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# HEALTH SYSTEM PROFILE

**SAUDI ARABIA**



Regional Health Systems Observatory  
World Health Organization

2006

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## FOREWORD

Health systems are undergoing rapid change and the requirements for conforming to the new challenges of changing demographics, disease patterns, emerging and re-emerging diseases coupled with rising costs of health care delivery have forced a comprehensive review of health systems and their functioning. As the countries examine their health systems in greater depth to adjust to new demands, the number and complexities of problems identified increases. Some health systems fail to provide the essential services and some are creaking under the strain of inefficient provision of services. A number of issues including governance in health, financing of health care, human resource imbalances, access and quality of health services, along with the impacts of reforms in other areas of the economies significantly affect the ability of health systems to deliver.

Decision-makers at all levels need to appraise the variation in health system performance, identify factors that influence it and articulate policies that will achieve better results in a variety of settings. Meaningful, comparable information on health system performance, and on key factors that explain performance variation, can strengthen the scientific foundations of health policy at international and national levels. Comparison of performance across countries and over time can provide important insights into policies that improve performance and those that do not.

The WHO regional office for Eastern Mediterranean has taken an initiative to develop a Regional Health Systems Observatory, whose main purpose is to contribute to the improvement of health system performance and outcomes in the countries of the EM region, in terms of better health, fair financing and responsiveness of health systems. This will be achieved through the following closely inter-related functions: (i) *Descriptive function* that provides for an easily accessible database, that is constantly updated; (ii) *Analytical function* that draws lessons from success and failures and that can assist policy makers in the formulation of strategies; (iii) *Prescriptive function* that brings forward recommendations to policy makers; (iv) *Monitoring function* that focuses on aspects that can be improved; and (v) *Capacity building function* that aims to develop partnerships and share knowledge across the region.

One of the principal instruments for achieving the above objective is the development of health system profile of each of the member states. The EMRO Health Systems Profiles are country-based reports that provide a description and analysis of the health system and of reform initiatives in the respective countries. The profiles seek to provide comparative information to support policy-makers and analysts in the development of health systems in EMR. The profiles can be used to learn about various approaches to the organization, financing and delivery of health services; describe the process, content, and implementation of health care reform programs; highlight challenges and areas that require more in-depth analysis; and provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in different countries. These profiles have been produced by country public health experts in collaboration with the Division of Health Systems & Services Development, WHO, EMRO based on standardized templates, comprehensive guidelines and a glossary of terms developed to help compile the profiles.

A real challenge in the development of these health system profiles has been the wide variation in the availability of data on all aspects of health systems. The profiles are based on the most authentic sources of information available, which have been cited for ease of reference. For maintaining consistency and comparability in the sources of

information, efforts have been made to use as a first source, the information published and available from a national source such as Ministries of Health, Finance, Labor, Welfare; National Statistics Organizations or reports of national surveys. In case information is not available from these sources then unpublished information from official sources or information published in unofficial sources are used. As a last resort, country-specific information published by international agencies and research papers published in international and local journals are used. Since health systems are dynamic and ever changing, any additional information is welcome, which after proper verification, can be put up on the website of the Regional Observatory as this is an ongoing initiative and these profiles will be updated on regular intervals. The profiles along with summaries, template, guidelines and glossary of terms are available on the EMRO HSO website at [www.who.int.healthobservatory](http://www.who.int.healthobservatory)

It is hoped the member states, international agencies, academia and other stakeholders would use the information available in these profiles and actively participate to make this initiative a success. I would like to acknowledge the efforts undertaken by the Division of Health Systems and Services Development in this regard that shall have the potential to improve the performance of health systems in the Eastern Mediterranean Region.

Regional Director  
Eastern Mediterranean Region  
World Health Organization

# 1 EXECUTIVE SUMMARY

## **Socio Economic Geopolitical Mapping**

Saudi Arabia geographically, is divided into four major regions: Central region, Western region, Southern region, and Eastern region. Saudi Arabia is run by a traditional monarchy. The Kingdom is ruled in accordance with Islamic law (shari'a). There are a Consultative Council with 150 members. The Kingdom is divided into thirteen Administrative Regions, each headed by a governor. This is an oil-based economy, with strong government controls over major economic activities. The government is encouraging private sector growth to lessen the Kingdom's dependence on oil.

## **Health status and demographics**

Saudi population was 22,673,538, in 2004. Infant mortality, maternal mortality, and Infectious diseases generally have decreased, while non-infectious diseases have become an important health issue.

## **Health System Organization**

The MOH is the biggest provider of health care, (providing more than 60% of health services, the rest provided by other governmental and non governmental sectors). There are 20 Health Directorates covering all Saudi Arabia regions and provinces, they fully cooperate with central MOH to provide and supervise health services.

## **Governance/Oversight**

Saudi Arabia is a welfare state. Saudi health policy is generally committed to the HFA objectives. There is a three-tier health care system —primary, secondary and tertiary, corresponding respectively, to health centers, general hospitals and specialist hospitals. Three health sectors are considered in this review: MOH, other entities in the government sector and the private (for profit) health sector. MOH has a well-defined Semi decentralized organizational and administrative structure.

## **Health Care Finance and Expenditure:**

Overwhelmingly, health care financing in Saudi Arabia is provided mainly from government revenues. The budgetary provision for the MOH has continued to increase—from 2.8% of the national budget in 1970 to 6.4% in 2004. Cooperative Health Insurance System will be applied, so private health sector participation will be increased.

## **Human Resources:**

The health worker/population ratio in Saudi Arabia has improved in the last 10 years to facilitate accessibility to health services. Increased number of health colleges and institutes, and increased training and scholarship budget allocation is aiming to provide the health services with different and qualified health specialties to cover the issue of shortage in health human resources with expansion of Saudization of health jobs.

## **Health Service Delivery:**

PHC centers reached 1848, and 200 MOH hospitals out of 345 hospitals distributed all over the Kingdom in 2004. Health services include primary, secondary, and tertiary health services. PHC is going to be expanded as a corner stone of health services.

Hospital utility rate is improved to meet WHO standards. Studying privatization to include MOH hospitals in progress. The proper use of essential drugs and new technology at reasonable cost is targeted.

**Health System Reforms:**

- Expansion of Primary Health Care services.
- Implementation of cooperative health insurance system.
- Improvement of health systems at all levels.
- Privatization, and corporotization.
- Development and Saudization of health manpower.

## 2 SOCIO ECONOMIC GEOPOLITICAL MAPPING

### 2.1 Socio-cultural Factors

**Table 2-1 Socio-cultural indicators**

Indicators	1990	1995	2000	2003
Human Development Index*:	0.708	0.741	0.762	0.772
Literacy Total:	-	-	17.7	20.6*
Female Literacy( 2001) :	-	-	25.7	-
Women % of Workforce	-	-	-	-
Primary School enrollment	247000	395000	491000	-
Primary education, pupils (% female)	43%	47%	46%	-
Urban Population (%)	-	-	-	-

*Source:* Demographic research, General Directorate, Ministry of Planning and economy, 2001, KSA. Achievements of Development Plans: Facts and Numbers, Ministry of Planning and Economy, 21<sup>st</sup> edition, KSA.

\* <http://hdr.undp.org/statistics/data/indicators.cfm?x=15&y=1&z=1>

Achievements of the developmental plans show better improvement in life status in Saudi Arabia. Number of health facilities increased (e.g. 74 hospital in 1970 increased to 345 in 2004, in addition to 1848 PHC centers), number of student enrolment in education, and education facilities increased ( there were, 547000 student in all education levels in 1969 increased to 5.1 million student in 2002. Those changes are the result of governmental commitment to improve life necessities by increasing budget allocation for social and health aspects.

### 2.2 Economy

**Table 2-2 Economic Indicators**

Indicators	1990	1995	2000	2004
GNI (Million Saudi Riyals)	154,721	146,500	258,065	-
GNI per capita( PPP) Current International	-	-	-	-
GDP per Capita (Million Saudi Riyals)	27.856	28.378	32.106	-
GDP per Capita annual growth %	-	-	-	-
Unemployment % (estimates)	-	-	4.57	-

*Source:* Achievements of Development Plans: Facts and Numbers, Ministry of Planning and Economy, 21<sup>st</sup> edition, KSA.

**Table 2-3 Major Imports and Exports**

<b>Major Exports:</b>	Petroleum and petroleum products 90%
<b>Major Imports</b>	Machinery and equipment, foodstuffs, chemicals, motor vehicles, textiles

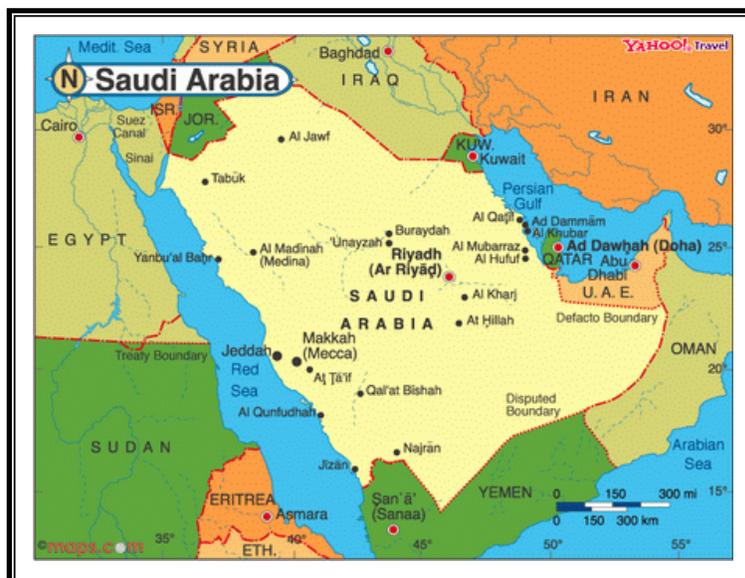
### Key economic trends, policies and reforms

This is an oil-based economy, with strong government controls over major economic activities. Saudi Arabia has the largest reserves of petroleum in the world, ranks as the largest exporter of petroleum, and plays a leading role in OPEC. The petroleum sector accounts for roughly 75% of budget revenues. The government in 1999 announced plans to begin privatizing the electricity companies, which follows the ongoing privatization of the telecommunications company. The government is encouraging private sector growth to lessen the Kingdom's dependence on oil and increase employment opportunities for the swelling Saudi population. Government priorities for spending additional funds include education, health, social welfare, and water/ sewage systems and transportation.

## 2.3 Geography and Climate

Structurally, the whole of Arabia is a vast platform of ancient rocks, once continuous with north-east Africa. In relatively recent geological time a series of great fissures opened, as the result of which a large trough, or rift valley, was formed and later occupied by the sea, to produce the Red Sea and the Gulf of Aden.

**Map of Saudi Arabia**



The Arabian platform is tilted, with its highest part in the extreme west, along the Red Sea, sloping gradually down from the west to the east. The Red Sea coast, where the upward tilt is greatest, is often bold and mountainous, with peaks of 3,000 meters.

Along the Red Sea coast, there is a narrow coastal strip (Tihama) which broadens out in the Jiddah area and provides access through the highlands to the interior. On the eastern side of the Kingdom, the Arabian Gulf coast is flat and low-lying. The shallow seas in this region deposited layers of younger sedimentary rock, allowing the creation of the vast oil reserves for which the area was to become famous. The coast is fringed with extensive coral reefs which make it difficult to approach the shore in many places.

Geographically, Saudi Arabia is divided into four major regions. The first is the Central region, a high country in the heart of the Kingdom; secondly, there is the Western region, which lies along the Red Sea coast. The Southern region, in the southern Red Sea-Yemen border area, constitutes the third region. Fourthly, there is the Eastern region, the sandy and stormy eastern part of Saudi Arabia, the richest of all the regions in petroleum.

It is important to note that, for administrative purposes, the Kingdom is divided into thirteen Administrative Regions.

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## 2.4 Political/ Administrative Structure

### Basic political /administrative structure and any recent reforms

Saudi Arabia is run by a traditional monarchy. King Abdel-Aziz Al-Saud, established the first steps for well organized polices and procedures, where, his Majesty raised all opportunities for successful projects in the Kingdom.

King Fahd bin Abdel-Aziz al-Saud, also serving as Prime Minister, has ruled since 1982. The Kingdom is ruled in accordance with Islamic law (shari'a).

In 1992, King Fahd issued decrees establishing the Basic Law, the Consultative Council, and new regulations covering a system of regional government. In 1997, King Fahd expanded the council from sixty to ninety members, and in 2005 to 150 member. The decree on regional authority established a ruling hierarchy in various regions, governorates, districts, and localities. It also defined a clearer relationship between the regions and the central government authorities by setting up 13 regional councils, each headed by a governor.

A Ministerial committee for administrative organization was established in 2000, headed by the Seconded Deputy Prime Minister HRH Prince Sultan bin Abdel-Aziz Al-Saud, its function is to revise and recommend changes in the administrative and structures of the different ministries and corporations.

### Key political events/reforms

- Municipal Council elections were conducted 2004.
- National Dialogue center was established in 2004, it held conferences on general reform matters including women, youth and culture.
- Increase in the participation of the private sector.

### 3 HEALTH STATUS AND DEMOGRAPHICS

#### 3.1 Health Status Indicators

**Table 3-1 Indicators of Health status**

Indicators	1990	1995	2000	2004
Life Expectancy at Birth:	-	-	71.4	73.6
HALE:	-	-		-
Infant Mortality Rate:	-	-	19.1	-
Probability of dying before 5th birthday/1000:			Not available	
Maternal Mortality Rate:	-	18	12	-
Percent Normal birth weight babies:	-	-	95	95
Prevalence of stunting/wasting:			Not available	

**Table 3-2 Indicators of Health status by Gender and by urban rural**

Indicators	Urban	Rural	Male	Female
Life Expectancy at Birth:	-	-	72.5(2004)	74.7(2004)
HALE:	-	-	-	-
Infant Mortality Rate:	-	-	19.1( 2000)	
Probability of dying before 5th birthday/1000:			Not available	
Maternal Mortality Rate:	-	-	-	12(2000)
Percent Normal birth weight babies:	-	-	95 (2000-2004)	
Prevalence of stunting/wasting:			Not available	

**Table 3-3 Top 10 causes of Mortality/Morbidity, 2002.**

Rank	Mortality*	Morbidity
1	Diseases of circulatory system 27%	-
2	Injury and poisoning 17%	-
3	Perinatal 11.9%	-
4	Neoplasm 5.3%	-
5	Diseases of respiratory system 4. %	-
6	Congenital anomaly 3.4%	-
7	Endocrine and metabolic disorders 3. %	-
8	Infectious diseases 2.5%	-

Rank	Mortality*	Morbidity
9	Diseases of digestive system 2.5%	-
10	-	-

*Source:* Deaths registered with MOH .

There is decline in the indices of infectious diseases, and there is a program for T.B control that succeeded in increasing case detection rate and decreasing the incidence rate, there is also anti malaria and anti bilharziasis programs controlling these diseases. Non-communicable diseases become of priority concern in the Saudi Arabia, and initiative control programs are in process to be applied nation wide, started with the application of WHO step wise surveillance system.

Deaths recorded in MOH hospitals are coded according to ICD10, and the leading causes of death in the kingdom are cardiovascular diseases.

## 3.2 Demography

**Table 3-4 Demographic indicators**

Indicators	1990	1995	2000	2004
Crude Birth Rate:	-	-	27.8	29
Crude Death Rate:	-	-	2.5	3.7
Population Growth Rate:	-	2.9	2.9	2.5
Dependency Ratio:	-	-	-	-
%population <15 years	-	-	40.3	-
Total Fertility Rate:	-	-	4.3	-

**Table 3-5 Demographic indicators by Gender and Urban rural**

Indicators	Urban	Rural	Male	Female
Crude Birth Rate:				
Crude Death Rate:				
Population Growth Rate:				
Dependency Ratio:				
%population <15 years				
Total Fertility Rate:				

### Demographic patterns and trends:

Official figures published by the Saudi government in 2004 indicated a population of 22673538, based on the official figure, the rate of growth was 2.5. 16,529,302 of the population holding Saudi citizenship and 6,144,236 were foreign residents in the Kingdom. A goal of Saudi planners continued to be a reduction in the number of foreign workers and expansion of Saudization of jobs.

## 4 HEALTH SYSTEM ORGANIZATION

### 4.1 Brief History of the Health Care System

A public health department was established in 1925, by a Royal decree from King Abdel-Aziz Al-Saud, based in Makka AlMukrma, with branches in provinces, followed by establishment of dispensaries, hospitals, and laboratories. This was the beginning of emphasis on prevention and environmental health. The first school of nursing was opened in 1926, followed by the school of health and emergencies in 1927.

In 1951, the Ministry of Health was established. From that date the health services expanded. From 1970 to 1980, health services were predominantly curative as most health personnel had received their formative training in patient-oriented, hospital-based medical institutes. Furthermore, there was a general population expectation of curative care. This care was delivered through a network of hospitals and dispensaries, while preventive care was delivered by health offices and to some extent through maternal and child health care centers. Disease control activities, such as for malaria, tuberculosis, leprosy, schistosomiasis and leishmaniasis, were handled by vertical programs. Episodic outbreak control activities were managed through the health offices.

In the early 1980s, the concept of primary health care (PHC) became popular, with the WHO slogan 'Health For All' (HFA) gaining recognition. A ministerial decree in 1980, led to the establishment of the health centers, administratively integrating the existing dispensaries, health offices and maternal and child health (MCH) centers into one unit. At the same time, health posts were upgraded to health centers, thus paving the way for the delivery of integrated health services, i.e. initiation of the PHC approach.

Currently there are 1848 PHC centers, and 200 hospitals run by Ministry of Health. The MOH budget increased from 2,8% of the total National budget in 1970 to 6,4% in 2004.

The Saudi health system was established by a Royal decree in 2002, aimed to insure the provision of comprehensive and integrate health care to all inhabitants in Saudi Arabia in an equitable, affordable and organized manner. This will be done through the Council of Health Services headed by the Minister of Health and composed of representatives of governmental and private health sectors.

### 4.2 Public Health Care System

#### Organizational structure of public system

See attached MOH organization structure.

#### Key organizational changes over last 5 years in the public system, and consequences

There are 13 health regions, each led by a Regional Director General for Health Services, who is directly responsible to the Deputy Minister of Health for Executive Affairs and Deputy Minister for Planning and development. Each health regional general directorate supervises one or more of health provinces through provincial health directorate. Each provincial health directorate supervises and manages at least one general hospital and a number of health centers, and supervises private health sector. The policies, plans and programs of the MOH are implemented through this structure. The health directorates

are reasonably autonomous in terms of staff recruitment and welfare, training, discipline, supervision and evaluation. However, some responsibilities are shared with the MOH when necessary. Links to other health-related sectors (e.g. military, education, agriculture, municipal and rural affairs) are maintained through sectoral coordinators. A health area policy will soon be introduced to provide greater decentralization of health services throughout the country. The MOH is the biggest provider of health care, providing health services (more than 60% of health services, the rest provided by other governmental and non governmental sectors). Each region has a dental centre that acts as a referral centre for the dental clinics attached to the health centers and hospitals. There are medical rehabilitation centers for speech and hearing therapy, accident injury repair and physiotherapy. Central laboratories serve as reference laboratories for the health centre and hospital laboratories. Quarantine centers located along the border with neighboring countries conduct health check up and vaccinations and provide chemoprophylaxis as needed. Smoking is a serious problem in Saudi Arabia and there is at least one anti-smoking clinic in each health directorate for counseling, health education and rehabilitation. Under 'other government' sectors are grouped the health facilities of the military, National Guard, universities (and affiliated teaching hospitals), large multinational corporations such as Saudi Aramco oil company, and a number of specialist hospitals. Apart from the specialist hospitals, the health facilities in this sector are primarily designed to serve the workers of the different establishments and members of their families. As a rule, services are not extended to members of adjoining communities, and where such communities are lacking services, it is the responsibility of the MOH to provide them. The 'other government' facilities carry out similar functions to those of the MOH with respect to ambulatory care and inpatient care.

### **Planned organizational reforms in the public system**

- Administrative reforms including restructuring the MOH organization structure, policies procedure, and regulations.
- Implementation of the Saudi Health System.
- Implementation of the cooperative health insurance system.
- The Primary Health Care strengthening and expansion of.
- Strengthening quality assurance in health care.
- Privatization and corporatization of some of MOH hospital.

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## **4.3 Private Health Care System**

### **Modern, for-profit**

The private health sector includes private hospitals, clinics, dispensaries and pharmacies. The facilities are mostly located in urban centers. The private sector has grown rapidly in recent years. Health services vary from basic medical care to highly organized specialist services.

### **Modern, not-for-profit**

Not available

**Traditional**

There is a recently established traditional medicine department in MOH to supervise and control traditional medicine in the market.

**Key changes in private sector organization**

MOH fully cooperates, and coordinates with the private health sector, either directly or through the medical units in chambers of commerce and industry in the kingdom.

**Public/private interactions (Institutional),**

- Participation in joint committees.
- Plays a major role in cooperative health insurance system.
- Privatization and corporatization projects.

**Public/private interactions (Individual),**

Under-development.

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**4.4 Overall Health Care System****Organization of health care structures**

See the attached MOH Diagram

**Brief description of current overall structure**

The organization structure is self explanatory.

## 5 GOVERNANCE/OVERSIGHT

### 5.1 Process of Policy, Planning and management

#### **National health policy, and trends in stated priorities**

Saudi Arabia is a welfare state. The right to health of Saudi citizens has been provided for through the development of particular socioeconomic and health policies. Saudi health policy is generally committed to the HFA objectives. There is a three-tier health care system —primary, secondary and tertiary, corresponding respectively, to health centers, general hospitals and specialist hospitals. Three health sectors are considered in this review: MOH, other entities in the government sector and the private (for profit) health sector.

MOH, headed by the Minister of Health, is responsible for running the country's health system. It has a well-defined; Semi decentralized organizational and administrative structure. Its functions include strategic planning, formulating specific health policies, providing almost 60% health care, and supervising all health service delivery programs, as well as monitoring and controlling all other health-related activities.

#### **Formal policy and planning structures, and scope of responsibilities**

The Health Services Council (see 4.1) is responsible for preparation of National health care strategies, coordination and complementation between the deferent sectors providing health care in the kingdom.

The deputy minister for planning and development is responsible for strategic policy and planning for MOH, through the assistant deputy minister for planning and research who heads the general directorate for planning which responsible for MOH planning.

#### **Analysis of plans**

Analysis of plans conducted by the general directorate for planning in cooperation with statistics department, health economics department in MOH, and ministry of planning and economy.

#### **Key legal and other regulatory instruments and bodies: operation and any recent changes**

In the MOH there are Legal affairs department, follow up directorate, organization and methods directorate, and administration and finance directorate are responsible for legal and regulatory procedures. This in addition to Saudi Board for health specialties and Saudi board for specification and measurements and Saudi board for food and drugs, and there are also, other bodies involved in their particular fields.

### 5.2 Decentralization: Key characteristics of principal types

#### **Within the MOH:**

They have administrative authorization, but limited financial delegation.

**State or local governments**

Health directorate participates in Regional council which is representing all governmental and private sectors.

**Greater public hospital autonomy**

Applied.

**Private Service providers, through contracts**

Applied.

**Main problems and benefits to date: commentary**

- Mainly financial, administrative, and procedural issues.
- Benefits include better performance, more recruitment for qualified cadres, greater flexibility.

**Integration of Services**

Applied.

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**5.3 Health Information Systems****Organization, reporting relationships, timeliness**

Statistics department in full cooperation with computer department under the authority of assistant deputy minister, are responsible for organizing data by receiving it from all departments and directorates in MOH, in addition to data gathered from other governmental and private sector on scheduled formats.

**Data availability and access**

Data is generally available and accessible and it is being continuously improved.

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**5.4 Health Systems Research**

There is a directorate for medical research, but it needs to overcome certain logistic and administrative regulations.

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**5.5 Accountability Mechanisms**

See (5.1)

## 6 HEALTH CARE FINANCE AND EXPENDITURE

### 6.1 Health Expenditure Data and Trends

**Table 6-1 Health Expenditure**

Indicators	1990	1995	2000	2004
Total health expenditure ( health budget in Saudi R)*	8,597	7,364	11,939	14,756
Total health expenditure as % of annual government budget in Saudi R (M )	6	4,9	7,6	6,4
Investment Expenditure on Health				
Public sector % of total health expenditure				

\* X1000.000

**Table 6-2 Sources of finance, by percent**

Source	1990	1995	2000	2004
<b>General Government</b> (Saudi R)*	8,597	7,364	11,939	14,756
Central				
State/Provincial				
Local		100% Central		
Social Security				
<b>Private</b>	-	-	-	-
Private Social Insurance				
Other Private Insurance				
Out of Pocket				
Non profit Institutions		Not yet applicable		
Private firms and corporations				
<b>External sources</b>		<b>Nil</b>		

\* X1000.000

#### Trends in financing sources: commentary

Overwhelmingly, health care financing in Saudi Arabia is provided mainly from government revenues. The budgetary provision for the MOH has continued to increase—from 2.8% of the national budget in 1970 to 6.4% in 2004. The 'other government' sector also receives annual allocations to meet their health care commitments. The remaining health services financing is derived from private sources (e.g. personal out-of-

pocket payments) and from occupational health insurance premiums mainly subscribed to by large private company employees

## Health expenditures by category

**Table 6-3 Health Expenditures by Category**

<b>Expenditure</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2004</b>
Total expenditure: (Saudi R)*	8,597	7,364	11,939	14,756
% capital expenditure				
% by type of service				
Curative Care				
Rehabilitative Care				
Preventive Care				
Primary/MCH				
Family Planning		Not applicable		
Administration				
% by item				
Drugs and supplies				
Other				
Staff costs				78,271

\* X1000.000

## Trends in health expenditures by category: commentary

Health expenditures by category, is the new concern of the MOH, as it composes an important part of the National health account system, and more efforts are directed to wards it.

## 6.2 Tax-based Financing

Not applicable

## 6.3 Insurance

The cooperational insurance in Saudi Arabia is under the process of application in phases.

**Table 6-4 Population coverage by source**

<b>Source of Coverage</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2004</b>
Social Insurance		Not yet applicable		
Other Private Insurance				
Out of Pocket				

Private firms and corporations

Government

**Uninsured/Uncovered**

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## **6.4 Out-of-Pocket Payments**

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## **6.5 External Sources of Finance**

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## **6.6 Provider Payment Mechanisms**

## 7 HUMAN RESOURCES

### 7.1 Human resources availability and creation

**Table 7-1 Health care personnel**

Personnel per 10,000 population	1990	1995	2000	2002
Physicians	-	17	15.3	15.6
Dentists	-	1.6	1.8	1.9
Pharmacists	-	2.9	2.6	3
Nurses	-	33	32.3	33
Paramedical staff	-	19	18.5	17
Midwives				
Community Health Workers		Not applicable		
Others				

In Saudi Arabia, many health professionals are expatriates of various nationalities. However, a gradual change has been observable, with increased numbers of Saudi nationals becoming qualified and taking up employment in the health sector. In 2002 figure of 15.6 physicians/10 000 populations compares favorably with the WHO minimum recommendation of 1 physician/10 000 populations for developing countries, and the WHO Eastern Mediterranean Region average of 9.4 physicians/10000 populations. The annual large influx of pilgrims during the Haj season dramatically alters the health worker/population ratio as doctors, nurses, pharmacists and allied health personnel are drawn from the different parts of the country. The pilgrimage poses special problems, not only in terms of the number of people, but also the special health problems associated with this diverse group. Saudi Arabia provides the essential man power and other resources needed to manage Haj season safely. The Saudi health system is unique in that medical consultations are overwhelmingly doctor– patient encounters, unlike in other settings where there are different mixes of personnel. Examples of the latter include physicians, clinicians and nurse practitioners in the United States, physicians and barefoot doctors in China, and physicians and medical auxiliaries in most Asian and African countries. The burden of the Saudi approach can better be appreciated by the enormous workload of health centre physicians in some areas. However, there are a number of health care centers of excellence, such as the King Faisal Specialist Hospital and Research Centre and the King Khalid Specialist Hospital for Eye Diseases in Riyadh. The military hospitals, university hospitals and some private hospitals also have state-of-the-art equipment and well-qualified personnel. In addition, there is an air ambulance service that provides prompt transfer of patients from one part of the country to the other to optimize care. This arrangement helps to minimize the need for overseas treatment.

## Trends in skill mix, turnover and distribution and key current human resource issues and concerns

The health worker/population ratio in Saudi Arabia has improved in the last 10 years to facilitate accessibility to health services.

Increased number of health colleges and institutes, and increased training and scholarship budget allocation is aiming to provide the health services with different and qualified health specialties to cover the issue of shortage in health human resources with expansion of Saudization of health jobs.

**Table 7-2 Human Resource Training Institutions for Health**

Type of Institution	Current		Planned		
	Number of Institutions	*Capacity	Number of Institutions	Capacity	Target Year
Medical Schools	10	1861	2	120	2013
Postgraduate training Institutions	-	-	-	-	-
Schools of Dentistry	4	373	2	74	2013
Schools of Pharmacy	4	625	3	150	2012
Nursing Schools*	43	9813	8	1600	2010-15
Midwifery Schools			Not applied		
Paramedical college	4	1220	2	120	2012
Schools of Public Health			Not applied		

Source: Ministry of High education statistics, 2003-2004.

\* Capacity is the annual number of graduates from these institutions.

## Accreditation, Registration Mechanisms for HR Institutions

Saudi Board for Health specialties with MOH cooperation is responsible for accreditation, and registration mechanisms for HR Institutions.

## 7.2 Human resources policy and reforms over last 10 years

- Increase number of qualified health workers.
- Saudization, in the previous 7th five year plan reached 50.9%
- Increased number of health colleges and institutes.
- Issue of guidelines for policy and procedures aiming to raise the quality of health work.

## 7.3 Planned reforms

8th five year, aim to continue provisions mentioned in (7.2 above), and increase the number of health jobs.

## 8 HEALTH SERVICE DELIVERY

### 8.1 Service Delivery Data for Health services

**Table 8-1 Service Delivery Data and Trends**

<b>TOTAL (percentages)</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2004</b>
Population with access to health services	-		99%	
Married women (15-49) using contraceptives	-		31.8%	
Pregnant women attended by trained personnel	-	90%	-	96%
Deliveries attended by trained personnel	-	91.4%	-	96%
Infants attended by trained personnel	-	-	-	96%
Infants immunized with BCG	-	-	94.3% (03)	
Infants immunized with DPT3	-	-	95.2% (03)	
Infants immunized with Hepatitis B3	-	-	94.7% (03)	
Infants fully immunized (measles)	-	-	96.3% (03)	
Population with access to safe drinking water	-	92%	-	97%
Population with adequate excreta disposal facilities	-	86%	-	100%

<b>URBAN (percentages)</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2004</b>
Population with access to health services				
Married women (15-49) using contraceptives				
Pregnant women attended by trained personnel				
Deliveries attended by trained personnel				
Infants attended by trained personnel				Not Applicable
Infants immunized with BCG				
Infants immunized with DPT3				
Infants immunized with Hepatitis B3				
Infants fully immunized (measles)				
Population with access to safe drinking water				
Population with adequate excreta disposal facilities				

<b>RURAL (percentages)</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2004</b>
Population with access to health services				
Married women (15-49) using contraceptives				
Pregnant women attended by trained personnel				Not Applicable
Deliveries attended by trained personnel				
Infants attended by trained personnel				
Infants immunized with BCG				
Infants immunized with DPT3				
Infants immunized with Hepatitis B3				
Infants fully immunized (measles)				
Population with access to safe drinking water				
Population with adequate excreta disposal facilities				

### **Access and coverage: commentary**

#### **Access to primary care:**

- In MOH, there were 1848 PHC centers in 2004. It is estimated that there were 57.5 million visitors in 2003.
- PHC centers (implementing the 8 PHC elements) will be expanded to cover the entire country.

#### **Access to secondary care:**

In MOH, there were 200 hospitals in 2004, providing 28751 beds. It is estimated that there were 11109134 out patients, and 1252617 inpatients in 2003.

The private sector will be expanding its role in establishing hospitals through privatization including MOH hospitals.

## **8.2 Package of Services for Health Care**

Health services in Saudi Arabia provided at primary, secondary, and tertiary levels in governmental and private sector.

## **8.3 Primary Health Care**

Health centers are the flagship of the Kingdom's health care system. They are distributed throughout the country and serve as the patient's first point of contact with the national health system. By 2004, there were 1848 health centers in the country. The centers form a network closely linked to the general hospitals, which in turn are linked to tertiary care services by a referral and feedback system. The health centers implement the various components of primary health care. They carry out population and family censuses within their catchment areas, maintain patient health files, form 'health friends' committees, survey schools in their areas and conduct routine home visits.

Each health centre services a catchment area with a defined population. Services provided are essentially promotional, preventive, curative and rehabilitative. They include maternal and child health, immunization, management of chronic diseases (e.g. hypertension and diabetes), dental health, provision of essential drugs, environmental health (e.g. water and sanitation), food hygiene, health education and disease control. The number of health centers per region varies, as does the availability of selected services such as dental clinics, X-ray equipment and laboratories in each health centre. Most such facilities are in urban areas.

A defined group of health centers constitute the catchment of a hospital for services, referrals and coordination. The hospitals provide secondary care (medical, surgical, pediatric, obstetric and gynecological, dental and emergency service ..etc) and some are affiliated to medical colleges for undergraduate and postgraduate clinical training. Service provision for pregnant women is shared between the health centre and the hospital. Antenatal care is provided at the health centre with two referrals to the hospital, at 16–18 weeks for ultrasound scan and at 34–36 weeks for final check-up. Over 90% of births in Saudi Arabia take place in hospitals. The health services of the MOH are complemented by referral system which needs to be strengthened, a reasonable level of community partnership, an emerging health information system and a growing quality improvement program.

## **Infrastructure for Primary Health Care**

### **Settings and models of provision**

See (8.1.1)

### **Public/private, modern/traditional balance of provision**

#### **Public-private ownership mix;**

PHC centers mostly owned by MOH.

#### **Public Sector:**

PHC, provided through PHC centers in MOH, and to some extent through private dispensers.

### **Primary care delivery settings and principal providers of services; new models of provision over last 10 years**

MOH is the principle provider followed by other governmental sectors. A part of services is provided by large companies e.g Aramco in addition to other private facilities.

### **Public sector: Package of Services at PHC facilities, any services deliberately excluded**

All PHC elements are applied.

### **Private sector: range of services, trends**

Mainly curative.

### **Referral systems and their performance**

The health services of the MOH are complemented by referral systems at all levels, which need to be strengthened

**Utilization: patterns and trends**

See (8.1.1 ) in addition to ( 2004):

- Hospital Admission rate 5.7/100 persons.
- B.O.R 62% .
- ALOS 4.4 day.

**Current issues/concerns with primary care services**

- Old buildings of PHC centers, with increased land and building costs.
- Difficulty of Saudi Arabia geography.
- Increased population.
- Increased cost of drugs and technology.

**Planned reforms to delivery of primary care services**

- Increase budget allocation for PHC.
- Ambulatory medicine.
- Expansion of information technology and its networks.
- Use of essential drugs and technology at reasonable cost.
- Increased quality of PHC performance, by manpower development and enhancement of administration aspects.

**8.4 Non personal Services: Preventive/Promotive Care**

- **Availability and accessibility:**

All health services are available and accessible.

- **Affordability:**

They are affordable.

- **Acceptability:**

To large extent they are acceptable.

**Organization of preventive care services for individuals**

Available at all levels, provided through health directorate facilities, supervised and controlled by deputy minister for preventive medicine..

**Environmental health**

Covered by MOH, and other governmental sectors, with input by private companies.

**Health education/promotion, and key current themes**

See (8.4.2).

**Changes in delivery approaches over last 10 years**

- Use of telemedicine

- Increased number of PHC centers.
- Implementation of preventive programs e.g premarital examination, antismoking campaign in addition to old programs processing like tuberculosis, and malaria control program etc
- Increased international cooperation and mainly with border countries e. g Saudi Yemeni joint malaria control programs.
- Promotion of healthy life style to reduce non communicable diseases.

### Current key issues and concerns

- Difficulty of Saudi Arabia geography.
- Increased population.
- Increased cost of drugs ( including vaccines) and technology.
- Instability of global economy
- Inadequate medical sub specialties.

### Planned changes

- Implementation of cooperative health insurance.
- Use of essential drugs and technology at reasonable cost.
- Studying the implementation of privatization of MOH hospitals, and expansion of involvement of private sector..
- Expansion of information technology and its networks.
- Increasing number of health specialized staff, and encouragement of medical training and continuous medical education.

## 8.5 Secondary/Tertiary Care

**Table 8-2 Inpatient use and performance**

	1995	2000	2001	2002
Hospital Beds/1,000	2.3	2.2	2.2	2.2
Admissions/100	10.6	10.3	10.4	10.5
Average LOS (days)*	4.1	4.3	4.1	4.4
Occupancy Rate (%)*	61.9	65.3	62.4	64.6

\* General hospital MOH.

### Public/private distribution of hospital beds

There is increase in bed number in both public and private sectors, 81% covered by public hospitals, while, 19% covered by the private sector.

### Key issues and concerns in Secondary/Tertiary care

- Escalating costs.

- Scarcity of medical sub specialties.
- Administrative, organizational and procedural obstacles.
- Inadequacy of information system.

### **Reforms introduced over last 10 years, and effects**

- Total quality management.
- Evidence based medicine.
- Use of modern technology.
- Increased training and fellowships.
- Increased accessible facilities.

### **Planned reforms**

MOH approach towards privatization and corporatization of hospitals.

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## **8.6 Long-Term Care**

### **Structure of provision, trends and reforms over last 10 years**

Long-Term Care provided by several governmental and non-governmental agencies including MOH. Preventive measures included the introduction of programs such as premarital medical examination to limit and reduce the incidence of inherited diseases. Policy and procedures established to reduce accidents especially road traffic accidents

### **Current issues and concerns in provision of long-term care**

Change in demography towards aging population, high incidence of road traffic accidents and non-communicable diseases increase the burden of long term care including expenses.

### **Planned reforms in provision of long-term care**

Expansion of long term facilities, and increased participation of private sector.

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## **8.7 Pharmaceuticals**

### **Essential drugs list: by level of care**

The Ministry of Health is using already a list of essential drugs at the primary and secondary level of care.

The drugs used at the tertiary level are considered as highly specialized and are not included within the list of essential drugs.

### **Manufacture of Medicines and Vaccines**

The Kingdom had already started to manufacture some drugs and vaccines . Other drugs are procured and imported according to need.

### **Regulatory Authority: Systems for Registration, Licensing, Surveillance, quality control, pricing**

- There are regulations for registration of pharmaceutical companies and their products at the central level in MOH and in its health directorates.
- Regulations also, used for registration of Herbal products , health supplementary food , Cosmetics and antiseptics that have medical claim .
- Saudi Food and Drug Board cooperate with MOH to regulate drugs.

### **Systems for procurement, supply, distribution**

Procurement and supply has two systems, one through the Gulf States Governments unified Contract ( G .G. C ), the other, by local and direct purchase.

### **Reforms over the last 10 years**

Over the last 10 years reforms have been taken for drugs regulation, procurement and its storage system at the central MOH and its health directorate's stores, in addition to, the use of the essential drugs and their guidelines.

### **Current issues and concerns**

- Increased drugs costs.
- Organizing drug storage, distribution and use.

### **Planned reforms**

- Expansion of more items to be involved in the GGC.
- Cost containment in drugs dispensary.
- Increased number of drug stores, and strengthening drug storage policy and procedure.
- Expansion of computer and drug information system.

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## **8.8 Technology**

### **Trends in supply, and distribution of essential equipment**

Supply done through tender offered to private sector, and distribution of Essential equipments and supplies is carried at the regional level and controlled and supervised by concerned department in MOH.

### **Effectiveness of controls on new technology**

It will result in appropriate use of technologies at reasonable cost.

### **Reforms in the last 10 years, and results**

MHO, worked on providing its facilities with new technology at reasonable costs, and regularly maintained. It is controlled and directed through deputy minister for laboratory and blood transfusion, so work will be updated and performing properly.

### **Current issues and concerns**

- Rapid technology changes, and its high cost.

### **Planned reforms**

- The use of essential updated technology at reasonable cost.
- More trained personnel on proper use and maintenance of technology.

## 9 HEALTH SYSTEM REFORMS

### 9.1 Summary of Recent and planned reforms

#### Determinants and Objectives

##### Determinants include:

- Socioeconomic changes.
- Demographic changes.
- Epidemiologic transition of diseases.

##### Objective:

- Health promotion and reduction of mortality and morbidity rates.
- Improvement of quality of curative care, health services performance.
- Finding alternative modes for health care financing.
- Development of national health manpower and administrative policies and procedures.
- Completion of health information technology program.
- Activation of the role of Health Services Council, and strengthening of the coordination between health care sectors nationally, regionally and internationally.
- Improving the performance of emergency medical services.

#### Chronology and main features of key reforms

- Expansion of Primary Health Care services.
- Implementation of cooperative health insurance.
- Improvement of health systems at all levels.
- Privatization, and corporotization.
- Development and Saudization of health manpower.

#### Process of implementation: approaches, issues, concerns

- **Expansion of Primary Health Care services:**
  - Coverage of all parts of the Kingdom ( increasing accessibility ) by PHC.
  - Provision of essential health services at reasonable cost.
  - Improvement of performance.
- **Implementation of cooperative health insurance:**
  - Provision of an alternative means of health services financing.
  - Cost containment of health services.
  - Implementation in three phases ( 1st applied on companies employing 500 and more, 2nd on companies employing 100 and more, 3rd all remaining non governmental employees )

- **Improvement of health systems.**
  - Review, evaluation and development of the health systems aiming to improve health performance for all levels at a reasonable cost.
  - Establishment of national committee and task teams.
  - Follow up of improvement process of health system development.
- **Privatization, and corporatization:**
  - Expansion of private sector involvement in health services provision.
  - Completion of Privatization, and corporatization studies.
- **Development and Saudization of health manpower:**
  - Coverage of health jobs, and substitution of non-Saudi personnel by Saudis.
  - Phasing of the process of Saudization.
  - Provision of more health jobs in the health budget.
  - Establishment of more medical colleges and health institutes.
  - Increasing number of health graduates.
  - Increasing number of health personal to scholarship and training program.

### **Progress with implementation**

- **Expansion of Primary Health Care services:**
  - Increased number of PHC centers and their accessibility.
  - Improvement of performance, by applying total quality assurance to PHC, good training programs, provision of suitable facilities.
- **Implementation of cooperative health insurance:**
  - Establishment of cooperative health insurance committee.
  - Final preparation to implement its 1st phase.
- **Improvement of health systems.**
  - Establishment of Saudi Health System by Royal decree, and its Health Services Council.
  - Attendance of meetings, and symposiums on improvement of health systems.
  - Start to review, and evaluate the health systems.
- **Privatization, and corporatization:**
  - MOH carried out studies on Privatization, and corporatization of MOH hospitals.
- **Development and Saudization of health manpower:**
  - More health jobs provided in the health budget
  - Increase in Saudization of health jobs .
  - More medical colleges and health institutes are established.
  - Increased number of health graduates.
  - Increasing budget allocation for scholarship and training program.

### **Process of monitoring and evaluation of reforms**

Monitoring and evaluation process depended on the previously established objectives, and policies and procedures. Data are collected from several formats composing the periodical reports submitted from all involved health agencies. These data are analyzed by concerned bodies e.g. Statistics Department in a way useful for health planning and decision making..

### **Future reforms other concerned**

See the above.

### **Results/effects**

Good health system improvement, better health services at reasonable cost.

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## 11 ANNEXES

- MOH Organization Structure (Arabic/English).



The Regional Health Systems Observatory is an undertaking of the WHO Regional Office for the Eastern Mediterranean. The Observatory supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of the dynamics of health systems in the EMR. Its primary goal is to contribute to the improvement of health system performance and outcomes, in terms of better health, fair financing and responsiveness of health systems. The aim of this initiative is to provide relevant comparative information to support policy-makers and analysts in the development of health systems and to serve as repository of information on health systems.

This document is part of a series of in-depth health systems profiles, produced and updated by the Observatory using standardized approach that allows comparison across countries.

They provide facts, figures and analysis and highlight reform initiatives in progress.



## World Health Organization

Regional Office for the Eastern Mediterranean  
Abdel Razek El Sanhoury Street,  
PO Box 7608, Nasr City, Cairo 11371, Egypt  
Phone: +202-6702535, Fax: +202-6702492  
URL: [www.emro.who.int](http://www.emro.who.int)