EMRO

HEALTH SYSTEM PROFILE

TUNISIA

Regional Office for the Eastern Mediterranean

Regional Health Systems Observatory

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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

Socio Economic Geopolitical Mapping

The Republic of Tunisia has been engaged in economic and sector reform over the past two decades. On the economic level, the country went through the most prospect growth in its history in the late 1990s and early 2000, followed by the application of very comprehensive structural reforms in the last 15 years. Although the five years plan of development has been largely successful from a macro-economic point of view, GDP is still growing at annual rate of 5%, so some impressive growth and poverty reducing is somewhat observed[1].

Tunisia has pursued an ambitious reform program with the collaboration of international agencies to restore macro-economic stability, reduce debt burden, and boost growth. The reform has achieved external and internal balances in an environment of price stability and contributed to economic recovery after a financial crisis and a "stagflation" phase in late 1980s. Furthermore, the reform has resulted in the buildup of foreign exchange reserves and alleviating the debt problem. This broadly positive reform outcome, however, hides wide variations in performance and outcome sustainability. One of the noticeable and most resilient accomplishments of Tunisia's stabilization program is unemployment stability. Also, growth performance and hence poverty profiles, fell below expectations.

In 2000 Tunisia signed the GATTs agreements and made a large number of commitments related to dismantling the limitations on market access to its network industries, which joins the others agreement like GATT, European Union and Maghreb Union. Otherwise, Basic Socials services are usually defined as priority axes of the development policy (human resources development: ensuring the essential food consumption, education, health, social security, poverty reduction, employment…). Public expenditures on social services are evaluated at around 20 % of GDP, where health receives 2.73% from state budget. For the last three years (2002-2004), the percentage increase of health expenditures is evaluated to 5.4% annually.

Health status and demographics

Tunisian's population has increased tenfold since 1956, from slightly over three (3) million to more than ten (10) million today. This increase is accounted for by the high natural population growth rates with high fertility and low mortality rates in the three decades after independency. However, these fertility rates began to decline in the 1990s (2.5). Crude birth rates declined from 50 per 1000 in the 1956s to 25.2 per 1000 in the 1990s to 16.8 per 1000 in 2004. Similar trends are also observed for death rates. These trends have contributed to significant decline in population growth rates from 3.5% in 1956 to 2.4% in 1994 and to 1.08% in 2004. This rate will be, according to United Nations division of population (2004), 0.87 % for the coming period 2020-2025.

The population structure of ages has deeply modified over the last years: Tunisia is going probably to rapidly aging. At the horizon of 2020, given the United Nation division of population estimation (2004), the number of the persons older than 60 years will increase to 12.5% while it was 9.5 % on 2004 and 6.7 % on 1984. Rapid growth made possible a remarkable improvement in social and health indicators and a decline in the poverty rate from 40 percent in 1970 to 3.9 percent in 2004.

Health indicators registered substantial progress to achieve the health and nutrition-related Millennium Development Goals. Life expectancy at birth has reached 73.1 years,

reflecting the epidemiological transition during the past decades. The decline of the infant mortality rate is the most important progress accomplished, decreasing from 41 (1990) to 21 (2002). During the last 44 years, Tunisia has the highest life expectancy at birth when compared to MENA region countries and the gap continues to increase, approaching OECD countries.

The epidemiological profile of Tunisia is not the same, as observed at the end of 1980 decade. We currently observe a net recession of communicable diseases and the eradication, a dominance of non communicable diseases and recrudescence of injuries and accidents. In 2002, non communicable diseases represent 79.7% of deaths and 70.8% of the burden of morbidity. The emergence of chronic diseases is related to social transformations, changes in lifestyle and in socio-economic conditions.

Health System Organization

The Tunisian health system, mainly governed by the MoPH and its regional directorates is dominated by a strong public sector. However, since the end of 1980s, a rapid growth of the modern for profit private sector is registered, especially in the inpatient care.

Tunisian's population of 9.910 million (2004) is served by public health facilities, according to pyramidal scheme: 2068 PHC centers, 118 district hospitals, 32 regional hospitals and 22 teaching hospitals. These facilities are state owned and employ health professionals as civil servants. Private sector is dominated by for single practises physicians and provides ambulatory care. The private facilities have followed credit-worthy demand and have set up in Greater Tunis, central-eastern areas and the coastal regions.

Evolution of public infrastructure is strongly regulated by the five-year plans of economic and social development which define health public sector investments and by the annually investment and operational budgets. In the private sector, few facilities are submitted to certification of needs such as heavy equipments, haemodialysis centres or retail pharmacies. Health sector financing is carried by three stakeholders: the state budget, the social security funds and the households. The budget subsidies cover the public facilities' needs while the private sector is mainly financed by the households increasingly requested to direct finance their own expenditures. The social security contribution is essentially oriented to the public sector although an increasing contribution in the private sector.

Over the last years, public sector sets up many organisational measures, where the MoPH tried to develop and enhance higher levels of management autonomy, especially in the teaching hospital's, targeting more flexibility in day-to-day operation and strategic planning, associating closely the health professionals. Later, MoPH implemented accompaniment measures focusing on emergencies' management, quality assurance, information system, payment mechanisms with social security funds and incentives to specialist physicians to exert in prior regions.

Governance/Oversight

For the private sector, there are a many legal rules which set standards and norms for equipment, buildings and staff, as well as norms of facilities functioning. The control and respect of norms is ensured by MoPH inspection departments. Cabinets for health professionals' practice, including laboratories and medical imaging, as well as inpatient care facilities aren't submitted to certification of needs.

MoPH supervise the health sector, through its departments of planning, of legal and juridical procedures and inspection. However, professional orders of medical doctors, dentists and pharmacists are also allowed to supervise in some defined activities. The National Health Insurance Fund will have competences of monitoring of health care

services provided to social insured patients and it will introduce new contractual rules with health providers, worked out and implemented with MoPH collaboration.

In Tunisia, until now there are no accreditation mechanisms for both public and private sector. However, various factors and reasons (mercantile) have motivated same private facilities to get "certifications" from foreign organizations. Generally, the management of health sector is centralized, even with the multiple attempts to decentralization at regional departments of public health or hospital level. It remains delegation of tasks than a real delegation of power. The mechanisms of accountability in the Tunisian health system are relatively weak due to two main reasons: the scarcity of professional's norms of practice and the absence of a dedicated institution for autonomous evaluation, recognized by professionals and authorities.

The current legislation authorizes public health facilities to use private suppliers of services or engineering. These suppliers can be private health professionals, private health facilities or private companies specialized on non technical fields. Outsourcing of non clinical activities: cleaning, housekeeping, meals and others activities is allowed and practised in a large scale.

Health Care Finance and Expenditure

Total health expenditures per capita are evaluated around 150 USD per capita (2004) and around 5.6% of the GDP. The Tunisian health care financing system is a combination of social insurance, general revenue, and out-of-pocket payment. In the 2000s, the household and state share is estimated respectively to 50% and 26% while social security contributes with 24% of total health financing. Private insurance plays only a very limited role.

Until the end of 1980s, the health expenditure was mainly supported by State budget (50%) and incidentally by social security funds (15%). During this period, the expenditure share of public funds is nearly 65%. The financial crisis (second half of 1980s decade) and the socioeconomic programs of structural adjustment plan have reduced the expenditure share of the State, relayed firstly stage by an important increase of household expenditures and secondly by a small increase on social security expenditures. For the period 1995-2004, health expenditure is equally supported by public funds (State and Social security funds) and private funds (out of pocket -direct payment of households- and complementary and private health insurance).

User fees were instituted, in the public sector, since 1983 and constitute ever since a financial resource in the running budget of health facilities. Their amounts were revised with an upward tendency, especially in the 1990s. For the poor population, as identified by social affairs departments, care in public sector facilities is free of charges. Paying these fees, patients have access to medical and nursing care, drugs and other pharmaceuticals, and all complementary examinations such as medical imaging, laboratory tests and so on. Government also provides social assistance and health coverage to protect vulnerable groups of population, not classified as poor and not covered by social security. They benefit of reduced tariffs after justifying low income (in accordance with official minimum salary guaranteed by the law) and investigation by social affairs department.

Private financing of health is increased since the beginning of the last decades and it causes problems of equity and accessibility. Increasing public funds for health is included into the new prospect regime of health insurance. State budget devoted to MoPH will be more used to improve provision and quality of primary health care. Knowing the iniquity generated by this situation, authorities have reformed the health insurance systems to

reduce the health cost supported by households. The reform of social health insurance has been decided and the National Fund of Health Insurance was created on 2004. This reform will be implemented at mid 2007, for meadows 65% or 70% of population.

Human Resources

For 100 000 Tunisian citizens, the health system offer nearly 100 physicians and 300 paramedical staff, including nurses, midwives and other technicians (anesthesia, radiology, laboratory, etc.). This human resources' capital is locally trained in four (4) medical schools, 19 nursing schools and 5 health technicians' schools. Human resource policy is focused on firstly training of general physicians to satisfy the health care needs as regards to basic health and secondly training of specialists. These second stages are often followed by the development of training capacity of university hospitals.

In the public sector, MoPH is the only employers and no recent changes have been made. All health personnel are governed by the national law of civil-servants. Procedures of recruitment and dismissal interfere have a limited role on affecting professionals. However employment is subject to national exam of recruiting general practitioner and specialist physicians, according to previous criteria of needs of region (general physicians) and specialities. Data on health professional unemployment are unreliable. The possibility of working in the private sector is being always opened but undeclared. The real unemployment concerns superior technician's categories (nutrition, physiotherapists) and general physicians and pharmacists (numerus clausus). Generally, it doesn't exist, on national level, official standardized mechanisms to evaluate personnel performances. However, these mechanisms are developed on university hospitals dealing with their mission of training and development of competencies. This evaluation is also made at basic health care level using mechanisms of supervision on local and regional level. In all cases, inspection and disciplinary proceedings are used to reduce aberrant practices; but did they have impact on the performances?

Three reforms, impacting human resources are planned:

- First, the consequences of health insurance reform on human resources: (i) New opportunities of employment in the private sector, (ii) New distribution of health professionals between sectors, and (iii) New role of GP as gatekeeper,
- Reform of Medical Education was introduced in 2005, aiming: (i) Adaptation of programs, curricula and length to specialty, and (ii) Strengthening of GP training especially by introducing the "family practitioner".
- Reform of Nursing Education, introduced in 2006, aiming: (i) Adaptation to international standards aligning Bologna agreement, and (ii) Recruitment of baccalaureate graduates and training at the high education schools.

Health Service Delivery

95% of population have access to health facilities within at least 5 Km distance. In the public sector, the only valid restrictions are related to user fees that citizens must pay to get curative care. All the personal preventive care is freely delivered to all Tunisian citizens. For medical emergencies, patients can reach all public levels of care, without any restriction.

Access to specialists is direct for ambulatory care delivered at primary health care centres, in particular in the urban centres which offer certain categories of specialized ambulatory care. Elsewhere, patients examined at the first line are referred to specialists in hospitals. The access of the citizens to in the private sector is direct. It is subjected to no constraint and the patient has the whole freedom of choice of the doctor. He also chooses the private medical facility if a hospitalization is required. GP gate keeping, non-

existent in the private sector, will be gradually set up within the framework of the health insurance reform, but strongly disapproved by the medical community. Tunisia never explicitly defined package of health services. In public sector, all citizens have access to all categories of care. Nevertheless, the refund regime (complementary insurance) limits the access to only long term diseases and surgical interventions and by ceilings. Private insurance regimes make the same with the restricted refunding.

The hospital sector is essentially public, being a matter for the MoPH (85% of the beds). The non-profit private sector doesn't exist. The majority of public hospital beds is beds in acute hospitals, and doesn't include long term care institutions yet. Inpatient operating indicators indicate a decrease of average length of stay in the teaching hospitals where a high occupancy rate is registered and a low average length of stay and occupancy rate in the regional hospitals. A national regulatory authority of pharmaceuticals is managed by the MoPH, through its drug and pharmacy unit coordinating its activities with the national lab of drug control. Central Pharmacy of Tunisia, public body related to MoPH, is the sole entity allowed to import drugs for the country, dealing with international tenders.

Health System Reforms

After an exhaustive analysis of health sector problems, new strategy has been implemented, encompassing the three following objectives:

- The continuously development of primary health care through a program to consolidate the provision of primary health services.
- The improvement of hospitals' inpatient care by reforming structural and institutional aspects of teaching hospitals.
- The reform of legislation rules related to private providers.

Major reforms in the public sector concerned the management modes of teaching and regional hospitals, associated with several measures devoted to the entire sector and the primary health care level. These reforms are at the same time pursued by a legislative reform encompassing the both private and public sectors.

In matter of insurance, an important reform will be progressively implemented since July 2007 and it is in the last phase of its preparation. It aims to improve health insurance coverage of the population, to increase the efficiency of health services, to reduce wastes of resources and health expenditures and to insure a best social equity. The health insurance reform aims also to prevent transitions' consequences and pursues three major goals:

- Set up and implement a sole mandatory basic regime, to be managed by one health insurance body, the National fund of health insurance.
- Implement optional complementary regimes in order to bear the costs that remain uncovered by the basic regime.
- All health care providers should be involved, whether they are public or private through contracts that include and determine quality standards of care delivery, mechanisms of cost containment, tariffs and provider payment methods.

2 SOCIO ECONOMIC GEOPOLITICAL MAPPING

2.1 Socio-cultural Factors

Table 2-1 Socio-cultural indicators

Indicators	1990	1995	2000	2002	2005
Human Development Index:	0.656	0.700	0.739	0.745	0.753
Literacy Total:	59.11	64.67	71.01	73.17	77.10 (2004)
Female Literacy to total literacy:	46.54	53.29	60.57	63.13	69.00 (2004)
Women % of Workforce	29.1	22.9 (1994)	22.5	23.3	25,0
Primary School enrollment	113.25	204 971	197 115	179 863	159 232 (2004)
% Female Primary school pupils	na	na	na	na	na
Rate of primary education, Female aged 6-12 years	83,6	89.4	92.2	91.6	94.40 (2004)
%Urban Population	57.95	61.34	62.77	63.41	64.90 (2004)

Source: (NIS, 2004)[2], (ATCE 2002) [3] (UNDP 2001)[4]

Tunisia has a land area of 162 155 km2. Its population was 9.9 million in 2004 (census) and estimated to 10.1 million in 2006. It is characterized by an urban population of 65% (2004). The population is largely Arab, and Islam is the dominant religion. Arabic is the official language, although French is widely spoken, because Tunisia has been a France protectorate for the period 1881 to 1956.

Several social policy programs, as summarized below, have been implemented.

- Since 1956, the setting up of personal status code that contains the emancipation of women (prohibition of polygamy and judicial procedures of divorce).
- Implementation and strengthening of the social security system: this system provides coverage to all workers and civil-servants of both private and public sectors. The social coverage includes retirement, health insurance and family allowances.
- Access to education is generalized and it's obligatory. The authorities are determined to increase the population's level of education, both for ethical reasons and to help them gain a more effective place in the national and international job market. There are residual pockets of persistent illiteracy (22.4% in 2002), especially among women (31.2%), and in the western and southern governorates in particular. But the elimination of gender disparities in primary and secondary education and universal access to primary education (Millennium Development Goals 5 and 6) are well on the way to being achieved: school enrolment ratios at age 6 are 100% for both boys and girls and 92.9% for 6–14 years old (in 2002)

- Policy and strategies are devoted to regulate births through planning family and reproductive health programs.
- Economic policy is conceived to serve social objectives through a moderated socialist approach until the end of the year 1960, relayed by a progressive liberalization, which is adapted to international context and it will be full used for the coming years.
- Women's participation in economic life has progressed steadily. The proportion of economically active women rose from 22.9% in 1994 to 23.3% in 2001. It currently stands at 25% and is estimated to 26% for 2006. The women's unemployment rate declined, falling from 17.2% in 1994 to 15.3% in 2001. The economically active female population accounts for 23.6% of persons employed in the agricultural sector, 37.2% in industry and 39.2% in the trade and services sector. A breakdown by occupational status shows that 15.7% of working women are heads of enterprises or self-employed, while 67.5% are wage-earners or apprentices.

2.2 Economy

Table 2-2 Economic Indicators

Indicators	1990	1995	2000	2002	2004	2005
GNI per Capita (Atlas method) current US$	1,430	1,820	2,080	1,990	2,650	2,890
GNI per capita (PPP) Current International	3,560	4,450	5,970	6,440	n.a	7.900
Real GDP per Capita (constant 2000 US$)	1,503	1,655	2,036	2,122	2.336	
GDP annual Growth (%)	7.95	2.30	4.70	1.70	5.80	
Unemployment % (estimates)	15.6	15.8**	15.7	15.3	14.2	
External Debt as % of GDP	76,8	63,0	59,6	67,6	67,8	
Trade deficit* (Million TND):	-1,739	-1,751	-3,733	-3,762	-3,905	-3,494

* Trade Deficit of Commercial Balance (Source: NIS)
** Year 1994
Source : World Bank Indicators (2005) (NIS 2007)

Table 2-3 Major Imports and Exports

Major Exports:	Textiles, clothes and leather, phosphates, chemicals, agricultural products, Energy products, mechanical
Major Imports	Basic farms and food products, Energy products, intermediate goods, equipment and installation, hydrocarbons….

Source : NIS

The higher export rate obtained over the last years is linked to greater volume in sales of mechanical and electrical articles, the second most important export sector after textiles/clothing/leather, footwear, with shares accounting for 20.8% and 47.2% respectively in 2003. Agricultural, fishing and agrofood exports was increased by 7.9, following radically better rainfall after four straight years of drought. This contributed to higher growth in overall exports. Moreover, in light of soaring crude oil prices on the

international market, the share of the energy sector in overall exports rose. These developments were also attributable to a more highly valued euro, in that 80% of Tunisian exports go to the European Union, the first economic partner. This appreciation contributed about 50% to higher sales to the region, up 8.9% over 2002 level.

Key economic trends, policies and reforms

- One of Tunisia's outstanding characteristics is its remarkable economic development, sustained over many decades and currently driven by a process of market liberalization and integration into world markets, particularly the European markets.
- From the independence (1956) until the mid 1980s, the economy was mainly under government control. A structural adjustment plan was implemented in 1986. Tunisia then underwent progressive liberalization and steady integration into the global market (becoming a member of GATT in 1990 and signing the association agreement with the European Union in 1995). The period was marked by a dynamic resurgence in growth, but also the danger that the disappearance of businesses and jobs wasn't compensated for by sufficient growth in direct foreign investment[5].
- Real GDP growth has been increased from an annual rate of 3 % during the period 1985-90 to more than 5 % for 1996-02. Today, with a per capita income of US$2,000, Tunisians enjoy more than two-and-a-half times the real incomes of their parents had thirty years ago. Tunisia has signed an agreement with the European Union, which is related to liberalization of trade for manufacturing by 2008. The European Union (EU) has been Tunisia's dominant trading partner with 67 % of capital flows to Tunisia, and accounts for lion share of Tunisia's tourism, also it's the region that contains the largest community of Tunisian expatriates. So, economic activities are vulnerable to adverse developments in the EU.
- In Tunisia, deficit of balance of payment is observed since 1980s, but it's currently maintained with a solid macroeconomic stability and remarkable socioeconomic progress. The main attributes of Tunisia's success were ownership and broad political consensus and well-developed human resources. Reforms of financial sector were achieved as well as the setting up of investments incentives code (1992) and privatization of public firms. Customs taxes have been progressively reduced allowing an open economy. Exports of manufacture products have a steadily rate of growth and its share represent 80 %.
- To well integrate the new environment (WTO membership Since 1994 and UE partnership), important reforms related to all economic sectors are implemented in order to solidify and diversify the economy, so it should be more competitive and enhancing the international trade. These reforms concerned prices, trade, fiscal system, investment incentive, banking sector, capital market and the restructuring public firms, administrative procedures and commitment to privatization.
- Tunisian economy is significantly developed under a macro-economic stabilization (World Bank, 2000). Positive resultants are obtained :
  - A sustained growth of the GDP with an average rate of 5.8% at constant prices for the period 1997-2001 (Source: National Statistic Institute) for which global productivity of factors has contributed by more than the third, dealing with a special context characterized by stability of inflation, fallen from 2.9% in 2000 to 1.9% for the year 2001.
  - The increase of investment with a systematic annual rate of 13.5% per year which has allowed to carry out a rate of investment equal to 23.2% of the GDP

on 1996 to 26.4% on 2001 and respectively for the same years, the saving rate is 23.7% and 25.5,% (MEDIC, 2002)

- The improvement balance of external financial through reductions of the current deficit rate which attempts 2.9% of the GDP for the year 2000.
- The decreasing rate of debt during the period 1996-2000, going from 50.5% to 48.9% (MEDIC, 2002)
- Balance of internal financial remains limited of budgetary deficit with an average of 3% of the GDP per year, despite the negative impact of dismantling of customs taxes that have produce a minus value of 470 MTND for the year 1999.

- An important decrease in investment was observed (-2.8%), as compared with the five last years. Reduction concerns the following economic branches, in terms of rate of growth: agriculture and fishing, manufacturing, government services.
- Exports manufacturers was considered as the essential branch for the Tunisian economy during the decades 1980 and 1990, but currently their real growth rate decreased, due to recently WTO measures on dismantling the contingents on import for textiles and clothes. Consequently, the increasing world competitiveness reduces the Tunisian manpower on this field, especially into the European Union. Also, given the international trade liberalization, we mention the taxes on imports decreasing. The corresponding rate is estimated to 1.7% in 2002 against 5.4 % in 2000[6].
- Control of population growth has contributed to economic and social development and changed social behaviour. Women are recognized as full-fledged partners in social development, the average age of marriage has risen and the proportion of single adults is increasing. There is an increase in older age groups in the population. However, the population remains young and the proportion of the 15–19 year old age group will only begin to decrease towards 2010. This causes increased pressure on the employment market and there is a high unemployment rate, particularly among young people.

However, development is concentrated in the coastal regions and there are problematic inequalities in the western and southern regions and in the disadvantaged rural and suburban areas.

2.3 Geography and Climate

Tunisia is characterized by diverse relief following regions and an important maritime cover (1 298 kilometers) oriented to East. The main mountain, that crosses the country in the south-west and north-east direction, is the dorsal that constitutes the continuous extremity of the Atlas Mountains. The important one is the Chambi mountain (1 544 meters) with 700 m as average altitude. The Sahara, situated at the south, covers approximately 40 % of the territory.

Medjerda is the only waterway that is cross continuously the country and it throws to the gulf of Tunis. The main natural resources are oil, phosphates, iron, lead, zinc, salt and its arable earth. The climate is influenced by its proximity of the Mediterranean Sea and the Sahara: in fact, it is distributed into 7 bio-climatic zones which are favorable to a great and diversity practice of agricultural. The difference observed between north and the rest of the country is due to the dorsal that provide a separation on Mediterranean climate and the arid Sahara climate.

Annual pluviometry varies according to regions: 1 000 millimeters for the north, 380 millimeters to the centre, and 300 millimeters to the south. The arid summer season

provides heat and dryness. Temperatures vary according to latitude, altitude and proximity to Mediterranean Sea. Average temperatures are 12°C in December and 30°C in July. The country benefits from important rate of sun (exceeding 3000 hours per year). In winter, sometimes we can observe degrees under 0 in mountains, like "Kroumirie", the temperature climbs sometimes, in summer, around 50°C at the shade of desert regions.

Map of Tunisia

2.4 Political/ Administrative Structure

Basic political /administrative structure and any recent reforms

The President is officially elected and serves as the head of executive organ of the Republic. In addition, the executive organ is composed of the prime ministry and council of ministers, all of whom are appointed by the president. Voting rights are extended to all Tunisian nationals of at least 20 years of age. The president of the Republic is elected, by popular vote, each five years with a universal suffrage. He can present to the election, so much time that he wants even when he is less than 75 years old.

The legislative power is bicameral since 2002: The chamber of deputies is composed of 189 deputies among which 37 are from the opposition. Deputies are also elected from a universal suffrage. The Chamber of counselors (that holds its inaugural session on August 16, 2005) is composed of 112 members.

Tunisia is divided of 24 governorates, directed by governors, depositaries of the state authority and appointed by the President of the Republic. Working with governors, the Regional Councils are loaded to examine all questions interesting the governorate and related to economic, social and cultural areas. They give their advice on programs and State projects, give a review of the budget and received taxes on the profit of the public

collectivities, also it establish the cooperation relationships with foreign authorities at regional level (after approval of the minister of the interior and local development).

Key political events/reforms

The current constitution is proclaimed on June 1st, 1959, just three years after the independence. It was two times modified: the first one on July 12, 1988 in order to limit to three times the accepted number of presidential mandates. The second time is on June 1st, 2002 following a national referendum: it allows the suppression of the limited number of presidential mandates, lengthens the age limits to deposit a candidacy to the presidency (75 years), institutes a judicial immunity for the president (during and after the exercise of his functions) and institutes a bicameral parliament.

Constitutional amendments in 2002 established the Chamber of Councilors (Senate - Majlis al-Mustasharin). This new organ is composed from three groups: the first group includes one or two representatives for each governorate, elected by an electoral college composed of electors from each municipal council on the governorate. The second group is elected by trade unions and professional associations on a national level. The third group is appointed by the President from among nationally known personalities. Each representative will serve a six year term, but half of the members have to be renewed each three years.

3 HEALTH STATUS AND DEMOGRAPHICS

3.1 Health Status Indicators

Rapid growth made possible a remarkable improvement in social and health indicators and a decline in the poverty rate from 40 percent in 1970 to 3.9 percent in 2004[7].

- Health indicators registered substantial progress to achieve the health and nutrition-related Millennium Development Goals. Life expectancy at birth has reached 73.1 years, reflecting the epidemiological transition during the past decades (Table 3.3). It is also noteworthy that Tunisia has succeeded in controlling its rate of population growth more effectively than the other countries EMR_WHO region in general, as evidenced by both the lower total fertility rate (2.1) and a lower population growth rate (1.1) from 2000-2005.
- Tunisia is a middle income country with an average level of development. The level of health expenditures (5.6% of the GDP) is moderated. With less than150 US$ of health expenditure per capita; in terms of, Tunisia produces a better a better level of health indicators if compared to MENA region countries:
  - The decline of the infant mortality rate is the most important progress accomplished.
  - Life expectancy at birth has increased by 21.8 years, since the end of the decade 1960[8]. It goes from 51.5 on 1966 to 73.1 for the years 2004. During this period, the gain obtained for the life expectancy at birth of women is 23.7 years while for men is 20.8 years. During the last 44 years, Tunisia has the highest life expectancy at birth when compared to MENA region countries (WBI, 2006) and the gap continues to increase, approaching OECD countries.
- Demographic transition has been followed by an epidemiological transition, feebly documented given the lack of a reliable information system
- The epidemiological profile of Tunisia is not the same, as observed at the end of 1980 decade. We currently observe [9:]
  - A net recession of communicable and traditional infectious diseases and the eradication of some diseases (malaria, bilharzias, trachoma) and those for childhood (poliomyelitis, tetanus, neonatal, diphtheria...)[10].
  - Dominance of non communicable diseases, which have chronic and degenerative character, multi-factorial etiological and a high treatment cost. In 2002, non communicable diseases represent 79.7% of deaths and 70.8% of the burden of morbidity. The emergence of chronic diseases is related to social transformations, changes in lifestyle and in socio-economic conditions[11].
  - A recrudescence of injuries and accidents and their consequences.

Table 3-1 Indicators of Health status

Indicators	1990	1995	2000	2002
Life Expectancy at Birth:	70.31	71.35	72.10	72.65
HALE:	68.6	69.5	70.6	71.0
Infant Mortality Rate:	41.00	29.00	22.00	21.00
Probability of dying before 5th birthday/1000:	52.00	37.00	28.00	26.00
Maternal Mortality Ratio:	70	-	69	-
Percent Normal birth weight babies:	93	95	95	-
Prevalence of stunting/wasting:	-	-	-	-

Source: NIS (2004)

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

Indicators	Urban	Rural	Male	Female
Life Expectancy at Birth:	-	-	70.8(02)	74.6(02)
HALE:	-	-	61.7(01)	63.1(01)
Infant Mortality Rate:	22(99)	50(99)	21.2(99)	18.4(99)
Probability of dying before 5th birthday/1000:	-	-	-	-
Maternal Mortality Ratio:	-	-	-	-
Percent Normal birth weight babies:	-	-	-	-
Prevalence of stunting/wasting:	-	-	-	-

Source: NIS (2004)

Table 3-3 Top 10 causes of Mortality/Morbidity

Rank	Mortality (2003)		Morbidity/Disability
1.	Cardiovascular diseases	28.2%	
2.	Malignant neoplasms	15.1%	
3.	Respiratory diseases	11.4%	
4.	Metabolic Diseases	9.7%	
5.	Perinatal	8.0%	
6.	External causes of Mortalities	3.8%	
7.	Digestive diseases	3.3%	
8.	Urogenital Diseases	3.1%	
9.	Traumatic lesions and poisonings	3.1%	
10.	Infectious and parasitic diseases	2.9%	

Source: NIPH (2006)

3.2 Demography

Demographic patterns and trends

- Tunisia has a population of over nearly 10 million people, yielding an average population density of 57 people per square kilometer (148 per square mile). About three-quarters of the population live in the mild, mountainous north and in the coastal regions. The remainder of the population lives in the arid central plain and southern regions, which merge into the Sahara Desert (approximately 70 percent of the land area). The Tunisian population is young: 34.8% being under 15 (1994) 26.7% being under 15 (2004) while those more than 60 years of age represent only 8.3% of the population (1994) and 9.3% (2004). [Source: NIS – 2004].
- Tunisia has an original course in its demographic changes, distinctive from Arab and African countries. The demographic model is influenced by the polygamy abolition (1956) associated with a family planning policy and the health system progress.
- The total population has been multiplied by 2.6 since independence, growing from 3.780 in 1956 to 9.910 millions in 2004; it will be 12.028 million at the year 2020. The rate of demographic growth has clearly reduced from 3.2% for the year 1966 to 2.35 % during the period 1984-1994 and to 1.21% for the period 1994-2004. This rate will be, according to United Nations division of population (2004), 0.87 % for the coming period 2020-2025.
- The population structure of ages has deeply modified over the last years: Tunisia is going probably to rapidly aging. At the horizon of 2020, given the United Nation division of population estimation (2004), the number of the persons older than 60 years will be closely to near those less than 9 years and it will increase to 12.5% while it was 9.5 % on 2004 and 6.7 % on 1984.

Furthermore, we note that this change from situation characterized by high rates of mortality and birth to a situation with low rates mortality and birth, was produced not at the same period and the same intensity, as observed in others developed, intermediary or poor countries.

- Infant mortality rate decreased from 200 per thousand for the year 1956 to 20.6 per thousand currently. According to National Institute of Statistics, this rate will be 10.0 per thousand on 2020 and 8.0 per thousand at the horizon of 2030. This spectacular fall of the infant mortality is due to the interaction of three strategies:
  - Since August 1956, the prohibition of polygamy by the code of personal status.
  - Since the beginning of 1960 decade, setting up a generalized policy of family planning and reduction of births.
  - Maternal and infantile health and the reproductive health have been included into the prior national health programs, since 1960: following-up pregnancies, deliveries, childhood, immunization…

These strategies have evolved and periodically updated, within an economic environment of fight against poverty, of a greater accessibility of the female to the obligatory education and the improvement access to health care and in particular those aiming for communicable diseases and those concerning childhood.

- The continuously fall of fertility is a remarkable aspect of the demographic transition. Going from a level close to the least advanced countries, the fertility index is 2.02 for the year 2004, approaching the developed countries that have an average index equal to 1.57.

- The birth rate is 16.8 per thousand for the year 2004 against 50 per thousand 45 years ago. It would be 15 per thousand about 2025-2030.

Thus, given the late beginning of the mortality reduction occurred after the decade 1950, the speedy reduction of the fertility index, we can classify Tunisia among the countries that have a delayed model of demographic transition as South Korea, Hong Kong, Sri Lanka and China.

Table 3-4 Demographic indicators

Indicators	1990	1995	2000	2002	2005
Birth Rate per 1,000 Population:	25.20	20.80	17.10	16.70	17.10
Death Rate per 1,000 Population:	5.60	5.80	5.60	5.80	5.9
Population Growth Rate:	1.96	1.50	1.14	1.08	1.12
Dependency Ratio %:	-	-	-	-	-
% Population <15 years	36.7	34.0	29.9	27.9	26.2
Total Fertility Rate:	3.38	2.67	2.08	2.00	2.04

Source: NIS (2006)

Table 3-5 Demographic indicators by Gender and Urban rural

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

Source:

4 HEALTH SYSTEM ORGANIZATION

4.1 Brief History of the Health Care System

The Constitution of Tunisia clearly states that the prosperity of the nation is based on the welfare of the family and on the right of each citizen to work, to health protection and to education. Health policies, strategies and reforms implemented 50 years ago, shows the main tendencies of the health system:

- Until the 1980 decade, the Tunisia health system have been moved on basis of colonial heritage medical infrastructure, especially hospitals concentrated in the urban area. Authorities have focused its efforts on improving health services supply and health coverage, devoted mainly to :
  - Preventive programs (individual or collective) against communicable diseases, financed only by the State: These efforts have contribute to eradicate same of these diseases and strongly reduce the incidence of others diseases.
  - Geographical access to primary health care affordable to all population categories.
  - Human resources development and training (Medical and paramedical professionals) with recourse to foreign professionals to satisfy population needs.
  - Progressive development of hospital to deal with the need to specialized care.
  - Early setting up of social insurance for a large proportion of population (civil-servant and employees of the formal sector).
- After 1990 decade, authorities have started a new vision of health sector development, based on a strategy that includes[12]:
  - Continuously development of primary health care through a consolidated supply programs.
  - Improving hospital care obtained by reforms of structural and institutional aspects of teaching hospitals.
  - Reforms of legislation of private health care supply.

In term of public-private partnership, we note also two periods:

- First period characterized by an essential public supply, the ambulatory private sector coexisted and provides services to a limited set of the population. This period prevailed until the end of 1980 decade.
- The second period concerns the end of 1980 decade, with a fast development of the private sector, in terms of professionals' number and health care supply. In particular, private inpatient care in surgery has been strongly developed, making available other forms of hospital supply. One of the challenges of the recent health insurance reform is to succeed an efficient public-private partnership.

The extensive growth of the private sector, associated to the quantitative and qualitative changes of health care demand, have contribute to a significant growth of the household expenditures, increasingly requested to direct finance their health expenditures. Knowing the iniquity generated by this situation, authorities have reformed the health insurance system to reduce the costs borne by households.

Given the current context of the health system and the reforms implemented, regulation constitutes the fundamental pillar of the good governance, given the fact that health system is facing deeply constraints and challenges, resulting from its own evolution and reforms undertaken during the last decade and the macro-economic and social environment.

4.2 Public Health Care System

Organizational structure of public system

1. Ministry of Public Health Organization

Organogram of the Ministry of Public Health dates from 1981 (decree n° 81-793 of June 9, 1981) and was submitted to several modifications and adjustments:

- 1984: Creation of the Unit of Organization, Methods & Informatics
- 1985: Creation of the Financial Direction, separating financial affairs from human resources management and Equipment and Buildings administration.
- 1993: Creation, in all the ministerial departments of an office of citizen's relations
- 1998: Creation Emergencies Unit joined to General Directorate of Health
- 2000: Creation of two units, joined to the same General Directorate of Health : Medical Research Unit & Quality of Care Unit
- 2005: The last modification creates:
  - General Directorate of Health Public Facilities, raising the former hospitals' department to a general directorate and modifying its missions and organization.
  - General Directorate of Common Services, coordinating the departments of resources implementation, in substitution of the formal post of General Secretary.

The current organogram of the MoPH is drawn in the annex n°1.

In addition to these central administrations, several public institutions have central prerogatives, helping MoPH headquarters in its general missions:

- Central Pharmacy of Tunisia
- Family and Population Office
- National Center of Blood Transfusion
- National Center of Technical Studies and Bio-medical and Hospital Maintenance
- Informatics Center of MoPH
- National Center of Organ Transplant Promotion

At the regional level, Regional Directorates of Public Health were also created in 1981. They are joined to the Minister and his Office. They are still organized in three services:

- Administrative and Financial
- Basic (Primary) Health Care
- Hygiene and Environment Protection

In addition to their MoPH relationships, representing the Minister of health at the regional level, Regional Directorates of Public Health are closely bound to the regional authority of the Governor. They exert missions of planning, evaluation, supervision, coordination and resources' allocation and distribution at the regional level. The authority

of the regional director covers the private sector, the hospitals (whatever their category) and the primary health care network.

2. Health care provision in the public sector

The pyramid of health public infrastructure has three levels[13]:

- At the first level :
  - An extensive network of 2067 Primary Health Care Centres (including maternal and child health centres, dispensaries and health posts) equally spread throughout the territory, even in the poorest areas.
  - District hospitals (118), based in the main city of rural area, provide primary health care and maternity and general inpatient and outpatient care.
  - These two levels of the public health pyramid cover most of the health needs of the local communities.
- The second-referral level is made up of 34 regional hospitals, located in the main city of each governorate. They provide specialized care in the fields of obstetrics, gynecology, pediatrics, surgery, orthopedics, cardiology and other medical specialties if available.
- At the top of the pyramid, are 22 university hospitals divided in four geographic poles: Tunis, Sousse, Sfax and Monastir. They provide high technology health care for referred patients, and cover the proximity population running needs. These structures host very performing technical platforms and specialized services covering all the specialties, using the most sophisticated equipments.

All these structures, called public facilities, are under direct authority of the MoPH. They offer health care package to all the Tunisian population. Outpatient public facilities provide individual or collective urgent care.

Psychiatric and mental care is available at same regional and university hospitals. National program of mental health have contribute to improve access to this kind of care, by recruiting psychiatrists at regional hospitals and ensuring an adequate training for interested general physicians.

Other structures owned by other ministries are also considered as public sanitary structures and provide care to certain specific categories of the population:

- 03 military hospitals
- 01 hospital of the interior security forces (Police, national guard)
- These structures are classified as teaching hospitals.
- 06 ambulatory care polyclinics of the National Social Security Fund, providing outpatient health services and medical care to social insured patients.

The greater part of the population is served by the public health sector, financed and managed by the State. Indeed, both the private medical sector, and the social security health care services are essentially located in urban areas. So, the public sector remains the first providers, since it accounts more than 80% of all hospital beds' supply, providing inpatient only short or middle term health care. They aren't able to provide long term hospital care.

Evolution of public infrastructure and its development are strongly framed by:

- The five-year plans of economic and social development which define health public sector investments. The year 2007 is the first year of the 11th plan. These plans are prepared on the basis of broad dialogue implying local, regional and national levels

and they are defined after negotiation between ministry of economic development and international co-operation (in charge of national planning), ministry of finances and MoPH.

- The investment and operational budgets are annually allowed after discussion with ministry of finances and it recently introduced a negotiation with social security funds.

3. Health care financing of the public sector

Public sector financing is organized according to three modalities:

- The **state budget** finances investments, professionals' wages and give subsidizes to public facilities as operational budgets. State finances also all preventive programs whose benefit is free of charge for Tunisians.
- **Social security funds (SSF)** finance public sector according to various modes:
  - SSF contribute to finance the investment budget, towards heavy equipment and new technologies. Amounts and objectives are negotiated, implying the ministry for finances.
  - SSF give annually a lump sum to the MoPH, via Ministry of finances, as payment to medical care received by insured patients, at public facilities.
  - A Billing system, introduced since 1996 at university hospitals and 1999 at regional hospitals, is implemented on annual contractual basis. Invoices that give health services received by insured patients and tariffs are transmitted from hospitals to SSF. This system is used in order to improve efficiency and reduce and monitor cost.
  - A Billing system is also introduced on basis of particular conventions, used for some medical acts and pathologies. These conventions concerns also private facilities, except transplantation which remain exclusively allowed at university hospitals:
    - ✓ Kidney and Bone-marrow Transplantation
    - ✓ Cardiovascular surgery and interventions
    - ✓ Lithotripsy
    - ✓ CT Scanner.
    - ✓ Magnetic imagery
- **Households participate** into the direct finance of public facilities, following the three situations:
  - Social insured patients pay a lump sum (moderated ticket) for each service received (consultation, hospitalization and acts). Moderated ticket value varies according to the facilities types and specialized received care.
  - Patients who benefit from reduced tariffs (kind of medical assistance) are treated as social insured.
  - Patients without coverage should direct pay services fees (fee for services), on basis of official tariffs and nomenclature of professional acts. Some of them can be refund if they benefit from private insurances or professional mutual.

4. Public sector administration and supervision[14]

As indicated previously, health public sector is under MoPH authority. The MoPH exerts roles of planning and control, through its departments, as direction of planning and study and medical inspections.

Public facilities have a relative autonomy, defined in terms of organization and operating modes. In this context, we distinguish:

- The public administrative unit (PAU) is a legislative and lawful governing the districts and regional and some universities facilities (hospital, centers or institutes). Primary health care centers do not constitute a legal administrative unit and are related, according to their localization, to district or regional hospital. Moreover, these centers can be integrated into only one administrative unit, called basic health group. The PAU has a management autonomy regarding the use of their operating resources. Budget is attached to State budget and it remains governed by the code of public accounts.
- The Public establishments of health (PES) were created under the law n°91-63 of July 29, 1991, relating to the health sector organization. PES has two objectives: increase hospitals' autonomy and ensure a greater participation of the professionals in hospital management. The PES is governed by commerce code.

All these establishments are submitted State supervision, control and monitoring authorities such as the MoPH inspections and the general inspection departments of the Ministry of finances or the primary ministry (Auditing bodies).

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

Up until the recent devolution initiative the health sector was not subject to major organizational and management reforms. There were some isolated attempts at reforms

Over the last 5 years, public sector sets up many organizational measures, defined on the programs of socio-economic development plans, in particular on their components initiated with the World Bank. These measures can be summarized as follows:

- Strategy for improving emergency care has been implemented in order to reinforce resources and management of these departments, through for example, specific training to various professionals categories. Despite the improvement of emergencies procurement, these measures are not scientifically documented or objectively evaluated.
- Strategy for improving health care quality and setting up a continuously assurance quality, in partnership with WHO. Tunisia is still in experimentation stage at pilot sites level and no results that can be currently identified.
- The social security funds payment mechanisms of health care received at public hospitals have been at many times revised in order to get a new financing schema, based on pathologies. The technical complexities of this approach have slow down the process. However, we succeed on better assessment of the real care costs.
- For various reasons, State has allowed same university physicians to get a private activity, called "Complementary Private Activity-CPA-". Strongly regulated, this activity has been at several times modified. It's estimated that procedures must be softened to allow to these doctors improving their incomes, but under serene conditions. It's also, stressed the negative consequences in terms of (i) presence of these doctors at their original workplace: public facilities, (ii) training of new doctors and (iii) the unfair competition observed with the private sector.
- In order to improve the territory coverage from Tunisian specialists doctors, the State have implement an incentive system, based on an increase of professionals wages and authorization to practice on private sector (ambulatory care) if the specialists doctors accept to get a full time job on public facilities, located at priority

defined regions. Since the implementation of this system (1995), it's observed better country coverage from Tunisian specialists, but it remains under the assigned objectives. Coverage does not seem dependent on these incentives. These organizational measures are currently under review.

- Two processes of reform are implemented in the human resources training:
  - A reform of medical studies aimed to better adapting the course of training to specialist and promoting training of general practitioner dealing to the need to "the family physician".
  - A reform of nurses studies, revises access conditions to studies and the training schemes - which will be attribute a university diploma adapted to the internationally recognized standards.

Planned organizational reforms

Since 1996, a reform of social health insurance has been decided and The National Fund of health insurance was created on 2004. Really, it will be implemented at mid 2007, for meadows 65% or 70% of Tunisian population.

This reform[15] will improve the access of social insurance patients to all public and private providers, on preliminary defined contracts. The public sector, which is often protected, will be submitted to competition with private sector that has clearly developed its ambulatory and hospital services during last years. Public sector should improve quality of its services; cost monitoring and continue its roles of health population safety and of last recourse, because it should keep its public service mission. Partnership between public and private sector is currently under development.

In addition, the following conceived organizational measures should be taken at short times:

- The review of central department of the MoPH organization seems still pressing, despite the changes introduced during the year 2005.
- The review of missions, prerogatives and organization of public health regional directions, (in the context of decentralization and regional directions reinforcement) is to be defined at the same time as the MoPH headquarters organization, for a real delegation of power.
- Beside the introduced improvements for university and regional hospitals, organization and management of public facilities still requires enhancement to re-organize district hospitals and basic groupings.

4.3 Private Health Care System

Private health sector have various development stages, as it's always exist beside the dominant public sector. The private sector includes:

- Doctor's practice: it's initially limited to individual practice at single cabinet; but currently it includes private outpatient centers of medical imagery and laboratories.
- Dentists practices
- Pharmacists, drugstores (retail sale) or wholesalers
- Liberal practice, individual or collective, private ancillary practice (physiotherapists, opticians and nurses).

Private sector has realized a significant development, until the end of the 1980 decade and has several impacts:

- Improvement of population's purchasing power has allowed certain categories to demand health care offered by private sector.
- High numbers of professionals were trained on several medical specialities.
- The reduced state expenditures in health care, as consequence of structural adjustment plan, have strongly reduced employment in public health sector.
- The financial solvency of the social insured patients, for heavy medical acts, have encouraged to privately invest more on some lucrative crenels such as cardiology, cardiovascular surgery and heavy equipment (CT scanner and MRI).
- State incentives and subsidies to private investment in general were undertaken at private health sector.
- The increase interest of private investors from non professionals to the health care sector.

Modern, for-profit

Single practice physicians (specialists and generalists) dominates private sector and provides ambulatory care. Inpatient care at the private sector has been developed since the last decade, as shown at the following table:

Number of private health facilities and beds (1995-2004)

Year / Facilities	1990		2004	
	No	**Beds**	**No**	**Beds**
Clinics	33	1142	81	2379
Multi-disciplinary	25	1060	49	2175
Mono-disciplinary	8	82	32	204
Dialysis Centers	18	205	99	986

Source: MoPH

Overall, the private sector has been growing rapidly since the 1990s. The sector employs 83% of the country's pharmacists, 72% of dentists, but only 7% of paramedical professionals[16]. It has most of the country's heavy medical equipment. It is mainly financed by households, absorbs about half of all health expenditure and its development is likely to accelerate with the health insurance reform. The private sector has followed credit-worthy demand and has set up in Greater Tunis, central-eastern areas and the coastal regions.

The main regulation mechanisms driving the private sector are shown in the table below. Any significant change was registered out of replacing of previous authorization of the MoPH by rules defined on the book of duties

Main regulation mechanisms of the private sector

	Previous Situation	Current situation
Liberal Practice	No geographic or population restriction for implementation	
Private Clinics	- No geographic or population restriction for implementation - Obligation to satisfy norms of building, equipment and human resources	
Renal Dialysis Center	- Certificate of needs and authorization - Obligation to satisfy norms of building, equipment and human resources	
Heavy Equipments	Certificate of needs and authorization	
Laboratories for Medical and analysis acts	Authorization for fitting	Book of duties
Retail pharmacy	*Numerus Clausus*	
Medicines Distributor wholesaler	*Numerus Clausus*	Book of duties
Paramedical	Authorization for fitting	Book of duties

Source: MoPH

Modern, not-for-profit

It doesn't exist a not for profit private sector in the Tunisian health sector

Traditional

Health professions practice, outside the controlled modern setting, is forbidden by the law and is liable of heavy judicial pains. However, some isolated and few cases are described under shape of practice of healers or trade of medicinal plants or practice to the limit of the sorcery (witchcraft).

Key changes in private sector organization

- In 1991, many legal rules were implemented to regulate private hospitalization and to eliminate the old rules, used since the end of the 19th century. A series of lawful acts was promulgated in order to regulate private professions, as ancillary practice.
- Private sector receives increasingly foreign customers, coming from bordering countries. Many attempts have been made to satisfy this health care demand, using various contractual forms.
- Private sector develops new crenels dealing with, by investing on thalassatherapy and renal dialysis centers into or near tourist hotels.
- Main organizational changes are related to State disengagement from investment approval or authorization for the private sector fitting. Installation for some professions is no more submitted to MoPH previous authorization, but it is due to rules defined on the book of duties.

Public/private interactions (Institutional)

There's no officially interaction policy or system that provide a link between the public and private health institutions. However, interactions between NGOs and the MoPH exist and it's especially devoted to patients. NGOs provide assistance to patients having diseases treated at the university hospitals, like housing.

Public/private interactions (Individual)

Private practice physicians are sometimes authorized to exert in the public facilities on:

- a purely voluntary basis, without remuneration,
- An individual convention basis with the consequent remuneration, when it's really needed.

University teaching physicians can have a private activity (CPA), as mentioned earlier

Planned changes to private sector organization

The main reform that will fundamentally transform the private sector will be the health insurance reform, defined following law n°2004-71 of August 2, 2004, which create the National Fund of Health Insurance (CNAM) and its application rules.

According to this law, relations between the CNAM and the private providers will be governed exclusively by conventions (contracts): a general chart and most of the sector conventions (physicians, dentists and medical laboratories) have been signed. Other conventions are again under negotiation (pharmacists and private clinics).

These conventions will introduce:

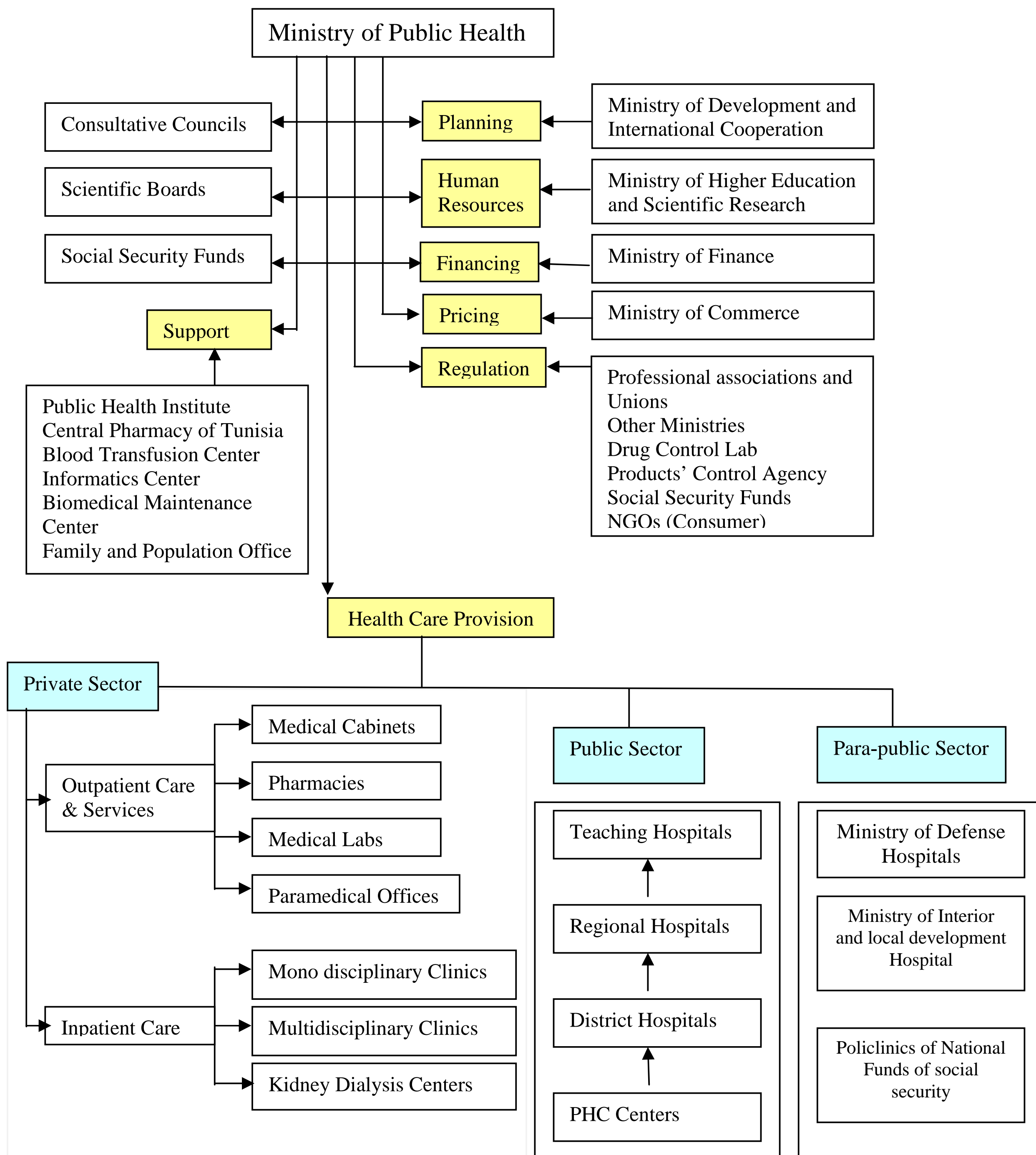
- conventional tariffs which will be fixed and can only evolve after negotiation with the CNAM;
- The medical control will permit to ascertain the quality of benefits and the expenses containment.

Implementation conditions and management procedures of the new system are under development and negotiation with the social partners, in particular the central employees' union and the employers' organization, and private providers of care and services.

4.4 Overall Health Care System

Organization of health care structures

4.4.1 *Organization of health care structures*



Brief description of current overall structure

The health care system in Tunisia is made of three sub sectors: Public, para-public and Private.

1. The Ministry of Public Health (MoPH) is responsible for formulating policies, strategies, plans, programs and technical and administrative standards on health matters in order to guarantee the people's constitutional right to health.
2. Health policy is based on primary health care and has been endorsed at the highest official level.
3. In order to reach the entire population, the services of the MoPH are decentralized and located in the 24 regions into which the country is divided for administrative and political purposes.

In order to improve health care insurance, new national funds (CNAM) has been implemented. This new regime is an obligatory and unified basic mode and look to ensure sufficient covering of financial risk disease. In the near future, the CNAM will provide a health care coverage for both public and private providers and on real cost basis. Then it will have a great importance in the overall health system, in terms of organization, financing and regulation.

5 GOVERNANCE/OVERSIGHT

5.1 Process of Policy, Planning and management

National health policy, and trends in stated priorities

Formally, there is no official document that reports health policy or strategy. However, the five-year plans of development constitute an occasion to implement a medium-term strategy of developing health sector, which constitutes the reference documents for investment and planned action for health during the 5 years. Furthermore, since 2004, the program elaborated by His Excellence the President during the electoral period, becomes an essential political document that gives the main objectives and priority for developing health sector. This program contains the following axes:

- Social protection for all by reaching an effective social security cover rate of 95% in 2009.
- Better health care coverage by introducing new reforms to foster the referential role of the public sector in terms of managerial supervision and research and medical treatment, to further develop the private sector, and to optimize the complementarities between the two sectors.
- Higher quality of health services by making specialized medicine available in all Governorates by the year 2009; establishing a flexible system to ensure the continuity of hospital services and consultations all day long; and providing better medical emergency services through a practical promotion plan
- Better indicators for the health of the mother and the child by achieving a percentage of 100% of controlled and safe childbirth in all Governorates; bringing down the infant mortality rate to less than 15‰; establishing regional departments concerned with the mother and child health, and establishing a practical plan to promote departments of childbirth and intensive care for newborns, and early diagnosis of child disability.
- Prevention against chronic and serious illnesses a national priority.
  - Generalize the early diagnosis of diabetes and blood pressure
  - Establish new regional centres and additional departments for cardio-vascular and renal illnesses;
  - Set up a plan for the early diagnosis of cancer, and generalize cancer-specialized hospital departments in all the regions of the country.
- The health of the elderly by reinforcing medical and paramedical specialties for them. We will endeavour to monitor new and newly-identified illnesses and stimulate the sector of advanced medicine by establishing a national observatory for the prevention of new illnesses; reinforcing encouragements in the field of advanced medicine, and fostering partnership with foreign countries in this field, which will contribute to making of Tunisia a centre for the export of health services.
- The objective of having one exercise trail at least in each municipality by the year 2009 to offer best conditions for all citizens to practice daily physical activities.

Other existing documents of health policy or strategy cover neither the totality of health system nor the needed resources to its development. Moreover, in the five-year plans documents, health objectives are not always clearly defined and evaluated. Recurring resources for functioning are not approached in terms of public facilities needs, like human resources. All these questions are tackled annually during budgets allocation and negotiations between MoPH central department and public health facilities[17].

Population health needs are unfortunately not used as basis at time of setting up development policy or strategies development, because it's less documented as consequence of the weaknesses of the health information system. Therefore, population needs are often expressed by health professionals, on the basis of many fragmented evaluations that focus specific health problems. The availability of epidemiologic studies, particular for transmissible diseases, as well as the performances of reproductive health is a significant source of information, used in the planning process.

The implementation of certificate of death, according to the WHO model and the studies on burden of diseases has also significantly contributed to better inform the decision-making process. The same remark could be done for the three regional cancer registers and the cardiovascular diseases register.

The socio-economic plans of developing health sector dealing with satisfying population health needs are implemented according to the following strategies:

- Ensuring equity, financial access to health facilities dealing with cost monitoring.
- Reduce regional disequilibrium in terms of health and resources indicators and in particular between East and West and East and South. Major difficulties remain human resources, especially mobilization of specialized physicians to practise at the underserved area (priority area), regarding the government financial incentives.
- Protect vulnerable population groups and improve health of poor persons, through various financial assistance and social aid programs. The later is given in nature, as total exemption from payment or reduced tariffs of health care received at public facilities. These programs concern poorest family and persons that are not affiliated to any social security fund. In addition, the progressive extension of social coverage (including the social health insurance) participates to protect vulnerable population.

In spite of these efforts, inequalities remains and it's due to other economic and sociological factors.

- State is exclusively responsible of supporting poor in receiving health care. It provides health assistance which allows accessibility to all public facilities whatever the needed health services. Only expected changes will be related to the extension of social health insurance that will gradually integrate more and more persons among those considered as vulnerable.
- The management of the health system is often based on short and medium term strategies (3-5 years), to the detriment of long-term strategies.
- The following table indicates the definition and the expectations of the roles of public, private sectors in financing, provision, resource generation and stewardship.

Roles of public and private sectors in financing, provision, resource generation and stewardship

	Public	Private
Financing	Moving from dominant State financing to more request of The new implemented scheme of social health insurance.	Relatively high (#50% of national health expenditures, it's awaited to be reduced using public financing of the new scheme of the social health insurance.
Provision	- A prevalent public sector assures a wide geographic coverage. - More coordination in developing primary, secondary and tertiary care is encouraged into the network scheme of public health facilities regarding an expansion of their use of production capacities. - Problem of human and resources allocation should be resolved to reduce the regional disequilibrium.	- Coexistence of private providers of ambulatory care with public sector which dominates these activities. - Rapid growth of the inpatient care of the private sector. - Problem of geographical and financial accessibility
Human resources and resources generation	- Health professionals training still remain a field of the public sector. - State still remains organising and controlling import of drugs, in spite of WTO agreements.	- Development of nurse's staff training, working for the private sector. - Rapid growth of drugs industry, regarding its improved share of local consummation (45% for the year 2005). - Private pharmacies are distributed according to *numerus clausus* criteria. - Private facilities can import heavy equipments and medical accessories.
Stewardship	- MoPH and other government departments are responsible for official regulation. - The new social health insurance (CNAM) will be more and more a significant actor which contributes to regulate the both public and private sectors.	Remarkable intervention of professional organizations and unions.

Formal policy and planning structures, and scope of responsibilities

Several partners are implied on developing, setting up, executing and assessing health sector strategy under the five-year health plans: chamber of deputies, higher council of

plan, Ministry of economic development and international co-operation (MEDIC), regional councils of development, the MoPH, and so others.

Firstly, the main general development objectives are fixed by the government, and then consultations are conducted at regional, interregional and national level. These objectives are elaborated following an evaluation process of results obtained at the previous plan that are diffused to different sectors and partners through a Prime Ministry circular who fixes the different stages of the next plan. The MEDIC plays coordinator role for this action. The preparatory stage of the plan began at the same time on central and regional level.

At central level: A "sector committee of health" is mandated to produce the development plan. It is chaired by the Minister of Public Health and has a multi-sectoral composition implying representatives from other ministries (agriculture, social affairs, interior, finance and MEDIC...) as well as representatives of ordinal councils, universities and other training facilities, professionals unions and national experts. Committee carries an assessment of the previous plan, fixes the general objectives of the health sector that should encompass government strategies and objectives. It creates technical committees to fix the objectives to reach and identify the needed resources during the five years. Document for health sector is then prepared and submitted to approval of sector committee and it's addressed to the MEDIC.

At regional level: At the same time, regional councils of development, chaired by governors, carry out the same acts as done at central level. These councils are often composed from officials elected persons (deputies), members of civil society and representative of various ministries that are working at regional level. Regional document is also prepared and also addressed to the MEDIC.

The MEDIC that coordinates the preparation of the plan holds to bring closer consultations between central and regional level in order to fix priorities regarding investment. In case of litigation, arbitrary meetings take place in presence of representative of MoPH, MEDIC, and Ministry of finances. If accepted, the project of the plan is submitted for advice to the higher council of plan, then to the government for approval. Finally, it must be voted at the chamber of deputies. Voted plan represents a comprehensive framework and are annually executed. In addition, it is annually evaluated by the same structures, according to the same procedure through the health sector committee. A semi-course evaluation permits to review the priorities and objectives of the plan and to introduce the necessary corrections.

Analysis of plans

The development policy of health is articulated around five main axes:

- The promotion of health services is conceived by improving accessibility, in particular for underserved areas. This is obtained by the implementation of new modes of services provision, organization and management of health care services within a strategy of continuously quality assurance.
- Health care financing with the implementation of health insurance reform must allow an improvement of financial access of the population, while monitoring the total expenditures growth and developing the system's managerial capacities.
- Several propositions for resource mobilization are given for drugs, professionals training and health system research. Total health expenditures, maintained at an acceptable level of GDP share (5.5%), will rapidly increase dealing with the new health insurance reform.

- Improvement of the health system governance is required for the current context. Governance should be developed at a standards' design of health system references, assessment of its performances and communication with users.
- Reactivity of health system is a recent concept which should be analyzed and adapted to specific context of the country.

The strategic visions of health look essentially to the public sector and are generally devoted towards the development of facilities and practically not focusing on health problems. The objectives of strategy are clearly defined in written documents, but formulated in general terms and do not include the awaited impacts.

Plan does only identify the needed resources for investments which are annually given on budgets. The current functioning expenditures required are discussed and put on the annual budget.

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

MoPH supervise the health sector, through its departments of planning, of legal and juridical procedures and inspection. However, professional orders of medical doctors, dentists and pharmacists are also allowed to supervise in some defined activities.

The CNAM will have competences of monitoring of health care services provided to social insured patients and it will introduce new contractual rules with health providers, worked out and implemented with MoPH collaboration.

In Tunisia, unfortunately, until now there's no accreditation but quality department exists at the MoPH headquarters. However, various factors and reasons have motivated same private facilities to get "certifications" from foreign organizations. MoPH is not included and not engaged on these procedures.

For the private sector, there are a many legal rules which set standards and norms for equipment, buildings and staff, as well as norms of facilities functioning. Implementation and functioning of different private facilities as well as ancillary activities are subject to previous authorization of the MoPH, following conditions and rules, defined on a Book of duties. The control and respect of norms is ensured by MoPH inspection departments. The first control is made at the opening of the facilities and followed by regular visits, unexpected or often after citizen's complaints. These regular inspection, unexpected or not, systematic or thematic, contribute to guarantee the respect of standards and norms.

5.2 Decentralization: Key characteristics of principal types

Generally, the management of health sector is centralized, even with the multiple attempts to decentralization at regional departments of public health or hospital level. It remains delegation of tasks than a real delegation of power. Given this approach, the health sector doesn't have any specificity when compared to other sectors and remains governed by the same legislation.

Within the MOH:

Regional departments of public health, implemented at each governorate, were created since 1981. As representative of MoPH, these departments function follow MoPH policy and directives with missions in regional planning, resources allocation, coordination,

monitoring and evaluation. In 2000, sanitary districts were created in order to participate at planning, management and evaluation for the district level.

Until now, these approaches remain delegations of tasks than decentralization which are not coherent with the legal statutes of hospitals, another form of decentralization, generating conflicts of competences between regional directors and hospitals directors.

State or local governments

The administrative subdivision of Tunisia is based on governorates which permit certain coordination and management for all sectors, including health.

Greater public hospital autonomy

Public hospitals are classified into three levels: Publicly-owned establishments of health, regional hospitals and districts hospitals. Reform of hospital management have been implemented since 1992, as well as project of reforming regional hospitals "mise à niveau" that aims to reinforce decentralization and financial and management autonomy.

Publicly-owned establishments of health (EPS)

MoPH exerts its supervision of EPS- (22 University hospitals and specialized institutes and centers), according to legislation and with regulation rules applied to public firms. For each EPS, State controller is working following Ministry of finance rules and procedures. These establishments' accounting is in conformity to rules of business accounting and Commerce Code. The assessments and accounts of management and accounts documents of results are annually transmitted to Chamber of deputies, Prime Ministry, Ministry of finances, MEDIC and MoPH.

EPS have three bodies of management:

1. The administrative board is composed of 16 members, representing the ministries of finances, of public health, of social affairs, of MEDIC and representatives of medical and nursing professions of the hospital, of the president of medical committee, of the dean of medical university, of private physicians, of the municipality and the association of consumer defense. Board has all latitudes and capacities to act for the hospital.
2. General Director ensures the establishment functioning and has authority of decision in all aspects related to the establishment and not expressly reserved to the administrative board. His authority includes the management of all human resources.
3. The medical committee composed of all heads of medical pharmaceutical and dental departments and representatives of physicians and nurses exerting in the hospital. This committee provides objectives and carries out the annual program scheduling of medical research of the establishment with close cooperation of faculties. The medical committee draws up an annual report of technical and economic evaluation of health care provided at different wards of the establishment.

Regional Hospital:

They are regarded as publicly-owned establishments with administrative character and placed under the control of the MoPH. These hospitals have also, bodies of direction and management that are director, board of establishment and medical committee.

- The director of regional hospital ensures the general control; and supervises with collaboration of management bodies the hospital activities, hospital management as well as human and financial management and conservation of the inheritance.

- Chaired by the regional director of public health, the regional hospital's board is includes the following members: heads of medical, pharmacy and dental departments, heads of administrative departments, nursing chiefs of hospital and emergency, regional head of basic health care, heads of hygiene and environmental protection, representative of the district municipality. The council proposes the development program of the hospital, who gives multi-annual objectives, program the annual needs and the human resources allocation. It also identifies and ensures the follow-up of continuous training programs and the improvement of health care quality.
- The medical committee is composed from heads of medical, pharmaceutical and dental departments, director and responsible of health care management department. The committee is a consultative body of technical and economic evaluation, regarding health services provided with an attempts to give optimal quality. Sub-committees can be created, like committee of medical ethics.

District Hospitals

The District hospitals are governed by the same general regulation as the regional hospital. However, the administrative and financial organization and modes of functioning are under review in order to adapt them to the objectives of more participative management and to a more autonomy, and to better integration on the management process of sanitary district.

Private Service providers, through contracts

The current legislation authorizes public health facilities to use private suppliers of services or engineering. These suppliers can be private health professionals, private health facilities or private companies specialized on non technical fields. We mention the following examples:

- The subcontracting of non technical services is very widespread on university and regional hospitals:
  - food (meals for patients);
  - cleaning (wards and administrative buildings);
  - guarding;
  - Wash-house (washing, drying and sharpening of the linen and working clothes of professionals).
  - Maintenance of heavy equipment and technical installations of the hospital is often made using contracts with private firms.

Contracts of services are implemented following national tender published by the concerned public facilities. Private company must meet the schedule conditions given on a book of duties and it can obtain the contract, with competitive market. Hospital professional have to follow-up, control and evaluate the respect of the contract terms.

- Private specialized physicians can practice (consultations or medical guards) under convention. This is allowed given the lack of specialized physicians.
- In very particular situations, public facilities resort to private facilities, even when heavy equipment is broken down (e.g. medical imagery, lithotripsy ...).

Main problems and benefits to date:

The Tunisian health system is composed of sub-sectors: public and private. Each one of these sub-sectors is well integrated, but problems appear in situations when we need to transfer patients from one to the other.

Public sector is well integrated and contains all health programs provided to the population, according to the capacities of the public facilities. The health care supply of the private sector, dominated by providing curative care, is fragmented according to medical specialities, which avoid the integration of health programs.

In the public sector, different functions of health services management are defined and ensured at various levels, in particular regional and central level. The MoPH is going to develop competencies on these fields, as strategic planning and evaluation.

However, private sector wasn't interested to management matters. This sector focuses on conformity to standards of investment and resources. It is expected that the health insurance reform which will introduce public funding of private health services, will be a significant lever to better integration of private sector in the national process of planning and management of health services.

Integration of Services

Since the "Health for All", the MoPH have integrated all preventive and curative services in on daily work of health facilities, especially basic health centers (first line). All health programs, whatever their nature, are integrated technical, administrative and financial at the concerned facilities.

This administrative and financial integration is ensured at a single level of management process which allows a shared coordination of responsibilities on local, regional and central levels in order to mobilize the needed for all programs. The programs' design is prepared at national level implying all competencies and responsibilities of different departments.

Family planning activities, managed by a national Family and Population Office-FPO-(MoPH department), are remained excluded from the integration process. However, since many years, the authorities have integrated these services, according to availability of the resources for different partners. A closer coordination between the various departments of MoPH and the FPO has lead to a better use of available resources and an improvement of performances as regards reproductive health.

5.3 Health Information Systems

Organization, reporting relationships, timeliness

An important weakness of Tunisian health system is its information system, in spite of the multiple attempts to set up. In the current state, it is composed of fragmented sub-systems for different components of health system:

- First and oldest system of collecting data is done for activities of all facilities by the statistical department of MoPH.
- The FPO set up a powerful information system, regularly adapted to its activities of reproductive health and family planning.
- During the year 1980, collecting data on basic health care are processed on various fields.

- From the years 1990 until now, hospital system constitute a major interest and supported by two World Bank projects. One project is relating to the implementation of a computerized information system of management, which now exists at the informatics centre department of the MoPH. Until now, this system gives only traditional data and tools of management and doesn't integrate medical records of patient's health care or information of human resources.
- The current insufficiencies of information system are due to its fragmentation and the lack of integration, associated with the new challenges of the hospital sector. This has led authorities to the need of an exhaustive study which aims to conceive new bases of development and strategy of implementation of the information system focused on patient. This study is completed and will be submitted to the government and its results will be certainly used on the next plan of development (2007-2011).

Data availability and access

- Public Hospital facilities (Number of admissions, length of stay and occupancy rate of beds, hospital morbidity and mortality)
- Causes of death, register of cancer, register of the cardiovascular diseases
- Epidemiologic data for communicable diseases
- Human Resources and public budgeting system indicators
- Lack of data concerning activities and resources use for the private sector:

Sources of information

- MoPH Departments:
  - Department of studies and planning
  - National Institute of public health
  - Department of basic health care
  - Department of DMSU
  - Regional departments of health
- National Institute of Statistics
- Nationals Social Security Funds
- Since 1990, MoPH has undertaken many attempts to develop a system of information, such as:
  - National System of Health Information project (SNIS)
  - National Strategy of SNIS, using the available sub-systems.
  - Identify methods of providing missed data to complete: Research, investigations, national registers, certificate of death.

5.4 Health Systems Research

Since 2004, 1% of the GDP are devoted to scientific and technological research. Health research is well developed and integrated, with objectives to study health problems, epidemiology, health economics dealing with preserving and promoting individual and collective population health.

Data available on health and medical research are reported in the following table[18]. This table gives the numbers of papers Medline indexed for 35 years of (1965-1999). Total publication is 3673, where the first author and its affiliation are from Tunisia.

Distribution of published (Medline Indexed) papers (1965-1999)

Years	Numbers of papers
1965-1969	100
1970-1974	159
1975-1979	288
1980-1984	405
1985-1989	889
1990-1994	1015
1995-1999	817
Total	3673

Source: Ben Abdelaziz A. and Aouf S (2002)

The same study shows:

- Medical research is monopolized by university facilities which produce almost 90% of papers. Public facilities of basic health care and private facilities produce only 1.8% of total publications.
- 12.9% of Tunisian papers published on Medline were carried out in collaboration with foreign researchers.
- 2/3 of papers are published in Tunisian journals and only 8.8% are English written.
- Approximately ¾ of research are produced by clinical professionals, from which 80% are carried out by clinical medicine and surgery.
- Three topics of research are mostly treated: malignant tumours, hydatic cyst and tuberculosis.

The future of medical research is promising, several reforms indicates the great interest, so we mention:

- The MoPH was engaged to more promote medical research. New department of medical research was created in 2000, and have a mission to promote, coordinate and ensure the follow-up and evaluation of health research activities with the Ministry of high education and scientific research and technology.
- New organization of research is implemented: improvement and reorganization of some existing research centers and encouragement of creation and financing of research laboratories and units in all universities.
- Multiple actions are devoted to promote research, coming from several sources:
  - Specific resources are given to health facilities;
  - Financing resources are directly given from Ministry of high education and scientific research and technology to health facilities.
  - Resources are coming from international co-operation and international agencies to finance health research.
- National system of research is currently composite by approximately 140 research units and 15 research laboratories implemented at health facilities, faculties of

medicine, pharmacy and dental surgery. Varied topics are subject of many researches.

- In addition, and according to recent estimates, medical research contributes to the national effort for 35.000.000 TND per annum. This contribution consists of direct and indirect expenditure devoted to Medical research. This expenditure represents approximately 5% of the MoPH budget and 15% of national expenditure on research.

5.5 Accountability Mechanisms

The mechanisms of accountability in the Tunisian health system are relatively weak due to the following reasons:

- Scarcity of professional's norms of practice except the general standards defined by the law for certain national programs.
- Absence of an evaluation autonomous institution, recognized by professionals and authorities. The administrative, financial and technical inspections of all health system components are the sole mechanisms of evaluation of the health facilities' running.

The chambers of deputies and counselors (senate) vote budgets in plenary sessions, opened to public hearing. During the budget discussions, public accounts are addressed to ministers concerning their management and their utilization of resources received last year as well as programs of coming year. All these questions related to sector policies are approached without any restriction. Furthermore, during the budgetary year, ministers are often invited to give reports and to reply for some questions related to their department; this is done during sessions of questions addressed to government.

Complaints of consumers are treated by independent body, called organization of consumer defense, which is nongovernmental independent organization, represented in all regions of the country. Furthermore, the government has created an organism that is loaded to pursue complaints of consumers against state or public services: it is called the administrative mediator. There is no special committee that attends health sector problems out of a consultative organ called the superior advice council of health, deliberating on policy and technical concerns.

The Tunisian legislation anticipates the notion of medical responsibility. The former is based on the medical fault and it's defined as being the breach to a pre-existing duty that wouldn't have been committed by other physician placed in the same conditions that the author of the injury. The Tunisian legislation anticipates four types of faults:

- The civil faults with repairing vocation are due to indemnification
- The hospital and administrative fault with repairing vocation
- The ethical fault whose sanctions are prerogatives of the order of physicians

The public has the duty to complain beside different nongovernmental and governmental authorities, which are:

- The MoPH (department of medical inspection and juridical department)
- The order of physicians
- Common courts

All public enterprises (university hospitals) as well as para-public establishments are submitted legally to the required annual auditing of financials accounts, undertaken by

independent auditors, and presented to the administrative boards. The annual auditing of parastatal organisms are published on official journal, those of public hospitals are transmitted to several departments and are not published, so not accessible to the public.

Only one systematic procedure of monitoring of capital consists of an initial declaration of capital goods of civil-servants that are designed for an important responsibility (directors, general managers ...). This declaration is systematically updated each five years and deposited at the account court. Although, the fiscal control department of the ministry of finances is allowed to undertake, randomly or each time they judge necessary, a control of the patrimony and the life standing of all persons including administrators of public or private health facilities.

The civil-servants of public facilities are governed by laws and procedure handbooks, written and published on the official journal. A great part of these manuals exists on web site of different organisms. These manuals concern all aspects of management, as human resources, financial management, markets ... There's no political interference that can constrain responsible to take care of the legislation, because responsible are indebted to their management, given the multitude of organisms that can inflict sanctions for them, being able to be very heavy (prisons....). The main authorities are:

- The accounts body
- The budgetary discipline body
- The administrative court
- The common courts

Transparent methods are used to aware government contracts, rules are used to obligate government department to create competitive market for making purchases. Concerning contracts, government departments must publish on journals all their needs, to insure competitive market. Book of duties must include clearly indicators on technical aspects, classification modes involving technical and financing notes. Opening all submissions supply must also done in presence of submitters. The control and respect of these procedures is usually pursued by national committee of markets and the national authority of public market control.

6 HEALTH CARE FINANCE AND EXPENDITURE

6.1 Health Expenditure Data and Trends

The Tunisian health care financing system is a combination of social insurance, general revenue, and out-of-pocket payment. Private insurance plays only a very limited role and is therefore not included in the analysis below. The military, which operates its own health care facilities and is financed by the Ministry of Defense, is also excluded from this analysis due to lack of available information.

Table 6-1 Health Expenditure

Indicators	1990	1995	2000	2002
Total health expenditure/capita,	72	105.5	155.8	170.4
Total health expenditure as % of GDP	5.3	5.5	5.6	5.8
Investment Expenditure on Health	-	-	-	-
Public sector % of total health expenditure	-	-	-	-

Source: World health report 2004

Table 6-2 Sources of finance, by percent

Source	1990	1995	2000	2004
General Government	51.5	52.1	49.8	45.1
Central Ministry of Finance	36.6	36.2	30.9	21.8
State/Provincial Public Firms Funds	-	-	-	-
Local	-	-	-	-
Social Security	14.9	15.9	18.9	23.3
Private	47.4	46.8	49.1	51.2
Private Social Insurance	-	-	-	-
Other Private Insurance	-	-	-	-
Out of Pocket	-	-	-	-
Nonprofit Institutions	-	-	-	-
Private firms and corporations	-	-	-	-
External sources (donors)	-	-	-	-

Source: World health report 2004.

The main sources of health financing are households, state and social security. The household and state share is estimated respectively to 50% and 26%. Social security contributes with 24% of total health financing.

Trends in financing sources

Until the end of 1980, the health expenditure was mainly supported by State budget (50%) and incidentally by social security funds (15%). During this period, the expenditure share of public funds is nearly 65%. The financial crisis (second half of 1980 decade) and the socioeconomic programs of structural adjustment plan have reduced the expenditure share of the State, relayed firstly stage by an important increase of household expenditures and secondly by a small increase on social security expenditures.

For the period 1995-2004, health expenditure is equally supported by public funds (State and Social security funds) and private funds (out of pocket -direct payment of households- and complementary and private health insurance).

- The extensive coverage hides the fact that the total out-of-pocket expenditures (i.e., not counting their social insurance premiums) comprise almost 50 percent of all health expenditures. Moreover, the percentage of private expenditures in Tunisia has rising the past two decades. Based on earlier work on benefit incidence analysis, the economic burden of health expenditures on the poor is substantial, and the poor are likely to spend a significant proportion of their income on private health care even though public services for poor are available and provided free of charge.
- Household surveys indicate that the share of the household budget devoted to health care is positive at very low consumption levels and greater in rural areas at all income levels.

Health expenditures by category

Table 6-3 Health Expenditures by Category

Health Expenditure	1992	1995	2000	2002
Total expenditure: (only public)	-	-	-	-
Per capital expenditure	-	-	-	-
% By type of service:	-	-	-	-
Curative Care	-	-	-	-
Rehabilitative Care	-	-	-	-
Preventive Care	-	-	-	-
Primary/MCH	-	-	-	-
Family Planning	-	-	-	-
Administration	-	-	-	-
% By item	-	-	-	-
Staff costs	-	-	-	-
Drugs and supplies	-	-	-	-
Investments	-	-	-	-
Grants Transfer	-	-	-	-
Other	-	-	-	-

Data for Health Expenditures by Category is not available. Such data can be found for health sub-systems, but it not coherent with the required details of table 6-3.

6.2 Tax-based Financing

6.3 Insurance

The population coverage by source were estimated once (2000), according to several data available in sub-systems of social security bodies and health coverage of poor and vulnerable, managed by ministry of social affairs. Nevertheless, these data must be interpreted with caution because of double coverage: [social insurance + private insurance + private firms and corporation] and [social insurance + government coverage for vulnerable].

Table 6-4 Population coverage by source

Source of Coverage	1990	1995	2000	2002
Social Insurance	-	-	65%	-
Other Private Insurance	-	-	-	-
Out of Pocket	-	-	-	-
Private firms and corporations	-	-	-	-
Government	-	-	34%	-
Uninsured/Uncovered	-	-	1%	-

Source: Achouri H. (2001)[19]

Trends in insurance coverage

Social insurance has two challenges, in order to perform its coverage:

1. Extend the legal coverage to some population categories, not covered yet by the current system: artisans (craftsman), fishers and home workers (housekeeping) ...
2. Extend the coverage of the submitted groups such as agricultural and seasonal workers.

Key issues related to the health care financing system are the implementation of the social health insurance reform which has stalled for over many years. The reform needs to tackle the financial risk protection discussed above, but it should also tackle other system performance problems, such as, reforming provider payment methods to encourage cost containment, and improve efficiency and quality of care. Obstacles to this new health coverage are complex:

- lack of information system on part of the social security funds needed to analyze and manage health expenditures;
- lack of experience with being an effective purchaser of care (including, but not limited to, a lack of experience with competitive bidding, contract management and monitoring of quality of care);
- insufficient actuarial capacity and authority to create a package of benefits/ services that are actuarially sustainable;
- fragmentation of the social security system, reflecting the existence of two different social security funds: Considerable inefficiency has resulted from the dual current

management systems and any health insurance reform would need to include the merging of the different insurance funds; and

- Lack of private health insurance markets: the high proportion of private expenditures indicate a potential demand for private insurance. However, gaps in the regulation of private insurance markets make them unsustainable due to large information asymmetries[20].

Social insurance programs: trends, eligibility, benefits, contributions

- The social insurance is described here following the regime implemented under the two social security funds and currently unified in term of the CNAM. The social security (SS) provides health coverage for professional and no-professional health care risks. It concerns coverage for private activities (CNSS) and State civil servants (CNRPS). Scope and forms of SS services vary then, according to the mode of affiliation. The coverage rate is closely 100 % for civil servants and near 90 % for private employees.
- Only insured by the CNSS are allowed to receive health care at its polyclinics. The benefits of SS services can use public facilities given their payment of a moderating ticket. They use private facilities only for same diseases defined under the particular convention (cardio-vascular diseases, renal dialysis...).
- Health financing contribution of SS is largely devoted to public sector and takes several forms as detailed in paragraph 4.2.1.3.

Private insurance programs: trends, eligibility, benefits, contributions

- Dealing with private insurance expose to a deep lack of information especially in matters of coverage, contributions and benefits.
- Private health insurance (insurance group) was adopted by same public and private firms, in addition to social security enrolment, in order to allow accessibility to private sector, using reimbursement mechanisms. Employers contract insurance for all employees, as a complement of the social insurance, but in fact private insurance give a coverage that replace the observed failure of social security schemes (very limited access to private sector, low rate of reimbursement on private sector, lack of free choice...).
- The contract-group is made similarly to other insurance contracts: it is financed by co-contribution of employers and employees related to wages (it varies from 4 to 7% of wages) and limited reimbursement.
- The mutual practise the same kind of coverage, but are not for-profit organisms. Private insurance claim to lose money on this type of insurance but they do not wish to give up this sector which enables them to get other types of insurance from firms.
- In the future, in the health insurance reform context, private insurance will manage the complementary regime, while CNAM driving the mandatory regime.

6.4 Out-of-Pocket Payments

The data available on out of pocket payments is obtained from national survey on budget and consumption. This survey[21] gives the following results:

- Private sector absorbs a lion share of household health expenditures (87.3%). This result can be explained by the subsidizing care provided at public and para-public

health facilities and the very limited coverage of health services provided at private facilities, and the too lower rate of reimbursement.

Household health expenditure according to ownership facilities

Public Facilities	Private Facilities	Para-public Facilities	Total
9,9%	87,3%	2,8%	100,0%

Source: Arfa C. et Achour N. (2004)22

- Household expenditures are estimated for 55% of the total expenditure on "hygiene and care". 79% of this expenditure is allocated to drugs and ambulatory care.
- Since many years, private sector performs only 11% of the country inpatients days, 50 % of outpatient care, but absorbs the half of total health expenditures.

(Direct Payments) Public sector formal user fees: scope, scale, issues and concerns

User fees were instituted since 1983 and constitute ever since a financial resource in the running budget of health facilities. The table following below shows amount of user fees applied in the public sector to the social security insured patients and those who benefit from reduced tariffs, and their evolution from 1991.

Trends on user fees for the public hospital network

User Fees (TND)	01/01/91	03/01/93	08/22/94	02/18/98
Outpatient Care				
Primary Health Care Centers	0,4	0,6	1,0	1,5
District hospitals	0,7	1,0	1,5	2,0
Regional hospitals	1,5	1,5	2,0	3,0
Teaching hospitals	1,5	2,0	3,0	4,5
Inpatient Care				
District hospitals				
Medical specialties & Obstetrics	7	7	8	15
Surgical specialties	13	13	15	15
Regional hospitals				
Medical specialties & Obstetrics	7	10	12	20
Surgical specialties	13	15	18	30
Teaching hospitals				
Medical specialties & Obstetrics	7	12	15	35
Surgical specialties	13	18	20	40
Reanimation & Intensive care	====	====	30	60
Since august 22, 1994, social security insured patients were submitted, in addition to user fees, to pay 10% of official tariffs for examinations in lab or X-ray and other medical acts. Since February 2, 1998, this measure was extended to reduced tariffs beneficiaries and the amount was raised to 20% with a ceiling amount of 30 TND.				

Source: MoPH

For the poor population, as identified by social affairs departments, care in public sector facilities is free of charges while in absence of official coverage (or private insurance coverage), patients have to pay fees for services, according to official tariffs and nomenclature of medical and nursing acts.

Paying these fees, patients have access to medical and nursing care, drugs and other pharmaceuticals, and all complementary examinations such as medical imaging, laboratory tests and so on.

In order to contribute to a more affordable use of first line facilities, user fees are the lowest in the primary health care centers and increase higher in the secondary and tertiary levels.

(Direct Payments) Private sector user fees: scope, scale, type of provider involved, issues and concerns

Tariffs for medical practice are fixed by the medical associations (Unions and Order), based on official nomenclature, and defined as an interval between minimum and maximum levels. Some examples of tariffs of medical visits can be given:

- General practitioner: [15-25 TND]
- Specialist physician: [30-50 TND]
- Normal Delivery : [700-900 TND]

The new health insurance scheme will introduce fixed contractual tariffs for the medical care, after negotiation with medical associations and unions, implying CNAM and several government departments. Drugs' price is fixed by government's rules and is the same in all private pharmacies.

Public sector informal payments: scope, scale, issues and concerns

Informal payment cases in the public sector are especially brought back through complaints of patients or professionals, notably of the private sector. They are pursued and are punished by the ministry of health, but they continue to be exercised to a relatively weak scale.

Cost Sharing

There isn't a real policy for cost sharing as described in some countries. The main real policy is the financial coverage of health expenditures between Government and social security funds implying accessorily users' contributions.

Decisions about the level of user fees and protection mechanisms are made at the Central level of government implying departments of Health, Social Affairs, Finance and Interior. These decisions are applied for all Tunisian citizens everywhere.

When discussing user fees, the main objectives below are considered:

- Maintain and enhance financial access for the poor and vulnerable groups,
- Reduce inappropriate demand,
- Encourage consumer responsibility.

Government provides social assistance and health coverage to protect vulnerable groups of population:

- For the poor population, as identified by social affairs departments, care in public sector facilities of MoPH is free of charges.
- For the vulnerable group, not classified as poor and not covered by social security, the benefit of reduced tariffs is possible after justifying low income (in accordance with official minimum salary guaranteed by the law) and investigation by social affairs department.

In the health insurance reform to be implemented, explicit sharing between CNAM and the insured were identified, implying several government departments and associations such as unions and medical associations.

6.5 External Sources of Finance

External sources of financing are insignificant and decreasing [always under 1% of total health expenditures]. Loans contracted are integrated into the government expenditures.

The main use of this expenditure is:

- Family planning programs,
- Training programs within bilateral cooperation,
- Research activities in health facilities.

6.6 Provider Payment Mechanisms

Hospital payment: methods and any recent changes; consequences and current key issues/concerns

Payment modalities of the public facilities according to insurance schemes

<table>
<tr><td colspan="2"></td><th>Public sector</th></tr>
<tr><td rowspan="6">Insurance</td><td>Persons without insurance</td><td>Fees for services [Public tariffs]</td></tr>
<tr><td>Reduced Tariffs</td><td>User fees (Table 6-6)</td></tr>
<tr><td>National Fund of Social Security</td><td rowspan="2">- User fees (Table 6-6)
- Contractual billing system (convention between public regional and university hospital and social security funds)
- Billing based on negotiated tariffs for particular conventions</td></tr>
<tr><td rowspan="2">National Retirement and Contingency Fund (NRCF)

Mandatory regime

NRCF Complementary regime</td></tr>
<tr><td>- Fees for services (reimbursement)
- Billing based on negotiated tariffs for particular conventions</td></tr>
<tr><td>Private and mutual insurance</td><td>Fees for services (reimbursement)</td></tr>
</table>

Source: MoPH

Payment to health care personnel: methods and any recent changes; consequences and current issues/concerns

In the Public sector, all health professionals are civil-servants and paid on salaries, fixed civil servant department.

In the private sector:

- Payment of physicians and paramedical care is based on fee for services.
- Pharmacists perceive a beneficiary margin based on sold drug prices.
- Private clinics perceive fees for their other charges, to be added to medical charges.

7 HUMAN RESOURCES

7.1 Human resources availability and creation

Table 7-1 Health care personnel

Personnel (per 100,000 population)	1994	1995	2000	2004
Physicians	55	67	78	99
Dentists	124	96	76	53
Pharmacists	81	67	51	48
Nurses	-	-	-	-
Paramedical staff	294	289	294	298
Midwives	-	-	-	-
Community Health Workers	-	-	-	-
Others	-	-	-	-

Source: MoPH

- Human resource policy is focused on firstly training of general physicians to satisfy the health care needs as regards to basic health and secondly training of specialists. These second stages are often followed by the development of training capacity of university hospitals. The training policy includes also a training of different categories of ancillary.
  - Creation of training schools for nurses in most of governorates, to increase nursing staff in order to cover all the regions.
  - Incentive mechanisms were implemented for Tunisian medical specialists on prior areas, so we observe an increasing coverage in underserved regions, remaining insufficient, explaining the recruitment of foreign specialists. Financial incentives (pay supplements) are provided to specialized physicians some paramedical, when they accept to work in public facilities at prior regions. MoPH updates periodically the list of specialties and the priority regions.
- Officially, there are no norms, references or criteria used to staff public facilities to satisfy their needs of manpower.
- In the public sector, MoPH is the only employers and no recent changes have been made. All health personnel are governed by the national law of civil-servants. Procedures of recruitment and dismissal interfere have a limited role on affecting professionals. However employment is subject to national exam of recruiting general practitioner and specialist physicians, according to previous criteria of needs of region (general physicians) and specialties. There are no plans to downsize particular cadres in the public sector.
- Staff retention concerns only some specialist physicians, working in western and southern regions. After have been recruited by the public sector, they attempt to be transferred to coastal regions or to settle in the private one (internal brain drain). There is no specific strategy to face these specific difficulties, except new recruitment to substitute.

- When comparing the reward package of public sector health workers with those in the private sector, it is noted:
  - Paramedical personnel have a better situation in the public.
  - Physicians receive the highest wages, distributed for all civil-servants. They have a decent life with relatively high and guaranteed incomes but their wages remain on average lower than those observed in the private sector with instability and no advantages as retirement.
  - pharmacists and dentists earn much better their living in the private sector, but remain paid relatively well in the public sector (as well as the general physicians).
  - Private sector attraction is less and less significant and it concerns mainly specialists, pharmacists and dentists. It will be probably modified by the implementation of the health insurance reform.
- Productivity of teaching physicians and specialists in the priority areas allowed to regulated private practice is significantly affected in public facilities. It is the same for paramedical personnel having clandestine activities in the private facilities. The practice of lucrative activities not regulated is proscribed and punished, for all categories of personnel. Moreover, the productivity of human resources in different facilities is not monitored.
- Generally, it doesn't exist, on national level, official standardized mechanisms to evaluate personnel performances. However, these mechanisms are developed on university hospitals dealing with their mission of training and development of competencies. This evaluation is also made at basic health care level using mechanisms of supervision on local and regional level. In all cases, inspection and disciplinary proceedings are used to reduce aberrant practices; but did they have impact on the performances? Performances of staff are criteria used in :
  - personnel career evolution
  - Appointment and attempts to functional employments such as head of ward or nursing chief or administrative career.

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

- During the last two decades, proportion of physicians exerting at public sector is always the most important. Until December 31, 2000, 59 % of physicians exert in the public sector. The average annual growth of physicians, during the period 1981-2000 is 419 physicians per year. This growth is 246 physicians per year for the public sector and 173 physicians per year for the private sector. Between 1981 and 2000, staff of general physicians has more than quadrupled (4.5 time) for the public sector as well as for the private sector. Specialized physicians have been multiplied more than three times (more than twice for the public sector and more than 5 times for the private sector).
- No particular issues related to workforce characteristics [e.g. gender balance, culture or language] can be cited in terms of service use by vulnerable groups, especially the poor.
- No vacant posts in the public sector, in fact all budgetary posts devoted to employment are used in the same year.
- The ratio of general practitioners to specialists and how has it evolved over the decade is shown in the following table.

Trends of GP/Specialists physicians (1981-2004)

Years	General practitioners	Specialists physicians
1981	45%	55%
1985	55%	45%
1991	57%	43%
1995	54%	46%
2002	48%	52%
2004	55%	45%

Source: MoPH/Studies and Planning Department

- Data on health professional unemployment are unreliable. The possibility of working in the private sector is being always opened but undeclared. The real unemployment concerns superior technician's categories (nutrition, physiotherapists) and general physicians and pharmacists (numerus clausus). Data are not available and estimation is based on job's searching. Possibilities of reducing unemployment of health professionals are:
  - private sector and incentives for implementation,
  - incentive for private facilities to employ health professional,
  - health insurance reform – solvency of demand – can increase jobs),
  - systematic replacement of retired persons,
  - Export of health professionals (paramedical).
- Human resources training institutions are indicated in table 7-2 below. The MoPH have nineteen (19) nursing public schools in the majority of Tunisian governorates. The private sector is developing this activity (about 25 nursing schools are inventoried). Their training system is considered as of a good quality.

Table 7-2 Human Resource Training Institutions for Health

	Current		Planned		
Type of Institution*	**No of Institutions**	***Capacity**	**Number of Institutions**	**Capacity**	**Target Year**
Medical Schools	04	700 GP 350-400 specialists		-	
Schools of Dentistry	01	100		-	
Schools of Pharmacy	01	120		-	
Nursing Schools	19	700		-	
Midwifery Schools	05	500 health technicians		-	
Paramedical Institutes				-	
Schools of Public Health	00	-		-	

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

Source: MoPH/Studies and Planning Department

The main problems in this regard can be summarized as below:

- The medical training is "hospital-practice" oriented; general practitioners are not well prepared for their job, especially in public health.
- The formation (training) of specialists has a uniform duration (4 years) whatever is the specialty. For certain specialties, this length is judged insufficient.
- All the teaching is delivered in French, which limit the scope of communication with English or Arabic speaking countries.
- The nursing training is not oriented to nursing sciences but oriented to the medical approach of diseases.

Accreditation, Registration Mechanisms for HR Institutions

There's no national body responsible for accreditation of the training institutions. The institutions establishment is based on sector needs, estimated for the short and medium terms. It's jointly done MoPH and Ministry of high education and scientific research or only by the MoPH. Quality and relevance of the training is the responsibility of Ministry of high education, MoPH and scientific council of faculties.

Training standards and curricula are elaborated by medical schools and evolve gradually to a unique standard, not yet available or attorney, while MoPH, through its Pedagogic Center manage nursing curricula and training programs.

Continuing education is enough developed for physicians and weakly for the others categories of professionals- badly framed and organized and it depends on the initiatives of concerned departments or wards. Extent is often replying department needs of professionals and personal objectives, not necessarily related to performances' improving. Coordination in this issue is very weak even non-existent.

7.2 Human resources policy and reforms over last 10 years

Four periods can be distinguished in the national policy of recruitment of health professionals.

- **1956 – 1981:** Supply of all health professionals was less then the demand: itinerant teams and delegation of tasks to nursing team permit to face the medical shortage.
- **1982 – 1991:** Simultaneous increase in supply and demand for curative care during the implementation of primary health care programs. Recruitment was focused on nurses, midwives and general practice physician and specialists.
- **1992 –2001:** characterized by increase demand for specialized health care leading to target recruitment in prior areas and definition of prior specialties (1995) with financial incentives for some categories of health professionals.
- **2001 –?:** Limited Employment [economic and financial constraints] for all health professionals, except for specialists, while the demand of the public health sector is still high. National exam for GP recruitment was introduced and implemented and the number of budgetary posts decreases yearly.

7.3 Planned reforms

Three reforms, impacting human resources are planned.

1. First, the health insurance reform will have several consequences on human resources[23]:
   - New opportunities of employment in a private sector publicly funded by CNAM,
   - New distribution of health professionals between private and public sectors and within the public sector,
   - New role of GP as gatekeeper and new relationship with specialists,
   - Settings of evaluation and medical practice control,
   - Continuous training to improve quality of care and cost containment.
2. Reform of Medical Education was introduced in 2005, aiming :
   - Adaptation of programs, curricula and length to specialty.
   - Strengthening of GP training in accordance with the health insurance reform, especially by introducing the "family practitioner".
3. Reform of Nursing Education, introduced in 2006, aiming:
   - Adaptation to international standards aligning Bologna agreement, to promote quality of nursing care and open opportunities to export manpower abroad.
   - Recruitment of baccalaureate graduates and training at the high education schools.

8 HEALTH SERVICE DELIVERY

8.1 Service Delivery Data for Health services

Table 8-1 Service Delivery Data and Trends

TOTAL (percentages)	1990	1995	2000	2004
Population with access to health services	-	-	-	-
Married women (15-49) using contraceptives	-	-	65.5	62.2
Pregnant women attended by trained personnel	72.0	-	91.5	96.0 (2006)
Deliveries attended by trained personnel	71.3	-	89.3	94.5 (2006)
Infants attended by trained personnel (doctor/nurse/midwife)	-	-	-	-
Infants immunized with BCG	99.4	97.2	97.4	98.6 (2006)
Infants immunized with DPT3	91.0	92.0	97.0	98.0
Infants immunized with Hepatitis B3	-	83.0 (1996)	94.0	96.0
Infants fully immunized (measles)	88.0	91.0	95.0	97.0
Population with access to safe drinking water*	-	69.1 (1994)	-	83.4
Population with adequate excreta disposal facilities	-	39.5 (1994)		53.5

Source: MoPH and NIS

URBAN (percentages)	1990	1995	2000	2004
Population with access to health services	-	-	-	-
Married women (15-49) using contraceptives	-	-	67.0	-
Pregnant women attended by trained personnel	-	-	96.8	-
Deliveries attended by trained personnel	-	-	97.5	-
Infants attended by trained personnel	-	-	-	-
Infants immunized with BCG	-	-	-	-
Infants immunized with DPT3	-	-	96.8	-
Infants immunized with Hepatitis B3	-	-	-	-
Infants fully immunized (measles)	-	-	-	-
Population with access to safe drinking water	-	-	-	-
Population with adequate excreta disposal facilities	-	-	-	-

RURAL (percentages)	1990	1995	2000	2002
Population with access to health services	-	-	-	-
Married women (15-49) using contraceptives	-	-	62.6	-
Pregnant women attended by trained personnel	-	-	84.2	-
Deliveries attended by trained personnel	-	-		-
Infants attended by trained personnel	-	-	78.5	-
Infants immunized with BCG	-	-		-
Infants immunized with DPT3	-	-	95.0	-
Infants immunized with Hepatitis B3	-	-		-
Infants fully immunized (measles)	-	-		-
Population with access to safe drinking water	-	-	80	-
Population with adequate excreta disposal facilities	-	-	26	-

Source: MoPH

Planning is limited to the public facilities at all network level (see section 3). The distribution of infrastructures is defined regarding population's needs for curative care and preventive coverage of health programs. The private sector does not obey any national process of planning.

The only process for certifying needs before the installation and technology is that which governs the creation of haemodialysis centers and the installation of the heavy equipment, submitted to certification off needs. The MoPH publishes and revises regularly deployment standards of the heavy equipment, on the basis of which, the investors formulate requests, examined by a commission implying others departments sitting at the MoPH. Also, the installation of retail pharmacies (Day's or night working) is submitted to numerus clausus according to ratio of population, regularly reviewed. Only MoPH can give authorization, based on waiting list of pharmacists. Apart from these particular cases, installation of health professions in the private sector is free and not restricted. In the public sector, deployment is subject to national process of planning and the annual budgets.

All Health facilities, especially inpatient ones, should respect some technical and safety requirements to do their activities. The respect of these requirements is regularly monitored from various State departments (MoPH, Civil protection, municipality services…).

Capital investments are funded and controlled by:

- State for public facilities (investment budget), without differences between in hospitals and primary care facilities.
- National Social Security Fund for its ambulatory polyclinics
- and private's initiatives for private sector. It's separated from reimbursement delivery. For private sector, bank's credits are used to invest on health facilities. There are no public private partnerships for investment in capital facilities.

Access and coverage

Access to primary care:

95% of population have access to health facilities within at least 5 Km distance. In addition, in the public sector, the only valid restrictions are related to financial contributions that citizens must pay to get curative care (user fees). All the personal care with preventive character is freely delivered to all Tunisian citizens: immunization, - tracking examinations - family planning services - treatment of endemic diseases [tuberculosis, STD-AIDS ...]). However, all delivered health care on the private sector is subject to payment.

Access to secondary care:

Access to specialists is direct for ambulatory care delivered at primary health care centers, in particular in the urban centers which offer certain categories of specialized ambulatory care, such as pediatrics, gynecology-obstetrics, ophthalmology and ORL.

For medical emergencies, patients can reach all public levels of care, without any restriction.

Elsewhere, patients examined at the first line are referred to specialists' physicians in hospitals where it's decided to provide ambulatory care or hospitalization. In this case the patient may choose the reference facility but in general does not choose the doctor. This passage by the general practitioner, become of use, although that it is not obligatory in a lawful way, shows the significant role played by the general practitioner in primary health care centers. The referral pathway in the public sector is based on GP as first point of access to the health care system. However, this die is always respected, neither by the patients, nor by care facilities.

The access of the citizens to in the private sector is direct. It is subjected to no constraint and the patient has the whole freedom of choice of the doctor. He also chooses the private medical facility if a hospitalization is required. GP gate keeping non-existent in the private sector, will be gradually set up within the framework of the health insurance reform, but strongly disapproved by the medical community.

The patients' referral system in the public sector has some problems:

- a very high confidence on capacities and competence of specialists is part of Tunisian culture,
- the low capacities of diagnostics and treatment on the majority of primary health care centers,
- the amalgam of proximity and reference missions of university hospitals where professionals usually complain about the extent of ordinary care that they provide regarding the possibility of providing this same health care at in lower levels facilities. It is especially the problem of big cities that haven't intermediate level facilities between primary health care centers and university hospitals.

Overall, the distribution of primary health facilities and physician health can be considered as relatively balanced through the country. However, the number of physicians is higher in urban area than rural area. Until December 31, 2004, at the public sector, in particular at first levels, we have:

- 1632 physicians from which 366 are working at local hospitals (22.43%) and 1266 at the primary health care centers (77.57%). The number of inhabitants per physician varies from 9331 to 4024 according to regions, with an average of 6073 per physician.

- 248 dentists with a not homogeneous geographical distribution: It varies from one dentist at the governorate of Zaghouan to 26 dentists for Nabeul, 22 for Sousse, 20 for Sidi Bouzid and 18 for Monastir.
- A Total of 106 pharmacists going from zero pharmacist in governorate of Tozeur to 13 pharmacists at Monastir. The number remains very weak as compared to the number of health districts (202) and it doesn't cover the totality of local hospitals.
- 11 380 paramedical which concern all specialties and it give one paramedical professional for 871 inhabitants (per capita).
- Radiology and laboratories equipment as well as dental chairs are implanted essentially in urban areas and particularly at local hospitals level.

8.2 Package of Services for Health Care

Tunisia never explicitly defined package of health services. In public sector, all citizens have access to all categories of care (diagnosis, treatment, prevention, health promotion, rehabilitation, mental health, palliative care, accident-related care...). Nevertheless, the refund regime (complementary insurance) of the NRCF limits the access to care to only long term diseases and surgical interventions and by annual ceilings of refunding. Private insurance regimes make the same with the restricted refunding, fixed at the contracts of adhesion.

In the public sector, only medical assisted procreation is fully paid and it is not covered by any insurance systems. Occupational health care and prevention is covered free for all employees, financed by employers within medical services of labor. Job related accidents and occupational diseases are insured by social security bodies: care is free for all patients in this case, both in public and the private sector.

In absence of a defined benefit package, decisions about benefits are made using sanitary legislatives and rules, decided by the chamber of deputies and government departments: health care coverage to all citizens with regard to their enrolment to social security funds or assistance regimen. No explicit official decision of rationing is made, but patients' can appeal against availability and affordability of services using newspapers and complaints.

The current setting up initiative is related to health insurance reform: All social insured persons will have straight to basic coverage of all kinds of morbidity, through a unique and obligatory regime which will cover only a part of different components of health care fees: consultations, exploration acts, medicines, hospitalization. The social insured persons can get a complementary insurances scheme to cover fees not include into the obligatory regime.

The quasi totality of population benefits currently from a total coverage, through the social health insurance or through regimes managed by the State. Perspectives of development of this coverage are limited and oriented according to two major issues:

- An improvement of social security coverage extended to the maximum of population,
- A levelling (setting up) of the public sector whose services must be improved to satisfy the needs for the population on the various levels of the pyramid for care.

As, mentioned in the beginning of section 8.1 some measures are in place to regulate and control deployment of new technologies and drugs sale. But, steering the appropriate usage of technologies (heavy equipments) is weak; the MoPH examines with sporadic way the heavy equipment use at public facilities. No particular action is

addressed to the private sector. These measures are ineffective, because not based on opposable and non-systematic technical reference frames.

8.3 Primary Health Care

For the primary health care, patient chooses the physician in the private sector but not in the public sector. Patient go to the nearest primary health centre from where he can be transferred, if needed, to the local hospital located at the same health district.

At these facilities, patients have access to very varied services, covering the totality of primary health needs.

- Curative care of general medicine through external consultation as well as hospitalization at local hospitals;
- Deliverance of medicines for preventive and curative objectives;
- Maternal health care: supervision of pregnancy, simple deliveries, neonatal resuscitation without complications, postnatal consultation, prevention of anaemia, family planning and so on...
- Infants health care: prevention and treatment of diarrhoea and respiratory infections, supervision of growth, vaccination defined on the national extended program of immunization (tuberculosis, diphtheria, tetanus, poliomyelitis, measles, viral hepatitis), prevention of domestic accident;
- Prevention and treatment of chronic diseases: diabetes, arterial hypertension ;
- Mental health;
- Health Education;
- Specific health care to handicapped in specialized units (19 units), grouping physicians, physiotherapy technicians, social workers.

District hospitals are publicly opened 24 Hours; in particular for emergencies, whereas the primary care centers function only during the day. However, it is necessary to specify that the presence of a doctor in the centers is not every day regular in all the centers. To December 31, 2004, on the 2067 primary care centers, only 1995 offer medical consultations (96.51%). Among these centers 45,38% offer a daily consultation, 50,13% offer medical consultations at a rate of at least two days per week and 21 centers of health (< 1%) provide medical consultations for one times per week to one times per month.

Rhythm of medical Consultation in the primary care centers

Rhythm of the medical consultation	Number of primary care centers'	Percentage
6 days/6	412	19,93 %
5 days /6	96	4,65 %
4 days /6	59	2,85 %
3 days /6	128	6,20 %
2 days /6	341	16,50 %
1 day /6	938	45,38 %
1 day /12	19	0,91 %
1 day /24	2	0,10 %
Zero consultation	72	3,49 %
Total	2067	100 %

Source: MoPH- Basic (Primary) Health Care Department

The no daily availability of physician in centers is strongly criticized by population. It contributes to lack of citizen confidence towards these facilities and decreases their credibility. Reproductive health services, like family planning are provided by 1893 centers (91.58%) by well trained midwives. For 174 centers, these services are not provided.

Rhythm of reproductive health services at the primary care centers

Rhythm of consultation	Number of centers	Percentage
6 days/6	301	14,56 %
5 days /6	24	1,16 %
4 days /6	31	1,50 %
3 days /6	39	1,89 %
2 days /6	125	6,05 %
1 day /6	1136	54,96 %
1 day /12	191	9,24 %
1 day /24	46	2,22 %
Zero consultation	174	8,42 %
Total	2067	100 %

Source: MoPH- Basic (Primary) Health Care Department

Infrastructure for Primary Health Care

Primary Health Care is provided:

- In the public sector by directly employed providers, in primary health care centre publicly owned and hospitals.
- In the private sector, by self employed (independent) health professionals.

Health care personnel involved and its roles and missions are shown in the following table below.

Roles and functions of health care professionals by area

Health care personnel involved	URBAN	RURAL	Roles and Functions
General practitioners	++	++	Curative medical care Preventive care
Specialists Pediatricians Obstetricians Others		+	
Dentists	+		Dental care
Pharmacists	+		Drug provision and stock management
Midwives	++	++	Reproductive health and family planning Preventive care
Dietitians	++	+	Nutritional education and counseling
Nurses	++	++	Preventive care Curative care
Workers	++	++	driving, cleaning ...

Source: The authors according to their experience

Public/private, modern/traditional balance of provision

Such as defined in the guide of this health profile [the first point of contact of the health system with the individual consumer and includes general medical care for common conditions and injuries], primary health care centers can public or private, while in

Tunisia the appellation PH Center is devoted to public sector where these facilities are state owned. GP cabinets, personal ownership of physicians, are considered private PH centers in the private sector.

In the public sector all facilities provide primary health care services according to their main activities related to their level:

- Level I- Primary health centers and local hospitals
- Level II- Regional hospital for proximity population and for certain activities, like vaccinations, reproductive health services, tracking acts…
- Level III - Universities hospitals, general or specialized

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

We observed over the last ten years progressive changes of primary health care, related to demographic and epidemiologic changes: from focusing on communicable diseases, we introduced diagnostics and preventive programs for chronic and non communicable diseases, and focusing on family planning, integrated programs of reproductive health were implemented at the majority of health facilities.

Furthermore, the strengthening of medical density has contributed to increase medicalization of primary health care, notably in the public sector. Some PH centers, located at urban areas (agglomerations) have increasingly a technical exploration plants and equipments (X-ray and Lab.) and specialist physicians.

The network system of primary health care is regularly reinforced by implementation of new PH centers (see table above) with a voluntary reducing implementation of local hospital, especially for their hospitalization capacity.

Numbers of PHC Centers (1970-2004)

Year	1970	1980	1996	2000	2004
Number of PHC Centers	435	765	1841	2008	2067

Source: MoPH- Basic (Primary) Health Care Department

Public sector: Package of Services at PHC facilities

All available primary health care is offered at public primary facilities, without restriction. There's no defined package (refer to section 8.2).

Private sector: range of services, trends

All available primary health care is offered at for profit private facilities, without restriction. There's no defined package. There are no incentives for private sector to function in disadvantaged area.

Trends on privates facilities providing primary health care

Private Health Facilities	Number 1990	Number 2004
Medical Cabinets	1717	4641
GP Cabinets	1028	2635
Specialist Cabinets	689	2006
Dentist Cabinets	625	1125
Paramedical Cabinets	334	1006
Pharmacies	1055	1530

Source: MoPH

The private sector contributes certainly to promote the provision of primary health care, but there is no information available to analyze its activities. We argue its contribution by the trends on facilities over the last ten years.

Referral systems and their performance

Basically, health care centers should transfer patient to the local hospital, located at the same district or to the reference local hospital. Several local hospitals of the same governorate refer to the regional hospital of the governorate or to its known reference, if there's more than one regional hospital. Regional hospital refer to university hospitals regarding geographical reference criteria (North: Tunis, Centre: Sousse and Monastir; South: Sfax).

In urban non-university agglomerations, the regional hospital has double functions, as regional and local facility. At the university urban area, the teaching hospital has three functions: in addition to its specific missions, it has also activities of regional and local facilities. The PHC centers can then refer directly to university or regional facilities. Obviously this schema is not respected for emergency needs.

The referral mechanisms described above are shown on regular rules and texts, but aren't formally identified as obligatory reference mechanisms. It's devoted to insure the continuity of care, especially for chronic pathologies and some transmissible diseases, such as tuberculosis, but the feedback information is a major weakness of the referral system, although MoPH often remind the importance of these mechanisms.

Utilization: patterns and trends

Data available for consultation frequency show that utilization of urban primary health centers is higher than rural centers.

For the year 2004, 8 539 090 consultations have been realized at different primary health centers, distributed on 271 304 sessions which gives an average equal to 31 patient per session. This average number hides regional disparities, weekly rhythm of activities and according rural or urban centre. The number of treated patients by only one physician per sessions can reach 100 for some centers. The average number of consultation by citizen is 0.86 (year 2004).

Differences in utilization between public and private, if any, can't be evaluated facing the unavailability of data private sector, notwithstanding differences on activities, availability, practice and geographic location of the PHC facilities.

Current issues/concerns with primary care services

The major issues with personal health care services are summarized in the questions below:

- How better adapt the benefit of services to the evolution of morbidity and to include a provision more adapted to non communicable diseases?
- How to ensure continuous availability of medicines for curative use?
- How to warrant a sufficient and adequate financing for primary health services?
- How to improve the quality of primary health care, on the base of performance indicators regularly followed?
- Given the improved accessibility to private facilities (reform of health insurance), how to insure the durability of public sector provisions and benefits?

Some tracer conditions can inform about technical quality of care at the first level of care:

- Mechanisms of obligatory declaration of communicable diseases are implemented and regularly followed for all levels of public facilities. The adherence of private sector remains and need to be improved.
- Tuberculosis treatment (2005): 97.5% of patients have behaved to term their treatment. Since, the DOTS strategy, the proportion of treatment observance has clearly improved, regarding the decline of the rate of failure, going from 15.2% in 1993, to 5.3% in 1998 and to 2.1% in 2004 (Source : MoPH / Basic health care department)
- Availability of drugs in the PH centers: punctual inquiries and surveys estimated the demand satisfaction rate to 50-60%.

Planned reforms to delivery of primary care services

There's no specific reform for primary health care. Nevertheless, the country is focusing on implementation of health insurance reform which will allow social insured choosing between public and private sector. The impact of this reform will be firstly seen on the first level public facilities and will upset its utilization and performances. The major challenge is how to maintain the strong elements, given competitive context, especially by implying these facilities at various national programs under a coherent and integrated approach. General discussions are elaborated for the public sector, but no approach is currently envisaged.

8.4 Non personal Services: Preventive/Promotive Care

Accessibility of the population to improved water is indicated in table below.

Table 8-7 Households according to the principal drinking water resource

	Percentage (%)	
	1994	2004
Water of tap	69,1	83,4
Private resource	13,0	6,4
public resource	14,2	7,9
Others	3,7	2,3
Total	100,0	100,0

Source: NIS (General Census 2004)

Water of tap is provided by a public society: National Company of Water Exploitation (SONEDE).

Accessibility of the population to improved sanitation is shown in the table below; connection of the residences to the sewerage system is maintained by a public body: National Office of Sanitation (ONAS).

Connection of the residences to the sewerage system

	Percentage (%)	
	1994	2004
Communal	59,8	75,4
Non communal	1,8	4,8
Total	39,5	53,4

Source: NIS (General Census 2004)

According to general census of 2004, updated on September 2005, distribution of the residences according to the mode of drainage worn (sanitation facility) is as following:

Residences according to drainage worn (sanitation facility) -2005

ONAS	52%
Septic tank	30%
Gutter or Nature	16%
Non-declared	3%
Total	100%

Source: NIS (General Census 2004)

Outside geographical barrier, to serve some isolated rural and feebly populated areas, the drinking water is financially accessible to the quasi totality of population.

In the same way, there is not problem of acceptability or expectation regarding in matter of sanitation.

Organization of preventive care services for individuals

Dealing with the transition context, some programs have been developed for the early detection of pathology:

- Diabetes and Arterial Hypertension: covering all the whole country
- Tracking of the cancer of cervix uterus, to reduce the evolutionary forms.
- Breast cancer and introduction of the mammography into some areas, with for objective the reduction of the size of the breast tumors at the diagnosis.
- These activities of early detection of cancer are exposed to difficulties related to shortage of well trained personnel.

Environmental health

Organization bodies having responsibility for environmental health, food safety, and sanitation are:

- Ministry of Environment (ONAS)
- Ministry of Interior and local development
  - Local and public collectivity (municipalities)
  - Municipal Police
- Ministry of Commerce (Quality and consumer protection department)
- Ministry of Industry (Agroalimentary industry department and the Technical Centre of Agroalimentary industry)
- Ministry of Tourism (Offices of Hydrotherapy and Tourism)

To ensure the linkage with the health system, the MoPH has a department of hygiene and environment protection which ensure the necessary interface with all other organisms; having in totality or partly a relationship with environmental health. Otherwise, this collaboration between these departments is strengthened through the national agency for environmental control of the products (MoPH agency) and the National Institute of Standardization or the Technical Centre of Agroalimentary Industry). In this context formal mechanisms are in place and functioning between all these departments[24].

Health education/promotion, and key current themes

Occupational health, managed by Ministry of social affairs ensures a risk protection of employees, especially in the industrial activities. This activity, mandatory by law, covers all the employees. Medical services, fully financed by employers, carry out all the preventive and promotive health programs. Nevertheless, difficulties are described to cover the agricultural employees.

MoPH carry out several classic activities of health education, collaborating with the national media (television) about many issues such as immunization, STD_AIDS, reproductive health smoking. Otherwise health education take place in all health care facilities, and extended to specific activities such as anti-tobacco consultations implemented in some hospitals.

Pupils and students in schools and universities are specially targeted by health promotion programs conducted by the MoPH department of scholar and university health. All the schools and universities are covered by this department's programs: medical visit, immunization and health education.

Programs of life-style promotion are developed by municipalities to reach the objective of having one exercise trail at least in each municipality by the year 2009 to offer best conditions for all citizens to practice daily physical activities.

Changes in delivery approaches over last 10 years

Changes in delivery approaches, if any, are related to morbidity changes: larger attention is given to non communicable diseases and life style. Otherwise, non-significant changes can be noted.

Current key issues and concerns

Out of matter of primary health care, the principal current concerns can be summarized as follows:

- Maintain the performances acquired and to reinforce them in the areas which still record reliable coverage rates as regards motherhood and childhood: maternal mortality, antenatal coverage and assisted childbirth.
- Adapt the primary health care programs and intervention modes to the requirements of the health insurance reform, by reinforcing the private sector integration in the health policy and its implementation.
- Develop programs adapted to the morbidity evolution and the increased prevalence of the degenerative diseases which take account of the resources available for the whole health system in its several levels. These programs have to integrate promotion, risk protection, early tracking and affordability of adequate treatment. A particular attention will have to be given to mental health.
- Mobilize adequate financing necessary to the first line operations in order to likely improve its services' quality and to promote its attractivity and its credibility.
- Develop the health system awareness to face the emerging diseases and with the risk of reintroduction of certain eradicated diseases.
- Revise and adapt the missions of the structures and organizations concerned, in particular those of the National Family and Population Office.

Planned changes

For the next five years, no planned change is formally envisaged. However the questions indicated above are in the course of discussion and could lead to changes.

8.5 Secondary/Tertiary Care

Secondary and tertiary care services are organized as mentioned in the earlier sections 4.2 [Organizational structure of public system, Health care provision in the public sector] and 4.3 [Private health care system] and summarized in section 4.4 [Organization of health care structures]

Table 8-2 Inpatient use and performance

	1991	1995	2000	2004
Hospital Beds/1,000				
Teaching Hospitals (III)	0.90	0.87	0.82	0.80
Regional Hospitals (II)	0.63	0.61	0.58	0.57
Admissions/1000				
Teaching Hospitals (III)	2.87	3.13	2.85	3.01
Regional Hospitals (II	2.42	2.52	2.38	2.31
Average LOS (days)				
Teaching Hospitals (III)	8.3	7.6	8.0	7.0
Regional Hospitals (II	5.5	5.2	4.6	5.3
Occupancy Rate (%)				
Teaching Hospitals (III)	75.0 (1992)	75.0	75.5	77.0
Regional Hospitals (II	57.2	58.8	51.7	53.6

Source: MoPH- Planning & Hospitals' Departments

All the public hospital beds indicated in the table 8-2 above are beds in acute hospitals and there of the sole psychiatric hospital in Tunisia (Razi hospital -640 beds). The hospital sector doesn't include long term care institutions yet.

Specialized ambulatory medical services are provided by:

- outpatient departments of public hospitals, provided according to the integrated referral system, by directly employed physicians.
- specialists working in their own practices (the main form) and polyclinics of specialties in the private sector

Inpatient operating indicators, shown in table 8-2, indicate the following trends:

- Decrease of average length of stay in the teaching hospitals where a high occupancy rate is registered. These indicators presume a better efficiency in this level explained by human resources availability and the development of medical equipments and financial resources. In addition this level of hospital care benefited of a special World Bank project to develop management abilities and staffing.
- Low average length of stay and occupancy rate in the regional hospitals. These trends can be explained by the insufficient number of medical staffing, unable to assure all kinds of care needed and preferring refer difficult cases to teaching hospitals. Otherwise, in some regions an over supply is registered in governorate of Medenine: four regional hospitals -712 beds- for 433 000 inhabitants, compared to Governorates of:
  - Kairouan: One regional hospital – 331 beds- for 546 000 inhabitants
  - Kasserine: One regional hospital – 283 beds- for 412 000 inhabitants).

Hospitals: Main categories, Functions and Distribution

Public hospitals categories		Functions	Distribution
District Hospitals (circumscription)		Normal Delivery General medical care Emergencies	Cover one or more administrative delegations
Regional Hospitals		Specialized medical care (basic specialties) Act as district hospital with the proximity (closeness) population	At least one by governorate, except in the academic regions
Teaching Hospitals (bound to the existence of medical school)	**General**	Act as district and regional hospital with the proximity (closeness) population High specialties delivery	North : Tunis Center: Sousse + Monastir South : Sfax
	Single specialized	Maternity, Cancer, Pediatrics, Neurology, Orthopedics, Ophthalmology, Nutrition, Psychiatry, Lung diseases.	Only in Tunis District

Public/private distribution of hospital beds

The hospital sector is essentially public, being a matter for the Ministry of the public health (85% of the hospital beds). The non-profit private sector doesn't exist.

The geographical distribution of secondary and tertiary hospital beds is indicated in the following table, related to the population of the six economic regions of the country.

Population and Hospital Beds according to the socioeconomic regions

	2005 Population (%)	2005 Regional Hospital Beds	2005 Teaching Hospital Beds	Total II & III Hospital Beds
Tunis District	23%	2%	60%	**34%**
North East	14%	20%		**9%**
North West	12%	19%		**8%**
Center East	23%	13%	40%	**28%**
Center West	14%	12%		**5%**
South East	9%	20%		**9%**
South West	6%	14%		**6%**
Total	**100%**	**100%**	**100%**	**100%**

Source: MoPH- Planning & Hospitals' Departments

Governorates of Sousse, Monastir and Sfax are in the same center east economic region while Sfax is considered, for the health system as southern region. So teaching hospital beds in this region can be learned, in the table below as follows:

- North : Tunis 60%
- Center: Sousse + Monastir 24%
- South: Sfax 16%

A recent survey (2002) has been driven by the ministry of the public health and the national institute of public health to measure the perception of the technical and clinic quality in the regional hospitals by users themselves. This survey valued the satisfaction discerned by 4130 patient according to the following aspects: reception, the comfort of

the hospital room, expertise of the staff, care received, patient-nursing relation and ambulatory care.

Results of the quality health care survey (2002)

Satisfaction with emergency care	Rather satisfied	Very satisfied
Reception	51,5 %	4,4 %
Completion of administrative formalities	47,7 %	4,0 %
Relation with care providers	53,3 %	4,0 %
Waiting period for doctor	35,0 %	2,6 %
Length of medical consultation	41,7 %	1,8 %
Competence of Doctors	58,4 %	4,9 %
Doctors' explanation	39,6 %	2,3 %
Laboratory procedures	56,8 %	2,4 %
X-Ray procedures	57,6 %	2,4 %
Satisfaction with outpatient care	Rather satisfied	Very satisfied
Completion of administrative formalities	37,1 %	3,1 %
Waiting time	22,9 %	1,4 %
Politeness of agents	55,0 %	2,9 %
Length of medical consultation	41,3 %	1,8 %
Competence of doctors	65,1 %	4,4 %
Doctors' explanation	43,4 %	2,7 %
Laboratory procedures	54,8 %	2,9 %
X-Ray procedures	54,8 %	3,0 %
Satisfaction with inpatient care	Rather satisfied	Very satisfied
Information before the hospitalization	33,8%	-
Reception	56,0%	8,6%
Completion of administrative formalities	50,0%	7,5%
Waiting time	42,8%	5,2%
Rooms comfort	51,0%	-
Nurses attitude	17,6%	2,3%
Competence of doctors	69,9%	10,7%
Doctors' explanation	48,6%	6,5%
Patients' support (aid)	70,0%	-

Source: National Institute of Public Health

Regional hospitals do not offer many of the basic medical specialties. Even when some services are offered, they are perceived to be of low quality by the population who skips that level of care to seek treatment in the more costly teaching hospitals.

Key issues and concerns in Secondary/Tertiary care

- Primary health care constitute the main point of all the care system, notably in its public component. Thus, relationship between the hospital sector and primary health care structures are very strong. In the setting of primary health programs of action are conceived with the hospital physicians, also implied in their assessment.
- Patient's complaints are gathered in dedicated boxes in the hospitals and in citizen relation office in MoPH. They are used to solve some acute problems.

- In absence of patient safety agency, medical errors are not recorded, except in managing cases of patient complaints. To improve patient safety, MoPH is reviewing its strategy to prevent cross infection in hospitals.
- With regard to adverse drug reactions, drug vigilance centers (national and regional pharmaco-vigilance centers) manage adverse drug reactions reported by patients, doctors or pharmacists.
- In terms of user advocacy, some hospitals employ "social workers" to support (help) some users with external bodies (social affairs, justice, social security ...). One NGO (consumer defense) operate as member of board of teaching hospital.
- Direct-to-consumer advertising of drugs, medical devices or doctors' services permitted is not allowed.

Reforms introduced over last 10 years, and effects

The major changes that occurred in recent years are related to provision of health services and in to financing mechanisms.

Provision of health services: There were efforts to improve provision of care at the primary and tertiary health care levels. At the tertiary care level, major organizational and management reforms were introduced in teaching hospitals. The July 1991 law has changed the legal status of teaching hospitals into autonomous entities both administratively and financially - "établissements publics de santé" (EPS). Although autonomy is not total for some aspects such as human resources, experience to date demonstrates a marked improvement in the EPSs' performance: activities have increased by 15-20%, particularly in the outpatient department with no significant increase in personnel, and the average length of stay has dropped from 8.5 to 7.5 days. A number of management tools were introduced such as management procedures manual, accounting and financial management system, and a computerized management information system. A new billing system for inpatient and outpatient services has been introduced using a simplified version of a Diagnostic Related Grouping system. This newly piloted payment mechanism and billing system have enabled the hospitals to increase their revenues.

Financing mechanisms: A reform of the health insurance funds under the Social Security System was decided by the Government, based on the following principles: basic coverage combined with optional supplementary coverage; and equal access to all providers. The tariffs applied in public hospitals were revised to bring them more in line with the real costs of services. The social security funds have entered into agreements with public hospitals which allow for lump-sum payments for the services provided to both outpatients and inpatients with social insurance coverage, established on the basis of cost studies. This has also made it possible to increase the contributions of the social security funds to the hospitals' budgets.

Planned reforms

The health insurance reform and all its implications on the public hospitals and the private sector are currently implemented.

8.6 Long-Term Care

This provision mode is not still identified like a component of the care system. Some social services offer services to the aged people and the disabled of all nature. They are weakly integrated to health services.

8.7 Pharmaceuticals

Public reimbursement of pharmaceuticals can be summarized in the following key points:

- In the public sector facilities, drugs are furnished by the primary health care centers and the hospitals;
- In the private sector, drugs are sold only in retail pharmacies.
- The price, unique every where over the country, is fixed for all the drugs between MoPH and Ministry of Commerce.
- All the drugs can be reimbursed by insurance bodies at their selling price.
- The health insurance reform will introduce new mechanisms and rates of reimbursement.

The maximum rate of the gross margin applicable to pharmaceutical products is fixed for wholesalers, all taxes included, to 8.7% of the purchase price.

For the pharmacists (retail selling), rates of the raw margin applicable pharmaceutical products are fixed, all taxes included, as follows:

- 42.9% of the purchase price for products of which the price of purchase is equal or lower than 1,022 TND.
- 38.9% of the purchase price for products of which the price of purchase is between 1,023 TND and 1,596 TND.
- 35.1% of the purchase price for products of which the price of purchase is between 1,597 TND and 9 TND.
- 31.6% of the purchase price for products of which the price of purchase is superior to 9 TND.

Essential drugs list: by level of care

There's no official list of essential drugs.

Manufacture of Medicines and Vaccines

Local industry of medicines, with 28 units (2005), covers 45% of the local consumption and export for several countries.

Vaccines are currently imported, waiting the development of Pasteur Institute Capacities to introduce vaccine production.

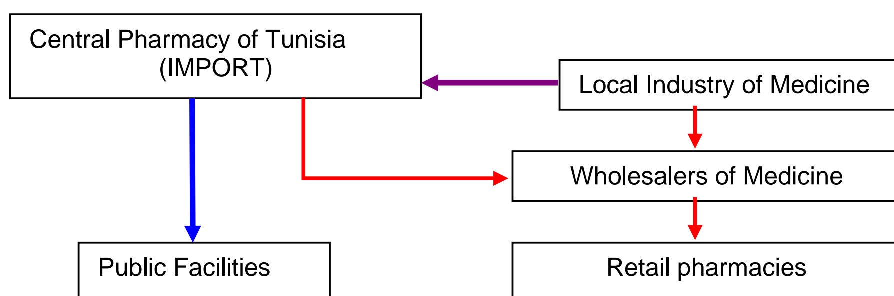
Regulatory Authority: Systems for Registration, Licensing, Surveillance, quality control, pricing

- A national regulatory authority is managed by the MoPH, through its drug and pharmacy unit coordinating its activities with the national lab of drug control, the pharmacy inspection unit and the vigilance drug centers. This unit manages also many technical commissions with various medical and administrative expertises.
- This unit is the only authority habilitated on the authorization or the withdrawal of the merchandising of drugs and pharmaceutical products.
- It is also a WHO collaborative center.
- Price is fixed by government, controlled through a complex system, since the local production or the import. This scheme is the same for "princeps" or generic drugs.

- Only some products (fixed as counsel products) can be sold over-the-counter by the pharmacists. The majority of medicines are submitted to medical prescription.
- The pharmaceutical sector is regulated through several mechanisms:
  - National nomenclature of drugs, in which a specific nomenclature of public hospitals is identified;
  - No product can be commercialized if it not has previous authorization of market placement;
  - Prices are unique and fixed by government;
  - Installation of private pharmacies is restricted to the MoPH authorization and numerus clausus criteria. Mail-order and internet pharmacies aren't permitted;
  - Regulation of advertising of prescription drugs, not permitted for direct-to-consumer;

Systems for procurement, supply, distribution

The process of purchasing/ procuring pharmaceuticals is summarized in the figure below.



- Central Pharmacy of Tunisia, public body related to MoPH, is the sole entity allowed to import drugs for the country, dealing with international tenders. It sells local and imported products to private wholesalers and public facilities.
- Private wholesalers can buy drugs from the central pharmacy or directly from local manufactures, and sell them to private retail pharmacies.

Reforms over the last 10 years

No major reforms have taken place over the last ten years. However, two actions where implemented:

- Revision of numerus clausus rules to downsize population required to permit installation of private retail pharmacy.
- Reduction of wholesalers' and retail pharmacists' margins.

Current issues and concerns

- Drugs are approved for use and controlled as previously indicated in section 8.7.3
- Given the system of procurement, supply and distribution (section 8.7.4), availability of drugs is not a major concern for the country.
- No drugs are officially banned, but we refuse until now to introduce Viagra and similar.

- There is any evidence of availability of counterfeit drugs in accordance of the traditional surveillance mechanisms in place of the medicines' market.
- The most important current concern in the country is to maintain the mission, roles and activities of the Central Pharmacy of Tunisia, as unique importer of drugs. Other countries' experience with full liberalization of drug import enhance the wisdom that in similar countries, drug policy and procurement must be considered as strategic and governed by public and governmental bodies.

Planned reforms

The health insurance reform will introduce new mechanisms and rates of reimbursement of drugs (in accordance to a reference price fixed by CNAM). This will have a major influence on the activities of private pharmacists, on drug prices and prescription.

8.8 Technology

- Information Technology use decrease from the tertiary level to the secondary level to primary care where it is very weak. A national strategy is developed for the public sector and began in the teaching hospitals and extended to regional hospitals. During the next years, it will be extended to district hospitals and primary care facilities.
- Coordination in purchasing/ procuring IT systems is guaranteed for the public sector by a national body: Informatics Center of the Ministry of Public Health, mandatory technical reference for all public facilities for software as well as hardware. There is no regulation of IT in the private sector.
- Introduction of electronic medical records is experimented in some facilities and for some medical specialties. MoPH has under study to develop a standardized unique electronic medical record, in relationship with the health insurance reform.

Trends in supply, and distribution of essential equipment

Supply and distribution of essential equipment is driven by MoPH headquarters within its annual budget according to three approaches: replace the redeemed and depreciated equipment, purchasing for new health facilities and acquire new technologies.

- All equipment and medical accessories are sold by private agencies (stores) or/and represented in the country.
- All equipment of public facilities is financed by State budget and acquired according to defined regular procedures, without any difference according to the categories of health care facilities.
- The maintenance is insured by MoPH and hospitals employees (technicians) or by private technicians or equipments suppliers. There's also a national center of technical studies and bio-medical and hospital maintenance with three regional centers providing a consistent training, good conception and implementation of the national maintenance policy.

Effectiveness of controls on new technology

The law of sanitary organization provides a definition of heavy equipments submitted to preliminary authorizations. The list of these equipments is defined by decree of jointly Ministers of Finances, of Trade and of Public Health. The MoPH defines index of needs of the population for each type of equipment.

The following table indicates what heavy equipments are concerned and their public-private distribution (1995 – 2004). This list is essentially applicable for the private sector. For the public sector, the main regulation way remains the annual investment budget, all the more regional and teaching hospitals were excluded from the regulation through certification of needs.

Public/Private distribution of heavy equipments (1995-2004)

Equipments	1995		1997		2003		2004	
	Public	Private	Public	Private	Public	Private	Public	Private
MRI	1	0	2	0	3	5	4	6
CT-Scanner	7	20	8	29	15	54	20	54
Lithotripsy	3	3	3	5	3	12	3	13
Tele-Cobalt	1	4	2	6	4	5	4	5
Digital Angiography	nd	nd	2	9	6	10	6	10
Cardio-vascular Catheterism	4	1	7	4	9	10	10	10
Extra-Corporeal Circulation	4	nd	4	6	6	12	6	12

Source: MoPH- Planning Department (carte sanitaire)

Reforms in the last 10 years, and results

No major reforms have taken place over the last ten years, except some revisions of index of needs of the population for each type of equipment.

Current issues and concerns

- Numerous heavy equipments were installed, especially in the private sector without any regulation neither of their use nor their prescription. As result, misuse is likely expected. An evaluation system implying public and private facility is needed to help decision makers in introducing new technologies and equipments.
- How can the country follow (or resist to) the development rhythm of technologies in high income countries?

Planned reforms

An overhaul of the health and hospital information system is projected and currently under study. Its main objectives are:

- Update, modernize and integrate the full administrative and financial management system,
- Medicalize the management information in order to setting up unique medical records, shared by all health professionals.
- Use of demographic data that allows steady regular of health population needs.

Feasibility Studies have been achieved and a progressive setting up is anticipated, and waiting now for necessary financings.

9 HEALTH SYSTEM REFORMS

9.1 Summary of Recent and planned reforms

During its development, the Tunisian Health system has known important changes, related to both organizational and functional. These changes are obtained from several undertaken reforms at different levels, notably during 15 last years.

Been in crisis, an exhaustive analysis of health sector problems has been undertaken and new strategy has been implemented. This strategy encompasses the three following objectives:

- The continuously development of primary health care through a program to consolidate the provision of primary health services.
- The improvement of hospitals' inpatient care by reforming structural and institutional aspects of teaching hospitals.
- The reform of legislation rules related to private providers.

Major reforms in the public sector concerned the management and functioning modes of teaching and regional hospitals, associated with several measures devoted to the entire sector and the primary health care level.

In matter of insurance, an important reform will be progressively implemented since July 2007 and it is in the last phase of its preparation.

These reforms are at the same time pursued by a legislative reform encompassing the both private and public sectors. The main legislatives texts, rules and regulation are indicated in the following table.

Main legislatives rules in the Tunisian health system

Reference of judicial text	Content
Law n° 91-63 ; July 29-1991, relative to the sanitary organization and abrogating a law dating 1969 and its application texts	This law established general organization of the health system, the public and private facilities and their missions. It introduces two new measures : - creation of Public Health Establishments - organization of the hospitalization in the private sector
Decree n°93-1915 of August 31 1993, setting up facilities and specialties as well as norms in capacity, installation, equipment and personnel of private facilities. Modified by the decree n° 2001-1082 of May 14, 2001.	Setting up norms of infrastructure, equipment, professional and functioning for private clinics.
Ordinance of Prime Ministry of March 1st 1995, setting up the sanitary regions for according advantages to some particular MoPH personnel. Modified on 2003 and 2005	For the first time, the government introduces particular advantages to civil-servants physicians: specific allowances to specialist physicians (prior specialties) exerting in prior regions

Reference of judicial text	Content
Ordinance of the MoPH of 1996, setting up norms and indices needs in heavy material and equipment. Modified on June 22, 2000 and March 07 2003.	Introducing the certification of needs for heavy equipment and indices of needs.
Decree n°2000-2825 of November 27, 2000 relative to organization of health district.	Creation of health districts and it provide its organization and functioning.
Law n°2001-94 of August 7, 2001, relative to health establishments that provides their total health services to non residents.	In the perspective to promote foreign investments and health services export, this law allows the creation of off shore health care facilities.
Various acts completing the decree n°81-793 of June 9, 1981, relative to the MoPH headquarters organization.	Creation of : - Emergencies unit (2002) - Department of medical research (2002) - Department of quality of care (2002) - General Directorates of public facilities and common services (2006)
Law n° 2004-71 of August 2, 2004 relative to new regime of health insurance and its texts of application.	Reforms the current benefits of health insurance under social security regimes, prevailing since the end of 1950 and institutes two essential notions: - A mandatory regime associated to an optional complementary regime. - Conventional relationships with public and private providers of health care, on the basis of negotiated tariffs. This law creates a unique organism of health insurance for social insured persons (National Fund of health insurance-CNAM).

Source: The authors according to their experience

Determinants and Objectives

Reforms undertaken since 1990 have as objective to overcome the different problems of the health sector, where the most important are:

- The significant increase of health expenditure and the rapid increase of direct payment of households, reaching the half of total expenditure.
- The insufficiency of public fund (State budget and social health insurance) to overcome the growing needs of health services, accelerated by the epidemiological transition.
- The public sector is characterized by :
  - Some inefficiencies;
  - Rigidity of administrative and budgetary procedure;
  - Lack of qualified professionals in health sector and facilities' management.
- The organization and regulation of the private sector are obsoletes.
- Strong centralized management of the health system
- The information system is ineffective to help in decision making.
- The quality of health care is becoming for the first time an explicit problem.

New strategy has been developed, where the main objectives are:

- The continuously development of primary health care through a program aiming to consolidate and to extend the public supply.
- Improving hospital inpatient using reform of structural and institutional aspects of university hospitals.
- The recasting of legislation rules of private providers.
- The rationalization of health care financing, aiming both reduction of expenditure and enhancing efficiency, and the equitable cost sharing among stakeholders.
- The continuous improving of health care quality through programs aiming the promotion of training, the use of technologies, modern medicine and implementation of quality assurance system.

Since the beginning of 1990, the Tunisian health system has known several reforms that have concerned its different levels.

The tertiary Level knew the most important reform which hit teaching hospitals and specialized centers and institutes. It is the hospitals' reform which introduced a new legal entity known as "Etablissement Public de Santé", autonomous with civil personality, ruled according to commercial legislation, governed by a board and administrated by general directors. These structures remain under State supervision. Besides these changes, the reform included several tasks improving infrastructure and equipments in addition to training sessions dedicated to managers and administrative personnel as well as medical and paramedical staff.

The stated objectives of this reform were to:

- address major hospital internal efficiencies by containing costs while improving quality of services; and
- provide the necessary information that would permit adjustments in the cost-sharing schemes by linking actual utilization of hospital services to financial contributions made by the different organizations.

At the Secondary Level of the Regional hospitals several actions of reform have been carried, towards the development of infrastructures, equipment and professional training. In addition, some actions have been devoted in order to increase regional hospital autonomy, and to reform their organization and structure of direction. A billing system was also introduced aiming to increase financial contributions of social security funds, similar to teaching hospitals.

These reforms are implemented under a global health sector project, whose objective is encompassing major programs of health reforms. In addition, this project has aimed the development of medical emergency, as well as a national health information system.

Four strategic objectives were defined for this project:

- Improving efficiency of public investments at macro-economic level;
- Improving operations' efficiency at micro-economic level ;
- Increasing financial viability of activities financed by public funds with the introduction of cost monitoring mechanisms ;
- Improving the quality of services and training of professionals.

At the First Level of Primary Health Care, national program of perinatal period has been established to improve health care of mothers and Childs. Consequently, health care have been integrated at this level of health system (primary health care) while

additional efforts have been made to analyze maternal mortality causes. Also, national programs have been widened to include chronic diseases, diabetes, arterial hypertension, mental health and health of adolescents and elderly that have begun increasingly included in the primary health activity.

Chronology and main features of key reforms

After the enactment of the sanitary Law (1991), the health sector has known a new dynamics, characterized by:

- The setting up of hospitals' reform in the teaching hospitals (1992-1999)
- This reform has been accompanied by the consolidation of primary health care, through a project dedicated to infant and maternal health.
- The health sector project (1998-2003): some important actions were realized in order to :
  - The review of organization and management of regional hospital (July 4, 2002) ;
  - Setting up a strategy of promoting emergencies services,
  - Setting up a quality assurance strategy in public facilities,
  - Setting up a strategy of deployment of a national information system.
- Since 1996, many thinks about health care financing system have been committed to result, at the middle of the year 2004, in enactment of law related to a new health insurance regime.

Process of implementation: approaches, issues, concerns

The government adopted an incremental approach to implement hospital reform to ensure greater collaboration and commitment from all stakeholders, which significantly contributed to its success.

The reform devoted to teaching hospitals has been divided into four components:

- An institutional component is concretized by the law n° 91-63 of July 29, 1991 which created and organized the Public Establishments of Health.
- A management component that aimed to set up a computerized system of information and management. The setting up of this system has pushed the need to develop capacities of human resources.
- The third component is reserved to studies preparing other reforms of the health system:
  - Reform of medical assistance for poor (free health care and reduced tariffs).
  - Analysis and proposition to reform health insurance.
  - Implementation of practical methodology to charge costs to financing sources.
- The fourth part concerns the setting up program of infrastructure and quality improvement that aims to renovate and to acquire equipment and technical installations.

The health sector project has concerned:

- Regional hospitals, by:
  - Implementation of computerized system of information of management.
  - Renovation of infrastructure and reinforcement of medical equipment and the ambulances' fleet.

  - Implementation of legislative and regular measures aiming better organization of these facilities and to provide them more specialized human resources.
- Implementation of national strategy of emergency which included three prior axes: pre-hospital segment, intra-hospital segment and training to improve hospital emergency services.
- Implementation of national health information system, reduced to the central dashboard (operational in 2003) and to the strengthening of sub-systems of information.

Concerning public facilities' financing, the two projects above have allowed setting up a billing system to social insured patients that represent almost the half of treated patients at public facilities. Started in 1996, and generalized gradually to public establishments of health and to regional hospitals (2002), the billing system has permitted to:

- mobilize additional resources for the public hospitals,
- Reduce the State subsidies to hospitals and redirect its part to primary health care.

The current billing system is based on overhead tariffs, negotiated on the basis of cost estimated in teaching hospitals. These tariffs are established for external visits (whatever is the specialty) and for hospital admissions, with a unique tariff each admission, whatever is its duration and provided acts.

Progress with implementation

The hospitals' reform and the health sector project have been implemented at all their components and have allowed results with more or less satisfaction according to the reform components.

However, the impact was slowed down in particular,

- the autonomy of hospitals is hampered by the fact that human resources management is controlled by the central MoPH;
- the lack of effort to strengthen MoPH capacity for monitoring and regulation;
- Lack of measures to strengthen the capacity of staff, particularly the paramedical staff to improve quality of services.

Furthermore, reforms of public hospital sector have allowed:

- To improve the financial and administrative organization of hospitals;
- To modernize equipment and installations ;
- To mobilize additional financial resources, through the social health insurance;
- To implement strategies of improving emergencies and quality of health care;
- To introduce incentive to specialists in order to exert in priority regions.

Reforms introduced in the private sector have allowed accompanying its development by new rules of regulation, like norms of buildings, equipment (notably in heavy equipment) and human resources for each inpatient facility. Nevertheless, regulation rules remain weak and limited, notably those that aim at costs and quality of provision.

Process of monitoring and evaluation of reforms

Processes of reform have been implemented with coordination with the World Bank. Then, it has necessitated rigorous procedure of implementation and evaluation whose principals are:

- The creation of dedicated "project coordination units" to follow up, at full-time, each project;
- Cabinet meetings devoted to these projects;
- Periodic meetings of the MoPH;
- Supervision missions of the World Bank officials;
- Reports of furtherance 'advancement) produced by the MoPH;
- Audit annual reports;
- Completion reports of each project.

Results/effects

The indirect and direct impact of implemented reforms for the public sector can be summarized with the following elements:

- **Impact on health sector financing:** the mobilization of additional resources via the social health insurance in order to develop hospitals' sector has allowed the beginning of re-equilibrium on cost sharing. These resources were allocated to the teaching and regional facilities while State subsidies were essentially orientated to primary care level.
- **Equity and availability:** The reforms have allowed improving accessibility to hospitals' inpatient care, given the rapid rotation of beds. Concerning ambulatory cares, with the implementation of afternoon consultation and hospitalization substitutes, their accessibility is improved and it can be more improved on organizational side. The accessibility of poor population that benefits from free of charges or reduced tariffs hasn't been reduced.
- **The macro-efficiency of public investment:** we observe an increase of equipment and specialized professionals, which allow a significant increase in the number of consultations of specialists, surgical interventions and admissions.
- **The micro-efficiency of operators** has been clearly improved through the new management process: standardization of procedures, use of computer…and best utilization of available infrastructure.
- **The consolidation of financial durability** for activities publicly financed by introducing monitoring and cost recovery give satisfaction.
  - The billing system has allowed mobilizing additional resources for public hospitals.
  - The annual hospital budgets are based on data analysis of expenditures, census of activities and estimation of operating costs.
- **The improvement of services quality** is not supported by fitting indicators, out of patient's satisfaction surveys which recognize its improvement on several areas.
- **Information system :** results are relatively weak although several actions have been realized; such as :
  - The implementation of three cancer regional registers (Tunis, Sousse and Sfax)
  - Certificate of death (according to the WHO model) was elaborated in 1999 and it is currently in application.

Future reforms

It is the social health insurance reform, decided after a cabinet meeting, held on February 16, 1996, devoted to the health insurance and fixing the principles of its reform. The major insufficiencies of the current health insurance system were identified as follows:

- The fragmentation of the social security system: The social health insurance is managed by two social security funds according to several legislations without coordination neither harmonization.
- Risks on financial balances of funds: the high annual increase of expenditures, threatens financial equilibrium. The weak rate of contributions differs largely between professional categories, when they receive the same health services.
- The dissatisfaction of funds' affiliated: this is related to the "mediocre" quality of care provided in the public sector and to the quasi absence of insurance coverage for health care received in the private sector.

The health insurance reform aims to overcome these difficulties, to improve health insurance coverage of the population, to increase the efficiency of health services, to reduce wastes of resources and health expenditures and to insure a best social equity.

The health insurance reform aims also to prevent consequences of transitions affecting health care and pursues three major goals:

- Harmonize the benefits of the different health insurance regimes in place: a sole mandatory basic regime has to be adopted and managed by one health insurance body, the National fund of health insurance (CNAM).
- Implement optional complementary regimes in order to bear the costs that remain uncovered by the basic regime.
- With regard to the health system as a whole, all health care providers should be involved, whether they are public or private through contracts that include and determine quality standards and norms of health care delivery, mechanisms of cost containment, tariffs and provider payment methods.

In coherence with these aims and goals, current works of health insurance committees are devoted to implement the project of reform and are focused on the following issues:

- The setting up of the benefits package that will be covered by the mandatory and those by complementary regime;
- The elaboration of practical modalities of reimbursement of health care charges;
- The reform of the general organizational framework (funds, public and private facilities) in order to get an organization that allows to pilot all aspects of the reform.

Since the political initiative (1996), the health insurance reform is under a national debate involving all stakeholders in order to achieve the necessary consensus. Until the end of 2006, and after several discussions and negotiations with the various stakeholders:

- In 2004, Parliament passed Law 2004-71, creating the new health insurance fund (CNAM).
- In 2005, the Government passed several decrees that define the framework
  - Decree n° 2005-321 of February 16, 2005, relative to financial, administrative organization and functioning modalities of the National Fund of health insurance.

- Decree n° 2005-2192 of August 8, 2005, relative to organization of the national council of health insurance.
- Decree n°2005-3031 of November 21, 2005, fixing procedures and modalities of medical control, as provided by the law n° 2004-71 of August 2, 2004.
- Decree n°2005-3154 of December 6, 2005, relative to procedures of contracting between CNAM and providers.

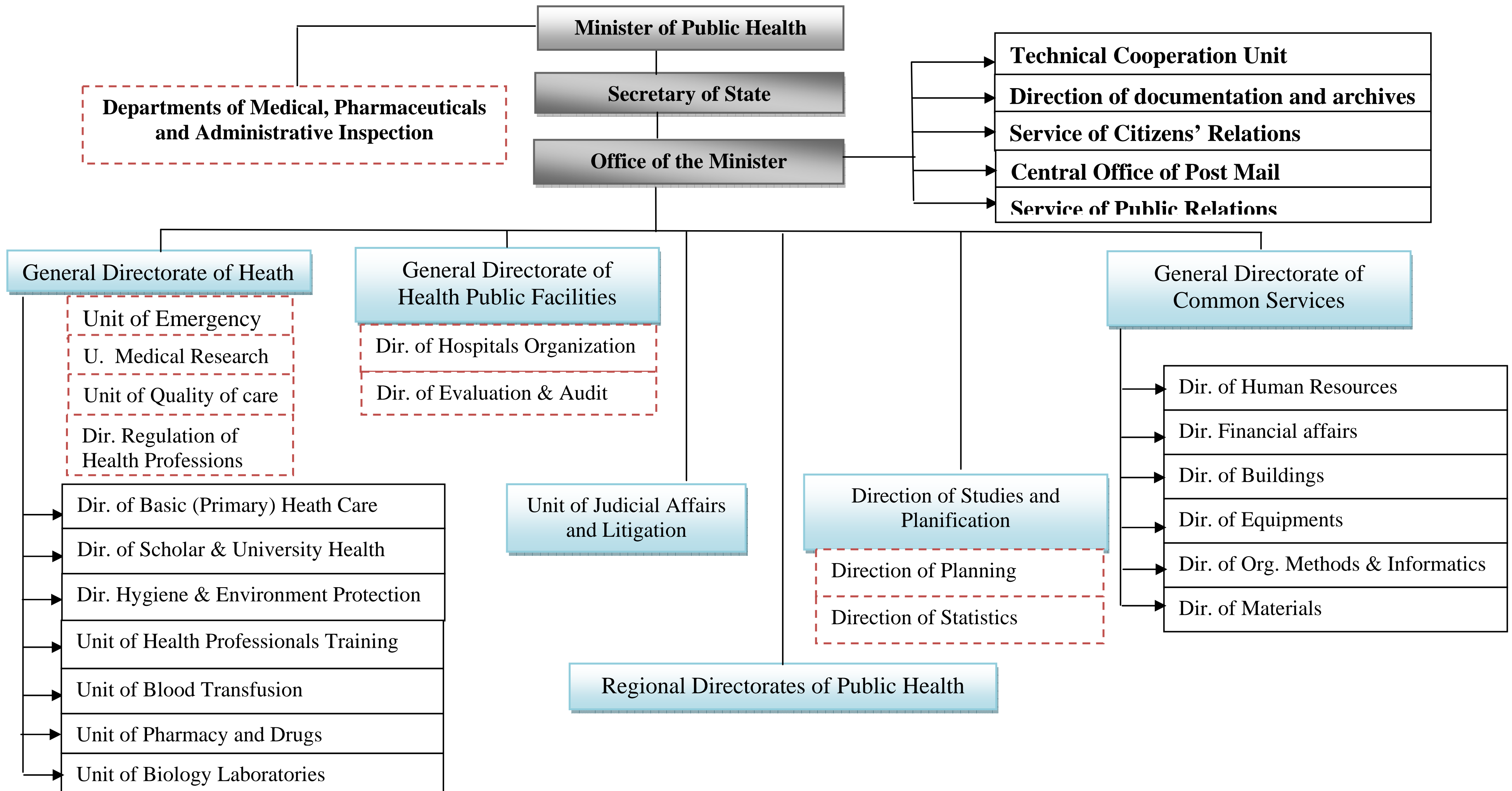
- In 2006, sector conventions have been signed with health care providers (physicians, dentists and biologists). Only conventions with pharmacists and private clinics are still in discussion.

The implementation of the health insurance reform is foreseen progressive and its first stage will start on July 1st, 2007.

10 ANNEXES

1. Organizational chart of Ministry of public Health

Annex 1: Ministry of Public health Organogram



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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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