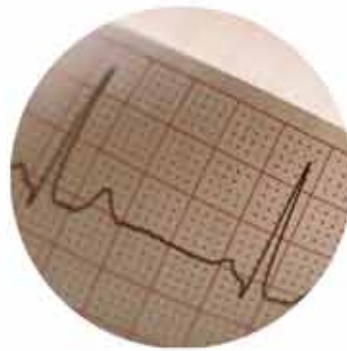




Kingdom of Bahrain  
Ministry of Health

# BAHRAIN'S HEALTH AGENDA



HEALTH IMPROVEMENT STRATEGY (2011-2014)

2<sup>nd</sup> Version  
2012





His Royal Highness Prince  
**Khalifa bin Salman Al Khalifa**  
The Prime Minister



His Majesty the King  
**Hamad bin Isa Al Khalifa**  
The King of Bahrain



His Royal Highness Prince  
**Salman bin Hamad Al Khalifa**  
The Crown Prince and Deputy Supreme  
Commander



# **BAHRAIN'S HEALTH AGENDA**

HEALTH IMPROVEMENT STRATEGY

## TABLE OF CONTENTS

Introduction.....	1
Vision and Mission.....	3
Overview of current situation.....	5
1.Fundamentals of Bahrain’s healthcare framework.....	5
2.Improvements and developments in the health sector.....	6
3.Strategic reform programme for further improvement.....	7
Health improvement agenda.....	9
1. Sustaining the population’s health through health promotion and prevention.....	9
1.1 Strengthen primary healthcare system through early detection and prevention.....	9
1.2 Establish and strengthen national policies and plans for prevention and control of non-communicable diseases (NCD).....	10
1.3 Promote healthy lifestyles to reduce non-communicable diseases.....	10
1.4. Enhance protection against communicable diseases and newly emerging diseases.....	12
2. Integrating services throughout the health system.....	13
2.1. Integrate services within the Ministry of Health.....	13
2.2. Integrate services between the Ministry of Health and other government institutions.....	15
3. Putting quality first.....	18
3.1. Ensure the Ministry of Health complies with NHRA requirements.....	18
3.2. Continue accreditation of all relevant Ministry of Health facilities.....	19
3.3. Maximise patient safety throughout the Ministry of Health.....	19
3.4. Promote a culture of quality assurance throughout the Ministry of Health.....	20
4. Access for all to healthcare services.....	20
4.1. Improve access to the Ministry of Health’s primary healthcare facilities.....	21
4.2. Improve access to the Ministry of Health’s secondary and tertiary healthcare facilities.....	21
5. Enhancing MOH’s role in policy making and governance.....	22
5.1. Enhance the Ministry of Health’s role in policy making.....	23
5.2. Align Salmaniya Medical Complex’s governance with international best practice.....	23

5.3. Align the governance of other hospitals and units with international best practice.....	24
5.4. Ensure informed decision making throughout the Ministry of Health.....	24
5.5. Improve the collection and utilisation of health information throughout the Ministry of Health.....	25
5.6. Support the establishment of the National Health Regulatory Authority.....	25
5.7. Establish partnerships with the private sector.....	26
6. Health service sustainability.....	27
6.1. Develop and adopt a new healthcare financing model.....	27
6.2. Improve financial resource utilisation and cost management within Ministry of Health.....	27
6.3. Maximise the human resource potential throughout the Ministry of Health.....	28
6.4. Improve the Ministry of Health’s procurement and materials management systems.....	29
6.5. Maintain and improve the Ministry of Health’s infrastructure.....	30
Implementation of agenda.....	31





## Introduction

Bahrain is expecting promising opportunities, while also facing some unprecedented challenges for the economy in general, and for healthcare in particular. Historically, progress in Bahrain's healthcare sector has been accomplished through improved access to primary and secondary healthcare services and the development of a robust healthcare infrastructure. Recent developments in the government's healthcare reform initiative include the accreditation of the Ministry's primary healthcare facilities and Salmaniya Medical Complex (SMC) and psychiatric hospital by Accreditation Canada; the near completion of King Hamad General Hospital (KHGH), which will provide secondary and tertiary services to the public and is a welcomed and long overdue prospect for improving accessibility to healthcare services; and the establishment of the National Health Regulatory Authority (NHRA), which will license all healthcare professionals and regulate private and public healthcare facilities in Bahrain.

The Ministry of Health is currently striving to implement a new phase of the healthcare reform project. This began by studying and evaluating the current status of the health sector in the Kingdom. Many challenges were found. The increase in aging residents, combined with the growing general population has put an ever-increasing pressure on the public healthcare facilities in Bahrain. What further add to this pressure is the increase in non-communicable diseases due to unhealthy lifestyles, the continually rising cost and expenditure of health care delivery as well as the shortage in some specialities of human resources for health.

A key role of the Ministry of Health is to work towards tackling these challenges and ensure that resources are optimally utilised, and that the health of the population is protected and enhanced. The current financial situation places pressure on government funds and questions future ability to fund the healthcare system in a sustainable manner. As such, today the Ministry is more committed than ever to make the most of the resources available and work towards a healthier Bahrain, and to ensure that the health system is sustainable in the future. This document illustrates many of the challenges that are posed, and possible plans to address those challenges and carry out improvement initiatives for the healthcare system.

An integrated system with levels of quality suitable for the needs of the population is envisioned; along with the hope to continue implementing facilities to improve access to the system and to build proper governance capabilities to drive it forward.



## Vision

“All population have access to quality health care throughout life time”

## Mission

The Ministry of Health in partnership with stakeholders leads an informed, integrated, regulated, sustainable, equitable and affordable health system to ensure the availability of high quality service to all population. The Ministry plays a major policy making role, promotes health and ensures that resources are used efficiently and effectively for a high standard evidence based care.

Four interrelated principles guide the above aspiration:

- Sustainability,
- Accessibility
- Equity
- Quality

In writing this national health agenda, consideration was taken and closely linked to the economic vision 2030 of the Kingdom of Bahrain. And been taken into account the viewpoint of various relevant parties of health care public and private sectors , as well as other key government institutions, including the Supreme Council for Women in mainstreaming women’s needs in health services as well as executing the principle of equal opportunities in the agenda’s strategies and the programs and projects emergent from it, moreover the participation of many professional and workers in the Ministry of Health with various specializations and levels, making it comprehensive document for the development of the health sector in the kingdom of Bahrain.



## Overview of current situation

### I. Fundamentals of Bahrain's healthcare framework

Healthcare is a topic of huge interest and importance worldwide as countries struggle to meet the challenge of providing adequate healthcare for their citizens. Changing demographics, increased expectations, a global shortage of health professionals and rising costs associated with innovative technologies and new drugs mean that healthcare is consuming an increasingly large proportion of gross domestic product, is a key contributing factor to economic growth and is becoming a priority for most governments.

Bahrain's healthcare system represents around 3.4% of the Kingdom's 2007 GDP. This investment in the health sector, in addition to a variety of socio-economic and demographic factors, is tied to changes in key health indicators and the health status of the population. Over a period of six years, 2001 - 2007, total health expenditure doubled and this was associated with an increase in doctors from 16.9 to 21.4 per 10,000 population, a decrease in infant mortality to 7.2 per 1,000 live births and an increase in average life expectancy to 76.7 (2010).

The need for Bahrain to look closely at its arrangements for providing healthcare has been recognised in Bahrain's Economic Vision 2030 and the National Economic Strategy (NES). The Ministry of Health (MOH) is leading several development initiatives in the health sector, in line with the Economic Vision 2030 and the NES.

Public funds are one of the main sources of financing healthcare in Bahrain and thus policy-makers are looking to see evidence-based decisions shape the future of healthcare and to ensure that funds are suitably allocated to develop a sustainable healthcare system. This calls for a healthcare framework that is built on transparency and that is able to meet the goals of the NES.

To understand the improvements that are necessary today, the views of a number of health professionals and a massive amount of data were considered to guide Bahrain in developing its Healthcare Agenda.

---

1-Source: Bahrain healthcare statistics 2007, team analysis

### 2. Improvements and developments in the health sector

In recent years, Bahrain's government has implemented a series of social, political and economic initiatives to address the challenges of changing economic circumstances and to improve the quality of life for all of Bahrain's residents. The most significant development in Bahrain's reform programme was the introduction of the Economic Vision 2030 and the NES in 2008.

The Economic Vision 2030 sets out Bahrain's socio-economic vision and goals, while the NES specifies the initiatives required to fulfil those goals and drive the ongoing development of Bahrain's economy and society.

**Bahrain's Health Agenda** is directly linked to the objectives of the Economic Vision 2030 and the NES. Enhancing Bahrain's health sector is a priority of the government and is signified by the specific objectives within the Economic Vision 2030 and the NES to ensure access to quality healthcare for all Bahraini nationals and residents. The Economic Vision 2030 makes a number of commitments to encourage healthy lifestyles, provide easy and equitable access to high-quality healthcare, ensure fair regulation of the healthcare system by an independent health regulator and develop the healthcare workforce. The NES, recently revised to reflect amendments to priority initiatives, presents a set of strategic initiatives focused on improving the health sector, specifically:

- 1 Population health promotion and prevention by strengthening primary healthcare services, with a greater focus on health screening programs for non-communicable diseases, and the development and implementation of public policies to encourage healthy lifestyles
- 2 Integration of health services within the MOH, as well as between the Ministry and other government institutions, to provide efficient health services focused on patient needs
- 3 Provision of quality health services by maintaining international accreditation of facilities and ensuring their compliance with National Health Regulatory Authority (NHRA) requirements
- 4 Access to all healthcare services, both primary and secondary, through reduced catchment areas and shortened waiting times
- 5 Enhancing MOH's role in policy making and revising governance arrangements in line with international best practices
- 6 Health service sustainability through the development of sustainable funding arrangements, meeting future demand for healthcare professionals, upgrading management systems and improving the quality of infrastructure
- 7 Fair regulation for all public and private providers through the establishment and operation of the NHRA

The process of introducing and implementing improvements to the health sector began with a diagnostic study. This diagnostic study aimed at identifying the strengths and challenges of Bahrain's healthcare system, in comparison to the healthcare systems of selected benchmark countries and other GCC nations. Based on this study's findings, proposals for reform were developed through extensive consultation.

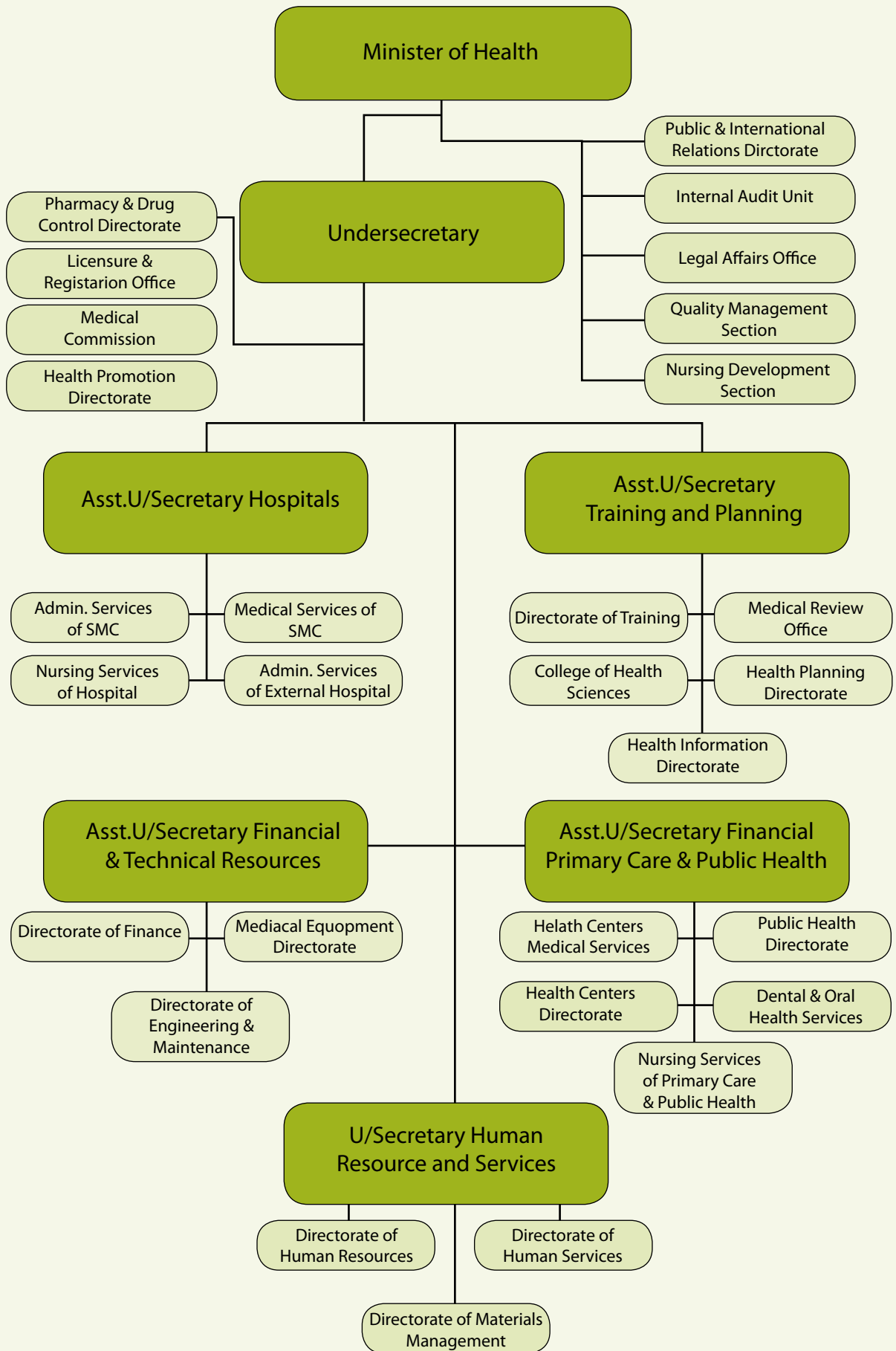
### 3. Strategic reform programme for further improvement

Certain attributes of the system such as the increasing occurrences of non-communicable diseases due to the development of unhealthy lifestyles by a large proportion of the population, the growing and aging population, access difficulties and overcrowding due to large catchment areas at primary health centres, the shortage of health professionals to meet demand for healthcare services and the expected rise in medical costs create a challenging environment for stakeholders.

Building on the health sector's achievements thus far and to address the challenges facing the sector, a comprehensive reform programme for the health sector, aligned with the 2010 - 2014 NES initiatives, will be implemented in order to:

- Meet the increasing demand for service provision due to the Kingdom's growing population;
- Directly address the causes of many diseases, specifically non communicable diseases, or conditions to minimize the necessity for subsequent treatment;
- Meet the future need for skilled healthcare professionals;
- Respond to demands for greater quality in service provision and improvements in patient safety;
- Improve coordination within the health sector to provide integrated, efficient and patient-centred healthcare services;
- Encourage greater involvement and participation from the private sector;
- Ensure that standards and quality requirements apply equally across the public and private sectors; and
- Ensure Bahrain's healthcare services are sustainable, given that the costs of healthcare are rising more rapidly than other government costs, through better policies, planning, integration and the consideration of alternative funding arrangements.

**Bahrain's Health Agenda** establishes six strategic objectives and a number of specific initiatives identified by the MOH as needed to bring about further improvements to the existing healthcare system. Whilst the reform initiatives, which reflect the priorities identified in the 2010 -2014 NES, are intended to be implemented over a four year period, they also form part of Bahrain's long-term Economic Vision 2030, and pave the way for future progress in the health sector.





## Health improvement agenda

### **I. Sustaining the population's health through health promotion and prevention**

Improving the health of the population is a national priority and will be realised through the Ministry's continuing efforts to enhance the capacity of the primary care services. The aim is to not only provide curative services but also to promote and enhance the population's health through a greater focus on health screening programs and the development and enforcement of public policies to encourage healthy lifestyles.

Expenditure on preventive care and health promotion has been insufficient to date. Changing disease patterns call for reallocation of some resources from curative to preventive services to make better use of available resources and decrease the cost of secondary and tertiary care, which is more expensive.

Investing in health promotion and prevention services is a proven, cost-effective route to reduce long-term costs and is an important element of initiative 2.2, which focuses on integrating services throughout the health system. When the integration of preventive services and health promotion is well-developed, the community becomes actively involved and supportive and the use of secondary and tertiary services can be diminished. The proposed initiatives will offer high-quality services in the areas of prevention, treatment and rehabilitation.

#### **I.1 Strengthen primary healthcare system through early detection and prevention**

The Ministry will work to increase the chances of successful treatment by promoting early detection of non-communicable diseases (NCDs). Today, for example, cardiovascular disease and cancer are two of the leading causes of death in Bahrain, and more could be done through early detection to reduce their incidence and the subsequent costs and complexities of treatment.

The Ministry will reorient its primary healthcare system to raise awareness of warning signs of NCDs to health professionals and the general public. This will focus on improving and enhancing screening programs to identify asymptomatic individuals. Examples include screening for risk factors leading to diabetes, cardiovascular disease and cancer. In implementing such a system it is important that the criteria or protocols for screening, such as setting the frequency and age commencement, establishing quality control mechanisms and establishing guidelines for referral, treatment and rehabilitation of abnormalities are clearly defined.

In fulfilling this initiative, effective and accurate monitoring and evaluation mechanisms must be developed. Development of a surveillance system would facilitate monitoring mortalities and morbidities attributed to NCDs as well

as monitoring the level of exposure to key risk factors. This will help update clinical guidelines for prevention, cost-effective screening, treatment and rehabilitation of common NCDs.

Actions required for improvement:

- Strengthen the coordination of services and establish and operate screening and wellbeing clinics in each governorate by 2016
- 30% more women to breast and cervix cancer has been detected by end of 2016.

### **1.2 Establish and strengthen national policies and plans for prevention and control of non-communicable diseases (NCD)**

In order to strengthen the prevention and control of NCDs, the Ministry has developed a national policy framework of laws, directives and regulations. These are designed to protect public health through measures such as restrictions on smoking in public and other designated areas, ensuring food safety and the labelling of food and drinks so that purchasers are aware of the content of what they are buying. Other measures will include fiscal policies that encourage the consumption of healthy goods over unhealthy ones. To ensure a comprehensive approach to disease prevention and control, the Ministry will focus on taking consultative measures to encourage participation and endorsement by representatives of key sectors in the policy making process.

Actions required for improvement:

- Operate 10 specialised NCD clinics in primary care setting by end of 2012
- Implementation the national policy framework for prevention and control of non-communicable diseases for the coming 15 years to reduce the current percentage of mortality rate by 25% for the age group of 30-70 years.
- Establish intra-sectoral committee for NCD by 2011 in order to coordinate and monitor activities and programs related to NCDs
- Develop and commence implementation of policies for food labelling and nutrition by 2014
- Implement policy of decrease intake of salt-containing foods, completely stop of using hydrogenated cooking oil and control of advertising and marketing of non-healthy food in the community and in particular among children and adolescents

### **1.3 Promote healthy lifestyles to reduce non-communicable diseases**

Motivating, educating and supporting individuals and families to make healthy choices in their daily lives are crucial to reducing the incidence of non-communicable diseases. Health promotion is an integral part of all health services and is a shared responsibility between individuals, community groups,

health professionals, health service providers, social insurance systems, the government and Non-Governmental Organisations (NGOs).

In the transition towards a new health system there is a need to refocus public health action and reorient the healthcare system as a whole. This involves more than modifying health delivery systems; it requires a rethinking of the traditional role of health services, which involves not only treating disease but also enabling people to control and improve their health. The task involves orienting the healthcare providers as well as the public about the social determinants of health, such as healthy literacy, physical and social environment, working condition, personal health practice and encouraging individual behaviour change. It also involves empowering people to change the environments that constrain or support their overall health. Health services must include a broad range of approaches to ensure that social needs and environmental problems are not viewed as medical problems requiring medical solutions.

Under the leadership of the MOH, it is proposed to develop and implement a national action plan that sets out different programmes, time frames and performance indicators needed to create and maintain an environment, which encourages the population to follow a healthy lifestyle. The health promotion plan to be executed by the Ministry will provide advice and raise public awareness of, for example, the consequences of smoking, lack of regular exercise, unhealthy diet and other hazardous lifestyle choices.

The approach will be risk-based and focused on a comprehensive risk analysis, mainly in order to promote community-based initiatives for prevention of NCDs. The programmes will be geared towards the youth with specific health promotion strategies covering school health programmes.

Actions required for improvement:

- Develop National Action Plan to encourage healthy lifestyles, covering a number of programmes, including timeframes and KPIs for the coming 15 year for the purpose of:
  - 1- To reduce the current prevalence of obesity
  - 2- To deduce the prevalence of (sedentary lifestyle) among adults (> 18 years) by 10% of the current percentage
  - 3- To deduce the prevalence of nicotine consumption among smokers at age of 15 years and above by 30% from the current percentage
  - 4- To reduce intake of salt-containing foods to less than 5 grams daily by 30% among adults (>18 years)
  - 5- Completely prohibition of partially hydrogenated oil in food production
  - 6- To increase the % of people consuming fruit and vegetables to 3-5 intakes everyday by 30% of the current percentage

- Introduce health-enhancing healthy diet programmes/initiatives in coordination with all sectors in order to increase the percentage of people consuming fruits and vegetable more than once a day from the current prevalence of 50% to the target of 53% by the end of 2016
- Expand dental promotion program in five health centres to cover 30% of target group by 2012
- Continue strengthening the health promotion programs at schools and work places

### **1.4 Enhance protection against communicable diseases and newly emerging diseases**

Surveillance is a fundamental element in the prevention and control of communicable diseases. The Ministry will strengthen its surveillance activities through proper planning and cooperation with other stakeholders at the national level. Recent events, such as the emergence of the H1N1 virus which was appropriately managed and controlled, confirm that it is vital to strengthen the co-ordination and planning of surveillance activities at the national level and to develop a strategic plan for responding to the priority public health problems identified. Specifically, the Ministry will upgrade its clinical and laboratory services, develop a strategic plan for responding to the identified public health risks and will undertake further efforts to reduce the social and economic impact of communicable diseases on the population.

In particular, the Ministry will focus on strengthening food control measures and enhancing environmental health controls in addition to monitoring and implementing international public health regulations.

Many diseases that were once thought to be controlled are re-emerging and there is a continued flux of new diseases. More than one-third of all deaths worldwide are due to communicable diseases. There is a need to carry out a prioritisation exercise to focus efforts on key areas. The matrix for prioritising communicable diseases should include criteria such as the social and medical costs, preventability, number of incidents reported, prevalence, mortality rates and other key factors. Once the prioritisation exercise has been carried out, there needs to be a programme for the management and control of identified priority areas.

Addressing different priorities might require different levels of work and cooperation. For example, many childhood diseases are non-existent in Bahrain today and immunisation has been a key factor in achieving this success. The successful expanded immunisation programme is almost universally available to most children or users at no cost. It is vital that Bahrain maintains and builds on this success for not only the massive effect on the quality of life, but also the value of immunisation; WHO estimates that for every USD1 spent, immunisation saves up to USD29.

Actions required for improvement:

- Continue the prevention of communicable diseases by maintaining the

- 99% vaccination rate of children above five years old
- Strengthen the surveillance system for communicable diseases by 2014. The system will provide consistent reporting, facilitate collection of information and provide an opportunity for data analysis
- Identify priority focus areas to be addressed, based on a set of agreed assessment criteria for communicable diseases, and prepare preliminary action plan to address priority areas by 2012
- Implement disaster and emergency plans and ensure coordination between stakeholder and effective crisis management by 2012
- Upgrade and improve existing laboratory services by end of 2012
- Strengthen the monitoring and implementation of international public health regulations by 2011

## 2. Integrating services throughout the health system

Countries around the world struggle to meet the challenges posed by the complexity of medical problems, which often exhibit co-morbidities and require attention from more than one provider. Combined with demographic and lifestyle shifts, the need to treat patients cost-effectively and as close to home as possible and in the right kind of facility presents considerable challenges to the healthcare system and its resources in Bahrain. To address such challenges, the MOH will need to develop more efficient arrangements to integrate its services across the Kingdom.

Integration of healthcare has many interpretations and Bahrain follows the WHO definition of integrated healthcare: “the organisation and management of health services so that people get the care they need, when they need it, in ways that are user-friendly, achieve the desired results and provide value for money.”

To achieve this, greater integration of the healthcare system needs to be achieved in which patients are treated in a more holistic manner - at the most appropriate setting for their medical needs, by the right providers who are able to coordinate their treatment seamlessly. This requires well-developed policies and protocols which encourage, wherever appropriate, patient treatment at facilities other than hospitals.

The integrated care system in Bahrain will be built on four principal pillars: policies and protocols which specify roles and responsibilities of the different healthcare providers; developed linkages between patient-centred collaborative healthcare providers (public and private); the active involvement of the public in the development and location of health facilities; and a governing structure and supportive IT systems that promote and enable alignment of healthcare providers towards integrated care.

### 2.1 Integrate services within the Ministry of Health

Whilst historically, primary, secondary and tertiary healthcare have been provided efficiently and collaboratively, the increasing complexity of the healthcare system and the addition of new facilities such as the King Hamad



General Hospital, require a greater level of integration between all facilities of the MOH to achieve both optimum patient care and cost efficiency.

To achieve this level of integration a number of critical matters need to be addressed. These include:

**Governance and coordination:** MOH will ensure that its governance arrangements lead to improved coordination between all primary, secondary and tertiary care facilities and services and ensure that the plans of services are integrated and focused on patient needs.

**Roles and responsibilities:** The roles and responsibilities of all providers involved in integrated care will be defined and mapped clearly at every stage.

**Communication between facilities and services:** Channels will be developed to improve communication and engagement between all primary, secondary and tertiary healthcare providers. Organisational processes will also be improved to ensure coordination between all providers and sectors of care.

**Gate keeping:** Primary healthcare providers will play a major role in ensuring that people receive the right care at the right time. This will be achieved by ensuring that primary care providers are responsible for public health education, preventive medicine, acute chronic disease management and the referral of patients to appropriate secondary health or other health facilities when needed.

**Performance management system:** Maintaining high quality services is a very important aspect of an integrated system. The performance of facilities and providers will be closely monitored to ensure that critical indicators (e.g. the time taken to be moved from one facility to another) meet benchmarks and help ensure that the performance of the whole system is not prejudiced by the performance of a single facility.

**Patient centred delivery of healthcare:** Policy makers and clinicians will work to ensure that patients' journeys are as seamless as possible. The delivery system will ensure that patients are at the most appropriate facility, being treated by the most appropriate practitioner, at the right time, to give the best possible chance of optimum outcomes with proper attention being given to the patients' experience.

**Mindset change:** Patients will be educated on health prevention, the treatment of chronic diseases (much of which can be done in the home), and the necessity for periodic tests. They will be consulted about the implementation of their individual treatment plans and why it is proposed that their treatment will be undertaken in a particular facility.

**Preparation of healthcare professionals:** Ensuring an integrated healthcare system will require the support of capable well-trained staff who are committed to the integration of care and treating patients in the most appropriate environment. To achieve this regular and continuous training

dealing with disease trends, demographical changes and patient needs as well as the Ministry's policies and protocols on integration will be provided for all medical, nursing and allied staff.

**Clinical guidelines for management and referral:** Clinical guidelines for treating specific diseases or conditions will be developed by health professionals to minimise vertical and horizontal patient movement, and maximise patient safety.

**Systems reform (including IT):** The Ministry will move to make patients' records and information more accessible and easily retrieved by health providers to promote efficient and safe care. Systems that enable information sharing between all levels of care at the MOH will be put in place to give patients and providers ready access to their own and to their patients' medical records, respectively, from anywhere.

Actions required for improvement:

- Develop and start implementation of a strategy to integrate MOH services, incorporating each of the matters above, by 2011

## **2.2 Integrate services between the Ministry of Health and other government institutions**

In addition to the services provided by the MOH, health services are also provided by the Bahrain Defence Force Hospital (BDF), a number of private hospitals and many other private or non-profit organisations. Coordination and integration between these providers and between these providers and the MOH, has been limited to date, although specific protocols and arrangements are in place in some areas, such as those between the MOH and the Sh. Mohammed Cardiac Centre work in treating cardiovascular diseases. However, much more integration is required between sectors and facilities to ensure the most effective use of resources and equipment and streamline the patient experience. For example, in 2008 the BDF hospital changed its coverage policy for the Ministry of Interior personnel, which led to a significant and unplanned demand for primary and secondary healthcare services at MOH facilities. In the absence of prior co-ordination this action had a serious impact on the patients' health, government resources and the performance of the entire public healthcare system in Bahrain.

Consequently, the Ministry will work together with the other government healthcare providers in Bahrain to: (1) ensure effective communication and coordination between them; (2) set and implement national health policies to integrate health services; (3) define roles and responsibilities for all players; and (4) put in place the required systems and processes. All this will be aimed at ensuring that the healthcare provided is centred on patients' needs.

To achieve this level of integration a number of critical matters need to be addressed. These include:

**Coordination:** The government will put in place suitable governance and coordination mechanisms that ensures effective delivery of an integrated healthcare system across the board and allows patients to move seamlessly between all health providers in Bahrain. As an example, this would include the implementation of policies and arrangements by 2012 to ensure effective referral of patients from primary health centres to KHGH or SMC through a centralised system.

**Roles and responsibilities:** The roles and responsibilities of all providers will be clearly defined to ensure integrated services and effectively utilised resources. Patients' journeys within the system will be clearly mapped to ensure effective and high quality care.

**Communication between stakeholders:** Channels will be developed for continuous communication and engagement between all providers to ensure best care for patients. Organisational processes will also be developed to ensure coordination between all providers and sectors of care; by 2012, MOH will identify roles and responsibilities and opportunities for coordination and synergy between MOH facilities and other healthcare facilities.

**Patient centred delivery of healthcare:** Regulators, policy makers and clinicians will work to ensure the maximum consistency between the policies of the MOH and those other providers with which it works. The delivery system will ensure that patients are at the most appropriate facility, being treated by the most appropriate practitioner, at the right time, to give the best possible chance of optimum outcomes with proper attention being given to the patients' experience.

**System reforms (including IT):** Patient records and information will be shared between MOH facilities and all other healthcare providers in Bahrain. Patients information and medical records will be accessible when and if needed subject to appropriate confidentiality arrangements.

**Regulatory framework:** The NHRA will ensure healthcare services are integrated by putting in place incentives for providers, promoting coordination between them and putting in place regulatory standards that enable patient centred services.

In addition to the matters above, MOH will seek integration and collaboration with other ministries to address other social determinants of health and ensure that health is in all policies. Such an approach will enable the integration of health matters into national policy making and will contribute to the health status and well-being of the population.





## 3

Strategic Objective

Actions required for improvement:

- Develop and start implementation of a strategy to integrate MOH and other government healthcare services, incorporating each of the matters above, by 2011.
- Coordinate with government organisations to review all related policies to ensure that healthcare aspects are taken into consideration by 2012.

### 3. Putting quality first

Quality is at the heart of the delivery of healthcare services. On a national level, increased emphasis has been placed on quality and patient safety through policy reform and legislative changes. This includes the establishment of the NHRA and the accreditation by Accreditation Canada, of the MOH's primary healthcare facilities, the SMC and the Psychiatric Hospital.

To build on these recent efforts, the Ministry will implement a number of initiatives to further improve the quality framework of Bahrain's healthcare. As the new single, independent regulator, NHRA, will gradually take over regulating the healthcare sector (excluding public health). It is important that the healthcare providers and individuals cooperate with the new authority in developing and complying with such regulations and guidelines. While certain MOH facilities spent considerable time and effort in realigning their processes in order to attain accreditation by Accreditation Canada, it is vital that the recommendations made are implemented and a continuous culture of improvement is promoted in order to retain such accreditation and improve the quality of care in these facilities. Finally, further emphasis will be placed on patient safety.

Government bodies and regulators will lead the development and enforcement of minimum guidelines and regulations with regards to quality. However, it must be noted that each health provider is ultimately responsible for putting in place the appropriate systems and controls to ensure quality. For some health providers, depending on their size and services offered, additional regulation might be necessary.

#### 3.1 Ensure the Ministry of Health complies with NHRA requirements

Prior to the establishment of the NHRA, regulation was limited to private sector facilities and services. Under the new law coverage, regulation of facilities and services is now extended to those for which the MOH is responsible. The NHRA is already and will gradually introduce new and improved standards and policies regarding operations and facilities requirements, licensing and approvals for professionals, facilities, drugs and pharmaceuticals. In addition to the aforementioned objectives, the NHRA will also develop a set of comprehensive national healthcare quality indicators for the sector. It is expected that healthcare providers will be part of the consultation process during the development phases of these standards and will cooperate with NHRA to implement the resulting standards and guidelines. Consequently the Ministry must take urgent steps to ensure that all of its facilities meet the new licensing, facilities and service provision standards of the NHRA.

The NHRA will have licensing and inspection functions, while the healthcare facilities will have compliance functions to ensure compliance of each provider and its professionals with NHRA guidelines and regulations by cooperating with NHRA inspectors and responding appropriately to enforcement actions by NHRA. Providers will need to maintain their licenses in order to continue to operate and care for patients. This entails meeting minimum standards of governance, and being subject to oversight through periodic reporting requirements and periodic onsite inspections to assess performance and compliance. Providers will also be required to promptly respond to any enforcement actions proposed by the NHRA under their legal powers.

Actions required for improvement:

- Build MOH compliance capabilities to ensure it can meet NRHA's regulatory requirements by 2012

### **3.2. Continue accreditation of all relevant Ministry of Health facilities**

Through its licensing and accreditation process, the NHRA will lay the foundation for the further development and entrenchment of quality and patient safety. However, ultimately, it is the healthcare providers that are responsible for ensuring that there are proper quality and patient safety systems in place. An important support in doing this lies in continuing to hold the international accreditation, which was recently achieved. MOH will ensure the compliance of its health facilities with international accreditation standards through conducting semi-annual self-assessments and monitoring the implementation of recommendations of the accreditation report.

Health facilities will be licensed by the NHRA, even if they are currently accredited. The mechanisms for licensing will be developed with extensive stakeholder consultation and will take into account issues pertaining to the difference in size and scope of different providers.

Actions required for improvement:

- MOH to take all the actions necessary to implement the recommendations of previous accreditation reports and to maintain the accreditation status of its facilities following the 2011 review visits and going forward.

### **3.3. Maximise patient safety throughout the Ministry of Health**

While the NHRA licensing and accreditation process will lay the foundation for patient safety, healthcare providers will ultimately be responsible for ensuring patient safety. To support good practice and patient safety, the Ministry will ensure that its facilities have clinical standards, that guidelines and key performance indicators are in place for common conditions; that its healthcare professionals have access to the up-to-date guidelines on clinical practice; that a formal process for clinical audits, both internally and externally, is in place; and that legitimate non-health needs of patients are well catered

for, including considerations of confidentiality and dignity.

Moreover, the MOH will ensure that evidence based practice is adopted for various aspects of patient care through establishing a formal process for reviewing, updating and approving actions related to enhancing patient care.

Actions required for improvement:

- Develop, review and update evidence based clinical and non-clinical guidelines in different aspects of patient care by 2012
- Design and implement patient safety protocols by 2011

### **3.4. Promote a culture of quality assurance throughout the Ministry of Health**

The MOH must ensure a culture of continuous quality improvement in all of its clinical and administrative facilities. To do this, the Ministry will introduce a new quality assurance framework to identify and report adverse events, to have them investigated and to disseminate learning from them. Through the new framework, the Ministry will encourage staff to work together to identify, analyse and disseminate information.

Actions required for improvement:

- Strengthen infection control program by improving the infrastructure for infection control and reporting mechanism of incident and adverse events by 2012.
- Develop and implement a new quality assurance framework for MOH departments and sections to ensure effective and efficient delivery of services by 2012.

## **4. Access for all to healthcare services**

Bahrain has made steady progress over the past four decades in providing improved access to primary and secondary care and has been able to establish a strong healthcare infrastructure. However, all facilities are experiencing accelerating demand as the population grows and the prevalence of certain diseases and conditions increases. MOH benchmark, based on the OECD average, for the accessible size of a primary healthcare sector is for the catchment area to be around 20,000 population. Today 21 out of 23 health centres are above this limit (14 out of them being more than double the catchment size). Furthermore, the ratio of hospital beds per 10,000 population has reached 21 (compared with the OECD benchmark of 49 beds per 10,000 population). Such issues are likely to cause access-related difficulties in the near future if not properly assessed and resolved. Waiting times and waiting lists for some specialities are also increasing.

At the same time, the supply of health professionals from local and international academic institutions is not growing at a rate commensurate with the increased demands and expectations from the healthcare services. A shortage of human resources has a direct impact on accessibility of services. Given the global shortage of professionals and the massive future need for

# 4

Strategic Objective

healthcare workforce of nurses and some specialties, this is a key priority and will be addressed in a later section.

#### **4.1 Improve access to the Ministry of Health's primary healthcare facilities**

Although all Bahrainis have the right to accessible healthcare services, there are indications that the level of available primary healthcare is not suitably distributed among expatriates. For non-Bahrainis, today there is a disproportionate distribution of health centres according to catchment area, which creates a negative impact on the services and reduces the consultation time. There is also a significant percentage (17%)<sup>1</sup> of expatriate residents who do not have regular access to primary healthcare and are not registered at any public healthcare provider.

Difficulties in access to primary healthcare services can contribute to poor health outcomes and result in increasing the number of people visiting the accident and emergency departments for conditions that should be referred to primary healthcare services. Thus, timely and equitable access to a comprehensive range of services is an essential driver of this initiative. The organisational model for primary healthcare will be improved in order to further emphasise the preventive elements of healthcare and the skills required to identify and help individuals change behaviours that are deemed to be health risk factors.

The MOH will, in conjunction with other initiatives (for example, disease prevention, health promotion and alternative healthcare funding arrangements) work on enhancing access to primary healthcare facilities in order to lower the catchment area of each centre to 20,000 population and by increasing the average consultation time at primary healthcare facilities to 10 minutes.

Actions required for improvement:

- Take steps to reduce catchment area by building a number of new health centres and operating three new centres by 2016
- Open an additional five visiting consultant specialty health clinics by 2012 to reduce referral times to SMC
- Operate two additional health centres for 24 hours by 2014
- Increase ambulatory services provision by 25%, through increasing the number of available vehicles and staff, by 2011

#### **4.2 Improve access to the Ministry of Health's secondary and tertiary healthcare facilities**

Secondary care consists of services (elective or emergency) provided by medical specialists in a hospital or other secondary or tertiary care setting. Patients are usually referred from a primary care professional. With the rapid increase in population in the Kingdom of Bahrain, timely access to these services is becoming a key issue.

---

<sup>1</sup>-Source: MOH interviews, Primary care annual report 2007, Patient survey report 2007, team analysis

The opening of the KHGH will be an important step in improving access to secondary and tertiary care by making available another 312 beds across a variety of services in the public healthcare system. However, over and above this, the MOH is in the process of monitoring waiting times and waiting lists for selected surgeries and out-patient care, and review its overall management of the areas where the patient waiting times are longest. Furthermore, MOH will develop measurement methodologies that are able to produce time series comparisons for different services in a largely consistent manner. The root causes of the extended waiting lists and waiting times vary, and it is therefore important to continue the effort of identifying the reasons for delay in order to address them effectively. This will be done in concert with other initiatives, for example, to review policies around length of stay in high cost facilities. Actions required for improvement:

- Reduce the ambulance response time from an average of 13 minutes to 10 minutes by 2014.
- Open specialty centers including national cancer center, national sickle cell anemia center and inherited blood-diseases center.
- Long term stay treatment hospital.
- Open additional kidney dialysis centers at governorates by 2014.
- Establish new transplant center by 2014.
- Open specialty clinics at health centers e.g. dermatology, orthopedic and ophthalmology clinics.
- Upgrade and replace diagnostic equipment with a more advanced ones (e.g. MRI-3 tesla and CT scan).
- Complete furnishing and operating of Intensive Care Unit by 2014
- Complete furnishing and operating of new pharmacy to serve 120 patients simultaneously.
- Replace oncology equipment with new ones (e.g. Linear Accelerator)
- Open new kidney dialysis center at Busaiten area.
- In accordance with the improvements made in 2005, maintain low waiting times and waiting lists for secondary and tertiary healthcare services at MOH facilities, including elective health treatment and diagnostic scans for cardiac, general surgery, cancer surgery, ophthalmic surgery and orthopaedic surgery.

### **5. Enhancing MOH's role in policy making and governance**

The health system is large and complex, and consequently needs effective governance arrangements to function effectively. This includes being quite clear about roles in the system and who is responsible for particular roles or services and their associated outcomes.

Currently the MOH undertakes all the high level roles in the health system in Bahrain, with the greatest emphasis on service provision. Over time, the MOH will place an increasing focus on its policy-making role in support of its overall responsibility to maintain and sustain the health status of the population and improve the health system's performance. It will also address other social determinants

# 5

Strategic Objective

that affect the health of the population with concerned stakeholders to ensure health is in all policies. The Ministry will give consideration to greater delegation of its responsibilities for provision either through greater operational autonomy for provider services within the Ministry or by contracting out, or making other similar arrangements with the private, government and NGO sectors.

These developments will allow the Ministry to place a greater focus on evidence-based health policy making, establish partnerships with external stakeholders, improve the collection, analysis and utilisation of health information and implement governance best practices.

### **5.1 Enhance the Ministry of Health's role in policy making**

In enhancing its policy making role, the Ministry will place much greater emphasis on ensuring that national health policies required to govern the health system are in place and are adequately formulated based on sound evidence and health system research outcomes. The Ministry will also ensure that health policies are implemented and evaluated on a regular basis and that each of the priorities in the NES, which are reflected in Bahrain's Healthcare Agenda, is fully supported by effective policies (including clarity about responsibility for outcomes). This will require the more effective use of data and resources, greater co-ordination across different parts of the Ministry to promote integration, more effective dialogue with stakeholders and the development of specific health policies to meet the most pressing needs to improve and maintain the population health status.

To allow a more consistent approach, enhanced policy making will involve an evidence based development process and will be undertaken in a manner that unifies health policy-making standards and that is informed by communication with various parts of the health system. It should involve participation from representatives of relevant stakeholders and be based on up-to-date facts and data. All healthcare policies will be publicly available and shared nationally. MOH policies will be action-oriented frameworks that will take into account the identified goals and objectives, the methodology required to accomplish the objectives, the concerned entities responsible for implementing the policies and the monitoring and evaluation methodologies.

Actions required for improvement:

- Improve MOH infrastructure to enhance its policy making capabilities, including the development of structures, procedures, systems and human resources by 2012.
- Formulate a clear vision of the future role of the MOH, identify gaps in health policies, and publish a national health policy document by 2012.

### **5.2. Align Salmaniya Medical Complex's governance with international best practice**

SMC consumes more than half of MOH overall resources. Consequently, it is important that the governance of SMC is effective and in line with international best practice. For effective utilisation of its resources, SMC needs more operational autonomy within a strict accountability framework.

The Ministry is reviewing the adequacy of the present governance structure and is in the process of implementing new arrangements, one of which will involve establishing an independent board of directors and dedicated hospital management, including a Chief Executive Officer (CEO).

The Board and CEO will put in place an effective governance structure and processes to ensure the delivery of high quality services. MOH will develop a performance management system to ensure that the management is accountable for meeting the required outcomes. MOH will also ensure that the services provided at SMC are integrated with other public providers in Bahrain.

Actions required for improvement:

- Develop and implement a transition plan to ensure alignment of SMC governance with international best practice by 2012
- Ensure that SMC board members and CEO are appointed by the end of 2012
- Agree on performance indicators between MOH and SMC board by 2012

### **5.3. Align the governance of other hospitals and units with international best practice**

In line with the proposed changes to the governance of SMC, the Ministry will review the governance arrangements for its other hospitals and major services to ensure that they are in line with international best practice. The new structure must allow public healthcare facilities to have, within an appropriate resourcing and accountability framework, the appropriate level of independence and flexibility to meet higher standards. Similar to the process of realigning the governance structure of SMC, the Ministry will put in place mechanisms for performance management to ensure the efficient provision of services to patients. The Ministry's hospitals, excluding SMC, will be grouped under one board of directors.

Actions required for improvement:

- Establish the legal framework and obtain necessary approvals to implement the new governance arrangements by 2011.
- Ensure that the board members are appointed by 2012 and that roles and performance indicators are developed and agreed between MOH and the board.

### **5.4. Ensure informed decision making throughout the Ministry of Health**

Through the Health Information Directorate (HID), the Ministry has the infrastructure to collect and disseminate healthcare information in Bahrain. However, at the moment, whilst the HID collects large amount of data, much of it is not analysed or used for informed decision-making.

Informed decision-making is dependent on the availability of reliable information and the presence of health system research capabilities to produce information that can be utilised to develop evidence-based plans and strategies to improve the health system. The Ministry will gradually replace the



existing Health Information System (HIS) with a modern and comprehensive system, supported by a number of new administrative systems, to enhance efficiency, policy making, planning and monitoring. The MOH will enhance its data analysis capabilities through establishing a health system research unit, as a major tool in the Ministry's Planning Directorate, to prepare and publish outcomes of health system research and progress reports.

Actions required for improvement:

- Establish health system research unit in the Ministry's Planning Directorate by 2011.
- Conduct a formal Health Needs Assessment to identify the population's health needs on regular basis starting from 2012.

### **5.5. Improve the collection and utilisation of health information throughout the Ministry of Health**

As noted above, informed decision-making needs to be supported by the availability of relevant, accurate, reliable and timely information. The MOH will invest in manpower and other resources necessary to replace the current HIS, which is being phased out by suppliers and will soon not be supported. The new HIS will be based on international best practice, and it will be clinically knowledge based driven. Additionally, MOH will build its data gathering capacity in collaboration with other government entities such as the NHRA and Central Informatics Organisation (CIO).

For an efficient system, generation of information should be selective to save time and effort spent on collecting information, which may not be useful, and to ensure that information, which reveals important aspects of the health system, is not missed. Therefore, it is vital to properly assess and implement an improved HIS that will take into account the clinical, statistical and financial information needs of the healthcare system in Bahrain. The new HIS contemplates an outsourced solution based on the Build-Own-Operate-Transfer (BOOT) model that will start by rolling out the clinical modules in the first few phases.

Actions required for improvement:

- Scope the infrastructure requirements for a comprehensive and enhanced information system in collaboration with key stakeholders and start implementation of the new HIS by 2011.

### **5.6. Support the establishment of the National Health Regulatory Authority**

The NHRA was established in 2010 to ensure that standards and quality requirements apply equally across the public and private sectors, to lift the quality of those standards, and to encourage greater private sector participation in healthcare provision. The NHRA will assume the responsibility of licensing and regulating Bahrain's healthcare providers and professionals. The Board members, including the Chairman, have been formally appointed. The full operation of the regulatory authority requires substantial development, which is the responsibility of the newly appointed Board. Apart

from the transfer of the MOH's licensing and drug control functions, the NHRA also requires support from a number of directorates at the MOH, including the Health Information, Material Management, Human Resources, Engineering and Medical Equipment Directorates.

Interactions between the NHRA and the MOH will not be limited to the establishment and transitional phase. Once established and fully operational, the Minister of Health will have the right to request progress updates and to request feedback on improvement policies.

The transitional phase in the development of this important organisation will require coordinated efforts between the MOH and the NHRA. The MOH is committed to provide the required support to the NHRA during its establishment phase, ensure the smooth transition of certain functions from MOH to the regulator and address staffing concerns which may arise in the process.

Actions required for improvement:

- Support the NHRA through the provision of expertise and human resources until it is fully operational in 2012

### **5.7. Establish partnerships with the private sector**

Public private partnership (PPP) is critical for the development of Bahrain's healthcare system. Capitalising on strengths of the private sector and encouraging participation by all stakeholders will help in meeting increasing demand and enhance access for healthcare services.

With the establishment of the NHRA and the enforcement of compliance to quality standards by both public and private providers, the quality of healthcare services will be improved and patient choice will be expanded.

As part of the development of its policy role and its move away from a near monopoly over service provision, the MOH will establish partnerships with the private sector. This will set the path for undertaking joint efforts to reduce the financial burden on the government and to stimulate the economy through encouraging private sector investments in healthcare.

Actions required for improvement:

- Identify areas of need in which collaboration and partnership with the private sector is desired by 2011.
- Begin implementation as per the agreed collaboration plan over the following four years.

## 6. Health service sustainability

The rising costs of healthcare in Bahrain which – as in most countries is well ahead of the normally used price indices – means that the future sustainability of the healthcare system is a major issue, both for government financing and for the continuing provision of quality service. This matter requires extensive review and exploration of a range of longer-term funding options, including consideration of the best ways to source, train and utilise the expanding number of skilled healthcare professionals required to provide services. Additionally, improved management and planning systems are needed to ensure cost-effective purchasing and the continuing availability of high quality facilities and equipment.



### 6.1. Develop and adopt a new healthcare financing model

Costs associated with changing demographics, increased patient expectations, innovative technologies and new drugs and rising trends of NCD occurrences have been increasing rapidly. This, along with a global shortage of health professionals means that healthcare is likely to consume an increasingly large proportion of the Government's budget. Furthermore, similar to the case in other countries, public expenditure on healthcare is generally rising at rates well beyond the rates of increase of most governments' revenues and will continue to increase. Over the past decade, the average annual increase, measured by its compounded annual growth rate (CAGR), in Bahrain's spending on healthcare was around 12.13%.

In the near future, Bahrain will need to increase and diversify the sources of funding to meet the challenges of rising costs. There are various strategic options that can be considered in order to establish the expected funding, expenditure and outcomes for the entire country. The MOH will lead an analysis of policy options to meet the challenges that this presents. Based on such analysis, the Ministry, in consultation with major stakeholders, will develop and implement an improved healthcare financing model that is feasible and sustainable into the longer-term.

Actions required for improvement:

- Conduct a study to evaluate strategic funding options by 2013.
- Ensure effective implementation of the selected option by 2014.
- Implement health insurance on expatriates by 2014.

### 6.2. Improve financial resource utilisation and cost management within Ministry of Health

The MOH will introduce enhanced and robust programs to ensure the effective utilisation of the financial resources available to operate, enhance and sustain the health system. These will include the introduction of improved billing mechanisms, the upgrade of storage systems and other cost management initiatives.

The Health Information System (HIS) today is not able to support the needs of the professionals within the MOH. For example, the MOH can track costs to specific department, yet it is unable to track costs based on health conditions over the cycle of care, nationality or age group.

To further enable effective cost management, the MOH also plans to address other healthcare cost management concerns by establishing a standardised code and price system for medical services by the end of 2012, enhancing the internal audit function and investing in additional manpower.

Actions required for improvement:

- Establish infrastructure for implementation of the new billing system by 2011.
- Implement an integrated health information system to enable tracking of inputs, outputs and outcomes (including a DRG system) by 2012.

### **6.3. Maximise the human resource potential throughout the Ministry of Health**

The WHO estimates that the global shortfall in the healthcare workforce stands at over two million professionals, and the shortage is likely to worsen in the near future. It is estimated that Bahrain will require more than 29,000 new health professionals, for the public and private sectors, over the next 20 years to meet service demands in line with international benchmarks. To take an example - each year, for the next 20 years, Bahrain will need to recruit 850 nursing graduates to meet service demands. At present, the College of Health Sciences and the other healthcare training organisations in Bahrain do not have the capacity to meet these identified requirements.

MOH, as a public provider of healthcare, has identified the shortage of skilled and qualified healthcare professionals in Bahrain as an impediment to its sustainability and will develop and implement a strategic plan to meet this challenge. As part of this plan, the Ministry will introduce measures to retain talented health professionals through the greater use of professional development and performance management opportunities, and will consider changes to staff compensation to meet recruiting shortfalls. Compensation of the workforce of the MOH is a key factor influencing the workforce shortage; the MOH has identified this matter and will continue in its efforts to motivate staff and improve retention levels.

The MOH will also support higher education institutions, including the College of Health Sciences, to reach their potential of preparing the required healthcare professionals for the needs of Bahrain. In line with the recent recommendations of Bahrain's Higher Education Agenda, by the end of 2011, the Ministry will support transfer of the college of health sciences to university college to enable it to play a larger role in developing the workforce of the health sector.

Actions required for improvement:

- Maximise the potential of the College of Health Sciences (CHS) in graduating a sufficient number of healthcare professionals through the move to university of Bahrain by 2013
- Raise awareness of the need for training of healthcare professionals with the Ministry of Education and higher education institutions and develop collaborative agreements with these institutions to ensure a supply of qualified professionals sufficient to meet the Ministry's needs
- Review organisation structure of MOH to improve performance and attract talent and publish the policy on talent management and training by 2014
- Establish and implement a performance management system for MOH staff which includes linkages with training by 2012

#### **6.4. Improve the Ministry of Health's procurement and materials management systems**

The Ministry will introduce new programs to target the effectiveness, efficiency and transparency of its procurement systems. Health purchasing, whether of drugs, equipment or technology, involves considerable expenditure and there are significant opportunities to increase savings that could be re-directed to other priority needs in the system.

Increasing the effectiveness, efficiency and transparency of procurement systems will be beneficial to the health system. Specific programs, such as those that aim to reduce the number of out-of-stock inventory items, also contribute to the quality of services.

The MOH plans to enhance existing inventory and storage systems by improving stock management and minimising damage to medical items during transport. Such improvements to the Ministry's inventory management will help ensure and maintain effectiveness and efficiency. Ultimately, this will contribute to the quality and timely treatment of patients.

Actions required for improvement:

- Develop a policy for procurement and stock management that covers the new strategic warehouse by 2012
- Implement the Warehouse Management System (WMS) by 2011
- Improve transportation of stock items by 2012

### **6.5. Maintain and improve the Ministry of Health's infrastructure**

Although the future role of the Ministry will move to a greater focus on policy making and regulation, not merely service provision, the change will be gradual. During the transition, it is essential to maintain and improve the services provided to develop the health sector and to avoid disruptions in healthcare service provision during this process.

The MOH is aware of the need to provide safe and dependable environments for patient care, especially during times of cost containment and the implementation of increasing regulations and guidelines. Over the next four years, the MOH will be upgrading the engineering services and facilities and replacing major parts of its medical equipment inventory, revamping the emergency power system in primary and secondary facilities and introducing further automation and computerisation of the medical equipment inventory management system.

Actions required for improvement:

- Upgrade engineering services and improve emergency power in hospitals and health centres by 2012
- Upgrade the medical equipment inventory and introduce a computerised maintenance system by 2012
- Upgrade the emergency power system in primary and secondary facilities by 2012
- Execute renovation plan of hospitals and health centres by 2012

## Implementation of the agenda

Strategic objective	Initiative/ Action	Time line	Ownership
I. Sustaining the population's health through health promotion and prevention	I.1. Strengthen primary healthcare system through early detection and prevention <ul style="list-style-type: none"> <li>• Strengthen the coordination of services, establish and operate screening and wellbeing clinics in each governorate</li> <li>• Raise population awareness and have 30% of all women above 40 registered and screened for breast and cervix cancer</li> <li>• Operate 10 specialised NCD clinics in the primary care setting</li> </ul>	2011-2016	Assistant Undersecretary for Primary Care and Public Health
	I.2. Establish and strengthen national policies and plans for prevention and control of non-communicable diseases (NCD) <ul style="list-style-type: none"> <li>• Implement the national policy framework for prevention and control of non-communicable diseases</li> <li>• Establish intra-sectoral committee for NCD to coordinate and monitor activities and programs related to NCDs</li> <li>• Develop and commence implementation of policies for food labelling and nutrition</li> </ul>	2011-2014	
	I.3. Promote healthy lifestyles to reduce non-communicable diseases <ul style="list-style-type: none"> <li>• Develop National Action Plan to encourage healthy lifestyles, covering a number of programmes, including timeframes and KPIs</li> <li>• Introduce health-enhancing anti-smoking programmes/initiatives in coordination with all sectors in order to reduce smoking rates among adults from the current prevalence of 20% to the target of 17%</li> <li>• Introduce health-enhancing physical activity programmes/initiatives in coordination with all sectors in order to reduce the current prevalence of obesity, from the current prevalence of 36% to the target of 33%</li> <li>• Introduce health-enhancing healthy diet programmes/initiatives in coordination with all sectors in order to increase the percentage of people consuming fruits and vegetable more than once a day from the current prevalence of 50% to the target of 53%</li> <li>• Expand 018- dental promotion program in five health centres to cover 30% of target group</li> <li>• Continue strengthening the health promotion programs at schools and work places</li> </ul>	2011-2016	

## HEALTH IMPROVEMENT STRATEGY

Strategic objective	Initiative/ Action	Time line	Ownership
	<ul style="list-style-type: none"> <li>• Introduce health-enhancing healthy diet programmes/initiatives in coordination with all sectors in order to increase the percentage of people consuming fruits and vegetable more than once a day from the current prevalence of 50% to the target of 53%</li> <li>• Expand 018- dental promotion program in five health centres to cover 30% of target group</li> <li>• Continue strengthening the health promotion programs at schools and work places.</li> </ul>		
	<p>I.4 Enhance protection against communicable diseases and newly emerging diseases</p> <ul style="list-style-type: none"> <li>• Continue the prevention of communicable diseases by maintaining the 99% vaccination rate of children above five years old</li> <li>• Strengthen the surveillance system for communicable diseases. The system will provide consistent reporting, facilitate collection of information and provide an opportunity for data analysis</li> <li>• Identify priority focus areas to be addressed, based on a set of agreed assessment criteria for communicable diseases, and prepare preliminary action plan to address priority areas</li> <li>• Implement disaster and emergency plans and ensure coordination between stakeholder and effective crisis management</li> <li>• Upgrade and improve existing laboratory services</li> <li>• Strengthen the monitoring and implementation of international public health regulations</li> </ul>	2011-2014	



Strategic objective	Initiative/ Action	Time line	Ownership
2. Integrating services throughout the health system	2.1 Integrating services throughout the health system • Develop and start implementation of a strategy to integrate MOH services, incorporating each of the matters under 1.2.1		Undersecretary
	2.2 Integrate services between the Ministry of Health and other government institutions • Develop and start implementation of a strategy to integrate MOH and other government healthcare services, incorporating each of the matters under 1.2.2	2011	Undersecretary
	2.3 Integrating services between MOH and other government institutions • Coordinate with government organisations to review all related policies to ensure that healthcare aspects are taken into consideration	2012	All Assistant Undersecretaries
3. Putting quality first	3.1 Ensure the Ministry of Health complies with NHRA requirements • Build MOH compliance capabilities to ensure it can meet NRHA's regulatory requirements	2012	Office of the Minister of Health
	3.2 Continue accreditation of all relevant Ministry of Health facilities • MOH to take all the actions necessary to implement the recommendations of previous accreditation reports and to maintain the accreditation status of its facilities following the 2011 review visits and going forward	2011	
	3.3 Maximise patient safety throughout the Ministry of Health • Develop, review and update evidence based clinical and non-clinical guidelines in different aspects of patient care • Design and implement patient safety protocols	2011-2012	

## HEALTH IMPROVEMENT STRATEGY

Strategic objective	Initiative/ Action	Time line	Ownership
	<p>3.4 Promote a culture of quality assurance throughout the Ministry of Health</p> <ul style="list-style-type: none"> <li>• Strengthen infection control program by improving the infrastructure for infection control and reporting mechanism of incident and adverse events</li> <li>• Develop and implement a new quality assurance framework for MOH departments and sections to ensure effective and efficient delivery of services</li> </ul>	2012	
4. Access for all to healthcare services	<p>4.1. Improve access to the Ministry of Health's primary healthcare facilities</p> <ul style="list-style-type: none"> <li>• Take steps to reduce catchment area by building a number of new health centres and operating three new centres</li> <li>• Open an additional five visiting consultant specialty health clinics to reduce referral times to SMC</li> <li>• Operate two additional health centres for 24 hours</li> </ul>	2011-2012	<p style="text-align: center;">Assistant Undersecretary for Primary Care and Public Health</p>
	<p>4.2 Improve access to the Ministry of Health's secondary and tertiary healthcare facilities</p> <ul style="list-style-type: none"> <li>• Increase ambulatory services provision by 25%, through increasing the number of available vehicles and staff, by 2011</li> <li>• Reduce the ambulance response time from an average of 13 minutes to 10 minutes by 2011</li> <li>• In accordance with the improvements made in 2005, maintain low waiting times and waiting lists for secondary and tertiary healthcare services at MOH facilities, including elective health treatment and diagnostic scans for cardiac, general surgery, cancer surgery, ophthalmic surgery and orthopaedic surgery</li> </ul>	2011	<p style="text-align: center;">Assistant Undersecretary for Hospitals</p>

Strategic objective	Initiative/ Action	Time line	Ownership
5. Enhancing MOH's role in policy making and governance	5.1 Enhance the Ministry of Health's role in policy making <ul style="list-style-type: none"> <li>• Improve MOH infrastructure to enhance its policy making capabilities, including the development of structures, procedures, systems and human resources</li> <li>• Formulate a clear vision of the future role of the MOH, identify gaps in health policies, and publish a national health policy document</li> </ul>	2012	Assistant Undersecretary of Training and Planning
	5.2 Align Salmaniya Medical Complex's governance with international best practice <ul style="list-style-type: none"> <li>• Develop and implement a transition plan to ensure alignment of SMC governance with international best practice</li> <li>• Ensure that SMC board members and CEO are appointed by the end</li> <li>• Agree on performance indicators between MOH and SMC board</li> </ul>	2012	Assistant Undersecretary for Hospitals
	5.3 Align the governance of other hospitals and units with international best practice <ul style="list-style-type: none"> <li>• Establish the legal framework and obtain necessary approvals to implement the new governance arrangements</li> <li>• Ensure that the board members are appointed and that roles and performance indicators are developed and agreed between MOH and the board</li> </ul>	2011-2012	Assistant Undersecretary for Hospitals
	5.4 Ensure informed decision making throughout the Ministry of Health <ul style="list-style-type: none"> <li>• Establish health system research unit in the Ministry's Planning Directorate</li> <li>• Conduct a formal Health Needs Assessment to identify the population's health needs on regular basis</li> </ul>	2011-2012	Assistant Undersecretary of Training and Planning

## HEALTH IMPROVEMENT STRATEGY

Strategic objective	Initiative/ Action	Time line	Ownership
	<p>5.5 Improve the collection and utilisation of health information throughout the Ministry of Health</p> <ul style="list-style-type: none"> <li>• Scope the infrastructure requirements for a comprehensive and enhanced information system in collaboration with key stakeholders and start implementation of the new HIS</li> </ul>	2011	Assistant Undersecretary of Training and Planning
	<p>5.6 Support the establishment of the National Health Regulatory Authority</p> <ul style="list-style-type: none"> <li>• Support the NHRA through the provision of expertise and human resources until it is fully operational</li> </ul>	2012	Undersecretary
	<p>5.7 Establish partnerships with the private sector</p> <ul style="list-style-type: none"> <li>• Identify areas of need in which collaboration and partnership with the private sector is desired by 2011</li> <li>• Begin implementation as per the agreed collaboration plan over the following four years</li> </ul>	2011-2012	All Assistant Undersecretaries
6. Health service sustainability	<p>6.1 Develop and adopt a new healthcare financing model</p> <ul style="list-style-type: none"> <li>• Conduct a study to evaluate strategic funding options</li> <li>• Ensure effective implementation of the selected option</li> </ul>	2011	Assistant Undersecretary for Financial and Technical Resources
	<p>6.2 Improve financial resource utilisation and cost management within Ministry of Health</p> <ul style="list-style-type: none"> <li>• Establish infrastructure for implementation of the new billing system</li> <li>• Implement an integrated health information system to enable tracking of inputs, outputs and outcomes (including a DRG system)</li> </ul>	2011-2012	Assistant Undersecretary for Financial and Technical Resources

Strategic objective	Initiative/ Action	Time line	Ownership
	<p>6.3 Maximise the human resource potential throughout the Ministry of Health</p> <ul style="list-style-type: none"> <li>• Maximise the potential of the College of Health Sciences in graduating a sufficient number of healthcare professionals through the establishment of the college as an autonomous entity</li> <li>• Raise awareness of the need for training of healthcare professionals with the Ministry of Education and higher education institutions and develop collaborative agreements with these institutions to ensure a supply of qualified professionals sufficient to meet the Ministry's needs</li> <li>• Review organisation structure of MOH to improve performance and attract talent and publish the policy on talent management and training</li> <li>• Establish and implement a performance management system for MOH staff which includes linkages with training</li> </ul>	2011-2012	Assistant Undersecretary of Human Resources and Services
	<p>6.4 Improve the Ministry of Health's procurement and materials management systems</p> <ul style="list-style-type: none"> <li>• Develop a policy for procurement and stock management that covers the new strategic warehouse</li> <li>• Implement the Warehouse Management System (WMS)</li> <li>• Improve transportation of stock items</li> </ul>	2011-2012	Assistant Undersecretary of Human Resources and Services
	<p>6.5 Maintain and improve the Ministry of Health's infrastructure</p> <ul style="list-style-type: none"> <li>• Upgrade engineering services and improve emergency power in hospitals and health centres</li> <li>• Upgrade the medical equipment inventory and introduce a computerised maintenance system</li> <li>• Upgrade the emergency power system in primary and secondary facilities</li> <li>• Execute renovation plan of hospitals and health centres</li> </ul>	2012	Assistant Undersecretary for Financial and Technical Resources





For more information:  
Ministry of Health, Directorate of Health Planning  
Assistant Undersecretary for Training & Planning  
Tel. +973 17 286275, Fax. +973 17 286608, P.O. Box 12  
[www.moh.gov.bh](http://www.moh.gov.bh)  
[autp@health.gov.bh](mailto:autp@health.gov.bh)