Republic of Botswana

Intergrated Health Service Plan:

A Strategy for Changing the Health Sector For Healthy Botswana 2010-2020

November 2010

MINISTRY OF HEALTH

GOVERNMENT OF BOTSWANA

INTEGRATED HEALTH SERVICE PLAN:

A STRATEGY FOR CHANGING THE HEALTH SECTOR FOR A HEALTHY BOTSWANA 2010-2020

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ABBREVIATIONS

APR	Annual Planning and Review
ART	Anti-Retroviral Treatment
ARV	Anti-Retroviral
ASRH	Adolescent Sexual and Reproductive Health
BCC	Behaviour Change Communication
BFHI	Baby Friendly Hospital Initiative
BNDP	Botswana National Drug Policy
BWP	Botswana Pula
CBO	Community Based Organization
CHD	Child Health Division
C-IMCI	Community-based Integrated Management of Childhood Illness
CMS	Central Medical Stores
CMU	Change Management Unit
CPD	Continuous Professional Development
CSO	Central Statistics Office
DH	District Hospital
DHMT	District Health Management Team
DMSAC	District Multi-Sectoral AIDS Committee
DP	Development Partner
DPS	Deputy Permanent Secretary
DRSA	Drugs & Related Substance Act
EDL	Essential Drug List
EHSP	Essential Health Service Package
EPI	Expanded Programme of Immunization
ETAT	Emergency Triage and Treatment
FFS	Fee for Service
GDP	Gross Domestic Product
GoB	Government of Botswana
HAART	Highly Active Anti-Retroviral Therapy
HEP	Health Education Programme
HFTG	Health Financing Thematic Group
HIS	Health Information System
HIV/AIDS	Human Immunodeficiency Virus/Auto-Immune Deficiency Syndrome
HPE	Health Promotion and Education
HR	Human Resources
HRH	Human Resources for Health
IEC	Information, Education and Communication
IHS	Institute of Health Sciences
IHSP	Integrated Health Service Plan
IMCI	Integrated Management of Childhood Illness
IMF	International Monetary Fund
ITU	Intensive Trauma Unit
IYCF	Infant and Young Child Feeding Initiative
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
MDR	Multi Drug Resistant (TB)
MFDP	Ministry of Finance and Development Planning

MLG	Ministry of Local Government
MMR	Maternal Mortality Rate
MNT	Maternal and Neonatal Tetanus
MOESD	Ministry of Education and Skill Development
MOH	Ministry of Health
NACA	National AIDS Coordinating Agency
NDP	National Development Plan
NGO	Non-Governmental Organisation
NHI	National Health Insurance
OH	Oral Health
PEP	Post Exposure Prophylaxis
PH	Primary Hospital
PHC	Primary Health Care
PHP	Public Health Professionals
PLHIV	People Living With HIV/AIDS
PWD	People With Disabilities
RED	Reaching Every District
RH	Referral Hospital
SHI	Social Health Insurance
SHIO	Social Health Insurance Office
SO	Strategic Objective
SRH	Sexual and Reproductive Health
SWAp	Sector Wide Approach
SWOT	Strengths, weaknesses, Opportunities, Threats
TB	Tuberculosis
THE	Total Health Expenditure
ToRs	Terms of Reference
UB	University of Botswana
WHO	World Health Organization
YFHS	Youth Friendly Health Services

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EXECUTIVE SUMMARY

The Integrated Health Service Plan (IHSP) is the strategy that presents the vision for the improvement of the health status and health care of the population in the Republic of Botswana up to 2020. It identifies priority areas and aims to ensure that those health services that are being delivered will provide the greatest benefits for all citizens. The IHSP addresses the goals and objectives of the revised National Health Policy 2010. It prioritises those health services that are most needed and most efficient, and incorporates the views of both health professionals and the general public. The services reflect best international practice.

Health profile of Botswana
Life expectancy is estimated at 54.4 years. Infant and under-five mortality rates are 54 and 76 per 1000 live births respectively. The maternal mortality ratio (MMR) is 193 /100,000 live births.

Morbidity and mortality continue to be dominated by infectious diseases with HIV/AIDS and other communicable diseases causing around half of all deaths. The prevalence of HIV/AIDS is declining, the result of an effective anti-retroviral treatment programme, but remains a major concern. Non-communicable disease is an increasing challenge, with significant increases in cardiovascular diseases and cancers

The health system in Botswana
Health service delivery in the country is pluralistic. There are public, private for-profit, private non-profit, and traditional medicine practices. The Ministry of Health (MOH) is responsible for the formulation of policies, regulation and norms, and standards and guidelines for health services. Government has achieved the Abuja target of contributing 15% of total government expenditure to health (representing around 75% of total health expenditure). With the relocation of primary health care from the Ministry of Local Government (MLG), the MOH is now the principal public sector health care provider.

A shortage of trained and qualified staff remains one of the major bottlenecks towards the availability of quality health care in Botswana. There are also increasing demands on the already over-stretched skilled workforce as a result of additional programmes and projects, in particular those related to HIV/AIDS. Staff turnover is high; inequitable deployment and failure to optimise the existing skill mix present additional challenges.

MOH is upgrading and equipping (outdated) health facilities, but ensuring that they are staffed by appropriately skilled health workers remains a challenge. Supply chain management systems are weak, resulting in limited availability and regular stock-out of essential drugs.

Health management information is weak. Challenges include untimely data collection, collation, analysis, interpretation, and dissemination of information. The situation in compounded by the existence of several databases (epidemiology, human resources, finance etc) existing in parallel. Monitoring and evaluation is

fragmented; as a consequence, tracking health outcomes, and measuring the impact of specific interventions is compromised.

Challenges in the health sector

Botswana is not on track to achieve the health development goals (MDG 4, child health; MDG 5, maternal health; and MDG 6, reversing the prevalence of HIV/AIDS, TB and malaria).

The principal issues likely to affect Botswana over the next 10 years are:

- High infant and child mortality including post-neonatal mortality
- High maternal mortality ratio
- High mortality and morbidity from communicable diseases (HIV/AIDS, diarrhoeal diseases, acute respiratory infections, etc.)
- Under nutrition of mothers and children
- High incidence of infectious diseases such as HIV/AIDS and TB
- Increasing prevalence of non-communicable diseases
- Poor Quality of Care
- Increasing number of injuries and accidents
- Excessive shortage of skilled human resources
- Poor quality management and regulation in both public and private sectors
- Unhealthy lifestyles and widespread inappropriate health seeking behaviour
- Weak sector-wide management.

Vision of the IHSP

The vision, mission, and values for the IHSP derive from the National Health Policy 2010 and underpin the strategy. The vision is to provide an enabling environment whereby all people living in Botswana have the opportunity to achieve and maintain the highest level of health and well-being.

The following values will guide the implementation of the IHSP:

- Ethics
- Equity
- Ownership
- Evidence based
- Innovation
- Gender Equity
- Client Satisfaction
- Skilled staff retention and circulation
- Partnerships.

Objectives of the IHSP

The goal of **service delivery** is the attainment of universal coverage of a high-quality package of essential health services, EHSP, through:

- Scale up of utilisation of a well defined and comprehensive essential health service package;
- Redefining existing service delivery levels and delineating types of health services for each of these levels of the health care to ensure continuity and harmonised referral and supervisory functions;
- Increasing and strengthening partnerships with the private sector and NGO's

- Community involvement to ensure effective demand for health services
- Promoting community participation in the planning and delivery of health services.

The goal for **human resources** goal is ensuring an adequate, motivated, and skilled health work force is in the right places and at the right time. Objectives include:

- addressing the shortage of health professionals
- Improving the distribution of health professionals
- Ensuring staff have the necessary skills to deliver the required services
- Improving performance and motivation of human resources
- Co-ordination of human resource planning for the health sector
- Improve the quality and provision of pre-service and in-service training and supervision in Botswana
- Intake of students to training institutions aligned with projected HR needs
- Establish a programme of Continuous Professional Development, CPD.

The **health-financing** goals are three-fold: to raise sufficient resources to ensure that all citizens have access to a range of cost effective interventions at an affordable price; to ensure financial incentives and systems are in place to deliver services efficiently and with a particular focus on the needs of the vulnerable groups.

The health financing strategic objectives are:

- To raise additional resources for health
- To ensure resources address priority areas
- To improve accountability and transparency of health expenditure
- To develop a health financing structure capable of addressing the challenges of the future. remains
- To ensure key development programmes are adequately funded
- The implementation of NDP 10.

The goal for improving **procurement and logistics** is to ensure the effective and efficient delivery of health services to all people living in Botswana. The strategic objectives are:

- To ensure adequate and uninterrupted availability of drugs and medical supplies at CMS and in all the health facilities
- To ensure that the drugs and medical supplies available in the health facilities are used appropriately and rationally, and are properly accounted for
- To support the provision of the ESHP through the continuous availability of serviceable and appropriate equipment in all the facilities
- To support the provision of the EHSP through the establishment and maintenance of appropriate buildings and physical infrastructure.

The **Health Information and Research** goal is to create an enabling environment for efficient monitoring and evaluation of the implementation and achievements of the integrated health service plan and to provide the basis for evidence-based decision-making. The objectives are.

- To collect and analyse health information about diseases, services, finances, health workforce, medicines and medical products, infrastructure and equipment from all stakeholders of the health sector.

- To clarify the roles and functions of different stakeholders in data management in order to minimise duplication and maximise optimal utilisation of resources
- To ensure timely, wide, and need-based dissemination of data to all stakeholders.
- To develop and implement a research agenda in collaboration with relevant partners to support national policy development
- To develop and implement regulations regarding mandatory reporting of defined information requirements
- To develop, implement and enforce regulatory mechanism for health research.

The **leadership and management** goal is to ensure strategic guidance and oversight in the regulation and implementation of all health related services.

Strategic objectives for leadership and management are:

- To create a platform in the health sector for the provision of strategic guidance and oversight
- To develop the National Health Strategic Plans to guide the implementation of the Policy
- To clarify roles of stakeholders
- To ensure functionality of all regulatory frameworks
- To separate the inspection and implementation roles within the health sector
- To establish a Change Management Unit for assisting the reform process.

Operational Planning and Review process involves the annual planning, management, and review of the implementation of the IHSP based on the principles of a Sector-wide Approach and incorporating the principles of harmonisation and alignment. The following principles underpin the approach (based on the National Health Policy, 2010):

- Clear links between the sector policies and the expenditure plans for the sector, so that the allocation of resources reflects the sector strategies
- Annual operational plans which specify the activities to be carried out under each strategy
- Use of resources to implement the plans, with pooling of resources from various sources to fund the plan
- Resources which are not pooled but activities are included in IHSP should still be reflected in the annual plans
- Integrated management of activities especially at the district level under the DHMTs
- Reporting on activities and results against the plan, with common reporting and performance monitoring arrangements (rather than each funding agency having its own review process or different system used by different departments).

The purpose of the annual operational plans is to show the planned activities for the year and the related expenditures, in order to:

i) demonstrate that the funds will be well used, based on sound plans directed towards achieving agreed objectives;

ii) draw together related project and programme activities which are funded in different ways, to show the total investment and activities for each programme; and
iii) provide a mechanism for performance monitoring of implementation and expenditure.

Implementation of the Integrated Health Service Plan to 2020 will cost an estimated BWP49 billion.

1. INTRODUCTION

The Integrated Health Service Plan (IHSP) is the strategy that presents the vision for the improvement of the health status and health care of the population in the Republic of Botswana up to 2020. It identifies priority areas and aims to ensure that those health services that are being delivered will provide the highest possible benefits for all citizens.

A health system, defined by the World Health Organisation (WHO), includes all the actors and activities the primary purpose of which is to promote, improve, or maintain the health of the citizens.

Organised health services, i.e. the health care system, are only one of the many factors for maintaining good health, recovering from ill health, or making a life with chronic illness easier. Health is influenced by many external factors such as environmental, social, and economic factors, and by factors related to lifestyles and to other sectors within society.

Health is priceless but health services cost money. Living within a defined budget means that a balance must be established between the needs and the resources that are available.

This strategy focuses on the issues related to the health care system that fall under the jurisdiction of the Ministry of Health (MOH), emphasizing the need for intersectoral cooperation in various fields such as environmental health, food safety, occupational health and safety, protection against smoking, the fight against alcoholism and addiction diseases, as well as the responsibility of the citizens for their own health.

This strategy gives priority to those health services that are most needed and most efficient, as well as most appreciated by the population, reflecting the views of both the experts and the public.

The choices made in the strategy are based on the development of the health care system in Botswana so far, as well as derived from national and international documents and strategies.

The strategy is based on the Revised National Health Policy 2010 of Botswana, the Millennium Declaration of the United Nations, and also on finalised policies and strategies in many fields of health and health care (including HIV/AIDS, tuberculosis (TB), mental health, alcohol, tobacco, drugs, food safety and nutrition, and pharmaceuticals).

This strategy document, also supported by three key documents prepared during the same period, will guide the preparation of annual operational plans each year. The supporting documents are:

a) Essential Health Service Package with Norms and Standards
b) List of indicators to be used at various levels

c) Annual Operational Plans (to be developed for all departments and districts).

This document is divided into 11 sections. Chapter 2 summarises the socio-economic context and the current health situation of the country. A detailed situation analysis was conducted using the six building blocks of the health system.

Chapter 3 describes the vision, mission, and values underpinning the strategy.

Chapter 4 covers the overarching strategic plan for service delivery, with particular emphasis on the Essential Health Service Package (EHSP). The EHSP document (stated above) details the health services provided at each level of care, as well as defining the norms and standards for human resources and for equipment. The current EHSP needs to be periodically reviewed based on the epidemiological and economic context of the country. Therefore, the present EHSP should not be taken as a long-term solution for Botswana. Although the EHSP is supposed to integrate health care services, the strategic plans are developed based on the current management structure of the MOH. It is expected that, with the anticipated reform of the MOH organisational structure, the strategic plan will be integrated. It should be noted that there may be separate strategies for the different programmes such as reproductive health, child health, communicable diseases, non-communicable diseases, etc. at MOH level, but the service delivery plans at the district levels should be integrated. Therefore, the district plans will be based on the delivery of the EHSP for the population of the district.

Chapter 5 provides the strategic plan for human resources for health (HRH), covering the key issues to be addressed, and the human resource development plan, including training and education for health professionals.

Chapter 6 is the strategic plan relating to health financing. It includes sections regarding different financing options, as well as the resource envelope for the health sector.

Chapter 7 is the strategic plan for improving the availability of the drugs, medical supplies, and equipment, as well as equitable access to infrastructure.

Chapter 8 is the monitoring and evaluation strategy. This section also provides a framework for information technology for the health sector.

Chapter 9 is the plan for governance and leadership of the health sector, and the change management strategic plan.

Chapter 10 details the planning and review process of the IHSP. Planning formats for District Health Plans and Referral Hospital Plans are included in the Annexes.

Chapter 11 presents the estimated cost of EHSP and estimated budget for the IHSP.

2. OVERALL CONTEXT

2.1 Socio-economic context

Botswana has a total Gross Domestic Product (GDP) of BWP 25 billion, representing a GDP per capita of BWP 14,232 (at 1993/94 constant prices) for the year 2009/10. The main contributors to the GDP are the mining industry and the services sector. However, due to the skewed distribution of wealth, a substantial proportion of the total population live on less than a dollar a day. It is a challenge for the health system to ensure universal access to quality promotive, preventive, curative and rehabilitative health services among the economically disadvantaged people.

Universal primary education has raised the national literacy rate to 81.2% (2003/04), with a slightly higher literacy rate for females (81.8%) than males (80.4%).[1] Despite the reduction of school dropouts between 2005 and 2006 (by 14.8% and 5.1% for primary and secondary schools respectively), the school dropout rate is still significant – mainly due to desertion, pregnancy, and illness.[2]

The number of registered orphans has increased over the years, principally as a result of the HIV/AIDS epidemic. The number of orphans for the whole country was 41,592 at the end of December 2003, rising to 48,997 by the end of July 2008 (reports from 21 out of 27 districts).

2.2 Development Framework

The overall guiding document for national development in Botswana is Vision 2016, a broad-based national approach adopted in 1996 focussing on the aspiration of the Nation. The principles and objectives of Vision 2016 guide the formulation and implementation of revolving 6-year National Development Plans (NDP). In pursuit of Vision 2016, health related goals are set which contribute to the national development of Botswana, mainly through one of the pillars of 'A compassionate, just, and caring nation'. Table 1 shows the country's policy planning process.

Table 1: Botswana Policy Planning Process

Policy Planning Initiative	Objective
Vision 2016	National vision of economic and social objectives to be attained by the year 2016
National Development Plans	Six-year strategic plans to realise the Vision 2016

[1] CSO, Report of the Second National Survey on Literacy In Botswana, 2003
[2] Education Statistical Report,2006

2.3 Health Sector Context

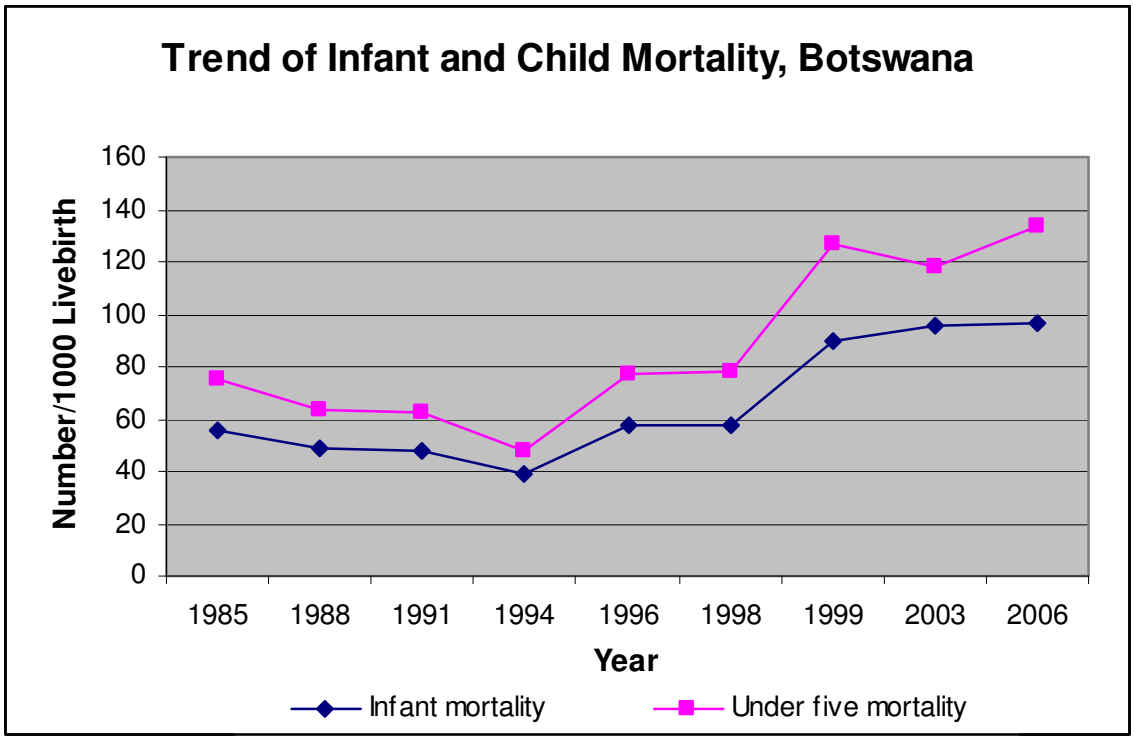
The National Health Service Situation Analysis 2009 provides a detailed analysis of the health sector using the six building blocks of the health system, i.e. service delivery; human resources for health; health financing; drugs, equipment and infrastructures; health information system including monitoring & evaluation; and governance and management of health sector. The key features are incorporated in this document.

2.3.1 Health Profile

Life expectancy at birth in Botswana is estimated at 54.4 years (48.8 for males and 60 for females). The crude birth and crude death rates were estimated at 29.7 and 11.2 per 1000 respectively; infant and under-five mortality rates were 54 and 76 per 1000 live births respectively.[3].

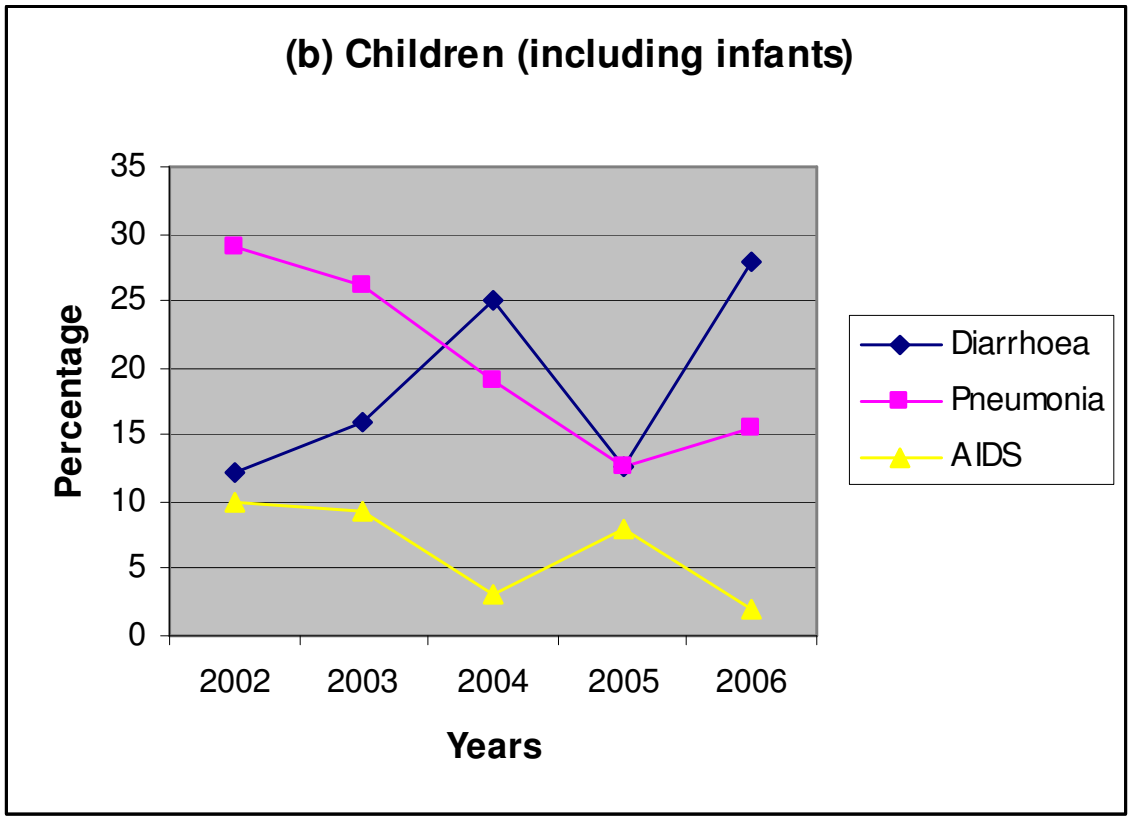
Figure 1 shows the trend for infant and under-5 mortality rates since 1985; Figure 2 shows trends in deaths from pneumonia, diarrhoeal disease, and AIDS

Fig 1: Trend of Infant and Under-5 Mortality rates



[3] CSO, Botswana Family Health Survey, 2008

Fig 2: Trends in under-five deaths from pneumonia, diarrhoeal diseases, and AIDS

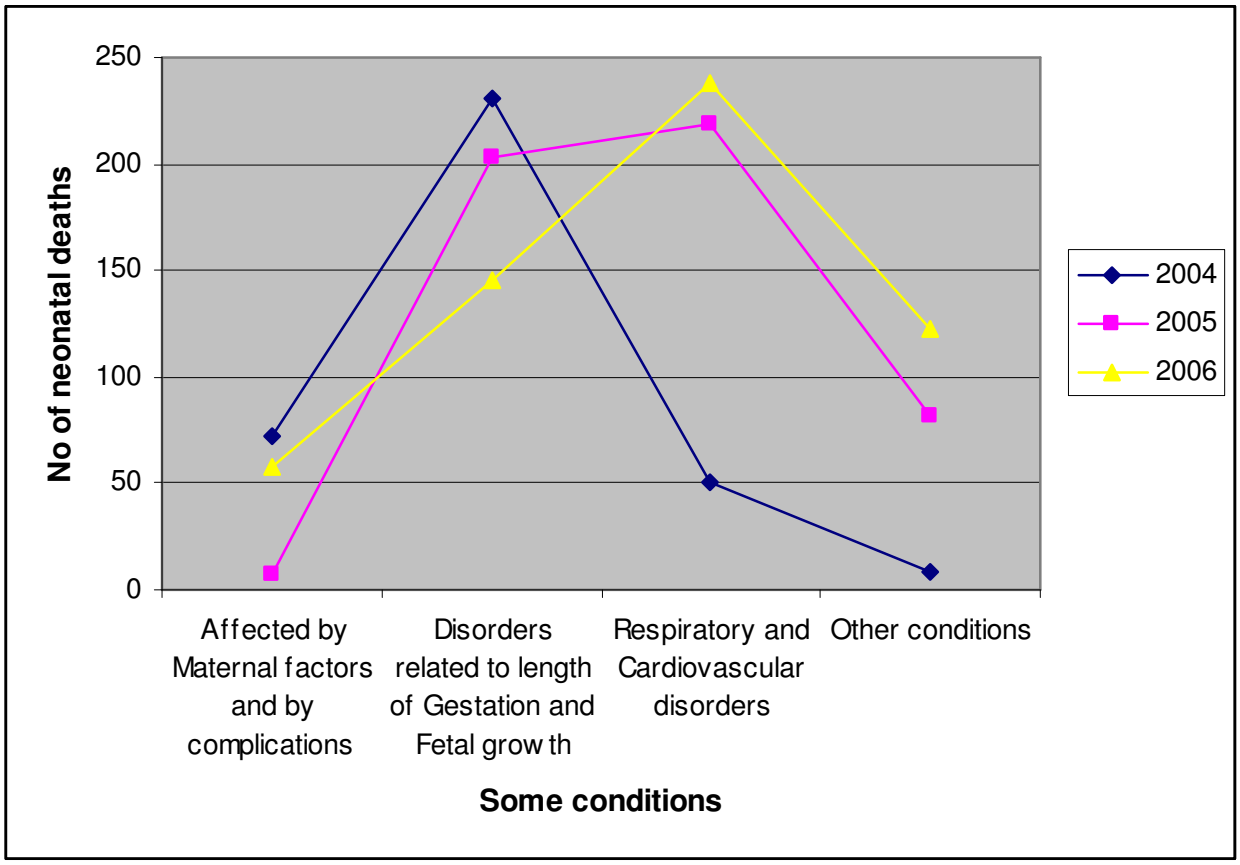


In Botswana, more than 40% of under-five deaths occur during the neonatal period; over 90% in the first day of life. Table 2 shows the neonatal mortality by age in days and by selected conditions, and Figure 3 shows time trends in the number of neonatal deaths by principal causes in 2006.

Table 2: Number of neonatal deaths by age (in days) & selected conditions, 2006

Selected Conditions	Age Group (Days)										Total (%)
	<1	1	2	3	4	5	6	7-13	14-20	21-28	
Affected by Maternal factors and by complications of pregnancy	56	0	0	0	0	1	1	0	0	0	**58 (10%)**
Premature birth and low birth weight/ growth retardation	139	4	1	1	1	0	0	0	0	0	**146 (26%)**
Respiratory and Cardiovascular infections and disorders	231	3	1	0	0	2	1	0	0	0	**238 (42%)**
Other conditions	116	4	0	1	0	1	0	0	0	0	**122 (22%)**
Total	**542 (96%)**	**11 (2%)**	**2 (0.4%)**	**2 (0.4%)**	**1 (0.1%)**	**4 (0.7%)**	**2 (0.4%)**	**0 (0%)**	**0 (0%)**	**0 (0%)**	**564 (100%)**

Fig 3: Neonatal Mortality trend by groups of causes



The Maternal Mortality Ratio (MMR) is 193 per hundred thousand live births (based on the Central Statistics Office (CSO) 2007 calculations). Table 3 shows the trend of MMR and the principal causes. 23% of the population are stunted; 15.1% are moderately stunted, and 7.9% severely stunted[4]

Table 3: MMR Trend with proportional cause

Causes of Maternal Deaths	2005		2006		2007	
	Number	%	Number	%	Number	%
HIV related	21	29.6	19	30.6	8	9.8
Pregnancy, childbirth and puerperium	27	38.0	23	37.1	48	58.5
Other causes	23	32.4	20	32.3	26	31.7
Total	**71**	**100.0**	**62**	**100.0**	**82**	**100.0**
MMR (per 100,000 live births)	157.9		139.8		193.4	

Morbidity and mortality for all ages are dominated by infectious diseases, with HIV/AIDS and other communicable diseases causing around half the deaths. As a

[4] CSO, MICS Study, 2000

result of an effective anti-retroviral (ARV) drug programme, mortality from HIV/AIDS has been declining over the past 4 years, but remains a major concern.

Although non-communicable diseases (hypertension, diabetes, etc.) do not yet count among the top ten causes of disease morbidity and mortality, prevalence rates are increasing. Cardiovascular diseases and cancers in particular have increased alarmingly over the last decade.[5]

In terms of achieving the Millennium Development Goal (MDG) targets, Botswana's progress is mixed; some health indicators are on track; many are unlikely to be attained. Table 4 summarises progress towards the health related MDGs.

Table 4: Progress towards the MDGs – Selected Indicators

MDG	1990-94	2002-06	Target (2015)
1. Underweight children for under 5 (%) to reduce by half	17.0	5.9	8.5
4. Infant mortality rate (per 1000) to reduce by two-thirds	48	56	16
4. Under five mortality rate (per 1000) to reduce by two-thirds	63	74	21
4. Children immunised against measles (%)	74	86	100
5. Births attended by skilled personnel (%)	93	96	100
5. Maternal mortality rate (per 100 000) to reduce by three-quarters	326	150-190	81
6. HIV prevalence among adults (%)	NA	25	Falling
6. Access to ART (% clinically eligible) universal	NA	95	≈100
6. TB notifications (per 100 000)	200	620	Falling
7. Proportion of population without access to safe drinking water (%) to reduce by half	23	4	12

Sources: CSO (2003a, 2004b, 2006a); CSO & GoB (2004); NACA & CSO (2005); GoB (2007b) CSO HIES 2002-2003.

2.3.2 Health System

Health service delivery in the country is pluralistic. There are public, private for-profit, private non-profit, and traditional medicine practices. The MOH is mandated with overall oversight and delivery of health services; it is responsible for the formulation of policies, regulation and norms, and standards and guidelines for health services. Recent reorganisation and the relocation of primary health care from the Ministry of Local Government (MLG) to the MOH makes the MOH the main public sector health care provider. This move has been made with a view to increase efficiency and also to provide a continuum of care.

A shortage of trained and qualified staff remains one of the major bottlenecks towards the availability of quality health care in Botswana. Table 5 shows the number of health staff by type and staff/population ratios.

[5] MOH, Health Statistics Reports

Table 5: Health staff numbers by cadre, and staff/population ratios

Cadre	Number	Number per 10,000 population
Doctors	715	4
Nurses and midwives	4,753	26
Pharmacists	333	2

Source: World Health Report 2010 WHO, Geneva

Additional programmes and projects, in particular those related to HIV/AIDS, are placing increasing demand on the already over-stretched skilled workforce. Although the rate of attrition is negligible, there is high staff turnover at all levels of the health sector. Other challenges relate to inequitable deployment and failure to optimise the existing skill mix. Appropriate division of labour could contribute significantly to reducing staff shortages.

Training of health care professionals is provided through a combination of in-country and out-of-country institutions, with heavy reliance on the latter. There are eight training institutes, principally providing nurse training, and a limited number of other courses - health technologies, pharmacy, etc. The University of Botswana also trains a small number of nurses and health technologists. The Medical school has just started training the first cohort of medical students. Due to the limited output of nationally trained skilled health professionals, the health sector employs a large number of expatriates.

According to the National Health Accounts Report, in 2002 the Government had contributed around 75% of Total Health Expenditure (THE) in 2002, or around 9.2% of the total government budget. Since 2004 the proportion of government budget allocated to health has achieved the Abuja target of 15%[6]. The percentage of GDP spent on health has increased progressively from 6.43% in 2000, to 9.27% in 2001 and to 10.54% in 2002[7]. The share of out-of-pocket spending declined from 16% to 9% between 1995 and 2006, and the share of donor support increased from 4% to 7%, mainly due to increased funding for HIV/AIDS.

A nominal cost recovery system is in place for services provided in public facilities, with exemption for vulnerable populations. Other additional charges include admission fees, and ambulance charges, with additional charges for private patients and non Botswana citizens. However, the extent to which these costs compromise utilisation of essential services has not been assessed. It is generally believed that the cost of collecting far exceeds the funds collected. Alternative mechanisms for pre-payment, including social health insurance, and appropriate policies are yet to be explored.

Health infrastructure is widely distributed with facilities ranging from health posts to tertiary hospitals. The older primary facilities (clinics) and some hospitals were not designed to ensure patient flow and care. The Government is now equipping public health facilities with modern equipment; however this is not standardised by facility level. Staff working may not have the necessary training (or availability) to ensure

[6] MOH, NHSSA, 2009
[7] MOH, Botswana National Health Accounts, 2006

optimal use of the equipment; the diversity of equipment presents challenges in terms of planned preventive maintenance, conducting annual inventories and determining equipment lifespan. In addition there are no clear standards for the distribution and size of health facilities, and infrastructure development may not be linked to human resource availability. This leads to under- or over-utilisation of certain facilities.

The Botswana National Drug Policy (BNDP) and its implementation plan were appraised in 2002. Medicines regulation and control is based on the provisions of the Drugs and Related Substance Act (DRSA) of 1992 and regulations thereto of 1993. These are currently being amended to align them with the BNDP 2002 and other health related Acts and policies.

The National Drug Quality Control Laboratory tests medicines, condoms, and gloves for conformity to specifications; however it is resource-constrained and is unable to meet public and private sector testing demands. The major challenges in the area of regulation of medicines have been the shortage of staff at the Drugs Regulatory Unit to register medicines and conduct drug control activities; inadequate legislation to deal with importation and distribution of counterfeit medicines; prescribing and dispensing by unqualified staff contrary to provision of the DRSA; and inadequate regulation and control of traditional medicines.

The supply chain management system at all hospitals and clinics is weak, resulting in erratic availability and shortages of essential drugs. The ongoing reform of the Central Medical Stores (CMS) will improve its performance and ensure universal access to essential medicines in the future.

There are also many challenges related to timely data collection, collation, analysis, interpretation, and dissemination. Not all the health systems data are captured and stored in a single database. Weak referral and supervisory frameworks for health facilities and management units mean that timely reporting, data entry and cleaning, analysis, interpretation and the use of data does not always happen.

Currently there is limited use of data for planning purposes or programme improvement – which in turn undermines the quality of information. Different information systems (epidemiological, logistics, human resources, health statistics, and finance) are incompatible and poorly coordinated. The existing monitoring and evaluation processes are fragmented; this affects the tracking of outcomes, impact on health status, and programme interventions.

Several data sources indicate that by 2006, none of the three health MDGs (Goal 4: reducing the under-five mortality rate by two-thirds; Goal 5: reducing the maternal mortality rate by three-quarters; and Goal 6: halting the increase and begin to reverse the prevalence of HIV, malaria and tuberculosis by 2015) - were on track. However, some specific health related targets such as access to ART, access to safe drinking water and reduction of underweight children under five were on track. Facility-based data shows a reduction in the prevalence of malaria in endemic areas. With increased access to ART, the target of reducing the HIV prevalence may be replaced with a more appropriate measure of incidence (a reduction of new HIV cases).

2.4 Principle Issues over the next 10 years

Over the next 10 years, the main health related issues in Botswana are expected to be:

- High infant and child mortality, including post-neonatal mortality
- High maternal mortality rate
- High mortality and morbidity from communicable diseases (such as HIV/AIDS, diarrhoeal diseases, acute respiratory infections, etc.)
- Malnutrition among women (obesity) and children (general and micronutrient under-nutrition)
- High incidence of infectious diseases such as HIV/AIDS and TB
- Increases in non-communicable diseases
- Poor quality of care
- Increases in injuries and accidents
- Shortages of skilled human resources
- Weak quality management and regulation in both public and private sectors
- Unhealthy lifestyles and widespread inappropriate health seeking behaviour
- Weak sector-wide management.

3. VISION, MISSION AND VALUES

The following vision, mission, and values are derived from the National Health Policy 2010 and underpin the strategy.

3.1 Vision

An enabling environment whereby all people living in Botswana have the opportunity to achieve and maintain the highest level of health and well-being.

3.2 Mission Statement

A sustainable improvement in health status through progressive creation and maintenance of physical, mental, economic, and social well-being.

3.3 Values

The following principles will guide the implementation of the IHSP:

Ethics: Respect for human dignity, rights, confidentiality, and cultural beliefs.

Equity: Equitable distribution of resources to guarantee accessibility to quality services at every point of demand especially for the vulnerable, marginalised, and underserved, irrespective of political, ethnic, or religious affiliations and place of domicile.

Ownership: Involvement/participation of all stakeholders (providers and users) of health services, in defining policy as well as implementation framework.

Evidence based: Based on evidence particularly pertaining to Botswana.

Innovation: Continuous exploration of new ideas in health care delivery, e.g., geographical targeting, to benefit high priority areas, health insurance coverage for the disadvantaged sections of the society, public private partnership, demand-side financing, etc.

Gender Equity: Addressing gender sensitive and responsive issues including equal involvement of men and women in decision-making; eliminating obstacles (barriers) to services utilisation and prevention of gender-based violence.

Client Satisfaction: Ensuring efficient twenty-four hour quality health services that is more responsive and sensitive to Customer needs.

Skilled staff retention and circulation: Attractive service conditions (package), job satisfaction to encourage a net inflow of critically required skills.

Partnerships: Increasing community empowerment; active involvement of the private sector, NGOs, local government authorities and civil society and effective development partner co-ordination.

4. STRATEGIC PLAN: SERVICE DELIVERY

4.1 Overview

This section describes the strategies for service delivery. The health system issues necessary to deliver the services are described in sections that follow. The overarching strategy is the delivery of an Essential Health Service Package (EHSP)

The service delivery strategies of the IHSP aim to achieve the following outcomes:

- Increased life expectancy
- Reduced infant mortality rate
- Reduced child mortality rate
- Reduced maternal mortality rate
- Improved nutritional status among children and adults
- Increased access and utilisation of a quality essential health services package especially for the poor and vulnerable
- Reduced household health expenditure among the poor especially for catastrophic illnesses
- More effective, efficient and decentralised health system
- Increased number of client-centred and user-friendly health facilities and institutions
- Optimum public-private mix
- Increased number of skilled human resources.

This chapter outlines the service delivery plan to achieve all the above outcomes through provision of universal coverage of a high-quality package of essential health services.

The service delivery objectives are:

- To scale up utilisation of a well defined and comprehensive essential health service package
- To redefine the existing service delivery levels and delineate types of health services for each level to ensure continuity and harmonised referral and supervisory functions
- To increase and strengthen partnerships with the private sector and NGOs in attaining universal coverage of a high quality EHSP
- To involve all community based groups in order to ensure effective demand for health services
- To promote community participation in the planning and delivery of health services.

Based on the current management structure of the MOH the Service Delivery Strategic Plan is divided into three main areas:

- The Strategic Plan for the EHSP – described in section 4.2
- The Strategic Plan for Public Health – described in section 4.3.

- The Strategic Plan for the Health Sector HIV/AIDS Prevention and Control is described in section 4.4. Once the anticipated reorganisation of the MOH management structure has taken place, HIV/AIDS prevention and control will be incorporated in the strategic plan for public health.

4.2 Essential Health Service Package

4.2.1 Overview

The key component of the service delivery strategy is the delivery of an EHSP. The EHSP is a set of health interventions - promotive, preventive, curative, and rehabilitative - that the Government is committed to providing, and making accessible to the entire population. The content is not, however, comprehensive – i.e. not all health needs will be met by the EHSP. Interventions defined in the EHSP can be provided through public, private, or a combination of public and private facilities. The assumption that all health care should be provided by government is, in many countries, unrealistic - the necessary resources simply do not exist.

The EHSP is an integrated collection of cost-effective interventions that address the main diseases, injuries and risk factors that affect the population. They include diagnostic and therapeutic services. The range of interventions is dependent upon the financial resources available; that is, the per capita health expenditure a government is prepared to commit to the EHSP.

Cost effectiveness will be achieved through synergy between treatment and preventive activities, joint production costs, and improved use of specialised resources. The EHSP ensures that the highest priority services get the highest priority with regards to finance. There is considerable inefficiency in resource allocation between primary health care (PHC), secondary and tertiary care, as well as Curative and Preventive services. A disproportionate share of resources is usually allocated to secondary and tertiary sectors, where the costs incurred are often excessive in terms of the benefits achieved. Similarly, low workforce productivity, lack of essential supplies (especially essential drugs), and low levels of utilisation (especially at PHC facilities) also result in further inefficiencies.

In addition to determining the interventions, the EHSP also identifies other health system issues required to deliver the package. In Botswana the approach for developing the EHSP involved a combination of cost-effective analysis as well as technical, political, and social considerations. The aim is to concentrate scarce resources on the services which provide the best ‘value for money’. The EHSP provides a comprehensive list of services to be offered at different standard levels of health facilities within the health system. The types of services offered will determine staffing levels, and define referral mechanisms. The EHSP also determines overall staff numbers and the skill-mix necessary to deliver not only the EHSP but the entire range of services that are required in the country.

The draft revised National Health Policy 2010 identifies the following five Levels of Care for Botswana as part of standardising the health care service delivery:

- Individual/family/community
- Primary health care clinic/centre
- Primary hospital
- District hospital
- Referral hospital.

The selection criteria that were followed are based on the three ethical principles:

- Principle of need (based on the disease profile of the country)
- Principle of cost-effectiveness (based on the international literature)
- Principle of human dignity (based on the stakeholders' judgement).

The choice of interventions was based on:

- Technically effective services that can be delivered successfully
- Specific diseases – based on current and future burden, effects on individuals and social impacts (such as epidemics and adverse economic effects)
- Long term sustainability of services - as donors reduce support in the years ahead, taking into consideration the government's ability to maintain a basic level of health services
- The need for equity in ensuring that critical health services are provided to all, and especially the poor.

4.2.2 Objectives

The Overall Goal of the EHSP in Botswana is:

- Reaching universal coverage of a high-quality package of essential health services.

The EHSP has two key purposes:

- to provide a standardised package of basic services which forms the core of service delivery in all primary health care facilities and;
- to promote a redistribution of health services by providing equitable access, especially in underserved areas, population etc.

Each targeted population is linked to specific EHSP objectives (Table 6).

Table 6: Objectives for targeted population

Targeted population	Specific objectives
Mothers	• To ensure access to high quality antenatal care, and quality care during and after delivery to mothers and their babies • To implement a population-based system of service delivery for mothers and their babies which strives to achieve agreed objectives

Targeted population	Specific objectives
Children	• To enable each child to reach his/her maximum potential within the resources available, and to enable as many children as possible to reach adulthood with their potential uncompromised by illness, disability, environmental hazard or unhealthy lifestyle
Adolescents	• To ensure access to relevant and appropriate information, community support and health services, which enable adolescents to cope with the rapid physical and psychological changes that occur during this period, and which expose them to risk-taking behaviours
All women	• To achieve optimal reproductive and sexual health (mental, physical and social) for all women and men across their life-span • To raise the status of women, their safety, health and quality of life
All elderly	• To ensure the availability health care support to live an active life.
All people living in Botswana	• To enable all people living in Botswana to have access to high quality essential health services at the moment of need and within convenient reach. • To raise the health status of all Batswana through active involvement and access to information on disease prevention and health promotion.

4.2.3 Contents of the EHSP

The EHSP provides a comprehensive list of services to be offered at the five standard levels of health facilities within the health system: family/community based care, health clinics, primary hospitals, district hospitals, and referral hospitals. These terms replace a number of different nomenclature systems, and will help create a more uniform system of classifying and denoting health facilities. In the past the MOH and MLG have used various names for different types of facilities, which has often caused confusion over types of services offered, staffing, and roles those facilities play in the health referral system. The EHSP has been used as an instrument to develop a standard name and description of the key types of facilities in the health system. It also requires that Botswana determine the required health cadre to deliver not only the EHSP, but also a range of other services.

The detailed interventions and activities of the EHSP by levels of health care can be found in a separate document ('EHSP for Botswana').

In summary, the EHSP has the following components:

a) Sexual and Reproductive Health (SRH)

- Antenatal Care
- Delivery Care

- Postnatal Care
- Family Planning
- Sexually Transmitted Infections
- Prevention of Mother to Child Transmission (PMTCT)
- Adolescent SRH
- Infertility
- Male Involvement in SRH
- Gender -based violence (includes rape):
- Post Abortion Care
- Reproductive Cancers.

b) Child Health

- Vaccine Preventable Diseases (VPD)
- Integrated Management of Childhood Illness including diarrhoea, respiratory infections, nutrition, Micronutrient supplementation
- HIV/AIDS
- School Health
- Orphans and vulnerable children (OVC)
- Disabilities.

c) Communicable Diseases

- HIV/AIDS
- TB
- Malaria
- Diarrhoeal diseases
- Respiratory Infections including Pneumonia
- STI
- Meningitis
- Dermatological diseases
- Neglected tropical diseases
- Nosocomial (facility-acquired) infections
- Emerging infectious disease.

d) Non-Communicable Diseases and Conditions

- Mental Health
- Oral Health
- Trauma
- Diabetes
- Hypertension and cardiovascular diseases
- Cancers
- Eye Conditions

- Respiratory Diseases
- Chronic Obstructive Pulmonary Diseases (Asthma, Bronchiectasis, Chronic bronchitis, etc.)
- Alcohol Abuse.

4.2.4 EHSP Strategic Plan

The EHSP strategic implementation plan brings together detailed implementation plans in the input and support areas outlined below, with respective strategic actions:[8]

EHSP input areas:

a) Finance:
- Conduct a resource mapping exercise by MOH, MFDP and other development partners to identify the resource gap more accurately
- Completion of the detailed stock and flow analysis.

b) HR:
- Workload study and revision of staff establishment conducted by each facility
- Finalise the attraction and retention strategy, and development of a revised deployment strategy/policy and implementation process
- Review the overall pre-service training strategy and develop a plan
- Develop/refine training curricula
- Detailed in-service training plans for relevant cadres as per their roles in EHSP delivery.

c) Drugs:
- Review the EDL as per the EHSP requirement.

d) Infrastructure/Equipment:
- Develop detailed upgrading/construction plans as per revised EHSP service delivery model

1. Identify equipment requirement as per standards and norms for EHSP.

EHSP Support areas:

a) Supervision:

2. Develop an integrated EHSP supervision checklist, supervisory teams, and supervisory visit plans encompassing QA concerns.

b) Other support areas:

3. Policy on transport management including ambulance services, DHMT operations, District planning systems, laboratory systems (including referral services, commissioning other providers etc).

[8] While strategies for most of these areas are described elsewhere in this document.

c) *M&E:*
   4. Develop an effective integrated monitoring and evaluation system, based on the existing HMIS and other systems.

d) *EHSP costing:*
   5. Conduct an EHSP costing survey, and develop a template for the use of DHMT.

e) *Public awareness:*
   6. Nationwide assessment/formative research to inform the development of Behavioural Change and Communication (BCC) Strategy
   7. Develop Comprehensive BCC Strategy
   8. Conduct an awareness campaign for the public as well as orientation of health workers on the EHSP.

4.3 Public Health Strategy - A Strategy on Health, Healthy Living, and Working Environment and Occupational Safety

4.3.1 Overview

Public Health is 'the science and art of preventing disease, prolonging life, and promoting health, through the organised efforts of society'. The processes and methods used in public health intend to preserve health by minimising, and where possible removing, injurious environments, social and behavioural influences, and to provide effective and efficient services to restore health, and reduce suffering, disability and dependence.

As described in the Ottawa Charter 1986, the main components of public health are:

- Building healthy public policy
- Creating supportive environments
- Strengthening community action
-
- Developing personal skills
- Re-orienting health services.

The key focus areas for Public Health in Botswana are:

- Preventive health services
- Promotive health services
- Rehabilitative services.

4.3.2 Strategic Objectives

The seven Strategic Objectives for Public Health, including child health, are:

- Strategic Objective (SO) 1: To develop/review policies and regulations related to public health.

- SO 2: To improve the access and utilisation of quality preventive, promotive, and rehabilitative services
- SO 3: To develop and implement a human resource plan for public health
- SO 4: To provide adequate resources (financial as well as material) for all public health programmes and plans
- SO 5: To establish a robust information and research system for efficient, effective, innovative and evidence-based public health interventions
- SO 6: To enhance community involvement and participation, allowing individuals and communities to take responsibility for their own health and health risks
- SO 7: To establish and implement efficient and effective management of public health programmes which foster coordination as well as partnership.

4.3.3 Strategic Plan for Public Health

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
STRATEGIC OBJECTIVE 1: TO DEVELOP/REVIEW POLICIES AND REGULATIONS RELATED TO PUBLIC HEALTH					
Health Promotion & Education (HPE) Division 1.1: To formulate and adopt health promotion policy	HP policy developed.	HP Policy	• Conduct a situation analysis • Draft HP Policy • Consultation with stakeholders • Finalise HP Policy • Dissemination of HP Policy	HPE Division	Year 1
1.2: To develop comprehensive BCC strategy	BCC strategy developed	BCC strategy	• Assessment/formative research in selected districts • Dissemination of research results • Development of BCC strategy • Implementation of BCC strategy		Year 2 (HEP) Year 3 (HEP)
1.3: To formulate, adopt and implement Oral Health Policy and implementation strategy.					
i) To formulate and adopt Oral Health (OH) Policy	OH policy developed	• OH Policy	• Conduct a situation analysis • Draft OH Policy • Consultation with stakeholders • Finalise OH Policy • Dissemination of OH Policy	Community Oral Health Unit – Public Health	2 years 2 years
ii) Implement Oral Health Policy	Implementation strategy developed	• National Strategic Oral Health Plan	• Implement Oral Health Policy		2 years
iii) To develop and			• Develop National Strategic Oral		

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
adopt implementation strategy iv) Implement strategy			Health Plan		 8 years
Mental health and Rehabilitation Service Division (RMHD)					
1.1: To review the National Mental Health Policy of 2003	National Mental Health Policy reviewed	Draft Revised National Mental Health Policy	• Mobilisation of funds • Set up a Reference group for the review of the policy • Consultation with stakeholders • Finalise Revised policy	RMHD	
1.2 To review the Mental Health Act	Mental Health Act reviewed	Draft Revised Mental heath Act	• Mobilisation of funds • Set up a Reference group for the review of the Mental health Act • Consultation with stakeholders • Finalise Revised Mental Health Act.	RMHD	
1.3 Develop Hearing Conservation policy	Hearing Conservation Policy developed	Draft Hearing Conservation policy	• Mobilisation of funds • Set up a Reference group for the development of the Hearing Conservation Policy • Consultation with stakeholders Finalise Development of the Hearing Conservation Policy.	RMHD	
1.4: Development of regulations for the establishment of Health Rehabilitation Centres.	Regulations developed	Draft regulations for Rehabilitation Centres	• Mobilisation of funds • Set up a Reference group for the Rehabilitation Centre Regulations • Consultation with stakeholders	RMHD	

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
			• Finalise Development of the Hearing Conservation Policy.		
Nutrition and Food Control Division 1.1: To develop food safety policy and strategy	Food Safety Policy and strategy developed	Food Safety Policy	• Conduct a situation analysis • Draft Food Safety Policy • Consultation with stakeholders • Finalise Food Safety Policy	Nutrition & Food Control Division	
1.2: To develop new food regulations	New Food Regulations developed	New Food Regulations	• Conduct a situation analysis • Consultation with stakeholders • Finalise draft Regulations	Nutrition & Food Control Division	
1.3: To review the Food Control Act and Regulations	Food Control Act and Food regulations reviewed	Revised Food Control Act and food regulations	• Conduct a situation analysis • Consultation with stakeholders • Finalise draft Regulations	Nutrition & Food Control Division	
1.4: To finalize the Botswana National Policy on Infant and Young Child Feeding	Final IYCF policy developed and implemented	IYCF policy	• Finalize IYCF policy	Nutrition & Food Control Division	
1.5: To Develop and implement a Nutrition Policy for Botswana	Nutrition Policy developed and implemented	Nutrition Policy	• Nutrition situation analysis • Review National Plan of Action for Nutrition • Finalize Policy • Nutrition communication strategy	Nutrition & Food Control Division	
Sexual & Reproductive Health (SRH) Division 1.1: To develop and review SRH policies service standards,	SRH Policies, service standards, Guidelines and protocols developed	Availability SRH Policies service standards, Guidelines and protocols	• Situational analysis on SRH issues • Consultation with stakeholders	SRH Division	10 years

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
Guidelines and protocols	and reviewed		• Develop and disseminate SRH Policies service standards, Guidelines and protocols		
Child Health Division (CHD) 1.1: To formulate and adopt Child development policy	Child Development policy developed.	Child Development policy	• Conduct a situation analysis • Draft Child development Policy • Consultation with stakeholders	CHD	Year 1
1.2: To finalise EPI Procedure Manual	EPI Procedure manual developed	EPI and Procedure manual	• Finalise EPI Procedure manual • Dissemination of EPI policy documents and guidelines	CHD	Year 2
1.3: To develop policy on injection safety	Injection safety policy developed	Injection safety policy	• Conduct a situation analysis • Consultation with stakeholders • Draft Safety Policy • Monitoring use of appropriate injection equipment	CHD	2 years
STRATEGIC OBJECTIVE 2: TO IMPROVE THE ACCESS AND UTILISATION OF QUALITY PREVENTIVE, PROMOTIVE AND REHABILITATIVE SERVICES					
Health Promotion & Education Division 2.1: To promote smoking cessation.	Smoking rates decreased	Smoking rates amongst adolescent	• Mandating record of smoking status in all medical notes • Training health professionals, schools on the behavioural and pharmacological cessation interventions • Provision of smoking cessation services (drugs/aids, counselling etc.) through all health facilities • Capacitating CBO's, Civil	DPH – Divisions	

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
			Society on cessation interventions • Establish Community-based group counselling/support groups on smoking cessation, quitting alcohol (e.g. alcoholic anonymous groups, stop smoking support groups)		
2.2: To promote physical activity and weight management	Obesity rates reduced	Obesity rate amongst women	• Development of food based dietary guidelines • Integration of NCDs risk factors services into the existing health programmes including CVD, cancer, diabetes, maternal and child care programmes • The national health service to cover the cost of providing weight management services (subsidised services) • Establish Community-based group counselling/support groups on weight management.	DPH – Divisions	
2.3: To provide comprehensive information and resources for health literacy.	• Health literacy improved • Accessible Health information	Health literacy rate	• Establish and strengthen community resource centres/libraries • Development of culturally, age and gender sensitive health learning materials		
2.4: To provide a comprehensive school health programme.	• Health Promoting Schools • health status improved	• Number of health promoting schools • School results improved • Supportive school	• Establish and strengthen health-promoting schools. • Establish school action groups (e.g. PTA, SHC, EHC, PACT, ICT etc.)	DPH – Division	

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
		environment	• Strengthen collaboration with MOH, MLG and MES&D • Strengthen the implementation of school healthy menus • Monitoring of National School Health Standards		
Mental health and Rehabilitation Service Division 2.1: To promote substance use reduction	Positive behaviour change in substance use	Substance use rates.	• Public awareness campaigns • Sensitisation on the use of substances • Capacity building for community based organisations.	RMHD	Year 1
2.2: To reduce the occurrence of disabilities.	Disability occurrence reduced	Incidence rates of disability	• Training of Health Professionals/ School Community.	RMHD	Year 1
2.3: To improve accessibility of rehabilitation services to people with disabilities.	Accessible rehabilitation services.	• Trained personnel • Knowledge on the availability of the rehabilitation services • Structures at the community level	• Public awareness and sensitisation campaigns • Early identification and referral to appropriate service provider. • Resource mobilisation- • Training of personnel	RMHD	Year 1
Nutrition and Food Control Division 2.1: To promote smoking cessation, weight management, increased physical activity	• Smoking rates decreased • Obesity rates reduced	• Smoking rates amongst adolescent • Obesity rate amongst women	• Mandating record of smoking status in all medical notes • Training health professionals, schools on the behavioural and pharmacological cessation interventions	Nutrition and Food Control Division	

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
			• Provision of smoking cessation services (drugs/aids, counselling etc.) through all health facilities • Capacitating CBO's, Civil Society on cessation interventions • Development of food based dietary guidelines • Integration of NCDs risk factors services into the existing health programmes including CVD, cancer, diabetes, TB maternal and child care programmes • The national health service to cover the cost of providing tobacco cessation alcohol quitting, weight management, services • Establish Community-based group counselling/support groups on smoking cessation, quitting alcohol, weight management (e.g. alcoholic anonymous groups, stop smoking support groups)		
2.2: To strengthen capacity of the National Food Control Laboratory	• Wider range of Food analysis (e.g. contaminants and pathogens , food additives, nutritional analysis) • Laboratory physical	• More parameters of food safety/quality assessed • Quality Manual available including Standard operating procedures	• Capacitating the Food Laboratory (staff and funds) • Build a modern Laboratory	Nutrition & Food Control Division	

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
	working conditions improved • Laboratory management system in place • Laboratory accredited		• Accreditation		
2.3: To decentralize the food quality /safety laboratory services in the country	Food and water satellite Laboratories.	Resources available	• Sourcing for funds • Establish satellite laboratories	Nutrition and Food Control Division	
2.4: To increase early and exclusive breastfeeding rates	• Health facilities offering maternity services designated as Baby & Mother Friendly • More CBOs partnering in implementation of IYCF initiatives • Establishing breastfeeding support groups in the community	• % of babies breastfed within one hour of birth • % of babies 0-6 months of age exclusively breastfed in the last 24 hours	• Develop and disseminate IYCF IEC materials • Revitalise the BFHI • Promote appropriate diets for pregnant/lactating mothers	Nutrition and Food Control Division	
2.5: To increase coverage of timely and appropriate complementary feeding for children aged 6-9 months	• 80 % of children receiving timely complementary feeding • IEC for promotion of appropriate complementary feeding developed and used in	% children aged 6-9 months receiving timely and complementary feeding	• Create awareness in communities on timely and appropriate complementary feeding and its benefits • Promote use of appropriate locally available complementary foods • Strengthen growth monitoring and promotion	Nutrition and Food Control Division	Continuous

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
	counselling • Demonstrations on preparation of complementary foods held regularly in health facilities				
2.6: To reduce mal-nutrition among children under five	% of malnourished children (underweight) reduced from 13.5%(CSO, 2007) to 10%	% underweight malnourished children identified who receive therapeutic feeding or food supplements and/or counselling of their caretakers	• Strengthening growth monitoring and promotion • Improve communication for behaviour change: develop IEC materials for use by health workers and others • Manage acute and severe malnutrition • Strengthen supply chain of supplementary and therapeutic foods	Nutrition and Food Control Division	continuous
2.7: To prevent and control micronutrients deficiencies	• % Vitamin A deficiency • % Iodine deficiency • % Iron deficiency • % Zinc deficiency	• % vitamin A supplementation coverage • % households using iodated salt • % consumption of foods rich in micronutrients	• Supplementation • Dietary diversification • Food fortification • Ensure all Salt is iodated	Nutrition and Food Control Division	
Sexual & Reproductive Health Division 2.1: To promote universal access to quality SRH services	• Improved provision of Emergency Obstetric and Newborn Care services	• Reduced Maternal mortality	• Strengthen maternal mortality audit system • Strengthen utilization of maternal and newborn guidelines	SRH Division	5 years

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
	• Improved Youth Friendly Health Services	• Reduced teenage pregnancy	• Strengthen YFHS services (capacity building, community awareness, creating enabling environment)		
	• Improved cytology screening services	• Reduced incidences of cervical cancer	• Establish cervical cytology registry		
	• Increased male access and participation in SRH services	• Increased utilization of SRH services by men	• Implementation of the Male Involvement in SRH plan of action and implementation strategy		
	• Increased utilization of modern FP methods	• Increased contraceptive prevalence	• Promote Reproductive Health Commodity Security		
Child Health Division 2.1: To increase immunisation coverage for all antigens to at least 95% at national and 95% in all districts by 2020	Increased coverage in all districts	Reduced probability of outbreaks of preventable diseases	• Provide integrated routine immunization services • Strengthen data management at all levels • Regular monitoring and feedback at all levels • Vaccinate beyond the traditional target group	CHD	Ongoing
2.2: To strengthen EPI services for potential pockets of unimmunized children, such as hard to reach populations	Strengthened services	All children reached	Implement RED approach	CHD	Ongoing
2.3: to strengthen vaccine management at all levels	Vaccine managed appropriately at all level	Good quality vaccine management at all level	• Vaccine monitoring. • Vaccine forecasting.	CHD	Ongoing

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
by 2020			• Capacity strengthening in vaccine management. • Introduction of MDVP and VVM based vaccine management. • Vaccine wastage monitoring		
2.4: strengthen vaccine safety at all levels by 2020	Injection safety practiced appropriately	Reduced adverse events following immunizations	• Surveillance and response to Adverse Events following Immunization. • Procuring vaccines from sources that meet recognized quality standards. • Quality Assurance and regulatory guidance for vaccines and supplies	CHD	Ongoing
2.5: to strengthen cold chain management and distribution of new cold chain equipment by 2020	Vaccine managed appropriately at all level and good storage capacity	supply of potent vaccines	• Replacement of dysfunctional or inappropriate cold chain equipment. • Improve cold chain management and monitoring at all levels	CHD	Ongoing
2.6: to strengthen logistic management at all levels by 2020	Employment of a logistician	Proper management of immunization Logistics	Monitoring of logistics at all levels	CHD	1 year
2.7: introduce new vaccines and technologies by 2020	Hib vaccine, Pneumococcal, and Rotavirus vaccines and MMR introduced	Hib vaccine incorporated in the immunization schedule	• Assess the disease burden, cost and cost effectiveness of potential new vaccines and technologies • Review the long term financing for potential new vaccines and technologies	CHD	4 Years
2.8: establish emergency triage and treatment	Deploy the ETAT strategy in all hospitals	ETAT rolled out to all hospitals in the country	Train hospital nurses and doctors in ETAT	CHD	4 years

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
(ETAT) in all hospitals in the country by 2020					
STRATEGIC OBJECTIVE 3: TO DEVELOP AND IMPLEMENT A HUMAN RESOURCE PLAN ON PUBLIC HEALTH					
Health Promotion & Education Division 3.1: To increase number of establishments for public health professionals	Public Health Professionals (PHP) increased	% increase of PHP	• Courses on PH • Established PH school	DPH – HR	
Mental health and Rehabilitation Service Division 3.1: To upscale the rehabilitation and mental health services	Number of rehabilitation and Mental Health Professionals increased	• Availability of new programmes • Public health specialised training plan	• Review of current programmes • Recruitment of new required officers.	RMHD	Year 2
3.2: To increase number of establishment for public health professionals	Number of Public Health Professionals increased	Number of Public Health Professionals	• Advocacy with DPSM and MFDP. • Implement attraction and retention plan	Ministry Management	1 year
Sexual & Reproductive Health Division 3.1: i) To increase human resource establishment for SRH ii) To build human resource capacity for SRH	• Increased human resource • Skilled and competent SRH personnel	• Improved SRH services • Retention of SRH staff	• Recruit adequate and appropriate SRH personnel • Improve implementation of retention policy • Advocate for implementation of the "R" in PBRS	SRH Division	10 years

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
Child Health Division 3.1: To increase number of establishment for public health professionals	Number of Public Health Professionals increased				
STRATEGIC OBJECTIVE 4: TO PROVIDE ADEQUATE RESOURCE (FINANCIAL AS WELL AS MATERIAL) FOR ALL PUBLIC HEALTH PROGRAMMES AND PLANS					
Health Promotion & Education Division 4.1: To increase budget for PH programme	Public Health Budget increased	Proportion of PH budget	Lobby and advocate for PH budget	• DPH – Admin accounts • DPH – Divisions	
Mental health and Rehabilitation Service Division 4.1: To upscale the Rehabilitation and Mental Health Services	Number of rehabilitation and mental health programmes established	Programme specific budget.	• Consultations on creation of votes • Development of proposal based on recommendations on programme /policy reviews	RMHD	Year 2
Sexual & Reproductive Health Division 4.1: To advocate for activity/result based budgeting	Equitable distribution of financial resources	Increased attainment of results	Develop and implement costed plans	SRH Division	10 years
Child Health Division 4.1: To increase budget for CHD programmes	Increased budget	Budget			

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
STRATEGIC OBJECTIVE 5: TO ESTABLISH A ROBUST INFORMATION AND RESEARCH SYSTEM FOR EFFICIENT, EFFECTIVE, INNOVATIVE AND EVIDENCE-BASED PUBLIC HEALTH INTERVENTIONS					
Health Promotion & Education Division 5.1: To establish and functionalise an online surveillance system.	Functional surveillance system	Surveillance system in place	• Establish Information Management System • Establish research agenda (Areas of concern)	• DPH – Divisions • DPPME - IT	
Mental health and Rehabilitation Service Division 5.1: To establish Information Management Unit.	Information management unit established	• Identified responsible officers • Orientation of responsible officers	• Benchmarking with well-established management systems in sister divisions. • Capacity building of responsible officers • Develop/Review and harmonise data flow and Data collection tools for inclusion of disability and Mental Health issues.	RMHD	Year I
5.2: To conduct researches and studies for evidence based implementation strategies and programme.	Researches and studies conducted.	• Availability of information management system. • Work plan/ framework	• Mobilisation of resources • Development of proposal • Set up technical working group	RMHD	Year 3
Sexual & Reproductive Health Division 5.1:To improve management of information and research	• Local research references	• Availability of local evidence based SRH operational research	• Conduct SRH operational research/studies/survey	SRH Division	10 years

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
system for SRH division	• Up to date SRH database	• Improved SRH MIS	• Develop SRH database		
Child Health Division 5.1: To interrupt polio transmission and maintain polio free status by 2020	Polio free Country	No polio out break in Country	• Develop Epidemic preparedness & plan outbreak response • Maintain Certification level AFP surveillance & containment	Child Health Division	
5.2: To maintain measles elimination by 2014	Measles cases reduced	Reduction of reported measles cases	• Conduct Measles Follow-up campaigns • Strengthen Case-based surveillance • Maintain high measles routine immunization coverage at > 95%	Child Health Division	4 years
5.3: To maintain Maternal Neonatal Tetanus (MNT) elimination through 2020	Maternal Neonatal Tetanus maintain	Zero reporting of tetanus toxoid	• Maintain MNT surveillance • 5 dose TT vaccination schedule	Child Health Division	3 years
5.4: To strengthen surveillance activities for all vaccine preventable diseases	Surveillance activities strengthened	Harmonised surveillance report	Strengthen IDSR activities including for Hib, rubella, and other diseases of public health importance	CHD	On going
5.5: To strengthen appropriate laboratory network for vaccine preventable diseases	Appropriate laboratory network for vaccine preventable diseases strengthened		• Commodity security for laboratory reagents. • Capacity building for laboratory service delivery. • Expand the existing laboratory network	CHD	
5.6: To conduct Health Facility Survey on IMCI	Survey conducted	Survey results	• Source funds • Contact stakeholders	CHD	2 Years

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
implementation			• Conduct the survey		
STRATEGIC OBJECTIVE 6: TO ENHANCE COMMUNITY INVOLVEMENT AND PARTICIPATION FOR INDIVIDUALS AND COMMUNITIES TO TAKE RESPONSIBILITY FOR THEIR OWN HEALTH AND HEALTH RISKS					
Health Promotion & Education Division 6.1: To increase awareness on NCDs and their risk factors among the population	NCD and risk factors decreased	• Physical activity rate among the population • Awareness increased on Diabetes, Cancer, Hypertension, unhealthy eating practices, alcohol and substance abuse.	• Conduct a baseline qualitative study (KAP) on NCD's to establish level of awareness • Develop different IEC materials on NCDs and NCD risk factors (tobacco use, unhealthy eating, harmful use of alcohol, physical inactivity) for different target groups: • Disseminate information on access to user friendly alcohol rehabilitation services • Form partnerships with different stakeholders • Regular meetings with relevant stakeholders • Integrate NCD information into existing systems (web, establish toll free lines, libraries, • Conduct regular health campaigns. • Strengthening and support social action groups.	DPH – Divisions	
6.2: To increase awareness on childhood illnesses and their risk factors.	Mobility and mortality reduced among children	Mobility and mortality rates among children	• Strengthen immunization interventions especially among hard to reach population. • Promote child wellness events • Strengthen collaboration with	DPH – Divisions	

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
			Traditional health Practitioners/Traditional Birth Attendants. • Conduct regular health campaigns. • Strengthening and support social action groups.		
6.3: To increase awareness on risks associated with geriatrics.	Improved coping mechanism.	• Reduced rates of injuries and psychosocial manifestations. • Social support increased	• Establish geriatric programmes • Strengthening and support social action groups and /or establish social support groups for old people. • Establish geriatric friendly services. • Conduct regular health campaigns.		
6.4: To increase awareness on Communicable Diseases and their risk factors.	Communicable diseases and risk factors degreased	Awareness increased	• Develop different IEC materials on CDs and CD risk factors (TB, Malaria, STIs, HIV&AIDS) for different target groups: • Conduct regular health campaigns. • Form partnerships with different stakeholders • Regular meetings with relevant stakeholders • Integrate CD information into existing systems (web, established toll free lines, libraries) • Strengthening and support social action groups.	DPH – Divisions	

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
Mental health and Rehabilitation Service Division 6.1: To promote Community based programming initiatives	Community based initiatives developed.	• Functional programmes initiated by communities. • Projects/ programmes managed by individuals/community members.	• Community Mobilisation (Including community leaders) • Enhancement of donor participation • Consultation with the communities on community programming initiatives. • Formation and revival of community based committees. • Public education/Training • (Health information to people with disabilities)	RMHD	Year I
Environmental & occupational Health Division 6.1: To increase awareness on NCDs and their risk factors among the population	• Increased knowledge on health risks • Improved attitude towards health risks avoidance • Increased health service utilization	• Knowledge on health risks • Attitude towards health risks avoidance • Health service utilization trend	• Conduct a baseline qualitative study (KAP) on NCD's to establish level of awareness • Develop different IEC materials on NCDs and NCD risk factors (tobacco use, unhealthy eating, harmful use of alcohol, physical inactivity) for different target groups: • Disseminate information on access to user friendly alcohol rehabilitation services • Form partnerships with different stakeholders • Regular meetings with relevant stakeholders	Disease Control	

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
			• Integrate NCD information into existing systems (web, establish toll free lines, libraries)		
Sexual & Reproduction Health Division 6.1: To increase and improve public awareness on SRH risk factors	• Improved public awareness • Functional SRH community support groups	• Early and improved health seeking behaviour • Increased community participation in SRH programmes by all groups	• Develop IEC materials on SRH risk factors • Disseminate IEC materials • Establishment of SRH community support groups	SRH Division	10 years
Child Health Division 6.1: To improve family and Community – IMCI	Functional C-IMCI in all districts	C-IMCI	• Formation of C-IMCI working groups in all districts • Strengthening of the c- IMCI working groups activities • Supportive supervision of C-IMCI working groups	CHD	3 Years
STRATEGIC OBJECTIVE 7: TO ESTABLISH AND FUNCTIONALIZE EFFICIENT AND EFFECTIVE MANAGEMENT OF PH PROGRAMMES THAT FOSTER COORDINATION AS WELL AS PARTNERSHIP					
Health Promotion & Education Division 7.1: To conduct an organisational audit of the MOH and its departments	New organogram of the MOH developed with appropriate job description and functional linkages.	• New organogram • Job descriptions • Working modalities with reporting lines	• Engage a consultant to conduct institutional review • Assess the institutional review report with key stakeholders. • Develop and adopt an organogram of the MOH with appropriate reporting and coordination. • Develop job descriptions	DPH – Divisions	

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
7.2: To strengthen collaboration and partnership with private and NGOs for effective management of PH programmes.	• Programmes effectively managed • Improved working relationship • Strong partnerships and networks	• New partners • Sustainable programmes • Quality services	• Identify partners • Lobby and advocate for partnership • Mainstreaming public health programme into existing private health structures. • Strengthening linkages with civil societies and media in an informed and mutually supportive way	DPH – Divisions	
7.3: To facilitate establishment of Alcoholic Anonymous Association	AAA established and providing counselling services	Number of AAA established and functional	• Conduct stakeholder consultations with NGOs • Prepare a proposal for establishing AAA. • Provide budget and set AAA		
Mental health and Rehabilitation Service Division 7.1: To strengthen coordination of Community based Rehabilitation and Mental Health programmes.	Coordinated Community based rehabilitation and Mental Health programmes established	Programme coordinators Operational structure	• Consultation with stakeholders • Develop organisational • Monitoring and evaluation system. • Establishment of Rehabilitation structure at the local level. • Establishment of Mental structures at the local level.	RMHD	Year 2
Sexual & Reproduction Health Division 7.3: To improve and strengthen coordination	Functional SRH Coordination structures	Improved coordination of SRH services	Establish and strengthen coordinating structures for SRH	SRH Division	10 years

Strategic Objectives	Outputs	Indicators towards achievement	Strategic actions	Lead responsibility	Timeframe
structures for SRH services			services		
Child Health Division 7.1: To ensure availability of a Divisional organ gram	• New organogram of the CHD developed with appropriate job description and functional linkages.	• New organogram • Job descriptions • Working modalities with reporting lines	• Develop and adopt an organogram of the CHD with appropriate reporting and coordination • Develop job descriptions	CHD	1 year
7.2: To strengthen capacity for planning, organization and management to support EPI service delivery at all levels by 2020	Capacity strengthened	Skilful personnel on planning and managing of EPI issues	• Training health workers on EPI Mid level management course. • Regular monitoring and evaluation of programme performance at all levels • Strengthen management of human resources to support EPI service delivery • Strengthen motivation of health workers, particularly those in hard to reach areas • Build coordination with National Registration for births and deaths registration	Child Health Division	1 year
7.3: To strengthen the partnerships with other stakeholders in child care by 2020	Functional Inter-agency Coordinating Committee (ICC)	Quarterly ICC meeting with report regarding progress in reduction of maternal and infant mortality	• Strengthen ICC coordination of joint support systems such as financing, transport & communication • Strengthen coordination of joint interventions such as IDSR, Vitamin A supplementation, and IMCI	Child Health Division	1 year

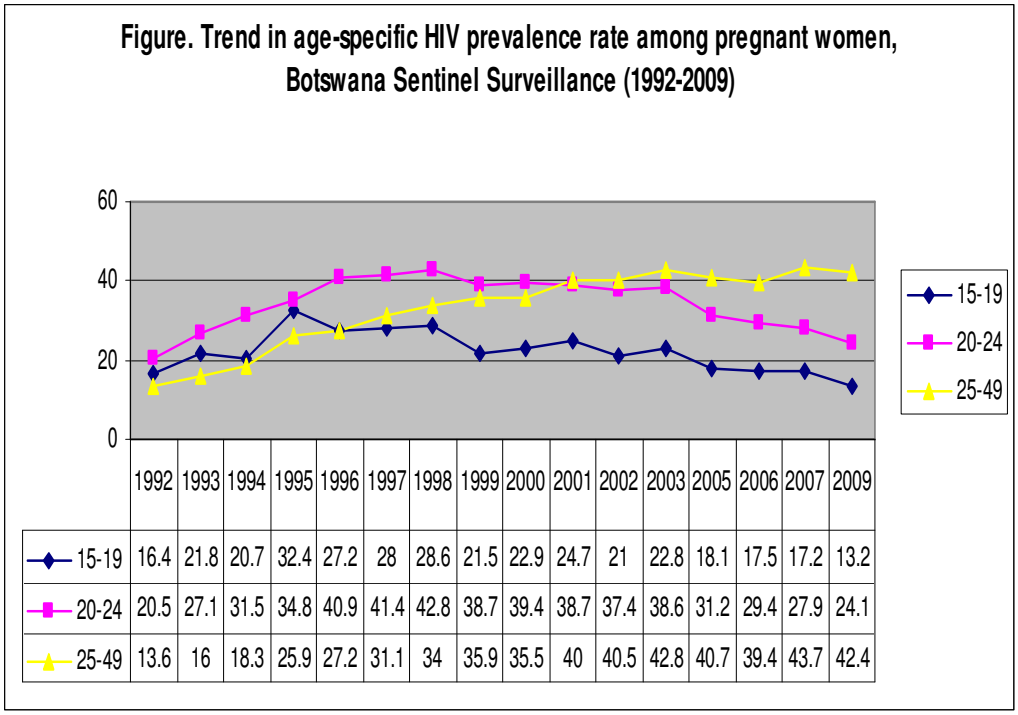
4.4 Strategic Plan for the Health Sector HIV/AIDS Prevention and Control

4.4.1 HIV/AIDS Context in Botswana

The HIV prevalence in Botswana was 17.6% in 2008 (BAIS III), marginally higher than in 2004 (17.1%, BAIS II). The figures show gender and urban/rural disparities in HIV prevalence. In 2009, the overall prevalence of HIV in females was 20.4% compared to 14.2% in males (BAIS III). This is comparable to overall prevalence rates in 2004 (19.8% in females; 13.9% in men). HIV prevalence in urban areas continues to be higher than that in rural areas (22.1% vs. 16.6%).

Since 1992 sentinel surveillance has been used to monitor HIV prevalence trends among pregnant women aged 15-49, and as a proxy for prevalence among the general population (Figure 4). In 2009, a prevalence of 31.8% was recorded among pregnant women who accessed antenatal services in public health facilities. The figure reflects a decline from 36.2% in 2001. Among the 15-19 year age group, the highest peak was observed in 1995 at 32.4%, but by 2009 it had fallen to 13.2%. HIV prevalence among the 20-24 year age group is stabilising; however it continues to rise among the 25-49 year age group, probably because of longer survival among those on ART.

Fig 4: Trend in Age specific HIV prevalence rates among pregnant women



	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2005	2006	2007	2009
15-19	16.4	21.8	20.7	32.4	27.2	28	28.6	21.5	22.9	24.7	21	22.8	18.1	17.5	17.2	13.2
20-24	20.5	27.1	31.5	34.8	40.9	41.4	42.8	38.7	39.4	38.7	37.4	38.6	31.2	29.4	27.9	24.1
25-49	13.6	16	18.3	25.9	27.2	31.1	34	35.9	35.5	40	40.5	42.8	40.7	39.4	43.7	42.4

Source: Sentinel Surveillance Report, 2009

HIV/AIDS places a huge burden on the health system, but is also a broader development issue. Consequently, the health sector response led by the MOH entails institutional repositioning and nurturing solid inter-sectoral collaboration.

4.4.2 Goal of HIV/AIDS Prevention and Control

The overall goal of HIV/AIDS Prevention and Control is "to prevent new HIV infections and improve the quality of life of infected and affected populations by 2016".

4.4.3 Strategic Objectives by Thematic Area for HIV/AIDS

The strategies to achieve the goal outlined above have been split into four thematic areas.

a) Thematic Area 1: Preventing New HIV Infections

Main Strategic Objective: To prevent new HIV infections

Strategic objectives

i) To increase availability of quality HIV prevention services
ii) To increase demand for quality HIV prevention services
iii) To strengthen coordination and integration of HIV prevention initiatives in all health care services

b) Thematic Area 2: Systems Strengthening

Main Strategic Objective: To strengthen the capacity of the health system to support the HIV/AIDS health sector response in a coordinated and sustainable manner.

Strategic Objectives

i) To strengthen community and health systems capacity for Universal Access to quality, comprehensive and sustainable HIV and AIDS services
ii) To effectively coordinate partner support in the health sector response to HIV/AIDS
iii) To strengthen leadership commitment on HIV/AIDS at all levels
iv) To improve the ethical and legal environment for the health sector response to HIV/AIDS

c) Thematic Area 3: Scaling Up Treatment, Care and Support

Main Strategic Objective: To improve access to quality treatment, care, and support services for HIV and AIDS.

Strategic Objectives

i) To increase availability and demand for quality HIV/AIDS treatment, care and support services for infants, children, adolescents, and adults

ii) To improve quality of care for ART patients

d) Thematic Area 4: Strategic Information Management

Main Strategic Objective: To strengthen the information management system of the national response to enhance information sharing and utilization for evidence based planning.

Strategic Objective

i) Strengthen the health information system to enhance data generation and utilization for evidence based planning.

4.4.4 Health Sector HIV/AIDS Strategic Plan

Strategic Objectives	Outputs/indicators	Strategic actions	Lead responsibility	Timeframe
THEMATIC AREA A: PREVENTING NEW HIV INFECTIONS				
1.1: To increase availability of quality HIV prevention services	• Percentage of adults aged 15-49yrs who both correctly identify ways of preventing sexual transmission of HIV and who reject major misconceptions about HIV transmission increased from xx% in 2008 to y% in 2016	• Strengthen capacity of civil society organizations (CSOs) to deliver community-led HIV prevention initiatives		
	• Percentage of people aged 15-24 yrs who report using condoms with their casual partners in last 12 months increased from x% to y% by 2016	• Intensify public education on HIV prevention in the homes, schools, workplaces, community and health facilities • Strengthen social dialogue on socio-cultural aspects that fuel the spread of HIV infection e.g. MCP, intergenerational sex		
	• Proportion of women and men aged 15-49 yrs who had more than one sexual partner in the past 12 months reporting the use of condom during their last sexual intercourse	• Strengthen HIV prevention services for People With Disabilities (PWD) at health facility and community levels		
	• % of women and men aged 15-49yrs who received an HIV test in the last 12 months and who know their results	• Strengthen HIV prevention services for most at risk populations (MARPs), including sex workers, men who have sex with men, etc • Strengthen interventions for Promotion of Health Dignity and Prevention • Strengthen availability of Adolescent Sexual and Reproductive Health (ASRH) and Youth Friendly Services		

Strategic Objectives	Outputs/indicators	Strategic actions	Lead responsibility	Timeframe
	• % of donated blood units screened for HIV in a quality assured manner • % of infants born to HIV infected mothers who are infected • % of HIV-positive pregnant women who received HAART to reduce MTCT	• Strengthen and expand workplace programmes for HIV prevention • Strengthen condom programming and implementation of the national condom strategy at national and district levels • Improve gender sensitive health programming on HIV and AIDS knowledge, life skills and abstinence (primary & secondary abstinence)		
	• Rate of mother to child transmission of HIV reduced from 4% in 2009 to <1% by 2016 • % health workers who are eligible for Post Exposure Prophylaxis (PEP) who actually received PEP services • % of rape victims eligible for PEP who received PEP services	• Improve Parent-Child communication on sexual and reproductive health including HIV and AIDS • Enhance Youth-Adult partnerships across all levels of social interaction • Expand HIV Testing and Counselling services for children, adolescents, youth, people with disability, couples and adults at community and health facility levels by 2016 • Increase access to comprehensive PMTCT services with a focus on early infant diagnosis, paediatric ART services, infant and young child feeding services • Strengthen capacity of service providers for delivery of quality PMTCT services as an integral component of Sexual and Reproductive Health services • Increase access to Sexual and Reproductive Health (family planning) services for HIV infected women • Increase access to Safe Male Circumcision education among men, women as partners, guardians and parents • Scale-up Safe Male Circumcision services nation wide • Strengthen Public- Private Partnership for the		

Strategic Objectives	Outputs/indicators	Strategic actions	Lead responsibility	Timeframe
		provision of safe male circumcision		
	• % of eligible males aged 0-49 yrs who are circumcised in health facilities (stratified by age, gender, MARP status)	• Increase access to integrated STI/HIV and alcohol/substance abuse prevention services • Intensify both passive and active partner tracing among STI clients • Strengthen HIV prevention in clinical and medical settings • Improve health facilities and household clinical waste management by different stakeholders • Improve access to PEP services for eligible individuals including health workers • Enhance knowledge and skills on infection control among health workers in health facilities and community settings • Improve capacity of Botswana National Transfusion Services (BNTS) to ensure provision of safe blood and blood products • Increase availability of blood for transfusion through public education of different target groups on blood donation as a life saving strategy • Strengthen provision of integrated SRH /STI/counselling services in blood donation interventions		
1.2 Increase demand for quality HIV prevention services	• Proportion of community members having received HIV prevention education/messages from community mobilization activities • Proportion of women attending PMTCT services with male partners	• Strengthen community mobilization and empowerment for HIV prevention • Improve development of target specific prevention messages/materials • Strengthen utilization of multi-media approaches to create demand for HIV prevention services • Strengthen referral mechanisms within the		

Strategic Objectives	Outputs/indicators	Strategic actions	Lead responsibility	Timeframe
	• Proportion of clients attending facilities for HTC services as couples • % facilities with infection control systems in place	health system and between health facilities and community structures for effective utilization of HIV prevention services • Promote utilization of PEP services among health care workers, care givers and rape clients • Intensify adherence, compliance and utilization of infection control standards by health care workers • Intensify public education on Safe Male Circumcision • Intensify public education on infant and young child feeding and counselling practice services • Mobilize communities for improved male involvement in SRH, PMTCT, HIV and STI services • Increase community mobilization to increase utilization of male and female condoms among 15-49 yr olds with special focus on MARPs • Strengthen community mobilization to increase utilization of HIV prevention services by youth and adolescents, PWD, PLWHIV and MARPs • Increase community mobilization to increase utilization of HIV testing and counselling services by children, adolescents and couples		
1.3 To strengthen coordination and integration of HIV prevention initiatives in all health care services	• % of District Multi-sectoral AIDS Committees (DMSACs) with 60% implementation rate of a multi-sectoral annual HIV prevention plans • % of functional national and district coordination structures	• Strengthen national and district coordination structures for effective delivery of HIV prevention services • Improve collaboration and networking between health facilities and community health service delivery structures • Strengthen Referral linkages between		

Strategic Objectives	Outputs/indicators	Strategic actions	Lead responsibility	Timeframe
	• % of districts with District Partnership Forums held at least twice in the past 12 months and discussed HIV prevention	community structures and health facilities to facilitate referral for HIV prevention • Promote partner involvement and participation in joint health sector review and planning for monitoring implementation of health sector response • Strengthen partnerships among community structures • Improve collaboration and networking among workplace stakeholders at national and district levels • Expand and strengthen collaboration between VCT stakeholders and national blood transfusion services for effective and efficient blood transfusion services		
THEMATIC AREA B: SYSTEMS STRENGTHENING				
2.1 To strengthen community and health systems capacity for Universal Access to quality, comprehensive and sustainable HIV and AIDS services	• Number of CSOs with capacity to deliver minimum package of HIV/AIDS services • Percentage of CSOs monitored for delivering HIV/AIDS services as per essential health or minimum package in the last 12 months • Percentage of health facilities that meet basic service delivery capacity standards • Number of health workers deployed according to HRH Plan • Percentage of facilities that keep adequate logistics data for inventory management • Number of stock-outs of medicines, diagnostics at facility	• Strengthen social dialogue on policy analysis at national & district level • Enhance CSOs' institutional capacity for policy and strategy formulation , development and partner coordination and management • Strengthen capacity of CSOs to provide health care services (financial, human and materials resources including infrastructure and equipment • Strengthen interpersonal relations between providers and patients and Community groups • Improve provision of technical support for delivery of HIV and AIDS services by CSOs • Enhance health components of poverty reduction strategies and income-generating activities into health related community empowerment initiatives • Facilitate regular/periodic customer		

Strategic Objectives	Outputs/indicators	Strategic actions	Lead responsibility	Timeframe
	level • Number of stock-outs of medicines and diagnostics at national level including expires	satisfaction survey in health facilities and CBOs/FBOs • Strengthen interpersonal relations between service providers ,patients and Community groups • Improve health system/sector leadership capacity for policy analysis ,monitoring & evaluation the performance of health system and health system management • Improve quality management systems • Intensify regulation to ensure safety, efficacy and quality of drugs • Improve capacity of leadership and management on soft skills for people management • Strengthen integrated management of neonatal and childhood illnesses in all health facilities. • Facilitate implementation of the national Human Resources for Health Plan • Improve productive capacity of tertiary institutions for health for health professionals • Improve management of Human Resource for Health • Improve health sector standards and norms for delivery of quality HIV/AIDS services • Strengthen integration of HIV prevention services in all health care settings • Scale-up provision of integrated services for management of both HIV and non-communicable diseases • Improve quality of HIV testing and counselling services in public, private and CSO settings • Improve monitoring of service delivery among CSOs and health facilities		

Strategic Objectives	Outputs/indicators	Strategic actions	Lead responsibility	Timeframe
		• Strengthen Supply Chain Management for medicines, diagnostics and related supplies at national and district levels • Improve the capacity of Central Medical Stores to meet the national demand for medicines, diagnostics and related medical supplies • Facilitate local production of drugs and other pharmaceutical products		
2.2 To effectively coordinate partner support in the health sector response to HIV/AIDS	• Percentage of partner plans aligned to national priorities • Number of functional health sector coordination structures at all levels • Percentage of CBOs surveyed for customer satisfaction • Percentage of health facilities surveyed for customer satisfaction	• Strengthen partner alignment and harmonization of aid to national priorities and strategies • Improve coordination of partner support at national and district level • Strengthen capacity of Botswana Business Coalition on AIDS for improved coordination of private sector participation in the health sector response • Strengthen collaboration and coalition building across sectors and CSOs for addressing key determinants of health • Enhance mechanisms for accountability of health sector partners for delivery of quality services at all levels • Strengthen coordination of health sector stakeholders at national and district levels • Improve systems for coordination and management of technical support from partners at national and district levels • Facilitate regular customer satisfaction survey in health facilities and CBOs		
2.3 To strengthen leadership commitment	• Proportion of resources allocated to the health sector HIV/AIDS	• Strengthen advocacy for sustained leadership commitment on HIV and AIDS Resources		

Strategic Objectives	Outputs/indicators	Strategic actions	Lead responsibility	Timeframe
on HIV/AIDS at all levels	response • Number of organizations practicing matching of funds	• Strengthen coordination and financial aid management for effective health sector response • Promote a culture of matching funds among health sector stakeholders during planning implementation, monitoring and evaluation • Enhance diversification of health sector financing sources • Strengthen joint planning, implementation & monitoring to avoid duplication of effort • Strengthen integration of HIV and AIDS interventions into sectoral corporate and business strategies • Expand Public-Private Partnership for improved service delivery		
2.4 To improve ethical and legal environment for health sector response on HIV/AIDS	• % of communities informed of ethical and legal aspects of HIV and AIDS	• Enhance support for community involvement for advocacy for improved policy, legal and governance environment for HIV/AIDS • Empower leadership and legal system drivers for effective advocacy on HIV/AIDS-related legal and policy limitations • Facilitate implementation of policies and strategies that address equity and gender equality commitments including gender based violence • Improve occupational health and workplace safety measures • Strengthen stigma and discrimination reduction interventions at workplaces, schools, family and Community		
THEMATIC AREA C: SCALING UP TREATMENT, CARE AND SUPPORT				
3.1 To increase availability and demand	• % of community members with accurate knowledge of treatment,	• Improve capacity of CSOs, CHBC, CBOs, FBOs, NGOs to deliver community-led		

Strategic Objectives	Outputs/indicators	Strategic actions	Lead responsibility	Timeframe
for quality HIV/AIDS treatment, care and support services for infants, children, adolescents and adults	care and support services available at local health facility • % of eligible PLWHIV accessing ART • Increase proportion of eligible infants accessing ART from X% in (year) to Y% in 2016 • Increase proportion of eligible children and adolescents accessing ART from X% in (year) to Y% in 2016 • Increase proportion of eligible adults accessing ART from X% in (year) to Y% in 2016 • Proportion of community members having accurate • knowledge of treatment, care and support services available at local health facility • Proportion of eligible people utilizing care and treatment services (stratified by age (infants, children, adults) and gender) • % of orphaned and vulnerable children aged 0-17 yrs whose households received free basic external support in caring for the child	treatment, care and support initiatives • Strengthen capacity of health facilities to deliver comprehensive, quality treatment, care and support services • Increase access to treatment, care and support services for eligible infants, children, adolescents, youth, adults, PWDs, and pregnant women • Strengthen and expand provision of specialized treatment, care and support services at peripheral facilities • Accelerate the implementation of National Accelerated Child Survival and Development strategy • Facilitate provision of palliative care services in health facilities and at community level • Scale up care and support services at community level for People Living With HIV • Strengthen the capacity of the health facility laboratories and national laboratory to meet the demands for diagnostic tests and regular monitoring • Strengthen treatment and management of STIs • Strengthen social services and other related CBOs, NGOs for effective delivery of services to orphans and vulnerable children based on the family-centred plan for their protection care and support • Increase access to psychosocial support for HTC clients and discordant couples • Improve public education on treatment, care and support services during contact with health services • Increase utilization of treatment, care and support services for eligible infants, children,		

Strategic Objectives	Outputs/indicators	Strategic actions	Lead responsibility	Timeframe
		adolescents, youth, adults, PWDs and pregnant women		
3.2 To improve quality of care for ART patients	• % of patients who, during a selected time period, demonstrate >90% adherence by pill count • % of PLHIV (adults and children) alive on ART 12 months after initiation of antiretroviral therapy • % of HIV positive patients screened for TB at each visit • % of eligible patients placed on IPT • % national treatment failure rate for patients on ART • % of health facilities that monitor clients for secondary drug resistance	• Strengthen adherence education and counselling for all persons on ART at community and individual levels • Improve the provision of ongoing psychosocial support at community and health facility level • Strengthen management of co-morbidities and treatment- associated complications • Strengthen integration of TB/HIV services at all levels of care including effective management of other opportunistic infections • Strengthen Systems capacity for management of MDR/HIV • Improve the capacity for contact tracing for sputum positive patients and contacts of MDR • Strengthen monitoring of secondary drug resistance • Improve management of clinical waste/hazardous health care wastes from facilities and households • Strengthen collaboration with stakeholders to ensure safe waste disposal practices		
THEMATIC AREA D: STRATEGIC INFORMATION MANAGEMENT				
4.1 Strengthen health information system to enhance data generation and utilization for evidence based planning	• Routine M&E reports produced monthly and annually • Health Sector Report produced annually • Programme and consolidated reports produced to track progress in implementation of health sector interventions • Proportion of programmes	• Improve country Health Information Management Systems to generate routine, quality information (data) for decision making at all levels • Strengthen and expand surveillance to monitor the dynamics of the epidemic and impact of interventions • Increase proficiency in information technology among service providers for quality data		

Strategic Objectives	Outputs/indicators	Strategic actions	Lead responsibility	Timeframe
	informed by generated information • Proportion of HIV and AIDS budget allocated to M&E • Proportion of programmes informed by research and evaluation findings	management • Improve infrastructure for strategic information management • Improve capacity of CBOs, health facilities and District Health Management Teams for strategic information and knowledge management for decision making • Strengthen capacity in monitoring and evaluation of health system performance • Strengthen e-health • Increase sharing of information and provision of feedback across all levels and among stakeholders • Strengthen utilization of generated information for decision making at all levels • Strengthen collaboration between tertiary institutions and Health Research Unit for implementation of the health research agenda through academic fulfilment research • Improve capacity for data management, program performance monitoring, operational research and evaluation within the health sector		

5. STRATEGIC PLAN: HUMAN RESOURCES FOR HEALTH

5.1 Overview

The goal of the human resource (HR) strategy is to ensure an appropriately skilled, motivated, well-distributed, and productive workforce providing quality health services effectively and efficiently to all the people living in Botswana. It is designed to support the new service delivery plan for Botswana 2010-2020.

The major employer in the Botswana health sector is the public sector; since 1 April 2010 the sole public sector employer is the MOH. Previously the Ministry of Local Government (MLG) was responsible for primary health care services and employed approximately 5,500 health staff. These health workers have been transferred to the MOH, which now employs a total of approximately 15,500 health workers. In addition, it is estimated that about 10-20% of total health workers in Botswana are employed in the private sector.

It is generally accepted that the main human resources for health challenges are an inadequate number of health professionals and inequities in the geographical distribution of health workers, particularly in remote areas.

The local labour market in Botswana is such that despite an adequate pool of school leavers and graduates for the available training opportunities in health, regional and global market forces result in many health care professionals migrating to other countries. The country therefore relies heavily on recruiting workers from other countries to meet human resource gaps.

The analysis in this strategy is based on the best available statistics and supported by qualitative analysis from key informant interviews and stakeholder consultation.

The key human resource issues and challenges identified are:

- Shortage of health professionals.
- Inequitable distribution of health professionals, particularly in remote areas.
- Ensuring staff have the necessary skills.
- Improving the performance and motivation.
- Establishing a co-ordinated approach to HR planning for the health sector, including integrated HR information systems.

These challenges are described in more detail in the following sections.

5.1.1 Shortage of health professionals

Problems in the recruitment, attraction, retention, and deployment of skilled staff significantly restrict the ability of the MOH to deliver the required health services, particularly in remote areas.

The introduction of new programmes, especially those relating to HIV/AIDS, also places increasing demands on the already overstretched workforce.

The previous HR strategic plan indicated a 7% vacancy rate (with over 1,000 vacancies) and identified the need for an additional 10,000 new posts. With the relocation of primary health care within MOH, as well as the development of HR norms by levels of care, the vacancy rate cannot be calculated at this moment. The completion of the HR information system and the creation of posts to meet MOH staff norms will provide actual information of vacancies.

There is a major shortage of health professionals in general, and in particular of doctors, pharmacists, and specialist nurses. There is also a perceived shortage of public health professionals at the central MOH and at the District Health Management Team level, including lack of expertise for effective data analysis and presentation.

The ESHP is a key part of the new ten-year health service plan. The key shortages identified for the delivery of the EHSP are among Medical Officers, Medical Specialists, Pharmacists, Specialist Nurses (midwives, ophthalmic, paediatrics, mental health, intensive care, and ITU), Radiographers, and Laboratory Staff.

There are also inadequate facilities for the production of health professionals, and so many of them are trained outside the country. However, once training is completed not enough qualified staff, and in particular doctors, are returning to Botswana to take up employment opportunities in the health sector.

Bonding agreements exist but do not function well, with too many not being honoured and or grants repaid. There is little information about the precise numbers of bonding agreements honoured and no effective procedure to follow up those not returning to Botswana. Therefore there is no clear understanding about why this is occurring.

In order to alleviate staff shortages a large number of expatriates (foreign health professionals) are recruited to the health sector. The MOH Infinium HR system has data for December 2007 (latest available data), showing 737 foreign health professionals employed by the MOH, of which 173 Medical Officers. It has been noted that expatriates do not stay for long and that there can be resentment among others who do not have the same favourable terms and conditions of employment. Table 7 shows the type of expatriates employed in 2007.

Table 7: Number of expatriates employed as at December 2007

Type of expatriate	Number
Medical Officers	173
Specialists	44
Consultants	33
Dental Specialists	2
Pharmacists	49
Pharmacy Technicians	49
Nurses	213
Clinical Psychologists	3
Radiography Officers	33
Radiographers	28
Medical Scientific Officers	56
Medical Laboratory Technicians	37
Physiotherapists	15
Occupational Therapists	2
Total	**737**

Source: MOH Infinium HR system

The main bottleneck in the production of staff trained in country appears to be the availability of appropriate lecturers. A list of the different types of health professionals, identifying where they can be trained is contained in Annex 1.

There is therefore a clear need to develop and implement a recruitment, attraction, and retention strategy to address the shortage of key health professionals. It is recognised that work in this area is already in progress, including for example the recent initiatives to attract retired nurses back to work and the utilisation of private doctors to provide specialist services, but a greater focus on this is required.

5.1.2 Inequitable distribution of health professionals

The distribution of human resources is markedly skewed, especially for doctors. For example, Gaborone and Francistown have 42.6% and 15.4% respectively of the total number of medical professionals in Botswana, even though Gaborone has a population of 180,000 (10% of total population) and Francistown of 80,000 (4% of total population). However for nursing the distribution is more equitable, with only about 11% of all nurses working in Gaborone and about 4.5% of all nurses working in Francistown. The distribution of health personnel by health districts is shown in Annex 2.

It is therefore necessary to address the inequitable distribution of some health professionals to reflect broader population needs.

5.1.3 Ensuring staff have the necessary skills

The key issues identified from discussions with stakeholders were:

- Lack of accessible data to identify current skills and skill gaps.

- Similarly, MOESD information on the numbers and types approved for health care professional training is not easily accessible.
- Training requests are not supported by a systematic formal training needs analysis, linked to meeting organisational and service delivery requirements.
- Training is not co-ordinated.
- Lack of a list of accredited out-of-country training institutions.

There is a need to address the way in which training is planned and delivered to improve the acquisition of the skills necessary to deliver the new ten-year health service plan.

Information on the location of training for the various types of health professionals, whether in or out of country, is contained in Annex 1.

As background information, Annex 3 contains the Institute of Health Sciences (IHS) outputs (i.e. the number of students who successfully completed the training programme) from 1997 to 2008. The current target enrolment for IHS health training is detailed in Annex 4.

5.1.4 Human resource performance and motivation

Having identified shortages in the number of staff and skills of health workers, it is important to ensure that the workforce is supported to perform at as high a level as possible. Following a SWOT analysis with key stakeholders, a number of performance and motivation issues were identified:

- Current management practices, such as the effective implementation of existing policies and procedures, should be improved to ensure staff performance is maximised.
- Recruitment/promotion practices, such as succession/career planning, should support staff to realise their full potential and effectively utilise their skills.
- Comprehensive HR policy implementation procedures should be in place.
- The need to ensure the quality of in-country pre-service and post basic training.
- The need to improve in-service training and development and the establishment of CPD opportunities.
- A need to ensure staff health and well-being.

All of these issues should be addressed as part of the strategy.

5.1.5 Establishing a co-ordinated approach to human resource planning for the health sector, including an integrated human resource information system

The importance of human resources to the delivery of the ten-year health services plan means that it is important to ensure that all human resources plans (for example, training and recruitment) are co-ordinated, integrated and harmonised.

Co-ordinated human resource (HR) planning across ministries and the health sector has yet to be fully established. For example there is no formal arrangement for information about the number of professionals being trained and produced to be made available on a regular basis to the MOH from the MOESD.

It is also apparent that capital planning and development is not supported by adequate HR planning and development.

A co-ordinated approach for HR planning will become increasingly important as investment is planned for more health care professional training within Botswana. Specifically, investment is planned for the University of Botswana and the development of the School of Medicine.

The information needed to support human resource planning is poorly developed and even basic human resource information is difficult to access. This also needs to be improved as part of the human resource strategy.

5.2 Human Resource Targets

Although it is clear there are human resource gaps, the lack of an HR information system means it is difficult to identify current staff in post. A review of current staff in post and the desired future staffing requirements is being conducted as part of the new ten-year health service plan. Staffing requirements will be based on staffing norms by levels of care; these will need to be periodically reviewed and updated. It is important that this work is prioritised to provide specific HR targets to be delivered by the human resource strategy.

Table 8 shows the staffing needs (key categories). The methods and assumptions for this exercise are:

- Community based and Clinic based staff numbers are based on population.
- Hospital based (PH, DH and RH) staff norms are based on service delivery models (i.e., no matter what workload these services are standardised) and number of beds.
- Population-based norms are derived from WHO recommendations and adopted to sparsely populated areas of Botswana.
- Hospital based norms are based on a multi-country study conducted by RTI-USA for the USAID Policy Project.
- Detailed utilisation and work-load study will be required to rationalise staff norms for hospitals as well as clinics.
- The number of beds for each level of hospitals is to be determined based on bed utilisation.
- A minimum of three years' past utilisation should be used for determining increases or decreases in the number of beds.

Table 8: Staffing requirements for the new service delivery model

Position Title	Grade	Average Salary (BWP)	Community Based Staff	District Based - Community	PHC based - Community	Primary Health Clinic	District based for PHC	Primary Hospital	District Hospital	Referral Hospital	TOTAL
Clinical Psychologist I	C1	111,354						32	20	8	**60**
Community Health Nurse	C1	111,354			240	754		64	40	10	**1,108**
Community Health Worker	C3	72,438	1,200								**1,200**
Consultant (A&E)	E1	293,940							20	6	**26**
Consultant (Anaesthesia)	E1	293,940						32	20	4	**56**
Consultant (Cardio-thoracic)	E1	293,940								4	**4**
Consultant (Chest)	E1	293,940								4	**4**
Consultant (General Surgery)	E1	293,940						32		4	**36**
Consultant (Geriatric)	E1	293,940								4	**4**
Consultant (infectious Diseases)	E1	293,940							20	4	**24**
Consultant (Intensive Care)	E1	293,940								4	**4**
Consultant (Maxilla-facial surgeon)	E1	293,940								4	**4**
Consultant (Neonatology)	E1	293,940							20	4	**24**
Consultant (Nephrology)	E1	293,940								4	**4**
Consultant (Neurosurgery)	E1	293,940								4	**4**
Consultant (Neurology)	E1	293,940								4	**4**
Consultant (O&G))	E1	293,940						32	20	8	**60**
Consultant (Oncology)	E1	293,940								4	**4**

Position Title	Grade	Average Salary (BWP)	Community Based Staff	District Based - Community	PHC based - Community	Primary Health Clinic	District based for PHC	Primary Hospital	District Hospital	Referral Hospital	TOTAL
Consultant (Ophthalmology)	E1	293,940							20	4	**24**
Consultant (Orthopaedics)	E1	293,940								4	**4**
Consultant (Paediatrics)	E1	293,940							20	8	**28**
Consultant (Pathology)	E1	293,940								8	**8**
Consultant (Physician)	E1	293,940						32	20	12	**64**
Consultant (Psychiatry)	E1	293,940								8	**8**
Consultant (Radiology)	E1	293,940							20	4	**24**
Consultant (Reconstructive Surgery)	E1	293,940								4	**4**
Consultant (Urology)	E1	293,940							20	4	**24**
Senior Medical Officer	D3	164,760						64	60	20	**144**
Medical Officer	D4	143,274				477		128	120	60	**785**
Chief Medical Officer	D1	217,878						32	20	4	**56**
ECG Technician	C1	111,354							40	8	**48**
Audiologist	D.2	180,084							20	4	**24**
Biomedical Engineer I	C1	111,354							20	4	**24**
Cyto-technologist	D4	136,188						32	20	8	**60**
Medical Laboratory Technician I	C3	72,438				477		64	60	16	**617**
Optician	D2	180,084							20	16	**36**
Orthodontist	D2	180,084								8	**8**
Orthotics	D2	180,084								8	**8**

Position Title	Grade	Average Salary (BWP)	Community Based Staff	District Based - Community	PHC based - Community	Primary Health Clinic	District based for PHC	Primary Hospital	District Hospital	Referral Hospital	TOTAL
Infection Control Officer	C1	111,354							20	4	**24**
Health Care Auxiliary	D4	143,274						160	100	20	**280**
Health Education Assistant	B4	27,264	1,500	39	3			64	60		**1,666**
Laboratory Scientist	C2	89,820						32	60	12	**104**
Laboratory Technician	B1	47,118				477		64	60	24	**625**
Social Worker	D3	164,760	1,500			954		32	80	16	**2,582**
Lay Counsellor	D4	143,274	3,600			1,432		64	40		**5,136**
Perfusionist	D2	180,084								8	**8**
Occupational Therapist Assistant	B3DR	32,724						32		4	**36**
Occupational Therapist I	C1	111,354						32	20	16	**68**
Phlebotomist	B3	32,724							40	12	**52**
Physiotherapist I	C1	111,354						32	20	40	**92**
Plaster Technician	B3	32,724							60	12	**72**
Senior Technical Officer (Optom) I	C2	89,820								20	**20**
Radiographer I	C1	111,354				477		32	20	8	**537**
Radiotherapist	D2	180,084						32	20	4	**56**
Senior Occupational Therapist	D4	143,274								4	**4**
Substance Abuse Officer	C1	111,354							20	4	**24**
Technical Officer(Health Education) I	C3	72,438						32	60	16	**108**

Position Title	Grade	Average Salary (BWP)	Community Based Staff	District Based - Community	PHC based - Community	Primary Health Clinic	District based for PHC	Primary Hospital	District Hospital	Referral Hospital	TOTAL
Ultrasonographer	D2	180,084						32	20	8	**60**
Pharmacist I	C1	111,354					1	32	40	12	**85**
Pharmacy Technician I	C3	72,438				477		64	60	24	**625**
Dental Officer	D4	143,274							20	8	**28**
Technical Officer(Dental) I	C3	72,438						32	60	24	**116**
Family Nurse Practitioner	C1	111,354						64	60	20	**144**
Matron I/Nurse Manager	C3	72,438						96	20	16	**132**
Other Specialist Nurses	C1	111,354							31	117	**148**
Ophthalmic Nurse	C1	111,354						32	40	12	**84**
Mental health Nurse	C1	111,354						32	40	16	**88**
Anaesthetic Nurse	C1	111,354						128	60	36	**224**
Theatre Nurse	C1	111,354						192	60	36	**288**
Diabetic Nurse	C1	111,354						32	20	12	**64**
ENT Nurse	C1	111,354						32	40	16	**88**
A&E Nurse	C1	111,354						160	80	24	**264**
Neonatal Nurse	C1	111,354						64	20	12	**96**
Midwife	C1	111,354				1,234		320	240	100	**1,894**
Registered Nurse	C1	111,354				2,468		1,152	840	480	**4,940**
Psychiatric Nurse	C1	111,354							60	20	**80**
Nurse manager	B1	47,118							80	48	**128**
Dietician I	C1	111,354						32	20	12	**64**
Nutritionist	C1	111,354		1			1		20	8	**30**

Position Title	Grade	Average Salary (BWP)	Community Based Staff	District Based - Community	PHC based - Community	Primary Health Clinic	District based for PHC	Primary Hospital	District Hospital	Referral Hospital	TOTAL
Nursing Assistants	B1	42,936								1 per 3.5 beds	**700**
Senior Theatre Assistant II	B1	47,118						64	120	36	**220**
Mental Attendant	B5DR	22,722							40	16	**56**
Paramedics	C3	53,232							80	40	**120**
Accountant I	C1	111,354						32	20	8	**60**
Accountant II	C2	89,820						32	60	16	**108**
Administration Officer I	B1	47,118				477			120	40	**637**
Domestic Supervisor I	C3	72,438							20	8	**28**
Data Clerk	B4	27,264				477		32	80	40	**629**
Hospital Manager I	E2	257,850							20	4	**24**
Hospital Manager II	D1	217,878						32	20	8	**60**
Hospital Superintendent I	E1	293,940							20	4	**24**
Hospital Superintendent II	E2	257,850								8	**8**
Medical Records Clerk	B4DR	27,264						64	80	20	**164**
Medical Records Officer	D4	143,274						32	20	8	**60**
Public Relations Officer	C1	111,354							20	8	**28**
Supplies Officer I	C3	72,438						32	40	12	**84**
Cleaners	B4DR	27,264				1,431		160	200	80	**1,871**
Messenger	B4DR	27,264				477		64	80	40	**661**
Transport Officer I	C3	72,438					28	32	40	8	**108**

5.3 Delivering Change

In establishing the strategy to deliver the human resource changes required, five guiding principles have been adopted, namely that any solutions should be:

- **Service led** – they should support the services required to respond to the health needs of the population.
- **Inclusive** – of all appropriate stakeholders.
- **Creative, flexible and responsive** – to adapt and respond to changing situations.
- **Supportive of an integrated approach** – and not place barriers.
- **Evidence based** – based on the best available evidence.

Using the above guiding principles, the Human Resource Strategy has identified five key strategic objectives to be delivered:

- Reducing the shortage of health professionals
- Improving the distribution of health professionals
- Ensuring staff have the necessary skills to deliver the required services
- Improving performance and motivation of human resources
- Co-ordination of human resource planning across the health sector, including an integrated human resource information system.

The following sections outline the key strategic work areas required to deliver these objectives. Details about the work programme are in Annex 5.

To support delivery of the human resources strategy work programme a more detailed pre-service and in-service training plan has been developed; this is included in Annex 6.

5.3.1 Strategic Objective 1: Reducing the shortage of health professionals

To reduce the shortage of health professionals, seven key strategic work areas have been identified:

1) Addressing known push and pull factors that influence attraction and retention.

   This will require the development and implementation of an attraction and retention strategy based on best available evidence. It is recognised that Botswana will need to continue to recruit expatriates to fill health professional posts; therefore the attraction and retention strategy will need to include addressing issues to improve the recruitment and retention of expatriates as well as nationals.

   There is a need to develop 'career ladders' and promotion opportunities for specialist nurses and specialist doctors, to ensure that promotional opportunities

are available in clinical settings, rather than managerial posts. This will help with the retention of specialist skills in a clinical setting.

2) Increasing the types of health professionals produced in-country.

   The assumption is that those who train in Botswana are more likely to stay and work in the country. Therefore increasing the types of health professionals produced in country will increase the availability of local health professionals.

3) Increasing production where current production is insufficient.

   A key issue to be addressed regards the retention and availability of IHS lecturers. The attraction and retention strategy will therefore need to include targeting lecturers.

4) Improving recruitment of students for health professional programmes.

   Some health professions suffer from an inability to recruit students. The MOH and the MOESD need to take the lead in marketing health professional careers in schools effectively. The MOH will need to develop and implement a comprehensive marketing plan.

5) Enhancing the targeted recruitment of retired health professionals.

   This will build on the 2009 initiative whereby a significant number of retired nurses were recruited. It will involve targeting all types of health professionals and will be supported by refresher training for the retirees recruited who have not practiced for a significant period of time.

6) Increasing public-private partnerships.

   The public and private sectors need to work together to identify opportunities for those health services dependent on scarce skills to be provided by the private sector.

7) Maximising the utilisation of existing health professionals.

   It is necessary to improve the utilisation of the health professionals currently in post; this can be done through:
   - ensuring staff deployment/transfers are skills/speciality based;
   - identifying interventions that could be carried out by existing staff, or new types of posts that are easier to fill in;
   - ensuring that service delivery models maximise the use of scarce resources (for example, one health care professional providing services to a cluster of facilities).

5.3.2 Strategic Objective 2: Improving the distribution of health professionals

To improve the distribution of health professionals, three key strategic work areas have been identified:

1) Developing effective incentive packages for rural areas.

   There is a need to improve the availability of human resources in rural areas by reviewing allowances, improving working and living conditions and by developing a policy that staff to give first priority for further training and promotion etc. to those who have worked in a rural area for a certain period of time.

2) Delivery of effective and fair staff transfers.

   The staff transfer policy affects the availability of staff; it should ensure effective and fair transfers, for which implementation is monitored, and that transferred staff have the necessary skill requirements to meet service needs.

3) Training programmes held in rural areas for practicing in rural areas.

   This builds on the UB School of Medicine initiative for training doctors in the speciality of Family Medicine aiming is to establish training infrastructure in District hospitals in rural areas. It is considered important for doctors to train in a rural environment as they are then more likely to remain in that environment, particularly if they have access to a training infrastructure.

5.3.3 Strategic Objective 3: Ensuring staff have the necessary skills to deliver the required services

To ensure staff have the necessary skills to deliver the requirements of the ten-year health services plan three key strategic work areas have been identified.

1) Integration of human resources for health information systems.

   There is a need to develop integrated human resources information systems to support the identification of training needs/skill gaps and to monitor staff access to training.

2) Co-ordinated training plans.

   There is a need to ensure co-ordinated and integrated annual and long-term training plans are produced. These plans will need to be based on regular training needs assessments and include project-based training plans.
   Any training budget allocation will need to reflect the training priorities identified in the training plans.

   A Training Co-ordinating Committee is required to be established (as a sub-committee of a high-level HR Strategy Steering Committee). The key role of the Training Co-ordinating Committee will be to co-ordinate and monitor all training

plans and activities (pre-service, post basic, in-service training and CPD) to ensure they are harmonised with service delivery requirements and organisational priorities. Membership of the Training Co-ordinating Committee will include representatives from the MOH (including representation from the DHMTs), MOESD, professional councils, and the University of Botswana (UB).

3) Accredited out-of-country training institutions.

   There is a need order to ensure that out-of-country institutions used for health care professional training are of the correct quality. The MOH and other relevant bodies will need to develop and maintain a list of accredited institutions for training students in health related programmes.

5.3.4 Strategic Objective 4: Improving performance and motivation of human resources

The WHO Report 2006 highlights the need to make the most of existing human resources and the fact that without improved performance any recruitment and retention strategies will have limited effect. Improving the performance and motivation of human resources will require the delivery of four key work areas:

1) Improving management practice.

   It is crucial to have management and leadership development and training opportunities to ensure managers have the necessary competencies to manage effectively. A priority will therefore be the development and implementation of a management and leadership development plan.

   Another priority is the provision of management development and training opportunities for the District Health Management Teams (DHMT) that are being established from 1 April 2010.

   In line with good HR practice, newly appointed mangers and staff should undergo induction programmes.

   Succession and career planning should take place to motivate staff and ensure staff potential is realised. Succession/career planning, together with the introduction of appropriate recruitment and promotion criteria that is competency based should be used for managerial positions.

   HR implementation procedures also need to be developed to ensure the effective and fair implementation of policies, for example disciplinary policy.

2) Improve clarity of job role/purpose.

   Staff should always have up to date job descriptions. It is therefore a priority that new job descriptions are prepared for all health staff and managers to reflect:

   - The needs of EHSP and the new models of care outlined in the IHSP.

- The management reorganisation of the MOH and the MLG.

This needs to be done by a skilled specialist to ensure the content of the job descriptions reflect organisational and service delivery needs and objectives.

3) Improve quality of pre-service and post basic training in country.

   To ensure the quality of training programmes will require addressing the shortage of lecturers (linked to the "Attraction and Retention Strategy" mentioned under Objective 1 strategy 1 in Annex 5); infrastructure and equipment development; and the establishment of an accreditation framework

4) Improve in-service training and development/continuing professional development opportunities.

   The quality assurance and regulatory role of professional councils should be strengthened with the aim to establish the minimum requirements for in-service training/continuous professional development (CPD) for health workers to remain licensed practitioners.

   All in-service training for individuals should be linked to assessments of staff performance and competency requirements.

   The provision of in-service training opportunities should be based on regular training needs assessments and the identification of priorities to meet organisation requirements (this is linked to Strategic Objective 3 Strategy 2 in Annex 5).

   It is envisaged that the development of flexible learning models for training and CPD (such as on-site training, distance learning, and mentoring) will improve access to learning opportunities.

5) Improve staff health and well-being.

   Ensuring safe working environments can be done by developing (national) health and safety legislation; strengthening the staffing of health and safety organisation structure within the central MOH and at facilities; and establishing initiatives to promote health and well-being, which includes ensuring that staff time is allocated for wellness week.

5.3.5 Strategic Objective 5: Co-ordination of human resource planning for the health sector

To ensure co-ordination of human resource planning for the health sector the following four key strategic work areas have been identified.

1) Sector-wide human resource planning

   This will involve the establishment of a high-level sector wide HR Steering Committee, encompassing all stakeholders including NGOs and the private sector, to provide strategic oversight into human resource planning.
   This will provide opportunities for information sharing and enable the development of more comprehensive annual and three year human resource implementation plans.

   The key role of this Committee will be to monitor progress against the delivery of key strategic milestones, to ensure structures are in place to deliver the key strategic objectives and to provide guidance and support where problems in delivery are encountered.

   There is also a need to train MOH personnel in Human Resource Planning so that these skills are embedded at the central MOH.

2) Integrated human resources for health (HRH) information systems (also linked to Strategic Objective 3 Strategy 1 in Annex 5)

   There is a need to develop an integrated HRH information system capable of supporting human resource planning for the whole of the health sector.

   All data generated for pre- and in-service training, recruitment, deployment and migration should be captured and analysed to support decision-making and inform policy.

   It is therefore important to ensure HRIS systems are always functionally appropriate; when developed and implemented they should be reviewed on a regular three yearly basis.

3) Monitoring and evaluation of all human resource implementation plans

   This requires the development of a monitoring and evaluation system capable of supporting performance monitoring of all human resource implementation plans.

5.4 Monitoring Delivery of HRH Strategic Plan

To monitor delivery, indicators for each strategic objective have been incorporated in the Human Resources Strategic Work Programme and the Pre-service and In-service Training Plan detailed in Annex 5 and Annex 6 respectively.

In addition, monitoring against the required types and numbers of staff will need to be done once these targets have been established.

5.5 Leadership for HR Strategy Implementation

There is a need to ensure appropriate leadership is in place to support the delivery of the Human Resource Strategy and the various strands of this strategy.

Individual responsibility for this leadership lies within Corporate Services.

- The DPS Corporate Services is responsible for overall leadership and co-ordination of the Human Resource Strategy.

- The Senior Manager Corporate Services has leadership responsibility for operationalising and implementing the Human Resources Strategy.

The HR strategy identifies the need for a high-level HR Strategy Steering Committee and a Training Coordinating Committee to be established to support implementation of the strategy. This is therefore a high priority within the Year 1 implementation plan detailed in Annex 7.

6. STRATEGIC PLAN: HEALTH FINANCING

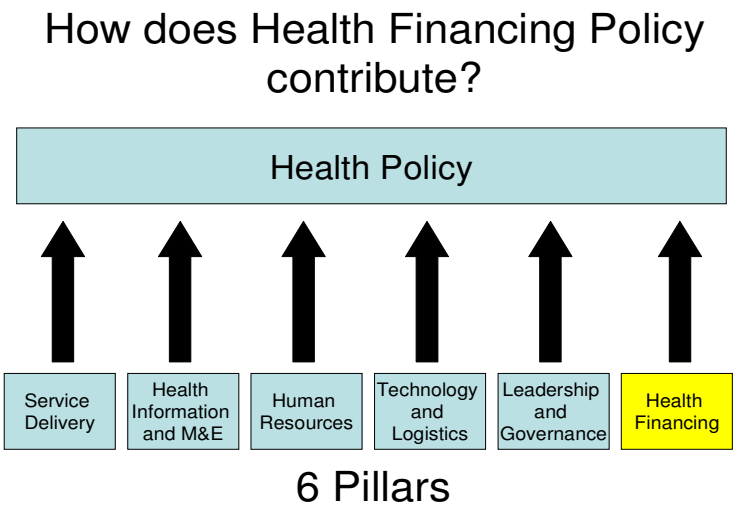
6.1 Overview

Botswana spends a considerable amount of resources on health (in comparison to its neighbours) but there are concerns about how effectively such funds are allocated and used. There are also questions as to whether the current financing system – though it has served Botswana well in the past – remains the best way of sustaining progress. Future prospects are reasonably good but efforts are required to make sure resources are put to their best use. A more detailed analysis is presented in the National Health Service Situation Analysis Report.

6.2 Health Financing in Context

Health financing is a means to an end, not an end in itself. Its aim, alongside a number of other key pillars, is to contribute towards overall health policies.

Fig 5: Contribution of health financing policy on the health system



The following table, Table 9, sets out the strengths, weakness, opportunities, and threats faced by the health sector in Botswana. A more detailed situation analysis is presented in the National Health Service Situation Analysis Report (GoB, July 2009).

Table 9: SWOT analysis of the health sector in Botswana

Strengths	**Weaknesses**
• Increased spending and continued Government Commitment to Health • Large, and growing, formal sector – Increasing affordability In non formal sector • Strong fiscal position • Low (and declining) reliance on Out Of Pocket funding For health care	• Increasing reliance on donor support • Long term concerns about fiscal sustainability • Short term economic prospects • Lack of diversified economy • Capacity to implement – overambitious targets • Medical Schemes facing growing financial pressures • Reliance on migrant labour • Low uptake Of prepayment schemes
Opportunities	**Threats**
• Medical hub • Scope for further contracting with Private Sector • Reallocation of budget to EHSP within growing resource envelope • Scope to establish a sustainable financing model • Scope to develop new revenue streams e.g. sin tax • Developing lower cost prepayment schemes	• Lack of competition In provider markets • Increasing recurrent costs associated with meeting HIV/AIDS needs • Increasing health costs could hamper competitiveness

6.3 Health Financing Goal

The health-financing goal for Botswana is:

To raise **sufficient** resources to ensure that **all** citizens have access to a range of **cost effective interventions** at an **affordable** price. To ensure financial incentives and systems are in place to deliver services **efficiently** and with a particular focus on the needs of the **vulnerable** groups. To enter into strategic **partnerships** to support the financing and delivery of health services.

6.4 Guiding principles

A number of principles should underpin the health financing strategy – most of these are spelt out in the HFTG ToRs and also present in the revised 2010 health policy. Amongst these principles include the need for:

- **Adequacy**: The need to raise sufficient resources to meet needs in a sustainable manner. This will be achieved this through strengthened Government efforts but also through strategic partnerships with the private sector and donor community to support the delivery and financing necessary health interventions.

- **Universality**: A package of essential health interventions will be made available to all citizens. The EHSP will be modified and expanded as priorities develop and resources permit.

- **Cost effectiveness**: Public funding should only be directed to services which deliver health benefits at reasonable cost.

- **Affordability**: No citizen should be denied access to essential health services because of inability to pay. Services with important public health benefits and services for vulnerable groups will continue to be provided free at the point of use. Efforts will be made to increase the populations' protection against the risk of incurring catastrophic health care costs. Measures to contain costs will also play an important role in ensuring that overall health costs are affordable for the nation as a whole.

- **Efficiency:** Efforts will be made to strengthen systems to ensure that all services are delivered efficiently without wastage – at as low a cost as possible without compromising quality.

- **Focus on vulnerable groups**: Specific efforts may be required to ensure that vulnerable groups are not excluded.

6.5 Strategic Plan for Health Financing

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Responsible
STRATEGIC OBJECTIVE 1: RAISE ADDITIONAL RESOURCES FOR HEALTH				
1.1: Increase Government financial commitment to health sector	Share of national budget to health increased by end of Plan period (see fiscal space analyses)	• Development of long term cost projections based on EHSP • Progress tracked through annual budget analyses	ongoing	PPME, Ministry Management , Ministry of Finance
1.2: Establish and utilise new revenue streams.	• Additional resources raised from sin taxes • Significant reduction in use of harmful products	• Sin taxes in place. • Process in place to earmark (some share of) additional resources earmarked to health. • Ongoing assessment of their impact	Ongoing	PH Department Finance Department PPME, Health statistics
1.3: Put donor support to strategic use	• Donor support provided in line with national health priorities. • Value of donor support maintained • Reduction in degree on aid dependence	• Continued efforts to attract appropriate donor support • Ongoing recurrent expenditure implications fully assessed as part of negotiations on donor programmes • Efforts to reduce aid dependency	Ongoing	Planning, Health Sector Relations and Partnership
1.4: Establish user fee schedule for services outside the EHSP providing for exemptions for the poorest	• Increase in revenue collections from non EHSP services • Effective implementation of exemption policy	• Carry out costing analysis to estimate costs of delivering services. • Set cost schedule • Implement fee schedule	Year 1 Year 2 Year 2	

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Responsible
STRATEGIC OBJECTIVE 2: ENSURE RESOURCES ARE PUT TO PRIORITY USE				
2.1: Refine budgetary and allocation processes	• Share of public spending on EHSP established • Increase in share of spending on EHSP • Reduced inequity in allocation of resources by district	• Agree detailed EHSP and cost. • Continued development of norms – especially for HR drugs and equipment • Establish baseline for current level of spending on EHSP • Periodic review of content/appropriateness of EHSP • Consider the potential for an equity based resource allocation formula (based on population, health needs and cost of delivering services) for district health services • Track expenditure over time	Year 1 Years 1 to 2 Year 1 Ongoing Year 2 Ongoing	PPME, Finance Division,
2.2: Improve efficiency of public expenditure on health	• Positive finding from expenditure review • Development of sound public private partnerships	• Activities defined under other themes • Independent in depth public expenditure review of sector performance • Develop innovative mechanisms where they offer value for money • Develop programme for medical/health hub • Explore scope for broader use of public private partnerships e.g. in relation to contracting out	Year 3 Ongoing	Other themes PPME (contracted out)

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Responsible
2.3: Improve value for money from private spending on health			On completion of current income and expenditure survey	Central Statistics, PPME
STRATEGIC OBJECTIVE 3: IMPROVE ACCOUNTABILITY AND TRANSPARENCY IN HEALTH EXPENDITURE				
3.1: Ensure transparency in flow of funds to the health sector	Availability of key health financing data (as set out in situation analysis) on a timely basis	• Conduct national health accounts exercise on a regular basis • Annual update of budget analysis	Year 2 Ongoing	PPME (contracted out)
3.2: Encourage better use of information for decision making	Increased demand for financing data from senior management			
STRATEGIC OBJECTIVE 4: ENSURE THAT BOTSWANA'S HEALTH FINANCING STRUCTURE REMAINS CAPABLE OF DEALING WITH FUTURE CHALLENGES				
4.1: To seek national consensus on a long term financing strategy for Botswana	• Process established • Strategy agreed by key stakeholders	• Develop options for future financing options (broad options are set out in section 6.6) – to include study tours as necessary • National consultation process • Agree on a long term health financing strategy	Year 1 Year 2 Year 3	PS, PPME
STRATEGIC OBJECTIVE 5: ENSURE KEY DEVELOPMENT PROGRAMMES ARE ADEQUATELY FUNDED IMPLEMENTATION OF NDP 10				
5.1: Effective implementation of NDP 10 priorities	Programmes implemented on time and within budget	• Project documentation prepared in a timely fashion. • Project plan implemented as agreed	Ongoing	Various

6.6 Health Financing System Options

6.6.1 Current Situation and Broad options

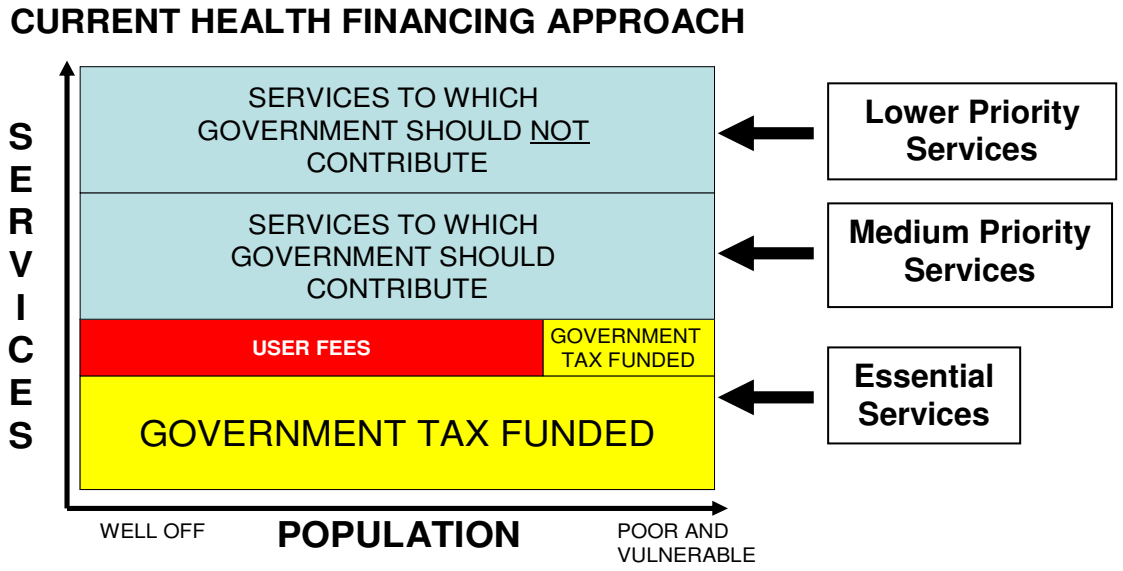
Government's aim is to ensure universal access to a broad range of services which meet the most pressing needs of its population. This will include access to the EHSP but also other important services.

Having defined an Essential Health Services Package key remaining challenges for Government are to:

- decide how it should fund services within the EHSP.
- to consider whether and to what degree it should fund medium priority services that fall outside the EHSP
- decide what to do about even lower priority services which fall outside these categories and where there is no case for public funding

Currently services, including essential services, are currently provided through a mix of tax funding (which includes some donor support) and user fees.

Fig 6: Current approach to health financing



The following section maps out possible broad options for financing health services as a whole.

6.6.2 Options for Financing EHSP and non-EHSP Services

The proposed policy is that the EHSP should be provided free at the point of delivery. However, there are still a number of broad options on how support for health services, as a whole, could be financed and delivered.

A number of institutional options are possible. They vary according to:

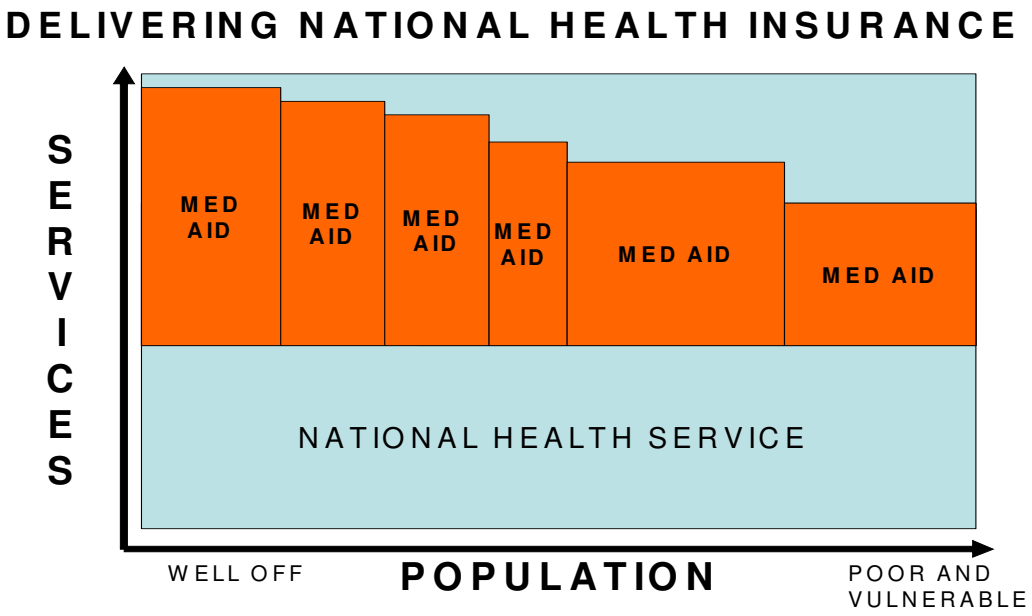
- the role of Government in the financing and delivery of services
- the degree of competition between purchasers,
- the mix between public and private providers, and
- the scope of coverage (particularly extent to which medical aid schemes are allowed to provide top-up coverage).

A number of possible ways of organising service delivery are mapped out below.

a) Expansion of Current System

One option could involve an expansion of the current system with medical aid schemes encouraged to deliver the full range of medium priority services. In this option Government subsidies may be required to cover the premiums of poorer groups who could not otherwise afford to contribute. The medical aid schemes would also be free to provide coverage of lower priority services for those willing to pay for services over and above this package. The EHSP is covered by a tax funded "national health service".

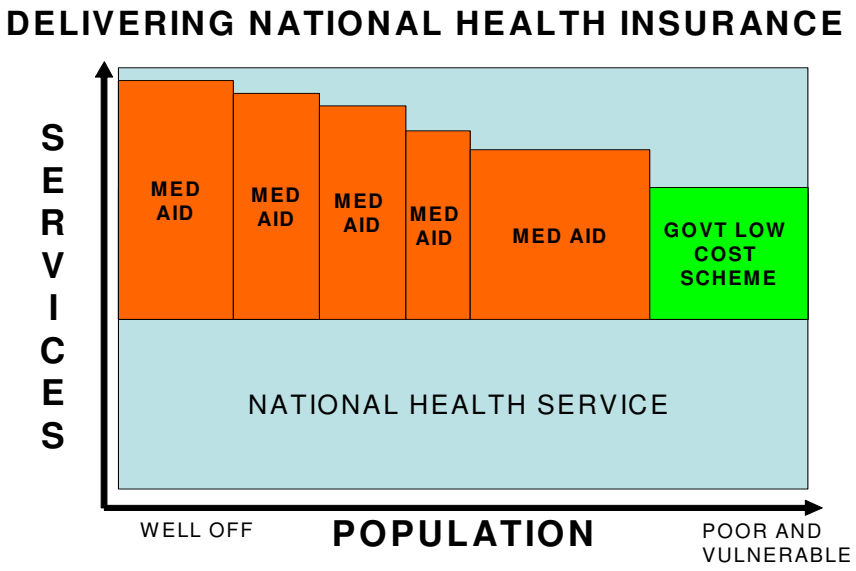
Fig 7: Expansion of Current System



b) Establishment of a Public Low Cost Scheme

Under this system Government could directly establish a low cost scheme to directly meet the needs of poorer groups. Equally, and probably more likely, it could contract a private organisation to carry out this function

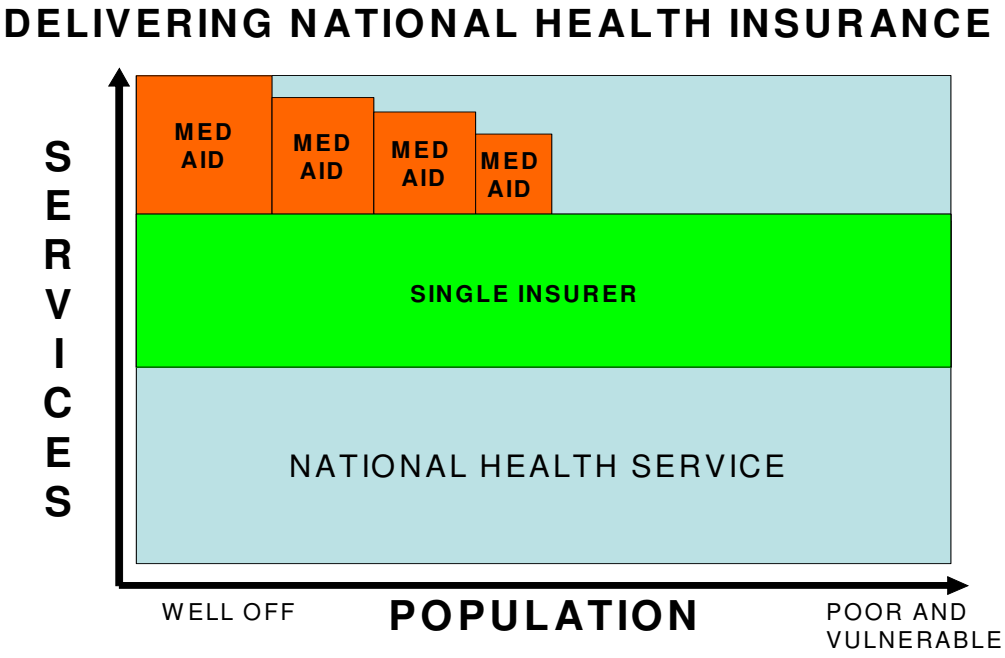
Fig 8: Public Safety Net Option



c) A Single insurer to cover medium priority services

Under this system a single insurer might be responsible for covering medium priority with other medical aid schemes only allowed for providing top up coverage above this package. Such an arrangement would lose the potential benefits from competitions but this would have to be balanced against lower marketing costs and stronger purchasing power which might result in lower costs

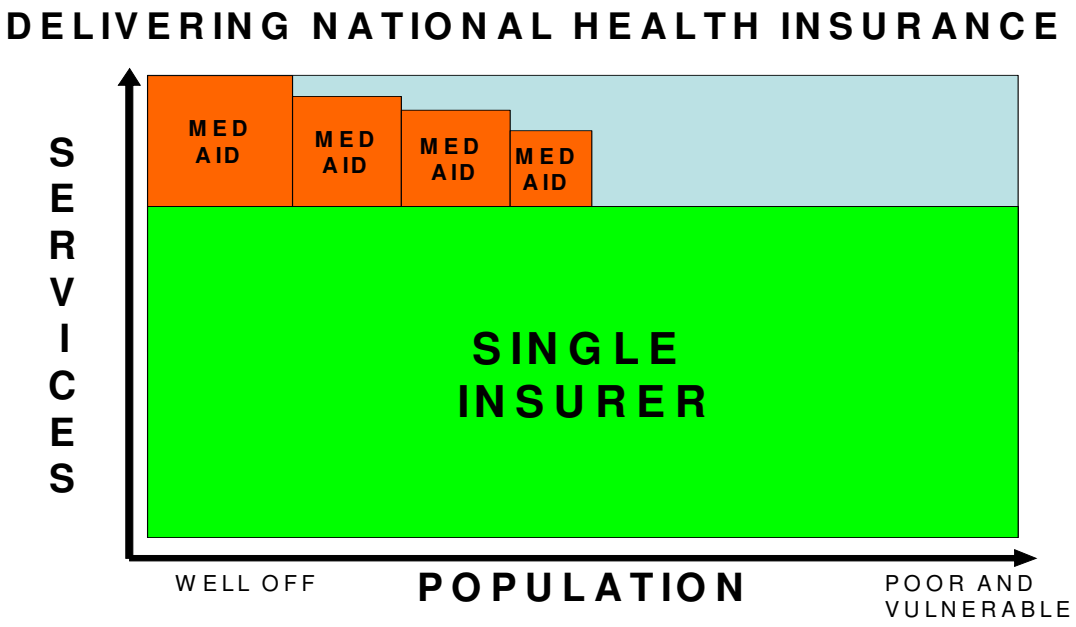
Fig 9: Single Insurer Option



d) A single insurer for essential and medium priority services

Under this system a single insurer assumes responsibility for both the EHSP and medium priority services with other medical aid schemes again only allowed for providing top up coverage.

Fig 10: Single Insurer covering essential and medium priority services



6.6.3 Key considerations

There are many variations in these basic models which would need to be fully studied in the light of local market conditions. They include:

- The content of the packages (which will affect costs and the need for government subsidies).
- The trade off between increased competition and purchasing power: a single insurer may be able to drive a better bargain with providers than multiple competing insurers and does not have to incur advertising and marketing costs but has less incentive to operate efficiently.
- The relative effectiveness of public and private insurers: if MOH is a very poor commissioner of services, and any new public insurance agency was likely to suffer from similar faults the case for reliance on non-government insurers – perhaps on a contracted basis - would be greater.
- The need for reasonably large risk pools: below a minimum risk (estimated at ~ 20,000 in the US but unknown in southern Africa effective risk pooling and financial sustainability may be problematic.

- The degree of provider competition: if there is little competition containing costs may be a major problem.

- The extent to which people will have a choice of schemes (rather than being allocated one): this opens the possibility that patients may self-select to certain schemes resulting in different risk profiles. To cope with this some form of risk equalisation approach might be needed.

- The speed of transition: a big bang approach might involve an early introduction of national health insurance (Mongolia did this at very low per capita income levels but ran into problems in funding the package with heavy reliance on user fees. Likewise South Korea has universal coverage but heavy reliance on user fees which causes access problems for some groups. A gradual approach with coverage increasing gradually over time in terms of breadth (population coverage and depth (service coverage) is another option. A key problem with such approaches is that progress has stalled and coverage remains confined to civil servants and the private sector.

Lessons from overseas need to be taken on board. Key general lessons include the findings that:

- Design and implementation are more important than the choice of mechanism
- Social health insurance is not a panacea – achieving breadth and depth of coverage is very difficult when there is a degree of informality. It will almost certainly require Government funding if the poor are to be covered.

6.7 Future Resources for Health in Botswana

This section assesses the fiscal space[9] that might be available to scale up health services in the coming years. As such it should give some indication as to how affordable any new initiatives – such as the essential health package - are likely to be.

In short, the approach involves a simple model which makes a series of assumptions about the key determinants of likely public health expenditure over the next few years.

Such determinants include:

- the rate of GDP growth
- the share of GDP which goes to public expenditure
- the balance between development and recurrent expenditure
- future trends in donor expenditure

[9] Fiscal space refers to an assessment of the availability of additional resources for increasing government expenditures, and has been defined as "the capacity of government to provide additional budgetary resources for a desired purpose without any prejudice to the sustainability of its financial position".

- the share of the government development and recurrent budgets allocated to health

These assumptions for these determinants are drawn, as far as possible, from official government documents. Clearly assumptions about the future entail a large degree of uncertainty, especially in the face of the current global financial crisis. As a result, the analysis considers a range of scenarios – including a best estimate (the base case) - but also more optimistic and pessimistic outcomes. The assumptions are set out in Table 10 below. A spreadsheet has been developed to allow further scenarios to be run or for the model to be updated as more accurate estimates become available.

6.7.1 Short Term Outlook

In the recent Budget Speech it was announced that the MOH health budget would increase to BWP 2.2bn by 2009/10 including provision for 701 new posts for new and upgraded health facilities. In terms of the development budget the allocation for the HIV/AIDS Programme (under NACA) has been at BWP 838.8 million with Primary Health Facilities under MLG at BWP 125.2million), The analysis takes these figures as a baseline .

Table 10: Key Assumptions – Fiscal Space Estimates

	Baseline Figure	Base Case	Optimistic (High)	Pessimistic (Low)	Comments
Growth GDP	BWP 96bn in 2009/10	2.5% to 2010/11 then 4.4%pa	7.5%pa	2.5%pa	7.5% growth required to achieve Vision 2016 targets
Population	1.9m	2% growth	2% growth	2% growth	
Share of GDP to Public Expenditure	39.5% in 2009/10	Share increases to, and remains at 40% of GDP from 2014/15	Share increases to 42.5% of GDP by 2021/22	Share declines to 33.5% of GDP by 2021/22	Fiscal rule suggest spending should remain under 40% of GDP and 70:30 recurrent: development split
Share of Public Expenditure to Health	8.0% of recurrent budget to MOH; 7.9% of development budget to NACA in 2009/10	Share of recurrent budget to MOH increases by 0.1% pa Share of development budget to NACA increases by 0.1% pa	Share of recurrent budget to MOH decreases by 0.1% pa Share of development budget to NACA decreases by 0.05% pa	Share of recurrent budget to MOH increases by 0.2% pa Share of development budget to NACA increases by 0.2% pa	

It should be noted that the downside risk of these assumptions is quite considerable. The proposed 2009/10 budget involves a large budget deficit which

represents a short-term stimulus in line with other major global economies – but runs counter to Botswana's aim of investing budget surpluses to provide support once diamond revenues decline after around 2021. The IMF has also raised some questions as to whether the 40% of GDP/public spending ratio is sustainable – suggesting a somewhat lower figure nearer 30% (which is covered under the lower scenario here).

The implications of these assumptions for funding flows to the sector are shown in the following two charts. The chart shows that under the base case scenario a modest increase in per capita spending (by 18% by 2014/15 and 49% by 2021/22) might be expected. Under the high case scenario a more rapid increase might be expected (30%/85%) whilst under the worst case scenario per capita spending might be expected to decline by over 20% by 2021/22 .

International Experience: factors underlying successful health financing reforms

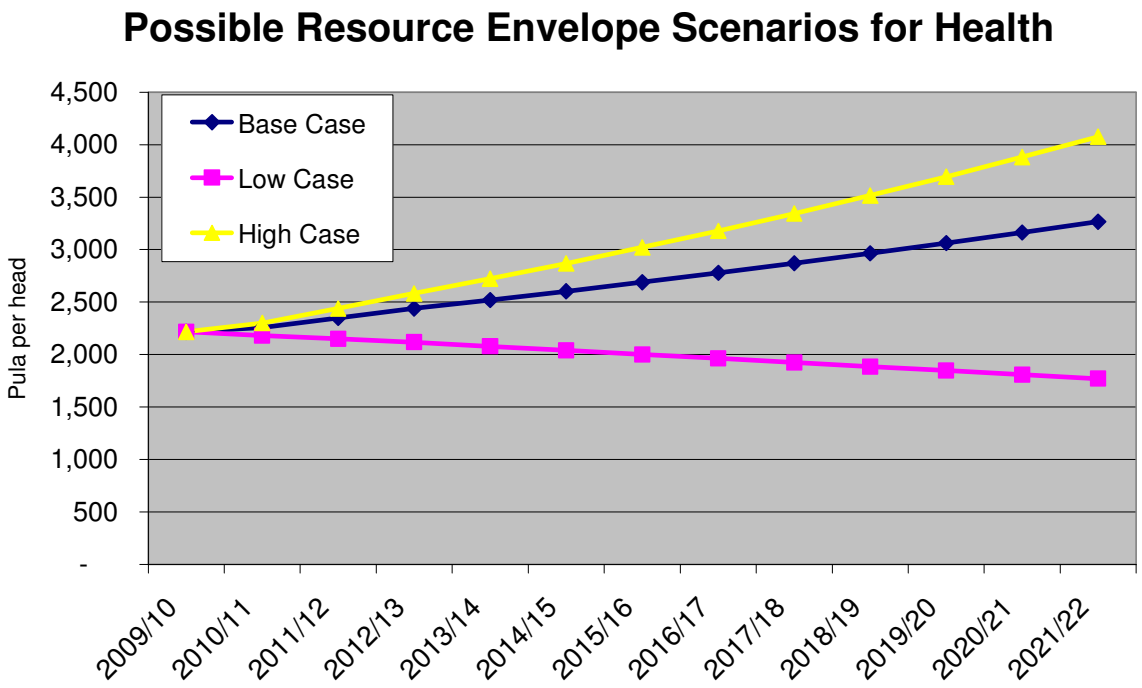
Experience suggests the importance of:

- **Conducive economic environment:** The importance of sustained economic growth – as a means of creating more formal employment, raising household ability to pay for and Government ability to subsidise, health care.
- **Conducive institutional and policy environments:** Including efficient tax collection, ability to enforce rules e.g. mandatory enrolment, regulations.
- **Well-educated population:** High adult literacy probably makes selling reforms to the population easier, improves patients' ability to be discerning healthcare consumers and enables them to adopt health seeking behaviour.

Effective implementation includes:

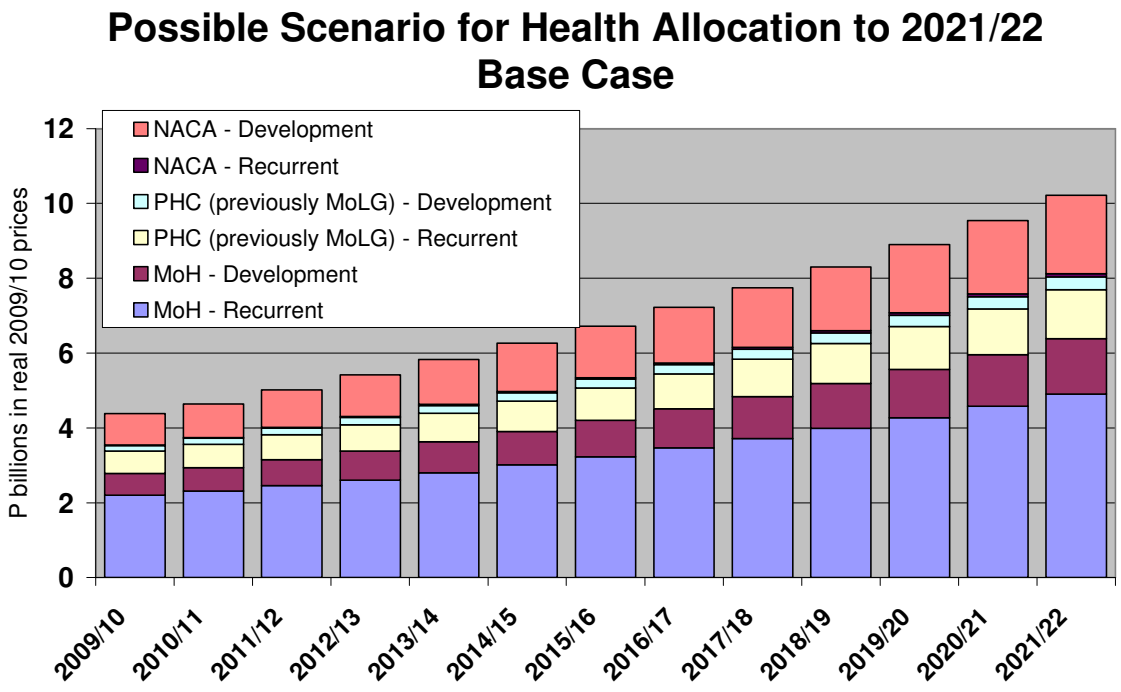
- Carefully sequenced health service delivery and provider payment reform
- Improving physical infrastructure and human resources
- Reforming provider remuneration to curb over-expenditure
- Pharmaceutical purchasing reform (where relevant) to curb costs
- Good information systems and evidence based policy making to allow flexibility and support mid course correction
- Strong stakeholder support

Fig 11: Possible resource envelope scenarios for health



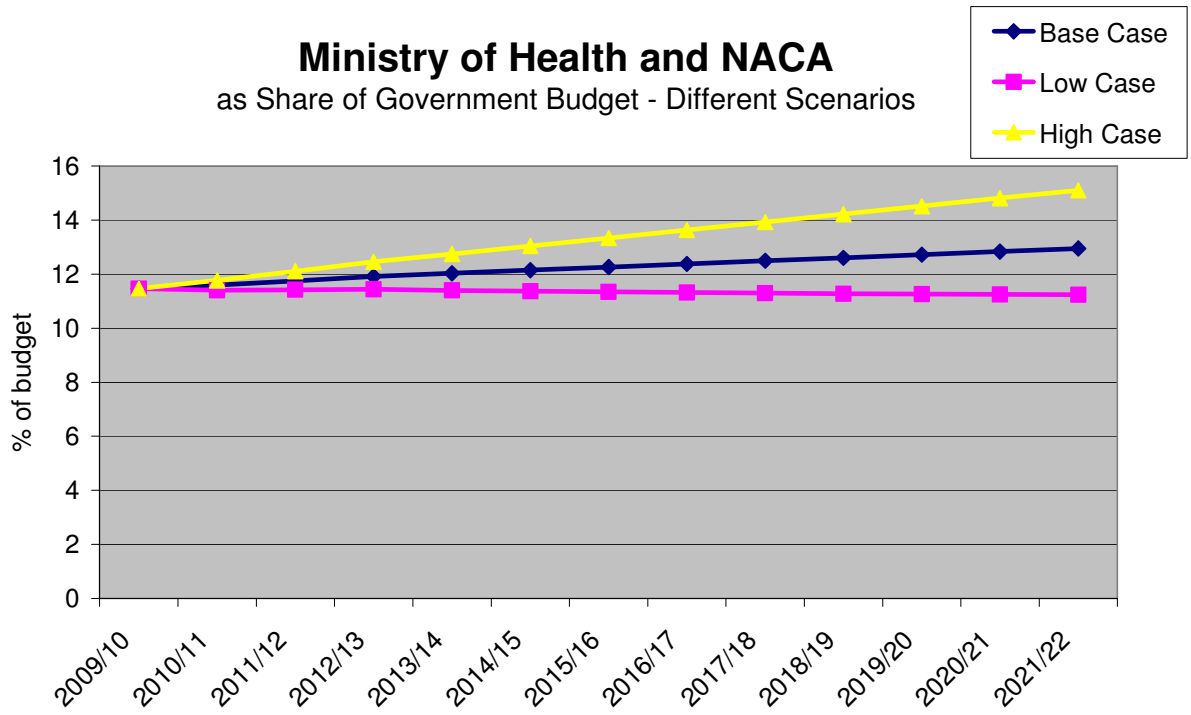
In terms of breakdown, according to the base case scenario, the chart below shows that spending on health through MOH, NACA and MLG might be expected to increase from just over P4bn in 2009/10 to just under P10bn by 2021/22 (in real 2009/10 prices).

Fig 12: Possible scenario for health allocation to 2021/22



These estimates would suggest that the share of public spending through MOH, NACA and health spending by MLG may increase modestly from its current share of just over 11% of the budget.

Fig 13: Projected Share of National Budget



7. STRATEGIC PLAN: PROCUREMENT AND LOGISTICS IN HEALTH SERVICE DELIVERY

7.1 Overall aim

To ensure effective and efficient delivery of health services to all people living in Botswana.

7.2 Overall strategic objective

To establish an effective and efficient procurement and logistics management system for drugs, medical supplies, equipment and infrastructure.

7.3 Specific objectives

Objective 1: To ensure adequate and uninterrupted availability of drugs and medical supplies at CMS and in all the health facilities**.**

Strategies

1. Strengthen institutional arrangements for regulation, procurement and distribution:
   - Enhance collaboration, communication and coordination among the statutory and regulatory bodies responsible for procurement and logistics for health products
   - Update relevant policies, guidelines, manuals and lists to guide procurement and logistics.

2. Increase financing for procurement and logistics:
   - Develop a comprehensive procurement plan to facilitate clear Financial Planning & Budgeting, Staffing and Logistics management
   - Allocate adequate resources in the annual budgets to CMS, health facilities and bodies that support procurement and logistics
   - Encourage collaboration between those who use supplies and those who make decisions about the allocation of resources.

3. Strengthen the capacity to manage procurement and logistics:
   - Employ adequate numbers of staff
   - Employ the right mix of staff in terms of training and skills
   - Upgrade the Logistics Management information system
   - Establish a system for feedback on consumption from health facilities to CMS.

4. Strengthen the systems for estimating and quantifying commodity requirements:
   - Strengthen procurement planning process and supply management system

- Train staff to undertake quantification/forecasting and on other relevant procurement and logistics issues
- Strengthen all aspects of drug management at the health facilities
- Enhance monitoring and reporting on procurement.

Objective 2: To ensure that the drugs and medical supplies available in the health facilities are used appropriately and rationally, and are properly accounted for.

Strategies

1. Build capacity of staff and consumers to reduce inappropriate use of commodities:
   - Train HF staff to implement good management /storage practices
   - Develop and circulate guidelines and manuals on rational drug use for the respective levels
   - Encourage appropriate utilization of drugs by health professionals and consumers
   - Support establishment and functioning of Medicines and Therapeutics Committees.

2. Enhance monitoring and reporting on usage of commodities and other logistic functions at the facility level:
   - Develop adequate monitoring and reporting capacity through training
   - Improve or computerize drug management systems at the facilities
   - Emphasize utilization of standardized tools for data collection and reporting
   - Ensure adequate and frequent communication system
   - Strengthen supervision through routine collection and use of data
   - Encourage external auditing to enhance accountability.

3. Improve information management and performance measurement of supply chain processes:
   - Train staff on reporting
   - Establish a system for measuring performance.

Objective 3: To support the provision of the ESHP through the continuous availability of serviceable and appropriate equipment in all the facilities.

Strategies

1. Promote planned preventive maintenance of all equipment at the health facilities.
   - Undertake an equipment needs assessment in all the health facilities
   - Undertake an inventory of all equipment in all facilities
   - Assess state of equipment and required attention
   - Develop and implement a maintenance plan (periodic inspection, maintenance and analysis of maintenance related data).

2. Provide adequate financial resources for preventive maintenance, repair and purchase of equipment:
   - Undertake costing of the maintenance and purchase
   - Allocate resources in the annual budgets

- Mobilize resources from other sources, including from development partners.

3. Build capacity for appropriate, efficient and effective usage of all equipment in the health facilities:
   - Develop and provide operational guidelines for equipment in all facilities
   - Adequately train staff using the equipment on how to handle and undertake preventive maintenance to avoid user-induced breakdowns.

4. Strengthen the coordination of procurement of equipment by stakeholders, including development partners:
   - Encourage communication and meetings among Development partners, procurement stakeholders and the MOH to review requirements
   - Create a common forum and agree on a national procurement plan
   - Institute flexible procurement procedures driven by set financial thresholds to allow delegation of procurement functions.

5. Standardize the equipment used throughout the facilities:
   - Identify the equipment requirements of the different health facilities
   - Develop a standard equipment list with specifications
   - Procure only the equipment on the list.

Objective 4: To support the provision of the EHSP through the establishment and maintenance of appropriate buildings and physical infrastructure.

Strategies

1. Promote planned preventive maintenance to minimize the deterioration of the buildings and physical infrastructure:
   - Undertake an assessment of the current physical infrastructure of the health facilities
   - Establish the needed infrastructure to support the EHSP at each health facility level
   - Undertake an inventory of the condition of physical infrastructure
   - Develop and implement a rehabilitation and maintenance plan.

2. Provide adequate financial resources for development, rehabilitation and maintenance of physical infrastructure:
   - Undertake costing of the required development and maintenance
   - Allocate adequate resources in the annual budgets
   - Mobilize additional resources from other sources such as development partners.
3. Develop or renovate facilities to accommodate new or expanded services:
   - Establish the facilities needed for new or expanded services
   - Obtain the required designs while involving the end users
   - Build or renovate while ensuring there is professional supervision.

4. Build maintenance capacity or provide maintenance support at the different health facilities:
    - Employ/deploy maintenance staff at the facilities
    - Establish workshops/or provide adequate machinery, hand tools and basic consumables for maintenance.

5. Standardize buildings and building components:
    - Identify the physical infrastructure requirements of the different health facilities
    - Make standard designs but ensure participation and involvement of end users
    - Identify and standardize the building components
    - Develop a standard list of building materials.

7.4 Strategic Plan for Procurement and Logistics in Health Service Delivery

Strategy	Indicators	Activities to achieve the strategy	Time scale	Lead Responsibility
STRATEGIC OBJECTIVE 1: TO ENSURE ADEQUATE AND UNINTERRUPTED AVAILABILITY OF DRUGS AND MEDICAL SUPPLIES AT CMS AND IN ALL THE HEALTH FACILITIES				
1.1: Strengthen institutional arrangements for regulation, procurement and distribution	• Consultative meetings held • Documents updated	• Enhance collaboration, communication and coordination among the statutory and regulatory bodies responsible for procurement and logistics for health products • Update relevant policies, guidelines, manuals and lists to guide procurement and logistics	Plan period Year 1	
1.2: Increase financing for procurement and logistics	• Procurement plan in place • Resources allocated for procurement • Joint consultative meetings	• Develop a comprehensive procurement plan to facilitate clear Financial Planning & Budgeting, Staffing and Logistics management • Allocate adequate resources in the annual budgets to CMS, health facilities and bodies that support procurement and logistics • Encourage collaboration between those who use supplies and those who make decisions about the allocation of resources.	Year 1 Plan period	
1.3: Strengthen the capacity to manage procurement and	• Staff in place • Well functioning LMIS system in place	• Employ adequate number of staff • Employ the right mix of staff in terms of training and skills	Year 1 and 2	

Strategy	Indicators	Activities to achieve the strategy	Time scale	Lead Responsibility
logistics	• Facility reports	• Upgrade the Logistics Management information system • Institute feedback on consumption from health facilities to CMS		
1.4: Strengthen the systems for estimating and quantifying commodity requirements	• Number of facilities ordering the correct quantities • Number of adequately trained staff in place	• Strengthen procurement planning process and supply management system • Train staff to undertake quantification/forecasting and on other relevant procurement and logistics issues • Strengthen all aspects of drug management at the health facilities. • Enhance monitoring and reporting on procurement	Year 1 and 2	
STRATEGIC OBJECTIVE 2: TO ENSURE THAT THE DRUGS AND MEDICAL SUPPLIES AVAILABLE IN THE HEALTH FACILITIES ARE USED APPROPRIATELY AND RATIONALLY, AND ARE PROPERLY ACCOUNTED FOR				
2.1: Build capacity of staff and consumers to reduce inappropriate use of commodities	• Number of facilities dispensing drugs according to standard treatment guidelines • Number of therapeutic committees established	• Train HF staff to implement good drug management practices. • Develop and circulate guidelines and manuals on rational drug use for the respective levels. • Encourage appropriate utilization of drugs by health professionals and consumers • Support establishment and functioning of Medicines and Therapeutics Committees	Year 1 and 2	
2.2: Enhance monitoring and reporting on usage of commodities and other logistic functions	• Number of facilities utilizing tools for reporting • Number of reports received • Number of facilities audited	• Develop adequate monitoring and reporting capacity through training • Improve or computerize drug management systems at the facilities	Year 1 and 2	

Strategy	Indicators	Activities to achieve the strategy	Time scale	Lead Responsibility
at the facility level		• Emphasize utilization of standardized tools for data collection & reporting • Ensure adequate & frequent communication system • Strengthen supervision through routine collection and use of data • Encourage external auditing to enhance accountability		
2.3: Improve information management and performance measurement of supply chain processes	• Number of facilities sending performance reports	• Train staff on reporting • Establish a system for measuring performance	Year 1	
STRATEGIC OBJECTIVE 3.: TO SUPPORT THE PROVISION OF THE EHSP THROUGH THE CONTINUOUS AVAILABILITY OF SERVICEABLE AND APPROPRIATE EQUIPMENT IN ALL THE FACILITIES				
3.1: Promote planned preventive maintenance of all equipment at the health facilities	• Equipment needs assessment report • Equipment inventory • Maintenance plan	• Undertake an equipment needs assessment in all the health facilities • Undertake an inventory of all equipment in all facilities • Assess state of equipment and required attention • Develop and implement a maintenance plan (periodic inspection, maintenance and analysis of maintenance related data)	Year 1 Plan period	
3.2: Provide adequate financial resources for preventive maintenance and purchase of	• Amount of available resources	• Undertake costing of the maintenance and purchase • Allocate resources in the annual budgets • Mobilize resources from other sources,	Year 1 and 2	

Strategy	Indicators	Activities to achieve the strategy	Time scale	Lead Responsibility
equipment		including from development partners		
3.3: Build capacity for appropriate, efficient and effective usage of all equipment in the health facilities.	• Operational guidelines • Number of trained staff	• Develop and provide operational guidelines for equipment in all facilities • Adequately train staff using the equipment on how to handle and undertake preventive maintenance to avoid user-induced breakdowns		
3.4: Strengthen the coordination of procurement of equipment by stakeholders, including development partners	• Number of meetings held • National procurement plan in place	• Encourage communication and meetings among Development partners, procurement stakeholders and the MOH to review requirements • Create a common forum and agree on a national procurement plan • Institute flexible procurement procedures driven by set financial thresholds to allow delegation of procurement functions	Year 1 and 2	
3.5: Standardize the equipment used throughout the facilities	• Standard equipment list	• Identify the equipment requirements of the different health facilities • Develop a standard equipment list with specifications • Procure only the equipment on the list	Year 1	
STRATEGIC OBJECTIVE 4: TO SUPPORT THE PROVISION OF THE EHSP THROUGH THE ESTABLISHMENT AND MAINTENANCE OF APPROPRIATE BUILDINGS AND PHYSICAL INFRASTRUCTURE				
4.1: Promote planned preventive maintenance to minimize the deterioration of the	• Infrastructure needs assessment report • Inventory report on condition of infrastructure	• Undertake an assessment of the current physical infrastructure of the health facilities • Establish the needed infrastructure to support the EHSP at each health facility	Year 1	

Strategy	Indicators	Activities to achieve the strategy	Time scale	Lead Responsibility
buildings and physical infrastructure	• Rehabilitation and Maintenance plan in place	level • Undertake an inventory of the condition of physical infrastructure • Develop and implement a rehabilitation and maintenance plan	Plan period	
4.2: Provide adequate resources for development, rehabilitation and maintenance of physical infrastructure	• Amount of available resources	• Undertake costing of the required development and maintenance • Allocate adequate resources in the annual budgets • Mobilize additional resources from other sources such as development partners	Plan period	
4.3: Develop or renovate facilities to accommodate new or expanded services	• Number of facilities developed or renovated	• Establish the facilities needed for new or expanded services • Identify facilities or location • Obtain the required designs while involving the end users • Build or renovate while ensuring professional supervision	Plan period	
4.4: Build maintenance capacity or provide maintenance support at the different health facilities	• Number of facilities with maintenance staff • Number of facilities with functional workshops	• Employ/deploy maintenance staff at the facilities • Establish workshops/or provide adequate machinery, hand tools and basic consumables for maintenance	Plan period	
4.5: Standardize buildings and building components	• Standard design of buildings • Standard list of building materials	• Identify the physical infrastructure requirements of the different health facilities • Make standard designs but ensure participation and involvement of end users	Plan period	

Strategy	Indicators	Activities to achieve the strategy	Time scale	Lead Responsibility
		• Identify and standardize the building components • Develop a standard list of building materials		

8. STRATEGIC PLAN: HEALTH INFORMATION SYSTEMS / MONITORING & EVALUATION

8.1 Overview

The integrated health service health information system (HIS)/monitoring and evaluation (M&E) strategic plan is aimed at providing guidance to MOH in developing a single, functioning health information/M&E system for the integrated health service plan (IHSP)[10], thereby contributing towards overall improvement of health information/M&E within the health service delivery set-up. New policy statements on health information and research[11] provide sufficient direction on development of the system. This strategic plan incorporates the findings of the health service situation analysis[12] which are critical to the development of the system, as well as the findings from other key documents, including the revised National Health Policy. It addresses specific areas arising out of the six strategic objectives of the HIS/M&E.[13]

8.2 New Policy Statements in Relation to Health Information and Research

The availability of complete health information in a timely manner is critical for policy, planning and for operations based on informed and sound decisions. However for data to be efficiently used, it is important that norms, standards, and guidelines be set in regard to data collection, collation, analysis, and interpretation. The end result should be a viable information system that can effectively monitor and evaluate health services and programmes.

The new policy statements are as follows:

a) Data Collection
The policy indicates that the MOH will ensure that all relevant health information regarding population dynamics, diseases, health services, health financing, health workforce, medicines and vaccines, infrastructure and equipment is collected from all the health stakeholders including donors, private sector, and NGOs.

b) Development of Capacity and Tools
The policy calls for the MOH to develop capacity and tools, including a web-based observatory, to ensure effective data collection, collation, analysis, interpretation, and timely feedback and dissemination for improved evidence-based decision making at all levels.

[10] The IHSP is the overall plan document for health services delivery
[11] See MOH June 2010 " National Health Policy " Chapter 4 Section 4.6
[12] See MOH July 2009 "National Health Service Situation Analysis Report"
[13] See MOH June 2010 " National Health Policy " Chapter 4 Section 4.6

c) Development of Core Indicators

The policy places the responsibility to the MOH in consultation with the relevant stakeholders to develop indicators for measuring performance in different policy areas and programmes.

d) Harmonisation

The policy requires that the MOH establish an institutional/organisational arrangement to harmonise and link all the data management units with the aim of reducing duplication and wastage of data and maximising its effective use through prompt reporting and feedback.

e) Regulatory Framework

The policy states that the MOH will develop a regulatory framework (norms, standards operation procedures, policy, directives and laws) to ensure that all data is collected and reported to the relevant data management units and shared with all the concerned stakeholders.

f) Research Agenda

The policy states that the MOH, in collaboration with research institutions will develop a comprehensive research agenda to streamline areas that require new knowledge and provide guidance to the National Health Policy, plans, and programmes.

g) National Health Research Council

The policy states that the MOH will set-up an autonomous National Health Research Council which will be responsible for ensuring adherence to scientific and ethical standards in the conduct of health research.

8.3 Current Situation of Health Information & Research

The National Health Service Situation Analysis considered the following areas, all of which are related to the above policy statements:

1. Data collection, tools/instruments
2. Data analysis, reporting, feedback, use and information sharing
3. Special studies/evaluations
4. Data/information flow patterns
5. Protocols/guidelines
6. Informatics infrastructure
7. Human capacity and
8. Coordination, harmonisation and alignment.

While the assessment revealed a number of strengths and opportunities that can be built upon, it also recognised some key issues and challenges that include:

- A fragmented information system
- Overload of reporting units
- Inadequacy of information emanating from the systems
- Limited information sharing and feedback
- Limited human resource capacity in terms of numbers and skills

- Irregular/late production of reports.

8.4 Strategies for Improving Delivery of Health Information & Research

8.4.1 Vision

To contribute to the National Health Policy vision through the development of a sustainable and effective[14] integrated health information/monitoring and evaluation system.

8.4.2 Mission

The integrated health information/M&E system will in a systematic manner collect, analyse and store accurate health service delivery data from all stakeholders in the country and ensure accountability, track progress, track resources allocation and determine intervention effectiveness as articulated in the IHSP.

8.4.3 Overall Goal

To create an enabling environment for efficient monitoring and evaluation of the implementation and achievements of the integrated health service plan and make decisions based on evidence emanating from the integrated M&E system at all levels.

8.4.4 Overall Strategic Objective

To ensure timely availability, accessibility, quality and use of health information for sustainable improvement of the health status of the people living in Botswana.

8.4.5 Specific Objectives

Objective 1: To collect and analyse health information about diseases, services, finances, health workforce, medicines and medical products, infrastructure and equipment from all stakeholders of the health sector.

Strategic Actions

1. Develop an agreed upon set of core indicators for the IHSP
2. Revise/develop data collection tools (to facilitate collection data)
3. Develop an analysis plan

[14] A sustainable and effective health information/M&E system that should be supported by systems (e.g. the relevant infrastructure and human capacity) to enable it provide timely; accurate; standardised; appropriate and high quality health data.

4. Develop/upgrade existing databases/ harmonise/create linkages at all levels.

Objective 2: To clarify the roles and functions of different stakeholders in data management in order to minimise duplication and maximise optimal utilisation of resources.

Strategic Actions

1. Enhance organisational structures at all levels *(clear and well defined)*
2. Put in place clear data collection, transfer, and reporting mechanisms
3. Define/develop standard reporting requirements for different stakeholders
4. Develop written mandates for planning, coordinating and managing the health information/M&E system for all levels
5. Put in place mechanisms for health information/M&E planning, management, stakeholder coordination and consensus building for all levels
6. Develop clear and well-defined health information/M&E roles and responsibilities (job descriptions) for relevant individuals and organisations at all levels.
7. Develop human capacity in terms of skills and numbers in relevant areas
8. Develop local leadership in M&E/health information and capacity for stakeholder coordination
9. Establish a National M&E Technical Working Group.[15]

Objective 3: To ensure timely, wide, and need-based dissemination of data to all stakeholders.

Strategic Actions

1. Strengthen data use, dissemination, and quality improvement by June 2011.
2. Develop health information/M&E communication and advocacy plan
3. Enhance commitment to health information/research at all levels

Objective 4: To develop and implement a research agenda in collaboration with relevant partners to support national policy development.

Strategic Actions

1. Develop evaluation and research agenda based on the identified health gaps and needs
2. Strengthen coordination of surveys/evaluations and research studies
3. Strengthen surveys and surveillance systems.

Objective 5: To develop and implement regulations regarding mandatory reporting of defined information requirements.

Strategic Actions

1. Develop/revise guidelines for supervising routine data collection at relevant levels

[15] Critical to enhancing stakeholder partnerships, coordination and in offering technical backstopping to M&E activities

2. Strengthen supervision, data assessments, and feedback component
3. Strengthen data quality component.

Objective 6: To develop, implement and enforce regulatory mechanism for health research.

Strategic Actions

1. Establish health research regulatory structures
2. Develop a human research bill
3. Review and appraisal of research protocols
4. Develop standard operating procedures (SOPs).

8.4.6 Strategic Plan for Health Information System and Research

Strategic Actions	Activities	Outputs	Responsible Agency/Person(s)
STRATEGIC OBJECTIVE 1: To collect and analyse health information about diseases, services, finances, health workforce, medicines and medical products, infrastructure and equipment from all stakeholders of the health sector by December 2013			
1.1: Develop an agreed upon set of core indicators for the IHSP by December 2010	• review existing indicators • identification of information needs • mapping of information needs in relation to current indicators • hold consensus building meetings • field test indicators & review • adopt indicators and apply to data collection situations	Availability of agreed upon set of core indicators for the IHSP by December 2010	
1.2: Revise/develop data collection tools (to facilitate collection data) by December 2010	• review existing tools • revise existing tools/develop new tools • hold consensus building meetings • field test tools & review • adopt tools and apply to data collection situations	Availability of developed/revised and agreed upon integrated data collection tools by December 2010	
1.3: Develop analysis plan by June 2011	• draft analysis plan • hold consensus building meeting • implement plan • periodically review plan	• Availability of analysis plan by June 2011 • Availability of timely reports	
1.4: Develop/upgrade existing databases by December 2012	• carry out detailed assessment of existing databases • develop/upgrade existing databases • interface systems • hold consensus building meeting	Availability of integrated electronic informatics system which meets needs of users	

Strategic Actions	Activities	Outputs	Responsible Agency/Person(s)
	• test database& review • roll out database • enhance communication system		
STRATEGIC OBJECTIVE 2: To clarify the roles and functions of different stakeholders in data management in order to minimise duplication and maximise optimal utilisation of resources by December 2012			
2.1: Enhance organisational structures at all levels by December 2012	• Review current organisational structure • Develop proposal for new structure • Hold consensus building meeting • Implement structure • Periodically review of structure	• Availability of an agreed organisational structure at all levels by December 2010. • M&E divisions/units established at all levels by December 2012	
2.2: Put in place clear data collection, transfer, and reporting mechanisms for all levels by June 2011	• Carry out detailed assessment of existing mechanism • Revise existing mechanism / develop new mechanism • Hold consensus building meeting • Implement mechanism • Carry out periodic review of mechanism	Availability of data collection, transfer and reporting mechanisms for all levels by June 2011	
2.3: Define/develop standard reporting requirements for different stakeholders by June 2011	• Review existing reporting requirements • Revise existing reporting requirements/develop new reporting requirements • Hold consensus building meeting • Implement reporting requirements • Carry out periodic review of reporting requirements	Availability of standard reporting requirements by June 2011	

Strategic Actions	Activities	Outputs	Responsible Agency/Person(s)
2.4: Develop written mandates for planning, coordinating and managing the health information/M&E system for all levels by June 2011	• Carry out a review of existing mandates • Revise existing mandates/ develop new mandates • Hold consensus building meeting • Implement mandates • Periodically review mandates	Availability of written mandates for planning, coordinating & managing health information by June 2011	
2.5: Put in place mechanisms for health information/M&E planning, management, stakeholder coordination and consensus building for all levels by June 2011	• Carry out detailed assessment of existing mechanism • Revise existing mechanism/develop new mechanism • Hold consensus building meeting • Implement mechanism • Carry out periodic review of mechanism	Availability of mechanisms for health information/M&E planning, management, stakeholder coordination and consensus building for all levels by June 2011	
2.6: Develop clear and well-defined health information/M&E roles and responsibilities for relevant individuals and organisations at all levels by June 2011.	• Review existing roles & responsibilities • Revise existing roles & responsibilities/ develop new roles & responsibilities • Hold consensus building meeting • Roll out and implement • Carry out periodic review of roles/responsibilities	Availability of clear and well-defined health information/M&E roles and responsibilities for relevant individuals and organisations at all levels by June 2011	
2.7: Develop human capacity in terms of skills and numbers in relevant areas by 2016[16]	• Develop recruitment & retention strategy • Develop workforce development plan • Develop skill set for individuals & organisations at all levels • Develop costed human capacity plan • Carry out inventory of training capacity	Availability of human capacity in terms of skills & numbers by 2016	

[16] To be done in conjunction with the departments/divisions/units responsible for Human Resources (note: there will be need to harmonise this with the HRH strategic plan.

Strategic Actions	Activities	Outputs	Responsible Agency/Person(s)
	(institutions) • Develop /adopt standard curricula[17]		
2.8: Develop local leadership in M&E/health information and capacity for stakeholder coordination by December 2011	• Carry out detailed assessment of local leadership capacity • Put in place plan to develop capacity • Implement plan • Carry out periodic reviews	Availability of local leadership in M&E/health information and capacity for stakeholder Coordination by December 2011	
2.9: Establish a National M&E Technical Working Group by September 2010	• Prepare draft terms of reference for group • Propose membership • Discuss draft terms of reference for consensus • Finalise terms of reference • Working group operational • Carry out periodic reviews of TWG	Availability of a National M&E Technical Working Group (TWG) by September 2010	
STRATEGIC OBJECTIVE 3: To ensure timely, wide and need-based dissemination of data to all stakeholders by December 2016			
3.1: Strengthen data use, dissemination, and quality improvement by June 2011.	• Assess existing dissemination, data use and quality improvement strategy/plan • Draft strategy/ plan • Hold consensus building meeting • Implement plan • Periodically review plan	• Availability of dissemination, data use & quality improvement plan by June 2011 • Availability of up to date& quality briefs & reports(for different audiences) on a regular basis by June 2011 • Regular dissemination • Meetings held for different stakeholders by June 2011	

[17] For in house organisational and technical capacity building

Strategic Actions	Activities	Outputs	Responsible Agency/Person(s)
3.2: Develop health information/M&E communication and advocacy plan by June 2011	• Assess existing communication strategy/dissemination plan • Draft HIS/M&E communication and advocacy plan • Hold consensus building meetings • Implement strategy/plan • Periodically review strategy/plan	Availability of HIS/M&E communication and advocacy plan by June 2011	
3.3: Enhance commitment to health information/M&E at all levels by December 2012	• Carry out assessment (to determine level of commitment to health information/M&E) • Draft strategy/plan • Hold consensus building meeting • Implement strategy/plan • Carry out periodic review of strategy/plan	Availability of strategy/plan to enhance commitment to health information/research at all levels by December 2012	
STRATEGIC OBJECTIVE 4: To develop and implement a research agenda in collaboration with relevant partners to support national policy development by December 2011			
4.1: Develop evaluation and research agenda based on the identified health gaps and needs by December 2010	• Identify health needs & gaps • Draft agenda • Hold consensus building meeting • Roll out agenda for implementation • Periodically review agenda	Availability of research agenda by December 2010	
4.2: Strengthen coordination of surveys/evaluations and research studies by December 2010	• Carry out inventory of surveys conducted/to be conducted • Carry out inventory of completed/ongoing evaluation and research studies • Carry out inventory of in country evaluation and research capacity • Disseminate results	• Availability of inventory database by December 2010 • Coordinated efforts in surveys/researches and evaluations' implementation by December 2011.	

Strategic Actions	Activities	Outputs	Responsible Agency/Person(s)
	• Periodically update inventory document		
4.3: Strengthen surveys and surveillance systems by June 2011	• Gaps in systems including human capacity & infrastructure identified	Quality data and information emanating from surveys & surveillance systems by June 2011	
STRATEGIC OBJECTIVE 5: To develop and implement regulations regarding mandatory reporting of defined information requirements by December 2011			
5.1: Develop/revise guidelines for supervising routine data collection at relevant levels by December 2010	• Review existing supervision guidelines • Hold consensus building meetings • Enforce guidelines • Periodically review guidelines	Availability of supervisory guidelines	
5.2: Strengthen supervision, data assessments and feedback component by June 2011	• Put in place supervisory visits calendar • Hold consensus building meetings • Carry out supervisory visits • Periodically review implementation	• Supervisory visits done on a regular basis • Facilities/stakeholders receiving regular and timely feedback	
5.3: Strengthen data quality component by December 2010	• Review existing indicator & data quality protocols • Draft new/revise indicator & data quality audit protocols • Hold consensus building meeting • Enforce protocols • Periodically review protocols	• Availability of indicator and data quality audit protocols • Regular indicator & data quality audit done	
STRATEGIC OBJECTIVE 6: To develop, implement and enforce regulatory mechanism for health research by June 2011			
6.1: Establish health research regulatory structures by December 2010	• Review existing regulatory structures/develop proposal on new structures	Functional health research regulatory structures in place	

Strategic Actions	Activities	Outputs	Responsible Agency/Person(s)
	• Hold consensus building meeting • Operationalise structures		
6.2: Develop human research bill by December 2011	• Draft bill • Draft bill circulated for comments • Draft bill submitted? to parliament for approval • Act enforced	Availability of and enforcement of human research act	
6.3 Review and appraisal of research protocols	• Draft protocols review calendar • Hold consensus building meetings • Enforce protocols	Protocols reviewed and appraised	
6.4: Develop standard operating procedures (SOPs) by December 2010	• Draft SOPs • Hold consensus building meeting • Enforce SOPs • Periodically carry out review of the SOPs	Availability of SOPs	

8.5 Health Information and Communication Technology Strategy

8.5.1 Goals and Objectives

In order to establish a functional M&E system for health sector it is essential to put in place a system of procurement, deployment and use of information and communication technology that will ensure that a careful balance is established between the need for the technology and the human and financial resource availability. The goal of the Health Information and Communication Technology policy is thus to ensure the maximum use of modern technology to enhance the overall performance of the health sector.

The overall objective is to provide a framework for the procurement, deployment, and use of information and communication technology in the health sector.

The framework will involve:

- Providing guidelines for the specification and selection of products and services to develop, enhance and maintain equipment and systems for data collection and analysis; information generation and dissemination; information transmission and communication.
- Providing standards for the human resource development for information management.
- Providing guidelines for the development and enhancement of a culture of information utilisation in the health sector.
- Identify priority areas and systems to be developed to meet the challenges of the sector.

8.5.2 Information and communication technology boundaries in the health sector

In the deployment and use of Information and Communication Technology in the health sector, the Health Management Information Unit shall be the focus for the development of:

1. Health management information and support systems;
2. Internal communication systems; and
3. External communication systems.

The Health Management Information Units to be considered are:

- Health Centres
- Primary and District Hospitals
- District Health Management Team
- Referral Hospitals
- The health training institutions
- Ministry of Health.

8.5.3 Health Clinics

These will include clinical and public health services both in the communities and through health facilities. Every individual within the catchment population will be registered with basic personal information so that proactive preventive and promotive, services can be provided. The register will also contain information of other providers in the community as well as Community Based Disease Surveillance information.

The content of reports from communities to the clinics includes the description and location of a health event which will require verification and prompt action from the district. Clinics will report to the district in a manner that allows for aggregation of information and assessment of the performance of individual clinics and the district as a whole. The clinics are the crucial element in disease control and surveillance activities.

The clinics shall have facilities to enable the following tasks to be performed:

- Simple addition, subtraction, multiplication, and division in order to report on indicators for performance assessment
- Report writing in a legible manner, compatible with normal reporting and filing systems
- Storage of information in a systematic way, allowing for easy retrieval
- Computers and accessories
- Data clerk.

8.5.4 District and Primary hospitals

Primary hospitals and some district hospitals are the first referral point in the health care delivery system. They provide some specialist support to the community and clinics in the district. The Hospitals provide clinical services to a large number of clients and are usually staffed with qualified personnel. Systems that need to be supported include patient care services, drugs and medical supplies, human resource and financial information systems. These systems are can be grouped into complete transaction systems, services and decision-making systems and comprise the basis for the monitoring and evaluation system.

Information and support systems

Hospitals shall have facilities to enable computerisation of all key activities and transactions as follows:

- All complete transactions and unit record points in the hospital shall be computer based. These are:
  - The medical records unit including Admissions and Discharges
  - The pharmacy store
  - Accounts and revenue units
  - The non-drug medical supplies store
- All services shall be captured on a computer. These are:
  - Laboratory, x-ray

    - Dispensing
- All decision-making systems shall be computer assisted. These are:
    - Consulting room services
    - Ward activities

Internal communication requirements
The District and Primary hospitals shall have facilities to allow reliable communication among staff both in and out of the hospitals and specifically to support on call activities and the provision of 24-hour services.

External communication requirements
The District and Primary Hospitals will have the facility to:

- Communicate by voice to all health centres and other health facilities in the district.
- Communicate by voice and fax with referral hospital
- Communicate by voice, fax and data with the District Health Management Team

8.5.5 District Health Management Team

The District Health Management Team has the overall responsibility for the performance of health service delivery at the district level. To do this the district receives reports and information from all Health Management Information units within the district. At the district level these are analysed and put together as district reports. Resource distribution and monitoring of programme implementation at the district level is also a major function, usually involving the analysis of large volumes of data. Rapid response activities and follow up on health events at the community level also takes place at the district level. Operational research activities also take place at the district level to support internal decision-making and to contribute to national and regional surveys and research.

Information and support systems
Information management at the DHMT level facilitates a wide range of activities including planning, budgeting and performance monitoring. It will therefore require capacity for collection and analysis of a high volume of data and the preparation of reports with capacity for graphical presentation.

Internal communication requirements
The DHMT will have facilities to enable communication with all clinics in the district, the primary and/or district hospital and other sectors within the district.

External communication requirements
The DHMT will have facilities to:

- Communicate by voice to all health centres and other health facilities in the district
- Communicate by voice and fax and data with Primary and/or District Hospital
- Communicate by voice, fax and data with the MOH.

8.5.6 The Referral hospital

The Referral Hospital provides Tertiary care which includes specialist support to the District/Primary Hospitals, the communities and other hospitals and clinics in the region. Information systems to be supported include patient care services including ambulance services, drugs and medical supplies, human resource and financial information systems. As for district hospitals, these systems can be grouped into complete transaction systems, services and decision-making systems.

Information and support systems
The Referral Hospital shall have facilities to enable computerisation of all key activities and transactions as follows:

- All complete transactions and unit record points in the hospital shall be computer based. These are:
  - Medical records unit including admissions and discharges
  - Pharmacy store
  - Non drug medical supplies store
  - Accounts and revenue units
- All services shall be captured on a computer. These are:
  - Laboratory, x-ray
  - Dispensing
- All decision-making systems shall be computer assisted. These are:
  - Consulting room services
  - Ward activities

Internal communication requirements
The Referral Hospital shall have facilities to allow reliable communication among staff both in and out of the hospitals and specifically to support on call activities and the provision of 24-hour services.

External communication requirements
The Referral Hospital shall have the facility to:

- Communicate by voice to all Health Centres and other health facilities in the region. This shall include all ambulance services within the region
- Communicate by voice and fax with all Primary/District Hospitals
- Communicate by voice, fax, and data with the DHMT
- Communicate by voice, fax, and data with the MOH.

8.5.7 The health training institutions

Training institutions shall ensure adequate provisions for computer literacy especially based on systems used in the health sector. The institutions shall make the following minimum provision in the training curricula:

- Computer appreciation programme for all trainees.
- Word processing and spreadsheet usage for all trainees.
- Use of statistical packages for officers who will manage information

- In-house network management.

Information and support systems
Health training institutions will require capacity for collection and analysis of data and the preparation of reports with capacity for graphical presentation for training purposes.

Internal communication requirements
The Training Institutions shall have facilities to enable communication with all departments.

External communication requirements
The Training Institutions shall have facilities to:

- Communicate by voice and fax and data with District and Referral Hospitals
- Communicate by voice, fax, and data with the DHMT and MOH
- Allow access to the Internet.

8.5.8 Ministry of Health

The MOH is made up of the Offices of the Permanent Secretary, the Deputy Permanent Secretary's, and several Departments all of which have responsibilities for information management for decision-making. It also includes a number of technical units, most of which are replicated at the district level; for the purposes of support and guidance these maintain constant communication links.

Service planning and implementation are coordinated at this level, which also has the additional responsibility of managing contractual arrangement with other sectors for service provision. Information management at this level will largely be part of the corporate planning process and provide access to MOH policy, frameworks, and standards.

All divisions and units at the headquarters manage large volumes of data, reports, and other pieces of information on regular basis. Decision-making is usually supported by such varied sources of information. Many units maintain useful data which are not usually accessed and information sharing is not optimal. The demand for improvement in information and communication at the national level therefore focuses on the need to enhance the responsibility for information management by divisions and units, and to ensure that a system for information dissemination is supported. The recent decision of integrating the monitoring and evaluation system provides the platform to re-engineer the information flow as well as developing the capacity to useful and timely use of information.

Information and support systems
Based on the premise that divisions will have the capacity to manage information for decision making and contribute to sector policy formulation, each division will ensure that all units are equipped with appropriate facilities

for collating, analysing and disseminating information. With decentralised management of health services the roles of the Departments will be primarily in setting norms and standards, and supervision and monitoring. The overall information flow will be integrated within the MOH under the newly established M&E Division. However, every department/division will continue to analyse and use information for monitoring and supervision. The information from the DHMT, Referral Hospitals, and training institutions will be directed towards the integrated M&E division, which will ensure it is shared with all stakeholders.

Internal communication requirements
An internal communication system will be established to enable:

- Information broadcasting to all divisions and units.
- Departments/Divisions to access relevant information from other divisions and units, including the Health Information Management Unit of the M&E Division.

External communication requirements
Facilities will be established to enable:

- Information on health sector performance to be made available to all partners and other stakeholders.
- Information about developments within the sector to be readily available to all decision makers and stakeholders.

Technical standards
The main components of an information technology system are the hardware or physical infrastructure and the software. For the deployment of a system in the health sector:

a. The hardware shall be sufficiently powerful and reliable to operate effectively.
b. The software must be capable of meeting the needs of the Health Management Information System in a cost effective and user-friendly manner.
c. The whole system should be capable of expansion and development to meet the changing needs during its lifetime.

The Health Informatics Centre of the Health Information Management Unit of the M&E Division will provide up-to-date information on the specification and capability of computer hardware and other aspects of information technology to the health sector. The Health Informatics Centre will periodically publish an annual list of standards to cover:

- Operating systems
- Programming tools
- Software tools and
- Application software packages

The deployment of Information and Communication technology will take into consideration:

a. The general guidelines for use of Information and Communication Technology at each level, and for each Health Management Information Unit.

b. The level of basic infrastructure and the availability of human resource at the point of deployment.
c. Networks and information systems will be guided by the following principles:
    - Compliance with basic policy guidelines for network and information systems development
    - Compatibility with other networks and information systems to ensure easy communication and exchange of information between the various networks and information systems. A proliferation of networks and systems with different technical characteristics will either impede or raise costs of any future later integration. Furthermore, a variety in technical characteristics will make possible the replication of partial network and information systems to other institutions. All networks and information systems must therefore be fully compatible and regulated by clear technical guidelines as spelt out in this policy.
    - Modular set up of networks and systems avoids over capacity and addresses required future capacity expansion. As much as possible, networks and systems should be designed in such a way that replication to other levels of intervention and to other institutions is possible.
d. The minimum criteria for selecting any network and system shall be:
    - Based on technologies that can be managed and maintained by the responsible network and information system officers.
    - Based on proven technologies.
    - Based on technologies for which sufficient and high-quality local support and maintenance is available.
    - Based as much as possible on off-the-shelf available technologies, requiring minimal customisation. Extensive new development of software shall be minimised.
    - Based on technologies that can easily be replicated at other levels of intervention and to other institutions in the health sector.
    - Based on technologies developed by professional suppliers. Design and development of networks and systems by IT non-professionals shall be avoided.

The deployed specific software systems will comply with international health sector software standards.

In line with the information and supply systems and the internal and external communication infrastructure, the following minimal infrastructure requirements were developed at the different Health Management Information System.

1) Health Centres

Information system and support:

- Computer with appropriate software;
- PDA.

Communication:

- Land phones with fax or cell phones.
- Transport.

2) The primary/district hospital

Information systems and support

- An internal telephone system connecting all departments.
- A local area network linking all activity and transaction point.
- Computers and software

Communication

- A paging facility for all medical officers and heads of departments.
- Internet network.
- A telephone and fax link based on the national telecommunication network.
- A telephone link with dial in facility to the DHMT.

3) DHMT

Information system and support

- Personal computers for all staff, with two staff dedicated to data entry and analysis.
- Facilities for document preparation and reproduction including copiers and bookbinders.

Communication

- A telephone and fax link based on the national telecommunication network.
- Internet facilities.
- An internal telephone system connecting all departments of the DHMT.

4) Referral hospital

Information systems and support

- A local area network linking all activity and transaction point.
- Software

Communication

- An internal telephone system connecting all departments.
- A paging facility for all medical officers and heads of departments.
- A telephone and fax link based on the national telecommunication network.
- Computers and software with internet facilities.

5) Health training and research institutions

Information systems and support:

- A small local area network for administration.

- A computer laboratory with enough facilities to enable at most five students to one computer during instruction periods.
- Facilities for document preparation and reproduction, including copiers and bookbinders.

Communication
- An internal telephone system connecting all departments.
- A telephone and fax link based on the national telecommunication network.
- Internet access.
- Computers with necessary software.

6) Ministry of Health

Information systems and support
- Personal computer for all staff.
- A computer laboratory for training of staff.
- Every division shall have facilities for document preparation and reproduction including a photocopier and bookbinders.

Communication
- An internal telephone system connecting all Divisions, Units, and Officers under each unit.
- A local area network.
- An external telephone link based on the national telecommunication network.
- Internet access
- A website dedicated to the sector.

Information procedures

i. Standards and procedures for information and communication management will be developed and updated annually by the Health Management Information Unit of the M&E Division to guide users in the management of both hardware and software. The procedures will also include procedures for data and information flows and additional standards required.

   For data and information procedures the following policy principles apply:
   1 A unique coding system for basic patient information
   2 A standard for the classification of diseases (ICD 10 and beyond)
   3 A standard for the classification of diagnosis and treatment
   4 Procedures on the protection and use of patient information.

ii. A unique coding system based on the provisions of the Medical records Policy shall be adopted for all patients. The coding will cover a unique number for each registered patient including data on the patients'

geographical health unit. The coding system will have the following minimum criteria:

- The number will be applied to all health transactions of the patient. This will enable to health providers to build a health history on each patient. The coding will be directly applied to all information and communication systems.
- The unique coding system is only related to the health sector.
- For each patient, a basic minimum set of patient data will be developed including at least Name, Address, Omang/passport number and other basic personal information.
- This minimum data set in combination with a standard way of registration (like using the ICD-10) makes it possible to aggregate information (for scientific and managerial purposes) and to compare figures of different regions (or of different hospitals).

iii. A standard classification system for diseases will be introduced to ensure effective registration and exchange of disease related information. The system to be deployed is the International Classification of Diseases (ICD) adopted for Botswana.

iv. Procedures on the protection and use of patient information shall be developed and for all categories of data and information and shall apply to all levels. To avoid misuse of information, there shall be a standard code of practice for all data managers and health practitioners. It is advised to take the Guidance on the Protection and Use of Patient Information developed by the UK Department of Health as a starting point for the development of privacy procedures. The basic principles and starting points for privacy procedures are the following:

- Establishing a set of procedures with which users of personal information must comply (e.g. fair and lawful processing of information; information to be collected and processed only for specific purposes; information to be accurate an up to date and retained in a form which identifies the subject only for as long as is necessary for the purpose).
- Giving individuals the right to gain access to information held about them.
- A supervisory authority to oversee and enforce the law.

The procedures will:

- Permit the processing of health information where is required for the purposes of preventive medicine, medical diagnosis, the provision of care or treatment or the management of health care services, and where those data are processed by a health data manager of practitioner subject under national law or rules established by national competent bodies to the obligation of professional secrecy or by another person also subject to an equivalent obligation of secrecy.
- Require certain information to be provided to individuals whose personal information is processed.
- Apply both to computerised and manual records.

The procedures will provide detailed practical guidelines for the basic principles governing the use of patient information:

- Informing patients why information is needed, how it is used and their own rights of access to it.
- Safeguarding information required for national health statistics and related purposes.
- The circumstances in which information may be passed on for other purposes or as a legal requirement.

ICT training and human resources development procedures

Health sector training programmes will include Information and Communication Technology awareness creation and skills development. The training programmes will upgrade/give new skills to information officers and health staff. Specific training and human resources development programmes will be directly linked to specific ICT network or information systems. Specific training requirements will therefore be detailed in strategic plans for specific network and information systems activities.

Capacity development

The capacity building programmes will encompass:

- Information management for higher health administration staff, network manager and information officers
- Network management and maintenance for network managers and information officers
- Database and web development, management and maintenance for information officers
- Information analysis and reporting for information officers
- Data entry for support information staff
- Basic computer literacy for health staff (basic office programmes such as text, spread sheet and presentation programmes).

8.5.5 Implementation of the M&E

This section provides a broad operational framework for the MOH and its stakeholders with regards to developing the health services HIS/M&E system. The results framework has been developed based on the HIS/M&E strategic objectives as per the health policy. Implementation of this M&E strategy will be guided by development of annual costed plans, developed at appropriate times over the plan period, and based on the strategic actions for completion targets. All implementing stakeholders will need to develop and/or align their annual plans using this document as the reference. The Department of Policy Development, Monitoring & Evaluation will undertake as part of its technical and coordination role to ensure that the strategy is operationalised and that there is a shared implementation framework. This framework will include systems for harmonised annual planning, funding requests, budgeting and

accounting; and reporting. This will allow for the available resources to be utilised optimally.

9. GOVERNANCE, LEADERSHIP AND MANAGEMENT OF THE HEALTH SECTOR

9.1 Overview

This chapter describes roles and responsibilities for effective governance, leadership, and management of the health sector. The goal is to ensure strategic guidance and oversight in the regulation and implementation of all health related services.

9.2 Strategic Objectives

The strategic objectives for governance, leadership and management of the health sector are:

- To create a platform in the health sector for the provision of strategic guidance and oversight
- To develop the National Health Strategic Plans to guide the implementation of the Policy
- To clarify the roles of stakeholders
- To ensure functionality of all regulatory frameworks
- To separate the inspection and implementation roles within the health sector
- To establish a Change Management Unit for assisting the reform process.

9.3 Change Management Unit to be established in MOH

The revised National Health Policy and the IHSP propose a number of reforms to the health sector in Botswana. These include:

- Reorganisation of health care delivery by a strengthened District Health Management Team (DHMT) within the purview of the MOH.
- A reorganized health delivery model by levels of health care delivery, as well as through focus on an EHSP.
- Reforms in health financing including improved efficiency.
- An integrated M&E framework.
- A sector-wide approach (SWAp) to planning, financing, management, and M&E for the health sector.
- A coordinated HR strategy with established workforce planning, improved performance management and capacity building.

There is inadequate capacity within the MOH for supporting the above reform initiatives of the IHSP. The SWAp is new concept for the country. International

experience (from both developing and developed countries) has shown the need for (and benefits from) change management units (CMUs) established within health ministries to support the implementation of health reforms. The CMUs have been supported with external technical assistance (also developing national capacity). Accordingly, a Change Management Unit will be established in MOH to support the implementation of the IHSP and its reforms.

9.3.1 Tasks and responsibilities of the Change Management Unit

1) Review the plans for all management reform initiatives to ensure they are consistent with each other, harmonised with the new National Health Policy and IHSP, have clear objectives and realistic plans, and that there are adequate plans for monitoring and evaluation.
2) Assist preparation of plans for management reforms at the central level and in Districts, particularly moving from projects to programmes; restructuring the MOH; restructuring the DHMT.
3) Commission supporting activities to assist the introduction of management reforms, such as the development of a communication strategy to prepare staff and the public for the changes planned; commissioning management training for the MOH and DHMT; commissioning work to identify whether and how to merge specific support function.
4) Assist the MOH in discussion and negotiation with other parts of the Government of Botswana to assist with the introduction of the reforms, for example with Ministry of Finance on financial delegation issues and DPSM on personnel issues.
5) Monitor implementation of the various initiatives to identify any problem emerging and how the changes can be expedited or made more effective.
6) Capacity building of the reorganized Ministry of Health staff.
7) Capacity building of the DHMT.
8) Report regularly to the Permanent Secretary and the Minister on progress and issues requiring their input.

9.4 Capacity building of Health Sector Management

The current changes in the management of health services, including the relocation of PHC services under the MOH, require reorganisation within the MOH. A draft organogram has been developed for the consideration/approval of the competent authority.

9.4.1 Formation of the District Health Management Team

The principal objective of managing PHC under one ministry is to ensure a continuum of care, from preventive to curative to rehabilitative services, through an effective referral mechanism. The other objectives are to separate service delivery and management of health services, including delegation of

power to the districts through newly-created District Health Management Teams (DHMTs).

9.4.2 Key functions in health service delivery at different levels of the health system

The following sections describe roles and functions at all levels of health care delivery. These norms and standards are based on international experience from decentralization of health systems in both developed and developing countries (including Africa).

The roles and functions of the Ministry of Health would be:

- Leadership and governance in the health sector
- Formulate the National Health Policy and Strategic Plan (IHSP)
- Propose the review and enactment of health legislation
- Provide a framework for the regulation of drugs, food and health service delivery and practice
- Provide a strong and effective advocacy role for intersectoral action related to health delivery
- Contribute to setting national health and disease priorities
- Provide strategic direction for health services
- Develop a strategic EHSP, which is regulated, accountable, transparent and results based
- Ensure effective referral system
- Develop an integrated M&E framework as part of the national health information system
- Annual planning, monitoring and evaluation cycles with priority on EHSP
- Set norms, standards and guidelines for health care delivery by public, private and NGO sectors
- Source funding for service delivery through GOB, international community and partners, health insurance, etc.
- Allocate resources to all care delivery agencies under the Ministry
- Provide a framework for the effective and efficient procurement, distribution, management and use of health sector goods, works and services
- Coordination of the health sector (public, private, NGOs and DP)
- Efficient management including supervision
- Provide a framework for the development and management of the human resources for health.
- Provide a framework for the production of human resources for health

The roles and functions of the District Health Management Teams are:

- Assessment of health and management needs
- Set priorities and review progress towards achieving indicators and outputs
- Annual district plans
- District council and health sector coordination

- Ensure effective referral system
- Effective supervision and monitoring
- Monthly management including monitoring of work plans
- Implement user-friendly health services
- Develop and manage human resources for health
- Procurement, distribution and management of drugs, vaccines and other medical and non-medical supplies for health facilities

The roles and functions of Health facilities (PHCC, PH, DH, and RH) are:

- Implementation of user-friendly health services (mainly curative, preventive and promotive services)
- Effective and efficient outreach
- Supervision
- Community participation

The roles and functions at the Community level are:

- User-friendly, effective and efficient household and outreach services (mainly preventive and promotive and rehabilitative services)
- Community participation.

9.5 Strategic Plan for the Governance, Leadership and Management of the Health Sector

Strategy	Indicators	Activities to achieve the strategy	Time scale	Responsibility
STRATEGIC OBJECTIVE 1: TO CREATE A PLATFORM IN THE HEALTH SECTOR FOR THE PROVISION OF STRATEGIC GUIDANCE AND OVERSIGHT				
1.1: Establish and functionalise the National Health Council	• Terms of Reference of the NHC • Minutes of NHC	• Develop terms of reference with multi-disciplinary stakeholders as members • Launch of the National Health Policy by the NHC • Quarterly meetings of the NHC	Year 1 Year 1 Plan period	PS PS NHC Chair
STRATEGIC OBJECTIVE 2: TO FORMULATE AND ENSURE FUNCTIONALITY OF ALL REGULATORY FRAMEWORKS				
2.1: Review all existing legal and regulatory instruments and identify gaps	• Review report	• Establish a committee to review • Provide technical assistance to the committee • Conduct stakeholder consultation		DPS – CS and HS
2.2: Formulate new legal and regulatory instruments, and revise the existing instruments as per identified gaps	• Number of legal and regulatory instruments	• Draft required legal and regulatory instruments • Draft Health Act to translate revised national health policy • Identify regulatory authority		MOH/AG
STRATEGIC OBJECTIVE 3: TO ESTABLISH AND FUNCTIONALISE INDEPENDENT REGULATORY AUTHORITIES				
3.1: Establish and functionalise an autonomous Health Inspectorate to regulate quality assurance of	• Health Inspectorate Act	• Formulate Health Inspectorate Act • Develop Strategic Plan for HI • Implement strategic plan		MOH/AG MOH HI

Strategy	Indicators	Activities to achieve the strategy	Time scale	Responsibility
health facilities				
3.2: Establish and functionalise an autonomous Food and Drug Regulatory Authority (FDRA)	• Revised Food and Drug Act	• Review the DRSA • Formulate revised Food and Drug Act • Approve Act • Establish autonomous FDRA • Functionalise FDRA		• MOH • MOH/AG • Parliament • MOH • FDRA
3.3: Establish an unified Health Professional Council (merging existing HPC and NMCB)	• Revised unified Health Professional Act	• Review the existing HPC and NMCB Acts • Conduct benchmarking visits to other developed countries • Conduct stakeholder consultation • Draft Unified Health Professional Act • Approval of Health Professional Act • Develop annual plans and implement plans of autonomous Health Professional Council		• MOH • MOH/HPC/NMCB • MOH/HPC/NMCB • MOH/AG • Parliament • New HPC
STRATEGIC OBJECTIVE 4: IMPROVE THE QUALITY, ETHICS AND CAPACITY OF HEALTH RESEARCH				
4.1: Establish an autonomous Health Research Council	• Health Research Council Act	• Draft and approve Health Research Council Act • Establish autonomous Health Research Council • Functioning of Health Research Council		
STRATEGIC OBJECTIVE 5: STRENGTHEN MANAGEMENT OF THE HEALTH SECTOR				
5.1: Establish a Change Management Unit (CMU)	• Change Management Unit	• Develop Terms of Reference for CMU • Contract a Consultancy Firm • Conduct Tasks of the CMU (detail below)		
5.2: Establish a		• Develop organogram of the Knowledge		

Strategy	Indicators	Activities to achieve the strategy	Time scale	Responsibility
Knowledge Management Centre		Management Centre • Develop and implement a strategic plan		

10. ANNUAL OPERATIONAL PLANNING AND REVIEW PROCESS

10.1 Overview

The annual planning, management, and review of IHSP implementation will be based on the principles of the sector-wide approach and incorporate the principles of harmonisation and alignment.

The following principles underpin the sector-wide approach:

- A clear sector policy and strategic framework - the revised National Health Policy 2010 of Botswana provides this.
- Clear links between sector policies and the expenditure plans for the sector, so that the allocation of resources reflects the sector strategies.
- Annual operational plans which specify the activities to be carried out under each strategy.
- Use of resources to implement the plans, with pooling of resources from various sources to fund the plan.
- Resources which are not pooled but whose activities are included in the IHSP should still be reflected in the annual plans.
- Integrated management of activities especially at the district level under the DHMTs.
- Reporting on activities and results against the plan, with common reporting and performance monitoring arrangements (rather than each funding agency having its own review process or different system used by different departments).

The purpose of the annual operational plans is to show the planned activities for the year and the related expenditures, in order to:

a) demonstrate that the funds will be used well, based on sound plans directed towards achieving agreed objectives;
b) draw together related project and programme activities which are funded in different ways, to show the total investment and activities for each programme; and
c) provide a mechanism for performance monitoring of implementation and expenditure.

The Annual Planning and Review (APR) will be the main opportunity for both GoB and development partners (DPs) of the health sector to review progress and decide how to support the sector the following year.

The purposes of the APR are thus:

i) GOB and DPs to review performance over the past year against plans and expected results, to see how much has been achieved.

ii) Management of the sector and deliver against plans, and to make proposals for support in the following year.
iii) All funding agencies to assure themselves that the funds provided have been used properly in line with agreed plans, particularly the pooled funds.
iv) To identify problems in implementation and seek solutions.
v) To agree on the basis for the next year's plans, including the likely level of funding and key activities planned.
vi) To share the findings of any separate reviews of bilateral programmes or evaluation studies with other development partners.

10.2 Information requirements for the APR

In order to serve these purposes, the APR will require the following data:
i) A report on performance against planned activities and outputs/results (using the performance indicators defined). This would draw on the annual monitoring of performance and accounting information to show how far major activities have been carried out, expenditure by programme and source; and measures of outputs or results. There would also be a commentary, which highlights the major achievements, and identifies gaps or delays with an explanation of the reasons for these. Report to be developed by all districts as well as all Departments.
ii) A financial report which reviews the expenditure, financial information and reporting, to comment on the adequacy of the financial management system and recommend where strengthening may be required.
iii) A review of key management issues, including progress with sector-wide management and experience gained (could be part of 1).
iv) Proposals for the following year, which would set out the resource envelope (including Government and pool) and its allocation between broad programmes, and identify key activities and initiatives proposed for the coming year.
v) Community and stakeholder perspectives will be reflected through the agreed performance indicators that will be used to collect information in the service delivery survey.

Each district will develop the District Annual Plan, which will show a three-year rolling plan as per the attached format (Annex 2). Similarly, the referral hospitals will develop their annual plan as per the format provided in Annex 3.

11. BUDGET ESTIMATES

11.1 Overview

The chapter addresses budget estimates for the EHSP and the projected costs of the IHSP.

11.2 Estimated cost of the EHSP

The estimated cost of the EHSP is based on the interventions by levels of care. It only contains the costs of drugs, vaccines, medical supplies, and other related hospital services, including beds and diet. Table 11 provides the cost of these levels of service projected for the next six years. No further projections are made because the content of the EHSP will be reviewed at around this time

Table 11: Estimated cost of Drugs, Lab and Medical Supplies for the EHSP

LEVEL OF CARE	TOTAL COSTS IN PULA					
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Community Health Clinics	49,131,100	56,493,060	62,653,710	69,316,860	76,374,640	83,972,440
Primary Hospitals	800,118,042	783,121,613	765,587,575	783,798,405	834,468,056	887,193,366
District Hospitals	226,744,348	245,493,829	252,494,458	256,231,048	260,776,931	265,820,490
Referral Hospitals	152,681,208	170,115,211	173,678,539	177,685,005	182,196,316	187,076,797
TOTAL	156,893,900	199,639,230	216,436,130	235,316,730	257,644,480	280,351,450
	1,385,568,598	**1,454,862,943**	**1,470,850,412**	**1,522,348,048**	**1,611,460,423**	**1,704,414,543**

The cost of the HR element of the EHSP is provided in Table 12. The annual cost shown will be during the 10th year of the IHSP, when all posts will be created in tandem with the upgrading of the health facilities. The annual cost will be based on number of posts created each year.

Table 12: Estimated cost of Human Resources required for the EHSP

Position Title	Total	Total Annual Cost (BWP)
Clinical Psychologist I	60	6,681,240
Community Health Nurse	1,108	123,380,232
Community Health Worker	1200	86,925,600
Consultant (A&E)	26	7,642,440
Consultant (Anaesthesia)	56	16,460,640
Consultant (Cardio-thoracic)	4	1,175,760
Consultant (Chest)	4	1,175,760

Position Title	Total	Total Annual Cost (BWP)
Consultant (General Surgery)	36	10,581,840
Consultant (Geriatric)	4	1,175,760
Consultant (infectious Diseases)	24	7,054,560
Consultant (Intensive Care)	4	1,175,760
Consultant (Maxilla-facial surgeon)	4	1,175,760
Consultant (Neonatology)	24	7,054,560
Consultant (Nephrology)	4	1,175,760
Consultant (Neurosurgery)	4	1,175,760
Consultant (Neurology)	4	1,175,760
Consultant (O&G))	60	17,636,400
Consultant (Oncology)	4	1,175,760
Consultant (Ophthalmology)	24	7,054,560
Consultant (Orthopaedics)	4	1,175,760
Consultant (Paediatrics)	28	8,230,320
Consultant (Pathology)	8	2,351,520
Consultant (Physician)	64	18,812,160
Consultant (Psychiatry)	8	2,351,520
Consultant (Radiology)	24	7,054,560
Consultant (Reconstructive Surgery)	4	1,175,760
Consultant (Urology)	24	7,054,560
Senior Medical Officer	144	23,725,440
Medical Officer	785	112,470,090
Chief Medical Officer	56	12,201,168
ECG Technician	48	5,344,992
Audiologist	24	4,322,016
Biomedical Engineer I	24	2,672,496
Cyto-technologist	60	8,171,280
Medical Laboratory Technician I	617	44,694,246
Optician	36	6,483,024
Orthodontist	8	1,440,672
Orthotics	8	1,440,672
Infection Control Officer	24	2,672,496
Health Care Auxiliary	280	40,116,720
Health Education Assistant	1,666	45,421,824
Laboratory Scientist	104	9,341,280
Laboratory Technician	625	29,448,750
Social Worker	2,582	425,410,320
Lay Counsellor	5,136	735,855,264
Perfusionist	8	1,440,672
Occupational Therapist Assistant	36	1,178,064
Occupational Therapist I	68	7,572,072
Phlebotomist	52	1,701,648
Physiotherapist I	92	10,244,568
Plaster Technician	72	2,356,128
Senior Technical Officer (Optom) I	20	1,796,400
Radiographer I	537	59,797,098
Radiotherapist	56	10,084,704

Position Title	Total	Total Annual Cost (BWP)
Senior Occupational Therapist	4	573,096
Substance Abuse Officer	24	2,672,496
Technical Officer (Health Education) I	108	7,823,304
Ultrasonographer	60	10,805,040
Pharmacist I	85	9,465,090
Pharmacy Technician I	625	45,273,750
Dental Officer	28	4,011,672
Technical Officer(Dental) I	116	8,402,808
Family Nurse Practitioner	144	16,034,976
Matron I/Nurse Manager	132	9,561,816
Other Specialist Nurses	148	16,480,392
Ophthalmic Nurse	84	9,353,736
Mental health Nurse	88	9,799,152
Anaesthetic Nurse	224	24,943,296
Theatre Nurse	288	32,069,952
Diabetic Nurse	64	7,126,656
ENT Nurse	88	9,799,152
A&E Nurse	264	29,397,456
Neonatal Nurse	96	10,689,984
Midwife	1,894	210,904,476
Registered Nurse	4,940	550,088,760
Psychiatric Nurse	80	8,908,320
Nurse manager	128	6,031,104
Dietician I	64	7,126,656
Nutritionist	30	3,340,620
Nursing Assistants	700	30,055,200
Senior Theatre Assistant II	220	10,365,960
Mental Attendant	56	1,272,432
Paramedics	120	6,387,840
Accountant I	60	6,681,240
Accountant II	108	9,700,560
Administration Officer I	637	30,014,166
Domestic Supervisor I	28	2,028,264
Data Clerk	629	17,149,056
Hospital Manager I	24	6,188,400
Hospital Manager II	60	13,072,680
Hospital Superintendent I	24	7,054,560
Hospital Superintendent II	8	2,062,800
Medical Records Clerk	164	4,471,296
Medical Records Officer	60	8,596,440
Public Relations Officer	28	3,117,912
Supplies Officer I	84	6,084,792
Cleaners	1,871	51,010,944
Messenger	661	18,021,504
Transport Officer I	108	7,823,304
TOTAL	**31,442**	**3,248,507,286**

The investment costs for the construction and upgrading of facilities along with capital equipment are shown in Table 13. However, these costs will be dependent upon district plans and resource allocation.

Table 13: Capital investment costs

Item	Unit Cost in Pula	Number of units	Total Cost (BWP)
Upgrading of Health posts to Health Clinics	10,000,000	85	850,000,000
Upgrading or new construction of Primary Hospitals	67,000,000	16	1,072,000,000
Upgrading or new construction of District Hospitals	160,000,000	12	1,920,000,000
TOTAL			**3,842,000,000**

11.3 Summary cost of the IHSP

The summary cost of the IHSP, indicated below in Table 14, is based on several assumptions. Firstly, the HR costs are based upon a 10% increased establishment every year over the 10-year period. Secondly, the MOH management costs are based on the current establishment. And finally, the capital and running annual costs of the medical school are not included. The total cost is based on district averages as three districts have not finalised their plans.

Table 14: Summary cost of the IHSP

Budget Item	Average Annual Cost (in Million Pula)	Total Cost in Million Pula (10 years)
Drugs, Medical Supplies and other establishment costs for EHSP	1,656.00	16,560.00
Construction and Equipment	384.20	3,842.00
Human Resources	2,623.50	26,235.00
MOH and other Management costs	104.00	1,040.00
National level programmes (public health, HIV/AIDS, quality assurance, etc.)	132.00	1,320.00
TOTAL	**4,899.70**	**48,997.00**

12. Annex 1: Health Sector Professionals and Training Providers

	Training Provider
Doctors	
Medical Officers	OC/UB*
Specialist doctors:	
Anaesthetist	OC
Cardiologist	OC
Dermatologist	OC
Endocrinologist	OC
Family Health	OC
General Surgeon	OC
Maxillo Facial Surgeon	OC
Obstetrician/gynaecologist	OC
Oncologist	OC
Ophthalmologist	OC
Orthopaedics	OC
Paediatrician	OC
Pathologist	OC
Psychiatrist	OC
Public Health	OC
Radiologist	OC
Radiotherapist	OC
Traumatologist	OC
Urologist	OC
Dentists	OC
Nurses	
Nurse – Registered	IHS
Specialists:	
Anaesthetic Nurse	IHS
Community Health Nurse	IHS
ENT Nurse	OC
Family Nurse Practitioner	IHS
Intensive Care Unit/Critical Care Nurse	OC
Medical and Surgery Nurse	OC
Midwives	IHS
Neurosurgery Nurse	OC
Oncology Nurse	OC
Ophthalmic Nurse	IHS
Orthopaedics Nurse	OC
Paediatric Nurse	OC
Psychiatric Nurse	IHS
Theatre Nurse	OC

	Training Provider
Other Professional Staff	
Audiologist	OC
Bio Medical Engineers	OC
Biomedical Engineering Technicians	OC
Clinical Psychologist	OC
Dental Laboratory Technologist	OC
Dental Therapist	IHS
Environmental Health Officer	UB
Environmental Health Technician	IHS
Family Welfare Educator	IHS
Health Education Officer	IHS
Lecturers	UB/OC
Medical Laboratory Assistants	UB
Medical Laboratory Technicians	IHS
Medical Scientific Officers	OC
Nutritionist/Dietician	OC
Occupational Therapist	OC
Optometrist	OC
Orthotics/Prosthetic Technician	OC
Orthotist/Prosthetist	OC
Pharmacy Technician	IHS
Pharmacist	OC
Physiotherapy Assistant	OC
Physiotherapist	OC
Radiographer/Image Specialist	OC
Rehabilitation Officer	OC
Social Welfare Officer	UB
Social Worker	UB
Speech Therapist	OC

Notes

* UB from August 2009

Key

HTI = Institute of Health Science
UB = University of Botswana
OC =Out of Country

13. Annex 2: Distribution of Health Personnel by Health Districts

Category	Health Districts													
	Ngamiland	North-East	Serowe/ Palapye	Bobirwa	Kwenenng-East	Southern	Gantsi	Mahalapye	Kgatleng	Chobe	Kgalagadi-South	Tutume	Boteti	Okavango
Professional Doctors	12	10	20	7	25	13	8	18	10	7	2	7	17	6
Professional Nurses	195	130	205	136	448	178	67	265	149	121	49	99	166	110
Other Professionals	121	166	268	93	339	200	62	285	321	99	106	166	149	147
Administration	135	99	234	48	222	236	40	172	658	59	100	125	139	115
Total	**463**	**405**	**727**	**284**	**1,034**	**627**	**177**	**740**	**1,138**	**286**	**257**	**397**	**471**	**378**

Category	Health Districts (contd.)											Total
	Gaborone	Francistown	South-East	Lobatse	S/Phikwe	Kwenenng-West	Mabutsane	Jwaneng TC	Good Hope	Kgalagadi North	Tonota	
Professional Doctors	252	91	25	20	11	6	1	15	4	7	1	**595**
Professional Nurses	1,077	423	239	311	170	68	21	158	88	100	33	**5,006**
Other Professionals	765	479	215	124	121	189	30	80	76	91	39	**4,731**
Administration	1,261	378	251	115	68	216	34	48	95	39	12	**4,899**
Total	**3,355**	**1,371**	**730**	**570**	**370**	**479**	**86**	**301**	**263**	**237**	**85**	**15,231**

14. Annex 3: Output For Health Training Institutions 1997 -2008 (All Programmes)

PROGRAMME	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
General Nursing	245	242	244	242	316	312	346	332	355	309	321	301
GN Upgrade	212	208	187	164	165	150	28					
Midwifery	69	39	57	103	85	88	152	172		167	189	
Pharmacy	7	12	12	13	14	12	13	10	17	11	17	13
Health Education	11	12	12	11				15	10	9	14	11
Dental Therapy	8	6	6	7	6	5	7	6	7	6	8	7
Med. Lab. Tech.	16	15	14	10	10	13	12	7	18	17	11	17
Env. Health	14	13	13	10	12	10	14	14	9	14	12	14
C.H.N.	14	13	11	13	13	12	14		9		8	
F.N.P.		15		18		21	10	21		28		22
N.A.		6		8		8		6		8		8
A.D.P.M.H.N.		20		24	18	21	17		21		20	
O.P.N.											11	
TOTAL	**596**	**601**	**556**	**623**	**639**	**652**	**613**	**583**	**446**	**569**	**611**	**393**

EN/GN UPGRADE	
1995	91
1996	152

15. Annex 4: Target Annual Enrolment for the Health Training Institutions with effect from 2009

Institution	BASIC PROGRAMMES						POST BASIC PROGRAMMES					
	G.N	Dental	Pharmacy	MLT	Health Education	Environmental Health	Midwifery	FNP	NA	CHN	OPN	CMH
IHS Francistown	100						50					
IHS Gaborone	80	10	30	30	20		60	20	10			
IHS Lobatse	60					20	20					20
IHS Molepolole	50		30				40			20	20	
IHS Serowe	90				30		50					
DRM School of Nursing	30											
BLH School of Nursing							50					
KSDA College of Nursing	50							20				
Total per Programme	**460**	**10**	**60**	**30**	**50**	**20**	**270**	**40**	**10**	**20**	**20**	**20**

KEY

G.N. General Nursing
MLT Medical Laboratory Technician
FNP Family Nursing Programme
NA Nursing Anaesthesia
CHN Community Health Nursing
OPN. Ophthalmic Nursing
CMH Community Mental Health Nursing

16. Annex 5: Human Resource Strategy Work Programme

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Responsible
STRATEGIC OBJECTIVE 1: REDUCE THE SHORTAGE OF HEALTH PROFESSIONALS				
1.1: Address known push and pull factors that influence attraction and retention for targeted staff groups	• Vacancy Rate • Number of staff in post • Turnover Rate	• Develop and start implementation of an attraction and retention strategy that includes: o Career progression (i.e. parallel progression) for speciality areas e.g. psychiatric nursing o A review of conditions of service and allowances (e.g. improved allowances for attractive packages for health professionals) o Choice for nationals to have fixed term contracts of employment similar to those given to expatriates o Improved recognition and utilisation, and provision of a conducive working environment for certain skills/disciplines e.g. some allied professionals o Lecturers o Expatriates	Year 3	PS MOH DPS Corporate Services
1.2: Increase the types of health professionals produced in-country (*The assumption is that those who train in Botswana are more likely to stay in Botswana)*	Percentage of staff trained in Botswana	• Identify the additional types of health professionals to be produced in-country and improve local institutional capacity (infrastructure, equipment, human resources etc)	Year 5	PS MOH
1.3: Increase production where current	Capacity of training institutions as a	• Identify areas of underproduction and develop appropriate training plans that are supported by	Year 2	PS MOH

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Responsible
production is insufficient	percentage of target required	appropriate attraction and retention strategies		
1.4: Improve recruitment of students for health professional programmes	Percentage against target number of students recruited for health professional programmes	• Develop a comprehensive plan on career marketing in schools by MOH and MOESD	Year 1	DPS Corporate Services
1.5: Enhance the targeted recruitment of retired health professionals	• Number of retired employee recruited • Percentage of vacancies filled	• Recruitment of retirees for all health professions • Introduce refresher training for retirees recruited who have not practiced for a significant period of time	Year 1	DPS Corporate Services
1.6: Public private partnerships	Number of public private partnerships in place	• Identify opportunities for public private partnerships for health services e.g. physiotherapy, psychology, dietetics etc.	Year 1	Director Policy, Monitoring & Evaluation
1.7: Maximise the utilisation of existing health professionals	Report on initiatives delivered	• Ensure appropriate deployment of health professionals to maximise utilisation of their skill • Identify interventions currently undertaken by skilled health care professionals that could be carried out by existing staff or new types of posts that are easier to train and recruit (e.g. health care assistants) • Ensure task shifting/new posts created are supported by	Year 1 Year 1 Year 1	PS MOH Director Clinical Services DPS Corporate Services DPS

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Responsible
		appropriate training and accreditation frameworks and remuneration • Identify changes that could be made to service delivery models to maximise use of resources e.g. create clusters of facilities with professionals serving a number of facilities training and accreditation frameworks	Year 1	Corporate Services PS MOH Director Clinical Services
STRATEGIC OBJECTIVE 2: DISTRIBUTION OF HEALTH PROFESSIONALS MEETS SERVICE REQUIREMENTS				
2.1: Develop effective incentive packages for rural areas	• Report on delivery of incentive packages • Report of defined rural areas • Percentage of staff working in rural areas • Staff satisfaction in rural areas – staff survey • Turnover rates in rural areas • Vacancy rates in rural areas	• Redefine rural/remote/hardship areas and review allowances and incentives • Develop a plan to improve working conditions in rural areas • Develop a plan to improve living conditions in rural areas that includes housing and recreational facilities • Develop a policy that staff, who have worked in rural area for a certain period of time will have first priority for further training, promotion, etc	Year 3	DPS Corporate Services, Director Clinical Services DPSM
2.2: Effective and fair	• Transfer policy in	• Develop a transfer policy to ensure effective and fair	Year 2	DPS

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Responsible
staff transfers	place • Report on initiatives delivered	implementation of transfer guidelines and which ensures staff transferred have the necessary skill requirements to meet service needs (to include compulsory transfer policy) • Monitor implementation of the transfer policy and guidelines	 Year 1	Corporate Services All Directors MOH
2.3: Training programmes held in rural areas for practicing in rural areas	• Number of training programmes held in District hospitals in rural areas to support training in Family Medicine • Number of Family Medicine doctors practicing in rural areas	• Develop a plan for the establishment of training infrastructures in District hospitals in rural areas to support training in Family Medicine	Year 3	PS MOH
OBJECTIVE 3: STAFF HAVE THE NECESSARY SKILLS TO DELIVER EHSP AND NON-EHSP SERVICES				
3.1: Integrated human resources for health information system	• Integrated HRIS utilised to identify and monitor training needs	• Develop an integrated human resource information system	Year 1	DPS Corporate Services Director PME
3.2: Co-ordinated training plans	• Co-ordinated Training Plan in place and reviewed annually	• Establish a Co-ordinating Committee- to be covered under training strategy • Undertake regular training needs assessments	Year 1	Senior Manager Corporate Services

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Responsible
		• Develop co-ordinated and integrated annual and long term training plans, including project-based plans • Base budget allocation on training priorities identified in the training plan		
3.3: Accredited out of country training institutions	• Percentage of out of country training institutions used that are not accredited by Botswana	• MOH, MOESD, Health Professional Councils and other relevant bodies to develop and maintain a list of accredited out of country institutions for training students in health allied programmes	Year 1	DPS Corporate Services
OBJECTIVE 4: IMPROVED PERFORMANCE AND MOTIVATION OF HUMAN RESOURCES				
4.1: Improve management practices	• Report on initiatives • Percentage of new appointed managers and all newly recruited staff attending an induction programme within 3 months of joining	• Develop and implement management and leadership training and development plan to ensure best management practices • Ensure induction programmes for newly appointed managers and new staff • Develop and implement succession and career plans to motivate staff and ensure staff potential is realised • Use succession/career planning and appropriate recruitment/promotion criteria for management positions • Develop HR policy implementation procedures to ensure effective implementation of policies e.g. disciplinary procedure.	Year 2 Year 1 Year 1 Year 1 Year 2	DPS Corporate Services DPS Corporate Services & Director PME

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Responsible
4.2: Improve clarity of job role/purpose	• All staff have up to date job descriptions	• Up to date job descriptions completed for all staff	Year 2	DPS Corporate Services
4.3: Improve quality of pre-service and post basic training in country	• Turnover of lecturers • Report on initiatives	• Improve retention of lecturers (link with Objective 1, Strategy 1)	Year 1	DPS Corporate Services
		• Infrastructure and equipment development	Year 2	PS MOH & PS M MOIST
		• Develop appropriate accreditation framework	Year 2	Director Health Services
4.4: Improve In-service Training and Development/Continuing Professional Development opportunities (T&D/CPD)	• Report on initiatives • Training needs assessment report	• Strengthen quality assurance and regulatory role of professional councils	Year 2	Director Health Sector Relations & Partnership
		• Strengthen links between In-service Training & Development/CPD and staff performance and competencies	Year 1	DPS Corporate Services
		• Undertake regular training needs assessments *[also relevant to Objective 3, Strategy 2]*	Year 1	Senior Manager Corporate Services
		• Develop flexible T&D/CPD models to include on-site	Year 2	DPS

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Responsible
		training, distance learning, mentoring		Corporate Services
4.5: Improve staff health and well being	• Health and Safety Act in place • Organisation structure for Health and Safety in place for headquarters and facilities • Report on initiatives	• Formulate a (national) Health and Safety Act • Strengthen the capacity of the Health and Safety function within the Ministry of Health to deliver staff health and wellbeing initiatives • Employ Health and Safety Officers at facilities • Establish initiatives to promote health and well being (e.g. gyms/recreational fitness facilities; wellness centres; health check-ups; psycho-social support) • Continue to ensure staff time is allocated for Wellness Week	Year 1 Year 2 Year 3 Year 3 Year 1	Director Department of Public Health DPS Corporate Services DPS Health Services Director Department of Public Health
OBJECTIVE 5: CO-ORDINATED APPROACH TO HUMAN RESOURCE PLANNING FOR THE HEALTH SECTOR				
5.1: Sector-wide Human Resource Planning	• High level HR Committee established and meets • Annual Plan in place • Three Year Plan in place	• Establish a high level sector wide human resource steering committee to provide strategic oversight into human resource planning encompassing all stakeholders including NGOs and the private sector. • Develop annual and three year human resource implementation plan	Year 1	Director PME

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Responsible
	• Number of trained personnel	• Train personnel on Human Resource Planning		Senior Manager Corporate Services
5.2: Integrated human resources for health information system *[also relevant to Objective 3, Strategy 1]*	• Integrated HRIS utilised supports HR Planning • HRIS reviewed	• Develop an integrated human resources for health information system capable of supporting human resource planning for the whole of the health sector • Review of the HRIS whether its functionally appropriate	Year 1 Every three years	Director Corporate Services & Director PME
5.3: Monitoring and evaluation of all human resource implementation plans	• Monitoring and evaluation system in place for all HR plans	• Develop a monitoring and evaluation system capable of supporting performance monitoring of all human resource implementation plans	Year 1	Director PME & Senior Manager Corporate Services

17. Annex 6: Pre-service and in-service (excluding long-term formal study) training

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Lead Responsible
STRATEGIC OBJECTIVE 1: IMPROVE THE QUALITY AND PROVISION OF PRE-SERVICE AND POST-BASIC TRAINING IN BOTSWANA				
1.1: Pre-service and post-basic training centrally coordinated and harmonised with MOH HR strategy	• TCC established	• Establish a Training Coordination Committee in MOH • Establish formal link with MOESD	Year 1 Year 1	DPS Corporate Services DPS Corporate Services
1.2: Recruitment, development and retention of appropriately qualified lecturers in training institutions	• All lecturer posts filled • Staff-to- student ratios meet international standards • Lecturers undergoing CPD	• Attraction and retention strategy developed that includes salary enhancements/ benefits for lecturers to match/ exceed those attainable by health professionals working in clinical settings and improvement of working conditions for lecturers • Recruit additional lecturers in order to meet international staff to student ratios • Address lack of specialist lecturers (in e.g. anaesthetics) by providing fast-track post-basic training for potential staff • To meet gap in the short-term	Year 2 Year 2 Year 1	Senior Manager, Corporate Services Senior Manager, Corporate Services Senior Manager,

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Lead Responsible
		urgently recruit specialist lecturers from outside the country		Corporate Services
		• Continuous professional development (CPD) programme introduced for all lecturers	Year 2	Senior Manager, Corporate Services
		• Introduce flexible staffing arrangements (part-time working, visiting fellowships, etc)	Year 1	Senior Manager, Corporate Services
		• Use locums	Year 1	Senior Manager, Corporate Services
1.3: Training facilities provided with appropriate infrastructure, equipment and training materials	• Training facilities have the necessary equipment and infrastructure	• Gap analysis of present infrastructure and equipment available in training facilities • Costed proposal to meet infrastructure and equipment needs • Infrastructure improved, and equipment provided	Year 5	PS MOH Director, HPDME
1.4: Training syllabuses aligned with content of EHSP and other services	• Training syllabuses aligned with EHSP, and approved by BoA	• Liaison between Institute of Health Sciences (HIS), Faculty of Health Sciences University of Botswana (FHS UB), and MOH departments in ensuring all elements of EHSP and other services are incorporated in	Year 1	Director HPDME IHS Coordinator

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Lead Responsible
		syllabuses of training institutions • Revised syllabuses approved by Board of Accreditation, UB • Regular review/ revision of syllabuses (as EHSP content evolves)		
1.5: Training syllabuses address health professionals' workplace need (Improve staff performance at IHSs)	• Workplace training needs assessment informs training pre-service and post-basic training syllabuses	• Establish a mechanism for syllabus modification based on regular performance review of health professionals workplace activities • Establish cadre of workplace trainers	Year 1 Year 2	IHS Coordinator IHS Coordinator
1.6: Develop an appropriate accreditation and licensing framework	• Roles of professional bodies defined • Licensing and accreditation mechanisms functioning	• Support for, and clarification of roles of, professional bodies (Nursing and MW Council, Botswana health professionals council) in accreditation and licensing. • Licensing examinations (competency-based) introduced	Year 1	Director Health Services
STRATEGIC OBJECTIVE 2: INTAKE OF STUDENTS TO TRAINING INSTITUTIONS ALIGNED WITH PROJECTED HR NEEDS				
2.1: Intake of pre-qualification and post-	Workforce planning informing student intake to training	Close liaison between MOH, MOESD, IHS and UB to ensure student intake	Year 1	PS MOH

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Lead Responsible
qualification students aligned to projected HR needs	facilities	matches projected HR needs in the future		
OBJECTIVE 3: IMPROVE IN-SERVICE TRAINING (EXCLUDING LONG TERM FORMAL STUDY)				
3.1: Effective planning, coordination and programming of in-service training	• Master trainers appointed, and involved in IST • Districts submitting costed annual training plans	• Training Coordination Committee in MOH *(linked to objective 1 strategy 1 above)* has overall responsibility	Year 1	Senior Manager Corporate Services
		• Establish a cadre of master trainers (training-of-trainers) to oversee supervision, training needs assessment, delivery of training	Year 1	Senior Manager Corporate Services
		• All planned IST activities coordinated, and integrated at central, regional and district levels	Year 1	Senior Manager Corporate Services
		• Development/ introduction of additional training methods – training of trainers, distance learning, workplace training	Year 2	Senior Manager Corporate Services
		• Development of integrated IST programmes that include inputs from all, rather than individual programmatic components (thereby reducing health workers' time away from their health facilities when attending IST)	Year 2	Senior Manager Corporate Services

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Lead Responsible
		• Development of annual training plans at central, regional and district levels	Year 1	Senior Manager Corporate Services
3.2: Strengthen quality assurance and regulatory role of accreditation and professional bodies	• Training programmes approved and quality assured by accreditation and professional bodies • In-service training established as a requirement for re-validation/ licensing to practice	• Enhanced role of accreditation and professional bodies in determining health practitioners' fitness to practice defined • All training programmes (MOH, donor supported) subject to approval and quality assurance by accreditation and professional bodies • In-service training established as a requirement for re-validation/ licensing to practice	Year 1 Year 2 Year 2	Director Health Services Director Health Services Director Health Services
3.3: In-service training programmes aligned with local training needs	• Workplace training needs assessments informing IST • DHTs providing local training based on TNA	• MOH/ DHMTs conduct regular training needs assessments in the workplace • DHMTs afforded greater autonomy in commissioning/ providing training programmes to address local training needs (with earmarked training budgets) • DHMT training programmes	Year 1 Year 1 Year 1	Senior Manager Corporate Services Senior Manager Corporate Services Senior Manager

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Lead Responsible
		supported with (enhanced) earmarked training budgets		Corporate Services
		• Establish a cadre of trainers at regional level through training of trainers programmes	Year 2	Senior Manager Corporate Services
3.4: Equitable provision of in-service training	• Health worker's record of in-service training incorporated in MOH HRIS database	• MOH/ DHMTs ensure that all health professionals have regular access to in-service training programmes • Health worker's record of in-service training incorporated in MOH HRIS database	Year 1	Senior Manager Corporate Services
3.5: Workplace follow-up, monitoring and supervision of in-service training programmes	• Evidence of regular workplace follow-up and supervision at district level	• Ensure workplace follow-up and supervision incorporated in all IST programmes	Year 2	Director Clinical Services
		• Recruitment and training of additional workplace trainers and supervisors at regional and district levels	Year 2	Director Clinical Services
		• Conduct training impact assessment	Year 2	Director Clinical Services
3.6: In-service training a requirement of revalidation/ license to practice	• Licensing standards established, and incorporate IHS	• Regulatory bodies establish minimum requirements for IST necessary for health workers to	Year 3	Director Health Services

Strategy	Indicators	Tasks to achieve the strategy	Time scale	Lead Responsible
	requirements	remain licensed practitioners		
STRATEGIC OBJECTIVE 4: ESTABLISH A PROGRAMME OF CONTINUOUS PROFESSIONAL DEVELOPMENT, CPD				
4.1: Individual health workers engaged in CPD	• Health workers' CPD activities recorded on HRIS	• Training Coordinating Committee, MOH to develop a CPD programme • Train CPD appraisers (part-time activity for clinical practitioners/ IHS lecturers & instructors) • Health workers' CPD activities recorded on HRIS • CPD budget for CPD activities for all districts	Year 1	Senior Manager Corporate Services
4.2: CPD a requirement of revalidation/ license to practice	• Appraisal process to include CPD • CPD activities recorded on HRIS • Revalidation/ licensing process introduced	• Regulatory bodies to establish minimum requirements for CPD necessary for health workers to remain licensed practitioners (link to Objective 3 strategy 6) • Regular appraisal of all health workers, results recorded on HRIS and sent to regulatory bodies	Year 3	Director of Health Services

18. Annex 7 HR Strategic Implementation Plan for Year 1

Task	Responsible
Establish HR Strategy Steering Committee	Director PME
Establish Training Co-ordinating Sub-committee	Senior Manager Corporate Services
Attraction and retention strategy delivered and reviewed by HR Strategy Steering Committee	PS MOH DPS Corporate Services
Identification of the additional types of health professionals that potentially could be produced in-country for review by the HR Strategy Steering Committee	PS MOH
Identification of areas of underproduction of health professionals for review by the HR Strategy Steering Committee	PS MOH
Comprehensive plan on health professional career marketing in schools developed for implementation in year 2	DPS Corporate Services
Develop and implement a plan, to include refresher training where needed, to increase the number of retirees recruited	DPS Corporate Services
Identify opportunities for public private partnerships for health services requiring scarce skills for review by HR Strategy Steering Committee	Director PME
Review deployment practices and identify opportunities to improve deployment of scarce skills	PS MOH Director Clinical Services DPS Corporate Services
Review service delivery to identify potential opportunities (and what needs to be in place - e.g. training - for it to happen) for task shifting/creation of new posts to deliver services by staffs that are easier to recruit/train.	PS MOH Director Clinical Services DPS Corporate Services
Review service delivery to identify potential opportunities for changes to the service delivery model that would make best use of the available human resources	PS MOH Director Clinical Services
Develop a project plan to review and improve incentive packages for hardship areas for review by HR Strategy Steering Committee.	DPS Corporate Services Director Clinical Services DPSM
Complete first draft of new transfer policy	DPS Corporate Services
Establish monitoring arrangements for implementation of transfer policy and guidelines	All Directors MOH
Develop an integrated human resource information system	DPS Corporate Services Director PME

Task	Responsible
Complete training needs assessment and identify annual and long-term training plans, including project-based plans, together with prioritised budget allocation plans	Senior Manager Corporate Services
Develop and maintain a list of accredited out of country institutions for training students in health allied programmes	DPS Corporate services
Develop and implement a plan for management and leadership training and development for DHMTs	DPS Corporate Services
Develop and implement induction programmes for newly appointed managers and new staff	DPS Corporate Services
Develop and implement succession and career plans for specialist nurses and doctors	DPS Corporate Services
Promote and monitor the use of succession/career planning and appropriate recruitment/promotion criteria for management positions	DPS Corporate Services
Develop plan to deliver up to date job descriptions for all staff by end of year 2	DPS Corporate Services
Develop and implement a plan to strengthen links between in-service training and development/CPD and staff performance and competencies	DPS Corporate Services
Formulate a (national) Health and Safety Act	Director Department Public Health
Staff time allocated for Wellness Week	Director Department Public Health
Develop annual and three year human resource implementation plan	Director PME
Train personnel on human resource planning	Senior Manager Corporate Services
Develop monitoring and evaluation system for human resource implementation plans	Director PME Senior Manager Corporate Services
Establish HR Strategy Steering Committee	Director PME
Establish Training Co-ordinating Sub-committee	Senior Manager Corporate Services
Attraction and retention strategy delivered and reviewed by HR Strategy Steering Committee	PS MOH DPS Corporate Services
Identification of the additional types of health professionals that potentially could be produced in-country for review by the HR Strategy Steering Committee	PS MOH
Identification of areas of underproduction of health professionals for review by the HR Strategy Steering Committee	PS MOH
Comprehensive plan on health professional career marketing in schools developed for implementation in year 2	DPS Corporate Services
Develop and implement a plan, to include refresher training where needed, to increase the number of retirees recruited	DPS Corporate Services
Identify opportunities for public private partnerships for health services requiring scarce skills for review by HR	Director PME

Task	Responsible
Strategy Steering Committee	
Review deployment practices and identify opportunities to improve deployment of scarce skills	PS MOH Director Clinical Services DPS Corporate Services
Review service delivery to identify potential opportunities (and what needs to be in place - e.g. training - for it to happen) for task shifting/creation of new posts to deliver services by staffs that are easier to recruit/train.	PS MOH Director Clinical Services DPS Corporate Services
Review service delivery to identify potential opportunities for changes to the service delivery model that would make best use of the available human resources	PS MOH Director Clinical Services
Develop a project plan to review and improve incentive packages for hardship areas for review by HR Strategy Steering Committee.	DPS Corporate Services Director Clinical Services DPSM
Complete first draft of new transfer policy	DPS Corporate Services
Establish monitoring arrangements for implementation of transfer policy and guidelines	All Directors MOH
Develop an integrated human resource information system	DPS Corporate Services Director PME
Complete training needs assessment and identify annual and long-term training plans, including project-based plans, together with prioritised budget allocation plans	Senior Manager Corporate Services
Develop and maintain a list of accredited out of country institutions for training students in health allied programmes	DPS Corporate services
Develop and implement a plan for management and leadership training and development for DHMTs	DPS Corporate Services
Develop and implement induction programmes for newly appointed managers and new staff	DPS Corporate Services
Develop and implement succession and career plans for specialist nurses and doctors	DPS Corporate Services
Promote and monitor the use of succession/career planning and appropriate recruitment/promotion criteria for management positions	DPS Corporate Services
Develop plan to deliver up to date job descriptions for all staff by end of year 2	DPS Corporate Services
Develop and implement a plan to strengthen links between in-service training and development/CPD and staff performance and competencies	DPS Corporate Services
Formulate a (national) Health and Safety Act	Director Department Public Health
Staff time allocated for Wellness Week	Director Department

Task	Responsible
	Public Health
Develop annual and three year human resource implementation plan	Director PME
Train personnel on human resource planning	Senior Manager Corporate Services
Develop monitoring and evaluation system for human resource implementation plans	Director PME Senior Manager Corporate Services

19. Annex 8: DISTRICT HEALTH PLANS

_____ DISTRICT HEALTH PLAN

DISTRICT HEALTH MANAGEMENT TEAM
APRIL 2010

FOREWORD

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1. INTRODUCTION

_____ district is within the_____ Region. It is bordered by _____ to the east, in the south by _____, in the north by _____ and in the west by _____. _____ district occupies a land of around _____ square kilometre/hectors.

_____ district's population is estimated to be _____ in 2010 as projected from 2001 census, with XX% of the population being male and XX% of the population being female. Approximately XX% are children less than 15yrs giving a dependency ratio of XX%. Annual growth rate of the district is around X.X%.

_____ has a good/bad network of roads and all clinics can be reached/about xx% of clinics have access through tarred road. Xx% of the clinics have a good telephone network, this makes communication very easy/difficult within and outside the district. XX clinics have transport for administrative and referral of patients in need of emergency transfer. ARV clinics are linked online through IPMS; this makes management of patients on ARV's much easier.

2. CURRENT SITUATION

The existing socio-demographic conditions are as follows for the _____ district:

Indicators	Values
Total population	223,218
Total female	112,034
Total male	111,184
Children 0-4yrs	16,130
Age 5-14	36182
Age 15-49	157,545
Age 15-64	168,384
Age 65+	2524
Women 15-49yrs	77977
Dependency ratio aged 15-64	35.47
Number of expected live birth	6099
Number of reported institutional live birth	6657
Number of neonatal deaths	195
Number of surviving infants	5769
Notified live births as a % of expected live birth	95%

The current status of different district health indicators can be best described as per following:

	INDICATORS	Current Status of the District (2010)	Comments
1	Number of *health personnel* per 10000 population		
2	Number of *professional doctors* per 10000 population		
3	Number of *professional dentists* per 10000 population		
4	Number of *professional nurses* per 10000 population		
5	Number of *health education assistants* per 10000 population		
6	Number of *health education assistants* per 10000 population		
7	Proportion of facilities with available equipment that are safe, appropriate and effective		

	INDICATORS	Current Status of the District (2010)	Comments
8	Proportion of facilities whose equipment is maintained as per the set standards		
9	Proportion of facilities using equipment according to standard and in an optimal manner		
10	Total number of facilities per 10000 population		
11	Bed occupancy rates (BOR)		
12	Hospital beds per 10000 population		
13	Proportion of facilities meeting set quality standards regarding architecture, engineering, environment & safety		
14	Proportion of facilities (buildings) that are maintained as per the set standards regarding architecture, engineering, environment & safety		
15	Proportion of laboratories with appropriate and essential equipment to perform required tests		
16	Proportion of laboratories reporting a quality control visit		
17	Ante-natal care coverage-at least 4 visits (%)		
18	Ante-natal care coverage –at least 1 visit (%)		
19	Proportion of deaths among high risk pregnancies		
20	Proportion (number) of facilities with functioning basic essential obstetric care		
21	Proportion (number) of facilities with functioning comprehensive essential obstetric care		
22	Proportion of pregnancies with obstetric complications[18]		
23	Proportion of births by C-		

[18] These include eclampsia; anaemia; obstructed labour; post-partum haemorrhages

	INDICATORS	Current Status of the District (2010)	Comments
	section		
24	Post natal coverage		
25	Proportion of PNC complications		
26	Contraceptive acceptance rate by method (New)		
27	Contraceptive acceptance rate by method (Repeat)		
28	Proportion of infants born to HIV-infected mothers who are infected		
29	Proportion of pregnant women tested for HIV and who know their results		
30	Number of HIV positive pregnant women assessed for ART eligibility		
31	Proportion of pregnant women who received ARV to reduce risk of MTCT		
32	Contraceptive acceptance rate among adolescents by method (New)		
33	Contraceptive acceptance rate among adolescents by method (Repeat)		
34	Proportion of facilities offering youth friendly services		
35	Proportion of males attending RH partner companion sessions		
36	Proportion of males accessing SRH services		
37	Prevalence of infertility among men women of reproductive age		
38	Number of cases reported to facilities for post abortion care		
39	Number of deaths due to abortion complications		
40	Proportion of abortion related admissions		
41	Proportion of women screened for cervical cancer		
42	Proportion of women screened for reproductive cancer		

	INDICATORS	Current Status of the District (2010)	Comments
43	Number of cases of cervical cancer by stage		
44	Proportion of 1 year old children immunised against measles within stipulated time frame		
45	Proportion of children under 5 fully immunised with all antigens		
46	Number of deaths due to measles complications		
47	Number of reported cases of Measles		
48	Proportion of children under 5 with diarrhoea given more fluids and continued feeding		
49	Proportion of children under 5 with diarrhoea receiving ORS with zinc supplementation		
50	Number of reported deaths due to diarrhoea		
51	Proportion of children under 5 treated for pneumonia completing full dosage of antibiotics		
52	Proportion of mothers/caregivers recognising danger signs of pneumonia among under 5s		
53	Proportion of pneumonia cases treated by IMCI trained workers		
54	Number of deaths due to pneumonia		
55	Proportion of live births with low birth weight		
56	Proportion of underweight children under 5 years of age		
57	Proportion of under- 5 year old children with stunted growth		
58	Proportion of under- 5 year old children that are overweight		
59	Proportion of children under 6 months with exclusive breast feeding		
60	Proportion of children		

	INDICATORS	Current Status of the District (2010)	Comments
	breastfeed within 1 hour of birth		
61	Proportion of children receiving breastfeeding for 24 months and beyond		
62	Proportion of children aged 6-9 months receiving timely and complementary feeding		
63	Proportion of malnourished children who received therapeutic feeding or food supplements		
64	Proportion of children aged 6-59 months receiving two doses of vitamin A per year		
65	Proportion of school going children screened under the school health programme		
66	Proportion of children with disabilities (identified under the school health programme)		
67	Number of districts reporting on the school health programmes		
68	Proportion (number) of schools with (functional) health clubs		
69	Proportion of OVCs accessing basic health care services		
70	Proportion of OVCs with malnutrition		
71	Proportion of population (adults and children) with advanced HIV infection receiving ARV therapy		
72	Proportion of population (adults and children) with advanced HIV infection known to be on treatment 12 months after initiation.		
73	Proportion of men & women aged 15-49 who received an HIV test (in the last 12 months) and know their status.		
74	Proportion of never married young people aged 15-24 that have never had sex		

	INDICATORS	Current Status of the District (2010)	Comments
75	Proportion of young men & women aged 15-24 who have had sexual intercourse before the age of 15		
76	Proportion of deaths attributable to HIV		
77	Number of males circumcised as part of the minimum package for HIV prevention services		
78	Number of STI cases reported and treated		
79	Treatment success rate		
80	TB bacteriological coverage		
81	TB case detection rate		
82	TB notification rate		
83	Proportion of TB patients counselled and tested for HIV		
84	Proportion of registered TB patients who are test HIV positive		
85	Proportion of HIV + TB patients registered and enrolled for ARV		
86	Proportion of deaths due to TB		
87	TB mortality rate		
88	Proportion of TB patients on CPT		
89	Proportion of relapse cases		
90	Number of reported cases of malaria		
91	Proportion of children under 5 who took anti-malaria drugs within 1 day (same or next day?)		
92	Proportion of children under 5 sleeping under ITNs		
93	Proportion of (pregnant?) women sleeping under ITNs		
94	Proportion of households with at least 2 ITNs		
95	Prevalence of diarrhoea		
96	Number of diarrhoea cases reported		
97	Proportion of diarrhoea cases receiving ORS		

	INDICATORS	Current Status of the District (2010)	Comments
98	Proportion of inpatient admissions due to diarrhoea		
99	Proportion of outpatient services for diarrhoea patients		
100	Prevalence of asthma		
101	Number of asthma cases reported		
102	Proportion of respiratory cases treated through outpatient		
103	Proportion of respiratory cases requiring inpatient services		
104	Number of admissions due to asthma		
105	Prevalence of chronic obstructive airways disease		
106	Prevalence of lung disease from occupational hazards		
107	Number of reported cases of meningitis		
108	Proportion of cases receiving meningitis vaccinations		
109	Proportion of morbidity attributable to dermatological diseases		
110	Number of facilities reporting nosocomial infections		
111	Number of reported cases of leprosy		
112	Number of facilities providing mental health outreach services		
113	Number of relapse cases of mental health patients		
114	Number of clients presenting with alcohol induced psychosis		
115	Proportion of clients presenting with HIV/AIDS & mental disorder		
116	Proportion of reported new cases of affected disorders, depression and maniac		
117	Proportion of reported schizophrenic cases		
118	Proportion of psychiatric cases successfully rehabilitated into the community		

	INDICATORS	Current Status of the District (2010)	Comments
119	Proportion of children under 15 with dental carries		
120	Proportion of outpatient visits due to road accidents		
121	Proportion of admissions due to road accidents		
122	Proportion of deaths due to road accidents		
123	Proportion of the population within a 20km radius of a facility providing 24 hour accident and emergency services		
124	Proportion of outpatients visits due to violence		
125	Proportion of admission due to violence		
126	Number of diabetes cases detected		
127	Number of patients on oral sugar lowering drugs		
128	Number of patients on insulin		
129	Number of deaths due to diabetes		

3. STRENGTHS AND ISSUES/CHALLENGES

The strengths and issues or challenges by the six building blocks of health system for _____ district are described below:

	AREAS/SYSTEM	STRENGTHS	ISSUES/CHALLENGES
A	HUMAN RESOURCE		
B	HEALTH FINANCING		
C	INFRASTRUCTURE, EQUIPMENT, DRUGS AND MEDICAL SUPPLIES		
D	HEALTH INFORMATION SYSTEM INCLUDING M&E		
E	SERVICE DELIVERY		
F	MANAGEMENT AND SUPERVISION		

4. VISION, MISSION AND OBJECTIVES

Vision:
Universal access and utilisation of a high quality EHSP of all people living in _____ district.

Mission:
The mission of the _____ DHMT is to improve the equity and effectiveness, and ensure efficiency in the health care delivery – preventive, promotive, curative and rehabilitative services.

The objectives of the DHMT as targeted until:

1. Improve ANC 4+ (with 2 in the last trimester) from XX% to XX% by 2016
2. Improve PNC coverage (domiciliary visit within 24 hrs of discharge and second visit within 7 days) from 0% to 60% by 2016.
3. Improve access to 24hr services within 30 minutes of travelling time to XX% of the population by 2016.
4. Increase and sustain 100% ARV therapy to eligible mothers.
5. Reduce mother to child transmission to <1% by 2016.
6. Improve timely information collection from all facilities from XX% to XX% by 2016
7. xxxxxxxxxxxx

5. ROLES OF DIFFERENT LEVELS IN THE DISTRICT

The roles of DHMT, Facilities and community of the district are described as:

A. District Health Management Team level:

- Assessment of health and management needs
- Setting priorities and reviewing progress towards achieving indicators and outputs
- Annual district plans
- District council and health sector coordination
- Ensuring effective referral system
- Useful supervision and monitoring
- Monthly management including monitoring of work plans
- Implementation of user-friendly health services
- Ensuring quality of care for delivering the Essential Health Service Package (EHSP) to all people living in the district.

B. Health facility level (PHCC, PH, DH and RH)

- Implementation of user-friendly health services (mainly curative, preventive and promotive services) as described for each level in the EHSP
- Effective and efficient outreach
- Supervision
- Community participation

C. Community level

- User-friendly, effective and efficient household and outreach services (mainly preventive and promotive and rehabilitative services) as described in the EHSP
- Community participation

6. HEALTH DEVELOPMENT PLANS

This section of the _____ district plan contains the infrastructure, human resource and equipment need.

The following are the equipment need for the _____ district:

ITEM (EXAMPLE ONLY – DISTRICT WILL PREPARE THEIR OWN LIST AS PER NEED)	NUMBER REQUIRED FOR _____ HOSPITAL	NUMBER REQUIRED FOR CLINICS	TOTAL
ELECTRONIC BP MACHINE			
SUCTION MACHINE			
EMERGENCY TROLLEY			
DRESSING TR0LLEY MEDIUM SIZE			
PATIENT TROLLEY HIEGHT ADJUSTABLE			
DOPPLER MACHINE			
MICROSCOPE			
SHAKER			
WATER BATH			
BLOOD MIXER HEAMATOLOGY			
CLASS 2 SAFETY CABINET			
WATER DISTILLER DE-IONIZER			
OPTHALMOSCOPE SET			
SHIOTZ TONOMETER			
TRIAL LENS WITH FRAME			
ELECTRONIC SNELLENS CHART			
LENS METER WITH PRINTER			
RETINOSCOPE-WELCH ALLYN			
MEDICINE TROLLEY			

ITEM (EXAMPLE ONLY – DISTRICT WILL PREPARE THEIR OWN LIST AS PER NEED)	NUMBER REQUIRED FOR _____ HOSPITAL	NUMBER REQUIRED FOR CLINICS	TOTAL
LEAD APRONS ADULT			
DIAGNOSTIC SET			
VITAL SIGNS MONITOR –WALL MOUNTED			
4 SECTION BEDS WITH COLLAPSABLE RAILS			
EXAMINATION LAMP- MOBILE			
NEBULIZER			
LARYNGOSCOPE-WELCH ALLYN			
OTOSCOPE SET-WELCH ALLYN			
FETAL MONITOR WITH PRINTER			
VOMIT BOWLS			
SELF RETAINING VAGINAL SPECULLUM-52.29.00			
METAL AMNIOTONES 53.12.05-BEACHAM			
OVERHEAD SPOT LAMP			
VACUUM EXTRACTOR			
PORTABLE ULTRASOUND MACHINE			
PLASTIC BOOTS			
DELIVERY GAWNS			
DEFIBRILLATOR			
INFUSION PUMP			
BABY COT-HUNTLEIGH PRODUCT			
ELECTRIC DELIVERY BED			

ITEM (EXAMPLE ONLY – DISTRICT WILL PREPARE THEIR OWN LIST AS PER NEED)	NUMBER REQUIRED FOR _____ HOSPITAL	NUMBER REQUIRED FOR CLINICS	TOTAL
WITH ALL ACCESORIES			
DETECTO BABY SCALE			
LONG SPONG HOLDING FORCEP			
SHORT SPONGE HOLDING FORCEP			
NEEDLE HOLDER			
EPISIOTOMY SCISSORS			
DRESSING SCISSORS			
CORD SCISSORS			
DISSECTING FORCEPS			
KIDNEY DISH MEDIUM			
KIDNEY DISH LARGE			
VACUUM SET WITH SILACTIC CUPS			
PLASTIC FETOSCOPE			
COCHER FORCEPS			
ORTHOPEDIC BED WITH COMPLETE ACSSESORIES			
MORTUARY HYDROLIC TROLLEY			
STEEL CASSCATE			
MORTUARY FREEZER			

Following are the infrastructure development plan for the district:

Facility type	Existing number	Change (+/-) by 2016
District Hospitals		
Primary Hospital		
Primary Health centre/clinic		

Description of infrastructure development is as follows:

Description of the infrastructure development	Targeted year for completion
Upgrade the _____ clinic to primary hospital with xx beds	
Construction of a new _____ hospital/clinic in _____	

The human resource projection plan:

	CADRE (LIST FOR EXAMPLE ONLY. EACH DISTRICT WILL HAVE DIFFERENT)	_____ HOSPITAL CURRENT TOTAL	_____ HOSPITAL PROJECTED TOTAL [2016]	CLINICS CURRENT TOTAL	CLINICS PROJECTED TOTAL [2016]	COMMENTS
1	_____ SPECIALIST DOCTOR					
2	MEDICAL DOCTORS					
3	GENERAL NURSES					
4	_____ SPECILISED NURSE					
4	HEALTH EDUCATION ASSISTANT					
4	PHARMACY TECHNICIAN					
5	LABORATORY TECHNICIAN					
6	RADIOGRAPHERS					
7	PHYSIOTHERAPIST					
8	SOCIAL WORKERS					
9	DIETICIANS					
10	CATERING OFFICERS					

	CADRE (LIST FOR EXAMPLE ONLY. EACH DISTRICT WILL HAVE DIFFERENT)	_____ HOSPITAL CURRENT TOTAL	_____ HOSPITAL PROJECTED TOTAL [2016]	CLINICS CURRENT TOTAL	CLINICS PROJECTED TOTAL [2016]	COMMENTS
11	DRIVERS					

7. SERVICE DELIVERY PLANS

Sl No	OUTPUT (OUTPUTS SHOULD REFLECT EACH OBJECTIVE) /ACTIVITY (LIST ACTIVITIES FOR EACH OUTPUT)	EXPECTED OUTPUT – 2010-11	Input Category	Estimated Cost (in Pula)			Lead Responsibility
				2010/11	2011/12	2012/13	
1.	OBJECTIVE 1: TO INCREASE ANC 4+ (WITH AT LEAST 2 DURING THE LAST TRIMESTER) FROM XX% TO XX% BY 2016						
1.	Output 1. Improved ANC 4+ (with 2 in the last trimester) from XX% to XX% by 2016 1.1 Community sensitisation on importance of ANC 1.2 Recruit additional staff	*ANC 4+ increased to xx%* *2 road shows* *Kgotla meeting 1 / kgotla* *5 nurses, 1 doctor*	*Exhibition contract* *Salary – D4*				

20. Annex 9: HOSPITAL PLAN

(REFERRAL??) HOSPITAL PLAN

HOSPITAL TEAM

APRIL 2010

FOREWORD

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1. INTRODUCTION

_____ hospital is situated in_____. The hospital provides referral services to the population of mainly _____ region. It has a total of xxx number beds. It was established in the year of _____ and was refurbished/upgraded in the year _____.

2. CURRENT SITUATION

_____ hospital has the following specialised services with number of beds and other services:

Services	Number of beds	Outpatient services (Y/N)	Laboratory facilities (Y/N)
General			
Medicine			
Surgery			

The current status of some key indicators of the hospital can be best described as per following:

	INDICATORS	Current Status of the Hospital (2010 in most cases of indicators should be assessed for 1 year data)	Comments
1	Number of *bed per specialist area:* **(Write for each speciality)**		
2	Number of bed per *doctor*		
3	Number of bed per nurse		
4	Bed occupancy rates (BOR)		
5	No of pregnant women receiving ante-natal care (at least 4 visits)		
6	No of pregnant women receiving ante-natal care (at least 1 visit)		
7	Proportion of deaths amongst pregnant women (or number of death recorded in a year)		
8	Number of pregnancies with obstetric complications		
9	Number of births by C-section		
10	Number of infants born to HIV-infected mothers who are infected		
11	Proportion of pregnant women tested for HIV and who know their results		
12	Number of HIV positive pregnant women assessed for ART eligibility		
13	Number of pregnant women who received ARV to reduce risk of MTCT		
14	Number of cases reported for post abortion care		
15	Number of deaths due to abortion complications		
16	Proportion of abortion related admissions (Number admitted for abortion related in a year/Total number of admission in a year*100)		
17	Number of women screened for		

	INDICATORS	Current Status of the Hospital (2010 in most cases of indicators should be assessed for 1 year data)	Comments
	cervical cancer		
18	Number of women screened for reproductive cancer		
19	Number of cases of cervical cancer by stage		
20	Number of deaths due to diarrhoea amongst under 5		
21	Number of deaths due to pneumonia amongst under 5		
22	Proportion of live births with low birth weight		
23	Number (adults and children) with advanced HIV infection receiving ARV therapy		
24	Proportion of deaths attributable to HIV (Number of deaths attributable to HIV in a year/Total number of deaths in a year*100)		
25	Number of HIV + TB patients registered and enrolled for ARV		
26	Proportion of deaths due to TB (Number of deaths attributable to TB in a year/Total number of deaths in a year*100)		
27	Proportion of outpatient services for diarrhoea patients		
28	Proportion of inpatient admissions due to diarrhoea		
29	Number of asthma cases		
30	Proportion of respiratory cases treated through outpatient		
31	Proportion of respiratory cases requiring inpatient services		
32	Number of admissions due to asthma		
33	Number of chronic obstructive airways disease		
34	Number of cases of meningitis		
35	Proportion of morbidity attributable to dermatological diseases		
36	Number of wards reporting nosocomial infections		
37	Number of relapse cases of mental health patients		
38	Number of clients presenting with alcohol induced psychosis		
39	Proportion of clients presenting with HIV/AIDS & mental disorder		
40	Proportion of reported new cases of affected disorders, depression and maniac		
41	Proportion of reported schizophrenic cases		

	INDICATORS	Current Status of the Hospital (2010 in most cases of indicators should be assessed for 1 year data)	Comments
42	Proportion of psychiatric cases successfully rehabilitated into the community		
43	Proportion of outpatient visits due to road accidents		
44	Proportion of admissions due to road accidents		
45	Proportion of deaths due to road accidents		
46	Proportion of outpatients visits due to violence		
47	Proportion of admission due to violence		
48	Number of diabetes cases detected		
49	Number of patients on oral sugar lowering drugs		
50	Number of patients on insulin		
51	Number of deaths due to diabetes		
52	Average length of stay		
53	Average length of stay for: • Maternity ward • Surgical ward • Any other speciality		
54	Waiting time: • Medical OPD • A&E • OBGN OPD		

The IQIs include the following 32 measures:

1. Mortality Rates for Medical Conditions (7 Indicators)
    - Acute myocardial infarction (AMI) (IQI 15)
    - AMI, Without Transfer Cases (IQI 32)
    - Congestive heart failure (IQI 16)
    - Stroke (IQI 17)
    - Gastrointestinal hemorrhage (IQI 18)
    - Hip fracture (IQI 19)
    - Pneumonia (IQI 20)
2. Mortality Rates for Surgical Procedures (8 Indicators)
    - Esophageal resection (IQI 8)
    - Pancreatic resection (IQI 9)
    - Abdominal aortic aneurysm repair (IQI 11)

- Coronary artery bypass graft (IQI 12)
- Percutaneous transluminal coronary angioplasty (IQI 30)
- Carotid endarterectomy (IQI 31)
- Craniotomy (IQI 13)
- Hip replacement (IQI 14)

3. Hospital-level Procedure Utilization Rates (7 Indicators)
    - Cesarean section delivery (IQI 21)
    - Primary Cesarean delivery (IQI 33)
    - Vaginal Birth After Cesarean (VBAC), Uncomplicated (IQI 22)
    - VBAC, All (IQI 34)
    - Laparoscopic cholecystectomy (IQI 23)
    - Incidental appendectomy in the elderly (IQI 24)
    - Bi-lateral cardiac catheterization (IQI 25)
4. Area-level Utilization Rates (4 Indicators)
    - Coronary artery bypass graft (IQI 26)
    - Percutaneous transluminal coronary angioplasty (IQI 27)
    - Hysterectomy (IQI 28)
    - Laminectomy or spinal fusion (IQI 29)
5. Volume of Procedures (6 Indicators)
    - Esophageal resection (IQI 1)
    - Pancreatic resection (IQI 2)
    - Abdominal aortic aneurysm repair (IQI 4)
    - Coronary artery bypass graft (IQI 5)
    - Percutaneous transluminal coronary angioplasty (IQI 6)
    - Carotid endarterectomy (IQI 7

3. STRENGTHS AND ISSUES/CHALLENGES

The strengths and issues or challenges by the six building blocks of health system for _____ hospital are described below:

	AREAS/SYSTEM	STRENGTHS	ISSUES/CHALLENGES
A	HUMAN RESOURCE		
B	HEALTH FINANCING		
C	INFRASTRUCTURE, EQUIPMENT, DRUGS & MEDICAL SUPPLIES		
D	HEALTH INFORMATION SYSTEM INCLUDING M&E		
E	SERVICE DELIVERY		
F	MANAGEMENT AND SUPERVISION		

4. VISION, MISSION AND OBJECTIVES

Vision:

Mission:

The objectives of the _____ hospital plan are:

5. HEALTH DEVELOPMENT PLANS

This section of the _____ hospital plan contains the infrastructure, human resource and equipment need.

The following are the equipment need for the _____ hospital:

ITEM	NUMBER EXISTING AND FUNCTIONAL	NUMBER REQUIRED	TOTAL

Description of infrastructure development is as follows:

Description of the infrastructure development	Targeted year for completion

The human resource projection plan:

	CADRE (LIST FOR EXAMPLE ONLY. EACH HOSPITAL WILL HAVE DIFFERENT)	_____ HOSPITAL CURRENT TOTAL	_____ HOSPITAL PROJECTED TOTAL[2016]	COMMENTS
1	_____ SPECIALIST DOCTOR			
2	MEDICAL DOCTORS			
3	GENERAL NURSES			
4	_____ SPECILISED NURSE			
4	PHARMACY TECHNICIAN			
5	LABORATORY TECHNICIAN			

	CADRE (LIST FOR EXAMPLE ONLY. EACH HOSPITAL WILL HAVE DIFFERENT)	_____ HOSPITAL CURRENT TOTAL	_____ HOSPITAL PROJECTED TOTAL[2016]	COMMENTS
6	RADIOGRAPHERS			
7	PHYSIOTHERAPIST			
9	DIETICIANS			

6. SERVICE DELIVERY PLANS

Sl No	OUTPUT (OUTPUTS SHOULD REFLECT EACH OBJECTIVE) /ACTIVITY (LIST ACTIVITIES FOR EACH OUTPUT)	EXPECTED OUTPUT – 2010-11	Input Category	Estimated Cost (in Pula)			Lead Responsibility
				2010/11	2011/12	2012/13	
1.	OBJECTIVE 1: TO REDUCE WAITING TIME FOR CONSULTATION FROM CURRENT AVERAGE OF XX MINS TO XX MINS BY 2016						
1.	Output 1. Waiting time reduced from xx mins to xx mins by 2016 2.1 Conduct a survey to assess the waiting time for creating baseline and also causality 2.2 Establish a triage system through CHN 2.3 Recruit additional staff	*Waiting time reduced to xx minutes*					

Intergrated Health Service Plan:

A Strategy for Changing the Health Sector For Healthy Botswana 2010-2020