# HEALTH SYSTEM PROFILE MOROCCO



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

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 has 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**

Kingdom of Morocco is situated on the northwest side of the African continent. This geostrategic situation makes it an amalgam of Europe and Africa, Arab - Moslem orient and Euro – Mediterranean cultures, one of the more versatile countries of the region. The Moroccan population is a harmonious ethnologic assemblage of Berber, Arabic, and andalouses cultures. Morocco's varied geography includes mountain ranges, valleys, coasts, and wide expanses of desert. Its climate is relatively dry, although small amounts of rain do fall between November and March. Temperatures, however, vary considerably by season and locale.

As with other developing nations, Morocco is undergoing a transition in the form of urbanization. In 1960, Moroccan population living in cities used to account for barely 30% of the total population, while now more than 51% of inhabitants live in cities. The countryside environment, in which most of the Moroccan population lives, very clearly determines their demographic and health profile apparent through the high fecundity index and the structure of families.

Overall, there has been a marked improvement in the health status indicators of the Moroccan population during the last fifty years, indirectly evident through a rise in life expectancy to 68 years and fecundity reduced to 2.3. However, some selected indicators like Maternal Mortality Ratio remained stagnant over the past decade; the results of the last investigation on the population and the family health (EPSF, 2003-2004) give an indication of maternal mortality of 227 for 100.000 live births. Similarly, the under-five mortality rate remained the same 37% between 1997 and 2003, rising to 40% for the period 1999-2003, with neonatal mortality is posing a major problem.

Restraining government spending, reducing constraints on private activity and foreign trade, and achieving sustainable economic growth are some economic issues that Morocco faces currently. Long-term economic challenges include: preparing the economy for free trade with the EU and US, attracting foreign investment to boost the living standards and job prospects for Morocco's youth and improving educational status.

Although education in Morocco is free and compulsory through primary school (fundamental course until age 15), many children (particularly girls in rural areas) still do not attend school. The country's illiteracy rate has remained at around 50% for some years, reaching as high as 90% among girls in rural regions. Morocco has about 230,000 students enrolled in 14 public universities.

Since the formulation of the first health policy in 1959, the Moroccan health system is organized with a predominance of the public sector, characterized by the free health care services and the centralized management. The State is positioned at the midpoint of the health system performing at once the functions of financial source, administrator and health care provider. The Ministry of Health runs the Basic Care Health Network, Hospital network and the National Institutes and Laboratories. The Defense department runs its own hospitals and services and local governments have Municipality health services. Over the years, the private sector developed progressively, functioning independently in most cases.

The health system is organized according to a pyramidal hierarchy. Structures of primary healthcare (clinics, urban and rural health centers and local hospitals in rural districts for the public sector; medical offices and infirmaries for the private sector) represent the first resort for the patients. They provide preventive and promotional cares as well as

ambulatory curative cares. The second recourse corresponds to the provincial and prefectorial hospitals for the public sector and the specialized offices and clinics for private one. The third recourse includes regional hospital centers. Fourth recourse is the university hospital centers, one each in Rabat, Casablanca, Fez and Marrakech, where secondary healthcare requiring high technical supplies and logistics is being provided.

The health sector is governed by a set of ruling texts for the administrative, sanitary legislation and regulation of professional bodies. The overall responsibility for the public and private sectors lies with the Ministry of Health. A Regulation and Claims department within Ministry of Health is responsible for regulating the public healthcare institutions, legal aspects of medical and paramedical professions, and sanitary legislation. Morocco has over 269 private hospital units which make up a total capacity of about 5,500 beds. Half of this capacity is located in Casablanca and the rest is distributed between Rabat and the other main cities of the country. The private sector is ruled in part by a governmental department, the Government's General Secretary, and partially by a Professional Council (physicians, pharmacists and surgeons dentists).

The non profit sector is represented by health care establishments run by two mutual benefit societies, the National Social Security Fund (CNSS) and the National Fund for Social Security organisms (CNOPS). These health care institutions take care of employees of private and public sector respectively. Currently, 13 CNSS polyclinics are functional with 1138 beds (98). The sector employs 305 physicians, 1720 male nurses, and 6 pharmacists on permanent basis, while 127 physicians work part time.

Two separate types of institutions train health professionals:

- Schools of Medicine and pharmacy: Four in total, one each in Rabat, Casablanca, Fez and Marrakech
- Schools for nurses and paramedics (IFCS): Ten in total.

The public basic healthcare network comprises of 2458 Health Facilities providing curative and preventive healthcare services as well as undertaking health promotion activities. The public hospital network included of general and single specialty hospitals, semi-autonomous hospital centers, University and hospital centers have total of 124 hospitals with 25,000 beds.

At each province or prefecture level, an administrative organization, named "Delegation of the Health Ministry" has the responsibility of the implementation of health policy, within its territory, through budget allocated by the central administration. This organization is the result of a type of decentralization called de-concentration, through which authority was delegated from central administration to the provincial and prefectorial levels. It also supervises public sector healthcare institutions and public schools of paramedical training. However, the human resource functions like recruitment, salary and career structure are still the responsibility of the central administration.

The Region is currently the interlocutor of the central government regarding to all health issues. Since the institutionalization of the Region as intermediate governance level, there is a new dimension of public sector involvement; there is more participation of local actors, improved proximity of the administration to the citizens and decentralization of the decision making processes. Some strategic functions reserved to the central administration are gradually being delegated to the regional level, such as the health care supplies planning (each Region Health administration develops its health care supplies diagram, called SROS<sup>i</sup>). However, financial and human resources control is still

out of its scope of responsibilities. Recently, MOH set up the first regional health department<sup>ii</sup> in the Region of the Oriental.

Healthcare financing in Morocco is characterized by inequity and lacks adequate regulation, being more in favor of the wealthy segment of the population than those less affluent. The financing system is optional and done on voluntary basis. It covers only 16.4% of the population, more than three fourth of them city dwellers (3.8% rural vs. 12.8% urban). Again, state and public sector employees and their dependants constitute more than two thirds of the covered population. Since the criterion for membership is income in the form of a salary or the retreat pension, economically disadvantaged people are excluded from this system. They are treated nearly free of charge at public health care establishments (automatically as concerns primary care and upon giving a certificate of indigence for hospital care). The rest of the population, neither insured nor indigent, must pay professionals directly for health care. An autonomous state sponsored public establishment called "National Agency of the Health Insurance (ANAM)" is the first organization to regulate health insurance system. It's mission is to supervise the obligatory health insurance system and to manage RAMED resources allocation process.

According to the national health accounts, the private hospitals benefit from the largest flows (nearly two-thirds). This is particularly true of private clinics, which receive almost 51% of all payments. Despite the minimal participation of CNOPS, the share of private practice is quite high, mainly due to radiology and laboratory investigations included in different health insurance plans. Public hospitals receive just 6.2% of all direct payments from organizations that manage the various health insurance plans.

The sanitary human resources comprise of four types of professionals; the physicians, the pharmacists, the surgeon dentists and the paramedics, distributed between the public sector and the private one. Currently, there're about 16.000 physicians (1/1850 inhabitants) and nearly 30.000 paramedical (either 1/1000 inhabitants). In the public sector, the Ministry of Health is the main employer of the physicians, who represent one fifth (19%, n=8003) of the total of the staff of the Ministry of Health. More of the half of these physicians, both in the public and private sectors are condensed in the center (Casablanca), and regions of the northwest, Rabat, despite efforts by the Ministry of Health to orient the recruitment of the new physicians toward the less covered rural regions. The last two recruiting operations (2003 and 2004) were exclusively for the rural districts. The pharmaceutical industry, a group of twenty-six enterprises is controlled by ten laboratories, some funded by foreign donors. The industry caters to 80% of the local needs through it's production.

The public health sector reforms aim to correct sector dysfunctions and inequities that reduce its effectiveness and efficiency. Still the main challenges are improving equity in access to healthcare; enhancing coverage of secondary and tertiary care and healthcare financing; increasing responsiveness to emergent morbidity needs through public sector infrastructure and stewardship of Ministry of Health.

### **2 SOCIO ECONOMIC GEOPOLITICAL MAPPING**

#### 2.1 Socio-cultural Factors

#### Table 2-1 Socio-cultural indicators

Indicators	1990	1995	2000	2002
Human Development Index	0.542	0.571	0.603	0.620
Literacy Total:	38.69	43.94	48.84	50.73
Female Literacy in %	24.95	30.53	36.07	38.31
Women as % of Workforce	34.6	34.6	34.7	34.94
Primary School enrollment	-	66.89	83.75	101.23
Primary education, pupils (% female)	-	39.84	42.01	45.63
Urban Population (%)	48.39	52.00	55.46	56.78

As with other developing nations, the population in Morocco is undergoing a transition in the form of urbanization. In 1960, Moroccan population living in cities used to account for barely 30% of the total population, but now more than half (51%) of the inhabitants live in cities. The countryside environment, in which most of the Moroccan population lives, very clearly determines their demographic and health profile, apparent through the high fecundity index and the structure of families.

The major changes that affect the Moroccan population are the direct consequence of the massive and often uncontrolled urbanization of the last thirty years. The urban population increased from 48.4% in 1990 to 56.8% in 2002, resulting in an overlap between urban zones and economically vulnerable suburban zones. The level of adult literacy improved considerably during the same period, from 39% to 51%, especially among women.

#### 2.2 Economy

#### Table 2.2 Economic Indicators

Indicators	1990	1995	2000	2002
GNI per Capita (Atlas method) current US\$	1,030	1,120	1,180	1,170
GNI per capita (PPP) Current International	2,630	2,840	3,390	3,730
GDP per Capita: (constant 1995 US\$)	1,310	1,250	1,369	1,455
GDP per Capita annual growth %	1.93	-8.21	-0.69	1.55
Unemployment % (estimates)	-	15.8	22.9	19*
External Debt as % of GDP	96.89	72.22	62.16	51.54
External balance on goods and services (%GDP)	-5.98	-6.67	-6.25	-4.34

Major Exports:	Clothing, fish, inorganic chemicals, transistors, crude minerals, fertilizers (including phosphates), petroleum products, fruits, vegetables
Major Imports:	Crude petroleum, textile fabric, telecommunications equipment, wheat, gas and electricity, transistors, plastics

#### Table 2.3 Major Imports and Exports

Source: Morocco Country profile: http://www.cia.gov/cia/publications/factbook/geos/mo.html

#### Key economic trends, policies and reforms

Morocco faces most of the challenges typical to developing countries - restraining government spending, reducing constraints on private activity and foreign trade, and achieving sustainable economic growth. Despite structural adjustment programs supported by the IMF, the World Bank, and the Paris Club, the dirham is only fully convertible for current account transactions. Reforms of the financial sector are being contemplated.

Droughts depressed the activity in the key agricultural sector and contributed to a stagnant economy in 2002. However, favorable rainfall in 2003 led to a growth of 6%. Morocco reported large foreign exchange inflows from the sale of a mobile telephone license, and partial privatization of the state-owned telecommunications company as well as the state tobacco company. Formidable long-term challenges include: preparing the economy for freer trade with the EU and US, improving education, and attracting foreign investment to boost living standards and job prospects for Morocco's youth.

#### 2.3 Geography and Climate

Morocco is situated on the extreme northwestern corner of Africa and is bordered by Mauritania and Algeria, towards the south and east respectively. An area of 446,550 sq. km. includes no less than four separate mountain ranges, in addition to lush river valleys, beautiful sandy coasts, and wide expanses of desert. The three most prominent mountain ranges, which run parallel to each other from the southwest to the northeast, are the Middle Atlas, the High Atlas, and the Anti-Atlas.

The Moroccan coastline, which touches both the Mediterranean and the Atlantic Oceans, offers plenty of great beaches as well as a number of fascinating old coastal cities. In the southeast, Morocco's mountain ranges yield inexorably to the desolate expanse of the Sahara. The rivers that flow down this side of the High Atlas support long, narrow, and lush river valleys that resemble linear oases.

The climate in Morocco is relatively dry, although there is small amount of rainfall between November and March. Temperature varies considerably by season and locale. While the southern and southeastern desert regions can reach extremely high temperatures during the hot summer months, the higher altitudes of the mountains are cool in summer evenings and freezing in winter.



Map of Morocco

### 2.4 Political/ Administrative Structure

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

Morocco has been undergoing a period of political transition since 1998 when the government, lead by the long-time left-wing opposition leader Abderrahmane Youssoufi, changed for the first time. Begun by the late King Hassan II, the movement towards democracy has accelerated since the accession of King Mohammed VI in 1999.

Officially described in the 1996 constitution as a democratic monarchy, Morocco's hereditary monarch has wide executive power. In 1997, a bicameral legislature was established. It consisted of a 270-seat upper house or Chamber of Councilors, whose members are elected by an electoral college for nine-year terms, with one-third of the members renewed every three years. The lower house is the 325-seat Chamber of Representatives, members of which are elected by popular vote for five-year terms.

The government is headed by the prime minister, who is appointed by the monarch following legislative elections. The Prime Minister heads a 31-member cabinet known as the Council of Ministers, yet many of its appointments are made by the king rather than the Prime Minister himself. The king appoints the ministers of interior, foreign affairs, justice and Islamic affairs - often from outside party politics.

Supreme Court judges are appointed on the recommendation of the Supreme Council of the Judiciary, presided over by the monarch.

#### Key political events/reforms

In the first parliamentary elections under the new king, held on 27 September 2002, no clear majority was produced. The Socialist Union of Popular Forces (USFP) won the most seats (50) in the 325-seat House of Representatives, followed by the nationalist Istiqlal Party (48) and the Islamic Fundamentalist Justice and Development Party, which tripled its earlier number of seats to 42. Thirty-five women were also elected, compared with only two in the 1997 elections.

# **3 HEALTH STATUS AND DEMOGRAPHICS**

#### 3.1 Health Status Indicators

Overall, the health status indicators of the Moroccan population improved markedly during the last fifty years. However, despite considerable efforts, maternal mortality showed no considerable change in the past decade. The results of the last investigation on the population and the domestic health (EPSF, 2003-2004) give an indication of maternal mortality of 227 for 100.000 live births. Studies revealed an important gap between the urban and rural districts: 187 in urban areas vs. 267 in rural areas. Similarly, the under-five mortality rate remained the same (37%) between 1997 and 2003, rising to 40% for the period 1999-2003, with neonatal mortality is posing a major problem.

#### Table 3.1 Indicators of Health status

Indicators	1990	1995	2000	2002	2004
Life Expectancy at Birth (in years)	63.48	65.75	67.65	68.35	-
Infant Mortality Rate (/1000)	66.00	51.00	41.00	39.00	40.00
Under five Mortality Rate (/1000)	85.00	61.00	46.00	43.00	47
Maternal Mortality Ratio (/ 100,000 live births)	332	228	-	-	227
Percent Normal birth weight babies:	-	96(92)	96	97	-
Prevalence of stunting/wasting:	-	9(92)	8.9(97)	-	-

*Source*: Eastern Mediterranean Regional Office Data base: reports from member countries

#### 3.3 Demography

Indicator	1990	1995	2000	2002	
Crude Birth Rate	31.16	26.70	21.90	21.25	
Crude Death Rate	8.42	7.08	5.90	5.80	
Population Growth Rate	2.04	1.76	1.64	1.60	
Dependency Ratio	0.74	0.65	0.58	0.57	
% Population <15 years	39.80	37.17	34.65	33.46	
Total Fertility Rate	4.01	3.42	2.89	2.75	

#### Demographic patterns and trends

Arabic is Morocco's official language (it is the "classical" Arabic of the Qur'an, literature and news media), and with the distinctive Arabic dialect, is the most widely spoken language in Morocco. Approximately 10 million Moroccans, mostly in rural areas, speak Berber, which exists in Morocco in three different dialects (Tarifit, Tashlehit, and Tamazight), either as a first language or bilingually with the spoken Arabic dialect. French, which remains Morocco's unofficial third language, is taught universally and still serves as Morocco's primary language of commerce and economics; it also is widely used in education and government. Many Moroccans in the northern part of the country speak Spanish. English, while still far behind French and Spanish in terms of number of speakers, is rapidly becoming the foreign language of choice among educated youth. As a result of national education reforms entering into force in late 2002, English is taught in all public schools from the fourth year on.

Moroccans are ethnically Arab and/or Berber, a vast majority (98.7 %) Sunni Muslim, with a small local Jewish minority accounting for .02 percent of population. Most people live west of the Atlas Mountains, a range that insulates the country from the Sahara Desert. Casablanca is the center of commerce and industry and the leading port; Rabat is the seat of government; Tangier is the gateway to Morocco from Spain and also a major port; "Arab" Fez is the cultural and religious center; and "Berber" Marrakech is a major tourist center.

Education in Morocco is free and compulsory through primary school (fundamental course until age 15). Nevertheless, many children (particularly girls in rural areas) still do not attend school. The country's literacy rate has remained 50% for some years, reaching as low as 10% among girls in rural regions. Morocco has about 230,000 students enrolled in 14 public universities. The oldest and in some ways the most prestigious is Mohammed V in Rabat, with faculties of law, sciences, contemporary arts, and medicine. Karaouine University, in Fez, has been a center for Islamic studies for more than 1,000 years. Al-Akhawayn, in Ifrane is a private university, founded in 1993 by King Hassan II and late King Fahd of Saudi Arabia. It is an English-medium, American-style university comprising about 1,000 students.

## 4. HEALTH SYSTEM ORGANIZATION

#### 4.1 Brief History of the Health Care System

In 1956, when Morocco became independent, there were only about 300 public health physicians and 400 private practitioners in the country. Since then, the government has made health care services more widely available and improved their quality. By 1992, health care was available to 70% of the population. Health education courses at schools and colleges, and programs to teach hygiene to children and parents, have also helped raise the quality of health. The current life expectancy is 66.5 years for men and 70.6 years for women.

Most health providers and health care centers are located in urban areas. In rural areas, mobile medical teams and a group of pharmacies and clinics provide outpatient care. Efforts to improve health care in Morocco have been hampered by problems with waste disposal, the limited availability of safe drinking water and the rapid growth of the population. The government has been working to improve sanitation and the quality of drinking water.

In 1982, the Ministry of Public Health was formed. Since then, smallpox has been eliminated, typhus outbreaks are less frequent, and malaria and tuberculosis have been brought under control. The World Health Organization and UNICEF also support the government's campaigns to reduce eye disorders and sexually transmitted diseases. Employers in industry and business are required to register their workers for benefits, but many workers are still not covered. Many other programs aiming at extending medical care to needy Moroccans are under way.

During the early eighties, there was a decline in the overall state supremacy. With the world economic crisis, the State had to face a profound financial crisis leading to the adoption of restrictions and reforms. The coming of Alma-Ata declaration offered the opportunity to focus on the prevention of disease and the development of basic health care and health programs. Since then, prevention became the state priority while hospitals were left in the shadow of health policies. The Medical Doctors showed a growing interest in the liberal medicine. The development of the private sector increased in the urban area and in the most promising regions of the country, independently from the State.

#### 4.2 Public Healthcare Delivery System

#### Organizational structure of public system

Since the formulation of the first health policy in 1959, the Moroccan health system is organized with a predominance of the public sector, characterized by the free health care services and the centralized management. The State is positioned at the midpoint of the health system performing at once the functions of financial source, administrator and health care provider. The Ministry of Health runs the Basic Care Health Network, Hospital network and the National Institutes and Laboratories. The Defense department runs its own hospitals and services and local governments have Municipality health services. Over the years, the private sector developed progressively, functioning independently in most cases.

The Basic Health Care network comprises of 2458 Health Facilities responsible for curative and preventive ambulatory care + Collective health prevention.

The Hospital network comprises of 124 hospitals with 25,000 beds, including single specialty hospitals, semi-autonomous hospital centers, University and hospital centers.

The National Institutes and Laboratories are primarily responsible for preventive activities and research and extend their expertise in hospital and ambulatory care and training.

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

Public sector has undertaken a modernization of its infrastructure and management processes regarding human resources and information technologies in use. Responsibility and anticipatory management are gradually replacing a rigid and less reactive bureaucracy. However, salaries in government services reduce considerably the resources allocated to development strategy to alleviate this salary mass is currently being contemplated.

#### Planned organizational reforms in the public system

Since 90's Morocco has initiated a process of reforms in some vital sectors of the public administration and its political, economic and social environment. Reforms of public administration, public expenditure, labor code, family code and other legal reforms make way for the public sectors to modernize themselves and try to adjust their actions to satisfy the population requirements and to meet national and international politico-economic changes.

#### 4.3 Private Health Care Systems

#### Modern, for-profit

Morocco has over 269 private units, which make up a total capacity of about 5,500 beds. Half of this capacity is located in Casablanca and the rest is distributed between Rabat and the other main cities of the country. Some infrastructures are of medium size and possess some of the most sophisticated equipment with a capacity of 50 to 100 beds, whilst the vast majority is small clinics with a capacity of less than 30 beds and limited resources. Despite major development during the 90's, the sector is now in crisis due to competition amongst hospitals belonging to the Department of Social Security, overconcentration in big cities, the limited purchasing power of the large majority of the population and the lack of financing. Government control is exercised at equipment level. In clinics that have been practicing for at least 10 years, specifications have been imposed which define the minimum technical level required.

#### Modern, not-for-profit

This sector is represented by health care establishments run by mutual benefit societies, the National Social Security Fund (CNSS) and the National fund for social security organisms (CNOPS). These institutions provide health care to employees of private and public sector respectively.

Currently 13 CNSS polyclinics are functional with 1138 beds (98). The sector employs 305 physicians, 1720 male nurses, and 6 pharmacists on permanent basis, while 127 physicians work part time.

#### Traditional

Traditional medicine sector remain active, particularly in the disadvantaged suburbs and among the populations with low socioeconomic level. There is lack of reliable data about expenses assigned to the care prescribed by the healers and traditional midwives. The impact on users' health status is also unknown.

#### Key changes in private sector organization

During 80's and 90's, private medical sector underwent an important development. Centers of specialized cares, with advanced healthcare technologies appeared in the big urban centers, especially in the cities with university hospital centers.

#### Public/Private interactions (Institutional)

In the recent years, many projects of partnership have been developed between the Ministry of Health and the NGOs operating in the sector of the reproductive health or the enhancement of rural women's status. Other memorandums of agreement focus on youth health or the protection of the environment. MoH leads a survey to assess the potentialities and the profits of a public—private partnership in health activities.

#### Public/private interactions (Individual)

In Morocco, the legislation controls the employ of physicians of the public sector in the private sector. University physicians are allowed to work two half days per week in private health institutions. This rule is often contravened and the liberal physicians often show their dissatisfaction about facing an unfair competition.

Other mode of partnership between the two sectors is agreements passed between the Ministry of Health and the liberal physicians, in order to reduce medical training insufficiency in public hospitals.

Leasing is another example of public-private interaction. This rental procedure allows public healthcare institutions to make available services involving costly health care equipments such as haemodialysis generators.

#### Planned changes in the private sector organization

The advent of the obligatory health insurance (AMO) will obligate the state to implement regulation measures of healthcare supplies and costs in private and public sectors. A recent World Bank report estimates that AMO will necessitate an adjustment of payment system and tariffs applied in the private sector.

#### 4.4 Overall Health Care System

#### Organization of health care structures

Diagram (see annex)

#### **Current overall structure**

The health system is organized according to a pyramidal hierarchy. Structures of primary healthcare (clinics, urban and rural health centers and local hospitals in rural districts for the public sector; medical offices and infirmaries for the private sector) represent the first resort for the patients. They provide preventive and promotional cares as well as ambulatory curative cares.

The second recourse corresponds to the provincial and prefectorial hospitals for the public sector and the specialized offices and clinics for private one. The third recourse includes regional hospital centers. Fourth recourse is the university hospital centers, one each in Rabat, Casablanca, Fez and Marrakech, where secondary healthcare requiring high-tech equipment and logistics is being provided.

The semi-public sector comprises of health care institutions managed by health insurance organization (CNOPS and CNSS) and other semi-public institutions (office chérifien of the phosphates; national office of the railways etc). They provide curative ambulatory and hospital cares.

# 5. GOVERNANCE/OVERSIGHT

#### 5.1 Process of Policy, Planning and management

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

Since the 1st national conference on health, 1959, Morocco developed several health strategies in accordance with the human rights for health and the equality of access to care for all citizens. The government's health sector policy is implemented through strategic planning of the health ministry. Priority was always accorded to increasing the sanitary facilities (particularly to rural zones); preventive- promotive programs for the health of the mother and the child and prevention and promotion of the overall health of the population, for example combating endemic and epidemic diseases.

In the recent years, MOH has tried to develop vertical programs for managing some chronic diseases, like diabetes, high blood pressure, respiratory chronic illnesses or cancer especially in ambulatory care.

The strategic plan of the MOH for the period 2003 - 2007 reproduces these orientations through the following objectives:

- Strengthening promotional and preventive healthcare programs, especially those in support to mothers and children;
- Developing programs to manage some chronic diseases (diabetes, terminal renal insufficiency, arterial high blood pressure, mental illnesses, and some cancers);
- Strengthening decentralization process toward the regional level;
- Extend hospital reform toward public hospitals;
- Develop an efficient medicine policy in order to improve their quality and make them easily accessible for consumers;
- Support partnership for health;
- Develop health research.

These strategic objectives have been built consequent to other sector reforms: public sectors reform, budgetary reform, healthcare financing reform (AMO and RAMED).

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

The decree of November 21st, 1994 announces that the Ministry of Health has the responsibility of the development and execution of the Government's health policy. It is supposed to act, in coordination with other departments (ministry of interior, ministry of agriculture, etc.) to implement actions of prevention and promotion of the health of the citizens. Its interventions are dependent on the annual budgeting of the ministry of the finance.

Strategic planning is done through a process of dialogue between the central administration and its decentralized services. The Plan and Financial Resources department is the central structure assigned to compile orientations from the 7 other department of the MOH and to define budgetary plan.

The strategic five-year plan is returned to decentralized services. At this level, strategic plan is converting into operational plan. Setting up of the sanitary Region, as decentralized level of governance is currently a way of mitigation of the procedures of scheduling and execution of the budgeted activities at the local level.

#### Analysis of plans

Studies for assessment of implementation of strategic plans are exceptional. It is only appreciated through the budget execution. This assessment does not permit measurement of the impact of decision and actions on the population health status.

Since the setting up of the contractual arrangements between the central administration and the decentralized services, called budgets - program, the strategic planning is based on results-based management. The financial resource allocation process to the decentralized services complies with this rationale.

#### Key legal and other regulatory instruments and bodies

The health sector is governed by a set of ruling texts for the administrative, sanitary legislation and regulation of professional bodies. The overall responsibility for the public and private sectors lies with the Ministry of Health. A Regulation and Claims department within Ministry of Health is responsible for regulating the public healthcare institutions, legal aspects of medical and paramedical professions, and sanitary legislation.

Two different types of institutions carry out health professionals' training:

- Schools of medicine and pharmacy: Four in total, one each in Rabat, Casablanca, Fez and Marrakech
- Schools of nurses and paramedics (IFCS): 10 in total

Accreditation system does not exist in Morocco. Currently, MOH is in the process of developing a framework and guidelines for hospital accreditation. Recently, the National Agency for Health Insurance (ANAM) has been created. The legislator has delegated this institution to manage the reimbursement process of financial resources allowed to CNOPS and CNSS. Additionally, this institution will have to manage the regime of medical aid to poor populations (RAMED).

#### 5.2 Decentralization: Key characteristics of principal types

Morocco had to make a choice for the decentralization policy. The debate about decentralization had its outcome with the approval of the Regionalization Law in 1997. The Region is currently the local level of decision-making and the Government's interlocutor.

#### Within the MOH

Within the public sector of health, the type of decentralization executed was "deconcentration" from central administration toward the provincial and prefectorial levels. At each province or prefecture, an administrative organization, named "Delegation of the Health Ministry" has the responsibility of the implementation of health policy, within its territory. All public healthcare institutions and public schools of paramedical training are entirely under the supervision of Delegation. Annually, the central administration allocates budgets to the provincial and prefectorial Delegation. However, human resources are still managed by the central administration in terms of recruitment, salaries, career development etc.

#### State or local governments

Since the institutionalization of the Region as intermediate governance, there is a new dimension of public sector involvement encompassing more participation of local actors, improved accessibility of the administration to the citizens and decentralization of the decision-making processes. The Region is currently the interlocutor of the central government regarding to all health issues. Some strategic functions reserved to the central administration are gradually being delegated to the regional services, such as in the case of healthcare supplies planning where each Region Health administration develops its health care supplies diagram, called SROSiii. Recently, MOH set up the first regional health departmentiv in the Region of the Oriental. Although the Region is autonomous in its planning process, the financial and human resource aspects are still out of its scope of responsibilities.

#### Greater public hospital autonomy

Hospital establishments network (REH) is a group of 124 establishments and nearly 25000 beds. These establishments can be categorized on the basis of resource level or type of management.

There are three types of hospitals according to the recourse level:

- 1 The public health polyclinic (PSP<sup>v</sup>): first hospital level. In addition to emergency cares, it provides services related to basic disciplines like medicine, surgery, obstetrics and pediatrics. It covers a population of 20 000 inhabitants.
- 2 The provincial or prefectorial hospital center (CHP): constituted by one or several general or specialized hospitals. In addition to the basic disciplines, the following medical and surgical specialties are also included: ophthalmology, dermatology, ORL, the infectious diseases, pneumo-phthisiology, cardiology, gastroenterology, endocrinology, traumato-orthopedics, internal medicine and intensive care units. CHP can have a regional vocation (CHR) when it overtakes provincial area. In this case it can develop some other specialized disciplines as urology, neurosurgery, burn care unit, nephrology, rheumatology, neurology and hematology.
- 3 The university hospital center: It includes a set of establishments undertaking a complete range of highly specialized services.

There are three groups of hospitals according to the management method:

- 1 The autonomous public establishments (EPA): represented by the university hospital Centers. This statute confers on them a moral responsibility and a financial autonomy. They are 18 in number (15% of the public hospitals).
- 2 The semi-autonomously managed establishments (SEGMA): these are the most numerous hospitals (n=89). They don't have a moral responsibility but they have a financial autonomy. This statute was initiated for the first time in 1987 in five hospitals. In 1998, SEGMA hospitals are regrouped in Provincial or Prefectorial Hospital Centers (CHP).
- 3 The "en régie" managed hospitals: this type of statute doesn't confer to the hospital neither moral responsibility nor financial autonomy. Its budget is not individualized.

#### According to care provided

The general hospitals: offer emergencies cares, surgery, medicine, obstetrics and pediatrics. There are 88 general hospitals (72% of the public hospitals).

Health Systems Profile- Morocco

The specialized hospitals: They are 34 (28% of the public hospitals) and are represented essentially by the psychiatric and pneumo-phthisiology hospitals.

#### Private Service providers, through contracts

The procedure of subcontract is followed in the majority of the public hospitals, particularly SEGMA Hospitals. Currently, purchases of support services include those related to hygiene, restoration, laundry and the security. The subcontract is controlled by special notebooks of specifications, which clarify the terms of reference and the quality required for the bought benefits. Recently, MOH conducted a study about the opportunity of subcontracting and invoice activity in hospitals.

#### Main problems and benefits to date

In Morocco, regionalization process aims to adapt decisions to local environment and to accelerate the implementation of plans. It also encourages involvement of local staff improving their expertise and capacities.

However, decentralization process is still incomplete. It restricts the scope of local decision-makers responsibilities, as the human and financial resources management is still centralized.

#### Integration of Services

Morocco has a hierarchic/pyramidal organized health care system. Thus, the basic sanitary institutions (clinics and health centers) are the population's first line contact. Recourse to the superior levels (provincial hospitals, regional hospitals and national or academic hospitals) requires higher specialization level of human and technical resources. Integration regarding health care services (promotional, preventive and curative activities) is an important issue especially at the level of the basic healthcare establishment network. At managerial level, integration of the different management functions throughout central, regional and provincial/prefectorial levels is still at the commencement level.

#### 5.3 Health Information Systems

MOH has a national system of sanitary information (SNIS), which underwent a number of reviews since the 80's. The main strength is management information subsystem of maternal and childhood health programs. This subsystem is computer program-based, which allows data entry and validity control, synthesizing graphs for different activities as well as control panel for decision making. The data transmission from basic health structure to central level is made electronically. These data are accessible for consultation to all structures of the Health Ministry.

Since 1997, MOH publishes an annual report on the population health status. This Report named "santé en chiffres" retraces the care supply chain and examines the program performance indicators for primary and secondary cares. However, some there are some weaknesses. The lack of integration and quality is evident because development of different health programs and strategies leads to many information subsystems, completely independent and with no logical linkage with the SNIS. In fact, information is broken up, sometimes duplicated depending on whether the data source is a structure that manages the routine information or a project structure. Moreover, the SNIS is underused by the actors and so human, material and financial resources are not

mobilized according to the product of the process of generation, collection, treatment and analysis of the information. Furthermore, there's no feed back mechanism.

The private sector is less inclined towards the production and the dissemination of sanitary information towards the Ministry of Health. The register of Haemodialysis and kidney transplantation (MAGREDIAL) is one of the first coordination mechanisms between the Ministry of Health and the private sector.

#### 5.4 Health Systems Research

Health research is not well developed. Research studies initiated by the MOH are often those with a financial support of international organizations and the United Nations. There are no private or independent mechanism/institutions for research in health.

MOH has an institute of training and research in sanitary administration and public health (National Institute of Sanitary Administration – INAS). INAS is a WHO collaborationr Center. This institute contributes towards a body of national research on health. The major research initiatives led by the MOH are focused on assessment of mother and child health and health care financing.

A list of the major investigations and studies conducted by the Ministry of Health:

- National investigation on the population and Health (ENPS 1987 and 1992)
- National panel investigation on population Health (1995)
- Survey of the households' contribution to hospitalization charges (1995)
- National investigation on the Health of the Mother and the child (1997)
- National investigation on the reasons and circumstances of death of children less than five years of age (1998)
- Hospital morbidity and expense study (2000)
- Investigation on the population and the domestic health (2003-2004) PAPFAM,
- Health National accounts (1997-98 and 2004),
- Costs and morbidity in public hospitals (2001-2002)
- Health system reactivity survey (in progress).

Most of these studies had an impact on the strategy formulation, especially, prevention and promotion of the reproductive health and the motherhood and infantile health.

#### 5.5 Accountability Mechanisms

Accountability mechanisms have been introduced in contractual arrangements. However, on ground these mechanisms are operational to a limited extent.

# **6** HEALTH CARE FINANCE AND EXPENDITURE

#### 6.1 Health Expenditure Data and Trends

#### Table 6.1 Health Expenditure

Indicators	1990	1995	2000	2001
Total health expenditure/capita	32.4 (89)	56 (98)	50	59
Total health expenditure as % of GDP	3.2 (89)	4.5 (98)	3.8	5.0
Investment Expenditure on Health	-	-	-	-
Public sector % of total health expenditure	5.0 (91)	4.4	4.5 (97)	32.8

Sources: Eastern Mediterranean Regional Office Data base: reports from member countries Belghiti Alaoui A., Réforme de santé au Maroc. Atelier sur les réformes de santé, Hammamet, Tunisie, Mars 2005. WB, 2002

#### Table 6.2 Sources of finance, by percent

Source	2000	2002	2004
General Government	39.3	33.29	-
Central	37	26.16	28.40
State/Provincial	-	1.25	-
Local	2.27	4.86	-
Social Security		-	-
Private	60.7	66.7	64.6
Private Social Insurance	-	-	-
Other Private Insurance	-	-	-
Out of Pocket	13.7	-	-
Non profit Institutions	45	59.3	61.3
Private firms and corporations	-	4.8	2.9
External sources	0.55	1.02	0.7
Others	-	2.50	0.4

Sources: WHO Country profile

National Health Accounts Study Morocco 2001 and 2004

In 2002, per capita on health in Morocco was US \$59. It is equivalent to 4.6% of the GDP (1282\$us or 3810\$us in ppa.) = US \$17.7 billion. Despite this meager expenditure, health status of the Moroccan population, if measured by its life expectancy of 68.4 years, is comparable to that prevailing in countries to more elevated levels of health

expenditures (Turkey: 69.9 years and 202 \$custom; Poland: 73.8 years and 394\$us; USA: 77.3 years and 4887\$us).

The direct payment of the households represents 56% of the total of resources mobilized for healthcare. The public financing, assured in major part by the taxes income, represents 25% of these same resources. The health insurance represents 16.4%. Supplementary resources come from the employers (4%) and the international cooperation (less 1%).

#### Trends in financing sources

The implementation of the health insurance reform will have an impact on the levels of financing of the healthcare expenses. According to the Ministry of Health, obligatory insurance extension is expected to get healthcares affordable to 34% of the Moroccan population. It is necessary to specify that those 34% covered persons are the salaried employees of the public and private sectors. Low-income people (so-called in absolute or relative poverty) will be covered by the Medical aid system (RAMED). Complete information about RAMED financing framework is not available, however it will be financed largely by tax.

#### Health expenditures by category

Expenditure	1997/98	2002		
Total expenditure: (all sectors)	-	17.7 billion \$us		
% capital expenditure	-	-		
% by type of service	-	-		
Ambulatory Care	31	-		
Hospital Care	20	-		
Preventive Care	3	-		
Administration	7	-		
Drugs and supplies	37	-		
Training research	1	-		
Other	1	-		

#### Table 6.3 Health Expenditures by Category

*Sources:* National Health Accounts Study Morocco 2001 WB, WDI

#### Trends in health expenditures by category

Data not available

#### 6.2 Tax-based Financing

Data not available

#### 6.3 Insurance

Source of Coverage	1997	2004
Insurance	16.4 % (total)	16.3%
National Social Provident Bodies Fund, CNOPS	68.6	-
СМІМ	1.3	-
In house Mutuals (OCP, ONCF, CNSS, RAM, Tobacco Authority, Bank Al.Maghrib, Banque Populaire)	12.0	-
Other Private Insurance	18.1	-
Government	23.6	28.4
Local Government	1.03	-
Employers	3.58	2.9
Uninsured/Uncovered		
Out of Pocket	53.66	-

#### Table 6.4 Population coverage by source

#### Trends in insurance coverage

The system is optional and voluntary. It covers only 16.4% of the population, majority being urban (3.8% rural vs. 12.8% urban). State and public sector employees and their dependants constitute more than two thirds of the covered population. Since the criterion for membership is income in the form of a salary or the retreat pension, the economically disadvantaged people are excluded from this system. They are treated nearly free of charge at public health care establishments (automatically as concerns primary care and upon giving a certificate of indigence for hospital care). The rest of the population (neither insured nor indigent) must pay professionals directly for health care.

Currently the health insurance is managed by:

- 1 Group health insurance, provide by companies of private insurances,
- 2 National Fund of the Social security Organisms (CNOPS). Beneficiaries are the civil servants; this regime currently covers 85% of the civil servants of the state.
- 3 Mutual Inter professional Moroccan Fund (CMIM): provide their benefits to salaried employees of private enterprises (banks and hydrocarbon enterprises) against the risk illness;
- 4 Internal regimes assured by semi autonomous public establishments (drinking water department, railway department, phosphates department...)

The Social Security National Fund (CNSS) doesn't admit the health insurance in its social insurance services. It only offers an all-inclusive domestic sanitary help to their the private sector employees. These health insurance regimes are under the direct or indirect tutelage of several ministerial departments. However, no ministry has the complete charge of all the institutions that manage these regimes. The market regulation adhered to for the selection of people. The lack of inclusion of the medical expenditure is one of the weak points of the regulation of this system.

Health Systems Profile- Morocco

Other than the CMIM, whose resources per beneficiary were 1,732 DH per year (versus 307 DH for the CNOPS, 1,102 DH for the in-house plans and 670 DH for insurance companies), all the plans are losing money (see Table 11). The CNOPS's financial balance is only artificial. Due to technical problems that arose in determining the CNOPS's actual spending, especially in terms of reimbursements during the year of the study, it was found that reimbursements are based on the collection of income. In reality, the CNOPS has a chronic deficit that prevents it from honoring its commitments in rather short time-frames. The debts to the public sector and private providers are very high, several hundred million DH, and it takes several months and sometimes even more than one year to reimburse members.

Insurance companies have income that amounts to barely 71% of all their expenses. These losses on the "health insurance" product are offset by positive results on the other products, such as labor accidents and occupational illnesses, casualty insurance, etc.; these are part of the package the insurance companies offer their customers. In fact, health insurance has a long way to go as far as health sector is concerned.

# Social insurance programs: trends, eligibility, benefits, and contributions

From a historical point of view (mutual benefit societies first began operating in Morocco in the 1920s) and considering the volume of insured persons (mutual benefit societies insure 72.5% of currently insured people), the mutual benefit system plays a vital role. The CNOPS (National Social Provident Bodies Fund) is the largest system, comprising of nine mutual corporations Royal Armed Forces, Post Office, Education, Public Administration, Local Authorities, Auxiliary Forces, Police, Port Authority and Customs. The global resources available to this system amount to 2.5 billion Dhs, with expenses slightly higher. Nearly all disbursements by current insurers are for medicines and treatment by private care producers; public hospitals receive only 4.4%vi. As a general rule, mutual benefit societies provide very substantial coverage of major medical risks (often 100%) and more moderate coverage of minor risks (70 to 80% on a nominal basis, but most often nearly 50% of the contractual maximum reimbursement)

Financing for coverage comes primarily from contributions: almost 6% for employees (2.5% is paid for by the employees) and 1.7% for retired people. The CMIM mainly covers the employees of the 256 firms in the banking and hydrocarbons sectors. Contributions are shared evenly by employers and employees. Coverage of insured services is high—the highest at the national level.

# Private insurance programs: trends, eligibility, benefits, and contributions

Insurance companies do exactly the inverse of CNOPS, reimbursing 70 to 80% of minor risks on the basis of the stated charge and providing little or no coverage for major risks under the practice of applying annual ceilings per beneficiary and per disease, and due to risk selection based on age and initial state of health.

Private insurance companies cover the employees of a few private firms, with slightly over 3,000 units. This coverage is in the context of group health insurance contracted by the companies. Premiums vary based on the coverage selected and are determined as a percentage of the salary bill using fixed rates. Generally, the employer's share is similar to the employee's share. Reimbursement rates for insured services fall between those of public and private sector mutuals (CMIM).

In-house mutuals (in-house plans) are health insurance plans offered and run by public Companies and Corporations (OCP, ONCF, CNSS, RAM, Tobacco Authority, Bank Al Maghrib, Banque Populaire, etc.) for their employees. Fees vary from one entity to the next, but in general, the employers contribute more than the employees. Some employees contribute nothing, such as OCP employees. Reimbursement rates vary as well. Generally, coverage is much more generous than that of mutuals in the public sector.

#### 6.4 Out-of-Pocket Payments

Net and direct payments from households (more than 9.8 billion DHvii) are made mainly for the purchase of drugs and other medical products (60%) for self-medication, prices and prescription customs, but are exacerbated by the low health insurance coverage for the population. A considerable share of payments is made to private service providers: 18% to private clinics, 14% to private practices and 2% to traditional medicine workers. Moreover, when care is provided in the public network (mainly the hospitals but including the basic health care network), the households pay both the formal costs (which appear in the accounting books of care establishments) and informal costs that amount to more than 3% of all their net and direct payments.

#### **Cost Sharing**

The process of financing of healthcare in Morocco is characterized by inequity and lack regulation. Currently financing is more in favor of the wealthy segment of the population than those less affluent. An autonomous public establishment called "National agency of the health insurance (ANAM)" has been set up as the first regulation organization with the introduction of the obligatory insurance. Its mission is to supervise the obligatory health insurance system and to manage RAMED resources allocation process.

#### 6.5 External Sources of Finance

#### Levels, forms, channels, use and trends

Several contributor countries and international organizations participate to the financing of the health activities, particularly for health promotion and prevention. The global amount of the financing of health coming from the foreign funds reached 16 millions \$US in 1997/98. This amount represents about 1% of the global expenses of health.

From the resources raised from international cooperation (89.9%), 87% go to the MOH (44% for the RSSB, 21.6% for the hospital network 12.5% for university hospitals and 19.1 for other public hospitals), 19.4% for local and national administration and 2% for the National Institutes and Laboratories). Other than the NGOs, which receive 6% of international resources, the aid provided to the other sectors continues to be marginal: 4.7% for the other ministries, 1% for the local community representing and 1% for the private sector (training for private physicians under the USAID-funded Family Planning Program).

The distribution of financial aid granted by the international cooperation is as follows:

Level	%
Hospital care	25.4
Ambulatory care	34.4
Collective sanitary prevention	10.5
Training-research	9.8
Administration – health system studies	20.0
Total: 154 million DHS (19 million \$us)	100%

#### Table 6.5 International cooperation expenditures in health (1997/98)

#### 6.6 Provider Payment Mechanisms

According to the national health account, the private hospitals benefit from the largest flows (nearly two-thirds). This is particularly true of private clinics, which receive almost 51% of all payments. Despite the minimal participation of CNOPS, the share of private practices is quite high, largely due to radiology practices and laboratory analysis which contract with the different health insurance plans.

Public hospitals receive just 6.2% of all direct payments from organizations that manage the various health insurance plans. Each plan's priorities and their own contracts with the providers determine the share of providers in direct payments under this plan:

- The CNOPS has few contracts with private practices (5.5%). Its payments mainly go to private clinics (54.2%) and, to a lesser extent, to mutual clinics and practices (13.3%) and public hospitals (10.3%); 7.8% goes to CHUs and 2.4% to the MOH's other hospitals (106).
- The other plans place more emphasis on ambulatory care. Most of the private practices range from 28.6% (in-house plans) to 36.6% (CMIM and insurance companies). The public hospital share is minute (the CMIM has no contracts with the public hospitals).

#### Hospital payment: methods, consequences and current key issues

The payment of the hospital cares is submitted to a pricing decided by the competent ministerial authorities. The nature of the payments depends on whether the patient is insured or not and also the type of insurance regime. People covered by a health insurance pay only for the part not assumed by their insurer. People without social security pay directly to hospital. Indigent people are exempt from payment when they present the indigence certificate. In any case the payment is determined by the medical and paramedical act. About a third of the budget of the public hospitals is supported by the direct payment of the users and reimbursements by health insurance organisms (that repay about 55% of the real costs of the medical services only). At public hospitals, all the medical, paramedical staff and the administration are civil servants. Their wages come directly from the payment office (Ministry of finance). This mode of payment is less incentive for health professionals. Some categories of the staff are contractual (security, hygiene or restoration personal).

### **7 HUMAN RESOURCES**

#### 7.1 Human resources availability and creation

Personnel per 100,000 population	1990	1995	2000	2002
Physicians	40 (93)	41.5	45	47
Dentists	-	-	7.6 (97)	9.4
Pharmacists	-	-	13.2 (97)	21
Nurses and midwives	90 (93)	91.7	94.4	95.2

#### Table 7.1 Health care personnel

Source: Health Ministry: Santé en chiffres 2003, Morocco 2004.

The sanitary human resources are distributed between 4 professional bodies: the physicians, the pharmacists, the surgeons dentists and the paramedical, distributed between the public sector and the private one. Currently, there're about 16.000 physicians (1/1850 inhabitants) and nearly 30.000 paramedical (either 1/1000 inhabitants).

In the public sector, the Ministry of Health is the main employer of the two professional bodies. The physicians represent 19% (n=8003) of the total of the staff of the Health Ministry. More than half of the physicians (of both the public and private sectors) are condensed on the Regions of the northwest (Rabat) and of the center (Casablanca). In the public sector, the situation is similar in spite of the efforts of the Health Ministry to orient the recruitment of the new physicians toward the less covered rural zones. The last two recruiting operations (2003 and 2004) had been toward rural districts exclusively. However, MOH has not instituted incentive measures toward physicians (public and private) to push them to exercise in disadvantaged.

General practitioners exercise mainly in basic healthcare establishments. Specialist physicians are generally employed in hospital institutions. Staff of basic healthcare centers receives sessions of refresher in-service training in programs of promotion and prevention of health developed by the Ministry of Health. Several workshops are organized around themes like sanitary planning, sanitary district management, programs of communicable diseases prevention and treatment etc. These sessions aim to enhance technical and managerial know-how. Reflections about restructuring of the medical course are in progress.

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

The physicians - inhabitant ratio in Morocco is about 1: 2123. It varies from 1:4177 to 1: 4319 between public and private sector respectively. Medical density for 100.000 inhabitants increased from 32 to 47 between 1992 and 2002.

The total General practitioners of the two sectors are 6080, distributed as follows:

- Private sector: 3485 practitioners
- Public sector: 2595 practitioners.

General practitioners represent 51% of all physicians (13533 in 2002). Physicians' specialists / general practitioners ratio is of 1.22.

Tupo of institutions	Current			
Type of institutions	Number	Capacity		
Medical Schools	4	ND		
Schools of Dentistry	1	ND		
Schools of Pharmacy	2	ND		
Nursing Schools Midwifery Schools Paramedical Training Institute	10	ND		
Schools of Public Health	1	40		

Information about planned institutions is not available. ND: not done.

#### Accreditation, Registration Mechanisms for HR Institutions

Actually, no institution is responsible for health establishments' accreditation. Currently, Hospitals and ambulatories cares department (MOH) have developed a guideline and reference for public hospital accreditation. This is the starting point to set up national accreditation system. The department organizes a quality competition in order to reward health establishments that achieved successfully quality insurance system implementation.

#### 7.2 Planned reforms

Since the 90's Morocco launched political, administrative, economic and social reforms: decentralization, reforms of the public administration, of the judicial system, of the civil code, of the financial and fiscal policies, and enhancement programs for small and medium enterprises. Moroccan state judged these reforms appropriate in order to face social and economic challenges.

Regionalization of the health system, hospital reform, health insurance reform and institutional reform of the Health Ministry has following targets:

- Enhancing MOH capacity for strategy formulation and development;
- Improving affordability and quality of care;
- Improving health system performance.

# 8. HEALTH SERVICE DELIVERY

#### 8.1 Service Delivery Data for Health services

Indiantor		ç	%	
Indicator	1990	1995	2000	2002
Population with access to health services	62(89)	77		85(01)
Married women (15-49) using contraceptives	42(92)	50	49(97)	58.4
Pregnant women attended by trained personnel	37(91)	45(95)	56(97)	56
Deliveries attended by trained personnel	37	37	46(99)	-
Infants attended by trained personnel	-	62(92)	-	87.1
Infants immunized with BCG	96	93	97	98(03)
Infants immunized with DPT3	81	90	92	95(03)
Infants immunized with Hepatitis B3	-	-	-	92
Infants fully immunized (measles)	79	88	90	90(03)
Population with access to safe drinking water	54(91)	57	57.7(9 7)	89% urban 62% rural
Population with adequate excreta disposal facilities	63(92)	68	72(99)	70%

### Table 8.1 Service Delivery Data and Trends

URBAN (percentages)	1990	1995	2000	2002
Population with access to health services	100	100	100	100
Married women (15-49) using contraceptives	-	-	54(97)	55.8
Pregnant women attended by trained personnel	7(91)	6(97)	88(99)	87.7
Deliveries attended by trained personnel	-	75(97)	75(99)	-
Infants attended by trained personnel	-	-	-	94.4
Infants immunized with BCG	-	94(93)	-	97.9
Infants immunized with DPT3 <sup>a</sup>	-	93(93)	-	96.6
Infants immunized with Hepatitis B3	-	-	-	-
Infants fully immunized (measles) <sup>a</sup>	-	87(93)	-	-

Population with access to safe drinking water	92(91)	97	100(99)	
Population with adequate excreta disposal facilities	96(92)	97	-	-

RURAL (percentages)	1990	1995	2000	2002
Population with access to health services	30(89)	50	-	65(01)
Married women (15-49) using contraceptives	-	-	44(97)	50.7
Pregnant women attended by trained personnel	19(91)	28(97)	40(99)	40.2
Deliveries attended by trained personnel <sup>a</sup>	-	27(97)	27(99)	-
Infants attended by trained personnel	-		-	80.9
Infants immunized with BCG	-	82(93)	-	94.6
Infants immunized with DPT3	-	73(93)	-	90.6
Infants immunized with Hepatitis B3	-	-	-	-
Infants fully immunized (measles)	-	77(93)	-	88.5
Population with access to safe drinking water	14(91)	20	46(99)	30
Population with adequate excreta disposal facilities	32(92)	39	-	-

Sources: USAID Population Assistance in Morocco

WHO/ UNICEF database

Eastern Mediterranean Regional Office Data base: reports from member countries Office National de l'Eau Potable, 2

Ministère de la Santé : santé en chiffres 2003.

#### Access and coverage:

#### Access to primary health care:

The lack of access to health care for people in rural areas continues to be a major deficiency in the system. The data on coverage by the Basic Health Care Institutions in rural areas, evaluated by radius in kilometers, show that distances between the people and health centers are considerable. In 1996, nearly 31% of these people were located more than 10 kilometers from a health institution. Those in remote areas are supposed to be covered by a mobile system that was established to supplement coverage using the non-mobile method. However, mobile performance in terms of coverage and contribution to the supply of health coverage is low, to the point that it can be said that a high percentage of people in rural areas have only very little access to care (DPRF/MOH. 1999. "Stratégie Sectorielle de la Santé." Rabat.)[2].

Health Facilities	Urban	Rural	Both
Local hospital	36	56	92
Urban health center	596	-	
Rural health center with child birth facility	-	302	
Rural health center	-	860	
Rural dispensary	-	644	
Total	632	1862	2458

#### Table 8.2 Basic health facilities

Source: DHSA/Ministry of Health, 2003.

These establishments of the RSSB are supported by support and intervention structures for the family planning (CRPF), specialized Centers for tuberculosis diagnosis (CDST) and for the epidemiology and environment hygiene Laboratories (LEHM).

#### Access to secondary care:

Furthermore, rural populations face even more difficulty accessing hospital care; they consume only one-fourth of nights spent in public hospitals. This situation is partially the result of the small development of General Public Clinic-type intermediary hospitals. The access issue is all the more acute in that the MOH is essentially the only care provider in rural areas. In fact, the gap between numbers of private consultation practices in urban and rural areas (1 practice per 95,418 inhabitants in rural areas versus 1 per 4,354 in urban areas) is the reason for a significant imbalance between the two areas in terms of overall medical services. This is in addition to the problem of access to drugs due to the fact that there are not enough pharmacies or drug depots in rural areas (1 depot per 46,000 habitants).

#### 8.2 Package of Services for Health Care

Package of minimum care exists and is well-defined for the primary level of healthcare: vaccinations of the child and the mother, treatment of diarrheal diseases and respiratory infections of the adult and the child, follow up of pregnancy and postpartum, prevention and treatment of the sexually communicable diseases, tuberculosis program etc. All these programs of primary health care are free of charge and is universally available in the urban and rural areas. The private sector participates in some of these health activities, but follow different protocols.

#### 8.3 Primary Health Care

# Infrastructure for Primary Health Care: Settings and models of provision

Basic health care establishments' network is the operational base for all the sanitary action. It constitutes the first frontline between the population and the health system. Through this network MOH has developed strategies for improving population coverage. We have 2458 basic establishments organized according to a model of recourse, which

are getting from the rural clinic to the local hospital. These establishments provide ambulatory care to urban and rural zones.

#### The basic healthcare network

- Healthcare centers provide basic care to mothers and children including birth assistance. Some centers, located in urban areas are also able to provide dental care.
- Welfare centers and clinics essentially serve rural areas and are attached to a healthcare center managed by state registered nurses. Patients are referred for medical examination if required.
- Local hospitals have a very small bed capacity which cannot be added to the national total due to the rudimentary nature of the healthcare provided. There are 56 local hospitals in Morocco, all located in rural districts.
- Ambulatory units are still very insufficient and the number of district nurses is falling. There are three modes of coverage: fixed (42% de la population), itinerancy (21%), and mobile (34%)

#### Human resources and their production

Their distribution is as follows:

- Physicians: 3259 either a national ratio: 1 physician for 6577 inhabitants (2000 10.738) that produce 13.646.874 medical consultations annually (of which 595.534 specialized)
- Paramedical: 9682 that produce 25.122.388 paramedical visits annually.

#### Production/productivity

In 2003, the basic health structures dispensed:

- Medical consultations 13,646,874; (0.47 consultations/inhabitant/ year)
- Paramedical consultations 25,122,388; (0.87 consultations/inhabitant/year)
- Childbirths 346,295 ; (50% of all child births)

#### Primary care delivery settings and principal providers of services;

Healthcare provision is widespread on the national territory since Alma - Ata declaration in 1978 and part of all development plans since 1981. Infrastructures extension toward rural zones, covering 67% of their population, while the rest live more than 10 Km from the nearest clinic or health center. The private sector is implemented exclusively in urban districts.

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

Private sector developed extensively during the 80's to 90's, consequent to the decline in the public investment during the same period, particularly in the big cities and especially toward ambulatory cares and high technology. There are medical offices of general medicine or specialty providing ambulatory care and private clinics providing general or specialized hospital care (cardiology, nephrology and haemodialysis, obstetrics)

Regions	General practitioners	Specialist practitioners	Total
Oued Eddahab	2	0	2
Laayoune Boujdour Sakia Lhamra	14	15	29
Guelmim Smara	19	0	19
Souss Massa Draa	207	182	389
Gharb Chrarda Bni Hssen	174	145	319
Chaouia Ourdigha	178	68	246
Marrakech Tensift El Haouz	208	178	386
Oriental	236	172	408
Grand Casablanca	1145	1283	2428
Rabat Salé Zemmour Zaeîr	398	552	950
Doukkala Abda	162	103	265
Tadla Azilal	115	52	167
Méknès Tafilalet	150	144	294
Fès Boulemane	157	209	366
Taza Alhouceima Taounat	82	29	111
Tanger Tétouan	238	244	482
Total national	3485	3376	6861

#### Table 8.3: Private practitioners

Source: MOH- Santé en chiffres 2003

#### **Referral systems and its performance**

Referral system is not properly coded. A patient referred to an urban or rural health center can be examined and receive treatment there. When his health status requires specialized exams or care in hospital, he will be referred in the center of specialized diagnosis or to the local or provincial hospital near his place of residence. An information card is given upon referral. The patient is referred toward a regional or academic hospital structure if it is justified. The feedback on referral is given for follow-up. However, this referral chain with no coordination and the cards of link are neither consigned nor computerized. The patient can be missed while passing through the different levels, thus compromising care continuity.

#### Utilization: patterns and trends

In 2002, public health centers achieved 0.5 consultations per capita and per year. A big difference exists between the urban environment with 0.6 C/H/A and the rural one with 0.3 C/H/A. This disparity is in major part due to the problems of physical accessibility of the rural sanitary structures (more than 30% of the inhabitants of the farming zones live more than 10 Km of the nearest center of health) and to the inequality of physicians distribution between the urban (1 physicians for 8735 inhabitants) and the farming (1 physician for 10506 inhabitants).

The volume of the medical benefits achieved on the private sector is not documented. However, this sector that accounts for 50.7% (2002) of the physicians in Morocco, essentially providing curative care. There is 1 medical office for 67.921 inhabitants in rural versus 1 for 3.412 in urban).

#### 8.4 Non personal services: Preventive/Promotive Care

There is an important expansion of basic infrastructure during the last two decades. The rate of electrification in rural zone surpassed 55 percent in 2002 (17 percent in 1996), access to drinking water in rural environment increased to 50 percent (14 percent in 1994) and 7, 719 kilometers of rural roads have been achieved. According to the Direction of the Studies and the Financial Forecasting of the Ministry of Finance and Privatization, provision of drinking water in urban environment, reached a branching rate of 89% in 2003, covering 5.2 million inhabitants, while access to the drinking water in rural areas reached 54% by the end of 2003.

#### Organization of preventive care services for individuals

At the present time, no individual program exists. No sanitary programs target the elderly people specifically.

#### Environmental health

The sanitary control of food commodities is under the responsibility of two departments: the Ministry of Health and the Ministry of Agriculture. Sanitary controls are performed at restaurant, places of sale of food products and slaughtering of livestock, as well as units of production.

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

Health education is one of most important promotional and preventive actions of the Health Ministry. Several programs of health education have been developed. Most of them concern the maternal and child health, contraception program and reproductive health, IST-AIDS prevention. Other programs are developed by other departments: it is about the road security campaign, food and environmental hygiene (domestic garbage).

#### Current key issues and concerns

For the past twenty years, MOH has focused on public health problems, common to the emergent countries of the Mediterranean area. Some programs are developed and applied in all basic health structures.

Public health policies lean on thirteen vertical programs. Some of them are listed below:

- The follow up pregnancy program which aims to decrease the maternal and infant mortality
- The family planning program promoting contraceptive use
- The tuberculosis program: diagnosis and treatment (particularly lung tuberculosis)
- The immunization program which aims to maximize the vaccination coverage,
- The Sexually Transmitted Infections prevention and treatment program
- The micronutrients deficiencies program,
- The malaria program with supervision of anopheles breeding places.

#### **Planned changes**

Currently, no measure is in progress.

#### 8.5 Secondary/Tertiary Care

#### Table 8.4 Inpatient use and performance

	1996	2000	2003
Hospital Beds/1,000	0.95	0.89	0.83
Admissions/100	2.66	2.88	2.91
Average LOS (days)	7.0	5.7	5.0
Occupancy Rate (%)	59.1	54.0	56.9

Source: MOH, Santé en Chiffres 1997, 2000 & 2003

#### The hospital network

Third of the public hospitals (42), currently in service, was functional before the independence. Between 1912 and 1956, 117 hospitals were constructed with a capacity of 17.819 beds. It provides essentially phtisiologique (sanatoriums) and psychiatric cares. This evolution was maintained until 80'. During the period 1981 - 1995, that come after the subscription of Morocco to the strategy of the World organization of Health for the primary healthcares, stated in Ata Alma declaration in 1978, Morocco has developed strategies in favor of primary cares. During this period basic health structures and sanitary programs were launched. At the same time investments in the hospital network reduced distinctly.

Currently, Morocco has 124 public hospital establishments with a total capacity of 25000 beds and 269 private clinics (with 5000 to 6000 beds). The national bed capacity is estimated to be around 30.000 beds (1 bed for 1000 inhabitant).

Four levels of hospitals exist:

- 1 The "polycliniques de santé publique" (PSP) offer general medical and surgical care, and pediatric and obstetric care. There are currently 34 such hospitals with a total capacity of about 2,816 bedsviii.
- 2 Provincial hospitals (HGP & HSP) provide general and specialized care. There are 56 of them distributed in 56 different provinces and their total capacity is about 10,000 beds. An additional 14 specialized hospitals (psychiatric hospitals, leprosarium...).
- 3 Regional hospitals (16) (HGR & HSR) are concentrated in the main cities of Agadir, Marrakech, Méknès and Fez, Bénimellal and Oujda (6 regional hospitals with a capacity of 3,700 beds), and offer both basic care and specialized care (cardiology, third-degree burns). There are another 10 specialized regional hospitals with a capacity of 2,400 beds.
- 4 National hospitals (18) (HGN & HSN) are attached to the Centers Hospitaliers Universitaires (CHU – University Hospital Centers) in Rabat (9 hospitals) and Casablanca (3 hospitals). Two new CHU were established in Fès (3 hospitals) and Marrakech (3 hospitals).

These hospitals come under one of the following status:

- Autonomous establishments which have a full administrative and financial autonomy. They are administered by an administrative committee and a management committee.
- Their income comes from patients themselves or from state run medical insurance. CHUs come under this status.
- Establishments with SEGMAix status (state run but with autonomous management) have total autonomy on operational spending level but need to submit a provisional budget to the Ministry of Public Health every year at investment spending level.
- State- run establishments, which possess absolutely no autonomy.

Regional distribution of public hospitals beds shows a strong disparity between regions. Bed density varies from 4.13 beds for 10.000 inhabitants in the region of Taza-Alhoceima-Taounate to 18 beds for 10.000 inhabitants to the region of Laayouneboujdour-Sakia Alhamra. Only 4 Regions (out of 16) have a density of over 9 beds for 10.000 inhabitants.

#### Ambulatory activities

Emergencies

In 60% of the cases, the reason of consultation is not an emergency. In 2003, emergencies units received 3.162.929 patients (105 passages to the emergencies for 1000 inhabitants). According to the same source, half of the public hospitals receive more than 71 visits to the emergencies for 1000 inhabitants. About 80% of these visits are notified by SEGMA hospitals, 16% by university hospitals and 4% by the rest of public. In 2003, the number of the visits to the emergencies that required a hospitalization is estimated to be 195.165 (22.5%). The main reasons for visiting an emergency are the traumatic injuries, the respiratory difficulties and digestive problems.

• External specialized consultations

The support that hospitals provide to the basic health centers is in the form of specialized consultations in favor of the external patients, referred by this primary level. These consultations are performed within or outside hospital structures, which are under administrative and financial hospital tutelage, called poly-diagnoses centers (CDP). In 2003, CDP achieved 2.084.309 specialized consultations, against 1.921.722 in 2002, (69.5 consultation per 1000 inhabitant in 2003). 50% of the hospitals performed less than 23 external specialized consultations per 1000 inhabitants.

#### Hospitalizations

In 2003, the number of the admissions in the public hospitals reached 864.877 for 4.629.905 days of hospitalization. According to the epidemiological survey, public hospitals are less attractive, since between 40 and 60% users come from the 3 adjacent communities. In 2003, the intervening journey duration (DMS) was of 5.3 days. This DMS varies appreciably between the different categories of hospitals.

#### Specific activities

• Major surgical operations: 234.662 acts of major surgery have been achieved in 2003 in the 409 operation wings in the 90 public hospitals that practice the surgery. A ratio of 573 major interventions by operative room and per year. According to the epidemiological survey, half of the surgical interventions relate to the Caesareans, cholecystectomia, cures of hernias, cures of cataracts and appendectomies.

• The childbirths constitute 29% of hospital admissions. There are 86 maternity hospital units. In 2003, 252.471 childbirths have been conducted (39.45% of the expected births, valued to 640.000 in 2003).

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

Demographic and epidemiological transitions are the major reason of an increased requirement for secondary and tertiary cares. The emergence of chronic diseases requiring expensive treatment put a burden on the public hospital network causing financial insufficiency. In fact, only 16.4% of the Moroccan population has a health insurance. No strategy of hospital care has been developed to reduce the costs of the care to an affordable level.

Health cares cost surveys in public hospitals revealed that the public financing assumes the most important part of the costs with 64% for the Ministry of health (wages and subsidies centralized) more 10% for the hospital (SEGMA budget excluding patients direct payment). The patients bear 20% of the costs of which 5% correspond to the direct payments to hospital and 15% supplementary charges correspond to medicines expenses. Finally, NGO' and cooperation contribute the remaining 6%. This survey shows on one hand an important degree of financial resources centralization and on the other hand, the important economic charge assumed by the patients.

Another key issue is autonomy of the public hospitals. The hospital reform launched since 2001, aims the preparation of the public hospitals in order to make them autonomous.

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

The hospital reform constitutes the main component of the health sector reform in Morocco. Initiated since January 2001, its general objective is to improve hospital healthcare quality through the modernization of the infrastructures and strengthening of management.

Hospital reform is launched in 14 public hospital centers. It aims to:

- Increase hospitals efficiency: this objective will be reached by strengthening their strategic planning capacities and introducing new instruments and procedures of management and organization: human resources management, information management, costs control etc.
- Improve cares quality (in 5 pilot hospitals) applying a normative setting for the modernization buildings and facilities modernizations and while instituting some mechanisms of to the internal and external quality assessment.

#### 8.6 Long-Term Care

Currently, long-term care is not considered yet as strategy issue. Hospital and ambulatory cares especially dedicated to this type of cares do not exist. Studies achieved on health insurance reform has drawn up lists of long duration diseases (ALD) and of costly care diseases (ALC), that will be taken in charge by the regimes of the obligatory health insurance (AMO) and of the medical aid.

#### 8.7 Pharmaceuticals

The private pharmaceutical sector dominates medicine production, import distribution process.

#### Medicine consumption:

Users directly pay major cost of medicine consumption. Some medicines are handed out for free in public health centers and dispensaries (tuberculosis program, malaria program, contraception program etc...) but represent less than 4% of the global consumption. Consumption levels per capita are meager in comparison with Algeria and Tunisia. The national health accounts 1997/98 shows that average cost of a prescription is 146.25 DH (160 DH for the private sector) ranging from 40 to 1200 DH. This financial burden seems to be unreachable for low incomes people (estimated to 5 - 11 million inhabitantsx). Between the population of the poorest deciles and the one of the richest deciles, the consumption of medicines varies from 1 to 10.

Inequalities of incomes conjugated with disparities in the geographical access to the care establishments of cares and pharmacies (25 000 inhabitants by pharmacy in rural zones) culminate into important regional and social disparities. Distribution, although in expansion, is concentrated very strongly in the urbanized zones, where the medicine demand is the most important. About 82 dirham (DH) in rural zones, the medicines consumption surpasses 216 DH in urban environment.

#### Medicine production:

Local pharmaceutical production caters for 80% of solvent demand. Regrouping 26 enterprises, the pharmaceutical industry is controlled by ten laboratories, some to foreign funds, which achieve close to 80% of the production. The Moroccan industry of medicine is especially an industry of formulation and conditioning. The activity of the enterprises depends on the import of active materials (close to 100%), and of conditioning articles (close to 50%). Its production specially constitutes of original specialties, the generic occupying 20% of medicines sales. It is necessary to underline that in mid 80's this industry began export to some European, Arabian and African countries. However these exports remain at modest level.

#### Organizational and authorized plan

A Pharmacists Order organizes the conduct of the profession and associates the professionals to the development and to the implementation of the pharmaceutical policies. Only graduate pharmacists can exercise pharmaceutical activities. Half of the capital (51%) of the pharmaceutical societies must be held by one or several pharmacists.

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

(See annex)

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

The state-controlled authority is shared between the Government's General Secretary (pharmaceutical establishment authorization), the Direction of the Medicine and the Pharmacy of the Health Ministry (pharmaceutical sales authorizations and price fixation), and the national laboratory for medicines quality control.

Pharmaceutical regulation is adequately applied: there is no clandestine trade of medicines, nor merchandising of non authorized medicines; and the regulation of the prices is respected: the prices are the same in the whole kingdom. Supervision is done by professionals (order, union of the pharmacists, industrial association) and by medicine department of the Ministry of Health.

#### 8.8 Technology

Health care technology in Moroccan public hospitals is characterized by relatively old equipments.

In 2003, technology equipment in public hospitals was as follows:

- 598 imagery devices, from the simplest (standard radio) to the most sophisticated as the scanner and the IRM. 72% of these devices are in use in SEGMA hospitals.
- Since 1996 and until 2003, there was purchase of a 237 automatons of coagulation, of biochemistry, sensors of haematology and spectrophotometers, of which 70% are in use in 58 SEGMA hospitals and 16% in "Régie" hospitals.

# 9. HEALTH SYSTEM REFORMS

During the last two decades, Morocco undertook important reforms relating to vital sectors: economy, finances, education, justice, human rights, etc.. During the same period health system had to face public health challenges in relation with demographic and epidemiological transitions on one hand and healthcare financing insufficiencies and health insurance weaknesses on the other. This obligated MOH to launch a comprehensive sector reform.

The public health sector reform aims to correct sector dysfunctions that reduce the health system effectiveness and efficiency. Main problems are: inequity in access to care; healthcare financing insufficiency; secondary and tertiary cares scarcity and unresponsiveness to emergent morbidity needs, dilapidated public hospital infrastructures and deficiency in MOH stewardship. Investigations about a sector reform have been started early 90's. Since 2001, two sector projects support the health system reform:

- The PAGSS or health sector management support project
- The PFGSS or health sector financing and management support project

# 9.1 Summary of Recent and planned reforms: determinants and objectives

#### PAGSS

PAGSS is a component of European MEDA program. It is integrated with the implementation of regionalization and the sector strategy of the Health Ministry. PAGSS aims to correct regional organization and performance shortage. Project financing rises to 22.6 millions euros, of which 20 million euros are donation from the European Union and 2.6 million euros are the contribution of the Moroccan state.

Project objectives are:

- Support sanitary region implementation, which consists to set a functional organization of the sanitary region.
- Assist defining and implementing regional planning processes, which consists on hospital establishment plan and regional schema of cares supplies.
- Enhance human and financial resources management and the sanitary information system management

The 1st Sanitary Region has been instituted this year (2005) in the Region of the Oriental. A Director and a regional staff are named. The sanitary Region is an intermediate governance level. It will have the responsibility of the planning and the organization of the healthcares offer. The ultimate goal is to delegate to regional level more decisional autonomy.

#### PFGSS

PFGSS is the project that supports the health sector reform in 14 provinces financed to 85% by World Bank credit. Its 3 components are:

**1. Public hospital reform**: Improving public hospitals effectiveness and efficiency while increasing healthcare quality. This will be reached through infrastructures and technology modernization (in five regional hospitals<sup>xi</sup>) while strengthening hospital management in the 5 hospitals + 9 other provincial hospitals<sup>xii</sup>.

Strengthening the hospital management had mobilized a large staff of hospital professionals and an international technical assistance. Its major achievement is:

- Develop and make use of hospital establishment project (business plan for hospitals).
- Develop or improve the hospital management system: 6 areas have been identified
  - Human resources,
  - Financial and accounts,
  - Information system for hospital management,
  - Quality management,
  - Administrative reorganization and internal rule,
  - Cost assessment and healthcare acts invoicing.
- 2. Health financing reform that aims the setting up of two financing mechanisms:
  - Obligatory health insurance (AMO) that will carry the protected population from 16.4% present to 34%. This regime interests the salaried employees of the public and private sectors. It should start during July 2005.
  - Medical aid regime for less wealthy people: the sanitary and financial authorities estimate that this regime will cover an eligible population of 5 to 11 million people. Fixing eligibility criteria, financial mechanisms and healthcare packaging are under examination. The regime would be launch by 2006.
- **3. Institutional reform** that aims at reinforcing the stewardship capacities of the MOH (public health policies and strategies formulation). This component proposed MOH reorganization models (central and decentralized administration).

# 9.2 Process of implementation, monitoring and evaluation of reforms

These reforms are in progress. The most advanced component is hospital reform. It has commenced and its implementation process has an international technical assistance. Actually, local managerial teams pilot implementation works. Follow-up is performed regularly.

### **10.** References

- 1. Belghiti Alaoui A., Réforme de santé au Maroc. Atelier sur les réformes de santé, Hammamet, Tunisie, Mars 2005.
- 2. Bennani A.: La Réforme Budgétaire: Vers le renforcement de la performance de la dépense publique. Intervention aux Journées portes ouvertes de la réforme hospitalière. Casablanca, 25 juin 2005. Ministry of Finances/Budget department
- 3. Bouhafa M.; Waters H. : Appréciation du secteur privé médical au Maroc, Résumé exécutif. Rapport POPTECH N° 98-147-74, septembre 1998. USAID.
- 4. MOH: Santé en chiffres 2003
- 5. MOH: appréciation de l'état de santé et de ses tendances. Dossier thématique n°2, version 08/2005
- 6. MOH, Politique de santé: acquis, défis et objectifs, Plan d'action 2005 2007
- 7. MOH/DPRF: Note relative à la mise en place du budget du Ministère de la Santé au titre de l'exercice 2005.
- 8. MOH/DHSA/DH: Les hôpitaux publics au Maroc, niveaux de l'offre et bilan d'activité 2003
- 9. MOH, National Health Accounts Study Morocco 2001
- 10. MOH, National Health Accounts Study Morocco 2004 (not published)
- 11. Office National de l'Eau Potable, 2004
- 12. Haut commissariat au plan 2005.
- 13. Résultats préliminaires d'une enquête au Maroc, 12-15 Avril, 2004. Medicine prices
- 14. USAID Population Assistance in Morocco <u>http://rabat.usembassy.gov/Services</u>
- 15. Van de Wall D.: Do basic services and poverty programs reach Morocco's poor, evidence from poverty and spending maps. Novembre 2004. WB discussion paper.
- 16. WHO, Eastern Mediterranean Regional Office Data base: reports from member countries
- 17. World Bank, WDI 2002
- 18. WHO Country profile: <u>http://www3.who.int/whosis/country/indicators.cfm?country=mar&language=en</u> <u>#economic</u>
- 19. WDI, 1999
- 20. WHO/ UNICEF database <u>http://www.who.int/vaccines/globalsummary/immunization/countryprofileresult.cf</u> <u>m?C='mar</u>'
- 21. WHO/Eastern Mediterranean Regional Office Data base: reports from member countries

- 22. WHO: Le secteur pharmaceutique privé commercial au Maroc. Dynamique de développement et effets sur l'accessibilité des médicaments. WHO/DAP/97.1
- 23. World Bank: Rapport sur l'extension de la couverture maladie au maroc. Juillet 2005. Work paper.
- 24. Zine Eddine El Idrissi M.D: les comptes nationaux de la santé au Maroc (1997/98). Health economy department/DPRF/MOH
- 25. Zine Eddine El Idrissi M.D: La régulation des dépenses de soins dans le cadre de l'AMO. Intervention aux Journées portes ouvertes de la réforme hospitalière. Casablanca, 25 juin 2005
- <sup>i</sup> SROS : schéma régional de l'offre de soins
- " called : Direction Régionale de la Santé
- <sup>III</sup> SROS : schéma régional de l'offre de soins
- <sup>iv</sup> called : Direction Régionale de la Santé
- <sup>v</sup> PSP : polyclinique de santé publique
- vi Ministry of health, National Health Account 2004.
- <sup>vii</sup> Ministry of health, National Health Account 2004.

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- viii MOH, Santé en Chiffres 2003.
- <sup>ix</sup> SEGMA : service de l'Etat géré de manière autonome
- <sup>x</sup> Haut commissariat au plan 2005.
- <sup>xi</sup> Regional hospital centres of Meknes, Agadir, Benimellal, Safi and Settat
- <sup>xii</sup> Provincial hospital centres of Elhoceima, Tangier, Khemisset, Laayun, Sefrou, Tantan,, Essaouira, Casa Moulay rachid, Kenitra.

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.



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