**Introduction**

**Government and recent political history**

The Republic of Turkey is a secular and democratic state headed by a President. Legislative power resides with the Grand National Assembly, which consists of 550 elected representatives, including the Prime Minister and the Council of Ministers. Turkey is a candidate country for accession to the European Union (EU), although it does not yet have a date for the start of accession negotiations.

**Population**

Turkey’s population of about 66 million people is relatively young. In recent years it has experienced rapid urbanisation due to migration from the eastern to the western part of the country.

**Health status**

Infant and maternal mortality rates in Turkey are much higher than in any other country in Europe, while estimates of life expectancy are lower. These indicators also vary between different parts of the country, suggesting a degree of health inequality within Turkey. In 1999 infant mortality in Turkey was 40 deaths per 1000 live births, compared to an EU average of 4.9, a Central and Eastern European (CEE) average of 11.3 and an newly independent states (NIS) average of 17.8. The trend for maternal mortality is worse. WHO calculated a rate of 130 maternal deaths per 100 000 live births in 1998, although other sources quote a higher rate of 180. This compares to a European average (of the countries in WHO’s European Region) of 20.3 and a Central Asian Republics (CAR) average of 42.6. Poor health status in Turkey – both in absolute and relative terms – is associated with an unequal distribution of income, rapid urbanisation and health care system failures.

**Leading causes of death**

Infectious diseases are the main cause of death in infants up to the age of five. The main causes of death among adults are heart disease and accidents (for those aged 25 to 44) and heart disease and smoking-related respiratory disorders (for those aged 45 to 64).

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**Fig. 1. Total health care expenditure as % of GDP, comparing Turkey, selected countries and EU average**

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Expenditure as % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>2000</td>
<td>8.2</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1994</td>
<td>6.4</td>
</tr>
<tr>
<td>Greece</td>
<td>2001</td>
<td>6.1</td>
</tr>
<tr>
<td>Italy</td>
<td>2002</td>
<td>7.5</td>
</tr>
<tr>
<td>Romania</td>
<td>2002</td>
<td>5.6</td>
</tr>
<tr>
<td>Turkey</td>
<td>1998</td>
<td>5.9</td>
</tr>
<tr>
<td>EU average</td>
<td>2000</td>
<td>8.0</td>
</tr>
</tbody>
</table>

*Source: WHO Regional Office for Europe health for all database.*
Recent history of the health care system

The 1961 Law on the Nationalization of Health Care Delivery established the concept of integrated primary care delivered by health centres and health posts across the country, but its vision has yet to be fully realized. Subsequent attempts to introduce a universal statutory health insurance scheme have also failed. The 1990s saw a rapid increase in the number of private facilities for health care and the development of a market for private health insurance, although demand for the latter has fallen more recently.

Reform trends

Establishing a universal statutory health insurance scheme has been a key objective since the 1960s, but universal coverage remains an elusive goal. In addition to universal coverage, reform proposals of the 1990s have focused on decentralisation, training of family doctors and health care managers, introducing a gate-keeping family doctor model for primary health care in urban areas and improving management information systems.

Health care expenditure and GDP

Official statistics suggest that total expenditure on health care as a proportion of GDP is low in Turkey, relative to EU member states and CEE countries, although the actual volume of private expenditure is not known. Total expenditure currently stands at 4.3% (in 2000).

Organizational structure

The complex structure of the Turkish health care system reflects historical developments rather than rational planning processes. Health care is provided by public, quasi-public, private and philanthropic organizations, but relations among them are not well structured or regulated.

The Ministry of Health is the largest provider of health care in Turkey and the only provider of preventive services. At the central level, the Ministry of Health is responsible for Turkey’s health policy and health services. At the provincial level, health services provided by the Ministry of Health are administered by provincial health directorates accountable to provincial governors. Lack of coordination between different directorates within the Ministry of Health and between the centre and the provinces is a key issue.

Health services provided by the Ministry of Health are funded by the Ministry of Finance. The Ministry of Defence has its own health care infrastructure exclusively for the use of military personnel and their dependants. The Council of Higher education is responsible for university hospitals. The Ministry of Labour and Social Security has jurisdiction over the SSK, the insurance scheme for private sector employees and blue-collar public sector employees, which is the second largest provider of health care in Turkey. The two other social security institutions are Bag-Kur, the insurance scheme for self-employed people, and the GERF, which insures retired civil servants and is managed by the Ministry of Finance.
Many private hospitals, polyclinics, laboratories and diagnostic centres were established in the larger cities during the economic liberalisation of the 1980s, mainly as a result of substantial incentives provided by the government (see below).

The Turkish Medical Association and other professional organizations are neither well organized nor distinguished by clearly defined responsibilities.

Planning, regulation and management

Overall responsibility for planning, coordinating, financially supporting and developing health institutions is divided among the Ministry of Health, the military, parliamentary commissions and others. The State Planning Organization is responsible for strategic planning and investment appraisal and planning.

Decentralization of the health care system

The Ministry of Health is strongly centralized and, until recently, local (provincial) decision-making has not been encouraged. Dealing with local health problems at a local level has been problematic due to excessive bureaucracy. The government’s current reform proposals aim to increase the decentralization of some responsibilities to provincial level (see below).

Health care financing and expenditure

Health care financing

Turkey has three main sources of health care financing:

- the general government budget funded by tax revenue and allocated mainly to the Ministry of Health, the Ministry of Defence, university hospitals, other public agencies and the health care expenditure of active civil servants
- social security contributions obtained from members of the three social security schemes: SSK, Bag-Kur and the GERF
- out-of-pocket payments in the form of direct payments to private doctors and institutions, premiums paid for private health insurance and cost sharing.

Coverage

Estimating the proportion of the population covered by the social security system is difficult and controversial. While official statistics show that it covers over 95% of the population, this figure is likely to be inflated by double counting. In theory, Turkish citizens have access to primary care that is largely free at the point of use. In practice, this is not the case. The Green Card scheme established in 1992 is directly funded by the government for people earning less than a minimum level of income (11.3 million people).

Complementary sources of financing

According to official statistics, taxes accounted for 40.4% of health care funding in 1998, social security contributions for 31.5% and out-of-pocket payments for 28.1%. However, the proportion of out-of-pocket payments is likely to be much higher, largely because national statistics are based on data collected from private providers, who may under-report revenue, but also due to the boom in private sector enterprise and activity and the rapid expansion of private health insurance during the 1990s. About 650 000 people are estimated to have some form of cover from about 30 private health insurers, although numbers have declined in recent years. Informal payments are also an issue. Recent surveys suggest that many people regard corruption in the health sector to be a major problem. It seems clear that there are significant financial barriers to access in Turkey, although the precise distribution of private expenditure is not known.
Health care expenditure

Official statistics suggest that total expenditure on health care as a proportion of GDP is low in Turkey, relative to EU Member States and CEE countries, although the actual volume of private expenditure is not known. Total expenditure has generally exceeded 3.0% of GDP and currently stands at 4.3% (in 2000). Under-spending is most marked in the public sector; the size of the government’s budget allocation for health care resembles that of low income countries, despite Turkey’s middle income status. Public spending on preventive services is particularly low. Between 1992 and 1998, the proportion of the Ministry of Health’s budget allocated to preventive services declined from 7 to 3%.

Health care delivery

Primary care

At the provincial level, the Ministry of Health provides primary care through health centres and posts, mother and child health and family planning centres and tuberculosis dispensaries. The national network of health centres and health posts that was envisaged through the 1961 Law on the Nationalization of Health Care Delivery has yet to be achieved. While infrastructure has been successfully developed in rural areas, infrastructure in urban areas is relatively weak, partly due to rapid urbanization. At the same time, doctors have been trained to become specialists rather than general practitioners, and there have been serious shortcomings in the number and quality of nurses and midwives (see below). As a result, private practitioners seem to be an important point of initial contact with the health
care system, both for urban and rural populations, although people living in rural areas make less use of private doctors and are more likely to use health centres. The choice of initial contact also varies according to income, education and geography, with wealthier and university-educated people and those living in western Turkey making more use of private practitioners.

Health indicators demonstrate the severe constraints primary health care has been facing in Turkey. Attempts during the 1990s to provide coordinated and integrated primary care in eight pilot provinces were unsuccessful, and coordination and collaboration among primary care providers is still almost non-existent. Reasons for this failure include the limited leadership of the Ministry of Health, the lack of properly trained staff (particularly general practitioners and family doctors), insufficient managerial capacity and ineffective legislation.

Turkey does not have a functional referral system, mainly due to the importance accorded to free choice, which has restricted the development of general practitioners as gatekeepers, and the inability of hospitals to refuse to treat self-referred patients.

Public health services
The Ministry of Health takes the lead in environmental services through environmental health officers located across the country. Municipalities also provide sanitary services. The Ministry of Labour and Social Security is responsible for occupational health services, but the services it provides are inadequate. School health services are provided by the Ministries of Health and Education but, with the exception of vaccination programmes, they have structural deficits.

Secondary and tertiary care
Turkey has about 25 hospital beds per 10 000 population. However, the distribution of hospital beds across the country is uneven, ranging from 3 to 60 beds per 10 000 population.
The Ministry of Health owns about half of all hospital beds. The SSK is the second largest provider with 16% of all hospital beds, university hospitals provide 14% and the Ministry of Defence 9%. Although the private sector is developing rapidly, private hospital beds only account for 8% of the total number of hospital beds in Turkey. The occupancy rate for acute hospital beds is just under 60%, but varies considerably between hospitals.

In case of emergency, patients can make use of any hospital, but once their condition has stabilized, they may be referred to other institutions that can provide the necessary diagnostic or curative services.

University hospitals serve as referral centres for the region in which they are located. However, the quality and the range of services they provide varies widely across the country, and many patients travel from remote parts of the country to use university hospitals in metropolitan areas. University hospitals are open to members of the general public, provided that they or their referring institutions are able to pay the fees.

Ministry of Health hospitals do not require referrals. Patients referred from health centres to hospital outpatient departments comprise less than 2% of the total number of outpatients seen in Ministry of Health hospitals.

Bag-Kur members are restricted to using hospitals with which the organization has an agreement and that are in the province in which they live. Government employees and people insured by the GERF are eligible to use university hospitals and GERF will pay the hospital directly, while SSK members and Green Card holders need to be referred by an authorized institution, such as an SSK hospital.

Before the 1990s, private hospitals served as operating theatres for privately practising specialists, but recent changes have brought about a new form of service. Well-established outpatient departments make private hospitals a convenient one-stop centre for patients. Private hospitals vary with the income levels of their target patients, ranging from basic structures to luxurious centres with high-tech equipment.

Lack of professional management is an important concern for hospitals in Turkey.

During the economic liberalisation of the late 1980s, the government provided substantial incentives for investment in private health care, such as generous public subsidies, reductions in import regulations and easier ways of financing the purchase of equipment. By the end of the 1990s, over 100 new private hospitals had been established, mainly in the largest cities. Growth has slowed since the economic crisis of 2001.

Rapid expansion of the private sector has contributed to the development of health care infrastructure – particularly in terms of the accumulation of high technology – and may satisfy patients who are able to pay for private care, but it exacerbates existing inequalities in access to health care between those with different levels of income and those living in different parts of the country. The development of an unregulated private sector also raises concerns about quality and service outcomes.

**Human resources and training**

The geographical distribution of secondary and tertiary health services and personnel is very uneven and secondary and tertiary centres in urban areas tend to be used for primary care purposes. One third of hospital beds and almost half of all doctors are concentrated in the three largest cities and there are fewer personnel per capita in less developed regions of the country. Specialists are most unevenly distributed: Istanbul has almost 14 times as many specialists per capita as the eastern provinces of Muş and Van. As in other countries, these variations arise from socioeconomic and climatic differences between regions and the absence of strong financial or other incentives to encourage personnel to practise in less favourable regions.

Doctor and nurse to population ratios are comparatively low in Turkey, although the number of health personnel increased sharply.
during the 1980s and 1990s. The skill-mix of health personnel also restricts the delivery of effective health services, with too few nurses and midwives in relation to doctors and, until recently, too many specialists in relation to general practitioners.

Pharmaceuticals

Turkey obtains pharmaceuticals through domestic production and import. In 1997 the total consumption of pharmaceuticals was US $2070 million at ex factory prices, or US $32 per person. These figures are low when compared to pharmaceutical consumption in western European countries. Pharmaceutical consumption grew dramatically between 1997 and 1998, rising to US $3310 million, but there is no clear explanation for this rapid growth. According to more recent Ministry of Health data, pharmaceutical consumption was equal to between US $4000 million and US $4500 million in 2001, or about US $60 per person.

The pharmaceutical industry is regulated by the government. New licensing regulations that closely resemble EU regulations came into force recently, and a national patent law has been in effect since 1 January 1999.

Although Turkey has an unofficial list of essential drugs, the list has no practical implications for the pharmaceutical sector. The three social security schemes have negative lists for prescriptions. There have been a number of unsuccessful attempts to promote the use of generic drugs, but doctors generally prescribe by brand name.

Pharmacies are staffed by a pharmacist, one or more supervisors and an assistant supervisor. A system of green and red prescriptions is used to control the sale of certain drugs.

Health care technology assessment

The lack of regulation and control of medical technology, combined with economic incentives to import high-tech medical equipment, has led to dramatic increases in the use of such equipment. Much privately-owned diagnostic equipment is used inefficiently, mainly to generate profit.

Financial resource allocation

Third-party budget setting and resource allocation

Turkey’s government budget allocation for health care resembles that of low-income countries, despite its middle-income status. Relative under-spending in the health care sector is most marked in public expenditure on health care, which is responsible for at least part of the poor performance of Turkey’s health care system.

Payment of hospitals

Ministry of Health hospitals receive 80% of their funding from general government revenue and 15% from insurers or individuals (paid into revolving funds). Since 1988, the remaining 5% has been obtained from earmarked excise taxes on fuel, new car sales, cigarettes and alcohol.

The Ministry of Health allocates resources from the general budget in cooperation with the Ministry of Finance. The amount is ratified by the Grand National Assembly before the start of each fiscal year. In recent years the rapid rate of inflation has been a major challenge in reporting, monitoring and controlling public expenditure. With public sector salaries being adjusted twice a year and the costs of material inputs rising constantly, the initial allocation is routinely increased by supplementary allocations during the fiscal year.

Revolving fund revenue, obtained from fees paid by insurers or individuals, is retained by the hospital generating the revenue. Revolving funds have become progressively more important as a source of funding.
A commission with representatives from the Ministry of Health and the Ministry of Finance determines the fees for different health services, without considering the actual cost of these services.

Funding for university hospitals comes from general budget allocations made by the Council of Higher Education and revolving funds.

SSK health services are primarily funded by employees’ and employers’ contributions, but also through co-payments for outpatient drugs and fees paid by non-members using SSK facilities. The SSK allocates funds to hospitals similarly to the Ministry of Health.

Payment of physicians
Doctors working in the Ministry of Health, university or SSK hospitals receive government salaries. They also receive bonuses from revolving funds. While public sector doctors’ salaries are fairly uniform, doctors in less-developed parts of the country, particularly the eastern part, earn more due to government incentives to encourage doctors to practise in these areas.

Some public sector doctors, particularly specialists, establish independent private practices, which allows them to charge on a fee-for-service basis. Doctors working in private hospitals earn more than public sector doctors as they are usually paid for overtime and receive large extra payments for working night shifts. In general, however, doctors’ incomes have declined substantially over the last 15 years.

Health care reforms
The government made its most structured attempt to establish a national health service and extend coverage across the country during the 1960s through the 1961 Law on the Nationalization of Health Care Delivery. Unfortunately, the initiative fell short of its goals, largely due to limited financial and human resources. At the same time, the growth of the SSK and GERF and the establishment of Bag-Kur led to the creation of a de facto system of multiple insurance schemes providing coverage to some, but not all, of the population.

In 1987 the government passed the Basic Law on Health Services, which defined the steps needed to establish a universal health insurance scheme. The law also envisaged decentralizing state hospitals and allowing them to employ their own personnel. However, the Constitutional Court struck down some crucial provisions of this law, and although the law is still in force, none of it has been implemented.

Between 1988 and 1993 the Ministry of Health was active in implementing a national health policy and a programme of health care reform known as the First Health Project. The issue of universal health insurance was revisited during the First National Health Congress held in 1992. A policy document, including a reform proposal, was presented at the Second National Health Congress in 1993. The proposed changes included decentralization, the establishment of a universal health insurance scheme, introducing gate-keeping and improving management information systems. The proposed changes required a radical overhaul of the existing legislation, much of which dated from the 1920s and 1930s. However, the reform programme was interrupted by a change of government in 1993. The main aspect of the programme to be implemented was the Green Card scheme for low earners.

More recently, the government has published plans for a ‘health transformation programme’ to be implemented over the next few years, the main components of which are as follows:

- restructuring of the Ministry of Health to enhance its core functions of setting priorities, ensuring quality and managing public health processes, including preventive services
- introducing compulsory statutory health insurance for the whole population, with the possibility of supplementary private health insurance operated by private insurers
• increasing access to health care by making use of private facilities where necessary, strengthening primary care, improving the referral system and giving institutions more administrative and financial autonomy
• improved and more appropriate training for doctors, nurses and administrators and better incentives to encourage a more even distribution of personnel across the country
• establishing a school of public health and a national quality and accreditation agency
• supporting more rational use of drugs and medical devices through the establishment of a national drug agency and a medical device agency
• improving health information systems.

Conclusions

Universal coverage remains an elusive goal in the Turkish health care system. Major health care challenges include the following:
• improving health status and reducing regional and urban/rural inequalities in health status
• increasing population coverage
• increasing access to quality health services
• reducing high levels of out-of-pocket expenditure
• achieving a more equitable distribution of health services and health care personnel
• tackling inefficiencies in delivery, including the lack of a proper referral system and relatively low occupancy rates in hospitals
• improving doctors’ training and management skills
• improving preventive health services
• improving accountability and transparency
• introducing health technology assessment

The last few years have seen a rapid expansion of the private health care sector in Turkey. The expectations of those with high incomes provide incentives for further expansion and encourage the private sector to play a larger role in the health care system. However, this process is likely to exacerbate existing inequalities in access to health care and raises concerns about quality and service outcomes. It is to be hoped that the Turkish health care system can move forward by addressing the deficiencies of the public sector identified elsewhere in this report, rather than by encouraging further privatization.

Table 1. Inpatient utilization and performance in acute hospitals in the WHO European Region, 2001 or latest available year

<table>
<thead>
<tr>
<th>Country</th>
<th>Hospital beds per 1000 population</th>
<th>Admissions per 100 population</th>
<th>Average length of stay in days</th>
<th>Occupancy rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>–</td>
<td>14.8&lt;sup&gt;a&lt;/sup&gt;</td>
<td>10.7&lt;sup&gt;a&lt;/sup&gt;</td>
<td>64.1&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Greece</td>
<td>4.0&lt;sup&gt;b&lt;/sup&gt;</td>
<td>15.2&lt;sup&gt;c&lt;/sup&gt;</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Italy</td>
<td>4.0&lt;sup&gt;a&lt;/sup&gt;</td>
<td>16.0&lt;sup&gt;a&lt;/sup&gt;</td>
<td>7.0&lt;sup&gt;a&lt;/sup&gt;</td>
<td>75.5&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Turkey</td>
<td>2.1</td>
<td>7.6&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.4</td>
<td>58.8</td>
</tr>
<tr>
<td>EU average</td>
<td>4.1&lt;sup&gt;a&lt;/sup&gt;</td>
<td>18.9&lt;sup&gt;b&lt;/sup&gt;</td>
<td>7.7&lt;sup&gt;b&lt;/sup&gt;</td>
<td>77.4&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Source: WHO Regional Office for Europe health for all database.
Notes: <sup>a</sup> 2000, <sup>b</sup> 1999, <sup>c</sup> 1998, <sup>d</sup> 1997, <sup>e</sup> 1996, <sup>f</sup> 1995.
Attempts to reform the Turkish health care system have been hampered by political instability – between 1993 and 1997 Turkey had six different Ministers of Health – and fragmented policy making. In future, however, there is scope for improvement, particularly in terms of publicly funded and provided health care. Internal and external pressures – notably the prospect of accession to the EU – could precipitate changes to public structures more generally, which may lead to increased transparency and greater pressure for accountability. Such changes may also encourage improvements in the performance of the health care system and the state of the population’s health.