3. Financing

Sources of health expenditure and its share of GDP have always been contentious topics in Turkey. As will be outlined in detail in this chapter, because of the different approaches taken to calculate GDP in different time periods, the share of health expenditure as a proportion of GDP can range from 7.5% to 5.4% for the same year (TURKSTAT, 2009e; Yardım et al., 2007). According to the most recent official statistics, 81.9% of the population was covered by one of the (then) available social security schemes in 2007 (SSI, 2008). This figure does not include Green Card holders, who only have health care coverage (17.9% of the population in 2007) (SSI, 2008). The benefit package is quite comprehensive in Turkey, covering both inpatient and outpatient care. There are co-payments for pharmaceuticals (20% of the prescription for active workers and 10% for retirees) and medical devices such as prostheses. Co-payments for outpatient care have been introduced for all those covered by the SSI who visit hospitals without a referral from a primary care physician (GP); patients pay 8 TL (€ 3.6) and 15 TL (€ 6.8) to public hospitals and private hospitals, respectively. Visits to primary care facilities do not require a co-payment. Some over-the-counter medicines that were reimbursed in the past were excluded from the positive list in 2006. The remaining over-the-counter medicines on the positive list incur the same co-payments as prescription drugs.

In 2008, 73% of health care expenditure came from public sources and around 60% of this came from social health insurance (TURKSTAT, 2009e). Historically, pooling of resources has been complex and fragmented. In the past, the scene was more complicated as there were five different schemes covering different segments of the population, with varying resource pooling rules and benefit packages. However, this has been simplified since 2008, with the transfer of the main health insurance funds to the SSI.

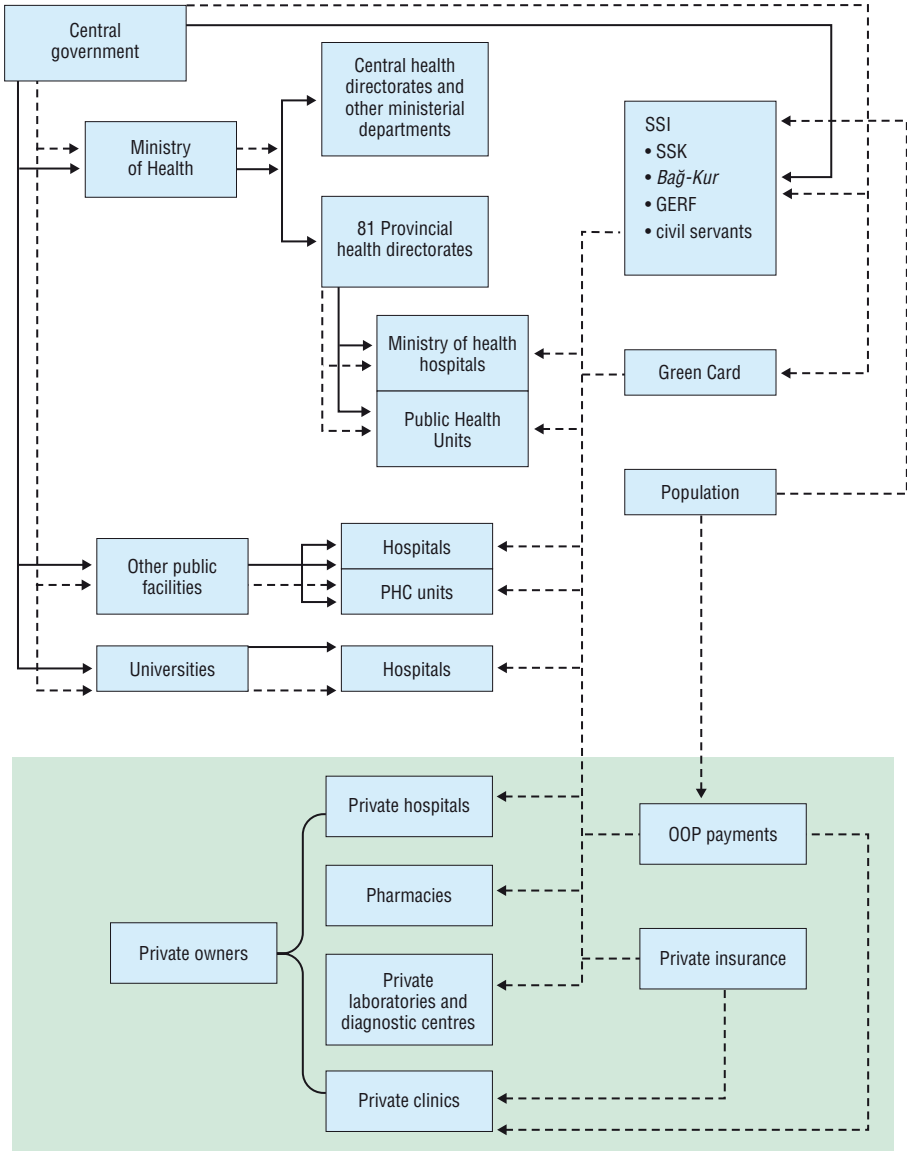
Since 2003, as an important component of the government's HTP (see Chapter 7), radical steps have been taken in the area of financing. According to the National Health Accounts (NHA) study in 2000,[12] Turkey spent 19.8% of its resources on inpatient care and 28.4% on outpatient care. The same study concluded that 27.8% of health care expenditure was spent on pharmaceuticals in the same year (Ministry of Health RSHCP School of Public Health, 2004). There is also a complex provider payment system. Public hospitals and university hospitals are allocated annual budgets from the government, but they are also paid by the SSI and patients on a fee-for-service basis for services provided. The amount paid directly to the hospital either by the SSI or individuals is pooled in the hospital's revolving fund. Individual providers are paid by salary and are also given a certain amount of money through the revolving fund of the hospital based on a formula taking into account the "performance" of both the provider and the hospital during the previous month. Fig. 3.1 outlines the financial flows within the Turkish health care system. The following sections will provide further details on this complex health financing structure.

3.1 Health expenditure

Turkey had its first internationally comparable health expenditure estimations for the years 1999 and 2000 with the publication of the first NHA study (Ministry of Health RSHCP School of Public Health, 2004). Although until 1999 the Ministry of Health estimated public and private expenditure (Ministry of Health, 1998b, 2001a, 2001b), these estimates were not based on an internationally acceptable methodology and nomenclature. The NHA study revealed considerable underestimation for both the public and the private sector. For example, the last Ministry of Health expenditure study concluded that Turkey spent 4.8% of its GDP on health care in 1998 (Ministry of Health, 2001b), whereas the NHA study estimated the figure for the following year as 6.4% (Ministry of Health RSHCP School of Public Health, 2004). No noteworthy policy changes had taken place that would have increased health expenditure radically within one year, and, in fact, the difference between the two estimations results from the differing methodologies employed. For the period 1999–2000, the NHA study used the System of Health Accounts (SHA) methodology developed by the OECD to derive its estimations. Although the NHA study placed special emphasis on continuing its work in ensuing years,

[12] The first NHA study was conducted by the Ministry of Health for 1999–2000. Subsequent NHA studies have been carried out by TURKSTAT with technical assistance from the Ministry of Health, but these follow-up studies are not as comprehensive as the first one and provide only basic information about health care expenditure.

Fig. 3.1
Financial flows in the Turkish health system



Notes: Solid lines represent administrative relationships; dotted lines represent financial relationships.

it was not repeated in the same way and with the same detail for the following years, mainly because the responsibility for the study moved to TURKSTAT from 2000. Currently, there are attempts by TURKSTAT to compile health expenditure data according to requirements stipulated by the European statistical agency Eurostat.

Table 3.1 shows health expenditure figures for selected years between 1980 and 2008. However, the data should be treated cautiously as the sources of information and methodologies used to estimate expenditure do not allow direct comparisons over years. The figures between 1980 and 1995 are taken mainly from Ministry of Health data and the central government budget. Calculating health expenditure is complicated by the fact that during the period under consideration Turkey had a very complex health care system with multiple providers and funding sources. In addition, there has always been large out-of-pocket (OOP) expenditure that is not covered fully in the estimations prior to 1999. Reliable and comparable health expenditure data became available only after 1999, with the publication of the NHA studies. Increases in health expenditure in the period 2000–2004 can be attributed mainly to various reform initiatives that improved access to health care services and to changes in the provider payment system. This trend has continued with rises in the share of public expenditure on health as well as public health expenditure's share of GDP, from 2.9% in 1999 to 4.4% in 2008 (TURKSTAT, 2009e). This increase mainly reflects improvements in the public provision and financing of health services, which decreased the share of OOP expenditure. Table 3.2 illustrates more clearly some of these trends.

Table 3.1

Health expenditure in Turkey, 1980–2008 (selected years)

	1980	1985	1990	1995	2000[a]	2005[a]	2007[a]	2008
Total expenditure on health/capita (US$ PPP)	70	68	155	195	458	622	813	902
Total expenditure on health (% of) GDP	2.4	1.6	2.7	2.5	4.9	5.4	6.0	6.1
Public expenditure on health (% of total expenditure on health)	29.4	50.6	61.0	70.3	62.9	67.8	67.8	73.0

Sources: OECD, 2006; [a]TURKSTAT, 2009e.

Fig. 3.2 shows comparative figures on health expenditure as a percentage of GDP for a selection of European countries. These data show that there has been a significant increase in Turkey's expenditure since 1995, reaching approximately 5% in 2008. Although this is below the EU average, the growth rate between 1995 and 2008 has been much greater than that in the EU as a whole (56% growth versus 13%). It should be noted, however, that changes in

Table 3.2.
Trends in health expenditure in Turkey, 1980–2008 (or latest available year)

	1980–1985	1985–1990	1990–1995	1995–2000	2000–2008 (or latest available year)
Mean annual real growth rate in total health expenditure (%)[a]	0.8	9.6	5.0	6.4	15.2
Mean annual real growth rate in GDP (%)[a,d]	4.8	5.7	3.2	3.8	2.8
Total government spending (% GDP)[b]	n/a	n/a	n/a	26.8–42.7[e]	42.7–38.9
Government health spending (% total government spending)[b]	n/a	n/a	n/a	10.1–9.8[e]	9.8–13.9
Government health spending (% of GDP)[b]	0.7–0.8	0.8–1.6	1.6–1.8	1.8–3.1	3.1–4.4 (2007)
Private health spending (% total expenditure on health)[c,f]	76.5–49.4	49.4–39.0	39.0–29.7	29.7–37.1	37.1–27.0 (2007)

Sources: [a]TURKSTAT, 2008c, 2009e; SPO, 2008; [b]WHO, 2006b; [c]OECD, 2006.

Notes: [d]Calculated as the mean of the annual growth rates in national currency units at 1995 GDP prices. New GDP deflators were calculated by 1995 prices; then, real growth was calculated by dividing each period's GDP by new GDP deflators; finally, mean annual growth rates for five-year time periods were calculated; [e]1996–2000; [f]Range shows value at beginning of period and end of period; n/a: Data not available.

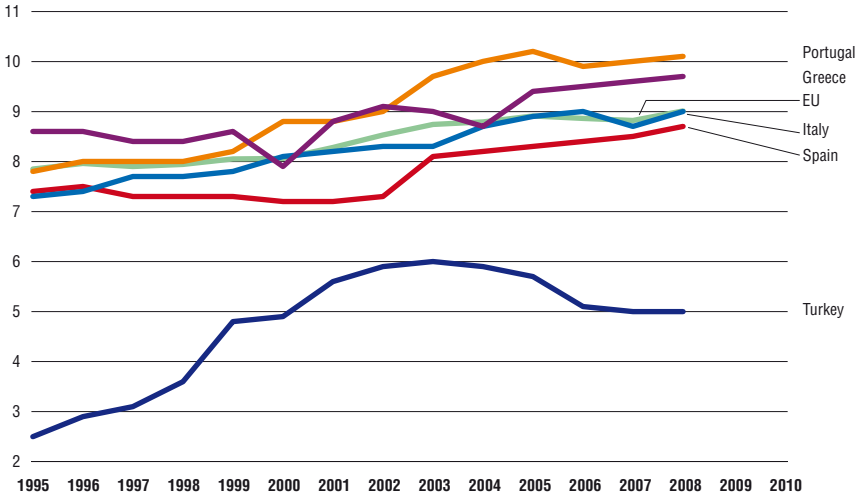
the way GDP is calculated by TURKSTAT impacts on the estimates of health expenditure as a share of GDP. First, the base year was changed from 1987 to 1998 and, second, foreign trade in economic free zones was included in the GDP calculation, thus increasing the volume of exports. In addition, new methods were used to incorporate the informal economy into the calculation. Table 3.3 compares the old and new calculations of GDP and the share of total health expenditure.

The data in Table 3.3 lead to contradictory conclusions about health expenditure trends in Turkey. If the old GDP calculations are taken into account, then Turkey, with a 7.3% share of GDP (in 2006), spends a considerable amount of its GDP on health. The implications of these data are that although Turkey spends a considerable amount of its economic wealth on health services, there is room for improvement in the utilization of these resources for better health outcomes. In contrast, if the new GDP calculations are taken into account, then Turkey, with a 6.1% share of GDP (in 2008), spends a lower amount of resources than other countries with a comparable income. Prior to the new GDP calculations, the first conclusion prevailed and policy-makers focused more on improving the use of resources. However, the new data changes the situation and the issue of increasing the amount of resources allocated to health care may be placed on the political agenda.

Fig. 3.3, taken from the WHO Health for All database, outlines the health expenditure per capita (PPP) for the countries of the WHO European Region. From these data, Turkey lies in the group of countries in the bottom third of the graph, spending below € 600 per capita PPP.

Fig. 3.2

Trends in health expenditure as a share (%) of GDP in Turkey and selected other countries WHO estimates,1995–2008



Source: WHO Regional Office for Europe, 2011.

Table 3.3

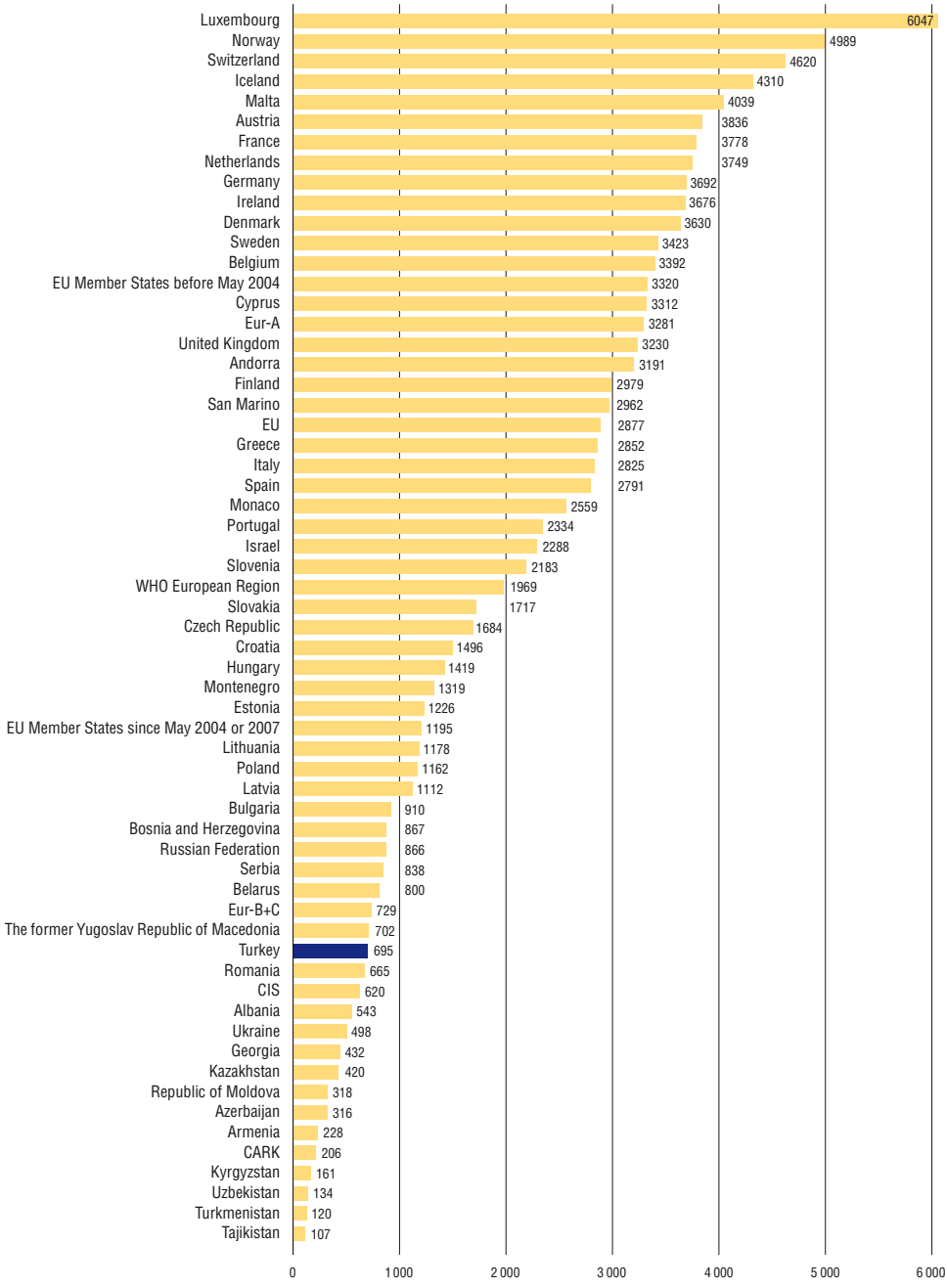
Health expenditure and GDP (at current prices), 1998–2008

Years	GDP (million old TL)	GDP (million YTL)	Total health expenditure (million TL)	Share of health expenditure (% old GDP)	Share of health expenditure (% of new GDP)
1998	52 225	70 203	n/a	n/a	n/a
1999	77 415	104 596	4 985	6.4	4.8
2000	124 583	166 658	8 248	6.6	4.9
2001	178 412	240 224	12 396	6.9	5.2
2002	277 574	350 476	18 774	6.8	5.4
2003	359 763	454 780	24 279	6.7	5.3
2004	430 511	559 033	30 021	7.0	5.4
2005	487 202	648 932	35 359	7.3	5.4
2006	576 322	758 391	44 069	7.6	5.8
2007	n/a	843 178	50 904	n/a	6.0
2008	n/a	950 354	52 320	n/a	6.1

Sources: TURKSTAT, 2008c, 2009e; Yardım et al., 2007.
Note: n/a: Data not available.

Fig. 3.3

Total health expenditure per capita (US$ PPP) in the WHO European Region, 2008, WHO estimates



Source: WHO Regional Office for Europe, 2011.

Data on the distribution of health expenditure by type of expenditure come from the NHA study in 2000, and figures for more recent years are not available. As Table 3.4 shows, inpatient care and public health care services in 2000 were predominantly paid for from public sources. Private sources (that is, private insurance, OOP payments and other private sources) and public sources (central and local government plus social security funds) contributed more or less equally to outpatient services. The estimates for 2000 show that 83.1% of total health expenditure was on personal health care services and goods, which included inpatient and outpatient services as well as pharmaceuticals and other medical goods. Nearly 60% of this expenditure was derived from government sources, with social security funds having the largest share. The share of pharmaceutical expenditure as a proportion of total health care expenditure was high in 2000 (27.8% of the total) compared with other OECD countries, but country-specific reasons should be considered before interpreting these results. Liu, Çelik and Şahin (2005) and Tatar (2007) have outlined the reasons for relatively high pharmaceutical expenditure in Turkey.

- In the Turkish health care market, pharmaceutical prices reflect international market prices, whereas labour costs are normally based on national wage structures. This means that other elements of health care expenditure are relatively underestimated because of the relatively lower domestic prices of these other components of the health care system.
- Public facilities are highly subsidized in Turkey. According to the NHA study (Ministry of Health RSHCP School of Public Health, 2004), 35% of Ministry of Health hospital revenue in 2000 came from the general budget, meaning that social security organizations were paying less for hospital services than the actual service costs. However, pharmaceutical expenditure was based on prices determined by the Ministry of Health by referencing the lowest price in five EU countries (France, Greece, Italy, Portugal and Spain) and there was no subsidy.
- Access to pharmaceuticals is easier compared with other components of the health care system. As a result, there is a high level of self-medication and of polypharmacy practised by doctors. According to the NHA Household Survey[13] (Ministry of Health RSHCP School of Public Health, 2004), 26.6% of people who assessed themselves to be in need of health care opted for self-care. Many products with strict prescription rules in other countries can be freely obtained from pharmacies in Turkey. In other words, if patients are willing to pay out of pocket, then they can

[13] The NHA Household Survey is a subcomponent of the NHA study.

obtain a wide range of products from pharmacies without a prescription. This situation contrasts with that in countries with better regulation of pharmacists' activities. Turkey's relatively high percentage of pharmaceutical expenditure as a proportion of total health spending, when compared with OECD countries, could also be related to the OECD's SHA methodology. In the SHA, only the retail sale of pharmaceuticals, (that is, pharmaceuticals sold in pharmacies) is included under the pharmaceuticals category. Pharmaceuticals used during an inpatient or outpatient episode in a hospital are classified under either the "inpatient" or the "outpatient" category. In Turkey, there is evidence from both the NHA Household Survey and other sources (Tatar et al., 2007) that patients are asked to purchase their prescriptions from retail pharmacies even when they are hospitalized. The NHA Household Survey indicated that 29.7% of people purchased their inpatient medicines in this way (Ministry of Health RSHCP School of Public Health, 2004). This practice, therefore, artificially increased the estimates for pharmaceutical expenditure for 2000. In 2007, the government issued a decree forbidding this practice, and hospitals became obliged to meet the pharmaceutical requirements of their inpatients from hospital stocks. The impact of this policy change on total pharmaceutical expenditure is yet to be assessed.

- In OECD countries, the majority of health care spending occurs for inpatient services, indicating that quite a large amount of pharmaceutical expenditure is absorbed into the "inpatient expenditure" category. In contrast, in Turkey pharmaceutical spending is intensive for outpatient care and prescriptions have a higher share in the treatment of patients.

Table 3.4

Total health expenditure by type of service and financing agent, 2000[a]

	Inpatient care (%)	Outpatient care (%)[b]	Prevention and public health services (%)	Medical supplies given to outpatients (%)[c]
Central government	37.9	19.6	95.8	14.3
Local government	1.1	0.5	0.3	0.8
Social security funds	46.1	25.2	0.0	46.8
Private insurance	4.4	3.0	0.1	1.4
Household expenditure	8.7	42.8	0.0	32.9
Other private expenditure	1.8	8.9	3.8	3.8

Source: Ministry of Health RSHCP School of Public Health, 2004.
Notes: [a]Latest year where financing data are available by type of service is 2000; [b]Primary care services are included in this category; [c]Includes pharmaceuticals.

The SSI now accounts for the largest share in pharmaceutical spending. After extending Green Card coverage to outpatient prescriptions and improving access to private pharmacies for all social security schemes, the share of public sources in pharmaceutical expenditure also increased. Prevention and public health expenditure had only a 2.3% share of total current health expenditure in 2000, and 96.1% of this expenditure was made from public sources.

3.2 Population coverage and basis for entitlement

Prior to 2008, Turkey had five independent financing schemes with different entitlements and rules of access. Merging all social security schemes under one umbrella had been a long-standing desire, and concrete steps to this end were made under the HTP of the new government that took office in 2003.

The year 2006 can be regarded as a watershed in Turkey's social security policies, with the introduction of two crucial pieces of legislation to set up the GHIS. First, the Social Security Institution (SSI) Law instigated the transfer of three of the major social security schemes – SSK, *Bağ-Kur* and GERF – to the newly created SSI. The Active Civil Servants Scheme was subsequently transferred in January 2010. The health care needs of poorer citizens who qualify for the Green Card Scheme currently are financed by the Ministry of Finance, but there are plans to also transfer administration of the Green Card to the SSI in 2011. Second, the Social Insurance and General Health Insurance Law was ratified by parliament in 2006 (Law No. 5489) and it eventually began implementation on 1 October 2008. As a transitional solution, the government took concrete steps to equalize benefit packages, entitlements and access rules and regulations for all five of the schemes in operation.

Since the merger of the schemes, most of the Turkish population is covered by the GHIS. All employees who entered the social insurance system after 1 October 2008 are recorded as members of the newly established SSI. Employees who entered the system before this date are still kept in their relevant schemes in terms of benefits but the schemes are now administered by the SSI.[14] The Health Implementation Guide (HIG (*Sağlık Uygulama Tebliği*)), published annually, covers the rules and regulations for the benefits package and there is a unified guide that covers all existing schemes.

[14] The social security schemes that existed before October 2008, which contained a social health insurance component, cannot be formally annulled as in Turkey, by law, any rights or benefits that have been acquired cannot be cancelled. Therefore, the strategy that was pursued was to equalize the majority of the rules and regulations for the pre-existing health insurance schemes before their administrative transfer to the SSI.

3.2.1 General Health Insurance Scheme (GHIS)

The GHIS came into effect on 1 October 2008. Article 60 of the Social Insurance and General Health Insurance Law states that the following population groups are covered by the GHIS: previous members of the SSK, *Bağ-Kur*, GERF and active civil servants and their dependants; citizens with personal monthly income less than one-third of the base wage rate;[15] specific populations receiving a monthly salary from the government (such as war veterans, Olympic medal winners, etc.); refugees; foreign residents who do not have social security coverage in their home country;[16] people benefiting from unemployment insurance; and all citizens who are covered by previous social security laws (Table 3.5). The following people are not included: conscripts undertaking their military service, foreigners with their own social insurance coverage in their home country, people working in country representative offices abroad with social security coverage in the host country, tourists or short-term visitors, illegal immigrants and prisoners.[17]

The General Health Insurance Law also determined the rules for entitlement. Accordingly, in order to benefit from the scheme, the insured should have paid a minimum of 30 days of general health insurance contributions in the last year. The self-employed (in other words, those who were formerly under the *Bağ-Kur* scheme) and those who were not previously covered by any other scheme should have paid at least 60 days of contributions. In addition, there has been an extension of the coverage period for previous members of SSK and *Bağ-Kur* as well as for active civil servants when they cancel their membership for any reason. Previously, they were covered for up to 10 days after cancellation; now both they and their dependants can benefit from the GHIS for 90 days provided they have paid 90 days of contributions in the last year.

3.2.2 Green Card Scheme

The Green Card Scheme covers the poor: that is, those who can certify that their income is lower than one-third of the base wage rate determined by the state. There were 9 377 850 Green Card holders in 2008 (13.2% of the population), which was a decrease from 2007 when 17.9% of the population were holders

[15] Currently, this group falls under the criteria to qualify for a Green Card, which will be placed under the remit of the SSI in 2011.

[16] Where there is a reciprocal agreement with the other country, foreign residents from that country must have lived in Turkey for one year in order to be eligible to join.

[17] There are health care facilities within prisons to provide public health care services to the prisoner population. If secondary or tertiary care is needed, the Ministry of Justice covers the health care costs of prisoners.

Table 3.5
Health insurance coverage and contribution rates

Population group	Coverage mechanism	Contribution source and rate	Compulsory or voluntary membership	Coverage for dependants
Private sector employees	GHIS	12.5% of wage (7.5% employer, 5% employee)	Compulsory	Yes
Blue collar public sector workers	GHIS	12% of wage (7% employer, 5% employee)	Compulsory	Yes
Self-employed, artisans and merchants	GHIS	12% of income, determined as the base for premium [a]	Compulsory for those whose income is more than the minimum wage	Yes
Agricultural workers	GHIS	12% of income, determined as the base for premium [a]	Compulsory for those whose income is more than the minimum wage	Yes
Active civil servants	GHIS	General budget, 12% of salary	Compulsory	Yes
Retired civil servants [b]	GHIS	No premium is paid as this group made contributions when they were active civil servants	Compulsory	Yes
Citizens with personal monthly income less than one-third of the base wage rate	Green Card Scheme	General budget	Subject to means test to qualify	No
Unemployed people with unemployment insurance [c]	GHIS	General budget	When they are eligible	No
Foreigners residing in the country [d]	GHIS	12% of income, determined as the base for premium	Voluntary	No

Notes: [a]The income bands from which premiums are calculated are related to the base wage rate set by the government, with the highest (maximum) band being 6.5 times this amount. The insured person chooses the relevant premium rate within this range; [b]The health expenditure of government retirees are financed by the government and the contributions of active civil servants, not the retirees themselves. The revenues paid in from these two sources cover retirement, old age and health care benefits. There is no specific health care premium per se. The government also provides substantial additional subsidies from general revenues as there is always a gap between income and expenditure; [c]Unemployment insurance is at its infancy in Turkey (began in 1999) and is paid to the unemployed for 180–300 days depending on a person's previous social security premium payments; [d]Only if they have legal permission to reside in the country and they do not have social security in their country of origin. They have to reside in the country for at least one year to become eligible.

(SSI, 2008).[18] A Green Card is issued personally and assessments are made on an individual basis. Until 2004, the coverage of this scheme was limited to inpatient care, with outpatient and pharmaceutical expenditure excluded. However, since 2004, the scheme has covered all expenditure, although a 20% co-payment for pharmaceuticals and other outpatient co-payments are applied (see Section 3.3).

3.2.3 Population coverage by health insurance

Official figures estimate that 94.2% of the entire population was covered by public health insurance in 2008, compared with 99.8% in 2007: 13.2% by the Green Card and 81% by the four social security schemes that were in place

[18] The decrease can be explained by the fact that an audit of the financial status of Green Card holders was carried out by the Ministry of Health, and ineligible people had their Green Cards revoked.

before their transfer to the SSI (SSI, 2008). However, a word of caution is required about the calculations on the dependent population in these estimations. In 2003, government statistics stated that around 80% of the total population was covered by one of the available schemes. However, two national household surveys found the coverage rate to be 67% for the same year (Ministry of Health RSHCP School of Public Health, 2004; Ministry of Health & Başkent University, 2004). A follow-up study by TURKSTAT found a similar result (Kartal, Özbay & Erişti, 2004). The discrepancy occurs because of the calculation method used in official figures: the number of beneficiaries is calculated by counting a person's official health card but the overall number of dependants is calculated by multiplying the number of card holders by the average size of households. This clearly results in double counting in some cases.

Voluntary health insurance (VHI (*Gönüllü Sağlık Sigortası*)) is in its infancy. According to the NHA study (Ministry of Health RSHCP School of Public Health, 2004), only 3.7% of total health care expenditure was made by VHI in 2000. The majority of people with such insurance are "white collar" (clerical or professional), private sector employees insured by their companies. At the moment, the available data do not provide detailed information about the distribution of beneficiaries in terms of gender, socioeconomic status or regional distribution. VHI holders can use both public and private facilities depending on the rules and regulations of their policies. There are no special accessibility benefits for VHI holders in public facilities.

3.2.4 Definition of benefits

The benefit package is quite comprehensive. In the past, there were substantial differences between the different schemes, but in 2005 benefits were equalized by implementing one standard guideline for all of them.

In the past, the Ministry of Finance determined the scope of benefit packages by publishing the Budget Implementation Guide (*Bütçe Uygulama Talimatı*) annually. However, the Guide was binding only for the two schemes covering active and retired civil servants, the other social security schemes determining their own rules and regulations. As part of the plan to merge all social security schemes and to equalize benefits, in 2006 the Guide became binding for all social security schemes. In 2007, the SSI introduced the HIG, which replaced the Budget Implementation Guide. Initially only for the SSK, *Bağ-Kur* and GERF schemes, the HIG now applies to the GHIS across the board.

Reimbursement decisions for human medical products and pharmaceuticals are made by the Reimbursement Commission (*Ödeme Komisyonu*) comprising members from the SSI, the Ministry of Health and the Ministry of Finance. The Reimbursement Commission makes its final decision based on inputs from the Medical and Economic Evaluation Commission (*Tibbi ve Ekonomik Değerlendirme Komisyonu*). The Commission is made up of members from the SSI, the Ministry of Health, the Ministry of Finance, universities and representatives from industry. The Commission has published its guideline for reimbursement, effective from October 2008. Briefly, the functions of the Medical and Economic Evaluation Commission are as follows:

- to assess the content and data of individual application dossiers;
- to publish the changes in prices of medicines resulting from changes in reference pricing and discounts by firms;
- to assess applications from a pharmacoeconomic point of view, in terms of budget impact, market share and epidemiological, pharmacological, clinical and societal perspectives, and to present the results to the Reimbursement Commission;
- to prepare and present reports to the Reimbursement Commission on drugs to be excluded from the positive list;
- to make assessments on equivalent drug groups and report the results to the Reimbursement Commission;
- to propose rules for prescription and reimbursement of drugs included in the positive list; and
- to prepare data standards guidelines and forms for application dossiers.

The Reimbursement Commission meets bimonthly and has additional (extraordinary) meetings if needed, whereas subgroups of the Commission meet weekly. The recent guideline for reimbursement applications has made pharmacoeconomic analysis compulsory. The implicit criterion at present is the budget impact of inclusion/exclusion of a procedure/technology from the positive list. HTA is at its infancy in Turkey; there is not yet sufficient capacity to undertake or evaluate HTA principles and methodologies (see section 4.2.1).

There are co-payments for pharmaceuticals, for outpatient care in hospitals accessed without a referral and for medical devices. However, there are also exemptions from co-payments for certain diseases (e.g. cancer) and chronic conditions. Upon receipt of a medical report from a group of doctors that a patient has a chronic condition requiring regular medication (e.g. diabetes mellitus or

hypertension), 100% of the prescription charge is reimbursed. Moreover, new regulations since 2004 have been applied to prescribing and reimbursement of certain medical procedures as part of a wider cost-containment package. For example, reimbursement of certain drugs (such as statins or drugs to treat diabetes mellitus) requires laboratory tests to verify the state of the condition, and these drugs are reimbursed only at a certain level of severity.[19] In addition, some prescriptions are restricted only to certain specialties (e.g. new-generation antidepressants). There are also new co-payments for outpatient visits (see section 3.3).

Volumes of care are also specified in the HIG. For example, prescriptions for outpatient visits are restricted to four items and only prescriptions for 10 days are reimbursed. The doctor should clearly indicate the daily dose of the drug in the prescription so that the package volumes are controlled. There are exemptions for chronic conditions and doctors can prescribe a three-month supply with the verification of a medical report. Another area where volume is specified is in-vitro fertilization. The most recent HIG states that public schemes can reimburse two trials of in-vitro fertilization for women under the age of 40.

Primary health care services are provided by family health centres, population health centres and some other units such as dispensaries in the public sector and doctors' private offices and private clinics. These units are described in detail in section 6.3. Services at public units are free of charge, and expenditure at these centres is met from the central budget. Currently, there is no compulsory referral system, so all patients can visit a hospital (secondary or tertiary level) without being referred by a primary level facility. However, co-payment exemptions have been introduced in order to encourage people to visit primary care services to obtain any necessary referrals.

Until 2006, all schemes had their own rules and regulations for reimbursement. When all the schemes were merged under the same rules, all their services were also incorporated into the coverage framework. However, with rising pressure to control rapidly increasing health care expenditure and pressure to contain public spending in general, revisions were made to the benefit package. This mainly occurred in the area of pharmaceuticals. From 2005, some of the over-the-counter medicines previously reimbursed by the public schemes were excluded from the positive list, mainly vitamins, common cold preparations and

[19] For example, statins are reimbursed only if the patient's low density lipoprotein level is above 1.6 mg/l. For patients with diabetes mellitus, acute coronary syndrome, coronary artery disease, myocardial infarction and stroke, this level is reduced to 1.0 mg/l and for patients over 65 years it is 1.3 mg/l.

similar items. However, this process and the underlying reason for the exclusion of certain drugs were not made explicit and, in response, there was substantial public opposition. Some NGOs took these decisions to court, resulting in some of the drugs being reinstated. However, neither the exclusions nor the court decisions were based on scientific evidence or transparent principles.

Turkey has reformed the structure and content of its health care services for the last two decades, with substantial improvements since 2003. The new GHIS has a very comprehensive benefit package, and reimburses the following services:

- personal preventive health care including preventive care for addictive substances harmful to health;
- inpatient and outpatient services, including medical examinations, diagnostic tests and procedures; all medical interventions and treatments after diagnosis; follow-up and rehabilitative services; organ, tissue and stem cell transplantation; emergency care and medical care given by paramedical staff under a doctor's instruction;
- inpatient and outpatient maternal health care, including medical examinations, diagnostic tests and procedures, delivery, all medical interventions and treatments after diagnosis, follow-up services, abortion, sterilization, emergency care and medical care by paramedical staff under doctors' orders;
- inpatient and outpatient oral health care, including oral and dental examinations, diagnostic tests and procedures, all medical interventions and treatments after diagnosis, tooth extraction, conservative dental treatment and endodontic treatment, follow-up services, oral prosthesis, emergency services, and orthodontic treatment for children under 18;
- in-vitro fertilization services, reimbursed up to two attempts; to be able to benefit from this service, the insured (both women and men where the woman is a dependant) should have a medical report proving that this is the last resort solution, the woman should be aged between 23 and 39, the failure of other methods in the last three years should be certified, and the insured should be a member of the GHIS for at least five years, with 900 days of paid contributions;
- blood and blood products, bone marrow, vaccines, medicines, prosthesis, medical goods and medical equipment, including their installation, maintenance, repair and renewal services;
- treatment abroad under certain conditions;

- free health care provision for children under 18 regardless of their insurance status;
- pharmaceuticals and medical devices.

The benefit package excludes aesthetic interventions based only on aesthetic concerns (that is, not related to work accidents or congenital anomalies), all interventions that are not classified as medical services by the Ministry of Health and the treatment of foreigners with pre-existing chronic diseases.

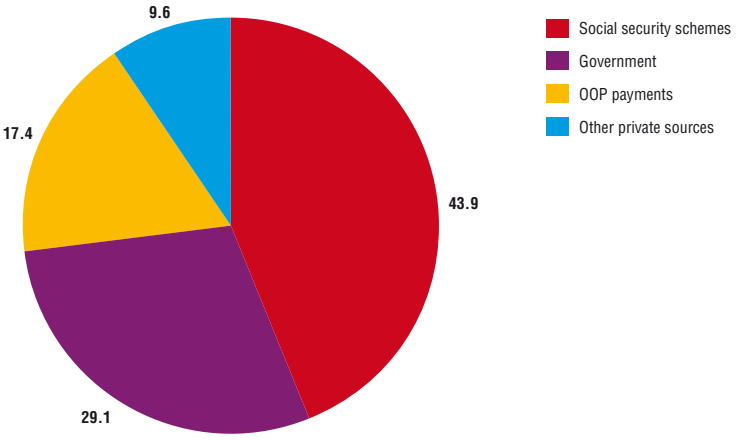
VHI schemes outline their own benefit packages. Currently, such policies are predominantly purchased by private companies for their employees. Benefit packages vary depending on the premium arrangements. In practice, there is usually a co-payment for outpatient care and prescriptions but inpatient services are fully covered.

3.3 Revenue collection/sources of funds

Turkey finances health care services from various sources. According to the most recent TURKOSTAT data, 43.9% of funds came from social health insurance in 2008, followed by 29.1% from government sources, 17.4% from OOP payments and 9.6% from other private sources (Fig. 3.4) (TURKSTAT, 2009e). In recent years, a number of radical changes have had an impact on the composition of funding sources, particularly OOP payments, which have decreased since 2000 when they formed 27.6% of total health care expenditure (Ministry of Health RSHCP School of Public Health, 2004). This decrease results from considerable improvements in accessing publicly funded health services. For example, in 2003 active and retired civil servants and their dependants were permitted to obtain reimbursable health services from private facilities as well as public ones, in 2005 Green Card coverage was extended to outpatient care and prescriptions, in the same year SSK members were allowed to purchase their prescriptions from public facilities (in addition to private pharmacies) and, finally, with the transfer of all health care facilities to the Ministry of Health, the number of facilities accessible to the whole population has increased (Table 3.6).

Fig. 3.4

Percentage of total expenditure on health according to source of revenue, 2008



Source: TURKSTAT, 2009.

Table 3.6.

Sources of revenue as a percentage of total expenditure on health, 1980–2008 (selected years)

Selected ratio indicators for expenditures on health	1980[a]	1985[a]	1990[a]	1995[b]	2000[c]	2005[c]	2007[d]	2008[d]
THE (% of GDP)	2.4	1.6	2.7	2.5	4.9	5.4	6.0	6.1
Public expenditure on health (% of THE)	29.4	50.6	61.0	70.2	62.9	67.8	67.8	73.0
General government expenditure (% of THE)	n/a	n/a	n/a	43.1	28.0	28.2	29.1	29.1
Social security funds (% of THE)	n/a	n/a	n/a	27.1	34.9	39.6	38.7	43.9
PHE (% of THE)	76.5	49.4	39.0	29.8	37.1	32.2	32.2	27.0
OOP payment of private households (%)	n/a	n/a	n/a	n/a	27.6	22.8	21.8	17.4
Prepaid and risk-pooling plans (%)	n/a	n/a	n/a	n/a	4.4	3.6	n/a	n/a
NGOs serving households (%)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
General government expenditure on health (% of total)	n/a	n/a	n/a	n/a	9.8	11.3	12.1	n/a
OOP payments of private households (% of PHE)	n/a	n/a	n/a	n/a	74.8	70.8	67.8	64.4
Prepaid and risk-pooling plans (% PHE)	n/a	n/a	n/a	n/a	11.8	12.8	n/a	n/a

Sources: [a]OECD, 2005; [b]Ministry of Health, 1998b; [c]WHO, 2006b; [d]TURKSTAT, 2009e.
Notes: THE: Total expenditure on health; PHE: Private sector expenditure on health; n/a: Data not available.

Private expenditure on health care still comes predominantly from OOP payments. Historically, problems with access to health care, even by those covered by social insurance schemes, and the increasing involvement of doctors in part-time private practice caused high levels of OOP spending in the country. As detailed below (section 3.3.3), visiting a doctor's private office before using public facilities has become the norm over time. Moreover, problems with accessing health care have resulted in the increased use of "self-care". The NHA study defined "self-care" as any attempt by people to cure themselves with or without the help of others (non-health professionals) and buying a drug directly from a pharmacy when in need of health care without any prescription or advice from a health care professional. The NHA Household Survey carried out in 2003 found that 15.5% of patients did nothing, while 26.6% attempted to cure themselves with or without the help of others (Ministry of Health RSHCP School of Public Health, 2006b). In 2000, the share of OOP payments as a proportion of total health care expenditure was estimated to be 27.6% (Ministry of Health RSHCP School of Public Health, 2004), and in 2008, this share was 17.4% (Fig. 3.4) (TURKSTAT, 2009e). The breakdowns of these payments by function and provider, as well as other survey findings, are detailed in section 3.3.3 below. OOP payments comprise direct payments (to private facilities for self-care etc.), cost-sharing (co-payments for prescriptions) and informal payments.

The share of VHI as a proportion of total health expenditure was 3.7% in 2000 (Ministry of Health RSHCP School of Public Health, 2004). External sources do not have a significant share in the composition of health care funds (0.3% in 2000).

Here, a brief note should be made about the reliability of data. The data for 1980, 1985 and 1990 are from unknown sources declared to international organizations. The data for 1995 is from the health expenditure survey carried out by the Ministry of Health (Ministry of Health, 1998b). It should be noted that this survey is the first comprehensive attempt to identify both total health care expenditure and its breakdown by financing agent and source in the public and private sectors. However, the methodology used in the survey is not explicitly defined. Public expenditure is compiled from public sources but there are serious problems, particularly in private expenditure estimations. Results of the 1998 health expenditure survey concluded that the share of health expenditure as a percentage of GDP was 4.8% (Ministry of Health, 2001b). However, the NHA 2000 study, following the OECD's SHA methodology, found the same figure for 1999 to be 6.6%. As there was no visible policy reason for increasing health expenditure from 1998 to 1999, the discrepancy in the two figures lends

support to a general concern about the reliability of data between 1990 and 1998. Similar concerns exist for data published after 2000 as the NHA study was not repeated in the same way (Ministry of Health RSHCP School of Public Health, 2004).

Currently, data on public health care expenditure are collected from public sources with a high level of precision. However, private sector expenditure is estimated from data that are not clearly identified. Given that health care policies have radically changed since 2003, with considerable impact on expenditure patterns, it is still the case that the impact of these changes on the structure of public and private expenditure has not yet been clearly identified within available data. The health expenditure estimates between 2000 and 2005 are calculated by TURKSTAT, whereas the figures for 2006 come from Ministry of Health estimations. However, the situation will improve in future; as a candidate country for EU membership, in order to meet the extended requirements of the EU *acquis communautaire* in the area of health statistics, TURKSTAT began a project in 2007 to improve the reporting of health expenditure. Accordingly, since 2009, Turkey has reported its health expenditure using the SHA methodology.

3.3.1 Compulsory sources of financing

Taxes are collected by the Ministry of Finance in Turkey. There is an ongoing debate regarding serious problems with compliance. Taxes are collected both at the central and the local level but not at the regional level. Local taxes such as property taxes are collected by municipalities. Tax rates are set centrally and confirmed by parliament. Local authorities cannot raise taxes beyond the level defined by the central authorities. In Turkey, tax revenues predominantly come from indirect taxes (60% of total taxes in 2009) (Ministry of Finance, 2010b).[20] There is no tax relief for OOP payments or private health insurance.

Social insurance contribution rates and premium levels are determined by the central government. The GHIS premium rates are given in Table 3.5. Sources of finance can be the government (as an employer), employers and the employee or the beneficiary. The premiums of white and blue collar workers are paid as payroll taxes by the employer and the employee. The contributions of active civil servants are made by the government. Retired members do not pay any premiums themselves, as they have already contributed when they were working, but active civil servants make contributions for this purpose. The self-employed and agricultural workers can be exempted from the compulsory

[20] The VAT (Value added tax) for pharmaceuticals decreased from 18% (the normal rate) to 8% in 2004.

scheme if their annual net incomes (after tax) are below a predetermined range. If their incomes are higher than this level, their premiums are 12% of the income base for premiums (see Table 3.5).

Historically, all social insurance schemes in Turkey have suffered from deficits in their balance of accounts, resulting in heavy state subsidies to make up shortfalls. For example, in 2006, 22 billion YTL (4.0% of GDP, 12.9% of the general budget) was transferred from the state to the SSI to cover the gap between revenues and expenditure (Yardım et al., 2007).

3.3.2 VHI

VHI does not make up a considerable share in health expenditure, and was estimated at 3.7% in 2000 (Ministry of Health RSHCP School of Public Health, 2004). Currently, there are no substitutive or complementary insurance schemes. In the past, some members of SSK and *Bağ-Kur* were believed to have bought supplementary VHI to improve their benefits and also to provide faster access and increased consumer choice. Individuals or companies purchase private insurance for their employees at their discretion. VHI companies are profit-making companies and currently there are no non-profit-making companies operating in the sector. Premiums, duration of insurance, coverage rules and all other rules are set within individual policies bought by the insured. Insurers are free to set their own policy benefits. They can reject applications or exempt some health care services depending on the health status of the insured. Some policies, after a certain level of contribution, can guarantee life-time coverage. VHI normally provides annual coverage and premiums are group or risk rated. Usual risk factors such as age, gender and health status are used in calculating premiums. The previous history of the insured can be a major determinant in decisions to include or exclude certain diseases from the policy or whether to insure the individual at all. Currently, genetic testing is not required as part of the application process. Dependants are not automatically covered by a policy but, depending on the particular policy offered by a company, additional premiums can be paid to extend cover to dependants. There is usually cost-sharing for outpatient care and co-payments for prescriptions.

There is no obligatory package of benefits or a minimum or standard package for VHI. There are two means of reimbursement. If the insured uses facilities contracted by the VHI organization, then it reimburses the facility directly and the patient only pays any co-payments arising from the contract conditions. If the patient prefers to use non-contracted facilities, then patients pays the facility directly and are reimbursed by their health insurance company

upon making a claim. VHI policies usually set upper limits for outpatient visits, prescriptions, physical therapy and outpatient surgical operations. There are no cross-subsidies from VHI to statutory health insurance and there are no tax subsidies for VHI.

3.3.3 OOP payments

OOP payments constituted 27.6% of total health care expenditure in 2000 (Ministry of Health RSHCP School of Public Health, 2004), decreasing in relative terms as private expenditure overall has decreased over time (Table 3.6). The share of OOP payments was 17.4% of total health care expenditure in 2008 (TURKSTAT, 2009e). OOP payments can be in the form of direct payments, cost-sharing or informal payments. The most comprehensive household health care utilization and expenditure survey in Turkey was undertaken in 2003 as a part of the NHA study. The survey concluded that 13% of OOP expenditure was for inpatient care, 75% was for outpatient care and 12% was for preventive care (Yardım et al., 2007). In this study, outpatient care services included outpatient visits to any facility, visits for prescriptions only, vaccinations, intravenous drugs, dialysis, radiotherapy, chemotherapy, physical therapy, outpatient surgery, day surgery, outpatient mental health care and visits to traditional healers. Preventive services covered personal preventive services such as family planning, prenatal and postnatal care, immunizations, checkups and well baby clinic visits. According to TURKSTAT estimations in 2004, 13.3% of OOP payments were made in hospitals, 44.5% to providers of ambulatory care and 40.5% to retail sales and other providers of medical goods (TURKSTAT, 2008a).

Cost-sharing

There is both direct and indirect cost-sharing in Turkey. The level of cost-sharing is decided at the central level by the HIG and it cannot be changed by any other authority unless there is a cancellation of the regulation by a court. There are no explicit stated objectives regarding cost-sharing policies, but the main drivers are to reduce unnecessary demand, to contain costs and to encourage responsible consumption.

Direct cost-sharing occurs as co-payments for prescriptions, medical devices and outpatient care without a referral. Currently, all active workers pay 20% of prescription charges, as do Green Card holders; retirees pay 10%. There are co-payments for outpatient care in hospitals when that is accessed without a referral from a GP; patients pay 8 TL (€ 3.6) and 15 TL (€ 6.8) to public hospitals and private hospitals, respectively. Visits to primary care facilities do not require a co-payment.

Under the Social Insurance and General Health Insurance Law, the SSI is authorized to determine the co-payment rates for pharmaceuticals and medical devices at between 10 and 20% of the total charge. The co-payment rate is 30% in the first trial of in-vitro fertilization treatment and 25% in the second trial. Co-payments are deducted from the salary of the insured and there are exemptions for certain groups. There are no deductibles in the Turkish health care system.

Extra billing and reference pricing are new methods of indirect cost-sharing that were introduced after 2003. The social security funds purchased health care services from the private sector based on prices set in the HIG. However, in many cases, these prices did not cover the actual costs of the service, in which case private providers requested an additional OOP contribution from patients. There is no documented information on the scope and extent of these payments. Under the previous version of the General Health Insurance Law, extra billing was strictly forbidden and requesting extra payment was regarded as a basis for cancelling contracts with providers who followed this practice. However, private providers expressed concern over this prohibition (given that officially stated prices were not based on the actual costs of services), and, subsequently, new legislation allowed a certain amount of extra payment for private providers; up to January 2010 the accepted ratio was up to 30% of the total bill for the next year. In 2010, however, a committee made up of members from the Ministry of Health and SSI classified private facilities into five categories (from A to E) based on the number of beds, patient operations and so on, and established that these facilities can request extra money from patients according to the classification applied. For example, class A facilities can ask patients for up to 70% of the bill for each episode of care and class E facilities can ask for up to 30%.

There is also an ongoing project to introduce a system based on diagnostic-related groups (DRGs) for inpatient care, and actual costs are being calculated for a number of interventions. Currently, there is a pilot study in a number of hospitals controlled by the Ministry of Health, and there are plans to move to this system in 2012.

Reference pricing, a second type of indirect cost-sharing, was introduced after 2004 as part of reforms in the reimbursement of pharmaceuticals. Accordingly, reimbursable pharmaceuticals are grouped into 333 pharmaceutical equivalent groups. These groups are based on price comparisons between similar dosages with the same active ingredients for the same indication. The reference price is calculated in comparison with the drug with the lowest price within each

pharmaceutical equivalent group. The reimbursement agencies pay the cheapest price plus 15%. If a patient chooses to pay for a prescribed drug that costs above the reference price, s/he pays the price difference. Doctors are free to prescribe a pharmaceutical above the reference price. In these cases, the drug is either replaced by a fully reimbursable one by the pharmacist or the patient pays the difference.

Imposing a benefit maximum, a third type of indirect cost-sharing, is generally used by VHI policies. For certain services, depending on the premiums and policy conditions, the VHI policy determines a limit on the amount that will be reimbursed for a defined period (usually one year). This is mainly applied to outpatient services such as physical therapy, dental care and optician services.

There are no differential charges but there are exemptions for certain diseases (e.g. cancer and mental disorders) and chronic diseases, emergency cases and intensive care. Exemption rules are determined by the HIG. Patients with chronic diseases or other cost-sharing exempted diseases have to provide a medical report from a group of doctors. These reports are valid for two years and have to be renewed using the same process. There is no evidence of fraudulent practices (and given that medical reports must be validated by a group of specialists, it would be very difficult to obtain false documentation). Such patients are exempt from co-payments for pharmaceuticals. However, reference pricing rules apply to all categories of patients. In other words, even patients with medical reports have to pay any differentials of the cost of their prescribed drugs above the reference price. Since the implementation of the GHIS, all health care services have become free for children under 18 without any other social security coverage (as dependants).

Informal payments

Informal payments – their scope, the reasons for their payment and the amounts involved – are widely debated in Turkey. In the 2002–2003 NHA Household Survey, the rate of informal payments was found to be 5.2% of total OOP expenditure (Ministry of Health RSHCP School of Public Health, 2006a). A more recent study aimed specifically to explore the scope and reasons for informal payments found higher shares (Tatar et al., 2007). This study concluded that 25% of total health expenditure fell under the "informal category" for a selected province (Kırıkkale) in Turkey. The main reasons for the difference, again, are attributable to the methodologies used (the first study was a general OOP payments survey, whereas the second was designed explicitly to find out about informal payments), coverage (the first study was representative of Turkey

as a whole, while the second covered only a medium-sized city) and, last but by no means least, considerable differences in the definition of informal payments used in the two studies. The first study defined informal payments loosely as any in-cash contribution made without a receipt and in-kind contributions, whereas the second study defined informal payments as payments (in cash or in kind) made to service providers (person or institution) by people who are entitled to the services given, in addition to any legally defined payment (Tatar et al., 2007).

According to the results of this second study, informal payments were commonly made for outpatient services and in offices of practitioners who work part-time in the private sector. Only 28% of informal payments were in-kind contributions and goods. There is no clear evidence showing the effect of informal payments on access to health care. However, Tatar et al. (2007) shows that 59% of respondents replied that they paid informal payments in the expectation of receiving better quality or more attentive medical care.

There are two aspects of informal payments in Turkey that make the practice challenging to quantify. The first is that allowing doctors to operate in their private part-time practices as well as in the public sector was, until quite recently, a long-standing norm,[21] making it difficult to gauge the level of payments made in the private realm. Several reasons can be given for the existence of such payments but the most salient are the fact that part-time private practice allows private medical offices to be a bridge to accessing public facilities and doctors in the public sector earn relatively low salaries. This may change in future due to the passage of new legislation, the Law on Full-Time Medical Practice of University and Public Sector Health Personnel, in January 2010, which requires health care professionals working in Ministry of Health facilities to choose whether they will work exclusively in the public sector and discontinue any work in the private sector.[22] The second aspect of informal payments is that since they take place illegally (that is, "underground"), by definition, it is almost impossible to obtain information from sources or to discuss challenges.

[21] In the 1970s, an attempt was made to halt this dual practice but it met with enormous opposition from professionals and the government had to change its stance.

[22] Those working in university facilities can continue to work in both sectors as long as their daily full-time hours in the public sector are fully met before undertaking any private work.

3.3.4 Parallel health systems

Before 2005, certain ministries (such as transport and education) had their own facilities to provide health care services for their employees. However, in 2005 all these facilities were transferred to the Ministry of Health, leaving only the Ministry of National Defence and municipalities with their own facilities. The Ministry of National Defence facilities serve staff and their dependants as well as conscripts undertaking their military service. Facilities are open to the public (only 5% of their capacity). In terms of financing, these facilities are funded through the Ministry of National Defence's allocated budget. Municipality facilities serve the public and are financed from the central government budget and their revolving funds.

3.3.5 External sources of funds

The share of external funding sources is meagre in the Turkish health care system. According to the 1999–2000 NHA study (Ministry of Health RSHCP School of Public Health, 2004), these funds formed 0.3% of total health care expenditure in 2000.

3.3.6 Other sources of financing

According to the NHA study, occupational health services and other medical benefits to employees provided by companies or private employees constituted 3.7% of total health care expenditure in 2000 (Ministry of Health RSHCP School of Public Health, 2004). By law, companies employing 50 or more employees are obliged to employ a medical doctor and have a health care unit within the facility. The NHA study found that the share of non-profit-making institutions serving households was 1.5% of total health care expenditure (Ministry of Health RSHCP School of Public Health, 2004).[23]

3.3.7 Mental health care financing

It is impossible to separate mental health financing from the general financing of health care services. The implementation of community-based mental health services began in 2011, with the establishment of 26 such centres providing services in 24 provinces (see Chapter 6). Mental health services are financed by the GHIS covering the patient. Low-income patients are covered by the Green Card. In 2000, mental health hospitals represented a 0.22% share

[23] A special survey was carried out to estimate this expenditure as there is no other information regarding this aspect of health care financing.

of total health care expenditure (but this excluded mental health wards in general and university hospitals) (Ministry of Health RSHCP School of Public Health, 2004).

3.3.8 Long-term care financing

Long-term care is not well developed in Turkey except for some private initiatives that have started to flourish recently. However, currently there are no data on the scope of this sector.

3.4 Pooling and allocation of funds

3.4.1 Pooling agencies and allocation methods

Currently, the public "funders" in the Turkish health care system are the SSI and the government. For previous SSK, *Bağ-Kur* and GERF members, funds are collected and pooled separately under the umbrella of the SSI. Payroll taxes for the SSK are collected by the SSK, which also collects contributions for pensions and unemployment. The contributions for health are collected separately and are not mixed with other contributions. Any annual deficits are covered by the state, with the difference directly transferred to SSK's accounts. Similarly, premiums for *Bağ-Kur* and GERF members are collected and the state subsidizes any deficits.

For the Active Civil Servants Scheme and Green Card, funds are allocated through the government budget. The size of the budget for these schemes is based on the previous year's budget plus the inflation rate and other envisaged changes. If the budgeted money is less than the funds used during the year, supplementary funds are transferred to the schemes.

The premiums of employees entering the system after October 2008 are pooled by the SSI. Currently, the SSI manages the premium income on behalf of the social insurance schemes and also controls all expenditure, except that of the Green Card programme. By law, the government is obliged to transfer 25% of the SSI's collected premium income each month as a government subsidy. The basic principle is eventually to have a health insurance system that can balance its books, but it is envisaged that at the beginning the government will need to provide subsidies until the system becomes self-sufficient.

3.4.2 Mechanisms for allocating funds among pooling/ purchasing agencies

For the SSI, revenue collection, pooling and purchasing functions are integrated. Services are purchased from public and private providers as per global budget and service contracts (see section 3.5).

For the Green Card and Active Civil Servants Schemes, a global budget is set for overall spending. The allocation process is made annually through the state's general budgeting procedures. The magnitude of the budget is historical, based on the previous year's budget plus any other expected increases for the coming year. The budget is set out in annual legislation so it is enforceable for all public facilities. However, there are no penalties for overspending. In cases where expenditure is more than the budgeted amount, a supplementary allocation is made. Overspending has always been an issue in Turkey, particularly with recent increases in health care expenditure by public agents. There are no regional or local budgets, nor are there separate budgets for mental health, long-term care rehabilitation, and so on. However, the specific vertical programmes within the Ministry of Health, such as the directorates of tuberculosis control, malaria control and cancer control, have their own budgets. But these programmes are specifically directed towards prevention and health promotion and not to patient care.

The SSI currently allocates a global budget to Ministry of Health hospitals. Accordingly, a predetermined amount of money is transferred to the Ministry of Health for the services provided by its facilities for SSI members. This has triggered a debate between the SSI and the private sector as the SSI is now considering whether to implement the same payment method for private hospitals and drugs. However, the initiative is strongly opposed by the affected parties.

3.5 Purchasing and purchaser–provider relations

For Ministry of Health hospitals, a global budget is set for overall spending. These budgets are set by parliament based on the requests made by the Ministry of Health as a part of the annual state budgeting process. Every year, the Ministry of Health determines the next year's budget based on the previous year's budget plus new investments and programmes and the inflation rate, minus completed investments and programmes. The draft budget is prepared internally within the Ministry based on draft budgets from various departments. The draft is

then sent to parliament for ratification as part of the general state budget. Before ratification, the budgets of each Ministry and public institution are discussed by the Budget Commission, where the previous year's budget is also cleared. When a budgeted amount is exceeded during the year, a supplementary amount is transferred from the state for activities that cannot be cancelled or stopped midstream. Ministry of Health hospitals also have additional funds from their revolving funds, which receive money from reimbursement agencies (SSI, VHI insurers) or households for services provided.

University hospitals also have dual budgets. The first financing stream comes from the state following the same procedures as Ministry of Health hospitals. University hospitals also have revolving funds from which they generate income from reimbursement agencies and patients. In reality, for both Ministry of Health and university hospitals, the state budget covers the majority of medical personnel expenses but other expenditure is increasingly covered by the revolving funds.

Before 2006, the SSK had an integrated budget as hospitals and other health care facilities were directly owned by the organization. However, after the transfer of SSK facilities to the Ministry of Health, the purchaser and provider functions were clearly split. At the point, the SSI and private insurance funds purchased health care services from both public and private facilities. For public (that is, Ministry of Health and university hospitals and facilities) and private institutions, the prices and service delivery rules are determined by the HIG and providers are reimbursed only if they follow these rules.

For public sector providers, there are no contractual agreements where facilities are owned by the Ministry of Health; the SSI transfers a global budget to the Ministry of Health for services provided to its beneficiaries. For private sector facilities, contracts are negotiated and concluded between the SSI and providers.[24] The duration of a contract is usually one year. Currently, the monitoring process is quite loose. The provider organization is not reimbursed if it deviates from the agreed contract but there are no mechanisms to assess and monitor the quality and appropriateness of the services provided. In theory, if a provider deviates from the agreed terms and conditions, the contract should be cancelled. However, there is little evidence on what happens in practice. The SSI contracts selectively with the private sector; consequently, not all private providers have contracts with the SSI. Contracts are generally on a case by case basis for selected services, such as cardiovascular diseases, or certain

[24] This has been compulsory since July 2007.

operations, such as bypass or cataract surgery. Currently, as the SSI does not cover Green Card holders, the Ministry of Finance signs separate contracts with private health care providers.

In some cases, patients may be asked to pay any difference to bridge the gap between the reimbursed price and the actual cost of the service. Under the GHIS, private providers can request from 30 to 70% of the bill from the patient based on their classification (see section 3.3.3). Given the flourishing private sector and the current high level of unmet demand, there is currently no competition among health care providers, although it is envisaged that in the long run, with increasing numbers of public and private providers, this will change. Some private hospitals have already entered into block contracts with other countries for cross-border health care provision; however, currently there are no data to assess the extent of these contracts.

The impact of supplier-induced demand is causing concern in Turkey. In particular, since the introduction of a performance-based payment system for health professionals in public facilities in 2004 (see section 3.6.2), a link has been established between the number of interventions and the income of the facility and the health professional. Therefore, it is believed by some that supplier-induced demand has played an important role in the increasing number of health care interventions and rising expenditure in recent years. However, there is no formal evidence to support this claim. The impact of the new payment system is detailed in section 3.6.2.

3.6 Payment mechanisms

3.6.1 Paying for health services

Both prospective and retrospective payment mechanisms are used in Turkey. Health care facilities have resources from the state (through the general budget) and the SSI and private health insurance funds (which pay for services supplied, with the income going into a facility's revolving funds). The state budget is predominantly used to pay staff salaries; all other items are financed through the revenues generated by the hospital/medical facility. The budget is calculated on an historical basis, based on the previous year's allocation adjusted for inflation and budget growth. Revolving funds are paid retrospectively. Providers are reimbursed after services are delivered based on the prices in the HIG. Until August 2008, the reimbursement agencies made their payments both on a fee-for-service basis and through so-called "package prices". For example,

primary care providers were paid 11 YTL (€ 6.5) for each visit regardless of services provided in that visit. There were also comprehensive arrangements for package payments both in secondary and tertiary care. The HIG outlined the services under a package payment, along with their prices. However, in August 2008, this arrangement was challenged successfully in the courts and services are now paid for only on a fee-for-service basis. Currently, the SSI allocates a global budget to Ministry of Health hospitals. Accordingly, a predetermined amount of money is transferred to the Ministry for the services provided by its facilities to SSI members.

Two radical changes are expected in the foreseeable future. First, there is a proposal to move to a DRG-based system for the reimbursement of inpatient care. Comprehensive cost-analysis research is being undertaken in eight selected hospitals. It is envisaged that the GHIS will purchase inpatient services from all hospitals based on DRG groups after the finalization of the project. The second change involves the payment of family practitioners. The family practitioner scheme started implementation on a pilot basis in 2004 and was extended to cover the whole country at the end of 2010 (see Chapter 6). Family practitioners will now be paid on a per capita basis with an additional component based on performance (see section 3.6.2).

Public health services are mainly the responsibility of the Ministry of Health, although some responsibilities also fall within the jurisdiction of municipalities. These services are funded extensively from the state budget and are delivered through family health centres and population health centres (see Chapter 6). As described above, family practitioner services in primary/ambulatory care settings are paid for on a capitation basis as part of the family practitioner scheme, but other facilities which provide such services are reimbursed through retrospective payments (on a fee-for-service basis). Inpatient care, by comparison, is paid for by both prospective payments (through Ministry of Health budget payments) and retrospective payments (by reimbursement agencies and patients paying into hospital revolving funds). Pharmaceuticals are reimbursed retrospectively but there is a co-payment for active workers (20%), Green Card holders (20%) and retirees (10%).

Outsourcing of diagnostic services and other services such as hospital catering and cleaning is quite common in Turkey. A survey conducted by the Ministry of Health in 2008 with the aim of making an economic assessment of outsourcing practices found that 244 hospitals analysed saved a total of 32.3 million TL by outsourced cleaning services, while 131 hospitals saved a total of 38.7 million TL by outsourced catering services. With regard to medical

services, a magnetic resonance test cost 81.80 TL in hospitals that conducted the test on their premises but cost 42.8 TL for hospitals that preferred outsourcing. Similarly, a computed tomography scan cost 65.0 TL when conducted in-house and 41.30 TL when outsourced (Ministry of Health, 2010).

3.6.2 Paying of health care personnel

Turkey has a mixed payment system for health care personnel. With the introduction of family practitioner scheme and a performance-based payment system (see below), the overall system has become more complicated. Moreover, as mentioned above, hospitals are financed both by central government budgets and their own revolving funds. A medical degree is the prerequisite for a position in the public health care system.

As mentioned earlier in this section, following the full implementation of the family practitioners scheme, family doctors are paid by capitation, which is the only payment method for these practitioners. According to the payment model, individuals register on a family practitioner's list. Specific coefficients are determined for specific population groups (Table 3.7).

Table 3.7
Coefficients used to determine family practitioner payments

Population/patient group	Coefficient applied
Children under 5 years of age	1.6
Children and adults aged between 5 and 65 years	0.79
Adults over 65 years	1.6
Pregnant women	3.0
Prisoners	2.25

The number of people in each group on the family practitioner's list is multiplied by the relevant coefficient to derive a total number of points. Up to 1 000 points, a fixed amount is paid to the family practitioner, but this varies according to the status of the physician: for specialists and physicians without any specialty, this figure is 2 167 TL, and for family practitioner specialists the figure is 3 139 TL. Over 1 000 points, the remaining points are multiplied by a coefficient of 1.4418 and the resulting amount is paid to the family practitioner. Family practitioners are also paid allowances to cover rent for the premises they work in, for their staff and for specific preventive measures they oversee.

Hospital-based doctors are paid both by salary and through revolving funds based on their performance in the previous month under the new performance-based payment system. There is no differentiation between medical specialties as performance is graded by medical procedures. The system has identified 5 300 different medical procedures, such as medical examination, operation and invasive diagnostic techniques, with different coefficients based on the difficulty of the procedure and its time demands. The coefficients change for part-time practitioners, specialists and for some departments such as intensive care, dialysis, operating rooms and emergency.

Universities have their own hospitals where academics teach, conduct research and undertake clinical practice. University hospitals can be either public or private depending on the ownership of the university. If the university is public then the university doctors are paid a salary from the government budget and also are paid from their hospital's revolving fund. If the university is private, the doctors are paid directly from university resources. Finally, there are Ministry of Health teaching hospitals providing specialty education for doctors. These doctors are paid both by salary and through additional revolving funds subject to performance.

The performance-based system is applied in all Ministry of Health facilities and determines the rules and payment levels that will be applied from revolving fund revenues. The main factors that determine the amount that will be paid from the revolving fund to health personnel are type of job, title, working conditions and hours of work per week; length of service; performance; part-time or full-time status; and the number of consultations, operations and all other medical interventions undertaken. The system started in 2003 in 10 hospitals and 1 provincial health directorate as a pilot study, and countrywide implementation commenced at the beginning of 2004. Initially, only individual-based criteria and quantified performance criteria were used, but later in 2005 institutional criteria were also included in the system. For primary health care facilities, the provision of preventive services was added to the measurement of performance in addition to curative services. For hospitals, the system differentiates between teaching hospitals and others, as teaching and research activities need to be considered in the former case.

The starting point of the system was to determine the relative cost rates of 5 300 medical procedures undertaken by doctors from start to finish. Each procedure is given a specific number of points. A doctor's individual performance is calculated by adding all the points attributed to the procedures s/he has undertaken each month. After adding up the points of all the doctors

in the hospital, an arithmetical average is calculated to determine institutional performance. For hospital managers, doctors in non-clinical specialties, other health personnel (technicians, nurses, etc.) and other staff working in the hospital (ancillary staff, civil servants), a coefficient is determined based on their duration of work, title, tasks and working conditions. These coefficients are multiplied by the average institutional performance points of the facility to calculate net performance points. Consequently, in this system, the performance of clinicians is measured directly and the performance of other staff is measured indirectly. There are additional points for those who work full-time in the facility in order to motivate full-time practice. The points of the staff are multiplied by a monthly determined monetary coefficient to define the extra payments from the facility's revolving fund. This monthly coefficient is determined by the revolving fund committee by dividing the money that would be distributed to the personnel from the revolving fund by the total net performance points of all staff.

In 2005, institutional performance was added to the system. There are four measures of institutional performance: the outpatient coefficient; the quality coefficient, based on hospital staff's self-evaluation of the quality of services provided; the physical facility coefficient; and the patient satisfaction coefficient. The last factor is determined by periodic questionnaires applied to patients and their companions. The institutional performance appraisal is determined by calculating the arithmetic average of these four aspects. The calculated outcome is a coefficient between 0 and 1. By law, only 40% of revolving fund revenues can be distributed to health personnel, and only institutions achieving 1 as their institutional performance coefficient can access this maximum of 40%; the lower the coefficient, the lower the amount that can be distributed to staff. In this way, not only individual performance but also the performance of the institution as a whole is taken into account in determining additional revolving fund disbursements to staff every month.

There are no clear-cut nursing specialties in Turkey. Nurses and midwives are paid based on the salary scale that reflects their experience rather than their specialty. These members of staff are salaried but may receive an additional share from their institution's revolving fund. Nurses can undertake postgraduate nursing programmes in internal medicine, surgical nursing, gynaecology, psychiatry, paediatrics, public health and nursing management.

Dental practitioners, both specialists and primary care dentists, predominantly work in private practice and are paid on a fee-for-service basis. Only the services of dentists working in public sector facilities are reimbursed by the SSI, and these dentists are paid by salary and a facility's revolving funds.

Other health care workers, including allied health professionals, managerial staff, social workers and pharmacists working in the public sector, are paid by salary plus revolving fund payments. Pharmacists are predominantly community pharmacists working in the private sector and are paid by the SSI and patients.