Kingdom of Swaziland

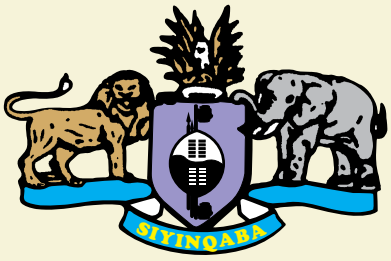
# MINISTRY OF HEALTH

# National Health Sector Strategic Plan

2008 - 2013

World Health Organization

REGIONAL OFFICE FOR Africa




# MINISTRY OF HEALTH

# NATIONAL HEALTH SECTOR STRATEGIC PLAN

*2008-2013*

*March 2009*

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# ACRONYMS

| | |
|---|---|
| AAP | Annual Action Plan |
| ADSRH | Adolescence Sexual Reproductive Health |
| AEFI | Adverse Events Following Immunization |
| AIDS | Acquired Immune Deficiency Syndrome |
| ANC | Ante Natal Care |
| ART | Anti Retroviral Therapy |
| BCC | Behavior Change communication |
| BFHI | Baby Friendly Hospital Initiative |
| BMD | Births, Marriages and Deaths |
| CBO | Community Based Organizations |
| CDD | Control of Diarrhoeal Diseases |
| CDR | Crude Death Rate |
| CHW | Community Health Workers |
| CI | Client Initiated |
| COPD | Chronic Obstructive Pulmonary Diseae |
| DHS | Demographic Health Survey |
| DOTS | Directly Observed Treatment Strategy |
| DPT | Diphtheria Pertusis Tetanus |
| ECSA-HC | East Central and Southern African Health Community |
| EDL | Essential Drug List |
| EmOC | Emergency Obstetric Care |
| ENT | Ear Nose and Throat |
| EPI | Expanded Programme on Immunization |
| EPR | Emergency Preparedness and Response |
| FAO | Food Agriculture Organization |
| FBOs | Faith based Organization |
| FP | Family Planning |
| GDP | Gross Domestic Product |
| GIS | Geographic Information System |
| GNI | Gross National Index |
| GNP | Gross National Product |
| GOS | Government of Swaziland |
| GPS | Global Positioning System |
| HDI | Human Development Index |
| HISCC | Health Information Systems Coordinating Committee |
| HIV | Human Immunodeficiency Virus |
| HMIS | Health Management Information System |
| HPSI | Health Promoting School Initiative |
| HRWM | Health Risk Waste Management |
| HRH | Human Resources for Health |
| HSC | Health Service Commission |
| HTC | Health Provider Initiated Testing and Counseling |
| ICPD | International Conference on Population and Development |
| IDD | Iodine Deficiency Disorder |
| IEC | Information Education and Communication |
| IMCI | Integrated Management of Childhood Illness |
| IPC | Infection Prevention and Control |
| IRHS | Indoor Residual House Spraying |
| ITN | Insecticide Treated Nets |
| IVM | Integrated Vector Management |
| IYCF | Infant and Young Child Feeding |
| JICA | Japan International Cooperation Agency |
| KAP | Knowledge Attitude and Practices |
| LBW | Low Birth Weight |
| LLN | Long Lasting Nets |

| | |
|---|---|
| LRTI | Lower Respiratory Tract Infections |
| LSDI | Lubombo Spatial Development Initiative |
| IGA | Income Generating Activities |
| IMR | Infant Mortality Rate |
| MDGs | Millennium Development Goals |
| MDR TB | Multi Drug Resistant Tuberculosis |
| M&E | Monitoring and Evaluation |
| MOET | Ministry of Education and Training |
| MOEPD | Ministry of Economic Planning and Development |
| MOU | Memorandum of Understanding |
| MMR | Maternal Mortality Rate |
| MOA | Ministry of Agriculture |
| MOF | Ministry of Finance |
| MOH | Ministry of Health |
| MOHSA | Ministry of Health South Africa |
| MOJCA | Ministry of Justice and Constitutional Affairs |
| MRDYA | Ministry of Regional Development and Youth Affairs |
| MTEF | Medium Term Expenditure Framework |
| NAT | Nucleic Acid Testing |
| NCD | Non Communicable Diseases |
| NDPCD | National Decentralization Programme Coordination Directorate |
| NDPCF | National Decentralization Programme Consultative Forum |
| NDS | National Development Strategy |
| NERCHA | National Emergency Response Council on HIV/ AIDS |
| NGO | Non Governmental Organization |
| NHP | National Health Policy |
| NHRIS | National Heath Research Information System |
| NHSDC | National Health Sector Decentralization Sub-committee |
| NHSSF | National Health Sector Stakeholders Forum |
| NMCP | National Malaria Control Programme |
| NQCL | National Quality Control Laboratories |
| NSAPC | National Substance Abuse Prevention and Control Programme |
| ORT | Oral Rehydration Therapy |
| PAC | Pregnancy and Post Abortion Care |
| PADESCO | Parliamentary Decentralization Subcommittee |
| PEP | Post Exposure Prophylaxis |
| PHAST | Participatory Hygiene and Sanitation Transformation |
| PHC | Primary Health Care |
| PI | Provider Initiated |
| PLWHA | People Living With HIV/ADS |
| PMTCT | Prevention of Mother To Child Transmission |
| PPP | Public Private Partnership |
| PRSAP | Poverty Reduction Strategy and Action Programme |
| PTPP | Part time Private Practice |
| QAU | Quality Assurance Unit |
| RDT | Rapid Diagnostic Test |
| RH | Reproductive Health |
| RHMT | Regional Health Management Team |
| RHM | Rural Health Motivators |
| RTI | Reproductive Tract Infections |
| SADC | Southern African Development Community |
| SAM | Service Availability Mapping |
| SBFH | Swaziland Business Forum on Health |
| SEA | Swaziland Environmental Authority |
| SGBV | Sexual Gender Based Violence |
| SHIES | Swaziland Household Income and Expenditure Survey |
| SHPCC | Swaziland Heath Partners Coordination Consortium |

| | |
|---|---|
| SOO | Strategic Operational Objective |
| SPEED | Smart Programme on Economic Empowerment and Development |
| STI | Sexually Transmitted Infection |
| SWAP | Sector Wide Approach |
| TAT | Test and Treat |
| TB | Tuberculosis |
| TWG | Technical Working Group |
| U5MR | Under Five Mortality Rate |
| UNAIDS | United Nations Programme on HIV/AIDS |
| UNDP | United Nations Development Programme |
| UNDAF | United Nations Development Framework |
| UNFPA | United Nations Population Fund |
| UNICEF | United Nations Children Fund |
| USAID | United States Agency for International Development |
| WATSAN | Water and Sanitation |
| WB | World Bank |
| WFP | World Food Programme |
| WHO | World Health Organization |
| VIP | Ventilated Improved Pit-latrine |
| XDR TB | Extreme Drug Resistant Tuberculosis |
| YLL | Years of Life Lost |
| YPLL | Years Of Potential Life Lost |

# FOREWORD

The Ministry of Health is pleased to present the National Health Sector Strategic Plan (NHSSP) that was developed in line with the vision and mission set out in the National Health Policy (2007). Given the immense challenges facing Swaziland, achieving the vision will only be realised with a clear plan of action, dedication and unity. The document belongs not only to Government, but to the entire health sector with its multiple partners and stakeholders.

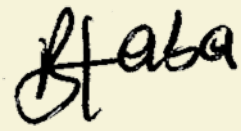
The scale and nature of health issues facing the country is immense tackling them will require that all partners work closely together, assisting and complementing each other. A strengthened collaboration, and the success of the Sector Wide Approach to Health, will therefore be vital in the implementation of the plan. The dialogues and alignment achieved by such a forum will propel the process and allow for more effective health programmes.

The strategic plan should not be seen as the end but only the beginning. Continued dialogue, debate and innovation will be required in each of the strategic areas to ensure best practise and maximum results. Through the annual reviews and action plans, the strategy must be given the flexibility to respond to the emerging challenges of the future, and the space to learn the lessons of the past.

Further prioritisation of the NHSSP must emerge in these annual action plans (AAP) in a way that responds to the most pressing of current needs. It should be guided by relevant criteria and evidence based. It must also be mutually agreed by the stakeholders of the health sector. This prioritisation is, in itself, an essential undertaking for the implementation of the strategic plan.

Implementation of the NHSSP could not wait as illness and disease plague the country. This plan presents the health sector with a way forward and challenges stakeholders to respond with the energy and dedication that went into its formulation.

The Ministry is committed to play its stewardship role and this is reflected in the seriousness with which it proposes to tackle its institutional challenges. Partners are encouraged to align themselves with the strategic plan and work with, and alongside Government.
With this message, I implore stakeholders and partners to play an active role in the implementation of this Strategic Plan.



**BENEDICT N. XABA**
**HONOURABLE MINISTER FOR HEALTH**

# ACKNOWLEDGEMENTS

The Ministry of Health would like to thank all those who participated in the production of this National Health Sector Strategic Plan. Your contribution is highly appreciated and applauded. The bilateral and multilateral partners made invaluable contributions into the development of the Plan. Special thanks go to the World Health Organization, European Commission and African Development Bank without whose continued technical and financial support it would not have been possible to produce this document.

Inputs received and the continued participation of stakeholders (Central Agencies, Health Workers , NGOs FBOs and private sector) is very much appreciated. The critical feedback received from all the stakeholders and Partners was not only informative but also played a big part in shaping the content of this document.

The Ministry further acknowledges sacrifices made by each participant where some had to work extra hours, beyond the call of duty. Hopefully, the document will instill a sense of pride and accomplishment in all stakeholders in the sector. The quality of this document does not only speak clearly of what the health sector will embark on for the next five years, but also drives the health workforce to reach greater heights in the provision of health services.

Finally, stakeholders are urged to refer to this document for guidance on every aspect of the operation of the sector. It is also worth emphasizing that owning this document goes beyond participating in its formulation but its consistent use.

**DR. STEVEN V. SHONGWE**
**PRINCIPAL SECRETARY**

# EXECUTIVE SUMMARY

The primary purpose of the National Health Sector Strategic Plan (NHSSP) is to guide the MOH and its partners in the implementation of the National Health Policy. The Strategic Plan conveys the prospects for improving the health status of all the people of Swaziland and provides a coherent and system wide framework for intervention planning and performance measurement over the next five years. As a management tool, the Strategic Plan seeks to enable the MOH to manage change and reforms within the sector in a structured and predictable way. In this respect, the Strategic Plan commits the entire health sector to the same objectives, processes and accountability standards. More importantly, the Plan provides an enabling framework for forging and sustaining strategic partnerships and cooperation among various stakeholders within and outside the health sector.

While there is no doubt that HIV/AIDS and TB co-infection remains a key priority for the country, the NHSSP underlines the need for an integrated and comprehensive approach to the number of current as well as emerging and re-emerging health challenges that are likely to affect the population. For instance, it is deemed that HIV/AIDS and TB survival will severely challenge the country in the near future and this remains one of the main issues the NHSSP tries to address anticipating needs and planning for actions based on evidence of successes and/or cultural financial appropriateness.

## Specifically, based on the Primary Health Care Strategy, it is the purpose of the NHSSP to:

1. Reverse the downward trend in health outcomes and improve the health status of the Swazi population ;
2. Accelerate the achievement of the health related MDGs and poverty reduction strategies;
3. Guide the needed health sector reforms;
4. Provide a coherent framework for sector wide intervention planning and resource targeting over the next five years;
5. Guide the coordinated participation of all stakeholders and Development partners towards the achievement of stated objectives; and
6. Provide a framework for monitoring and evaluating the performance of the sector at all levels.

Over and above the guiding principles stated in the National Health Policy, the NHSSP foresees the following to facilitate implementation:

- Integrated approach in the delivery of services,
- Health systems strengthening,
- Universal access to quality health services
- Universal coverage,
- Promotion of high impact interventions,
- Strengthening partnerships and coordination,
- Evidence based planning and result based management,
- Pro-poor interventions and
- Inclusive and equitable delivery strategies that target the vulnerable and promote gender fairness.

The NHSSP highlights the key strategies for the control and management of both communicable and non-communicable diseases, the promotion of better family and environmental health as well as the key systemic and structural imperatives necessary for a sustained response to the various health challenges and needs of the nation. Emphasis is put on sector-wide approaches (SWAPs) and strengthening sustainable partnerships between the MOH and all other relevant local and international stakeholders. This, is necessary for the ultimate realization of the wellbeing of all Swazi people. The Plan also indicates the level of investment required for achieving the health sector policy objectives and priorities and provides an enabling framework for the mobilization of additional resources for health.

The NHSSP is based on a comprehensive review of the sector performed by involved health workers, who are the prime actors in service delivery and the prime beneficiaries for any kind of support that may be agreed with Development partners. Quantitative analysis has been conducted wherever and whenever feasible.

In line with the key strategic objectives, the Strategic Plan interventions will be centred on three priority Strategic Thrusts as follows:

**1. Strengthening health system capacity and performance: To ensure that the MOH effectively executes its core health sector policy, regulatory, administrative, technical and health service delivery functions, efforts will be directed at:**

- restructuring and rationalizing the functions and task structure of the MOH.
- strengthening governance and management capacity of the MOH,
- strengthening regulatory, policy and planning capacity of the MOH;
- improving research and quality management capacity and M&E systems of the MOH,
- strengthening the decentralization processes of the health system and
- improving coordination and partnership.
- construction of MOH National and Regional offices

**2. Improving access to essential, affordable and quality public health services towards universal coverage. The following strategies will be implemented;**

- Delivery of quality maternal, neonatal, nutrition and child health services
- Prevention and control of communicable and non communicable diseases
- Delivery of quality Environmental Health Services
- Promotion of healthy lifestyle
- Involvement of communities in health service delivery
- Development of capacity to manage health Emergency Preparedness and Response,

**3. Improving access to essential, affordable and quality clinical services towards universal access: To enable the health sector to provide and ensure universal access to essential, efficient, equitable, affordable and high quality health care, the MOH will work with all partners in implementing the following;**

- Delivery of essential curative, diagnostic and rehabilitative health services
- Training, continuing education and capacity building
- Establishment of functionally efficient and effective referral system
- Development of collaborative mechanisms with traditional practitioners
- Building of skills and capacity to manage health facilities
- Establishment of quality assurance standards and benchmarks
- Strengthening of the essential health commodities (medicines, medical supplies and equipment) management system
- Support to NGOs, local authorities, private sector and mission health care providers
- Identification of viable telemedicine services appropriate to Swaziland
- Establishment of the Swaziland Medicines Control Authority to be the strategic procurement and regulatory unit for the health sector
- Rehabilitation and upgrading of Health facilities
- Rehabilitation and upgrading of Mbabane Government Hospital
- Construction of a national referral hospital
- Standardization of medical equipment and furniture for the different types of health facilities, and
- Standardization of staffing norms and patterns

**This will be achieved through:**

- Reorientation of the organization structure and rationalization of functions of the MOH
- Establishment of Health Services Commission
- Development and implementation of human resource for health plan
- Strengthening of MOH financial management and accountability systems
- Strengthening of policy, planning and budgeting capacity
- Review and update of MOH regulatory mechanism
- Production and enforcement of appropriate legislation
- Strengthening of M&E systems
- Establishment and institutionalization of research and quality management systems
- Reinforcement of the decentralized regional health systems
- Institutionalization of Public Private Partnerships (PPPs) and of a Sector Wide Approach (SWAp) and
- Development and standardization of an exit strategy for externally funded programs
- Promote socially acceptable community based financing and cost-sharing schemes,
- Establish a Social Health Insurance Scheme,
- Develop and implement an advocacy plan targeting 15% budget allocation to the sector,
- Strengthen MOH financial management and accountability systems,
- Strengthen the MOH capacity in planning and budgeting at all levels and
- Promote private sector investment in healthcare through incentives and legislative measures.

Sectoral performance monitoring will be undertaken on an annual basis as part of the annual review of the sectoral MTEFs, focusing mainly on process. In addition, the annual and periodic performance indicators to assess sectoral progress towards meeting the NHSSP objectives and improving service delivery will be used.

A Monitoring and Evaluation (M&E) Framework based on NHSSP shall be developed. The M&E Framework shall build on governance, evidence and opportunity informed policy options, feasibility of solutions, sector wide development perspectives and analysis of subsectoral inputs, processes, outputs and achievements.
The M&E process will be done through; proper HMIS managed by dedicated unit at MOH, systematic audit based on qualitative data including stakeholder and community participation, quarterly progress reports, Annual progress report, health sector performance profile, annual and mid-term health sector reviews, ad hoc surveys and follow up and feedback meetings.

It shall take into consideration the national and international M&E indicators (MDGs) and shall also be based on the Three-Ones principles (One Coordinating Body, One National Policy, One M&E Framework).

# CHAPTER ONE: INTRODUCTION

## 1.1 Introduction

The National Health Sector Strategic Plan 2008-2013 is based on the National Health Policy (2007). This Policy follows the previous National Health Policy that was adopted in 1983 and was founded on the concepts and principles of Primary Health Care. After twenty-four years of implementation, it was necessary to update the policy so as to align it with new national and global developments that have impact on the health status of the country, including the Millennium Development Goals (MDGs), and for the purpose of enhancing the ability of the Ministry to effectively deal with emerging health challenges as well as to modernize governance and management of responsive, equitable and financially viable health services.

Good health is considered central to the overall realization of economic growth, poverty reduction and national development goals . It is also important in enabling individual citizens to achieve their personal ambitions and human rights. The national vision for health is therefore to provide equitable and affordable health care to all citizens at the highest standard. Against this background, this Health Sector Strategic Plan has been prepared in keeping with the Constitution of the Kingdom of Swaziland, the National Development Strategy -Vision 2022 and the Poverty Reduction Strategy (2006).
In line with the National Health Policy (2007), the MOH shall pursue the following Vision, Mission and Objectives:

## 1.2 Vision

By the year 2015, the sector shall have developed into an efficient and effective comprehensive system and shall be able to support individuals and communities that live longer and healthier, and conduct socially fulfilling lives. As such the country's health and social welfare status indicators shall compare favorably to those of countries with a similar level of human development.

## 1.3 Mission

The Health and Social Welfare Sector seeks to improve the health and social welfare status of the people of Swaziland by providing promotive, preventive, curative and rehabilitative services that are of high quality, relevant, accessible, affordable, equitable and socially acceptable.

## 1.4 Objectives

- To reduce morbidity, disability and mortality that is due to diseases and social conditions
- To enhance health system capacity and performance
- To promote effective allocation and management of health and social welfare sector resources
- To reduce the risk and vulnerability of the country's population to social welfare problems as well as the impact thereof

## 1.5 Major preliminary issues

1.5.1 The system suffers from problems in legislative coherence and governance. There are several key (non technical) areas that are inevitably only partially reflected in the NHSSP but that will need to be carefully looked at, as they indicate constrains within the health sector that are only partially attributable to the sector control as decisions are taken by other Ministries (e.g., a paradox is related to the health planning office in the MOH, whose staff belong to the Ministry of Planning). This lack of power within the sector affects the entire chain of command, as the system is theoretically decentralized, but still suffers from highly centralized and centrally dominated procedures even for relatively minor issues such as transport. Implicitly this situation seems to affect the sector absorption

[1] Improving the health and longevity of the poor is an end in itself, a fundamental goal of economic development. But it is also a means to achieving the other development goals relating to poverty reduction. The linkages of health to poverty reduction and to long-term economic growth are powerful, much stronger than is generally understood. The burden of disease in some low-income regions, especially sub-Saharan Africa, stands as a stark barrier to economic growth and therefore must be addressed frontally and centrally in any comprehensive development strategy. (Macroeconomics and Health: Investing in Health for Economic Development, Report of the Commission on Macroeconomics and Health, Chaired by Jeffrey D. Sachs, 20 December 2001. http://whqlibdoc.who.int/publications/2001/924154550x.pdf, accessed 25th October, 2008)

capacity in, eg., all capital investment schemes (unable to spend up to 50% of the available budget), whereas the budget formulation and management process is far from being efficiently and effectively conceived and implemented.

1.5.2 Major advocacy and the collection and presentation of viable options to guide decisions in reforming the sector will be the MOH responsibility and the plan will be of great value in presenting priorities and diagnosing reasons and problems to overcome. Currently, the end result of this limitations is a restricted capacity of the MOH to implement solutions appropriate to long standing constraints, such as timely and efficient procurement and distribution of fundamental commodities (such as pharmaceuticals and PHC basic equipment), flexible contracting of required staff (eg., national specialists who practice in the private and unregulated sector, who cannot be hired to serve in the public sector, even part time or to render specific services; qualified nurses willing to relocate in the country from the diaspora, who are prescribed two years of compulsory inactivity before resuming job with the public sector), career path design (eg., for nurses, who are offered one grade/level only, irrespective of their qualifications), staff placement and retention opportunities, besides their remuneration scale. From the human resources perspective, given the ambitious targets set by the NHSSP, it is probably necessary to reconsider the entire civil service arrangements and to amend the traditional and possibly unfeasible methodology to expand the volume of centrally hired staff in order to cope with the NHSSP needs. It is crucial that alternative ways of providing services are carefully explored before embarking in the full plan implementation. The risk to inflate the system and, at the same time, the difficulties for the public sector to hire staff and maintain them within the service is obvious, given the fact that the human resources needs assessed at just the central level, for instance, dictate to double the number of professional, administrative and managerial staff for the MOH. This is clearly beyond technical reach, besides the long term financial implications. Alternatives would be to commission out services that are not critical in ensuring the attainment of essential public goods as described by the NHSSP. The execution of specific services may be eligible for non governmental entities to take over: clinical services, home based care, diagnostics and other potentially profitable elements of the system not directly connected with public health protection may be substantially reorganized and handed over to the private sector, provided that a stringent regulatory and control system is in place and that a third payor is introduced in the health system to manage the remuneration aspects in a neutral and professional perspective targeting a balanced budget management. Whether the third payor is public, semi-public or private is irrelevant as the transactions will need a careful set of rules and regulations to avoid mismanagement as well as inequities that may affect those who are otherwise unable to pay out of pocket. The need for a major reform of the MOH role and in general the way the system is organized and regulated is outlined by evidence: in a status quo situation the NHSSP is unfeasible.

1.5.3 Diagnosed poor coherence is also evident within the sector, as the service provision is fragmented in several lines of authority and disoriented by competing interests of area based clinics and outreach services against vertical programs or vertically organized delivery schemes, such as school health and EPI (besides HIV/AIDS related operations). This situation severely constrains the PHC level capacity to deliver integrated services (eg., high immunization coverage is not matched by post partum assistance and follow-up, in spite of the mother taking her child for vaccination, as an example of missed opportunities and poorly utilized client activated encounters; RHMs (rural health motivators) and school teachers are not involved in school based health education, counseling and screenings, in spite of being already in place and participating in other schemes, such as (successful) mass deworming.

1.5.4 Alternative solutions to pending problems, such as transport for outreach and home based services and emergency care, are not considered as staff are forced to move within a very narrow decisional capacity, with almost no degrees of autonomy: as a result, an increased volume of expensive vehicles, difficult to maintain and sustain is seen as the only option to solve the current crisis in providers' mobility, whereas transport rentals may be a better, more efficient and less expensive possibility, and the legal system has to be reoriented to allow it; ambulances are procured and equipped but cannot be used to support medical evacuations, stabilize critical patients, supply emergency care in case of road or occupational accidents, and are inappropriately used only to move staff from one service to another.

1.5.5 As for technical areas, it seems that non communicable diseases (NCD) are particularly neglected and limited to in-house designed educational messages disseminated via traditional media with negligible impact on behaviors and vulnerable target individuals and groups. Looking at available statistics, though, the yearly payments for referrals abroad is reaching about US$ 8.6 million/year and benefiting not more than 1,200 patients, mainly - if not exclusively – affected by chronic conditions. Hospital inpatients are predominantly suffering from chronic diseases (often HIV+, but admitted for other reasons) and home based care is also providing services to post-infarction, post-ictus patients or to patients who suffer from unnecessary and severe complications of otherwise simple to diagnose and manage diseases (such as diabetes, whose devastating complications, from amputations to blindness, are affecting an increasingly large number of people in their productive age). This has clear economic implications for the country as well as for the sector, creating preventable disabilities and increasing an already high population dependency ratio.

1.5.6 Other constrains due to specific conditions should be noted and amended, such as the institutionalization of mental patients, based on the existing national referral mental health hospital. This strategy should be revised at the light of internationally recognized best practices as it is based on outdated concepts that are no longer supported by the current medical knowledge. Additionally the over 100 staff confined to perform within the hospital could be easily relocated to strengthen the system capacity to deliver, eg., much needed community based services.

1.5.7 The need for medical technology is outstanding, as all the levels in the sector, from primary to tertiary, are constrained by outdated, useless, broken equipment that make even basic services difficult to be provided in an acceptable way. No real comprehensive assessment and cost-benefit analysis has been conducted in the country and the result is an unfair competition with a fully equipped private sector, that is paradoxically (partly) financed by the MOH, with no real regulatory provision and no audit scheme in place to make sure that public money is used to purchase public goods in a fair way. Donors are not encouraged to align to standards and some non functioning, expensive (donated) equipment stays to witness this sector specific weakness.

1.5.8 Even pharmaceuticals are sometimes dispensed directly by the private sector, whose prescribing habits are unknown. In spite of an existing list of essential drugs, that is rather outdated, no formulary has been produced and prescribing patterns and responsibility as well as the allocation of drugs by service level are not addressed at all. No capacity to plan for and conduct regular pharmaco-epidemiology and pharmaco-economy analysis is available in the sector.

1.5.9 Diagnostics (laboratory and imaging) is another major area in the system that is virtually ignored, besides no qualified radiologist being available in the country (meaning that diagnoses are compiled and countersigned by technicians sometimes supported by consultations from South Africa, with clear medico-legal and financial implications). This is confirmed by the lack of reagents at the peripheral level as well as by the lack of standard operating procedures and manuals even in the most needed (and vital) area of HIV and TB. Several laboratory based activities are financially supported by donors with no strategy to empower and capacitate the local system. Given the incoming outbreak of MDR and XDR tuberculosis, already devastating the neighboring South African Province of KwaZulu-Natal, a growing prevalence of HIV/AIDS and the increasing coverage with antiretroviral treatment (that is based on quantitative laboratory diagnosis for treatment start-up, adherence monitoring and side effects management) it is clear that good and reliable laboratory skills and technologies are key aspects that should not be underestimated.

1.5.10 Environmental health and occupational health are priority areas and need to be prioritized, given Swaziland position in the global industrial and manufacturing market and its relative environmental fragility. In particular, the reported flow of settlers that migrate to periurban (virtually unregulated and unplanned) areas, should be accurately monitored and specific services designed to ensure proper construction and provision of essential water and sanitation services. Microenvironment pollution at household level may also become an area of concern (considering the high incidence of respiratory

[2] Multi and Extensively Drug Resistant Tuberculosis

infections in young children), as well as a cofactor linked to HIV status (for instance HIV+ mothers usually refrain from breast feeding their children who are therefore exposed to water borne infections and potentially lethal diarrheas). Industrial pollution is reported as not being properly inspected and the number of clinics providing private medical services to industrial workers are not balanced by an equal capacity to investigate diseases such as chronic obstructive pulmonary diseases, asthma, cancer, potentially linked to exposure to dangerous contaminants.

1.5.11 Other system weaknesses relate to traditionally neglected areas, such as health information (currently implemented as databases related to specific conditions and/or programs, rather than built on population or at least patient originated data), management information system (capable to capture data and generate usable indicators in support of decision making), referral system, very difficult to implement given the lack of specific level of care-oriented guidelines and standards. The net result is an unregulated access of patients to services that may be inappropriate for their needs. Hospital based physicians seem to work prevalently in outpatient departments and no serious attempts to objectively evaluate appropriateness of care and related costs with existing and validated protocols have been noted.

1.5.12 A final consideration needs to be done for an ambitious and very appropriate area of interest, namely the need to rationalize the health sector financing and improve and protect access to services for the poorest and most vulnerable population groups by means of feasible reforms, including possible health and social insurance schemes, hospital remuneration schemes, regulated tariff and exemption policies. This is a crucial area whose implications and difficulties will determine the NHSSP success or failure in the short and medium term.

1.5.13 In conclusion there seem to be:

- a fundamental need to reform the system to allow for a feasible and timely implementation of the overall plan. Unless specific steps are undertaken the NHSSP will not be feasible and its ambitious targets will not be achievable in the given timespan.
- several areas where major efficiency can be gained without altering the volume of resources currently available to the sector, focusing on legislative and governance review and optimization as well as to alternative solutions to the mere increase in number of, eg. staff, commodities, clinical sites, hospital beds and service provisions spots;
- a number of areas whose economic mid to long term implications due to their current and foreseeable consumption of resources are not fully estimated, as well as their impact on the present (and most important the immediate future) population health profile;
- some areas where additional and substantial investments are needed at the condition that the current less than functional legal framework is carefully reformed, making it supportive and responsive;
- sporadic interventions that are needed to promote better qualifications and technical capacity of existing staff, that should be empowered and supported while implementing the NHSSP provisions (analytical, budgeting, planning, monitoring, audit, inspecting and controlling skills);
- a need to provide assistance to implementation with a view to facilitate decentralization and the full deployment of strategic provisions by means, eg., of pilot services design and management that may become the benchmark for the rest of the system to align (assisting care providers in implementing relevant and personnel driven solutions to daily constraints, from the frontline to the top of referral system re-integrating otherwise competing uncoordinated programs).

# CHAPTER TWO: COUNTRY BACKGROUND AND CONTEXT

The health sector in Swaziland operates in a complex socio-cultural, economic and political environment that presents both opportunities and challenges to the Ministry of Health as it strives to meet sector objectives. This chapter provides highlights of some key contextual issues under which the sector operates.

## 2.1 Demographic and Population Context

According to the 2007 population census, the population of Swaziland is 1,018,449. In 2006, the population was estimated at 1,029,392 people with a significant drop in the population growth rate from … % in 1997 to less than 1 % per annum in 2006. About 77 % of the population lives in rural areas and 23 % live in cities and towns.

Women of childbearing age (15-49 years) make up 26.2 % of the population while all females account for 53 % of the population. An estimated 4.6 % of the population is 60 years of age or over. According to the results of the Swaziland Demographic and Health Survey (2006-2007), about 60 % of the population are aged below 30 years of which about 39.6% are children under the age of 15 years. This reflects the young age structure of the Swazi population. There has also been a shift in the population structure, with the group aged 0-15 years reducing from 45 % in 1997 to 41 % while the 25-39 years is down from 53 % to 52 % over the same period. The total fertility rate is estimated at an average of 3.8 births in a woman's life compared to 6.4 births in 1986. The life expectancy at birth has drastically declined from 56 years in 1986 to 32.5 years in 2003. This dramatic drop in life expectancy is mainly attributed to the impact of HIV/AIDS epidemic.

## 2.2 Socioeconomic Status

The World Bank classifies Swaziland as a lower middle-income country because of its per capita income estimated at about US$ 2,280 . The real GDP growth rate of Swaziland has however been deteriorating from a high of 9 % per annum during the period 1986 – 1990 to an average of 2.8 % in 2006. The official real GDP growth rate in 2007 remained constant at 2.8 %.

Overall, the country's economy faces serious challenges. In many respects, most of the economic indicators point to a fragile economy. First, the classification as a lower middle-income country, denies the country the much-needed concessional resources appropriate for addressing the country's many socio-economic challenges such as high poverty and HIV/AIDS prevalence rates. Secondly, while the GDP per capita places the country among lower middle-income developing countries, its income distribution is markedly uneven, with a GINI index of 51% (PRSAP, 2006). The pattern of wealth concentration indicates that 54.6 % of the wealth is held by the richest 20 % while the poorest 20 % hold only 4.3 % of the wealth.

Thirdly, unemployment is estimated at 22.8 % of the economically active population, and is above 40 % for the youth. The country's labor force is estimated to grow at an annual average rate of 2.9 % whilst the growth in employment opportunities for both public and private sectors is 1.7 %. The private sector accounts for 69 % and the public sector 31 % of total formal employment. The average growth rate for private sector employment is however, estimated at only 0.7 % while the growth rate for the public sector employment is about 1.4 % which are both well below the 2.9 % labor force annual growth rate. The informal sector has consequently become the key sector absorbing most of school leavers, unskilled and disadvantaged members of society.

According to the PRSAP (2006), 69% of the country's population is living below the upper poverty line of E 71.07 per capita, per month. This is aggravated by high food and energy costs as well as the severe impact of HIV/AIDS pandemic. The UNDP report of 2003 also shows that human development has worsened between 1991 and 2003 with the Human Development Index (HDI) declining from 0.583 to 0.498. Of the population of children aged 0-18 years, 69% are vulnerable and exposed to chronic hunger, child-labor, various forms of abuse and for girls, teenage pregnancy, early marriage and prostitution. It is estimated that child headed households are at 10 per cent of the total households.
Overall, the declining economic performance continues to compromise the country's capacity to pursue

[3] ADB (ESTA) Bank Data base

policies that increase expenditure on social services such as education, basic health, safe water and safety nets that benefit the poorest and most vulnerable groups. It is estimated that the country requires a minimum real GDP growth rate of at least 5% per annum, or a growth rate of 2.3% per annum in real per capita GDP. On the other hand, in order to achieve the MDGs, an economic growth of 7% per annum is required. The current growth rate of 1.8% per annum therefore falls far short of the required annual GDP growth rate to meet the national commitments to combat poverty and provide essential social services to the people of Swaziland.

The Poverty Reduction Strategy 2005-2015 views poverty as both a cause and consequence of ill health. The Strategy thus considers investment in health as a prerequisite for the long-term goal of poverty reduction .

## 2.3 Health Sector Profile

This section presents the health sector profile including analysis of the prevailing health related conditions and health system challenges.

## 2.4 Health System

### *2.4.1 Organization of the Health System*

The health system is based on the concept of Primary Health Care, consisting of three main levels: primary, secondary and tertiary. At the primary level, there are community based healthcare workers, clinics and outreach services. The secondary level comprises health centres which offer both outpatient and inpatient services. They also serve as referral points for the primary level. The tertiary level comprises regional hospitals, specialized hospitals and the national referral hospital.

The health service delivery system consists of both formal and informal sectors. In the formal health service sector there are both public and private health service providers including NGOs, mission, industry and private practitioners. The informal sector consists mainly of traditional and other complementary and alternative health care providers . The table below shows some health service indicators by region.

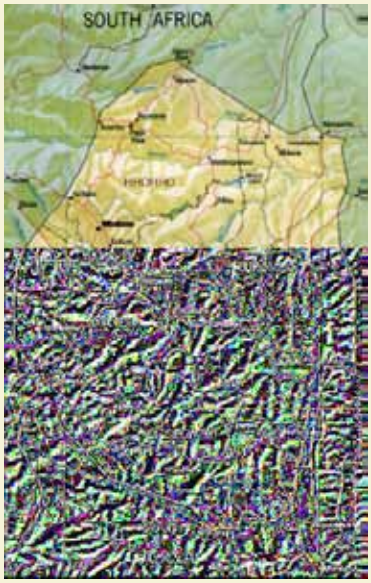
**Table 1: Selected Health Service Indicators by Region (2006)**

| Region | Hhohho | Lubombo | Manzini | Sheselweni | Total |
|---|---|---|---|---|---|
| Population per Region | 331,734 | 249,153 | 360,228 | 241,365 | 1,182,480 |
| Total No. of Health Facilities | 40 | 35 | 52 | 27 | 154 |
| Facilities per 100,000. | 12.05 | 14.04 | 14.43 | 11.18 | 13.02 |
| Facilities with Inpatient Beds | 9 | 9 | 14 | 4 | 36 |
| Inpatient beds per Region | 363 | 302 | 813 | 257 | 1755 |
| Inpatient beds* per 100,000 | 115 | 121 | 226 | 106 | 148 |
| Doctors ratio per 100,000 | 17 | 6 | 10 | 5 | 10 |
| Nurses ratio per 100,000 | 70 | 52 | 57 | 41 | 56 |
| Midwifes ratio per 100,000 | 72 | 47 | 80 | 46 | 64 |
| *Estimated population from 1997 census by applying 2.8% annual growth rate. | | | | | |

SOURCE: MOH 2006

[4] 1 USD:10.28 E, 25th October 2008 exchange rate.

[5] It is recognized that: "Building health systems that are responsive to client needs, particularly for poor and hard-to-reach populations, requires politically difficult and administratively demanding choices. Some issues,such as relative commitments to the health needs of rich and poor, relate to the health sector. Others, such as whether the public sector budget and procurement systems work or whether there is effective supervision and local accountability of public service delivery, are public management issues. Underlying these issues are broader questions of governance, conflict, and the relative importance of development and poverty reduction in national priorities". (Macroeconomics and Health: Investing in Health for Economic Development, Report of the Commission on Macroeconomics and Health,Chaired by Jeffrey D. Sachs, 20 December 2001. http://whqlibdoc.who.int/publications/2001/924154550x.pdf, accessed 25th October, 2008)




Functionally, the public health system is decentralized from the central Ministry to the four Regional Health Offices (RHOs) in Hhohho, Lubombo, Manzini and Shiselweni. The central level performs executive and administrative functions as well as providing strategic guidance on delivery of the essential healthcare package at all service delivery levels.
At the regional level, each Regional Health Office is headed by a Regional Health Administrator and supported by the Regional Health Management Team (RHMT) whose mandate is to provide technical leadership in executing MOH policies. The RHMT is also responsible for planning, monitoring and supervision of all health related activities within each region. At the community level, there is a network of community health workers including Rural Health Motivators (RHMs) to promote community participation in health activities in the areas. There are also community health committees assisting in the general management of health facilities. The Community through individuals and households/ families are not only expected to use the services but also to contribute local resources and participate in the planning, implementation, monitoring and evaluation of health interventions.
In terms of access to services, about 85 % of the population is currently living within a radius of 8 kilometers of a health facility. Nationally it is estimated that about 20 % of the population does not have access to health facilities. The rural and poor communities are worse off as compared to urban communities.
Although physical access to health services looks quite reasonable compared to other African countries, the quality of care provided remains a challenge due to - among others - the heavy disease burden, a chronic shortage of human resources in the public sector, deteriorating infrastructure, inadequate budget allocations and weak supportive supervision systems.

***2.4.2 Human resources for health***

The health sector faces a severe human resource shortage across all cadres at all levels of the health system, for example according to the HMIS (2008) report the doctor to patient ratio is 1.8 per 10 000 and the nurse to patient is 28/10 000. The health personnel shortage especially in the public sector is aggravated by stiff competition for qualified health professionals from the private sector and more developed economies such as South Africa, Europe and United States of America among others.

The exodus of skilled health workers from the public sector is mainly attributed to lack of career progression, unsatisfactory terms and conditions of service, poor working environment and lack of incentives, including promotions. The productivity of those remaining within the public sector continues to be affected by the low morale as well as the increased disease burden mainly due to HIV/AIDS. Other than the inadequacy of the health workforce, there is also a problem of imbalanced distribution of the health personnel between the rural and urban areas. With over 50 % of the health workforce deployed in hospitals mainly located in urban areas serving only about 20 % of the population, it suffices to conclude that rural areas with 80 % of the population is underserved.

In terms of human resource development for the health sector, there are only three local training institutions for health professionals in the country. 1. The Faculty of Health Sciences of the University of Swaziland is responsible for the training of almost 70 % of the professional nursing cadres in community, medical and surgical nursing. 2. Nazarene College of Nursing on the other hand accounts for the remaining 30 % of professional registered nursing cadres. 3. The Good Shepherd Nursing School is responsible for the training of the Nursing Assistants cadre with an output of 40 per year. There are no training facilities for the rehabilitation therapists, radiographers, laboratory technicians and biomedical engineering technicians. The Faculty of Health Sciences is however, planning to re-establish the training of clinical officers, pharmacy technicians and dental therapists. Currently such cadres and medical doctors are sent for training outside the country, from where some never return to serve the country.

[7] Reaching Every District, from http://www.who.int/immunization_delivery/systems_policy/red/en/index.html, accessed 25th October 2008

Overall, the human resource crisis is partly attributed to weak human resource planning systems and lack of capacity among the training institutions to produce and supply the required human resources for health. The lack of a comprehensive human resource information system integrating all the disciplines involved in the provision of health services also remains a key challenge for effective human resource planning and management.

### *2.4.3 Investment in Health*

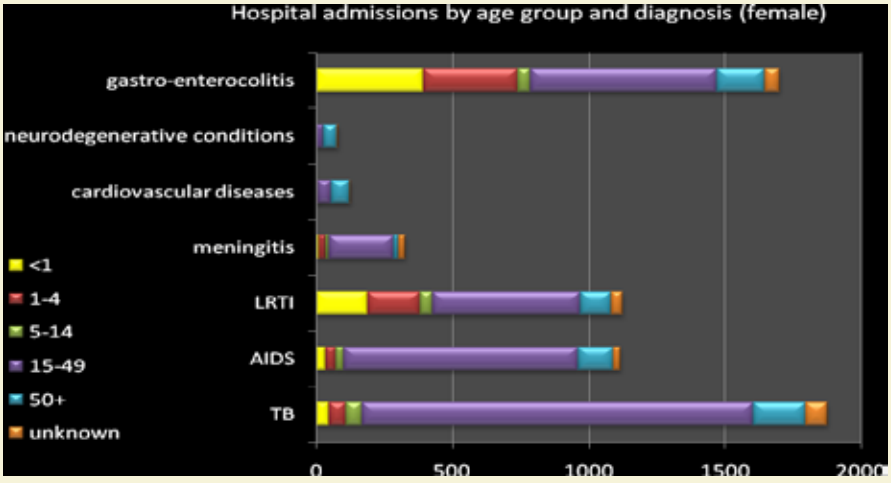
Investment in health in the country has been declining over the past decades at a time when the demand for health services has increased due to HIV/AIDS and other re-emerging diseases such as TB. Approximately 3.8% of GDP is spent on health care (including private) of which 60% comes from the exchequer. As a percentage of GDP, government expenditure on health accounts for only 2% of the GDP. The relative share of government expenditure of the total health expenditure has fallen from 72% in 1998 to 54% in 2006. An examination of trends over the past decade also shows that the health sector's expenditure as a proportion of total government expenditure declined from 13.5% in 1998 to 10.9 % in 2002 but has recently increased to 11.5% in 2009. However,the government allocation to the health sector remains short of the Abuja Declaration commitment of at least 15 %.

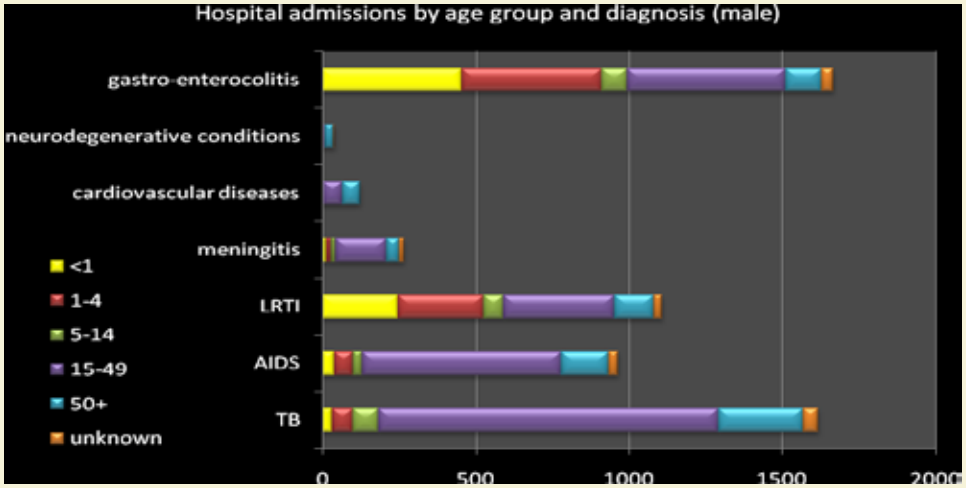
In terms of per capita expenditure, there has been a 38% fall in per capita health spending from US $54 in 1998 to US $39 in 2003 (World Bank, 2006), which has further declined to an estimated US $24. This is well below the recommended minimum per capita expenditure of US $34 recommended for developing countries. As a result, households are bearing more burden of financing healthcare at a time when poverty and unemployment are on the rise. In this regard, household expenditures as a percentage of the total private health expenditures have risen from 34.9% to 41.7% between 1998 and 2002 (World Bank, 2006).

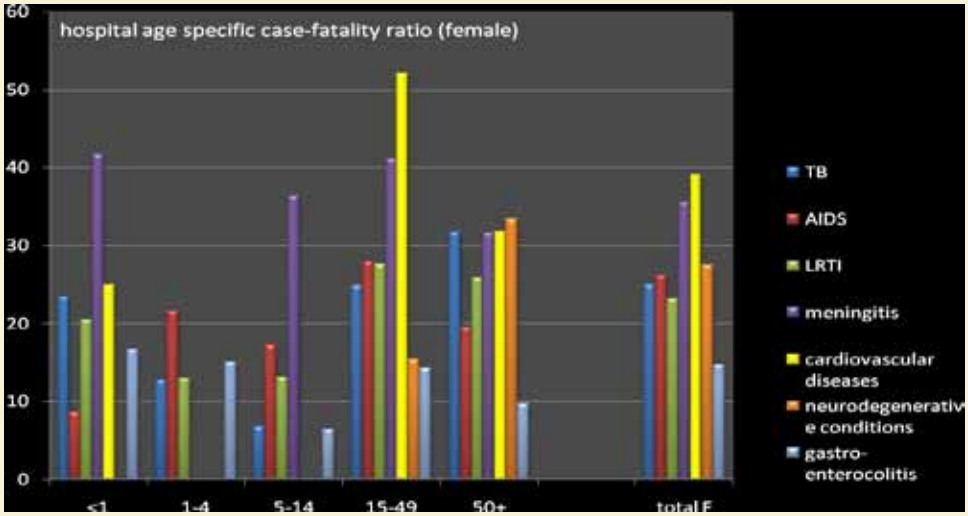
### *2.4.4 Health Status*

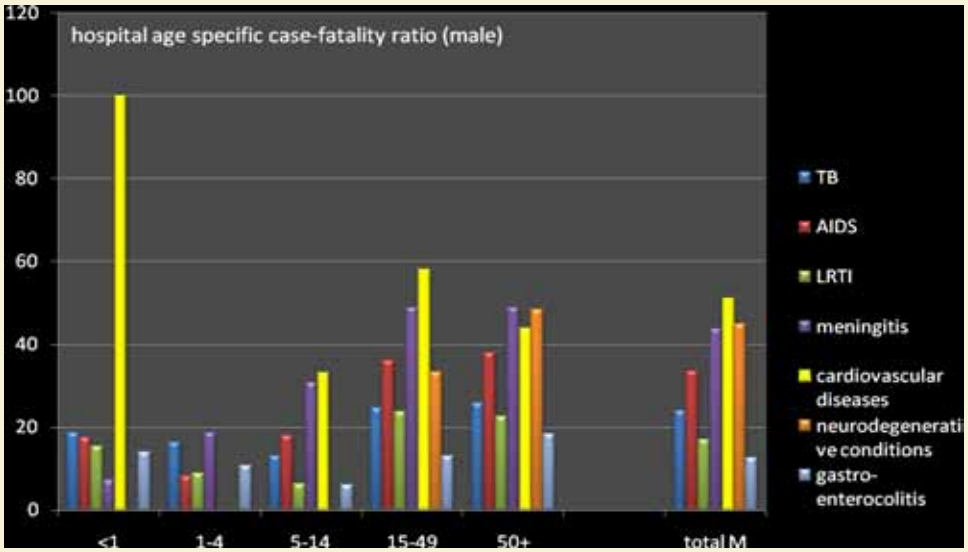
The investment made on health inputs has not resulted in improvement of some the health indicators. The situation has also been worsened by the advent of HIV/AIDS and rising incidence of poverty. From a sample of hospital admissions the following data highlight a cluster of priorities that need to be carefully considered by regional and hospital administrators as well as by the preventive sector. A part from the clear clustering of communicable diseases (especially TB and HIV/AIDS that may be better treated in different sites than hospitals and for which major questions on effective isolation and prevention of transmission can be raised), it seems that:

- Cases admitted are probably manageable at ambulatory, outpatient or primary care level, as the main diagnoses' degree of complexity may not be matching what a secondary or tertiary hospital should treat
- Non-TB LRTI (several of which are due to pneumococcus) and meningitis outbreaks suggest to review the composition of essential vaccines and immunization program to incorporate relevant vaccines
- Non communicable disease are becoming important determinants of admission and even more they account for a large proportion of in-hospital mortality, with a very high case-fatality ratio, possibly suggesting to audit the quality of care delivered by each hospital in at least cardiovascular and neurodegenerative conditions, the mortality of which seem to be very high






*2.4.5 Communicable Diseases*

The country has one of the highest HIV prevalence in the world at 26% among the sexually active population with HIV infection higher among women at 31.1% than men at 19% (DHS 2006-7). The number of people living with HIV who need antiretroviral therapy is estimated at 58,250. Antiretroviral treatment is provided in 22 health facilities with 25,000 clients on treatment as at the end of 2007.

The HIV/AIDS epidemic has also given rise to a concurrent tuberculosis epidemic in the country, with recorded new cases rising from less than 1, 500 in 1993 to over 8,000 in 2006. As such, TB has become a

major public health problem. It is estimated that HIV co-infection occurred in about 80% of all TB cases. Progress in addressing tuberculosis in the country is slow. Implementation of the DOTS (Directly Observed Treatment, Short Course) strategy is currently being introduced in the four regions of the country having been piloted in one region (Lubombo). The case detection rate (57%) and cure rate (42%) are respectively lower than the international targets of 70% (detection rate) and 85% (cure rate). In order to improve the control of TB, the Ministry has re-organized the management of the National TB Control Program.

HIV-related illnesses have become the major cause of morbidity and mortality among children under the age of five years. According to the MOH, the HIV-related illnesses account for 47% deaths among under-fives. Pneumonia and diarrhoeal diseases account for 12% and 10% respectively (DHS 2006-7). HIV infection could be a contributory factor to the mortality due to pneumonia and diarrhoeal diseases, whereas limited access to clean water and sanitation, especially in rural areas are indicated as the major direct risk factor
In 2005 mother to child transmission of HIV infections was reported to have been reduced by 1.74% (Government of Swaziland, 2005). Access to PMTCT has been scaled up with the result that by mid 2006 PMTCT services were available in 110 of 154 health facilities. Among sexually related diseases, there is high prevalence of genital ulcer diseases (12% in 80s to 60% of all genital ulcers in 2005).

Malaria continues to be a public health problem and is more prevalent in the Lubombo Region where more than 50% of the cases occur. It is estimated that 30% of the population is at risk of malaria infection. For the period 2000-2005 the average incidence rate of clinical malaria was 13 per 1000 population and the incidence rate of confirmed malaria cases is 0.3 per 1000 population for 2006-2007. A significant reduction in the incidence rate of malaria has been observed during the period 2006-2007. The clinical and laboratory confirmed malaria cases have dropped from 1 to 0.3 per 1000 population respectively.
The country achieved high routine immunization coverage until the late 1990s; however, a fluctuation has been observed in DPT/HEP3 since 2000. Consequently, routine measles immunization coverage was 60% in 2006 while that of diphtheria, pertussis and tetanus (DPT3) was 68%. Evidence also suggests that low immunization coverage combined with paediatric AIDS has reversed the gains that the country had achieved in child survival in previous years.

### *2.4.6 Non-Communicable Diseases*

Non Communicable Diseases (NCDs) have received inadequate attention, given the serious double burden of disease that prevails in the country. Anecdotal evidence suggests that the country is experiencing an epidemiological transition that has resulted in a serious challenge from both communicable and non-communicable diseases. Cardiovascular diseases especially hypertension, diabetes and various cancers appear to be on the rise. Data on NCDs is limited; a STEPS survey is currently being undertaken with WHO support to gather baseline epidemiological data on the their prevalence in the country. It is expected that after this survey, a plan based on the WHO strategy for the control of chronic non-communicable diseases will be developed.

## *2.5 Health Sector Performance*

In improving the health status of the population, the health sector continues to realize progress in the control and management of diseases and in the promotion of healthy living through curative services and various public health programs. The efforts to ensure that curative services are made accessible to all sections of the population are evidenced by the expansion of the network of hospitals, health centres and rural clinics over the past decade.

[8] Sector-Wide Approach (SWAp) is an approach to international development that "brings together governments, donors and other stakeholders within any sector. It is characterized by a set of operating principles rather than a specific package of policies or activities. The approach involves movement over time under government leadership towards: broadening policy dialogue; developing a single sector policy (that addresses private and public sector issues) and a common realistic expenditure program; common monitoring arrangements; and more coordinated procedures for funding and procurement." (World Health Organization, World Health Report 2000). Another definition for SWAp is provided by Foster (New Approaches to Development Cooperation: What can we Learn from Experience with implementing Sector Wide Approaches? Working paper 140, Centre for Aid and Public Expenditure, Overseas Development Institute, London, UK, 2000) as: 'All significant funding for the sector supports a single sector policy and expenditure programme, under government leadership, adopting common approaches across the sector, and progressing towards Government procedures to disburse and account for all funds.'

In the public health front, the National HIV/AIDS Program has continued to step up efforts to counter the rapid escalation of the epidemic in the country. Out of 154 health facilities, HIV Counseling and Testing, PMTCT Services and Antiretroviral Therapy are provided in 110, 110 and 22 respectively. By end of 2005 about 50% of eligible PLWHA had enrolled in the national antiretroviral therapy program. Community Home Based Care (CHBC) services have also been initiated and appropriate guidelines developed and implemented.

The Malaria Control Program has accomplished a significant reduction in the incidence of malaria over the past decade from 24 to 2.2 per 1000. This drastic reduction in malaria incidence is mainly attributed to high indoor residual house spraying coverage, effective implementation of malaria control activities in the Lubombo Spatial Development Initiative (LSDI) area and improved public consciousness and awareness in the affected areas.
The Sexual Reproductive Health Program on its part has led to a decline in fertility from 6.5 births per women in the 1990s to about 3.8 in 2007. The contraceptive prevalence rate increased from 17% in 1990 to about 50.6% in 2007. The antenatal care coverage has over the years increased to about 98% of pregnant women attending antenatal clinics at least once. Health facility based deliveries have also increased from 56% to 74% (SDHS 2007). The Confidential Enquiry into Maternal Deaths Committee has been established and is expected to contribute further to improving maternal health.
The EPI Program has since its inception proved to be the cornerstone of primary health care strategy in Swaziland. However, a decline has been noted in immunization coverage from 91% in 1995 to about 72% at present, in spite of major progress noted in strengthening health education and promotion through the RED strategy .

The country's Polio Certification report was accepted by the African Accreditation Certification Commission in 2005. However, the country is not immune to polio importation. With regards to measles the country has reached the elimination phase. Notably there was only one isolated case in 2008.
According to the SDHS 2007, more than two thirds of households have access to an improved water source and 3 in 4 households are within 15 minutes of their drinking water source. 73% of urban households have water piped into their dwellings or yards. 23% of rural households has directly piped water. Half of households nationwide have an improved (not shared) toilet facility.
The MOH continues to forge partnerships with the civil society, local and international organizations including development partners to enhance delivery of services. In an effort to improve partner coordination, the Ministry is moving towards a Sector Wide Approach (SWAp) .

## 2.6 Policy Framework

Significant progress has been made in developing an effective policy framework for health care service delivery in recent years. The new National Health Policy is now in place and a number of auxiliary policies have been developed or are in the process of development. Cross-cutting all government sectors, the National Decentralisation Policy (launched in 2006) will have particularly significant implications for the structure of health care service delivery, as more functions and responsibilities are devolved to the regional, inkhundla and chiefdom levels. The MOH, and the Government as a whole, remain fully committed to operationalising these policies through the relevant legislation, protocols, guidelines and implementation plans.

Furthermore, the NHSSP is informed by and reflects a number of existing international and national policy instruments. In this regard, the Plan is designed as the principal MOH implementation tool for the National Health Policy (2007), the Decentralization Policy (2006); the National Development Strategy – Vision 2022 (1997-2022); the Poverty Reduction Strategy and Action Program (2005-2015); Swaziland Programme on Economic Empowerment and Development (SPEED); the Millennium Development Goals (MDGs); the Abuja Declaration on HIV/AIDS, Tuberculosis, Malaria and Other Related Infectious Diseases; the Regional Health Policy for All for the 21st century in the African Region - Agenda 2020; SADC Protocol on Health and other regional and international commitments.

# CHAPTER 3: HEALTH SECTOR STRATEGIC PLAN APPROACH

## 3.1 Purpose of the Strategic Plan

The primary purpose of the Strategic Plan is to guide the MOH and its partners in the implementation of the National Health Policy. The Strategic Plan conveys the prospects for improving the health status of all the people of Swaziland and provides a coherent and system wide framework for intervention planning and performance measurement over the next five years. As a management tool, the Strategic Plan seeks to enable the MOH to manage change and reforms within the sector in a structured and predictable way. In this respect, the Strategic Plan commits the entire health sector to the same objectives, processes and accountability standards. More importantly, the Plan provides an enabling framework for forging and sustaining strategic partnerships and cooperation among various stakeholders within and outside the health sector. Specifically, it is the purpose of the Health Sector Strategic plan to:

- Reverse the downward trend in health outcomes and improve the health status of the Swazi population;
- Accelerate the achievement of the health related MDGs and poverty reduction strategies;
- Guide the needed health sector reforms;
- Provide a coherent framework for sector wide intervention planning and resource targeting over the next five years;
- Guide the coordinated participation of all stakeholders towards the achievement of stated objectives, including Development Partners; and
- Provide a framework for monitoring and evaluating the performance of the sector at all levels.

## 3.2 Guiding Principles

In executing its mandate, the MOH and all its organs and related structures shall adhere to the fundamental principles as enshrined in the National Health Policy (NHP). Over and above the guiding principles in the NHP, the strategic plan foresees the following:

- Integrated approach in the delivery of services
- Health systems strengthening
- Universal coverage
- Promotion of high impact interventions
- Strengthening partnerships and coordination
- Evidence based planning and result based management
- Pro-poor interventions
- Inclusive and equitable delivery strategies that target the fragile and vulnerable and promote gender fairness

## 3.3 Process of Developing the Strategic Plan

The NHSSP has been developed through a participatory and extensive stakeholder consultation process. With technical support from Development Partners, the Ministry consulted widely internally and externally with health professionals, civil society actors, Development Partners and other stakeholders. The process also involved extensive review and analysis of various policy documents and reports. (see bibliography)
In order to obtain broad consensus on the plan, stakeholder consultative workshops and sector technical working groups were used to formulate, discuss and adopt the Strategic Plan.
In costing the Strategic Plan a combination of Absorption and Activity Based Costing (ABC) methodologies and the bottom-up ingredients approach was applied to identify the inputs used in implementing the activities of various health interventions.

## 3.4 Costing of the Strategic Plan

The Swazi economy is relatively small and vulnerable to external shocks. The country is currently facing a declining long-term growth, rising poverty and major social challenges. The Estimates of the Health Service expenditures from the Government of Swaziland for the years 2008-2011 are reported in the following table.

Table 3: Estimates of the Health Service expenditures for the years 2008-11 (Government of Swaziland)

| | 2006--07 | 2007--08 | 2008--09 | 2009--10 | 2010--11 |
|---|---|---|---|---|---|
| RECURRENT Costs TOTAL | SZL 535.139.418,00 | SZL 544.837.507,00 | SZL 721.521.571,00 | SZL 754.444.867,00 | SZL 782.161.535,00 |
| CAPITAL Costs TOTAL | SZL 190.580.000,00 | SZL 241.454.000,00 | SZL 112.815.000,00 | SZL 187.166.000,00 | SZL 0,00 |
| **GRAND TOTAL** | **SZL 725.719.418,00** | **SZL 786.291.507,00** | **SZL 834.336.571,00** | **SZL 941.610.867,00** | **SZL 782.161.535,00** |

Although the financing of the Swaziland Health Service has declined due to the prevailing economic situation , there is no dramatic change in public financing. The reported remarkable decline is probably due to the USD/ZAR exchange rate, as during a 12 month period the USD/ZAR exchange rate fell to 52 %. The private expenditures on health are probably underestimated in Swaziland due to the geographical conditions: as a significant number of people refer themselves to neighboring South Africa to receive treatment and it is difficult to track their expenditure. The impact of HIV/AIDS on the Swaziland society is responsible for decline in individual contribution mainly in mid-life , where the capacity to contribute is maximum and the average health spending is minimum. These phenomena will significantly affect the Swaziland Health Service financing in coming years.

The health sector is characterized by its complexity: results (outcomes) depend on many factors. Service delivery depends on burden of diseases, availability of health technology (diagnostics tools, pharmaceuticals), behavior of the community, as well as of the health professionals.
The NHSSP has been costed according to a bottom-up / incremental approach for several reasons:

- the health service cost is provider driven (cost control means provider control in health sector). Therefore producer's activities need to be identified in order to define costs
- efficiency/productivity increment can be addressed, but results will come up in a few years
- MOH analytic accounting is not available
- MOF financing information are available and accurate
- global approaches to the whole sector are time consuming with a risk to overestimate the NHSSP cost

The incremental approach is the only method that provides some information to the MOH and the international donors about the deficit in funding (in resources and in financing). In fact the health care service of the Kingdom has been operating since the 1960s and the NHSSP focuses on some health objectives/ actions but not all health care activities of the MOH. Results (at 2008 price, no inflation was added) are shown in Appendix 1. This result represents the financing requirement to implement the NHSSP, under the hypothesis that part of the NHSSP foreseen activities, such as coordination and planning, are executed by MOH staff.

# CHAPTER FOUR: THE HEALTH SECTOR STRATEGIC FRAMEWORK

This chapter presents the health sector strategic framework, outlining the key health sector strategic objectives, strategic thrust and outcomes and the approach.

## 4.1 Strategic Thrust and Outcomes Framework

In line with the key strategic objectives, the Strategic Plan interventions will be centred around the three key Strategic Thrusts as follows:

***4.1.1 To reform and enhance the institutional capacity of the Ministry of Health to ensure efficient and effective performance of the core health sector functions at all levels***

***This will be achieved by:***

- Strengthening the governance and management capacity of MOH to effectively and efficiently perform and discharge its core functions including sector wide leadership
- Strengthening the MOH financial management and administrative support (procurement and logistics) capacity to ensure maximum accountability, efficient resource utilization and delivery of quality health services
- Strengthening the human resources management systems and capacity
- Deepening the implementation of the health sector decentralization process and strengthen the capacity of the regional and community based health systems to ensure efficient and effective management and delivery of health services
- Establishing enabling institutional mechanisms to promote and manage health sector coordination, public- private partnerships within a sector wide approach
- Building the MOH capacity at all levels to effectively perform and facilitate health sector policy, planning and M&E functions
- Strengthening the regulatory capacity of the MOH in order to effectively safeguard public interest in health and enforce health related laws, ethical, professional and quality standards in health care
- Establishing appropriate national health research and knowledge management mechanisms to facilitate and coordinate all health research activities and promote the application of research evidence in decision making and delivery of service
- Increasing and diversifying investment in health through innovative health financing strategies

4.1.2 To ensure the population's universal access to essential, affordable and quality curative healthcare

This will be achieved by:

- Strengthening the referral system and ensuring the population's equitable access to a range of quality and affordable primary and specialized clinical, diagnostic and rehabilitative services in accordance with the level of health facility
- Providing essential clinical care:
    - To ensure the population's access to quality preventive and curative mental health services in order to enhance the mental health and well being of the people of Swaziland
    - To reduce the prevalence of dental caries and periodontal diseases and provide quality promotive, preventive, rehabilitative and conservative oral health care services especially to children, pregnant women and the elderly
    - To reduce the prevalence of blindness and loss of sight and provide quality blindness prevention and treatment interventions including cataract, refractive error and low vision services to persons with visual impairment
    - To strengthen the provision of Ear, Nose and Throat specialized services and ensure full coverage to related clinical needs
    - To build an intermediate level of care capable to bridging community and home based services in a network of appropriate and customized services ensuring continuity of care between the primary and the secondary - hospital based - level, integration of health and social support, and prompt rehabilitation and/or palliative care when needed
    - To improve the health infrastructure and equipment management systems in order to provide quality health care
    - To strengthen the national health commodities management system to assure consistent

availability of pharmaceutical, non-pharmaceutical and equipment of required safety, quality and efficacy standards at all times
- To strengthen the central, regional and health facilities capacity to provide appropriate and customized clinical laboratory and blood transfusion services
- To strengthen the central, regional and health centre facilities capacity to provide high quality, safe and efficient radiological services

4.1.3 To improve provision of and increase access to, essential, affordable and quality public health services in order to significantly reduce the burden of diseases, morbidity and mortality and improve the health status and quality of life of the Swazi population

This will be achieved by:

- Controlling and managing communicable and non-communicable diseases
  - Intensifying the prevention of new infections, expanding treatment and care interventions, improving the quality of life of PLWHAs and mitigating the socio-economic impact of HIV/AIDS in Swaziland
  - Intensifying and scaling up the TB control and DOTS interventions in order to reduce morbidity and mortality associated with the burden of TB
  - Reducing malaria morbidity and mortality to insignificant levels by 2013
  - Reducing the level of morbidity due to bilharzias and treating all infected school aged children in Swaziland
  - Strengthening the capacity of the MOH NCD Unit and scaling up NCD program interventions in order to reduce morbidity and mortality associated with the burden of non-communicable and lifestyle related diseases
- Protecting mother and child health
  - Ensuring access to the widest possible package of reproductive and maternal health care in order to significantly reduce maternal and neonatal morbidity and mortality
  - Improving the quality of health care provided to children in order to significantly reduce morbidity and mortality due to common childhood diseases among children under the age of five and improve their survival, growth and development by the full implementation of IMCI
  - Reversing the decline in immunization coverage and significantly reducing morbidity and mortality due to vaccine preventable diseases among children under-five years of age
- Combating malnutrition especially in mothers and children and contributing to the improvement of the nutritional status of the Swazi population
- Protecting and improving the Swazi population's health status by
  - Empowering individuals and communities with appropriate knowledge and skills to prevent diseases and promote healthy life styles and personal responsibility for better health in their own environment
  - Improving the health status of, and inculcating positive health behavior and healthy lifestyles among school children and college students of 5-24 years of age
  - Improving the health status of, and inculcating positive health behavior and health lifestyles among individuals, families and communities especially in rural areas
  - Establishing a comprehensive and multi-sectoral environmental health framework to ensure a safe and sustainable environment for the promotion and sustenance of good health and quality of life for all people in Swaziland, contributing to a significant reduction in morbidity and mortality due to environment related conditions and diseases with special focus on children's needs
  - Contributing to the prevention, control, management and treatment of illnesses and diseases attributed to psychoactive substances like alcohol, tobacco, and drugs among vulnerable groups especially the youth and pregnant mothers
  - Enhancing the capacity of MOH in emergency, epidemic and disaster preparedness and response at all levels

The table below presents the strategic thrust, objectives, strategies and key outcomes of the Health Sector Strategic Plan.

**Table 3: Strategic Thrust and Outcomes Framework**

| | | | |
|---|---|---|---|
| **VISION** | By the year 2015, the sector shall have developed into an efficient and effective comprehensive system and shall be able to support individuals and communities that live longer and healthier, and conduct socially fulfilling lives. As such the country's health and social welfare status indicators shall compare favorably to those of countries with a similar level of human development. | | |
| **MISSION** | The Health and Social Welfare Sector seeks to improve the health and social welfare status of the people of Swaziland by providing promotive, preventive, curative and rehabilitative services that are of high quality, relevant, accessible, affordable, equitable and socially acceptable. | | |
| **Policy Objective** | To enhance health system capacity and performance | To promote effective allocation and management of health and social welfare sector resources | To reduce morbidity, disability and mortality that is due to diseases and social conditions |
| **Strategic Plan Thrusts** | To reform and enhance the institutional capacity of the Ministry of Health to ensure efficient and effective performance of the core health sector functions at all levels | To ensure the population's universal access to essential, affordable and quality curative healthcare | To improve provision of and increase access to, essential, affordable and quality public health services in order to significantly reduce the burden of diseases, morbidity and mortality and improve the health status and quality of life of the Swazi population |

## Strategic Objectives

- To strengthen the governance and management capacity of MOH to effectively and efficiently perform and discharge its core functions including sector wide leadership
- To strengthen the MOH financial management and administrative support (procurement and logistics) capacity to ensure maximum accountability, efficient resource utilization and delivery of quality health services
- To strengthen the human resources management systems and capacity
- To deepen the implementation of the health sector decentralization process and strengthen the capacity of the regional and community based health systems to ensure efficient and effective management and delivery of health services
- To establish enabling institutional mechanisms to promote and manage health sector coordination, public- private partnerships within a sector wide approach
- To build the MOH capacity at all levels to effectively perform and facilitate health sector policy, planning and M&E functions
- To strengthen the regulatory capacity of the MOH in order to effectively safeguard public interest in health and enforce health related laws, ethical, professional and quality standards in health care
- To establish appropriate national health research and knowledge management mechanisms to facilitate and coordinate all health research activities and promote the application of research evidence in decision making and delivery of service
- To increase and diversify investment in health through innovative health financing strategies

- To strengthen the referral system and to ensure the population's equitable access to a range of quality and affordable primary and specialized clinical, diagnostic and rehabilitative services in accordance with the level of health facility
- To provide essential clinical care, targeting in particular curative mental health services oral health (especially for children, pregnant women and the elderly), eye health, ENT services, intermediate rehabilitative and palliative care
- To improve the health infrastructure and equipment management systems in order to provide quality health care
- To strengthen the national health commodities management system to assure consistent availability of pharmaceutical, non-pharmaceutical and equipment of required safety, quality and efficacy standards at all times
- To strengthen the central, regional and health facilities capacity to provide appropriate and customized clinical laboratory and blood transfusion services
- To strengthen the central, regional and health centre facilities capacity to provide high quality, safe and efficient radiological services

- To control and manage communicable (with a focus on HIV/ AIDS, tuberculosis, malaria, bilharzias) and non-communicable diseases
- To protect mother and child health by ensuring access to the widest possible package of reproductive and maternal health care in order to significantly reduce maternal and neonatal morbidity and mortality, by improving the quality of health care provided to children by the full implementation of IMCI and by reversing the decline in immunization coverage, reducing morbidity and mortality due to vaccine preventable diseases
- To combat malnutrition especially in mothers and children and contributing to the improvement of the nutritional status of the Swazi population
- To protect and improve the Swazi population's health status by empowering individuals and communities with appropriate knowledge and skills to prevent diseases and promote healthy life styles and personal responsibility for better health in their own environment, improving the health status of, and inculcating positive health behavior and healthy lifestyles among school children and college students of 5-24 years of age, as well as individuals, families and communities especially in rural areas
- To establish a comprehensive and multi-sectoral environmental health framework to ensure a safe and sustainable environment for the promotion and sustenance of good health and quality of life for all people in Swaziland, contributing to a significant reduction in morbidity and mortality due to environment related conditions and diseases with special focus on children's needs
- To contribute to the prevention, control, management and treatment of illnesses and diseases attributed to psychoactive substances like alcohol, tobacco, and drugs among vulnerable groups especially the youth and pregnant mothers
- To enhance the capacity of MOH in emergency, epidemic and disaster preparedness and response at all levels

## MAIN EXPECTED RESULTS

| STRATEGIC THRUST 1 | STRATEGIC THRUST 2 | STRATEGIC THRUST 3 |
|---|---|---|
| Rationalizing recruitment and deployment of staff and establish incentives to motivate the workforce and reduce the attrition rates | Developing population based health service planning standards, service profiles and referral guidelines | Halving adult HIV sero-prevalence and the % of children (0-4 years) who are HIV+ |
| Establishing a national staff development, training and continuing education program to improve management and technical skills of health workers | Defining an essential package of services for each level of the referral system integrating promotive, preventive, curative, rehabilitative and palliative care | Increasing and sustaining male condom use from 54.6% to 88% in both rural and urban areas |
| Establishing middle level pre-service and post basic medical training college to provide certificate, diploma and higher national diploma courses in nursing, clinical medicine, pharmacy, laboratory, dental health, orthopedics, ophthalmology, public health, medical engineering etc. | The program on essential clinical services will include treatment of injuries and common illnesses, such as prevalent non-communicable diseases, care | Increasing female condom use to 25% for both urban and rural areas |
| Upgrading the capacity of the Mbabane Government Hospital to the level of a national referral and teaching hospital and work with Ministry of Education to transform the Faculty of Health Sciences into a medical school | Entering into service agreements with private not for profit and for profit providers to ensure full coverage of population needs | Providing HIV voluntary counselling and testing services at all levels |
| Establishing a national scholarship and fellowship scheme to support post-graduate medical training for Swazi doctors outside Swaziland | Ensuring the delivery of essential clinical services including basic care of injuries and common illnesses, non-communicable diseases, mental health, palliative services, oral health, eye health, | Reducing the mother to child HIV transmission |

## MAIN EXPECTED RESULTS

| | | |
|---|---|---|
| | and rehabilitative care | |
| Establishing a national training program for Rural Health Motivators and other community based health workers | Establishing an effective community based mental health and social reintegration and support system to ensure smooth reintegration of mental health patients into their families and communities including psycho-social support for people living with HIV/AIDS and survivors of gender based violence especially rape | Achieving 100% HIV free blood for transfusion at all levels |
| Establishing a national continuing education program in collaboration with the professional councils | Strengthening of the MOH and Regional Health Services capacity to plan, implement, coordinate, monitor and evaluate both facility and population-based oral health programs, including community water fluoridation | Increasing access to basic HIV prevention services and commodities to 80% of the sexually active population |
| Developing service standards and guidelines for service delivery and management, facilitated and coordinated by the Quality Assurance Unit (QAU) and led by Technical Departments | Improving the capacity of health facilities to provide quality oral surgery procedures and conservative dentistry service | Increasing the % of people listed and aware of their HIV status from 10% to 60% |
| Ensuring that the annual planning and budgeting cycle is strictly implemented by providing Health Policy and Planning Department's technical support | Conducting dental screenings in all schools at least once every three years to help identify children who need dental care | Increasing the % of PLWHAs with access to ART and food packages to 100% |
| Developing M&E frameworks (including indicators and targets) for all health programs, unit and projects | Conducting 2500 cataract surgeries per year, correcting 20,000 children and adults refractive error, providing services to 6500 low vision individuals and screening 60% of school children | Increasing the No of PLWHAs accessing prevention services and commodities to 90% |
| Monitoring the implementation of the MOH strategic plan | Revitalizing National and regional Vision 2020 Committees to coordinate all eye care services and blindness prevention activities | Increasing survival of people after testing and those on ART by an average of 5-7 years |
| Designing, developing and maintaining electronic information systems to support M&E and health service delivery | Implementing a national health infrastructure development and maintenance plan, decentralizing the biomedical engineering unit to the regions | Reducing pediatric HIV by 30%. |
| Designing and carrying out major surveys and research projects, and produce and disseminate appropriate reports | Upgrading of the Mbabane Government Hospital to a national referral and tertiary hospital or construction of a new fully equipped hospital of 500 beds in a different location | Providing ART services to all PLWHAs eligible |

## MAIN EXPECTED RESULTS

| | | |
|---|---|---|
| Developing and implementing Standard treatment guidelines & protocols for major conditions based on Swazi Public Health Standards and norms for infrastructure, staff, equipment, management of each level of service rendered | Drafting and adopting a National Formulary | Ensuring provision of quality Home Based Care services to 100% of PLWHA in need. |
| Developing standards of services and costs in hospital care | Ensuring laboratory testing to monitor the response of patients to treatment of communicable and non-communicable diseases such as HIV, TB (MDR and XDR), cancers, malaria and diarrheas at all health care levels | Achieving 100% compliance in universal infection control procedures in all health facilities |
| Reforming and creating regulatory bodies | Elaborating and updating systematically technology inventories, assessment and maintenance scheme | Reducing the prevalence of STIs by a third |
| Ensuring public health safety from various environmental, industrial and chemical health hazards | Ensuring timely availability of safe blood and blood products in sufficient quantities | Reducing significantly the levels of HIV/TB co-infection and the burden of HIV in TB patients and TB in PLWHAs |
| Enforcing ethical practices in the delivery of health care | Establishing a pool of regular blood donors enrolled in a Swaziland National Blood Donor Register | Achieving 100% national coverage with community DOTS |
| Promoting the autonomy of the Mbabane Government Hospital and other health sector institutions | Promoting an essential package of services that will allow for post discharge rehabilitation for a period of up to six weeks; post discharge monitoring; step down services, providing early discharge to a residential or nursing home bed; respite care, that can be offered in either residential or nursing home facilities | Increasing TB cure rate from 42% to 80% |
| Enforcing registration, manufacture, importation, storage, sale, distribution, dispensing and use of pharmaceuticals, vaccines, health equipment and appliances, and other medical supplies | | Increasing TB treatment success rate to 85% |
| Ensuring the appropriate use and disposal of hazardous materials | | Increasing TB detection rate from 57% o 85% |
| Developing a financing system based on Social health Insurance, coordinating religious organizations, other non-profit and private-for-profit health and health related services | | Reducing TB prevalence from 1120 per 100,000 to 661 per 100,000 |

## MAIN EXPECTED RESULTS

| | | |
|---|---|---|
| Controlling of public advertising on health and health care and avoiding stigma and discrimination related to HIV/AIDS and other diseases<br>Developing ethical and quality principles to guide research<br>Producing and disseminating the Annual Swaziland State of Health Report<br>Establishing and managing a Research Ethics Committee<br>Setting national health research agenda and priorities and developing a critical mass in the Swazi scientific community conversant with health research methodology and protocols<br>Eliminating factors of cost and affordability as barriers to access to essential health care and obtaining significant additional resources for the health sector<br>Focusing the use of resources on the most relevant and cost-effective priority health interventions<br>Setting a remuneration system based on a mix of capitation and global budgets based on careful review and assessment of appropriateness and performance<br>Defining and supervising criteria for targeting public and donor resources to essential package of health care, based on evidence of effectiveness and with the greatest potential of reducing mortality and morbidity | | Reducing TB incidence from 1262 per 100,000 to 724 per 100,000<br>Reducing by half the burden of HIV in TB patients and of TB in PLWHAs<br>Increasing the % of persons diagnosed with TB who are tested for HIV<br>Increasing malaria control activities in the entire range of evidence based interventions, from vector control, to case management, surveillance information, epidemic and response and developing an elimination business plan.<br>Reducing the No of laboratory confirmed cases per year during malaria transmission season from 4000 (during 1995-2000) to 30<br>Reducing malaria hospital case fatality rate<br>Reducing the proportionate malaria attributed mortality and morbidity<br>Increasing to 100% facilities with trained health workers on malaria case management<br>Increasing the No of health facilities with capacity for correct management of malaria cases to 100% |

## MAIN EXPECTED RESULTS

| | | |
|---|---|---|
| Adopting socially acceptable health financing mechanisms such as community based financing, user fees, social health insurance and other prepayment schemes and strategies for enhancing the absorptive capacity of the MOH, fiscal discipline, accountability and budget performance<br>Adopting strategies for ensuring progressive increase in government investment in health towards the Abuja declaration 15% commitment and the Medium Term 2010 Budget Policy commitment of increasing allocation by at least 2% per year | | Increasing to 100% population that receive effective treatment for malaria within 24 hrs of the onset of symptoms<br>Increasing to 100% houses sprayed in target areas<br>Increasing to 100% identified vector breeding sites sprayed with larvicides<br>Increasing to 100% pregnant women sleeping under LLN<br>Increasing to 100% children under-5 sleeping under LLN<br>Increase to 100% households with at least one ITN<br>Monitoring insecticide resistance to IRS, LLN and larvicides<br>100% of malaria cases notified within 7 days of diagnosis<br>100% of malaria cases investigated within 7 days of confirmed diagnosis<br>100% of malaria epidemics identified and responded to within 2 weeks of onset<br>Procuring drug supplies, RDTs, reagents and slides in all health facilities<br>Conducting quality assurance for malaria rapid diagnosis test<br>Conducting indoor residual house spraying (IRHS) of dwellings in malaria prone areas<br>Assessing specific prevalence rates of urinary and intestinal bilharzia in the country<br>Strengthening snail control activities by replacing susceptible vector snails with non-susceptible snails; carrying out selective molusciciding; and/or applying Phytolacca Dodecodra (ENDOD) biological snail control methods<br>Procuring, distributing and ensuring consistent availability of praziquantel as a drug of choice for treatment, Kato laboratory equipment and supplies at all levels of health facilities as well as snail control equipment and supplies such as Bayclucide, Niclosamide and/or copper sulfate<br>Establishing a National and Regional Bilharzia Control Committee consisting the Ministries of Agriculture, Irrigation, Water, Education, Health, Public Administration and NGOs to coordinate the bilharzias control activities<br>Establishing test and treat (TAT) teams and train bilharzia assistants (health surveillance assistants) to test and treat using microscope and chemotherapy in communities and schools and to collect snails, urine and stool for examination |

## MAIN EXPECTED RESULTS

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|---|---|---|
| | | Establishing NCDs monitoring and surveillance system to collect routine data on prevalence of diet related NCD's, diabetes mellitus, hypertension and cancers, cardiovascular and neurodegenerative diseases<br>Establishing a program specially targeting children living with NCDs, especially Type 1 Diabetes<br>Reducing MMR from 229 per 1000 live births to 179 per 1000 live births<br>Increasing Contraceptive Prevalence Rate from 47% to 80%<br>Reducing teenage pregnancies from 25% to 15%<br>Targeting 100% of health facilities with youth friendly SRH services and delivering quality services for men<br>Targeting 100% communities (chiefdoms) sensitized about roles and responsibilities of men in RH, rights and responsibilities<br>Increasing of the proportion of skilled attendance at birth from 38% to 60%<br>Increasing of ANC Coverage (at least 1 visit) from 74.3% to 99%<br>Increasing Tetanus Toxoid (TT2) coverage for pregnant women from 50% to 80% (TT2+Immunisation 74.7% to 99%)<br>Achieving 100% antenatal care coverage with at least one antenatal visit during pregnancy<br>Increasing IPT coverage in pregnant women<br>Increasing supervised delivery from 70% to 95%<br>Increasing health facility delivery from 60% to 80%<br>Achieving at least two follow up visits during the first year after delivery to lactating mothers<br>Decreasing TFR from 3.8 to 3 children per woman<br>Reducing cases of sexual gender based violence<br>Developing a standard Essential Maternal and Reproductive Health Kit for every level of health care facilities<br>Developing kits for both normal and complicated vaginal deliveries, caesarean sections and all other obstetric operations and ensuring constant availability of life-saving equipment, supplies, and drugs<br>Defining minimum staffing standards necessary for the provision and maintenance of quality obstetric care at every level<br>Training health workers in Post Abortion Care (PAC)<br>Ensuring involvement of males in family planning programs<br>Strengthening of community based fertility control and FP interventions<br>Ensuring proper diagnosis and treatment of Chlamydiasis, Gonorrhoea, Syphilis, Trichomoniasis, Pelvic Inflammatory Disease and viral infections, such as herpes<br>Empowering communities, families and individuals to manage prevention, management and reporting of sexual gender based violence including its impact on the wellbeing and sexual reproductive health of community members |

## MAIN EXPECTED RESULTS

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|---|---|---|
| | | Training of at least 75% of health workers with responsibility to child health on IMCI (or at least one in each health facility)<br>Reducing the incidence of diarrheal diseases to 5% among children under 5 years of age<br>Increasing access to oral rehydration therapy (ORT) to above 90%<br>Reducing mortality due to diarrhea to 10%<br>Reducing annual diarrheal disease incidence to 15 per 1000<br>Reduction of mortality due to acute respiratory infections to less than 10%<br>Reducing mortality due to malnutrition to less than 5%<br>Increase and sustain routine immunization coverage at > 90%<br>Increasing DPT3 coverage from 92% to 100%<br>Increasing Polio 3 coverage from 87% to 100%<br>Increasing polio at birth coverage from 93% to 100% %<br>Increasing Hepatitis B 3 coverage from 91% to 100%<br>Increasing measles coverage from 92% to 100 %<br>Increasing TT2 coverage of pregnant women from 68% to 80%<br>Ensuring follow up of measles campaigns and community search for neonatal tetanus to facilitate elimination documentation<br>Improving and intensifying surveillance, prevention and control of acute flaccid paralysis, measles, neonatal tetanus, Haemophilus Influenza type B and adverse events following immunization (AEFIs) at all levels<br>Conducting measles, polio and tetanus supplementary immunization campaigns every four years and when confirmed cases occur<br>Providing Vitamin A at immunization sites<br>Enhancing injection safety and waste management, including the use of autodestruct syringes during campaigns<br>Conducting national immunization coverage surveys and operation research<br>Reducing stunting in the under five from 29% to 15%<br>Reducing underweight under-5s from 5% to less than 1%<br>Increasing exclusive breastfeeding at 6 months from 32% to 60%<br>Increasing % of children 6-23 months feeding according to minimum standards with respect to food diversity from 70% to >90%<br>Increasing Vitamin A supplementation coverage for children 6-59 months at > 90%<br>Ensuring that at least a third of children 6-23 months are consuming recommended Vitamin A rich foods<br>Increasing % households consuming iodated salt from 80% to 100%<br>Eradicating Vitamin A deficiency, Iodine deficiency disorders (IDD) through salt iodination and iodine supplementation and iron deficiency<br>Reducing the current levels of anemia among children 6-59 months from 42% to 20%<br>Reducing the current levels of anemia among women from 30% to 15%<br>Increasing % of women taking Vitamin A capsules from 44% to >80% |

## MAIN EXPECTED RESULTS

| | | |
|---|---|---|
| | | Increasing % of women taking iron tablets or syrup during pregnancy from 70% to >90%<br>Reducing perinatal mortality attributable to iron deficiency anemia from 20 % to 10%<br>Reducing maternal mortality attributable to iron deficiency anemia from 10% to 5%<br>Increasing % of women taking de-worming medication during their last pregnancy from 10% to 50%<br>Developing and enforcing a national code of marketing of breast milk substitutes<br>Promoting micronutrient supplementation including routine folate and Vitamin A supplementation for pregnant mothers during ANC and postnatal period for 6 – 8 weeks<br>Assessing food security and nutrition vulnerability and establishing sentinel surveillance sites at various levels e.g. health facility, community and households<br>Developing and implementing a comprehensive Multimedia Health Education and Communication Strategy<br>Providing training for journalists on health and ethical media reporting<br>Targeting all primary schools (public and private) to implement a national School Health Program, with health clubs, health open days every year, with safe water supply and adequate sanitation facilities such as pit latrines/toilet and hand washing facilities in accordance with national standards, with adolescent health services, promoting physical education and recreation<br>Providing timely and adequate drugs and materials to at least 90% of RHM<br>Training at least 90% of RHMs on growth monitoring of children under five years of age<br>Increasing safe water supply from 59% to >80%<br>Increasing improved sanitation facilities from 52% to >80%<br>Increasing safe waste disposal including human excreta facilities from 25% to >60% of households<br>Establishing community demonstration sites for sanitary facilities constructions<br>Conducting periodic assessment of air pollution levels at source in accordance with WHO guidelines in collaboration with Swaziland Environment Authority (SEA) and related NGOs and inspection of factories, workplaces, solid and liquid waste disposal sites, irrigation sites in collaboration with Swaziland Environment Authority (SEA)<br>Establishing epidemic and disaster early warning and response systems to ensure rapid response to all confirmed epidemics and disasters within 12-24 hours<br>Establishing risk assessment, monitoring, early warning and notification systems at all levels |

# CHAPTER FIVE: ENHANCING HEALTH SYSTEM CAPACITY AND PERFORMANCE

## 5.1 Strategic Objective (SO) 1: To reform and enhance the institutional capacity of the Ministry of Health to ensure efficient and effective performance of the core health sector functions at all levels.

The capacity to deliver quality services in Swaziland is constrained by a number of interlinked factors, such as weak management, planning, monitoring and evaluation capacity, lack of accountability, weak mechanisms conducive to a sector wide approach, facilitated by inter- and multi-sectoral coordination and regulated public-private partnership. Additionally, despite the efforts to decentralize the health system, the roles and functions of the different levels of the system are yet to be clearly defined while necessary re-orientation and capacity building have not essentially accompanied the decentralization process.

To be effective therefore, the health system at the national, regional, inkundla, community and facility levels will require increased and improved technical and managerial capacity in order to cope with the new and additional responsibilities that will come with the health sector reforms and decentralization. This would be achieved through the reform of the MOH and strengthening of the health sector's governance, leadership, management, regulatory and coordination capacity to ensure a coherent and consistent reorientation of the system at all levels. Specifically, efforts will be directed at the following key strategic priority areas:

- Strengthening the Governance and Management Capacity of MOH:
- Strengthening Financial Management and Administrative Support Systems
- Strengthening systems for Human Resource Development and Management
- Deepening Decentralization and Strengthening Regional and Community Based Health Systems
- Strengthening health sector Partnerships, Coordination and sector wide approach (SWAp)
- Strengthening Policy, Planning, Monitoring and Evaluation Systems
- Strengthening Regulatory, Standards and Quality Assurance Systems
- Strengthening Health Research and Knowledge Management Systems
- Strengthening Health Financing and Investment in health

### *5.1.1 Strategic Priority 1.1: Strengthening the Governance and Management Capacity of MOH*

The main functions of the MOH at the national level include policy formulation, standards and quality assurance; programming and planning; resource mobilization and allocation; capacity development and technical support to the lower levels of the system; provision of public health services, such as epidemic control, identified as public goods ; co-ordination of health services; monitoring and evaluation of the overall sector performance; policies related to human resources for health, including their certification, accreditation, deployment and retention; and international cooperation. At the regional level, it is the responsibility of the regional health administration to implement national health policies and plans; plan and manage regional health services; coordinate and supervise the health sector; provide disease prevention, health promotion, curative and rehabilitative services including vector control, health education, HIV/AIDS prevention and control, provision of safe water and environmental sanitation; and collect, manage, analyze, utilize and disseminate health information, among others.

Although the Government has embarked on re-organizing and restructuring the MOH in order to enhance its performance, the health system is still largely considered as inefficient and irresponsive (MOH (2007a). The NHSSP therefore aims to strengthen the governance and management capacity of MOH to effectively and efficiently perform and discharge its core functions including sector wide leadership. To achieve this, the MOH will seek to develop a national health sector institutional development strategy with the aim of enhancing the Ministry's long-term competence and performance. The institutional development strategy will mainly focus on building a distinctive organizational culture promoting values related to work processes and reward systems. Appropriate capacity building measures will be taken to develop best corporate documented governance and management procedures, practices and systems in order to engender institutional growth, efficiency, cost-effectiveness, responsiveness and sustainability.

The table below presents the key strategies and action points in strengthening the governance and management capacity of the MOH.

| **Strategic Operational Objective (SOO) 1.1:** To strengthen the governance and management capacity of MOH to effectively and efficiently perform and discharge its core functions including sector wide leadership. | |
|---|---|
| **Activities** | **Indicators** |
| 1. Finalising the proposed MOH organizational structure and rationalize the functions and task structure in line with the NHSSP<br>2. Conduct a comprehensive capacity needs assessment of the health sector and develop a human resources masterplan addressing capacity building, training, recruitment, deployment and retention strategies<br>3. Leadership, governance, management and supervision training for health sector leaders and managers<br>4. Establishment of Health Service Commission (HSC)<br>5. Strengthening the Management Information System at national, regional and facility levels<br>6. Improving ICT coverage and ensuring system-wide connectivity<br>7. Promote gender sensitive community participation and empowerment<br>8. Construction of MOH Headquarters building and regional health offices | 1. Availability of revised organizational chart<br>2. Availability of a national human resources masterplan<br>3. No and type of educational opportunities offered to leaders and managers and No of staff trained by event<br>4. An established and functional HSC<br>5. Availability of MHIS at each level of the system, flow and documented use of information for decision support<br>6. Availability of ICT standards and norms and their implementation<br>7. Inclusion of gender dimension in critical governance areas, such as areas gender budgeting, gender specific information and clinical records, gender disaggregated demographic data<br>8. Existence of MOH Headquarters building and regional health offices |

***5.2 Strategic Priority 1.2: Strengthening Financial Management and Administrative Support System***

Effective and efficient financial management and administrative support system is key to ensuring organizational effectiveness and delivery of quality services. However, the current system has been characterized as inefficient as indicated, eg., by the low absorptive capacity of the Ministry. The Strategic Plan therefore aims to improve the MOH capacity to provide those services that are necessary for the effective performance of the core functions of the Ministry. Ultimately, the Ministry believes that efficiency of the financial and administrative system will not only significantly influence the quality of services provided but also their final outcome, measured by improved quality of life of the health system final beneficiaries. Accordingly, one major indicator of the overall performance will be the proportion of budget absorbed, allocated and disbursed by the MOH.

The Plan will focus on strengthening financial management systems and accounting procedures; procurement and logistics management; public and media relations; physical development, transport and fleet management; and asset and inventory management. In strengthening financial management and accountability systems, the MOH will seek to ensure effective financial planning, timely financial reporting and transparent accountability. Both MOH and Regional health authorities will be supported to overcome current de-motivating factors such as ineffective pay roll management and salary payment delays and arrears. The MOH, in collaboration with the Ministry of Finance procurement and financial management units, will develop sector specific administrative manuals for implementing the annual operational plans and budgets. The Manual will outline the various procedures for procurement, disbursement, accounting, and financial management.

As part of its performance enhancing strategy, MOH will embark on a project for the development of MOH headquarters building and regional health offices equipped with suitable facilities. The MOH at present occupies the Ministry of Justice building and rented office facilities scattered in Mbabane and Manzini. In addition, MOH will endeavor to acquire the necessary vehicles, ICT and office furniture, and communication equipment, among other facilities, that add value to its key functions. The MOH will also put in place media

[9] Defined in: http://www.globalizationandhealth.com/content/3/1/9 (Smith and MacKellar, 2007) and at: http://www.who.int/trade/distance_learning/gpgh/gpgh1/en/index.html

and public relations desk to raise MOH public visibility, manage public and press relations, publications and ensure overall profiling of the health sector activities, services and best practices.

The table below presents the key strategies and action points in strengthening MOH financial management and administrative support systems.

| **Strategic Operational Objective (SOO) 1.2:** To strengthen MOH financial management and administrative support capacity to ensure maximum accountability, efficient resource utilization and delivery of quality health services. | |
|---|---|
| **Activities** | **Indicators** |
| Financial Management | |
| 9. Ensure efficient financial management including maintenance of accounting and financial records<br>10. Establish a Financial Management Information System at all levels<br>11. Establish an internal Audit Unit within MOH | 9. Improved expenditure performance and accountability and Financial Analysis Report availability<br>10. Financial Management Accountability systems in place<br>11. Internal Audit Unit activated and No. of audit queries managed quarterly |
| **Administration, Procurement and Logistics Management** | |
| 12. Develop sector specific MOH administrative manual and procedures, including standard requirements for procurement and financial management of projects funded by government and donors, preparing to move towards a comprehensive sector wide approach<br>13. Develop a legal framework to strengthen the National MOH Procurement Committee<br>14. Establish Regional Health procurement Committee<br>15. Recruit MOH's own procurement personnel<br>16. Establish logistic management information system<br>17. Establish and maintain asset inventory management system for the MOH<br>18. Establish media and public relations desk at the MOH<br>19. Develop a MOH media and public relations (PR) strategy | 12. Existence of Administrative manual for procurement and disbursement and degree of adherence to standard requirements by donors<br>13. Legal Framework (Procurement Bill) available<br>14. Regional Health procurement Committee established<br>15. Number of proposed staff identified and recruited<br>16. Logistic and functional management information system established<br>17. Effective Asset Inventory system<br>18. Media desk established and trained staff deployed<br>19. Strategy conceived and PR originated communication available on media |

***5.3 Strategic Priority 1.3: Strengthening systems for Human Resource Development and Management***

Human resources are one of the most important assets of the health system with direct bearing on the quality of services, productivity and performance of the sector. However, as indicated in the Chapter 1 of this Plan, the health sector in Swaziland is facing a chronic human resource crisis. The sector is not only facing a severe shortage across all cadres at all levels but it is also experiencing an increasing exodus of the already diminished skilled health workers from the public sector either to the private sector or abroad. This has been mainly attributed to various factors including lack of career progression, unsatisfactory terms and conditions of service, poor working environment and lack of incentives, including promotions. At the same time, the majority of the health workers are concentrated in only two cities, namely Mbabane and Manzini.

On the whole, the human resources for health crisis in Swaziland is mainly due to lack of planning capacity at the MOH with the existing training institutions lacking the ability to produce and supply the required volume and type of human resources needed. As a result, Swaziland depends largely on foreign experts to satisfy its needs in the health sector . Exacerbating this situation is the general lack of a comprehensive

dedicated information system integrating all health disciplines. In the context of decentralization and health sector reform in general, the human capital needs of the decentralized health system pose even greater challenges, as they demand significant upgrading of technical, operational and management capacities at all levels.

In response to the current crisis therefore, the MOH intends to finalize the development of the National Human Resource for Health Policy and move to develop the National Human Resources for Health Strategy. The main objective of the Strategy will be to attain by the end of the NHSSP period (2013), at least 75% of the minimum staffing norms at each level of the health system. Specifically, the strategy will seek to:

- Establish parameters and mechanisms for addressing issues of equity in distribution of health workers
- Address issues of terms and conditions of service including working condition and safety of health workers
- Rationalize recruitment and deployment of staff and establish incentives to motivate the workforce and reduce the attrition rates
- Build the national and regional capacity in human resource planning and management capacity
- Establish national health sector human resource observatory and management information system for Swaziland
- Enhance capability of local health training institutions in collaboration with the Ministry of Education and Public Service
- Establish a national staff development, training and continuing education program to improve management and technical skills of health workers and
- Establish parameters and mechanisms for ensuring and measuring performance and productivity at all levels

Institutionally, the MOH will establish the National Health Service Commission in accordance with the Constitution of Swaziland to deal with issues of terms and conditions of service for health workforce. The Health Services Commission Bill will determine the operational aspects of the Commission and will establish a code of conduct applicable to all health workers.

Capacity building for staff at all levels will be intensified and as a priority, there will be a deliberate effort to build human resource management and planning capacity at the national, regional and hospital levels. The MOH, in collaboration with the health professional councils, will therefore conduct national training and capacity needs assessment and gap analysis as a basis for the establishment of a national training and capacity building program for health workers. In addition, the MOH will carry out a sector wide audit of skills and staffing patterns at the different levels and sectors of the health system in order to come up with skills and staffing profile of the country health workforce. These will form the basis for the development of the National Human Resource For Health Strategy, National Human Resource For Health Policy and National Training and Capacity Building Program for the Health Sector. A key strategic focus of the training and capacity building program will be securing improvement in health system efficiency, effectiveness and quality of services. The MOH will, in collaboration with the Ministry of Public Service and Information, review the schemes of service of all cadres.

As part of the health sector human resources strategy, the MOH will review its human resource establishment at national and regional levels in order to re-align it with strategic tasks outlined in this Plan, and undertake specific measures to ensure an effective human resource mix responsive to the health sectors strategic needs. The MOH will also seek to train and upgrade nurses and create posts for nurses with advanced degrees and specialist training to provide additional avenue for career growth.

To address the problem of human resource shortage and capacity, the MOH will

- Establish middle level pre-service and post basic medical training college to provide certificate, diploma and higher national diploma courses in nursing, clinical medicine, pharmacy, laboratory, dental health, orthopedics, ophthalmology, public health, medical engineering etc.
- Establish a national scholarship and fellowship scheme to support post-graduate medical training for Swazi doctors outside Swaziland

[10] From the service availability mapping report from the 119 doctors working full in its studied 154 health facilities Swazis accounted for about 38% (WHO 2006).

- Establish a national training program for Rural Health Motivators and other community based health workers
- Develop a training program for administrators and health managers
- Strengthen the capacity of the Personnel Department and of the Training Unit at the MOH
- Establish a national continuing education program in collaboration with the professional councils
- Establish linkages with overseas institutions to provide specialized training in health

In terms of professional development, the Plan intends to strengthen the capacity of professional bodies and associations including supervision mechanisms to ensure effective enforcement of professional standards, ethical practice and professional qualifications. In addition to the existing medical and nursing councils, the MOH will facilitate the establishment of councils for allied health professionals as well. The MOH will endeavor to strengthen the existing licensing, registration and accreditation systems by developing, reviewing and amending appropriate legislation, rules and regulations. The MOH will institutionalize continuing medical education and establish a national continuing education program in collaboration with the professional councils, and promote linkages between the Swaziland professional councils and associations with the various relevant regional and international professional bodies.

The table below presents the key strategies and action points in strengthening systems for health sector human resource development and management.

| **Strategic Operational Objective (SOO) 1.3:** To strengthen the human resources management systems and capacity and realize at least 75% of the minimum staffing norms at each level of the health system by 2013. | |
|---|---|
| **Activities** | **Indicators** |
| **Human Resource Policy and Management** | |
| 20. Finalization and adoption of the National Human Resource for Health policy<br>21. Finalization and adoption of the National Human Resource for Health strategy<br>22. Establish a human resource management and planning system at the national, regional and hospital levels<br>23. Review systems, guidelines and tools for periodic appraisal and evaluation of staff performance<br>24. Carry out a sector wide analysis of skills and staffing patterns at the different levels and sectors of the health system and define skills and staffing profile of the health system<br>25. Review human resources management policies and improve the schemes of all the cadres in collaboration with MOPSI to support staff retention and motivation | 20. Availability of the National Human Resource for Health Policy<br>21. Availability of Human Resources for Health Strategy<br>22. An effective human resource management and planning system at the national, regional and hospital levels<br>23. Reviewed tools for periodic appraisal and evaluation of staff performance<br>24. An inventory Skills audit Report<br>25. Approved Schemes of Service |
| **Training and capacity building** | |

| | |
|---|---|
| 26. Conduct national training and capacity needs assessment and gap analysis<br>27. Restructure the MOH Training Unit to a strategic level<br>28. Establish middle-level pre-service and post-basic medical training to provide certificate, diploma and higher national diploma courses in nursing, clinical medicine, pharmacy, laboratory, dental, orthopedic, ophthalmic, public health, medical engineering etc<br>29. Establish a national scholarship and fellowship scheme and training program to support post-graduate health and medical training for health professionals, administrators and managers within and outside Swaziland<br>30. Establish a national training program for Rural Health Community Workers<br>31. Establish linkages with overseas institutions to provide specialized training in health<br>32. Conduct training on Quality management and assurance | 26. National training needs assessment report<br>27. Upgrade the head to management level and an adopted Training policy<br>28. An established college and No. and range of graduates produced by the training institutions and % absorbed by the sector<br>29. Scholarships and Fellowships for post graduate established and No and type of grants delivered<br>30. Curriculum and training plan available and No and type of staff trained<br>31. Formal MoUs linking overseas institutions to their Swazi counterparts<br>32. No and type of staff trained and No of quality improvement projects implemented |

***5.4 Strategic Priority 1.4: Deepening Decentralization and strengthening regional and community based health systems.***

The overall purpose of decentralization is to ensure easy access to government services and to make service delivery more efficient, effective and appropriate to the specific needs of end users and beneficiaries. The purpose of the MOH decentralization program is therefore to facilitate equitable, timely, efficient and cost-effective management of the health system and delivery of health services. Specifically, it is the aim of decentralization program to devolve authority and responsibility in the implementation, management, coordination, monitoring and evaluation of health services. Some of the foreseen key strategies include the promotion of bottom up integrated planning; capacity building and enhancement of skills of regional and community based health institutions; intersectoral coordination; and sensitization, mobilization, organization and empowerment of communities to participate in decision-making and program activities.

Decentralization process within the health sector has however not functioned as expected. Some activities that should be executed at regional level continue to be addressed by the national level while the capacity of regional management structures is still inadequate. In particular, the decentralized health systems are constrained by:

- Lack of clearly defined organisational and task structure
- Inadequate staff knowledge and practical skills in health management
- Weak governance and management systems impacting particularly on financial and human resources management
- Lack of defined governance and management guidelines
- Weak planning, budgeting and M&E capacity
- Weak health information systems
- Lack of capacity to ensure effective coordination among stakeholders
- Shortage of qualified personnel
- Inadequate funding and non-adherence to the budget
- Poor infrastructure and office facilities

To address these challenges, the NHSSP prioritizes the need to deepen the implementation of the health sector decentralization process and strengthen the capacity of the decentralized systems in order to ensure efficient and effective management and delivery of health services. In line with the Decentralization Policy, the roles of the Regional Health Authorities will be redefined and include responsibilities and skills relevant to health services delivery; recruitment and management of personnel for regional health services; formulating and implementing by-laws related to health; planning, budgeting, mobilization and allocation of available and possibly additional resources for health services.

The Regional Health Management Team will be strengthened and their role enhanced. To ensure effective operations of the regional health system, the organizational structure, roles and responsibilities at the regional level will be reviewed and restructured and its linkages with the political, administrative and technical arms of the various levels of the health system and related government departments will be defined. Building of the leadership and management capacity of the regional health authorities will also remain a high priority during the implementation of the NHSSP.

Functionally, while the central MOH will seek to empower the regional and the other decentralized structures to function autonomously, the MOH will relate to the regions in executing their roles by:

- Developing service standards and guidelines for service delivery and management, facilitated and coordinated by the Quality Assurance Unit (QAU) and led by Technical Departments
- Ensuring that the annual planning and budgeting cycle is strictly implemented by providing Health Policy and Planning Department's technical support
- Conducting pre-planned quarterly support supervision visits organized and coordinated by the QAU
- Carrying out regular biannual visits to supervise and provide Technical Departments' technical support
- Conducting emergency visits depending on need
- Coordinating and providing administrative support to overcome current de-motivating factors such as ineffective pay roll management, salary payment delays and arrears and lack of appreciation
- Coordinating and providing support in matters of epidemic and disaster prevention, preparedness and management; and
- Providing technical support on identified areas of need, based also on regional requests

The Plan will seek to promote gender sensitive community participation and empowerment. In this respect, the role and capacity of Rural Health Motivators (RHMs) will be strengthened and Community Health Committees or similar structures established in every community . The RHMs and Community Health Committees will be responsible for:

- Identifying the community's health needs and taking appropriate measures
- Mobilising additional resources and monitoring utilisation of all resources for their health programs including the performance of health centers and clinics
- Mobilising of communities using gender specific strategies for health programs such as immunisation, malaria control, sanitation and construction, and promoting health seeking behavior and lifestyles
- Maintaining a register of household members and their health status; and
- Serving as the first link between the community and health providers

To achieve its decentralization objectives, the MOH will closely collaborate and coordinate with the Parliamentary Decentralization Sub-Committee (PADESCO), Cabinet Decentralization Sub-Committee (CADESCO), National Decentralization Program Consultative Forum (NDPCF), the National Decentralization Program Coordination Committee (NDPCC) and he National Decentralization Program Coordination Directorate (NPDCD). The MOH will also align its strategic programs and service delivery activities with the decentralization structure at the regional, Inkhundla, urban government, chiefdom and community levels.

The table below presents the key activities and related indicators within the health decentralization and strengthening of the regional and community based health systems strategic objective.

| **Strategic Operational Objective (SOO) 1.4:** To deepen the implementation of the health sector decentralization process and strengthen the capacity of the regional and community based health systems to ensure efficient and effective management and delivery of health services. | |
|---|---|
| **Activities** | **Indicators** |
| 33. Establish National Health Sector Decentralization Committee (NHSDC) to oversee,, facilitate and coordinate the decentralization implementation process within the health sector<br>34. Review the organizational structure, roles and responsibilities at the regional level reflecting relations between the national and regional organs of the health systems<br>35. Conduct regional health systems capacity needs assessment<br>36. Develop regional health sector strategic plans<br>37. Strengthen the Regional Health Management Teams<br>38. Develop policy guidelines to align health sector activities and service delivery with the national decentralization structure at the regional, Inkhundla, urban government, chiefdom and community levels<br>39. Collaborate and coordinate with the national decentralization structures such as PADESCO, CADESCO, NDPCC and NPDCD | 33. National Health Sector Decentralization Committee established<br>34. Reviewed organizational structure, role and responsibility<br>35. Capacity needs reviewed and a comprehensive report drafted and published<br>36. Regional plans drafted and adopted<br>37. Regional teams fully staffed, ToRs defined and adopted, No of supervisory visits done per quarter<br>38. Guidelines available at each level of the system and regional organizational charts and organigrams adopted<br>39. No. of collaborative and coordination meetings with other national decentralization structures |

***5.5 Strategic Priority 1.5: Strengthening health sector Partnerships, Coordination and Sector wide approach***

With increased number of partners participating in the health sector over the last few years, the MOH believes that nurturing and coordinating partnership efforts within a common framework is key to the overall realization of the health sector objectives. In particular, strengthening the health sector partnerships, coordination and a proper strategy to promote a sector wide approach are considered key to ensuring enabling policy environment, fostering exchange and sharing of information and best practices; promoting joint and cooperative actions and maximizing the use of available resources. The NHSSP therefore aims to establish enabling institutional mechanisms to promote and manage health sector coordination, public-private partnerships and a comprehensive sector wide approach in Swaziland.

The four main categories of health sector partners and stakeholders include Non-Governmental Organizations (NGOs) and missions; private sector; development partners; and other relevant government ministries and departments. The NGO and mission stakeholders are already involved in close working relationship with the government and are considered an integral part of the health service delivery system. They provide a wide range of curative, preventive and rehabilitative services. As a priority, the Ministry will review the level of support and subventions to NGOs and mission health care providers and efforts will be directed at improving systems for co-ordination, information sharing and accountability (based also on recertification and accreditation procedures as well as a clear definition of volume and type of services required and related remuneration schemes and procedures). The MOH will encourage CANGO and Swaziland Council of Churches and individual mission health providers to establish their respective health fora to encourage intra sector coordination and dialogue on health matters.

As to the private sector including industry and private health institutions, the NHSSP intends to scale up their involvement through the establishment of an appropriate institutional mechanism to promote and manage public-private partnerships (PPPs) in the health sector. The MOH will also seek to encourage and facilitate them through contracting out non-core services in public health institutions; promoting their investment in tertiary health care, providing incentives for investment in the development of medical

centres of excellence, and strengthening systems for the supervision and regulation of private health care providers. The MOH will work closely with the Swaziland Business Council and Swaziland Federation of Employers to establish the Swaziland business forum on health (SBFH).

The traditional sub sector will be encouraged to forge greater co-operation with the formal allopathic health sector. The Ministry will establish a training program for traditional healers on appropriate preventative, curative and palliative care especially in relation to conditions where traditional medicine may be found to be effective. The Ministry will develop policy guidelines and regulations for traditional practitioners in collaboration with the Traditional Practitioners Association. The MOH will further initiate a Bill on Traditional Medicine to recognize, co-ordinate and regulate their practice.

In terms of international partnerships, aid agencies have increasingly become active in providing development assistance to Swaziland and are currently playing a significant role in supporting the health sector. Among these are:

- The United Nations (UN) agencies such as WHO, UNICEF, UNFPA, UNAIDS, WFP, FAO, UNDP under the United Nations Development Framework (UNDAF)
- The Global Fund to fight HIV/AIDS, TB and malaria
- Multilateral lending agencies such as the World Bank and the African Development Bank
- Bilateral agencies such as USAID, Italian Cooperation, JICA, Taiwan and China Government, CIDA and European Union, among others
- The global health partnerships such as the Bill and Melinda Gates Foundation, Health metrics Network; Clinton Foundation and
- International NGOs such as IPPF, among others

With the increase in the partners' interest in the health sector in Swaziland, the MOH shall be establishing a Sector Wide Approach (SWAp) to coordinate donor health related initiatives and funding. It is believed that the adoption of SWAp will bring about many benefits including improvement in aid effectiveness and coordination of donor initiatives, minimizing duplications, promotion of joint actions/missions among development partners and greater alignment of development assistance with government investment in health, strengthening of transparency and accountability in aid administration and management, and harmonization and rationalization of both government and development partners strategies. Thus, the MOH will work closely with the Development Partners to establish a Swaziland Health Partners Coordination Consortium (SHPCC) based on the key concepts of SWAp. The purpose of the SHPCC will be to:

- Provide a basis for improving dialogue between the government and development partners
- Provide a basis for promoting joint initiatives, missions and reviews among development partners
- Reduce duplication of development assistance and donor efforts in relation to the government initiatives
- Encourage multi-sectoral approaches and management of crosscutting health issues such as population, gender, HIV/AIDS, governance and environmental protection within the health sector
- Strengthen the MOH's leadership of the health sector and national ownership of the health sector development processes
- Ensure the alignment of development partners' support with the national health policy and strategic plan priorities
- Ensure harmonisation of donor procedures, country systems and management of health resources on the basis of desired national health sector results and
- Ensure mutual accountability in relation to resource flow and results achieved through the implementation of a mutually agreed health sector strategic framework.

At the government level, MOH will promote intersectoral collaboration and dialogue among various government ministries especially on crosscutting issues. In particular, the MOH will work closely with all central and line Ministries in the implementation of the NHSSP and related programs. Where necessary, the MOH will convene an inter-ministerial committee on health.

Overall, the NHSSP envisages establishing a national health sector stakeholders' forum (NHSSF) to promote collaboration, dialogue and information sharing among all the stakeholders. Other specific

common working arrangements will be agreed by all or specific parties especially in the areas of planning, budgeting, disbursement, program management, procurement, supportive supervision, accountability and reporting, monitoring and evaluation.

The table below presents the key strategies and action points in strengthening health sector partnerships, coordination within a sector wide approach.

| **Strategic Operational Objective (SOO) 1.5:** To establish enabling institutional mechanisms to promote and manage health sector coordination, public- private partnerships within a sector wide approach | |
|---|---|
| **Activities** | **Indicators** |
| 40. Conduct an appraisal of the health sector stakeholders landscape and maintain a database of various stakeholders and players involved in areas of strategic interest to sector<br>41. Improve systems and policy guidelines for effective co-ordination, information sharing and accountability of all providers<br>42. Promote Civil society organizations and individual mission health providers to establish respective health forums to promote intra sector collaboration and dialogue on health sector issues<br>43. Establishment of an appropriate institutional mechanism to promote and manage public-private partnerships (PPPs)<br>44. Work closely with Development Partners to establish a Sector Wide Approach (SWAp) mechanism | 40. Database of stakeholders and players compiled and maintained and listing of providers produced and updated quarterly<br>41. No. of partnership agreements signed and No of coordination meetings and review mission held per year<br>42. No. of conferences, fora and symposia held and No. and range of joint actions undertaken within the NHSSP framework per year<br>43. Availability of a PPP policy and No and type of joint actions undertaken per year<br>44. Development of Terms of Reference of SWAp, existence of SWAp Committees and No of sectoral plans produced and implemented |

### *5.6 Strategic Priority 1.6: Strengthening Policy, Planning, Monitoring and Evaluation Systems*

To ensure sustained improvement in the functioning and performance of the health sector, health sector reforms put emphasis on building enabling policy environment and effective systems for planning, monitoring and evaluation. This is particularly important in the context of the declining health status of the population, inadequacy of government resources to support health care, increased involvement of the private and non-governmental organization (NGO) actors in the health sector, increased role of market forces in the management and delivery of health care, increasing number of development partners supporting the health sector and ongoing implementation of decentralization policy within the health sector. More importantly, the desire to ensure universal equitable access to minimum standards of health services makes the need for reliable and evidence based policy, planning, monitoring and evaluation systems urgent. Moreover, there is a need to understand the major challenges related to the transitions Swaziland is currently facing:

- demography, with an increasing population of orphans and single parent families, a decrease in the overall life expectancy due to HIV/AIDS and, at the same time, a growing proportion of elderly in the society among those unaffected by HIV/AIDS;
- culture: due to a sharp increase in communication means coverage and consequent (unprotected) exposure to global issues, a raising demand for specific services (very often media induced and oriented towards alternative and complementary practices), with several induced hazards due also to unnecessary medical services/practices, and to defensive medicine inevitable development;
- epidemiology, with an increase in total mortality and a partial, relative decrease in fertility, a growing impact of HIV/AIDS and related pathology, more chronic patients successfully treated with antiretrovirals, a dramatic shift in the morbo-mortality due to TB, and especially an emerging,

[11] Monitoring & Evaluation (M&E)' refers to the development and maintenance of systems (including frameworks, targets and indicators) to routinely measure the progress or performance of programmes, projects or plans, and to periodically assess their relevance, efficiency, effectiveness, outcomes, impact and sustainability

[12] 'Health Management Information Systems (HMIS)' refers to the development and maintenance of systems (both paper-based and electronic) to routinely collect, process, analyse and disseminate health management information

though neglected outbreak of NCDs and (traffic) accidents, with little information on occupational diseases. An underestimated proportion of the Swazi population is suffering from such diseases as diabetes, hypertension, cardiovascular and pneumo-obstructive conditions and cancers. Their complications, mainly due to lack of timely treatment, poor guidelines and protocol designs and implementation, account for a large proportion of hospital admissions and expensive referrals abroad. A part from anecdotal evidence, almost nothing is known about morbidity related to environmental hazards, especially on long term effects of pollution, water and sanitation schemes, industrial investments. Indeed the overall success of health system depends to a great extent, on the effectiveness of the policy, planning, monitoring and evaluation systems and structures put in place to amend the current constrained situation;

- economics, whereas the family budget and revenues are constrained, unemployment is rampant, the global crisis has inevitable consequences over the fragile economic system of the country, more and more squatters move to periurban poorly served areas, and the unprecedented economic impact of HIV/AIDS has still to be fully understood in Swaziland.

Although a number of health policies have been formulated and the government has made several international and regional health policy commitments in the last few years, the weak technical capacity to translate them into action plans, programs and services remains a major challenge. Furthermore, due to lack of capacity, various policy initiatives are not only donor driven but, most often than not, they remain in draft form for a long time. Based on the current structure, regions and communities have little opportunity to contribute to policy development and implementation. Essentially, even though policy formulation must be centrally coordinated, a more structured participatory process for reviewing policy options needs to be established. This would require explicit mechanisms to facilitate each level stakeholders' participation to decision making processes.

In relation to Health Management Information Systems (HMIS), the system as currently established lacks the capacity to generate comprehensive, appropriate, accurate, timely and available information to support decision making. The MOH operates a fragmented data based information system throughout the health system. At the central level, it is acknowledged that there are a number of stand-alone information systems within the sector. Each system tends to support a vertical program reporting function and there is little horizontal integration. As a result, essential information is largely unavailable for effective planning, monitoring and evaluation at regional, local or national levels beyond the respective programs.

A modern HMIS is essentially based on patient generated data, collected and updated at each medical encounter, irrespective of, place, level and provider. These data are fully integrated with facility related data, such as staff, infrastructure, commodities and consumables, technology assessed for their budgetary implications and. Finally demographic data must also be consistent and usable within one general, coherent framework. It is only in this way that a valid and comprehensive M&E system can be designed that automatically generates benchmarks against which performances can be assessed and possible remuneration systems developed (e.g., to set and control hospital budgets and contributions to the private sector against measurable outputs).

In general, the following observations have been made on the functioning of the health management information system:

- Utility of data in decision-making is not appreciated while data are inadequately and inefficiently integrated into the managerial process
- Performance criteria and standards, health system and health status indicators are not defined at various levels of the system and the correlation between inputs and outputs or outcomes is not assessed
- The system lacks standardized data collection and reporting formats and guidelines
- The roles and responsibilities of different stakeholders at each level of the health system are not defined
- The information and communication technologies regarding information collection, processing, analysis and dissemination are insufficient
- The system lacks inbuilt documentation procedures to monitor data flow and quality, and lacks the capacity to validate data and grant feedback to data providers

- Medical and administrative audits are not documented and difficult if not impossible to conduct

Although the MOH has made significant progress in strengthening Monitoring & Evaluation (M&E) and Health Management Information Systems (HMIS) in recent years, many challenges still remain. There are significant skill gaps amongst M&E and HMIS staff, with large numbers of non-qualified data-entry staff, and a shortage of degree-qualified specialist staff. There is significant fragmentation and duplication of M&E and HMIS functions, with a variety of data collection tools deployed by various programmes and units, and no central coordinating body for M&E. Staff and resources for M&E, HMIS and research are for the most part split evenly between two units: the Ministry's Health Statistics Unit (HSU), and the M&E Unit within the Ministry's National AIDS Programme (SNAP).

As to planning, although the MOH has a Health Planning Unit with two staff seconded from the Ministry of Economic Planning, this lacks a clearly defined mandate. The Unit deals with unstructured and need and demand based tasks, from budgeting, policy development, planning, coordination, event organization, formulation of partnership agreements and MOUs, infrastructure development and research, among many other responsibilities. Administratively, the loyalty of the two planners in MOH remains with the parent Ministry of Economic Planning, which affects the strategic development of the Unit capacity. At the regional level, there is no defined health planning systems. The regional health systems also have weak linkages with the national framework for health development, planning and budgeting.

Moreover the main task of the Unit would be to support and inform an evidence based policy making mechanism. In fact better use of evidence in policy and practice can help reduce poverty and improve economic performance, health policy (per se a multi and intersectoral issue) should be based on and make use of, a wide breadth of evidence, not just empirical data. In this respect essential research functions should focus on the generation of evidence needed to drive policy and strategic decisions, at the same time safeguarding its inbuilt ethical dimensions and capacity to devise risk management and minimization procedures. One major task in the policy formulation process is the apparent lack of consistence and coherence when health issues are considered. Several Ministries and several chains of command should interact within a centrally managed regulatory and gender sensible impact assessment mechanism, that shall be developed and systematically implemented by the Unit, aiming to improve the chain of causality between evidence and advice, designing precise, targeted regulations that achieve overall harmonization.

Similarly, the MOH does not have defined monitoring and evaluation procedures and policy for the health sector is inevitably left to occasional decisions based on priorities very rarely based on evidence of need and almost never on a science based review of available best practices and validated actions. In particular, the MOH lacks the capacity to:

- Collect and produce timely coherent and quality information to support and document health sector policy, planning and decision-making with the needed analytical competence (no medical epidemiologist is currently available at the MOH) addressing impact assessment and appraisal on long term consequences and implications of current decisions, that include the economic dimensions and analytical capacity (e.g., producing cost-benefit and cost-utility reviews)
- Facilitate dissemination of information, experiences and best practices within the health system in relation to other national social and economic development systems
- Integrate existing databases and information systems. At present various vertical programs have created their own information, monitoring and evaluation systems which are not linked with each other and
- Support sector monitoring and evaluation processes at the regional, community and health facility levels based on the decentralized governance system and on robust and homogeneous IT technology
- Plan and conduct medical and administrative audits

Overall, the MOH has low institutional, human resource, infrastructure and ICT capacity to fully operate an effective and comprehensive planning, monitoring and evaluation function. It is therefore one of the NHSSP aims to establish an effective institutional mechanism and build the MOH capacity to adopt an

[13] 'Research' refers to the full range of health-related research, including questionnaires, field surveys, operational research, evaluations, desk research and clinical research (all three references from: MOH, Review of the Structures, Roles and Locations of the SNAP M&E Unit and Health Statistics Unit, Review Report, September 2008)

effective strategy for improving data and information collection and analysis. To achieve this, the MOH will establish a fully-fledged department to oversee and perform the needed policy, planning, monitoring and evaluation functions.
In particular, a national M&E function will be aggregated at the MOH, to incorporate three sub-functions for Program Monitoring, HMIS and Research. These functions will come under the broader Planning function, which in turn reports directly to the Principal Secretary. In particular:

**Program Monitoring will**

- develop and implement an M&E Strategic Plan for the health sector
- develop M&E frameworks (including indicators and targets) for all health programs, unit and projects
- monitor the performance of health programs, units and projects
- guide the HMIS unit in designing appropriate monitoring reports
- work with the Research Unit in designing evaluation projects
- coordinate the compilation and production of sectoral quarterly and annual reports
- support MOH senior management in conducting monthly, quarterly and annual review meetings with regions, programs, units and projects
- monitor the implementation of the MOH strategic plan
- provide secretariat support to the Health Sector M&E Steering Group/TWG
- build M&E capacity, including training health sector staff on all aspects of M&E

**HMIS will:**

- design and distribute integrated data collection and epidemiological surveillance tools for all for health programs and units, based on the M&E frameworks developed by Program Monitoring
- design, develop and maintain electronic information systems to support M&E and health service delivery
- develop a data warehouse, and act as the MOH's central collection point for health-related data and management information
- develop (with guidance from Program Monitoring and individual programs and units) a wide range of reports for use by the MOH and its partners
- develop and implement health-sector-wide date quality assurance and data protection (confidentiality) processes and guidelines
- provide secretariat support to the Health Information Systems Coordinating Committee (HISCC)/ TWG
- build capacity for evidence-based management, including training health sector staff on date collection, analysis & use

**Research will:**

- identify (in consultation with policymakers, Program Monitoring, and the Planning Unit) the research needs of the health sector
- develop and implement a Research Plan for the health sector
- develop close links with research bodies and institutes in Swaziland
- design and carry out major surveys and research projects, and produce and disseminate appropriate reports
- assist programs and units with the design and delivery of minor surveys and research projects
- design and commission external surveys and research projects from partners and consultants
- monitor the implementation of recommendations from completed studies
- provide secretariat support to the MOH Research & Ethics Committee
- provide training to health sector staff on research methods and research design.

**The system architecture can be foreseen as follows:**

**i. Community mapping to be done by field workers (RHMs)**

- **Information to be collected (minimum):** family dwelling and location, age and gender composition of the family, pregnancies (with due date), vaccinations, participation to feeding schemes, disabilities.
- **Modality:** family files, possibility of simple maps for subsequent GIS. Weekly updates desirable, monthly is acceptable for the first piloting period. Feedback from the RHM and PHC at set

intervals (first quarterly then monthly) are essential and has to be part of a routine supervisory audit.

- **Data flow:** from RHMs to local Health Centre and PHC and to Region at weekly intervals.
- Training: training of the RHMs is needed; The training components shall be: basic health and information literacy, basic analytical skills, basic database compilation skills. These skills are essential and should become the core component for training at this level
- **Notes:** this is the foundation of the whole system. MIS need to be citizen based with entries for each member of the community and linked with the family to let family generated and/or based risk factors become visible and addressed by epidemiologic investigations. Information on family location would allow any further GIS development if needed.

This level is the lowest, but most important source of information and becomes the backbone of the database that will be filled with additional information at the other levels. This is the level where the poor, the most in need, the excluded, the deprived become part of the system. They are part of the fabric of the community, but invisible to systems that are not based on a comprehensive health census. Mapping communities and building their (needs) profile means to actively search for clusters of population otherwise missed. Gender mainstreaming starts at this level. The information collected at this level is the main source for community based health planning. This may also enable a proper disease surveillance system as foreseen by the MOH within disease oriented programs.

**ii. MIS Organisation at Health Centre level**

- **Patient Based activity data to be done by Nurses**
- **Information to be collected (minimum):** name, age and gender (if not already available in the family file, and gender sensitive data), family, and note if the service provided is linked to a vertical program.
- **Modality:** use of family files, developed in simple maps for subsequent GIS. Better if all computerised, but pen and paper acceptable if at the PHC level data entry is available. Data collection has to be done in real time.
- **Data flow:** from sub-centre to PHC at weekly intervals. Feedback from PHC at monthly intervals
- **Data flow:** to PHC at weekly intervals. Feedback from PHC at monthly intervals.
- Training: Training of Nurses is needed and has to be done in conjunction with the RHMs. The training components should be: computer literacy, analytical skills, basic database compilation skills
- **Notes:** This is the level at which the contacts with the health service start to get included in the MIS and may be analysed. This is an intermediate level where physician generated data (i.e., aggregated and partially analyzed, indicating also service related information) is not yet included. Given that most information is referred up to the next level (PHC), computers are not strictly necessary, but may be helpful if connectivity and power are available. Frequent meetings with RHMs are needed in order to maintain and update the family files, in particular in the case of events related to vertical programs (e.g. Immunisation Days, Family Planning Campaigns, HIV/AIDS VCT camps and similar). Gender relevant data start to be put in a more general context at this level.

**iii. MIS Organisation at PHC level:**

- **Patient Based activity data** collected at each encounter between a community member and the health service plus merging of the data flowing up from the lower levels. Information has to be collected by dedicated health professionals.
- **Information to be collected (minimum):** name, age and gender (if not available already from family files and gender sensitive data), type of services provided, diagnoses, treatment, clinical tests, referrals, and note if service provided is linked to a vertical program
- **Modality:** Computerized database of family files, developed in simple maps for subsequent GIS. Dedicated human resources for data entry have to be provided (health professionals' shared time or specialized clerks) and minimum computer literacy is necessary. Data collection mostly done in real time (data entry and merging may be concentrated at regular intervals).
- **Data flow:** from PHC to Region at weekly intervals. Feedback to the lower levels at monthly

intervals.

- **Training:** Training is needed for data entry, database maintenance, data analysis, basic epidemiological and managerial skills, and use of data for (immediate) action. Training needs be delivered to all PHC health and clerical staff as well as to civil society representatives to promote accountability based community participation in health relevant schemes and activities.
- **Notes:** This is the level where community data merge with the complete range of EPI data and service utilization and management data. At this level information on human resources, utilization of financial and material resources become available and analyzed for managerial and planning purposes. It is necessary to map private health providers in the area to identify and make use of any coordination opportunity. Financial dataset should also incorporate detailed information on (possible) revenues generated and be linked to a specific activity (e.g., prescription to a specific patient).

  The MIS at this level unleashes all its potential. At this level, if all data are collected properly, all the components for proper management and planning are available for managerial and planning use. At this level indicators can be generated by means of automatic procedures, but the most important feature is that facility managers (if properly trained on analytical skills) can monitor community health profiles, manage resources (human, financial, and technological), monitor costs, plan interventions that are community tailored and in line with the local needs and epidemiological profile.

  At this level issues of accessibility, discrimination, deprivation, gender inequalities, exclusion, poverty may become known and addressed. Drug requisition will also be driven and optimised according to community needs. Procurement may be managed at a different level, but availability of pharmaceuticals and medical devices can be planned properly at this level by means of appropriate data crunching. At this level referrals and the referral network can be analyzed as data volume is manageable, there is no need for sophisticated IT tools and software can be easily adapted to suit individual users' specifications and needs. Frequently, existing databases on finance and human resources are integrated into the system, but each existing system has to be analysed for compatibility with the patient based paradigm.

  IT training is needed, but the key factor is to make health managers capable to analyze and understand data and to draw decisions based on analysis and forecasts. Training and orientation is also needed to clarify that data analysis is a fundamental managerial function that needs to be done as it qualifies the entire planning and evaluation process, being an essential requisite for appropriate delivery of the right service profile to the right beneficiaries by means of optimal resource allocation. This last point is of particular importance when it comes to clinical doctors and nurses whose traditional training may let them feel that data are useless, knowledge of potential beneficiaries' profile and needs is meaningless.

  They need to understand that social marketing of services and demand stimulation are part of their managerial duties and are not just interfering with the priority clinical work. At this level protocols aiming at securing data integrity, replicability and quality are crucial. At the lower levels, staff familiarity with users and terrain can easily allow for correction of misreporting, but at PHC level data volume is just too high to rely on direct personal knowledge. Reliability is extremely important when decisions are taken on the basis of MIS generated information. From the regulatory viewpoint it is also necessary to ensure that sufficient decentralization of power has taken place to give the needed decision autonomy to decision makers (specific guidelines have to be designed and implemented for this). Openness of the MIS system to community representatives and to the Regional and National monitoring system can guarantee accountability and control and proper convergence on evidence gained.

iv. **MIS Organisation at Regional level:** being the fundamental hub for receiving, validating and analyzing data and to produce information to support decision making, it has to be flexible and capable to extract needed and essential information from large databases generated at lower levels and to regulate dataflow. It needs to adapt to local needs and available resources and to be scalable to the available analytical skills according to the decision making tree. It will also become

a monitoring tool, a command and control centre and an integrated governance node. This is the level where healthcare is analyzed, planned, monitored and directed. It does not interfere with micromanagement at lower levels, but it rather ensures monitoring of adequate levels of health care being accessed by communities and individuals in the region and from the national level. It becomes the decisional centre where locally viable solutions can be identified and designed to respond to local needs and overcome local constrains. It supports coordination with (and possibly the inclusion of) vertical programs with standard health care delivery. It can also provide the evidence needed to initiate and promote changes in the regulatory system aiming at better care based on novel ideas and structures.

The MIS system is the source of accountability to the central level. At this level the information flow can support certification procedures needed for accreditation, outsourcing, public-private partnerships and insurance schemes or mutual funds if a decision is taken in this respect, as ventilated by the MOH. As in the case of the PHC level, appropriate power devolution has to be fully implemented, otherwise timely and locally relevant decisions cannot be taken and the system credibility will be undermined. From the technical viewpoint at this level computers become necessary, and full connection at least with the central level essential. This is also a precondition for e-health to be fully implemented, as foreseen by the NHSSP. At this stage excessive details may not be appropriate. However, a few actions are essential, such as:

- assessment of human resources needed for Data Centre functionality (e.g.,1 IT staff and 1 clerk trained in basic quantitative analysis)
- assessment of the existing initiatives in MIS, HIS and IT
- needs assessment training for the health officials at the Regional Office and in a coherent framework this training has to cascade down to lower levels
- equipment and software inventory and procurement plan based on needs and tasks
- financial and administrative procedures assessment against skills and abilities available

The scenario suggested is based on the assumption that connectivity is limited. As soon as connectivity and computer and analytical skills are available the MIS has to be upgraded and evidence based decision making decentralized. Computer interconnectivity at various levels is desirable as it allows extreme flexibility. Enabling web based solutions and web access will facilitate data entry, data flow and feedbacks and will allow for different codes and software to operate without altering the potential of a shared working environment. SMS systems can update databases and become warning systems or reminders. Web accessibility would also facilitate monitoring and transparency if community representatives are associated. The same holds valid for certification and accreditation schemes. Quality assurance and patient complaints systems are subsystems that call for specifically tailored solutions, based on agreed community empowerment levels, to ensure relevance and appropriateness to the Swazi environment.

It is also clear that the Region is the crucial node liaising technical issues and political (i.e., expressed by government) will. It is at this level that information need to be fed to decision makers, in order to allow for informed decisions to be taken and to monitor the implementation of Government policies. National Health Plans can thus be based on a coherent resources allocation process. The Region will develop the regulatory environment and will consequently devolve micro-management to lower levels. The Government needs to define the Regions' information debt needed to benchmark their performance and monitor the adequate and equitable delivery of care to the end users. The MIS complexity at the Government level is much lower than at regional level, needed data are far less and mostly aggregated as indicators; however the system needs flexibility. If appropriate connectivity is ensured, at any moment the Government can download from the regional systems all the necessary databases.

The Government is more in need of personnel with good analytical skills and capable to set conceptual maps, scenario analysis and support strategic planning even with incomplete data and in situation of uncertainty, than robust information systems (if Regions are properly equipped). In this respect capacity building and knowledge and ability transfer should be the main TA element to the State level.

| **Strategic Operational Objective (SOO) 1.6:** To build the MOH capacity at all levels to effectively perform and facilitate health sector policy, planning and M&E functions. | |
|---|---|
| **Activities** | **Indicators** |
| 45. Review terms of reference for the Health Policy and Planning division of the MOH<br>46. Develop the Health Sector Policy and Planning Strategy<br>47. Facilitate the review, analysis and development of health sector policies<br>48. Establish and operate a Special Project Management and Technical Support Unit to facilitate and coordinate the implementation of special and infrastructure projects of the MOH<br>49. Establish external relations desk to coordinate regional and international cooperation in health and facilitate MOH participation in high-level national, regional and international policy advocacy and negotiations meetings<br>50. To design M&E frameworks (including indicators and targets) for all health programs, unit and projects and to develop a common national system<br>51. Review and restructure M&E and HMIS units of the MOH, expanding the role of the SNAP M&E Unit to become a sector-wide Programme M&E Unit, the role of the Health Statistics Unit to become a fully-fledged HMIS Unit, and creating a Research Unit with epidemiological analytical skills, thus progressively decreasing the dependence on donor-funding and secondments for the majority of M&E, HMIS and Research posts<br>52. Develop and establish a Patient Based Health Information system (PBHIS) that includes HMIS with a view to integrating and consolidating them within a national M&E framework<br>53. Decentralise functions and posts to the regional level and strengthen integration by identifying M&E Focal Points in every health program functionally related to central units<br>54. Create new M&E and HMIS cadres and postcodes, with a scheme of service and job descriptions that reflect the specialised skills required and design and conduct relevant continuing education schemes<br>55. Carry out midterm and final strategic plan evaluations, hold quarterly review meetings and disseminate periodic documentation<br>56. Conduct systematic medical and administrative audits<br>57. Develop information policy for MOH<br>58. Develop standard computer programs and identify standard ICT technologies for data capturing, processing, analysis and dissemination of generated information including inquiries<br>59. Establish and manage a National Health Information System (HIS) including National Health Data Bank and warehouse | 45. Existence and adoption of reviewed ToRs<br>46. Adopted Health Sector Policy and Planning Strategy document<br>47. No of review reports produced and disseminated regularly<br>48. Existence of an operating Special project Management Technical Support Unit<br>49. Existence of the external relations desk; No of project proposals reviewed and managed; No of events with appropriate Swazi representation per year<br>50. No of programs and units with a M&E framework<br>51. Existence of a fully staffed, restructured and integrated Monitoring and Evaluation and HMIS Unit and No of nationally funded posts activated<br>52. System developed, installed and utilized integrating MHIS and M&E requirements and manuals<br>53. No. of stakeholders, programs, departments, facilities and regions monitoring and evaluating their activities and reporting to central units<br>54. No of staff recruited by type and position and No of training events conducted by No of participants<br>55. No of plans drafted and meetings hold delivered quarterly<br>56. No of medical and administrative audits conducted per year and No of related corrective measures adopted<br>57. Policy developed and adopted<br>58. Open source and commercial relevant software identified, adopted and installed and ICT technologies fully deployed within a national standard framework; No of facilities reporting fully an timely to central units<br>59. Existence of the National Health Information System (HIS) and Data Bank |

### *5.7 Strategic Priority 1.7: Strengthening Regulatory, Standards and Quality Assurance Systems*

One of the key functions of the MOH is to regulate the health sector, enforce good public health practices and ensure provision of high standard of health services in accordance with the Laws of the Kingdom of Swaziland. More importantly, it is the responsibility of the MOH to protect public interest in health by

safeguarding people from various health hazards and enforcing professional ethics and discipline among health providers. The current situation, however, points to weak MOH's capacity at both national and regional levels to effectively regulate the health sector, set and maintain ethical and clinical standards of acceptable quality and enforce the health laws. As to quality assurance, there is also ample evidence to show that the MOH lacks adequate quality control and assurance systems, procedures and capacity to ensure that high standards of care is upheld and maintained, especially considering the large number of private, almost unregulated, providers.

To work towards this goal the role of quality assurance and Accreditation is clearly vital. Accreditation programs have developed for a wide variety of health and social service organizations over the past several decades in response to rising pressures for improving the quality and value of services and strengthening the viability and competitive position of organizations that provide these services. These pressures include low confidence levels in the public sector by the communities, heightened public concern about persistent gaps and wide variation in the availability and quality of essential public health services, limited public and private investments in public health services, and difficulties demonstrating accountability and value for these investments to the public and external stakeholders. In several countries similar to Swaziland, the governing structures and accreditation processes created for health programs initially reflected the interests of the program sponsors, but many programs have evolved over time to represent the interests of multiple stakeholders within the field of practice, including service providers, purchasers, consumers, and regulators.

This is to be expected in Swaziland as well and the NHSSP is placed critically to accelerate the implementation of a regulated health care environment. The degree of success experienced by accreditation programs in achieving widespread adoption and use of their prescriptions hinges largely on the strength of the incentives faced by organizations within the industry to pursue and maintain accreditation or on the capacity of the regulatory bodies to enforce legislation. There is evidence to suggest that accreditation programs produce positive effects on service quality, service outcomes, and the operations of service providers. Moreover no clear evidence exists suggesting that accreditation programs have had severe unintended and adverse effects on service providers and their communities. However, the sizable costs that may be incurred by organizations that undergo accreditation have the potential to create significant barriers to accreditation for many organizations that could benefit most from the process including organizations serving disadvantaged and under-resourced communities.

Therefore a specific government led process has to be developed and implemented with the aim at facing initial costs for meeting the accreditation principles and requirements. There is also no alternative than having a third party monitoring and managing the process itself, avoiding the otherwise clear conflict of interest of an intrusive public system that dictates rules, adopts them and assesses their status at the same time, losing credibility and the fundamental accountability principles that the NHSSP has endorsed:

- Accreditation programs hold potential for promoting improvements in service delivery, operations, and outcomes in public health. Ultimately, however, the success of any program will depend critically on the specifics of its design and implementation and the environment in which it is introduced
- Accreditation programs entail significant costs that must be weighed against the potential benefits to determine feasibility and value. To generate the information necessary to support such an assessment, policy-makers may wish to consider the use of an accreditation pilot study, demonstration program, or experiment similar to those used in other fields of practice
- The costs of accreditation programs need to be distributed and financed equitably to ensure they do not preclude participation by organizations that could benefit most. To prevent disparities and inequities in access to accreditation, policy-makers may need to consider financing strategies that subsidize the costs of accreditation and spread these costs equitably across the health system as a whole
- Strong incentives for seeking and maintaining accreditation appear essential to the viability and success of accreditation programs. If used, such incentives should be phased in gradually over time to avoid adverse consequences associated with short-term shifts in resources
- Governance for any accreditation program should include representation from the full array of stakeholders engaged in the field of practice to ensure responsiveness, fairness, credibility, and a

balanced perspective

- Accreditation programs should facilitate progress toward evidence-based practice and emphasize performance standards that have strong and consistent links to desired outcomes. Such programs should bring together the scientific and practice communities on an ongoing basis to develop, validate, update, and improve evidence-based standards of practice.

Where standards and regulation are concerned there are substantial gap in the Swazi health systems. At the facility level there are no standard protocols except for some of the national disease programs. Prescriptions are not audited, there are no patient records maintained and both physical and clinical standards are reported as deficient. There have been sporadic efforts in quality improvement by seeking certification for some of the functions in the hospital but wherever they have been done they have not been consolidated. Given the deficiencies within the health system it is quite clear that quality is suboptimal. Where the staff is concerned there is both discontent and frustration. The former due to poor human resource policies and the latter due to the deficiencies within the infrastructure, inadequate supplies and lack of autonomy in decision making and spending. There is very little knowledge on how to establish optimal standards and put in place an accreditation system. However the interest is high and competition with the private sector in this respect is also stimulating a viable nationwide solution.

The suboptimal quality is somewhere linked to inadequate resources both human and material. The latter can be improved by higher levels of allocation, but the former needs more than allocations. It needs a shift to a new strategy. The public system needs to focus in developing a comprehensive human resource policy. The segmentation in the public and private sector needs to be removed, especially for doctors whose large majority is in the private sector and there is a general sense that their corporation has been left unmanaged and unsupported in the past. Doctors are professionals and they must be treated as such, that is their autonomy in practice and the payment mechanism needs to be changed. Also the contracts with doctors need redesigning: as in other countries, they should be given the option of either working for a salary but if they so desire on the basis of capitation or fee for service worked out on a mutually agreed basis between them and the purchaser of health services, in this case the MOH. This cannot be done without a system of regulation and accreditation being in place and hence needs expediting.

Quality costs also money and hence MOH budgets need to be enhanced substantially but also allocative efficiencies need improvement. The NHSSP target of increasing substantially the Government expenditure in health has to become a reality and for this innovations in financing and payment mechanisms have to be promoted to avoid leakage and inappropriateness and to improve the absorption capacity of the sector.
With the possible introduction of insurance mechanisms, accreditation at least of specific services under the scheme takes place as a precondition to listing and to the appropriate management of such actions as:

- Development and observance of Standard treatment guidelines & protocols for major conditions
- Codification of a Swazi Public Health Standards, setting norms for infrastructure, staff, equipment, management of each level of service rendered
- Developing standards of services and costs in hospital care
- Develop, display and ensure compliance to Citizen's Charter at PHC level
- Reform of regulatory bodies (creation where necessary)
- A National Expert Group to monitor standards and give suitable advice and guidance on protocols and cost comparisons
- Task Group to improve guidelines/details.

Against this background, the NHSSP seeks to strengthen the regulatory capacity of the MOH as a key strategy to enhancing the health system performance and ensuring access to equitable and quality health care. The strategy will involve setting, maintaining and enforcing health standards and strengthening the legislative capacity of the health sector. More importantly, the MOH will establish a division/ department of Regulation, Standards and Quality Assurance. The purpose of the division will be to:

- Ensure effective regulation of the health system operations
- Ensure effective protection of public interest in health
- Ensure public health safety from various environmental, industrial and chemical health hazards
- Ensure effective protection of the public and individuals involved in health research and trials
- Enforce ethical practices in the delivery of health care; and

- Ensure provision of high standard and quality health care and services by means of supervised and managed licensing, certification, accreditation procedures and mechanisms

In strengthening the legislative capacity of the sector, the MOH will undertake a comprehensive review of all health related laws in order to identify the gaps that exist in the Ministry's exercise of its constitutional mandate to regulate the sector and implement its core functions, policies and plans. On the basis of the review, the MOH will appropriately propose appropriate amendments to the existing laws and develop new ones in response to the needs and dynamics of the health sector. In the short run, the MOH, in collaboration with Attorney General's office, will seek to fast track the enactment of the following Bills: the Pharmacy Bill, Nursing Bill, Public Health Bill, Medicine and Substance Bill, Anti Smoking Bill and the Swaziland Medical Practitioners and Dentists (Amendment) Bill. The MOH will also seek to streamline the registration and licensing of private and NGO health providers and institutions. The health sector legislative agenda including strengthening of the legal instruments and systems for licensing, registration and accreditation systems by will therefore mainly relate to:

- Establishment of a Health Services Commission
- Development, management, regulation and control of the National Health Services
- Autonomy of the Mbabane Government Hospital and other health sector institutions
- Functions and operations of Regional Health Authorities and Community Based health services
- Traditional medicine, including traditional midwifery
- Registration, manufacture, importation, storage, sale, distribution, dispensing and use of pharmaceuticals, vaccines, health equipment and appliances, and other medical supplies
- Training in, and conducting of, medical and health research
- Use and disposal of hazardous materials
- Occupational health and protection of workers against health hazards related to their employment
- Food hygiene and safety
- Social health Insurance
- Coordination of health services provided by religious organisations and other non-profit organizations
- Establishment and operation of private-for-profit health and health related services
- Environmental health control
- Control of public advertising on health and health care and
- Stigma and discrimination related to HIV/AIDS and other diseases

To effectively enforce the health related laws, the MOH will work closely with other law enforcement agencies such as the Police, local government and traditional authorities at all levels. In addition, the MOH, in close collaboration with the health-related professional councils, will continue to carry out inspection of health care and related services, so as to safeguard the interest of the public. At the regional level, the Regional Health Authorities especially the Regional Health Management Teams will be strengthened to enable them to effectively enforce the relevant laws and regulations and carry out inspections and controls within their regional jurisdictions. As the provision of health services becomes more liberalized, the MOH will invest in regulating private practice including part time private practice (PTPP) by Consultants who may be employed by the Government to ensure that they provide services against remuneration as appropriate in volume and quality. This will be done by reviewing, developing and amending appropriate legislation, rules and regulations.

To ensure effective enforcement of professional standards, ethical practice and professional qualifications, the Plan intends to strengthen the capacity of medical and nursing councils and professional associations. The MOH will also facilitate the establishment of professional councils for allied health workers and pharmacists. The MOH will seek to institutionalize compulsory continuing medical education as a tool to maintain high professional standards. In this regard, the MOH will establish a national continuing education program in collaboration with the professional councils, and promote linkages between the Swaziland professional councils and associations with other relevant regional and international professional bodies.
To ensure quality of care, MOH will establish a national quality assurance program for health services and develop quality standards and protocols of service delivery. The Government will also enhance the regular quality control and quality assurance of care through statutory and management audits and inspections.

A national accreditation system will be established and both public and private health care providers will be encouraged to seek for ISO certification and accreditation for excellence based on best internationally recognized practices oriented towards clinical governance.

| **Strategic Operational Objective (SOO) 1.7:** To strengthen the regulatory capacity of the MOH in order to effectively safeguard public interest in health and enforce health related laws, ethical, professional and quality standards in health care. | |
|---|---|
| **Activities** | **Indicators** |
| **Legal and Regulatory Capacity** | |
| 60. Establish a division/department of Regulation, Standards and Quality Assurance<br>61. Undertake a comprehensive review of all health related laws and identify gaps and needs of the MOH<br>62. Develop new laws regulations and enforcement mechanisms<br>63. Conduct regular meetings with law enforcement agencies | 60. An established Regulation, Standards and Quality Assurance Unit<br>61. Existence of a review report and an action plan<br>62. Existence of new laws, regulations and enforcement mechanisms<br>63. No. of meetings and minutes of meetings and No. of licenses and registrations issued |
| **Quality Assurance** | |
| 64. Establish a national quality assurance program for health services<br>65. Establish a national accreditation system<br>66. Institutionalize continuous quality improvement mechanism at all levels<br>67. Conduct studies and surveys on users and providers satisfaction and produce service charters and disseminate service providers<br>68. Encourage health providers to seek for ISO certification | 64. Existence of a national quality assurance program<br>65. Existence of an accreditation system and % of providers licensed and accredited<br>66. Existence of service charters and % of providers trained in quality issues<br>67. Reports, service charters and No of surveys on customers' satisfaction conducted<br>68. Proportion of health facilities that are ISO certified |
| **Professional and Ethical Practice** | |
| 69. Strengthen the institutional capacity of professional bodies to ensure effective enforcement of professional standards, ethical practice and professional qualifications<br>70. Facilitate the establishment of councils for allied health professionals<br>71. Promote linkages between the Swaziland professional councils and associations with the various relevant regional and international professional bodies<br>72. Establish a compulsory national continuing education program in collaboration with professional councils | 69. Ethical and quality standards developed and implemented and legislation, rules and regulations for licensing, registration and accreditation consolidated<br>70. Councils for allied health workers and Pharmacists established<br>71. No. of agreements with international councils and twinnings with similar bodies<br>72. No of health workers attending continuing education and % of recertified ones |

### *5.8 Strategic Priority 1.8: Strengthening Health Research and Knowledge Management Systems*

Research is key to the overall improvement of human health and promoting innovation in health and health related service delivery. Research is also a critical tool to gain evidence needed to support policy and decision-making. Indeed the entire enterprise of health sector reforms and service delivery would only be successful if it is based on good knowledge of the health situation and of health determinants as well as on options for improvement. While the Ministry has periodically undertaken some research and reviews in the health sector, all these efforts have tended to be piecemeal and incoherent. As currently established, the MOH lacks a clear structure, establishment and capacity to plan for, design, facilitate and oversee types of essential health research whether health systems, clinical and/or biomedical. At the same time ethical issues related to fair research protocols and regulatory procedures enforcement are crucial in the current globalized health market.

It is therefore one of the NHSSP aims to establish a national health research mechanism to facilitate, coordinate

and regulate all health research services in the country. In this regard, the MOH will develop the National Health Research and Knowledge Management Strategy to guide health sector research and development activities. To create an enabling institutional framework for research the MOH will establish the Swaziland National Health Research Organization (SNHRO) as a statutory body to provide overall technical co-ordination and guidance in health research, knowledge management and development throughout the country and to oversee all health research activities, establishing and maintaining partnerships with national and international research institutions. Specifically, the Organization will seek to:

- Develop and implement national health research and development policy
- Oversee and coordinate all health sector research activities
- Develop ethical and quality principles to guide research
- Strengthen national research capacities through training and capacity building
- Facilitate, commission and carry out policy and health systems research, epidemiological studies, assessments and health surveys etc.
- Produce and disseminate the Annual Swaziland State of Health Report
- Establish and manage Research Ethics Committee to clear research applications and enforce ethical practices in research
- Establish and manage a National Health Research Information System (HRIS) including a National Health Data Bank and warehouse linked to international data banks
- Promote collaboration and coordination among all health research stakeholders at various levels
- Provide technical support to the regional health authorities in identifying research priorities as well as co-ordinating health research activities within the regions in collaboration with the SNHRO.

The SNHRO Secretariat will be responsible for:

- Setting national health research agenda and priorities
- Mobilizing the relevant skills and resources for research Organizing and holding annual regional scientific conference
- Commissioning and organizing health systems, clinical and biomedical research based on priority and key needs of the system
- Entering into collaborative and joint research arrangements with other research and academic institutions, NGOs, and other national and international organizations
- Developing a critical mass in the Swazi scientific community conversant with health research methodology and protocols
- Publishing, disseminating and ensuring application of research results to policy and decision-making and delivery of services

| **Strategic Operational Objective (SOO) 1.8:** To establish appropriate national health research and knowledge management mechanisms to facilitate and coordinate all health research activities and promote the application of research evidence in decision making and delivery of service | |
|---|---|
| **Activities** | **Indicators** |
| 73. Establish a Health Research and Knowledge Management Unit at the MOH<br>74. Develop and implement the national health research and development policy<br>75. Develop the national health research and knowledge management strategy<br>76. Strengthen national research capacities through training on research design and methodology, twinnings and mobilization of essential research resources also from the international side<br>77. Facilitate operational and policy research<br>78. Provide technical support to the regional health authorities in health research in collaboration with the SNHRO<br>79. Develop and present a bill to establish the Swaziland national health research Organization (SNHRO)<br>80. Mobilize resources for health research<br>81. Enter into collaborative and joint research agreements with research and academic institutions, NGOs, and international organizations<br>82. Promote dissemination and applications of research in policy and decision-making and improving quality of services | 73. Existence of Unit<br>74. Availability of policy<br>75. Availability of strategy<br>76. No. staff trained in health research and No of research proposals approved, funded and implemented<br>77. No of operational and policy research reports<br>78. No of research proposals submitted by the Regions and No of research projects implemented at the regional level<br>79. Availability of Bill/Act<br>80. % of budget allocated to research and overall volume of (public and private) financial resources allocated to research<br>81. No. of collaborative and joint research agreements signed<br>82. No of research reviews used to support decision making and % of policy decision quoting research results and data |

***5.9 Strategic Priority 1.9: To strengthen health financing and investment in health***

Of the resources allocated to health, curative services absorb the largest proportion. For example, in the 2007/2008 financial-year about 91% of the MOH budget went to curative medicine as compared to a meager 4.5% allocated for preventive medicine (see the figure below). As a result, donors heavily support preventative health programs such as HIV/AIDS/STI, EPI, TB, malaria and SRH where the Government has been consistently unable to meet the need. The heavy reliance on donor funds for key preventive health services although welcome, remains an unsustainable source of health financing in the long term.

The NHSSP therefore seeks to increase and diversify investment and per capita financial flows to the health sector by setting out explicit strategies for broadening the financing base for the sector, and ensuring equity, efficiency, fairness and sustainability in resource allocation and management. Specifically, the NHSSP seeks to:

- Eliminate factors of cost and affordability as barriers to access to essential health care
- Obtain significant additional resources for the health sector
- Focus the use of resources on the most relevant and cost-effective priority health interventions and
- Ensure full accountability and transparency in the use of health sector resources through result-oriented management at all levels
- To set a remuneration system based on a mix of capitation and global budgets based on careful review and assessment of appropriateness and performance

The MOH intends to establish a Health Financing Unit within the Directorate of Policy, Planning and M&E to facilitate health sector financing activities also by means of national and regional health accounts . The MOH will further endeavor to develop a National Health Financing Policy and Strategy. The Strategy will

outline:

- The guiding principles and benchmarks for fair health financing and resource allocation. This will include thoroughly assessing the relevance of user fees in the Swazi context and to ensure appropriate safeguards for women and children
- The criteria for targeting public and donor resources to essential package of health care, based on evidence of effectiveness and with the greatest potential of reducing mortality and morbidity
- Strategies for mobilizing alternative and additional financial resources for health
- Modalities for establishing socially acceptable health financing mechanisms such as community based financing, user fees, social health insurance and other prepayment schemes
- Strategies for enhancing the absorptive capacity of the MOH, fiscal discipline, accountability and budget performance
- Systems and incentives to encourage private sector investment in health
- Safeguards for ensuring that financing schemes do not unduly discriminate against the poor and vulnerable groups, distort the demand for care, or provision of health services, and
- Strategies for ensuring progressive increase in government investment in health towards the Abuja declaration 15% commitment and the Medium Term 2010 Budget Policy commitment of increasing allocation by at least 2% per year

The MOH will establish and strengthen systems for monitoring trends in health sector funding at the national level as well as between and within regions and autonomous health sector public institutions. The MOH will build the capacity of the Regional Health Authorities to effectively implement health financing initiatives, accountability and co-ordination activities within the context their regional health plans/ strategy. More importantly, the Plan envisages the establishment of a system that would ensure that use and administration of Government funds, donor transfers and user fees are conducted strictly in accordance with the law and in the best interest of citizens.

| **Strategic Operational Objectives (SOO) 1.9:** To increase and diversify investment in health through innovative health financing strategies | |
|---|---|
| **Activities** | **Indicators** |
| 83. Establish Health Financing Unit at the MOH<br>84. Develop a National Health Financing Policy and Strategy<br>85. Develop National Social Health Insurance Policy<br>86. Develop National Social health Insurance Bill to establish the Scheme<br>87. Establish and launch National Social Health Insurance Scheme<br>88. Develop policy guidelines on Community Based Health Financing<br>89. Define and implement suitable remunerations schemes for health providers (capitation, global budgets, performance based payment)<br>90. Conduct impact studies on user fees and develop policy guidelines.<br>91. Develop policy and benchmarks for fairness on resource allocation<br>92. Review and streamline the system for providing subvention to non-governmental and faith based organizations<br>93. Review the operations and sustainability of the Medical Referral Scheme established vide Circular No. 17 of 1995 for civil servants and their dependants | 83. Existence of the Health Financing Unit<br>84. Availability of Health Financing Policy and Strategy<br>85. Availability of policy<br>86. Availability of Bill/Act<br>87. Existence of Scheme<br>88. Availability of policy guidelines<br>89. Schemes available and enforced timely<br>90. Report of impact study and existence of policy guidelines<br>91. Existence of policy and utilization of formula for resource allocation<br>92. Efficiency of subvention system, % of budget absorbed by private sector; % of services rendered; degree of appropriateness of care delivered<br>93. No. of beneficiaries and established case of providers |

[14] Especially linked to WHO global efforts and support, http://www.who.int/nha/en/, accessed 26th October 2008

| | |
|---|---|
| 94. Review, streamline and strengthen the operations and sustainability of the Phalala Specialists Scheme<br>95. Establish and institutionalize National Health Accounts<br>96. Develop costing standards for health services and facilitate/carry out costing studies for the health sector<br>97. Carry out periodic health expenditure surveys and value for money assessments and analysis of annual accounts<br>98. Facilitate and assist departments, programs, autonomous institutions and regional authorities in budgeting and preparation of quarterly and annual budget review and performance reports<br>99. Facilitate joint resource mobilization initiatives targeting the mega global funds in the context of ECSA Health Community and SADC<br>100. Establish and implement a national training and capacity building program on health financing, national health accounts, costing of health services, budgeting, financial management and reporting for health managers and administrators | 94. Volume and justification of transfers to support the Medical Referral Scheme and the Phalala Specialists Scheme and No of beneficiaries<br>95. Existence of the National Health Accounts<br>96. Existence of costing standards and reports of costing studies<br>97. Availability of health expenditure Report<br>98. % of personnel trained in health financing and financial management<br>99. No. resource mobilization initiatives established and % private (non government) contributions to the health budget<br>100. No. of facilities, departments and programs with functioning accounting systems and No of staff trained in budgeting and financial management |

# CHAPTER SIX:
# DELIVERY OF ESSENTIAL CURATIVE HEALTH CARE

## 6.Strategic Objective (SO) 2: To ensure the population's universal access to essential, affordable and quality curative healthcare.

The delivery of curative services cannot be separated from planning of implementation of related preventive services. Whereas the former supports individual care and responds to clinical needs of affected persons, the latter looks at communities, behaviors, social values and is based essentially on the state of the art evidence that makes health part of the global public goods. It is indeed on the preventive area that the public sector keeps a clear responsibility and should be considered socially accountable. Currently, most preventive services are not only delivered from hospital outpatient departments, health centres and clinics, which are classified as curative facilities but the essential health care package such as reproductive and maternal health; integrated management of childhood illnesses (IMCI), malaria control, HIV/AIDS/STI and TB control and nutrition has interwoven curative and preventive dimensions. For purposes of the NHSSP, curative health includes facility and community based clinical, diagnostic and rehabilitative interventions based on defined referral system and hierarchy of services.

The main challenges in the delivery of curative services however, remain the poor quality of care, shortage of qualified human resources, weak quality assurance systems, perennial shortage of medicines, less than appropriate medical equipment and other essential supplies, poor infection control systems, poor and inadequate infrastructure, inadequate diagnostic facilities, weak facility management systems and inadequate budget allocations. To address these challenges, NHSSP seeks to support:

- Strengthening of the referral system and delivery of essential, affordable and quality clinical, diagnostic and rehabilitative care
- Provision of essential clinical care, that includes:
    - Mental health care
    - Oral Health care
    - Eye Health and Prevention of Blindness
    - Ear, Nose and Throat
    - Intermediate care, rehabilitation and palliative care services
- Health Infrastructure development and management
- Strengthening health commodities management system and security
- Strengthening laboratory services and blood safety
- Strengthening the central, regional and health centre facilities capacity to provide high quality, safe and efficient radiological services

At the center of the curative service delivery strategy will be the strengthening of the health facility management systems and the training and retraining of health workers at the different levels to provide quality diagnostic, clinical and rehabilitative care according to set evidence based guidelines and documented best practices. At the national level, the Medical Services Department will be responsible for policy development, overall co-ordination, infrastructure development and improvement of health infrastructure; development of quality standards and guidelines and facilitation of procurement and distribution of health commodities and equipment. The Department will also provide technical supervision and support to the regions, and maintain continuous working relationships with other directorates and hospitals.

The Department will further closely collaborate with key technical agencies such as WHO and UNICEF and coordinate with other health service providers such as NGOs, mission and private health facilities. At the regional level, the RHMT will be responsible for the dissemination of standards and guidelines, delivery of logistics and supplies, and implementation, co-ordination and regulation of curative services.

### *6.1 Strategic Priority 2.1: Strengthening the referral system and delivery of essential, affordable and quality clinical, diagnostic and rehabilitative care*

The National Health Policy calls for the establishment of a national referral system that includes a national referral hospital and regional hospitals. The policy also requires that all health service providers at every level should comply with established referral guidelines, protocols for case management and the established

WHO compliant Essential Drugs list. Although the country does not currently have a well-defined national referral system, the service delivery system is loosely organized into four-tier system including hospitals, health centres, clinics and outreach sites. In this arrangement, even though the Mbabane Government Hospital is not officially designated as a tertiary national referral hospital, it acts as one while the four regional hospitals are widely regarded as secondary referral centers. Ideally, hospitals whether designated as tertiary, secondary or primary, act as referral centres to clinics and health centers, and provide technical and clinical support supervision for all outlying health facilities.

They provide a comprehensive range of outpatient and inpatient services including rehabilitative services. However, several specialist services such as urology, dermatology and highly specialised surgeries are not currently offered in country. Patients requiring these services are either transferred to hospitals in South Africa under the Phalala Special Care Medical Aid Fund, or are treated in the country by visiting specialists under special bilateral technical assistance arrangements with the South African Department of Health. The primary care services are delivered mainly through health centres and clinics while the community-based care is mainly provided through a network of rural health motivators, outreach sites, traditional birth attendants and home based care. For specialised treatment patients are referred to South Africa.
The objective of the NHSSP is therefore to strengthen the referral system to ensure the population's equitable access to a range of quality and affordable primary and specialized clinical, diagnostic and rehabilitative services in accordance with the level of health facility. In pursuit of this objective, the NHSSP envisions a national referral system consisting of the following:

- **Community and outreach sites:** This level is the foundation of service delivery. Services at this level should include community based promotion, prevention and basic curative care. It is crucial to strengthen the interface between the health facilities and community based health providers including RHMs, TBAs and home based care. Community health committees will be organized in each community through which households and individuals would be enabled to participate and contribute to their own health. Additionally RHMs will be properly supervised and equipped with commodities and appropriate comprehensive training addressing their primary tasks of protecting their communities' health and wellbeing.

- **Rural Clinics:** Rural clinics categorized in Type A and Type B clinics form the backbone of the primary health care infrastructure. They are the bases from which PHC programmes operate and provide first-line curative and emergency interventions to the rural population. The rural clinics services include promotive, preventive, and outpatient curative health services, outreach care and interface with community based health systems, including households and individuals. To reduce pressure on the regional hospitals, the MOH in collaboration with the respective City Councils is making effort to develop Urban Filter Clinics in Mbabane and Manzini cities.

- **Health centers:** The purpose of the health centers, which should be preferably located at the chiefdom level, is to provide an intermediate range of promotive, preventive, and curative services between the community and the hospital level. The services at this level include promotive, preventive, outpatient curative, maternity and in-patient services as well as laboratory services, outreach care and interface with community based health systems. As a basic requirement of the Primary Health Care Strategy, all health centres are expected to have operational Public Health Units for the provision of MCH/FP, preventive, outreach and supervisory services to their established catchment area.

- **Regional hospitals:** Although not designated as secondary level of the referral system, regional hospitals should provide in addition to primary hospital services, selected specialist services, such as psychiatry, ear, nose and throat (ENT), ophthalmology, dentistry, intensive care, radiology, pathology, higher level surgical and medical services. The regional hospitals may also provide in-service training, consultation and research in support of the primary health care programs. Regional Referral Hospitals should be responsible for providing technical support and supervision to sub-regional and primary health care facilities within their defined catchment areas. It is

[15] Type A: Clinic without maternity unit
[16] Type B: Clinic with maternity unit

anticipated that the construction of a regional hospital in Lubombo and the rehabilitation and expansion of Mankayane and Pigg's Peak Government Hospitals will reduce the workload on Mbabane Government Hospital.

- **National Referral Hospital:** At present the country does not have a designated tertiary or national referral hospital. Nonetheless the process of transforming Mbabane Government Hospital into an autonomous national referral hospital is ongoing. When fully established, the national referral hospital should provide comprehensive curative, specialist and rehabilitative services and, to a limited extent, promotive and preventive care. In addition, it should be involved in teaching and research.

To operationalise the referral system, the MOH will develop population based health service planning standards, service profiles and referral guidelines in accordance with the level of health facility. The MOH will define an essential package of services for each level of the referral system with special emphasis on the integration of promotive, preventive, curative, rehabilitative and palliative care. The program on essential clinical services will include treatment of injuries and common illnesses, such as prevalent non-communicable diseases, care for the terminally ill, oral health, ear/eye care, and rehabilitative services graded by level of health facility.

In cognizance of the diversity of curative service providers, it will be the priority of the MOH to formalize relationships with mission facilities and to enter into service agreements with industry health providers to also offer services to communities where public services may not be available.

**Strategic Operational Objective (SOO) 2.1:** To strengthen the referral system and ensure the population's equitable access to a range of quality and affordable primary and specialized clinical, diagnostic and rehabilitative services in accordance with the level of health facility.

| Activities | Indicators |
|---|---|
| 101. Establish a national referral system and rationalize service delivery at the various levels of the system | 101 Protocols available at each facility, degree of compliance and % of patients admitted with referral slips from previous level |
| 102. Strengthen and continue providing a range of essential and specialized diagnostic, outpatient, inpatient and rehabilitative services | 102 Level of utilization of services with specific indicators developed for each level; appropriateness reviews and audit conducted biannually |
| 103. Develop health facilities capacity and preparedness for emergency and disaster response and trauma management | 103 No. of facilities with trained staff, set guidelines and protocols and case fatality ratio of trauma patients |
| 104. Develop population based health service planning standards, service profiles and referral guidelines | 104 No. of facilities providing care according to set guidelines and protocols and No of staff trained in their implementation |
| 105. Define an essential curative health care package for each level of the referral system | 105 Package developed and protocols available at each facility, deployed and accessible, No of referrals abroad by diagnosis and outcome and customer's satisfaction |
| 106. Train and retrain health workers at the different levels to provide quality essential clinical care according to set guidelines based on evidence of effectiveness and affordability | 106 No. of health workers trained in special areas of service and % increase in the utilization of facilities |
| 107. Explore the possibility of constructing a new National Referral Hospital ( new site) | 107 Feasibility plan available |
| 108. Rehabilitate Mbabane Government Hospital to be a national referral hospital | 108 Rehabilitation plan available and budget committed |
| 109. Explore the feasibility of the telemedicine to improve efficiency in disease diagnosis and referral systems in health service delivery | 109 Technology and feasibility plan available, pilot sites established, staff trained and level of compliance of staff and beneficiaries |
| 110. Develop clinical guidelines | 110 Guidelines available at each clinical centre, No of staff trained, compliance level and outcome for main diagnoses |

| | |
|---|---|
| 111. Develop patient charters | 111 % of users who know charters and are satisfied with treatment received |
| 112. Strengthen infection control and risk management systems | 112 Incidence rate of hospital acquired infections by diagnosis and by facility; % of facilities with risk managers implementing related procedures; No of events recorded and No of patients affected by medical errors |
| 113. Develop guidelines for regulation and integration of traditional and other complementary and alternative health services into curative service system | 113 No of providers regulated and No of patients treated by integrated complementary services |
| 114. Strengthen and streamline the operations of the referrals to South Africa under the Phalala Special Care Medical Aid Fund | 114 No. of patient sent for specialized care in South Africa by diagnosis and outcome and cost utility analysis of referrals |
| 115. Strengthen role of mission, NGOs, private and industry health service providers | 115 No. of service agreements signed with mission, NGO, industry and private health providers |
| 116. Strengthen the palliative and rehabilitative health services | 116 No of staff trained in palliative care and No of patients treated per year and diagnosis; No of facilities delivering rehabilitative care and service outcomes |
| 117. Strengthen the interface between health facilities and community based health providers | 117 No of facilitating and instructional supervisory visits per facility per month; No of referrals from community to facilities per diagnosis |
| 118. Establish quality standards and benchmarks applicable to all health service providers | 118 Benchmarks available and frequency of updating |
| 119. Conduct skills audit and provide appropriate continuing medical education to various cadres of health workers in collaboration with the professional councils and associations | 119 No of audit reports per quarter and No and type of staff trained |
| 120. Build management capacity of health facilities | 120 No of trained facility managers appointed |
| 121. Conduct research on gender imbalance in access to curative services | 121 Availability or research report on gender imbalance in access to curative services |

*6.2 Strategic Priority 2.2: Provision of Essential Clinical Care*

The NHSSP aims to ensure the delivery of essential clinical services including basic care of injuries and common illnesses, non-communicable diseases, mental health, palliative services, oral health, eye health, and rehabilitative care. Taking into account the increasing contribution of accidents and other occupational injuries to the national burden of diseases, the NHSSP seeks to capacitate all health facilities to effectively manage common injuries according to the level of their level. The NHSSP also aims to improve palliative care for chronically and terminally ill persons both at home and at the health facility. In this respect training will be provided to health providers on palliative care and deliberate efforts will be made to integrate related skills into training curricula. The essential clinical care program will therefore be expected to integrate promotive, preventive, curative, rehabilitative and palliative care into the facility based care system. It will also seek to ensure consistent availability of appropriate logistics and medical supplies at all levels of care. The NHSSP will particularly seek to strengthen collaboration between MOH and other government institutions, NGOs and private providers and donor agencies to supply essential care. Health workers at the different levels will be trained and retrained to provide quality care according to set guidelines and best practices.

At the National level, the Directorate of Clinical Services will be responsible for policy development, overall co-ordination, and development of standards and guidelines for essential clinical services. The Directorate of Clinical Services will do this alongside the development and improvement of health infrastructure. The Directorate will provide technical supervision and support to the Regional Health Services, and maintain continuous working dialogue with other Directorates and Referral Hospitals. It will also co-ordinate with other institutions like the Central Medical Store, National Drug Authority, NGO and private health facilities, and other international agencies like WHO and UNICEF. At the regional level, the Regional Health Services will be responsible for the dissemination and enforcement of standards and guidelines, delivery of logistics and supplies, and implementation and co-ordination of essential clinical services program. Overall clinical governance will be progressively introduced to ensure proper management and delivery of essential services.

### *6.3 Strategic priority sub-area 2.2.1: Mental Health Care*

Mental health services in the country have evolved from patients being sent to Pretoria for examination and treatment before independence to establishment of a mental health institution in the army barracks in Matsapha in 1967, to the present day mental hospital built in 1985 and the three ten bedded psychiatric units in 3 regional hospitals (Mbabane, Pigg's Peak and Siteki). The main mental health disorders treated include schizophrenia, neurological disorders, and psychosocial consequences of chronic illnesses such as HIV/AIDS.

The NHSSP seeks to ensure the population's access to quality preventive and curative mental health services in order to enhance the mental health and well being of the people of Swaziland. In this regard, the MOH will establish a comprehensive and holistic mental health program to promote and provide cost effective facility and community based mental health services countrywide. A mental health strategy will thus be developed to promote, maintain and restore the mental health of individuals, families and communities. The strategy will focus on advocacy, provision of integrated mental health support and care services, use of psychotropic medicines and protection of mentally ill persons of all ages, especially vulnerable groups such as children and the elderly. Specifically, the following key interventions will be undertaken during the plan period:

- Development of a national mental health policy
- Support to the regional health services to develop regional mental health plans
- Development of policy and guidelines for implementation of mental health services
- Strengthening of the national and regional capacity in planning and management of mental health services
- Establishment of an effective community based mental health and social reintegration and support system to ensure smooth reintegration of mental health patients into their families and communities including psycho-social support for people living with HIV/AIDS and survivors of gender based violence especially rape
- Rehabilitation and/or construction, equipment and strengthening of health facilities to provide quality mental health services at all levels
- Integration of mental health into all general health services from the clinic to health center up to regional and national hospital levels
- Procurement and distribution of mental health drugs and supplies and inclusion of mental health drugs in the Essential Drugs List
- Development of a comprehensive mental health education program to educate and create awareness among the population on mental health issues, prevention and management
- Development and dissemination of IEC materials on mental health prevention and control of mental illnesses and disabilities
- Training of health workers on mental health services, management and integration of psychological support at all levels
- Training of community based health workers in each chiefdom in identification, referral and follow up of mentally ill
- Review of paramedical and nursing curricula to integrate mental health into training programs
- Promotion of mental health research, conducting needs assessment and periodic surveys on mental health to support quality patient care
- Design and establishment of mental health surveillance and monitoring system

At the National level, the MOH through the Directorate of Clinical Health Services, the Mental Health Program and Mental Hospital will be responsible for policy development, overall coordination and guidance. In addition, it will provide technical supervision, training and support to regional health services and reorientation to community based care. The Directorate of Clinical Services will co-ordinate with the NGOs, donor agencies and others stakeholders on the establishments of standards and regulations, and monitoring the delivery of public and non-governmental services throughout Swaziland. At the regional level, the Regional Health Services will be responsible for the planning, management, monitoring and co-ordination of relevant activities within the regions. Clinics and health centres and community based health workers and committees will also play a key role in the follow up and rehabilitation of patients.

**Strategic Operational Objective (SOO) 2.2.1:** To ensure the population's access to quality preventive and curative mental health services in order to enhance the mental health and well being of the people of Swaziland.

| Activities | Indicators |
|---|---|
| 122 Develop national mental health policy and guidelines for each level of the health system | 122 Availability of mental health policy and guidelines |
| 123 Establish a comprehensive and holistic mental health program to provide and promote cost effective facility and community based mental health services also by strengthening outreach services | 123 No of facilities offering services and No of enrolled patients by facility, diagnosis and outcome per month; No of outreach clinics offered and No of users per clinic |
| 124 Develop a mental health strategy | 124 Availability of national mental health strategy |
| 125 Support regional health services to develop regional mental health plans and implement related schemes at the community level | 125 No of communities with functioning community based mental health and social reintegration and support system |
| 126 Establish an effective community based mental health and social reintegration and support system to ensure smooth reintegration of mental health patients into their families and communities including psycho-social support for PLWHA and survivors of gender based violence especially rape | 126 No. of mental health patients successfully re-integrated into their families and communities; No. of PLWHA and survivors of gender based violence receiving psychosocial support |
| 127 Rehabilitate and/or construct, equip and strengthen health facilities to provide quality mental health services at all levels | 127 No. of health facilities rehabilitated and equipped |
| 128 Facilitate the integration of mental health into all general health services from the clinic to health center up to regional and national hospital levels | 128 No of patients diagnosed and treated by facility, by level and by region |
| 129 Procure and distribute mental health drugs and supplies and include mental health drugs in the Essential Drugs List | 129 No. of health facilities reporting stock outs |
| 130 Develop a comprehensive mental health education program for health services personnel, supported by proper IEC materials to educate and create awareness among the population on mental health issues, prevention and management | 130 No of personnel trained and % of communities reached out and aware of mental prevention and management checked with KAP surveys |
| 131 Train community based health workers in each chiefdom in identification, referral and follow up of mentally ill | 131 No. of community based health workers trained in each chiefdom and No of patients properly identified and referred |
| 132 Review paramedical and nursing curricula to integrate mental health into training programs | 132 No. and type of curricula reviewed and No of staff properly trained |
| 133 Promote mental health research, conduct needs assessment and periodic surveys on mental health to support quality care provision | 133 No of research projects, needs assessments and periodic surveys conducted |
| 134 Design and establish mental health surveillance and monitoring system | 134 Mental diseases prevalence and incidence in the population by diagnosis and severity |

*6.4 Strategic priority sub-area 2.2.2: Oral Health care*

The prevalence of dental caries and periodontal diseases remains a key public health problems in Swaziland. Dental problems can result into failure to thrive, impaired speech development, absence from and/or inability to concentrate in school and reduced self-esteem. Poor oral health has been related to decreased school performance among children and poor social relationships.

The objective of the NHSSP is therefore to reduce the prevalence of dental caries and periodontal diseases

by means of quality promotive, preventive, rehabilitative and conservative oral health care services to the population, especially targeting children, pregnant women and the elderly. To this end, the MOH will establish a National Oral Health Program to promote optimal oral health and prevent or control oral diseases by promoting healthy behaviors and lifestyles and improving access to affordable, high quality and culturally-sensitive oral health care services. Specifically, the following key strategic interventions will be undertaken during the Plan period:

- Development of a National oral health Policy
- Development of a National oral health Strategy
- Development and adoption of guidelines and standards of care
- Strengthening of the MOH and Regional Health Services capacity to plan, implement, coordinate, monitor and evaluate both facility and population-based oral health programs, including community water fluoridation
- Training of teachers in primary and secondary schools in oral health care to assist health personnel to implement a comprehensive oral health program
- Continuing medical education and in-service training to upgrade the skills of nurses, dental hygienists, dental therapists and other health personnel
- Building and sustaining community and RHMs capacity to support prevention, control, and reduction of oral diseases and integration of community based oral health services
- Development and maintenance of appropriate oral health infrastructure in all health centers and hospitals
- Improving the capacity of health facilities to provide quality oral surgery procedures and conservative dentistry service
- Promotion of public–private oral health partnership to support collaborative planning, coordination and implementation of oral health interventions at all level
- Integration of oral health into school health program and school curricula
- Teachers' training on oral health to provide practical information to promote healthy behaviors
- Promotion of fluoride mouth rinsing among children to help strengthen and protect children teeth
- Dental screenings in all schools at least once every three years to help identify children who need dental care
- Development of oral health IEC, instructional tools such as posters, videos, pamphlets and models
- Oral health surveillance, tracking and monitoring system

At the National level, the MOH through the Directorate of Clinical Health Services will establish an Oral Health Program that will be responsible for policy development, overall coordination and guidance. In addition, it will provide technical supervision, training and support to regional health services and reorientation to community based oral health care. The Directorate of Clinical Services will co-ordinate with the NGOs, donor agencies, and others stakeholders on the establishments of standards and regulations, and monitoring the delivery of oral health activities throughout Swaziland. At the regional level, the Regional Health Services will be responsible for the planning, management, monitoring and co-ordination of oral health activities within the regions. Public Health Units, clinics, health centres and RHMs will also play a key role in patients follow up.

| **Strategic Operational Objective (SOO) 2.2.2:** To reduce the prevalence of dental caries and periodontal diseases and provide quality promotive, preventive, rehabilitative and conservative oral health care services especially to children, pregnant women and the elderly | |
|---|---|
| **Activities** | **Indicators** |
| 134 Develop National Oral Health Policy<br>135 Develop National Oral Health Strategy<br>136 Develop and adopt standards and training guidelines<br>137 Strengthen MOH and Regional Health Services capacity to plan, implement, coordinate, monitor and evaluate both facility and population-based oral health programs<br>138 Promote community water fluoridation<br>139 Train teachers in primary and secondary schools in oral health care to assist health personnel to implement a comprehensive oral health program<br>140 Provide continuing medical education and in-service training to upgrade the skills of nurses, dental hygienists, dental therapists and other health personnel<br>141 Build and sustain community and RHMs capacity to support prevention, control, and reduction of oral diseases and integration of community based oral health services<br>142 Facilitate appropriate oral health infrastructure development and maintenance in all health centers and hospitals<br>143 Establish and promote public–private oral health partnership to support collaborative planning, coordination and implementation of oral health interventions at all level as well as to enhance the capacity of health facilities to provide quality oral surgery procedures and conservative dentistry service<br>144 Conduct dental screenings in all schools at least once every three years to help identify children who need dental care and distribute oral health IEC, instructional tools such as posters, videos, pamphlets and models<br>145 Establish oral health surveillance, tracking and monitoring system | 134 Availability of national oral health policy<br>135 Availability of national oral health strategy<br>136 Availability of guidelines and standards<br>137 No of oral health services activated; No of patients treated by facility and level; prevalence of oral diseases by type and gender<br>138 % of water reservoirs fluoridated and frequency of fluoridation<br>139 No of teachers trained and No of educational and clinical sessions held by school<br>140 No. of staff trained in oral health by cadre by year<br>141 No of facilities providing integrated oral health promotion and prevention services and No of RHMs equipped and supplied to deliver relevant services<br>142 No. of health facilities equipped with appropriate infrastructure and staff<br>143 No. of private and public facilities providing oral surgery procedures and conservative dentistry service; No of patients treated by conditions by year and No. of partnership agreements signed with private sector and NGOs<br>144 Frequency of dental screening in schools and No of children screened per session and per year<br>145 Quarterly reports compiled and disseminated |

***6.2.3 Strategic priority area 2.2.3: Eye Health and Prevention of Blindness***

While the exact magnitude of refractive error, low vision or blindness is not precisely known in Swaziland, it is estimated that refractive error is prevalent among all ages requiring presbyopic correction (reading/near vision spectacles). The current spectacle coverage rate is about 5%. On the other hand, prevalence of blindness and low vision is estimated at about 1% with approximately 21 blind + low vision children per 10,000 children according to WHO standard definition of blindness. Cataract surgery rate is about 772 per million.

Vitamin A deficiency, glaucoma, ocular trauma, macular degeneration and retinopathy remain major causes of blindness. Diagnosed risk factors include exposure to ultra-violet radiation, smoking, dehydration and possible nutritional factors. While trachoma is preventable, there are no proven effective ways of preventing cataract that relies on the availability of dedicated surgical services, currently the most challenging task for blindness prevention in Swaziland. The provision of cataract surgical services is constrained by lack of

access to services, their relative high costs and perception that surgery is dangerous, painful and not always successful. About 40% of blind or low vision patients attending eye clinics are told nothing can be done, even though at least one-third of these adults can be helped through low vision services.

Children with low vision have been treated as a blind child with no attempts to enhance their residual vision to its best potential through the use of LVD's. This has meant that these children are either encouraged to read Braille, 'taken away' from their parents/guardians to attend the resource centre, treated as special or are simply left at home not attending school. Children with uncorrected significant refractive error, low vision or blindness lack self-esteem, have hindered personality development and are often socially isolated. For adults, uncorrected significant refractive error, low vision or blindness often lead to limited career opportunities, social isolation and lack of self-esteem.

As a signatory to the global WHO initiative: Vision 2020 - The Right To Sight, the government of Swaziland through MOH is committed to reducing the prevalence of blindness and loss of sight through preventative and curative measures. The NHSSP objective is therefore to contribute to the achievement of Vision 2020 through provision of quality blindness prevention and treatment interventions including cataract, refractive error and low vision services to persons with visual impairment. The national targets to be achieved by the end of 2013 are as follows:

- 2500 cataract surgeries conducted
- 20,000 children and adults refractive error corrected
- Services provided to 6500 low vision individuals
- 60% of school children screened
- All regional hospitals equipped and capacitated to handle cataract and post-operative care, low vision and refractive error services

In pursuit of the above targets, the MOH will establish a comprehensive and integrated eye health program to provide cost effective preventive and curative eye care services countrywide. A National Eye Health Strategy will be developed to prevent blindness; integrate blindness prevention activities into the primary health care and improve quality of services, including cataract surgery, post operative care and correction of refractive anomalies. The strategy will focus on human resources development, infrastructure development and expansion of eye care services, community sensitization, mobilization and participation, coordination and networking and research on eye health. The MOH, in collaboration with NGOs and private sector organizations, will therefore undertake the following key interventions during the plan period:

- Development of a national eye health policy
- Development and adoption of guidelines for the prevention and management of cataract blindness and community based blindness assessment and prevention in collaboration with NGOs and the private sector
- Revitalization of the National Vision 2020 Committee and establishment of regional Vision 2020 Committees to coordinate all eye care services and blindness prevention activities
- Strengthening of capacities for eye care at community, primary, secondary and tertiary levels through training, recruitment and deployment of ophthalmologists, cataract surgeons, optometric technicians, optometrists and Ophthalmic Nurses
- Training of RHMs on primary eye care and prevention of blindness
- Procurement and distribution of good quality, low-cost essential assessment items, spectacles, low vision devices (optical & non-optical), drugs and other consumables
- Improvement of the capacity of regional hospitals and Mbabane Government Hospital as referral centres for specialist eye care including low vision services and surgical treatment of cataract
- Equipment of the Mbabane Government Hospital and other regional hospitals with intraocular lens implantation technology, lasers and theatre facilities and training of health workers on their use
- Regular low vision and optometry clinics including cataract camp surgeries in all the regional hospitals
- Regular mobile eye clinics including community refraction and school screening clinics in collaboration with the schools health program and Public Health Units
- Supervision of eye clinics managed by ophthalmic nurses
- Integration of eye care into school health programs
- Advocacy for the provision of appropriate education opportunities and skills training for children

with low vision
- Development of a comprehensive and integrated eye health education program to sensitize and create awareness among the communities, parent/guardian and families on blindness prevention, causes of visual loss, early detection and referral of to eye clinics and primary eye care
- Development and dissemination of relevant IEC materials
- Establishment of visual stimulation clinics and a system for follow-up of all children with low vision under the age of five (especially post-operation cataract children)
- Mobilization of communities, teachers, health care workers and community based health workers to participate in the identification and referral of children with eye diseases for assessment
- Operational research on eye health including studies on perceptions and uptake of eye services
- Eye health monitoring, tracking and evaluation system at all levels

The eye health services will adopt a multidisciplinary approach involving health, education, rehabilitation and social welfare disciplines to ensure optimized quality of life for the affected individuals and their families. The program will therefore incorporate all elements of identification, referral, treatment and follow-up for visually impaired adults and children. At the National level, the MOH through the Directorate of Clinical Health Services will establish a Eye Health Program that will be responsible for policy development, overall coordination and guidance. In addition, it will provide technical supervision, training and support to regional health services and community based eye health interventions.

The Directorate of Clinical Services will co-ordinate with the NGOs, donor agencies, and others stakeholders on the establishments of standards and regulations, and monitoring the delivery of eye health activities throughout Swaziland. At the regional level, the Regional Health Services will be responsible for the planning, management, monitoring and co-ordination of all eye health activities within the regions. Public Health Units, clinics, health centres and RHMs will also play a key role in the follow up of patients.

**Strategic Operational Objective (SOO) 2.2.3:** To reduce the prevalence of blindness and loss of sight and provide quality blindness prevention and treatment interventions including cataract, refractive error and low vision services to persons with visual impairment.

| Activities | Indicators |
|---|---|
| 147 Develop a national eye health policy | 147 Availability of national eye health policy |
| 148 Establish a comprehensive and integrated eye health program (with designated focal person) | 148 Existence of comprehensive and integrated eye health program |
| 149 Develop a national eye health strategy | 149 Availability of national eye health strategy |
| 150 Develop and adopt guidelines for prevention and management of cataract blindness and community based blindness assessment and prevention interventions in collaboration with NGOs | 150 Availability and No of guidelines on eye health and No of patients identified and using services by facility and by diagnosis |
| 151 Revive the National Vision 2020 Committee and establish regional Vision 2020 Committees to coordinate all eye care services and blindness prevention activities | 151 Existence of National Vision 2020 Committee |
| 152 Strengthen the capacities for eye care at community, primary, secondary and tertiary levels through training, recruitment and deployment of ophthalmologists, cataract surgeons, optometric technicians, optometrists, and ophthalmic nurses | 152 No. of ophthalmologists, cataract surgeons, optometric technicians, optometrists, and ophthalmic nurses posts approved and filled, and No of staff trained and deployed |
| 153 Train RHMs on primary eye care and prevention of blindness | 153 No of RHMs trained |
| 154 Procure and distribute good quality, low-cost essential assessment items, spectacles, low vision devices (optical & non-optical), drugs and other consumables | 154 Availability and stock out of essential assessment items, by type in each eye clinics |

| | |
|---|---|
| 155 Improve the capacity of regional hospitals and Mbabane Government Hospital as referral centres for specialist eye care including low vision services and surgical treatment of cataract, fully equipped with intraocular lens implantation technology, lasers and theatre facilities and train health workers on their use | 155 No. of hospitals with all essential equipments including intraocular lens implantation technology, lasers and theatre facilities, No of staff trained and No of patients treated by diagnosis and per year |
| 156 Conduct regular low vision and optometry clinics including cataract camp surgeries in all the regional hospitals | 156 No. and frequency of low vision and optometry clinics, No. and frequency of cataract camp surgeries conducted and No of patients treated by diagnosis |
| 157 Conduct regular mobile eye clinics including community refraction and school screening clinics in collaboration with the schools health program and Public Health Units, integrating eye care into school health programs | 157 No. and frequency of mobile eye clinics conducted; No of patients treated by diagnosis; No of screening sessions held per month |
| 158 Strengthen the support supervision for eye clinics managed by ophthalmic nurses | 158 No. of supervisory visits conducted per month and per facility |
| 159 Advocate for the provision of appropriate education opportunities and skills training for children with low vision | 159 No. of children with LV assisted &/or followed up |
| 160 Develop a comprehensive and integrated eye health education program to sensitize and create awareness among the communities, parent/guardian and families on blindness prevention, causes of visual loss, early detection and referral of to eye clinics and primary eye care | 160 No. of children with LV mainstreamed into education system; No. of community awareness workshops or seminars held; No of schools adopting revised curricula for blind & LV children and No of blind & LV children attending visual stimulation clinics |
| 161 Develop and disseminate relevant IEC materials | 161 Level of awareness and public knowledge on eye care measured by periodic KAP surveys |
| 162 Establish visual stimulation clinics and a system for follow-up of all children with low vision under the age of five (especially post-operation cataract children) | 162 No. of low vision children with access to appropriate education and skills training; No. of Visual stimulation clinics established |
| 163 Mobilize communities, teachers, health care workers and community based health workers to participate in the identification and referral of children with eye diseases for assessment | 163 No of children transferred for refraction and confirmed with significant refractive error |
| 164 Conduct operational research on eye health including studies on perceptions and uptake of eye services | 164 No. of research proposals submitted and % approved |
| 165 Establish eye health monitoring, tracking and evaluation system at all levels | 165 Specific M&E system in place |

### *6.1.6 Strategic priority 6.2.4*

| Strategic Operational Objective (SOO) 2.2.4: To strengthen the provision of Ear, Nose and Throat specialized services and ensure full coverage to related clinical needs | |
|---|---|
| **Activities** | **Indicators** |
| 166 Establish a proper ENT department | 166 Established department |
| 167 Develop a national policy and guidelines for ENT services | 167 Availability of Policy document |
| 168 Strengthen human resources capacity for ENT services through training recruitment and deployment | 168 Enough and well skilled staff |
| 169 Equip national, regional and health centre facilities with ENT equipment to enable them to provide ENT care | 169 Enough equipment |
| 170 Decentralize ENT services to regional hospitals and health centre facilities | 170 Availability of ENT services at regional and health centre facilities |
| 171 Facilitate ENT infrastructure development at regional and national health facilities | 171 Developed infrastructure |
| 172 Develop IEC instructional materials such as posters, models and pamphlets | 172 Availability of educational materials |
| 173 Initiate ENT health promotion program and integrate it into school health program | 173 Increased awareness of the program |

### *6.3 Strategic Priority 2.3: Health Infrastructure Development And Management*

Availability of well maintained and functioning health infrastructure including physical facilities and medical and non-medical equipment is key to widening access to health care, ensuring the quality of care and enhancing the performance of the health system as a whole. Undoubtedly, keeping the health infrastructure and the equipment in good condition also shapes the public's perception of good quality care and this in turn encourages utilization of the available health services. The National Health Policy therefore emphasizes the need to:

- Develop a national health infrastructure development and maintenance plan;
- Standardize MOH infrastructure and equipment
- Ensure security of equipment and infrastructure
- Increase community ownership and maintenance of infrastructure
- Establish a replacement and maintenance program for physical assets
- Improve working environment and infrastructure and
- Decentralise the biomedical engineering unit to the regions

Various studies in Swaziland however reveal poor state of health infrastructure and facilities. Most health facilities lack basic maintenance and essential amenities such as water supply, adequate staff housing, incinerators for proper medical waste disposal, electricity, security fencing, sanitation, communication, transport facilities, furniture and other essential equipment. An inventory report by Ramani Consultants 2007 of primary health facilities buildings, for instance, revealed serious problems like leakages, wall cracks, unreliable water supply and floor screed with potholes among others as common in most of the facilities. In an IDCG Engineering Management and Health Consulting in 2007 audit of the Mbabane Government Hospital's buildings and major equipment, it was found that most buildings were in very bad shape with old and obsolete equipment. This is partly attributed to budgetary limitations, lack of trained personnel to maintain physical infrastructure and centralization of any decision at the headquarters.

[17] Medical equipment includes laboratory equipment, operating theatre equipment, maternity equipment, intensive care equipment, physiotherapy equipment, radiology equipment, ward equipment, dental equipment etc.

[18] Non-medical equipment includes standby generators, incinerators, laundry equipment, kitchen equipment, orthopaedic workshop equipment, water supply equipment, boilers, lighting systems/electrics, communication equipment, transport facilities etc.

[19] Ramani Consultants (2007) Pre-contract Consultancy Services for the Rehabilitation and Upgrading of Primary Health Care Facilities and Training Institutions: Site Inspection Record Sheets, Government of Swaziland, MOH.

[20] See IDCG Engineering Management and Health Consulting 2007 for the MOH.

In terms of office facilities, the MOH is currently occupying one floor in the Ministry of Justice building with several rented premises in Mbabane and Manzini. This situation affects not only the productivity of the Ministry but also overburdens its budget in terms of high costs of rents and communication. The development of office facilities for the MOH is therefore expected to save substantial resources, which could be channeled towards improving service delivery. With the decentralization process and strengthening of the regional health offices, there will also be increased need for office facilities over the next five years at the regional level.

Different modes of transport including vehicles, motorcycles, air and other non-motorized systems are essential for ensuring effective functioning of the health services. They support field outreach, coordination and supervisory functions, transportation of supplies and materials/commodities and provision of first aid and emergency medical care. The health system not only lacks adequate transport facilities but also lack an effective maintenance system due to inadequate recurrent budget to keep the transport fleet operational. In a number of cases, ambulances are often used for supervision, transportation of commodities and outreach functions because no proper vehicles are available. Moreover no legal procedure to allow for quick intervention during, eg, accidents has been produced for the health sector, with the result that only fire brigades, and no medical ambulances, are allowed to deliver first aid care on site. With the growth in ICT the role of communication technologies have become indispensable part of health care delivery. However, lack of clear policy and strategy for the use of ICTs for health care has affected the application of ICTs to improving the coordination and performance of the health service system and referral/management of emergencies in particular.

Against this background the NHSSP seek to scale up investments in development, rehabilitation, upgrading and management of health infrastructure and equipment as a key strategy to improving the overall sector performance. To this end, MOH will develop a comprehensive National Health Infrastructure Development and Maintenance Plan to guide all the infrastructure development in the health sector. On the basis of the proposed referral system, the NHSSP envisages construction of new health care facilities and upgrading of existing facilities to conform to the new and additional service standards for each level of the referral system. In addition to the on-going rehabilitation works and upgrading exercises by the MOH, the ADB Health II project proposes upgrading and rehabilitation of 58 clinics, public health units, staff houses as well as three training institutions. The upgrading of these facilities will include acquisition of new and replacement of old, ones for the selected facilities. The other major infrastructure projects include:

- Upgrading of the Mbabane Government Hospital to a national referral and tertiary hospital or construction of a new fully equipped hospital of 500 beds in a different location
- Construction a regional hospital in Lubombo and
- Rehabilitation and expansion of Mankayane and Pigg's Peak Government Hospitals

With respect to equipment management, the MOH will strengthen the capacity of Bio-Medical Engineering Department to effectively manage, maintain and repair all buildings structures and medical and non-medical equipment in all health facilities including hospitals, health centres and clinics. The department's capacity will also be built on preventive maintenance and inventory management. In this regard, equipment specifications, standards and policy guidelines for contracted works and preventive maintenance will be developed. The Plan will further seek strengthening the transport system by developing National Health Sector Transport Policy guidelines to ensure the availability and maintenance of an adequate number and type of transport facilities. Communication and ICT policy guidelines will also be formulated to enable and improve communications among the various actors operating in the health sector and referral of emergencies including tele-management of patients and geo-positioning of ambulances. A major effort will be subsequently done to incorporate a comprehensive health technology assessment procedure to drive identification, analysis, purchasing, installation and maintenance of medical technologies for the entire system. The procedure is expected to be fully implemented by the end of this NHSSP, given its complexity and the need to train and capacitate all relevant cadres.

[21] Health Technology Assessment (HTA) is a multidisciplinary process that summarises information about the medical, social, economic and ethical issues related to the use of a health technology in a systematic, transparent, unbiased, robust manner. Reference is made, eg, to the European network accessible at: http://www.eunethta.net/ (27th October, 2008)

| **Strategic Operational Objective (SOO) 2.3:** To improve the health infrastructure and equipment management systems in order to provide quality health care. | |
|---|---|
| **Activities** | **Indicators** |
| 174 Conduct a national health infrastructure and equipment assessment | 174 Availability of the health infrastructure development and maintenance plan |
| 175 Develop and implement an infrastructure development and maintenance plan | 175 Availability of policy guidelines and standards |
| 176 Establish standard designs for different levels of health facilities | 176 No. of health facilities upgraded by type and level of service profile |
| 177 Standardize MOH infrastructure and equipment schedule and specifications | 177 No. of health facilities rehabilitated |
| 178 Develop the capacity of Bio-Medical Engineering Department to effectively manage, maintain and repair all buildings structures and medical and non-medical equipment | 178 No. of health facilities with appropriate equipment and facilities |
| 179 Manage and keep a proper physical facilities inventory | 179 No. of staff trained in infrastructure and equipment management, maintenance and repairs |
| 180 Establish national infrastructure and equipment maintenance program | 180 Level of efficiency and effectiveness of the maintenance system |
| 181 Develop guidelines for contracted works | 181 % of works assigned according to guidelines |
| 182 Rehabilitate, upgrade and expand clinic, health centers and outreach services in line with the referral system | 182 No of facilities surveyed and No of interventions implemented by category (rehabilitation, upgrading, expansion) |
| 183 Develop and implement injection safety measures and establish medical waste management system | 183 No of waste management plants operational |
| 184 Construct the regional hospital in Lubombo | 184 Degree of compliance with specific masterplan |
| 185 Rehabilitate and expand Mankayane and Pigg's Peak Government Hospitals | 185 Degree of compliance with specific masterplan |
| 186 Upgrade the Mbabane Government Hospital to a national referral and tertiary hospital | 186 Degree of compliance with specific masterplan |
| 187 Develop office block for the MOH | 187 Degree of compliance with specific masterplan |
| 188 Develop a health sector transport system including fleet management and maintenance within a decentralized framework | 188 Fleet management plan available and degree of compliance with surveyed needs |
| 189 Develop National Health Sector Transport Policy guidelines | 189 Policy available and implemented |
| 190 Develop communication and ICT policy guidelines for the health sector | 190 Policy available and implemented; ICT plan developed and technology needs assessed; procedures and manuals developed and disseminated |
| 191 Introduce HTA and develop a national comprehensive strategy also by means of international twinning and collaboration | 191 Existence of an HTA comprehensive plan |

### *6.4 Strategic Priority 2.4: Strengthening Health Commodities Management System and Security*

The purpose of health commodities management system is to ensure that pharmaceutical and non-pharmaceutical commodities and equipment are made available according to the laid down standards in medical procedures and guidelines, and that they are used efficiently, effectively and transparently. Cost-effective and efficient supply and management of health commodities including drugs, condoms and equipment is therefore required to guarantee effective delivery and utilization of preventive, diagnostic and clinical services, and to ensure reaching targets of MDG 8 which seeks to increase access to essential and affordable drugs.

However, given the fact that most of the health commodities are imported, the services are vulnerable to global economic exigencies including inflationary and foreign exchange fluctuations. At the country level, they are constrained by inadequate resource allocation and logistical challenges in the distribution chain. Other challenges include inadequate human resources and regulatory and quality control capacity, weak

inventory control systems and wastage. As to shortages of essential drugs and other medical supplies, the Service Availability Assessment (MOH 2006) for example found that almost every health facility in Swaziland lacks an important equipment or essential drug or supply. The IDCG Engineering Management and Health Consulting in 2007 also found that 75% of equipment in Mbabane Government Hospital and 100% and 82% of the equipment in the operating theatre/casualty and radiology departments respectively, required replacement.

In response to these challenges, the Cabinet approved the National Pharmaceutical Policy whose aim is to provide good quality, safe, efficacious and affordable medicines to the population of the Kingdom of Swaziland. The MOH has also developed Medicines and Related Substances Control Bill and the Pharmacists Council Bill to regulate professional and ethical practice in the pharmaceutical sector.

In line with the National Health Policy and the National Pharmaceutical Policy, the NHSSP aims to strengthen the national health commodities management system to assure consistent availability of pharmaceutical, non-pharmaceutical and equipment of required safety, quality and efficacy standards at all times. To achieve this, the NHSSP proposes to strengthen the capacity of the MOH Pharmaceutical Services Department and the regional health authorities to effectively coordinate and guide the procurement of pharmaceutical products in line with the Government procurement regulations; enforce rational use of pharmaceutical products; and ensure harmonized management of the pharmaceutical sector. A national Health Commodities (Pharmaceutical) Strategy will be developed to ensure harmonized and good practices in health commodities procurement and management. In this respect, the NHSSP envisages progressive shift from the push (supply driven) to a pull (demand driven) system whereby the Central Medical Store upon demand or request, supplies the drugs to the health care providers through local procurement.

As required by the National Health Policy, a Medicine Control Authority (MCA) will established to regulate the manufacture, import, export, distribution and sale of pharmaceutical products and related commodities and ensure the quality and safety of medicines as well as their rational use. The MCA will also enforce the international standards such as Good Manufacturing Practices (GMP) among all manufacturers and will actively participate in the WHO Certification Scheme on the Quality of Pharmaceutical Products (QPP) and provide technical supervision, quality control and regulatory support to the regions and health facilities. To ensure quality of drugs and other pharmaceutical products imported into Swaziland or manufactured locally, the MOH will establish a National Quality Control Laboratory (NQCL). The National Quality Control Laboratory (NQCL) will also institute a program for continuous monitoring of drug efficacy for most common drugs used in Swaziland.

The MOH will consider transforming the Central Medical Stores into a parastatal to manage central level procurement to ensure quality and economies of scale and improve the logistics capacity of the supply chain. As drugs supply, the NHSSP puts emphasis on procurement by generic name, concentration on the Essential Drugs List (EDL), the formulation and updating of a National Formulary (based on scientific evidence and international guidelines), rational needs assessment, pre-qualification of suppliers, competitive tendering among pre qualified suppliers, improved quality assurance, and systematic monitoring of supplier performance. The MOH believes that with effective registration, quality assurance and regulatory procedures in place, it will be possible to guarantee the safety, quality, efficacy and relevance of generic products to specific medical needs in Swaziland. Products whose proposed wholesale and retail prices are excessive compared to those already on the market will also not be accepted. To this end the MOH will ensure that established wholesale prices are regularly published and that a mechanism is established to exchange price information with other countries. Availability of health commodities especially drugs in the private, mission, and NGO sectors will be improved through a strengthened registration and certification system, a more systematic approach to determining where particular types of drugs may be sold ("scheduling"), and streamlining of the importation process.

To promote rational drug use including better prescribing, dispensing, and patient use of drugs, the NHSSP envisages the following interventions:

- Regular updating and wide dissemination of standard treatment guidelines for hospitals and primary health facilities
- Standardization of levels of authorized prescribing
- Integration of the Essential Drugs concept into all health-related training

- Establishment of Pharmacy and Therapeutics Committees in all major health institutions
- Establishment of a national drug information system
- Drafting and adoption of a National Formulary
- Planning and implementation of pharmaco-epidemiology and pharmaco-economy studies to monitor effective and appropriate use of medicines
- Provision of appropriate training of health professionals and suitable public education and
- Control of drug advertising and promotion

The MOH in collaboration with the Ministry of Enterprise Development will promote self-sufficiency and self-reliance by actively advocating for local manufacturing of pharmaceutical products for domestic use and even export complying with GMP standards. Training and educational programs will be developed and implemented to build the capacity and skills of medical practitioners, pharmacists, other health professionals, health institutions and regional health authorities in all aspects of the health commodities management cycle to ensure availability, rational use and accountability of supplies.

**Strategic Operational Objective (SOO) 2.4:** To strengthen the national health commodities management system to assure consistent availability of pharmaceutical, non-pharmaceutical and equipment of required safety, quality and efficacy standards at all times.

| Activities | Indicators |
|---|---|
| 192 Enact the Medicines and Related Substances Control Bill and the Pharmacy Council Bill into law | 192 Availability of the Medicines and Related Substances Control Act and the Pharmacy Council Act |
| 193 Strengthen the capacity of MOH (Pharmaceutical Services Department) and the regional health authorities in coordination, procurement and enforcement | 193 Improved capacity of the MOH coordination and procurement and regulation |
| 194 Develop National Health Commodities (Pharmaceutical) Strategy | 194 Availability of the National Health Commodities (Pharmaceutical) Strategy |
| 195 Establish the Medicine Regulatory Authority (MRA) | 195 Existence of the Medicines Control Authority |
| 196 Participate in the WHO Certification Scheme on the Quality of Pharmaceutical Products (QPP) | 196 Formal application to, and MoU with WHO available |
| 197 Establish a National Quality Control Laboratory (NQCL) | 197 Existence of the National Quality Control Laboratory (NQCL) |
| 198 Transform the Central Medical Stores into the National Health Commodities (Pharmaceutical) Procurement Agency | 198 Existence of a fully staffed, equipped and financed National Health Commodities (Pharmaceutical) Procurement Agency |
| 199 Commission a comprehensive study of the functioning of the country's health commodities/pharmaceutical system | 199 National commodity survey available |
| 200 Develop procurement plan for health commodities to guide the central procurement requirements and distribution of supplies | 200 National procurement plan based on national survey available |
| 201 Develop health commodities procurement and management training manuals | 201 No. of personnel trained in the health management commodities management system |
| 202 Strengthen the supply chain (including procurement, reception, warehousing, stock control, inspection and monitoring) | 202 No of facilities with stock out per quarter and per commodity |

| | |
|---|---|
| 203 Assist regional health authorities to establish the basic structures for purchasing and quantification, stock control and warehousing, and inspection | 203 No of appropriate requisitions placed by region and % of budget saved/optimized at constant consumption |
| 204 Develop guidelines and procedures for decentralized pull system (demand driven) procurement | 204 % of health facilities with consistent availability of drugs and medical supplies per quarter |
| 205 Strengthen registration and quality assurance systems to guarantee the safety, quality, efficacy and relevance of generic products | 205 No of generics identified, classified and procured per year and No of unregistered generics available in the market |
| 206 Ensure regular publication of wholesale prices, control of drug advertising and promote and establish a mechanism for exchanging price information with other countries | 206 Availability of published prices and No of international exchanges on the matter |
| 207 Develop, review and disseminate standard prescription and treatment guidelines for hospitals and primary health facilities based on a National Formulary continuously updated | 207 Availability of Swaziland Essential Drug List (EDL) and National Formulary based on validated guidelines |
| 208 Conduct pharmaco-epidemiology and pharmaco-economics surveys to monitor prescription patterns by public and private prescribers | 208 No of facilities and prescribers surveyed and % of prescriptions monitored |
| 209 Establish standardized levels of authorized prescribing | 209 No of prescriptions complying with approved standards |
| 210 Establish Pharmacy and Therapeutics Committees in all major health institutions | 210 No of Committees' meetings by institution by year |
| 211 Establish Pharmaceutical Management Information System (PMIS) | 211 Existence of Pharmaceutical Management Information System (PMIS) and ICT framework |
| 212 Advocate for local manufacturing of pharmaceutical products for domestic use and export compliant with GMP standards | 212 No of accredited GMP facilities in the country |
| 213 Computerize inventory systems and strengthen controls in all major facilities | 213 No of facilities with computerized inventory system and No of controls/ month executed by facility |

***6.5 Strategic Priority 2.5: Strengthening Laboratory Services and Blood Safety***

Laboratory services are key in ensuring delivery of appropriate and customized preventive and curative health services as well as ensuring that safe blood and blood products are made available in sufficient quantities at the right time. Various assessments have however, revealed deficiencies in the national health laboratory network, particularly at the health centre levels. The scope of support in microbiology and basic hematology is not only limited, but the medical laboratories also are understaffed, under-equipped and experience perennial shortage of reagents. Some of the laboratory units are also inadequately housed or supplied with basic utilities such as running water, safe drainage or dependable source of light.

According to the Service Availability Report (MOH 2006), for instance, the proportion of facilities with capacities to perform laboratory tests was found to range from 7.8% for hepatitis and 9.7% for sputum examination, to 39.6% for blood sugar level. It was also reported that, with the HIV/AIDS epidemic, only 74% of the facilities were found to have the capacity to perform antibody tests on site. Although the techniques of blood collection have been improved over the years, the efforts to select blood are frustrated by blood shortage, which emanates from among other things the shortage of blood collecting staff.

The NHSSP will seek to strengthen the central, regional and health facilities capacity to provide appropriate

and customized clinical laboratory and blood transfusion services. To achieve this, systematic upgrading of volume and competence of medical laboratory personnel and ensuring availability of adequate supplies and equipment for medical laboratories at all levels will be undertaken. At the regional level, capacity will be strengthened through the progressive deployment of senior medical laboratory technologists in each region. As part of the capacity building strategy, the laboratory personnel will be included in the national continuing medical education program.

At the central level, a comprehensive national public health laboratory service policy will be developed and the capacity of the National (Central) Public Health Laboratory Services will be strengthened. The National (Central) Public Health Laboratory Services will be entrusted with overseeing and systematic quality control functions of both Clinical Laboratories and the Blood Safety and Transfusion Services. As a matter of policy, Clinical Laboratories and Blood Safety and Transfusion Services will be developed as two separate units. The construction of a purpose-built laboratory/blood bank complex at Mbabane Government Hospital should enable each unit to carry out their designated functions effectively. Laboratory service standards at each level of the public health system will be reviewed and needs for personnel, equipment and supplies at each level established. To ensure quality of laboratory procedures and results, a National Medical Laboratory Quality Assessment Scheme will be developed.

In respect of the Clinical Laboratory Services, the NHSSP will seek to build capacity of clinical laboratories at all levels to:

- Perform laboratory diagnostic tests to patients and monitor the response of patients to treatment of communicable and non-communicable diseases such as HIV, TB (MDR and XDR), cancers, malaria and diarrheas at all health care levels
- Detect emergence of new diseases and monitor disease trends of current and emerging epidemics
- Provide continuous support to such services as HIV screening and sentinel surveillance, measles surveillance, diabetes and hypertension screening and monitoring
- Ensure high quality of laboratory results in accordance with international standards
- Implement safe working procedures of laboratory services according to GLP standards
- Elaborate and update systematically a technology inventory, assessment and maintenance scheme
- Support the design, planning and implementation of serological surveys based on internationally recognized standards and guidelines on selected diseases in collaboration with clinical departments and
- Establish and maintain a data management system for laboratory services

A vital component of the clinical laboratory services will be further strengthening health centre level laboratories and the introduction of laboratory services in Type B clinics. This will reinforce the ability to deliver primary services, facilitate accelerate customized care of HIV/AIDS patients and support voluntary testing of HIV.

As for blood safety and transfusion services, the NHSSP will seek to enhance the capacity and efficiency of Blood Transfusion Testing Laboratory to ensure expanded blood collection and assure consistent availability of screened blood and blood products in sufficient quantities. The National Blood Safety and Transfusion Service will be strengthened to ensure appropriate screening and storage of blood and blood products; and to ensure compliance with national standards in terms of donor recruitment, blood collection and testing. The National Blood Safety and Transfusion Service will in particular seek to:

- Ensure timely availability of safe blood and blood products in sufficient quantities
- Expand the scope and scale of tests of donated blood units
- Establish a pool of regular blood donors and support donors clubs
- Scale up the collection of donated blood and improve the efficiency of the current Blood Donor collection process
- Enable nucleic acid testing (NAT) and antenatal blood screening in support of the PMTCT program
- Establish a quality management system to ensure quality control in all aspects of Blood Transfusion services
- Maintain a Blood Bank Data Management system to enable donors follow up and recall
- Establish and maintain a Swaziland National Blood Donor Register

- Maintain blood cold chain from collection up to transfusion
- Establish blood transfusion committees in all hospitals to ensure appropriate and effective use of blood and blood products
- Provide a conducive and safe environment for blood donors and blood transfusion service staff
- Improve and maintain the Blood Transfusion Services Infrastructure and make it conducive to blood donation also by means of community education and social marketing activities

**Strategic Operational Objective (SOO) 2.5:** To strengthen the central, regional and health facilities capacity to provide appropriate and customized clinical laboratory and blood transfusion services.

| Activities | Indicators |
|---|---|
| 214 Strengthen the National (Central) Public Health laboratory services, its clinical laboratory and the blood safety and transfusion services units | 214 % of sector budget allocated to National Laboratory and blood transfusion services |
| 215 Develop a comprehensive national medical laboratory services policy | 215 Availability of national medical laboratory services policy |
| 216 Review laboratory service standards at each level of the public health system | 216 Availability of standard guidelines for laboratory services and blood use |
| 217 Conduct personnel, equipment and supplies needs assessment at each level | 217 Inventory and needs assessment reports availability and dissemination |
| 218 Establish and operationalise National Medical Laboratory Quality Assessment Scheme according to GLP standards | 218 Existence of a functioning laboratory service quality assurance system |
| 219 Strengthen central, regional and health facilities capacity to manage laboratory services quality assurance schemes | 219 % of laboratory staff posts filled per facility |
| 220 Upgrade the staffing and competence of medical personnel | 220 No. of continuing medical education events delivered and No of participants per event |
| 221 Procure and distribute laboratory supplies and logistics to all levels of the health care system | 221 Level of stock-outs in health facilities and turnover rate of laboratory supplies |
| 222 Build capacity of clinical laboratories at all levels to effectively perform diagnostic and monitoring tests to determine efficacy of drugs and treatment and disease trends | 222 No of tests performed by laboratory and by month on drugs efficacy and No of sero-epidemiological surveys conducted per year |
| 223 Provide continuous support to such as services as HIV screening and sentinel surveillance, measles surveillance, diabetes and hypertension monitoring and screening | 223 No. of patients screened per critical area (HIV, measles, diabetes, hypertension) per month |
| 224 Enhance laboratory safety procedures | 224 No of laboratories surveyed and implementing safety procedures |
| 225 Ensure adequate supplies and equipment for medical laboratories at all levels | 225 No and type of laboratories complaining stock outs per year |
| 226 Provide continuing medical education for laboratory personnel | 226 No of educational events and No of participants per event per year |
| 227 Strengthen health centre level laboratories | 227 No. of health centers with functioning laboratory units |
| 228 Introduce laboratory services at Type B clinics | 228 No. of Type B clinics with functioning laboratory units |
| 229 Establish and maintain a data management systems for laboratory services | 229 Proportion of health facilities meeting minimum laboratory service standards |
| 230 Build capacity of the Blood Safety and Transfusion Services in blood collection, safety and screening | 230 No of critical events (near misses and accidents) recorded by facility by month |
| 231 Develop blood use guidelines for hospitals | 231 No. of facilities fully implementing blood use guidelines |
| | 232 % blood units collected from voluntary donors and No of retrieved and recalled donors per year |
| | 233 No of blood units wasted per facility per year |

| | |
|---|---|
| 232 Maintain a national Blood Bank Data Management system and maintain Swaziland National Blood Donor Register<br>233 Maintain blood cold chain from collection up to transfusion<br>234 Establish blood transfusion committees in all hospitals and develop and disseminate social marketing materials to improve and increase blood donations<br>235 Ensure timely availability of safe and appropriate blood and blood products<br>236 Establish a quality Management system for the Blood Transfusion services | 234 No of blood transfusions offered per year and No of new blood donors per year<br>235 No of patients without adequate blood supplies per facility per year<br>236 No of audits conducted per facility per year |

***6.6 Strategic Priority 2.6: Strengthening the central, regional and health centre facilities capacity to provide high quality, safe and efficient radiological services***

**Strategic Operational Objective (SOO) 2.2.8:** To strengthen the central, regional and health centre facilities capacity to provide high quality, safe and efficient radiological services.

| Activities | Indicators |
|---|---|
| 237 Develop a national radiological services policies<br>238 Establish standards regulation and monitoring systems for the radiological services<br>239 Equip health centres, regional hospitals and national referral with radiological equipment<br>240 Ensure availability of radiological consumables<br>241 Establish a referral system for specialized radiological assessment<br>242 Strengthen the human resource capacity for radiological services for all levels of care through training, recruitment and deployment of adequate radiologist, chief radiographer, radiation controller, ultrasonographer, radiographer and darkroom attendant<br>243 Provide continuous medical education for the radiology personnel<br>244 Strengthen central, regional and health centre facilities' capacity radiological quality assurance program<br>245 Enhance safety radiological environment at all levels of care.<br>246 Rehabilitate radiology infrastructure to meet minimal standards<br>247 Establish and implement a functional radiological waste management system | 237 National radiology policy will be developed<br>238 Developed standards regulation and monitoring system<br>239 Availability of equipment<br>240 Availability of radiological consumables<br>241 Established referral system<br>242 Enough and well skilled staff<br>243 Well educated personnel<br>244 Improved quality assurance program<br>245 Safe and conduce working environment<br>246 Standardized radiological infrastructure<br>247 Waste management system in place |

# CHAPTER SEVEN: DELIVERY OF PUBLIC HEALTH SERVICES

## 7. Strategic Objective (SO) 3: To improve provision of and increase access to, essential, affordable and quality public health services in order to significantly reduce the burden of diseases, morbidity and mortality and improve the health status and quality of life of the Swazi population.

The MOH mission includes the improvement of the health status of the people of Swaziland by providing promotive and preventive services that are of high quality, relevant, accessible, affordable, equitable and socially acceptable. It is also the MOH objective to reduce morbidity, disability and mortality due to preventable conditions that contribute to the national burden of diseases. The National Health Policy identifies health promotion including environmental health as the cornerstone of the health system and puts premium on prevention and control of priority communicable and non-communicable prevalent diseases. The control and prevention of diseases and improving the health status of the population therefore remain the key outcome for the health sector. Indeed available information reveal that most illnesses and deaths are caused by preventable conditions.

According to WHO (2007) Country Health System Fact Sheet 2006, 64% of deaths and 68% of Quality Life Years (QALY) lost in Swaziland are attributed to HIV/AIDS. The remaining deaths are attributed to tuberculosis, lower respiratory infections, diarrheal diseases, heart diseases, perinatal conditions, protein-energy malnutrition, cerebro-vascular disorders, chronic obstructive pulmonary disease (COPD), traffic accidents and other conditions. As a result, most health status indicators in Swaziland have worsened over the past decade with life expectancy at birth dramatically dropping from 60 years in 1997 to the current 32.5 years.

It is against this background that the NHSSP aims at reducing the burden of diseases, morbidity and mortality and improve the health status and quality of life of the Swazi population. To achieve this objective, the NHSSP defines the key priority public health interventions that will address most immediate primary needs of the population and cover diseases whose substantial reduction or eradication will greatly help improve the health status of the vast majority of the population. Interventions selected are also considered to have the greatest potential of responding to significant proportion of the population health demand. If effectively implemented, priority interventions will provide the opportunity for bridging the equity gaps in access to quality health services and allow the country to progress rapidly towards achieving at least three health MDGs, namely MDG 4 (two-third reduction in child mortality), MDG 5 (reducing maternal mortality by three-quarters), and MDG 6 (halting and reversing HIV/AIDS, TB and malaria).

The selected key priority public health interventions, which form the minimum package of essential public health services to be scaled-up, to achieve set target health outcomes over the plan period, include:

- Prevention and Control and management of communicable and non-communicable diseases
- Family health (including reproductive and maternal health, child health, and nutrition)
- Health promotion including health education, environmental health, school health, substance abuse prevention and control, and emergency, epidemic and disaster prevention, preparedness and response

In addition to the above, NHSSP recognizes that that Government of Swaziland is a signatory to international resolutions committed to the elimination and eradication of certain diseases and conditions such as poliomyelitis, Vitamin A, iron and iodine deficiency disorders, neonatal tetanus and measles among others. Accordingly, the NHSSP will strengthen the existing programs for disease elimination/eradication and continue with cross boarder disease surveillance and control activities through regional and bilateral collaboration.

The NHSSP targets diseases and conditions, which are listed among the top ten leading causes of morbidity and death. It is therefore anticipated that if these interventions are to be effectively implemented, they could cater for over 80% of the leading causes of death as well as contribute towards a reduction of more than 85% of Years of Life and Years of Potential Life Lost (YLL and YPLL) due to diseases. The priority interventions

are also considered to be cost effective in that they have the potential of reaching the vast majority of the population at lower costs while leading to marked reduction in mortality and morbidity.

In terms of implementation strategy, at the national level, the Public Health Programme shall be strengthened to support the Regional Health Management Teams in the planning and implementation of disease prevention and control and health promotion programs at various levels. The Programme will also be responsible for policy development, overall co-ordination and guidance on the prevention and control of diseases throughout the country. Furthermore, various divisions within the Programme will co-ordinate with the non-state sectors on the establishment of standards and regulations affecting the programs, and for monitoring the delivery of public sector and non- governmental disease control and health promotion activities throughout Swaziland.

More importantly, successful implementation of these control measures under the NHSSP will depend on revitalization of health centers, public health units, clinics, the efficient operation of hospitals and an appropriate and efficient referral system as well as a carefully designed, supervised and supported community-facility interface. Strengthening of the interface between curative services, preventive and promotive services and community-based health care will be considered a top priority. At the community level, social mobilisation through the Chiefdom and Inkhundla Health Committees and RHMs will be an important strategy. Gender and life cycle strategies will be developed to ensure that all segments of the population are covered. The community-based health systems will hence be re-oriented to deliver specific package of public health interventions to reach especially the poor and difficult to reach populations.

### *7.1 Strategic Priority 3.1: Control and management of Communicable and Non-Communicable Diseases*

The impact of communicable diseases especially tuberculosis, STD/HIV/AIDS, malaria and bilharziasis remains the greatest challenge to the health system and population wellbeing in Swaziland. They are among the most common causes of morbidity and mortality across the age profiles. In addition non-communicable and lifestyle related diseases such as cardiovascular diseases, hypertension, diabetes mellitus, obesity, asthma and cancers are also on the increase giving Swaziland a full transitional epidemiological profile. To control and manage these conditions, the NHSSP will build on and strengthen the ongoing programs and seek to promote integration of communicable and non-communicable disease control interventions. The Division of Epidemiology and Disease Control, in collaboration with other Departments will provide technical supervision and support to Programs and the Regional Health Management Teams in the planning and implementation of disease prevention and control activities. The capacity of the Division will be developed to carry out needed epidemiological surveys and studies based also on an increased laboratory effectiveness. At the regional level, the Regional Health Management Team will be responsible for the planning, management, monitoring and co-ordination of prevention and control of communicable and non-communicable disease activities. Each RHMT will support and guide services providers to develop their respective operational plans and budgets.

#### *7.1.1 Strategic Priority area 3.1.1: Control and Management of HIV/AIDS/STIs*

Controlling the spread of HIV/AIDS in Swaziland remains a top priority. The impact of HIV/AIDS epidemic not only poses a major challenge to the country's health system but also to the whole socio-economic fabric of the Swazi nation. Available information shows that previous gains on the health status as well as the quality of life of the Swazi people are rapidly being eroded by HIV/AIDS. As a result of the increased incidence and prevalence of opportunistic infections associated with HIV/AIDS, the health facilities have become overburdened with increased demand for treatment and care. The ramifications of HIV/AIDS are manifested in a drastic reduction in life expectancy at birth, a significant increase in mortality, an increased number of widows and orphans, an increase in child headed household households, a loss of productivity; and depletion of family assets to care for PLWHAs and to cater for funeral expenses.

In response to these challenges, Swaziland has been making massive efforts since 2001 to combat and reverse the impact of HIV/AIDS epidemic. These efforts, led by NERCHA, SNAP and a host of Faith Based Organizations, NGOs, CBOs and business sector entities, are reflected in both past and present policy and plan documents such as the Second National Multi-sectoral HIV and AIDS Policy; the National Multi-sectoral HIV and AIDS Strategic Plan (2006-2009); the National Action Plan (2006-2009); and the Health Sector Response Plan to HIV/AIDS (2006–2008). Notable achievements have particularly been recorded

in the mobilization and sustain of political commitment; in the implementation and review of the multi-sectoral strategy in the fight against HIV/AIDS; in developing a national framework for prevention of HIV transmission and provision of comprehensive and quality standards of treatment, care and support for persons with HIV/AIDS.

However, despite the efforts and achievements in the fight against HIV/AIDS, the spread of HIV infections is growing and given the fact that the pandemic is maturing, number of people who require treatment, care and support services is also rapidly increasing. Issues of limited behavior change and persistent negative attitude towards and discrimination against PLWHAs and affected persons are also still rife.
Building on past achievements, the objective of the NHSSP is to intensify the prevention of new infections, expand treatment and care interventions, improve the quality of life of PLWHAs and mitigate the socio-economic impact of HIV/AIDS in Swaziland. Specifically, the NHSSP will seek to meet the following targets by 2013:

- Reduce the rate of HIV incidence from 3%(2008) to below 2.3% by 2014
- Reduce the percentage of young people aged 15-19 who are HIV infected is reduced from 9% in 2007 to 5% by 2014
- Increase the percentage of men with multiple concurrent partners who have reported using a condom during the last sex has from 26% in 2007 to 70% by 2014
- Increase the percentage of young people 15-24 reported using a condom during first sex is in from 43% for women and 49% for men in 2007 to 70% by 2014
- The percentage of HIV positive pregnant women who received a course of ARV prophylaxis to reduce MTCT in the last 12 months is increased from 65% in 2007 to 100% by 2014
- Maintain 100% of donated blood units screened for HIV in a quality assured manner
- The prevalence of genital ulcers is reduced from 20% in 2007 to 15% by 2014
- The percentage of people aged 15-49 tested for HIV in the last 12 months and know their status increased from 22% to 50% for women and 9% to 40% for men by 2014
- % of people aged 18-59 years who have been very sick or who died within the past 12 months whose households have not received basic external support to care for them is reduced from 77.8% to 50%
- 100% of estimated HIV positive incident TB cases that received treatment for TB and HIV by 2014
- At least 80% of people enrolled on pre-ART programme retained on pre-ART by 2014
- 85% of people on ART retained on treatment three years after the initiation of ART by 2014

To achieve the above targets, the NHSSP will endeavor to strengthen and scale up the following priority interventions and programs through SNAP, NERCHA and other non-state implementing partners including organizations or groups of PLWHAs and caregivers:

- **Capacity building:** The NHSSP seeks to strengthen the organizational and management capacity of MOH, SNAP and NERCHA to lead and coordinate the fight against the epidemic. In this regard, the NHSSP will focus on strengthening management and coordination capacity of relevant institutions, build human resource capacity, strengthen capacity for resource mobilization and management and promote an inter and multisectoral comprehensive approach in the fight against HIV/AIDS.
- **HIV/STI prevention:** A set of interventions will mainly focus on implementing blood safety measures including injection safety and universal precautions; intensifying advocacy and political mobilization; interventions for in-school and out-of-school youth; interventions targeting high risk and vulnerable groups such as commercial sex workers and men having sex with men and intravenous drug users; public sector promotions and social marketing of male and female condoms; promotion of male circumcision; STI prevention interventions services; voluntary counselling and testing (VCT); workplace policies and interventions; infection prevention and control in health facilities; prevention of mother to child transmission (PMTCT); positive prevention interventions; post-exposure prophylaxis (PEP) services for both survivors of sexual violence and health workers; and behavior change communication (BCC) through mass media and community level IEC.
- **Treatment, care and support:** These interventions will focus on pre-ART interventions; HAART services, palliative care; clinical management of STIs and opportunistic infections; TB/HIV co-infection management; youth friendly services within health facilities; home based care, nutrition

support; and pediatric/clinical care for children; ART monitoring; and strengthening of the National HIV/AIDS Quality Control Laboratory services.

- **Mitigation:** These interventions will be implemented in close collaborations with Social Welfare Department and other stakeholders including Ministry of Education, Agriculture, Justice, Enterprise, Local governments, Housing and non-state actors such as NGOs, FBOs, CBOs, business and industry among others. The activities will mainly focus on providing support for orphans; psychosocial support and counseling, income generating activities (IGAs), child protection services, education, shelter and vocational training.
- **Protection of Human Rights of People living with and affected by, HIV/AIDS:** On human rights of PLWHAs and their families, a legislation on Prevention and Control of HIV and AIDS to address stigma and discrimination will be enacted and extensive nationwide social mobilization campaign on the rights of PLWHAs will be carried out. In addition, legal aid and legal counseling support will be provided to vulnerable groups such as women and children affected by HIV/AIDS in collaboration with the Ministry of Justice and NGOs such as Women and Law in Southern Africa.
- **Monitoring and evaluation, research and surveillance:** the NHSSP will strengthen the M&E capacity of the health sector and establish HIV/AIDS information management and surveillance systems to support planning of interventions and to increase the understanding of HIV trends and changes in the levels of prevalence overtime. The MOH through SNAP and NERCHA will also endeavor to establish links with both regional and international institutions involved in HIV/AIDS related research.

Overall, in order to meet its objectives in the fight against HIV/AIDS, the NHSSP will adopt principles of multisectorality, integration, decentralization, community participation, partnership building and regional collaboration. Priority will also be put on facilitating integration of HIV/AIDS services in other essential services and programs such as reproductive health, TB, blood safety and transfusion, STIs nutrition and food security and training.

**Strategic Operational Objective (SOO) 3.1.1:** To intensify the prevention of new infections, expand treatment and care interventions, improve the quality of life of PLWHAs and mitigate the socio-economic impact of HIV/AIDS in Swaziland.

| Activities | Indicators |
|---|---|
| 248 Review the Health Sector Response to HIV/AIDS Plan and develop a new strategy | 248 Health sector response plan reviewed |
| 249 Strengthen the organizational and management of MOH, SNAP, NERCHA and Regional Health Authorities to lead and coordinate the fight against the epidemic | 249 No of coordination meetings and % of joint documents and reports elaborated and adopted |
| 250 Strengthen and scale up counseling and testing (CI and PI) | 250 No. of health centres and Type B Clinics providing VCT services and No of standalone VCTs established |
| 251 Review & scale up HTV-VCT National guidelines and conduct counselors training | 251 No of trained counselors deployed and % of people who know their HIV status |
| 252 Increase number of hospitals, health centres and clinics providing PI-HTC | 252 No of facilities providing PI-HTC and No of clients per facility |
| 253 Increase number of standalone VCT centres providing CI-HTC | 253 No of standalone VCT centres providing CI-HTC and No of clients per facility |
| 254 Expand mobile HTC-VCT outreach services | 254 No of outreach clinics conducted and No of clients per session |
| 255 Training of community based peer educators (CBPE) and lay peer counselors | 255 No of educators and lay staff trained and in place and No of clients served per day |
| 256 Strengthen and scale up workplace programs and ensure availability of relevant drugs at relevant work places | 256 % of health facilities practicing infection control according to universal precautions |
| 257 Conduct HIV testing at national mass gatherings | 257 No of tests done per event and % done during events vs total |

| | |
|---|---|
| 258 Strengthen and scale up prevention of mother to child transmission (PMTCT) | 258 No. of pregnant mothers receiving PMTCT services |
| 259 Strengthen and scale up positive prevention and Post Exposure Prophylaxis (PEP) services | 259 No of facilities offering PEP services and No of clients per facility per month |
| 260 Strengthen and scale up behavior change communication (BCC) | 260 No of people who report having protected sex or a change in behaviors at risk |
| 261 Conduct social marketing of HTC-VCT services at all levels through print & electronic media, edutainment, drama, road shows and other | 261 No of events conducted and No of participants per residential event |
| 262 Strengthen and scale up interventions targeting high risk and vulnerable groups such as commercial sex workers and men having sex with men, intravenous drug users, in-school and out-of-school youth, long distance truck drivers and others identified by means of dedicated assessment | 262 Group specific incidence and prevalence rate<br>263 No of care givers and RHMs enrolled, trained and deployed who receive subsidies and No of clients served per care giver<br>264 No. of PLWHA in need of treatment receiving ART whose treatment is laboratory supported and whose adherence is laboratory monitored and %of PLWHA with access to prevention services |
| 263 Increase number of community based care givers and RHMs, training and incentivizing them and promoting income generation projects for them | 265 No of timely reports compiled, validated and disseminated |
| 264 Strengthen the ART monitoring and National HIV/AIDS Quality Control Laboratory capacity | 266 No of facilities and No of health workers capable to deliver STI services according to guidelines and No of clients served by facility |
| 265 Strengthen the M&E capacity for HIV/AIDS Interventions in the health sector | 267 % of eligible male clients identified and circumcised |
| 266 Strengthen and scale up STI services | 268 % of HIV free blood at all levels and No of injection related accidents recorded |
| 267 Review and scale up STI national guidelines to incorporate other stakeholders in HIV & AIDS service provision and to include male circumcision | 269 male and female condom use prevalence rate in both rural and urban areas per facility and per constituency |
| 268 Strengthen blood safety measures including injection safety and universal precautions in health facilities (IPE) | 270 % of clients receiving comprehensive HIV/ AIDS services by location and by provider |
| 269 Promote public, private and NGO sectors collaborations and social marketing of male and female condoms and male circumcision | 271 Proportion of health workers with capacity to administer standard diagnostic treatment and counseling by cadre and by location/facility |
| 270 Promote SWAP in the fight against HIV/AIDS | |
| 271 Build human resource capacity in various aspects of the fight against HIV/AIDS, strengthen capacity for resource mobilization and management at all levels | 272 No of schemes established and No of participants per scheme<br>273 No. of facilities providing MC services |
| 272 Establish income generating drives for PLWHA | |
| 273 Increase of facilities providing MC services | |

### *7.1.2 Strategic Priority area 3.1.2: Control And Management of Tuberculosis (TB)*

Tuberculosis (TB) is one of the major causes of morbidity and mortality in all age groups in Swaziland. Available records reveal substantial increases in TB prevalence and incidence rates from 263 per 100,000 population in 1990 to 1,262 in 2005 (WHO 2007a). A noticeable increase in the number of TB/HIV associated cases has also been observed. TB is now the major opportunistic infection and cause of mortality in HIV/ AIDS patients. Inpatients at the TB hospital are estimated to have a prevalence of 50% compared with the general prevalence rate of 19% in all TB patients. The sero-positivity rate i.e. proportion of TB patients who are HIV positive is estimated at 78.6%. In addition, there are emerging cases of Multi Drug Resistant (MDR) and Extensively Drug Resistant (XDR) TB.

TB prevention is undertaken through immunization of children and health education, while clinical services are based on case detection, testing and treatment of latent infections and active disease. Through the

implementation of the Directly Observed Treatment Strategy (DOTS), smear-positive case detection rate has increased from the relatively low levels of 38% in 2004 to about 57%, and treatment success rates under DOTS has increased to about 42% currently. These are however still much lower than the international standards of 70% (detection rate) and 85% (cure rate). Key among the challenges faced by the National TB Control Program are the scarcity of resources (human, equipment etc); uncoordinated management of TB and HIV/AIDS co-infected patients; and weak systems for infection control both within health facilities (OPD and wards) and in homes. The recent completion and opening of the Manzini TB hospital is expected to improve TB services in the country.

The NHSSP will therefore endeavor to intensify and scale up the TB control and DOTS interventions in order to reduce morbidity and mortality associated with the burden of TB. To this end, the NHSSP has set the following targets to be achieved by 2013:

- 100% national coverage with community DOTS
- An increase in TB cure rate from 42% to 80%
- An increase in TB treatment success rate to 85%
- An increase in TB detection rate from 57% o 85%
- A reduction in TB prevalence from 1120 per 100,000 population to 661 per 100,000
- A reduction in TB incidence from 1262 per 100,000 population to 724 per 100,000
- A reduction by half of the burden of HIV in TB patients
- A reduction by half of the burden of TB in PLWHAs
- A substantial increase in the % of persons diagnosed with TB who are tested for HIV

To achieve the above targets, the NHSSP will strengthen the capacity of the National TB Control Program to plan, implement and monitor TB interventions. Specifically, the NHSSP will facilitate integration of TB control into the health system and include TB in regional health care package. A countrywide implementation of community DOTS strategy and expansion of TB microscopy services coverage will be facilitated. The NHSSP will promote collaborative interventions in TB and HIV control and care and seek to ensure access to TB care for people living with HIV/AIDS. The NHSSP will promote a patient-centred approach in relation to diagnostics, treatment and prevention while increasing community involvement in TB control and care. In addition, partnerships between the public, private, voluntary and nongovernmental sectors will be strengthened in all aspects of TB control and management. A national surveillance system for monitoring HIV sero-prevalence among TB patients and anti-tuberculosis drug resistance will also be strengthened.

For practical purposes, TB prevention through immunization will be included in the Child Health interventions while treatment and prevention of TB for people living with AIDS will be included the HIV/AIDS prevention and management interventions.

**Strategic Operational Objective (SOO) 3.1.2:** To intensify and scale up the TB control and DOTS interventions in order to reduce morbidity and mortality associated with the burden of TB.

| Activities | Indicators |
|---|---|
| 274 Strengthen National TB Control Program human resource and infrastructure capacity to effectively facilitate, coordinate and implement prevention, control and treatment of TB (including MDR TB) in accordance with national and WHO guidelines | 274 TB incidence rate; TB prevalence rate; treatment success rate; case detection rate; case-fatality ratio and specific mortality rate |
| 275 Ensure availability of proper isolation structures and proper ventilation in health facilities to reduce nosocomial infections | 275 No of facilities implementing infection control measures (administrative, environmental and personal protection measures) as per national guidelines |
| 276 Develop and review guidelines for standard treatment regimes, MDR and infection control | 276 Availability of guidelines and % of patients treated accordingly |
| 277 Develop and implement an effective national Behavioural Change Communication (BCC) strategy for TB | 277 Availability of BCC strategy |

| | |
|---|---|
| 278 Develop, produce and distribute IEC materials on TB | 278 % of targeted audience who are aware and have sufficient knowledge of TB and related issues |
| 279 Provide training for health workers on prevention, diagnosis, treatment and management of TB | 279 No of health workers trained by facility and region |
| 280 Provide training for laboratory technicians on AFB techniques | 280 No. of technicians trained in AFB techniques |
| 281 Train community based volunteers and RHMs on TB control and management | 281 No. of community volunteers and RHMs trained and % deployed by location |
| 282 Procure and distribute TB drugs and medical supplies for treatment and diagnosis and ensure that laboratories and X-ray facilities are well equipped | 282 No. and % of TB diagnostic facilities reporting a stock out in first line drugs and No and % of treatment interrupted during the reporting period and No. of facilities with functioning laboratories and X- ray facilities |
| 283 Scale up implementation of community DOTS and management of MDRTB and XDRTB | 283 No and % of patients on DOTS and No. of facilities implementing DOTS |
| 284 Establish a comprehensive national TB management information and surveillance system for contact tracing, new cases and defaulters | 284 No. of reported defaulters and No of contact cases identified in a reporting period by location |
| 285 Establish quality assurance system for TB interventions | 285 No and % of laboratories performing regular EQA for smear microscopy |
| 286 Conduct special surveys on TB and research chemo-prophylaxis | 286 No of operational research studies completed and % of facilities with related reports available |
| 287 Establish and sustain TB/HIV coordinating committees at national and regional and grass roots levels | 287 No. of Committees established and operational at national and regional level |
| 288 Establish and sustain TB control network across the country and improve integration of TB care with HIV and AIDS care at all levels | 288 % of pregnant women screened for TB at PMTCT centres; No. of HIV+ TB patients provided with cotrimoxazole & isoniazid (INH); % of HIV burden in TB patients; % of TB burden in PLWHA; % of persons diagnosed with TB who are tested for HIV |

***7.1.3 Strategic Priority area 3.1.3 Control and Management of Malaria***

According to a recent report of the National Malaria Control Programme (2007) malaria continues to be one of the major public health problems in Swaziland. It is estimated that about 30% of the population, largely from the Lubombo Plateau, the Lowveld and parts of the Middleveld, is at risk of malaria infection.

Malaria is estimated to account for about 1.1% of all outpatient attendances, 0.6% of all hospital admissions and 0.9% of all deaths in the country, with strong variations among the regions. The disease is very seasonal and unstable occurring mainly during and after the rainy season, with intermittent occurrence of malaria epidemics, particularly, during periods of favorable conditions for malaria transmission.

It is worth noting that the country has over the years made significant progress in realizing the objective of reducing malaria to a level where it ceases to be a major impediment to socio economic development of the Swazi population.

The country has managed to achieve the Abuja and MDGs targets long before the set target dates. The biggest challenge now is how the program sustains the achievements. It was against this background that the program after wide consultations with stakeholders decided to scale up from malaria control to malaria elimination. The program with inputs from all stakeholders developed the National Malaria Elimination Strategic Framework 2008 – 2015. The major intervention areas of the strategic framework includes: vector control, case management, surveillance information, epidemic and response. The program is currently engaged in the development of a malaria elimination business plan.

**Case Management**

Case management is one of the key strategic interventions for malaria control programs, as it is able to

significantly reduce morbidity and mortality due to malaria. It involves implementation of prompt accurate diagnosis and effective treatment. Accurate diagnosis of malaria is achieved through the use of rapid diagnostic tests and slide microscopy. Effective treatment of malaria comprises of the appropriate use of an effective anti-malarial drug according to the WHO recommended and national treatment guidelines.

**Vector Control and Personnel Protection**
The principal objective of vector control is to suppress vector activity to a point where malaria transmission can be fully interrupted resulting in a decrease in malaria morbidity and mortality. Vector control in Swaziland is aligned to the WHO-recommended systematic approach to vector control, based on evidence and knowledge of the local situation. This approach is called Integrated Vector Management (IVM). The key intervention strategies for IVM in Swaziland will include IRS, LLIN, and larviciding. Swaziland has used IRS very successfully in the past few years, achieving over 90% of targeted households in the malaria transmission areas. However, LLIN coverage has been low in the targeted malaria areas, whereby only 5% of households were using effective nets. Ineffective delivery mechanisms were the reason for not being able to optimally deliver the nets.

Alternative delivery mechanisms of using spray-operators to deliver the LLINs should be implemented. Winter larviciding needs targeted at vector breeding sites. Geographic information has proved valuable in monitoring and surveillance of public health interventions. The implementation of the IVM strategies should therefore be guided by GPS and GIS technology, which will facilitate the geographical mapping of vector breeding and resting sites. This will ensure appropriate identification of transmission foci and effective implementation of IVM interventions at these sites.

**Surveillance and Epidemic Preparedness and Response (EPR)**
In order to accurately estimate the burden of disease and measure the trends in Malaria, the WHO recommends that robust surveillance systems needs to be implemented. Malaria data will be collected through both passive and active surveillance systems.

Passive surveillance will involve the reporting of all confirmed malaria cases from all health facilities to the appropriate health authorities. Both public and private sector health facilities should be regularly reporting malaria data to health authorities. Prompt reporting of malaria cases will become more important as malaria cases start to decline, this will allow the malaria program to identify remaining transmission foci and implement targeted interventions such as integrated vector control, case management and IEC. All positive malaria cases should be investigated to prevent localized spread of the disease. Regular training would need to be provided to appropriate personnel to ensure that case notification and reporting is optimal.

Active surveillance will involve the screening of high risk populations to identify malaria carriers. All malaria cases should be followed up to gather information about their potential source of infection. Screening should take place of persons with malaria symptoms using RDTs and all positive malaria cases should be treated with appropriate anti-malaria treatment. Dedicated staff (i.e., Malaria Surveillance Officers) from the malaria control program should follow up each case with a home visit to determine patient demographics, transmission source, and other key information.

**Malaria Health Promotion and IEC**
As malaria cases start to decrease in Swaziland, several sectors of the population and stakeholders, including certain government departments, may lose interest in malaria preventative measures. Health promotion and IEC will therefore be crucial for prevention of re-introduction of the disease. Malaria IEC using tailored messages and a variety of communication channels will therefore need to be used to ensure that communities and travelers travelling to and from malaria endemic areas should take the necessary precautions and actions needed to prevent being infected with malaria and onward transmissions.

The health promotion intervention strategy will involve increasing advocacy for malaria through the use of IEC to increase awareness of malaria, and actively mobilizing communities to become engaged in malaria control and elimination. The malaria health promotion and IEC strategy will be important for ensuring that the key strategies for malaria elimination are understood by communities. This involves:

- Early treatment seeking behavior;
- Compliance with Indoor residual spray teams for vector control;

- Ensuring that communities sleep under Insecticide treated nets; and
- Cleaning up their surrounding environment- to prevent vector breeding sites.

**Health System Strengthening**

Health system strengthening for infrastructural and technical support and ensuring access by both public and private sectors to malaria services are important precursors to ensure effective delivery of the strategic interventions for malaria elimination. Health system strengthening and its maintenance will be important to ensuring that the implementation of malaria elimination strategies are sustained at all stages of the malaria elimination continuum and can jeopardize the goal of malaria elimination if not adequately addressed. The current health systems challenges in Swaziland include:

- Limited laboratory infrastructural capacity for malaria diagnosis;
- Inadequate Health Management Information System (HMIS) for collecting, documenting and reporting health information;
- Lack of quality assurance processes for pharmaceutical and health products; and
- Inadequate Human resources for co-ordination and implementation all strategic interventions for malaria elimination.

**Monitoring and Evaluation**

Monitoring and evaluation must be regarded as an integral part of malaria control and elimination programs. Key requirements for monitoring are that data are regularly analyzed and fed back to all staff involved, particularly those at facilities that collect data. Monitoring and evaluation should be conducted through data collection and analysis from malaria indicator surveys (MIS, MICS, and DHS).

A detailed monitoring and evaluation plan should be developed, with the key monitoring and evaluation data information components for each phase of the elimination continuum as outlined below.

Building on the malaria control and management gains of the past years, the NHSSP seeks to prepare Swaziland for malaria elimination. Specifically, the NHSSP aims to achieve the following targets by 2013 by intervention area:

**Case Management**

- Reduce the number of laboratory confirmed cases per year during malaria transmission season from 4000 (during 1995-2000) to 30
- Significantly reduce malaria hospital case fatality rate
- Significantly reduce the proportionate malaria attributed mortality and morbidity
- Increase to 100% the proportion of facilities with trained health workers on malaria case management
- Increase the number of health facilities with capacity for correct management of malaria cases to 100%
- Increase to 100% the proportion of the population that receive effective treatment for malaria within 24 hrs of the onset of symptoms

**Vector Control and Personal Protection**

- Increase to 100% houses structures in targeted areas sprayed
- Increase to 100% identified vector breeding sites sprayed with larvicides
- Increase to 100% the proportion of pregnant women sleeping under LLN
- Increase to 100% the proportion of children under-5 sleeping under LLN
- Increase to 100% households with at least one ITN
- Regular insecticide resistance monitoring of IRS, LLN and larvicides

**Surveillance and Epidemic and Epidemic Preparedness and Response**

- 100% of malaria cases are notified within 7 days of diagnosis
- 100% of malaria cases are fully investigated within 7 days of confirmed diagnosis and
- 100% of malaria epidemics have been identified and responded to within 2 weeks of onset

To achieve the above NHSSP objective and targets, the National Malaria Control Programme (NMCP) will implement an integrated vector control, malaria management and diagnostic interventions including the following activities:

**Case Management**

- Procure and ensure consistent availability of drug supplies, RDTs, Reagents and Slides in all health facilities especially during the malaria transmission season
- Conduct training workshops on malaria for health workers and CHWs at community level
- Training of healthcare workers to ensure high level of diagnostic accuracy
- Develop new diagnosis and treatment guidelines on the management of malaria and distribution to all health facilities
- Roll out RDTs to all health facilities both within private and public sectors to ensure standardization of the diagnosis throughout the country
- Conduct quality assurance for malaria rapid diagnosis test
- Mount education campaign on malaria control at the community levels
- Strengthen the field logistic system and maintain an effective transport and communication system for the program
- Establish and hold meetings with National Malaria advisory committee, Vector control committee and Malaria Clinical Advisory Committee

**Vector Control and Personal Protection**

- Conduct Indoor Residual House Spraying (IRHS) of dwellings in malaria prone areas
- Procure and maintain IRHS equipments and protective clothing
- Procure and distribute Long Lasting Nets (LLNs) to target groups and re-treat the ITNs
- Develop IEC materials for ITN promotion
- Identify and map all vector breeding and resting sites

**Surveillance and Epidemic Preparedness and Response**

- Strengthen the malaria surveillance system
- Setting up mechanics for notification and investigation of all confirmed malaria cases
- Establishing Early warning systems to forecast epidemics
- Scaling up EPR systems
- Setting up Elimination GIS-based database on malaria cases and vector

**Health systems strengthening**

- Setting up and malaria elimination and prevention of reintroduction of malaria committees
- Ensure that resources are mobilized to implement elimination activities
- Establish partnership (financial and logistic sectors in government, community organizations, NGOs, UN agencies and private sectors to support malaria elimination in Swaziland
- Ensure adequate supplies and monitoring quality of malaria commodities
- Ensure cross border malaria initiatives such as LSDI and developing mechanisms for screening of malaria travelers
- Monitor and evaluate all the targets for malaria elimination

**Monitoring and Evaluation**

- Enhance case information system: geo-location and immediate notification of cases
- Geo-reference entomological data: insecticide resistance and location of breeding sites
- Entomological surveillance
- Drug efficacy by post treatment follow up of cases
- Epidemic preparedness and response
- Regular QA of laboratory diagnosis
- Monitor and evaluate targets for malaria elimination
- Reported malaria cases and deaths
- Proportion of population at risk targeted for ITNS and IRS
- Proportion of population protected by LLN and IRS
- Proportion of uncomplicated and complicated malaria
- Proportion of uncomplicated malaria cases receiving timely and effective treatment

| **Strategic Operational Objective (SOO) 3.1.3:** To reduce malaria morbidity and mortality to insignificant levels by 2013. | |
|---|---|
| **Activities** | **Indicators** |
| 289 Develop new malaria diagnostic guidelines<br>290 Conduct regular training of health workers on the use of new diagnostic guidelines<br>291 Distribute diagnostic guidelines to all health facilities<br>292 Procure and Roll-out of RDTs to all health facilities (both private and public)<br>293 Develop a quality assurance system to monitor the accuracy of malaria diagnostics (microscopy and RDTs)<br>294 Conduct regular meetings of National Malaria Advisory Committee<br>295 Procure and roll out of drug supplies, RDTs and slides in all health facilities and Provide Accurate Confirmed Diagnosis of malaria | 289 Availability of treatment and diagnostic guidelines developed<br>290 No. of health workers trained<br>291 % of health facilities with treatment and diagnostic guidelines<br>292 % of clinics with no RDT stock outs<br>293 % of blood slides correctly diagnosed<br>294 No of meetings conducted per month<br>295 % of facilities reporting no stock outs of RDTs, slides and ACTs and % of malaria cases confirmed by RDTs/microscopy |
| **Malaria Treatment** | |
| 296 Develop malaria treatment guidelines<br>297 Training of health workers management of malaria at health facility level on new treatment guidelines<br>298 Distribute malaria treatment guidelines to all health facilities<br>299 Procure and Roll out ACT to all health facilities both public and private sector<br>300 Conducting Monitoring drug resistance | 296 Availability of treatment guidelines in all health facilities<br>297 No. of health workers trained on malaria treatment guidelines<br>298 % of health facilities with treatment guidelines<br>299 % of health facilities with no ACT stock outs<br>300 No of studies conducted in accordance with WHO protocols |
| **Scale Up Vector Control and Personal Protection Interventions** | |
| 301 Regular / weekly reporting of malaria cases by health facilities<br>302 Conduct parasite surveillance studies<br>303 Epidemic Forecasting<br>304 Conduct training of EPR task force and RHMTs on Epidemic Preparedness and Response | 301 % of health facilities (public and private) reporting cases in a timely manner and existence of a well functional malaria surveillance system<br>302 % of all confirmed malaria cases that are fully investigated within 7 days of diagnosis<br>303 % of 1 malaria epidemics detected within 2 weeks<br>304 No. of EPR taskforce and RHMT workers trained on EPR |
| **Health Promotion and IEC** | |
| 305 Develop a communication strategy for malaria IEC<br>306 Develop malaria IEC material<br>307 Distribute malaria IEC to the total population and travelers<br>308 Mass media campaigns<br>309 Conduct KAP studies to evaluate effectiveness of IEC | 305 Availability of IEC communication strategy<br>306 No of critical areas of the program and No of target population groups addressed by IEC materials<br>307 % of population reached by malaria IEC<br>308 % of population reached by mass media campaigns<br>309 No of KAP studies conducted |

| | |
|---|---|
| **Health System Strengthening** | |
| 310 Conduct regular meetings of National Malaria elimination and prevention committee | 310 No of meetings conducted |
| 311 Conduct regular meetings of National Malaria Advisory Committee | 311 No of meetings conducted |
| 312 Conduct regular meetings of National vector control committee | 312 No of meetings conducted |
| 313 Conduct meetings of the National Malaria Clinical advisory committee | 313 No of meetings conducted |
| 314 Conduct meeting with partnership to support malaria elimination | 314 No of meetings with partners conducted |
| 315 Strengthen cross boarder malaria initiatives e.g. LSID and developing mechanisms for screening travelers | 315 % of travelers screened on malaria |
| **Monitoring and evaluation** | |
| 316 Conduct National KAP on malaria | 316 % of population with improved knowledge on malaria control and its prevention |
| 317 Conduct study to Evaluate management of uncomplicated and complicated malaria at health facility level | 317 No. of studies conducted |
| 318 Conduct monitoring ACT resistance at key sentinel sites | 318 % of malaria cases resistant to ACTs |
| 319 Conduct monitoring RDT quality assurance study throughout the supply chain management process including usage in health facilities | 319 % of RDTs monitored for quality assurance through supply chains |
| 320 Conduct study on health workers performance | 320 % of health workers who properly manage malaria cases according to treatment and diagnostic guidelines |
| 321 Conduct study on home-based management of malaria at community level | 321 % of malaria cases properly managed at community level |
| 322 Conducting entomological surveillance for both larval and adult forms of vector | 322 No of surveillance reports published timely |
| 323 Conducting insecticide resistance monitoring for IRS,LLNs and larvicides | 323 % of functional sites for monitoring insecticide resistance |
| 324 Conduct study on IRS coverage and LLNs coverage | 324 % of population at risk with LLNs and protected by IRS |
| 325 Conduct drug efficacy: in vivo and in vitro parasite sensitivity to antimalaria drugs | 325 % of malaria cases resistant to drugs |
| 326 Conduct case data from patient registers | 326 % of patients with malaria |

### *7.1.4 Strategic Priority area 3.1.4: Control and Management of Bilharzias*

Bilharzias (also known as schistosomiasis, bilharziosis or snail fever) is a parasitic disease caused by several species of fluke of genus Schistosoma. Although bilharzia prevalence is not precisely known in Swaziland, a study in 1990 estimated that the infected population could be as high as 35%, 20% of whom were affected by Schistosoma haematobium (urinary bilharzia). The prevalence of Schistosoma mansoni (intestinal bilharzia) infection however, remains unknown.. The public health impact of bilharzia, is second only to malaria as the most devastating parasitic disease.

In recent years the program has expanded its mandate to dual approach of morbidity control with de-worming for the schistosomiasis and soil - transmitted Helminthiasis. The de-worming treatment is done through a repeated single-dose and highly effective drugs of choice, so safe that they can be given to all age group at risk.

De-worming is simply the destroying of worms in the human body into a reduced number that will not harm the proper functioning of the body organs and systems.

The NHSSP therefore aims to reduce the level of morbidity due to bilharzias and to treat all infected school aged children in Swaziland over the next five years. Specifically, the NHSSP will seek to reduce

bilharzia prevalence to less than 1% by 2013 for all children entering or in school. To achieve this, the National Bilharzia Control Program will be guided by the World Health Organization (WHO) standard recommendation that if over 20% of children in a school are infected then all school-aged children should be offered mass treatment annually; and that if over 50% of children are infected, the whole community should be offered mass treatment annually.

The MOH will also establish mechanisms at all levels to educate and sensitize the public on the prevention and control of contact with schistosomiasis infested river water and in irrigation schemes. Specifically, the NHSSP will focus on the following key strategic interventions:

- Develop and implement a National Bilharzia Control Policy
- Develop and implement a strategic plan for National Bilharzia Control Program
- Develop and implement health promotion and education program to create public awareness on bilharzias prevention and management especially in riparian communities living around conservation dams, irrigation schemes and small streams and rivers
- Strengthen the field logistic, transport and communication system for the program

| **Strategic Operational Objective (SOO) 3.1.4:** To reduce the level of morbidity due to bilharzias and to treat all infected school aged children in Swaziland. | |
|---|---|
| **Activities** | **Indicators** |
| 327 De-worming of school-aged children<br>328 Develop and implement a National Bilharzia Control Policy<br>329 Develop and implement a strategy and an action plan for National Bilharzia Control Program<br>330 Health Facility De-worming<br>331 Procurement, storage, packaging and distribution of de-worming tablets.<br>332 Conduct raped assessment to verify re-infection status in the three ecological zones of the country<br>333 Motivate and mobilize the communities to participate in bilharzias control activities<br>334 Strengthen the program and field logistic, transport and communication system | 327 Proportion of school aged children de-wormed<br>328 Availability of bilharzia control policy<br>329 Availability of bilharzia control strategy and action plan<br>330 Proportion of under 5 and pregnant women de-wormed<br>331 No of tablets ordered, delivered and distributed<br>332 Existence of assessment reports<br>333 No of exposed communities actively involved in control activities and their prevalence rate<br>334 Suitable options for transport and communication identified and No of outreach visits conducted by region |

### *7.1.5 Strategic Priority area 3.1.5: Control and Management of Non-Communicable Diseases (NCD)*

Non-communicable and lifestyle related diseases are steadily emerging as a major public health problem in Swaziland. It is estimated that NCDs like cardiovascular diseases, hypertension, diabetes mellitus, obesity, asthma and cancers constitute about 20% of all cases of outpatient attendance. The main risk factors for non-communicable diseases (NCDs) include sedentary lifestyles, unhealthy diet, heavy alcohol consumption and smoking. Despite the growing public health importance of NCDs, the country lacks the capacity to effectively address the NCD challenges. This is manifested in uncoordinated NCD service delivery approach; poor quality of care; shortage of qualified human resources; perennial shortage of medicines; inadequate diagnostic equipment and facilities; inadequate budget allocations and inadequate institutional and logistic support systems.

There is scarce evidence of the availability, dissemination and use of clinical guidelines and of rigorous protocols to support diagnostic as well as therapeutic pathways. Additionally the vast majority of inpatient services focus on NCDs patients. These are also patients responsible for the less than acceptable length of hospital stay, given the unavailability of alternative care, such as nursing homes, post-acute event rehabilitation clinics; home based care (administrable with telemedicine facilities in urban areas and distant communities). Finally, it is mainly for NCDs that the Government is spending large financial resources in referrals abroad, for the lack of even basic diagnostic equipment and dedicated and competent staff in Swaziland.

The NHSSP seeks to strengthen the capacity of the MOH NCD Unit and scale up NCD program interventions in order to reduce morbidity and mortality associated with the burden of non-communicable and lifestyle related diseases. To this end, MOH will establish and strengthen the capacity of the MOH NCD Unit to effectively oversee, coordinate, support, facilitate and monitor prevention, control and management of NCDs at all levels. The MOH will also establish mechanisms at all levels to promote healthy life styles such as encouraging the public to stop smoking, engage in exercises or sports, eat a balanced diet regularly, reduce stress, and reduce alcohol consumption. Specifically, the NHSSP will focus on the following key strategic interventions:

- Develop and implement a national NCDs Policy and evolve a national NCD strategy and action plan
- Develop and implement a comprehensive NCD health promotion and education program to create public awareness on NCDs risk factors, early detection, prevention of complications, management of diet related NCDs, self-care and self- monitoring
- Establish NCDs monitoring and surveillance system to collect routine data on prevalence of diet related NCD's, diabetes mellitus, hypertension and cancers, cardiovascular and neurodegenerative diseases
- Conduct a national assessment on NCDs risk factors, incidence and prevalence
- Develop guidelines and protocols on NCD's management and counseling
- Establish a program specially targeting children living with NCDs, especially Type 1 Diabetes
- Develop a comprehensive and integrated NCDs risk factors prevention and management program
- Build capacity of and equip, health facilities with adequate diagnostic, laboratory, drugs and other essential medical supplies to effectively manage NCDs
- Conduct regular NCDs screenings
- Conduct training workshops on NCDs for health workers and CBOs at community level
- Strengthen the field logistic system and maintain an effective transport and communication system for the program

**Strategic Operational Objective (SOO) 3.1.5:** To strengthen the capacity of the MOH NCD Unit and scale up NCD program interventions in order to reduce morbidity and mortality associated with the burden of non-communicable and lifestyle related diseases.

| Activities | Indicators |
|---|---|
| 335 Strengthen the capacity of the MOH NCD Unit | 335. A fully staffed and equipped NCD Unit in place |
| 336 Develop and implement a national NCDs Policy | 336. Availability of NCD policy |
| 337 Develop and implement a national NCD strategy and action plan | 337 Availability of NCD Strategy and action plan |
| 338 Conduct a national assessment of NCDs risk factors, incidence and prevalence. and screening of risk factors (obesity, physical activity, smoking, alcohol, diet cholesterol, blood pressure, blood glucose) | 338. % of mortality and % of morbidity attributed to NCDs; Case fatality ratio of NCDs; No. of NCD screenings conducted; availability of screening equipment in place and No of staff capable to conduct screening by facility |
| 339 Plan and implement a special program for children living with NCDs especially Type 1 Diabetes | 339. No of children identified and enrolled in special program |
| 340 Conduct a technological review and inventory of NCDS relevant diagnostic tools, drugs and other commodities at hospital level, assess needs and gaps and procure and install identified equipment | 340. Inventory available and % of needed equipment procured and installed |
| 341 Build capacity of clinical staff to ensure continuity of care, from prevention to rehabilitation of NCDS patients, focusing on dysmetabolic diseases, cardiovascular and neurodegenerative diseases, COPDs, cancers | 341. No of staff capable to manage NCD cases by facility and disease and -% of NCD patients correctly diagnosed and treated according to NCD guidelines and protocols |

| | |
|---|---|
| 342 Strengthen the field logistic system and maintain an effective transport and communication system for the program | 342. Outreach activities conducted by location and % of facilities reporting no stock out of essential drugs and supplies |
| 343 Develop and implement a comprehensive NCD health promotion and education program | 343. % of the population aware of risk factors and adopting healthy life styles by condition and by location, gender and age group; No of educational events offered at school level and No of participants per event |
| 344 Establish and maintain NCDs monitoring and surveillance system | 344. Clinical patient based information system in place at each facility |
| 345 Develop guidelines and protocols on NCDs management and counseling and build health workers' capacity to adopt and adhere to guidelines | 345. Availability of NCD guidelines and protocols; % of facilities adopting guidelines and No of patients treated accordingly |
| 346 Develop and implement a comprehensive and integrated NCDs risk factors prevention and management program and build health workers' and CBOs' capacity to implement it, with special focus on the community level | 346. Prevalence of NCDs by disease, gender, location and age group; NCDs complications rate by disease |
| 347 Conduct economic assessment and cost-benefit analysis to support decision making in clinical investments to target NCDs and restructure the entire referral system accordingly | 347. Report available; % of referrals abroad fully documented and justified; appropriateness of care and hospital use protocols assessed and % of appropriate discharges by condition and facility |
| 348 Build and maintain a national databank of best practices, protocols and clinical and management guidelines for prevalent NCDs | 348. No of protocols and best practices published and adopted and % of health facilities using NCD control and management protocols and guidelines |
| 349 Develop and update a national formulary for NCDs treatment and procure related pharmaceuticals | 349. % of prescriptions based on national formulary and prescribing generics |

***7.2 Strategic Priority 3.2: Family Health***

Families play a central role in the health of their members, adult women, adult men, children, adolescents and the usually neglected and fragile elderly. They are beneficiaries of health services as much as they are managers of their own health. They are also key partners in assessing health needs, supporting the implementation of health interventions and in ensuring the referral system works.

However, in the families, women of childbearing age and children face most of the threats to life. Women are at risk of maternal infections, obstetric complications, anemia, malaria, nutritional deficiencies, hypertension, and postpartum haemorrhage, that are the major underlying causes of maternal mortality. In early childhood, the environment of life for children poses constant and serious threats to health. At this stage, children are most vulnerable to malaria, diarrheal diseases, upper respiratory infections and TB, worm infestations, and malnutrition which all contribute to the well-documented high child mortality and morbidity rates. In late childhood, the challenges that affect the health of school going children aged 6-12 years are increasingly becoming similar to those that confront adults. While they are still susceptible to the major childhood illnesses including worm infestation, they also suffer from high risk of traumas and injuries due to various factors such as child labor and sexual abuses especially for girls. At adolescent stage, new threats to healthy development relate to behavior changes, with a risk of contracting STIs and especially HIV/AIDS, early pregnancy and abuse of such substances, as alcohol, tobacco and drugs.

The health of the adults, men and women is basically threatened both by well-known infections like malaria, TB, STIs and HIV/AIDS, and by non-communicable diseases such as cardiovascular and neurological diseases, cancer, diabetes, traumas/accidents and stress. The older members of the society suffer from various chronic conditions such as hypertension, disabilities (eyes, ears, limbs), age and gender related cancers, degenerative diseases and mental disorders.

The NHSSP purpose therefore is to improve the health of Swazi families overall, looking also at ways and means to consolidate intrafamily protective relationships, with emphasis on women and children (including in and out of school children and children with special health care needs, as well as the increasing orphans population). The strategic focus will on individuals' health from birth to early childhood, during the school

age and teen years, through young adulthood and the childbearing years including pregnancy. The NHSSP will ensure that the capacity and infrastructure is developed to assure that health care systems support mothers, children and families countrywide. The family health interventions will therefore focus mainly on

i. reproductive, maternal and neonatal health
ii. child health and
iii. nutrition

All the family health interventions will be built around the key principles of primary health care, family-centered care, cultural appropriateness, social acceptability, community leadership, health promotion, evidence based decision making, community-facility interface and human rights in an attempt to empower end beneficiaries.

***7.2.1 Strategic Priority area 3.2.1: Reproductive, Maternal and Newborn Health***

In recognition of the importance and role of reproductive and maternal health in national development, the government of Swaziland adopted both the International Conference on Population and Development (ICPD, 1994) and the Millennium Declaration Development Goals. Both commit governments to improving reproductive health status of the population and reducing maternal mortality. The central goal of the ICPD Global Program of Action is "the provision of reproductive and sexual health services for all by 2015".

The MDGs 5 and 6 on the other hand seek to improve maternal health by reducing by three-quarters maternal mortality by 2015 and to increase the contraceptive rate and the proportion of births attended by skilled health personnel. The National Health Policy on its part, commits the MOH and all other health sector players to ensure that "all newborn deliveries, including those that take place in the community and at home, are attended by skilled persons". Improving reproductive and maternal health is therefore about:

- Enabling men and women to have a satisfying and safe sex life
- Empowering both men and women to be informed and to have access to safe, effective, affordable, acceptable and lawful methods of family planning of their choice for regulation of fertility
- Ensuring women's right to have access to appropriate health services that enable them to go safely through pregnancy and childbirth
- Providing couples with the best chance to having a healthy infant

In spite of several achievements, HIV remains a major reproductive health problem especially for young women and girls as indicated by sentinel data. Reproductive Tract Infections (RTIs) including sexually (simple and complicated infections, such as syphilis and gonorrhea) and non-sexually transmitted infections such as bacterial vaginosis and viral infections (e.g. HSV-2 and HPV) are also prevalent. Classical STIs and HIV transmission amplify each other and, since both sexual and reproductive ill health and HIV are rooted in the same social pathologies, including unequal gender relations, sexual violence, and poverty, integrated management of RTIs and HIV is strategy of choice. In relation to fertility, while on one hand infertility remains a problem not just to the couples, but the whole society, on the other hand, the total fertility rate has reduced from 4.5 live births per woman in 1997 to about 3.8 births per woman in 2007. These together, with the fact that the contraceptive prevalence rate (CPR) of modern methods of family planning is only about 47.7%, underlines an increased the need and demand for contraceptive commodities and fertility services in general.

In terms of services, Swaziland has limited capacity to deliver fundamental gynecological procedures, surgical and medical management of oncological conditions such as cancer of the cervix, breast and all other cancers of the reproductive tract; repair of VVF/RVF; management of endocrine-related ailments such as menopause and andropause. The facilities are also not prepared to handle infertility investigation procedures and management. As to obstetric care, most health structures lack adequate facilities like maternity and theatre units, equipment and appropriate staff also for emergency interventions, despite the fact that occurrence of obstetric complications tend to be sudden, unpredicted, serious and threatening to the lives of either or both mother and the infant.

As a result, maternal mortality ratio still remains unacceptably high estimated at 482 per 100,000 live births (DHS,2007), which is higher than the global average of 193 per 100,000 live births. Most maternal deaths

occur during childbirth and in the early postpartum period while majority of infant deaths occur during post-neonatal period. These are mainly attributed to hemorrhage (both APH and PPH), sepsis, anemia, hypertensive disorders including eclampsia, unsafe abortions and obstructed labor and malaria (in the malaria endemic areas). While abortion is one of the major causes of maternal morbidity and mortality in Swaziland especially among those young women presenting with unwanted pregnancies and those undergoing unsafe abortion, post abortion care (PAC) is however poor. Issues of weak referral system to effectively respond to emergency situations, cultural access barriers, inappropriate use of traditional medicine and lack of adequate human resource capacity (especially obstetricians and gynecologists), exacerbate the situation. Furthermore key reproductive health indicators are poorly defined and relevant data not collected or reported in a proper database to generate sufficient information.

Against this backdrop the NHSSP adopts an explicit strategy to significantly reduce maternal, neonatal and infant morbidity and mortality and to improve the reproductive health status of the population of Swaziland through a comprehensive, integrated, equitable and quality reproductive and maternal health care package targeting women of childbearing age, men, adolescents and newborns. To this end, the NHSSP has set the following targets to be achieved by 2013:

- Reduction of MMR from 482 per 100 000 live births to 179 per 100 000 live births
- Increase of Contraceptive Prevalence Rate from 47% to 80%
- Reduction of teenage pregnancies from 25% to 15%
- 100% of health facilities providing youth friendly SRH services
- 100% RH service delivery points providing quality services for men
- 100% communities (chiefdoms) sensitized about roles and responsibilities of men in RH, rights and responsibilities
- Increase of the proportion of skilled attendance at birth from 38% to 60%
- Increase of ANC Coverage (at least 1 visit) from 74.3% to 99%
- Increase of Tetanus Toxoid (TT2) coverage for pregnant women from 50% to 80% (TT2+Immunisation 74.7% to 99%)
- 100% antenatal care coverage with at least one antenatal visit during pregnancy
- Increase of IPT coverage in pregnant women
- Increase of supervised delivery from 70% to 95%
- Increase of health facility delivery from 60% to 80%
- Follow up visits to lactating mothers at least twice during the first year after delivery
- Decrease of TFR from 3.8 to 3 children per woman
- Reduction of cases of sexual gender based violence

To achieve the above targets, the NHSSP will endeavor to strengthen and scale up the capacity of the SRH Program to enable equitable access to the widest possible package of reproductive and maternal health care. The MOH adopts the view that both men and women, young and old have important roles to play in reproductive life of the nation and that all service providers will be gender sensitized, engaging both men and women in matters related to reproductive, maternal and child health. The key strategic interventions during the Plan period will focus on the following:

**i. Reproductive health services**

- Strengthening Reproductive Health Policy Framework: to strengthen the policy environment for reproductive and maternal health, the MOH will develop/finalize the national reproductive and maternal health policy and the national Reproductive Health Strategic Plan and Plan of Action. In addition, the MOH will develop a minimum reproductive and maternal health care package for each levels of health delivery system.

- Capacity building for Reproductive Health Services: the NHSSP seeks to strengthen the organizational and management capacity of MOH Family Health Division and Reproductive Health Unit and SRH program to lead and coordinate the health sector reproductive and maternal health interventions. In this regard, the NHSSP efforts will focus on strengthening management and coordination capacity of relevant institutions, build human resources capacity, strengthen capacity for resources mobilization and management; and promote integration and collaboration between the SRH program, other departments, health facilities and programs such as SNAP, NERCHA, Nutrition Council. Specifically, it will facilitate capacity building for decentralized

reproductive and maternal health planning, resources management, service delivery, regulation and coordination targeting regional, local government and non-governmental reproductive health systems. To enhance the human resource capacity for reproductive and maternal health, the NHSSP envisages to intensify recruitment of skilled reproductive health workers, namely obstetrician/gynecologists and nurse midwives; offer training for critical health workers such as doctors, anesthesiologists and nurses; and provide continuing education for relevant health workers. To this end, training needs assessment will be conducted to guide the establishment of a national reproductive and maternal health training program to enable service providers at all levels of health service delivery system to acquire appropriate competencies, skills and attitudes. The pre-service training curricula will also be reviewed and updated to be in line with internationally accepted best practices. As part of the continuing medical education/learning strategy, the MOH will facilitate and enable reproductive and maternal workers to attend and participate in exchange programs, meetings, conferences and training workshops in and out of country. The MOH will also endeavor to establish a training program for community based health workers such as TBAs and RHMs, traditional or informal sector reproductive and maternal health care providers on essential life saving and referral skills.

- **Strengthening of Reproductive Health Infrastructure and Commodities** Security: The NHSSP seeks to build the capacity to ensure equitable access to quality reproductive, maternal, neonatal and infant health care at all levels. Strengthening reproductive health commodities management systems and equipping health facilities with appropriate infrastructure and equipments is a crucial prerequisite to achieve this. In this regard, a national Reproductive Health Commodity Security Strategy will be developed/finalized and a complete inventory of the existing RH equipment and infrastructure conducted throughout Swaziland.

  Standard operating procedures and quality assurance guidelines for laboratories will be developed to enable effective screening of malaria, hepatitis B and C, HIV and all other relevant blood-born diseases to ensure blood availability and safety at all times for obstetric purposes. Health facilities will also be improved, rehabilitated or developed to effectively provide quality services and to implement reproductive and maternal best practices and guidelines in accordance with defined minimum planning and development standards for every level of health care facility. In addition, the MOH will endeavor to strengthen the ambulance services by ensuring that at least one vehicle is available in every Type B clinic and health center, and establish appropriate communication facilities e.g. two-way radios and cell and fixed line phones in all health facilities to ensure rapid response in case of obstetric emergencies.

**ii. Safe motherhood, Maternal and Newborn Health Services**

To decrease the unacceptable maternal and neonatal mortality rates in Swaziland, the MOH will ensure that all women in their reproductive ages have access to essential, affordable, quality and skilled maternal, newborn and infant health care that promote safe pregnancy and delivery of healthy children. The delivery of maternal health services will adopt an approach fostering continuity of care for mothers and newborns as documented in the available best practices. The promotive and preventive reproductive health and safe motherhood interventions will focus on provision of long-lasting impregnated bed nets (LLITNs), essential antenatal (TT2 and IPT) immunization, postnatal care, family planning/child spacing and general health education services. An Integrated Maternal, Neonatal and Infant Health Guidelines/road map for Swaziland will be developed and implemented.

**iii. Curative interventions**

will focus on making available antenatal care (ANC) and delivery services including provision of malaria prophylaxis and treatment within ANC, normal delivery and postpartum care. Health facilities will be strengthened to ensure that no women or newborn dies or incurs injuries due to pregnancy and/or childbirth and to effectively manage obstetric complications such as prolonged labour, instrumental vaginal deliveries, caesarean sections, maternal hemorrhage, sepsis, hypertensive disorders of pregnancy and post abortion care (PAC). Health providers will be trained in early recognition of complications (emergency obstetric care), early pre-referral treatment (emergency triage assessment and treatment) and life saving skills. Other priority maternal conditions include uterine prolapses, urinary incontinence, obstetric fistulae, urinary tract infections, mastitis, severe anemia. Screening

(mainly based on with pap-smear) coverage will be actively promoted and marketed. The newborn interventions will focus on prevention of ophthalmia neonatorum, newborn complications such as LBW and infections (including HIV), and standardized newborn screening based on 16 identifiable diseases. A PMTCT Training Manual and Standard Operating Procedures will be developed/finalized and implemented.

Specifically, NHSSP will:

- Develop guidelines to mid-level cadres such nurses to perform essential obstetric procedures, which are not currently permitted due to inhibitive medical professional norms and attitudes
- Train community and home based health workers on life saving skills including identification and timely referral of high-risk cases
- Strengthen the referral system and improve all maternal health facilities, including laboratory, blood safety and theatre
- Develop and prepare a standard Essential Maternal and Reproductive Health Kit for every level of health care facilities
- Develop kits for both normal and complicated vaginal deliveries, caesarean sections and all other obstetric operations and ensuring constant availability of life-saving equipment, supplies, and drugs
- Define minimum staffing standards necessary for the provision and maintenance of quality obstetric care at every level
- Conduct advocacy, education and sensitization campaigns to educate pregnant women and families on the importance of antenatal, prenatal and postnatal care
- Train health workers in Post Abortion Care (PAC) including management of patients presenting with incomplete or inevitable abortion
- Integrate maternal services with prevention, control and management of communicable diseases such as malaria, tuberculosis and HIV/STIs
- Develop and implement perinatal substance abuse prevention initiative to prevent perinatal substance abuse and to ameliorate its effects upon newborns
- Develop and implement a national maternal nutrition support initiative to provide and promote breastfeeding education and appropriate diets of pregnant, postpartum and breastfeeding women and infants. NHSSP will promote functional integration of nutrition and nutrition education into all maternal health services including antenatal clinics at all levels

**iv. Advanced Gynecological Services**

The NHSSP will promote the capacity of the health system to deliver essential and advanced gynecological services at the major hospitals in Swaziland. In this respect, the MOH will equip all the regional hospitals including Mbabane Government Hospital to provide and conduct advanced gynecological and fertility procedures such as radiotherapy, oncology, endocrinology, laparoscopy, tuboplasty, HSG, vesico-vaginal and seminal analysis. The Reproductive Health Unit and the SRH Program will also establish a national campaign to create awareness on common causes of infertility, the importance of early detection and management of cancers of the reproductive system, mid-life concerns including menopause and andropause, and promote population based screening for breast, cervical and other cancers of reproductive systems. Further, health workers will be trained on relevant and essential procedures and surgical techniques such as the repair of VVF/RVF, colposcopy, lumpectomy, and laparoscopic surgery.

**v. Family Planning Services**

The NHSSP will seek to reposition family planning in the context of HIV/AIDS and ensure that all health facilities are capacitated to provide both women and men with access to the widest possible range of family planning services such as condoms, diaphragm, foam tablets, injectables, IUD, oral contraceptives, spermicides and family planning counseling. The NHSSP will advocate and promote respect and support of the right of individuals and couples to make voluntary and informed choices about child spacing including the number and timing of their children in a confidential and protected client friendly environment. To this extent, appropriate information will be provided to individuals and couples to decide freely and responsibly when, how often and how many children to have. The MOH will improve community and facility based family planning services capacity to meet needs for family planning especially for the youth and develop/review family planning guidelines accordingly.

Specifically, the MOH and its non-state partners will pursue a family planning strategy focusing on:

- Integration of family planning, HIV/AIDS and sexual reproductive health rights services and programs
- Creation of sustained demand for family planning
- Ensuring involvement of males in family planning programs
- Procurement, storage, distribution and management of secure and safe family planning commodities
- Establishment of community based contraceptive distribution system
- Conduct contraceptive access and prevalence surveys/studies in order to generate the evidence needed to plan appropriate and customized services
- Increase of FP service delivery points and diversification of the range of available family planning services
- Development and dissemination of family planning services guidelines
- Strengthening of community based fertility control and FP interventions
- Family life education and maternal literacy
- Integrated Prevention and Management of Reproductive Tract Infections (RTIs) and HIV/AIDS

The NHSSP seeks to establish a comprehensive and integrated RTI prevention and management program to reduce the spread of both sexually and non-sexually transmitted RTIs including STIs and HIV/AIDS and promote responsible sexual behavior. Specifically, the NHSSP will:

- Integrate RTI/STI/HIV/AIDS and Sexual Reproductive Rights (SRRs) programs at all levels of the health system and target the unmet needs for reproductive health care among HIV infected persons
- Build capacity of health facilities to diagnose and treat RTIs according to evidence based guidelines and standard operating procedures. Focus will be mainly on Chlamydiasis, Gonorrhoea, Syphilis, Trichomoniasis, and viral infections, such as herpes
- Create community awareness on sexually and non-sexually transmitted RTIs through information, education and behavior change communication (BCC) strategies
- Train various cadres of health workers (facility and community based) on integrated management of STI/RTI/HIV/AIDS including care and counseling support and
- Procure and ensure consistent availability of RTI drugs, medical supplies and condoms (male and female)

**vi. Sexual Gender based violence (SGBV) and Reproductive Health Rights**

The NHSSP recognizes that sexual gender based violence including rape, sex trafficking, forced prostitution, sexual exploitation, sexual harassment are a serious public health problem in Swaziland. Most acts of sexual gender based violence are rooted in such social pathologies as unequal gender relations and poverty, which are also root causes of most reproductive ill health and HIV/AIDS. Sexual Gender Based Violence therefore not only has severe impact on an individual's psychological, emotional and physical wellbeing but also has serious medical consequences including the risks of unintended pregnancy, sexually transmitted infections and HIV/AIDS. In response to these challenges, the MOH through the Reproductive Health Unit and SRH Program will develop and implement a national Sexual Gender Based Violence (SGBV) strategy whose key elements are:

- Development and adoption of guidelines on trauma management and treatment for victims of sexual gender based violence especially rape
- Advocacy for sexual and reproductive rights, enabling legislation on sexual gender based violence and availability of appropriate legal recourse for victims of sexual gender-based violence
- Building of capacity of health facilities in trauma management and provision of rapid and quality basic and specialized treatment, rehabilitative and Post Exposure Prophylaxis (PEP) for HIV infection services for survivors of sexual violence
- Provision of training to health workers, lawyers, counselors, psychologist and law enforcement agencies on sexual gender based violence reporting and trauma management
- Empowerment of communities, families and individuals to manage prevention, management and reporting of sexual gender based violence including its impact on the wellbeing and sexual reproductive health of community members

**vii. Adolescent and Youth Reproductive Health**

The NHSSP aims to improve the overall reproductive health status of adolescents and youth aged 10 to 24. This group constitutes about 36.7% of the total Swazi population. To achieve this, the MOH will develop a national adolescent and youth reproductive health strategy to ensure their full access to quality and comprehensive youth friendly reproductive health services, information and protection.

The strategy will in particular seek to promote positive reproductive health behaviors among adolescents and youth through organized national, regional and community public awareness campaigns, educational programs and prevention activities. Through the SHR Program, the MOH will:

- Assist the youth to maintain safe reproductive health functioning and to an HIV free status by means of sustained informed health decisions
- Promote youth participation in the planning, implementation and evaluation of reproductive health programs
- Train and educate adolescents and youth on gender relations, prevention of sexual violence and STIs/HIV/AIDS and peer education skills
- Develop reproductive health communication and media strategy sensitive to the needs of the youth and adolescents by establishing youth friendly centers to train adolescents and youth on life skills and counsel them on the importance of pre-marital testing
- Promote involvement of teachers, parents and community leaders in adolescent sexual reproductive health (ASRH) issues including human rights

The strategy will give particular attention to the diverse needs of the vulnerable and hard to reach adolescents and youth in marriage and in and out of school in rural and urban settings.

**viii. Reproductive Health of the Older Members of Society**

To address the reproductive health problems of the elderly, the NHSSP will strengthen the regional and tertiary hospital capacity to provide quality sexual and reproductive health services including screening, early detection and management of cancers, diminishing hormonal changes as well as geriatric care. Through the SRH Program, the MOH will enhance awareness of, and sensitize the community on older persons reproductive health needs and preventive measures through information, education and communication services.

**ix. Monitoring, Evaluation and Research**

The MOH through the Reproductive Health Unit will establish a national M&E framework for reproductive and maternal health sub sector and a comprehensive Reproductive and Maternal Health Management Information System linked to the general MOH M&E and HIS framework. To facilitate reproductive health and maternal health research, the MOH will seek to establish a National Reproductive Health Research Centre (NRHC), to coordinate all maternal and reproductive health clinical, biomedical and operational research activities in Swaziland.

The effective implementation of the reproductive health and maternal programs under the NHSSP will depend on revitalization of clinics, health centres and the efficient operation of hospitals. The Family Health Division and the Reproductive Health Unit of the Primary Health Care Department will be responsible for policy, standards and regulations development; overall co-ordination and guidance of reproductive health services; provision of technical supervision and support to Regional Health Management Team; and monitoring of the delivery of public and non-governmental reproductive and maternal health services throughout Swaziland.

At the regional level, the Regional Health Administrator and the RHMT in close collaboration with SRH program will be responsible for the planning, management and co-ordination of all reproductive health activities within the region. At the regional level, Regional Sexual Reproductive Health focal persons, Regional contraceptives Logistics Management officers and SRH trainers will represent the SRH Program.

**Strategic Operational Objective (SOO) 3.2.1:** To ensure access to the widest possible package of reproductive and maternal health care in order to significantly reduce maternal and neonatal morbidity and mortality

| Activities | Indicators |
|---|---|
| 350. Develop and implement a national reproductive and maternal health policy | 350 Availability of RH and MH policy |
| 351. Develop and implement a national Reproductive Health Strategic plan | 351 Availability of RH Strategic plan |
| 352. Develop a minimum reproductive and maternal health care package for each level of health delivery system | 352 No of health facilities providing relevant RH and MH services and No of clients served per month |
| 353. Strengthen the organizational and management capacity of Family Health Division, Reproductive Health Unit and SRH program | 353 No of supervisory visits conducted per month and reports availability |
| 354. Conduct training needs assessment and establish a national training program for critical health workers such as doctors, anesthesiologists and nurses on various obstetric and gynecological procedures and surgical techniques | 354 No of training events and No of participants per event and profession |
| 355. Establish a training program on essential life saving and referral skills for community based health workers such as TBA and RHMs, and traditional care providers | 355 No of training events and No of participants per event and background |
| 356. Develop and implement a national Reproductive Health Commodity Security Strategy | 356 Strategy available and % of facilities reporting no stock-outs in FP items |
| 357 Strengthen the ambulance services and establish appropriate communication facilities in all health facilities | 357 No of patients transferred for obstetric emergencies and No and type of avoidable accidents and/or maternal and infant deaths due to delayed referral by facility |
| 358. Strengthen health facilities capacity to provide quality antenatal care (ANC), basic and comprehensive emergency obstetric care and newborn care services | 358 No of health facilities with appropriate equipment, trained staff and referral logistics and No of clients per facility per month |
| 359. Develop and implement PMTCT Training Manual and Standard Operating Procedures | 359 Availability of guidelines, standard operating procedures and No of clients per facility per month |
| 360. Train community and home based health workers on life saving skills | 360 No of training events conducted and No of participants per event and per location |
| 361. Develop and prepare a standard Essential Maternal and Reproductive Health Kit for every level of health care facilities | 361 No of facilities with available kits, and No of staff capable to manage equipment and procedures per facility |
| 362. Train health workers in Post Abortion Care (PAC) and management of incomplete or inevitable abortion | 362 No of trained health workers and No of patients treated per month |
| 363. Develop and implement perinatal substance abuse prevention initiative | 363 No of facilities offering substance abuse services, No of trained staff per facility and No of first time and chronic clients per month |
| 364. Develop and implement a national maternal nutrition support program | 364 Guidelines produced, No of trained staff, No of beneficiaries enrolled and supported and No of women in reproductive ages who know dietary requirements |
| 365. Equip all the regional hospitals including Mbabane Government Hospital with capacity to conduct and manage advanced gynecological, oncological and fertility control procedures | 365 % of health facilities offering basic emergency obstetric care (BEmOC) and comprehensive emergency obstetric care (CEmOC); No of clients treated by condition and by facility; No of maternal deaths by facility and No of clinical audits conducted by facility |
| 366. Reposition and strengthen Family Planning Services in the context of HIV/AIDS | 366 No of women of reproductive ages (HIV+ and -) counseled, tested and receiving and using family planning by facility |

| | |
|---|---|
| 367. Establish community based contraceptive distribution system | 367 No of chiefdoms with community based distributor (CBD) programs established and No of clients using the service per chiefdom |
| 368 Establish and implement a comprehensive and integrated RTI/STIs/HIV/AIDS prevention and management program | 368 No of facilities offering comprehensive services and No of clients enrolled in programs |
| 369. Develop and implement a national Sexual Gender Based Violence (SGBV) strategy, establishing post rape care and trauma management in health facilities | 369 No of regions and facilities with post rape services established and No of sexual violence survivors treated and managed |
| 370. Develop and implement a national adolescent and youth reproductive health strategy establishing youth friendly centers to educate adolescents and youth on life skills and pre-marital testing | 370 Availability of adolescent and youth RH strategy; No of facilities providing youth friendly SRH services and incidence rate of teenage pregnancies |
| 371. Develop IEC materials on prevention of STI and management of RH for men and for the elderly | 371 % of RH delivery points providing services for men; No of clients by facility and % of target population groups aware of RH services |
| 372. Establish a national RH M&E framework and Management Information System | 372 Framework capable to provide timely information on at least fertility rate; % increase in ANC Coverage; % increase in Tetanus Toxoid (TT2) coverage; % increase in IPT coverage; % increase in contraceptive prevalence rate; % of skilled attendance at birth (to increase from38% to 60%); % decrease in MMR and neonatal death rate |
| 373. Establish a National Reproductive Health Research Centre (NRHC) | 373 NHRC established and No of project proposals elaborated, approved and implemented |

### *7.2.2 Strategic Priority area 3.2.2: Child Health*

As children are born and grow, their environment of life poses constant and serious threats to their health and wellbeing. At their early stages of life, children are most vulnerable to malaria (in malaria endemic areas), diarrheal diseases, upper respiratory infections, anemia, TB, worm infestations, malnutrition, traumas and injuries which all contribute to the well-documented high infant and child morbidity and mortality rates. The aim of the NHSSP is to decrease infant and child morbidity and mortality and improve their health status targeting children with special health care needs. The key strategic interventions in child health during the Plan period will focus on Integrated Management of Childhood Illness (IMCI) and Immunization. In addition, the MOH will strive to identify children with special health care needs especially those who either have, or are at increased risk of chronic physical, developmental, behavioral, or emotional conditions that require special health and related services.

**a. Integrated Management of Childhood Illness**

A large proportion of childhood morbidity and mortality in Swaziland is caused by five preventable conditions, namely acute respiratory infections (ARI), diarrhea, measles, malaria, malnutrition, and/or HIV/AIDS related illnesses. For instance, diarrheal diseases, ARIs and malnutrition cause more than half of all hospital visits by under-fives. The impact of these diseases is manifested in the worsening health status of children. According to the SHDS (2007), 70% of children's deaths occur before their fifth birthday. Of these, 75% occur during infancy i.e. in the post neonatal period. The infant mortality is estimated at 85 deaths per 1000 live births while child under-five mortality rate is about 120 deaths per 1000 live births. This situation has worsened since the early 1990s with post neonatal mortality rates more than tripling from 18 deaths per 1000 live births in 1992-1996 to 64 per 1000 live births in 2002-2006. On the other hand, the under-five mortality rate doubled from 60 deaths per 1000 live births in 1992-1996 to 120 per 1000 live births in 2002-2006. Comparatively, Swaziland has one of the highest infant mortality in South and Eastern African.

To improve the health of children and newborns, the World Health Report 2005 recommended a number of interventions (WHO 2005), under the banner of Integrated Management Of Childhood Illness (IMCI). IMCI is an approach intended to provide a comprehensive package of health services with proven efficacy to children in a holistic manner. It includes both community IMCI (i.e. promotion of treated bed nets, exclusive breastfeeding up to six months, appropriate nutrition advice); and clinical IMCI (i.e. child weighing clinics, immunization, treatment of childhood diseases and Vitamin A distribution). IMCI is also intended to

integrate the control of diarrheal diseases (CDD), acute respiratory infections (ARI), immunization, case management of malaria (in malaria endemic areas), nutrition in children and PMTCT. These entities account for 70% of all childhood illnesses in Swaziland.

The goal of NHSSP therefore is to improve the quality of health care provided to children in order to significantly reduce morbidity and mortality due to common childhood diseases among children under the age of five years and improve their survival, growth and development. To this end, the NHSSP has set the following targets to be met by 2013:

- Training of at least 75% of health workers with responsibility to child health on IMCI (or at least one in each health facility)
- Reduction of the incidence of diarrheal diseases to 5% among children under 5 years of age
- Increase of access to oral rehydration therapy (ORT) to above 90%
- Reduction of mortality due to diarrhea to 10%
- Reduction of annual diarrheal disease incidence to 15 per 1000 population
- Reduction of mortality due to acute respiratory infections to less than 10%
- Reduction of mortality due to malnutrition to less than 5%

To achieve the above targets, the NHSSP seeks to establish and build the capacity of the MOH Child Health Programme to promote, supervise and monitor the IMCI full implementation at all health stations, ensuring that under-fives full access to dedicated services and are protected against common childhood illnesses. The NHSSP also aims to enhance the capacity of clinics, health centres and hospitals to prevent and manage common childhood illnesses, including: ARI, diarrheas, fever, ear infections, malnutrition, anaemias, bacterial infections and disabilities/impairments among under-fives.

Further, the NHSSP will seek to enhance the capacity of the health systems to ensure continuity and sustainability of IMCI interventions at all levels. The NHSSP will intensify resource mobilization for IMCI and scale up the implementation of both community and clinical IMCI at all levels. Specifically, the key strategic interventions during the Plan period will:

- Establish and strengthen the MOH Child Health Unit and IMCI Program organizational and management capacity
- Develop and implement the national child health policy
- Develop and implement the national IMCI Strategy
- Develop a minimum IMCI package for each level of health service delivery system, based on evidence of needs and available internationally recognized best practices and guidelines
- Re-establish the IMCI Steering Committee and Technical Working Group
- Promote intersectoral coordination and linkages between IMCI program and all other relevant programs
- Facilitate capacity building for decentralized IMCI health planning, resource management, service delivery, regulation and coordination, targeting regional, local government and non-governmental health systems
- Enhance the capacity of Health Units to promote, assure and provide health education and prevention activities
- Train, upgrade and re-orient health workers on IMCI preparedness and response, case management and counseling and establish a mechanism for sustained follow-up/supervision of the trained health workers
- Review pre-service training and incorporate IMCI into curricula for health workers
- Train and develop capacity of key community based health workers Develop and implement BCC strategy for IMCI
- Develop and disseminate IEC materials on IMCI
- Strengthen national and regional IMCI support supervision systems
- Establish an IMCI monitoring and surveillance system and link IMCI database with the national M&E and Health Management Information System
- Procure and ensure consistent availability of essential drugs and medical supplies for IMCI in all health facilities

At the national level, the Child Health Unit under the Family Health Division will be established to be responsible for policy development, overall co-ordination, standards and guidelines development, IMCI monitoring and evaluation including control of diarrheal diseases (CDD) activities. The Unit will provide technical support and supervision to the regions. It will co-ordinate with other child health related institutions and relevant international agencies such as UNICEF. The main focus of implementation will be at the regional, community and health facility levels where specific strategies for social mobilization will be developed for both men and women.

The Regional Health Management Team will co-ordinate all IMCI activities in the regions. In addition the team will ensure the availability of logistics and supplies required for IMCI implementation. Each regional health authority will design its own implementation plan to institutionalize IMCI at all levels of the region by the end of the plan period.

**Strategic Operational Objective (SOO) 3.2.2:** To improve the quality of health care provided to children in order to significantly reduce morbidity and mortality due to common childhood diseases among children under the age of five and improve their survival, growth and development by the full implementation of IMCI.

| Activities | Indicators |
|---|---|
| 374 Establish and strengthen the organizational and management capacity of MOH Child Health Unit and IMCI Program | 374. The MOH Child Health Unit established, staffed and equipped and personnel trained on the IMCI management and administration |
| 375 Develop and implement the national child health policy | 375. Availability of National Child Health Policy |
| 376 Develop and implement the national IMCI strategy | 376. Availability of National IMCI Strategy |
| 377 Develop IMCI guidelines and a minimum IMCI health care package for each level of health service delivery system | 377. Availability of technical guidelines and related minimum IMCI health care package; No of facilities delivering minimum package and No of children treated per month according to guidelines |
| 378 Re-establish the IMCI Steering Committee and Technical Working Group | 379. Existence of IMCI Steering Committee and Technical Working Group |
| 379 Strengthen national and regional IMCI support supervision systems | 380. No of supervisory visits conducted per month and No of facilities delivering appropriate services |
| 380 Build capacity for decentralized IMCI functions and train, upgrade and re-orient health workers at each level of the system on IMCI | 381. No. of health workers trained, re-oriented and upgraded on IMCI by facility and by location |
| 381 Review pre-service training and incorporate IMCI into the training curricula | 382. Training curricula reviewed and No of new staff trained accordingly per year |
| 382 Promote intersectoral coordination and linkages | 383 No of intersectoal meetings and joint policy and technical guidelines |
| 383 Strengthen the referral system and capacity of health facilities to provide quality clinical IMCI services | 384. % of under-fives with common childhood illnesses correctly referred to the appropriate level of care according to guidelines and receiving appropriate services |
| 384 Enhance the capacity of Health Units to provide health education and prevention activities | 385. % reduction in the incidence of common childhood illness among children under 5 years of age |
| 385 Develop and implement BCC strategy for IMCI, based also on IEC materials on IMCI | 386. No of mothers whose knowledge and attitude towards IMCI is appropriate |
| 386 Advocate for to promotion of IMCI | 387. No. of chiefdoms/communities with community IMCI interventions |
| 387 Establish the IMCI monitoring and surveillance system | |

| | |
|---|---|
| 388 Strengthen and maintain an effective IMCI logistics, transport and communication system<br>389 Procure and ensure consistent availability of essential drugs and medical supplies for IMCI | 388. Monitoring and evaluation system established and capable to produce at least % of households using ORT interventions; case fatality ratio of common childhood illnesses by facility and location; IMR and CMR by facility and location; % children with disabilities managed appropriately; % of under-fives attending growth monitoring clinics<br>389. Delay in the implementation of planned visits and in reporting of epidemiologic and routine data<br>390. No of facilities reporting stock outs of commodities per month and related interruption of services |

**b. Immunization**

Universal Immunization of children against the vaccine preventable diseases is crucial to reduce infant and child mortality. Immunization is considered a cost- effective intervention that prevents the child from contracting vaccine-preventable diseases thereby enhancing the child chances of survival. According to WHO guidelines, children are considered fully vaccinated when they have received by the age of 12 months (one year) a vaccination against TB (BCG); three doses of the diphtheria, pertussis (whooping cough), and tetanus (DPT) vaccine; three doses of poliomyelitis (polio) vaccine; and one dose of measles vaccine. According to SDHS 2007, 82% of children aged 12-23 months received all recommended vaccinations, higher than the 65% rate reported during 2000 MICS survey. However, concerns have been raised over the decline in immunization coverage from 91% in 1995 to about the current 82%.

It is therefore the objective of NHSSP to reverse the decline in immunization coverage and significantly reduce morbidity and mortality due to vaccine preventable diseases among children under-five years of age. In addition to the quoted vaccines, the MOH will explore the possibility of including Yellow fever, Haemophilus influenza and Hepatitis B into the universal vaccination package. The following national targets will be pursued by the end of the plan period (2013):

- Increase and sustain routine immunization coverage at > 90%
- Increase DPT3 coverage from 92% to 100%
- Increase Polio 3 coverage from 87% to 100%
- Increase polio at birth coverage from 93% to 100% %
- Increase Hepatitis B 3 coverage from 91% to 100%
- Measles coverage from 92% to 100 %
- Increase TT2 coverage of pregnant women from 68% to 80%

To meet the above targets, the NHSSP seeks to revitalize and strengthen the Expanded Program on Immunization (EPI) to ensure that all under-fives have easy access to appropriate immunization services and are protected against vaccine-preventable diseases. In this regard, the key strategic interventions during the Plan period will encompass the following:

- Strengthening the organizational and management capacity of EPI program including improved staffing capacity and support supervision system at national and regional level
- Development/update and implementation of national EPI policy and guidelines also on injection safety and waste management
- Improvement of the central and regional vaccine stores and development of effective and efficient vaccines and logistics management system
- Equipment of all regions with functional cold chain systems and strengthening of the capacity for cold chain maintenance at all levels
- Delivery of routine immunization at all facilities
- Follow up measles campaigns and community search for neonatal tetanus to facilitate elimination documentation
- Improvement and intensification of surveillance, prevention and control of acute flaccid paralysis, measles, neonatal tetanus, Haemophilus Influenza type B and adverse events following immunization (AEFIs) at all levels

- Measles, polio and tetanus supplementary immunization campaigns every four years and when confirmed cases occur
- Routine provision of Vitamin A at immunization sites
- Enhancement injection safety and waste management, including the use of autodestruct syringes during campaigns
- Forecast and procurement of bundled vaccines and material supplies (e.g. radio sets, vehicles, gas cylinders, cold chain equipment etc.) and consistent availability of high quality and potent vaccines at all service delivery points
- Training of health workers and EPI staff in immunization innovations
- National immunization coverage surveys and operation research
- Strengthening of the surveillance and monitoring system for all EPI targeted diseases including collection and management of immunization data at all levels
- Development and dissemination of IEC materials to improve immunization demand
- Advocacy for support new vaccine introduction into the routine immunization program
- Periodic monitoring and evaluation of program performance

In EPI implementation, participation of political and other community leaders in fostering community mobilization and advocacy will constitute a major strategy of the NHSSP. An Inter Agency Committee representing a wide range of civil society and stakeholders will be established to coordinate activities and mobilize resources. At the MOH, the Directorate of Epidemiology and Disease Control through the Family Health Division and Child Health Unit in collaboration with other relevant technical departments will be responsible for policy development, overall co-ordination and guidance on immunization programs. Technical staff of EPI Program will undertake supervision and regulate NGOs and FBOs based on standards whose adoption will be monitored and audited regularly. At the regional level, the RHMT will be responsible for the planning, management, monitoring and co-ordination of immunization services within the regions. All health facilities, FBOs and NGOs will offer EPI services on a regular and consistent basis including outreach services. A dedicated outreach program will be put in place to serve the "hard-to-reach population". Mass campaigns will be expanded in a phased manner against selected target diseases such as polio and measles. Effective implementation of the immunization program will however depend on health facilities being properly equipped with functioning cold chain systems and supplies.

**Strategic Operational Objective (SOO) 3.2.2:** To reverse the decline in immunization coverage and significantly reduce morbidity and mortality due to vaccine preventable diseases among children under-five years of age

| Activities | Indicators |
|---|---|
| 390. Strengthen the organizational and management capacity of EPI program at national and regional level<br>391. Develop/update and implement national EPI policy and guidelines<br>392. Expand the central and regional vaccine stores and equip all regions with functional and maintained cold chain system<br>393. Develop effective and efficient vaccines and logistics management system for EPI program<br>394. Conduct routine immunization at all levels<br>395. Conduct follow up measles campaigns and community search for neonatal tetanus cases<br>396. Improve and intensify disease surveillance, prevention and control of outbreaks of acute flaccid paralysis, measles, neonatal tetanus, Haemophilus influenza type B and AEFIs at all levels | 391 EPI program full staffed and equipped and No of supervisory visits conducted to the regions per month<br>392 Availability of EPI policy and guidelines<br>393 Availability of functioning EPI equipment, including cold chain<br>394 Consistent availability of all immunization vaccines at all levels of service delivery and No of reported stockouts<br>395 % health facilities offering integrated EPI services; No of immunization sessions held in static units per defined period; No of children immunized per session and % of infants immunized by location<br>396 Incidence rate of neonatal tetanus (NNT) by region<br>397 No of regions with Non-Polio AFP rate of 2 per 100,000 children under 15 years and No of regions reporting at least 1 suspected measles case with blood specimen per year |

| | |
|---|---|
| 397. Conduct supplementary immunization campaign every four years and when cases of measles, poliomyelitis or neonatal tetanus are reported and confirmed | 398 No of supplementary campaign conducted and No of children immunized per campaign and per location |
| 398. Provide Vitamin A and deworming tablets routinely at immunization sites | 399 No of Vitamin A supplements distributed per location; % of children supplemented with Vitamin A and dewormed |
| 399. Enhance injection safety and waste management procedures | 400 No of health facilities practicing safe injection practices and waste disposal |
| 400 Forecast and procure bundled vaccines and material supplies ensuring consistent availability of vaccines at all service delivery points | 401 No of facilities applying minimum-maximum stock levels approach and No of EPI sessions interrupted for stock outs |
| 401. Train health workers and EPI staff in immunization innovations | 402 No of health workers and program staff trained and re-oriented |
| 402. Conduct national immunization coverage surveys and operation research | 403 Survey conducted and reports available timely and No of research protocols proposed and conducted |
| 403. Strengthen the surveillance and monitoring system for all EPI targeted diseases at all levels | 404 Existence of comprehensive immunization surveillance and monitoring system and No of reports available per quarter |
| 404. Develop and disseminate IEC materials and conduct advocacy and communication at all levels | 405 No of mothers who are aware and know about EPI and target diseases per location |
| 405. Advocate for introduction of new vaccines into the routine immunization program | 406 N. of advocacy meetings held and No of new vaccines introduced into EPI |

***7.2.3 Strategic Priority area 3.2.3: Nutrition***

Poor nutritional status of the population, particularly children and women, remains a major health problem in Swaziland. Malnutrition associated with iodine deficiency disorders, iron deficiency, and vitamin A deficiency not only affects the cognitive development of children but also has consequences for adult health by increasing the risk of chronic diseases and blindness. Malnutrition is associated with more than 50% of child mortality and is the main contributor to the burden of disease among under-fives. In relation to HIV/AIDS, while on one hand malnutrition associated with micronutrients deficiencies hastens the onset of AIDS among HIV positive individuals and affects the management of ARVs, on the other hand, HIV/AIDS diminishes the capacity of households to produce food and assure food security. Malnutrition in HIV/AIDS presents as weight loss, muscle wasting and altered metabolism requiring increased use of micronutrients. Weight loss has been one of the strongest predictor to mortality in HIV infected population.

It is estimated that about 6% of the population lives below the food poverty line in Swaziland while protein-energy malnutrition and micronutrient deficiencies are increasing due to poverty, HIV/AIDS and household food insecurity. Re-emerging nutritional deficiencies like pellagra and scurvy are also manifesting. According to the SDHS 2007, 29% of children under five are stunted while the proportion of severely stunted is 10%. Stunting is highest (43%) among children aged 18-24 months and lowest (12%) among children aged 6-8 months. 3% of children are wasted while 1% is severely wasted. The prevalence of underweight children is 5% and severely underweight is 1%. While 87% of children were breastfed at some point, only 32% were exclusively breastfed during the first six months of life. 97% of children less than six months of age were however, breastfed at least six times a day.

The SDHS 2007 also found that because of poverty, most children aged 6-23 months are not consuming recommended Vitamin A rich foods such as fruits and vegetables, and proteins such as meat, fish, poultry, eggs and cheese, yoghurt and other milk products on a daily basis. Only a third consumes Vitamin A rich foods, half consumes meat, poultry, eggs or fish and 42% consumes milk products at least once in 24 hours. Overall only 70% of children aged 6-23 months were fed according to minimum standards with respect to food diversity. 80% of households use iodized salt. 42% of children 6-59 months have some degree of anemia of which 1% is severe, 20% is mild, and 19% is moderate. 80% of children under 3 receive foods rich

in Vitamin A, while half are getting foods rich in iron.

As to the nutritional status of women, malnutrition is associated with most of the risk factors for maternal mortality. While stunting increases risk of cephalo-pelvic disproportion and obstructed labor, deficiencies of several micronutrients can lead to low birth weight. It is estimated that 20% of perinatal mortality and 10% of maternal mortality can be attributed to malnutrition, associated with iron deficiency anemia. Anemia also results in an increased risk of premature delivery and low birth weight. Iodine deficiency is associated with a number of adverse pregnancy outcomes. The SDHS 2007 found that while only 3% women aged 15-49 are malnourished or too thin and 10% of men are assessed as malnourished or too thin, more women (28%) are overweight and 23% are obese as compared to 14% of men classified as overweight and 4% as obese. 30% of women have some degree of anemia with majority (23%) being classified as mildly anemic and 1% severely anemic. 88% of mothers with young children consume Vitamin A rich foods and 57% consume iron rich foods. 44% of women received Vitamin A capsule in the two months following birth of their last child. 70% of mothers took iron tablets or syrup during pregnancy with the last child. However only 10% of women took de-worming medication during their last pregnancy.

The NHSSP therefore aims to combat malnutrition especially in mothers and children and to contribute improving the nutritional status of the Swazi population. In particular, the NHSSP seeks to reduce the prevalence of micronutrient deficiencies among women and children and improve the quality of life of people affected and living with HIV/AIDS by providing nutritional support, treatment and counseling. The national targets with respect to nutrition to be realized by 2013 include:

- Reduction of stunting in the under five from 29% to 15%;
- Reduction of underweight under-5s from 5% to less than 1%
- Increase of exclusive breastfeeding at 6 months from 32% to 60%
- Increase of the proportion of children 6-23 months feeding according to minimum standards with respect to food diversity from 70% to >90%
- Increase of Vitamin A supplementation coverage for children 6-59 months at > 90%
- A third of children 6-23 months consuming recommended Vitamin A rich foods
- Increase the proportion of households consuming iodated salt from 80% to 100%
- Eradicate
    - Vitamin A deficiency
    - Iodine deficiency disorders (IDD) through salt iodination and iodine supplementation
    - Iron deficiency
- Reduce by half from the current levels of anemia among children 6-59 months from 42% to 20%
- Reduction of the current levels of anemia among women from 30% to 15%
- Increase of the proportion of women taking Vitamin A capsules from 44% to >80%
- Increase of the proportion of women taking iron tablets or syrup during pregnancy from 70% to >90%
- Reduction of perinatal mortality attributable to iron deficiency anemia from 20 % to 10%
- Reduction of maternal mortality attributable to iron deficiency anemia from 10% to 5%
- Increase of the proportion of women taking de-worming medication during their last pregnancy from 10% to 50%

To reach the above targets, the MOH through the National Nutrition Council and Nutrition Unit will develop and implement a National Health Sector Nutrition Strategy based on a comprehensive multi-sectoral approach that will involve all relevant stakeholders such as communities, NGOs, FBOs, other ministries, private sector and development partners at different levels. The key strategic interventions will focus on the following:

**Capacity building:** The NHSSP will seek to strengthen the institutional capacity of the Nutrition Council, the MOH Nutrition Unit and the Regional Health Services to effectively facilitate, coordinate, regulate, monitor and streamline nutritional activities at all levels; promote collaboration between the health sector and other sectors, ministries and partners; and to ensure continuity and sustainability of nutrition interventions at all levels. The capacity of health workers - including community health workers and PMTCT counselors - will also be developed through training on case management of severe malnutrition, integrated infant and young child feeding (IYCF), HIV/infant feeding and counseling in PMTCT. The MOH through the Nutrition Council will also facilitate the review and mainstreaming of nutrition education into

health/medical training curricula.

**Development of an enabling policy and regulatory framework:**
The MOH through the Nutrition Council and the Nutrition Unit in collaboration with key stakeholders will:

- Review and update the Swaziland National Nutrition Act and enforce nutrition related legislation in conjunction with other relevant sectors
- Develop a National Nutrition Policy
- Develop protocols on micronutrient supplementation and fortification
- Review and update infant and young child feeding guidelines
- Develop and enforce a national code of marketing of breast milk substitutes
- Develop and implement protocols for management of severe malnutrition

**Prevention, control and management of nutritional disorders:**
To prevent, reduce, control and manage malnutrition amongst mothers and children, the NHSSP will put emphasis on a combination of strategies including the following:

- Promotion of micronutrient supplementation including routine folate and Vitamin A supplementation for pregnant mothers during ANC and postnatal period for 6 – 8 weeks
- Promotion of exclusive breastfeeding
- Promotion of consumption of iodized salt and enforcement of the salt iodization regulation including surveillance of iodine deficiency disorders
- Facilitation of food fortification e.g. maize and wheat/sugar with vitamin A and other micronutrients
- Promotion of dietary diversification
- Strengthening of public health measures such as de-worming and food safety
- Introduction of effective case management and provision of diet therapy, therapeutic feeding, rehabilitation and treatment of nutritional disorders
- Awareness building on micronutrient supplementation, lactation management, infant and young child feeding and promotion of appropriate dietary practices and healthy lifestyles through nutrition education and campaigns
- Revitalization and assessments of the Baby Friendly Hospital Initiative (BFHI)
- Inclusion of nutrition education in school health programs
- Promotion of growth monitoring programs in health facilities and communities
- Establishment of community support groups
- Provision of support supervision and monitoring
- Strengthening the logistics, transport and communication systems at all levels to ensure consistent supply and availability of appropriate equipment and supplies for case management of severe malnutrition and growth monitoring

**Nutritional Support System for HIV/AIDS:**
The NHSSP will strengthen the nutritional support services through ART centers to ensure effective management of HIV/AIDS. This will include provision of nutritional supplements to TB and HIV infected individuals; individual counseling on nutrition and HIV/AIDS; and carrying out capacity building for health workers and care givers on HIV, infant feeding and counseling in PMTCT.

**Advocacy and communication:**
The NHSSP envisages a national nutrition advocacy and communication strategy to intensify advocacy and social mobilization for nutrition at all levels. The strategy will focus on:

- Development of advocacy strategies for engagement and sensitization of policy makers on nutrition matters
- Production of appropriate information, education and communication materials on nutrition and HIV/AIDS, HIV and infant feeding, appropriate dietary and healthy lifestyles, indigenous foods identification and consumption, exclusive breastfeeding, micronutrient supplementation
- Promotion of networking at national, regional and international levels for purposes of information sourcing and sharing on nutrition issues

[24] http://www.unicef.org/programme/breastfeeding/baby.htm, accessed 27th October 2008

- Development of media strategy to enhance collaboration with all media houses on nutrition matters and to develop social marketing activities
- Promotion of income generation activities, household food production and security to improve access to assets and good nutrition
- Promotion of annual breastfeeding and micronutrient awareness weeks

**Nutrition research, M&E and surveillance:**
The MOH through the Nutrition Council and the Nutrition Unit will establish a national Nutrition Research, Surveillance and M&E framework for the nutrition sub-sector. The NHSSP also seeks to build the capacity of the Nutrition Council to effectively facilitate and coordinate all nutrition research and information management activities in Swaziland. Specifically, the following interventions will be undertaken during the plan period:

- Implementation of a comprehensive Nutrition Management Information System (NMIS) and database
- Development and adoption of guidelines for monitoring and evaluation of nutrition interventions
- Assessment of micronutrient needs and implementation of a baseline population survey on nutritional status
- Strengthening of linkages between the National Nutrition Council and the University of Swaziland to promote nutrition research and studies
- Analysis of costs and cost effectiveness of nutritional supplementation interventions/programs targeting specific age groups of children, pregnant women, lactating mothers and PLWHA
- Assessment of food security and nutrition vulnerability
- Establishment of sentinel surveillance sites at various levels e.g. health facility, community and households
- Implementation of regular growth monitoring missions and counselling using the Triple A model

At the national Level, the National Nutrition Council and the MOH Nutrition Programme under the Family Health Division in collaboration with other technical departments, programs, other Government Ministries and agencies, will be responsible for policy development, overall co-ordination and guidance on nutrition throughout the country as well as technical supervision and support to regions. The National Nutrition Council will co-ordinate and forge linkages with various NGO and private sector players and establish appropriate standards, codes and regulations for the nutrition sub sector. At the regional level, the RHMT will be responsible for the planning, management, monitoring and co-ordination of nutrition activities within the region. The MOH in collaboration with the National Nutrition Council will also upgrade the health facilities including hospitals, health centres, clinics, health units and the community health departments of the hospitals to ensure effective implementation of promotive and curative nutrition programs.

| **Strategic Operational Objective (SOO) 3.2.3:** To combat malnutrition especially in mothers and children and contribute to the improvement of the nutritional status of the Swazi population | |
|---|---|
| **Activities** | **Indicators** |
| 406 Develop and implement a National Health Sector Nutrition Policy and related Strategy and action plans<br>407 Review and update the Swaziland National Nutrition Act and enforce nutrition related legislation in conjunction with other relevant sectors<br>408 Strengthen the institutional capacity of the Nutrition Council, the MOH Nutrition Unit and the Regional Health Services providing support supervision and monitoring | 407. Availability of a National health nutrition policy and related strategy and action plans<br>408 Availability of amended Swaziland National Nutrition Act<br>409 Council enforced, Unit and regional services fully staffed and equipped and No of supervisory visits conducted per month |

| | |
|---|---|
| 409 Establish a national Nutrition Management Information System (NMIS) and database and a Nutrition Research, Surveillance and M&E framework for the nutrition subsector | 410 An established nutrition comprehensive database interacting and integrated with the National HIS; guidelines and manuals available and No of staff trained in M&E reporting |
| 410 Conduct micronutrient needs assessment and baseline surveys on population nutritional status | 411. Minimum dataset available on % of children and women with anemia, % of children <5 years in all regions receiving at least one dose of Vitamin A in one year, % of pregnant women in all regions receiving at least one course of folic acid and iron per year, infant and child specific morbidity and mortality rates, prevalence of Vitamin A, iron and iodine deficiencies, % of stunted and underweight children, % of children and women with acute malnutrition per location |
| 411 Conduct cost analysis and cost effectiveness studies of the nutritional supplementation interventions/programs | 412. Reports available and utilized for decision making |
| 412 Train health workers including community health workers, PMTCT counselors and caregivers | 413 No of trained health workers by cadre and by location |
| 413 Establish and maintain sentinel surveillance system at various levels e.g. health facility, schools, community and households and conduct vulnerability assessments | 414. No of sentinel sites established and reporting and No of malnourished clients identified and supported per facility |
| 414 Integrate nutrition into school health programs | 415. No of schools actively educating schoolchildren on nutrition issues |
| 415 Facilitate the review and mainstreaming of nutrition education into health/medical training curricula | 416 No of training institutions adopting modified curricula |
| 416 Review, update, develop and adopt protocols on micronutrient supplementation and fortification and for severe malnutrition management and infant and young child feeding guidelines | 417. No of facilities adopting guidelines and protocols and No of patients seen and treated accordingly |
| 417 Develop and enforce a national code of marketing of breast milk substitutes | 418. No of facilities not complying with national code |
| 418 Promote micronutrient supplementation for pregnant women and mothers during ANC and postnatal care | 419. % of eligible women who receive supplementation and No of facilities complaining out stocks per month |
| 419 Promote exclusive breastfeeding | 420. % of lactating mothers who do not breastfeed and No of surveys aiming at identifying and amend reasons |
| 420 Promote consumption of iodized salt and enforce salt iodization regulation | 421. % of households using iodized salts |
| 421 Facilitate food fortification and supplementation | 422. % reduction of micronutrient disorders and % of eligible mothers and children supplemented with Vitamin A and iron |
| 422 Conduct regular growth monitoring and counseling using Triple A model | 423. No of growth monitoring sessions carried out per location and No of participants per session |
| 423 Promote dietary diversification | 424. % of health facilities offering appropriate nutrition services and % of households implementing appropriate nutrition practices |
| 424 Strengthen public health measures impacting on nutrition status, such as de-worming | 425. No of dewormed children per month and location who are diagnosed malnourished |
| 425 Enhance the capacity of health facilities to ensure effective case management and rehabilitation and provide diet therapy, therapeutic feeding and treatment of nutritional disorders | |

[25] Assessment, analysis and action: critical reference can be found at: http://www3.interscience.wiley.com/cgi-bin/fulltext/119424907/PDFSTART, accessed 27th October 2008

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| 426 Carryout nutrition education and campaigns on micronutrient supplementation, lactation management, infant and young child feeding, appropriate dietary practices and healthy lifestyles | 426. No of health facilities providing diet therapy; No of patients given diet therapy; % of malnourished women and children rehabilitated; No of facilities offering therapeutic feeding and No of patients treated per facility per month |
| 427 Revitalize Baby Friendly Hospital Initiative (BFHI) | 427. % of target audience who are aware and know how to feed children and nutrition essentials |
| 428 Establish community support groups | 428. No of certified baby friendly facilities |
| 429 Strengthen the logistics, transport and communication systems at all levels | 429. No of support groups established and operational per location |
| 430 Strengthen the nutritional support services for the effective management of HIV/AIDS and ART provision | 430 % of health facilities with adequate equipment, logistics and personnel and No of facilities reporting shortage or lack of supplies |
| 431 Develop national nutrition advocacy and communication strategy by means of appropriate IEC materials within a comprehensive social marketing strategy | 431. No of ART centers and health facilities equipped to offer nutrition support to PLWHA |
| 432 Promote networking and information sharing at national, regional and international levels on nutrition, in particular with the University of Swaziland | 432 % increase of financial resources allocated for nutrition interventions; No of public and private entities endorsing nutrition issues and No of media events addressing nutrition |
| 433 Promote income generation activities and food security | 433. No of MoUs on nutrition scientific collaboration and No of academic and applied research projects proposed and approved |
| 434 Promote and hold annual breastfeeding and micronutrient awareness weeks | 434. No of participants to awareness weeks and % of attendees who are aware and knowledgeable on nutrition issues |

***7.3 Strategic Priority area 3.3.1: Protection and improvement of Swazi population's health status***

The National Health Policy (2007) considers health promotion as the cornerstone of all health care services. Indeed preventable diseases account for 75% of the national disease burden. The NHSSP therefore assumes that effective implementation of health promotion interventions will significantly contribute to the overall prevention and control of diseases and improvement in the quality of life of the population. The aim of the NHSSP is therefore to reduce morbidity and mortality due to preventable diseases and to improve the health status and quality of life the Swazi population through promotive health interventions using community action, advocacy, information, education, communication tools and approaches. The key strategic interventions in health promotion during the Plan period will be based on the following:

**a. Health Education and Promotion**

Knowledge and attitudes of the population are key determinants of health and health seeking behavior. The commonest indirect root causes of morbidity and premature mortality remain ignorance of causative factors of diseases and available measures to promote health and prevent and manage sickness. The NHSSP main objective is therefore to empower individuals and communities with appropriate knowledge and skills to prevent diseases and promote healthy lifestyles and personal responsibility for better health in their own environment.

Through the Health Promotion Programme, the MOH will seek to create public awareness on harmful practices and high-risk behaviors that affect health, such as drug abuse, smoking, heavy consumption of alcohol, high-risk sexual behavior. To this end, the MOH will intensify social mobilization for "Health for All" through nationwide health education campaigns and behavior change communication strategies. The NHSSP targets at least 95% level of public awareness of personal and community responsibility for better health and healthy lifestyles by the end of the plan period. The key interventions will be:

- To build the health education unit and Regional Health Services capacity to effectively facilitate, coordinate and regulate health education activities

[26] Described initially in World Health Report 1998 (The). Several national, regional and international web sites dedicated to database and preparation of kit and relevant materials, such as http://www.euro.who.int/hfadb, for the European WHO region, accessed 28th October 2008

- To finalize the National Health Promotion Policy
- To develop the national health education and promotion strategy
- To establish and regularly hold community health days to create awareness and sensitize the public on relevant health issues
- To integrate health education and promotion into national festivals including the International Trade Fair
- To develop and disseminate appropriate IEC materials for all segments of the population and all levels of the health system
- To develop strategies for empowering individuals and communities with appropriate knowledge, skills and positive attitudes on health promotion and disease prevention
- To establish and revitalize health facility, Chiefdom and Inkhundla Health Committees to facilitate community involvement and participation in community health promotion and development interventions and to promote advocacy for health and adoption of positive health beliefs and behaviors at individual and community levels
- To develop and implement a comprehensive Multimedia Health Education and Communication Strategy
- To develop behavior change communication guidelines for integration and adaptation of IEC and BCC strategies into specific health promotion and disease prevention programs
- To develop health promotion and education guidelines for prevention of diseases and epidemic outbreaks
- To develop and implement media advocacy strategy to enhance media involvement and participation in health education and promotion
- To provide technical support to other MOH programs on health promotion, education and BCC
- To train health workers, community health workers, community leaders, youth groups and community health committees (Chiefdom, Inkhundla and health facility committees) on health education and promotion strategies
- To promote networking and collaboration with both government and NGOs on health education and promotion
- To provide training for journalists on health and ethical media reporting
- To conduct health promotion and education research and surveys

At the national level, the MOH through the Health Promotion Programme will collaborate with specialized programs in policy development, overall co-ordination and guidance on health education and promotion. In addition, it will offer technical supervision and support to Regional Health Services. The Programme will also co-ordinate NGOs, and other Government agencies to establish standards and regulations pertaining to the program, and will monitor the delivery of public and NGO IEC activities. At the regional level, the RHMTs will be responsible for the planning, management, monitoring and co-ordination of health education and promotion activities with all agencies working within the region.
Effective implementation of the Health Promotion Program largely depend on its linkages with specialized programs in the sector. In this regard, appropriate mechanisms will be developed to streamline Health Promotion Program with other technical programs in order to prevent duplications and overlapping.

| **Strategic Operational Objective (SOO) 3.1.7a:** To empower individuals and communities with appropriate knowledge and skills to prevent diseases and promote healthy life styles and personal responsibility for better health in their own environment. | |
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| **Activities** | **Indicators** |
| 435. Establish and regularly hold international special days commemoration and community health days<br>436 Integrate health promotion approaches into national festivals and the international Trade Fair<br>437. Develop and implement appropriate health promotion strategies for empowering individuals and communities with | 435 No of international and community days commemorated<br>436 No of national festivals conducted including health promotion<br>437 No of communities empowered with appropriate knowledge , skills and positive attitudes |

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| **Institutional Capacity building** | |
| 438 Build Capacity of Health Promotion Unit and Regional Health Promotion Services<br>439. Finalize the National Health Promotion policy<br>440 Develop and operationalise a national health promotion strategic plan<br>441 Establish health promotion advisory and coordination committee<br>442. Establish/revitalize health facility, chiefdom and inkhundla health committee<br>443. Deploy Health Promotion Officers to all regions<br>444. Establish and implement Quality Assurance Systems for health promotion interventions based on effectiveness reviews and best practices | 438 Existence and performance of Health Promotion Unit; No of planning meetings held with regional services and No of supervisory and audit visits conducted per year and per location<br>439 Availability of National Health Promotion Policy<br>440 Availability of a fully funded plan<br>441 Availability of a committee and No of meetings held per month<br>442 No. of health committees formed, trained and functioning and No of meetings held per month and location<br>443 No of positions established and % of officers and support staff at national and regional levels deployed<br>444 Quality control mechanisms established; best practices databank established; No of audit conducted per location and No of surveys assessing KAP of clients designed and implemented |
| **Advocacy and communication** | |
| 445. Develop a national health promotion advocacy and communication strategy<br>446. Develop and implement a comprehensive Multimedia Health Promotion Communication Strategy<br>447. Promote networking and collaboration at national, regional and international levels on health promotion issues<br>448. Conduct public awareness campaigns and community dialogues/conversations at all levels on various health issues<br>449. Establish a comprehensive and integrated advocacy and communication program<br>450. Train health workers and implementing partners on health promotion policy | 445 Availability of an advocacy and communication strategy; % of evidence based recommendations implemented per year and degree of compliance of promotion campaigns<br>446 Availability of a strategy and No of media events per category and per month<br>447 No of regions with established health promotion and education functions, and No of MoUs with international accredited entities<br>448 No of national campaigns and community dialogues conducted per location<br>449 Program funded and implemented; No of reviews/updates done based on evidence of effectiveness and degree of alignment of subnational initiatives<br>450 Availability of a health promotion training policy program, No of educational events conducted and No of staff trained per event and location; No of media organizations involved in health promotion campaigns and No of journalists trained in media management for health promotion |
| **BCC/IEC** | |

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| 451 Strengthen the human resources capacity for BCC/IEC component through training, recruitment and deployment of adequate staff<br>452. Conduct training for health workers on BCC/ IEC approaches<br>453. Develop and disseminate appropriate IEC materials for all segments of the population and all levels of the health system by means of routine IEC and media and community campaigns at all levels<br>454 Disseminate radio, television and print articles, adverts, infomercials, and programs throughout the year<br>455. Develop and disseminate health magazine/ newsletter on various health issues<br>456. Conduct follow up of various health issues campaigns and community availability of IEC materials including billboards<br>457. Strengthen multisectoral collaboration of health promotion services and interventions | 451 Existence and performance of Health Education Unit BBC/IEC section, No of positions established and % of staff deployed<br>452 No of events organized and No of health workers trained per event<br>453 No. of health facilities equipped with appropriate health education and promotion equipment and materials for patient education, % of target groups within communities reached and No of clients who are aware and retain knowledge of materials/ campaigns disseminated/ conducted per year<br>454 No of media programs for various health issues conducted and degree of awareness in the general population assessed by regular surveys<br>455 No of magazine/newsletters issued and their availability at dissemination places<br>456 No of follow up campaigns and degree of retention of target audience and general public KAP<br>457No of sectors collaborating with health promotion unit and degree of alignment of advertisements supervised by different bodies |
| **M&E and Research** | |
| 458 Build the capacity of health promotion Unit in health promotion research and information management<br>459. Conduct health promotion and education research and baseline surveys, health promotion interventions impact assessments, behavioral assessments<br>460. Establish M&E systems for health promotion interventions<br>461. Develop, disseminate and implement guidelines for M&E of health promotion interventions | 458 Existence and performance of Health Education Unit M&E section and availability of a national databank on best practice supported by reviews on evidence of effectiveness<br>459 No of surveys and research studies planned and conducted on behavior change, lifestyle related conditions and risk factors management<br>460 Availability of M&E systems for Health Promotion compliant with national requirements established and functioning<br>461 Availability of M&E guidelines and No of facilities regularly reporting in their catchment according to framework area on at least: % increase in persons adopting promotive and preventive health behavior, % increase in persons seeking and utilizing health services; % increase in knowledge and awareness of available disease prevention and health promotion services, % reduction in incidence of preventable diseases |

**7.4 School Health**

According to the 2007 Population Census, the population of school going children (5-19 years) in Swaziland is 401,230 (39.4%). Of these, 5-9 year olds are 13.4%, 10-14 year olds are 13.6% and 12.4% are 15-19 year. That means that for every 10 people in Swaziland, 4 are school children at pre-primary, primary, and secondary levels. If the 20-24 year olds (10.7%) are included, then more than half of the Swazi population should be either in school or college. The school going population is exposed to diverse health problems including communicable diseases, skin infections, worm infestation, conditions related to poor hygiene and sanitation, incomplete immunization schedules, malnutrition, trauma, injuries, substance abuse and high risk sexual behavior as they grow older.

According to SDHS 2007, 7.4% of girls as compared to 4% of boys had had sex before the age of 15. Other

studies have shown that children in Swaziland become sexually active on average by the age of 13. Pre-marital sex is among the factors that pre-dispose children to HIV, sexually transmitted infections, unsafe abortions, unwanted pregnancies and obstetric complications. According to the SDHS 2007, HIV prevalence among children was found to be 4.2% among 5-9 year olds, 2.6% among 10-14 year olds, 5.8% among 15-19 and 26.5% among 20-24. The prevalence among women aged 15-19 years was found to be 10% as compared with 2% among men in the same age group.

The NHSSP therefore seeks to improve the health status of, and inculcate positive health behavior and health lifestyles among school children and college students of 5-24 years of age. Through the School Health Program, the NHSSP also expects to reduce school dropout rates and enhance performance of children in schools. The national targets to be met by 2013 include:

- All primary schools (public and private) implement the national School Health Program
- All schools (public and private) have health clubs
- All schools regularly hold health open days every year
- All primary schools (public and private) have safe water supply and adequate sanitation facilities such as pit latrines/toilet and hand washing facilities in accordance with national standards
- All secondary schools (Public and Private) have adolescent health services
- All post secondary training institutions have established college health program

The School Health Program is intended to provide comprehensive preventive and promotive health services to school-going children (5-19 years) with a special program for young people (20-24 years) in colleges. The strategic focus will be put on primary and secondary schools and teacher training institutions. Broadly the NHSSP will endeavor to ensure that all school children have access to essential health care including adequate understanding of basic facts on disease and injury prevention and positive health values and habits which would be useful to them in school, within their families, communities and later in life.

The NHSSP will also endeavor to develop safe and healthy school environment necessary for ensuring appropriate physical, psychological and cognitive development of children. In secondary and post secondary institutions, the NHSSP will seek to promote adolescent and youth health programs including RH/HIV/STI counseling and contraceptives; VCTs for HIV; promotion of anti-tobacco and anti-drinking habits and substance abuse counseling; nutritional care; accident prevention; exercise and recreation and ITN promotion and use. To this end, schools and post secondary institutions will be adequately equipped to effectively implement gender specific health education and promotional activities in the institutions. Specifically, the key strategic interventions during the Plan period will target the:

- Development and implementation of a national school health policy
- Development of a national school health strategy
- Development and dissemination of school health standard guidelines and curricula
- Building of capacities of the National School Health Program to effectively coordinate and facilitate health promotion activities in schools
- Establishment of college health programs for training institutions focusing on adolescent and youth health interventions
- Development and implementation of a comprehensive health education program for schools to improve health behavior and inculcate healthy lifestyles among school children, their families and teachers
- Construction, maintenance and use of safe water sources, pit latrines and hand washing facilities to improve personal hygiene among school children
- Screening and treatment of minor ailments including dental/oral health care for school children
- Regular de-worming of school children
- Immunization outreach programs in schools
- Establishment of school feeding programs and training on micronutrient feeding for schools
- Promotion of physical education and recreation
- Establishment of school health clubs

[27] The Health Promoting School Initiative is a program launched by WHO/AFRO and described at: http://www.afro.who.int/healthpromotion/project.html, accessed 28th October 2008.
Participatory Hygiene and Sanitation Transformation is also a program launched by WHO/AFRO, fully described at: http://www.afro.who.int/wsh/pdf/phastinitiative/whatisphast.pdf, accessed 28th October 2008.

- Regular inspection and re-fill of first aid kits in schools
- Behavioral and KAPS surveys in schools and colleges
- Supervision to monitor school health programs and ensure that all schools have safe and healthy environment
- Establishment of school health open days to be held once a year
- Provision of psychosocial care and support for schoolchildren especially orphans and vulnerable children infected and affected by HIV/AIDS in collaboration with the Social Welfare Departments and Ministry of Education
- School and community based training on life skills, HPSI and PHAST for focal teams
- Development and dissemination of gender specific information, education and communication (IEC) materials and educational video to primary and secondary schools and colleges

At the national level, the MOH through the health Education Program in collaboration with the Ministry of Education, Deputy Prime Minister's office, Sports and NERCHA and such UN agencies as WHO, UNAIDS and UNICEF will formulate and implement a comprehensive school health strategy and program. The Health Education Division through the School Health Program will provide guidelines, advocacy and technical supervision to the regions. It will also co-ordinate and collaborate with other technical child health related institutions for effective implementation of the program. At the regional level, the RHMT will collaborate with the Regional Education Office and Regional Inspectors of Schools to ensure coordinated implementation of the school health program.

| **Strategic Operational Objective (SOO) 3.4:** To improve the health status of, and inculcate positive health behavior and healthy lifestyles among school children and college students of 5-24 years of age. | |
|---|---|
| **Activities** | **Indicators** |
| **Institutional Capacity building** | |
| 462 Develop and implement national school health policy, school health standards guidelines and curricula | 462. Availability of school health policy and guidelines and % of schools adopting guidelines and adapting curricula |
| 463 Promote intersectoral and within sector co-ordination and linkages between school health program and other programs such as SRH, SNAP, nutrition counseling, malaria control, EPI, IMCI, essential drugs and disability and conduct joint support supervision visits | 463. No. of formal links established, No of joint planning sessions and supervision visits conducted and % of IEC materials developed and disseminated jointly per facility per year |
| 464 Establish school health open days to be held once a year | 464 No of school health open days and No of participants per event |
| 465 Physical screening of every child in school, treatment of minor ailments and referrals | 465. No and % of children screened, tested, treated and referred per school per year and per condition |
| 466 Nutritional assessments of school children | 466. No and % of children nutritionally assessed per school per year and per age group |
| 467 Conduct regular monitoring and refilling of first-aid kits including sanitary pads in schools | 467. No of schools with first aid kits and No of children treated per school per month and per condition |
| 468 Promote physical education and recreation | 468. No and % of children actively involved in physical activity such as sporting exercise per school and per age group |
| 469 Promote usage of ITNs by parents and school children | 469 No of children, teachers and parents using ITNs per school |
| 470 Conduct periodic monitoring and evaluation of program performance | 470. M&E system in place and No of reports produced per school per year |
| **Safety and controls** | |

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|---|---|
| 471 Collection of baseline information on environmental health status in schools and surveillance of communicable disease at school established<br>472 Inspection of food hygiene in schools<br>473 Inspection of water supply hygiene in schools<br>474 Construction and promotion of proper use of toilets and hand washing facilities in schools<br>475 Promotion of basic personal hygiene among schoolchildren<br>476 Inspection of schools environment<br>477 Proper disposal of refuse and waste management in schools | 471. Complete school based database available and accessible by national HIS and No of actively reporting sentinel sites<br>472. No of food inspection reports and % of contaminated food samples diagnosed<br>473 No of water samples taken and % of contaminated samples diagnosed<br>474. No of toilets and hand washing facilities completed per school<br>475. Water borne diseases incidence rate per school and age group<br>476. No of inspections conducted and No of interventions activated to restore environmental hygiene when reported critical<br>477. No of schools with proper refuse disposal scheme |
| **Cross cutting and program support activities** | |
| 478 Conduct school brushing programs, water fluoridation, fissure sealants and national oral awareness campaigns<br>479 Eye and oral examination for all school children and proper refferals.eg. orthodontic and visual defects correction procedures<br>480 Perform tooth extractions and treatment of oral lesions eg. gingivitis<br>481 Trainings teachers, school committees and parents on health issues<br>482 Assist teachers in identifying children with learning disabilities<br>483 Carry out immunizations and deworming programs in schools<br>484 Develop, print and disseminate IEC materials and educational video to pre-schools, primary and secondary/high schools and college students on health issues<br>485 Conduct behavioral and KAPS surveys in schools and colleges<br>486 Facilitate provision of psychosocial care and support for in school children especially (HIV/AIDS) orphans and vulnerable children<br>487 Provide school and community based training on life skills, HPSI and PHAST for focal teams<br>488 Develop and disseminate gender specific information, education and communication (IEC) materials and educational video to primary and secondary schools and colleges | 478. No of schools with oral health programs, No of schoolchildren supervised and adhering to guidelines per school per month<br>479. No of children examined and referred per school per month<br>480. No of children treated per school per month<br>481. No of events conducted and No of participants per event per school<br>482. No of children identified and assisted per school per month<br>483. No of children immunized and de-wormed per school per month<br>484 No of educational sessions conducted per school per month, KAP surveys conducted per school and No of schoolchildren and students with correct knowledge and attitude on promoted health issues<br>485. No of surveys conducted per facility per year and No of reports available<br>486 No of orphans and vulnerable children enrolled and supported per facility per month<br>487. No of training hours dedicated to life skills and No of participants attending per school<br>488. No and type of materials disseminated and available per facility |

**7.5 Rural Health Motivators program**

The Rural Health Motivators are community based health volunteers, who are selected by community leaders in a community meeting. They include adult women and men, married and residing within the community. Once identified, they are trained at the Inkhundla centre by the regional health management team.

There are about 4000 RHMs distributed in the chiefdoms countrywide. Each RHM is responsible for 15-20 homesteads.

**Training**

RHMs are initially trained in a standard course of 12 weeks, that introduces them to all aspects of health. They are become conversant with primary health care concepts and contents, and their role and responsibility in PHC is highlighted. All MOH program managers present their programs to the RHM and explain what their role is expected to be, in each program at the community level, e.g. the environmental health department offers one week presentations and training on environmental health, VIP latrine construction and maintenance and water purification methodologies and needs at household level. Home-based care is allocated two weeks including practicals, where they visit homesteads to assist ailing community members. They are taught basic communication methodologies, how to interact with households and how to teach care-givers to assist sick household members.

HIV and ART are allocated one week as RHMs learn how to motivate people to increase their demand for HIV/AIDS testing, to improve adherence to treatment and to identify and manage side effects.
Swaziland Red Cross Society trains RHMs on First Aid and Emergency Care.
MoJ and CA orientate them on the importance of BMDs and their role in all the department at the MOH.
MoA, MoJ, and RDYA ministries, NGOs and FBOs are all involved in supporting and strengthening RHMs' competence to allow for a broad spectrum of services to be properly delivered to community members and households.

**Program objectives**
The mandate of the RHMs is to:

- Provide health information, education and communication to their communities with an effort to make people become responsible for their health and conduct a healthy lifestyle and behavior
- Provide Primary Health Care and Home Based Care including referral to the health facilities for severely ill clients or those in need of professional diagnosis and treatment

The national RHM Program coordinates, directs, monitors, evaluates and supervises the program activities.
RHM are a valuable resource in the communities, as they liaise communities to the health sector, including NGOs and FBOs and other line ministries.
RHM are also members of the inner councils for all the chiefdoms, and advise the councils on health issues and community development.
The NHSSP goal therefore is to improve the quality of health services provided by RHMs in the communities through fulfillment of the following targets:

***RHM***

- To provide timely and adequate drugs and materials to at least 90% of RHM
- To improve support supervision for RHMs at community level
- To train at least 90% of RHMs on growth monitoring of children under five years of age and to conduct monthly sessions at Umphakatsi level
- To promote effective coordination among community based volunteers in order to improve inter, intra and multisectoral interventions
- Disseminate all IEC materials for all MOH programs, NGOs and FBOs.

***NATIONAL LEVEL***

- To strengthen the National RHM office, increasing and targeting needed resources
- To capacitate the national and regional officers on public health issues
- To increase and improve coordination and networking within the Public health programs in-order to maximize RHMs' outcomes
- To integrate community based health information systemin the national HIS.

| **Strategic Operational Objective (SOO) 3.1.7c:** To improve the health status of and inculcate positive health behavior and health lifestyles among individuals, families and communities especially in rural areas. | |
|---|---|
| **Activities** | **Indicators** |
| **Institutional Capacity** | |
| 490 Build capacity of the RHM program and Regional Health Services<br>491 Develop and implement National RHM program policy and update RHM program strategic plan<br>492 Develop operational guidelines for the RHM program<br>493 Establish RHM program advisory and coordination committee<br>494 Strengthen national and regional RHM program support supervision<br>495 Define and implement a community driven M&E system for RHM program interventions<br>496 Establish networking and collaboration with government, non-governmental and private sector organizations on community based health interventions<br>497 Develop intersectoral coordination and linkages among organizations and volunteers working at community level<br>498 Develop and implement BCC strategy for the RHM program | 490. Number of training events per area and No of participants per event; inventory of personnel and recruitment and placement plan based on catchment population and workload prepared and adopted; No of posts filled and resources procured; No of kits refilling per location and per RHM per month<br>491 RHM policy available and adopted and RHM strategic plan updated accordingly<br>492. RHM operational guidelines produced and disseminated<br>493. RHM Coordinating Committee TOR in place and No of meetings held per month<br>494 No supervisory support visits conducted<br>495. M&E system in place and No of debriefing sessions held by community and RHMs on identified issues of interest<br>496. No of joint planning meetings held; No of joint plans of action implemented; customer satisfaction surveys conducted by formal sector to appraise RHMs' performance<br>497. No of meetings held; No of participants per meeting and degree of related decision awareness of community based volunteers<br>498. BCC strategy in place and No of RHM aware of, and adopting it |
| **Program support** | |
| 499 Training of all RHMs on community based growth monitoring, health promotion and relevant issues identified intra-sectorally<br>500 Sensitize health workers on RHMs roles in the community<br>501 Sensitize community leaders on RHMs roles in communities<br>502 Recruit and train RHM (replacing exited RHMs) to implement and expand RHM health services<br>503 Supervise and support RHMs in their functions and in the referral chain strengthening and management from communities to health facilities<br>504 Procure and supply regularly RHMs with community care and support materials<br>505 Formation of RHMs facilitated HIV/AIDS support groups in the communities<br>506 Involve and train RHMs in the dissemination and use of IEC materials for all MOH programs to communities | 499 No of RHMs trained per location and per month per health issue<br>500. Expand progressively the volume and type of health related activities assigned to RHMs by the formal health workers<br>501. % of community leaders attending meetings with RHMs per location<br>502 Number of training events offered and No of participants per event and per location<br>503. No of supervision visits conducted and No of patients correctly referred to the appropriate level by diagnosis and location<br>504. No of RHMs with stock outs per month per location<br>505. Number of groups formed per location<br>506. % of target audience who is aware and capable to recall health education and promotion messages on lifestyles and risk factors for common ailments per location |

**7.6 Environmental Health**

Environmental factors are major determinants of health. In Swaziland, it is estimated that over 80% of illnesses like acute watery diarrhea, dysentery, cholera, typhoid, food-borne illnesses, bilharzia, intestinal worms, bubonic plague, RTIs, TB, malaria, rift valley fever, skin infections and others are traceable to environment-related contamination and the use of unsafe water and sanitation. According to SDHS 2007, an estimated 59% of the rural population obtains water from improved sources as compared to 92% in urban areas. However, only 22% of rural households have access to piped water into dwelling/plot while 18.7% have access to public tap/standpipe. 52% of the rural households own pit latrines but with a significant 25.6% having no toilet facilities.

The phenomenon of global climate change and its impact on health is further complicating the disease burden scenario in Swaziland. The main environmental health challenges include lack of access to safe water and sanitation; poor sanitary conditions; inadequate domestic solid and liquid, medical, industrial and agricultural chemical waste disposal systems; poor and unsafe food handling and hygiene practices; poor housing conditions and indoor pollution; pests, vermin and rodents; poor occupational health hazards management capacity; environmental pollution from industrial and agricultural industries and weak health regulation enforcement.

It is against this background that the National Health Policy (2007) commits the MOH to promote environmental health programs including safe water supply, sanitation and pollution control, occupational hygiene and safety, food safety and meat hygiene, nutrition, health care risk/medical waste management, port health activities, and safe housing. Accordingly, the NHSSP will establish a comprehensive and multi-sectoral environmental health framework to ensure a safe and sustainable environment for the promotion and sustenance of good health and quality of life for all people in Swaziland. In particular, the NHSSP seeks to contribute to a significant reduction in morbidity and mortality due to environment-related conditions and diseases. The national targets to be achieved by the end of 2013 are:

- To increase safe water supply from 59% to >80%.
- To increase improved sanitation facilities from 52% to >80%
- All regions carrying out regular drinking water quality surveillance activities
- To increase safe waste disposal including human excreta facilities from 25% to >60% of households
- Environmental Health Act and subsidiary legislation in place and being fully enforced

To achieve the above targets, the MOH in collaboration with other relevant government ministries, departments, non-governmental and private sector organizations will develop a Comprehensive National Environmental Health Strategy to ensure effective prevention of environment-related illnesses and diseases. The Strategy will in particular seek to raise awareness on the relationship between health and the environment and the potential adverse health consequences of various environmental factors. The MOH through the Environmental Health Division will also endeavor to develop special environmental health programs for the peri-urban areas and large-scale irrigated agricultural and industrial communities.

The Environmental Health Division will further collaborate with other disease control programs to develop a common approach to disease prevention and surveillance and to strengthen disease and epidemic outbreak prevention, preparedness and response at both central and regional levels. In addition, the MOH will develop and implement a minimum environmental health services package for Swaziland. Specifically, the key strategic interventions during the Plan period will include the following:

i. Development of enabling policy and regulatory framework for Environmental Health: To promote an enabling policy and regulatory framework for the environmental health, the MOH in collaboration with key stakeholders will strengthen the legislative framework for effective regulation of environmental health factors and practices. This will include the review of Public Health Act, the Building Act, the Swaziland Environmental Authority Act and development and enactment of Environmental Health Act; support to and facilitation of the development and review of water, sanitation and hygiene promotion standards including food safety standards; development and dissemination of a comprehensive national environmental health management guidelines at central and regional level; and development and distribution of guidelines on household and community based good environmental health practices.

ii. Capacity building: The NHSSP will seek to strengthen the institutional and technical capacity of the Environmental Health Unit/Program and the Regional Health Services to effectively facilitate, coordinate, regulate, supervise, monitor and streamline environmental health activities at all levels. Environmental Health Officers will be deployed to all health centers and hospitals and their capacity developed through training and retraining. The MOH will also facilitate the review of environmental health training curricula. In addition, the MOHW will strengthen environmental health logistics, communication and transport system and operations at both national and regional levels.

iii. Advocacy and communication: The NHSSP seeks to develop a national environmental health advocacy and communication strategy to intensify advocacy and social mobilization for environmental safety and health practices at all levels. The strategy will focus on sensitization of policy makers on environmental health matters; production of appropriate information education and communication materials (IEC) on environmental health; promotion of networking and collaboration at national, regional and international levels for purposes of information sourcing and sharing on environmental health; development of media advocacy strategy to for the promotion of environmental health.

iv. Prevention and control of environment-related diseases and illnesses: The NHSSP envisages a Comprehensive National Environmental Health Strategy designed to support and facilitate prevention and control of diseases and illnesses. Specifically, interventions to prevent and control environment-related diseases and illnesses will focus on the following activities:

a) Water and Sanitation: Water and environmental sanitation underpin much of the disease and epidemic control interventions. The NHSSP therefore seeks to facilitate all households especially in the rural and peri-urban areas to improve their housing conditions and to have access to safe water supply, human waste disposal facilities as well as safe refuse disposal methods. To this end, communities will be mobilized and organized to support and participate in various water and sanitation program intervention. Awareness campaigns will be conducted at all levels to promote personal and community hygiene through health education programs. Therefore the following priorities will be pursued:

- Development and implementation of a health sector water and sanitation policy
- Development of Guidelines on water, sanitation and hygiene promotion
- Establishment/strengthening of the WATSAN program to support improvement and development of water and sanitation facilities including Ventilated Improved Pit (VIP) latrines and micro water systems, such as springs, wells and boreholes
- Establishment of community demonstration sites for sanitary facilities constructions
- Development and dissemination of IEC materials on hygienic practices and basic water treatment methods such as boiling, sedimentation, filtration and chlorination, and protection of water sources, wells and springs
- Upgrade of Swaziland water quality standards to meet WHO Drinking Water Quality Standards and Guidelines
- Conduct periodic sanitary surveys and inventories of wells, boreholes, protected springs and intakes in close collaboration with the Rural Water Supply Board (RWSB) and Non-governmental Organizations (NGOs)
- Procurement and distribution of water quality testing kits
- Regular water sampling and analysis/testing to monitor microbiological and chemical quality of water
- Integration of sanitation and hygiene in school health and educational programs
- Training of community environmental health workers on Participatory Hygiene and Sanitation Transformation (PHAST) approach to promotion of improved water - sanitation - hygiene behavior
- Training of personnel on water quality surveillance techniques

b) Food safety, hygiene and quality management: To promote food safety, hygiene and quality and to effectively control food borne illnesses, the MOH will develop and implement a National Food Safety Policy, food safety standards and formulate/enact a Food Safety Bill. The Ministry will also participate in CODEX Alimentarius Commission activities and collaborate with neighboring countries in food control and safety. Public awareness campaigns will be conducted at all levels to sensitize and educate the public on food and meat hygiene and safety including the correct ways of protecting, storing, handling, cooking and disposing of food. In addition, food handlers, inspectors and proprietors of eateries and business premises will be trained on food safety and meat hygiene. The MOH will further procure sampling materials and equipment and establish food and parqua laboratories in each region and ports of entry, and strengthen/establish central referral laboratory.

c) **Pollution control and waste management:** To control environmental pollution and protect the population from various environmental health hazards, a number of interventions will be undertaken as follows:

- Periodic assessment of air pollution levels at source in accordance with WHO guidelines in collaboration with Swaziland Environment Authority (SEA) and related NGOs
- Periodic inspection of factories, workplaces, solid and liquid waste disposal sites, irrigation sites in collaboration with Swaziland Environment Authority (SEA)
- Development and implementation of a comprehensive Waste Management Strategy to ensure appropriate collection, storage, and disposal/treatment of domestic, institutional, industrial and medical waste and other hazardous wastes in collaboration with the Swaziland Environment Authority, City Councils, Town Boards, Ministry of Housing and Urban Development, private sector organizations
- Procurement of pollution assessment equipment
- Development and dissemination of national policy and guidelines on health risk waste management (HRWM)
- Training of health staff, including Environmental Health Officers and health facility staff, on health risk waste management (HRWM)
- Establishment of medical waste management and disposal systems in all health care facilities
- Promotion of vector, vermin and pesticides control activities

d) **Occupational Health:** The MOH will develop and implement a comprehensive occupational health program based on international best practices and effective guidelines targeting factories and workplaces. The program will also include curative medicine, nursing services; preventive medicine, health promotion; support services and inspections; hygiene and hazards control; toxicity evaluation, risk assessment and health research. In addition the MOH will carry out regular work place inspections, inventories and follow ups in collaboration with the Department of Labor and other relevant labor organizations. Basic training in occupational health and safety for workers in selected areas and Training of Trainers (TOT) workshops on occupational health will be conducted in each region. Occupational health laboratories will be strengthened and equipped with staff and necessary reagents and kits.

e) **Port Health:** The NHSSP seeks to develop a comprehensive Port Health program and strengthen port health services in collaboration with South Africa and Mozambique to control the dissemination of infectious diseases and sub standard goods including food, chemical, drugs and other supplies. In this respect the MOH will establish an inter-country port health Committee with South Africa and Mozambique and deploy adequate number of Port Health Officers at all ports of entry, namely international airports and border posts. All ports of entry will also be equipped with necessary quality testing kits for food, drugs and chemical products.

f) **Environmental, M&E, research and surveillance:** The NHSSP seeks to build the capacity of MOH Environmental Health Unit and regional health service to effectively facilitate and coordinate all environmental health research and information management activities in Swaziland. Specifically, the following interventions will be undertaken during the plan period:

- Establishment of a comprehensive Environmental Health Management Information System

(EHMIS) and database

- Development and implementation guidelines for monitoring and evaluation of environmental health interventions; and baseline surveys, environmental health impact assessments, risk assessments and health vulnerability assessments in relation to climate change

In terms of implementation, the MOH Environmental Health Division in collaboration with Health Education Division and SEA, will be responsible for policy development, overall co-ordination and guidance of environmental health services throughout the country. It will also be responsible for providing technical supervision and support to Regional Health Services. It will co-ordinate with the NGOs, and other Government agencies on the establishment of standards and regulations affecting the program, and for monitoring the delivery of public and private sector environmental health services throughout Swaziland. At the regional level, the RHMT will be responsible for the planning, management, monitoring and co-ordination of environmental health services with all agencies within the regions.

| **Environmental Health Policy and Regulatory Framework** | |
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| **Strategic Operational Objective (SOO) 3.6.1** To establish a comprehensive and multi-sectoral environmental health framework to ensure a safe and sustainable environment for the promotion and sustenance of good health and quality of life for all people in Swaziland, contributing to a significant reduction in morbidity and mortality due to environment related conditions and diseases with special focus on children's needs | |
| **Activities** | **Indicators** |
| **Policy and Regulatory Framework** | |
| 507. Review and update the National Environmental Health Policy | 507 National policy reviewed and adopted |
| 508. Develop a comprehensive national environmental health strategy | 508 National strategy produced and endorsed by all line Ministries, agencies, public and private stakeholders |
| 509. Develop and implement special environmental health program for the periurban areas and large scale irrigated agricultural and industrial communities | 509 Special program defined, approved and launched; No of staff assigned and target areas and population identified, mapped and informed |
| 510. Develop a collaborative environmental health management approach at central and regional levels | 510 Framework developed, functional links between all levels established, chain of command clarified and functional organigram designed and disseminated |
| 511. Develop and implement a minimum environmental health services package for the country | 511 Minimum package developed and No of suitable locations and facilities adopting it |
| 512. Establish an environmental health coordinating/ Advisory committee | 512 Committee established and No of meetings held per month |
| 513. Develop and enact a Public Health Act | 513 Public Health Act adopted and No of facility managers aware and knowledgeable about it |
| 514. Develop and implement comprehensive National Environmental Health Management guidelines | 514 Availability of guidelines, No of facilities where they are know and used and No of supervisory visits promoted accordingly |
| 515. Develop and distribute guidelines on household and community based good environmental health practices | 515 No and % of households and communities aware and adopting good environmental health guidelines |

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| **Capacity Building** | |
| 516. Strengthen the institutional and technical capacity of the Environmental Health department and Regional health services<br>517. Deploy Environmental Health Officers (EHOS) to all Tinkhundla centers, health centers, clinics and hospitals<br>518 Train EHOS and community health workers on environmental health management<br>519. Review and modernise environmental health training curricula<br>520. Strengthen environmental health logistics, communication and transport system at both national and regional levels | 516 No of impact assessments conducted; No of trained and competent staff in place; No of supervisions conducted per location and per month; No of sentinel sites established; No of reports per region per year<br>517 % of Tinkhundla, clinics, health centers and hospitals with EHOS deployed; No of EHOS positions established and % fulfilled<br>518 No of training events organized and No of participants per profession, per location and per event<br>519 No of curricula updated and No of personnel trained accordingly per year<br>520 No of field visits conducted per justification, per location, per month and per output |
| **Advocacy and communication** | |
| 521. Develop a national environmental health advocacy and communication strategy<br>522 Develop and disseminate appropriate IEC materials on environmental health<br>523. Promote networking and collaboration at national, regional and international levels on environmental health<br>524. Develop a media data bank and an advocacy strategy | 521 Availability of an advocacy and communication strategy and No of advocacy meetings conducted per location and per month; No of non health stakeholders contacted and No of information tools adopted and developed based on evidence of success and best available practice at recognized international level<br>522 No and % of target audience aware and knowledgeable of environmental health issues per location and sector<br>523 No of collaborative environmental health actions taken with private sector and communities<br>524 Availability of media advocacy strategy, time of media coverage; No of journalists trained in environmental health and No of reports on environmental health produced and disseminated to the general public and to specific audience |
| **Water, Sanitation and Hygiene Education** | |
| 525. Develop and implement health sector water and sanitation policy<br>526 Develop guidelines on water, sanitation and hygiene promotion<br>527. Mobilize and organize communities to support and participate in various water and sanitation program intervention<br>528. Conduct awareness campaigns at all levels to promote personal and community hygiene through health education programs<br>529. Establish/ strengthen and expand the WATSAN program<br>530. Improve and develop water and sanitation facilities | 525 Availability and adoption of policy<br>526 Availability of water and sanitation guidelines based on evidence of effectiveness and on documented best available practices<br>527 No of community initiatives agreed and supported per location and per year; % of public funding to support community initiated actions<br>528 No of campaigns conducted and No of targeted audience per location per year<br>529 No of community WATSAN groups formed |

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| 531. Establish community demonstration sites for sanitary facilities constructions and PHAST<br>532. Develop and disseminate IEC materials on hygienic practices and basic water treatment methods<br>533. Upgrade Swaziland water quality standards to meet WHO Drinking Water Quality Standards and Guidelines<br>534 Conduct periodic sanitary surveys and inventories of water sources<br>535. Procure and distribute water quality testing kits<br>536. Conduct regular water sampling and analysis/ testing in all regions<br>537. Integrate sanitation and hygiene in school health and educational programs<br>538. Train community environmental health workers on Participatory Hygiene and Sanitation Transformation (PHAST) approach<br>539. Train personnel on water quality surveillance techniques | 531 No of VIP latrines constructed; No of water systems constructed and rehabilitated and No of users served per location and per year<br>532 No of demonstration sites for sanitary facilities constructions established and No of facilities demanded/ built eventually per location per year<br>533 No of people and communities reached and % of audience capable to recall good practices and retain basic knowledge<br>534 Availability of upgraded Swaziland water quality standards and No of testing samples that are compliant<br>535 No of surveys and inventories of water sources conducted per location per year<br>536 No of water quality testing kits procured and distributed per location per year<br>537 Frequency of water sampling and analysis/ testing per location and % of good quality results obtained<br>538 No of school with sanitation and hygiene education programs per location and per No of students<br>539 No of community workers trained on PHAST and capable to promote community based interventions<br>No of personnel trained on water surveillance techniques per location per year and No of tests conducted per personnel per year |
| **Food safety, hygiene and quality management** | |
| 540. Develop and implement a National Food Safety Policy and related action plan<br>541. Develop food safety standards<br>542. Formulate/enact a Food Safety Bill<br>543. Participate in CODEX Alimentarius Commission activities<br>544 Collaborate with neighbouring countries in food control and safety<br>545. Conduct public awareness campaigns at all levels on food and meat hygiene, safety and handling<br>546. Procure and distribute sampling materials and equipment<br>547. Establish food and parqua laboratories in each region including ports of entry<br>548. Strengthen/establish central referral laboratory<br>549. Develop a national training curriculum and train food handlers including street food handlers | 540 Availability of food safety policy and action plan<br>541 Availability of food safety standards based on best available international recommendations<br>542 Safety Bill available and enacted<br>543 No of personnel attending CODEX Alimentarius activities<br>544 No of crossborder meetings and No of joint inspections conducted per month and location<br>545 No and frequency of public awareness campaigns conducted on food safety and hygiene and No of target audience aware and capable to retain knowledge gained per location<br>546 No of sampling materials procured and distributed per location per month and target<br>547 No of parqua laboratories established per location and No of tests performed per month<br>548 Established central referral food laboratory, No of staff employed; No of analysis conducted per month and No of food borne diseases diagnosed and confirmed<br>549 Availability of curriculum and No of food handlers trained per location per month |
| **Pollution Control and Waste management** | |

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| 550. Periodically assess air pollution levels at source in accordance with WHO guidelines in collaboration with SEA and related NGOs | 550 No of inspections and supervisory visits to pollution sources conducted per location per month |
| 551. Periodically inspect factories, workplaces, solid and liquid waste disposal sites, irrigation sites in collaboration with SEA | 551 No of inventory of pollution sources conducted per location per month and incidence of respiratory illnesses related to air pollution and prevalence of COPD |
| 552. Formulate guidelines on Health Care Risk Waste Management (HCRWM) for all the levels of health care | 552 Availability of evidence based HCRWM guidelines compliant with internationally recognized best practices |
| 553. Formulate a strategy and an action plan for HCRWM | 553 Availability of plan of action, availability of resources required and its timely implementation |
| 554. Procure and distribute incinerators to health care facilities | 554 No of health facilities fully equipped with required incinerators per location |
| 555. Construction of health care risk waste storage areas | 555 No of facilities with adequate store areas per location |
| 556. Procure, calibrate and distribute pollution assessment equipment | 556 No of pollution assessment equipment procured and distributed per location |
| 557 Train Environmental Health Officers and health facility staff on health risk waste management (HRWM) | 557 No of staff trained per location, facility and year |
| 558 Produce and disseminate IEC material on health care waste management | 558 Availability of IEC materials and % of target audience aware and knowledgeable on related contents |
| **Port Health and International Health Regulations** | |
| 559 Develop a comprehensive Port Health and International Health Regulations (IHRs) programme | 559 Existence of a comprehensive port health and IHRs programme |
| 560. Develop and implement a National and strategic plan of action for the implementation of Port Health and International Health Regulations | 560 Existence of national and strategic plan of action for port health and IHRs |
| 561. Create posts for the implementation of Port Health Services and IHRs | 561 No of port health officers created and posted |
| 562. Procure and equip all ports of entry with necessary quality testing kits for food, drugs and chemical products | 562 No of food, chemicals and drug products tested per location per month |
| 563. Conduct training workshops for port health officers | 563 No of training events organized and No of officers trained per event and location |
| 564. Establish an inter-country port health committee with neighboring South Africa and Mozambique | 564 Availability of an Inter-country port health committee, No of joint supervisions conducted and degree of compliance between parties |
| **Environmental Health Research, M&E and Surveillance** | |
| 565. Build the capacity of MOH Environmental Health Unit and regional health service in environmental health research and information management | 565 No of appraisals, assessments, audits, research projects prepared, submitted and % approved and funded per year and No of analytical reports produced and disseminated; No of papers published per year on specialized press |
| 566. Establish and implement a comprehensive Environmental Health Management Information System (EHMIS) | 566 Existence of Environmental Information system compatible with national HIS; No of reports published; No of evidence based guidelines promoted per year |
| 567. Develop and implement guidelines for monitoring and evaluation of environmental health interventions | |

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| 568. Conduct baseline surveys, environmental health impact assessments, risk assessments and health vulnerability assessments (also in relation to climate change) | 567Existence of Environmental M&E system; No of reports produced and disseminated and No of documented corrective actions undertaken per location per year<br>568 Baseline surveys completed and organized in a national warehouse; No of impact assessments conducted per location and per year; No of vulnerability assessments and follow-up audits conducted |
| **Occupational health & safety** | |
| 569. Develop and implement a comprehensive occupational health program and guidelines targeting factories and workplaces<br>570. Strengthen collaboration with the Department of Labour and other relevant labour organizations<br>571. Carry out regular work place inspections, inventories and follow ups in collaboration with the Department of Labour and other relevant labour organizations<br>572. Conduct Training of Trainers (TOT) workshops on occupation health in each region<br>573. Establish and strengthen occupational health laboratories with adequate equipment and staff in each region<br>574. Procure, distribute and calibrate occupational health and safety assessment equipment | 569 Existence of occupational health program and guidelines,% of factories and workplaces mapped and assessed accordingly per region per year<br>570 No of joint meetings per month; No of joint assessments and reviews conducted; No of joint reports published and disseminated<br>571 No of work place and follow up inspections per location per month; % of work places compliant with health and safety standards and No of workers presenting with occupational illnesses and accidents<br>572 Number of TOTs events conducted and No of participants trained per location per month<br>573 No of laboratories established and No of trained staff employed per laboratory<br>574 % of needed equipment procured and installed; No of maintenance and calibration interventions per location per month |
| **Children's Environmental Health** | |
| 575. Conduct baseline survey on children's environmental health<br>576. Promote food safety and hygiene education in schools, day care centers, pre-schools, and households<br>577. Promote construction, maintenance and use of, pit latrine/ toilets<br>578 Promote construction and maintenance of safe water sources and ensure their constant quality by systematic regular testing<br>579. Promote chemical safety at household level<br>580. Promote and improve personal hygiene<br>581. Produce IEC material for the promotion of children's environmental health<br>582. Conduct competition on clean schools environment Communicable diseases surveillance and control<br>583. Strengthen the implementation of communicable disease surveillance and control guidelines and standard operation manuals<br>584. Strengthen sectoral collaboration with national and regional task force teams<br>585. Strengthen intersectoral collaboration in regional task force teams | 575 Baseline data on children's environmental health completed and available and No of analytical reports and follow ups produced and disseminated<br>576 No of educational sessions conducted and No of teachers, students and household members participating per event, per location and per month<br>577 No of toilets constructed and maintained per location and per month and No of expected users covered<br>578 No of water sources made available per location, per month and No of expected users covered; No of maintenance and testing visits conducted per month and per location; No of break downs assessed per location<br>579 No of educational sessions conducted on chemical safety per location and No of participants and degree of knowledge reassessed and retained after 6 months<br>580 No of educational sessions conducted on personal hygiene per location and No of participants and degree of knowledge reassessed and retained after 6 months |

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| 586. Develop and disseminate appropriate IEC materials on communicable disease surveillance and control<br>587 Conduct TOT workshops on communicable disease control and disease surveillance<br>588. Identify and procure testing equipment needed for communicable disease surveillance and control and train staff in their use | 581 % of target audience who improve their knowledge and change their attitude and behaviors per location and per month<br>582 No of school involved in environmental competitions per location and per year<br>583 No of sentinels sites established and surveillance reports available per location per month<br>584 No of joint meetings and No of joint reviews and assessments conducted per month<br>585 No of joint reviews and audits conducted per location and per month<br>586 % of target audience who have improved their knowledge and changed their attitude and behavior on communicable diseases per location per year<br>587 No of events conducted and No of trainers trained per event, per location, per month<br>588 % of identified equipments procured and utilized for testing; No of staff trained per location per month and No of analytical reports produced |

**7.7. Substance Abuse Prevention and Control**

A combination of factors including the influence of virtual media and the growing challenges of poverty, unemployment and breakdown in the family social support systems are increasingly driving the population especially the youth into abuse of psycho-active substance such as alcohol, tobacco and drugs. In Swaziland studies have shown that a large percentage of abusers are between the ages of 10-19 years, that accounts for 45% of alcohol abusers and 58% of drug abusers. The abuse of psychoactive substances, such as alcohol and drugs, are identified as a clear risk factor in HIV transmission, violence and (especially road) accidents, trauma and disability, lung cancer, mental illnesses and child morbidity. Exacerbating the situation is the escalation of cannabis cultivation and international drug trafficking syndicates' expanded presence.

The NHSSP aims to contribute to the prevention, control, management and treatment of illnesses and diseases attributed to psychoactive substances like alcohol, tobacco, and drugs among vulnerable groups, especially the youth and pregnant mothers. To this end, the NHSSP envisages a National Substance Abuse Prevention and Control Program (NSAPC) to facilitate prevention, control and reduction of the use of those substances. The program will focus on research, prevention and reduction of demand; advocacy, formulation of policies and legislation instruments; control of supply and trafficking of drugs; strengthening of law enforcement agencies; development and strengthening of youth focused prevention programs. Specifically, the MOH in collaboration with other ministries, departments, law enforcement agencies, NGOs and private sector organizations, as well as communities and traditional healers, will:

- Develop a national Substance Abuse Prevention and Control Strategy
- Develop and enforce appropriate policies and legislation relating to alcohol, tobacco and drug abuse and trafficking
- Develop and enact a Tobacco Control Bill
- Strengthen/revitalize the multi-sectoral National Advisory Committee on substance abuse to effectively co-ordinate all related prevention and control activities
- Establish/strengthen treatment and rehabilitation centres in the four regions
- Integrate substance abuse control and prevention education into school curricula from primary level to beyond high school
- Establish programs to sensitize community leaders and foster their participation in program activities
- Develop and implement perinatal substance abuse prevention initiative to prevent perinatal substance abuse and to treat affected children
- Develop national anti-substance abuse campaigns and advocacy strategy

- Develop and disseminate relevant and appropriate information education and communication (IEC) materials

The National Substance Abuse Prevention and Control Program (NSAPC) will be implemented under the Health Education Division. At the national level, the Health Promotion and Education Division will collaborate with specific technical programs in policy development, overall co-ordination and guidance on prevention and control of substance abuse activities throughout the country. In addition, it will conduct technical supervision and support to Regional Health Services. The Health Education Division will co-ordinate NGOs, and other Government agencies to establish standards and regulations pertaining to the program, and will monitor the delivery of public and NGO IEC activities throughout Swaziland. At the regional level, the RHMTs will be responsible for the planning, management, monitoring and co-ordination of anti-substance abuse activities with all agencies working within the regions.

| **Strategic Operational Objective (SOO) 3.7.1:** To contribute to the prevention, control, management and treatment of illnesses and diseases attributed to psychoactive substances like alcohol, tobacco, and drugs among vulnerable groups especially the youth and pregnant mothers. | |
|---|---|
| **Activities** | **Indicators** |
| 589 Establish/strengthen the National Substance Abuse Prevention and Control Program (NSAPC) | 589 Existence of a fully funded National Substance Abuse Prevention and Control Program (NSAPC) |
| 590 Develop a national Substance Abuse Prevention and Control Strategy | 590. Availability of a National Substance Abuse Prevention and Control Strategy based on internationally recognized best practices |
| 591 Develop and enforce appropriate policies and legislation relating to alcohol, tobacco and drug abuse and trafficking | 591. Existence of evidence informed policies and legislation developed to control alcohol, tobacco and drug abuse and trafficking |
| 592 Develop and enact a Tobacco Control Bill | 592. Availability of Tobacco Control Act and No of inspections conducted per location |
| 593 Strengthen/revitalize the multisectoral National Advisory Committee on substance abuse to effectively co-ordinate all prevention and control activities | 593. Existence of multisectoral National Advisory Committee, No of meetings held per month and No of participants per constituency |
| 594 Establish/strengthen treatment and rehabilitation centres in the four regions | 594. No and distribution of treatment and rehabilitation centers per region and No of patients treated and rehabilitated per centre per month |
| 595 Integrate substance abuse control and prevention education into school curricula from primary level to beyond high school | 595. No of schools with substance abuse education as part of curricula and No of specific educational sessions held per school |
| 596 Establish programs to sensitize community leaders and foster their participation in prevention and control activities | 596. No of sensitization meetings held per location and No of participants per meeting |
| 597 Develop and implement a perinatal substance abuse prevention initiative to prevent abuse and treat affected children | 597. No of staff trained in managing perinatal substance abuse prevention initiatives and No of children treated |
| 598 Develop national anti-substance abuse campaigns and advocacy strategy | 598. No of anti-substance abuse campaigns conducted and % of target audience who are aware and know related risks |
| 599 Develop and disseminate relevant IEC materials | 599 % increase in knowledge and awareness of available substance abuse prevention, control, treatment and rehabilitation services and No of media houses with Substance Abuse Prevention and Control programs |
| 600 Build a national substance abuse inventory and data warehouse in collaboration with police and security | |
| 601 Conduct research and surveys on substance abuse | |

| | |
|---|---|
| | 600 Warehouse established and linked to international organizations, capable to identify at least % of morbidity and mortality attributed to substance abuse; No of patients presenting with substance abuse related illnesses and diseases; % of road accidents attributed to substance abuse; No of years of productive life lost attributed to substance abuse<br>601 No of surveys conducted and of research proposals prepared and approved and No of related reports available and disseminated |

**7.8 Emergency, Epidemic and Disaster Preparedness and Response (EEDPR)**

Occurrence and threats of health emergencies and hazards as a result of both man-made and natural causes are prevalent in Swaziland. These include threats of chemical spillage, road traffic accidents, industrial unrest, bomb blasts/terrorism, wild/unguarded fires and epidemic outbreaks such as Avian Flu, which all contribute significantly to ill health, disability and death. Road accidents for example, contribute about 1% of deaths and years of life lost and to an increasing volume of severe lifelong disabilities. For this reason, the National Health Policy (2007) identifies emergency and disaster preparedness and response as a priority. The Health Policy therefore provides that "all health facilities shall put in place emergency/ disaster preparedness and response plans in line with the National Disaster and Emergency Plan".

The NHSSP thus aims to enhance the MOH emergency, epidemic and disaster preparedness and response (EEDPR) capacity at all levels in order to prevent and respond effectively and in a timely manner, to both natural and man-made health emergencies including outbreaks. In this respect, the MOH will develop and institutionalize a national health emergency and disaster preparedness and response plan and mobilize resources for EEDPR at central, regional, Inkhundla and community levels. At the health facility level, the MOH will ensure appropriate capacity for emergency response and management of trauma and injuries resulting from accidents and fires.

The MOH through the EEDPR Program, will work in close collaboration with other relevant ministries such as Roads and Transport, Education, Agriculture, Enterprise and Employment, Urban Development and Housing, city and town councils/boards, Fire Services, NGOs like Red Cross and International agencies. In particular, it will work with the Department of Social Welfare on disability issues, the police, Ministry of Roads and Transport and other relevant ministries to develop, implement and enforce laws and regulations that aim to reduce risks of accidents especially road accidents, fires and alcohol related violence. Further, the MOH through the EEDPR and in collaboration with the Red Cross Society will ensure consistent availability of adequate equipment, drugs and supplies.

The MOH will also establish an effective and efficient communication, surveillance, and co-ordination system to ensure efficient information flow, troubleshooting, prevention, early detection and prompt response to health emergencies at all levels. Specifically, during the plan period the MOH, in collaboration with other ministries, departments, law enforcement agencies, NGOs and private sector organizations, will:

- Develop and institutionalize a national and region specific integrated health emergency and disaster preparedness and response plan/strategy
- Develop, implement and enforce appropriate laws and regulations to control risks of accidents especially road accidents, fires and alcohol related violence
- Develop and distribute national guidelines on integrated emergency, epidemic and disaster surveillance, control and early warning systems
- Establish emergency and disaster committees at all levels of health care delivery system
- Strengthen the referral system at all levels and equip health facilities and casualty departments of hospitals with appropriate staff, equipment and supplies to deliver timely and effective emergency response and management services
- Establish epidemic and disaster early warning and response systems to ensure rapid response to all confirmed epidemics and disasters within 12-24 hours
- Train health workers in emergency management and surveillance, disaster management and

mass trauma management

- Provide appropriate equipment, technology, drugs and other medical supplies for emergency and disaster control to all health facilities and in institutions at all levels
- Establish an effective and efficient EEDPR communication and co-ordination system at community, health facility, regional and central levels
- Establish appropriate logistics, communication and transport system for the EEDPR
- Strengthen the National Laboratory support network at all levels
- Establish risk assessment, monitoring, early warning and notification systems at all levels
- Establish a comprehensive EEDPR education program to create awareness at all levels and to educate communities on the use of epidemic and disaster surveillance tools
- Develop and disseminate national and region specific IEC materials on EEDPR
- Conduct operational research and build capacity on data collection, analysis and reporting on EEDPR

At the national level, the Department of National Disease Control, in collaboration with the Office of the Prime Minister and with other departments within the Ministry of Health will be responsible for policy development, overall co-ordination and guidance on Emergency and Disaster Preparedness and Response throughout the country. In addition, the department will organize technical supervision and support to Regional Health Services. Continuous community based surveillance will be maintained at all levels through the regional and Inkhundla and community health systems. The Directorate of Clinical services in collaboration with the Directorate of Primary Health Care will coordinate with other government sectors, NGOs, neighboring countries and international agencies in accordance with internationally accepted best practices and protocols. The Director General of Health Services will ensure adequate funds, buffer stock of emergency drugs, equipment and other medical supplies as well as transport facilities at national, regional and health facility levels. The Regional Health Services will maintain similar budgets, supplies and facilities at the regional level. At the regional level, the Regional Health Services will be responsible for the planning, management, monitoring and co-ordination of Integrated Surveillance and Emergency and Disaster Response and Preparedness activities with all agencies working within the region.

| **Strategic Operational Objective (SOO) 3.8.1:** To enhance the capacity of MOH in emergency, epidemic and disaster preparedness and response at all levels | |
|---|---|
| **Activities** | **Indicators** |
| 602. Develop and institutionalize a national and region specific integrated health emergency and disaster preparedness and response plan/ strategy<br>603. Develop, implement and enforce appropriate laws and regulations to control risks of accidents especially road accidents, fires and alcohol related violence<br>604. Develop and disseminate national guidelines on integrated emergency, epidemic and disaster surveillance, control and early warning systems<br>605. Establish emergency and disaster committees at all levels of health care delivery system<br>606. Establish epidemic and disaster early warning and response systems to ensure rapid response to all confirmed epidemics and disasters within 12-24 hours<br>607. Strengthen the referral system and equip health facilities and casualty departments of hospitals with appropriate staff, technologies and supplies to deliver timely and effective response | 602 Availability of national and region specific plans/strategies<br>603 Existence of an operational integrated system for EEDPR at all levels of health care delivery system<br>604 Availability of national guidelines on integrated EED surveillance, control and early warning systems and No of staff aware and capable to react to emergency at the appropriate level per facility<br>605 No. of Emergency and Disaster Committees established per facility and No of meetings held<br>606 Existence of an integrated system of surveillance, forecasting, early detection of and rapid response to Emergency, epidemics and disasters (EED) and No of simulations conducted per year and per location<br>607 No. of health facilities and casualty departments with adequate and appropriate staff, equipment and supplies and No of simulations conducted per facility |

| | |
|---|---|
| 608 Train health workers in emergency management and surveillance, disaster management and mass trauma management | 608 No of training sessions conducted and No of participants per session and provenience |
| 609. Provide appropriate equipment, technology, drugs and other medical supplies for emergency and disaster control to all health facilities and in institutions at all levels | 609 No of health facilities and institutions keeping and inventory and reporting stock outs of equipment, technology, drugs and other medical supplies for EEDPR |
| 610. Establish an effective and efficient EEDPR communication and co-ordination system at community, health facility, regional and central levels | 610 Existence of EEDPR communication and co-ordination system at every level and No of simulations conducted per month and facility |
| 611. Establish appropriate logistics, communication and transport system for the EEDPR | 611 No of vehicles and radio sets dedicated to the program per facility |
| 612. Strengthen the National Laboratory support network at all levels | 612 No. of facility with appropriate EEDPR laboratory support and No of dedicated and trained staff |
| 613 Establish risk assessment, monitoring, early warning and notification systems at all levels | 613 Existence of notification system; No of audits conducted to assess their functionality per facility and No of accidents, fires and alcohol related violence reported per location |
| 614 Establish a comprehensive EEDPR education program to create awareness at all levels and to educate communities on the use of epidemic and disaster surveillance tools | 614 No of staff trained in surveillance and emergency response and % of communities reached by educational events |
| 615 Develop and disseminate national and region specific IEC materials on EEDPR | 615 % of general public targeted by educational events and aware of program contents and tools per location |
| 616. Conduct operational research and build capacity on data collection, analysis and reporting on EEDPR | 616 No of research projects proposals elaborated and implemented and No of reports available per year |

# CHAPTER EIGHT: MONITORING AND EVALUATION

Within the present NHSSP vision, the mission of the NHSSP 2008-2013 is to improve the health and social welfare status of the people of Swaziland by providing preventive, promotive, curative and rehabilitative services that are of high quality, relevant, accessible, affordable, equitable and socially acceptable. In this respect actions foreseen by the plan will have to be coherent, aligned and implemented timely, given the interdependence of the several subsectors onto governance issues and policy decision that will be crucial to orient the full plan implementation and achievement of expected results.

The NHSSP is the result of a widely participatory exercise that has involved all the sector stakeholders in problems definition, priority setting and identification of activities that will allow for the full achievement of the NHSSP vision.

In this respect it focuses on a mix of segmented actions that each subsector will be accountable for. This M&E plan builds on:

- Governance
- Evidence and opportunity informed policy options
- Feasibility of solutions
- Sector wide development perspectives and analysis of interrelated chain of intra and intersectoral linkages relevant to the system
- Analysis of subsectoral inputs, processes, outputs and achievements (in terms of outcome and impacts) at the light of a system wide framework that addresses population needs and indicators of wellbeing.

The production of the general M&E framework supports the process of result based management that will drive the overall NHSSP implementation.
General objectives are to:

- Improve accountability for both resources and results
- Promote organisational learning and continuous improvement
- Facilitate strategic decision making to reorient activities in a flexible and adaptive environment

Specific objectives for monitoring and evaluation include

- To assess performance along the following dimensions:
    - the degree of technical and budget implementation
    - the delivery and technical quality of products
    - the degree of achievement of expected results
    - the efficiency with which expected results were achieved
    - To analyse the relevance and contribution of subsectoral workplans to national health priorities
    - To retrospectively analyse the adequacy of plans and governance and management mechanisms in place
    - To identify enabling and constraining factors to program implementation and to remodel plans accordingly, reallocating resources and refocusing action on critical angles of the system timely and properly diagnosed.

Sectoral performance monitoring will be undertaken on an annual basis as part of the annual review of the sectoral MTEFs, focusing mainly on process. In addition, the annual and periodic performance indicators to assess sectoral progress towards meeting the NHSSP objectives and improving service delivery will be used either.

The monitoring process will be done through:

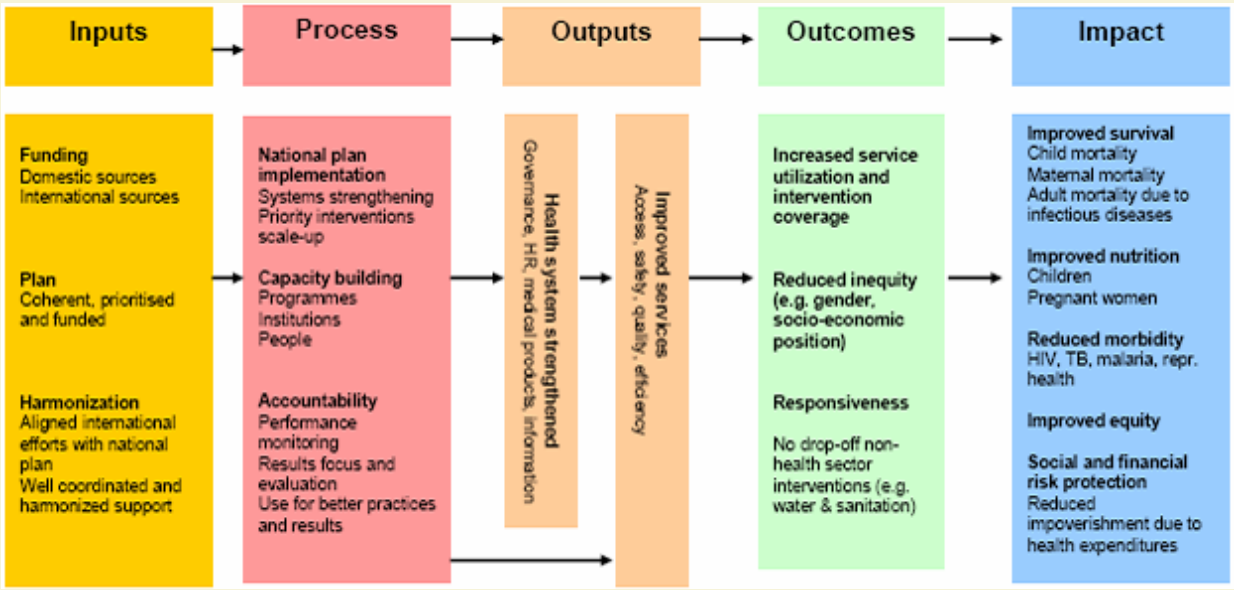
- A proper HMIS installed and managed by the dedicated Units/departments of the MOH producing the quantitative sets of information needed to identify variations in the expected development of the NHSSP
- Systematic audit based on qualitative data and stakeholders and community participation in identifying shortcomings and viable solutions compatible with the national legal framework and available resources

- Quarterly progress report based on supervisory field visits and endorsed aggregated facility generated reports
- Annual progress reports
- Health Sector Performance Profile
- Annual Health Sector reviews, SWAp and BFC committee
- Review of comprehensive plans/ annual report to be submitted by each Region and program
- Ad hoc surveys conducted at each level of the system
- Follow up and feedback meetings to reorient action and reallocate resources coherently with the participatory process that led the NHSSP production and endorsement.

Data sources will include the following:

- Patient based health information system
- Health management information system
- National Sentinel Surveillance System
- National Population Census
- Demographic Health Surveys
- Household Budget Survey
- Periodic health service delivery survey and other surveys
- National Program reports
- Study reports as they may be commissioned from time to time
- Performance assessments and audits

WHO has advocated for a systematic sector based framework approach to M&E that includes a systemic perspective in a broader view to overcome




specific programs' objectives (Fig. 3):

The above approach will be functionally addressed by linking the several database foreseen by the NHSSP as follows (Figure 4).

Quality control tools will be applied to a system of indicators related to inputs, process, outputs of the NHSSP, whereas outcomes and impacts will be assessed during the last year of program, in order to capture results, and match with inputs made available.

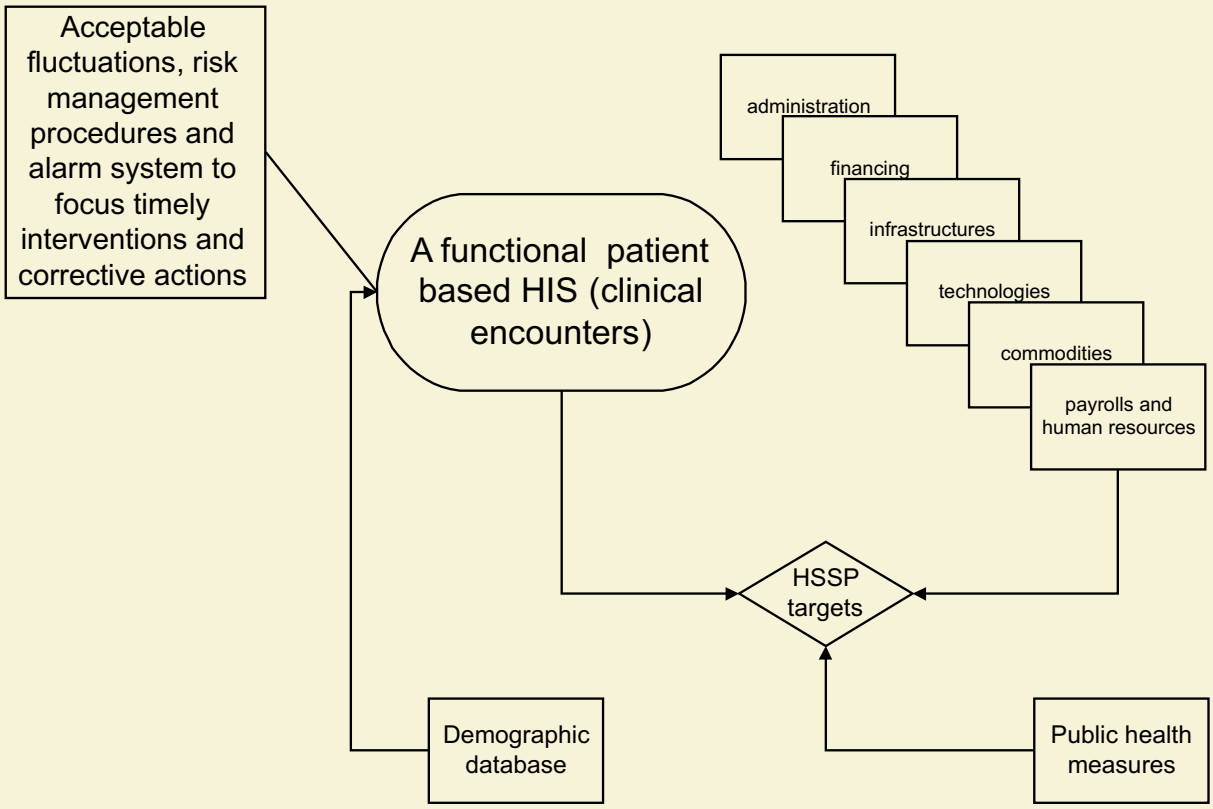
Inputs will be classified in monetary inputs, human resources, infrastructures, private not for profit and private for profit sector, communities share and donors' contributions by segment of the NHSSP.

Process indicators will assess the degree of completion of each subsector set of planned activities and will be generated by service, facility and/or program based M&E focal persons. Absorption of inputs against time will be the main critical indicator. Additionally main governance issues related to policy decisions and to needed reforms in the public sector will be closely monitored as essential milestones in facilitating the full and timely implementation of the NHSSP.

Outputs will be assessed in terms of service coverage, service use, No of beneficiaries reached, expanded volume of services and available professionals serving proposed clients.

The epidemiologic profile of served communities will be assessed by means of the restructured HIS and when disaggregated will be used as the main indicator for outcome assessment related to each segment of the health system.

The following indicators, addressed by the NHSSP, will be incorporated in the M&E framework:




The above approach will be functionally addressed by linking the several database foreseen by the NHSSP as follows (Figure 4).

Quality control tools will be applied to a system of indicators related to inputs, process, outputs of the NHSSP, whereas outcomes and impacts will be assessed during the last year of program, in order to capture results, and match with inputs made available.

Inputs will be classified in monetary inputs, human resources, infrastructures, private not for profit and private for profit sector, communities share and donors' contributions by segment of the NHSSP.
Process indicators will assess the degree of completion of each subsector set of planned activities and will be generated by service, facility and/or program based M&E focal persons. Absorption of inputs against time will be the main critical indicator. Additionally main governance issues related to policy decisions and to needed reforms in the public sector will be closely monitored as essential milestones in facilitating the full and timely implementation of the NHSSP.

Outputs will be assessed in terms of service coverage, service use, No of beneficiaries reached, expanded volume of services and available professionals serving proposed clients.
The epidemiologic profile of served communities will be assessed by means of the restructured HIS and when disaggregated will be used as the main indicator for outcome assessment related to each segment of the health system.
The following indicators, addressed by the NHSSP, will be incorporated in the M&E framework:

| | | | |
|---|---|---|---|
| Key Outcomes | • Significant improvement in critical health status indicators<br>• Over 50% health facilities rehabilitated and well equipped<br>• Fully functional health facilities established in every region<br>• Over 90% of the population reached with essential package of health services<br>• Essential healthcare package systematically reviewed and updated based on evidence of effectiveness and internationally accepted best practices and guidelines<br>• Outreach services rationalized, planned and sustained<br>• National referral system strengthened<br>• Professional management of health facilities enhanced<br>• Increased utilization rates of healthcare services<br>• Quality Assurance standards established and monitored<br>• HRH capacity Improved in key competency areas<br>• Medicines Control Authority established and functional<br>• Defined collaboration mechanism with traditional practitioners | • Functional decentralized MOHSW structure established.<br>• Management, technical and regulatory capacity of the MOHSW increased and improved<br>• Health Service Commission fully functioning<br>• Human resource management and development system for the health sector functioning<br>• Improved incentive system and a healthy and safe working environment established<br>• Improved productivity and retention strategy for health workforce implemented<br>• Enabling policy and legislative environment facilitated<br>• Accreditation and licensing system strengthened<br>• Increased effectiveness of the regional health authorities<br>• Improved fiscal discipline, efficiency, cost effectiveness and accountability in the use of health sector resources<br>• PPPs and SWAp institutionalized<br>• Improved monitoring, evaluation and accountability systems for the health sector<br>• Formalized exit strategy for externally funded programs accepted and specifically funded | • Sustainable and diversified health financing system established<br>• Socially acceptable community based financing system established<br>• Established incentives and legislative measures to promote private sector investment in health financing<br>• Increased public, private and donor investment in health<br>o Reduced out of pocket expenditure on health<br>o A Social health insurance scheme established<br>• Increased Government's financial allocation to the health sector to at least 15 % of the total government budget. |

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# APPENDIX I - NHSSP COSTING

Table 4: Incremental costing due to NHSSP (at 2008 prices in SWL).

| Strategic Operational Objective | 2009/2010 Incremental estimates (SWL) | 2010/2011 Incremental estimates (SWL) | 2011/2012 Incremental estimates (SWL) | 2012/2013 Incremental estimates (SWL) | 2013/2014 Incremental estimates (SWL) |
|---|---|---|---|---|---|
| SOO 1.1: To strengthen the governance and management capacity of MOH | 11,145,600 | 10,020,500 | 2,627,800 | 2,575,300 | 2,575,300 |
| SOO 1.2: To strengthen MOH financial management and administrative support capacity | 1,538,800 | 5,079,975 | 3,584,500 | 3,628,500 | 3,910,833 |
| SOO 1.3: To strengthen the human resources management systems and capacity | 843,250 | 4,938,750 | 4,133,000 | 4,133,000 | 4,780,000 |
| SOO 1.4: To deepen the implementation of the health sector decentralization process | 853,500 | 1,312,550 | 1,006,400 | 848,150 | 1,016,150 |
| SOO 1.5: To establish enabling institutional mechanisms to promote and manage health service coordination | 723,500 | 145,000 | 145,000 | 145,000 | 145,000 |
| SOO 1.6: To build the MOH capacity at all levels | 8,050,850 | 14,101,400 | 3,899,900 | 4,218,900 | 4,218,900 |
| SOO 1.7: To strengthen the regulatory capacity of the MOH | 2,529,825 | 1,417,700 | 1,544,800 | 1,544,800 | 1,544,800 |
| SOO 1.8: To establish appropriate national health research and knowledge management mechanisms | 815,750 | 2,274,700 | 1,885,300 | 1,885,300 | 1,885,300 |
| SOO 1.9: To increase and diversify investment in health through innovative health financing strategies | 3,435,250 | 4,471,650 | 2,786,900 | 2,649,400 | 2,649,400 |
| SOO 2.1: To strengthen the referral system and ensure the population's equitable access | 16,249,750 | 66,347,450 | 60,992,200 | 60,829,200 | 60,992,200 |
| SOO 2.2.1: To ensure the population's access to quality mental health services | 1,081,250 | 5,070,950 | 3,472,400 | 3,472,400 | 3,472,400 |
| SOO 2.2.2: To reduce the prevalence of dental caries and periodontal diseases | 3,648,350 | 6,219,000 | 6,219,000 | 6,219,000 | 6,219,000 |
| SOO 2.2.3: To reduce the prevalence of blindness and loss of sight | 3,772,150 | 4,888,000 | 4,888,000 | 4,888,000 | 4,888,000 |
| SOO 2.2.4: To strengthen the provision of Ear, Nose and Throat specialized services | 1,171,300 | 1,112,600 | 1,112,600 | 1,112,600 | 1,112,600 |
| SOO 2.2.5: To improve the health infrastructure and equipment management systems | 2,303,950 | 811,800 | 143,800 | 143,800 | 143,800 |
| SOO 2.2.6: To strengthen the national health commodities management system | 4,925,700 | 3,250,200 | 2,173,200 | 2,173,200 | 2,173,200 |
| SOO 2.2.7: To strengthen clinical laboratory and blood transfusion services. | 5,266,250 | 8,111,800 | 7,489,800 | 7,230,450 | 7,230,450 |
| SOO 2.2.8: To strengthen high quality, safe and efficient radiological services | 3,642,100 | 4,416,800 | 4,478,850 | 4,416,800 | 4,416,800 |
| SOO 3.1.1: To intensify the prevention of new infections of HIV/AIDS in Swaziland | 18,642,100 | 19,217,400 | 19,428,900 | 19,217,400 | 19,217,400 |
| SOO 3.1.2: To intensify and scale up the TB control and DOTS interventions | 8,262,750 | 5,017,000 | 5,017,000 | 5,017,000 | 5,017,000 |
| SOO 3.1.3: To reduce malaria morbidity and mortality to insignificant levels by 2013. | 8,396,800 | 7,267,800 | 7,267,800 | 6,691,800 | 6,691,800 |

| | | | | | |
|---|---|---|---|---|---|
| SOO 3.1.4: To reduce the level of morbidity due to bilharzias | 3,791,100 | 3,334,100 | 3,170,100 | 3,170,100 | 3,170,100 |
| SOO 3.1.5: To reduce morbidity and mortality associated with the burden of non-communicable and lifestyle related diseases. | 5,416,950 | 3,885,400 | 3,885,400 | 3,885,400 | 3,885,400 |
| SOO 3.1.6.1: Reduce maternal and neonatal morbidity and mortality | 5,983,950 | 4,230,600 | 4,016,600 | 4,016,600 | 4,016,600 |
| SOO 3.1.6.2a: To improve the quality of health care provided to children | 3,842,100 | 2,506,900 | 2,292,900 | 1,816,500 | 1,816,500 |
| SOO 3.1.6.2b: To reverse the decline in immunization coverage | 4,464,150 | 3,437,200 | 3,138,200 | 3,138,200 | 3,440,200 |
| SOO 3.1.6.3: To combat malnutrition especially in mothers and children | 3,122,200 | 3,652,200 | 2,588,200 | 1,988,800 | 2,120,800 |
| SOO 3.1.7a: To promote healthy life styles and personal responsibility for better health | 4,663,000 | 4,111,000 | 4,111,000 | 4,111,000 | 4,111,000 |
| SOO 3.1.7b: To inculcate positive health behaviour and healthy lifestyles among school children and college students | 2,661,600 | 2,491,600 | 2,491,600 | 2,491,600 | 2,491,600 |
| SOO 3.1.7c: To inculcate positive health behaviour and health lifestyles among individuals, families and communities | 2,765,500 | 2,463,900 | 2,463,900 | 2,463,900 | 2,463,900 |
| SOO 3.1.7d To establish a comprehensive and multi-sectoral environmental health framework | 8,053,250 | 7,445,800 | 4,817,800 | 4,817,800 | 4,817,800 |
| SOO 3.1.7e: Psychoactive substances like alcohol, tobacco, and drugs among vulnerable groups | 1,741,100 | 2,275,500 | 2,275,500 | 2,275,500 | 2,130,825 |
| SOO 3.1.7f: To enhance the capacity of MOH in emergency, epidemic and disaster preparedness and response at all levels | 4,588,200 | 3,169,600 | 1,693,600 | 1,693,600 | 1,693,600 |
| **Total recurrent expenditure** | **158,391,875** | **218,496,825** | **181,241,950** | **178,909,000** | **180,458,658** |
| **Total capital expenditure** | **347,090,083** | **271,883,667** | **63,013,500** | **-** | **-** |

Table 5: Grand Total Estimates for recurrent and capital costs in SWL at 2008 prices.

| Fonts | Cost Type | 2009—10 (SWL) | 2010—11 (SWL) | 2011—12 (SWL) | 2012—13 (SWL) | 2013—14 (SWL) |
|---|---|---|---|---|---|---|
| **Estimates *** | **RECURRENT Costs TOTAL** | *754,444,867* | *782,161,535* | *782,161,535* | *782,161,535* | *782,161,535* |
| | **CAPITAL Costs TOTAL** | *187,166,000* | *0* | *136,986,500* | *200,000,000* | *200,000,000* |
| **Incremental due to NHSSP** | **RECURRENT Costs TOTAL** | *158,391,875* | *218,496,825* | *181,241,950* | *178,909,000* | *180,458,658* |
| | **CAPITAL Costs TOTAL** | *347,090,083* | *271,883,667* | *63,013,500* | *0* | *0* |
| **Total** | **RECURRENT Costs TOTAL** | **912,836,742** | **1,000,658,360** | **963,403,485** | **961,070,535** | **962,620,193** |
| | **% of increment from Estimates** | **20.99%** | **27.94%** | **23.17%** | **22.87%** | **23.07%** |
| | **CAPITAL Costs TOTAL** | **534,256,083** | **271,883,667** | **200,000,000** | **200,000,000** | **200,000,000** |
| | **% of increment from Estimates** | **185%** | | | | |
| **Grand Total** | | **1,447,092,825** | **1,272,542,027** | **1,163,403,485** | **1,161,070,535** | **1,162,620,193** |

* Capital cost of 200.000.000 SWL have been added

Table 6 shows the previous estimates with costs calculated at current prices (with an estimated Swaziland/South Africa 12% /year inflation) and capital costs kept in the same range of previous years (~ 200 Millions of SWL).

Table 6: Grand Total Estimates for recurrent and capital costs in SWL at current prices (inflation = 12 % per year).

| Fonts | Cost Type | 2009—10 (SWL) | 2010—11 (SWL) | 2011—12 (SWL) | 2012—13 (SWL) | 2013—14 (SWL) |
|---|---|---|---|---|---|---|
| Estimates* | RECURRENT Costs TOTAL | *844,978,251* | *981,143,430* | *1,098,880,641* | *1,230,746,318* | *1,378,435,876* |
| | CAPITAL Costs TOTAL | *187,166,000* | | *171,835,866* | *280,985,600* | *286,605,312* |
| Incremental due to NHSSP | RECURRENT Costs TOTAL | *177,398,900* | *274,082,417* | *254,631,890* | *281,516,775* | *318,029,815* |
| | CAPITAL Costs TOTAL | *347,090,083* | *271,883,667* | *63,013,500* | *0* | *0* |
| Total | RECURRENT Costs TOTAL | **1,022,377,151** | **1,255,225,847** | **1,353,512,531** | **1,512,263,093** | **1,696,465,691** |
| | % of increment from Estimates | **20.99%** | **27.94%** | **23.17%** | **22.87%** | **23.07%** |
| | CAPITAL Costs TOTAL | **534,256,083** | **271,883,667** | **234,849,366** | **280,985,600** | **286,605,312** |
| | % of increment from Estimates | **185%** | **-** | **-** | **-** | **-** |
| Grand Total | | **1,556,633,234** | **1,527,109,514** | **1,588,361,897** | **1,793,248,693** | **1,983,071,003** |

* Capital cost of 200.000.000 SWL + inflation have been added

Table 7 is based on previous tables estimates with costs calculated at current prices in USD (parameters: exchange rate 1 USD = 11 SWL, with USA estimates of 1.1 % /year inflation) with capital costs kept in the same range of previous years.

Table 7: Grand Total Estimates for recurrent and capital costs in USD (exchange rate 1 USD = 11 SWL) at current prices (inflation = 1.1 %, foresee at 24th of December 2008 at six months - http://www.forecasts.org/inflation.htm).

| Fonts | Cost Type | 2009—10 (USD) | 2010—11 (USD) | 2011—12 (USD) | 2012—13 (USD) | 2013—14 (USD) |
|---|---|---|---|---|---|---|
| Estimates | RECURRENT Costs TOTAL | *68,585,897* | *71,887,756* | *72,678,521* | *73,477,985* | *74,286,242* |
| | CAPITAL Costs TOTAL | *17,015,091* | | *12,599,275* | *18,788,442* | *18,995,115* |
| Incremental due to NHSSP | RECURRENT Costs TOTAL | *14,399,261* | *20,081,845* | *16,841,018* | *16,807,107* | *17,139,165* |
| | CAPITAL Costs TOTAL | *31,553,644* | *24,988,581* | *5,855,220* | *0* | *0* |
| Total | RECURRENT Costs TOTAL | **82,985,158** | **91,969,600** | **89,519,539** | **90,285,092** | **91,425,408** |
| | % of increment from Estimates | **20.99%** | **27.94%** | **23.17%** | **22.87%** | **23.07%** |
| | CAPITAL Costs TOTAL | **48,568,735** | **24,988,581** | **18,454,495** | **18,788,442** | **18,995,115** |
| | % of increment from Estimates | **185%** | | | | |
| Grand Total | | **131,553,893** | **116,958,181** | **107,974,034** | **109,073,534** | **110,420,523** |

The calculated grand total shows that incremental costs due to the full NHSSP implementation are approximately US$45 million for the first two years, decreasing to US$22 millions in the third year, with US$ 17 million as the average trend (4th and 5th year). The increment for recurrent costs is approximately 23% in the medium term and, in general, it appears affordable by the Government with the current international donors' contribution. In fact, funds required (in USD) for the NHSSP five year lifespan are

Table 8: NHSSP financial requirements in USD at 2008 prices.

| 2009-2010 (USD) | 2010-2011 (USD) | 2011-2012 (USD) | 2012-2013 (USD) | 2013-2014 (USD) |
|---|---|---|---|---|
| 45,952,905 | 45,070,425 | 22,696,239 | 16,807,107 | 17,139,165 |

The different sources of funding could be:

- co-payment by patient (share health care costs)
- non-state funds (for activities)
- donors' funds
- additional Government funds

In middle-income countries, co-payment does not represent an important income component, as fees are very low, and usually achieve a few percent points of the public health expenditures. In Swaziland, it can be estimated to be 1% of the total recurrent costs from the second year, when private providers will be allowed to provide services (and receive fees for service). The estimated value is US$830,000 per year, E9 per person-year, less than 5% of resources needed from the fourth year of implementation (~ US$ 17 million).
The availability of donors' funding will probably fail to meet the entire amount required, though it will come very close to it.

*i The support provided include medical, emotional and social material support*
*ii UNGASS indicator 6*

EUROPEAN COMMISSION