The Turkish Healthcare System

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Turkey is a parliamentary democracy with a separation of executive, legislative, and judiciary powers. The Turkish Grand National Assembly is the legislative body acting on behalf of the nation. The President is elected by the people, and the Council of Ministers is headed by the Prime Minister. Turkey is situated in both Europe and Asia. The country has a population of 72.5 million people (2008) and an average annual population growth rate of 1.45 percent. Turkey has been a candidate for membership to the European Union since 1999 and is in the upper-middle-income country group, according the new classification of the World Bank. The development of health system institutions is mainly undertaken by the Ministry of Health, the Ministry of Labor and Social Security, the Ministry of Finance, parliamentarian commissions, the State Planning Organization, the Social Security Institution, the Council of Higher Education, military institutions, and other relevant organizations and institutions. In addition, professional organizations such as the Turkish Medical Association, chambers of doctors, and other non-governmental organizations all have roles in the policy-making process. Furthermore, international organizations such as the World Health Organization, the Organization for Economic Co-operation and Development, the World Bank, and the International Monetary Fund have been involved in different ways.

Unification Process

Healthcare reform initiatives date back to the beginning of the 1990s, but the implementation phase only began after the start of the Health Transformation Program in 2003. Before 2003, the Turkish healthcare system was a mix of private and public sector institutions and had a four-part health delivery system: 1) the Ministry of Health, 2) the Social Insurance Organization, 3) University hospitals, and 4) the private sector (hospitals, clinics and polyclinics, doctors' offices, pharmacies, laboratories). However, publicly owned hospitals – with the exception of university hospitals or military hospitals – were transferred to the Ministry of Health in 2005. As a result of this unification, healthcare provision can currently be described as tripartite: 1) the Ministry of Health, 2) University hospitals, and 3) the private sector. The Ministry of Health runs large-scale healthcare facilities (health centers, family health centers, population health centers, tuberculosis control dispensaries, cancer early diagnosis-screening hospitals, outpatient clinics, and hospitals). The Ministry of Health is the main provider of primary and secondary healthcare services and the only provider of preventive health services. The university hospitals should provide tertiary healthcare, but in practice they provide health services at all levels.

Facts & Figures

Turkey has accomplished remarkable improvements in terms of health status in the last two decades. Major health indicators such as life expectancy, infant mortality rate, and maternal mortality have considerably improved. However, despite these improvements, infant mortality and life expectancy at birth are still not compatible with other European countries and the USA. Average life expectancy reached 71.8 for male and 76.8 for female, and 74.3 for total in 2010. Infant mortality rate decreased from 117.5 to 10.1 per 1000 between 1993 and 2010. There are still regional discrepancies in terms of the infant mortality rate between the Eastern and Western parts of Turkey. Both the high level of infant mortality and regional discrepancies can be attributed to low socioeconomic conditions in some parts of the country, low education levels of females, and the high prevalence of infectious diseases.

As in other countries, the number of elderly people is growing in Turkey. As a result of rapid changes in the social structure, elderly people have an increasing need for state support and professional services. This need is met by both public and private agencies.

The main causes of death are ischemic heart disease followed by cerebrovascular diseases. The increasing rates of cancer are an alarming public health issue.

During the past ten years, the numbers of academic staff in medical facilities increased from 6,798 to 9,970, and the number of students graduating from medical school from 4,925 to 5,138. Between 2006 and 2010, the number of physicians increased from 104,475 to 123,447; the number of dentists increased from 18,332 to 21,432; and the number of nurses increased from 82,626 to 114,772. Although the number of physicians per 100,000 people (158.2) has grown moderately but steadily over the last two decades, it is still significantly below that of the European Union average. Similarly, the number of nurses per 100,000 people (320) is the lowest among its European neighbors. In addition to insufficient numbers, geographical distribution is still an important problem. Hospital care is delivered both by public and private hospitals. In 2010, there were 1,439 hospitals, of which 843 were owned by the Ministry of Health, 62 were owned by universities, and 489 were owned by the private sector. The rest were owned by other public organizations, such as the Ministry of Defense. Hospitals provide both inpatient and outpatient care.

Between 2002 and 2010, the number of hospital beds increased from 159,771 to 199,950 and the total hospital visits from 124,313,659 to 302,984,218. During that same period, the number of surgical operations increased from 373,439 to 8,614,789; organ transplantations from 744 to 3,336; and magnetic resonance and computed tomography imaging procedures from 5,817,090 to 7,567,064.

The use of medical technology in 2000 and 2008 is shown in Table 1. The ratio of general satisfaction with healthcare services increased from 39.5 percent to 73.1 percent between those years.

Table 1. Medical Technology in Turkey

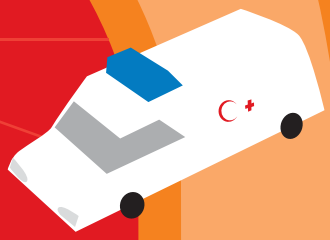
Medical technology (Number of units)	2000	2008
Computed tomography systems	121	329
Magnetic resonance imaging systems	18	200
Intensive care beds	869	6633
Ambulances	618	2029
Neonatal intensive care beds	665	2918

Number of Nurses per 10,000 Resident Population (2006)

29

Number of Physicians per 10,000 Resident Population (2006): 16

Number of Hospital Beds per 10,000 Resident Population (2006): 27



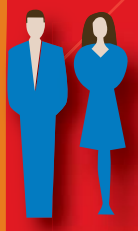
Total Expenditure on Health per Capita (2008): € 461[1]

Public Expenditure on Health as % of Total Expenditure on Health (2005): 71.4

Total Expenditure on Health as % of GDP (2005): 5.7

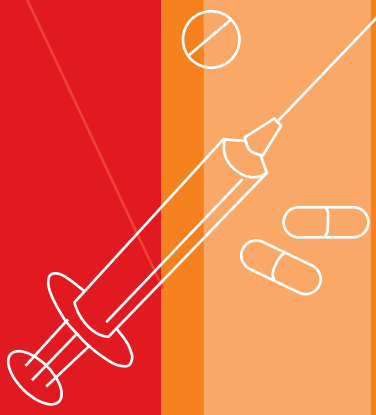
Male Life Expectancy at Birth (2006)

71



Female Life Expectancy at Birth (2006)

75



Population in Thousands (2006): 73,922

Sources: WHO Core Health Indicators (http://apps.who.int/whosis/database/core/core_select.cfm). Last accessed Sept. 27, 2011

[1] Saglik Bakanligi Istatistikleri. 2010 [Turkish Ministry of Health Statistics Yearbook 2010]

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Recent reforms have put special emphasis on the reorganization of primary care services. A family practitioner system was introduced as a pilot program in 2004. This model is currently being implemented in most of the 81 provinces. Family practitioners are general practitioners providing primary care to the population. They are paid on a capitation basis with incentives for preventive activities. The major drawback of the system is the lack of a referral system between primary, secondary, and tertiary care.

Spendings

Turkey spent €461 per capita on healthcare in 2008. Turkey finances healthcare services from various sources. Social insurance contributions take the lead, followed by government sources, out-of-pocket payments and other private sources. According to the most recent National Health Accounts (NHA) data, 41.0 percent of funds came from social health insurance in 2006, followed by 31.4 percent from government sources, 19.3 percent from out-of-pocket payments, and 8.3 percent from other private sources. Total expenditure on health as a proportion of gross domestic product (GDP) has risen from 2.4 percent to 5.6 percent between 1980 and 2008. This increase is mainly due to improvements in the public provision and financing of health services that decreased the share of out-of-pocket expenditures.

Prior to 2003, a number of health insurance funds operated. The Government Employees Retirement Fund, established in 1949, was financed by contributions from active civil servants to cover retired civil servants and their families. The Active Civil Servant Scheme, established in 1965, was financed through allocations from the government budget to institutions employing active civil servants. The Social Insurance Organization, founded in 1964, covered the largest segment of the population – blue- and white-collar workers in the public and private sectors. It was financed by premiums based on payroll wages. The Social Insurance Agency of Merchants, Artisans, and Self-Employed was established in 1971, and since 1987 has offered health benefits covering the self-employed financed by revenues from the self-employed. The Green Card Scheme, which was created in 1992 as a social assistance mechanism to cover poor people earning less than one-third of the minimum wage, was financed from the Ministry of Health budget. In 2005, Green Card holders were given access to outpatient care and pharmaceuticals, and Social Insurance Organization beneficiaries were given access to all public hospitals and pharmacies. In addition to these main programs, some of the institutions (banks, insurance companies, corporations, etc.) had funds to cover the health expenditures of their employees.

A Decade of Reforms

The General Health Insurance Scheme (GHIS) came to the forefront as part of the third wave of healthcare reform attempts, which started in early 2003 and aimed to organize, provide financing, and deliver healthcare services. This was going to be done in three ways: by unifying social security institutions under a single roof, pooling fragmented social health insurance schemes under a single legal arrangement that ensures unity in norms and standards, and eliminating payments without premiums from the

social insurance system and managing them in a single entity.
In 2007, legislative measures mandated that all Turkish citizens have access to free primary care, even if they were not covered under the social security system. Under the Health Implementation Decree of 2007, benefits across the formal health insurance schemes of Social Insurance Organization, the Social Insurance Agency of Merchants, Artisans, and Self-Employed, and the Government Employees Retirement Fund were further harmonized. A new law established a single agency in 2006 under the Ministry of Labor and Social Security, merging the Social Insurance Organization, the Social Insurance Agency of Merchants, Artisans, and Self-Employed, and the Government Employees Retirement Fund under one umbrella – the Social Security Institution. The Active Civil Servant Scheme and the Green Card Scheme were fully integrated in 2010.
The GHIS is compulsory, has universal coverage, and is based on residency criteria. The system includes all Turkish citizens, as well as refugees and foreigners who have resided legally in Turkey for more than one year and do not have health insurance coverage from another country. Family members of the insured aged under 18 years of age are also insured automatically. The age for dependent children can be extended to 25 years under the condition of continuing education.

Funding

The main funding source for GHIS is payroll taxes, and the revenue is centrally collected and managed by the Social Security Institution. The new scheme involves three different contribution mechanisms. The dominant mechanism is compulsory social insurance contributions, followed by state contributions and user charges. The GHIS has both contributory and non-contributory elements. Social insurance contributions are mainly earnings-based and are shared between employers and employees. Tax revenues fund healthcare for non-paying portions in addition to funding public health activities, medical education, and research.
The Social Security Institution limits the amount that private hospitals can charge 30 to 70 percent above the price paid by the Social Security Institution.
Turkey has set up a single funding agency by merging all existing public schemes and including the uninsured segment of the population to pool risks and resources nationwide. The pooling of funds is centralized in the Social Security Institution, which, as the single purchaser in the health sector, is responsible for purchasing healthcare from providers on behalf of the insured population. According to the GHIS, health services are provided through contracts made between the Social Security Institution and national or international competing healthcare providers and/or by means of reimbursing the costs of health services that are bought by the insured and dependents in accordance with the law.
One of the significant features of the GHIS is that it provides the family physician with an income based on capitation alongside salary. Payment mechanisms for state hospitals are determined by the GHIS. Fixed-price payments for outpatient and inpatient procedures based on the Current Procedural Terminology and International Statistical Classification of Diseases and Related Health Problems were introduced in all Ministry of Health and university and private hospitals under contract with the Social Security Institution. In the near future, a case-mix-based payment system called Diagnosis-Related Groups (DRG) is expected to be introduced. Through an application called Performance-Based Supplementary Payment, health professionals working in public hospitals receive substantial additional payments from the hospitals' revolving funds in accordance with performance.
Medicines are obtained through private pharmacies, and dispensing outpatient prescriptions from hospital pharmacies is not allowed. Pharmacies can sell other commercial products such as contracep-

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Adalet is a member of the European Society of Cardiology, the Turkish Society of Cardiology, the Turkish Medical Association, and the European Atherosclerosis Society. He is currently also Chairman of the Board of Istanbul University Hospitals and President of the Istanbul Society of Cardiology.

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tives, personal hygiene items, baby products, and cosmetics.

Concluding Remarks

The Turkish healthcare system has undergone a radical change through the realization of the legislative and enforcement stages of a longstanding reform process relating to the healthcare system and financing aspect. Accordingly, Turkey is moving from a system of multiple insurance schemes to a single-payer system intended to provide the whole population with access to a wide range of healthcare services. The GHIS reform can constitute a powerful engine for achieving universal coverage and enhancing equity and solidarity in the Turkish healthcare system.

The main challenges that remain are to implement the outstanding reform initiatives and to address sustainability issues. This includes extending the family practitioner scheme to the whole country, instigating an effective referral system from primary to higher levels of care, improving the supply of healthcare staff, introducing and extending public hospital associations that aim to grant autonomous status to public hospitals, and improving patient rights.

Becoming a Doctor

Becoming a medical doctor is extremely difficult in Turkey, and maintaining the profession is even more difficult. Two million students compete to enter one of the nine or ten top high schools in Turkey. This is a first and important step for those who want to pursue a medical education later, but only 10,000 of them can achieve this target. After that, about two million students compete to enter medical school, and only 5,000 of students achieve that goal each year. Medical education takes six years. After graduation from medical school, every physician is required to complete two years of compulsory service in a deprived area – a tool to balance geographical inequalities. In addition, one-and-a half years of compulsory military service must be completed by every male. To earn the right for specialization training, another competitive exam must be passed. The average duration of specialization training, with a very low salary, is four years. Seven or eight times a month, participants are required to perform 36 hours of continuous duty at the hospital. After passing a challenging exam to become a medical specialist, another two-year compulsory service is mandatory.

At age 35, medical specialists can work at the state hospitals, but, due to the low income, most also work at a private office or hospital after eight hours of public duty. At the university, medical doctors can win the right to work in the private sector after attaining the title of professor – and reaching the age of 45.

In January 2010, Turkey adopted a law banning dual practice for health personnel working for public facilities. The aim of this law is to use the health workforce more efficiently and effectively while also eliminating the problems arising from dual practice.

The new law strictly prohibits private activities after public duty, even after eight hours' work at the public hospital, but salaries are still limited. The introduction of a performance-based payment system in Ministry of Health and University Hospitals has not dramatically changed the income. To implement these policies, politicians and the media have influenced people's attitudes, physician-patient relationships have been negatively affected, and respect for physicians has almost disappeared. As a result of these problems, doctors have been very unhappy and restless.

On the other hand, the professional activities of physicians have been significantly restricted, not only in the public sector, but also in private offices and hospitals. It is very difficult to find a job in a private hospital due to limitations on the government's rules. These developments will surely result in many bright young people not selecting the medical profession, and the quality of medical education will fall. In the short term, this policy appears to be in favor of the people, but in the long term, it may have disastrous effects.

The opinions reflected in this article are those of the author and do not necessarily reflect those of Siemens Healthcare.

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