Health Care Systems in Transition

Turkey

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Foreword

The Health Care Systems in Transition (HiT) profiles are country based documents that provide an analytical description of the health care system and of any reform programmes under development. HiTs form the basis of the information system on health systems and reforms at the World Health Organization Regional Office for Europe (WHO/EURO).

The aim of the HiT initiative is to provide relevant comparative information to support the development of health care systems and reforms in countries in the European Region of WHO. This initiative has four main objectives:

- to learn about different approaches to financing, organization and delivery of health care services in the European Region of WHO;
- to describe the process and content of health care reform programmes and to monitor their implementation;
- to highlight common challenges and areas that require more in-depth analysis and which could benefit in particular from cooperation and exchange of experiences between countries;
- to provide a tool for dissemination and exchange of information on health systems and reform strategies between different countries in the WHO European region.

The HiT profiles are produced by country experts in collaboration with staff in WHO/EURO's Health Systems Analysis Programme. In order to maximize comparability between countries, a template and a questionnaire have been developed. These provide detailed guidelines and specific questions, definitions and examples to assist in the process of developing the HiT profile. Quantitative data on health services are based on the *WHO Health for All Database, OECD Health Data* and *World Bank Data*.

The realization of the HiT profiles faces a number of methodological problems. In many countries, there is relatively little information available on their health systems and on the impact of health reforms. Most information contained in the HiTs is based on information gathered from individual experts in the respective countries. As a result, some statements and judgements may be coloured by personal interpretation. In addition, the wide diversity of systems in the WHO European region means that there are inevitably large differences in understanding and terminology. As far as possible, these have been addressed by the development of a set of definitions but some differences may remain. These caveats, however, are not limited to the HiT profiles, but apply to most attempts to study health systems.

In addition, HiTs are a source of descriptive, up-to-date and comparative information on health systems, which should enable policy-makers to identify key experiences relevant to their own national situation. They constitute a comprehensive source of information which can form the basis for more in-depth comparative analysis of reforms. The current series of HiT profiles includes over half of the countries in the Region. This is an on-going initiative with plans to extend coverage to all countries in Region and to up-date the material at regular intervals and to monitor reforms over the longer term.

World Health Organization
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Department of Health Policy and Services
Health Systems Unit

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The current series of the Health Systems in Transition Profiles has been prepared by a team led by Josep Figueras and comprising Tom Marshall, Martin McKee, Suszy Lessof, Ellie Tragakes (regional editors) and Zvonko Hocevar (data analysis and production) in the Health System Analysis Programme, Department of Health Policy and Services of the WHO Regional Office for Europe.

Administrative support was provided by Phyllis Dahl, Doris Holst and Kathryn Winther. Data on health services was extracted from the Health for all database. Special thanks are extended to OECD for the data on health services in western European countries, and to the World Bank for the data on health expenditure in CEE countries.

The HiT on Turkey has been written by Dr Goksenin Aktulay and edited by Martin McKee.

Introduction and historical background

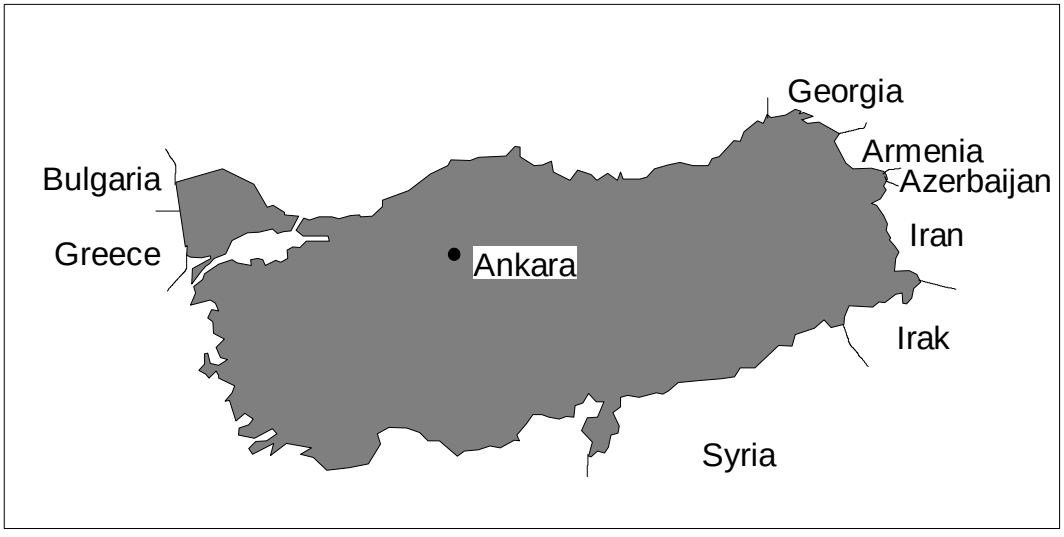
Introductory overview

Turkey is situated in the south east of Europe, divided between Europe and Asia by the Bosphorous. The European part of Turkey borders Greece and Bulgaria. The Asian part borders Armenia, Azerbaijan, Gerorgia, Iraq and Syria.

Turkey's population in 1990 was 56,473,035 but it is growing rapidly and in 1995 it was estimated to be about 62,526,000. This equates to an average density of 73 inhabitants per square kilometre. The political system of Turkey is parliamentary democracy. The country is administratively divided into 79 provinces. The governor of each province is appointed by the Council of Ministers on the recommendation of the Ministry of Interior, and is responsible to all central government ministries. There are considerable geographical variations: eastern and south-eastern regions are especially underdeveloped compared to other parts of the country.

The demographic profile of Turkey is relatively young compared with other European countries: 35.8 percent of the population is aged under 15 and only 4.2 percent is aged 65 and over in 1990. The projections for 2025 are 22.9 percent and 9.0 percent respectively, with an ageing population creating the need for different types of health services during the 21st century. The crude birth rate was 29.9 per 1,000 between 1985-1990, and during the period 1972-1990 life expectancy at birth increased from 57.6 to 65 years.

Although there are some weaknesses in the quality of epidemiological data, especially in rural areas, the most important causes of mortality in the country are: in infancy, infectious diseases; in children aged 1-5, infectious diseases and their complications, mostly associated with malnutrition; in adolescents and the early twenties, accidents; in those aged 25-44, heart disease and accidents; in those aged 45-64, heart disease and respiratory disorders.



Infant mortality, at 52.6 per 1,000 live births is one of the most significant health problems in Turkey. Childhood mortality is also high, although it varies within the country, with an overall figure for mortality among children under 5 of 60.9 per 1,000. This is 50.5 in urban areas and 76.4 in rural areas and accounts for 50 percent of all deaths.

A 1974 survey estimated the maternal mortality rate to be 207 per 100,000. Another study conducted in 1988, carried out in hospitals, estimated that this had fallen to 74 per 100,000. However, since the latter survey was based on hospital data and the risk to mothers is higher in births outside of health institutions, the maternal mortality rate seems more likely to be about 100 per 100,000.

Historical background

In the first years of the Republic (after 1923), the country lacked a coherent structure for the delivery of health services and for training personnel. The following years brought a rapid expansion of health provision; vertical programmes were established to control malaria, tuberculosis and other infectious diseases, and educational programmes were established to train health personnel whose numbers have increased steadily since.

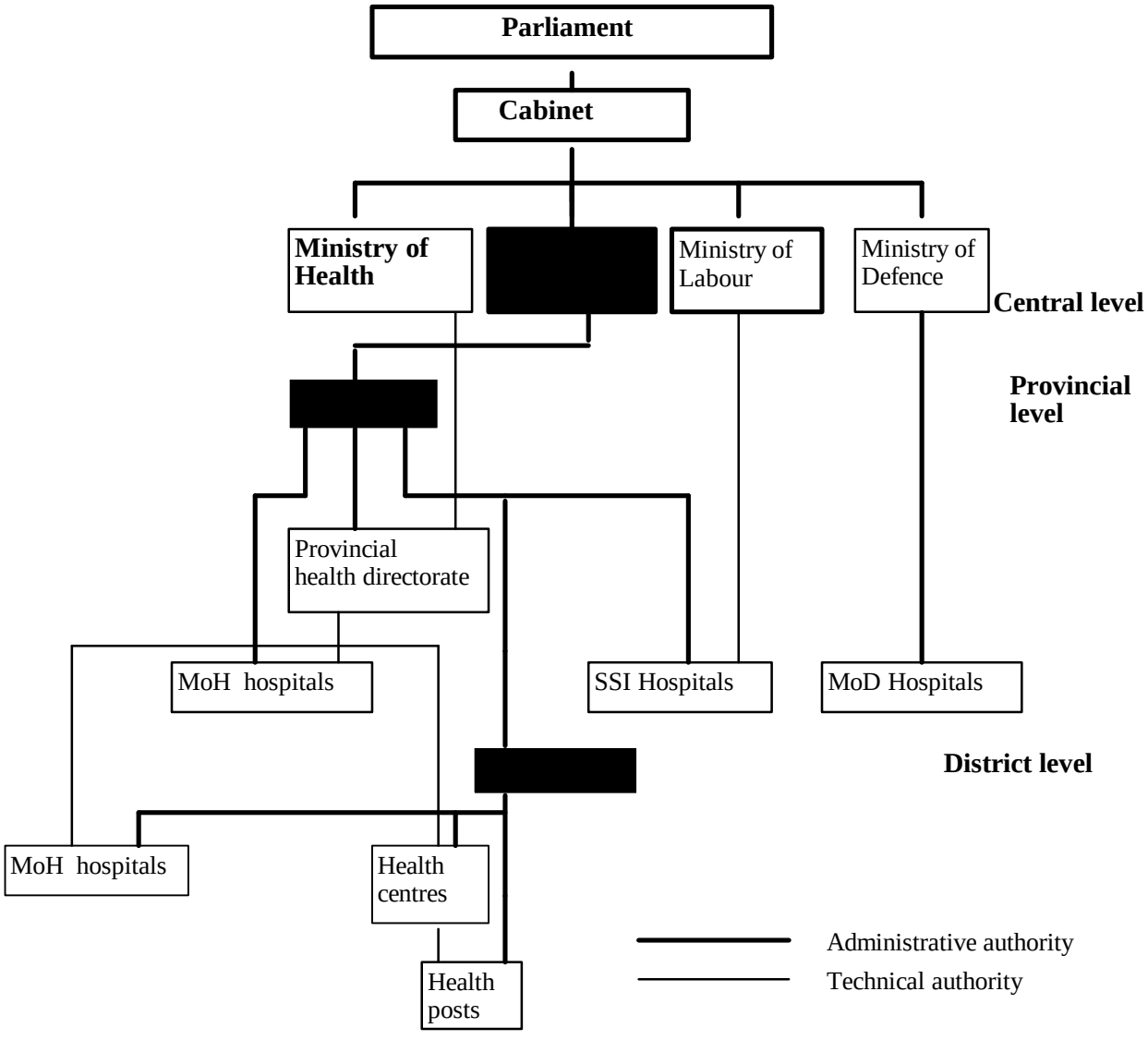
In 1945, the Social Insurance Organization (SSK) was established to provide health, disability and retirement benefits to workers and since then has developed its own network of health care facilities, mostly hospitals. Major progress in the provision of health services occurred in 1960's with the 1961 "Basic Health Law" or "Statute of Socialization of Health Services". The main aim of the 1961 Basic Health Law was to socialize health services. Socialization of health services was defined as providing health services free or partly free-of-charge at the point of delivery, by premiums paid by them, subsidies by the State, and allocations from public sector budgets.

The aim was to expand health care services to make them easily and equally accessible to the whole population. This applied to preventive and curative care, environmental health services and health education. Certain key aspects of this system, such as collection of premiums, were never implemented. Access to health services is not currently universal because of lack of affordability of certain services for some groups. Although there are different views on the underlying reasons, it is generally agreed that socialization of health services has not produced the expected outcome in the last 30 years; and since the late 1980's, movements to reform the health system have intensified.

Organizational structure and management

Organizational structure of the statutory health care system Health services in Turkey are provided mainly by the Ministry of Health (MoH), the Social Insurance Organisation (SSK), Universities, the Ministry of Defence (MoD), and private physicians, dentists, and pharmacists. Other public and private hospitals also provide services, but their total capacity is low. The autonomy of the agencies which provide health care makes it difficult to ensure effective co-ordination and delivery of services.

The MoH is the major provider of hospital care and primary care and the only provider of preventive health services. At the central level, the MoH is responsible for the country's health policy and health services. At the provincial level, health services provided by the MoH are administered by Provincial Health Directorates accountable to the Provincial Governors. The organisational structure is as follows.



Planning, regulation and management

The parliament is the ultimate legislative body and regulates the health care sector. The two main bodies responsible for planning the health care services are the State Planning Organisation (SPO) and the Ministry of Health. The role of SPO is to define the macro, policies. The MoH in-turn develops operational plans regarding the provision of health care services. The MoH is also responsible for the implementation of defined policies. In every province there is a provincial health directorate which is administratively responsible to the governor of the province and technically responsible to the MoH. Administrative responsibility mainly involves administration of personnel and estates management, whereas technical responsibility involves decisions concerning health care delivery, such as the scope and volume of services. Appointments of the provincial health directorate personnel is made by the MoH by the approval of the Governor.

The MoH operates an integrated model and provides primary, secondary and tertiary care. Primary care is provided by the MoH, through the health centers, mother & child health and family planning units, some vertical units such as TB dispensaries and health posts. The provider units are technically responsible to the provincial health directorates and administratively to the governor in provinces, to the kaymakam in the districts. The MoH appoints staff and appointments are approved by the governor. Apart from physicians, the distribution of the personnel to the provider units is undertaken by the provincial health administration. The governor and the kaymakam has the authority to relocate staff if needed. MoH also operates secondary and tertiary hospitals. These hospitals are technically responsible to the provincial health directorates and administratively to the governor in provinces, to the kaymakam in the districts.

The MoH is the decision maker of financial resource allocation for the current and capital expenditure once its budget is approved by the parliament. The Ministry of Finance directly allocates funds to some budget lines such as salaries, to the accounts of hospitals or to the provincial health administrations, following the authorisation of MoH.

The Ministry of Defence, the Ministry of Labour and Social Security, the municipalities, universities (with medical faculties) and several State Institutions have largely autonomous provider units, mainly hospitals, which are administratively responsible to the respective organisation, and technically responsible to the MoH.

Decentralization of the health care system

Decentralisation of the Turkish health care system is in line with deconcentration. The provincial health administrations are subordinate units of the MoH and possess some administrative functions. While technically responsible to the MoH, the provincial health administrations and the provider units are administratively responsible to the governors who ensure the inter-ministerial co-ordination at the provincial level.

Health care finance and expenditure

Main system of finance and coverage

The annual growth rate of GNP in Turkey is currently about 5 percent. Since 1963 total health care expenditure has accounted for between 3.0 percent and 4.3 percent of GNP. The allocation to the Ministry of Health from the national budget has been between 3 and 4 percent. Overall health expenditure also includes spending by social security organizations such as the Social Insurance Organisation, the Government Employees Retirement Fund (GERF), the Social Insurance Agency of Merchants, Artisans and Self-employed (Bag-Kur) and university hospitals, health expenditures for civil servants, state economic enterprise hospitals, foundations, private health insurance companies, and out-of-pocket payments (user charges).

Table 1. Aggregate sources of funding for health services and expenditure, 1993 (In 1994 Prices, Trillion TL)

	EXPENDITURE OF FUNDS					
SOURCE OF FUNDS	**Public**	**(%)**	**Private**	**(%)**	**Total**	**(%)**
State Budget	69.0	66	0.5	0.86	**69.5**	42.63
Insurance Funds	31.0	30	4.5	7.76	**35.5**	21.77
User Charges	5.0	4	53.0	91.38	**58.0**	35.60
Total	**105.0**	**100**	**58.0**	**100**	**163.0**	**100.00**

Source: Health Financing Policy Options Study For Türkiye, Health Insurance Commission of Australia, PCU, MoH, 1995

The financing of health care in Turkey is quite complex (Table 4) because of the large number of agencies involved in providing or financing health care services or both (see Table 2). Approximately one-third of the total expenditure is financed from taxation,17% by social insurance funds, the remaining %50 by direct out-of-pocket payments (user charges) (see Table 1).

Table 2. Provision and financing of health services

PROVISION OF SERVICES	SOURCES OF FUNDS
Public	**State Budget through**
Ministry of Health	Ministry of Health
Social Insurance Organisation	Higher Educational Council
University Hospitals	Ministry of Defence
Municipalities	Other Public Sector Sources
State Economic Enterprises	**Compulsory Insurance**
Ministry of Defence	Social Insurance Organisation
Other Ministries	Bag-Kur
Private	GERF
Turkish and International Hospitals	**Private Insurance Funds**
Private Physicians	**Out-of-pockets Payments (User Charges)**
Private Pharmacists	
Private Laboratories	
Philanthropic	

Source: Health Sector Master Plan Study, Price Waterhouse/Ankon, State Planning Organisation, 1990

The major source of funds for Ministry of Health hospitals is allocations from general government revenues (83%) and fees paid to hospitals by either insurers or individuals (12%). Since 1988 additional funding (5%) has been available from earmarked taxes on fuel, new car sales, and cigarettes. In recent years, inflation has presented a major challenge to efforts to control public expenditure. It has, therefore, become routine to revise the initial general budget allocations during the financial year.

University Hospitals:

University hospitals have two main funding sources: state budget allocations through the Higher Education Board and universities' own funds. The state budget covers both recurrent and capital expenditure. Through attention to self generated funds, that can be retained, revenues have been strengthened compared to state hospitals.

Social Insurance Organisation (SSK):

SSK is a social security organisation for private sector and blue-collar public sector workers, and functions both as an insurer and as a health care provider. Members mainly use SSK services but are referred when needed to MoH, University and private health institutions. The SSK does not provide or pay for preventive services. SSK health services are funded by premiums paid by employees and employers. There are two other sources of funding in addition to premiums: income from fees paid on behalf of non-members using SSK facilities (for example Bag-Kur members), and income obtained through co-payments (10 percent for retired and 20 percent for employed) of drug costs for outpatients.

Even though efforts are made to ensure that the different insurance branches of SSK are self financing, the surplus of income over health care expenditure has been used to subsidise other SSK activities such as pensions. However in recent years the surplus has been declining to a point where expenditure matches the revenue.

One of the major problems that SSK management faces today is the over emphasis on cost containment policies at the expense of quality. There are widespread complaints by SSK users about the quality of health care and accessibility of SSK health facilities.

There are also private funds established in accordance with article 20 of the SSK Law. These funds are open to insurance, banking and stock market institutions, and provide services to their members at least the same level as permitted by the SSK Law. In general, payments are made by enrolees that are later reimbursed. There are many complaints about services under this scheme.

The Social Insurance Agency of Merchants, Artisans and the Self-Employed (Bag-Kur):

Bag-Kur is the insurance scheme for the self-employed. All contributors have the same entitlement to benefits covering all outpatient and inpatient diagnosis and treatment. Bag-Kur operates no health facilities of its own, but contracts with other public service providers. The scheme works on a reimbursement system where fees are determined independently by the institution. Drug purchases require a 20 percent co-payment from active members and a 10 percent co-payment from retired members as in SSK.

The main problem of Bag-Kur is low participation in health insurance by those entitled to join. Currently, there are only about 4 million Bag-Kur health insurance certificate holders out of the 12 million Bag-Kur members.

Government Employees Retirement Fund (GERF):

GERF, primarily a pension fund for retired civil servants, also provides other benefits including health insurance. There is no specific health insurance premium collected from either active civil servants or pensioners. The scheme is financed by general budget allocations. GERF pays for all health care needs of retired government employees with only a 10 percent drug co-payment paid by users.

GERF has no control over its rapidly growing health expenditures and simply pays for the treatment costs of its members based on the amounts declared by the providers. It is purely reactive, with no capacity for analysis of costs or utilization rates.

Active Civil Servants:

Health care expenditure of all active civil servants is covered by their organisations through specific state budget allocations. When these are insufficient, new allocations are made.

Private Health Insurers:

About 30 institutions offer private health insurance with, in 1995, a total coverage of 500,000 people and a total turnover of 1,000 Million TL .Most subscribers are already insured by social insurance organizations, and therefore pay the premiums to the institution they are legally a part of, but also to their private insurance fund to obtain higher quality service. Private health insurance is the country's fastest developing form of insurance. Those covered by private insurance are the employees of banks, insurance companies, chambers of commerce, computer companies and the like. Generally, employers pay the premiums in addition to their statutory obligation to pay SSK premiums.

Structure of Health Care Expenditures :

This is set out in Table 4.

hide

(Current Prices Billion TL)

TOTAL FINANCING
154.108

GENERAL STATE BUDGET	
MINISTRY OF HEALTH	30,360
SPECIAL FUNDS	1,068
UNIVERSITIES	7,369
MINISTRY OF DEFENCE	6,745
OTHER PUBLIC	2,601
ACTIVE CIVIL SERVANTS	13,808
GOV.EMP.RETRM.FUND	5,525
OTHER SOCIAL FUNDS	2,508
TOTAL	69,984

SOC.INSURANCE PREMIUMS	
SOC.INS.ORGANIZATION	22,153
G.E.RETIREMENT.FUND	1,802
BAG-KUR	2,987
TOTAL	26,942

OUT-OF-POCKET EXP.	
VOLUNTARY INS.	1,000
DIRECT PAYMENTS	56,182
TOTAL	57,182

Gov.Emp.&Pensioners 19,333

Funds 1,706

Funds 802

48,143

SIO Drug co-payments 1,271

SOC.INS.FUNDS		
SIO	23,424	
GERF	7,327	
BAG-KUR	2,987	
ACTIVE CIVIL SERVANTS	13,808	2,049
TOTAL	47,546	

53,862

SIO	1,250	
GERF	2,029	
Bag-Kur	891	
Active C-S	4,557	
	8,727	

SIO Own Facilities 18,146

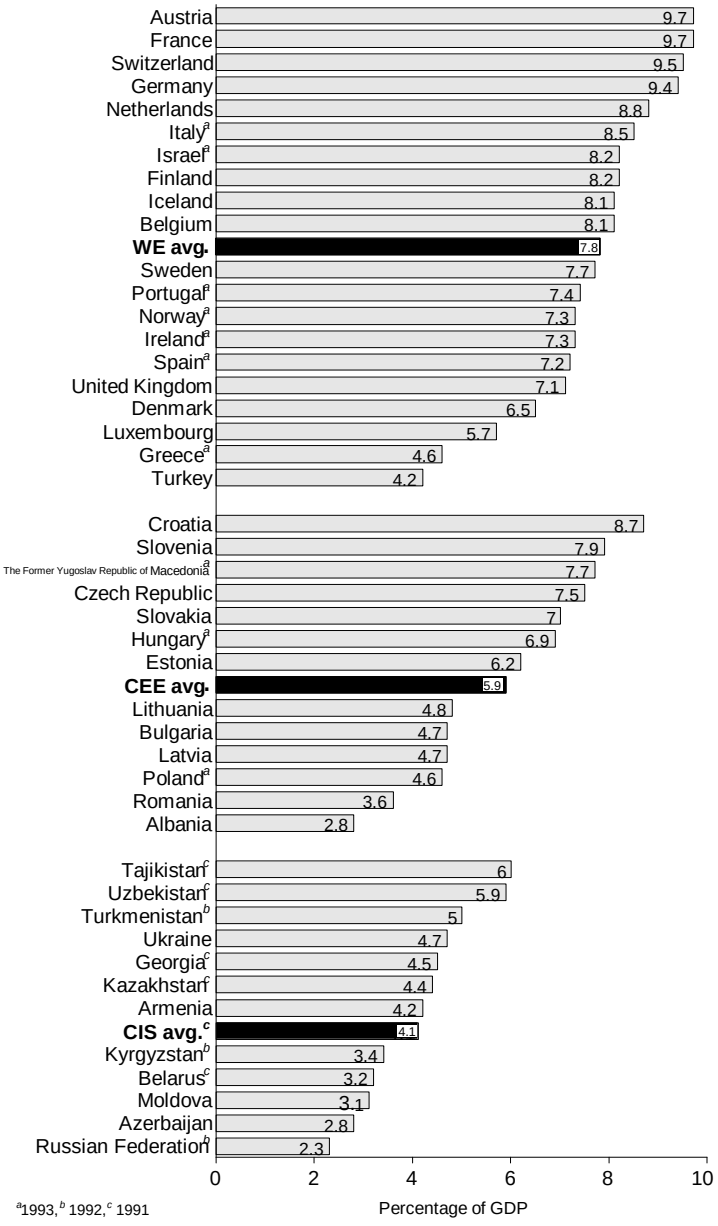
SELF GENERATED FUNDS			
MINISTRY OF HEALTH	6,985	SIO	4,028
UNIVERSITY HOSPITALS	5,497	GERF	5,298
		BAĐ-KUR	2,096
TOTAL	12,482	ACTIVE C-S	9,251
			20,673

TOTAL PUBLIC PROVISION	
MINISTRY OF HEALTH	38,413
MINISTRY OF DEFENSE	6,745
UNIVERSITY HOSPITALS	12,866
OTHER PUBLIC	2,601
SIO	18,146
TOTAL	78,771

PRIVATE PROVISION	
TOTAL	75,337

Health care expenditure

Figure 2. Total expenditure on health as a % of GDP in western Europe, the CEE countries (1994) and the CIS countries (latest available year)



Source: OECD health data, 1996; World Bank; WHO Regional Office for Europe, health for all database.

Health care delivery system

Primary health care and public health services

Since the law on socialisation of health services was enacted in 1961, the government has been committed to a programme of national health services .

The basic health units are health centers and health posts at the village level. According to the legislation, health posts staffed by a midwife serve a population of 2,500 - 3,000 in rural areas. There are 11,888 health posts in Turkey. Health centers serve a population of 5,000 - 10,000 and are staffed by a team consisting of at least a physician, a nurse, a midwife, a health technician, and a medical secretary. The main functions of health centers are the prevention and treatment of communicable diseases; immunization; maternal and child health services, family planning; public health education; environmental health; diagnosis and treatment of cases subject to primary level of care; and the collection of statistical data. There are 4,927 health centers in Turkey. Although the socialisation law calls for integrated health services, there are 269 mother-child health / family planning centers, 256 tuberculosis dispensaries, 16 syphilis dispensaries, 12 leprosy dispensaries, and four mental health dispensaries, which also offer preventive health services.

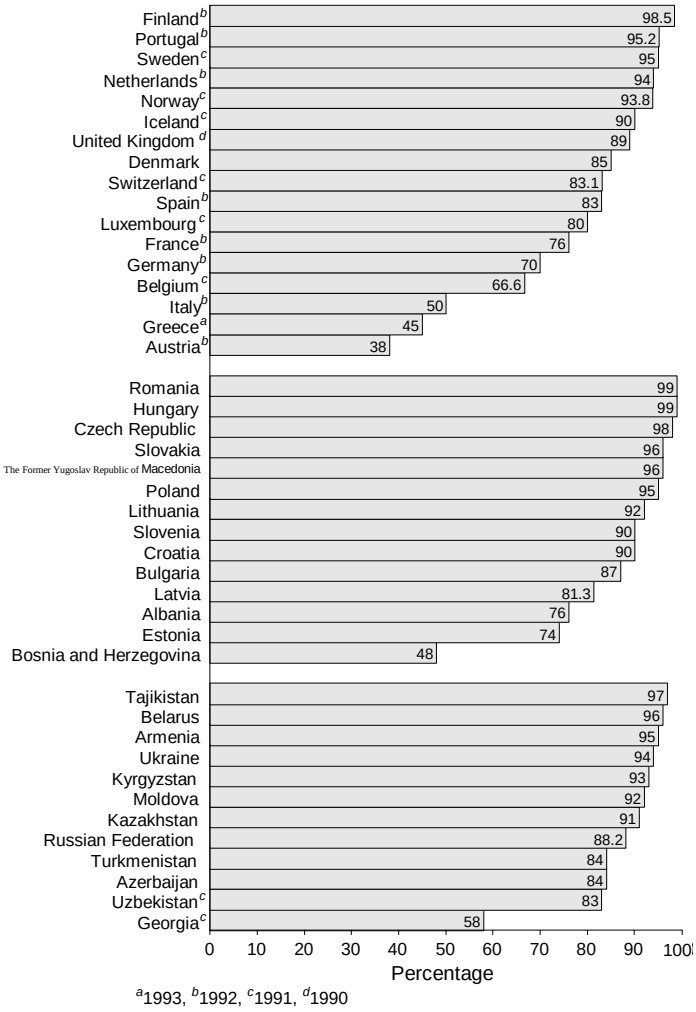
The Ministry of Health is the largest health services provider in Turkey, employing about 195,000 staff. It operates 677 hospitals (including speciality hospitals) with a total of 77,753 beds, and it runs 11,888 health posts, and 4,927 health centers for primary and preventive care.
The number of health service personnel in Turkey in 1995 is indicated in Table 3. Figures for that year indicate 928 people per physician, 5332 per dentist, 3327 per pharmacist, 1085 per nurse, 1716 per midwife, and 1983 per health officer. Ratios of population to medical personnel vary greatly among regions. The eastern part of the country and rural areas have fewer personnel of all categories in relation to their population.

Midwives and health officers work mostly in primary care health services, nurses in secondary and tertiary care. Physicians, dentists, and pharmacists are all university educated. Some nurses and midwives are university educated, but the majority are graduates of Health Vocational High Schools. In practice, the tasks performed by nurses are not related to their educational level.
Recruitment and placement of staff in all these facilities is carried out by the Personnel Directorate within the Ministry of Health. Remuneration is in accordance with the Law of Civil Servants, which establishes a pay scale based mainly on education, duration of public service and job title. There are automatic cost-of-living raises during the year, but the basic salary is not supplemented by incentives for performance. Public employees are granted lifetime employment. Individual hospitals or provincial health managers have little autonomy to hire or, fire their own staff.

Many dentists, pharmacists, and specialist doctors are employed in the private sector, while other health personnel are employed mostly in the public sector. Many specialist doctors have dual employment, working part time in public hospitals but also in their own private practice.

Public health services

Figure 1. Levels of immunization against measles in WHO European region, 1994



[a]1993, [b]1992, [c]1991, [d]1990

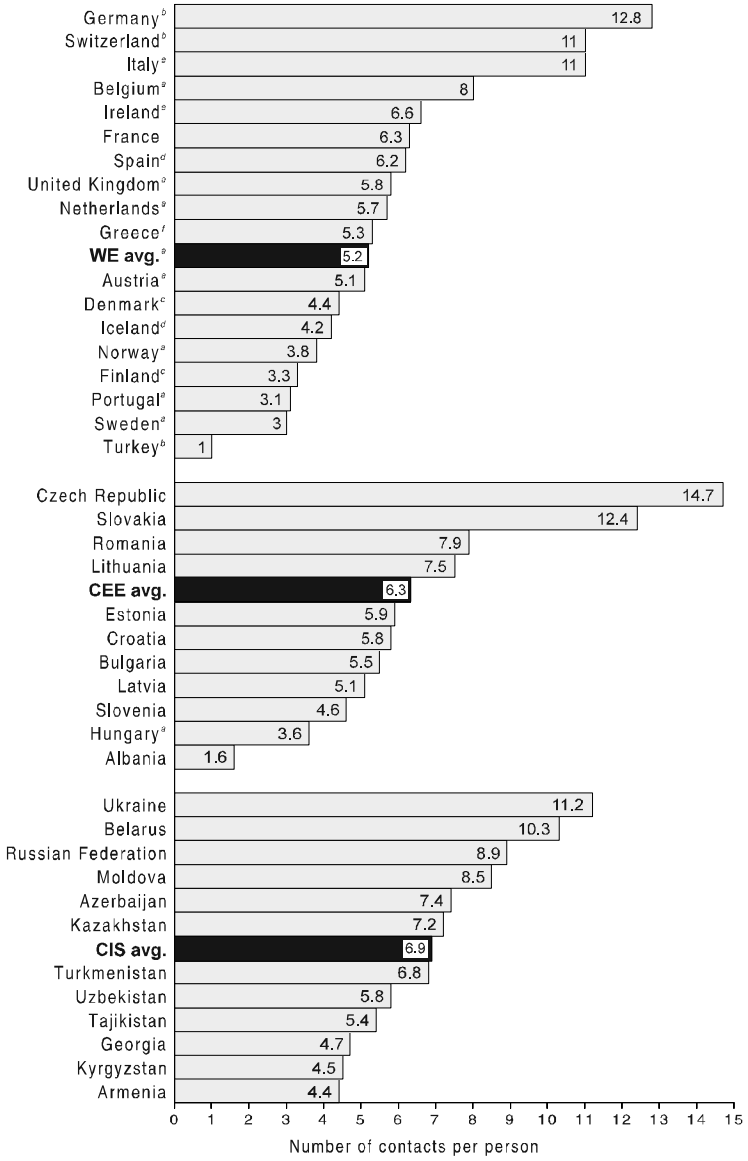
Levels of immunisation for measles in TURKEY

YEAR	Amount of doses	%
1986	431,214	34
1987	738,042	50
1988	906,879	66
1989	998,997	67
1990	1,040,095	68
1991	995,076	66
1992	1,002,907	65
1993	978,126	62
1994	1,026,679	76

Amount of doses : applied to babies at 0-11 months
% : ratio of vaccination by expected target population

Source : Health Statistics Yearbook 1994, Research, Planning and Co-ordination Council, MoH, TURKEY

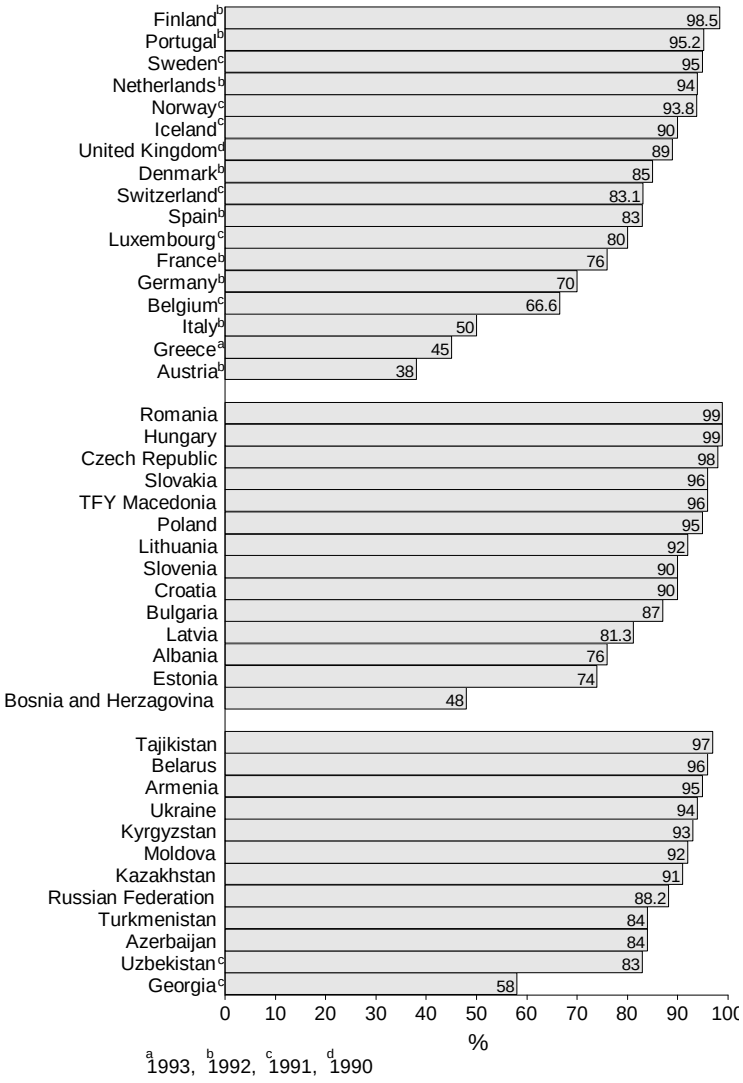
Figure 2. Physicians contacts per person, 1994



[a]1993, [b]1992, [c]1991, [d]1989, [e]1988, [f]1982

Source: WHO Regional Office for Europe, health for all database

Figure 6: Levels of immunization against Measles in European countries, year 1992



Source: WHO Regional Office for Europe, health for all database

Secondary and tertiary care

Hospital services are provided by the MoH, the Ministry of Defence, the Ministry of Labour and Social Security, some State Economic Enterprises, Universities, and the private sector. Of the total of 1051 hospitals, 677 are run by the MoH. These provide 51 percent of the hospital beds in the country, with an occupancy rate of 55 percent.

SSK provides only curative services to its members in 115 hospitals with 25,196 beds (15.9 percent) and an occupancy rate of around 65 percent. The 29 university hospitals provide health services with 19,852 beds.

Each Ministry of Health hospital is administered by a head doctor who is a practising clinician, with a hospital administrator assisting him in day-to-day administration. Both are appointed by the Ministry of Health. The head doctor, in general, is appointed on the basis of length of service and reputation and not necessarily due to his/her managerial abilities.

There are two major sources of funding for public hospitals; state budget allocations and self generated revenues. State budget allocations are made through simple adjustments by taking into consideration the previous year's inflation rates and sent to the Ministry of Health. Self generated funds arise from fees paid for services by individuals or third party insurers.

Fees paid for the health services are determined by a commission consisting of Ministry of Health and Ministry of Finance representatives without considering the actual cost of the services.

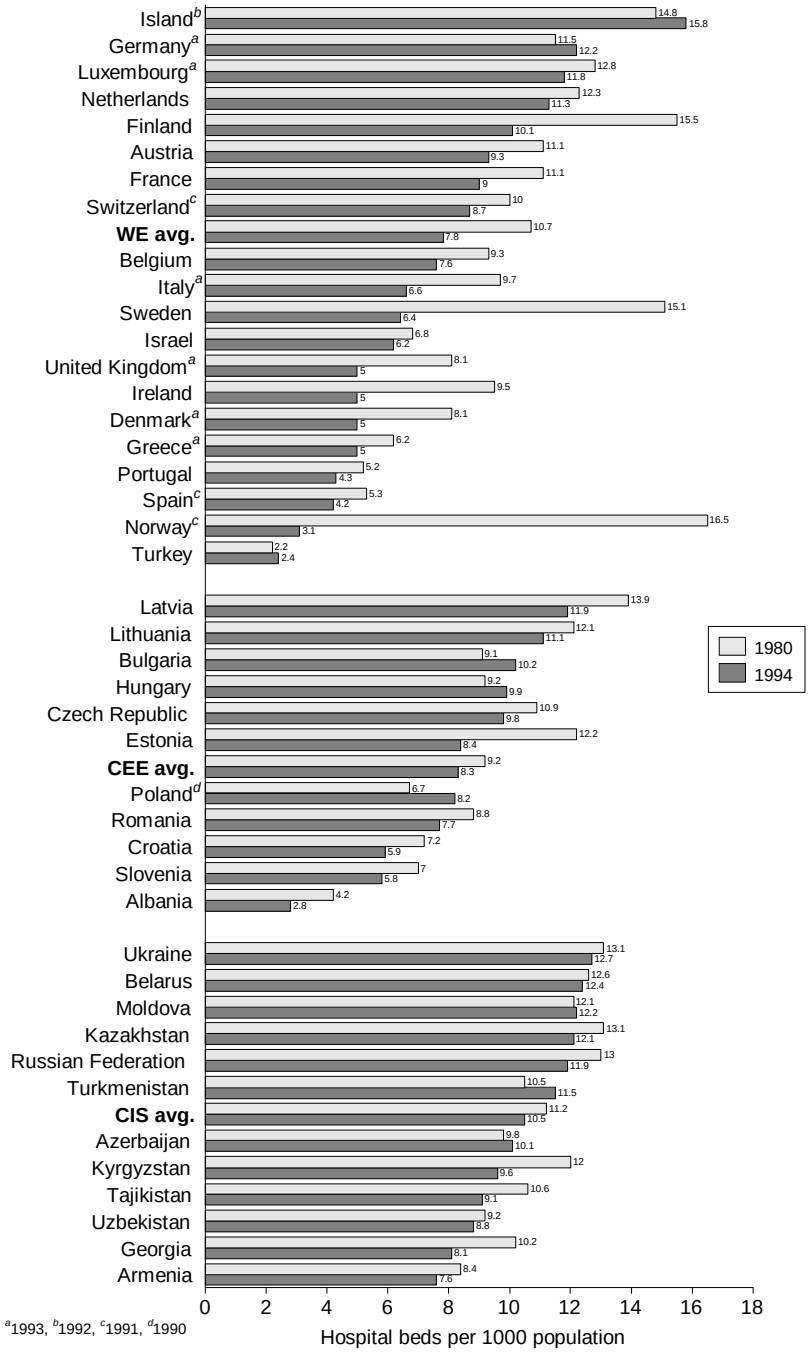
Since the referral mechanism is not well developed, hospitals are usually used extensively for primary care.

Number of hospital beds per 100,000 population in TURKEY

246 beds / 100,000 (1995)

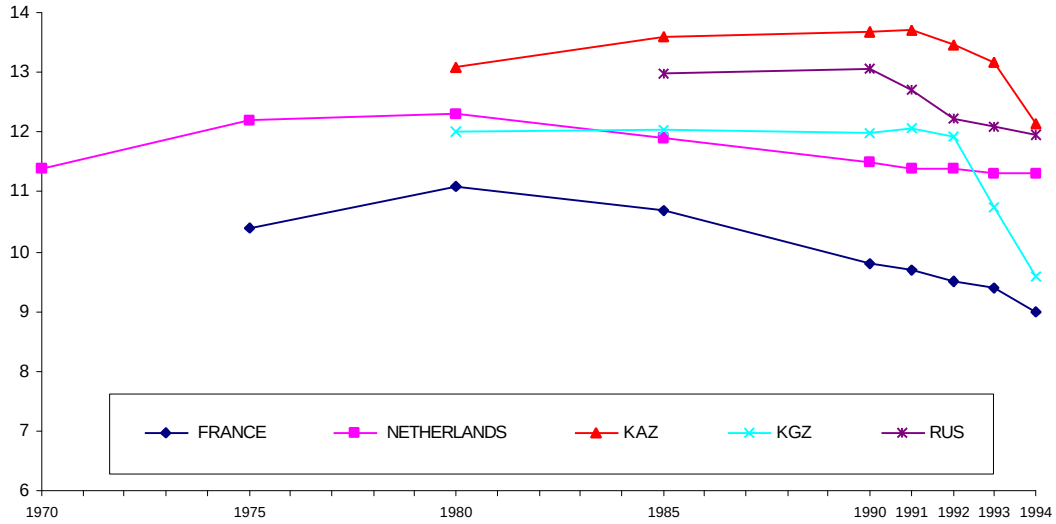
Source : Health Statistics Yearbook 1995, General Directorate of Curative Services, MoH, TURKEY

Figure 7: Hospital beds per 1000 population in the WHO European Region, 1980 and 1994



Source: OECD health data, 1996 (for western Europe), WHO Regional Office for Europe, health for all database (for CEE, CIS countries and Israel, Norway, Switzerland).

Figure 8 : Hospital beds per 1 000 population in Kyrgyzstan and selected European countries, years 1980 - 1994.



Source: WHO Regional Office for Europe, health for all database

Table 1: In-patient utilization and performance in WHO European Region, 1994

Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Austria	9.4	26.5	10.3	80
Belgium	7.6	19.7 [a]	12 [a]	83.5 [a]
Denmark	5.0 [a]	20.5 [a]	7.6 [a]	84.8 [a]
Finland	10.1	25.1	13.1	90.3
France	9	23.4 [a]	11.7 [a]	80.5 [a]
Germany	10.1 [b]	21.3 [b]	15.8 [b]	86.6 [b]
Greece	5.0 [a]	13.1 [b]	9.8 [b]	70 [c]
Iceland	15.8 [b]	28.2 [c]	17.8 [c]	84 [c]
Ireland	5.0 [a]	15.5 [a]	7.7 [b]	n/a
Italy	6.6	15.5 [b]	11.2 [b]	69.6 [b]
Luxembourg	11.8 [a]	20.3 [b]	16.5 [b]	81.4 [b]
Netherlands	11.3	11.2	32.8	88.6
Portugal	4.3	11.5	9.5	68.7
Spain	4.2 [c]	10 [a]	11.5 [a]	77 [a]
Sweden	6.4	19.5 [a]	9.4 [a]	83 [a]
Switzerland	8.7	14.6 [b]	n/a	82.6 [c]
Turkey	2.4	5.8 [a]	6.7 [a]	57.8
United Kingdom	5 [a]	21.6	10.2 [a]	n/a
Albania	2.8	8.07	8.98	71.8
Bulgaria	10.2	17.71	13.6	64.4
Croatia	5.9	12.78	13.78	81.6
Czech Republic	9.8	20.61	13.5	77.7
Estonia	8.4	17.82	14.2	83
Hungary	9.9	22.76	11.3	n/a
Latvia	11.9	20.14	16.4	78.7
Lithuania	11.1	20.6	15.9	79.1
Poland	8.2 [d]	n/a	n/a	n/a
Romania	7.7	21.1	10.3	77.4
Slovakia	7.9 [a]	n/a	12.74 [a]	n/a
Slovenia	5.8	15.8	10.6	79.4
The Former Yugoslav Republic of Macedonia	5.3 [c]	n/a	n/a	n/a
Armenia	7.6	7.6	16.32	n/a
Azerbaijan	10.1	8.52	17.9	41.5
Belarus	12.4	24.65	15.3	83.2
Georgia	8.1	5.5	15.2	28.3
Kazakhstan	12.1	18.17	16.8	68.9
Kyrgyzstan	9.6	17.7	15.4	77.9
Moldova	12.2	22	17.3	n/a
Russian Federation	11.9	21.6	16.8	n/a

Tajikistan	9.1	16.44 [b]	14.5 [b]	58.3 [b]
Turkmenistan	11.5	17.01	15.1	66.6 [a]
Ukraine	12.7	n/a	16.91	n/a
Uzbekistan	8.8	19.3	14.3	n/a

[a] 1993, [b] 1992, [c] 1991, [d] 1990,

Source: OECD Health Data File, 1996; WHO Regional Office for Europe, health for all database.

Table 2. In-patient utilization and performance, Kyrgyzstan, years, 1980 - 1994

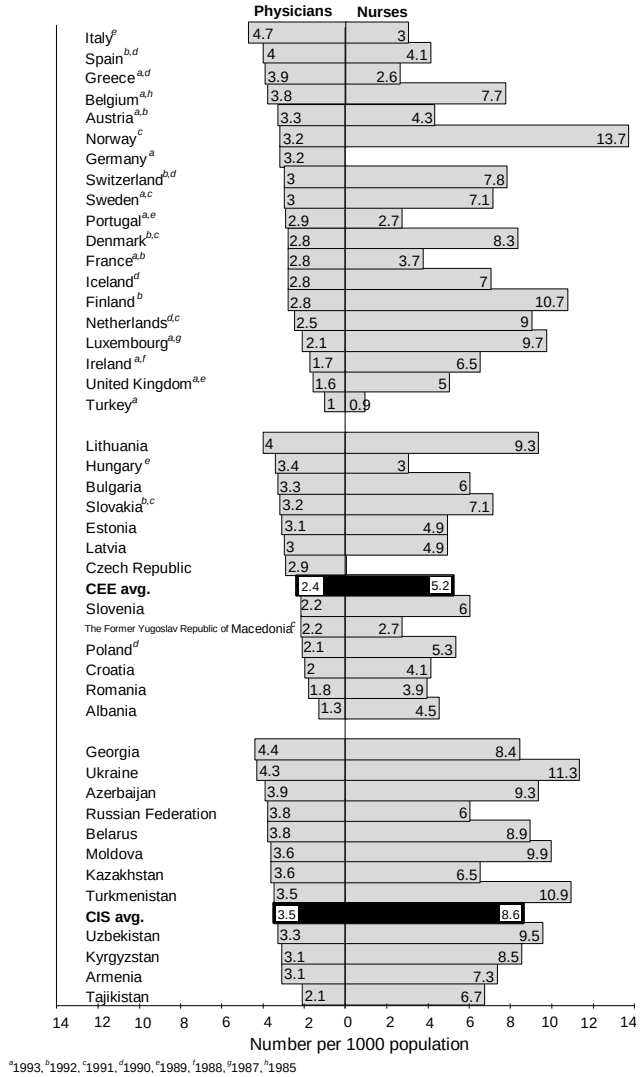
In-Patient	1980	1985	1990	1991	1992	1993	1994
Hospital beds per 1000 population	12.01	12.03	11.98	12.06	11.93	10.75	9.59
Admissions per 100 population	23.2	24.43	23.87	23.4	22.4	20.71	17.7
Average Length of Stay in Days	16.6	15.8	14.9	14.9	15.3	15.3	15.4
Occupancy Rate (%)	87.8	87.9	81.4	79.2	78.7	80.8	77.9

Source: WHO Regional Office for Europe, health for all database

Human resources and training

At present there is an imbalance between different kinds of staff in the Turkish health sector. Numbers of nurses are relatively low, while there are higher numbers of doctors than nursing staff. Among medical staff, many are specialised, so that there are relatively large numbers of specialists compared to general practitioners. As significant reforms of human resources and training are planned, this is discussed in more detail in the section on reforms.

Figure 3. Number of physicians and nurses per 1000 population in the WHO European Region, 1994



[a]1993, [b]1992, [c]1991, [d]1990, [e]1989, [f]1988, [g]1987, [h]1985

Figure 4 Physicians per 1,000 population in Kyrghyzstan and selected European countries, years 1980-1994

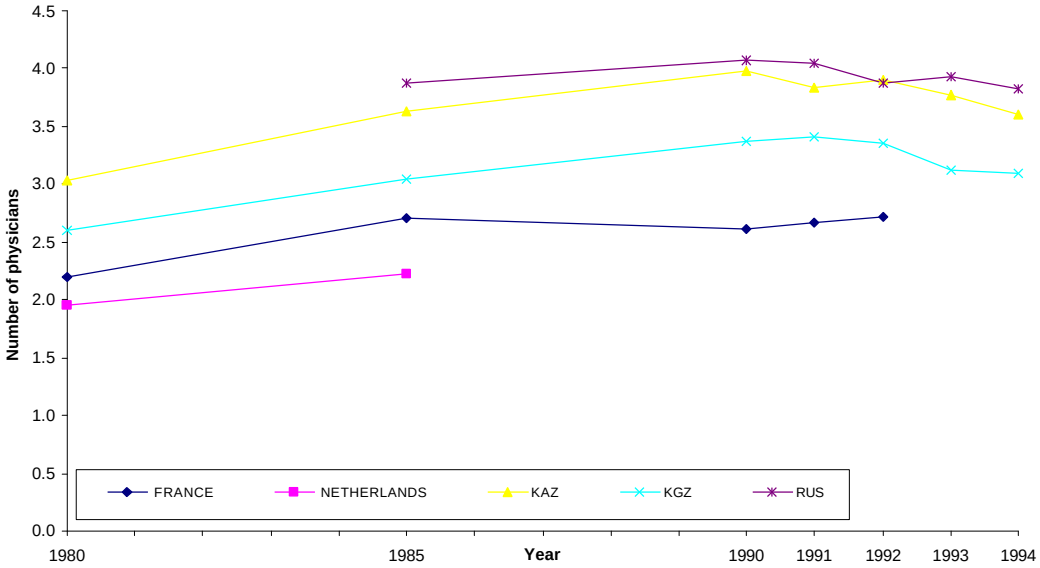
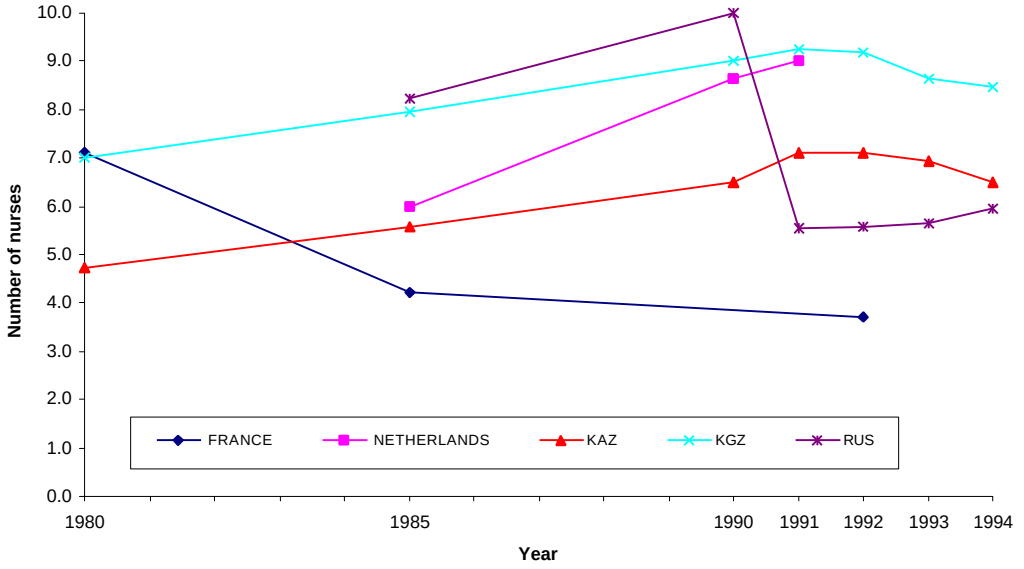


Figure 9 : Nurses per 1 000 population, Kyrgyzstan and selected European countries, years 1970 - 1994



Although the number of health personnel is higher than many other higher income countries, there is a geographical maldistribution of personnel as well as rural-urban variations.

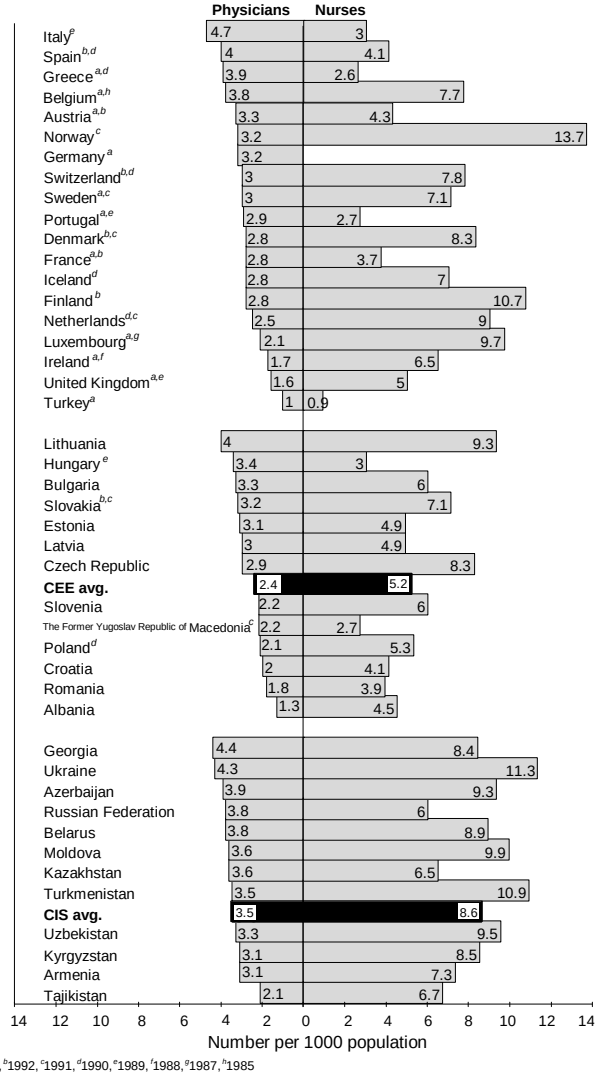
Table 6 : *Health care personnel, Kyrgyzstan, years 1970 - 1995*

	1980	1985	1990	1991	1992	1993	1994
Active Physicians /1 000 pop	2.60	3.04	3.37	3.41	3.35	3.12	3.10

Active Dentists /1 000 pop	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Certified Nurses /1 000 pop	7.0	8.0	9.0	9.2	9.2	8.6	8.5
Midwives /1 000 pop*	0.9	0.9	0.9	0.9	0.8	0.8	0.7
Active Pharmacists /1 000 pop	0.15	0.19	0.28	0.28	0.27	0.26	0.22
Physicians Graduating, /1 000 pop*	0.14	0.16	0.11	0.12	0.14	0.16	0.15
Nurses Graduating, /1 000 pop*	0.67	0.70	0.68	0.70	0.81	0.80	0.50

Source: WHO / Regional Office for Europe, Health For All Statistical Database

Figure 10. Number of physicians and nurses per 1000 population, year 1994



[a]1993, [b]1992, [c]1991, [d]1990, [e]1989, [f]1988, [g]1987, [h]1985

Source: WHO Regional Office for Europe, health for all database

Table 3 *Health care personnel, Kyrgyzstan, years 1970 - 1995*

Persons per 1000 population	**1980**	**1985**	**1990**	**1991**	**1992**	**1993**	**1994**
Active Physicians	2.60	3.04	3.37	3.41	3.35	3.12	3.09

Active Dentists	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Certified Nurses	7.0	8.0	9.0	9.2	9.2	8.6	8.5
Midwives	0.9	0.9	0.9	0.9	0.8	0.8	0.7
Active Pharmacists	0.15	0.19	0.28	0.28	0.27	0.26	0.22
Physicians Graduating	0.14	0.16	0.11	0.12	0.14	0.16	0.15
Nurses Graduating	0.67	0.70	0.68	0.70	0.81	0.80	0.50

Source: WHO Regional Office for Europe, health for all database

Pharmaceuticals and health care technology assessment

Pharmaceuticals and medical equipment in TURKEY

Consumption of medicines in TURKEY

YEAR	Value of drugs consumed (million TL)	Drug consumption per capita TL	Drug consumption per capita $
1980	32,400	726	8.8
1985	228,900	4,127	8.8
1990	3,317,339	58,742	23.0
1991	6,147,000	106,000	26.0
1992	11,780,690	196,000	28.6
1993	16,500,000	269,000	24.5
1994	33,400,000	564,376	19.0

Source : Health Statistics Yearbook 1994, Research, Planning and Coordination Council, MoH, TURKEY

Financial resource allocation

Third party budget setting and resource allocation

Overall health care budget is determined by the parliament. The health care budget proposal is prepared by the MoH and submitted to the parliament after consolidation of requested budgets of the hospitals and provincial health directorates. Once the overall health care budget is approved, financial allocation is made to the provider units. The current system is not based on geographical allocations nor it is a prospective formula based system.

Funding of different programmes is mainly based on the current provision and utilisation of services. This approach mainly, takes the existing infrastructure, and related operational costs into account.

Provincial levels has some authority in deciding how to use the allocated funds, within the line item budgets. Transferring funds between line items necessitate central approval.

Capital investment is also centrally funded and controlled regarding the public sector. Private sector has ultimate freedom in capital investments.

Payment to hospitals

Ministry of Health hospitals generate almost one third of their income through third party payments, at statutorily defined levels which do not reflect the actual costs. A third party payment is made for each patient. The payment can be made by an insurance organisation (GERF, SSK, Bag-Kur, or private), by the organisation where the patient works (Governmental or non-governmental) directly by the state (for those entitled to te green card) or by the patient himself as an out of pocket payment. Personnel costs, which account for two-thirds of expenses, are always paid from the General Budget through allocations by the Ministry of Health. The SSK (Social Security Organization) operates its own facilities and is financed from the health premium contributions received from SSK's members. In some cases, SSK utilizes the services of the MoH, in which the members of SSK receive an indirect subsidy, since the MoH services are already subsidized by the Government. Bag-Kur members utilize MoH facilities as well as private hospitals services, with a subsidy when using the MoH facilities as is the case for the SSK. Private services are paid by the organizations involved (SSK, Bag-Kur) according to the previously agreed contracts.

Payment to physicians

Ministry of Health physicians are civil servants and their remuneration (monthly salary and other-benefits) are paid from General Budget. The SSK physicians are employees of the organization. Although they are civil servants the funds for their salaries is the premium contributions paid by the members. Contracted physicians outside SSK are reimbursed generally on a salary basis or, in rare cases, on a fee-for-service basis.

Health care reforms

Determinants and objectives

The proposed health care reform adopts a problem-oriented approach. The reform program consists of a series of linked objectives: reorganisation of primary care, administrative and managerial reform, reform of hospitals, financing, human resources reform, and the creation of a management information system.

The reforms seek to improve the health status of the Turkish population through improvements in the effectiveness, efficiency and equity of the health care system. At present, there are great variations in health status associated with differences in geographical and financial access to services. In terms of the contribution that can be made by the health service, the greatest gains in health status will come from improving the accessibility of services to those people who have least access at present. These are generally the poor, those without existing insurance coverage, and those living in rural areas and in the eastern half of Turkey.

The main framework of the new strategy for health sector reforms has been set out in the Health Sector Master Plan Study commissioned by the State Planning Organisation (SPO). The Master Plan Study has defined, in a comprehensive report, the current situation of the main aspects of the health sector and has produced four main strategy options for its development. Of the four options considered (improvements but no radical change to the status quo, a free market strategy, a National Health Service. and an intermediate option), the intermediate option has been selected. The main areas of reform and corresponding targets have subsequently been defined in the Master Plan Study.

For the implementation of such comprehensive reforms, there is a need for a long-term, consistent, and stable National Health Policy that will not be influenced by changes of governments and ministers. For this reason, the Turkish Ministry of Health has conducted widespread consultation. This began at the First National Health Congress in 1992, at which health-related subjects were discussed in 34 working groups with 500 participants from all relevant institutions, sectors, universities, professional associations and the press. Each group prepared a report at the end of the Congress. After the Congress, all group reports were published as a book and a draft policy document was assembled by a group of editors. The draft document was open for public discussion and sent to the participants of the Congress as well as to all relevant individuals and institutions and to the World Health Organisation. The comments received were published. The draft document was revised and the National Health Policy Document was developed. The final document was presented at the Second National Health Congress in 1993.

Much effort has been devoted to the promotion of health reforms late 1980s. There have been continuous amendments to the initial design. Research has been undertaken, the opinions of relevant parties have been reflected and the Health Reform Model has been made a part of the country's general reform and development plans.

Since implementation requires changes in legislation, three major draft laws have been submitted to parliament by the MoH, Health Project Co-ordination Unit with contributions from interest parties. Two other draft laws which are complementary to the success of reforms are also in the last stage of preparation.

Research:
Major changes are being proposed in the new laws. Much effort has gone into design of the legislative framework. Some of the research that has been undertaken to support implementation can be summarised as follows:

- A survey on the utilization of health services in Turkey has been completed and is being analyzed.
- Surveys have been undertaken to determine the numbers and the characteristics of the insured and uninsured
- A survey of costs of health care was completed in 1994
- A survey of income levels and wealth was completed in 1993.
- A study of the perceived attractiveness, as a place to live, of each district, as a basis of developing financial incentives to redistribute staff.
- A survey of health professionals (Medical doctors, nurses, dentists, health technicians, pharmacists) explored their attitudes, preferences and beliefs.
- A study of alternative scenarios, including modeling, was undertaken.

The Aim of the Reform

- The aim of the reform is to improve the health of the population.

Objectives of the Reform
The stated objectives of the health care reform are:

- improved equity of access to health services;
- increased effectiveness in health services provision;
- increased efficiency in health service provision;

The Tools to Achieve These Objectives are:

- emphasize on preventive services, health promotion and primary curative care;
- development of a purchaser- provider split with provider competition;
- appropriate use of technology;
- community participation in decision making;
- emphasis on multisectoral approach to health;
- collection of effective, timely and accurate information leading to information based decision making
- appropriate number and mix of human resources with the right skills, at the right time, and in the right place
- delegation of decision making to individual service units

Restructuring the Primary Care Services:
One component of the health care reform is the emphasis on primary care and its restructuring. This aims to increase the quality and efficiency of health services provided at this level by introducing the concept of the family physician.
In the proposed primary care system (see Figure 1); health posts, health centers and public health laboratories, which currently exist will be subject to changes in the size of their service population, their functions and their relations. Health post will be the smallest unit in the health care system serving to a population size of 500-1,000 in rural areas, i.e. village(s). Each health post staffed by a midwife will be attached to a health center or a public health center.

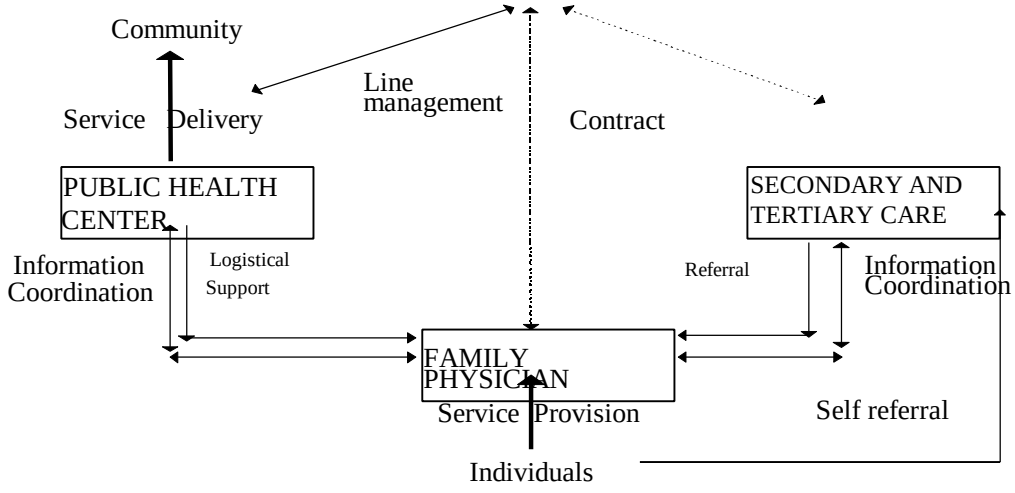
The health center staffed by at least one physician and appropriate other personnel. will serve to a population of 3,000-5,000. Health centers will be responsible for the monitoring, evaluation, and co-ordination of public health services, community diagnosis, health education, first aid, control of communicable diseases, patient follow-up, mother and child health services, environmental and preventive health services, school health services, laboratory services, and laboratory and radiological services.

The proposed system envisages the establishment of a new institution in every district, a public health center. The public health center will be responsible for the co-ordination of health centers and health posts. Moreover, the public health center will take the lead in intersectoral co-ordination at the district level.

In the proposed system, individual preventive services and primary-level curative services will be provided by family physicians, who will be self employed but under conditions regulated by the health centers. They will be responsible for primary curative care, follow-up of secondary and tertiary services, individual preventive care, laboratory services, periodic check/ups, first aid, and emergency care. Patients will have the right to choose their family physician but can only change every six months.

Family physicians will be paid on a mixture of salary and capitation. Factors such as age and geographical conditions will be considered in the determination of the capitation payment.

Figure 1
ORGANIZATION OF PRIMARY CARE SERVICES



There will be an emphasis on establishing a referral system. Family physicians will refer patients to a specialist or to a hospital that has a contract with the provincial health directorate.
Hospital Decentralisation (Health Enterprises)

An important part of the proposed reform is the decentralization of hospitals. This component of the reform aims at improving effectiveness, efficiency, and quality of hospital services. The decentralization of hospitals will be achieved by granting public hospitals autonomous status, and renaming them Health Enterprises. The health enterprise will have formal legal status. The general organisational model for Health Enterprises is shown in Figure 2.

The financial and administrative responsibility for hospital management will be at the Board of Directors. The board will consist of seven members chaired by the Hospital General Manager; of whom three are executives in the hospital and three are from the community and local organizations. Participation by the local community in hospital management will help to ensure reflection of the community's views.

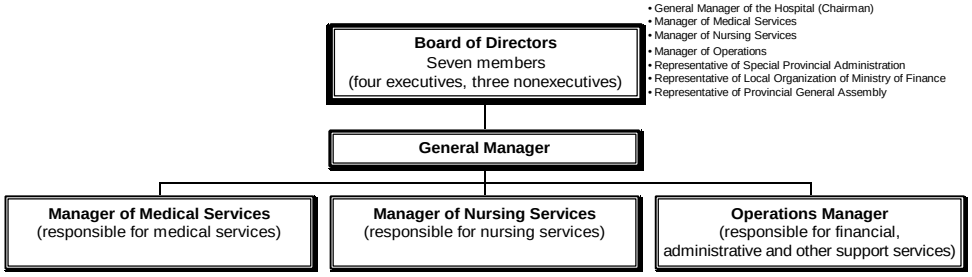
Instead of the traditional doctor-led hospital management system, it is envisaged that health enterprises will be managed by professional managers or physicians who possess the management skills are willing to devote all their time to management rather than medical practice.

Health enterprises will have the authority to allocate resources as they deem necessary. The main revenue of the health enterprise will be generated from service provision through block contracts. Resources will also be allocated for teaching and research, where appropriate.

Health enterprises will be able to select and recruit personnel and determine pay levels of employees.

The income of the health enterprise will be prospective via contracts with Provincial Health Directorates. Hospitals including the health enterprises and private hospitals will compete to enter into contracts on an annual basis. The price and quality of services provided by the health enterprise will be set through negotiations with third parties. Such a decentralized decision-making structure and competition is expected to encourage the hospitals to work efficiently and effectively.

General Organisational Model for Health Enterprises



Reforming Health Care Financing

The mechanism proposed for financing the provision of services is the General Health Insurance Scheme (GHIS). Considerable socioeconomic variations exist in Turkey that influence access to health care. Empirical studies have shown that as income increases the demand for health care increases. On the other hand, as poverty increases, the need for health care increases. The GHIS aims to ensure equity by achieving universal coverage for all citizens who are not currently covered by social security schemes.

The GHIS as a method of financing health services has wide support in Turkey and has been included in the Constitution, Five-Year Development Plans, and government programs since 1960. Furthermore, the First National Health Congress proposed the introduction of the GHIS, and the model was widely discussed at the Second National Health Congress.

The complexity of the task of introducing the GHIS in Turkey has never been underestimated. The major problem in designing and establishing the program has been a lack of information. To remedy this problem, a number of well-targeted studies have been initiated and already completed so that the GHIS will have a sound and scientific basis. Some of these studies have been mentioned earlier.

The major concept of the system will be separation of financing from provision of services. This separation is expected to promote efficiency and quality by introducing competition.

The new system (see Figure 3) aims to extend health insurance coverage to all of the Turkish population.

The establishment and the nature of the GHIS model and the organization has recently been reviewed. The GHIS is currently being considered within a broader Social Insurance Reform Package that aims to rationalize the overall pension systems and ensure consistency of general health insurance with overall policy on public expenditures on social policy objectives.

The main features of the GHIS model are as follows:

- The model is based on the principles of social insurance.

Figure 3 - Insert here

- Membership will be open to citizens of Turkey who wish to join and who are not covered by any other insurance scheme.
- Members will be entitled to a package of comprehensive but economical services.
- Contributions will be related to ability to pay, and will be zero for the very poor. The difference between the actuarial premium and the member's contribution will be met from the general tax subsidy.
- The unit assessed for contributions and entitled to benefits will be the contributing member and recognized dependents.
- The scheme will be administered by a new autonomous governmental body. In the beginning it will operate separately from previously existing insurance schemes, but the design will permit integration of health insurance schemes under a single umbrella in the long term.
- The new scheme will collect premiums from members and the state will subsidise a proportion of the premium of the poor on a sliding scale. The GHIS will be responsible for securing services for all of its members. It will transfer income to provincial health directorates, which will be directly responsible for making contracts with service providers both public and private on behalf of the insured population.
- The financing arrangements may include some co-payments, designed both to raise additional revenue or to limit unnecessary utilization of services.

The time required for a province to move from the present arrangement to the new scheme is estimated to be 3 to 5 years. The expansion of the scheme throughout the country will take six years after the initiation in the pilot province.

In the preparation period for transition to GHIS, the "green card" implementation has been started as a step toward ensuring equity (approximately 4.6 million citizens with a US$ 130 million cash outlay for 1995, are benefiting from scheme). The green card is issued to poor Turkish citizens with no capacity to pay for health services. The major problem in implementation arises from the definition of "the poor". As there is no widely accepted definition, the criteria used for the social solidarity funds, which formerly financed the health expenditures of people who claimed to be poor, are also being used for the green card system. Those who apply for the green card complete an application that includes information about their family income, assets and insurance status. This form is to be approved by the Muhtar, (elected head of the village), and other government authorities in the district. Finally, the Kaymakam, (the government representative in the district), approves and the citizen receives the green card. The number of people who will be issued with green cards is estimated, from social solidarity fund records, to be between 5 and 10 percent of the population.

Reforming Health Care Management and Organization

The current health care system is highly centralized. Centralized decision making forces peripheral administrators to refer decisions to top level management who do not have time to deal with them adequately.

The health care sector needs to be decentralized. The prerequisite of developing local management capacity is the development of qualified staff with modern management skills. Substantial efforts are being undertaken by the Policy Co-ordination Unit (PCU) to achieve this purpose. First is a wide ranging management training for MoH staff at all levels. This is intended to create a cohort of qualified health managers.

Local decision requires effective support from the center. The management training will form the base of the second program of the PCU which is Organizational Development and Restructuring of the MoH. The reform of primary care, hospitals and finance requires the revision of the MoH and Provincial Health Directorate Organization. The MoH will need to be more powerful in order to ensure the achievement of nationally defined targets for health.

The present organization of the Ministry of Health is not consistent with its stated objectives. On the one hand there are units based on a service model, such as Curative Services and the Primary Health Care General Directorate, while on the other hand there are units serving specific population groups, such as Mother and Child Health and Family Planning. At the same time, the remnants of some vertical organizations dealing with specific diseases, such as tuberculosis, malaria, and cancer, are incorporated in the structure. All these approaches have been implemented successfully at various periods in the past but the existence of these diverse management models has caused serious problems, including duplication of resources. It has also led to fragmentation of services. It is proposed that the central organization of the Ministry of Health be reorganized. The main principles will be integration in the field and co-ordination at the center.

To provide continuing health care management development, there is a need for an autonomous academic institution. The institution will support the MoH as it seeks to integrate the elements of the health care system, plan effectively, ant control service provision. As a first step to establish such an institution, the existing national hygiene institute will be restructured as a modern research institute. Necessary legislation for the new structure has been prepared and submitted to the Parliament.

As a result of these efforts, the current MoH will be replaced by an effective and flexible organization which is responsible only for developing policies, setting national quality standards, and monitoring and evaluating the implementation of policies.

Human Resources Reform

The stated goals of human resource policy reform seeks to establish a system in which the right number of people with the right skills are in the right place at the right time with the right motivation, thus contributing to service quality, efficiency, and effectiveness.

The specific aims of the human resources reform are as follows :

- To devise a rational human resources planning system based on workload principles, considering epidemiological, demographic and service utilization criteria as well as financial constraints;
- To develop mechanisms that will permit decentralised elements of the MoH to take responsibility for personnel planning and management.
- To devise a system of remuneration in which incentives can be introduced to encourage performance and work in less developed areas;
- To revise legislation defining the roles of health personnel to reflect contemporary professional practices and WHO Health for All Targets;

- To upgrade nursing education and relocate it within universities.

To achieve these goals, the current situation has been documented and projections at national and regional levels have been made based on existing norms. Other work is facilitating the development of staffing norms based on workload, raising awareness among MoH staff and others of human resources issues, improving human resource projections, and training and providing technical support to MoH staff to perform human resources planning. In addition, a survey of attitudes toward work was performed among health personnel; and district centers were ranked according to their attractiveness to form the basis of an incentive system to facilitate a more balanced geographic distribution of health personnel.

An important step toward the rationalization of recruitment policies has been the abolition of compulsory service for health professionals and efforts to decentralize hospitals so that staffing decision may be made at facility level instead of the Ministry. In addition, pay differentials for staff working in undeserved areas have been implemented.

To improve nursing education the curricula of both personnel training and teacher training schools have been revised and training has been transferred to four-year university programs. In addition, training materials are being developed; alternative training methods are being implemented to ensure community participation; and training skills are being enhanced through in-service training.

Health Information Systems

Reflecting the scale and complexity of the MoH and its responsibilities, information flows within the Ministry are both extensive and highly varied. How well the MoH's information systems facilitate the flow of timely, accurate and complete information throughout the organization profoundly affects the MoH's overall effectiveness.

Currently envisaged health care reforms seek to rationalize the roles and responsibilities of units within the MoH, decentralize decision-making and make decisions more cost sensitive. The First Health Project has a Health Information Systems sub-component that aims to establish a Core Health Information System within the MoH .

Similar aims underlie the reform of hospitals. The Hospital Information Systems sub-component of the Second Health Project will create a computerized Hospital Information System (HIS).

Conclusions

The existing Turkish health system faces substantial challenges that have long defied solution. Both financing and provision are highly fragmented. There are marked geographical inequities and many of the most vulnerable groups have inadequate coverage.

Turkey has, however, developed an ambitious strategy for reform, based on an extensive programme of research and supported by a major programme to develop the managerial skills to support its implementation.

The proposed system, based on integration of existing services on the financing and provision sides, is ambitious but, if implemented is likely to bring significant benefits. It draws on ideas developed elsewhere and this gives Turkey the benefit of being able to learn from mistakes made by others.

The extensive consultation programme has been important in developing widespread support for reform and this will be a source of considerable momentum. It would, however, be naive to ignore current political situation which is likely to act as a brake on the implementation of new laws in all areas.

Several questions remain unresolved. These include the legal status of health enterprises (a problem that has been difficult to resolve where quasi-markets within the public sector have been implemented elsewhere), and the ability, in those parts of the country where incomes are based on agriculture and are seasonal and often poorly recorded, to develop a system for collecting subscriptions related to earnings. This is already a problem with the "green card" scheme. Finally, as in any system where there is competition between insurance schemes, there are powerful incentives for opportunistic behaviour and it is difficult to see how these can be avoided.

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