Framework and PESS 2014-2019 Targets

		Baseline	Year	Source	Target (2015)	Target (2017)	Target (2019)*
Reduction of maternal and neonatal mortality	Maternal mortality ratio (maternal mortality / 100,000 live births)	408	2011	DHS	250	190	190%
	Neonatal mortality rate (per 1,000 live births)	30	2011	DHS	28	25	23%
	Births assisted by qualified health professionals	54.30%	2011	DHS	68%	70%	75%
	Unmet contraception needs	28.5%	2011	DHS	24%	20%	20%
	Contraception rates	11.3%	2011	DHS	19%	27%	30%
Improvement of child health and nutrition	Coverage of DTP3 (12–23 months)	70.90%	2011	DHS	88%	90%	94%
	Children under five with chronic malnutrition	43%	2011	DHS	30%	25%	17%
	Mortality rate for children under five (per 1,000 live births)	97	2011	DHS	75	65	55
	Infant mortality rate (per 1,000 live births)	64	2011	DHS	58	50	45
	Low birth weight rate	6.8%	2012	HIS	5.6%	4.9%	4.5%
Reduction of major endemic diseases	Proportion of deaths among reported cases of TB BK+, per year (per 100,000)	6.3	2011	PNCT	4	3	3
	Retention on ART following 12 months of treatment	70%	2012	EPTS	80%	80%	80%
	HIV/AIDS prevalence rate among 15-24 year olds (women, men)	11.1% 3.7%	2009	INSIDA	7.1% 2.7%	7.1% 2.7%	7.1% 2.7%
	Cases of malaria per 1,000 inhabitants	135	2012	BES	158 (SISMA)	139	120
Prevention and treatment of chronic diseases	Percentage of men and women with harmful alcohol consumption levels	23.7%	2005	STEPS	21.5%	20	18
	Percentage of men aged 15-64 that smoke	22%	2011	DHS	17%	12%	10%
	Coverage rate of cervical cancer screening in women aged 30-55	1%	2012	NCD	5%	10%	15%

		Baseline	Year	Source	Target (2015)	Target (2017)	Target (2019)*
Strategic Goals							
SG.1 Access / Utilization	No. (and %) of HIV positive pregnant women that received ART in the last 12 months to reduce the risk of mother to child transmission	80,779 (79%)	2012	HIS	87,423 (90%)	90%	90%
	No. of children (and % of those eligible) receiving paediatric ART	25, 891 (22%)	2012	HIS	90,087 (80%)	80%	80%
	Percentage of fully vaccinated children	78.80%	2012	HIS	87.50%	90%	94%
	Out-patient consultations / person (disaggregated by province)	1,21	2012	HIS	1,27	1,39	1,45
	Ratio of health professionals in general medicine, nursing and obstetrics / MCH per 100,000 people	68.2	2012	e-SIP	70	75	77
	Notification rate of all forms of TB (per 100,000 people)	222	2012	PNCT	253	306	TBD
	Percentage of the population at risk potentially reached by ITN distribution	64.20%	2012	PNCM	100%	100%	100%
	Exclusive breastfeeding for infants between 0-5 months	42.80%	2011	DHS	50%	50%	50%
	Institutional birth coverage (disaggregated by province)	63.80%	2012	HIS	68%	70%	75%
	Post-Partum Consultation coverage (and proportion of PPC in the two days following birth)	62%	2012	HIS	80%	90%	90%
	No. of APEs providing services at community level (and % in relation to APEs needed)	1,213 (24.2%)	2012	DEPROS	3,444 (68.8%)	3,944 (78.8%)	3,550 (71%)
	% of new users of modern contraception methods	24.40%	2012	HIS	27%	30%	32%
SG.2 Quality / Humanization	Acute malnutrition recovery rate	62%	2012	HIS	70%	75%	80%
	% of access to treatment for MDR-TB	40%	2011	PNCT	50%	60%	65%
	% of pregnant women receiving malaria prophylaxis as per national protocol among ANC users (first appointment)	36%	2012	HIS	70%	80%	80%
	% of children under five with ARI symptoms receiving antibiotics	12.1%	2011	DHS	25%	40%	40%
	ANC coverage (at least four appointments during the pregnancy)	51%	2011	DHS	70%	80%	80%
	Intrapartum stillbirth rate	0.23%	2012	HIS	0.20%	0.15%	0.15%
SG.3 Equity	No. of HIV positive adults (and % of eligible) receiving ART (disaggregated by sex)	282,687 (54%)	2012	HIS	520,076 (80%)	80%	80%
	Inhabitants / health facility (disaggregated by province/ district)	16,300	2012	HIS	16,060	TBD	TBD
	Beds / 1,000 inhabitants (disaggregated by province/ district)	0.86	2012	HIS	1	>1	>1
SG.4 Effectiveness and efficiency	Individual productivity (service unit / staff member)	5,689	2012	HIS	5,000-6,000	5,000-6,000	5,000-6,000
	DTP1-DTP3 drop out rate (DPT/HEP 3rd dose/DPT/HEP 1st dose)	8.40%	2012	HIS	6%	5%	5%
	Beds / 1,000 inhabitants (disaggregated by province/ district)	0.86	2012	HIS	1	>1	>1

		Baseline	Year	Source	Target (2015)	Target (2017)	Target (2019)*
Strategic Goals							
SG.5 Improved Partnerships	% of HIV positive / TB enrolled in PNCT on ART and TB treatment	54.60%	2012	PNCT	90%	> 90%	95%
	Proportion of external funds on-budget and on-cut	27%	2012	REO / EFS	80%	85%	>90%
	No. (and %) of health facilities with established and functional co-management committees	349 (24%)	2012	DEPROS	471 (30%)	593 (40%)	715 (50%)
SG.6 Transparency and Accountability	Budget execution rate of funds managed by the MoH	87%	2012	PNCT	90%	> 90%	95%
	% of budget needed to purchase contraceptives met by the State Budget	5%	2012	SB	10%	12%	12%
	% of provinces that satisfactorily meet required supply chain management, control and drug dispensation procedures	33%	2012	CMAM	70%	80%	90%

1. Introduction

Health is a fundamental prerequisite for the development of individuals and communities and the country as a whole. The current Health Sector Strategic Plan (PESS, Plano Estratégico do Sector da Saúde) unequivocally demonstrates the ambition to achieve this development as embodied in the established vision, mission and guiding principles.

Since 2000-2010, the Ministry of Health (the MoH, Ministério da Saúde) has been developing five-year strategic plans to guide the planning and implementation of sector activities, contributing to the development and resultant improvements to the health status of the Mozambican people. This third PESS continues with this management practice and aims to gradually ramp up this activity. The current PESS identifies sector problems and priorities across programmes, health services and support systems and now includes issues related to individualized clinical programmes, which were previously omitted. This document introduces discussion around current issues, such as the relation between health and climate change, the (inevitable) increase in urbanization, and the country´s industrialization. The PESS 2014-2019, with projections to 2023, was written during a period when the Government was stepping up its efforts for poverty reduction and public sector reform.

1.1 Objectives

The document aims to provide strategic guidance for the medium and long-term coordination of sector policies and programmes. The document also provides a conceptual framework that will allow the health sector to prepare for planned reforms as well as for decentralization over a five-year period.

1.2 PESS Development Process

Development of the PESS began in 2011 with the Health Sector Review (HSR), which produced a detailed sector performance report on the health of the population, programmatic results and challenges faced by components of the Mozambican health system.

The MoH created a Technical Working Group (TWG) in July 2012 overseen by the Directorate of Planning and Cooperation (DPC) comprising senior DPC staff, the MoH cooperation partners and national and international consultants; these latter, hired on either a full or part-time basis, were tasked with specific activities for the production of this document. The purpose of the TWG was to coordinate the entire process for development of the PESS 2014-2019.

PESS content began with an inventory of all MoH policies and other relevant documents, followed by their review. Based on this, the TWG proposed the vision, mission and guiding principles, as well an approach basing the PESS on two pillars – which was subsequently approved by MoH management. This was followed by a comprehensive consultation process involving nearly all the heads of MoH programmes, departments and other related areas in defining the strategic vision and specific related areas and key reform issues. The first unedited and un-costed draft of the PESS was produced in December 2012.

The costing exercise took place almost simultaneously once use of the OneHealth Model (OHM) had been agreed on (November 2012). Focal points were identified in all National Directorates and MoH subordinate institutions; these were trained and began adaptation of the OHM to the country context. Initial data entry began in December and took approximately five months. The costing exercise, including aligning it with the PESS document, involved holding meetings with MoH programmes and sectors, as well as their leadership, to secure consensus.

A second, fully edited but un-costed draft of the PESS was circulated in February 2013 for consultation with cooperation partners and a national consultation meeting was held with all the Provincial Health Directorates (DPS, Direcções Provinciais de Saúde) and civil society representatives. This draft was also independently assessed through the Joint Assessment of National Strategies (JANS) to measure the document's quality and the comprehensiveness of the process; however the document did not meet quality requirements.

An important data cleaning and validation exercise of the OHM database was carried out between March and June involving key MoH staff. A final step in this phase was the prioritization of interventions and streamlining targets to align with the resource envelope and health system´s response capacity.

A third, partially edited and costed version of the PESS, based on the OHM database and consultations with MoH health programmes and related areas was produced at the end of May 2013. Not only was this version shared with cooperation partners for comments, but it also underwent a broad process of consultation in all provinces, involving provincial government, DPSs and other Government sectors, District Services for Health, Women and Social Action (SDSMAS, Serviços Distritais de Saúde, Mulher e Acção Social), Town Councils, Civil Society Organizations (CSOs), Non-governmental Organizations (NGOs), and central Government entities.

A final draft version was developed based on the contributions provided on this third version; this was then submitted for a second JANS review from 14th-24th July 2013. Resultant recommendations were adopted by the MoH and sector partners, and formed the basis for the final PESS document subsequently approved by the National Coordinating Council and the Minister´s Consultative Council and endorsed by cooperation partners (see table in Annex 1).

Information used to write the PESS were obtained from a range of sources and using a variety of methods. Worth special mention are the HSR, which provided the starting point, the review of guiding / strategic programme documents, interviews with those responsible for health programmes / services, discussions held with MoH partners and the consultations that took place at different levels within the sector and among different interest groups.

1.3 Document Structure

The PESS is composed of ten chapters and a set of annexes that present additional and complementary reference information.

Chapter One presents the main objective and describes the process used to produce the document. Chapter Two describes the context in which the PESS was developed by analysing the country´s health profile, the health status of the population and key health determinants. This is followed by a description of the performance and challenges faced by the health sector across the six core components of the

health system i.e. health care services, governance, financing, Human Resources (HR), logistics and information systems, and Monitoring and Evaluation (M&E). Finally, it summarizes the key health and health systems issues determining short-term sector priorities.

Chapter Three ranks medium and long-term sector expectations. It starts by stating the PESS' guiding vision, mission and principles, it then defines health priorities and strategic goals for the next six years. Chapter Four details the conceptual framework and approach underlying the PESS and details the document's core pillars: Pillar I, "More and Better Health Services" seeks to accelerate progress especially in areas of poor performance; and Pillar II "Health Sector Reform Agenda", which aims to sustain sector achievements.

Chapter Five details how each health programme in Pillar I - and corresponding support areas - contributes to the achievement of PESS strategic goals, mainly by improving access and use, quality of service and equity, maximizing resource use and strengthening partnerships. Chapter Six is devoted to Pillar II; it discusses critical problems / challenges inherent to health sector reform and decentralization. This chapter sets out a roadmap for decision-making in relation to the most important changes that should be made in the country´s health system.

Chapter Seven illustrates how the PESS will be implemented, presents related instruments and outlines key stakeholder responsibilities.

Financial scenarios for PESS implementation are explored in Chapter Eight. This chapter examines intervention costs, sets targets and identifies financial gaps.

Chapter Nine lays out the structure of the M&E plan including the hierarchy of indicators and mechanisms through which results will be reviewed and disseminated.

Chapter 10 explores the principles underlying PESS implementation, potential risks identified and mitigating measures. The document also contains a set of annexes providing additional information and a list of bibliographical references used in the production of the Strategic Plan.

2. Background

" We can only fix or change things that we understand "

Unknown author

This chapter describes the health status in Mozambique in the context of current socio-economic development and political reform. It briefly describes and analyses health status indicators and related underlying factors, and provides a detailed account of heath care services and systems. Lastly, it analyses the effects of political reforms on sector functioning. This chapter also provides a summary of the most important challenges facing the sector in the next six years, with the chapters that follow focusing on the sector´s response to these specific issues.

2.1 Situation Analysis and Context

The production of this Strategic Plan was preceded by a Health Sector Review (HSR); much of the information presented in the PESS comes from the HSR. However, the PESS also includes data and additional information from the latest Demographic Health Survey (DHS, 2011), various MoH policy documents, as well as information obtained through interviews and consultations. It analyses progress achieved in recent years along with persisting challenges, which are used to set priorities and define key interventions to be implemented in the short-term.

2.1.1 Country Profile

Mozambique is located on the southeastern coast of Africa, with a total surface area of 799,380 km2. The country is divided into Provinces, Districts, Administrative Posts and Localities. The country is characterized by two distinctive climates: a humid, tropical climate is predominant in the north of the country and along the country´s coastline, while the interior in the south of the country experiences dry weather. Monsoon rains are common in the north, and cyclonic and anticyclonic flows prevail in the south; between the north and the south, the central region constitutes a transition zone. The dry season is between May and September, and the rainy season between October and April.

Figure 1. Historical Trend of Natural Disasters 1956-2008

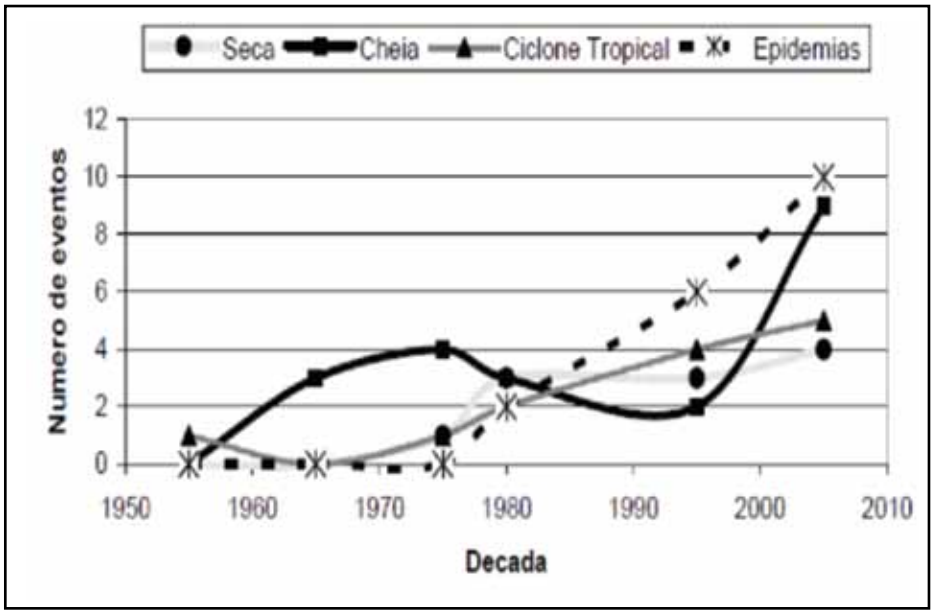
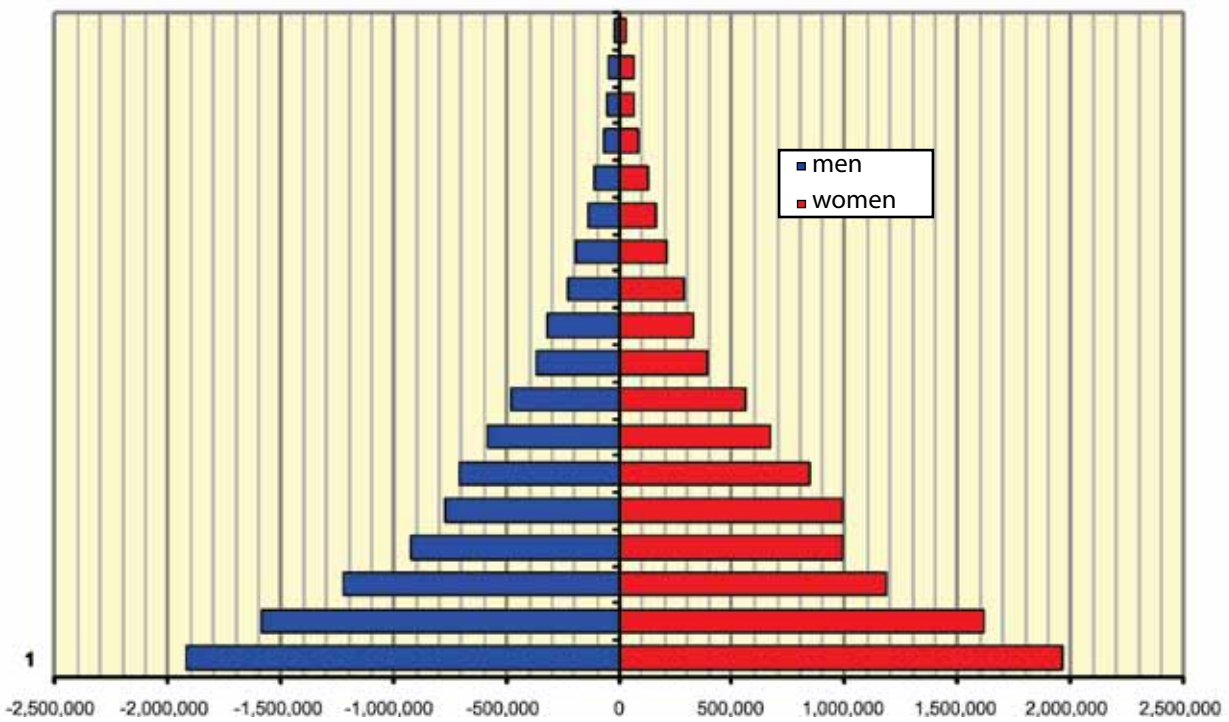


Figure 1. Historical Trend of Natural Disasters 1956-2008

The country´s climatic conditions determine epidemiologic disease patterns associated with malaria or cholera in the rainy season, and diarrheal diseases and meningitis in the dry season, and render the country vulnerable to natural disaster (floods, droughts and cyclones). This further exacerbates the country´s health status and pressure on existing health services due to heightened disease risk, and contributes to the deterioration and destruction of health infrastructure and centres created for displaced populations in affected areas. According to the National Institute for the Management of Natural Disasters (*INGC, Instituto Nacional de Gestão das Calamidades Naturais*)[1], the occurrence of such events has visibly increased in the last 30 years (Figure 1).

In 2013, the population of Mozambique was estimated at 24,366,112. Population projections indicate Mozambique will have 28.6 million people by 2019 (INE database), representing a high average annual growth rate of 2.4%, more a result of a falling mortality rate than falling birth rates.



Population density is estimated at 30 people/km2. Urbanization rates are increasing, from an estimated 21% in 1990 to 40% at present. The predominance of youth in the population results from stable and high fertility rates, women´s low schooling levels and low use of family planning methods (INE).

The 1990 Population Policy highlights the socio-economic implications of the country´s populational structure, recognizes underlying factors such as the tendency for consumption to be higher than production rates, the predominance of high dependency rates and the pressure on key development sectors including education, health, employment and housing. These demographic characteristics increase the pressure on health services located in urban areas and the demand for health services, especially for services to meet the needs of children and youth to generate the human capital necessary for economic development and poverty reduction. It is worth noting that older people constitute approximately 5.6% of the population. Older people commonly suffer hypertension, diabetes, cancer, arthritis, osteoporosis, and others, often aggravated by nutritional deficiencies and insufficient physical activity. However, the country has not developed programmes to protect the health of older people and ensure medical services cater to their needs.

[1] INGC, University Educardo Mondlane (UEM), 2009. Overall Approach Adopted by Mozambique in Relation to Natural Disasters and Climate Change.

In 2011, the per capita Gross Domestic Product (GDP) in Mozambique was at US$ 545.50 following economic growth of over 6% in the last decade. Projections remain encouraging, with an expected average annual growth rate between 7 – 8 % due particularly to large-scale extractive industry projects and public investment in infrastructure[2]. It is expected this growth will result in increased fiscal space (expenditure) for health, as well as increase individual and household income, with resultant improvements in living conditions and health, as well as GDP. In fact, the World Health Organization (WHO) argues health care service improvements resulting from higher levels of investment in health systems can speed up economic growth, and constitute an essential factor for sustainable development. By the same token, health improvements result in the reduction of health expenditure at household and community level, and for the private sector and Governments.

The Government of Mozambique (GoM) started producing and implementing Poverty Reduction Strategies (PARPA I and II, and PARP III) in 2001. In these documents, health stands out as a priority sector for social and human development. According to the Third National Poverty Assessment[3], the incidence of poverty decreased from 69.4% in 1996 to 54.7% in 2003, remaining stable until 2009. Poverty is higher in rural areas, although there are important variations within and between provinces. Likewise, the study reveals inequalities have widened; the Gini index increased to 43.5 points by 2008/9, that is, two points above 2002-03 levels. The study indicates it takes people less than 45 minutes to travel by foot to Health Facilities (HF), representing a significant improvement for rural areas of the country – especially in the northern region - in the period 2002/03 to 2008/09. In contrast, access has decreased in urban areas, possibly because of the dramatic population growth reported in peri-urban areas.

The GoM assumed commitments in the context of the Millennium Development Goals (MDGs). The most recent MDG progress report indicates it is highly likely that by 2015 Mozambique will achieve objectives 3 (gender equality), 4 (mortality for children under five) and 8 (global partnership for development), and that it is possible that objectives 1 (extreme poverty), 2 (universal primary education), 5 (maternal heath), 6 (HIV/AIDS, malaria and other diseases) and 7 (environmental sustainability) will be reached. In addition to these, the GoM assumed a set of "additional" commitments in relation to maternal and neonatal mortality and HIV[4].

The young democracy started in 1990 has been characterized by a presidentialist regime holding regular elections at national, provincial and municipal levels. Since 2001, efforts aiming to strengthen existing systems include the Overall Strategy for Public Sector Reform, with decentralization playing a prominent role. The Local Government Act (LOLE, Lei dos Órgãos Locais do Estado) was approved in 1997, establishing the district as the "main territorial unit for the organization and operation of local administration, as well as for planning Mozambique´s socio-economic and cultural development". Corresponding regulations have been progressively developed, explaining why functions and degrees of autonomy between different levels have not yet been fully defined. This poses a challenge for coordinated, decentralized, participatory planning, the management of policies, resources and public institutions, and more importantly, for meeting the needs of citizens.

2.1.2 Health Status

This section analyses common health status indicators, as shown in Table 1. Mozambique has witnessed uneven progress across health indicators: while life expectancy at birth has increased from 42.3 years in 1997 to 53.1 in 2013 (INE) the rate is still below the African average (55 years). This suggests key basic needs in the areas of nutrition, access to safe water, sanitation and basic health services, etc. have not been met.

Data reveal that little has been achieved in the reduction of maternal mortality and universal access to reproductive health services. Despite improvements reported for the period 1997 – 2003 (DHS, 1997

[2] International Monetary Fund. Republic of Mozambique: Staff Report for the 2011 Article IV Consultation.
[3] Third National Poverty Assessment, October 2010.
[4] MPD, 2010. MDG Report. Mozambique.

and 2003), maternal mortality rates remain unchanged (DHS, 2011) and alarmingly high (408/100.000 live births), potentially compromising the achievement of relevant MDG targets. Exposure to maternal mortality risks is equally high due to a high fertility rate of 5.9 children – higher in fact than reported in previous DHS'; this is partly explained by low uptake of Family Planning (FP) services.

Health indicators for infants highlight the achievement of significant and consistent progress in recent years. Mortality rates for children <5 and infants dropped by over 100% between 1997 and 2011 – however, the reduction in neonatal mortality appears lower, thus requiring special attention in the near future given 81% of deaths occur in the first week of life and 32% of these in the 24 hours following birth.[5]

The prevalence of malnutrition in children <5 continues to be high despite slight gains between 2003 and 2011. Recognizing the direct and indirect effects of malnutrition (further described below), the GOM launched the country´s Multisector Plan for the Reduction of Chronic Malnutrition for the period 2011-2015 (2020).

Health status indicators are largely influenced by disease patterns and health problems. Indeed, Mozambique´s health burden is dominated by communicable diseases, especially HIV/AIDS with a national prevalence rate of 11.5% (1.4 million people infected) and malaria (with 3.2 million cases reported in 2012). Jointly, these represent over half of the deaths in the general population (27% and 29%, respectively). Diarrhoeal diseases, respiratory infections and tuberculosis also contribute to this profile. Mortality in children <5 follows the same pattern, while neonatal deaths representing approximately 16% of deaths in children <5 are caused mainly by premature birth (35%), asphyxia (24%) and neonatal sepsis (17%). In addition, chronic malnutrition is estimated to be the underlying cause of approximately 30% of deaths among children <5. It is common for women of childbearing age to face these problems together with the additional burden resulting from maternal deaths associated to complications in pregnancy and delivery. Data from the National Needs Assessment for Maternal and Neonatal Health (NNA-2007/2008) indicates uterine rupture (29%), obstetric haemorrhage (24%), puerperal sepsis (17%) and complications associated with abortions are the most frequent direct causes of maternal mortality. The most common indirect causes include HIV/AIDS (54%) and malaria (40%). Moderate anaemia is also common in women aged 15 to 49 (14% in 2011).

Repeated disease outbreaks further exacerbate the communicable disease burden. In the last five years, outbreaks have included cholera[6] between 2008 and 2010 (reaching a peak in 2009 with over 19,000 reported cases), measles in 2010 (over 3,500 reported cases) and meningitis, with a frequency and severity that reveals limited sector capacity to respond to these situations. Dysentery and diarrheal diseases continue to have high incidence rates.

Even if Neglected Tropical Diseases (NTD) in Mozambique do not constitute direct causes of death, they lead to disabilities, physical and mental development delays in children, and are correlated to anaemia, malnutrition, and other conditions. This is especially the case with trachoma, intestinal parasites (53%), bilharzia (47%), lymphatic filariasis (13%), river blindness, etc. As such, NTD significantly affect the country´s disease burden, especially among school children, encourage social stigma, limit productivity of people affected by these diseases and further increase the correlation between disease and poverty. Non-Communicable Diseases (NCD) are considered to cause 80% of deaths and 60% of disabilities in developing countries, greatly affecting health service usage and economic resources. These diseases and trauma are beginning to influence the country´s epidemiologic profile, and thereby the disease burden and pressure on health services. Of the NCD, cardiovascular disease is the leading cause of morbidity and mortality, with hypertension as the number one risk factor with a national prevalence rate of 35% (40.6% in urban areas against 29.8% in rural areas), with a clear trend to increase with age. Diabetes is another important cause of disease and premature death and is responsible for increased risk of cardiovascular disease. In 2003, the prevalence of diabetes in Mozambique for people aged 20

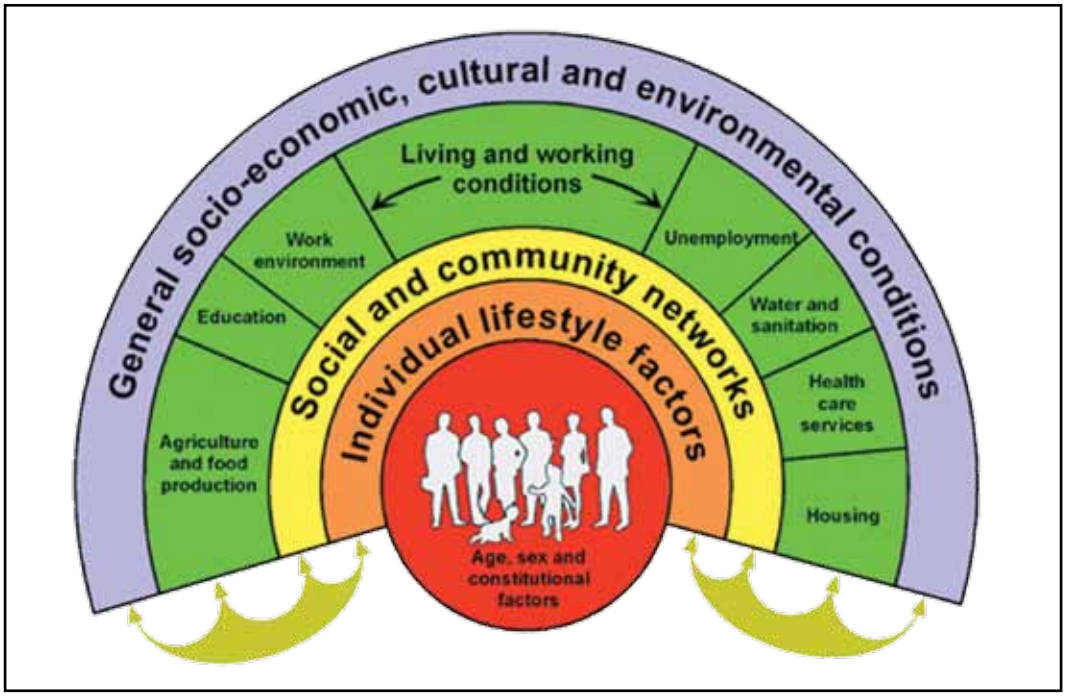
[5] MISAU, 2009. National Infant Mortality Survey.
[6] MISAU. Annual Epidemiological Bulletin 2007 to 2011.

and over was 3.1% with a projected increase to 3.6% by 2005. The number of patient consultations and hospital admissions associated to cancer have also increased, for example, the number of oncology patient consultations in Maputo Central Hospital (HCM, Hospital Central de Maputo) increased by over 50% in the last three years and the bed occupancy rate by over 100%. HCM Pathological Anatomy Service data for the period 1991-2008 and 2009-2010 shows the most common types of cancer among women in Maputo are cervical (31%), breast (10%) and Kaposi´s sarcoma (7%). Men however, are most affected by Kaposi´s sarcoma (16%), prostate cancer (16%) and liver cancer (11%). With regard to trauma, data provided by the HCM Intensive Care Unit indicate that, in 2012, traffic accidents were the third highest cause of death (10%) and complications resulting from traffic injuries the sixth direct cause of death.

Mozambique´s health status and disease burden is not uniform across provinces and districts of the country, or population groups. People living in rural areas, peri-urban areas and the poorest households are the most affected, as well as women and children – who bear the greatest disease burden. The 2011 DHS indicates fertility rates are much higher in rural than in urban areas (4.5 and 6.6, respectively). Likewise, the 2003 DHS indicates mortality in children <5 in poor households was twice as high as in better-off households; child malnutrition is higher in the north of the country and in rural areas.

Several factors designated as social determinants of health influence the country´s disease pattern, and are described in the section that follows.

2.1.3 Health Determinants and Health Inequities



This section describes key health determinants not only to better understand health patterns and health status of Mozambique, but also to better target health interventions across geographic areas and population groups, and strengthen intersectorial collaboration. The analysis is, however, considered incomplete given the limited availability of more specific Health Impact Assessments (HIA)[7].

Health status at individual, community and population level is not only conditioned by genetic, biological processes, but also by social and economic circumstances. Social determinants of health

[7] According to the WHO, Health Imapct Assessments (HIA) consist of a set of procedures, methods and instruments to assess the potential effects of policies, programmes or projects in health and the distribution of these effects on different population groups.

include political, sociocultural, economic, geographic and environmental factors that influence the emergence of disease, together with health service access and use. Yet, their influence is different across regions and population groups, resulting in health inequities among individuals, communities and entire populations.

Political contexts exert significant influence over the health of populations as they create the political and legal environment for the promotion and preservation of human health under equitable terms. The legal framework favours health and equity: the Constitution of Mozambique defines the Republic of Mozambique as a State based on principles of social justice. The support and promotion of human rights are among key State objectives aiming to guarantee the protection of special groups such as children, people living with physical disabilities and older people. The Constitution establishes the principle of gender equality, grants the right to medical and health care and promotes equal access to it.

The 1999 Population Policy recognizes the existence of inequities and inequalities in relation to access to resources, infrastructure and social services, and highlights the principles of respect to human rights, the right to equality between men and women and the need for further investments to meet the needs of a predominantly young population. The Policy also sets out fundamental objectives such as the reduction of maternal mortality rates, and mortality rates for children <5. In the same way, the GoM Five-Year Programme and Poverty Reduction Strategies place health high among their priorities.

Various sector policies and intersectorial strategies (social action, education, agriculture, etc.) draw attention to the role played by health, or attribute responsibilities to the sector. Health sector policies and strategies emphasize the GoM's commitment to the promotion and preservation of human health, and equitable access and distribution of health resources and benefits. Similarly, other policies promote government reforms, particularly decentralization. The National Health Service (NHS) was created with Law No. 25/1991; it is constituted by public institutions, namely, HFs, training and research institutions, laboratories, etc. Complementary legislation frames and guides private for-profit and non-profit operations in the health sector.

Economic factors are closely correlated to health outcomes: low incomes and low employment have a negative impact on health. Despite progressive economic growth, Mozambique remains one of the poorest countries in the world and shows persistent wealth inequalities: around 54% of Mozambicans live under the poverty line, mostly in rural areas (56.9%), and in the Provinces of Zambézia (70%), Maputo, Gaza, Sofala and Inhambane. Several studies, including the 2011 DHS, further indicate health indicators and access to health services is even worse among the poorest households in these areas. For example, mortality in children <5 in rural areas is 1.4 times higher than in urban areas; in Zambézia only 5% of married women use modern contraceptive methods. According to INE (National Statistics Institute, 2011), the Mozambican economy is dominated by agriculture (15%), the manufacturing sector (14%), transport and communications (13%) and trade and services (12%), which could explain the country´s occupational disease pattern and / or health conditions associated to the effects of these economic activities on the environment.

As is widely known, **malnutrition** plays a pivotal role in the emergence or exacerbation of disease and weakening of health; this is especially true for women and children. The negative effects of malnutrition in children´s physical and cognitive development and on individual productivity - and consequently on the economy - is equally well known. The immediate causes of chronic malnutrition are malabsortion of nutrients, high infectious disease rates and premature pregnancies. The main underlying causes are food insecurity (especially limited access to and use of nutritious foods), poverty and inadequate practices in the care of adolescent girls, mothers and children, as well as inadequate access to health and water – especially in rural areas where 45.5% of children (35% in urban areas) are affected, with particular severity in the provinces of Nampula (55.3%) and Cabo Delgado (52.7%). Around 69% of children between 6-59 months suffer anaemia; in rural areas it affects 72% of children (60% in urban areas). Cabo Delgado, Nampula and Zambézia (79%) are the most affected provinces. Approximately 54% of women in childbearing age (15-49 years old) suffer from anaemia - also with higher rates in rural

areas (55%) and in the Province of Zambézia (62%). These population groups and geographic areas bear the greatest burden of infectious disease and mortality rates in the country.

Agriculture can affect health in different ways: it provides the basis for adequate nutrition through basic foodstuff, however, food products can also stimulate the spread of disease when contaminated as a result of environmental factors (for example, irrigation projects). Food can also be a vehicle for the transmission of diseases such as malaria, bilharzia, etc. Most of the population of Mozambique subsists on agriculture in rural and peri-urban areas where the incidence and prevalence of disease and malnutrition is also higher.

According to InfoFlash[8], a regular publication produced by the Technical Secretariat for Food and Nutrition Security, the country suffers cyclical pockets of food and nutrition insecurity, sometimes reaching the point of ´extreme insecurity´. The interior regions of Gaza, Inhambane, Sofala, Manica and Tete are generally the most affected due to limited dietary diversification.

Education, especially women's education, plays a very important role in health and more specifically on children´s health status. Groups with higher education display lower mortality rates for common acute and chronic diseases, regardless of key demographic characteristics and the type of work they do. Illiteracy among women remains extremely high (64%), as shown in the 2007 population census. The prevalence of malnutrition in children of mothers without any schooling is almost twice as high as the rate in children whose mothers have completed secondary school or higher education (DHS, 2011). The same study also indicates 51% of adolescent pregnant girls have never attended school, against the 26% that reach at least secondary education. The same differences are apparent in the use of health services: usage levels are correlated to and increase with education. For example, only 40% of women that never attended school opt for institutional births, against 93% among women with secondary education or higher. Conversely, health problems can undermine investments in education by resulting in child absenteeism at school, increasing school dropout rates among girls to care for sick relatives, among other reasons.

According to WHO, 10% of the global disease burden could be prevented with improvements in access to **safe water, sanitation, hygiene and water resource management.** In fact, diarrheal diseases, malnutrition, malaria and NTD) can often be attributed to the lack of access to safe water, inadequate sanitation, or poor hygiene. According to the 2008 Multiple Indicator Cluster Survey (MICS), only 43% of the population had access to safe water and 19% to adequate levels of sanitation. The situation is clearly worst in rural areas where only 30% of the population had access to safe water and 6% to sanitation (against 70% and 47% in urban areas, respectively). The same study indicates that access to safe water is 6.5 times higher in the highest socio-economic quintile than in the poorest. The difference is much higher in relation to access to sanitation. It is precisely in these poor areas where cholera and other outbreaks occur frequently.

The **quality of housing** and associated basic facilities (water, sanitation and electricity) exert considerable influence on individual and community health as they can be conducive to the transmission of respiratory infections, skin infections and vector-borne disease. The precarious housing conditions of rural and peri-urban Mozambique are well known. According to the 2007 Population Census, around 70% of households build their houses with traditional materials (*palhotas*)[9]; the average size of households is 4.4 people (the rate is higher in urban areas of Maputo and Sofala with 4.9 and 4.8 people per household, respectively). In general terms, 85.4% of houses are divided into 1-2 rooms used for sleeping (rural 90%, urban 75%). This, together with family size and precarious living conditions results in over-crowded houses and easy transmission of diseases such as those referred to above. In addition, only about 10% of houses have electricity; most of them use oil, paraffin or kerosene (54%) and firewood (30%) as the main source of fuel. Only 10% of households have access to piped water inside their house or in their

[8] InfoFlash – Information on Food and Nutrition Security in Mozambique.
[9] Houses built with local material such as reed, grass, straw, etc.

gardens; most people use non-piped water, and most households in this group use unprotected water sources (90%). In relation to sanitation, approximately 53.7% of households do not have a toilet / improved latrine and 30.7% have a traditional latrine. The impact of water and sanitation on health was described above.

Socio-cultural factors also take a toll on health by influencing levels of exposure and health vulnerability, adoption of risky behaviours, the effectiveness of health promotion interventions, and access to, availability and quality of healthcare. Socio-cultural factors can also shape perceptions and attitudes in relation to health. Mozambique has great cultural diversity; beliefs and taboos can nevertheless have a negative effect on health, for example, some religious groups in different parts of the country refuse blood transfusions and immunization; some claim to cure HIV, while others adopt practices that actually favour its spread.

Cultural constructions of **gender** social relations reveal differences between men and women especially in access to resources, power or decision-making, and the distribution of roles and responsibilities. All of these factors influence the health status of the population – especially for women who often have limited decision-making capacity. The influence of gender on health is manifested in different ways: through differentiated exposure, risk and vulnerability; the nature, frequency and seriousness of health issues affecting men and women; the perception of symptoms; health-seeking behaviour; actual access to health services; ability to sustain medical treatment; long-term social and health consequences etc. For example, polygamy in Mozambique increases the risk of HIV transmission; according to INSIDA 2009, HIV prevalence in substantially higher in women (13.1%) than in men (9.2%). The 2003 DHS, however, indicates the mortality rate for children <5 is higher in boys. The Strategy for the Inclusion of Gender in the Health Sector (2009) highlights disregard for women´s sexual and reproductive rights, and women´s limited decision-making power in relation to their bodies and in relation to the use of health services during pregnancy as important factors influencing high maternal morbidity and mortality rates. Data from the 2011 DHS shows chronic malnutrition affects boys more, and points to more severe long-term health consequences among this population group.

Health services also constitute determinants of health. Access to quality preventive and curative health services and health promotion services contribute to reductions in morbidity and mortality and improvements associated to quality of life. Despite the significant improvements reported in the 2008 Household Survey, especially in northern Mozambique, less than half the population can access a health facility in less than 45 minutes. The study also indicates access has decreased in urban areas, possibly as a result of increased urbanization and population growth in peri-urban areas where access to public services is lower and there is greater dependence on hospitals and other urban medical facilities, reducing demand for primary health care facilities.

On the other hand, the 2011 DHS shows that only 54% of deliveries involved health professionals, albeit with important urban-rural variations (80% vs. 44%, respectively), and predominantly in Zambézia Province, where the participation of health professionals in labour and delivery dropped from 32% in 2003 to 26% in 2011. Full-immunization coverage for children between 12-23 months old remains at 64% despite the use of outreach services; coverage is higher in urban areas (75%) than in rural areas (60%); Zambézia also shows the lowest performance for this indicator.

There are a number of other health determinants that have not been touched on in this document as information is insufficient or only beginning to emerge, but which are starting to indicate the worsening of existing diseases or emergence of new ones and which will affect the country´s epidemiological profile and increase pressure on existing health services. Some factors worth highlighting include working conditions with the potential of increasing the risk of accidents and occupational illness; the development of new behaviours and habits negatively affect health; climate change (global warming and natural disasters) affecting communicable and non-communicable diseases; the potential effects of increasing industrialization on occupational health and that of neighbouring communities; increased road traffic and related accidents; air and sound pollution; changes in physical activity patterns, etc. The

development of long-term health and other policies should involve careful analysis of factors such as these, and lay the foundations for strengthening interventions in relevant areas, as required.

2.1.4 Provision of Health Care Services

The provision of health care services in Mozambique involves four types of service provider. The public sector (through the NHS), which has the widest geographic and technical coverage. The private sector, which includes for-profit (present mostly in urban areas) and non-profits, represented by national and international NGOs with strong linkages with the public sector. Community level service providers, who partially meet basic needs in areas not reached by the NHS. And lastly, Traditional Medicine Practitioners (TMPs), whose services are widely accepted by communities, offering non-allopathic medicine that is complementary to western medicine.

While this document provides summary information on other sub-systems, emphasis will be placed on the NHS given its importance and the fact it is managed by the MoH.

2.1.4.1 The National Health Service

2.1.4.1.1 Health Network and Human Resources

The NHS is structured in four levels of service provision: Health Centres and Health Posts comprise the primary level and include most priority health programmes. The secondary level, which comprises district hospitals, general hospitals and rural hospitals, generally serving more than one district and constituting the first level of referral for health services. The primary and secondary levels provide primary health care services. Provincial hospitals (tertiary level) and central and specialized hospitals (quaternary level) offer differentiated care, provided by specialists and represent the next referral level.

Theoretical Coverage of the NHS Primary Health Care Network

Provinces	HFs PER LEVEL OF CARE					THEORETICAL COVERAGE HF
	I	II	III	IV	Total	
Niassa	152	2	1	0	155	16
Cabo Delgado	107	4	1	0	112	16
Nampula	197	9	0	1	207	11
Zambézia	212	7	1	0	220	13
Tete	99	5	1	0	105	18
Manica	74	3	1	0	78	17
Sofala	191	4	0	1	196	11
Inhambane	120	3	1	0	124	13
Gaza	108	4	1	0	113	15
Maputo Province	103	2	0	0	105	8
Maputo City	32	5	0	2	39	2
Mozambique	1395	48	7	4	1454	14

In the last 10 years, the health sector has made impressive progress in improving access to health care – especially primary health care services. In effect, around 200 primary level health facilities and some hospitals were built in this period and a considerable number of Health Posts (320) were upgraded to the category of Health Centres, and now offer maternity services. A number of interventions have been implemented as well in level II to IV health facilities, with a view to improving referrals. However, NHS coverage is still limited, with each primary level HF having a theoretical catchment area of 14km (see

Table 3), with variations between 18km in Tete province to 2km in Maputo City. In fact, Maputo City has the worst ratio of inhabitants per HF – twice as high as the national average, confirming the worsening of urban access mentioned earlier. On the other hand, HFs are generally located in the main towns and villages, around a district level referral centre, i.e., a hospital (district or rural) or a type I HC usually located in district capitals. Transfers should occur from district referral facilities. Yet, the referral system does not function well and has no influence on the level at which users access services. As a result, larger facilities are generally overcrowded and inefficiencies are visible at all levels.

NHS health services are not structured around an integrated package of services, but rather, around health programmes generally developed on the basis of international strategies.

The vertical nature of health care programmes results in service provision often being lower than stipulated, and characterized by unequal expansion patterns that further enhance inefficiencies in the system.

For example, while 98% of HFs at primary level offer Integrated Management Services for Childhood Illnesses (IMCI) and over 90% offer at least three FP methods, the availability of basic emergency obstetric care is limited to 2.2 points of care per 500,000 inhabitants[10].

In addition to actual availability of services, limited access to HFs is aggravated by the inability to meet minimum staffing levels in these HFs and the poor quality of health infrastructure. Despite the fact the NHS network has approximately 34,500 staff, has defined the composition of standard teams for each type of HC, and has made significant effort in accelerating training and allocating staff to the most disadvantaged provinces, the allocation of health teams is uneven, particularly in remote areas and in the north of the country where the availability of HR is lower than the national average. The poor physical condition of infrastructure, with only half of peripheral HFs having power systems and 60% having water supply, further affect the quality of services offered.

2.1.4.1.2 Coverage of Key Health Programmes

This section looks at trends in key health programmes in Mozambique that, to some degree, reflect progress in the country´s health status, as described above.

In general terms, the expansion of health services and implementation of health interventions have seen important developments over time. However, the HSR points to a set of constraints spread across health programmes and services, namely:

- Inequitable availability of qualified HR is likely to be the challenge that most critically affects implementation of programmes and considerably influences quality of care.
- Obviously, constrained access to HFs, even at the lowest levels, results in programme coverage being lower than intended. Even where HFs do exist, insufficient equipment limits service provision and can negatively affect demand for services.
- The timely distribution of medication is vital to guarantee the provision of health care services.
- Increased *community involvement* is required for the expansion of programmes with the greatest potential of improving health, such as, adherence to treatment or the distribution of FP methods.
- Despite being a key factor for quality improvement, adherence to existing norms and protocols appears inadequate, and some programmes or services lack protocols.

Interventions in Sexual and Reproductive Health (SRH) show varying progress. Moreover, early sexual activity (average age 16 years), high adolescent fertility rates (167 births per 1,000 women aged 15-19 in 2001) – with significant disparity between urban and rural areas (141 vs. 183), high rates of early marriage (17.7% of girls married before reaching the age of 15), and the high prevalence of HIV among

[10] MISAU. PES Reports 2011, 2012.

adolescents and youth (DHS, 2011; INSIDA, 2009) indicate coverage and impact of programmes still fall short in performance. Contraceptive usage rates among married or co-habiting women decreased from 12% in 2003 to 11% in 2011 (DHS, 2011). Rates are even lower among women aged 15-19 (5.9%). Routine data from the NHS reveals increased health service capacity to attract new clients (from 13.9% in 2009 to 23% in 2011). However, according to the 2011 DHS, unmet FP needs remain high (22.3%). In relation to the maternal health component, the HSR indicates Anti-Natal Care (ANC) coverage remains stable at the 90%+ level reached in 2008.

However, only 67% of women receiving ANC services in 2008 had their blood pressure measured and only 40% provided a urine sample (INE; UNICEF, 2009). Institutional births increased from 44% in 1997 to 54% in 2011 (DHS). The worrying prevalence of obstetric fistula is estimated at 2-5 per 1,000 births. The high proportion of intrapartum stillbirths, which was 11.2% in 2011 (DHS) indicates shortfalls in the quality of services offered during childbirth.

There is a need to increase the number of maternity wards that offer Basic and Full Emergency Obstetric Care Packages (BEmOC / CEmOC), as only 38% and 80% (respectively) of targets in these areas were met (NNA-2007/2008). In addition, maternity wards need to be equipped with full birthing kits, as only 37% of wards included in the assessment had them (2010 MDG Report). According to the 2011 PES Report, coverage for first Post-partum Consultation (PPC) was 66.7% in 2010, but data from the 2003 DHS showed that only 25% of PPC actually took place in the week following birth – the period of greatest risk for post-delivery and neonatal complications. Inequalities, both geographic and among population groups, with the northern provinces, rural areas and poor households being the most disadvantaged, are pronounced in these health programmes.

In contrast to what is happening in maternal health, most child-focused health programmes have made significant progress, which substantiate progress observed on the health indicators for children: in 2011, over 90% of HFs had staff trained in IMCI. However, data from the 2011 DHS indicate demand for these services at community level and HF management of childhood illnesses, are not satisfactory. As in 2003, approximately 64% of children between 12 and 23 months old received the basic immunization package in 2011, but immunization for children in the first 12 months of life dropped from 53% to 46% over the same period. It is expected that the introduction of new vaccines such as PCV and rotavirus will increase the impact of the Expanded Immunization Programme (EPI).

With regard to **Nutrition**, exclusive breastfeeding in children up to 6 months old increased from 30% in 2003 to 43% in 2011 (DHS). Vitamin A supplement coverage also increased from 50% in 2003 to 75% in 2011. Despite the NHS having integrated nutrition interventions, especially within primary health care, there remains a need for HR qualified in this area. This hampers the promotion of good practices and counselling activities on healthy eating and nutrition, and the expansion of these services to community level. Treatment for acute malnutrition at HF level remains unsatisfactory, as shown by high dropout rates and in-hospital mortality levels from severe acute malnutrition, associated with the limited availability of inputs for its treatment. Added to these interventions, the health sector has been implementing other initiatives aimed at improving nutrition. These include "child-friendly services", iron salt supplements, iodine and deworming. Micro-nutrients are administered to children, pregnant women and adolescents. In addition, sentinel sites have been established to monitor chronic malnutrition and there are nutritional rehabilitation centres at HF level. Efforts also include the promotion of a basic nutritional package and the development of protocols to manage severe malnutrition. However, as mentioned above, nutritional indicators show slow progress over the last few years, pointing to the need to strengthen on-going multisectoral strategies, or the need to assess their impact.

Activities seeking to control the **HIV/AIDS** epidemic have considerably expanded in recent years despite visible inequities between and within provinces, and northern provinces continuing to be worst off. In fact, Mozambicans are continuously exposed to media-based prevention campaigns; Health Counselling and Testing (HCT) is offered in every HF in the country and at community level. Following the shift towards decentralization of Antiretroviral Treatment (ART) services in 2007, around 22.5% of

HFs (316) countrywide offered ART services to adults and children in 2012 - up from 12 HFs in 2003. Coverage of services for the Prevention of Mother to Child Transmission (PMTCT) has increased from 8 HFs with ANC services to 99% coverage of the existing 1,109 HFs.

As a result, almost 3 million people received counselling and testing services in HCT units in 2011, and almost 900,000 pregnant women received these services in 2012. ART services were offered to 300,000 people in 2012 (compared to 1,600 people in 2003). Moreover, according to the HSR, over ⅔of HIV+ pregnant women received ART for PMTCT in 2011; it also highlights coverage is considerably higher in the south compared to other regions. However, HIV incidence rates show no signs of decreasing in the near future; ART coverage remained at 52% in 2012 for adults and 22% for children, and retention of women after pregnancy and delivery remains challenging[11]. On the other hand, the Annual Joint Assessment (ACA, *Avaliação Conjunta Anual*) XI indicates the ART dropout rate was 19% in 2011, with inter- province variations (for example Cabo Delgado 29% and Maputo Province 11%). In this context, reducing the risk of infection, improving equity in access to and retention on ART – especially among pregnant women and children – constitute the most pressing challenges for the programme.

TB-HIV co-infection has increased in the number of **tuberculosis** cases, along with a yearly increase in the number of cases reported. The percentage of TB patients who are also HIV+ increased from 47% in 2007 to 63% in 2011. Directly observed treatment (DOT) is implemented across the NHS and at community level together with TB BK+ screening, with rates (50% in 2012) varying across provinces: Maputo City at 103% and Sofala at 91%, contrasting sharply with detection rates in Niassa of 21% and Tete Province of 30%, as documented in the National Tuberculosis Control Programme (PNCT) 2012 Annual Report. The cure rate is 88.6%, with Zambézia leading (90%), while Gaza, Inhambane, Manica Provinces and Maputo City demonstrate the lowest performance (80-81%). The increase of Multi-drug Resistant TB (MDR-TB) constitutes an additional challenge as it reduces cure rates to 40% according to the TB resistance programme. Over 1,500 people are affected by MDR-TB in Mozambique.

Malaria control interventions (improvements to vector control and case management) have reduced the number of cases reported. Despite this, malaria continues to be the leading cause of death in Mozambique. Mosquito net distribution campaigns, first targeting pregnant women and children <5 and then through universal coverage, have been implemented countrywide, but mosquito net usage remains low. According to the 2011 DHS, only 35% of children <5 and 34% of pregnant women slept under an Insecticide Treated Net (ITN) the previous night. Indoor Residual Spraying (IRS) also falls short of desired levels in IRS-targeted areas (80%). Coverage of Intermittent Preventive Treatment (IPT) for pregnant women appears to fluctuate, showing a decrease between 2008 and 2011, as reflected in surveys and routine data, and is not above 19% (DHS, 2011). Interventions around fever management worsened; children receiving artemisine-based combined therapy dropped from 26% in 2008 to 15% in 2011 (MICS, 2008; DHS, 2011).

In 2009, the MoH adopted a new strategy for the control of **NTD** following WHO guidance that includes mass drug administration, morbidity control, environmental sanitation, and the implementation of health education campaigns. Prevalence rates for most NTD in rural areas are over 40%. A number of mass treatment campaigns have been implemented since then, in selected locations, with the expectation some will be eradicated e.g. onchocerciasis. The fight against leprosy has made encouraging progress; eradication activities are being implemented across the country, these include campaigns and mini-campaigns, commemoration of World Leprosy Day and increasing drug distribution points. These activities have been possible thanks to the involvement of community volunteers, especially in the five provinces where leprosy is endemic, i.e. Cabo Delgado, Nampula, Niassa, Zambézia and Manica. In fact, leprosy detection rates in Mozambique have substantially decreased since 2006, and the disease is almost at the point of no longer constituting a public health problem for the country.

In 2002, the increasing burden of **NCD** in the country´s epidemiological profile led to the creation of an

[11] Draft of the HIV Acceleration Plan for Mozambique.

office, which was subsequently turned into a department dedicated to the control of NCD. The National Strategic Plan for the Prevention and Control of NCD for the period 2008-2014 was launched in 2007/8; it seeks to minimize and even eliminate the exposure to risk factors as obesity and smoking, and to guarantee access to relevant health services. Progress achieved includes the integration of cervical cancer in the SRH programme and the provision of associated medication free of charge. The MoH launched the Cervical and Breast Cancer Prevention Programme in 2009, having already established basic cervical cancer screening services in 75 HFs across the country. In 2012, around 36,700 women benefitted from these services, with 5.9% testing positive for pre-carcinogenic cervical lesions.

2.1.4.1.3 Quality and Efficiency of Health Programmes and Services

In addition to the challenges associated to access and equity mentioned above, the HSR report highlights poor quality of service and related inefficiencies across most health programmes. For example: recommended norms are met in less than half of ANC services (blood pressure measurement, urine analysis, etc.); few children with malaria, acute respiratory infections or diarrhoea receive appropriate treatment; only 65% of maternity wards assessed had an operational Ambu to resuscitate new-borns; a significant proportion of sector resources (37%) are spent on "Management and Administration of Public Health Programmes" and " Overall Health Management"; the inefficiencies and high costs of the logistics systems are driven by the use of emergency approaches, etc.

The causes behind these constraints, which also limit service uptake and resource availability will be analysed below in the chapter dedicated to ´support systems`. However, it could generally be said these challenges result from the absence or non-observance of protocols and quality control standards; poor planning and supervision of health service provision in the context of decentralization and the lack of response to real health problems; chronic sector under-financing and poor management of the limited resources available; lack of HR to respond to needs; irregular availability of medical products and ineffective oversight of services provided.

2.1.4.2 Private Sector

The scale and scope of private sector participation in health service provision varies across sub-categories: the presence of for-profit service providers is mostly limited to urban areas. In Maputo City in particular, over half provide pharmaceutical services mostly benefiting people working in large companies, diplomatic missions and those with medical insurance policies. It is assumed the HR used by this sector also work in the public sector. Very little data is available on use of services or the resources used due to the poor control of this sector and a lack of clarity regarding its regulation. Thus, there is a need for deeper analysis of its complementary role in improving equitable access to healthcare.

Non-profit private sector service providers are represented by national and international NGOs some linked to faith-based organizations present at community level. Even though some of these organizations are charities, promoting community participation and empowerment, most of those operating in the health sector focus on service provision and work in close coordination with the public sector, working in one or a number of programmes, mostly HIV/AIDS and Maternal and Child Health (MCH) and thus complement the NHS. Factors such as dependence on external funding, unequal distribution throughout the country, concentration on a restricted set of programmes – generally excluding the strengthening of national institutions – threatens the sustainability of their programmes and hinders the implementation of policies that seek to reduce inequities. Difficulties associated with overseeing the activities implemented by these organizations heighten the need for more effective partnership mechanisms with these players, particularly through cooperation instruments and M&E mechanisms, etc.

2.1.4.3 Community Health

Several community health programmes are being implemented in Mozambique, either with the

support of the GOM or national / international NGOs. In addition to NHS outreach services and health campaigns implemented with the support of sector partners, basic services are provided by Community Health Agents (ACSs, *Agentes Comunitários de Saúde*) and Community Health Workers (APEs), Traditional Birth Attendants (TBAs) and other ACS. The APE programme is being revitalised by the MoH, including a revision of the APE profile and the provision of intensive training; it is expected this will result in a 20% increase in NHS health service coverage. By the end of 2012, around 1,213 APEs had been trained across the country. Given that a considerable number of births take place at community level, with the enormous resultant risks, the MoH decided to redirect the TBA profile to that of community level promoters of maternal and neonatal health and institutional delivery, providing hygienic births and essential care to new-borns in emergency situations only. Other community health workers basically focus on HIV/AIDS (for example, providing home-based care), assuming the role of lay counsellors, activists, members of associations or of groups including Community ART and Retention Groups, Mothers-to-Mothers Groups and others. However, these groups are not uniformly present at community level. Equity in coverage, quality and sustainability, including the integration of these cadres into the State system constitute primary challenges for community health programmes.

2.1.4.4 Traditional and Alternative Medicine

Most Mozambicans first turn to TMPs when seeking healthcare due to a combination of cultural and access-related factors. The coverage of TMPs in Mozambique offering primary health care services at community level is approximately 70%, with a ratio of one TMP per 200 community members. Given current formal health care coverage rates, the formal integration of TMPs in the NHS and the establishment of effective mechanisms for collaboration on Primary Health Care (PHC) becomes extremely important. The value of medicinal plants and successful health care services provided by TMPs has been widely recognized. Some traditional treatments do however result in poisoning, and certain practices are not safe for patients. In this context, the MoH created the Traditional Medicine Institute (IMT, *Instituto de Medicina Tradicional*), in charge of promoting knowledge and use of traditional and alternative medicine, improving TMP practices, promoting primary health care using this type of medicine, and legislating and guiding TMP practice in the country. Much has already been achieved since its creation in 2010 in relation to the integration of TMPs and alternative medicine in PHC services, as well as in guiding the practice of traditional medicine in Mozambique. Data available from activities implemented indicates that around 4,743 TMPs have referred 60,972 patients to HFs and distributed 173,352 condoms and around 1,969 TMPs are members of Health and Humanization Committees. Some TMPs are also Community DOT Volunteers and offer home care. This sector is marked by the lack of legislation to regulate the practice of traditional medicine; very limited research has been conducted on medicinal plants and social and anthropological aspects; health professionals are reluctant to collaborate with TMPs, and few TMPs are organized in associations. TMPs are being trained to improve the approaches used to address health issues at community level. Moreover, a referral system for patients treated by TMPs and subsequently referred to HFs is currently being assessed. Given the high number of TMPs in the country, efforts will continue to progressively train more TMPs in the area of PHC. The most important challenges faced by the IMT in the coming five years include the construction of its premises and corresponding research laboratories.

2.1.5 Support Systems

The provision of health care services relies on various support systems providing inputs (human resources, infrastructure, drugs) and instruments (information, management methods, norms and protocols) to HFs, and the management structures behind them. This section explores health financing, HR, pharmacy, logistics and technology, information and M&E, and health sector governance, based on the HSR. Chapter 5.2 provides analyses these components, with the objective of informing short and medium-term interventions. Chapter 6 focuses on long-term reforms.

2.1.5.1 Financing and Financial Management

Financing levels and whether rational use is made of resources available directly influence NHS quantity and quality of service. In Mozambique, total health expenditure has systematically increased over time, representing in 2009 around 6.2% of the GDP, that is, approximately 1,000 Meticais (27 US$) per capita. These funding levels are still however well below regional averages and far from WHO and World Bank recommended financing levels for basic health care packages.

The State Budget (SB) is made up of ordinary State income, direct funds and budget support, and PROSAUDE (a fund for health sector budget support linked to the Sector Wide Approach, SWAp), used in the same way as the SB. Overall Government expenditure in the health sector has decreased in relative terms from almost 14% in 2006 to about 7% in 2011 (REO, 2006 and 2011). This drop is partly attributable to changes in the criteria for the inclusion of external funds as contributions to the SB. However, health remains a priority sector for the GoM.

The second most important source of financing is vertical funds targeting specific diseases. Of these, United States Government funding, and the Global Fund to Fight HIV, TB and Malaria represent over half the total financial resources available to the sector; these funds are frequently channelled through NGOs or through in kind donations (EFS, 2012). Lastly, the third source of financing is private expenditure, which represents about 13% of total expenses and relates to payments made to private service providers, pharmacies and co-payment for services at HF level within the NHS. This source also includes Medical and Medicine Assistance, which deducts 1.5% from civil servants' base salary to be used in NHS health facilities. Despite significant growth in recent years financing through insurers has not yet been explored.

On-going decentralization has meant resource allocation has moved from sectorial to geographic focus. State Budget resources are attributed to the different Beneficiary Management Units (UGB, *Unidades de Gestão Beneficiárias*) through the Ministry of Finance (MF). These include Provincial Governments, DPS, hospitals (central, provincial and general) and District Secretariats. Town Councils do not yet receive funds to finance services. In line with established hierarchies resource allocation to district and rural hospitals and to SDSMASs is the responsibility of District Secretariats; budgetary limits for District Secretariats are determined by the relevant Provincial Government. In general terms, the allocation of resources from the SB is incremental. Districts still execute only a small portion (11% in 2011) of the SB allocated to the sector. The allocation of PROSAUDE funds to provinces and districts follows objective criteria based on formulae that take into account the differentiated needs between the two levels. Resources are concentrated at three levels: i) National level, where drugs and equipment are purchased and public sector investment is financed; ii) Provincial level, for operational investments and expenses; and iii) District level, which assumes a portion of operational expenses for the primary and secondary network of HFs (district and rural hospitals). Despite constituting a tool for implementing health policies, the lack of separation between financers and service providers limits the use of the fund channelling mechanism (purchase of services).

The PES / SB are developed simultaneously at all levels, which makes integration difficult and challenges coherence. At the same time, efforts have been made to institutionalize programme-based budgeting, but classifications do not yet exist for all health services, thus, in practice, budgeting is still based on the inputs required for the implementation of planned activities. The District Secretariat manages budget execution at district level for SDSMASs and district and rural hospital expenses. The DPS manages PROSAUDE at provincial level by implementing decisions made by SDSMASs and hospitals. Decentralization has reduced DPS and central level capacity to monitor budget allocations and execution as information is now aggregated at district level, and not by district services.

2.1.5.2 Human Resources

The availability of qualified human resources has increased in recent years, more than doubling between

2000 and 2010 (from 15,920 to 34,507). This is credited to the implementation of the Accelerated Training Plan 2006-09 (PAF I, Plano Acelerado de Formação) and the current National Training Plan 2011-2015 and includes construction of new training institutions, increasing the number of classrooms. As a result, training capacity increased by a third between 2004 and 2010. New courses have also been created addressing critical support areas (financial management, HR, logistics, etc.) and are administered after normal working hours. This approach has been used with 59 courses. The PAF II 2013-15 will result in the production of around 1,475 new basic and medium-level professionals (85%), thus addressing training priorities for mid-level cadres. Over 2,000 health professional join the NHS every year, yet this is still below target and far from meeting staffing needs: Mozambique has 63 health professionals in key areas such as general medicine, nursing and MCH per 100,000 people – well below the 230 per 100,000 people recommended by WHO. Current training trends will not produce the amount of health professionals needed to meet minimal requirements in coming decades, even with the gradual increase of public and private institutions that train higher-level health professionals, from which there are less than 200 graduates per year. The availability of staff in key areas, such as nutrition and preventive medicine, to respond to health problems is also critical, in addition to support roles (financial management, HR, logistics, etc.), which also face significant staff shortages.

The health sector also faces difficulties in integrating graduates. Between 1,000 – 1,500 people join the sector each year but over 2,000 graduate from training institutions. Thus, every year, more and more professionals are added to the ranks working outside of the system (estimated at approximately 6,000 at present, equivalent to 18% of the total workforce), financed with external funding. Placement of graduates aims to prioritize areas with the greatest needs, such as the north of the country, which has a health professional / inhabitant ratio well below the national average. For example, the number of health professionals in Zambézia Province increased from 1,019 to 2,491 between 2000 and 2010 (a 144% increase).

Loss of health sector personnel to other countries has never been a real problem in Mozambique. Staff attrition (which represented 2.5% in 2010) results from retirement and voluntary requests to leave the NHS. Decentralization has brought changes in staff management. Technical health staff are distributed from the national level on the basis of standard team composition per type of HC and placed by the DPS after confirmation of their inclusion in the budget. Districts have the autonomy to announce openings for general careers, although staffing requirements are calculated by SDSMASs and DPSs based on expected staff losses and the construction of new HFs (based on standard team size).

The increase in the number of courses goes hand-in-hand with an increase in the number of teaching staff, both in terms of number and level of training, as well as with curriculum reviews. A training quality assessment system was introduced in 2008, including quality standards with assessment indicators in four areas: teaching in classrooms and anatomy laboratories, clinical internships, infrastructure and teaching material, and management of training institutions. Internal assessments are carried out every six months and an external assessment once a year. A national examination system for each training area was also introduced in 2012, aimed at "levelling" training quality within the country. Despite significant improvements, the quality of training is still of great concern, as illustrated by the results of a quality assessment exercise which rated implementation of quality standards in training institutions at 70-80%. The number of universities training medical doctors is on the increase; it is expected that by 2014 Mozambique will be able to produce around 2,000 graduates per year.

Continuing Education (CE) is fragmented and scattered mainly due to the number of vertical programmes and cooperation initiatives and the fact course content is not aligned with activities on the ground or the training levels of participants. Furthermore, teaching follows traditional approaches focusing on course content instead of skills development. There is no system to monitor training quality and the corresponding effect on staff performance and professional development. A CE strategy to address these challenges is currently under development.

2.1.5.3 Medical Supplies, Equipment and Technology

NHS logistics for drugs, vaccines and equipment is managed at central level through two institutions in different MoH Directorates: The Central Medicine Stores (CMAM, *Central de Medicamentos e Artigos Médicos*), in charge of drug logistics, rapid tests and laboratory reagents, and the Supply Centre (SC) responsible for managing supply chains for consumables, medical and surgical equipment, hospital furniture and vehicles. CMAM is responsible for planning, procurement, importing, storage and distribution whilst the SC's mandate begins with warehousing.

Drug regulation and registration is the responsibility of the Pharmacy Department (DF, *Departamento de Farmácia*). This area is affected by the following issues: absence of an approved Pharmacy Policy, delays in the National Drugs Formulary (NDF) scheduled for 2012, and inadequate drug quality control associated with the limited capacity of the National Laboratory for Drug Quality Contol (LNCQM, *Laboratório Nacional de Controlo de Qualidade dos Medicamentos*); as a result, generally controls are limited to suspect drugs only.

The selection and quantification of required drugs is undertaken by CMAM and health programmes on the basis of the NDF and previous consumption levels at intermediary distribution centres – not HFs – except for kits containing basic drugs (based on the number of consultations and an arbitrary annual increase of 10%); malaria, HIV/AIDS and TB programmes use epidemiological approaches.

Procurement is done by CMAM through national tenders, which increase costs by an estimated 30%. The system for monitoring orders and the quality of corresponding tender processes is weak. Delays in procurement processes lead to last-minute emergency purchases, increasing operational costs and at times the cost of medicines. To some extent this is due to the inappropriateness of the application of legislation regulating procurement of goods and services for the State for drug procurement systems.

CMAM is responsible for drug distribution from central (Maputo and Beira) to provincial level. Provincial distribution centres channel drugs to districts on a monthly basis. According to the PAF, average drug availability is over 90% although stock-outs for basic products are sometimes informally reported by HFs. One of the reasons for this is the exponential increase in needs resulting from the expansion of ART and other programmes, including malaria, TB, specialized clinical services, etc. No updated information is available on rational use of drugs.

The pharmaceutical area is financed via multiple streams, but is strongly dependent on external funding - including in-kind donations. According to the monitoring report on CMAM´s annual operational plan, the budget execution rate for drugs in 2012 was 99.9%. The standardization of drug prices for the public established some years ago (at a flat rate of 5 Meticais per prescription) reduced cost-recovery capacity, monies that were previously used as reserve funds for contingencies.

Surgical products and other supplies and equipment (furniture, vehicles, medical and general equipment, forms and printed materials) are procured through national and international tenders launched by four different agencies, namely the Procurement Management Unit (UGEA, *Unidade Gestora Executora das Adquisições*), CMAM, the DPC Infrastructure Department, and cooperation partners. The quantification of surgical supplies and equipment needs, and the production of associated plans, are done by the Logistics and Maintenance Department. The SC is only responsible for customs clearance, storage and distribution from central to provincial level; this has been possible through capacity improvement and the simplification of procedures.

The involvement of numerous agencies in these procurement processes, the lack of clarity on the position and responsibilities of the different stakeholders involved in the supply chain, and poor coordination among them cause substantial inefficiencies in an area crucial to effective health service performance.

The introduction and use of new medical technologies in the sector, such as *eHealth*, etc. is fragmented and still in the initial stages. The lack of clear policies limits sector capacity to take full advantage of recent technological developments.

2.1.5.4 Information System, Monitoring & Evaluation

The information system has several components: The integrated Health Information System (HIS) for M&E or *Módulo Básico*, aggregates and reports routine data through monthly forms completed by health facilities, which are transferred monthly to the district level SDSMAS, from there to the provincial DPS and then to the MoH. Specific programmes have developed their own parallel information systems in response to specific needs and have not been integrated in the HIS. The weekly epidemiological bulletin (BES, *Boletím Epidemiológico Semanal*) documents, aggregates and reports data on those diseases subject to compulsory notification. Disease specific programmes, such as HIV/AIDS or nutrition, have sentinel surveillance systems targeting selected sites. Demographic surveillance systems were recently introduced in three districts; a Mortality Surveillance System (SIS-ROH, *Sistema de Informação em Saúde – Registro dos Óbitos Hospitalares*) is also in use in two hospitals. Finally, population-based surveys conducted by INE constitute an important source of information for the sector.

Information and Communication Technology (ICT) are used by many DPSs, SDSMASs and hospitals when Internet connectivity is available; access to Internet is limited in some parts of the country. The MoH web site is currently under review and the HIS structure reconfigured.

According to the ACA, data quality, defined as the level of coherence between data reported and data available at HF level, is improving. However, there is still a need for M&E mechanisms to systematically monitor the data produced.

2.1.5.5 Health Sector Governance Structure

There is increasing evidence that health sector governance plays an important role (positive or negative) in health system performance. Indeed, effective responses to population needs require complex combinations of medical, scientific, political and organizational requisites and skills. Of the different aspects related to governance, this section briefly describes formal governance structures within the health sector (for more detailed analysis please refer to Chapter 5.2).

Health sector governance has traditionally concentrated at three levels: central level, provinces and districts, each with specific and direct responsibilities across the four levels of the health care system. It is common for organizational structures at lower level to mirror those at central level. However, the public sector decentralization policy underway is changing governance structures from a sector to a territorial focus. Moreover, this shift generates changes in institutional structures and the way they relate to each other - the health sector is no exception to this.

The MoH is responsible for developing sector policies and strategies; coordinating and developing plans; mobilizing and allocating funds; monitoring the implementing plans and the health status of the population; overseeing and auditing services, and coordinating with national and international partners. The DPS is part of the Provincial Government and as such it reports to the Provincial Governor. The DPS is responsible for coordinating the development and implementation of provincial sector plans, monitoring progress and achievements, distributing resources and providing logistical and technical support to district services. SDSMASs are an integral part of District Administrations and thus report to District Administrators. District services manage health sector resources and health services. Town Councils also assume health sector duties, including the "management of regular HF operations at primary level" and they "participate, propose and give their opinion on targets established for each health sector programme". Given that Town Councils can raise funds through the income generated at that level, and have a direct relationship with central Government authorities (rather than reporting to Provincial Government), this is likely to constitute the first experience of effective devolution in the health sector and elsewhere. This said, the functions to be assumed by the system at lower levels will need to be clearly defined in the near future.

In contrast, the allocation of resources to Government bodies at lower levels – Provincial Governments,

District Secretariats, Town Councils, Provincial Hospitals, DPSs and others – is done directly by the MF. These UGBs have management autonomy, while budgetary ceilings are established by the administrative unit on which they depend (for example, budgetary allocations for District Secretariats are determined by the Provincial Government); Town Councils have greater autonomy, can collect their own revenue and decide on its use. From a legal perspective the MoH and NHS (network of health facilities providing services) functions are separate, however, in practice the MoH, DPSs and SDSMASs share financing, supervisory and service provider functions, complicating inspection of the NHS. Sector planning is aligned with Government planning cycles. The PARP is orientated by the Government's Five-Year Plan – which is the government's medium term strategic planning document. The PESS allows implementation of the Five Year Plan, despite the fact its timing is out of step with both these overarching Government plans.

The MTEF, which includes the health sector, translates strategic plans into concrete priorities, guides resource allocation and facilitates the development of annual plans. Programme-based budgeting, which aims to ensure the link between and harmonisation of plans, is still in the early stages. Using these high-level tools, sector plans are integrated into territorial planning documents, at all levels, from the PES and Government SB, to the equivalent district level Social and Economic Plan and district budget (PESOD). The health sector has developed a wide range of strategic plans through programmes and services, but often these are not harmonized, cover different implementation timeframes and reflect a vertical logic / approach.

The three management levels (MoH, DPSs and SDSMASs) establish and coordinate relationships with multiple national and international sector partners, within Government structures and beyond. Multisector collaboration is made possible through Memorandum of Understanding (MoU) with other Government sectors and by participating in multisector working groups. Civil society, with its more or less formal mechanisms of association, presents specific challenges in engaging with the MoH at the different levels, especially in relation to its representativeness. Only districts have HF-based co-management committees and Local Consultative Councils; the latter were developed as part of the central Government´s decentralization policy. Cooperation partners – individually or collectively – provide financial and technical contributions for the development and implementation of health policies. A group of donors engages with the MoH in a Sector-Wide Approach (SWAp), formalized through cooperation agreements, MoUs and Codes of Conduct; it channels external funding as budget support to the sector through PROSAUDE and / or vertical funding (off-budget), using joint coordination mechanisms and parallel mechanisms, often considered as associated transaction costs. The private sector could increase its profile in the future in what related to sector sustainability through Public-Private Partnerships (PPPs) or as a result of the impact of large private investment projects.

2.2. Summary of Health Sector Problems and Priorities

Despite documented improvements, the health status of the Mozambican population suggests a need to accelerate progress to reverse high maternal and neonatal mortality rates associated with pregnancy, birth and perinatal complications, including the reduction of risks associated with high fertility rates and malnutrition. In addition to specific maternal-child health problems, the country´s health burden is still dominated by diseases that could be prevented through behaviour change and control measures, namely, malaria, HIV, TB and NCD. Having said that, NCD and trauma, with associated chronic conditions, are starting to influence the country´s epidemiological profile and increase competition over scarce resources. Furthermore, the country´s vulnerability to natural disasters and the occurrence of disease outbreaks create additional challenges to the health system´s response capacity. The country´s predominantly young population and increasing urbanization rates increase pressure on services. The determinants of these health problems are not solely dependent on the health sector, and affect the Mozambican population unequally – especially poorer households living in rural areas, the population of Zambézia province and other provinces in the north of the country. This profile highlights the need to focus system efforts on interventions that promote health and prevent disease, ensuring that due attention is given to young people and children, and reducing geographic, social and gender inequities. It should also be noted that substantial progress has been made in reducing mortality in children <5,

most notably infant mortality, as well as in controlling specific public health problems such as leprosy. Accelerating progress in poor performing areas and sustaining achievements require a strong and functional health system. This implies a system able to reduce inequities in the health status of the population in a number of ways, such as:

- Increasing access to life-saving interventions,
- Improving the quality of service provision in order to produce desired effects,
- Promoting and strengthening intersectorial collaboration – especially given the multisectorial nature of health problems, and
- Partnerships to overcome public health service limitations and ensure efficient use of the scarce resources available.

However, the health system currently faces a number of challenges:

The health network, which needs to improve basic conditions (HR, equipment and drugs) and infrastructure so as to offer a minimal package of key interventions, is still out of reach to the majority of the population - especially the most vulnerable socio-economically, geographically; because of where they live, their gender, age and physical condition. Conversely, the poor quality of interventions and of existing referral systems limit the impact of services provided.

In terms of governance, the country has a wide range of policies and strategies to promote developments in health but these require better coordination. Poor management capacity at peripheral level, as well as the management and planning system and inadequate reporting constitute challenges to public sector decentralization. In addition, poor intersectorial collaboration, coordination and optimization of potential partnerships with communities and the private sector (for-profits and non-profits) all limit the system´s capacity to respond to health issues.

Chronic health sector underfinancing, compounded by inefficient allocation of the scarce resources available and lack of transparency in their use, limit the health sector´s fiscal space and as such condition the quantity and quality of decentralized health service provision. The strong dependency on external financing, especially vertical funds, constitutes an additional challenge for efficient fund allocation, planning capacity (harmonization of plans), implementation (specific management units) and monitoring financial resources (different accounting procedures) and above all, affects sector sustainability.

Capacity limitations for HR production and integration constrains the availability of qualified health professionals in the country. The uneven distribution of health professionals and poor working conditions - mostly in rural areas - perpetuate access inequities and the quality of health services provided.

The poorly functioning drug and medical supply chain further deteriorates service quality and contributes to sector inefficiencies.

Evidence-based decision-making at all levels of the sector is conditioned as much by the lack of timely and reliable data, as by weaknesses in the system in place to monitor and evaluate sector performance. Health sector progress in key areas demonstrating poor performance relies on the provision of more and better health services, however, most programmatic issues that have a bearing on performance are systemic in nature and therefore require profound, holistic, cross-cutting, consensual solutions based on solid evidence in order to sustain current and future health system gains.

2.2.1 SWOT Analysis Summary

The analysis of health sector performance focused included the assessment of various elements of the national health system enabling the development of an in-depth Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis. The midterm monitoring process of the Strategic Plan will complete this analysis.

Strengths	Weaknesses
• Better coverage of the health facility network in urban areas (new, better equipped health centres and hospitals) • Capacity to train human resources for health; existence of national training plans and accelerated training plans • Capacity in planning and M&E • Capacity to define evidence-based policies • Availability of medical doctors in every district of the country • Existence of training institutions in every province • Context is conducive to favourable partnerships • Experience gained through the SWAp process at sectorial level	• Low investment in the urban health facility network • Provision of poor quality services; inefficiencies in to the provision of services • Absence or non-observance of protocols and quality standards, poor planning and supervision of health service provision • High costs for "Management and Administration of Public Health Programmes" and "General Health Administration" • Inefficiencies and high operational cost of the logistics system • Poor management of scarce resources available • Lack of and unsatisfactory distribution of human resources to meet health needs • Poor drug quality control systems associated with capacity limitations in the National Lab for Drug Quality Control • Data produced by the system is of poor quality

Opportunities	Threats
• Annual economic growth of over 7% over the last 20 years • Increased fiscal space (expenditure) for health • Improved household income levels • GOM assumption of MDG commitments • Public sector decentralization • Health is a core pillar in GOM strategic documents • High importance given to social responsibility in new mining projects • Increased research capacity	• High poverty levels • High prevalence of chronic malnutrition • High fertility rates • High prevalence of HIV and AIDS, malaria, TB, and NTDs • Increase of NCDs • High fertility rates associated with low use of modern contraceptive methods • The country is susceptible to natural disasters • Weak sector approach to social determinants of health • Chronic sector under-financing

3. PESS Vision, Mission, Guiding Principles and Priorities

All Mozambicans aspire to be part of a productive and developed society, where each individual is able to meet his/her basic food, housing, health and education needs. In this context, the health sector's role is to protect, promote and restore the population's health under the MoH´s leadership.

The vision, mission and guiding principles described below were developed based on the premise that health constitutes a basic human right, as such, they reflect the long-term values and aspirations of Mozambicans. This approach aims to substantiate the right to health and other related human rights reflected in the country´s legal framework. According to WHO, this means integrating human rights norms and principles in the design, implementation and M&E of health policies and programmes. Among these principles are human dignity, paying due attention to the needs and rights of vulnerable groups without any form of discrimination, participation and reporting, and targeted efforts to ensure the health system is accessible to all citizens taking into account issues such as availability, access, acceptance and quality. The MoH expects all health sector actors at all levels - from health posts to quaternary level - and all partners abide by these principles when engaging in the different forms of health service provision.

3.1. Vision

The declaration below presents the sector´s future vision and aims to guide the establishment of short and medium-term targets and benchmarks. The vision extends beyond the current PESS, assuming relative stability over time, and attempts to frame the sector´s role in the broader national development agenda. In this context, the health sector´s vision for coming years is as follows:

> Progressively achieve Universal Health Coverage enabling all Mozambicans, especially the most vulnerable groups, to enjoy the best health possible, at an affordable cost (to the country and its citizens), thus contributing to the fight against poverty and the promotion of national development

This statement represents the sector´s commitment to universal health coverage[12], its recognition of the role played by other sectors in the achievement of health improvements, and implicitly highlights the need for collaboration between sectors; it expresses the universal right to benefits (for all Mozambicans) and takes a human rights approach to health as well as including the principal of attending to the needs and rights of the most vulnerable groups, especially women, children, adolescents and youth. It is also expected that service provision will produce the best possible health outcomes at a cost that households / individuals can bear, without risking impoverishment, or limiting access to services, and that the State is able to financially sustain it. Finally, by contributing to poverty alleviation and promoting national development, the vision not only aligns with the national political agenda, but also reflects the impact of health on economic development.

3.2. Mission

In turn, the health sector´s mission expresses the sector´s mandate and commitment, and guides strategic decision-making processes. Hence, the MoH aims to:

> Lead the production and provision of more and better essential health services, universally accessible, through a decentralized system that favours partnerships to maximize the health and well-being of all Mozambicans, so as to lead a productive life towards personal and national development.

[12] Universal Health Coverage is defined as guaranteeing everyone has access to the promotional, preventive, curative, and restorative health services they need, and these are of sufficient quality to be effective, whilst also guaranteeing people are not expsed to financial difficulties in paying for these services.

This mission reflects the MoH´s political will to effectively lead the provision of better health services and accelerate progress in priority areas, introduce reforms based on decentralization, and strengthen partnerships – so as to better respond to the needs of citizens and maximize health benefits. As such, citizens will have greater opportunities to lead healthy and productive lives, in turn resulting in the achievement of better living conditions and enabling citizens to contribute to national development.

3.3. Guiding Principles

Programmes and investments seeking to achieve sector objectives will be based on the principles described below. These reflect the values held by Mozambicans, such as equity, solidarity / partnership and community mobilization, and issues revealed in the health sector situation analysis i.e. poor quality and limited access to health services, manifest social inequities associated with health and health care, and lack of accountability in the provision of health care services.

PESS principles
1. Primary health care
2. Equity
3. Quality
4. Partnerships
5. Community involvement
6. Research and technological innovation
7. Integrity, transparency and accountability

3.3.1 Primary Health Care Services

The promotion of universal access to health care services, especially Primary Health Care is defined as the provision of integrated, continuous health care, through accessible, locally relevant and acceptable services, using appropriate technology and promoting community participation and ownership.

The health sector is guided by a set of principles consistent with core values held by Mozambicans, as well as principles guiding primary health care as this is the model used for the provision of health care in Mozambique.

Values and Approaches at Primary Health Care Level

PHC upholds core values such as universal access, equity, participation and collaboration between sectors. The PHC approach emphasizes the importance of health promotion and the use of adequate technologies. The term also reflects how health care is organized, with the primary level or first contact level – for the health sector this usually means district level – assuming a driving force in the system providing health care services. Effectively providing as many services as possible at the first point of contact with the support of the secondary level for more complex services remains the aspiration of many countries, not just those in Africa. The concept of integrated primary health care is seen from an invidual perspective: the objective is to develop mechanisms to provide services for continued patient care within the system and at different levels of care, over their lifetime[13].

3.3.2 Equity

Ensure equity in the allocation, provision and use of health services so geographic location, gender relations, economic situation or health condition do not constitute barriers for use of services.

3.3.3 Quality

The provision of timely health care services (promptness), achieving desired outcomes (effectiveness), without provoking damage to users, providers or the environment (safety), as well as respecting user needs and preferences (humanization).

[13] WHO 2007. Everybodybusiness.

3.3.4 Partnerships

Promoting partnerships with a range of players with the view to maximizing health gains. The sector will focus on collaboration with other Government sectors to positively influence health determinants, public-private and international agency partnerships to mobilize additional resources, and with civil society and NGOs to enhance advocacy and service provision.

3.3.5 Community Involvement

Encourage community initiatives and empower communities so the population becomes an active and respected partner in the production, management and use of health services at all levels. For the MoH, community involvement means actively working with communities to facilitate their organization and their capacity to identify health problems and define interventions that enhance health promotion and disease prevention.

3.3.6 Research and Technological Innovation

Promote the adoption and use of technological innovations relevant to health care service provision in Mozambique, through scientific research and innovation incentives so as to maximize health gains.

3.3.7 Integrity, Transparency and Accountability

Firstly, promote a sector where all actors are honest, trustworthy, and oppose corruption in the exercise of official duties (integrity). Secondly, promote a focus on free and prompt access to reliable information about sector decisions and performance (transparency). Lastly, promote a sector in which reporting the use of public resources and being held accountable for non-fulfilment, become standard and regular practice at all levels (accountability).

These principles underpin the 2014-2019 PESS; they are presented below in the form of strategic goals to guide health sector activities over the next five years and ensure that their focus is not reduced.

3.4. Health Priorities and PESS Strategic Goals

The situation analysis presented in Chapter 2 showed the variable progress of improvements to health status and reductions in disease burden, as well as their unequal distribution within populations and across the country: some areas show stagnation or slow reductions, while others show significant progress – even if still below desired levels. Most health conditions, if not all, can be prevented through interventions promoting health and / or disease prevention. In this context, the PESS defines the following health priorities:

- Accelerating progress in the reduction of maternal and neonatal mortality, including the reduction of overall fertility rates.
- Accelerating progress in the reduction of chronic malnutrition.
- Reducing the burden of endemic diseases, namely, malaria, HIV, TB and NTDs.
- Sustaining gains in the reduction of mortality in children <5.
- Sustaining or reducing the progressing trend in NCDs and injuries.

Accelerating progress requires the provision of more and better quality services in the short-term, enabling the GoM to meet assumed commitments, especially the MDGs, and strengthen (reform) the Mozambican health system overall with a holistic approach to sustain current and future gains. These two approaches are described in more detail in Chapter 4; targets and key interventions for each priority area are presented in Chapter 5. It is on the basis of these health priorities and on the core problems reflected in PESS' guiding principles that the following strategic goals have been defined, to reverse the current scenario and provide a platform for defining the programme objectives and strategies described in Chapter 5.1[14]:

[14] Strategic goals, key interventions and expected results described in this document reflect PESS cross-cutting issues aiming to improve the overall health status of the population, while specific objectives and strategies in Chapter 5 indicate the specific contribution of each health programme and corresponding support areas for the achievement of strategic goals, and consequently, specific health status indicators.

3.4.1 Strategic Goal 1: Increase Access and Utilization of Health Care Services

A. Increase access to promotional, preventive, curative and rehabilitative health services, especially proven cost-effective interventions.

Key Interventions

- Expand the health care network, mainly at primary level and in rural and peri-urban areas, ensuring it is adequately equipped (core health team, basic equipment, drugs and basic medical and surgical equipment, water and electricity).
- Strengthen referral systems, especially at level II, to ensure the continuity of health care services.
- Intensify health promotion activities with a view to changing lifestyles and preventing risky behaviour.
- Expand preventive activities and strengthening of outreach services.
- Expand and strengthen community-based services, with a focus on APEs and other ACSs.

Main Expected Results

- Increased coverage of prevention interventions (coverage of PPCs, PMTCT, immunization, etc.).
- Improved knowledge, attitudes and practices in relation to key health problems (lifestyle, risky behaviour and health-seeking behaviour).

B. Increase the use of existing health care services

Key Interventions

- Strengthen interventions to increase demand for services and health programmes, with a focus on priority programmes.
- Remove barriers to access (financial, gender, cultural, service provision quality, drug availability, etc.).
- Promote community participation in HF management and of health programmes overall (planning, implementation and M&E).

Main Expected Results

- Increased outpatient consultations / inhabitants and care units / inhabitants.
- Increased number of health professionals (health professionals per inhabitants).
- Increased proportion of HFs with functional co-management committees.

3.4.2 Strategic Goal 2: Improve Quality of Services Provided

Key Interventions

- Guarantee humanization in patient care with the use of user-based services.
- Develop and implement norms, health care standards and protocols for medical procedures and support areas.
- Ensure the necessary number of qualified, motivated HR.
- Strengthen the logistics systems to avoid stock-outs for drugs and other basic supplies.
- Integrate accreditation systems at HF level, including patient and occupational safety, patient rights and duties charter, courtesy standards, etc.

Main Expected Results

- Lower general in-hospital mortality rates.
- Increase in the number or percentage of IMCI-accredited HFs.
- Reduced drug stock-outs at HF and district level as well as in provincial deposits

- Increased implementation of MCH norms (coverage of 4 ANC, intrapartum stillbirth rate, etc.).
- Higher cure and success rates (cure rates for acute malnutrition, TB and MDR-TB success rate, etc.).

3.4.3 Strategic Goal 3: Reduce Geographical Inequalities and between Population Groups in Access to and Utilization of Health Care Services

Key Interventions

- Develop and guarantee the implementation of needs / equity-based resource allocation mechanisms (funds, HR, drugs)[15].
- Develop and implement a planning and internal placement system favouring key interventions in priority health sector programmes.
- Strengthen social protection mechanisms for vulnerable groups (free services, exemptions, etc.).

Main Expected Results

- Reduced inequity between funds allocated per capita and expenditure per capita, and in the distribution of "critical" HR, HF / inhabitant and essential medicines, disaggregated by province / district.
- Reduced inequity between outpatient consultations / inhabitants and care unit / inhabitants, disaggregated by province / district.

3.4.4 Strategic Goal 4: Improve Efficiency of Service Provision and Utilization of Resources

Key Interventions

- Develop and implement an essential / minimum package of health services / interventions by level of service that meets health needs and is cost-effective (type and level at which interventions are offered, integration of services, etc.).
- Develop and implement mechanisms to improve clinical performance.
- Identify inefficiencies (staff productivity levels, clinical practices, level at which interventions are offered, budget execution, procurement systems, waste, drug misuse, medical and surgical equipment and other supplies, etc.), and develop corresponding mitigation measures.
- Mobilize additional resources for the implementation of a basic / minimum package of health services including reallocation / reinvestment of savings; ensure timely allocation.
- Integrate results-based operational planning mechanisms in the annual planning cycle, budgeting, M&E, etc. at all levels of service provision, including incentives / performance-based financing.

Main Expected Results

- Higher % of HFs implementing the basic / minimum package of health services, including BEmOC and CEmOC.
- Improved resource allocation at provincial level.
- Higher staff productivity rates (service unit / health professionals).
- Higher % of districts submitting complete information for HIS on time.
- Higher budget execution rates, disaggregated by province / district.
- Lower waste / inefficiency rates (vaccine stock-outs, expired drugs, etc.).

[15] Needs / equity based allocation mechanisms.

3.4.5 Strategic Goal 5: Strengthen Partnerships for Health based on Mutual Respect

Key Interventions

- Define and implement effective institutional mechanisms to improve intersectorial collaboration with a view to reducing health determinant effects and inequities, and facilitating sector decentralization.
- Review and implement mechanisms to improve civil society involvement in the design, implementation and M&E of health policies and programmes, at different levels within the sector.
- Develop and implement a strategy for the establishment of PPPs supporting sector fundraising efforts and increasing health care access and use.
- Strengthen mechanisms to improve dialogue and relationships with development partners to re-build mutual trust and strengthen the MoH´s leadership role.
- Review mechanisms for engagement with (national and international) NGOs so as to strengthen their advocacy role and the implementation of health programmes.

Main Expected Results

- Increased number of formal mechanisms (protocols, MoUs, etc.) established with relevant Government sectors to address health determinants.
- Increased number of forums for effective CSO participation, and of community-based programmes (HF co-management committees, etc.).
- Increased number of PPPs.
- Higher proportion of external funds on-budget and on-cut.
- NGO activities are included in district and provincial PES budgets (PESOD and PESOP).

3.4.6 Strategic Goal 6: Increase Transparency and Accountability in how Public Goods are Used

Key Interventions

- Strengthen sector accountancy and procurement systems at all levels.
- Develop a communication strategy that focuses on access to information and inclusive information sharing around political decisions and sector performance.
- Establish effective mechanisms for civil society participation in monitoring the use of public resources allocated to health.

Main Expected Results

- Increased proportion of audits with unqualified opinions, at all levels of the sector (disaggregated by province).
- Increased realised expenditure as a percentage of the approved health sector budget.

3.4.7 Strategic Goal 7: Strengthen the Mozambican Health System

Key Interventions

- Implement the Institutional Reform Acceleration Plan[16].
- Develop a reform agenda that effectively strengthens all components of the health system, with a focus on decentralization.
- Build the capacity of district health systems to implement strategic goals and prepare for effective decentralization.

[16] Related interventions are included in Chapter 5.2 Strategies.

Main Expected Results

- Reform agenda approved by consensus and with the use of participatory processes.
- District health systems have developed relevant capacities in relation to decentralization, planning, management, negotiation, leadership, etc.

Most key interventions for strategic goals 1 and 2 will contribute to speeding up progress in the areas mentioned above by increasing the quantity and quality of services. Objectives 3 - 6 relate more closely to the reforms considered in objective 7, however, to accelerate progress in these areas, additional activities will also be implemented (more and better quality services). The two approaches are described in the next Chapter.

4. PESS Approach

> "To face challenges, we must learn the best approaches and implement the best programmes"
> *Author: Global Health - Science and Practice Journal*

Through its two pillars or approaches the PESS reconciles immediate routine health service needs with health system strengthening longer-term requirements.

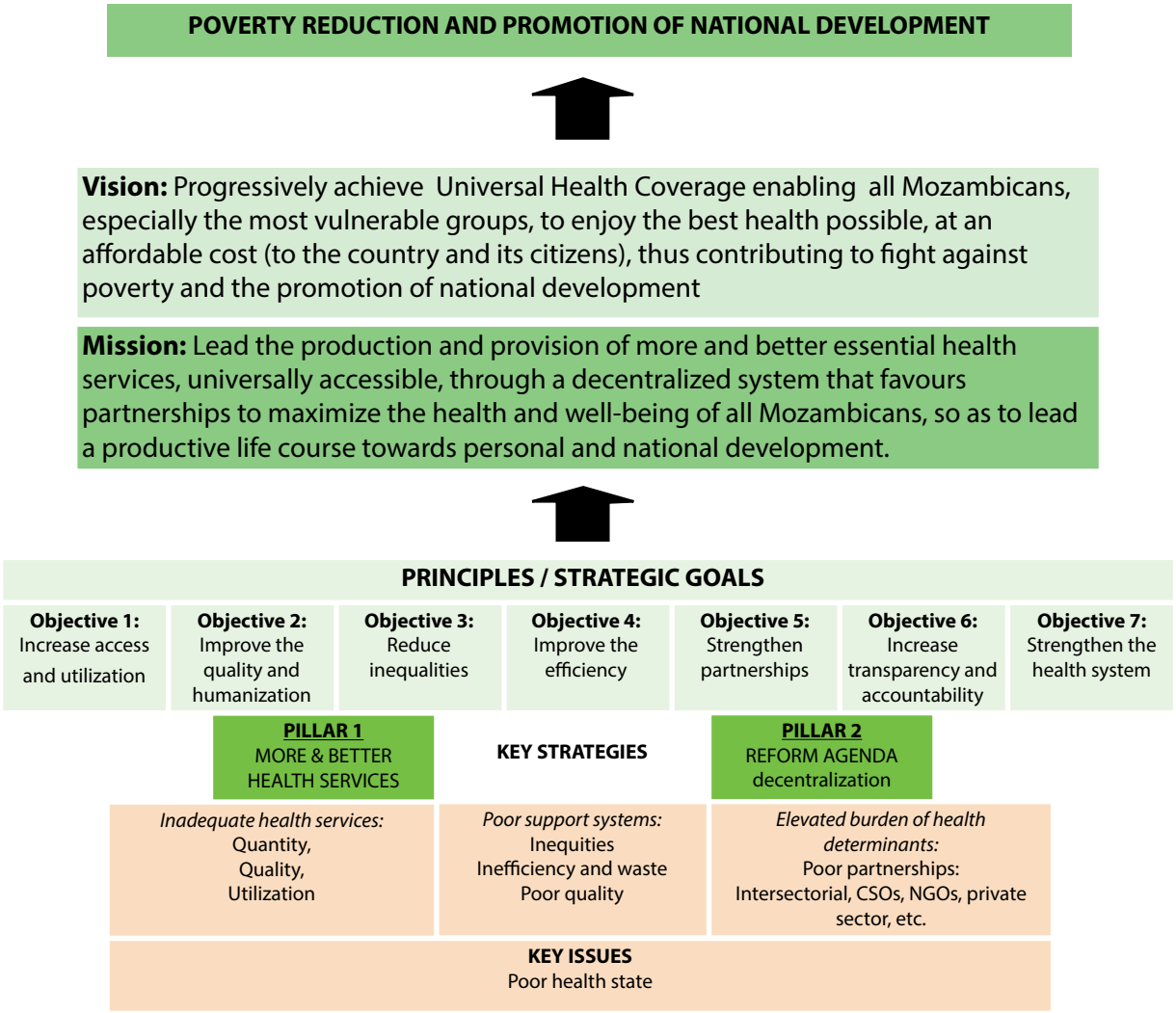
The first pillar, called the **"More and Better Services"**, aims to ensure continuity in the provision of routine health services and programmes incorporating two small but important changes (quick wins). Ultimately, it seeks to help accelerate progress in priority areas displaying slow progress to date, particularly by improving access, uptake and quality of services.

The second pillar seeks to sustain current and future health status gains and ensure equity and efficiency by introducing fundamental changes to health system strengthening, referred to as the **Reform Agenda**. The MoH will work with its partners over the next three years to define a clear roadmap to guide the health sector reform. Fundamental or structural health sector / system issues calling for reform or that can be addressed through reform will be identified in this first phase.

Nonetheless, an approach to guide the implementation of reforms (e.g. incremental) is needed, which is consistent with institutional capacity and does not affect the provision of health services.

The MoH recognizes the challenges associated with managing the pressure to achieve ambitious targets and accelerate progress as envisioned in pillar I (More and Better Services), including institutional capacity needs and health system reforms to sustain current and future gains. Institutional arrangements will be required for the effective management of pillar 2 (Reform Agenda).

Figure 3 illustrates the conceptual framework of the PESS 2014-2019, including the role assumed by each pillar to achieve health sector overarching and strategic goals, and the national political agenda.



4.1. More and Better Quality Health Services

The focus of PESS pillar I is to improve routine service provision while the sector develops and implements a reform agenda to increase overall sector functionality and performance in the long term. The health sector will therefore introduce or strengthen certain measures over the next 2 – 3 years to guarantee health services and programmes produce more and better quality results in line with GoM's domestic and international commitments. The principles discussed above guide the criteria associated to these improvements.

Access, use, quality, equity and efficiency constitute the core criteria, although the last two are explored in greater detail under the pillar dedicated to reforms. The PESS defines these values from an operational and short-term perspective in line with existing resources, and technical and management capabilities. A broader definition of these criteria will be developed in the context of the health sector reform agenda. Indicators to monitor these criteria at decentralized level for the period covered by the PESS 2014-2019 need to be developed.

4.1.1 Access to Routine Health Services

For the purpose of the PESS 2014-2019 access is defined as the availability of a set of key promotional, preventive, curative and rehabilitative health interventions offered within acceptable reach of communities, in line with the epidemiologic profile of Mozambique and the resources available to the sector. In other words, it refers to the level of ease with which users can access the health care services they need.

4.1.2 Quality of Service

In line with its two core guiding principles this PESS consideres four dimensions of quality:

- **Safety** (services provided achieve expected results without causing harm to patients, service providers or the environment),
- **Timeliness** (reduction in waiting times and delays that can sometimes be harmful to clients and providers),
- **Effectiveness** (services are based on scientific knowledge and provided to all who need them – refraining from providing unnecessary services, and avoiding excessive use or under-use), and
- **Patient-centred care and humanization** (care that respects and is sensitive to individual patient preferences).

4.1.3 Use of Services

Use is expressed in terms of the frequency of contact between target populations and health services – this includes community-based services. In the short term, the following factors, which determine use will be considered: physical access to services, financial barriers (including transport costs and illegal charges), as well as cultural factors influencing demand for services.

4.1.4 Equity

Equity is an ethical concept based on the principle of fair distribution of benefits, manifested through disparities in the distribution of health services and / or the health status of the population. Three dimensions will be used in this PESS in relation to equity: equal access for the similar needs, identical utilization rates for similar needs, and care services of identical quality for all. Equity analysis will be disaggregated by sex, age, geographic location, place of residence and socio-economic conditions, depending on the type of M&E and when it is done.

4.1.5 Efficiency in Routine Health Care Services

Efficiency refers both to obtaining better results with the use of the same resources, and to achieving the same results with less resources. In the short-term, the PESS will focus on the first dimension of efficiency, while both will be taken into account in the long-term (reforms).

Each of these criteria, especially access, use and quality, are applied when defining the health programme challenges, objectives and strategies described in Chapter 5, including inputs from support areas.

4.2. Health Sector Reform Agenda

Given mixed health sector performance and the systemic nature of the problems identified, the MoH has decided to develop and implement a holistic reform agenda to sustainably remedy or minimize existing health and health service problems, and safeguard current and future gains.

In fact, reforms involve significant and intentional efforts to improve the performance of the health care system. This implies fundamental shifts away from past practices (not incremental or developmental changes), together with sustained processes (not limited in time). Therefore, reforms generally require the

introduction of a set of interdependent and mutually supporting interventions. For this reason, this exercise includes three phases: the first describes the process for defining the reform agenda (content) - described in Chapter 6; the second phase involves discussions and consensus around the content of the reforms and the implementation approach to be used in the first three years of the PESS; the last phase involves the actual implementation of reforms over the second half of the PESS.

One thing is understood: for various reasons decentralization is the point of departure for these reforms. Since 2001, the public sector has been implementing a reform strategy with far-reaching impact on health service provision, with decentralization as one of its fundamental pillars. It was precisely in this context that districts were recently declared the powerhouses for development - district health systems are embedded at this level. As such, the health sector cannot isolate itself from this context.

This PESS considers decentralization as the transfer of certain health system functions and attributions (health policies, management of the health system, health financing and the provision of services) from central to lower levels. As mentioned above, the second phase of the PESS will deal with concrete functions to be transferred to lower levels, the necessary re-organization of the sector and the process itself, obviously taking into account the existing legal framework.

Even if the purpose of decentralization is fine-tuned in the future, the ultimate aim is for overall performance of the health system to improve, focusing on the achievement of equitable results and rendering it more sensitive to local health needs and expectations. In addition to equity, decentralization aims to improve the quality, effectiveness and efficiency of health care service provision, accountability and transparency.

Considering the different forms of decentralization and the Mozambican context, the current PESS proposes to discuss the following in the context of the reform agenda:

- **Deconcentration**, refers to the transfer of authority, responsibilities and resources from central to lower levels within the same administrative structure, i.e., from the MoH to DPSs and SDSMASs.
- **Delegation,** implies transferring authority, responsibilities and resources from central level to organizations the sector is not directly responsible for, including semi-autonomous institutions (for example, hospitals, CMAM), NGOs, local governments, etc.
- **Devolution,** involves the transfer of authority, responsibilities and resources from central level to a separate administrative structure within the Public Administration, which is usually elected, such as local Town Councils. In this example, the structure is already legally constituted, therefore the MoH only needs to adapt to it.
- **Privatization,** refers to the transfer of operational responsibilities and, in some cases ownership rights, to private providers generally through a contract defining what is expected in exchange for public funds. Outsourcing of services (e.g. hospital administration / medical care facilities) fits into this form of decentralization.

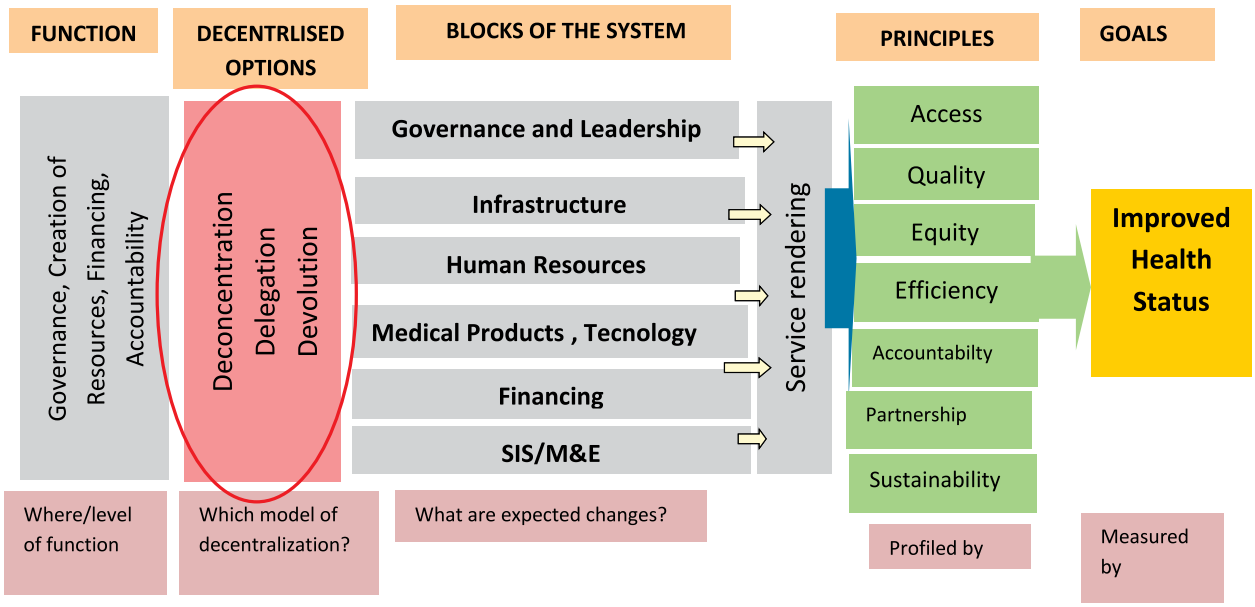
The forms, levels and purpose of decentralization will be defined or refined when the health sector reform agenda is discussed and developed in the next 2-3 years.

Once the decentralization focus has been clearly defined and taking into account the holistic approach to reforms, detailed changes for the effective implementation of decentralisation will need to be developed for each of the six health system components (health services, governance and leadership, financing and financial management, HR, medical products and technologies, and HIS and M&E). For example, it is not possible to "develop" health care in Town Councils without changing the contractual arrangements with health professionals at that level (see table in Annex 2).

Figure 4 graphically illustrates the approach to reforms, with decentralization as the point of departure: firstly, it lists health system functions and corresponding implementing institutions. For each form of decentralization it suggests the functions that need to be transferred to lower levels and subsequently analyses the major changes that need to be made in each component (block) of the health system to ensure

that health services are responsive to its guiding principles (PESS strategic goals). It is assumed that sound health system performance along with the achievement of strategic goals (principles) will bring about health status improvements - the objective of sector reforms.

Figure 4. Conceptual Framework for Sector Reform



5. Health Programmes and Corresponding Support Systems

This chapter describes the interventions to be implemented to achieve the strategic objectives of pillar I "More and Better Quality Services", both for the various programmes and services implemented by the MoH, as well as for corresponding areas that support their implementation. This chapter is divided into two parts. The first part uses a matrix to highlight the health programmes and services whose interventions intend to accelerate progress of priority health areas described in Chapter 3. This is in addition to the other health programmes covered by the PESS. The second part lists the interventions required for support areas to ensure that interventions from part one are effectively implemented. For each programme or service, strategies and interventions are identified per strategic goal. For support areas, the challenges affecting health system performance are described, including issues that have not been subject to in-depth analysis but that will be addressed in the reform agenda. It is worth noting that the OneHealth Model (OHM) costing tool presented in Chapter 8 was useful in projecting targets and interventions in a more realistic and manageable way, while taking into account political commitments assumed by the GoM and corresponding targets.

5.1. Health Programmes

Programme: Sexual and Reproductive Health		
Main Objective I Reduce morbidity and mortality through the expansion and improvement to the quality of maternal health services	**Impact indicator** Maternal mortality ratio (maternal deaths /100,000 live births) Adolescent fertility rate (births per 1,000 women aged 15-19)	
Strategic Goals	**Strategies and Interventions**	**Strategic Goals**
S01 (access)	Increase demand for maternal health services (ANC, PMTCT, institutional deliveries and PPC) by: • Strengthening community involvement (leaders, APEs, TBAs, activists and others) to encourage women to attend their 1st ANC visit in the first 16 weeks of pregnancy and achieve the goal of at least 4 ANC visits per pregnancy; raising awareness and mobilizing communities in relation to institutional deliveries (including the construction and use of "waiting homes" for expectant mothers); creation of community level transportation systems; promoting PPCs, and other interventions with a view to reducing morbidity and mortality and promoting maternal and neonatal health. • Strengthening community involvement, and participation of TBAs and APEs in referral systems from the community to HFs, targeting pregnant women, women during and after labour, and new-borns. • Developing advocacy-based interventions promoting SRH, maternal health, prevention of unwanted pregnancies and unsafe abortions.	Number and % of HFs with "maternity waiting homes"
S02 (quality)	Increase the provision of quality maternal health services (ANC, PMTCT, institutional deliveries and PPC) by: • Expanding the implementation of preventive and curative measures in the provision of ANC such as: malaria IPT and case management according to national norms; vaccinating women in childbearing age – especially pregnant women; preventing and treating syphilis among pregnant women and new-borns; implementing the plan to eliminate vertical transmission (of HIV) from mother to child. • Increasing and strengthening the number of HFs offering BEmOC and CEmOC in an equitable way; increasing and strengthening the number of maternity wards implementing the Model Maternity Initiative; and introducing and expanding the use of Misoprostol at HF and community level for the prevention and control of post-partum haemorrhage. • Strengthening Maternal Mortality Review Committees and National and Provincial level committees to improve maternal mortality surveillance and response systems. • Implementing the PPC Package; post-abortion care; and expanding the Strategy for the Prevention and Treatment of Obstetric Fistula by strengthening sector capacity around prevention, screening and treatment of obstetric fistula, and coordinating interventions on social reintegration with key sectors and CSOs. • Ensuring the existence of "basic teams" and the implementation of "integrated care packages" defined for each level of care, to guarantee continuum-of-care (pregnancy, labour, PPC, FP, etc.).	Antenatal care coverage (at least one visit during pregnancy) Antenatal care coverage (at least four visits during pregnancy) % of pregnant women attending ANC services that receive at least two doses of IPT Number of HFs with PMTCT services Institutional delivery coverage (disaggregated by province) % of institutional deliveries in BEmOC / CEmOC facilities Postpartum consultation coverage (and Proportion of PCC within 2 days after childbirth) Intrapartum stillbirth rate % of Provincial and District Committees established and operational (that conducted maternal and neonatal deaths reviews in the previous quarter) Number of HFs routinely offering reconstructive surgery for obstetric fistula (disaggregated by province)

Main Objective I Reduce morbidity and mortality through the expansion and improvement to the quality of maternal health services	**Impact indicator** Maternal mortality ratio (maternal deaths /100,000 live births) Adolescent fertility rate (births per 1,000 women aged 15-19)	
Strategic Goals	**Strategies and Interventions**	**Strategic Goals**
S03 (equity)	Developing and implementing referral norms (referral networks based on availability and location of BEmOC and CEmOC services. Improving and increasing availability of transport and means of communication.	
Main Objective II Expand and improve the quality of SRH services	**Impact indicators** Contraceptive prevalence rate Unmet needs contraception	
Strategic Goals	**Strategies and Interventions**	**Indicators**
S01 (access)	Implement the FP Strategy by: • Increasing capacity-building efforts targeting health care service providers, including technical skills to counsel and offer long acting FP methods (especially after labour and delivery and immediately after abortion), as well as permanent birth control methods. This Includes installing / strengthening the capacity of health care service providers, teachers, educators and counsellors in FP counselling; including people living with HIV. • National level implementation of a community-based FP approach, through APEs, outreach teams and CSOs. • Integration of FP in other services (ANC, post-partum, post-abortion, PMTCT, HIV/AIDS, Sexually Transmitted Infection (STI), cervical and breast cancer screening services, etc.). • Investing heavily in the development of contraceptive management and stock-control capacities, as well as in increasing the efficiency of corresponding supply and distribution chains. • Development and implementation of an FP communication strategy.	% of new users in modern family planning methodsNo. and % of HFs offering at least 3 modern contraceptive methods % of the required budget for purchasing contraceptives that was covered by the State Budget
S02 (quality)	Implementation of STI, HIV as well as cervical and breast cancer screening and treatment strategies in SRH services by: • Screening and treating STIs among all women in FP / reproductive health consultations. • Screening and treating cervical and breast cancer (or offer appropriate referral) in FP / reproductive health consultations. • Ensuring needs are accurately assessed and STI screening tests (especially syphilis) and HIV, are available at all times.	% of eligible HIV positive pregnant women initiating ART

Programme: Child Health		
Main Objective Reduce mortality in children <5	**Impact Indicators** Children under five mortality rate per 1,000 live births Infant mortality rate (per 1,000 live births) Neonatal mortality rate	
Strategic Goals	**Strategies and Interventions**	**Indicators**
S01 (access)	Improve access to basic new-born care services, including neonatal resuscitation and follow-up; placing special emphasis on the first week of life. Expand the number of HFs offering care to new-borns by: • Implementing new-born basic care interventions at community level, through TBAs and APEs. • Expanding the number of hospitals with neonatal care units (nurseries), including qualified staff and appropriate medication and equipment to provide care to new-borns in a severe / serious condition. • Implementing current neonatal and post-natal norms to improve services offered to new-borns. • Expansion of the use of the kangaroo mother care technique. • Introducing the use of chlorhexidine into umbilical cord care practices to prevent sepsis.	Neonatal mortality, by specific cause (prematurity, sepsis, neonatal asphyxia) % of new-borns assessed in PPC in the first 2-3 days of life % of new-borns assessed by TBAs or APEs in the first 24 hours and in the third day of life % of HFs offering new-born emergency care services No. of nurseries created
S02 (quality)	Improve the quality of child health care services offered at HF level, including adequate growth and development monitoring by: • Promoting implementation of the schedule for healthy child consultations (HCC), and offering quality HCC interventions (including child growth and development). • Accelerating the implementation of the IMCI strategy at HF and community level. • Strengthening paediatric care through implementation of Emergency Screening, Assessment and Treatment (TATE, Triagem, Avaliação e Tratamento de Emergência) in all referral HFs. • Improving the integration of the Child-at-Risk Clinic (CRC) and HCC consultations to facilitate child health monitoring, thus reducing lost opportunities and the number of lost cases. • Equipping HFs with qualified personnel, equipment and essential drugs for new-borns and children <5.	% of primary level and referral HFs implementing IMCI % of primary level and referral HFs implementing (ETAT) % of children 0-4 years of age following the HCC calendar % of children with other risk conditions in CRC % of children <5 with diarrhoea treated with Oral Rehydration Therapy (ORT), and ORT and zinc Maternal breastfeeding in the first hour of life
SG3 (equity)	Reduce inequalities in the distribution of health services for children <5, focusing on the most affected areas (provinces, districts, urban / rural areas).	All maternal health indicators will be disaggregated by region, place of residence and age groups
SG4 (effectiveness and efficiency)	Improve the efficiency of services provided to new-borns and children <5 by improving the quality of child and new-born monitoring activities.	No. of supervisory visits conducted

Programme: Nutrition		
Main Objective Contribute towards the reduction of child morbidity and mortality associated with malnutrition	**Impact indicator** Prevalence of chronic malnutrition among children <5	
Strategic Goals	**Strategies and Interventions**	**Indicators**
S01 (access)	Develop, update and disseminate Information, Education and Communication (IEC) material on healthy diet and train professional and community workers to implement education, agriculture and social care interventions to promote healthy nutrition. Promote good feeding and nutritional practices at household level, through the development and implementation of a behaviour change communication strategy that results in the adoption of healthier diets. Train professional and small-scale producers in rural and urban areas to engage in the promotion of healthier eating habits. Contribute towards the reduction of micronutrient deficiency. Promote adequate child feeding practices focusing on the first two years of life, through the implementation of the Child Feeding Policy and the Communication and Social Mobilization Plan for the Promotion, Protection and Support to Maternal Breastfeeding.	Growth faltering rate Exclusive breastfeeding for children under 6 monthsCoverage rate for postpartum vitamin. A supplementation Coverage rate for routine vitamin A supplementation in children <5 Maternal breastfeeding in the first hour of life
S02 (quality)	Contribute to HIV/AIDS and TB control by integrating nutrition into PMTCT activities and the treatment of infections. Ensure adequate growth monitoring at HF and community level, including updating and implementing the Basic Nutrition Package and its roll out at community level. Help women receive adequate nutrition during pregnancy and breastfeeding, ensuring adequate nutritional monitoring and quality nutrition counselling in ANC and PPC. Develop and implement a plan for the development of HR trained in nutrition. Implement the Nutritional Rehabilitation Programme, including the protocol for the treatment of acute malnutrition in children and adolescents up to 14 years old, and the protocol for the treatment of malnutrition in adolescents and adults aged 15 and over (including the promotion of breastfeeding immediately after birth and of exclusive breastfeeding in the first 6 months of life).	Low birth-weight rate Acute malnutrition cure rate Institutional mortality rate for severe acute malnutrition
SG3 (equity)	Organize educational campaigns to promote healthy eating habits among specific target groups. Implement micronutrient-based supplementation programmes for specific target groups.	% of eligible children receiving at least 60 packages of dry micronutrients in the last 4 months (and % of girls)
SG4 (effectiveness and efficiency)	With the HIS and research institutions, strengthen the Nutritional Surveillance System and promote studies and research to support monitoring of nutritional status, food consumption and nutritional intake Promote operational research to strengthen nutrition programmes, including multisector approaches.	No. of supervisory visits conducted

Main Objective Contribute towards the reduction of child morbidity and mortality associated with malnutrition	**Impact indicator** Prevalence of chronic malnutrition among children <5	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG5 (better partnerships)	Implement a multisector action plan to reduce chronic malnutrition in Mozambique, particularly nutrition activities under health sector responsibility. Promote the integration of nutrition in key sectors such as health, agriculture, education, social action and in development programmes. Adapt to the country´s context and then implement the **WHO Global Strategy on Diet and Physical Activity.** **Contribute to the control of overweight and obesity rates in children** and the prevalence of excess weight and obesity in adolescents and adults. Strengthen nutrition interventions in emergencies by improving the planning of nutrition response interventions, training contingency teams and allocating the necessary resources to respond. Collaborate in the development and implementation of the national Food Fortification Programme, including salt iodization.	Rate of children aged 9-11 months that received appropriate food supplements, the minimum required times per day, according to their breastfeeding status

Programme: Expanded Programme on Immunization (EPI)		
Main Objective Reduce prevalence and mortality from preventable diseases through immunization	**Impact Indicator** Incidence / prevalence of diseases preventable through immunization (EPI)	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SO1 (access)	Implement campaigns and other types of social mobilization to intensify routine vaccination activities in collaboration with DEPROS, involving CSOs, community-based organizations, outreach teams, etc. Increase the number of fixed immunization posts. Increase the number of vaccines included in routine EPI activities, namely, PCV, Rotavirus and HPV.	Percentage of children fully vaccinated DTP3 immunization coverage (12–23 months)
SO2 (quality)	Increase and improve supervision and technical support at lower levels.	DTP1-DTP3 drop out rate (DPT/HEP 3rd dose/DPT/HEP 1st dose)
SG3 (equity)	Involve outreach teams to access hard-to-reach areas, through the implementation of the Reach Every District (RED) strategy.	No. of districts with operational outreach teams
SG4 (effectiveness and efficiency)	Introduce new refrigeration techniques. Train / build staff capacity (through short-term courses and on-the-job training on issues such as cold-chain management, stock management, RED strategy, Data Quality System (DQS) and data quality). Integrate data quality control measures and conduct surveys to assess vaccine coverage. Supervise and train provincial level staff on improving data collection quality.	

National HIV / AIDS Programme

Main Objective	Impact Indicators
Increase the percentage of eligible HIV+ adults and children receiving ART to 80% by 2015; reduce (HIV) mother to child transmission rates to <5% by 2015, and reduce new infections by 50%, by 2015.	Prevalence rate of HIV/AIDS in young people aged 15-24 (women, men) Mother-to-child transmission rate in HIV+ pregnant women

Strategic Goals	Strategies and Interventions	Indicators
S01 (access)	Expand Provider Initiated Counselling and Testing (PICT) services at HF level and establish effective linkages between HIV counselling and testing services and other services offering HIV prevention, care and treatment. Expand family and couple testing based on index cases enrolled in clinical HIV care and treatment services. Place HCT-C focus on case identification in areas with HIV high-prevalence and low HIV testing coverage. Ensure condoms are distributed and that they are correctly and consistently used. Establish effective linkages between clinical and community services. Increase access to ART services for HIV+ pregnant women. Expand and strengthen strategies around adherence and retention for pregnant women, through support groups such as mother-to–mother groups in MCH services, and community awareness-raising activities. Improve men´s participation in MCH services. Improve community awareness and involvement around PMTCT. Guarantee members of key populations are targeted by HIV services, including counselling and testing, Male Circumcision (MC) and enrolment in HIV care and treatment services. Expand access and utilization of ART for HIV prevention, including post-exposure prophylaxis and ART as treatment for prevention. Improve the quality and availability of information materials around demand creation for services and user acceptance, including counselling and testing, MC and HIV care and treatment. Reduce HIV incidence by increasing detection rates and timely treatment of STIs in the general population. Increase HIV detection rates in infected children.	No. of users receiving HIV testing and counselling No. of cases diagnosed with STIs receiving treatment No. of HFs that have condoms and easily accessible, relevant educational material No. of HFs offering post-exposure prophylaxis No. of children (and % of those eligible) receiving paediatric ART No. of HIV+ adults (and % of those eligible) receiving ART (disaggregated by sex) % of children exposed to HIV with early diagnosis

National HIV / AIDS Programme		
Main Objective Increase the percentage of eligible HIV+ adults and children receiving ART to 80% by 2015; reduce (HIV) mother to child transmission rates to <5% by 2015, and reduce new infections by 50%, by 2015.	**Impact Indicators** Prevalence rate of HIV/AIDS in young people aged 15-24 (women, men) Mother-to-child transmission rate in HIV+ pregnant women	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG2 (quality)	Strengthen linkages between counselling and testing, and care and treatment services. Improve current retention rates, at 12 months, in pre-ART patients. Ensure ART initiation among eligible adults in the month following enrolment in HIV care and treatment services - and within two weeks for children. Routine screening of main causes of morbidity and mortality associated with HIV in all ART sites and provide treatment and prophylaxis. Ensure patients with therapeutic failure start second line treatment. Improve TB diagnosis capacity in adults and children. Expand the use of fixed dose combination ART (one tablet per day). Strengthen national HR for increased health capacity. Ensure all ART / PMTCT sites implement a standard package for quality improvement. Implement basic packages for positive prevention and psychosocial support.	No. and % of pregnant women receiving HIV test results in 1st ANC No. (and%) of HIV+ pregnant women receiving ARV drugs in the last 12 months to reduce the risk of mother to child transmission% of HIV+ pregnant women receiving anti-retroviral prophylaxis that receive ART (option B+) % of HIV outpatient consultations in CRC that imitated CTZ prophylaxis
SG3 (equity)	Rapidly expand coverage of MC in provinces with high HIV and low MC rates. Increase the number of HFs offering ART at national level. Develop family-centred services in HFs offering ART. Reach young adolescent girls with effective interventions to reduce HIV acquisition. Expand the Community Adherence and Support Groups (GAAC, Grupos de Adesão e Apoio Comunitário) strategy.	No. of HFs offering ART No. and % of HFs offering the basic PMTCT package of services No. and % of eligible men receiving MC in priority provinces
SG4 (effectiveness / efficiency)	Develop an efficient and sustainable M&E system to facilitate decision-making. Optimize national laboratory networks for disease diagnosis and surveillance. Optimize the national logistics system and related supply chains.	Retention rate after 12 months of ART treatmentPre-ART retention rates after 12 months of treatment
SG5 (better partnerships)	Increase the percentage of co-infected patients with TB and HIV receiving ART. Improve TB diagnostic capacity in adults and children. Improve the availability of FP services and of services offering care to cases of gender-based violence.	% of patients screened for TB at their last registered consultation % of HIV+ / TB patients registered in the National TB Control Programme on ART and TB treatment% of patients (ART and pre-ART) initiating IPT

National Tuberculosis Control Programme		
Main Objective Contribute towards the reduction of TB related morbidity and mortality, in line with MDGs	**Impact Indicator** % of deaths among TB BK+, notified on a yearly basis	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Collaborate with DEPROS in areas such as communication, social mobilization, for behaviour change and stigma reduction associated with TB, to remove barriers to access – including cultural, gender and financial barriers. Increase community knowledge for increased adoption of safe practices (attitudes and perception of risk) in relation to TB, enable people to identify TB symptoms, and encourage utilization of existing TB services. Implement the TB early and active detection strategy, for effective notification and quality treatment using DOTS. Introduce TB services in new HFs (particularly diagnosis, care and treatment) in the different levels of the NHS.	Notification rates for all forms of TB (per 100,000 people)
SG2 (quality)	Supervise, provide on-the-job training and improve health worker training curriculum to increase technical capacity to identify suspected TB cases and clinical case management. Reduce TB hospital infections by implementing effective hospital infection prevention and control measures. Reduce the number of people contracting resistant strains of TB, especially MDR-TB and Extensively Resistant TB (XDR), through awareness-raining activities targeting communities and health workers in relation to MDR-TB and XDR; earlier detection of MDR-TB and XDR; update treatment protocols for MDR-TB and XDR and implement infection prevention and control measures. Adopt new technologies available for TB and MDR-TB to increase the speed and effectiveness of diagnosis.	Tuberculosis treatment success rate under DOTS % of successful treatment for MDR-TB
SG3 (equity)	Increase TB detection rates in high-risk groups (prisoners, miners, health workers, sex workers) through active case finding. Increase the number of children <15 receiving TB diagnosis and treatment, especially between contacts and using the TB DOTS strategy.	No. of children <15 diagnosed with TB initiating treatment
SG4 (effectiveness/ efficiency)	Establish effective coordination mechanisms with CMAM and others, to improve the management of TB related pharmaceuticals. Guarantee prompt and quality bacteriological diagnosis and control by strengthening laboratory networks.	No. of provincial deposits with stock outs for 4DFC, paediatric 3DFC, etionamide or levofloxacin (tracer medicines), at least once per quarter
SG5 (better partnerships)	Guarantee universal access to ART in co-infected HIV / TB+ patients through the use of approaches such as "One-Stop", in close coordination with the HIV/AIDS programme.	Proportion of TB/HIV+ patients receiving ART during treatment for TB

National Malaria Control Programme		
Main Objective Reduce by half morbidity and mortality in relation to 2009 observed level	**Impact Indicator** Malaria cases per 1,000 inhabitants Total number of in-hospital deaths caused by malaria	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Mass distribution of ITNs, and distribution to pregnant women through ANC services, to guarantee universal coverage. Implement IRS in selected areas. Administer IPT to all pregnant women attending ANC services. Guarantee universal access to information on malaria prevention and treatment through advocacy and communication activities using the media, health workers, APEs, leaders (community, political or religious leaders) and volunteers.	% of the population at risk potentially reached by ITN distribution % of pregnant women attending ANC receiving at least two doses of IPT % of pregnant women receiving at least one ITN in the antenatal consultation
SG2 (quality)	Expansion of microscopy diagnostic capacity for malaria at HFs in the NHS and rapid tests to communities through APEs. Test all suspected malaria cases presented at HFs and communities (APEs); treat in line with national norms and strengthen case management of complicated / severe malaria. Strengthen malaria management capacity at all levels through technical support and provincial and district level malaria focal points. Quality control for malaria related products. Conduct evaluation of the National Programme for Malaria Control (PNCM, Programa Nacional de Controlo da Malária). Promote national norms for the treatment of malaria in the private sector in close coordination with the pharmacy department.	Percentage of suspected malaria cases receiving a diagnostic test% of cases of malaria correctly treated
SG4 (effectiveness/ efficiency)	Strengthen surveillance and M&E systems, including operational research at all levels (at central, provincial, district and community levels) so all districts have the capacity to regularly report on key malaria indicators. Improve the timeliness and response to malaria epidemics.	% of HFs not reporting stock outs for ACTs in a one month period
SG5 (better partnerships)	Support efforts towards the elimination of malaria in the SADC region, in collaboration with neighbouring countries. Strengthen the capacity of teachers, volunteers and adult literacy teachers on malaria control, in close coordination with the Ministry of Education (MoE, Ministério de Educação). Provision of information and education on malaria in schools; social mobilization for long lasting impregnated nets and IRS campaigns. Involve the private sector, including growth industries, in the implementation of malaria control interventions.	No. of coordination meetings held between NMCP and partners

Programme: Non-Communicable Diseases		
Main Objective Reduce the burden of NCD and mitigate related socio-economic impact	**Impact Indicator** Prevalence of risk factors associated to NCDs Mortality rates associated with traffic accidents	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Implement health promotion activities in coordination with local Government (Town Councils and Cities) and employers, emphasizing the need for regular physical activity and adoption of healthy eating habits, using IEC and theatre, and commemorating health days and NCD Day etc. Establishment of a legal framework for preventing and reducing exposure to associated NCD risk factors (alcohol, tobacco and unhealthy diets). Intensify efforts for preventing and treating the main NCD (cardiovascular disease, asthma) through training health workers and activities to increase the demand for services. Intensify efforts for preventing and treating cervical, breast and prostate cancer through screening campaigns, strengthening referral systems and increasing availability of relevant drugs and treatment (including surgical) for the most prevalent / frequent types of cancer.	No. of patients with NCD receiving treatment (disaggregated by province) % of men and women with harmful levels of alcohol consumption (4 and 5 standard units / day for men and women, respectively).
SG2 (quality)	Train and develop training plans and guidelines, and post-training monitoring, on prevention, counselling, clinical management and rehabilitation of patients afflicted by NCDs, including epidemiological surveillance of trauma. Guarantee health care for people suffering from asthma with the use of appropriate preventive and crisis treatment therapies.	Screening coverage rate of cervical cancer in women aged 30-55 years
SG4 (effectiveness/ efficiency)	Strengthen and expand surveillance systems and M&E for NCDs. In collaboration with research institutions, conduct studies such as on knowledge, attitudes and practices, and prevalence about NCDs and associated risk factors. Create functional organisational units at provincial level.	
SG5 (better partnerships)	Establish health promotion mechanisms to massively increase knowledge in relation to risk factors associated with NCDs. Strengthen advocacy for increased community, private sector and civil society involvement in the prevention and control of risk factors associated with NCDs.	

Programme: Neglected Tropical Diseases		
Main Objective Reduce the prevalence of NTDs at community level	**Impact Indicator** NTD prevalence rates disaggregated by disease	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Mass treatment of NTDs through targeted campaigns at community level and schools. Active case detection and treatment of cases of river blindness through self-care groups (where they exist), APEs, TMP and health activists. Create a humanized referral system for the treatment of complications associated with NTDs, including leprosy. Ramp up IEC activities on NTDs and leprosy at community level, involving political leaders, community volunteers, self-care groups, faith-based organizations, TMP and the media.	% of the population in endemic areas receiving information on NTD prevention
SG2 (quality)	Guarantee adequate diagnosis and treatment for all individuals arriving at HFs with NTD infections by strengthening the capacity of health workers, volunteers and members of self-care groups for improved provision of care and case management and the prevention of deformities associated with NTDs, including leprosy. Integrate surgeries dealing with deformities associated with NTDs into surgical services provided in HFs with surgery wards. In close coordination with the National Health Institute (INS, Instituto Nacional de Saúde) improve operations the already defined sentinel sites that will participate in the study of leprosy drug resistance in the seven provinces where it is more endemic. Integrate leprosy programme interventions into different health programme areas (surgery, ophthalmology and PM&R related to prevention, correction, and rehabilitation of disabilities and deformities caused by leprosy).	Deformity rate for NTDs (disaggregated by disease)
SG3 (equity)	Implement the Surgery, Antibiotics, Facial Cleanliness, Environmental Improvements Strategy in endemic districts. Establish sentinel sites in Niassa, Cabo Delgado, Nampula and Tete for Human African Trypanosomiasis surveillance, up to 2017.	No. and % of people reached through massive treatment campaigns (disaggregated by province and disease)
SG4 (effectiveness / efficiency)	Assess the magnitude of transmission of specific NTDs (trypanosomiasis, trachoma). Integrate specific filariasis-related activities into existing leprosy self-care groups. Conduct operational research, in collaboration with the INS, to assess and improve the performance of the NTD and leprosy programmes.	No. of trypanosomiasis sentinel sites
SG5 (partnerships)	Advocate for accelerated water supply, latrine construction and utilization and improvement of environmental sanitation with the public works sector / Town Councils / education sector.	TBD

Programme: Adolescent Health		
Main Objective Improve access and quality of SRH care and services for adolescents and youth	**Impact Indicator** Adolescent fertility rate (births per 1,000 women) HIV / AIDS prevalence rates in people aged 15-24	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Strengthen debates around SRH interventions through CSOs, especially on the topic of contraception-related counselling. Implement health education interventions for the prevention of unsafe abortions, in collaboration with DEPROS. Integrate adolescents and youth living with HIV In Youth Friendly Health Services (SAAJ, Serviços do Atendimento ao Adolescente e Jovem) in 80% of HFs with SAAJs. Increase the number of HFs offering Integrated Sexual and Reproductive Services for Adolescents and Youth (SSRAJ, Serviços de Saúde Reprodutiva para Adolescentes e Jovens), which include FP, counselling and testing for HIV as well as for other STIs, integration with other services, etc. and ensure the availability of replacement condoms and contraceptive pills directly in schools.	Contraception rate in adolescents aged 15-19
SG2 (quality)	On-going implementation and monitoring of the package of services for integrating interventions targeting adolescents and youth in health services, within HFs equipped with SAAJs. Strengthen the capacity of health sector service providers, including community level partners, for the provision of SRH care services to adolescents, provision of care and psychosocial support to minors and adolescent victims of violence and sexual abuse, and the provision of care to adolescents living with HIV / AIDS. Integrate SAAJs in the flowchart for providing integrated care to victims of violence, by reviewing the flowchart for integrated services for victims of violence.	% of HFs with SAAJs that integrate HCT services for HIV
SG3 (equity)	Expand SAAJs in HF not targeted to date (from 25 in 2013, to 50 in 2014, to 75 in 2015, to 85 in 2016 and to 100 in 2017), observing geographic equity criteria.	TBD
SG5 (partnerships)	Improve coordination of activities in the area of sexual education and sexuality, in partnership with MoE, the Ministry of (MJD), CSOs and others. Ensure coordination with relevant sectors and youth organizations for the adoption of a multisectorial approach adolescents and youth, SSRAJ (*Geração Biz*).	TBD

Programme: School Health		
Main Objective Contribute towards the establishment of a safe and healthy school environment favouring learning and the harmonized development of students	**Impact Indicator**	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Instil healthy life practices, though regular health education interventions in schools (individual and collective hygiene, physical exercise), promoting "cleaning days", school gardens, non-consumption of alcohol and tobacco and the promotion of road safety, as entry points for NCDs. Strengthen TT2 vaccination activities in schools. Expand the basic school health package to secondary and pre-university levels, including observation and / or regular medical exams in schools and the implementation of deworming campaigns.	TT2 vaccination coverage rate in schools (1st and 2nd grade)
SG5 (partnerships)	Strengthen coordination mechanisms to support school efforts to promote healthy lifestyles; counselling corners and the establishment of tobacco and alcohol-free environments (as well as free from the use of other drugs).	TBD

Programme: Health Promotion		
Main Objective Contribute to reducing the disease burden through adoption of healthy lifestyles and reduction of behaviours that are a risk to health	**Impact Indicator** Incidence / prevalence of communicable and non-communicable diseases	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Build the capacity of households / mother-to-mother groups to become community level role models, promoting healthy lifestyles, nutrition education, hygiene and sanitation, and disease prevention. Implement innovative health communication initiatives, prioritising the use of new communication technologies (and social networks, which are increasingly popular in the country) and community radios. Promote health fairs and campaigns integrating information and services, targeting communities and focusing on health promotion and disease prevention, including the promotion and distribution of FP methods at community level. Continue training and providing refresher training to APEs in all districts of the country.	% of the population adopting healthy lifestyles in relation to NCDs % of the population aged 15-49 adopting safe behaviours in relation to communicable diseases

Programme: Health Promotion		
Main Objective Contribute to reducing the disease burden through adoption of healthy lifestyles and reduction of behaviours that are a risk to health	**Impact Indicator** Incidence / prevalence of communicable and non-communicable diseases	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG2 (quality)	Build the capacity of health workers, community leaders, religious leaders, CSOs and community based organizations for health promotion, using the most effective means of communication to disseminate information that reduces vulnerability and risks, and promotes healthy lifestyles and quality of life. Develop a legal framework or environment that favours promoting and protecting health in the area of health education. Implement mechanisms to operationalize the APE programme (adequate training, regular subsidy payments, on-going quality supervision, regular reporting, effective and efficient logistics for drug kits, M&E, etc.) for the provision of quality services.	(findicators for APEs functionality to be defined)
SG3 (equity)	Reach the most vulnerable groups with health-related information through APEs and other community health agents, TMP and volunteer activists.	
SG4 (effectiveness / efficiency)	Develop an M&E system for activities promoting health and increasing community involvement, in coordination with the Health Information Department (DIS, Departamento de Informação para a Saúde). Evaluate the APE programme. Conduct research on behaviour, attitudes and practices at community level related to key diseases in collaboration with research institutions, in order to measure the impact of the health promotion programmes implemented. Improve the coordination of IEC activities. Adjust / update sustainable financing systems for the APE programme, in coordination with key Government sectors and in collaboration with sector partners.	
SG5 (better partnerships)	Strengthen health worker and partner capacity to develop activities for community level mobilization, promotion and monitoring. Update training curricula to integrate health education in primary and secondary schools and in initial and post graduate training, in coordination with lead Government institutions Strengthen the planning capacity of multisector working groups at all levels (central, provincial and district) through on-going advocacy efforts that result in increase involvement of other sectors in health promotion.	% of existing HFs that have designated and operational co-management committees

Programme: Mental Health		
Main Objective Prevent and reduce morbidity caused by mental and behavioural conditions, neuropsychiatric diseases and psychosocial disorders, including drug abuse, especially tobacco and alcohol	**Impact Indicator** Incidence / prevalence of communicable and non-communicable diseases	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Implement information and awareness-raising activities to raise community knowledge on the consequences of consuming psychoactive substances, including tobacco and alcohol, in close coordination with DEPROS. Promote community participation in the promotion, prevention, rehabilitation and reinsertion of the mentally ill through informal community networks and community-based organizations by including mental health workers in outreach teams, community level therapy and home visits. Assign psychiatry and mental health workers to HFs at district level. Equip rural hospitals with multidisciplinary psychiatry and mental health teams. Create specialized centres for the treatment and rehabilitation of drug addicts and centres for applied psychology and psycho-technical testing, in collaboration with the Infrastructure Department.	No. of awareness-raising and information campaigns implemented over the course of a year that focus on the consequences of psycho-active substances, including tobacco and alcohol % of districts offering mental health services
SG2 (quality)	Strengthen the capability of mental health workers and provide specialized training to doctors working in the area of mental health, focusing on continuing education, facilitating participation in international congresses and workshops and short-term courses. Integrate mental health issues in health worker training curricula.	No. of psychiatrists, clinical psychologists, occupational therapists, psychiatry and mental health workers trained
SG4 (effectiveness / efficiency)	Implement prevalence, and knowledge, attitudes and practices studies around epilepsy, schizophrenia and other psychoses. Create effective coordination and planning mechanisms with CMAM for the acquisition and management of psychiatric medication.	No. of studies conducted on prevalence, and knowledge, attitudes and practices related to epilepsy, schizophrenia and other psychoses % of HFs with stock outs for psychiatric medication
SG5 (better partnerships)	Increase intra and intersectorial collaboration, as well as collaboration with civil society through joint planning and monitoring of activities promoting mental health, and prevention of mental conditions and behavioural disorders.	No. of sector meetings, and meetings with other sectors and relevant partners, held in a year

Programme: Epidemiology		
Main Objective Contribute towards the reduction / frequency of outbreaks / epidemics, with emphasis on polio eradication and the elimination of measles	**Impact Indicators** Fatality rate from the principal epidemic diseases	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Strengthen district level capacity to prevent and respond to outbreaks and epidemics by designating district level focal points dedicated to epidemiologic surveillance.	
SG2 (quality)	Strengthen the capability of health workers to respond to outbreaks and epidemics, making it possible to train teachers in field and laboratory epidemiology and to provide guidance in epidemiology to higher-level health workers who can then be placed at provincial and district level. Supervise epidemiological surveillance and on-the-job training on surveillance, at provincial and district level.	No. of health worker experts in field and laboratory epidemiology
SG4 (effectiveness / efficiency)	Introduce new information technologies to enable timely transmission of information (access to internet in HFs at district level and other means such as personal digital assistants, cell phones, etc.). Define a legal framework that facilitates the collection of data and information from all stakeholders (NGOs, private sector, etc.). Conduct regular independent assessments of the epidemiological surveillance system. Expand the epidemiological surveillance system to prevent and provide timely responses to outbreaks and epidemics.	% of districts submitting information promptly and complete to DIS (HIS)
SG5 (better partnerships)	Collaborate with other sector institutions (EPI, environmental health, health promotion, etc.) to strengthen implementation of prevention interventions for potential epidemic diseases	

Programme: Environmental Health		
Main Objective Contribute to reducing the incidence and prevalence of diseases related to environmental determinants of health	**Impact Indicators** Malaria cases per 1,000 inhabitants	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Implement door-to-door visits to assess hygiene and sanitation conditions at community level, with a view to controlling the environmental determinants of health (water, food and environmental sanitation). Promote community education and awareness-raising on environmental issues through talks, the media and community-based organizations etc., in collaboration with DEPROS.	
SG2 (quality)	Develop an environmental health strategy that includes the evaluation of health risks associated with climate change and corresponding resilience mechanisms. Develop technical capacity (HR and technology) for the surveillance of health determinants, including emerging infectious diseases and diseases resulting from climate change, and to carry out health inspections along with water and food control activities. Define norms and procedures to prevent diseases associated with environmental conditions and to contribute to the protection of public health. Disseminate and implement the National Strategy for Safe Food, including the implementation of health control measures at key entry points (land, air and sea borders) with international traffic, within the framework of International Health Regulations.	No. of health technicians working in preventive medicine (técnicos de medicina preventiva) assigned to main entry points (air, sea and land borders) for international traffic
SG3 (equity)	Develop and train focal points in the most vulnerable districts to ensure adequate preparation and response to climate change.	
SG4 (effectiveness / efficiency)	Improve procurement and distribution of reagents and culture media to control water quality, in collaboration with CMAM. Improve bio-medical waste management in HF and general hospitals by 2016 by streamlining biomedical waste management procedures. Collaborate with CMAM in the management of vaccines against yellow fever.	
SG5 (partnerships)	Sign MoUs with related institutions (the Ministry of Agriculture - MINAG, the Ministry for the Coordination of Environmental Action – MICOA, and those in charge of Customs and Immigration, Water and Sanitation) to guarantee multisector interventions are implemented by 2015, including International Health Regulations.	

Programme: Sports Medicine		
Main Objective Contribute to the well-being of athletes and people practicing physical sports	**Impact Indicators**	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Create physical and logistical capacity for sports medicine, especially at provincial level. Support the National Institute for the Development of Education (INADE, Instituto Nacional do Desporto) to create a National Sports Medicine Centre.	
SG3 (equity)	Establish mechanisms to ensure compliance with regulations and the inclusion of examinations for physical fitness in sports, through increased advocacy and inspection. Conduct supervision visits and provide technical support. Strengthen health worker capacity in the area of sports medicine, including on-the-job training for focal points.	
SG5 (partnerships)	Establish intersectorial collaboration mechanisms for sports medicine to achieve adequate levels of performance, including the implementation of regulations around physical fitness examinations in sports.	

Programme: Older People´s Health		
Main Objective Create a programme for older people´s health with the view to improving the quality of life of older people	**Impact Indicators**	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Increase community knowledge on common diseases affecting older people and corresponding mitigation measures. Involve community members in the control of chronic diseases and NCDs among older people and promote good nutrition practices and physical activity. Recognize and raise awareness of the main pathologies affecting older people in urban and rural areas. Define a minimum package of services and implement a pilot programme centred on older people´s health in one HF for subsequent expansion based on the experience. Train health workers to provide assistance to older people, with the objective of disseminating information on services available in the areas of health promotion, preventive health and care for older people, at district level.	
SG4 (effectiveness / efficiency)	Create a central level, a multidisciplinary technical team to coordinate all interventions to consolidate the older people´s health programme (technicians in the National Directorate for Public Health (DNSP, Direcção Nacional de Saúde Pública) and National Directorate for Medical Care (DNAM, *Direcção Nacional de Assistência Médica*). In association with the HIS, design an effective data collection system for use in services offered to older people. Establish partnerships with various institutions and NGOs working on older people's issues, with a view to mobilizing resources to improve older people´s health.	

Area: Specialized Medicine and Paediatrics	
Main Objective Contribute to the reduction of morbidity and mortality by providing more and better services in the area of internal medicine and paediatrics, in line with international protocols and adapted to the reality of Mozambique	**Impact Indicator** Children under five mortality rate per 1,000 live births Overall mortality rate

Strategic Goals	Strategies and Interventions	Indicators
SG1 (access)	Increase services (out-patient consultations and hospital admissions) for different specializations related to internal medicine and paediatrics by recruiting, training and placing specialists and specialized health workers (for example Mozambican paediatricians) in all provincial capitals and rural hospitals.	No. of outpatient consultations per area of specialization No. of services dedicated to internal medicine and paediatrics established in provincial capitals, or % of provincial capitals offering these services
SG2 (quality)	Produce and distribute protocols / norms for standard operating procedures related to the key diseases (paediatric and internal medicine), to be used in each type of HF. Equip the main HFs with basic diagnostic and treatment aids (e.g. pump therapy, electric syringes, oximeters, continuous positive airway pressure, etc.). Conduct technical support visits, supervision and on-the-job training at provincial and district level. Strengthen service provider medical and paediatric capacity through supervision, training courses and national assessment meetings.	Intrahospital mortality rate for medical and paediatrics services Average waiting time for consultations
SG3 (equity)	Place and redistribute specialists in HFs across the country, giving preference to the most disadvantaged areas.	No. of doctors specialized in internal medicine / paediatrics per inhabitant and province
SG4 (effectiveness / efficiency)	Design an efficient system to record information for medical and paediatrics services, in collaboration with DIS.	Bed occupancy rate per service (disaggregated by province) Productivity of hospital beds, by service (and by province)

Area: Surgery and Anaesthesiology Care Services		
Main Objective Contribute towards the reduction of morbidity and mortality caused by acute disease and injuries, and corresponding after-effects	**Impact Indicator**	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Implement reconstructive surgery campaigns for orofacial clefts. Expand anaesthesiology and reanimation services, offering specialized training and placing at least one health worker specialized in anaesthesiology in each district, rural and general hospital. Expand pain management units to all central hospitals, facilitating training for specialists.	No. of surgeries performed % of district, rural and general hospitals with anaesthesiology and resuscitation services No. of pain management units created
SG2 (quality)	Guarantee that all operating theatres and small surgery rooms in the country operate adequately by: • Training additional (new) surgeons. • Developing specific protocols for each surgical speciality. • Introducing verification lists in operating theatres and routine use of informed consent. • Guaranteeing the existence of basic material and infrastructure conditions in hospitals to enable operating theatres to function adequately. • Conducting support / technical supervision visits, including on-the-job training, on the use of new medical-surgical technologies (for example, laparoscopic surgery) in all provinces. • Renovating all operating theatres requiring this type of intervention (at Rural Hospital level), including large theatres such as those in Maputo, Beira and Nampula. • Improve the quality of anaesthesiology and resuscitation services by requalifying basic to higher-level health workers specialized in anaesthesiology.	Intrahospital mortality rate for medical and paediatrics services Average waiting time for consultations
SG4 (effectiveness / efficiency)	In coordination with HIS, develop an information and management system for surgical, anaesthesiology and resuscitation services, and pain management units.	

Area: Specialized Surgical Services, Gynaecology & Obstetrics, Ophthalmology, Otolaryngology, Orthopaedics and Traumatology	
Main Objective Reduce morbidity and mortality by disease associated to surgical pathologies (gynaecology and obstetrics, ophthalmology and otolaryngology, orthopaedics and traumatology)	**Impact Indicator** General mortality rate Prevalence of cataracts at community level (measurement yet to be defined) Prevalence of deformities / post-injury disabilities at community level

Strategic Goals	Strategies and Interventions	Indicators
SG1 (access)	Increase access and demand for basic and specialized services related to medical-surgical services (gynaecology and obstetrics, ophthalmology and otolaryngology) through campaigns and health promotion activities, APEs, NGOs, community-based organizations and others. Expand (out-patient consultations and hospital admissions) services for different surgical areas of specialization by recruiting, training and placing specialists and specialized health workers in all provincial capitals and rural hospitals. Implement surgery campaigns for cataracts, early diagnosis for glaucoma and refractive errors, at lower levels.	No. of outpatient consultations by specialization area No. of specialized services in provincial capitals or % of provincial capitals offering these services
SG2 (quality/ humanization)	Build the capacity of health personnel at general, medium and specialized level, through on-the-job training around new technology for surgical procedures, purchasing bibliographic material, participating in international courses and conducting supervision and technical support visits. Design, disseminate and implement protocols / norms for standard operating procedures for compulsory use at HF level. Guarantee all HFs at all levels (district and provincial) are equipped and meet the needs of existing specialized services (standardized equipment needs). Introduce new diagnostic and treatment technologies at HCM.	Intrahospital mortality rate for surgical services (by area of specialization) Average waiting time for appointments and surgeries
SG3 (equity)	Place and redistribute specialists across HFs in the country, favouring the most disadvantaged areas.	No. of specialized medical doctors per inhabitant per province (disaggregated by area of specialization)
SG4 (effectiveness / efficiency)	Design an efficient data entry system for medicine and paediatric services, in collaboration with DIS.	Bed occupancy rate per service (disaggregated by province) Productivity of hospital beds, by service (and by province)

Area: Medical Emergencies and Trauma		
Main Objective Contribute towards the reduction of morbidity and mortality associated with acute disease and trauma.	**Impact Indicator** Hospital mortality rate in the first 48 hours following admission Proportion (weight) of injuries in emergency wards	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Develop a single, integrated system, which defines a broad referral network and specific ones for certain clinical conditions, as well as competencies or procedures to simplify patient flow. Create and integrate emergency pre-admission services with hospital emergency services, which includes transport to HFs for emergencies and injuries. Increase awareness and knowledge around emergencies / injuries, risk factors, consequences and preventive measures, in collaboration with DEPROS. Guarantee infrastructure / equipment which facilitates access to emergency hospital treatment for patients suffering multiple trauma.	TBD
SG2 (quality)	Improve emergency response, through creation of a centre to coordinate pre-hospital emergencies and the integration of these services in the hospital emergency system. Establish a platform for collaboration, training and monitoring that guarantees appropriate patient flow in hospitals. Strengthen and integrate training interventions in the context of emergency medical care within and outside of hospitals. Develop integrated care norms or protocols for pre-hospital and hospital emergencies for patients suffering injuries and / or sudden death.	TBD
SG4 (effectiveness / efficiency)	Strengthen the integrated system for epidemiologic surveillance, research, M&E in the area of injuries and spontaneous diseases. Establish documentation and M&E mechanisms.	TBD
SG5 (better partnerships)	Establish effective multisector collaboration and coordination mechanisms around prevention; creation of a legal platform for the provision of emergency care and injuries, including a system providing care for pre-hospital emergencies.	TBD

Programme: Oral Health		
Main Objective Improve the oral health status of the Mozambican population	**Impact Indicator** Prevalence of main oral diseases (to be defined in the technical notes)	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access)	Collaborate with DNSP in the design of education strategies, along with the promotion and prevention of oral disease at community level. Mass expansion of the use of fluoride at community level through the use of toothpastes containing fluoride, the addition of fluoride in water and the use of fluoride-based mouthwash in children aged 6 – 12 (children at risk). Improve knowledge among the population, especially of school-age children, on oral disease and associated risk factors; promote behaviour for good oral health through outreach teams. Increase the number of qualified staff, as well as working conditions, especially at district level.	No. of school aged children with knowledge of oral diseases and associated risk factors % of districts offering oral health services (disaggregated by province)
SG2 (quality/ humanization)	Define basic dental care package for each level of medical care. Increase the quality of infrastructure and the capability of specialized health workers around maintenance of dental equipment.	No. of HFs with dentistry services (disaggregated rural / urban areas)
SG4 (effectiveness / efficiency)	In collaboration with DIS, improve the management capability of the oral health programme through the creation of an M&E system for the programme. Conduct studies to assess the prevalence of the main oral diseases and design the epidemiologic framework for oral disease.	
SG5 (better partnerships)	Expand and improve multisector collaboration (agriculture, industry and commerce, public works, finances, education, environmental coordination), including the establishment of PPPs around oral health determinants with the aim of promoting oral health and distributing preventive materials.	

Programme: Occupational Health		
Main Objective Contribute towards the reduction and prevention of morbidity and mortality associated with occupational disease	**Impact Indicator** Incidence / prevalence of occupational diseases	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access / use)	Train health workers in different areas related to occupational health: occupational doctors, hygienists and occupational nurses.	
SG2 (quality / Humanization)	Map the main private sector groups active in the country and the main occupational health risk factors associated with them. Train health workers in various occupational health areas: occupational doctors, hygienists and occupational nurses. Define the functions and structures of the Occupational Health Programme at the various levels of the health sector. Develop a policy / strategy in the area of occupational health.	
SG4 (effectiveness / efficiency)	In collaboration with DIS, create a notification system for occupational disease. Establish the baseline for morbidity and mortality associated to occupational disease. Map the main private sector groups active in the country and the main occupational health risk factors associated with them.	
SG5 (better partnerships)	Establish effective multisector collaboration and coordination mechanisms with key stakeholders (Ministry of Labour, employer representatives and workers, International Labour Organization, WHO, etc.). In collaboration with employers, train first-aid trainers.	

Programme: Traditional Medicine		
Main Objective Promote safe, effective and quality use of Traditional and Alternative Medicine, with a focus on Primary Health Care and referrals.	**Impact Indicator** Proportion of children in HFs intoxicated by traditional treatments	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access / use)	Increase PHC coverage offered by TMPs.	No. of patients referred by TMPs to HFs
SG2 (quality / Humanization)	Integrate traditional and alternative medicine into the NHS, by: • Building the capacity of TMPs around PHC. • Improving systems for referral and counter reference. • Train health professionals on traditional medicine. • Hold regular meetings between TMPs and conventional health professionals to monitor and evaluate activities. • Integrate TMPs into the Health and Humanization Committees. Strengthen the capacity of the IMT staff in the following areas: photochemistry, ethnobotany, plant pharmacology, medical anthropology, and related short-term courses, to improve relevant activities. Finalize legislative framework and regulations for the practice of traditional medicine in Mozambique; create the National Council for Traditional Medicine and launch operations, including resource mobilization for the construction of the IMT.	No. and % of Health Committees which include TMPs
S04 (effectiveness / efficiency)	Prioritize and conduct research in the field of traditional medicine, especially around medicinal plants (ethnobotany, phytochemistry, as well as biological and clinical trials). Develop socio-anthropologic research related to health problems.	No. of research studies planned and conducted
SG5 (better partnerships)	Provide equipment needed for studies and research, establish partnerships with relevant institutions and guarantee HR availability. Establish effective coordination mechanisms for the implementation of activities with other Government Institutions and within the MoH (development of joint PESs).	

Support Services for Clinical Care (Nursing, Blood Transfusion, Physical Medicine and Rehabilitation)		
Main Objective Contribute to improving the quality of clinical care services by strengthening clinical support services (blood transfusions, nursing, physical medicine and rehabilitation)	**Impact Indicator** Hospital mortality rate, disaggregated by disease	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG1 (access / utilization)	In coordination with the Human Resource Directorate (DRH, Direcção de Recursos Humanos) define and train nursing teams, by level of care or type of HF. In collaboration with DRH / training department, increase nurse training activities at all levels to achieve the ratio of 1 nurse per 15 hospital beds. Develop and equip sterilization units in the Central, Provincial, Rural and District Hospitals that have operating theatres; build the capacity of health workers in charge of sterilization units. Train and place medium level health workers specialized in Physical Medicine and Rehabilitation (PM&R) at district level and physiotherapists in referral centres. Renovate existing infrastructure / building housing orthopaedic services (HCM, and Provincial Hospitals in Quelimane and Inhambane) and build infrastructure where these services do not exist, in collaboration with the Infrastructure Department. Promote interventions to boost the number of non-remunerated volunteer blood donations and reduce dependence on family donations, including communication / widespread education campaigns and courses. In coordination with DEPROS promote community prevention IEC activities for prevention and to promote physical health, as well as for the identification of pathologies that could lead to disability, to allow early referral to PM&R services.	Bed-to-nurse ratio No. of sterilization units created % of districts with physiotherapy services No. of orthopaedic units created / renovated % of blood donated by volunteers
SG2 (quality/ Humanization)	Expand the "Model Nursing Ward" approach / strategy in Central and Provincial Hospitals. Review / update the nursing procedures manual, as well as existing manuals on the sterilization of hospital products and equipment. Build the capacity / re-train nurses in the areas of respectful and humanized care, biosecurity and hospital waste management. Revitalize and expand the Commissions for Infection Prevention and Control, in Provincial and Central Hospitals, including interventions such as building staff capacity, conducting performance appraisals and the identification / integration of best practices. Guarantee quality testing (ELISA) of all samples collected, including screening for communicable diseases, blood type test and compatibility tests. Develop a National Blood Transfusion Policy. In coordination with the Infrastructure Department, develop and approve standardized blueprints for PM&R infrastructure, to be used in the construction of new HFs. In coordination with the Maintenance and Logistics Department, provide the basic equipment necessary for physiotherapy and orthopaedic services.	% of samples tested with ELISA

Support Services for Clinical Care (Nursing, Blood Transfusion, Physical Medicine and Rehabilitation)		
Main Objective Contribute to improving the quality of clinical care services by strengthening clinical support services (blood transfusions, nursing, physical medicine and rehabilitation)	**Impact Indicator** Hospital mortality rate, disaggregated by disease	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG4 (effectiveness / efficiency)	Promote more rational use of blood to reduce unnecessary blood transfusions. In collaboration with the Maintenance Centre, procurement and suppliers, establish mechanisms to improve equipment management and maintenance. Develop an information and nursing activity management system spanning across three areas: nursing care, follow up, and analysis of hospital infections in Central, Provincial and Rural Hospitals, together with blood transfusions and PM&R activities, in coordination with DIS.	
SG5 (better partnerships)	Advocate with MoE for the integration of issues related to PM&R in primary school teacher-training activities and to reopen courses for higher-level health workers in the area od PM&R. Advocate for the physical spacing of blood banks and clinical laboratories. Advocate with UEM and Health Sciences Institutes (ICSs, Institutos de Ciências da Saúde) for the inclusion of physiotherapy in health worker training curricula at all levels.	

Programme: Private Medicine		
Main Objective Guarantee private sector HFs provide quality health care to users	**Impact Indicator** Hospital mortality rate, disaggregated by disease	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG2 (quality/ Humanization)	In collaboration with the Legal Department, define operational norms and regulations for private sector HFs, including the definition of clinic type with corresponding specificities, and the development of protocols to establish quality standards for services and care in private sector medical practice. Increase the capacity of the Private Medicine Unit by recruiting, building the capacity and training staff from this unit to reach specialization level.	
SG4 (effectiveness / efficiency)	Integrate information related to indicators in private sector HFs in the existing system (NHS Módulo Básico), in collaboration with HIS.	

Clinical Care, Management Services (Clinical Management, Hospital Administration & Laundry Service and Clinical Files)		
Main Objective Guarantee efficient, effective and quality services that meet patient expectations.	**Impact Indicator**	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG2 (quality/ Humanization)	Improve management, location and security of patient records and clinical files at HF level, by building staff capability in hospital management, the establishment of hospital management teams, computerization of hospital admission services and of individual patient records, contracting higher-level managers for clinical records (Librarians or Arquivists). Define and / or strengthen procedures (protocols) around best practices for hospital management and administration. Improve hospital diets by training specialists in dietotherapy, building the capacity of kitchen staff and providing hospitals with basic kitchen equipment. Ensure appropriate methods are used to deal with and disinfect hospital garments. Disseminate and monitor the implementation of hospital statutes and regulations. Create and expand the network of Patient Support Units.	Hospital mortality rate (disaggregated by province and level of care) Average length of stay in hospital (disaggregated by province and level of care)
SG3 (equity)	Establish criteria for the distribution of resources per level of care and improve the distribution of human and material resources to reduce potential inequities in resource distribution. Purchase and distribute key hospital resources in an equitable way (beds, specialized personnel, equipment, etc.).	Beds / inhabitants (disaggregated by province, district)
SG4 (effectiveness / efficiency)	Increase efficiency levels in the provision of hospital care, as well as clinical and financial performance in hospitals and the health system, by creating appropriate M&E systems for hospital management in collaboration with DIS. Define and assign standardised personnel for each level of care. Produce and implement guidelines for hospital management. Develop a planning system for hospital activities based on population needs and hospital performance indicators, in coordination with the Department of Planning and Health Economics (DPES, Departamento de Planificação e Economía da Saúde). Define mechanisms to reduce hospital costs, including criteria for the allocation of financial resources, human resources (standardized teams), etc. Improve planning and implementation of activities in hospital administration, in particular in relation to drawing cost estimates, programming menus, M&E, etc.). Support scientific research activities for pathologies and certain causes of death, through a study on the possibility and relevance of introducing computers in public HFs across the country in current conditions. Strengthen control systems for hospital administration of inputs and outputs.	Average unit cost for bed occupancy rate (disaggregated by province and care level) Bed occupancy rate per service (disaggregated by province and level of care) Productivity of hospital beds, (disaggregated by province and level of care)
SG5 (better partnerships)	Establish effective multisector coordination mechanisms (hospital administration and cleaning, clinical programmes, etc.) to improve hospital performance. Collaborate with the Infrastructure Department in the MoH to define a standardized clinical filing system to inform the design of new HFs, taking into account the diverse care levels.	

Programme: Legal Medicine		
Main Objective Improve Legal Medicine Services for the administration of justice in Mozambique	**Impact Indicator**	
Strategic Goals	**Strategies and Interventions**	**Indicators**
SG2 (quality/ Humanization)	Expand access and utilization of the Legal Medicine Services at district level and open Provincial Level Legal Medicine Services (SPML, Serviços Provinciais de Medicina Legal) in provincial capitals by placing qualified HR and allocating physical space. Open Medical-Legal Units (GML, Gabinetes de Medicina Legal) in districts and in level II hospitals; train experts to work on an ad hoc basis (training health professionals and others). Create / reactivate medical-legal emergency services in Central and Provincial Hospitals. Renovate and expand Legal Medicine Services in Beira and Nampula. Create the National Commission for Forensic Psychiatric Expertise with a view to guaranteeing assistance is provided to both the victims and perpetrators of violence.	% of provinces / districts with SPML/GML % of Provincial and Central hospitals with operational medical-legal emergency services
SG2 (quality / Humanization)	Establish a referral system for products / body fluids of medical-legal interest. Set up specialized biochemistry, DNA, etc. laboratories in Regional Legal Medicine Services located in Central Hospitals. Promote the training and hiring of HR specialized in Legal Medicine (forensic doctors, clinical psychologists, psychiatrists, forensic biologists and chemists, laboratory technicians, thanatologists, nurses and experts to work on an ad hoc basis). Create the National Council for Legal Medicine to oversee medical-legal activity.	
SG5 (better partnerships)	In coordination with the Ministry of Justice, establish effective engagement mechanisms with other bodies involved in the administration of justice.	

5.2 Systems Supporting the Provision of Services

As shown in the PESS framework diagram, the national health system provides services through a network of health facilities with its resources and applied technologies including support systems that aim to establish the conditions for adequate health service provision.

Some of these support areas already have multi-year plans, even if they are often not harmonized with other components of the system or the programmes and services they seek to support. Significant changes will not be seen in the first phase of implementation of the PESS. The challenge will be to respond to increased programme and service needs, for more and better short and medium-term gains, in terms of access, utilization, quality, efficiency and equity of health care.

This section lays out the plans for each component of a health system (and exactly according to the MoH's organisational structure). Firstly, the key challenges the component faces in meeting health service needs for more and better services (pillar I) are presented. This includes presentation of the structural problems that need to be addressed by reforms (pillar II). Secondly, the short-term objectives ("quick-wins") and strategies to address these (by 2016) are presented. This includes activities in the Institutional Reform Acceleration Plan 2013-2015 and specific interventions to facilitate implementation of reforms. The Acceleration Plan considers eight key-intervention areas: (a) Budgetary Execution, Accounting, Reporting and Internal Control, (b) Planning and Budgeting, (c) SIS, (d) M&E, (e) HR Management, (f) Drugs Management and Logistics, (g) Procurement, Inventories and Asset Management, and (h) General Inspectorate. Expected results, activities and sub-activities have been identified for each of the areas, along with responsibilities and timelines for implementation.

Challenges, objectives and strategies associated with the development of the infrastructure network will be reflected in the Integrated Infrastructure Plan to be developed in the coming year (2014). However, the projects to be included in the Investment Plan have already been reflected in the costing exercise; details can be seen in Annexes 3 and 4. Far-reaching, system or structural changes required (reforms) to overcome or minimize the challenges described below will be dealt with in Chapter 6, which is dedicated to reforms.

5.2.1 Service Provision

As an essential part of the health system, service provision refers to how resources are organized and managed to guarantee access, quality, safety and continuity of care.

Limitations, mostly financial, affect the growth of the health care network that is, at times, unevenly equipped, with teams operating in challenging working conditions due to the lack of availability of basic equipment and infrastructure. These constraints affect the quality and efficiency of services provided. Inefficiencies also result from the limited functionality of the referral system, with hospitals being overloaded or disrupted health care.

The National Health Service is managed through a hierarchical and vertical structure. The system has limited horizontal communication, which contributes to the inefficiencies described above. Roles and responsibilities at each level, as well as coordination and communication mechanisms need to be further clarified to avoid the risk of fragmentation and lack of continuity in the provision of health care services.

Lucrative private sector activities in the health sector are concentrated mainly in cities and are mostly made up of pharmacies and clinics operating in a legal framework that is unclear and unregulated, with limited supervision from the MoH. The non-profit private sector, composed largely of national and international NGOs that essentially implement interventions at community level, operates in an unclear legal and strategic environment. Some religious congregations manage a reduced number of HFs within the NHS on the basis of agreements with the MoH.

The provision of health services at community level is secured by ACSs and TMPs; MOH´s relationship

with TBAs and APEs is more formal. However, poor supervision and support, particularly at lower levels, conditions the quality of service precisely at a level of crucial importance, as this is often where the first and only contact with the health system takes place.

Objectives:

- Improve NHS organization and management to guarantee the provision of more and better health services.
  - Define a legal framework for appropriate management and organization of health services
  - Ensure orderly and integrated expansion of health services
  - Improve the quality of health services provided in the country
  - Strengthen partnerships with the private sector and communities

Strategies

- Build the capacity of NHS managers on health system and service management.
- Conduct a study on Service Delivery Indicators to inform the Infrastructure Development Plan.
- Produce a health development plan that integrates infrastructure, HR and equipment.
- Implement the planned 300 (approximately) infrastructure interventions foreseen in the MTEF 2013-2015.
- Implement the quality and humanization strategy.
- Establish effective collaboration and coordination mechanisms with the private sector and communities to ensure effective partnership with the MoH.

5.2.2 Human Resources for Health

Within the MoH, the HR sector is responsible for: defining professional categories and their competencies; coordinating the identification of staff needs for different services; coordinating the elaboration and implementation of pre-service training plans and continuing education; regulating and producing instruments guiding the hiring, placement, retention and management of HRH.

The HRH situation substantially improved from 2000-2010, doubling mostly due to the integration of staff with medium and higher-level qualifications. In fact, the number of people employed in the health sector increased from 15,905 to 34,507 in 2010, representing a 117% increase. Growth was even greater in priority areas, with an increase of 191% in MCH, 171% in the medical field, due to substantial experience gained in training non-clinicians, basic, medium and medium-specialized health professionals (in the field of preventive and curative medicine, MCH, surgery, anaesthesiology, pharmacy and laboratory), resulting in increased access to primary health care services. Nevertheless, the number of health professionals and medical doctors (83.6 and 5.5 per 100,000 inhabitants in 2011) remains insufficient.

The sector is implementing the Human Resources for Health National Development Plan (PNDRHS) 2008-2015 with a view to achieving the Millennium Development Goals (MDGs), enhancing MoH training capacity, reducing the HRH deficit and HRH inequities within and between provinces, producing qualitative and quantitative performance improvements in HRH, retaining the NHS workforce and better defining the NHS regulatory function in respect to HRH. The medium-term evaluation of the PNDRHS conducted in May 2012 concludes that considerable strides had been made in relation to some indicators, namely, effective increase of HRH within the NHS and reduction of the absolute deficit in HRH, with improvements in the ratio of health workers in priority areas per 100,000 inhabitants; reduction of inequalities between provinces, mostly in relation to access to surgery technicians; differentiated training levels for health professionals; increases in the number of medium-level health workers produced and increases in the number of specialized services offered by foreign specialists. In addition, the HRH Observatory was created, HRH information systems, M&E and research were strengthened; civil service health career structures have been revised and adapted to health sector specificities; expansion of infrastructural and technical capacity of the MoH training institutions and improvement in the quality of teaching by adopting performance-based management approaches in sector training institutions.

Nevertheless, the NHS still faces a number of constraints, with emphasis on the lack of HRH in sufficient quantity and quality to respond to competing needs; limited capacity to produce and absorb HRH, persisting inequalities in the distribution of HRH within and between provinces, added to precarious working conditions. Moreover, the health sector faces difficulties in adapting to and integrating new policies on political/administrative decentralization and delegation of power, which poses a challenge to smooth management.

The current Personnel Information System (SIP, Sistema de Informação do Pessoal) continues to face basic information gaps which illustrate the country´s real situation. At present, SIP enables the health system to describe existing professional categories and the number and location of staff according to existing categories. In the medium term, the system will make it possible to visualize staff according to professional categories and careers down to the lowest levels.

Most constraints identified result from the lack of qualified HR to perform planned activities and insufficient financial resources.

To address these challenges, the HR sector will implement the following strategies and will seek to meet corresponding objectives, all of which are embedded in the four components of the PNDRHS.

Strategic Approach 1:

Objective

- Guarantee health teams match the type of HC in which they are placed;
- Reduce inequities within and between provinces, in terms of the ratio of health workers in priority areas, per 100,000 inhabitants.

Strategies

- Define standardized personnel for HFs (special and general health treatment) by level of care, that address staff needs on the basis of work burden / pressure (study "Work Load Indicator Staffing Needs")[17].
- Update approved institutional frameworks at all levels, on the basis of new standardized teams, functional analysis and projections related to resource packages.
- Define effective mechanisms to implement approved placement criteria (build the capacity of HR personnel in the use of updated planning instruments[18], Placement Criteria, Ministerial Diploma, etc.).

Strategic Approach 2:

Objective

- Improve the performance of NHS managers, especially HRH managers:
  - Strengthen management capabilities, with an overall focus on planning and administration and on HR management in particular.
  - Develop the HRH Observatory with a view to supporting policy formulation, evidence-based management and decision-making, and producing relevant information in relation to HRH.

Strategies

- Build the capability of HR managers in HRH management, planning and administration.
- Define and implement performance standards in provincial HRH departments.

[17] This activity will be included in the updating of Ministerial Diploma 127/2002.

[18] New strategy in the context of the PESS 2013-2017: activities to be implemented by 2015 to guarantee MISAU, DPSs and SDSMASs can assume new functions delineated in the context of sector reform.

- Build the capability of key NHS managers in management and leadership.
- Launch pre-service training for medium-level technicians in the field of Health Management and Hospital Administration in the Medium-Level Polytechnic Institute for Health (Instituto Médio Politécnico de Saúde - former Regional Centre for Health Development – CRDS, *Centro Regional de Desenvolvimento da Saúde*).
- Develop an integrated personnel information system (e-SIP Health) that integrates the key components of the life cycle[19] of a health worker.
- Define mechanisms for the use of data / information / evidence related to HRH for decision-making and political dialogue (define standardized reports for information analysis and use; capacity-building and supervision), produce policy reports on specific HR issues, etc.
- Develop and implement a policy for the dissemination of data, best practices and research related to HR in Mozambique.
- Implement HR management interventions considered in the Acceleration Plan for Institutional Reforms, with special attention to integrating health workers outside the system and technical assistance, including the creation of a Technical Assistance Fund.

Strategic Approach 3:

Objective

- Improve health staff productivity and motivation.
- Strategies
- Review indicators for the assessment of staff productivity.
- Assess health worker performance according to Public Administration Performance & Management System (SIGEDAP, Sistema de Gestão e Desempenho na Administração Pública) requisites (individual work plans reflecting contributions to institutional plans, including staff productivity indicators).
- Develop a strategy to attract and retain health professional within the NHS.
- Implement incentives defined in the General Statute for Civil Servants and State Agents (supplements).

Strategic Approach 4: Pre-service training

Objective

- Guarantee the training of health technicians in sufficient quantity and with quality to meet NHS needs:
  - Conduct health courses in all training institutions in line with existing capacities and defined priorities.
  - Improve the quality of training offered in training institutions.

Strategies

- Continue implementing the training plan approved for the period 2011-2015.
- Increase training infrastructure capacity in coordination with the DPC.
- Train lecturers, tutors and supervisors involved in internships in education and teaching methodologies.
- Adapt existing training curricula to skills-based curricula, respecting the Vocational Training Integrated Reform Programme (PIREP, Programa Integrado da Reforma de Educação Técnico Profissional) norms and produce corresponding teaching and learning material.
- Continue implementing performance standards for training institutions.
- Conduct operational research on student dropouts and skills assessments of students participating in general nursing and MCH courses.

[19] aProvisional appointment, definitive appointment, promotions, progression, career changes, transfers, retirement, dismissals, continuing education, leave, disciplinary measures, etc.

Strategic Approach 5: Continuing education

Objectives

- Improve the quality of continuing education
  - Integrate continuing education in the development of professional careers
  - Ensure continuing education content is aligned with the professional profile

Strategies

- Define and implement accreditation norms for continuing education.
- Define a coordination structure for continuing education spanning various levels and ensuring institutional capacity.
- Define instruments to regulate continuing education (regulations, manuals, quality standards, etc.).
- Train lecturers / trainers and supervisors / tutors on educational skills and continuing education norms.
- Training Information System for continuing education (SiFo, Sistema de Informação sobre as Formações) for central and provincial hospitals.
- Create a continuing education distance-learning programme.
- Design strategies for postgraduate medical activities and submit them for approval.

5.2.3 Health Information System, Monitoring & Evaluation and Vital Statistics

a) Health Information System and Vital Statistics

The Mozambican HIS is composed of a routine information system that enables the integration of key resources and activities from across the public health network and various vertical subsystems for programme and service oversight. The system includes epidemiological surveillance and disease notification, in line with International Classification of Disease (ICD) 10, SIS-H (data system aggregating hospital information) and the information system dedicated to causes of hospital deaths (SIS-ROH), as well as selected demographic information.

Health Information System for Monitoring & Evaluation (SIS-MA)

The Módulo Básico has the widest coverage as associated data entry tools are used in all NHS HFs across the country. In 2013, the MoH started developing a new M&E Health Information System (SIS-MA, *Sistema de Informação de Saúde para Monitoria e Avaliação*) with the aim of adapting the HIS to current needs and establishing a single, national information system that integrates vertical programme streams, with the support of its partners. The system will include all the data for all routine sector indicators listed in the matrix included in the executive summary, as well as some others. In a first phase, the system will integrate information from key health programmes including MCH, EPI, HIV, PMTCT, malaria and nutrition; other priority programmes will be included in the second phase (TB, community involvement, NCDs).

SIS-MA will be implemented in all provinces and districts across Mozambique; it will be developed with open-source technology specifically developed for the health sector, guaranteeing the MoH can retain intellectual property rights over the system.

Hospital computerization

Two information systems are being developed at hospital level:

(i) Health Information System – Hospital Deaths Register (SIS-ROH); (ii) Health Information System – Hospital Admissions (SIS-H). SIS-ROH is a platform that aims to implement a regular and routine system to document hospital deaths using the International Disease Classification (ICD-10). The system is installed in Central and Provincial Hospitals countrywide; gradual expansion to all Hospitals in the country is anticipated.

Objectives of the Health Information System and Vital Statistics

- Produce relevant and quality information related to health determinants, health system performance and health status to support evidence-based decision-making processes.

Strategies

- Improve HIS management with an emphasis on quality and coverage.
- Adapt the current HIS model to NHS needs, rendering it more reliable and comprehensive.
- Increase the availability and quality of HIS resources by training statistics technicians at provincial level and through continuing education.
- Strengthen supervision and technical support down to the lowest levels (HFs).
- Collect information at community level on births and deaths through community health workers and community leaders, including the use of verbal autopsies and testing new data collection tools (for example, with the use of cell phones).
- Strengthen civil registry systems to provide accurate and reliable data through the adoption of a multidisciplinary and interministerial approach (Ministry of Justice, MoH, INE).
- Consolidate the capacity to produce yearly vital statistics for sub-national levels.

b) Monitoring & Evaluation

The implementation of a robust M&E system in the health sector is still in the initial stages. Moreover, this important function is fragmented as many health programmes have their own M&E units, which are not integrated, and DPSs, SDSMASs and HFs are scarcely performing this function.

The sector finalized its national M&E plan, aligned with this PESS, which seeks to guarantee quality information is produced to:

- Measure programme efficiency, effectiveness and impact.
- Improve service provision based on the principles of transparency and accountability.
- Facilitate evidence-based decision-making to improve the provision of services at all levels of intervention.
- Support the development and implementation of new strategies, based on the realities or situations found.

Objective

- To have a more comprehensive, effective and useful M&E system to monitor progress in the implementation of strategic activities defined in sector plans and assess corresponding results.

Strategies

- Strengthen coordination at different levels within and beyond the sector to ensure the M&E system is flexible, interactive and continuously updated.
- Scale-up the capacity to produce quality information in relation to sector progress by improving data analysis capacities.
- Promote interventions that encourage the use of information produced in sector decision-making processes.
- Strengthen HR capacity in M&E to ensure successful implementation of strategic interventions.

5.2.4 Medical Products and Equipment

Achieving greater equity in access to essential medical products and technologies may require the creation or improvement of planning, procurement, disbursement, warehousing and distribution systems

to minimize losses and other types of waste and contribute to resources being used more rationally. In Mozambique, governance in this area is shared by several units in the MoH with key responsibilities in the areas of pharmacy and drugs logistics, surgical material and equipment. These include the Pharmaceutical Department, the Hospital Pharmacy Department, CMAM, the Supply Centre and the Department for Logistics and Maintenance. In addition, the system is partially decentralized: while relevant central level bodies supply basic products to provinces, the DPS is responsible for administrative and financial issues for the Provincial Deposits for Drugs and Equipment and Provincial Commissaries; the same applies to HFs at district level.

Challenges related to drugs logistics include under-financing for drug procurement, and high dependency on external funds which at times are channelled to programmes that generally use parallel purchasing processes, even if products are later submitted to CMAM for distribution. This leaves the MoH with limited possibility to make changes in relation to the allocation of funds to sector priorities. This situation is further aggravated by an information system that faces important challenges in relation to data inputs, which is usually outdated and is proving inadequate to meet health system needs. The existence of multiple lines of command and weak institutional capacity is associated with the lack of qualified HR and no logistics profile. These problems limit operational capacity in this area and, among other things, result in the incorrect application of procedures and routines. This leads to the use of emergency procedures at different levels and areas, which provoke performance inefficiencies in pharmacy and logistics. On the other hand, procurement legislation does not meet the needs of the logistics system for medicines and medical products, resulting in delays in purchase of medicines and encouraging expensive emergency purchases. Inefficient stock management at HF level results in frequent stock outs of basic drugs and other medical products at HF level, waste and inefficiencies, and the distribution of products sometimes beyond their expiry date, thus compromising the quality of health care.

The pharmacy area still faces important constraints which limit the quality of pharmaceutical products and services and are related to the absence of a clearly defined medicines and vaccine regulatory body; gaps in the regulation of specific areas such as good manufacturing practices; and low capacity to supervise international manufacturers. In addition, there are also serious gaps in the development and regular updating of the NDF, as well as a list of vital, essential and needed medicines / products for the public sector. Irrational drug prescriptions and the lack of adequate drugs also contribute to the irrational use of drugs in the sector. Pharmaceutical services in hospitals provide poor quality service in public pharmacies, and the non-prioritization of pharmaceutical services by HFs.

A large proportion of these challenges are also felt in the area of logistics for medical products and equipment. It is worth highlighting that despite the public sector reform process underway, the logistics system remains highly centralized, resulting in excessive and unnecessary warehousing, handling and transport costs, hindering the operational capacity of the SC and the system´s capacity to respond to health problems. The system is also limited by how mechanisms for the procurement, acquisition and management of medical products and equipment currently work. Operations are further affected by the poor functioning of information and data monitoring systems – associated with the absence of an integrated, updated and systematized database which would allow the control, monitoring and assessment of activities, as well as stocks, along the logistics chain.

Objectives

- Guarantee equitable access to drugs, basic medical products, vaccines, equipment and technologies, respecting quality standards, and in safe, efficient and cost-effective ways.
  - Guarantee drugs in use in the country are effective, safe and of quality.
  - Ensure vital and essential medical products and equipment are available in sufficient quantity, in the right place, condition, and at the time required, to meet the health priorities of the population at the lowest cost possible.
  - Improve the management and rational use of medical products at HF level.

Strategies

Pharmacy

- Review and approve the regulatory framework for drugs.
- Consolidate the early registration process for drugs and health products entering and circulating in the country.
- Guarantee compliance with best practices in the production and trade in medical products by reviewing or developing policies and procedures, training, staff hiring and implementation.
- Effectively strengthen monitoring of the pharmaceutical market through the revision or development of policies and procedures.
- Guarantee the efficient functioning of pharmacy surveillance systems, including monitoring of adverse effects.
- Guarantee effective quality control over products purchased by the MoH.
- Strengthen information systems in support of sector regulation and supervision (database for drug registry, adverse reactions, inspections, licenses, etc.).
- Update the National Drug Formulary by December 2014.

Logistics, and Medical Products and Equipment

- Approve and implement the Pharmacy Logistics Strategic Plan including the implementation plan, CMAM statutes and regulations, etc.
- Produce lists of priority drugs, consumables, surgical material, dressings, laboratory reagents, basic diagnostic aids and equipment to define priorities and rationalize resources in procurement and management processes.
- Institutionalize regular quantification (annual and quarterly) in the context of procurement plans for all product groups.
- Analyse, establish and implement procedures and mechanisms to improve control of purchasing (procurement, contracts, purchase, follow-up on orders, supplier performance) and speed up procurement processes.
- Document financing gaps for drugs, medical material and equipment and advocate within the MoH and with partners for an increase in financing.
- Review and approve norms and procedures associated with the logistics system for surgical material.
- Build the capacity of staff assigned to commissaries on new norms and procedures in the logistics system.
- Institutionalize and implement a system to supervise and audit logistical processes across the country.
- Increase provincial and district transport capacity, including the possibility of outsourcing transport, especially between provinces.
- Increase warehousing capacity, along with the levels of safety for drugs and medical material.
- Develop a new, systematized and integrated information system for logistics that improves data visibility at all levels of the supply chain; use information to substantially improve stock management.
- Extend coverage in the use of the Drug Management Information System (SIMAM, *Sistema de Informação para a Gestão de Medicamentos*) system in provincial hospital depots and district depots.
- Improve CMAM´s financial management by using electronic Government Financial Management System (e-SISTAFE, *Sistema de Administração Financeira do Estado*) and better controlling revenue.

Hospital Pharmacy

- Improve the rational use of drugs and health products, through the development and

substantial improvement of relevant policies, training and strengthening information systems and supervision.

- Expand Hospital Therapeutic Committees to monitor and guide the rational use of drugs across the country, prioritising hospitals.
- Update the NDF by December 2014.

5.2.5 Basic Diagnostic Aids

Despite progress in the establishment of computed tomography services, magnetic resonance imaging and hemodynamic, challenges continue in the area of basic diagnostic aids: access to services is limited by low service coverage, especially for specialized imaging and radiology equipment and basic laboratory services. The country only has 300 clinical laboratories and an imaging network of 60 units, mainly in the form of simple x-rays for a network of over 1,000 HFs.

Services lack qualified HR in technical and management areas. Important challenges are also faced in guaranteeing timely availability of materials and reagents in the quantities needed. The scarcity of equipment and material overburdens services and creates quality deficiencies in their provision. The information system in place for basic diagnostic aids is not strong enough to monitor service performance and control resources. This further restricts the capacity to manage the system with efficiency and quality. Likewise, most of the equipment available for imaging and laboratories is obsolete or inoperational due to lack of adequate maintenance or replacement. Laboratory quality control activities are not carried out on a regular basis. The problems faced in the management of health care laboratories worsen because the equipment used in the country is not standardized. This further complicates the acquisition and distribution of reagents and supplies for different types of equipment serving the same function.

With regard to other health technologies, other products are being introduced into the country (contraceptive implants, vaccines, new drugs, etc.), ICT and mobile solutions, but all through fragmented approaches that do not take into account sector challenges. The absence of a policy or strategy to guide knowledge, choice and the implementation of new technologies and innovations has resulted in the partial and fragmented implementation of new systems, an unawareness of the systems being used in the country, and significant difficulties in keeping systems operational. In addition, the status of the electronic platform for ICT limits MoH and staff communication and interaction capacities with internal and external actors, and affects problem-solving capacity.

Objectives

- Provide quality services with basic diagnostic aids and support clinical service providers in the diagnosis, treatment and prevention of disease in the various levels of health care:
  - Increase access to safe and quality imaging services.
  - Guarantee relevant protection and safety in radiology services for all NHS professionals, especially for technicians working in this area.
  - Increase access and coverage of quality laboratorial diagnosis services within the NHS.

Strategies

Imaging and Radiology

- Expand radiology services at provincial and district level.
- Regularly monitor the amount of ionizing radiations received by exposed staff whilst performing their duties, to guarantee their protection from ionizing radiation.
- Recruit and place specialized personnel in imaging and radiotherapy services; strengthen training and supervision.
- In coordination with the oncology department, install a radiotherapy unit in the HCM, equipped with sufficient specialized technicians.

- In coordination with the occupational health programme, propose and approve workplace safety norms specifically catered to imaging services.
- In coordination with CMAM, define effective planning, and M&E mechanisms to improve logistics for consumables, including an information system that improves financial controls and monitors the use of consumables and diagnoses performed.

Clinical Laboratories

- Expand the network of laboratories and improve current laboratorial infrastructure.
- Increase the quantity and quality of HR through continuing education, courses and the creation of centres of excellence.
- Create a list of NHS priority products (vital and essential products).
- In coordination with CMAM, define effective planning and distribution mechanisms to improve logistics for reagents and consumables.
- Strengthen the information system to improve cost control and monitoring of purchases of consumables and diagnostics for training or supervision.
- Strengthen transport systems for laboratory samples and transmission of corresponding results through training and supervision, with a view to improving laboratory quality control.
- Implement quality assurance systems through supervision and regular control of results.

National Service for Pathological Anatomy

Pathological Anatomy carries out morphological studies of organs, tissues and cells with the objective of supporting clinicians in the diagnosis of disease / injuries so as to better inform treatment and prognosis, as well as prevention. In this context, the Pathological Anatomy Services offer routine hospital activities (surgical pathology, exfoliative cytological tests, aspiration biopsies, and clinical autopsies), in addition to training and scientific research activities. However, there are only three Anatomical Pathology Services in the country, located in the three central hospitals, namely, those located in Maputo, Beira and Nampula; this limits availability of services. The existence of limited, qualified HR, lack of equipment and maintenance-related barriers, along with the difficulty of securing regular access to consumables and reagents undermine the quality of services provided.

Strategies

- Expand the network of Pathological Anatomy Services in provincial hospitals, and ensure they are adequately equipped.
- Create cytology units in Jose Macamo General Hospital, Maputo General Hospital, Provincial Hospitals in Tete, Xai-Xai and Quelimane.
- Provide pre-service training for laboratory technicians, higher-level technicians and medical doctors specialized in Pathological Anatomy.
- Introduce new techniques for anatomopathology, namely, immunohistochemistry at the Nampula Central Hospital and immunofluorescence HCM.
- In collaboration with DIS, install a data entry system for anatomopathological tests, especially for cancer.
- Collaborate both intramurally and with international research institutions to study the prevalence and local risk factors for cancerous disease.

5.2.6 Health Financing and Financial Management

This section of the PESS covers challenges in two core areas associated to financial resources: (1) sector financing, which is the function in the health system responsible for the mobilization, accumulation and strategic allocation of funds to meet individual and collective population health needs within the health system framework; (2) financial management, which supports fiscal rigour and the provision of efficient services. In terms of strategic solutions to address the challenges described below, this section focuses on

public financial management. As urgent improvements are required to secure adequate sector financing in the short and medium term, the focus is on two particular areas covered by the Institutional Reform Acceleration Plan (PARI, Plano Accelerado de Reformas Institucionais):

i. Budget execution, accounting, internal reporting and control, and
ii. Acquisitions, inventories and asset management.

Given the major changes likely to be needed in the health sector, the component related to financing will be covered in the chapter dedicated to reforms.

Financing

The health sector financing function aims to guarantee the availability of adequate funding levels and the definition of proper incentives for health care service providers, ensuring everyone has access to public or individual health care. Financing therefore assumes three core functions: (1) collection of funds (income sources, payment types or contribution mechanisms, and agents responsible for fund collection); (2) resource-sharing (accumulation and management of funds paid by citizens – pooling) and (3) payment or purchase of health care services.

An analysis of the situation concludes that despite positive trends in overall health spending, the sector is underfinanced as the per capita GDP spent on health is below recommended levels for the region. In addition, the sector´s relative weight in the SB has decreased in recent years. This demonstrates the sector's limited fiscal space to offer basic health services and the high dependence on external funding - especially in the case of vertical programmes – translating into limited sustainability of sector programmes and elevated transaction costs implicit in the management of these funds. The main sources of funding include the SB attributed by the Ministry of Finance, which in turn includes direct contributions from SB partners, PROSAUDE funds and funds allocated to vertical programmes. Other funds are also used, but these are not well documented in terms of what they represent for sector financing, such as contributions made by private entities or users i.e. payments made in private clinics and pharmacies and user co-payments at State health institutions, deductions made to civil servants for medical care, contributions towards private health insurance and contributions made by companies. With the exception of the SB or PROSAUDE, a large proportion of these funds are not under the MoH´s control (off-budget), including sector-generated revenue, which further constrains planning and management. These funds reach service providers either in cash or kind, or in the form of services, and are allocated through various channels and criteria, thereby becoming additional factors, which constrain efficiency and coordination for the planning, implementation and monitoring of attributed resources. Despite the fact budgets are produced on the basis of programmes using standard MF budget lines, programme definitions are generalized and do not include all health programmes and services. Under these circumstances, it is difficult to compare budgets against sector policy objectives.

The payment mechanisms for public health suppliers are based on the allocation of budget lines to the budget's functional categories, including salaries, goods and services, etc. Yet, for most HFs decisions related to funding attribution and expenditures are under SDSMAS responsibility; there is thus no financial incentive to shape or influence the behaviour of health care providers. Sector partners have been implementing performance-based financing, but the impact of these approaches has not been assessed yet.

Public Financial Management

Public Financial Management (PFM) is the process through which the Government generates income and allocates, spends and reports on the use of public resources. As such, it constitutes an important instrument for the achievement of Government objectives. PFM seeks to achieve three main objectives: (1) fiscal discipline through effective budget control; (2) strategic allocation of resources to guarantee Government objectives are implemented; and (3) efficiency in the provision of services through managing how budgeted resources are used. Public Financial Management is assessed on the basis of six measurements and their

internationally recognised indicators, including budget credibility; comprehensiveness and transparency; policy-based budgeting; predictability and budget execution control; accounting, documentation and reporting; and scrutiny and external audits.

Assessments and audits conducted in the last few years show gaps in public financial management in relation to financial management systems at various levels within the MoH. These are inconsistencies between approved budgets and sector expenditure, and not all sources of financing are included in budgets, including earmarked funds. In addition, budget execution rates are low, especially for external funds and at provincial level. There is little correlation between annual activity plans and their budgets and multi-year policy documents, with the focus being on inputs (rather than results). Lastly, compliance with and transparency of budget execution and accounting procedures is low – this includes internal control methods as well as asset procurement and management.

Objective

- Secure adequate and sustainable health care service financing.
- Reform and restructure the Directorate of Administration and Finance (DAF, *Direcção de Administração e Finanças*) to improve economic and financial management[20].
- Improve contracting processes and reduce unplanned purchases by 80%.

Strategies[21]

- Produce a financing strategy for the sector[22].
- Conduct studies to assess NHS inefficiencies.
- Implement DAF´s new institutional structure and recruit qualified technicians; including re-structuring sectors responsible for accounting and reporting at central and provincial level, and building the capacity of technicians in these sectors based on "Operations Manuals", and ensuring these are effectively implemented.
- Operationalize e-SISTAFE in CMAM, the National Laboratory for Water and Food (LNHAA, *Laboratório Nacional de Água e Alimentos*), the National Quality Control Laboratory (LNCQ, *Laboratório Nacional de Controlo de Qualidade*), CRDS, ICS, the INS along with Provincial, Rural and District Hospitals.
- Prepare a data entry system for income received, per budgetary unit.
- Produce an annual plan for contracts and acquisitions.
- Create an effective monitoring mechanism to monitor UGEA processes (computerized programme, etc.).
- Define contract management mechanisms (institutional arrangements, procedures, etc.).

5.2.7 Governance and Leadership

Governance and leadership functions are assumed by the Government and constitute the foundations of the health system, as the development of coherent policies based on evidence, technical knowledge and cooperation or consultation with relevant stakeholders, constitute pre-requisites for positive public sector performance.

As mentioned above, the legal and political context in Mozambique favours the achievement of health objectives. However, overlap, fragmentation and weak coordination between laws and policies within and between sectors are still common. A measure of this is that certain sector initiatives do not take health system capacity into account, especially HR implications.

[20] Objectives and activities removed from the Health Sector Institutional Reform Acceleration Plan 2013-2015.
[21] To be harmonized with the final version of the Public Financial Management Strengthening Plan.
[22] The steps to be followed in the development of this strategy are presented in Chapter 7 (reforms).

In 2002, the central Government launched the public sector reform strategy with the view to improving the provision of services to the people of Mozambique. The strategy was developed on the basis of six components one of them being decentralization. The development of new laws and integration of and crosscutting changes, particularly, the Local Government Act (LOLE) and corresponding financial and procurement systems, set the scene for sectors to propose associated reforms. Still, the MoH's institutional structure merely adapted over time and continued focusing on core functions, which include the development of sector policies and sector plans, regulation, financing, and oversight, along with direct management of public health services and conducting supervision. The situation partly results from the lack of institutional mechanisms to manage reform processes that often follow vertical approaches and have limited impact on health services. Conversely, the fragile state of district level health services limits the capacity to take advantage of benefits arising from decentralization.

Oversight functions related to the enforcement of laws, norms and regulations are mainly assumed by the General Health Inspectorate (IGS, Inspecção Geral de Saúde) represented at provincial level. Still, weak institutional capacity associated with insufficient quantity and quality of HR, especially at the DPS level; the shortage of adequate working instruments and shortcomings in the legal framework constrain performance in this area. Consequently, the governance and leadership function concentrates on administrative issues related to support areas (finances, HRs, etc.), however, activities that contribute to the provision of quality services are starting to be implemented.

The role of communications in effectively disseminating information and facilitating dialogue between various players is widely recognized. Yet, internal communication (vertical and horizontal) and external health sector communication is not effective; information asymmetries are present; there is little knowledge of priorities and performance, and dialogue between stakeholders is weak - especially with beneficiaries.

Despite the MoH´s efforts to improve internal planning systems, weaknesses between strategic and operational plans and between these and budgeting process and the execution of expenditures, are still evident. At the same time, plans are fragmented as they are developed by services, levels, geographic locations and programmes without proper coordination resulting in multiple planning exercises and documents. This scenario is further exacerbated by the lack of systematized data / information to conduct situational analyses, including information on fund flows, results and / or impact of public expenditures, cost-effectiveness of services and the lack of clear criteria to guide resource allocation at different levels to meet health needs.

Gender relations bear profound impacts on the health status of populations, and affects health service access and use. In 2009, the MoH approved a strategy for the inclusion of gender equality in the sector. The strategy prioritizes planning, budgeting, HR, quality, SRH, communicable, and non-communicable diseases. Since then, the sector has benefited from the identification of gender focal points at various levels, the implementation of comprehensive capacity building and awareness-raising activities, and HIS data disaggregation by sex. However, consistent integration of a gender lens in decision-making processes is still in the inicial phase.

The MoH coordinates and collaborates in the promotion, prevention and protection of public health, in particular, in relation to health determinants and the mitigation of natural disasters, including climate change, mainly through interactions with donors and international NGOs, at the highest levels. The Ministry has made efforts to include national and international NGOs in coordination mechanisms, but the participation of civil society and the private sector in decision-making is still limited. As a result, decisions are largely made at central level by key decision-makers. On the other hand, the proliferation and dispersion of financing and support mechanisms in the public health sector further weakens the MoH´s coordination capacity. Collaboration with other Government sectors in relation to health determinants is also not satisfactory - especially at local level and curbs the impact of interventions.

The creation of operational research centres and the strengthening of corresponding laboratorial capacities in Mozambique has significantly enhanced the country´s public health research capacity and the production

of scientific evidence in recent years, mostly in relation to vaccines and malaria. However, progress in these areas does not always result in positive effects for the health system. Furthermore, the issue has not been well articulated as a priority in sector policies and resources allocated are very limited. In consequence, despite having a group of health researchers the production of necessary evidence, together with health systems analyses are generally only produced in the context of consultancies and with external funding. In addition, the subordinate character of the governance system and the limited administrative and financial autonomy of the institution responsible for health research, restrain the capacity to produce the evidence needed to inform decision-making.

This section proposes a set of solutions to improve routine activities, while far-reaching measures for improved sector governance are discussed.

Objectives

- Improve health sector governance and leadership:
  - Promote internal and external communication for the development of the health sector.
  - Improve health sector and geographic planning processes.
  - Ensure that gender issues are effectively integrated in processes associated with the development and implementation of sector policies.
  - Increase research capacity and use of evidence in the development and implementation of sector policies.
  - Strengthen partnerships with key health sector players.
  - Strengthen capacities to oversee / monitor the legal framework and sector policies.
  - Improve transparency in decision-making processes and accountability around sector performance.

Strategies

Communication, transparency and accountability

- Develop a communication strategy to ensure that information on sector decisions and performance is disseminated effectively and in a transparent manner, promoting effective dialogue between sector actors.
- Define accountability mechanisms around sector performance.

Planning

- Approve and disseminate study results on resource allocation criteria and equity.
- Produce the 2013 National Health Accounts (2007-2011).
- Institutionalize the use of OneHealth for yearly planning and to align plans, budgets and results-based budgeting.
- Review and adapt the sector-planning system (instruments and processes) to make it more sensitive to local health needs.
- Build provincial level capacity on MTEF methodology to become an effective instrument for the implementation of sector policies.
- Build the capacity of district level teams around decentralized planning and management.
- Conduct the Public Expenditure Tracking Survey with the view to updating information on the impact of expenditures on the provision of services.
- Revitalize health service cost-analysis activities.
- Strengthen SWAp coordination mechanisms, especially dialogue with PROSAUDE partners.

Gender

- Conduct a mid-term evaluation of the gender strategy and adapt it to sector needs.
- Conduct a study on the effects of gender inequality / inequity on health (health status, health determinants, health system performance).

Partnerships

- Define effective collaboration mechanisms with Government sectors that bear influence on health determinants.
- Review coordination mechanisms used with development partners, national and international NGOs (MoUs, Codes of Conduct, reporting mechanisms, etc.).
- Define effective mechanisms to monitor Government agreements (specifically in the sector or others bearing impact on it).
- Develop a database dedicated to sector partnerships, to facilitate partnership management.
- Define effective mechanisms to improve civil society participation in decision-making and performance monitoring in coordination with DEPROS.
- Develop a strategy / policy / guidelines for PPPs within current Government legislation / policy.
- Identify opportunities for the establishment of PPPs.

Research

- Approve a National Research Agenda to respond to national health priorities and inform relevant decision-making processes.
- Define effective mechanisms for the dissemination of research results, including the revitalization of Medical Journal of Mozambique (*Revista Médica de Moçambique*).
- Provide capacity building opportunities (formal and on-going) to professionals at the INS to strengthen research capacities in different health domains, in line with the National Research Agenda.
- Establish provincial health research units to broaden research opportunities and the use of evidence in decision-making.
- Define coordination mechanisms with other areas / MoH institutions to improve operational research planning capacities.

Policy-Legal Oversight

- Build the capacity of inspectors and auditors to oversee health care, pharmacy, administration and financial sector activities.
- Hire / place staff in the General Health Inspectorate.
- Produce manual of procedures for inspections.

6. Health System Strengthening Reform Agenda

"The mind that opens to a new idea never returns to its original size"

Albert Einstein

The weaknesses of the Mozambican health system are described in Chapter 2.2. The MoH recognises the need for broad and inclusive consultations, and the fact that decision-making requires scientific evidence. For this reason, the PESS 2014-2019 was developed using a holistic, cross-cutting and rational process (a systems thinking process[23]) to identify the changes required for a functional health system that provides equitable services to the population of Mozambique.

WHO defines a functional health systems as one responding to the needs and expectations of populations in an equitable manner, leading to: (1) health improvements at individual, household and community level; (2) the protection of communities from health-risks; (3) the protection of people from adverse financial effects as a result of illness; (4) equitable access and the provision of people-centred care; and (5) participation in decisions that affect health and the health system. This requires strong policies, firm leadership and coherent investment across health system components.

This chapter provides orientations of the reforms that could be considered across different health system components to realize the mission and objectives of the PESS. It is worth noting that (see Chapter 4) decentralized management and service provision is the starting point, and at the same time, the central theme for reforms. In this context, the description of system components focuses on mapping key issues and presents a roadmap to guide discussions for the development of a reform agenda over the next 3 years. Implementation should take place in the 3 years that follow, that is, during the second half of the current PESS (from 2017 onwards). Specific reform priorities and a "critical path" will be defined in the course of development of the reform agenda.

This chapter describes key issues related to decision-making when identifying changes to be introduced in the health system, agreed upon by consensus on the basis of the seven[24] health system components. It also provides orientation on the steps or roadmap guiding these decisions. Given the complexity of the process of developing a reform agenda and the dedication required, the MoH leadership will create a working group with specific Terms of Reference (ToR) to manage the process. A detailed timeline outlining specific activities and a comprehensive map of relevant interest groups will be developed at the start of the process. A communication strategy will be developed to ensure that information related to the reform process is widely and effectively shared, creating a platform for inclusive dialogue enabling strategic decisions on the future of the health system. Consensus around key sector reform issues will be sought through meetings. Moreover, study visits to other countries with similar processes and ample experience with health sector reforms will be visited; consultants will be contracted to provide technical support and conduct studies for scientific evidence. All activities will be carried out on the basis of clear ToR developed and approved by consensus. The need, relevance and feasibility of creating a specific fund to support the development of the reform agenda will also be discussed. Moreover, the following activities will be implemented once

[23] Systems thinking consists of analyzing reality, placing emphasis on relations between system components, instead of individual components "System failures require systemic solutions" – WHO 2008.

[24] Instead of the internationally accepted classification of health systems in 6 components (health services, governance, HRs, logistics, information systems, M&E and financing), infrastructure is also considered as a component in itself given its complexity and the inclusion of infrastructure in support areas.

institutional arrangements are made and the communication strategy is developed: review the definition of decentralization in the context of the health sector in Mozambique; its purpose in light of expected sector performance improvements and the forms of decentralization explored to suit the Mozambican context.

Clarification will be key to discuss changes required per health system component (an example is provided in Annex 1), for effective decentralization and the achievement of expected results.

6.1 Health Services

"Access to quality health services, improves health outcomes."

The section focuses on resources, service organization and management to ensure access, quality, safety and continuity of care. Systemic contraints affecting health service, have informed the development of the health sector reform agenda.

Even if basic service-packages have been identified for specific areas including MCH, sector interventions are generally developed on an incremental basis by vertical programmes in the MoH. Minimal services offered to citizens at different levels have not been formally defined resulting in dissatisfaction inefficiency and inequity. Sector reforms will have to clarify the need for and content of minimal service packages at each level of care to meet basic needs, ensure continuity, have clear guidance (technical, political or both), display flexibility (geographic and at each level) and guarantee that associated costs will be covered.

The organizational structure and functionality of the NHS need to be reviewed. The sector functionality analysis[25], described in chapter 6.3, reviews the definition of district health systems in the context of decentralization, the integration of vertical programmes, and the role of NGOs in the provision of public health care services at HF and community level. This includes an explicit description of the roles and responsibilities assumed by different actors at different levels as a result of decentralization.

The review and harmonization of legal instruments related to health network management and operations (Ministerial Decree 127/2000, etc.), including the regulation and streamlining of operations in the private sector and at community level, are issues that merit special attention in this context.

The existence of effective referral systems is critical to ensure the continuum of care. To achieve greater clarity in the health services component, further study is required on a number of identified issues. These are (i) the role played by HFs; (ii) HF catchment areas; (iii) the availability of communication and transport systems and how they are organised; (iv) financing mechanisms; and (v) responsibilities and payments for referrals.

The area of health services management will benefit from in-depth analysis of: mechanisms used to finance health services; the level of autonomy exercised by hospitals and HFs at primary and district level; quality management systems and potential mechanisms to contract public and private sector providers, including NGOs in the context of decentralization. Issues pertaining to the adequacy of health infrastructure in the provision of better health services will be dealt with in the section that follows.

In addition to the functional analysis described in the section dedicated to Governance, additional studies will be conducted, including meta-analyses with large quantities of information that is currently scattered with the view of producing in-depth analyses of the functionality of health services. Consultancies will be carried out to support the development of a minimum service package, etc. Study visits will be scheduled to African countries with experience in health service reform, especially, in the separation of functions and / or decentralization of health service management functions.

[25] A functional analysis was conducted in the initial stages of public sector reform focusing on MISAU´s organizational structure at central level.

6.2 Infrastructure

"Adequate infrastructure, quality health services."

Infrastructure commonly refers to buildings, water supply, electricity and communications. The availability and accessibility of health infrastructure is fundamental for health service delivery. Therefore, issues such as HFs typification and standardized design for supporting infrastructure; flexibility; the attribution of clear planning, implementation, oversight and maintenance responsibilities in the infrastructure arena; and the production of infrastructure development plans[26] will be discussed in the context of the sector reform agenda.

Technical assistance available to the MoH will be used to support these activities, including consultation with various key actors; consultancy services will be contracted as needed.

6.3 Leadership and Governance

"Good health sector governance underpins positive health system performance."

Governance reforms essentially aim to create favourable political and legal conditions for the implementation and monitoring of sector decentralization. Some general but crucial issues related to health sector governance need to be dealt with from the onset, namely: the National Health Policy in existence since Independence needs to be reviewed including the definition of the "borders" of the Mozambican health system to define the breadth of reforms; the purpose of decentralization needs to be clarified along with options for the MoH to consider. The role played by each level and associated key functions need to be defined in the context of reforms and public sector decentralization taking into account overall health system (standard) functions. The technical working group dedicated to reforms could produce a document to support consultation and dialogue with interest groups. The group could also map the legal public sector reform framework to ensure that the sector reform agenda is produced in line with current legislation.

In relation to governance and leadership, functional and organizational structures that respond to sector needs have to be further clarified. The same applies to regulatory, oversight and supervisory roles assumed by the sector at various levels. Likewise, the process of developing policies and strategies needs to be harmonized and include different partnership models and associated roles. The issue of double subordination and the existence of mechanisms to ensure transparency in performance reporting processes, at all levels and among different players, will be analysed. It will include the development of an internal (MoH, DPSs, SDSMASs and providers) and external (MoH/Partners) communication strategy[27] to support coordination, information sharing and dialogue. Institutional capacity needed to assume sector governance and leadership in a decentralized and participatory context will also be explored. Further, more effective mechanisms will also be defined for civil society participation in decision-making at all levels. Increased availability and use of scientific evidence will be sought by discussing the role played by the INS and relevant institutional arrangements. This will involve the development of a National Research Agenda to meet country needs and address current challenges. Still related to governance, the need to strengthen sector policy oversight and supervision functions will be discussed, especially what relates to the institutional capacity of the General Health Inspectorate. A functional (re) analysis of the MoH and its peripheral network will help establish an organisational and functional structure more adequate to respond to current and future challenges. In particular, the on-going decentralisation process, which has important implications on how health services are managed and delivered.

The following issues will be discussed in relation to planning: strategic and annual sector planning systems, alignment with the Government´s planning cycle, the promotion of good practices, the existence of multiple non-harmonized plans, as well as mechanisms to promote integration between programmes, levels and geographic locations, in a single annual planning cycle. There will also be a review of planning and budgeting processes and methods in order to better adapt them to decentralisation of the sector. This

[26] Activity included in Chapter 6.2.
[27] See Chapter 6.2.

includes review of programme-based budgeting, the life-cycle approach, *OneHealth* and other tools, as well as mechanisms for implementing and integrating crosscutting issues (gender, integration, etc.) in sector governance processes and achieving the MoH's guiding principles within its organizational culture.

Instruments and processes that support intersectorial coordination, as well as partnerships with development agencies, implementing partners and the private sector, will also be reviewed to improve health system efficiency and effectiveness.

Furthermore, it is expected that decision-making on issues related to sector governance and leadership will be supported by joint working groups, special studies, study visits to other countries with experience in these areas, and consultancy services for certain technical areas.

6.4 Financing

"Financing and appropriate use, increase access to quality basic health services."

In defining health sector financing reform, the 2014-2019 PESS assumes that in the next three years the NHS in Mozambique will continue to be financed by SB resources and external partner contributions through different financing modalities, whilst the Health Sector Financing Strategy is being developed. The purpose of the **Health Sector Financing Strategy** will be to define diversified and sustainable mechanisms for resource mobilization (fiscal space). This will guarantee universal access to a basic package of quality health services, anticipating financial barriers to accessing health care services and promoting operational efficiency in the sector, including the use of performance incentives among service providers. Specific objectives for this strategy will be agreed at the start of the process.

The sector financing strategy / policy will need to be developed around the universal health coverage goal and the four[28] components of a health financing systems: 1) sources of funding (mobilization); 2) resource aggregation; 3) resource allocation; and 4) health service payment mechanisms. These four components will be designed and implemented to achieve system self-sufficiency and its capacity to secure and allocate sufficient resources to meet strategic health system needs. Key issues and processes that need to be in considered to approve the health sector financing policy include:

- For **resource mobilization,** the following questions will be adressed: health-spending levels, main contributors to expenditure and future spending capacity (assessment of fiscal space in the health sector). Other sustainable internal financing mechanisms will be explored, such as revenue generation, personalized services, health insurance, household co-participation and special taxes related to health (tax levy, health fund, etc.), among others. In addition to a document review, special studies will also be considered - National Health Accounts, Public Expenditure Review – to help answer some of these questions, along with the creation of mechanisms to monitor Government obligations, for example, prioritization of the health sector in the allocation of funding within the SB, the Abuja Declaration, etc.
- The **resource aggregation** analysis will include aggregation and risk pooling mechanisms; policy review; associated barriers to access and financial consequences; policies protecting vulnerable groups and mechanisms for their identification; and resource management capacity. Consultancies and study visits in areas of special interest, such as health insurance (social, private and community), will be conducted.
- For **Resource allocation,** it is important to analyse whether the criteria and mechanisms used for financial resource allocation at the different levels foster a reduction in health inequities and increase efficiency in allocation and use. For this reason, in addition to critically analysing the allocation criteria used by the Government and health service managers, it will be necessary to implement studies and analyses on inefficiencies in the attribution (allocation efficiency) and use of resources (technical efficiency), as well as on expenditure patterns within the sector.

[28] Note that certain specialists include allocation in payment mechanisms, thus considering only 3 financing components.

- Payment / purchase mechanisms used for services play an important role in guaranteeing technical and allocation efficiency, and in health service performance. In this context, analyses will cover issues such as the political-legal environment governing the payment of services – including the private sector; the procurement and contracting of services, main buyers and responsibilities in the purchase of services; the role played by external funds in this process, etc. Issues identified for this component will emerge from the document review, although additional studies and consultancies may be necessary. Certain payment modalities currently in experimental phase in Mozambique will be assessed, as they are thought to improve efficiency and accountability, these include performance-based financing.

The importance of the role played by financial management in public service efficiency and effectiveness has already been highlighted, together with the conversion of resources into results. For this reason, in addition to PARI and the decentralization of e-SISTAFE, it is necessary to conduct studies specifically around inefficiencies in order to document areas which potentially merit improvement and major changes so they meet the requirements of a robust public financial management system, namely, the six dimensions described in Chapter 6.2.

6.5 Human Resources

"Sufficient, motivated and competent HR result in increased use of quality health services and improved health system performance."

Based on the system problems described above and in order to achieve desired development levels and adequate management as per WHO recommendations, the HR reform process adresses the following:
The adequacy of existing professional categories is under discussion, along with multifunctional training, job descriptions (taskshifting) and the potential integration of new professional categories, such as logisticians, statisticians, lay-counsellors, APEs, assistants, phlebotomists, etc. In addition, the suitability of existing categories to the sector's needs and mandate needs to be analysed, including the identification of gaps and health workers outside the current legal framework.

In relation to staff planning and distribution, planning and budgeting responsibilities for staffing issues will need to be clarified as well as the basis / criteria used for staff planning and distribution / placement. Within the same scope, needs assessments for district health systems will be undertaken and will include issues such as district health team composition, competencies and capability building needs. An internal analysis of the DRH along with consultations at various levels will "map" present legislation, existing constraints and propose recommendations such planning and distribution criteria for several levels. Aditionally, a consultancy to map district health system needs and present recommendations on how to build district health team capacity will be undertaken.

Regarding recruitment, responsibilities and mandates need to be clarified, including opening new positions at HF/district level (standard HF team), integrating staff working outside the system; the compatibility of local contracts with the public administration and the potential of legal processing of volunteers and community level health workers. Obstacles encountered to date in the recruitment of specific categories at district level will also be analysed.

In the context of decentralization, it is vital to clearly define the professional linkage between civil servants in Town Councils and possible semi-autonomous units. Study visits to other African countries with ample experience in health sector reforms, will facilitate the analysis of the types of working relationships and identify the factors that should be taken into account in the context of decentralization.
Human Resource management is crucial for positive performance and staff motivation. In this component several issues will be analysed, including: the responsibility of SDSMASs, district secretariats, and autonomous and semi-autonomous institutions for staff management; responsibilities for the staff professional development system; mechanisms for staff allocation, retention and attraction; salary policy for the sector; performance assessments and linkages with possible monetary and non-monetary incentives, etc. Studies

already underway and/or strategies currently under development will be included in this process. In addition to these activities, an internal assessment of the DRH and supportive consultations at all levels will all allow the mapping of current legislation, constraints associated with staff development and retention, and salary policies – including an analysis of incentives and their impact on staff performance.

To minimize HRH gaps, the pre-service training component will strengthen capacity across the training network in the context of decentralization. This requires a review of access to health courses at medium and higher-level; decentralized course planning and management; quality assurance (definition of standards and corresponding control mechanisms, introduction of a preparatory course, and other.), financing of courses. This will include the use of innovative approaches such as training in the place of origin (local classrooms), increasing the profitability of training institutions, private sector involvement. A consultancy will be conducted to analyse current training capacities and assess training expansion needs, shortcomings in the planning and management of training, including mechanisms and levels to ensure quality and financing for courses.

Regarding continuing education, core issues such as planning, coordination, financing (management) and value assessment in HR development and performance need to be further explored. An internal analysis of the DRH will take place, supported by consultations at several levels to identify programming, coordination and financing constraints in continuing education and their impact on health worker development and performance.

A number of key issues that do not fit in the categories described above, merit special attention in the context of the reforms. These include the role of professional associations in health worker licencing, development and oversight; as well as regulation and oversight of health workers in the private sector. A group comprising of MoH, professional associations, private sector will be created to discuss these issues and develop solutions. The group will benefit from a study visit to another country with experience in this area.

6.6 Logistics and Medical Technology

"Availability of medical products in sufficient numbers and quality leads to increased access to quality health services."

According to the WHO, a functional health system guarantees equitable access to essential medical products, vaccines and relevant technology, ensuring quality, effectiveness, safety and cost-efficiency, along with its correct use and cost-effectiveness.

6.6.1 Logistics and Availability of Medical Products

Access to drugs and medical products will be one of the important and most affected areas within the reform and the decentralization agenda. One of the main challenges faced by the NHS has been ensuring that vital and essential medicines and medical products are available at all times at HF level to meet client needs. Therefore, improving the structure of the logistics chain to better meet the needs of a decentralized health system under expansion will constitute one of the MoH´s main objectives within the reform agenda. The MoH is in the process of concluding its Pharmacy and Logistics Strategic Plan (PELF, Plano Estratégico de Logística Farmacêutica), which will guide major reforms. The plan also responds to various needs the system has for other medical products, including those managed by the SC.

Key reforms proposed in the PELF include:

- Remodelling CMAM into an administratively and financially autonomous entity with authority over operations and the recruitment and retention of logistics staff and their adequate financing.
- Vertical integration of the logistics chain into the entire medicines chain with a single management unit responsible for direct distribution of health products to HFs.
- Horizontal integration of different products in a segmented chain (ensuring the supply chain meets the needs of each specific product).

- Adapting drug and medical products procurement processes.
- Reducing the levels in the supply chain to make it more efficient and versatile.

Certain reforms, namely, autonomy, financing and staff management, also apply to the supply chains for other medical products. The MoH will define the most efficient and effective supply chain model that best responds to the needs of an expanding NHS in the context of decentralization.

When analysing and designing supply chain reforms, the MoH will need to consider several issues. These include best international practice and the constraints of the legal framework. Past experience with providing autonomy, the level and type of autonomy that facilitate an efficient and effective logistics system, along with the roles and responsibilities of the different actors (CMAM, SC, programmes, lower levels, etc.) in planning, procurement and distribution also need to be taken into account. There is also a need to consider logistics financing mechanisms and the potential outsourcing of some supply chain functions (e.g. transport, imports), etc.

In terms of process, the MoH will approve a fully budgeted PELF based on a holistic and cross-cutting approach adopted by the reform agenda, possibly develop a strategic plan for surgical material and determine current costs and operational expenses in the logistics system. Additional studies and study visits to countries with similar context will take place.

6.6.2 Pharmaceutical Regulations and Supervision

Beside availability of drugs, quality, effectiveness and safety are equally important aspects of pharmaceutical regulations. The objective for pharmaceutical regulations and supervision in the context of sector reform is "to define a clear policy framework for the pharmaceutical area and create an institution capable of regulating and supervising the sector across the country". Best international practices in this domain include the creation of an autonomous entity that regulates pharmaceutical activity and the development of a National Pharmacy Policy.

The MoH does not have an approved National Pharmacy Policy, which ensures equitable access, quality and rational drug use prioritizing medium and long-term strategies to achieve objectives.

Public and private sector capacity to implement policies and regulate the medicines market requires a body that can establish the necessary norms and regulations, and that inspects and supervises the market on the basis of public interest and without external interference. Similar to the logistics area, autonomy would increase administrative and financial flexibility in realising these functions.

Hence, appropriate institutional arrangements for performing pharmaceutical regulatory and supervisory functions will be designed in consultation with key actors. If necessary, a consultancy could be conducted to support the development of the National Pharmacy Policy. The MoH will also advocate for the approval of the Medicines Law, which has been submitted to the National Assembly.

6.6.3 Medical Technologies and Basic Diagnostic Aids

The health sector is a high consumer of technology, especially in terms of specialized equipment, and of information, communication and dissemination systems. Technology will play a critical role in improving the expansion of quality health services in the context of decentralization. Therefore, and with the objective of securing access to safe and effective health technologies at all levels of the NHS, reforms in this area will concentrate on the development of a strategy and systems within the MoH to rationalize the introduction and implementation of new technologies that better respond to the needs of a decentralized health system under expansion. Key issues the MoH will need to consider include: clarifying the scope of medical technologies; defining units / committees within the Ministry to assume responsibility for different types of innovations, including purchase, maintenance and expansion; criteria for if, where and when new technologies should be used; identifying impact-evidence at international level and in Mozambique; and

deciding how to ensure the balance between technological standardization and flexibility / competition.

Clinical laboratories require technology and are confronted with large-scale distribution of equipment and limited resources for maintenance and the purchase of reagents. Performance in this area can be improved through discussion of institutional arrangements to enhance management. This includes developing a laboratory policy, as well as norms, procedures, standards and protocols, including a laboratory accreditation system. The general workload per laboratory, for each level of HF will be set when defining a minimum package of services and the health network development plan. Consultation at various levels and study visits will support decision-making on these and other aspects related to clinical laboratory management.

As the imaging and radiology area faces similar challenges and functions to clinical laboratories, the same approach will be adopted, and both areas will engage in joint discussions.

Blood services within the NHS are also frustrated by the fragmentation of the system and irrational use of resources / equipment. Similar to the area of basic diagnostic aids, reforms will seek adequate institutional arrangements to ensure effective responses that meet clinical care needs, including defining the types of blood services per level of care and the establishment of an accreditation system.

6.7 Information for Health, Monitoring and Evaluation

"Better information. Better decisions. Improved health."

The most effective health information systems are practical in nature and display clear linkages between data collection and use of information. This requires that systems are concise, reliable and generate timely information relevant to users, service and programme managers, political decision-makers and the general public. For health information systems and M&E to embrace this vision, several issues need to be revisited so as to match sector decentralization and existing strategies / policies. This will include issues such as defining suitable architecture for health information systems, including linking operations with M&E systems and their effective implementation, which includes data collection processes, data flow, integration, analysis, use, feedback and sharing. At the same time, M&E - an important system within the MoH – is relatively new and rapidly growing. Discussions are needed about developing new organizational and functional structures and human capability, and there is a need to define linkages or interactions with health information and other systems, such as civil registry and vital statistics, including causes of death, in the context of sector reforms. Issues such as instruments, use of ICT, the MoH's role at different levels, including the collection and processing of vital statistics and effective use of information in decision-making will be discussed. This will involve reviewing efforts to date, holding meetings to build consensus and, possibly, consultancies to help define reforms for these areas.

The process to develop the reform agenda will be implemented according to the following schedule of key interventions and related results:

Table 4. Timeline for Reform Agenda

Activity	2013	2014	2015	2016	2017-2019	Lead
1. Institutional and "political" arrangements associated with reforms						
1.a. Develop ToR for the reforms working group						Technical Working Group
1.b. Identify the management unit for reforms						MoH Leadership
1.c. Create the working group for reforms						Reforms Unit
1.d. Functional health sector (re-) analysis, including non public sector actors						Reforms Unit
1.e. Map interest groups (stakeholders)						Reforms Unit
1.f. Produce a detailed timeline for reform and definition of a consultation process						Reforms Unit
1.g. Approve the global agenda for sector reform						MoH Leadership
1.h. Develop a communication strategy around reforms						Reforms Unit
RESULT	Process for the implementation of reforms defined and implementation mechanisms operationalized.					
2. Service Provision						
2.a. Define a minimum package of services by level of care						DNSP / DNAM / DPC
2.b. Define a Hospital Reform Plan and new responsibilities to be assumed by DNAM						DNAM
2.c. Develop ToR for the effective implementation of a decentralized district health system						MoH Leadership
RESULT	Guaranteed provision of readily available, quality and sustainable services.					
3. Infrastructure						
3.a. Inventory of NHS infrastructure, services and resources						DPC
3.b. Develop an integrated development plan for infrastructure, HR and equipment						DPC
RESULT	MoH capacity to plan and develop an infrastructure network to meet the country´s health needs improved.					

4. Governance						
4.a. Review and approve the National Health Policy						MoH leadership
4.b. Map / review the legal framework governing the sector, including public sectors						MoH leadership
4.c. Review the sector´s strategic and operational planning system						DPC
4.d. Review health sector coordination mechanisms						DPC
4.e. Produce the Health Sector Decentralization Plan, including the principles guiding the process						MoH leadership
RESULT	Health sector coordination and decision-making systems strengthened.					
5. Financing						
5.a. Produce a roadmap for the financing strategy						DAF (GTAF) / DPC (PIMA)
5.b. Establish a working group dedicated to the financing strategy (ToR and actual establishment of the group)						DAF (GTAF) / DPC (PIMA)
5.c. Develop a financing strategy and institutionalization of OneHealth						DAF (GTAF) / DPC (PIMA)
RESULT	Adequate and sustainable financing of health services secured.					
6. Human Resources						
6.a. Analyse district health system needs (district health team composition, competencies and capacities)						DRH
6.b. Review health training programme / production of human resources for health						DRH
RESULT	HR management, planning and administration capacities strengthened.					
7. Logistics and medical technologies						
7.a. Develop the National Pharmacy Policy						Pharmacy Department / CMAM
7.b. Define CMAM´s administrative and financial autonomy						Pharmacy Department / CMAM
7.c. Review National Drug Formulary						Pharmacy Department / CMAM
7.d. Develop the strategy and systems for the introduction of new technologies						DPC / INS
RESULT	Equitable access to quality essential medical products, vaccines and technology is guaranteed.					
8. HIS and M&E						
8.a. Develop and implement a new, single health information system (SIS-MA) based on the use of the DHIS2 application						DPC
RESULT	Quality M&E system used for decision-making.					

7. Implementation Mechanisms

The purpose of implementation mechanisms is to guarantee PESS strategic objectives are achieved. These mechanisms define the implementation process and instruments, as well as the roles and responsibilities of various sector actors, including how they relate to each other, forums and processes to achieve the PESS objectives. This chapter includes a description of the PESS resource envelope and costs.

7.1. Planning and Budgeting Process

The planning and budgeting cycle of the Government of Mozambique is led by the MPD and the MF. The cycle starts in November every year with the development of the Medium-Term Expenditure Framework, which aims to define – or confirm – strategic Government objectives and associated macro level allocation of financial resources (allocation efficiency). Each Government sector and local Government (at Provincial and District level) submits their proposed scenarios to the Government. Based on this instrument, in May of each year, the MPD and MF define and communicate budgetary ceilings for each sector and local Governments for the following year; PES proposals and corresponding budgets are produced on the basis of this in June and July.

Based on PESS priorities and financial scenarios, the DPC / MoH elaborates specific technical guidelines for the decentralized level to support the development of their respective medium-term financing and expenditure scenarios. These are later integrated in the overall health sector MTEF. The costs and targets reflected in the OneHealth instrument are used to guide this process, as well as to justify the proposal put forward by the sector; these form the basis for discussion of potential "deviations" in the definition of budgetary ceilings.

Once the MTEF is approved in April, the DPC / MoH draws up specific technical guidelines for developing the PES and allocating the SB. These are based on the MPD's methodology, the health sector MTEF, performance in the previous year, targets and activities in the PESS and other strategies / policies, evaluations, newly approved policies, as well as potential new challenges confronted by the sector. These guidelines should detail the process for developing the plan and its budget, as well as specifying local interventions that will be managed at central level (infrastructure, distribution of material and equipment, staff placement, etc.). They will also include provincial level targets for achieving the objectives under "More and Better Services", the sector reforms, and incorporation of partners' contributions.

These guidelines will also include the methodology for allocation of resources and budgeting of activities, ensuring they reflect political sector priorities. In this context, the MoH will review the criteria for the allocation of funding. The actual application of these criteria is negotiated with MPD and MF.

The central, provincial and district level develop plans and budgets with partner participation, based on the budgetary ceilings defined by the MF, partner commitments and technical guidelines produced by the DPC[29], which will later aggregate and harmonize these. Activities are costed using an adaptated methodology of the *OneHealth* for multiannual budgets. The PES and SB include quarterly work plans at all levels, corresponding treasury plans, procurement and distribution plans. Those produced at national level are shared with provinces; provincial level shares with districts; and those produced by districts are shared with HFs. Negotiations associated with these plans and their harmonization first take place at provincial level, and later at national level through a planning meeting that takes place in July.

[29] Effective mechanisms for civil society participation in this process will be analysed in the context of the reform agenda.

7.2. Implementation Instruments

The implementation of the PESS will be supported by several operational instruments. The development of the PES and allocation of the SB will follow the steps described above. The documents will be validated in the National Planning Meeting with subsequent approval by the Minister's Advisory Committee and endorsed in the 1st Sector Coordination Committee (CCS, *Conselho Coordenador de Saúde*) following authorization of district and provincial Governments. For day-to-day management, expenses are authorized based on accounting principles (budgetary allocations and legality of expenditures) but also in compliance with approved activity and treasury plans. This explains why implementation units – with DAF support at central level - will be encouraged to introduce programmatic components in procedures associated with expenditure approval.

7.3. Planning and Implementation Roles and Responsibilities

The main responsibility of the DPC and associated local level bodies is to coordinate and guide the planning process and monitor the implementation of activities, ensuring complementarity of interventions at various levels, while avoiding duplication.

The DPC will also provide technical assistance to yearly DPS planning processes, and DPSs will in turn assist SDSMASs in the same way. The DPC / MoH is responsible for defending and justifying sector budgets in negotiations with the MF, as well as for technically supporting justifications for the provincial PES health component[30]. Other supporting sectors in the Ministry (programmes and support areas) develop corresponding proposals on the basis of DPC guidance and are responsible for the implementation of approved activity plans. The financial sector (DAF) is responsible for ensuring expenditures are in line with approved activity and treasury plans.

Harmonization, alignment and mutual accountability among donor agencies and NGOs is promoted through their participation in activity planning and monitoring sector performance using existing mechanisms (SWAp working group, the CCC or Joint Coordination Committee, CCS, provincial level planning exercises, ACA, etc.). In addition, these agencies also have particular responsibility for ensuring their financial[31] and technical contributions are integrated in the PES and SB, as well as guaranteeing timely disbursement of funds and implementation of activities under their direct management.

As mentioned above, the level of participation and effective integration of other Government sectors, civil society and the private sector in these processes needs to be better analysed and defined in the context of reforms. It should be noted that strengthening sector-planning systems is also anticipated in sector reforms.

[30] Provincial Governments also defend their PESOPs (provincial level PES and SB) before the MF.

[31] Regardless of the support modality adopted (on or off-budget, vertical projects, etc.).

8. PESS 2014-19 Resource Envelope and Costs

The expansion of services and interventions considered in this strategic plan represents a shift in the sector's response to health challenges. This chapter outlines estimated costs for activities foreseen for the period 2014-2019, core cost patterns, and financial projections. Finally, the section will analyse the present financial deficit to support the GoM in determining allocation of additional funds and informing external partners committed to implementation of the plan. It also identifies additional analyses needed to improve and adjust program needs and system capacities accordingly.

8.1. Costing Methodology

The main objective of the costing of the PESS 2014-2019 was to estimate financial needs to attain coverage targets for key health system services. Cost calculations relied on the use of the OneHealth Model[32] . Information was collected through interviews over a six-month period with heads of different programmes and department. The information was aligned with various MoH strategic and programme documents.

The costing methodology is based on targets set for each health system component that is considered essential for effective health programme performance. These pillars include:

- Infrastructure – type of HF, current number, new constructions and renovations, operational costs, medical equipment, furniture, vehicles and ICT equipment;
- Logistics – warehousing, current number, new constructions and renovations, operational costs and vehicles;
- Information systems – knowledge management, collection and provision of statistical data, patient records, etc.
- HR – staff categories, salaries and benefits, staff use of time, rotation, pre-service training and continuing education, recruitment, etc.;
- Governance – strategic vision, reform, decentralization and transparency, etc.[33] .

Targets and health programme management activities were also costed – including 15 public health and 25 medical care programmes.

Direct programme cost estimates associated with the provision of medical services (drugs, consumables and surgical materials) were calculated using the following steps: the process started by listing the main interventions and medical services associated to each programme. This was followed by defining the size of the target populations for each intervention[34], the proportion of that population requiring each intervention, together with annual coverage plan. Financial costs per person covered were applied on the basis of an average package of services for each intervention: drug type and dosage, and surgical material and consumables. Finally, total cost calculations were based on the total number of people reached per intervention and reflected in respective programmes[35].

[32] The OneHealth Model is a tool that supports medium-term integrated strategic planning which estimates direct programme costs, as well as the implications in terms of resources required for full implementation (for exemple, HR, drugs, consumables, etc.).

[33] Governance also included management costs for DAF, the INS, the IMT, IGS, DPC and the Minister´s Office.

[34] Target populations can be assessed through demographic and epidemiological modules integrated into the OneHealth Model, derived from the Spectrum modelling package (Spectrum modeling suite).

[35] Annex 5 provides details of the costing methodology. In addition, a OneHealth report was produced providing methodological details and comprehensive analysis of costing results.

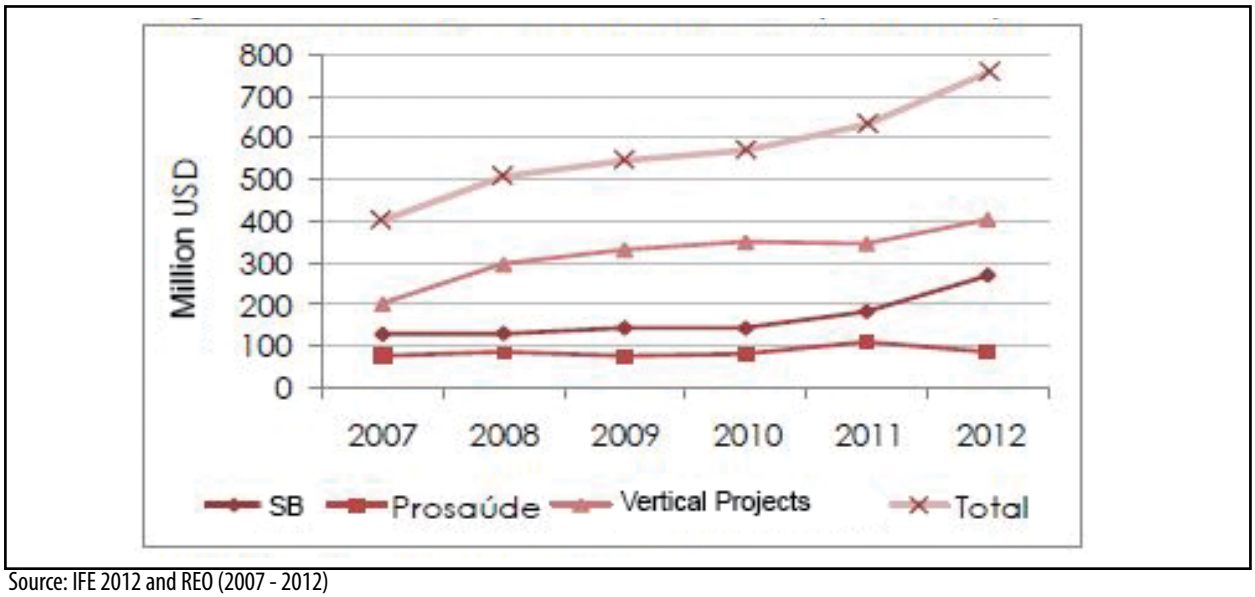
8.2. Resource Envelope

The health sector resource envelope in Mozambique consists of public and private sources. The 2012 EFS and State Budget Performance Reports[37] indicate that the GOM (SB) contribution to the sector (36%) was lower than that of donors / development partners (including PROSAUDE funds, on-budget and off-budget), which represented 64% of health expenditures in 2012.

Private resources (family contributions and other private entities) were not included in the resource envelope estimates given the difficulty of obtaining this type of information. Nonetheless, a study on health sector funding trends and projections in Mozambique is underway. A study on the National Health Accounts for the period 2007-2011 is also in progress. These will be used to inform the country's health sector financing strategy.

The sector has witnessed an increase in total expenditure in health from US$402 million to US$759 million between 2007 and 2012. This increase is partly explained by the significant increase in external funds, specifically from off-budget vertical projects, but is mainly due to increased SB allocations, which have more than doubled since 2007 (see Figure 5).

Figure 5. Financing Trends (2007-2012)



Source: IFE 2012 and REO (2007 - 2012)

Even when the overall financing trend points to an increase in recent years, the growing dependence on external financing sources comes with high levels of uncertainty caused by global economic and financial circumstances. In light of this, it is critical to conduct detailed analyses of potential alternative financing scenarios for the next few years, based on previous trends, current economic context and future economic perspectives both for Mozambique and developed economies[38].

Scenario 0

The MTEF (2014-2016) projections were used to estimate GoM funds. Projections for subsequent years were based on the trends verified for the period 2014-2016.

In relation to external funds, projections for all scenarios were based on information made available by development partners through the 2012 EFS[39]. Overall, this scenario expects to see a reduction in

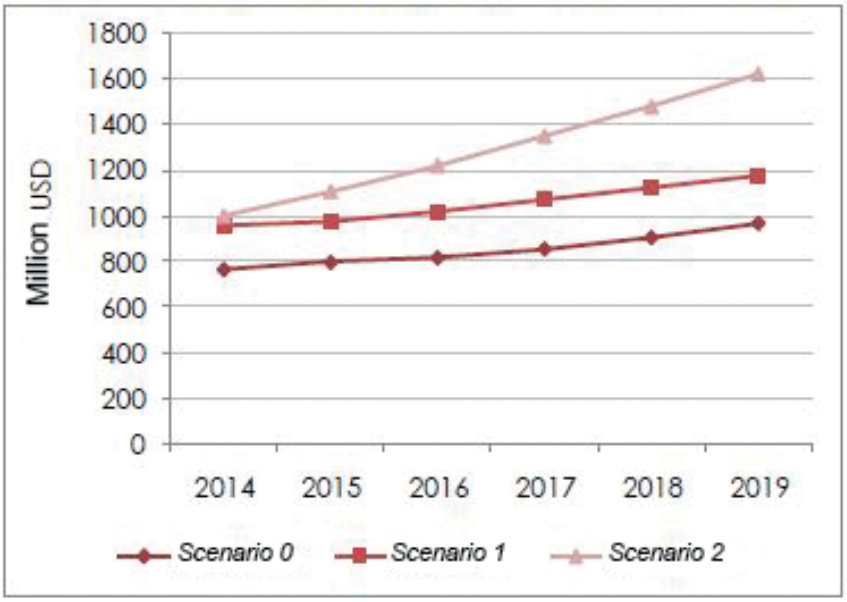
[37] Quarterly document that seeks to analyse and monitor Budget and Financial Performance of funds allocated to the Health Sector, consolidating NHS Budgetary and Financial Information.
[38] See Annex 6 for more details on the assumptions used for the different financing scenarios.
[39] Information made available for forecasting medium-term external financing is rather limited given it was not possible to obtain comprehensive information on all commitments made by health sector partners through the EFS or the ODAMOZ database. The difficulty faced by partners in making information available on committments for the period 2014-2019 could be associated to the current global financial crisis.

PROSAUDE common fund funds as a result the withdrawal of the European Union and the reduction of funding levels by Canada (for 2012). On-budget (excluding PROSAUDE) and off-budget vertical funds are considered to remain stable, even if partners that have not made any contributions in the last two years and who have not made any commitments for the future are expected to withdraw as of 2014.

Scenario 1

Projections for GoM funds in this scenario were made based on IMF macroeconomic indicators. In this scenario the economy is expected to grow 7.6% annually (IMF, 2012) between 2013-2015. This is due to new investments, which could expand the tax base, thereby generating an increase in internal resources. In this scenario, GoM funds are expected to increase in line with the GDP growth rate - taking 2012 as base year, (IMF projections, April 2013).

Figure 6. Alternative Funding Scenarios



External fund projections have assumed the EU's departure from PROSAUDE resulting in an 11% reduction (weight of the EU in PROSAUDE), as well as the departure of those partners, which have made no contributions in the last two years. It is assumed that in relation to off-budget support, the United States Government will reduce its assistance by 5% and that Global Fund funding will remain stable.

Scenario 2

This is a more optimistic scenario, which assumes the GoM will allocate 15% of its expenditure to the health sector by 2015. This assumption is based on the commitment to reach Abuja Declaration targets and that from 2016 expenditure increases will follow the trend seen in the last three years.

Based on the information provided by partners, three assumptions have been made:

i. The weight of on-budget funds (excluding GoM and PROSAUDE). and of PROSAUDE in public expenditure will remain stable (at 19% and 30% respectively);
ii. New partners will contribute off-budget funds in 2014, 2016 and 2018
iii. Partners that have not made contributions in the past 2 years have left the sector.

8.3. Costing Results

It is expected that between US$5.08 billion and US$7.78 billion will be available for the implementation of the PESS between 2014-2019, considering both "optimistic" (2) and "pessimistic" (0) scenarios respectively. When compared to the preliminary results of the costing exercise, these showed a financing deficit of US$3.6 billion (scenario 0) and of US$1.1 (scenario 2) for the entire period. This financing gap indicated a lack of resources to guarantee full execution of programmes and projects identified in the PESS, and led to cost rationalization. Further prioritisation was done based on efficiency, equity and rational resource allocation criteria, with the objective of improving and adjusting programme needs and health system capacities, while at the same time guaranteeing the desired impact on reducing mortality and morbidity. Resource prioritization was guided by the following parameters:

1. *Eliminating inefficiencies and reducing resource waste:* eliminate situations in which services are provided with the use of more resources than necessary, and improve their use;
2. *Improving coordination and efficiency across programmes:* avoid duplication in resource allocation, and improve coordination and harmonization of cross-cutting issues across programmes;
3. *Rationalizing targets:* define a package of interventions and set associated targets to minimize costs and at the same time allow achievement of desired impacts in population health.

Areas displaying potential inefficiencies associated with resource allocation were identified for programme management activities. Likewise, corresponding measures aiming at increasing efficiency in resource use were also suggested, including integrated supervision, training and other activities for some programmes (for example, malaria, MCH, nutrition, etc.). In addition to this, and in order to rationalize and harmonize costs across programmes, the same spread sheet was used to budget supervision activities, training and coordination meetings, resulting in cost rationalization to a total of US$202 million.

The costing exercise also allowed important synergies and improved coordination of cross-cutting issues across programmes and departments, which had formerly only planned these in a vertical and segmented way (for example, infrastructure, medical equipment, office material, hardware and software, transport, etc.). Lastly, programme targets were also reviewed and rationalized to contribute towards cost control and at the same time achieve expected impacts in the reduction of mortality and morbidity.

In summary, strategic PESS programmes and interventions were costed based the development of scenarios. Different intervention packages and coverage levels were analysed based on sustainability criteria, impact on health and cost rationalization taking into account the country´s context[40]. The more ambitious targets of other interventions were adjusted and aligned according to the system's capacity (NCD, NTD). The rationalization of targets resulted in a US$470 million reduction in costs and at the same time maximized impacts on the health of the population.

Following the prioritization process and based on the systematized methodology described above, costs were reduzed by US$780 million for the period 2014-2019, bringing the total cost of the PESS to US$7.82 billion.

[40] For example, targets for key interventions associated with the reduction in maternal and child mortality (mainly MCH, nutrition and malaria programme interventions), and at the same time redefining progressive and sustainable targets over time.

Figure 7. General Cost Distribution, 2014-2019

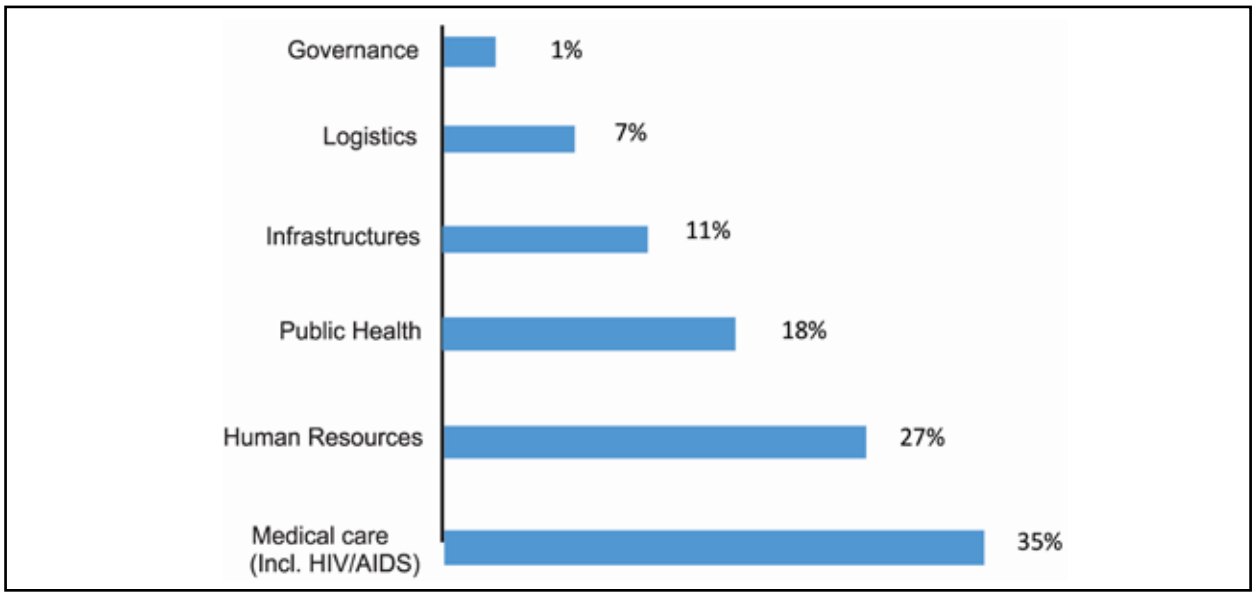


Figure 7 shows that, on the one hand medical care programmes worth US$2.7 billion (35% of the total), represent the highest costs within the Plan, mainly due to the HIV/AIDS programme with a value of US$1.35 billion (representing 17% of total PESS costs for the period 2014-2019).

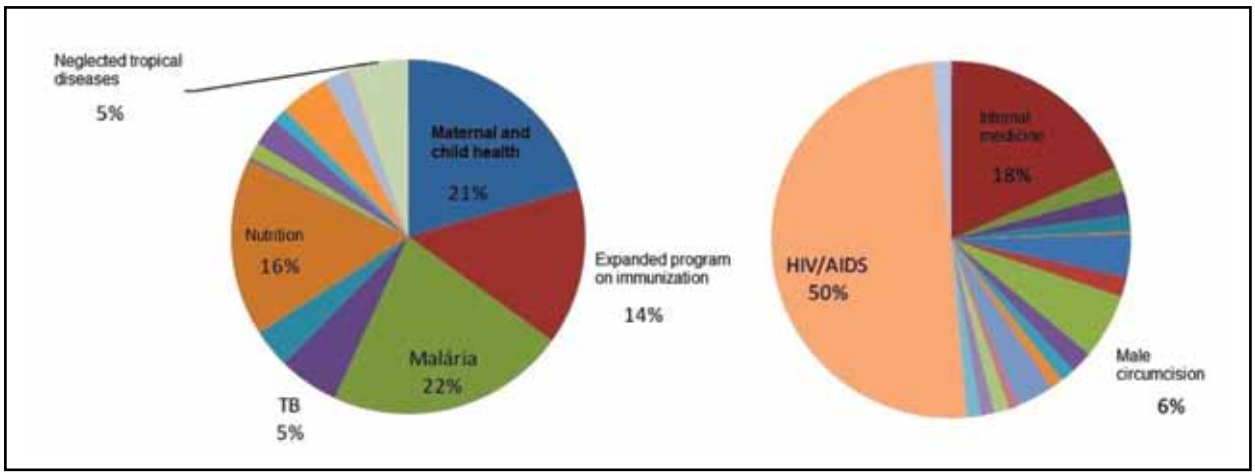
On the other hand, public health programmes account for only 18% of total costs. The financial value of health worker contributions to service provision (assessed through salary costs) comes to a total of US$2.13 billion (27% of total costs). The cost of strengthening infrastructure and equipment in the health system is US$887 million (11%), while logistics for drugs and consumables (including waste reduction), and governance systems amount to US$572 million (7%) and US$106 million (1.4%), respectively (see Annex 7 for further details).

The exercise also enabled costs to be redistributed more specifically both in health programmes and systems in the period under analysis. Estimated costs of public health programmes comes to a total of US$ 1.4 billion, of which 76% corresponds to the procurement of drugs and consumables, while the rest corresponds to overall programme management (training, supervisory visits, IEC material, etc.).
Investment in public health programmes is expected to increase by 23% in the period 2014-2019, with malaria, MCH and nutrition programmes representing the largest share of total costs (see figure 7). However, in medical care, the HIV programme (50%), internal medicine (18%) and MC (6%) represent the highest costs.

Figure 8 below illustrates cost patterns for different public health and medical care programme management activities. In the case of public health programmes, costs related to communications, the media and outreach account for the highest proportion of costs (32%) followed meeting costs and other programme planning activities (22%), while infrastructure and equipment account for 19% of the total costs. Cost distribution remains stable over time.

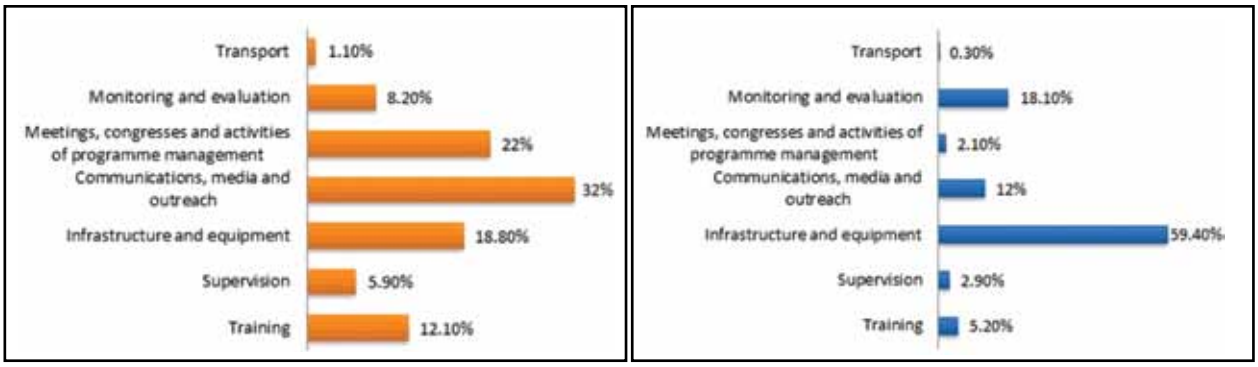
Figure 8. Costs Summary for Public Health and Medical Care Programmes (2014-2019).

Note: Diagrams only display programmes representing >4% of total Public Health or Medical Care costs.



On the other hand, contrary to public health programmes, the distribution of costs for management of medical care programmes, infrastructure and equipment represents the highest costs (approximately 59%), followed by M&E (18%) and communication, media and outreach activities (12%). It is important to note that HIV targets largely influence this distribution, as they represents about 70% of DNAM´s programme management costs.

Figure 9. Cost Distribution for Public Health and Medical Care (2014-2019)



US$3.7 billion for the health sector is distributed in the following way: HR (57%), infrastructure (24%), logistics (16%) and governance (3%).

HR costs, totalling US$2.1 billion for the entire period, are distributed between salaries (55%), benefits and incentives (37%), pre-service training (3%) and general administration and management costs (5%). Given the ambitious hiring policy for the coming years, a 23% increase in health sector staff is expected over the whole period, implying a 74% increase in total costs.

Strengthening the infrastructure system over the period will cost US$887.12 million; costs related to HF operations are highest (66%). In addition, and in line with the current infrastructure plan 22 HFs are expected to be renovated in 2014 and 65 new buildings constructed across the country between 2014-2019. It is important to highlight that most infrastructure works are scheduled to take place in the first two years (76 out of 88 are scheduled for 2014 and 2015). Construction, renovation and equipment costs associated with these new health units is about US$305 million (see Annex 3).

In addition to the projects foreseen in the general infrastructure plan, there are other specific projects

within programmes for which funding has not been secured. For example, public health programmes require US$39 million to invest in infrastructure in the period 2014-2019; medical care programmes forecast US$166 million for the same period, consist mainly of renovations, constructions, expansion of the laboratory network, pharmacies and rooms for medical consultations needed for the HIV programme (see Annex 4).

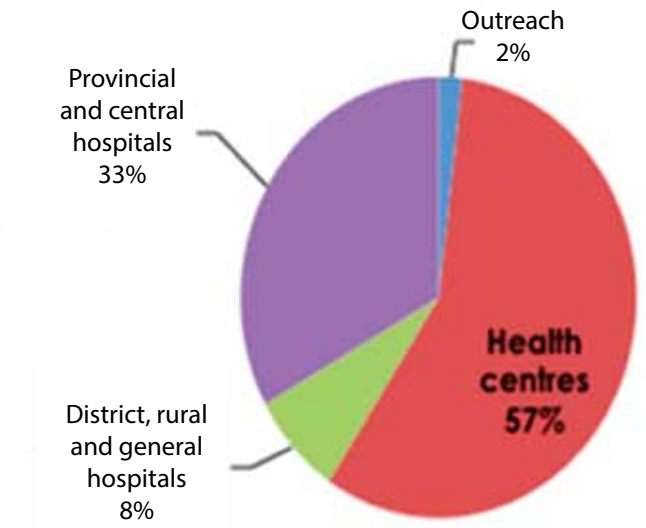
Specific project costs associated with programmes were costed within the corresponding programmes. Important cost inefficiencies and duplications could however persist due to the lack of coordination between programmes and departments.

The development of an integrated infrastructure plan will enable integrated and coordinated planning for all sector projects, and will significantly improve the efficiency of resource allocation.

The logistics system, which includes the costs associated with warehouse construction and maintenance nationwide, the drug transportation system, medical equipment and consumables, general management costs and drugs and consumables waste fee, represents a total cost of US$571.88 million; the waste fee for drugs and consumables accounts for the highest proportion of costs (79%). System administration costs including training, logistics information systems and outsourcing of transport services represent 10% of total costs, while the costs associated with warehouse construction, renovation, expansion and maintenance at national level total US$40 million.

Lastly, certain activities aiming to strengthen the health information system, as well as some M&E activities do not appear in the costing tables, as their costs have been included in each programme. However, when analysed jointly, they represent 5% of the total budget destined to health systems, equal to US$180 million.

Figure 10 presents the distribution by level of care.



Due to limitations in data quality, it was only possible to obtain cost estimates disaggregated by level of care for logistics (drugs and consumables) and infrastructure. On the one hand, 59% of these resources are channelled to care at primary level, including HF (57%) and outreach teams (2%). Conversely, 8% of total costs are destined for district, rural and general hospitals, while remaining funds (33%) go to provincial and central hospitals.

Health sector capacity limitations have to be taken into account even if all financial resources are

available. This explains why the costing exercise did not only focus on estimating financial needs, but included an assessment of internal system capacities to achieve targets set.

In fact, a comparative analysis of available and projected HR for the NHS against that needed for full PESS implementation was also conducted. This involved defining the type of staff required for the provision of services and the total amount of minutes dedicated per patient served. The application of this information to the total number of people covered by area of intervention was thus used to calculate the total number of minutes by staff type per year. The information was compared to the number of minutes available to each staff category (based on the number of working days and the number of staff contemplated in the PNDRH), making it possible to calculate the full-time equivalents of staff required for the provision of services and the achievement of targets established in the PESS.

The results of these analyses are presented in the table below. In order to facilitate the exercise, 65 specific staff categories were grouped into types and 14 sub-categories. It can be noted that the greatest differences found between actual and required staff for PESS implementation are medical specialists and general medical doctors. In these categories, full-time equivalents of staff required will by far supersede staff currently available to the NHS. For example, the NHS needs four times more medical specialists than it has to achieve PESS objectives.

This suggests the need to reconsider the current HR structure, as well as practices related to task-shifting and task-sharing, especially for professional categories with the highest full-time equivalents of staff required.

Table 5. Full-time Equivalents of Required vs. Actual Staff

	HR needs / HR available *(reflected in %)*					
	2014	**2015**	**2016**	**2017**	**2018**	**2019**
General Medical Practitioner	187%	181%	163%	150%	150%	151%
Specialist Medical Practitioner	608%	629%	519%	447%	448%	451%
Higher-level Midwifery Professionals	827%	824%	806%	821%	819%	819%
MCH Nurses (basic and medium-level)	91%	90%	90%	88%	87%	86%
Nursing (basic, medium and higher-level)	124%	122%	115%	110%	110%	109%

Staff categories not included: Paediatrics; Surgery; Curative Medicine; other Health Technicians (medium and higher-level), and cleaning staff.
Technical Note: percentages over 100% point to shortfalls in that staff category for that year.

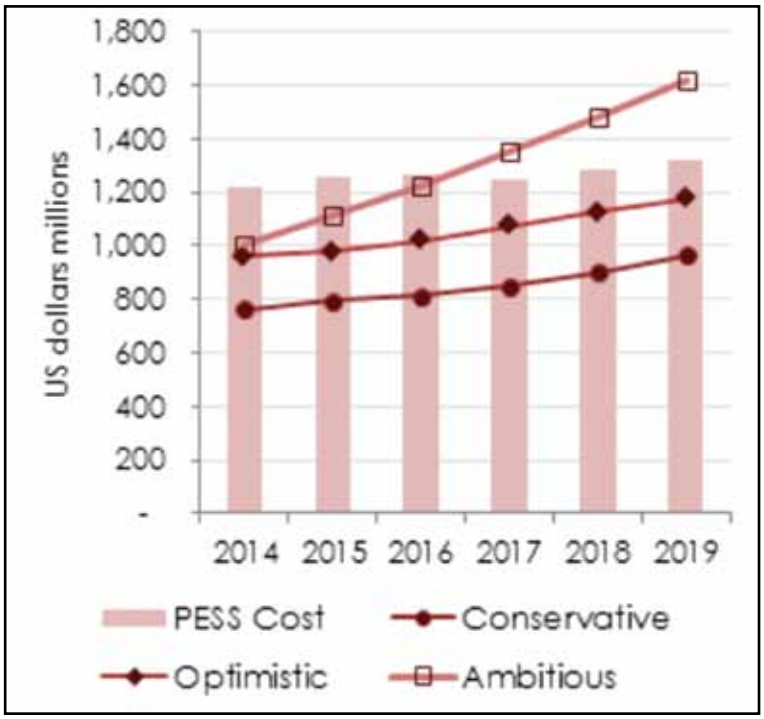
8.4. Conclusion

PESS 2014-2019 costing results obtained through the OneHealth Model made it possible to estimate financial needs to reach key health system service coverage targets associated with the Plan.

Three scenarios were developed in relation to expected fund availability during the PESS period, namely, scenarios 0, 1 and 2, based on estimates for both internal and external financing. The information used for the production of these scenarios was obtained from existing annual planning documents, past health sector financing trends and political obligations assumed by the Government, together with other macroeconomic indicators reflective of the current national and global economic picture.

Preliminary results of the costing exercise point to a financial deficit of US$3.6 billion (scenario 0) and of US$1.1 billion (scenario 2), over the entire period.

The deficit clearly highlights the sector´s lack of financial capacity for the implementation of activities planned for the first phase of the Plan; activities were thus prioritized to rationalize costs.



This process produced cost-savings for implementation of the 2014-2019 PESS of around US$780 million and improved alignment between programme needs and health system capacity. Nonetheless, health sector investment needs remain high when compared against the different financial scenarios (figure 10). Costing results related to scenario 1 highlight a total deficit of US$1.48 billion between 2014-2019, distributed as follows over the entire period: US$290, US$316, US$282, US$223, US$187 and US$182 million.

However, the prioritization of PESS activities will be reflected in the annual PES, taking into account sector targets and funds available for the following year (n+1).

Finally, targets will be analysed and adjusted as needed during the mid-term review in 2016 on the basis of the upcoming Five-Year Government Plan. Together, these mechanisms guarantee successful financing and implementation of key sector activities, as well as the adjustment of future plans to future financing scenarios.

9. Monitoring & Evaluation

The M&E system developed for the 2014-2019 PESS aims to provide data and information related to progress in implementation and related results, as well as on the impacts associated with PESS interventions. The M&E matrix includes output, result and impact indicators. Different versions were produced to meet the needs of different MoH interest groups, namely: a detailed matrix that includes process indicators to facilitate day-to-day management of PESS implementation[41], and a summary matrix, presented in the executive summary, focusing on key-indicators to inform decision-making at the highest levels within the MoH and to boost dialogue between the Ministry and sector partners around progress and results achieved related to PESS implementation.

The 2014-2019 PESS matrix is harmonized and aligned with M&E instruments and processes that already exist or are currently under development, such as regular sector reviews (balanços), PAF, ACA, OneHealth, programme plans and M&E frameworks. This means PAF contents need to be adjusted to PESS objectives.

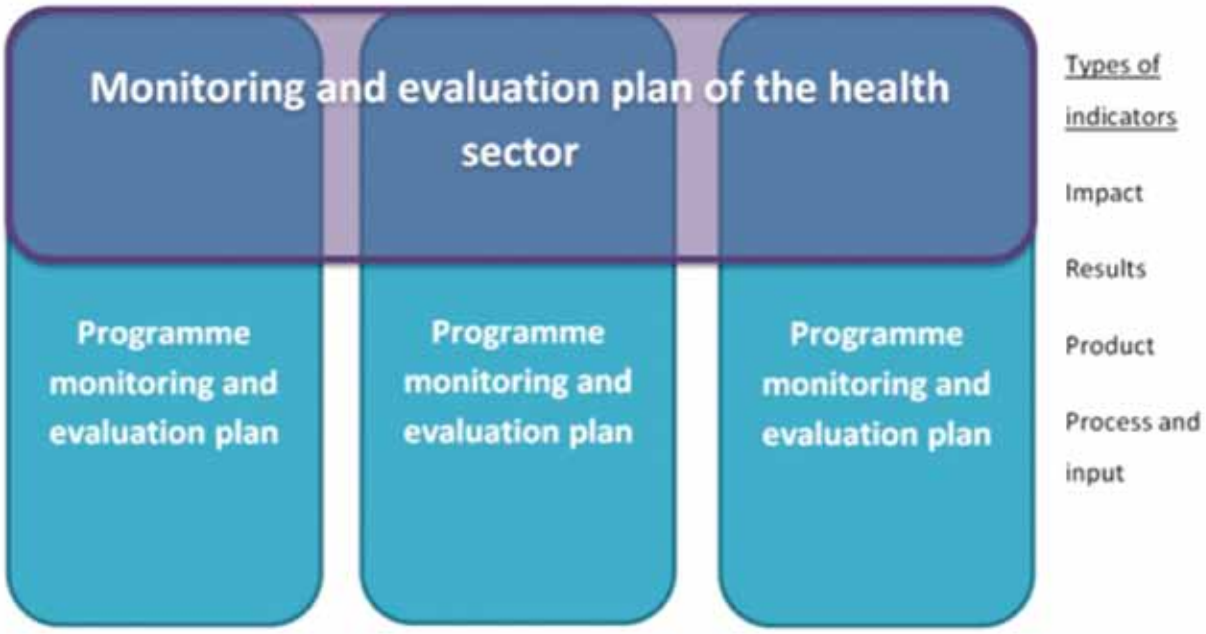
In addition to the 2014-2019 PESS matrix, a National M&E Plan will be approved to guarantee M&E mechanisms in the health sector are aligned with the PESS 2014-2019, ensuring quality improvement and the availability of information and its use.

Figure 12. Linkages Between Key Strategic Plans and the Monitoring & Evaluation System Strengthening Plan

In contrast, the M&E Plan produced for Directorates and Programmes includes not only the 2014-2019 PESS indicators, but also information related to programme management, as well as input and process indicators commonly used by programme managers. The figure below shows the relation between the National M&E Plan for the sector and programme M&E Plans.

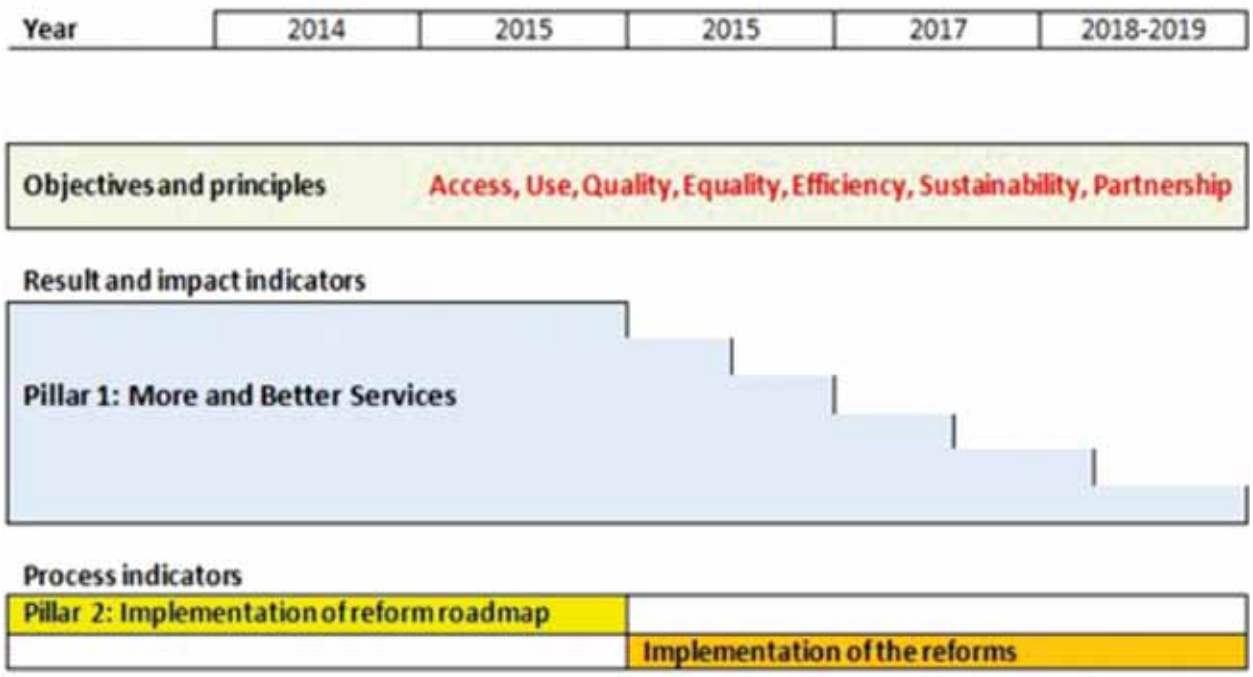
[41] The detailed matrix is for internal Minstery use and is annexed to the National M&E Plan.

Figure 13. Linkages Between the Health Sector National M&E Plan and Programmes



The fact the PESS is structured upon two pillars is also reflected in the structure and composition of the related M&E system. The figure below illustrates issues to be monitored in each period.

Figure 14. PESS M&E Framework



PESS monitoring is divided into two separate but interlinked processes, namely: monitoring of activities implemented to achieve PESS objectives, and the monitoring of their effect. The effects from implementing the PESS will be assessed by using indicators showing progress in relation to PESS Objectives and Guiding Principles, which coincide with conventional health system performance assessment indicators. The indicators will be calculated over the entire PESS period, even though they could be subject to change once reforms start being implemented and the mid-term review is conducted. Changes could include disaggregation of data and monitoring the determinants of health.

PESS implementation requires translating strategies into specific objectives and activities into annual plans. Therefore monitoring will focus on process indicators, i.e., confirming if activities were in fact implemented.

Pillar I, for the provision of more and better health service, will be monitored from the onset of PESS implementation as some of the activities will be implemented over the six years, also bearing in mind that, as of 2016, certain reforms may be substituted – certain approaches in the pillar may be replaced to improve coordination and integration.

Pillar II consists of two phases: the roadmap for the reform agenda, that is, activities related to analysis, consultation and discussion to support MoH decisions around required changes, while the implementation of reforms approved is implemented after 2016.

Decisions related to key issues touched on in Chapter 7 will be monitored in phase I (for example, the establishment of semi-autonomous hospitals), and phase II will concentrate on monitoring the implementation of decisions made (the transformation of hospitals into semi-autonomous units), including close monitoring of the effects of reforms on the provision of health care services. Indicators included in annual plans will need to reflect these specificities.

In addition to the MoH, other Ministries and State institutions also contribute to the of the development of the sector´s M&E system, for example, INE that is responsible for implementing large, population-based surveys.

The M&E Department will coordinate activities contributing to data collection, analysis and harmonization, as well as indicators needed for 2014-2019 PESS monitoring.

9.1. Main PESS III Indicators

The general assessment framework for the PESS outlines the hierarchy of objectives. The overall sector objective, expressing the vision of a healthier population[42], requires monitoring through indicators associated with health sector priorities, see table in the executive summary. Baselines were established for each indicator, and corresponding data sources and entities responsible for collection and analysis identified. Indicators were disaggregated by sex, age and geographic Indicators for priority areas are in line with PESS Strategic Objectives, expressed as Guiding Principles for Access and Use, Quality and Humanization, Equity, Effectiveness and Efficiency, Transparency and Accountability, and Partnerships. Indicators were adapted to those used by programmes and will be monitored in the context of the PAF. A working group will be established for this purpose led by the DPC M&E Department and will include representatives from various MoH departments and members of the PIMA group. Data quality and feasibility criteria will be taken into account when choosing indicators.

9.2. Revision Process

The Strategic Plan will be implemented, as mentioned above, through the Social and Economic Plan and State Budget (PESOE, *Plano Económico e Social e Orçamento do Estado*), which is monitored through regular reviews and the ACA. The PESS M&E framework is designed to facilitate decision-making at the highest level of the MoH and dialogue with partners. In this context, quarterly PESOE reviews[43] (balanços, at 3,6, and 9 months) will focus on PESS process indicators and several cumulative targets made available by the HIS, while the annual report will analyse the relation between outputs (for example, EPI achievement rates) and processes (number of new fixed sites opened), as well as on progress made in the reform agenda. The ACA will, in turn, concentrate on PAF indicators (adjusted) and on key issues related

[42] Multisector monitoring through population-based surveys given health´s limited impact.

[43] Monthly reports will be requested at micro level (directorates, programmes and subordinate institutions) for "micro-level" plans.

to the reform agenda, and possibly make recommendations for the following period. Regular reviews and the ACA will analyse achievement of targets and equity, with data disaggregated to subnational level (provincial and district level, as relevant).

Based on the Chess[44] report recommendations for developing the national health strategy's M&E component, there should be two evaluations to better analyse its impact. The first, mid-term evaluation (2016) will analyse the level to which pillar I has been implemented and how this relates to progress against results indicators, It will also verify the level to which the reform agenda has been developed in terms of scope and consistency of predicted changes etc. The second will be a final evaluation (2019/20) to analyse results and determining factors, including the effect of the reforms that will be underway. The first evaluation will include recommendations for the review of PESS indicators taking into account the reform agenda.

PESS 2014-2019 M&E activities will be coordinated by the DPC M&E Department. The Department will coordinate actors involved in the implementation of activities reflected in different work plans, and lead the process of budgeting M&E activities.

The PIMA working group (which includes the DPC and cooperation partners) is the platform, which coordinates ACA activities; reviews PAF indicators and actively participates in PESS mid-term and final evaluations. The ToR for the group, outlining corresponding objectives and responsibilities, are included as attachments to the National M&E Plan.

Data Quality Control

One of the driving objectives in M&E is to use data and information produced by the HIS to facilitate decision-making and enhance results associated with health interventions. Several factors can influence the process, one of which is data quality or credibility. The use of data for decision-making depends to a large extent on the trust decision-makers place in its reliability.

Previous evaluations[45] have highlighted the existence of poor data quality, related to incomplete information (completeness); data mismatch and low reliability, as well as delays in data flow. These weaknesses are a result of inadequate data quality control mechanisms[46] at the level of data collection (non-standardization of tools, excessive workloads at HF level and duplication of information) as well as at the level of data aggregation and reporting (and the absence of standard mechanisms to evaluate, control and improve quality).

The National M&E Plan includes detailed strategies to guarantee data quality control, including functions and responsibilities. These cover the implementation of the "Supervision Guidelines", including a data verification component to assess and strengthen the quality of data reported to the NHS; continuous implementation and improvement of the system used for feedback in relation to data completeness and timeliness), and the achievement of targets and validation of aggregate data reported. The new SIS-MA includes validation rules and deviation analysis to guarantee the quality of data collected and data verification on an annual basis, in the context of the ACA.

[44] Chess/IHP+, July 2010 "Development of a comprehensive M&E component of the national plan, Mozambique".
[45] Technical Report for the workshop dedicated to NHS Self-Evaluation on M&E System (2007); the report on the seminar organized by DIS to inform and develop an HIS Strategic Plan in 2008.
[46] Particularly in relation to individual data matches, registered in books at HF level, in monthly summaries produced by HFs and in data flows from HFs to higher levels.

Data Dissemination and Use

Access to data is a key factor in guaranteeing programme planning, monitoring and evaluation at central, provincial and district level. The Ministry obtains information from: a) routine systems; b) surveys; c) special studies and operational research. Various dissemination channels exist, such as presentations in national and coordination meetings with partners; the MoH website; production of "dashboards" at national and provincial level to share health system performance on a regular basis, and regular data review meetings. Moreover, the new SIS-MA, currently under development will make it possible for all key sector players at sub-national level to have immediate access to disaggregated data, including governmental and non-governmental players. These processes form the basis for monitoring health sector activities and results, as detailed in the National M&E Plan.

The MoH encourages the use of ICT for epidemiological data collection, analysis and dissemination and management of services (internet, e-health, etc.).

Monitoring and evaluation at community level can play a crucial role in interventions aimed at increasing quality, transparency and accountability in the health sector. The current use of M&E at community level constitutes a powerful management tool for communities to organize their resources and make informed decisions in planning future actions. The Ministry will encourage initiatives that promote community engagement around M&E, including pilot initiatives and the development of community engagement strategies.

10. Assumptions, Risks and Mitigation Measures

In this section, the PESS identifies and assesses internal health sector and external events that can affect implementation and thus represent risks. "Risk is defined as an event with a given probability of occurring and potential of producing adverse effects for the achievement of PESS strategic objectives".

Risk analysis is based on the AusAID risk matrix (Annex 9) categorized in four levels (4=very high; 3=high; 2=moderate; and 1=low) with corresponding mitigation measures.

The table below summarizes the risks inherent in the implementation of the PESS (for more details see Annex 9).

Table 6. Risk Analysis

Risk	Risk Analysis		
	Probability	Consequence	Risk
Inadequate health sector financing	3	4	3
Improvements in financial systems may be insufficient or not on time	3	3	3
Fiduciary risk assessment	3	2	2
Poor management and slow development of the fiscal decentralization process	2	3	2
Existence of *off-budget and off-cut funds*	4	4	3
Limited audits by the Administrative Court	4	3	3
Weak planning, budgeting and development of reports	4	3	3
Lack of skilled staff and insufficient public funds to cover the increasing wage bill	4	4	3
Unsustainable HR attraction and retention measures	3	2	2
Natural disasters and associated public health problems	4	3	3
Poor coordination between the public and private sector	2	2	1
Political stability	2	4	2
Demographic growth and endemic disease	4	4	3

Main Risks

i. Inadequate health sector financing

The PESS assumes that both the GoM and development partners will allocate financial resources for PESS implementation. However, the current macroeconomic crisis and expectations for the coming years will affect the resource envelope, and will have implications on the level of public expenditure programmed for the PESS 2014-2019. There is a risk that financing countries will reprogram or reduce their financial contributions to meet domestic investment needs. Similarly, even if the Mozambican economy has grown in recent years, it is possible that the 15% target contribution established in the Abuja Declaration will not be met. Moreover, even if GoM health expenditures reach the 15% mark, resources will still be insufficient for full PESS implementation.

- Mitigation measures: Securing mechanisms and leadership is needed in case PESS implementation needs to be adjusted to scenarios for lower funding levels, and redefining PESS priorities. Maintain dialogue with external sector partners to advocate for the allocation of additional resources; promote efficient use of resources allocated; develop a financing strategy that identifies other sources of financing and effective use of resources for the health sector in Mozambique.

ii. Financial Management

Improvements made to financial management systems may not prove to be sufficient or suitable.

- Mitigation measures: Strengthen financial management systems to guarantee efficient use of financial and other resources, and at the same time, promote transparency and accountability, so as to attract additional resources to the sector.

Perceived fiduciary risk increases and negatively affects the trust of partners providing budget support.

- Mitigation measures: Follow-up on Government commitments, combat corruption and promote anti-corruption campaigns; strengthen internal audit and monitoring processes; strengthen the capacity of audit and accounting teams; enforce disciplinary measure to increase compliance to existing norms in the area of financial management.

The fiscal decentralization process evolves at a slow pace and is characterized by ineffective management.

- Mitigation measures: Strengthen leadership capacities for effective management at all levels; keep political dialogue in the sector and with other State entities active and regular, at all levels.

The existence of a large proportion of off-budget and off-CUT funds, increases the risk of not achieving overall development efficacy as priorities could become blurred, undermining national planning and budgeting processes for the health system.

- Mitigation measures: Limit off-budget and off-CUT budgetting. Define the statutory framework for external partners that use these mechanisms so as to ensure greater transparency on use of resources in the health sector, with a requirement for information sharing. Identify the MoH structures responsible for resolving this limitation within a defined timeframe. Promote dialogue with partners to explore alternative mechanisms and procedures aimed at integrating planning and reporting within Government systems, even if funds remain off-CUT.

Weak capacity of the Administrative Court to conduct external audits for the sector, as envisaged in the MoU signed with PROSAUDE partners.

- Mitigation measures: Use external audit services to complement Government efforts while the capacity of the Administrative Court is being strengthened; maintain political commitment to continuously and consistently express the need for the capacity of the Administrative Court to be strengthened.

iii. Planning, Budgeting and Reporting

The sector continues to face important gaps in relation to planning, budgeting and production of reports at district and provincial levels.

- Mitigation measures: Define and implement actions to strengthen capacities at provincial and district level and monitor budgetary execution on an on-going basis.

iv. Human Resources

The PESS aims to improve HR in different areas within the health sector. This implies the existence of qualified staff. However, current levels of trained personnel are inadequate and the Government may not be able to increase the HR wage bill.

- Mitigation measures: Increased investment in HR as a priority in the Plan; lead, actively coordinate and maximize the use of technical assistance available to the Ministry with the view to strengthening existing capacity at all levels of the health system (central, provincial and district levels).

Private sector expansion and the possibility of certain qualified staff exiting the sector, along with unsustainable measures for attraction and retention, constitute a risk for the implementation of this Plan.

- Mitigation measures: Make decisions to render public sector employment attractive and increase retention levels.

v. Natural Disasters and Emerging Public Health Problems

The high frequency of natural disasters and disease outbreaks substantially increases the burden placed on health services, especially in rural areas where poverty is prevalent.

- Mitigation measures: Collaborate with Ministries and entities in relation to emergency preparedness; ensure that plans are updated and ensure readiness for implementation.

vi. Public-Private-Partnerships (PPPs)

Poor coordination between the public and private sector. Existing coordination mechanisms do not take into account diversity within the private sector.

- Mitigation measures: Frame PPPs in the sector reform agenda.

vii. Political Stability

Government's commitment to improve access to health care by the poor diminishes.

- Mitigation measures: a) the MoH works with other Ministries and local Governments in areas identified; b) PESS implementation should maintain commitments made by the Government in its strategy to reduce poverty.

Political support in prioritizing health diminishes at national, provincial and district level.

- Mitigation measures: a) Involve Ministries (particularly MPD and MF) and Local Government bodies in consultation processes related to the PESS; inform and update the Parliamentary Commission responsible for health on the PESS; demonstrate through the implementation of the PESS the priority given to social sectors through GOM expenditures.

The decentralization agenda loses political relevance.

- Mitigation measures: Involve the Ministry of State Administration, Government agencies and other entities in the decentralization process. This should be done through annual PESS reviews and proactive involvement of these entities in relation

to specific reform and programme decentralization topics, for example HR and the CPS devolution to Town Councils.

viii. Demography

Demographic characteristics, including life expectancy, continue to be impacted by HIV /AIDS and affect economically active youth.

- Mitigation measures: Continue and scale-up the HIV / AIDS programme and expand its implementation. Maintain on-going, direct and active collaboration with the national entity in charge of coordinating support for this programme.

Annexes

Annex 1: JANS Short-Term Recommendations Adopted by the 2014-2019 PESS

Recommendation	PESS 2014-2019 Action
1. Include the concept of "Universal Health Coverage" as a PESS general objective.	The theme includes "Universal Health Coverage".
2. Include a description of existing inter and intra sector coordination mechanisms at central and provincial level (CCC, GT-SWAp*, CCS, PROSAUDE . . .).	The technical working group includes main coordination structures in the governance section (for example, SWAp). The situation analysis and reforms include descriptions of the coordination structures and main mechanisms to strengthen these structures. Finally, Chapter 5.2 provides details for key challenges.
3. Align PESS with the next Five-Year Government Plan, changing the start date to 2014 and add another year. PESS III will cover the period from January 2014 to December 2019. The Mid-Term Review should take place in 2016.	Targets and costs were effectively aligned to the new timeframe (2014-2019)
4. In the context of pillar II, produce the ToR with corresponding work plan outlining main interventions / results of institutional reforms (see point G1 below).	The technical working group suggests the ToR focus on the process and are not too prescriptive.
5. Consider creating a Reform Unit to be directly led by the MoH, constituted by dedicated full-time staff from different sector levels / areas within the Ministry.	The PESS already suggests the creation of a "Permanent Working Group" dedicated to reforms, but it does not define its composition.
6.Strengthen dialogue with PROSAUDE partners to warrant that the important challenges faced by this financing mechanism are overcome.	The technical working group agrees with the recommendation, but suggests the discussion takes places in the long-term (to be included in the 2015 PES, ...)
7. Take stock of programme indicators to better reflect PESS priorities.	MCH indicators show sector priorities balanced against other indicators (health promotion and medical assistance).
8. Expand plans and expected results for HIS transition using new information technologies.	Half a page was devoted to the integration of new context in Chapter 5.1.
9. The 2014 sector PES will have to align to PESS priorities, strategic objectives, indicators and targets.	The sector PES to be finalized in November 2013 was effectively aligned with PESS priorities, objectives and strategic indicators.
10. The description provided in Chapter 7 on implementation mechanisms could be more detailed, to clarify how the PESS will be implemented and the contributions expected from various players.	Implementation mechanisms were better described in the last version of the document.
11. Allocation priorities need to be defined for funds available. Targets and coverage for different interventions should be adjusted in line with funds available.	The chapter dedicated to costing shows that cost patterns reflects sector priorities and the distribution of costs by level of care. Targets will be reviewed and adjusted on a yearly basis, as well as in the mid-term review.
12. The PESS should present alternatives to address HR gaps.	This intervention is framed in interventions foreseen in PESS Pillar II.
13. Chapter 2 should include: (i) a description of progress made to date in relation to large infrastructure; (ii) information on efforts required to train additional RH, project needs and address gaps; and (iii) analyse logistics management for medical and non-medical products, including equipment and consumables.	The information is reflected in the situation analysis.
14. Include a recommendation put forth by the RSS in relation to the development of a National Pharmacy Policy.	This issue was included in PESS Pillar II.

Annex 2: Matrix illustrating key issues per health system component, for each decentralization model

Decentralization strategies	Components and health care system areas					
	Health Service	Governance	HR	Financing	Medical supplies	HIS and M&E
Deconcentration	• Demand for health services • Organization of health services • Referral system • Health service management • Integration of services • Package of services • Infrastructure					
Delegation	• Demand for health services • Organization of health services • Referral system • Health service management • Integration of services • Package of services • Infrastructure					
Devolution	• Demand of health services • Organization of health services • Referral system • Health service management • Integration of services • Package of services • Infrastructure					
Privatization	• IDEM					

Annex 3. Projects Planned by the Infrastructure Department

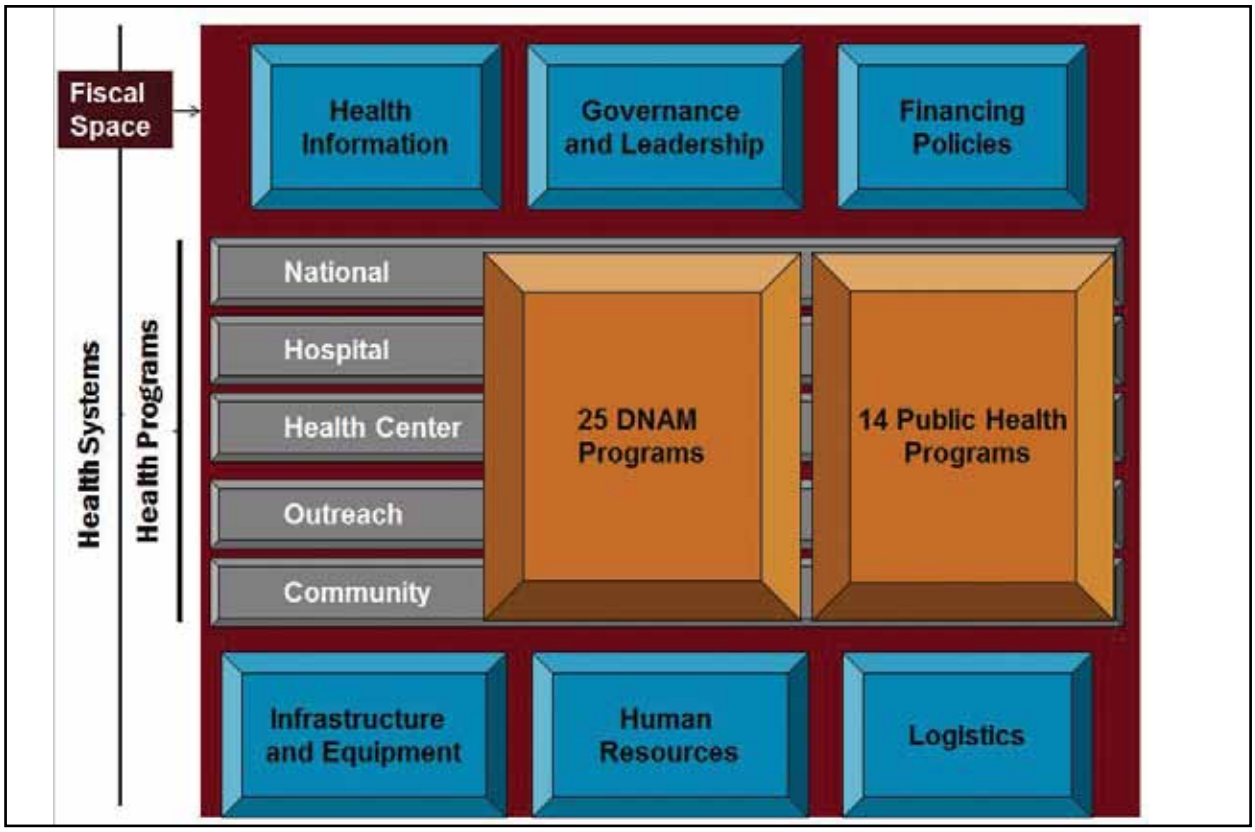
	Construction costs (USD)	2014	2015	2016	2017	2018	2019
Type II Health Centres	$600,000	38	0	0	0	0	0
District Hospital	$3,500,000	4	6	4	4	4	4
General Hospital	$10,000,000	0	2	0	0	0	0
Provincial Hospital	$15,000,000	0	1	0	0	0	0
Central Hospital	$60,000,000	1	0	0	0	0	0
Centre for the INS	$12,000,000	1	0	0	0	0	0
		$108,800,000	**$56,000,000**	**$14,000,000**	**$14,000,000**	**$14,000,000**	**$14,000,000**

	Renovation costs (USD)	2014	2015	2016	2017	2018	2019
Type II Health Centres	$132,000	22	0	0	0	0	0
Training Centres Inhambane	$833,333	1	0	0	0	0	0
Annual cost		**$3,737,333**	**0**	**0**	**0**	**0**	**0**

Annex 4. Infrastructure Projects per Programme

Public Health Programmes	Health Care Programmes
Construction of new SAAJs	Creation of cytology units
Construction of new SAAJs Creation of two regional drug rehabilitation centres (Maputo and Beira)	Creation of two new model nursing wards
Creation of Child Psychological Rehabilitation Centres (CERPIJ) in Zambézia and Manica	Renovation of emergency wards
Creation of Centres for Organizational Psychology in Sofala and Nampula	Renovation, construction and expansion of laboratories, pharmacies and HIV consultation rooms
Creation of MCH / PMTCT model centres	Construction of a new radiotherapy unit in HCM
New dentistry services	Creation of a surgical centre for the treatment of diabetic retinopathy
Renovation of Physical Medicine and Rehabilitation Centres	Renovation of HCM surgery facilities
Construction of 560 maternity wards	Construction of ophthalmology services in Nampula and Sofala
Construction of the new IMT	Creation of neonatal services
Various construction and renovation projects in INS Research Centres	Construction of a dental prosthesis laboratory at HCM
$43,314,160	**$166.627.291**
$209,941,451	

Annex 5: Costing Methodology



The costing exercise estimated the financial needs for the 6 health system pillars, as well as for the 39 health programmes, for the effective implementation and achievement of targets set in the Plan. Data to define and cost key activities and interventions come from various information sources; main sources include the PES, strategic plans developed for programmes and the proposals presented in the last financing rounds for the Global Fund to Fight AIDS, Tuberculosis and Malaria.

The recently produced "HIV and AIDS Response – Strategic Acceleration Plan for Mozambique 2013-2015" served as the basis for analysis for the HIV programme and to define corresponsing targets and unit costs. Specific data collection forms were developed and distributed for all other health programmes, especially for those that do not have recent plans and associated costs, or equivalent. Data was completed with programme staff, medical personnel, consultants and some came from academic literature.

Details of the methodology used by the OneHealth tool can be found in the OneHealth Report (2013). It is worth noting that the overall costing approach used by programmes was similar:

Total programme cost = Direct costs associated with the provision of services (drugs and consumables) + Indirect management costs (M&E, training, meetings, etc.)

Direct cost for the provision of services = Unit cost per person treated per year (drugs and consumables) x No. of people treated

No. of people treated = Coverage (%) x Target population (%) x Size of the population

The definition of the package of services for treatment is based on care patterns observed in Mozambique, consultation with key informants, and the analysis of key care and treatment guidance. Unit prices for drugs and consumables were provided by CMAM or based on recent purchases subsidized by various donors. The OHM tool was used to complete the steps to determine total costs; details of methodology and results can be seen in the OneHealth report produced for Mozambique.

Annex 6. Assumptions Used to Develop Financial Scenarios

SOURCE		Assumptions		
		Scenario 0	Scenario 1	Scenario 2
ON-BUDGET ON-CUT FINANCING	1) GOM	Increase relative to GDP nominal growth rate	2014-2016: MTEF 2017-2019: Growth in line with trends from three previous years	2014-2015: Progressive increase to achieve Abuja targets (attribution of 15% of national budget to the health sector) 2016-2019: Growth in line with trends from three previous years
	2) PROSAUDE	EFS Values* December 2012. Given the current economic context, it was assumed PROSAUDE funds would be reduced in 2014 because of 2 principal partners, i.e.:1) the EU departure from PROSAUDE, reducing funds by 11%; 2) reduction in Canadian funds (main PROSAUDE contributor in 2012 and 2013, accounting for 32%), to pre-2012 financing levels. 2015-2019: Growth in line with trend observed in the three previous years.	EFS values* December 2012. Given the current economic context, it was assumed the EU would leave PROSAUDE in 2014, resulting in an 11% reduction of funds available. It was also assumed that from 2014 PROSAUDE funds from all partners (i.e. DANIDA, DFID, Flanders, Ireland, Sweden, UNFPA, UNICEF, etc.) contributing in a regular manner for two years would remain stable over the years. Lastly, it was assumed that those that had not made contributions over a two-year period would exit PROSAUDE.	In the best case scenario, it was assumed the weight of PROSAUDE relative to public expenditure would remain stable (30%).
	3) Vertical Projects On-budget (on-budget funds excluding PROSAUDE and SB)	EFS Values* December 2012. From 2014, it is assumed that partner funds maintaining a regular and constant disbursement flow over a two-year period will remain stable. On the other hand, it is assumed that partners that had not made contributions over a two-year period will depart, while others maintain EFS levels stable.	EFS Values* December 2012. 2014-2019: growth in line with trends observed over the past 6 years.	In the best-case scenario, it was assumed that the funding in relation to public expenditure will remain stable (19%).

SOURCE		Assumptions		
		Scenario 0	Scenario 1	Scenario 2
OFF-BUDGET FUNDS	4) Vertical Projects Off-Budget	In the present economic context, the United States has reduced its official development contributions by an average of 12% per year. It is assumed that this trend will remain stable in coming years. It is expected that the Global Fund disburses 80% of funds committed. In addition, from 2014 onward it is assumed that partners showing a regular and constant disbursement flow over a two-year period will maintain stable. Conversely, it was assumed that those that do not make contributions over a two-year period would stop supporting the sector.	In the present economic context, the United States has reduced its official development contributions by an average of 12% per year since 2010. It is assumed that the Government will revert this trend to reduce support only by 5%. It is assumed that the Global Fund will disburse obligations in 2014 and remain stable over time. In addition, it is assumed that partners showing a regular and constant disbursement flow over a two-year period will continue. Conversely, it was assumed that those that do not make contributions over a two-year period would stop supporting the sector.	Off-budget fund are increase at the expense of funds directly managed by the Government. In this context, it is assumed that 50% of PROSAUDE funds of recent years (approximately 15 million USD) will be redirected to off-budget projects. Emerging economic powers could join the sector (2 partners in 2014, 2016 and 2018, respectively). It is assumed that funds provided by the United States will remain stable despite the current economic context, over the period 2014-2019, and that the Global Fund will increase annual disbursements by 5%. In addition, as of 2014, it is assumed that partner presenting funds in a regular and constant manner over a two-year period will remain stable. On the other hand, it is expected that partners that do not make contributions over a two-year period and have made no commitments into the future would stop supporting the sector.

* The EFS constitutes a document and an instrument; it is updated on a yearly basis and contains detailed information about financial commitments made by Cooperation Partners for the period 2007-2020.

Annex 7. Costs Summary PESS 2014-2019

	Total Costs, US$ (2013 dollars)						
	2014	2015	2016	2017	2018	2019	Total
Public Health Programmes							
Maternal and Child Health	35,209,695	48,347,490	49,048,584	53,756,240	52,368,185	52,540,874	291,271,068
Expanded Programme on Immunization	25,250,534	37,238,399	35,613,151	35,392,560	35,232,013	35,057,674	203,784,330
Malaria	55,105,586	47,858,453	56,023,395	50,240,567	50,113,655	50,078,569	309,420,226
TB	8,511,079	10,324,966	18,262,626	13,655,060	13,531,992	13,531,992	77,817,714
HIV / AIDS (only PMTCT)	7,344,976	8,500,546	8,566,399	8,650,084	8,655,665	8,661,246	50,378,916
Nutrition	31,861,927	35,596,274	39,703,742	40,781,916	40,536,860	40,495,937	228,976,655
Environmental Health	511,199	503,199	503,199	503,199	506,199	509,199	3,036,193
LNHAA	411,770	459,561	450,226	380,755	297,696	295,756	2,295,765
Non-Communicable Diseases	1,929,018	2,996,173	2,892,119	3,272,040	4,038,134	4,847,687	19,975,171
Non-Communicable Diseases	1,929,018	2,996,173	2,892,119	3,272,040	4,038,134	4,847,687	19,975,171
Mental Health	6,504,173	6,639,693	6,930,604	5,380,101	5,551,101	5,491,101	36,496,773
Adolescent Health	3,361,710	3,367,960	3,361,710	2,911,710	3,061,712	2,611,714	18,676,516
Health Promotion	8,749,776	9,077,432	11,208,112	10,612,848	12,359,596	11,776,514	63,784,278
School Health	5,044,442	5,057,436	5,065,719	5,076,704	5,088,004	5,099,599	30,431,903
Epidemiology	461,773	518,085	535,993	532,495	541,757	541,757	3,131,860
Neglected Tropical Diseases	9,566,739	12,376,706	12,832,663	13,402,553	13,749,480	13,750,196	75,678,337
Sports Medicine	52,974	72,514	72,514	72,514	72,514	72,514	415,544
Sub-total, Public Health Programmes	**199,877,369**	**228,934,886**	**251,070,757**	**244,621,345**	**245,704,562**	**245,362,330**	**1,415,571,249**
Medical Care Programmes							
Legal Medicine	524,342	413,955	371,698	352,291	310,034	363,843	2,336,163
Internal Medicine	78,587,942	80,236,026	81,919,422	83,640,015	85,598,291	87,602,490	497,584,187
Emergency and Trauma	7,982,386	7,922,761	8,333,135	8,356,082	12,082,465	16,232,402	60,909,231
Blood Transfusion	7,602,636	8,380,963	9,291,047	10,030,077	10,123,216	10,134,906	55,562,846
Physical Medicine and Rehabilitation	6,893,641	7,206,920	7,132,822	6,940,584	6,767,236	6,767,236	41,708,439
Pathological Anatomy	1,165,103	1,147,603	1,137,303	1,133,303	1,028,113	1,028,113	6,639,535
Clinical Laboratories	17,703,750	17,630,719	17,262,909	17,235,759	17,226,609	17,226,609	104,286,353
Imaging and Radiology Services	6,156,040	12,811,215	7,570,908	7,592,423	7,532,789	7,532,789	49,196,164
Male Circumcision	55,777,902	49,137,013	32,042,878	21,906,589	0	0	158,864,382
Paediatrics	8,596,946	8,755,200	8,948,970	9,107,344	9,336,269	9,531,173	54,275,902
Obstetrics and Gynaecology	6,734,685	7,072,145	5,498,050	5,617,349	5,741,809	5,868,779	36,532,817
Oral Health	4,416,479	5,122,579	5,194,866	5,284,192	5,410,038	5,492,921	30,921,075
Surgery	16,356,412	14,594,263	14,951,843	15,163,430	15,483,136	15,809,700	92,358,783
Anaesthesiology	4,593,374	3,230,398	3,331,835	3,350,710	3,473,934	3,491,111	21,471,362
Otolaryngology	6,338,267	5,754,425	5,869,088	6,708,845	6,131,593	6,270,969	37,073,188
Ophthalmology	4,864,782	5,055,282	5,296,363	5,751,459	5,875,549	6,002,549	32,845,984
Orthopaedics	5,445,960	5,535,264	5,627,799	5,723,433	5,804,606	5,887,683	34,024,745
HIV/AIDS	206,387,828	239,140,740	252,597,295	215,639,728	217,008,200	218,373,302	1,349,147,093
Other programmes*	10,988,428	7,516,682	6,807,220	6,673,255	6,529,886	6,027,229	44,542,699
Sub-total, Medical Care Programmes	**457,116,905**	**486,664,152**	**479,185,451**	**436,206,867**	**421,463,772**	**429,643,803**	**2,710,280,949**

	Total Costs, US$ (2013 dollars)						
	2014	2015	2016	2017	2018	2019	Total
Other Health System Components							
Human Resources	258,521,923	294,023,386	331,012,321	380,404,303	413,328,392	449,316,820	2,126,607,146
Logistics	93,509,270	97,316,755	100,598,622	93,179,447	90,969,071	90,501,617	566,074,782
Infrastructure	228,107,609	165,977,197	118,668,118	123,199,039	124,789,960	126,380,881	887,122,804
Governance**	12,439,535	21,554,203	19,058,035	20,798,557	16,271,676	16,271,676	106,393,681
Sub-total, Health Systems Component	**592,578,337**	**578,871,542**	**569,337,096**	**617,581,346**	**645,359,098**	**682,470,994**	**3,686,198,413**
Total Costs PESS, MoH	**1,249,572,611**	**1,294,470,580**	**1,299,593,304**	**1,298,409,557**	**1,312,527,432**	**1,357,477,127**	**7,812,050,611**

* Nursing Department, Occupational Health, Quality and Standards, Hospital Management, Hospital Administration, Logistics and Maintenance Department, Hospital Pharmacy Department, Private Medicine.
** DPC (all Directorates), DAF, IGS, INS, M&E, IMT, Pharmacy Department.

Annex 8: Risk Assessment Matrix, Ausaid

Consequences → / Probability ↓	**Insignificant** (Results in consequences that can be managed by routine operations)	**Minor** (can cause minor delays or have minor impacts on quality)	**Moderate** (May require adjustments and action plans; can cause negative effects)	**Major** (can threaten targets and objectives; requires monitoring)	Severe (targets and objectives will not be met)
Almost certain (it is expected to occur in various circumstances)	Moderate	Moderate	High	Very High	Very High
Probable (likely to occur in almost all cases)	Moderate	Moderate	High	High	Very High
Possible (can occur at some stage)	Low	Moderate	High	High	High
Improbable (can occur at some stage)	Low	Low	Moderate	Moderate	High
Rare (can occur in exceptional circumstances)	Low	Low	Moderate	Moderate	High

Risk Level	
Very High	Requires the attention of the executive team and a detailed action plan.
High	Requires attention and management.
Medium	Specify management responsibilities and monitor conditions closely.
Low	Normal monitoring measures suffice.

Annex 8: Risk Assessment Matrix, Ausaid

Description of Risk	Risk Analysis			Proposed Risk Mitigating Measures
	Probability (1-5)	Conse-quence (1-5)	Risk Level	
Inadequate health sector financing				
Even if partner contributions remain high, the current macroeconomic situation and forecasts for the future will be reflected in the resource envelope, with implications for public spending programmed for the PESS period (2014-2019). In this context, there is a real risk that financing countries need to reprogramme or reduce their contributions to cover domestic investment needs. However, even if the Mozambican economy has been growing in recent years it is possible that Government allocations to the health sector do not reach the 15% target (Abuja Declaration) in the period mentioned above.	3	4	HGH	Secure mechanisms and leadership in case PESS implementation needs to be adjusted in the face of reduced availability of financial resources, and decision-making around PESS priorities. Strengthen MoH leadership and capacity to document and justify the need to increase budgets before the MF. Maintain political dialogue with external partners, updating them with relevant information for dialogue. Anticipate different economic contexts by introducing measures aiming to produce efficiency gains through effective use of funds made available by partners.
Even if spending levels do reach 15%, resources will be insufficient for full PESS implementation. The hypothesis is that development partners should continue to provide additional resources to finance the sector.	3	4	HGH	Develop a financing strategy that identifies all sources of funding and effective use of resources for the health sector in Mozambique.
Financial Management				
The improvement of financial management systems may be insufficient or inadequate.	3	3	HGH	Strengthen financial management systems to guarantee efficient use of financial – and other – resources, and at the same time, promote transparency and accountability, so as to attract additional resources to the sector.
Perceived fiduciary risk increases and affects trust in the relationship with partners providing budget support.	3	2	MEDIUM	Actively assume Government commitments to combat corruption and promote anti-corruption campaigns. Strengthen internal audit and monitoring processes. Strengthen the capacity of audit and accounting teams; use disciplinary measures to increase compliance to existing norms in the area of financial management.
The fiscal decentralization process evolves at a slow pace and is characterized by ineffective management.	2	3	MEDIUM	Strengthen leadership capacity for effective management at all levels. Keep political dialogue in the sector and with other State bodies active and regular at all levels.

Description of Risk	Risk Analysis			Proposed Risk Mitigating Measures
	Probability (1-5)	Conse-quence (1-5)	Risk Level	
The existence of off-budget and off-cut funds. A substantial proportion of funds being off-budget and off-cut entails the risk of compromising the overall effectiveness of development, due to the possibility of priorities being side-tracked, and thus, undermines health system national planning and budgeting processes.	4	4	HIGH	Definition of limits to extend financing beyond sector budget. Definition of legal instruments that can be applied to external partners using them, with the purpose of increasing transparency in relation to resource use in the health sector and establishing commitments towards information sharing. Definition of structures within the MoH responsible for resolving this limitation within a certain period. Promote dialogue with partners to explore alternative mechanisms and procedures to integrate Government planning and reporting systems, even if funds remain off- cut.
Weak capacity of the Administrative Court to conduct external audits for the sector, as envisaged in the MoU signed with PROSAUDE partners.	4	3	HIGH	Use external audit services to complement Government efforts while the capacity of the Administrative Court is developed. Maintain political commitment to continuously and consistently express the need for the capacity of the Administrative Court to be strengthened.
Planning, budgeting and production of reports				
The sector continues to face important gaps in relation to planning, budgeting and production of reports at district and provincial levels.	4	3	HIGH	Define and implement actions to strengthen capacities at provincial and district level and monitor budgetary execution on an on-going basis.
Human Resources				
The need expressed in the Plan to strengthen HR in different areas within the health sector presupposes the existence of qualified staff. However, the sector is faced with a lack of qualified staff and the Government may not be able to increase the HR wage bill.	4	4	HIGH	Increased investment in HR as a priority in the Plan. Lead, actively coordinate and maximize the use of technical assistance available to the Ministry with a view to strengthening existing capacity at all levels of the health system (central, provincial and district levels).
Private sector expansion and the possibility of certain qualified staff exiting the sector, along with unsustainable measures for attraction and retention, constitute a risk for the implementation of this Plan.	3	2	MEDIUM	Make decisions to render public sector employment attractive and increase retention levels.
Natural Disasters and Emerging Public Health Problems				
The high frequency of natural disasters and disease outbreaks substantially increases the burden placed on health services, especially in rural areas where poverty is more prevalent.	4	3	HIGH	Collaborate with Ministries and competent bodies in relation to emergency preparedness. Ensure that plans are updated and ensure readiness for implementation.
Public-Private-Partnerships				
Poor coordination between the public and private sector; existing coordination mechanisms do not take into account diversity within the private sector.	2	2	LOW	The Plan has already defined strategies for improvement of this type of partnership.

Description of Risk	Risk Analysis			Proposed Risk Mitigating Measures
	Probability (1-5)	Conse-quence (1-5)	Risk Level	
Political Stability				
Government commitment to improve access to health care by the poor diminishes.	2	4	MEDIUM	Involve Ministries and Local Government bodies in consultation processes related to the PESS implementation. The implementation of the PESS must reflect commitments assumed by the GOM in its strategy to reduce poverty.
Political support in prioritizing health diminishes at national, provincial and district level.	2	4	MEDIUM	Involve Ministries (particularly MPD and MF) and Local Government bodies in consultation processes related to the PESS; Inform and update the Parliamentary Commission responsible for health on the PESS. Demonstrate through the implementation of the PESS the priority given to social sectors through GOM expenditures.
The decentralization agenda losses political relevance.	3	3	HIGH	Involve the Ministry for State Administration, Government agencies and other leadership in the decentralization process. This should be done through annual PESS reviews and proactive involvement of these entities in relation to specific reform and programme decentralization topics, for example HR and changes in relation to financial management.
Demography				
Demographic characteristics, including life expectancy, continue to be impacted by HIV / AIDS and affect economically active youth.	4	4	HIGH	Continue and revitalize the HIV / AIDS programme and expand implementation. Maintain on-going, direct and active collaboration with the national entity in charge of coordinating support for this programme.

11. Bibliographic References

Bignamini S, Soi C. Manual de Monitoria e Avaliação, (2012). Direcção Nacional de Saúde Pública. Ministry of Health.

Boletim da República, 2009. Publicação Oficial da República de Moçambique; SUPLEMENTO; Imprensa Nacional de Moçambique; E.P; I Series-Number 38; Monday, 28th September 2009.

Boletim da República, 2012. Publicação Oficial da República de Moçambique; 4º SUPLEMENTO; Imprensa Nacional de Moçambique, E.P; I Series-Number 32; Tuesday, 14th August 2012.

Departamento de Doenças Não Transmissíveis/DNSP, 2011. Plano Estratégico para a Prevenção e Controlo do Trauma e Violência do Ministério de Saúde 2011-2015. Ministry of Health.

Departamento de Prevenção e Controlo da Incapacidade e DNT/Direcção Nacional e Promoção de Saúde e Controlo de Doenças, 2007. Plano Estratégico Nacional de Prevenção e Controlo das Doenças Não Transmissíveis para o Período 2008-2014. Ministry of Health.

Departamento de Promoção de Saúde, 2010. Estratégia Nacional para a Promoção da Saúde. Ministry of Health.

Departamento de Promoção de Saúde/DNSP, 2012. Termos de Referência para o Estabelecimento e Funcionamento dos Comités de Co-Gestão das Unidades Sanitárias. Ministry of Health.

Departamento de Promoção de Saúde/DNSP, 2012. Termos de Referencia para o Estabelecimento e Funcionamento dos Comités de Saúde. Ministry of Health.

Departamento de Saúde Ambiental, 2009. Padrões e Procedimentos de Gestão de Lixos Biomédicos nas Unidades Sanitárias em Moçambique. Ministry of Health.

Departamento de Saúde Ambiental, 2009. Plano Nacional de Gestão de Lixo Biomédico. Ministry of Health.

Departamento de Saúde Ambiental-Direcção Nacional de Controlo de Doenças, 2012. Reforma de Sector de Saúde. Ministry of Health.

Departamento de Saúde Escolar, 2009. Estratégia de Promoção da Saúde e Prevenção de Doenças na Comunidade Escolar. Ministry of Health & Ministry of Education.

DIS, 2009. Plano Estratégico de Sistema de Informação para a Saúde 2009-2014. Ministry of Health.

Djedje, M.C., Arroz, 1995. Manual de Tripanossomíase Humana Rhodesiense; Instituto Nacional de Saúde. Ministry of Health.

DNAM, 2012. Programa de Atenção Integral ao Adulto Maior Sub-Programa Cuidados Comunitários de Idosos. Ministry of Health.

Direcção Nacional de Promoção de Saúde e Controlo de Doenças, 2007. Plano Estratégico de Controlo da Tuberculose em Moçambique para o Período 2008-2012. Ministry of Health.

DNSP. Instrumento de Avaliação da Qualidade dos Cuidados para Crianças nas Unidades Sanitárias de Referência em Moçambique. Ministry of Health.

DNSP, 2001. Consulta do Recém-Nascido no Período Neonatal; Guião de Utilização para o Pessoal de Saúde. Ministry of Health.

DNSP, 2005. Código de Comercialização dos Substitutos do Leite Materno. Ministry of Health.

DNSP, 2007. Plano Operacional de Saúde Neonatal e Infantil em Moçambique 2008-2010. Ministry of Health.

DNSP, 2007. Termos de Referência do Departamento de Saúde Mental. Ministry of Health.

DNSP, 2008. Plano Estratégico o PNCL em Moçambique 2009-2011. Ministry of Health.

DNSP, 2009. Comité de Auditoria das Mortes Maternas Perinatais e Neonatais. Ministry of Health.

DNSP, 2009. Plano de Comunicação e Mobilização Social para a Promoção, Protecção e Apoio ao Aleitamento Materno, 2009 – 2013, 2015. Ministry of Health.

DNSP, 2009. Plano Integrado para o Alcance dos Objetivos 4 e 5 de Desenvolvimento do Milénio. 2009-2012 (2015). Ministry of Health.

DNSP, 2010. Estratégia de Planeamento Familiar e Contracepção 2010-201. Ministry of Health.

DNSP, 2010. Estratégia Nacional para a Promoção de Saúde. Ministry of Health.

DNSP, 2010. Grupo de Mães para Mãe - Guião Operacional. Ministry of Health.

DNSP, 2010. Grupo de Mães para Mães, Formação de Enfermeiras - Manual de Facilitador. Ministry of Health.

DNSP, 2010. Grupo de Mães para Mães, Formação de Mães Educadoras. Ministry of Health.

DNSP, 2011. Política Nacional de Saúde e Direitos Sexuais e Reprodutivos. Ministry of Health.

Hospital Central da Beira, 2010. Relatório Anual de Actividades. Provincial Health Directorate of Sofala.

Hospital Central de Nampula, 2010. Relatório Anual. Provincial Health Directorate of Nampula.

Hospital Psiquiátrica de Infulene, 2011. Relatório Anual de Actividades do Ano 2010. Maputo City Health Directorate.

IMT, 2004. Política de Medicina Tradicional e Estratégia da sua Implementação. Ministry of Health.

IMT, 2011. Plano Estratégico e Plano de Acção do Instituto de Medicina Tradicional (IMT) -2012-2015 em Moçambique. Ministry of Health.

INE, 2006. Projecções Anuais da População Total , Urbana e Rural 2007-2040.

INE, 2010. III Recenseamento Geral da População e Habitação 2007; Resultados Definitivos, Moçambique.

INE, 2010. Projecções Anuais da População Total, Urbana e Rural 2007-2040.

INE, June 2010. III Recenseamento Geral da População e Habitação 2007; Resultados Definitivos-Moçambique Instituto Nacional de Estatística; Maputo.

INE & MoH, 2013. Demographic Health Survey.

MoE & MoH, 2009. Memorando de entendimento na Área de Saúde Escolar entre o Ministério da Saúde e Ministério da Educação e Cultura.

MMAS, 2006. Politica para a Pessoa Idosa e Estratégia de sua Implementação e Plano Nacional para a Pessoa Idosa (2006-2011).

MMAS, 2012. Proposta da Lei de Promoção e Protecção dos Direitos da Pessoa Idosa. VIII Sessão do Conselho Coordenador do Ministério da Mulher e Acção Social, Chidenguele, 25 a 27 de Julho de 2012.

MoH, 2006. Estratégia e Plano de Acção para a Saúde Mental (2006-2015).

MoH, 2006. Plano Estratégico do Sector Saúde: 2007 -2012.

MoH, 2007. Estratégia e Plano de Acção para a Saúde Mental.

MOH, 2008. Estratégia para o Fortalecimento das Intervenções da Parteira Tradicional.

MOH, 2008. Plano de Acção de Moçambique (200-2013) Estratégia 1: Promoção através dos Meios de Comunicação Social.

MOH, 2008. Plano Estratégico de Sector de Saúde: 2007-2012.

MOH, 2008. Plano Integrado Para o Alcance dos Objetivos 4 e 5 de Desenvolvimento do Milénio 2009 – 2012 (2015).

MOH, 2009. Estratégia de Casas de Espera para Mulheres Grávidas.

MOH, 2009. Parceria Nacional para a Promoção da Saúde Materna, Neonatal e Infantil.

MOH, 2010. Boletim de Epidemiológico N^{0} 4/2010; Período de Janeiro a Dezembro de 2010.

MOH, 2011. Boletim de Epidemiológico N^{0} 4/2011; Período de Janeiro a Dezembro de 2011.

MOH, 2011. Grupo de Mães para Mães.

MOH, 2011. Manual Técnico sobre Assistência ao Parto, ao Recém-Nascido e às Principais Complicações Obstétricas e Neonatais.

MOH, 2011. Normas de Atendimento à Criança Sadia e à Criança em Risco.

MOH, 2011. Política Nacional de Saúde e Direitos Sexuais e Reprodutivos. Ministry of Health.

MOH, 2011. Programa Nacional para a Fortificação de Alimentos de Consumo Massivo em Moçambique 2011 – 2016.

MOH, 2012. Avaliação e Tratamento de Emergência (TATE); Manual do Participante. Ministério de Saúde Triagem.

MOH, 2012. Boletim de Epidemiológico N^{0} 3/2012; Período de Janeiro a Setembro 2012.

MOH, 2012. Plano Multissectorial Plurianual para a Implementação do Regulamento Sanitário

Internacional, 2009-2012.

MOH, 2012. Relatório da Revisão do Sector de Saúde. Agência para o Desenvolvimento Internacional dos Estados Unidos.

MOH, 2012. Ministério de Saúde. Triagem, Avaliação e Tratamento de Emergência (TATE) Guião do Facilitador.

PM&R, 2007. Resumo do Plano Estratégico de Medicina Física e Reabilitação, Ministry of Health.

PM&R, 2007. Plano Quinquenal - Programa de Medicina Física e Reabilitação. Ministry of Health.

Programa Nacional de Medicina Desportiva, 2005. Plano de Medicina Desportiva. Ministry of Health.

PNCM, 2011. Plano Estratégico do Programa de Controlo da Malária 2012 – 2016. Ministry of Health.

PNCT, 2012. Plano Estratégico e Operacional 2013 – 2017. Ministry of Health.

Programa Nacional de Saúde Oral, 2012. Plano Estratégico de Saúde Oral 2013 – 2017. Ministry of Health.

Programa Nacional de Saúde Oral/DNAM, 2012. Plano Estratégico de Saúde Oral 2013-2016. Ministry of Health.

Serra C, Cossa D., 2007. Colectânea de Legislação de Saúde. Ministry of Justice.

WHO-AIMS, 2009. Report On Mental Health Systems in Mozambique. World Health Organization/ Ministry of Health Mozambique.