Health Care Systems in Transition

Greece

World Health Organization
Regional Office for Europe
Copenhagen
1996

CARE 04 03 06
Target 36.01.01

Keywords

DELIVERY OF HEALTH CARE
EVALUATION STUDIES
FINANCING, HEALTH
HEALTH CARE REFORM
HEALTH SYSTEM PLANS – organization and administration
GREECE

World Health Organization
Regional Office for Europe
Copenhagen
1996

Contents

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 care systems and reforms at the World Health Organization Regional Office for Europe (WHO/Europe).

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 care 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/Europe's Health Systems Analysis programme. In order to maximize comparability between countries, a standard 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/Europe health for all database*, *OECD health data* and *World Bank data*.

Compiling the HiT profiles poses a number of methodological problems. In many countries, there is relatively little information available on health care systems and the impact of health reforms. Most of the information in the HiTs is based on material submitted by 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 are not limited to the HiT profiles, however, but apply to most attempts to study health care systems.

The HiT profiles are a source of descriptive, up-to-date and comparative information on health care 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 covers over half of the countries in the European Region. This is an ongoing initiative with plans to extend coverage to all countries in the Region, to update the material at regular intervals and to monitor reforms over the longer term.

World Health Organization
Regional Office for Europe
Department of Health Policy and Services
Health Systems Analysis Unit

Acknowledgements

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 Phyllis Dahl 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.

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 Greece has been written by Ellie Tragakes and Nicholas Polyzos of the Ministry of Health and edited by Ellie Tragakes. The authors would like to thank A. Sissouras, M. Theodorou, A. Karokis and A. Konstantinides for their comments.

Introduction and historical background

Introductory overview

Greece, or the Hellenic Republic as it is officially called, lies at the southernmost end of the Balkan peninsula. It covers an area of 131 957 km^2. It is bordered to the north-west by Albania, to the north by the Former Yugoslav Republic of Macedonia and by Bulgaria, to the north-east by Turkey, to the east by the Aegean Sea, to the south by the Mediterranean Sea, and to the west by the Ionian Sea. Greece's topography is highly diverse. The numerous islands in the Aegean and Ionian Seas occupy about one-fifth of its territory. Much of the land is mountainous and rugged, less than a fourth is lowland, and about one-fifth is forested.

Greece's population according to the 1991 census was 10 259 900, giving an overall population density of about 78 persons per km^2. The capital is Athens, with a population of about 3 400 000.

Fig. 1. Map of Greece[1]

Source: Central Intelligence Agency, The World Factbook, 1997.

[1] The maps presented in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitations of its frontiers or boundaries.

The majority of Greeks (about 97%) belong to the Greek Orthodox Church, while there are small groups of Moslems, Jews, Roman Catholics and Protestants. In recent years there has been a

large influx of illegal immigrants, mainly from Albania, and to a lesser extent from Poland, Romania, Russia and other eastern European countries.

Agriculture in Greece employs about 24% of the work force and accounts for about 11% of the gross domestic product (GDP). The main crops include wheat, tomatoes, corn, grapes, olives, potatoes, barley and fruits. Pastures, which occupy about two-fifths of the land area support sheep, goats and cattle. Industry employs about 26% of the workforce, and accounts for nearly 30% of the GDP. Main products are food, beverages, textiles, chemicals, clothing and transport equipment. Tourism and shipping are major sources of income. Fishing is relatively limited, and mining is of minor importance to the economy.

Natural resources include lignite, bauxite, iron ore, zinc and lead, and a few offshore petroleum and natural gas fields. The deposits of bauxite and iron ore are rich in metal content, but lignite is of low quality and there are no coal deposits. Less than one-third of the land is arable, the rest consisting mainly of barren mountains. Forests have been depleted and soil erosion makes reforestation difficult.

Greece is a parliamentary democracy with a 300-member unicameral Parliament whose majority party leader is the Prime Minister. The President, elected by Parliament, holds a largely ceremonial position. The largest political parties in the 1980s and 1990s are the Panhellenic Socialist Movement (PASOK) and New Democracy (about 80% of the vote in elections of recent years).

Education is free and compulsory for nine years (ages 6 through 15). The literacy rate is 94%. Life expectancy in Greece is among the highest in Europe and in the world.

Historical background

Following Greek independence in 1830 and until the end of the nineteenth century, no more than 10% of the active Greek population had coverage for health care by any type of statutory body. In 1922 The Ministry of Hygiene and Social Welfare was established. The level of care provided at that time was rudimentary compared to that in other European countries. Municipalities and communities controlled the few existing municipal and communal hospitals, while some large hospital institutions were controlled by the state at national level. Some private hospitals were also in existence.

The first serious governmental action intended to increase coverage of the population involved the establishment of the Social Security Organization (IKA) in 1934. This was to provide health and pension coverage to blue- and white-collar workers in urban areas and in industries employing more than seventy workers, and resulted in coverage of approximately one-third of the population.

In 1941 temporary public hospitals were established to serve the war needs, and remained thereafter.

The next major step followed in 1953 with legislation intended to establish a National Health Service. The target was to decentralize health care competencies to the health regions and through them to the district health councils. Regional health councils would provide expert opinion on health care needs based on population, morbidity, etc. criteria, and would provide for the necessary equipment and building installations. Although the system foreseen by the legislation was hospital- and physician-based, it presented for the first time the perception of a needs-based approach to the health care system. However, the law was never implemented and in practice the opportunity was lost.

The 1960s saw a period of rapid economic growth during which a number of financial institutions, such as banks, established their own insurance funds financed mainly out of employer contributions. These funds provided full and high quality insurance coverage for their employees. During this period, social health insurance schemes were also established for public sector employees and self-employed professionals. Farmers and their families, who at that time comprised more than 50% of the Greek population, were for the first time provided with coverage in 1961 when legislation establishing the Agricultural Insurance Organization (OGA) was passed and subsequently implemented. This was the second major landmark after the earlier establishment of IKA covering blue- and white-collar workers. In addition, a network of rural medical stations was established, staffed mainly by a doctor (a graduate of a medical school doing one year of obligatory service), a nurse and a midwife.

Despite very high rates of economic growth during the 1960s and 1970s, public health care expenditure remained less than 2.5% of the GDP. With the exception of IKA, which developed its own health care infrastructure for its insured population, mainly in urban areas, all insurance funds contracted health care services from private specialist physicians in the case of primary health care services, and from public or private hospitals in the case of secondary care. Thus, the private sector expanded rapidly during that period due to the growth in numbers of physicians in solo private practice, as well as the erection of many small-scale private hospitals. The state, on the other hand, had only developed some public hospitals in large cities, while continuing to subsidize a number of charity hospitals.

The dictatorship of 1967–1974 tended to consolidate this pattern of health care services, although it was during this period that the first attempts to organize a comprehensive health care system emerged. In 1968, a plan for health care reform (L. Patras plan) was presented by the Ministry of Health with the following aims:

- expansion of the public sector in the provision of services through the establishment of new public hospitals;
- geographical redistribution of services in order to reduce regional inequalities;
- improvement in health care services for the rural population;
- the introduction of a family doctor system;
- efforts to cope with the great shortage in nursing personnel;
- improvements in environmental programmes;
- improvements in the levels and quality of psychiatric care.

In addition, the first proposals for a National Health Service were made by the Minister of Health, aiming at the harmonization of insurance fund regulations and the introduction of an agency that would be the sole source of funding. This agency would accumulate all insurance contributions and reimburse physicians and hospitals on a fee-for-service basis following negotiations with the medical associations. There were also provisions for the geographical redistribution of resources, and the introduction of a system of primary health care based on general practitioners who would gradually replace private specialists.

By the end of the planning period (1973), only a small portion of the health care reform plan had been implemented, public expenditures on health care had actually dropped, while the proposals on the establishment of a National Health Service were abandoned.

Following the restoration of democracy in 1974, political and social pressures as well as the growing numbers of problems in the health care system intensified the need for health care reform, making this an issue of high priority for the new government. In 1976, a working party of the Centre of Planning and Economic Research (KEPE) prepared a study on the health care system, indicating the main problems and proposing measures for their solution similar to the ones noted above. According to this study the main problems included the following:

- lack of harmonization of finance and coverage;
- geographical inequalities in the provision of services, especially between rural and urban areas;
- large gaps in the provision of services in the rural areas;
- absence of capital development in public hospitals;
- lack of coordination between the Ministry of Health and other governmental bodies;
- methods of payment that encouraged inefficient and unethical practices, creating conditions for the development of an underground economy in the health sector.

The working party proposed the unification of the services of the three major insurance schemes (IKA, OGA, and TEVE explained in detail in the social insurance funds section) which covered about 85% of the population as well as any others who wanted to join, the creation of a unified fund, and the introduction of a family doctor system. However, due to political and medical opposition, the proposals were never passed into legislation.

Four years later (1980), a team of experts in the Ministry of Health worked out a plan for the reorganization of the system (Doxiades Plan). The plan anticipated the creation of a planning agency for the coordination of health care provision and the development of a network of rural health centres, staffed mainly by family doctors. When the plan came as a bill to Parliament, it faced strong opposition both by physicians and members of Parliament, and was rejected without any discussion.

In 1981 the Socialist Party (PASOK) came to power and the prevailing conditions were mature for a radical change of the Greek health care system. The main core of proposals remained almost unchanged and thus in 1983 the government passed legislation incorporating these and introducing a national health service (NHS). This law can be characterized as the major legislative reform ever attempted in the Greek health care system. The provisions of this reform, as well as the extent of its implementation, will be discussed in some detail here as these set the background for the description of the various aspects of the Greek health care system in the sections that follow. The reform embodied the following principles:

- **Equity in the delivery and financing of health care services:** There was to be universal coverage and equal access to health services; the state was to be fully responsible for the provision of services to the population.

- **Primary health care development:** Special emphasis was to be placed on the development of primary health care; a system of referral was to be established.

- **A new public-private mix in provision:** Primary and secondary health care services were to be provided mainly by public health centres staffed by general practitioners, and by public hospitals; publicly provided health care services were to be expanded (health centres, new teaching hospitals, expansion of existing hospitals, new technology, increase in capital expenditures, etc.); establishment of new private hospitals was to be prohibited, while those already in existence were to either close or be sold to the public sector.

- **Decentralization in the planning process, improvements in management, and community participation:** A Central Health Council (KESY) was to be established, which would play an advisory role to the Ministry of Health on health policy and research issues. Health councils were to be established at regional level with planning and administrative responsibilities. The members of these bodies were to be representatives from the insurance funds, health care providers, trade unions, medical schools, the Ministry of Health, etc.

- **Payment methods for health care providers:** NHS doctors and other staff would be fully and exclusively employed by the NHS, and would be paid by salary.

Based on the above principles, the 1983 legislation provided for the establishment of health centres in rural as well as urban areas. These were to be staffed mainly by general practitioners and other health professionals, providing comprehensive primary health care services and implementing health promotion and disease prevention programmes within their respective communities. The health centres were to be attached to a local or regional hospital and patients referred to the hospital by the health centre's doctors.

In addition, the 1983 legislation anticipated the unification of the main insurance funds (though this was not made wholly explicit) with the infrastructure of IKA (the main insurance fund, covering 50% of the population) incorporated with that of the NHS. Moreover, no doctors working in the NHS were permitted to practise privately. Doctors, therefore, had to choose between exclusively salaried employment in the public sector or totally private employment. It was envisaged that this measure would reduce private health care expenditure and eliminate unethical practices by doctors.

Implementation of this legislation was to begin immediately and the following steps were to be taken in the period 1983–1988:

- substantial increase of public health expenditure: at least 4.5–5% of GDP was to be devoted to health;
- substantial increases in the salaries of doctors;
- substantial increase in public expenditure on capital outlays: 18 new hospitals were to be built, 3 of which were to be large regional university hospitals; 20 already existing hospitals were to be expanded; advanced technology was to be installed in provincial hospitals; 400 health centres were to be built, of which 180 were to be in rural and 220 in urban areas;
- definition (in the near future) of the financial relationship between the NHS and the insurance funds.

The 1983 legislation and plans for its implementation were, however, only partially followed through:

- The rural health centres were established, equipped and staffed, and began operation as planned; in urban areas no health centres were established. Today 176 rural health centres and 19 small hospital-health centres operate, covering the primary health care needs of about 2.5 million persons. However, staffing of the rural centres is considered inadequate. In urban

areas, primary health care services are provided mainly by IKA polyclinics for IKA members. There are also private providers who are contracted to the various insurance funds and hospitals (see the section on primary health care for more details). In 1987 there was a plan for IKA services to merge with the NHS, however, this plan was never implemented;

- Three large university hospitals were established (Ioannina, Patras and Crete), and certain improvements in hospitals and hospital departments were undertaken. In the private sector a large number of clinics were closed down or absorbed by the public sector and the establishment of new hospitals was prohibited. As a result, the number of hospitals actually declined and the ratio of private to public hospital beds shifted in favour of the latter. However, the establishment of private diagnostic centres was permitted and a large number opened during the 1980s and 1990s. As a result of the expansion in diagnostic centres, most of which have contracts with insurance funds, the insurance fund budgets have been heavily burdened through the provision of expensive and unnecessary diagnostic services induced mainly by doctors employed by the insurance funds;

- The employment of doctors exclusively by the NHS became a major issue. According to the law, doctors employed by the NHS were not allowed to exercise private practice. Their salaries were almost doubled but the restrictions on private practice were never strictly enforced with the result that the practice continued;

- The unification of the major funds and the establishment of a common fund never materialized. The mechanisms of financing and reimbursement remained unchanged. The Ministry of Health continued to determine premium levels and fees paid by the insurance funds to the health care providers. These fees were lower than the actual costs, especially in the case of hospital care, with the result that hospital budgets became increasingly dependent on government subsidies. The ratio of budget to insurance fund financing of hospitals changed from 40:60 in the 1970s and early 1980s, to 88:12 in the early 1990s. Whereas financing responsibility shifted substantially toward the state, in practice there was no change in the relationship between the NHS and the insurance funds and the funds continued to operate as before;

- The establishment of rural health centres represented the biggest project in the country to develop primary health care, but in fact this process stopped short with the failure to implement this portion of the 1983 legislation in urban areas, as well as with the failure to implement a referral system anywhere in the country;

- Decentralization in the planning process never materialized. A Central Health Council was established, but its role is minimal. The regional health councils were never established.

The decade of the 1980s was devoted mainly to implementation of portions of the 1983 legislation, the establishment of the NHS and the expansion of public health services. In the early 1990s, the emphasis shifted in the direction of managerial and market changes due to macroeconomic constraints and ideological and political changes. In 1992, the conservative government introduced new reforms that altered some of the provisions of the 1983 legislation. Specifically these were as follows:

- Primary health care centres previously financed through hospital budgets now became autonomous and financed through district health budgets;
- Doctors employed in public hospitals became free to choose full- or part-time employment within the NHS, allowing some private practice;
- The establishment of new private for-profit hospitals and clinics was once again permitted, with certain requirements concerning quality of services;
- Patients' freedom of choice and initiative were emphasized.

In addition to this legislation, other adjustments made in this period included the imposition of certain co-payments and fees in the case of drugs and visits to out-patient hospital departments and in-patient admissions. The most important measure in this period involved a huge increase in

per diem hospital reimbursement rates (by 600%) which created deficits in the insurance funds for the first time.

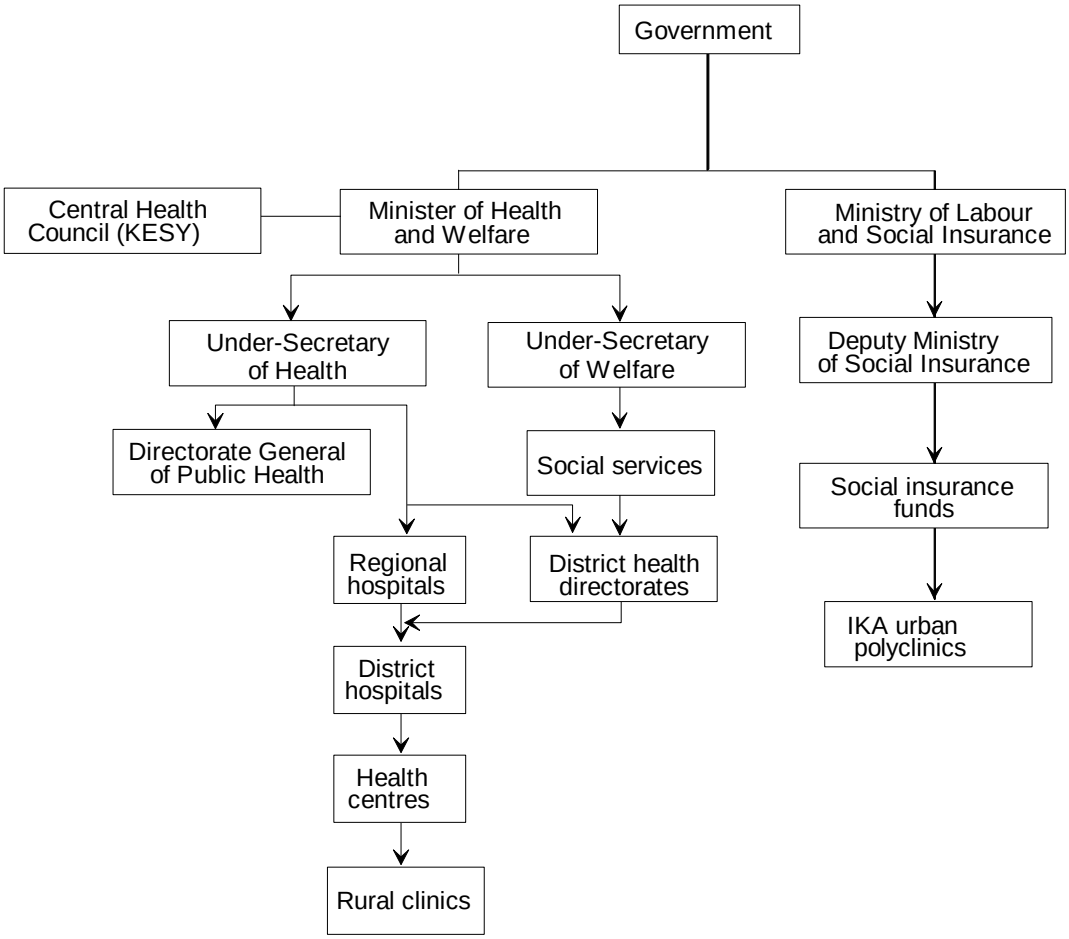
The problems of the Greek health care system that have led to numerous efforts to initiate radical reforms persist to the present day, and are now held to be more pressing than ever. Another major reform proposal was put forward in 1995–1996, in an attempt to deal with all the major shortcomings of the system that the 1983 reform failed to resolve. This will be discussed in the section on health care reforms.

Organizational structure and management

Organizational structure of the health care system

The Ministry of Health and Welfare is the leading institution in developing and financing health policies. The Ministry is responsible for provision and financing of the National Health Service as well as health and social services for the poor, the elderly and the disabled; a very small part of health and social services is provided by municipal authorities. Local authorities (52 districts or prefectures), through the Ministry of Health, play a limited role in the administration of 128 NHS hospitals and 176 rural health centres. The Central Health Council (KESY) and Committees for AIDS, Drugs, Cancer, etc., play an advisory role to the Minister.

Fig. 2. Organizational chart of health care system



The insurance funds (IKA, OGA, TEVE, and others) have been under the jurisdiction of the Ministry of Labour and Social Insurance since September 1995. They play a significant role in the provision and financing of ambulatory services. IKA, the largest social insurance fund (50% of the population) covering mainly blue- and white-collar workers, is responsible for the financing and provision of health care services through its wide and decentralized network of primary health care facilities (over 200 urban polyclinics and clinics). OGA, the second largest social insurance fund, covers farmers and their families (25% of the population) who use the NHS services (i.e. rural health centres). The rest of the funds provide health care services to their beneficiaries mainly through contracts with private physicians for the ambulatory sector, and public or private hospitals for secondary and tertiary health care services. Secondary and tertiary care is provided by NHS hospitals which are publicly owned and financed mainly by the state budget as well as by the insurance funds. Apart from the Ministry of Health and the social insurance funds, the private sector plays a significant role in health care provision.

Central administration

The Ministry of Health and Welfare, through its central and regional services, has the responsibility of planning and implementing health-related activities for public health, medical care and social welfare (social security was separated from the Ministry of Health in September 1995). The Ministry also coordinates health-related programme activities of private institutions and individuals. The central administration consists of the Minister, two Under-Secretaries of State and two Secretaries General (one for health and one for welfare) on the political side. On the managerial side, there are three general directorates: one for public health and medical care; one for administration of the Ministry and the entire system; and one for welfare. There has been much discussion about establishing a new general directorate for NHS management, taking the responsibilities related to the health care services from the three directorates, particularly the first two. The main factor favouring this change is that under the present structure there is no clear vision for public health and health care. The current management structure arranges the various services of the Ministry of Health and Welfare under its three directorates:

Directorate General of Health:

- public health
- environmental health
- primary health care
- development of hospital units and blood donation
- mental health
- medicines and pharmacies
- health professions
- medical care of civil servants.

Directorate General of Welfare:

- social housing and development of welfare units and professions
- family and child protection
- social work and welfare
- elderly and disabled people.

Directorate General of Administrative Support:

- personnel
- education
- organization and procedures
- informatics
- finance

- property evaluation
- biomedical technology
- technical services
- international relations
- health education and information
- civil planning for emergency
- European Union (EU) and other project development.

There are a few services subordinated directly to the Minister (legal coordination sector, press office and public relations, secretariat of the Central Health Council, strategic planning and policy analysis unit, and offices for problems due to drug use, and related to equity of the sexes) as well as services functioning under special provisions (office of audit board, statistical service, etc.).

The Central Health Council (KESY) was established following the 1983 reform. KESY functions as adviser to the Minister on health policy matters especially in the field of the structure and the function of the NHS. KESY is composed of:

- 3 representatives from the Pan-Hellenic Medical Association (PMA)
- 14 representatives from the health profession trade unions and university faculties
- 2 senior officers from the Ministry of Health
- 2 governors of the biggest social insurance funds (IKA, OGA)
- the Chairman of the National Drug Organization
- 3 members appointed by the Minister of Health and Welfare from the scientific and social fields.

The Chairman of KESY is elected only by the medical members of the Council. Several councils and committees work under KESY. Until now, KESY has not managed to produce innovative policies and programmes for the NHS or to establish new regional bodies foreseen by the 1983 legislation. Mainly due to its medically-oriented composition, KESY has focused particularly on the medical field, at the expense of the other professions and interests of the health care system.

In September 1995, the Ministry of Labour and Social Insurance took over the supervision of the operation and financing of social insurance funds and the services they provide. This was previously the responsibility of the Ministry of Health, Welfare and Social Insurance, which subsequently became known as the Ministry of Health and Welfare. The Ministry of Defence is responsible for the financing and management of 13 military hospitals which have remained outside the NHS, while the responsibility for the health of prisoners rests with the Ministry of Justice.

As a result of the 1983 legislative framework, the health-related functions of other Ministries were taken over by the Ministry of Health, which shared joint responsibility with the other Ministries for these areas. The areas concerned were: environmental health with the Ministry of Environment and Public Works; medical education with the Ministry of Education; occupational health with the Ministry of Labour, and nutrition with the Ministry of Agriculture. Thus, theoretically, the Ministry of Health and Welfare is charged with the responsibility for developing health policy in all these areas. In reality, some overlaps between Ministries result in excessively bureaucratic procedures and delays in decision-making, due to unclear lines of responsibilities among ministers and officials.

Social insurance funds

Out of a total of about 300 different social insurance organizations, about 40 provide coverage against the risk of illness to nearly the whole Greek population. Membership of the funds is compulsory for the employed population and its dependants, and is based on occupation. Most of the funds are administered as public entities and operate under extensive control by the central government. The range of services covered, the type of doctors to whom access is permitted, and the contribution rates are at present determined by the Ministry of Labour and Social Insurance and the Ministry of National Economy; until September 1995 they were determined by the Ministry of Health, Welfare and Social Insurance. The determination of these issues tends to depend on the priorities of the government at a given point in time and on the extent of political pressure exerted by different occupational groups. During the 1980s, a number of small funds covering small occupational groups were merged by ministerial decrees which did not take into consideration the financial ability of the stronger funds to support the weaker ones.

The main groups of social insurance organizations, the size of population covered, and occupational groups covered are as follows:

- IKA (Institute of Social Insurance): 50% of the population; urban population, i.e. blue- and white-collar workers;
- OGA (Organization of Agricultural Insurance): 25% of the population; rural population (i.e. agricultural workers);
- Civil servants: 7% of the population;
- TEVE-TAE (Fund for Merchants, Manufacturers and Small Businessmen): 13% of the population; merchants, manufacturers and shop owners;
- OTE, DEH, banks: 2.5% of the population; telecommunications, electricity and banking personnel.

IKA is the largest scheme in Greece and provides pension, sickness insurance and welfare benefits. Until 1982 its main sources of finances were employer and employee payroll contributions. Since 1982 the fund receives generous subsidies from the central budget. IKA provides services directly to its members. It employs doctors paid by salary to provide primary medical and dental services and owns a number of clinics where primary and secondary care are provided. But these facilities exist only in major urban centres and are not capable of satisfying the entire demand. Thus the scheme contracts out to some private doctors for primary health care services reimbursed on a fee-for-service basis. It also contracts out to a number of private clinics reimbursed on a per diem basis with additional fees for certain diagnostic and curative procedures. Its members can, in addition, receive free treatment at public hospitals which are reimbursed on the same lines as the private clinics. The prices of the services paid are determined by the Ministry of Health, and are subject to approval by the Ministry of Labour and Social Insurance.

OGA covers the rural population. It initially offered hospital care cover. Coverage for primary health care services started in the 1960s and is provided by the health care centres (built under the new system following the 1983 legislation) and a network of rural health stations and rural clinics, staffed by specialists and graduate doctors who are obliged to serve for at least one year in rural areas after their graduation. Coverage for pharmaceutical care was introduced in 1982. OGA is financed by earmarked general taxation; its members do not pay contributions and co-payment rates for the services provided are negligible, except in the case of drugs.

TEVE was created in 1934 in order to provide insurance coverage to shop owners and manufacturers. It covered a very limited range of primary health care services, mainly diagnostic tests and general practice services, until 1980 when the range of benefits expanded. It also covers hospital care and expenditure on pharmaceuticals. It is financed by its members' contributions

which vary according to the insured person's occupation and income. The schemes of those employed in banks provide the greatest range of benefits. They are financed mainly by employer and employee contributions. Primary health care is provided by contracted private doctors and secondary care by public and private hospitals of the choice of the insured. The fund covers visits to doctors, and hospital, dental and pharmaceutical care.

The fund covering public employees started operating in 1963. It does not include everyone employed by the central government and the public agencies, because half of these persons are employed on a contract basis and are insured with IKA. The total number of those employed in the public sector (central government and other public entities and agencies) is not known. It is estimated that the scheme covers about 700 000 persons which includes public, civil and military employees and their dependants. In 1990 the various schemes for bank employees provided coverage for about 1.8% of the total insured population, while another 1% is covered by small funds for public utilities employees.

IKA, OGA and TEVE-TAE cover nearly 90% of the total insured population. About 9% of the total insured population is covered by the public sector, the public utilities and the bank schemes. The rest of the population is covered by the remaining large number of very small funds.

Every year the number of IKA members increases not only for demographic reasons or reasons related to employment trends in the occupations covered, but also because small insurance sickness funds are periodically incorporated into IKA. On the other hand, the number of persons insured by OGA has continuously decreased since 1989. The total number of insured persons and the total number of persons insured in funds supervised by the Ministry of Labour and Social Insurance exceed the total population of Greece, mainly because certain segments of the population are insured in more than one fund. It may be noted, too, that whereas most funds are financed by employer and employee contributions, OGA is financed mainly by the state through general (earmarked) taxation.

The private sector

The 1983 changes to the system were intended to bring most of the voluntary portion of the health care system and a large part of private sector (especially in the case of secondary care) into the NHS. However, many Greeks not wholly satisfied with publicly provided services, turned to the private sector, especially in the case of primary health care. In the period 1983–1992 the establishment of new private hospitals was prohibited, and efforts were made to absorb at least a portion of private hospitals into the public sector. This policy was only partially successful, as some 200 small clinics with inadequate facilities and some 20 hospitals with luxury facilities and high quality staff resisted. They fought to survive by signing contracts with private insurance companies (a continuously growing sector) and more recently also with the social insurance funds. In 1992, the restriction on the establishment of private hospitals was removed. Since 1985, there has been significant growth in the establishment of private diagnostic centres by doctors and other health care professionals: there are currently about 200 such centres in the entire country. In addition, a significant portion of specialist care is offered by physicians in private practice, who are either contracted by various social insurance funds or paid directly by the patient on a private basis. Rehabilitation services (physiotherapists, etc.) and services for the elderly (geriatric homes) are predominantly offered by the private sector. The Ministry of Health and Welfare encounters many difficulties in its efforts to monitor the system, in the absence of regional health authorities and subsequent to the transfer of social insurance to the Ministry of Labour in 1995.

Planning, regulation and management

The Greek health care system is highly centralized and regulated. Virtually every aspect relating to health care financing and provision is subject to control by the Ministry of Health. Moreover, the Ministry of Health has never seen its role as extending beyond the areas of financing and provision. Thus, while exercising (until recently) strong regulatory control over insurance funds and public hospitals (for example, with respect to appointments and budget approval), it is not involved in ongoing planning activities in numerous areas, including ensuring a minimum level of benefits to be provided by insurance funds; provision of health care services and facilities using needs-based criteria; planning of health care manpower; determining priorities with respect to patterns of care to be provided; determining priorities across regions; or allocating resources according to specific criteria.

Specifically, the Ministry of Health and the Government exercise strict regulation and control in the following areas:

- Social insurance funds, though self-governed bodies by law, are strongly regulated by the Ministry of Health and the Ministry of Social Insurance as well as the Ministry of National Economy. These ministries determine the range of services to be covered, contribution rates, and types of doctors to whom the insured have access. Key factors influencing the ministries' decisions are the government's prevailing priorities and the political pressure of different occupational groups.

- The Ministry of Health determines the number of personnel employed in hospitals, the skill mix, terms of employment and salary levels. Every appointment in the public health sector must be signed by the minister. Hospital administrators have very little leeway with respect to hospital management and organization, as these are regulated by law.

- The Ministry of Health approves all budgets. Financial management in all publicly provided services (hospitals, health centres and all other services) is strictly regulated, leaving no room for any kind of manoeuvre by hospital or other administrators.

- All administrators in public health care institutions are appointed on the basis of their political affiliation with the ruling party in the government, and not because of relevant training or other qualifications. There are in fact few trained administrators in the Ministry of Health, in public hospitals, or in any other public health-related institution.

- It is not only the Ministry of Health which has regulatory powers over health-related areas, but also other ministries, which often gives rise to conflicting priorities. The most striking example is in the area of pharmaceutical pricing, which is controlled by the Ministry of Trade.

The 1983 legislation had attempted to rectify some of the above shortcomings in two ways: through the establishment of the Central Health Council, which intended to play an advisory role to the ministry in the areas of health policy and research; and through provisions for the establishment of regional health councils with planning and administrative responsibilities. However, as the latter were never established, the Central Health Council has been seriously impeded in its ability to carry out its tasks. Moreover, the Ministry of Health has avoided employing health scientists on a permanent basis, and the resulting temporary committees have failed to produce any long-term plan that would be acceptable to the various ministries involved in health.

Nonetheless, some serious steps toward the development of planning activities have been undertaken very recently. Since the beginning of 1996, a major political goal has involved putting into effect a four-year plan for the two regions comprising the Aegean islands. Reasons leading to the selection of these regions include their remoteness from major urban centres, and the relative underdevelopment of health care services. Objectives of the plan are the following:

- reorganization of primary health care services;
- upgrading of hospital units;
- introduction of comprehensive emergency care services;

- introduction of specific public health activities (screening for women, trauma centres, retraining programmes for doctors in provision of emergency care in nonhospital settings).

Financing for the plan has been secured, and the plan has already gone into effect. The two regions in question have recently become members of WHO's Regions for Health Network.

Similar plans are currently under preparation for other areas of Greece.

Decentralization of the health care system

The structure of the NHS is based on the regional and district division of the country, i.e. the 13 regions and 52 prefectures or districts ("nomoi"). The average population size is 200 000 for the districts (excluding Athens and Thessaloniki) and 800 000 for the regions (excluding Athens). Each of the prefectures has at least one district hospital. Each of the regions should have (according to the 1983 plans) one regional hospital which is in most cases a university teaching hospital. However, at present only 7 of the 13 regions have large university teaching hospitals, while the remaining regions are served by the regional hospital of the nearest region in the case of tertiary care.

The 13 regions are in principle (based on the 1983 legislation) responsible for planning and coordinating regional development for the whole country. The government has appointed the Peripheral (Regional) Secretaries General since 1986, and also defined the composition of the regional councils. These comprise the Secretary General (Chairman), the prefects of the region and representatives from municipal authorities. Separate regional health councils, related to the Central Health Council, and regional health departments were introduced by the 1983 act to advise the government on the health needs of their local populations. These were intended to play a significant role in determining priorities and proposals for addressing local needs. However, due to lack of human resources (managers, scientists, etc.) and lack of a managerial structure, they have not become operational. Thus, the regions have no responsibilities at present.

The 52 districts, or prefectures, are responsible for the provision of a whole range of services to the population of their catchment area: education, social policy, public works, agriculture, sports, etc. The services also include primary and secondary health care, and public health services. With regard to health care, the prefectures have or have had a number of functions including:

- distributing the health budgets to the hospitals and other NHS providers in the prefecture as determined by the Ministry of Health and the Ministry of Finance;
- approving new personnel for these services, subject to further approval by the Ministry of Health;
- managing the provision and financing of health services offered to the public employees and the farmers;
- certain tasks of environmental and public health.

However, in practice, the administration of the whole system has for many years been run centrally, because of the low level of power given to the districts and discontinuities in policy due to political changes. Recent developments suggest that decentralization processes are about to begin.

Since 1 January 1995, the district mayor and the council have been elected directly by the population instead of being appointed by the state (Ministry of Internal Affairs). More recently, the government announced that the regional administration will be reorganized to permit the decentralization of certain responsibilities to the regional level in all areas of social services. This will bring control of health services and public health to the regional level, with central government retaining control of financing responsibilities. If this materializes in conjunction with the planned health care reforms, the decentralization of the health care system, in the form of deconcentration, will be set into motion.

As to the local level of the system, the municipalities and the communities play no significant role in the provision or financing of health care services, except in the large cities. For example, the Mayor of Athens has established four small primary health care centres to cover the first aid needs of the populations living in the four areas of the municipality of Athens (each with an average population of 200 000 inhabitants). Recently, other municipalities have taken initiatives to develop primary and social care services for their citizens.

Health care finance and expenditure

Main system of finance and coverage

The health care system in Greece is financed by a mix of tax-based and insurance-based statutory financing (supplemented by a high proportion of voluntary financing). As such, it cannot at the present time be classified as falling under either the predominantly "Beveridge" or the "Bismarck" type of financing system. Rather, looked at from a long-term perspective, it can be considered as being in a transition phase from predominantly insurance-based (the Bismarck model) to being predominantly tax-based (the Beveridge model).

Until 1983, health care was financed predominantly by social insurance, supplemented by subsidies from the state budget. The 1983 health care reforms sought to change this through the establishment of what was intended to be a tax-financed National Health Service. These reforms were only partially implemented. What is more important from the point of view of financing, however, is that the 1983 reform plan concentrated exclusively on the provision of health care services, and did not deal with the financing side. In one article of the legislation, it is stated that the financial relationship between the insurance funds and the NHS would be defined in the near future. This never took place, and as a result, the numerous social insurance funds in existence simply continued to operate as before. The increased state budget financing that did occur, given the increases in publicly provided services that ensued, simply meant growing public subsidies of hospitals and social insurance funds.

The state budget, financed through taxation at the central level only, is responsible for financing of the following: rural health centre and rural clinic expenditures (which were established as part of the NHS), salaries of personnel in public hospitals, subsidies of public hospitals (involving payments to hospitals over and above the per diem fees paid by the social insurance funds), subsidies of the social insurance funds, and subsidies of civil servant health insurance, capital investments, public health, medical education, etc.

There are currently as many as 300 social insurance funds, about 40 of which cover the bulk of the population. Membership in the funds is compulsory and is based on occupation. Therefore there is no freedom in choice of fund, nor is there any competition among funds. Most of the funds are public entities, and while they are autonomous, they operate under extensive control by the central government. The state budget allocation for health is divided between expenditures incurred by the Ministry of Health and those incurred through the country's 52 districts, not only for health but also for welfare and other benefits.

Most of the funds obtain the bulk of their resources through employer-employee contributions which are income-related, the levels of which are set by the Ministry of Labour and Social Insurance. On the whole, contributions amounted to about 77% of total fund revenues in 1991, however, there are significant differences among funds concerning the proportion funded by contributions. In the case of OGA, for example, covering the agricultural population, sickness funding is exclusively through the state budget with no contributions from farmers. In addition, employer-employee contribution ratios vary significantly across funds. In IKA (the largest fund which covers white- and blue-collar workers) this ratio is two-thirds by the employer and one-third by the employee.

The state budget contribution to the social insurance funds has been steadily increasing in recent years, due to the continuously growing deficits of the funds. Until 1992, the deficits were

confined to the area of pensions, with the sickness area actually showing surpluses. These surpluses were, however, artificially maintained through the government's policy of setting low rates for insurance fund reimbursements to public and private health care providers. In 1993, following large increases in the fund reimbursement rates (set by the government), the sickness branches of the insurance funds began to show deficits as well, thus increasing the share of the subsidy from the state budget. Contribution rates have as a result also gradually increased since 1990. In IKA, they now stand at about 7.65% of income (for health only). Funds that had higher contribution rates have not been requested to increase their rates, while funds with lower rates have been requested to gradually increase theirs.

During the late 1980s, the relative contribution of the state budget was increasing, compared to the contribution of the social insurance funds. However, during the 1990s this trend appears to have been reversed, with the relative importance of the insurance funds growing as a result of the increasing burden of health service financing noted above.

Population coverage and the basis of entitlement to coverage varies in accordance with provider settings and their associated sources of finance. Since implementation of the 1983 legislation, there has been a significant expansion in access to health care facilities and coverage of the population. At the present time there are two main principles of entitlement: one is entitlement on the basis of citizenship in the case of out-patient services provided by the NHS, and the other is entitlement on the basis of insurance contributions for services which are provided and/or financed by insurance funds. In addition, there are certain parallel services offered by the Ministry of Defence, consisting of 13 military hospitals and offering services exclusively for the respective employees and their families.

Entitlement on the basis of citizenship involves two types of provider settings: rural health care centres (providing primary health care), and NHS hospital out-patient departments (for both primary health care and emergency services), both of which belong to the NHS. According to law, any Greek citizen (as well as any citizen of an EU country) can receive services at any out-patient department of a NHS hospital, or at a rural health centre. In practice, any person from any country (including illegal immigrants) can receive care at these two provider settings.

Entitlement on the basis of insurance contributions applies to all other provider settings. These include urban polyclinics owned by insurance funds, in-patient care provided by NHS hospitals, and private providers (whether private practices or diagnostic centres or hospitals) who are contracted with insurance funds. Coverage for these services is provided only for insurance fund members and their families. Pensioners continue to be covered by the fund they belonged to while working, and pay their own contribution. The unemployed belong to an unemployment fund financed by the budget, and are covered by IKA services for a period up to 12 months.

Finally, there is also entitlement to services by virtue of being poor. The poor are entitled to free out- and in-patient care at public hospitals.

Health care benefits and rationing

There are very wide variations in the range of services provided by the numerous social insurance funds, as well as in the quality of those services. Most funds provide reimbursement of primary, secondary, pharmaceutical and dental care, and in some cases also reimbursement for spectacles, and diagnostic and laboratory tests. IKA, the largest fund, offers the most comprehensive package, which includes almost everything except cosmetic surgery. OGA (the fund covering the agricultural population) offers dental care only up to the age of 18, while TEVE (covering shop owners and manufacturers) and some smaller funds do not offer dental care at all.

In addition, most of the funds provide income allowances for lost income due to illness, maternity benefits, spa treatment, and others.

It is important to note that there have been no reductions in benefit packages in recent years. In fact, benefits have, in the case of some funds, even increased.

Complementary sources of finance

Table 1. Main sources of finance (%)

	1992	1994
Public		
Taxes	40	30
Statutory insurance	30	40
Private	30	30

Source: Ministry of Health, 1994.

According to official figures, tax revenues until 1992 constituted the most important source of financing of the Greek health care system, with statutory insurance and private sources contributing roughly equally. The private sources do not include voluntary insurance. The large relative contribution of private sources are to some extent due to the underground economy in health care, which is a major problem in the system. It has been estimated that unofficial payments constitute about 50% of total private payments for health care. In more recent years, due to government financing restrictions and increases in premiums, state subsidies have been reduced while social insurance financing has correspondingly increased its share.

Out-of-pocket payments

Out-of-pocket payments in Greece take the following forms:

- co-payments for health care services covered by the statutory system (as well as payments in full for services not covered by social insurance);
- official private payments, including payments to private physicians, private diagnostic centres and hospitals;
- and unofficial, or under-the-table payments, particularly in the hospital sector.

Co-payments for health care services covered by the statutory system

It should be noted that Greece is the only country in the EU where cost containment in the health sector has not been a major policy issue, and where as a result very few cost-containment measures have been implemented in recent years. A major policy objective in the 1980s and early 1990s has in fact been expansion of public sector expenditure and provision. Since the health care reform legislation of 1983, establishing the NHS, coverage of the population has increased, and the benefit packages of sickness funds have expanded. Newly instituted out-of-pocket payments therefore include only the following:

- **Pharmaceuticals:** Since 1992, 25% of the cost of drugs has been paid by the patient. This applies to all major insurance funds. Exceptions are made for certain categories of patients who pay 10%, and for persons with chronic conditions who are wholly exempted. Since the new rates of co-payments for pharmaceuticals were introduced in 1992, there has been no effort as yet to measure the impact on consumption. It is possible that some vulnerable groups may have been negatively affected (for example the elderly on very low pensions). There is some evidence to suggest that doctors sometimes try to avoid the imposition of a co-payment on an elderly or other patient who appears to have difficulty in paying by indicating that the patient's condition is chronic (in which case the patient is exempted from the payment).

- **Out-patient consultations in hospitals:** Since 1992, all out-patients who are not receiving emergency treatment pay 1000 drachmas (this does not apply to follow-up visits). Members of the OGA fund (the rural population) and the poor are exempted (a total of about 25% of the

population). However, in the case of certain insurance funds, the patient is entitled to be reimbursed for this amount by his/her respective fund. In the cases of IKA and TEVE, (about 65% of the population) reimbursement is not possible. For comparative purposes, it may be noted that a private doctor receives 2200–4000 drachmas per consultation from a sickness fund. In the private sector, most doctors charge 5000–10 000 drachmas per consultation (though in some instances, such as in the case of doctors who are university professors, the fee can be as high as 20 000 drachmas per consultation). Out-patient consultations decreased slightly in 1993 when this fee was imposed, and increased again in the following year.

In addition to the above, there are certain co-payments which are imposed on certain items, particularly by some of the smaller funds. For example, the TEVE-insured pay 25% of laboratory test costs and public servants' dependants pay 10%. The number of funds is large, and the benefits are variable, so it is not possible to go into these in detail. The four larger funds, insuring approximately 90% of the population, cover almost all benefits in full. However, it is also the case that members of IKA (which is the largest fund) have the option to visit private doctors and hospitals contracted with IKA, in which case IKA pays only a portion of the cost, with the patient being responsible for the remainder. The co-payments here are variable, depending on the type of service received. This arrangement is optional, however, as the IKA member who does not wish or is unable to pay is entitled to visit IKA polyclinics which are entirely free-of-charge, or to go to public hospitals which, as part of the NHS, are also free. Most co-payments which do exist have been in place for a number of years (with the possible exception of new services that have been added to the benefits packages due to new medical technologies and the like), and there have been no recent changes imposed by cost- containment considerations.

Private payments to physicians in private practice, private diagnostic centres and hospitals

Whereas virtually all Greek citizens have coverage for health care services through statutory insurance or the NHS, there is a large private sector consisting of consultations with physicians in private practice, visits to private diagnostic centres, as well as private hospitals for in-patient care. This is due to dissatisfaction with publicly provided services.

Unofficial payments

These are especially prominent in the case of in-patient care, and are made to doctors, mainly surgeons, in public but also in private hospitals. These payments are also made in the case of out-patient care. The rationale is to jump the queue or to secure better quality services and greater personal attention by the doctor. Unofficial payments are considered to be a major problem in the Greek health care system. It is estimated that about half the total private expenditure on health care involves informal payments. There is no really reliable estimate of the size of the unofficial market, partly because it is so widespread, and partly because of the complexity of the Greek health care system.

Almost 60% of total out-of-pocket payments (official and unofficial) are made to doctors and dentists, 20% go toward pharmaceuticals, with the rest being mainly expenditures on private diagnostic centres and private clinics. Out-of-pocket payments (both official and unofficial) represent roughly 6% of household income (1990 figures).

Voluntary health insurance

It is estimated that approximately 5–8% of the Greek population take out some voluntary health insurance. This is as yet a relatively small proportion, but has been growing quite rapidly and is expected to continue to increase. There are numerous private insurance companies, both Greek and foreign, offering private health cover. Reasons for taking out private health insurance in Greece include comprehensive coverage for services provided by private providers (physicians in

private practice, private diagnostic centres, and private hospitals) as well as coverage for supplementary services not included or partially included in the statutory system.

External sources of funding

With the assistance of EU funds, Greece has undertaken a reform of portions of the psychiatric sector. Financing of the project was initiated in 1983 and ended in 1994. With 15 000 million drachmas contributed by the EU and an additional 5000 million by Greece, this project has resulted in the establishment of 31 psychiatric centres plus an additional 6 that are currently under construction, each of which is attached to the nearest hospital with psychiatric facilities. The project has also included renting of several hundred apartments for psychiatric patients in the proximity of the health centres. Several other services have been included, such as vocational training for the patients. Despite certain implementation delays, the EU has commended Greece for the progress made and the success of this programme.

In 1994, the Ministry of Health, in collaboration with the Ministry of National Economy, introduced a five-year plan (1995–1999) which was approved by the EU. The plan is being funded, two-thirds by the EU structural funds and one-third by the Greek government, and includes: the upgrading or construction of 15 hospitals; the improvement of the National School of Public Health; the expansion of the Ambulatory Emergency Service in the entire country; a new National Blood Bank; the establishment of one central and five regional public health laboratories; the establishment of a National Research, Evaluation and Quality Assurance Centre, and several projects for hospital informatics and health manpower education.

A final project being funded in part by the EU is Interreg, which involves the establishment of cross-border public health laboratories. This is a joint project with Albania and Bulgaria.

Billions of **GRD**								
Value in Constant Prices, Billions of **GRD90**	218.3	282.3	354.0	452.2	561.0	528.6	547.1	570.5
Value in Current Prices, per Capita (**PPP$**)	59	104	187	284	395	414	469	500
Share of GDP (**%**)	4.0	4.1	4.3	4.9	5.3	5.3	5.5	5.7
Public as share of Total Expenditure on Health care (**%**)	53.4	60.2	82.2	81.0	84.2	75.7	76.1	75.8

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

Health care expenditure

Table 2 shows the development of health care expenditure in Greece over the period 1970–1993. Health care expenditure has increased substantially in constant prices, in per capita US $PPP, and as a share of the GDP. It can be seen that the greatest increases have occurred in the period 1980–1990, reflecting increases that have occurred in both the public and private shares of spending. The development from public to private shares is in fact quite interesting when examined in the light of the 1983 reforms. While there was a significant growth in public sector expenditures following the reforms, there was also significant growth in private expenditures, especially after 1990. This can be seen in the last item of the table, which shows that whereas there was an increase in the public share of total expenditure from 81% in 1985 to 84% in 1990, after 1990 the public share dropped to 75–76%. That is, from 1985–1990 public expenditures were growing faster than private expenditures, but from 1990 onwards private expenditures were growing faster. This reflects the partial, at best, success of the 1983 reform with respect to its intention to increase public expenditure on health at the expense of private expenditure.

There is an another issue which should be noted concerning the OECD figures of health care expenditure in Greece. A number of studies suggest that OECD figures underestimate the size of both public and private expenditure on health in Greece. According to the Greek interpretations of the national accounts, health care expenditure may account for as much as 7.2–7.4% of the GDP.

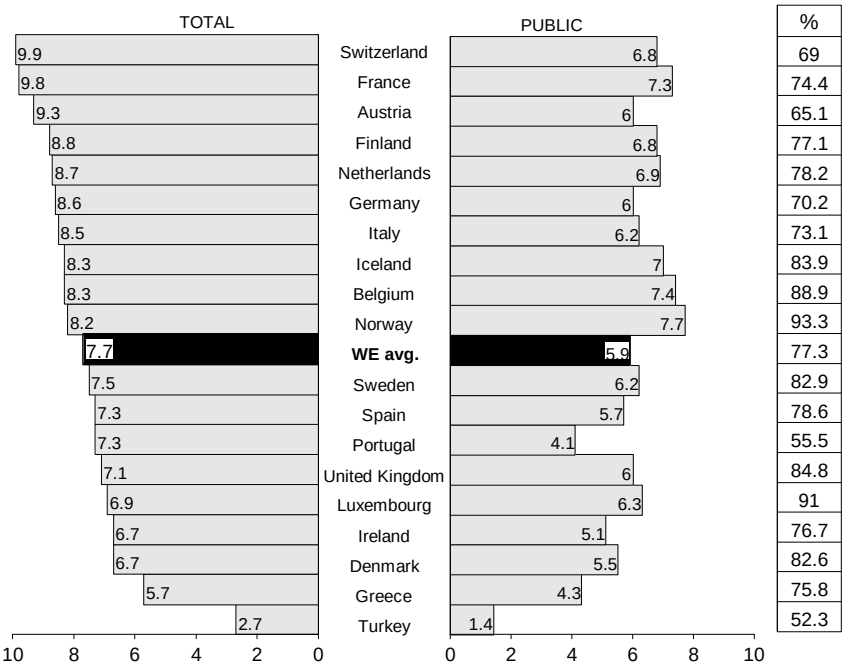
Table 2. Trends in health care expenditure in Greece, 1970–1993

Total expenditure on health care	**1970**	**1975**	**1980**	**1985**	**1990**	**1991**	**1992**	**1993**
Value in current prices, billion **GRD**	12.0	27.4	74.1	224.5	561.0	682.4	815.0	955.0
Value in constant prices, billion **GRD90**	218.3	282.3	354.0	452.2	561.0	528.6	547.1	570.5
Value in current prices, per capita (**US $PPP**)	59.0	104.0	187.0	284.0	395.0	414.0	469.0	500.0
Share of GDP (**%**)	4.0	4.1	4.3	4.9	5.3	5.3	5.5	5.7
Public as share of total expenditure on health care (**%**)	53.4	60.2	82.2	81.0	84.2	75.7	76.1	75.8

Source: OECD health data file, version #3.6 (1995).

Fig. 2 presents total and public health care expenditure in Greece and a number of other western European countries. In terms of total figures, Greece is shown to have one of the lowest shares of GDP spent on health of all the countries. However if the Greek estimate of about 7.3% is considered, Greece appears to be roughly the same as Spain and Portugal, or slightly below the western European average. In terms of figures showing the public expenditure as share of GDP, Greece is again shown as one of the lowest on the list, but would be somewhat higher according to the Greek estimates.

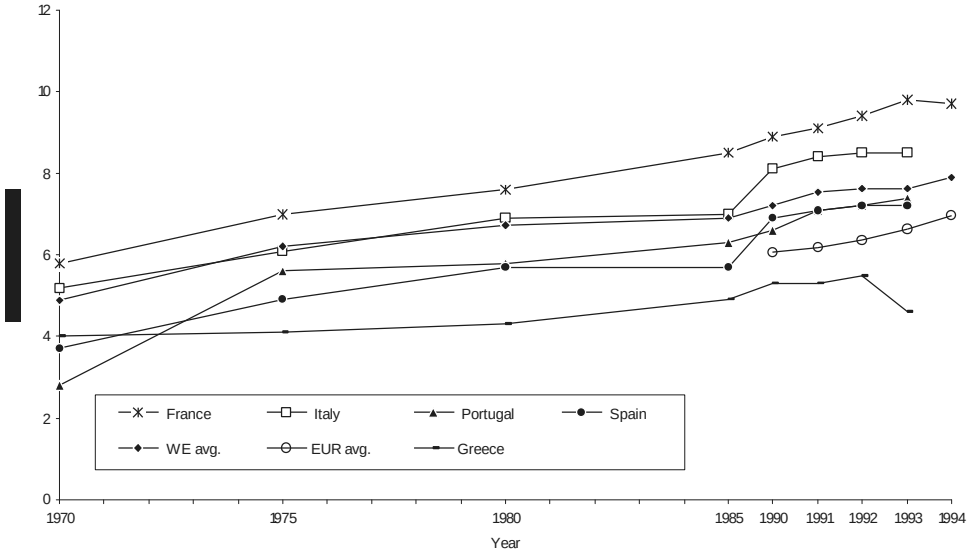
Fig. 3. Total and public health care expenditure as a share of GDP (%) in western Europe, 1993



Source: OECD health data file, version #3.6 (1995).

Fig. 4 shows trends in health care expenditure as a share of GDP over time. Greece appears below all the countries shown throughout the entire period, and is consistently below the western European average, though it has followed the same gradually increasing trend as the European average.

Fig. 4. Trends in health care expenditure as a share of GDP (%) in Greece and selected European countries, 1970–1994

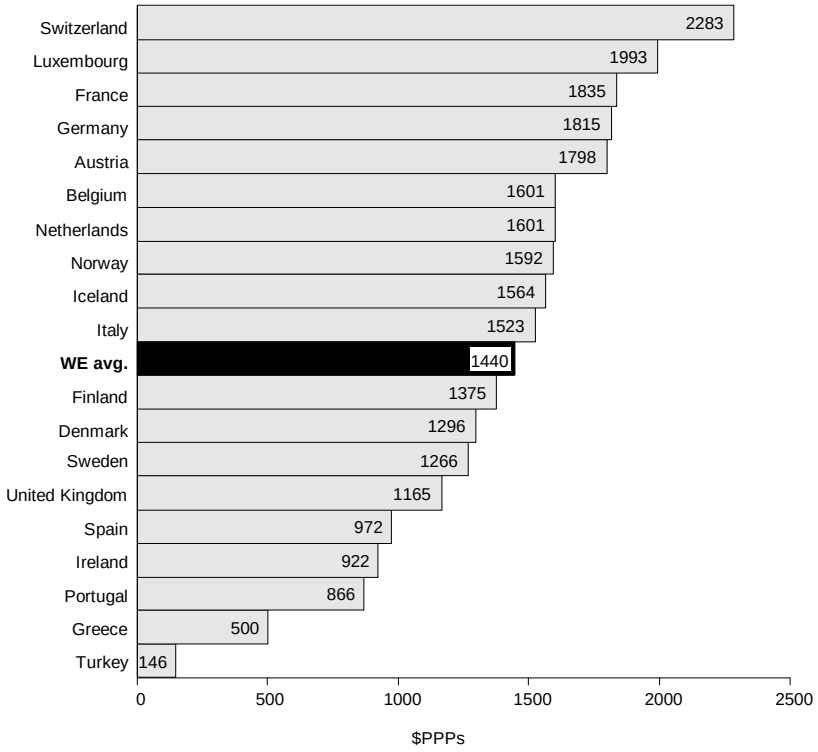


Source: OECD health data file, version #3.6 (1995).

Fig. 5 presents comparative data on health care expenditure in US $PPP. Greece has nearly the lowest expenditure on health care of all the countries appearing in the figure, amounting to

roughly one-third of the western European average. Once again, attention must be drawn to the possible underestimate of health care expenditures by the OECD. According to Greek estimates the OECD's expenditure figures on Greece are about two-thirds of the level of Greek figures. Still, because Greek expenditure in US $PPP is so very low compared to other countries, taking the Greek estimates into consideration would still leave Greece close to the bottom of the list.

Fig. 5. Health care expenditure in US $PPPs in western Europe, 1993



Source: OECD health data file, version #3.6 (1995).

Structure of health care expenditure

Table 3 presents the structure of health care expenditure in Greece. The first row shows the share of public expenditure in the total which, as noted earlier, increased until 1990 and then subsequently declined not because of an absolute drop but because of more rapid growth of private expenditure. The proportion of in-patient care has been steadily increasing throughout the period, reaching the rather high percentage of about 59% in 1992, which reflects the strong hospital orientation of health care. The share of pharmaceuticals, by contrast, has been continuously declining, and only in 1992 registered a small increase. The share of investment nearly doubled in the period 1970–1975, increased further in 1980–1985, and subsequently stabilized at between about 6% and 7% of total expenditure.

Table 3. Health care expenditure by categories in Greece (as % of total expenditure on health care), 1970–1993

As share of total expenditure on health care	1970	1975	1980	1985	1990	1991	1992	1993
Public (%)	53.4	60.2	82.2	81.0	84.2	75.7	76.1	75.8
In-patient care (%)	46.4	44.7	48.9	52.7	57.5	58.3	59.2	–
Pharmaceuticals (%)	43.3	41.4	34.8	28.9	24.1	22.7	23.5	–
Investment (%)	2.6	5.0	5.0	7.0	6.0	6.8	7.6	–

Source: OECD health data file, version #3.6 (1995).

Health care delivery system

Primary health care and public health services

Historical background

The most important events in the post-war development of the primary health care system were the following:

- 1953 Establishment of community health stations in rural areas
- 1955 Establishment of community and rural clinics
- 1960 IKA introduced a network of family physicians through its own urban polyclinics
- 1961 Foundation of OGA insurance scheme for farmers and their dependants
- 1968 Establishment of compulsory service (1 or 2 years) for doctors in rural areas
- 1969 Primary health care plan for an integrated primary health care system based on family practitioners; failed
- 1976 Plan for the unification of funds and the introduction of a family practitioner; failed
- 1980 Legislative proposal by the Minister of Health (Doxiadis) for an integrated PHC plan; failed
- 1983 Establishment of NHS; establishment of 176 health centres covering the rural population; out-patient hospital departments and IKA polyclinics cover the urban population
- 1988 The Central Health Council (advising the Ministry of Health) carried out a study for the unification of NHS with IKA provisions; failed
- 1992 New legislation by the conservative government introduced family physicians and the separation (administrative and financial) of health centres from the metropolitan hospitals; failed
- 1994–1996 Discussion on new reforms (see section on health care reforms).

PHC provider settings

According to the 1983 health care reform legislation, primary health care (PHC) was to be provided by health centres and their provincial clinics in both rural and urban areas. This law, which for the most part is still valid today, laid the foundations for the first time for an NHS. In the area of PHC it anticipated the establishment of a sufficient number of health centres and provincial clinics, as decentralized units covering the health needs of all the citizens in the entire country. Nearly all the health centres envisaged by the legislation for rural areas were constructed and began to offer primary health care services during the 1980s. However, in the case of urban areas, the provisions of the law did not materialize, and the pre-reform situation remained unchanged. This essentially meant the continued operation of a variety of provider settings, both public and private, with significant inequalities in the range of services provided and in their quality.

The various primary health care provider settings can be classified as follows:

- **PHC provided through the NHS:** This includes health centres (in rural areas), provincial clinics, and public hospital out-patient departments. These services are financed mainly through the state budget, and to a smaller extent by insurance funds.

- **PHC provided through social insurance funds:** This includes polyclinics owned and operated by specific insurance funds (mainly IKA). These services are financed by the social insurance funds.

- **PHC offered through local authority services:** This category includes few clinics and welfare services. These services are financed by the state budget through the Ministry of Interior.

- **PHC provided by the private sector:** This includes physicians in private practice who are contracted with one or more insurance funds (financed by the respective insurance fund), physicians in private practice who are not contracted with any insurance fund (financed by out-of-pocket patient payments or voluntary health insurance), and private hospital out-patient departments (financed mainly by out-of-pocket payments or voluntary health insurance).

Each of the above will be discussed in turn.

PHC provided through the NHS

One-hundred-and-seventy-six health centres have been established in rural areas alone, with the intention of providing preventive, curative, and rehabilitation services to their catchment areas (14 000–15 000 population on average). Although they were intended to act as gatekeepers to the health care system, in fact this has not occurred. The health centres are staffed by doctors (who are mainly pathologists, paediatricians and a few general practitioners) and nurses, all of whom are full-time salaried employees of the state. On average there are seven beds per centre for one day of medical treatment. The number of doctors employed in each health centre depends on the size of its catchment area.

Following the 1983 reform, the construction of health centres was carried out quickly (1984–1986) and the equipment they were provided with was initially appropriate for the first stage of their operation. Health centres have in fact fulfilled their objective to increase access to PHC in rural areas at least in part, and they constitute an excellent organizational structure upon which to build an effective PHC service. However due to a number of staffing, financial and organizational problems, their actual performance has fallen short of expectations.

Specifically, most health centres suffer from inadequate staffing, as only 48% of foreseen medical positions were actually filled. It is difficult to recruit doctors in sufficient numbers because of living conditions in rural areas, fewer opportunities for private practice and generally low salaries. Moreover, since 1990 the Ministry of Health has recruited limited numbers of new health care personnel because of a general restriction on employing new public sector employees. The best staffed health centres are those close to major urban areas. The staffing shortages in professions other than doctors, though significant, are somewhat less serious (62% of nursing positions, 55% of paramedical positions, and 62% of administrative staff positions have been filled).

Most doctors working in health centres (roughly 70% of the total) are specialists, as training in general practice was not established until 1987 and is generally inadequate.

In addition, health centres have not had managerial and financial autonomy to develop their own policies. They are financed via hospital budgets and they are still administratively attached to district hospitals. They, therefore, have to compete for resources with the hospitals' clinical departments, and given their lack of financial autonomy, are not in a position to formulate their own priorities.

Despite these difficulties, there is evidence that health centres are becoming increasingly accepted by the public, and that the flow of rural patients to out-patient departments has been somewhat reduced.

About 1500 provincial clinics are administratively attached to health centres and are staffed by publicly employed rural doctors, who, in some cases, are assisted by nurses and midwives. Rural doctors are medical graduates who are required to spend at least one year in a rural area upon graduation. Their lack of clinical experience raises concern about the quality of the services they deliver.

The out-patient departments of public hospitals also fall into the category of NHS-provided PHC. These are a very significant provider of PHC services for urban populations (though of course anyone is free to use these providers). Out-patient departments operate on an appointment basis. All persons, irrespective of type of insurance coverage (or lack of coverage) are entitled to use these services.

PHC provided through social insurance funds

The 1983 legislation had made provisions to include the services and infrastructure of IKA (the largest insurance fund, covering roughly 50% of the population) as part of the NHS. This, however, never took place. IKA and a small number of other insurance funds own and operate their own primary health care facilities, where a number of specialists provide care to fund members that is free at the point of service. IKA offers by far the largest number of fund-owned PHC services through a broad and decentralized network of polyclinics and clinics. Doctors and other health care personnel are employed on the basis of a full- or part-time salary. IKA provides its members with a wide range of preventive, diagnostic and curative services, while most other funds provide a more limited range of services through their own facilities. Services not offered by fund facilities (whether IKA or other funds) are provided by public (NHS) hospitals and private providers, mainly specialists, who are contracted by the funds. Private physicians or diagnostic centres contracted by insurance funds are generally paid on a fee-for-service basis. In the case of remote areas where membership size is small and thus does not justify the construction of IKA facilities, IKA contracts rural doctors whom it pays on a capitation basis.

Problems faced by IKA in connection with its PHC services include the following:

- High accessibility without significant financial, organizational or administrative restrictions.
- Most visits are to specialists while visits to pathologists or family doctors are limited, thus resulting in ineffectiveness as there is no filtering mechanism.
- The quality of services is questionable as there are no quality control programmes. In a recent survey only four out of ten persons stated that they were satisfied with IKA services, whereas eight out of ten said they would prefer to be members of the Funds for Civil Servants, Bank Employees, or others, where there is full freedom of choice.
- There is a limited family physician system, and there is no referral system for hospital care from pathologists to specialists, thus making for lack of continuity in care and lack of guidance for the patient on how to use the health care system effectively.
- Many IKA patients also use private providers on a private basis because they do not trust IKA's health services or because they want a second opinion.

The OGA fund is a special case in that it is financed through the state budget, and its members, being agricultural workers, are provided with PHC services in the rural health centres.

PHC offered through local authorities' services

Some municipalities and communities offer social services (services for the elderly, and prevention and welfare centres), but in addition often provide preventive care and prescriptions. Some of the large municipalities have also begun to establish small clinics. The significance of these services is as yet very small and no data are available that show the aggregate volume of services offered. For example, some data collected for the municipality of Athens indicate that Athens has five consulting centres with 167 doctors of various specialties, 102 additional nursing and administrative staff, and microbiology laboratories.

PHC provided by the private sector

Because Greece has a large number of doctors relative to its population, many are obliged to find supplementary professional employment by practising medicine on a private basis. In addition, dissatisfaction on the part of the public with publicly provided services has led to a large and growing demand for privately provided services. This is confirmed by the high percentage of private health care expenditure in total health care expenditure and by the size of the extensive black economy in the health sector. Today an increasing proportion of doctors, even those working in hospitals or in polyclinics of insurance organizations, maintain a private practice or clinic and offer PHC services.

Doctors in private practice include the following groups:

- Doctors employed by the NHS on a full-time basis, who "illegally" maintain a private practice, offering services the cost of which is covered by the patient's personal income (out-of-pocket payments).
- Doctors employed part-time by the NHS (approximately 300) who also legally maintain a private practice.
- Doctors working in polyclinics of insurance organizations (mainly IKA) who also legally maintain a private practice, attracting clients mainly from the insurance funds that employ them. The cost of these services is fully covered by the patients.
- Doctors contracted to one or more funds, who work in their private practices and are paid by a fee-for-service system based on fixed prices.
- Doctors, who for various reasons cannot or do not want to be contracted to the health funds, providing services on an exclusively private basis. They are paid by the fee-for-service system and prices are determined by market rules. The cost is fully covered by the patients (or partially by private insurance).

Dental care

Dental care, as part of PHC, is provided to a limited extent: by dentists in the NHS at hospitals and health centres; by dentists in polyclinics of the insurance funds, mainly IKA; by dentists contracted to the funds; and by private dentists. Financing in the first case comes from the state budget, in the second from employee and employer contributions, in the third from contributions and the patient's personal income, and in the last case exclusively from the personal income of the users.

The number of inhabitants per dentist on a national level is only 986 while for health centres and IKA the figure is 6668 and 5563 respectively. This reveals the immense private expenditure on dental care in Greece. The dental care offered by health centres to OGA beneficiaries includes fillings and dentures, but not visits to private dentists. There is no co-payment and the dentists are paid according to the NHS doctors' salary. IKA covers fillings, dentures and mobile prosthesis for its beneficiaries. It also covers orthodontics for children under the age of 15. It does not cover

services offered by private dentists. The patients do not participate in the cost. The dentists are part-timers receiving a salary and having the right to operate a private practice. Some funds contracted dentists for the dental care of their beneficiaries. In such cases the doctors are paid fee-for-service according to a determined price list. Other funds offer a free choice of dentist. In these cases the patient pays the dentist and is later reimbursed by the fund. Reimbursement rates are usually lower than market prices, and the patient covers the difference.

The dental care provided by IKA and NHS health centres and OGA is considered by the users to be of low quality. In the end most of the beneficiaries (mainly IKA and OGA) turn to private dentists. It has been estimated that one-third of total private health care expenditure goes to dentists. A recent survey showing the frequency of visits to private dentists/doctors by IKA members indicated that dentists rank first, followed by gynaecologists. The quality of services offered by the insurance funds through private dentists is considered adequate.

Problems in PHC

The major problems of PHC are the following:

- There is a plethora of social insurance funds and providers especially in the urban areas, with different organizational and administrative structures, offering services that are not coordinated and that often overlap. There are significant inequalities with respect to contribution rates among the different funds as well as in the range and quality of services provided.

- There are serious deficiencies in the health service infrastructure and a weak public sector response to the contemporary needs of medical science. These deficiencies result in the public provision of a limited range of services, so that insurance funds increasingly contract out private providers for services not offered by the public system.

- There is a serious lack of properly trained medical and nursing personnel. The specialty of general practice is accorded low professional and social prestige and as a result there is a serious shortage of general practitioners (GPs). There is an estimated need for 5000 GPs, but today there are only 560. These shortages are covered by pathologists, paediatricians, doctors with no specialization and rural doctors, with corresponding limitations in the quality of PHC services.

- There are serious shortages in medical and nursing personnel at the health centres and the IKA polyclinics.

- Low salaries and lack of incentives result in an unwillingness among doctors to staff the health centres, leading to low productivity and arbitrary limitation of working hours.

- The absence of a family doctor system and referral system, especially in the urban centres, precludes continuity of care, and increases system ineffectiveness. According to a recent study conducted in the University of Patras, about one in two Greeks visits the same pathologist over time, while in the case of gynaecologists and paediatricians the proportion is even higher. This suggests that Greek people favour continuity of care and would be highly receptive to a family physician system.

- Limited availability of services during the night hours, especially in the urban centres, forces patients to use out-patient departments of the hospitals on duty or private doctors.

- Low credibility in the system induces many patients to seek a second opinion, very often from private doctors. This creates additional expenses, overloads the system and partially cancels out the character of free health care.

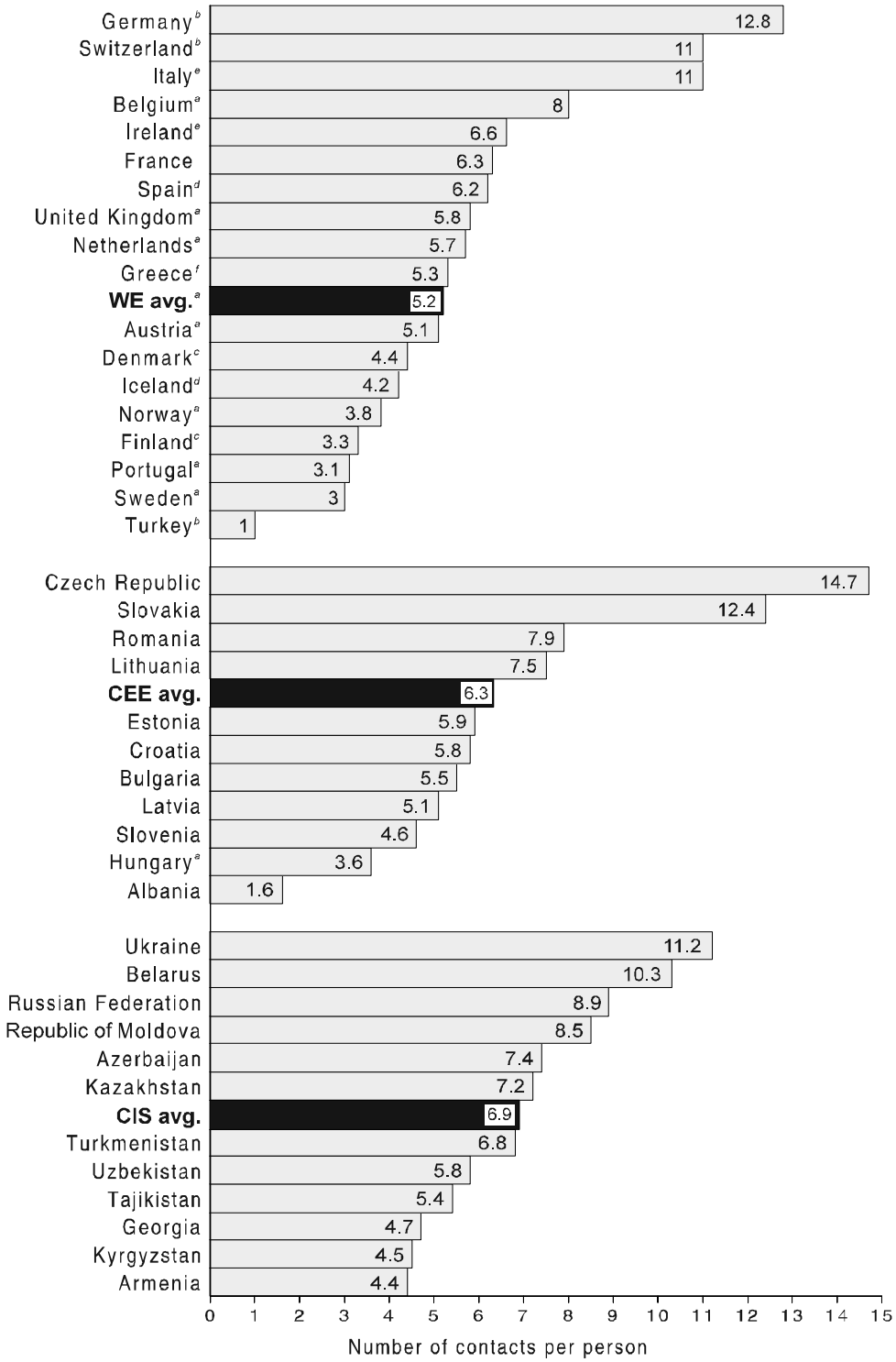
- Lack of quality control programmes, especially in prescribing and referring to private diagnostic centres for high-cost examinations, burdens the insurance funds with unjustifiable

expenses for examinations and medicines that are often useless and even hazardous to patients' health.

The reforms currently being planned (see section on health care reforms) will attempt to deal with some of these issues. However, some necessary changes may be delayed due to the greater importance that the Greek state and society attach to the secondary and tertiary levels of care, where enormous amounts of money have been invested. Even though there is general agreement on the principle of establishing an integrated GP network through the rural NHS services as well as the urban IKA ones, no process designed to achieve this has been set into motion. Plans along these lines have, however, appeared periodically. For example, the Central Health Council produced such a proposal in 1987, and a committee formed by the Ministry of Health in 1994 for the purposes of reform planning made a similar proposal in 1995. In addition, a reform proposal in 1992 attempted to introduce a family physician system, but this was also shelved. While a programme for training general practitioners has been initiated, it is not sufficient for the purposes of producing GPs in sufficient numbers over a short period of time. Only one (Crete) of seven medical schools offers a complete PHC course of study to its students. The only efforts being made by the state and IKA at present focus on improving the current infrastructure of services by employing more staff (in view of exemptions to the current restrictions on hiring public employees in the health and education sectors) and upgrading the facilities.

Fig. 6 shows comparative figures on patient–physician contacts in Greece and other European countries. With 5.3 physician contacts per person per year, Greece is just above the western European average of 5.2 contacts. However private contacts, which cannot be estimated, are not included in this figure.

Fig. 6. Physician contacts per person in WHO's European Region, 1994



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

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

Public health services

The public health system consists of a centralized service within the Ministry of Health and public health departments in each of Greece's 52 districts. There are public health doctors both in the Ministry of Health (22 in number) and in the decentralized public health departments (55 public health doctors, 15 doctors of social medicine, 250 public health supervisors, 200 nurses, and 570 others). This service is responsible for monitoring the health of the population, especially as regards environmental factors, immunization, prevention of communicable diseases, hygiene, collaboration with health services, and overall supervision.

In practice, however, not all of the above tasks are carried out effectively, primarily because of poor staffing in the public health departments due to low remuneration, low status of public health doctors, and their poor training in the field of public health. There are only 15–20 specially trained public health doctors in the country. The status, pay and conditions of service of public health doctors are low in comparison to clinical doctors, even for those employed at the Ministry of Health. The education of public health doctors is inadequate as the medical school programmes are limited, and the only postgraduate programme is offered by the National School of Public Health.

A number of public health activities are run by the Ministry of Health. These include:

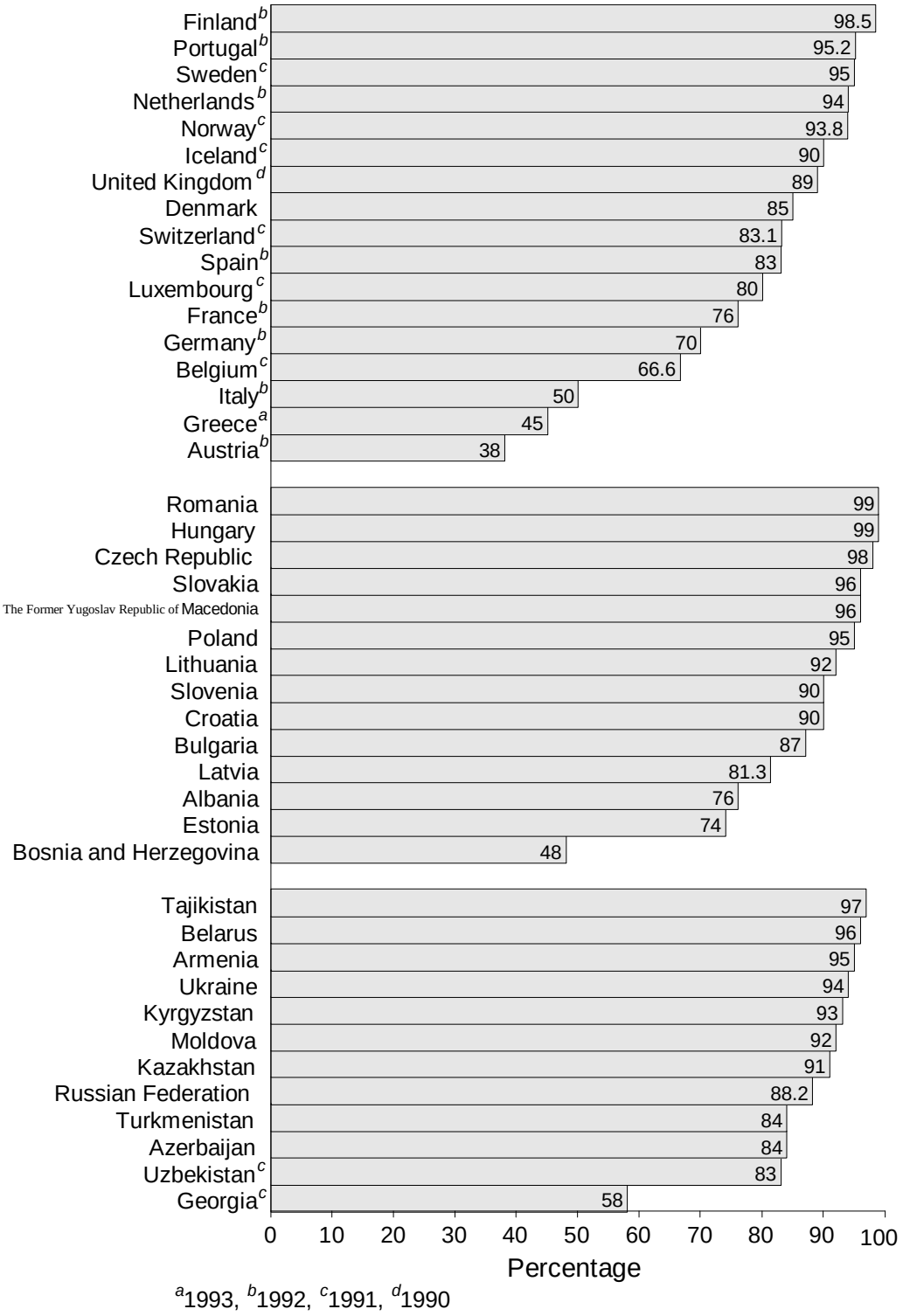
- public campaigns on nutrition, smoking, AIDS, thalassemia, diabetes, etc.;
- the operation of 12 diabetes centres throughout the country;
- the operation of 5 prenatal screening centres for thalassemia;
- the establishment in 1995 of the National Centre Against Drug Abuse.

The planned health care reforms, in combination with the decentralization (or deconcentration) of process which is about to begin (the establishment of administrative mechanisms at the regional level), are to involve the setting up of regional public health structures with the following responsibilities:

- determining and interpreting factors regarding the health status of the population;
- identifying the requirements for health (promotion, planning, efficiency, and service effectiveness);
- developing information services;
- identifying and controlling possible outbreaks of communicable diseases;
- promoting health by health education, public counselling, vaccination, immunization, screening, etc.;
- monitoring the health effects of the environment and initiating actions;
- identifying the needs of special groups (elderly, disabled, mentally ill, etc.);
- providing appropriate education and research facilities.

As part of the five-year plan (1995–1999) undertaken jointly with the EU and financed in part by EU structural funds, the National School of Public Health is to be renovated and upgraded. In addition, one central and five peripheral public health laboratories will be established.

Fig. 7. Levels of immunization for measles in WHO's European Region, 1994



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

Fig. 7 illustrates levels of immunization against measles in Greece as compared to other western European countries. It shows that Greece, at 45%, is well below the western European average of 79%.

Secondary and tertiary care

Provider settings for specialized ambulatory care

The Greek health care system has a strong hospital orientation. The weaknesses of PHC services discussed in the previous section are associated with the significant use of hospital out-patient departments as a first point of contact, as well as secondary care in the form of specialized ambulatory medical services. Because of the absence of a referral system, the freedom of the patient to refer himself/herself to virtually any type of care, and the multiplicity of provider settings offering both primary and secondary care, the dividing line between primary and secondary care in the case of ambulatory services becomes very blurred.

Secondary level ambulatory services are thus offered by out-patient hospital departments (both public and private) and by private physician practices, which are almost exclusively run by specialists in areas other than general practice. Both of these provider settings, as noted in the previous section, also provide PHC. In addition, secondary level ambulatory care is offered by a growing number of private diagnostic centres.

All public hospitals and many private hospitals have out-patient hospital departments, which operate on a walk-in basis or by appointment. In the case of public hospitals, both out-patient and emergency services are offered on particular days determined on a rotating basis, at least in densely populated urban areas where there is more than one public hospital in close proximity. Any person has access to these services regardless of type of insurance coverage (or even lack of coverage) and regardless of nationality. The same applies to emergency care. This arrangement has emerged as a result of the philosophy behind the 1983 reform aiming at the establishment of an NHS, which was to provide universal population coverage regardless of fund membership.

In recent years significant amounts of capital have been invested in medical technology in private diagnostic centres. This has been made possible by the development of new technologies in health and the relatively slow response of the public sector in adopting them. Most of these investments were made in the area of ambulatory care not only because of their high profitability but also because the NHS law of 1983 had forbidden the establishment of private hospitals (until 1992 when the 1983 provision was abolished). Therefore the number of private diagnostic centres, especially after 1985, increased by 25% a year. Seventy per cent of these diagnostic centres are concentrated in the Athens area; Thessaloniki follows with 12.5%.

Diagnostic centres are contracted by insurance funds which pay on a fee-for-service basis. The large number of diagnostic centres and the intense competition that has been created often leads to over-consumption. The lack of controlling mechanisms for patient referral results in insurance funds being called upon to pay large amounts of money for high-cost provisions that most of the time cannot be justified. It is worth noting that in 1990–1991, although the prices for computed tomography (CT) scanning remained stable, the two big funds IKA and OGA had to pay double the amount paid in the previous year in the private sector.

Today the private diagnostic centres are equipped with the most modern medical technology and can offer the most unusual examinations. Due to the quick introduction of biomedical technology in the health system, especially through private diagnostic centres, there are today 12.5 CT scanners and 21.5 ultrasound scanners per one million inhabitants, while the corresponding ratios over the average of the EU are 5 and 13.5 respectively.

In-patient care

Table 4 shows the distribution of hospitals by main category, together with numbers of beds and sources of financing :

Table 4. Secondary and tertiary care in Greece

NHS hospitals	
A. General/specialized	
Regional hospitals (tertiary care)	23
District hospitals (secondary care)	96
Number of beds	27 343
B. Psychiatric hospitals	9
Number of beds	5951
Sources of financing (A and B):	
State budget	64%
Sickness funds	33%
Other sources:	3%
Public hospitals outside of the NHS	
Military hospitals:	13
IKA hospitals	5
Teaching hospitals (clinics)	3
Others (incl. psychiatric)	6
Number of beds	4 069
Sources of financing:	
Ministry of Defence	
Sickness Funds	
Ministry of Education	
Other sources	
Private sector hospitals	
General hospitals and clinics	209
Number of beds	11 060
Sources of financing:	
Sickness Funds	
Out-of-pocket	
Psychiatric clinics	40
Number of beds	4 219
Sources of financing:	
Sickness Funds	
Out-of-pocket	

The three main categories of hospitals are: (1) NHS public hospitals, (2) public hospitals operated by the Ministry of Defence, IKA, the Ministry of Education and the Ministry of Justice (i.e. military hospitals, IKA hospitals, teaching hospitals and hospitals for prisoners respectively), and (3) private hospitals, the overwhelming majority of which are private for-profit institutions. In terms of hospital numbers, the NHS owns and operates almost 32% of the total number of hospitals, private hospitals constitute about 62% of the total, while the remaining roughly 6% are non-NHS public hospitals. However these percentages are misleading with respect to hospital bed numbers, as the privately owned hospitals tend for the most part to be quite small. In terms of bed numbers, therefore, total NHS hospitals account for almost two-thirds (63.5%) of beds, private sector beds under one-third (28.8%) and other public hospitals 7.7%.

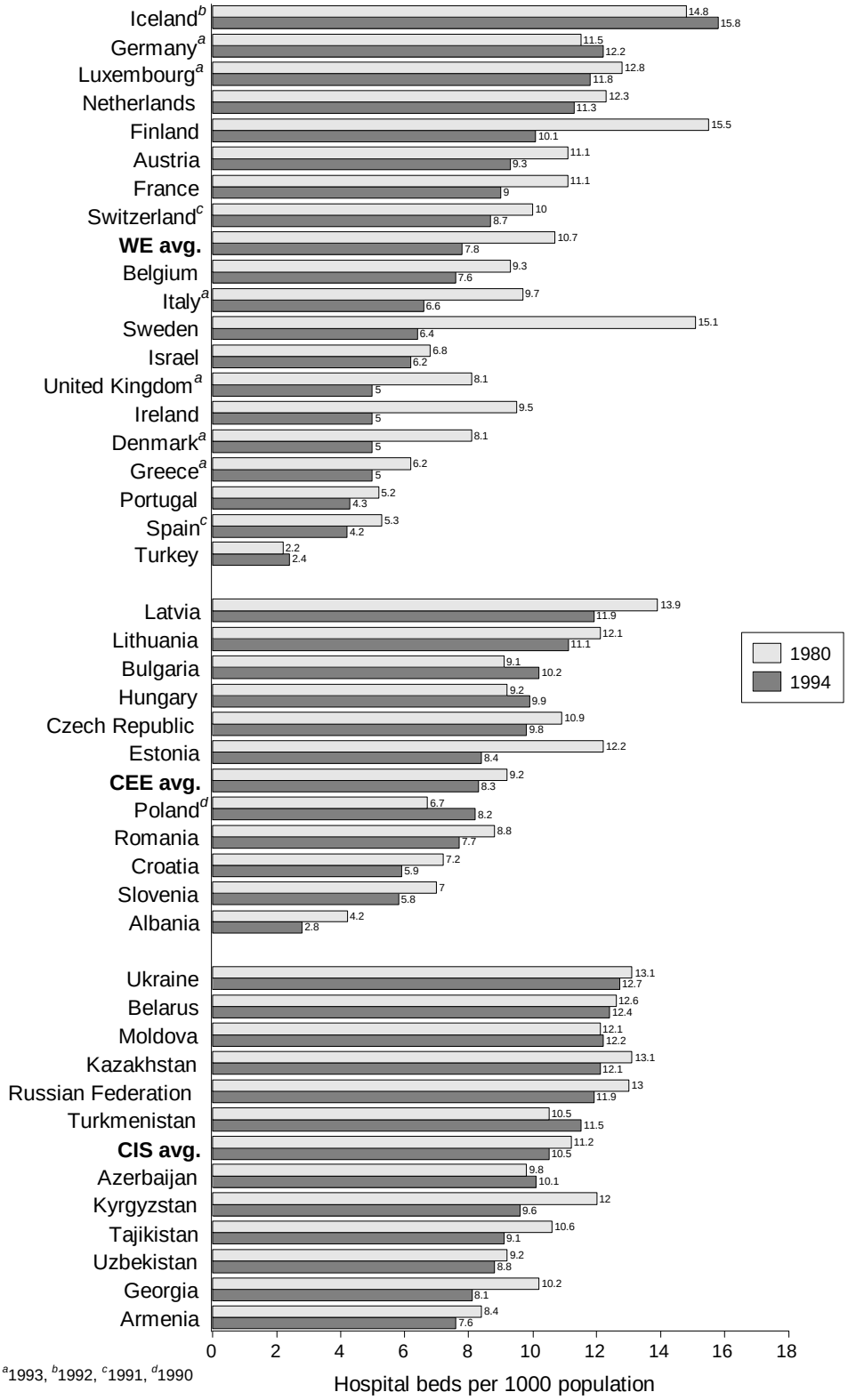
The NHS hospitals include 96 district hospitals which provide secondary care services to their catchment areas. These hospitals typically have 100–200 beds, and serve populations ranging from 50 000 to 500 000 persons. They provide emergency care and general hospital services covering a variety of specialties. The 23 regional hospitals provide tertiary, or highly specialized care, in addition to secondary care. NHS hospitals are financed by the state budget and sickness funds.

The non-NHS hospitals include 13 military hospitals (2088 beds), access to which is confined to military personnel and their families, and which are financed by the Ministry of Defence. The 5 IKA hospitals (881 beds), for persons who are members of the IKA social insurance fund, are financed by IKA. The 3 small teaching hospitals (309 beds) included in this category are the only hospitals that are exclusively teaching hospitals, and are financed by the Ministry of Education; there are several other teaching hospitals which are not exclusively so, and these are owned and operated by the NHS.

Private sector hospitals in some instances provide high quality care with luxury standards (concerning hotel facilities) and are concentrated mainly in the urban areas of Athens and Thessaloniki. For the most part they are small clinics with under 100 beds and are poorly staffed. These hospitals are financed partly by sickness funds which have contracts with the hospitals in question for services offered to the funds' patients, and partly by private out-of-pocket patient payments and voluntary insurance.

The NHS hospitals are financed primarily by the state budget and to a lesser extent by sickness funds. These can be characterized as a combination of the integrated (directly employed) and contract (indirect) models: they are integrated to the extent that the NHS hospitals are owned and financed by the state, but NHS hospital services are also contracted by the social insurance funds for their patients. In the case of non-NHS public hospitals, all three groups follow the integrated model, as in all three the employer and third-party payer are one and the same. The case of IKA differs in that it is an insurance fund (rather than the state) that is the employer and third-party payer.

Fig. 8. Hospital beds per 1000 population in the WHO's European Region, 1980 and 1994



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

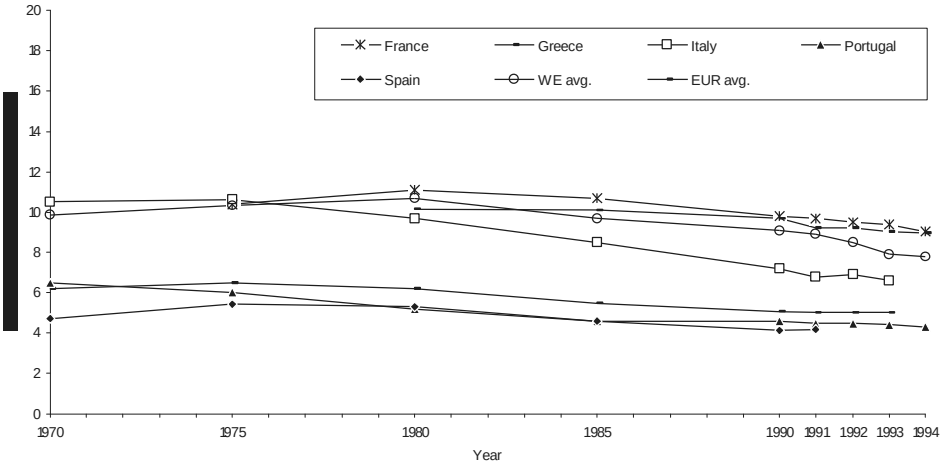
Source: OECD health data, 1996 (for western Europe), WHO Regional Office for Europe, health for all database (for CEE, CIS countries and Israel, Norway, Switzerland).

Fig. 8 shows the number of hospital beds in Greece in comparison with other European countries. It can be seen that with 5 beds per 1000 population, Greece is substantially lower than the western European average of about 8, and only three countries, Portugal, Spain and Turkey have lower bed numbers per population.

During the 1980s there was a decrease in total hospital bed numbers. However this was not due to substitution policies, but rather the result of the establishment of the NHS following the 1983 reform, the restrictions placed on the establishment of new private hospitals, and the lower per diem reimbursement by the social insurance funds for private hospitals compared to public hospitals (as set by the Ministry of Health). This was a policy pursued by the government as part of its strategy to expand the public sector at the expense of the private sector, and resulted in the closure of a number of small private clinics or their absorption by the public sector. Hence, in the period 1980–1990, while there was a decline in the number of private hospital beds, there was actually a smaller increase in public bed numbers, resulting in a net drop.

This trend in declining bed numbers can be seen in Fig. 9, showing the time trend for Greece, as well as selected western European countries.

Fig. 9. Hospital beds per 1000 population in Greece and selected European countries, 1970–1994



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

Table 5 shows in-patient utilization and performance data for Greece in the period 1970–1992. Admissions show a continuously increasing trend from 1970 to 1992, which is a reflection of improving patient access to hospital services over this period. The average length of stay, by contrast, shows a continuously declining trend. This reflects more intensive treatments, increasing patient flows toward large regional hospitals after a brief admission into a district hospital (this factor may also be partially responsible for increases in admissions), the psychiatric reform and to a lesser extent, alternative therapies such as one-day care. The occupancy rate shows some fluctuations but is for the most part stable over this period.

Table 5. In-patient facilities utilization and performance in Greece, 1970–1992

In-Patient	1970	1975	1980	1985	1990	1991	1992
Admissions per 100 population	10.5	10.8	11.8	11.9	12.8	13.1	13.4
Average length of stay in days	15.0	14.5	13.3	11.6	9.9	9.9	9.8
Occupancy rate (%)	76.0	73.0	69.0	70.0	68.0	71.0	70.0

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

Table 6 shows in-patient utilization and performance data for Greece and other European countries. Compared to western European countries, Greece stands somewhere in the middle-to-lower range with respect to admissions per 100 population. In the case of average length of stay Greece is at the lower end, with only four of the countries shown (Denmark, Ireland, Sweden and Turkey) having a lower average length of stay. Occupancy rates in Greece are also

Table 6. In-patient facilities utilization and performance in WHO's 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	80.0
Belgium	7.6	19.7 [a]	12.0 [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	9.0	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]	70.0 [c]
Iceland	15.8 [b]	28.2 [c]	17.8 [c]	84.0 [c]
Ireland	5.0 [a]	15.5 [a]	7.7 [b]	–
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]	10.0 [a]	11.5 [a]	77.0 [a]
Sweden	6.4	19.5 [a]	9.4 [a]	83.0 [a]
Switzerland	8.7	14.6 [b]	–	82.6 [c]
Turkey	2.4	5.8 [a]	6.7 [a]	57.8
United Kingdom	5.0 [a]	21.6	10.2 [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	83.0
Hungary	9.9	22.76	11.3	—
Latvia	11.9	20.14	16.4	78.7
Lithuania	11.1	20.6	15.9	79.1
Poland	8.2 [d]	–	–	–
Romania	7.7	21.1	10.3	77.4
Slovakia	7.9 [a]	17.8	12.74 [a]	76.6
Slovenia	5.8	15.8	10.6	79.4
The Former Yugoslav Republic of Macedonia	5.3 [c]	–	–	–
Armenia	7.6	7.6	16.32	–
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
Kazakstan	12.1	18.17	16.8	68.9
Kyrgyzstan	9.6	17.7	15.4	77.9
Republic of Moldova	12.2	22	17.3	–
Russian Federation	11.9	21.6	16.8	–
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	–	16.91	–
Uzbekistan	8.8	19.3	14.3	–

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

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

at the lower end, with only three other countries (Italy, Portugal and Turkey) showing lower occupancy rates. Low bed-occupancy rates combined with low bed numbers per population suggest that the Greek people make relatively less use of in-patient care than most other countries shown in the table.

The regional distribution of secondary level hospital beds tends to be uneven, with the urban areas of Athens and Thessaloniki being better served, as well as Crete, Epirus and western Greece which recently (in 1990) acquired large university teaching hospitals. The construction of new public hospitals in areas distant from the major urban areas in more recent years represents an effort to address this problem.

In the case of tertiary care, 7 of Greece's 13 regions are covered by at least one large NHS highly specialized hospital, while the remaining regions are covered by the hospital(s) of the neighbouring region or Athens and Thessaloniki.

There are broad discrepancies among regions regarding cross-regional patient flows. Crete, Epirus and western Greece, with newly acquired specialized services, show some autonomy with regard to serving the needs of their residents, and attract patients from surrounding districts. By contrast, districts which are close to the major urban areas of Athens and Thessaloniki show the largest patient flows toward hospitals of these urban centres. In part this is due to the prevailing inability of some district general hospitals to readily fulfil specialized needs. In addition, the absence of a referral system and the freedom of patients to refer themselves to virtually any NHS hospital draws patients to the major urban centres, which tend to have a concentration of higher-standard hospitals.

This problem of strong interregional flows could be partly alleviated by the development of one-day care units throughout the district hospitals. This type of care has recently made its appearance in Greece, but is as yet fairly limited: in 1992 there were 144 such beds in 4 regions (Central Macedonia, Thessaly, Attica, and Crete). Moreover, such care is offered only within large, highly specialized regional hospitals. The significance of one-day care units is being increasingly recognized and more such units are developing in the both the public and private sectors.

Levels of patient satisfaction with in-patient care tend to be substantially higher than in the case of PHC services. In one study based on questionnaire responses in 17 public hospitals, patient satisfaction is fairly high with respect to medical services provided in public hospitals, but medium to low with respect to organizational and administrative aspects and hotel services. Specifically, 83% of patients were very satisfied or satisfied with doctors' services and the treatment they received, while only 39–74% felt the same about organizational and hotel aspects. In another study focusing on two district general hospitals, 92.3% of patients felt that medical care was very good or good.

NHS hospitals are administered by a seven-member board of directors, composed of four members appointed by the state (the president and vice-president by the Minister of Health and two members by both the Minister of Health and district mayors), and three elected members (one doctor and one nurse or administrator from the hospital staff and one representative from the municipality), with two years' tenure. Nursing and administrative personnel have their own respective directors, and medical services are run by a five-member scientific committee.

Staff full-life tenure and low compensation policies contribute to problems of accountability. The lack of budgetary controls and remuneration methods (will be discussed in the section on financial resource allocation) provides no incentives for the development of cost-effective procedures. Quality control and quality assurance are quite unknown, especially in the public hospitals. In addition, some hospital beds are old and hospital buildings outdated and in poor condition.

Some of these problems will be rectified, at least in part, in the near future. According to new legislation and the five-year plan for 1995–1999, which has been undertaken with the assistance of the EU (see section on External sources of funding) four new regional hospitals and twelve new district level hospitals will be added to the NHS in order to improve building facilities. This should be accompanied by the closure of old beds, otherwise a part of the additional nearly 5000 beds will add to the already existing excess bed capacity. In addition, there are plans to computerize hospital services, educate staff, upgrade the emergency ambulatory services, and establish a national institution for clinical audit.

Additional issues on the agenda include improvement of the non-functioning referral system, computerization of hospital procedures, development of staff managerial roles, and the establishment of quality assurance systems. The plan to fill the position of hospital general manager (which had been provided for by the 1983 legislation but never actually filled) who will automatically become chairman of the board of directors for a five-year period, will help overcome the old political nature of managerial positions. At the same time, the new position of a medical director will allow for the more effective management of all medical services. Finally, a new hospital-oriented financial accounting system will assist in improving the situation financially.

Social care

State-run social services include Mother and Child Centres (PIKPA) and Centres for Disabled Persons. There are 112 PIKPA units all over the country (half of them in Athens) offering PHC for pregnant women and newborn children. There are 17 centres for disabled persons, especially for children and adults up to 25 years of age, with 1305 beds in the entire country.

Many municipalities and communities offer social services through Elderly Centres (KAPIs) and Prevention and Welfare Centres. Centres for the elderly are meeting places for the elderly and very often also provide preventive care and prescriptions. The centres were established during the last decade and are today considered a successful institution for the protection of the elderly in Greece. There are 250 such centres throughout the country. The prevention and welfare centres provide welfare and rehabilitation services to people with special needs.

Both the centres for the elderly and the prevention and welfare centres employ mainly nursing personnel; however, in many cases there is a doctor who prescribes for those with chronic diseases, so that people can avoid having to visit polyclinics or hospital out-patient departments.

In addition to these two types of centres, during the last three years some of the larger municipalities have opened small clinics, offering very few services. Unfortunately there are no data on these services for the entire country, although some have been collected from the Municipality of Athens which has the most developed infrastructure to date. According to this information, the Municipality of Athens today has 5 consulting centres with 67 specialists and with microbiology laboratories. There is also a mobile diagnostic unit with 7 doctors. In addition to the doctors, there are 102 nursing and administrative personnel. Of the users of these services, 40% are IKA members, 24% uninsured persons, 13% civil servants, and the remaining are from other funds. In 1991 there were 93 816 visits to the clinics of the Athens Municipality. The Municipality of Aghia Paraskevi has a clinic with 6 doctors, and the Municipality of Kessariani a preventive centre for children. It is quite possible that other large municipalities in other parts of the country have small clinics with not more than 100 doctors.

Long-term care for the elderly is provided almost exclusively by the private sector, or in the form of home care which remains the custom in Greece, as in other Mediterranean countries.

In the area of psychiatric care, there are 11 public psychiatric hospitals, of which 9 are NHS hospitals with 6351 beds, and 2 non-NHS hospitals with 399 beds. Psychological rehabilitation units are attached to 9 of these hospitals. In addition, 40 public hospitals (district and regional) have psychiatric departments, while an additional 10 hospitals provide the services of 1–2 psychiatrists, although with no psychiatric department. There are also 30 hostels and 15 vocational training centres for psychiatric patients. Recently, with the assistance of EU structural funds, 31 new psychiatric centres and hostels were established, which include vocational training and other services, and an additional 6 are currently under construction. Each is attached to the nearest respective hospital with psychiatric facilities. Several hundred apartments for psychiatric patients have been established in the proximity of the psychiatric centres.

Human resources and training

Overview

In Greece the total labour force is 4 053 000 persons, while the unemployment rate is 9% (1993). There has been a significant development of health manpower from 1.5% of the total employment at the beginning of the 1970s to 3.3% today (135 000 persons).

The following table shows the distribution of health care personnel among various professions. The total number of doctors (including the first three groups in the table) amount to 28.5% of total employment in the health sector, while nurses constitute 30%, dentists nearly 8% and pharmacists nearly 6%.

Table 7. Distribution of Health Care Personnel by Profession in Greece, 1992

Doctors with a specialty	18.3%
Doctors in training for a specialty	5.1%
Medical graduates (no specialty)	5.1%
Biologists, chemists, etc.	0.9%
Dentists	7.7%
Pharmacists	5.8%
Nurses	30.0%
Paramedicals	5.7%
Administrative staff	5.8%
Others	15.5%
TOTAL	100.0%

Source: Ministry of Health, 1993.

Table 8 shows the development of numbers of health care personnel since 1970. Total employment in the health sector more than doubled in the period 1970–1992. On the basis of personnel per population, physician numbers more than doubled, dentists doubled, nurses (since 1975) nearly tripled, and midwives (since 1980) showed only a small increase. Graduating physicians, since 1980, tended to be stable though with some fluctuations, while the number of nurses graduating in 1991 was five times greater than in 1980.

Table 8. Health care personnel in Greece, 1970–1992

Per 1000 population	1970	1975	1980	1985	1990	1991	1992
Active physicians	1.62	2.04	2.43	2.93	3.40	3.65	3.76
Active dentists	0.50	0.66	0.79	0.88	1.00	1.01	1.01
Certified nurses	–	0.86	1.07	1.43	2.31	2.43	2.57
Midwives	–	–	0.18	0.19	0.22	0.21	0.21
Active pharmacists	–	–	0.43	0.60	0.70	0.73	0.76
Physicians graduating	–	–	0.12	0.09	0.11	0.13	0.13
Nurses graduating	–	–	0.04	0.02	0.18	0.20	0.22

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

Table 9 illustrates the distribution of certain professions (doctors, dentists, and nurses) among the various provider settings, respectively.

Table 9. Distribution of health professions by provider settings in Greece, 1992

	Doctors with specialty	Doctors under specialty	Medical graduates (no specialty)	Dentists	Nurses
	%	%	%	%	%
Public hospitals	39.0	97.1	0	3.0	79.0
Private hospitals	9.0	0	0	0	11.0
Rural health centres	5.0	0.1	0	4.0	3.0
Rural clinics	0	0	38.0**	0	1.0
Urban IKA polyclinics	27.0	2.8	0	8.0	6.0
Private out-patient practices	18.0	0	0	83.0	n/a
Others*	2.0	n/a	62.0	2.0	n/a
Total	100	100	100	100	100

* Includes military services, unemployed, abroad.

** This figure refers to both rural clinics and rural health centres.

Source: Ministry of Health, 1993.

Table 9 reveals certain key characteristics of the Greek health care system that can be related to the earlier discussions on health care provision. It can be seen that specialized doctors tend to be concentrated in public hospitals and urban IKA polyclinics. The 18% of doctors appearing under private out-patient practices refers to doctors who are exclusively self-employed in their own practices – this does not include doctors who are employed directly in the public system or by social insurance funds (specifically IKA) and who simultaneously operate private practices. It is interesting to note that whereas the public-to-private distribution of hospital beds is roughly 71 to 29, the corresponding distribution of specialized doctors between the public and private sectors is roughly 81 to 19, revealing the substantial understaffing of private sector hospitals. Moreover, it can be seen that rural health centres and clinics, presumed to cover the PHC needs of about 25% of the total Greek population (the rural population), are staffed by only 5% of the total of specialized doctors. These primary care settings are staffed mainly by physicians with no training beyond basic medical training. This underscores the serious staffing shortages prevailing in rural areas.

In the case of dentists, the table shows that the majority work in private practices, a few are contracted by insurance funds to serve the needs of fund members, and even fewer work in rural health centres.

Nurses are concentrated overwhelmingly in public hospitals, thus revealing the serious shortages of nursing staff in private hospitals and in virtually all PHC settings (i.e. rural health centres and clinics, IKA polyclinics, and private practices).

The main problems in the area of human resources and training in Greece are the following:

- oversupply of doctors, dentists and pharmacists;
- poor distribution of doctors among the various medical specialties (e.g. too many surgeons and gynaecologists, and very few general practitioners, geriatricians and public health doctors);
- shortages and inadequate education of nurses;
- shortages and inadequate education of other specialists (managers, health economists, biomedical engineers, statisticians, medical computer analysts etc.);
- poor distribution of health manpower (especially doctors and nurses) among the regions;
- imbalances between demand and supply.

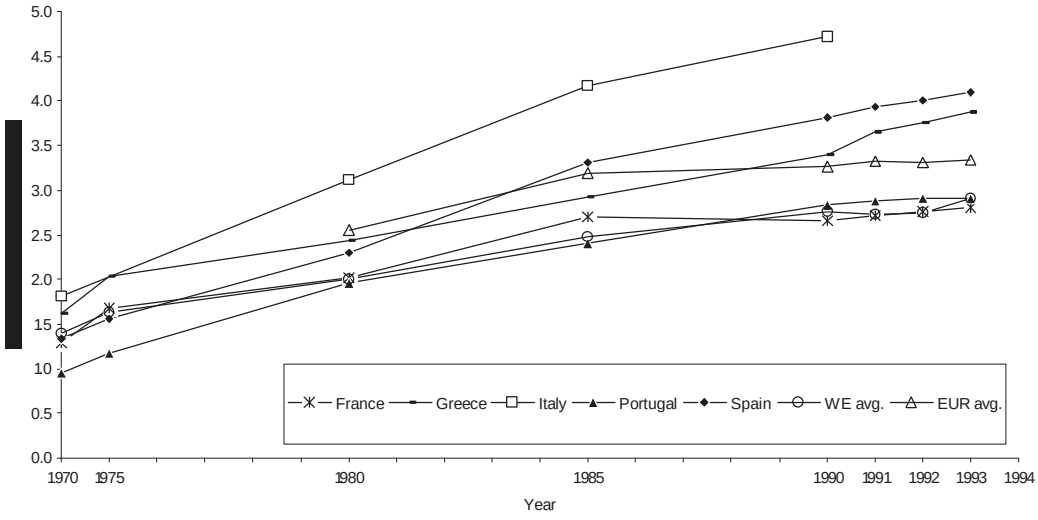
In Greece, there is some limited planning by KESY (the Central Health Council) and the Ministry of Education related to manpower. Priorities do not follow any measures of demand or need. There are limited policies based on projections and no efforts are made to match supply with demand through the educational system. Thus, the only figure appearing in recent health manpower requirements is the vacancy of permanent posts in the NHS public hospitals (35 367 posts) and the health centres (3671 posts). Nearly 12% of these posts must be staffed by doctors and 48% by nurses.

If the above posts were to be staffed, they would represent a 12% increase in the number of doctors, and a 46% increase in the number of nurses. However, financial constraints and the bloated public sector in terms of public employee numbers, have led to the imposition of restrictions in the hiring of public employees. Exceptions have been made only for the health and education sectors, thus permitting the opening of 5000 new positions in health since March 1994. But even in the absence of these restrictions it would not be possible to fill the nursing positions because trained nurses are not available in such numbers. In the case of doctors, whose numbers are excessive but whose distribution among specialties and geographical regions is inappropriate, it is unlikely that these positions could be filled in accordance with needs across specialties and across regions.

Physicians

Fig. 10 shows trends in the number of physicians per 1000 population for the period 1970–1993 in Greece and selected western European countries. As in other countries, Greece shows a continuous upward trend. The average annual rate of increase in 1980–1992 has been nearly 4%. The number of doctors in Greece per population has consistently been above the western European average.

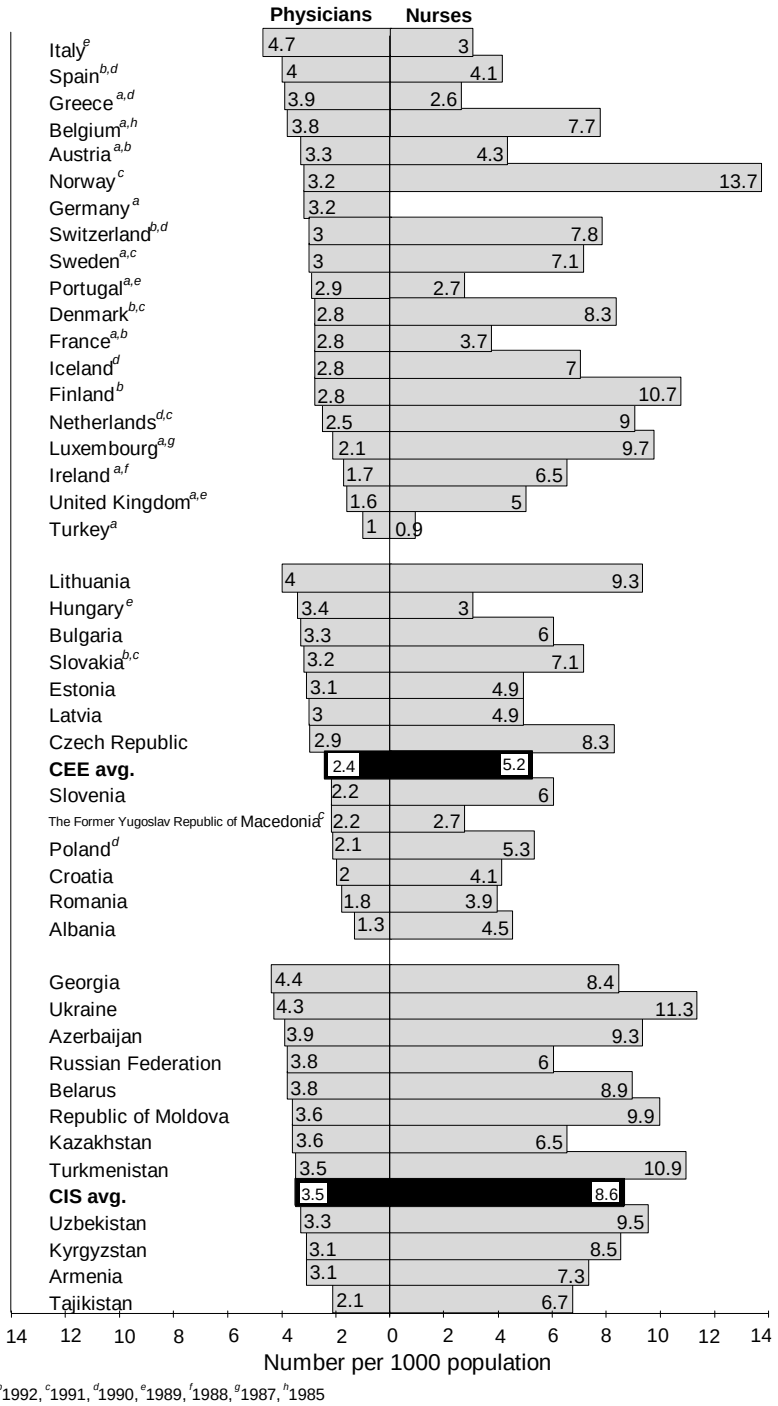
Fig. 10. Physicians per 1000 population in Greece and selected European countries, 1970–1994



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

In Fig. 11 (showing numbers of both doctors and nurses), the differences between Greece and other countries can be seen in greater detail. With 3.9 doctors per 1000 population, Greece is substantially higher than the western European average of 3.2 doctors. In fact, only two of the western European countries (Italy and Spain) shown in the figure have higher doctor-to-population ratios.

Fig. 11. Number of physicians and nurses per 1000 population in WHO's European Region, 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.

There are, however, very wide regional variations in the doctor-to-population ratios, ranging from a low of only 1.6 per 1000 population in the region of central Greece to a high of 5.7 in the region of Attica, which comprises Athens. Attica, concentrating about 34% of Greece's total population has 52% of all doctors.

Such an uneven distribution has prevailed for many years, leading in 1968 to a legislative act requiring young doctors to practise for at least one year in rural health centres and clinics upon completion of their basic medical training. Hence, as was noted earlier, rural health centres and clinics are staffed mainly by unspecialized doctors. As this measure focuses only on unspecialized doctors, it has done little to alleviate the problem with respect to specialists. More recently this law was modified, and at present only doctors who intend to specialize in general practice are required to work in rural areas. This has been part of recent efforts which are being made to develop general practice as a specialty, and eventually to staff rural health centres and clinics with GPs.

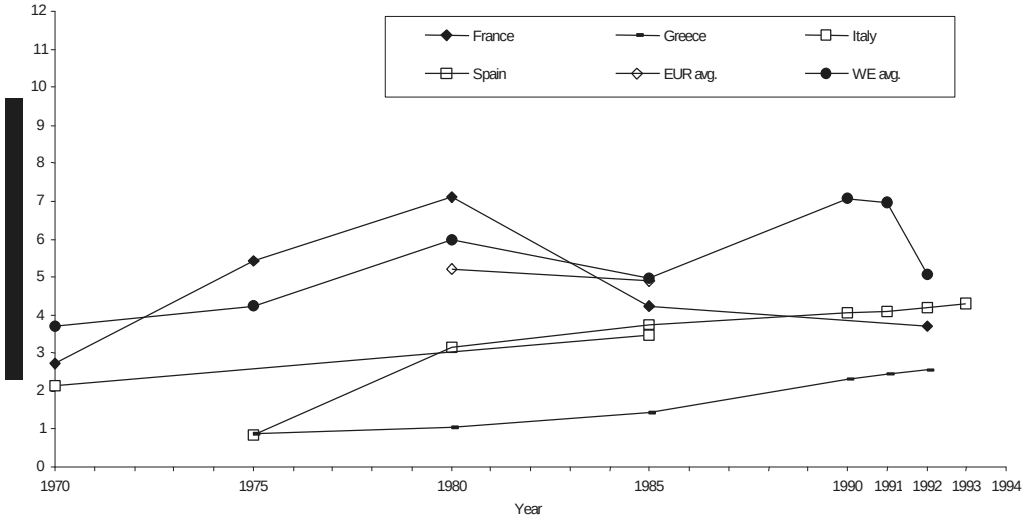
In fact, the geographical maldistribution of doctors is greatly compounded when looked at from the point of view of particular specialties: 80% of anaesthesiologists, 73% of radiologists, 70% of microbiologists, 70% of cardiologists, 70% of orthopaedic specialists, 75% of gynaecologists, 88% of psychiatrists and 90% of neuro- and plastic surgeons offer their services in the two largest cities, Athens and Thessaloniki. Some specialties have only a rather symbolic presence in other regions.

In addition to the poor regional distribution of doctors, there is also poor distribution among specialties. Only about 2.2% of all doctors are general practitioners, and if pathologists are added to GPs, this proportion rises to just over 14%, which is quite low compared to other countries of western Europe. In fact, general practice as a specialty is almost unknown in Greece, and as a rule is not highly regarded, probably because of the relative underdevelopment of PHC – hence the very low numbers of doctors who specialize in this area.

Nurses

Nursing personnel constitute 30% of the total health care personnel. Fig. 12 shows the development in the number of nurses per 1000 population over the past two decades in Greece and selected western European countries. Greece shows an upward trend which has accelerated since the mid-1980s. In addition, it can be seen that the number of nurses in Greece per 1000 population is substantially lower than in any of the countries shown.

Fig. 12. Nurses per 1000 population in Greece and selected European countries, 1970–1994



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

A more precise comparison between Greece and other western European countries can be made based on the data shown in Fig. 11. Greece, with about 2.6 nurses per 1000 population is substantially lower than the western European average of about 4.8 nurses. However, there is a category of nurses in Greece not found in most other European countries, in which training requirements are only slightly below those of qualified nurses. If this group is included, the Greek figure becomes 3.3 per 1000 population.

As in the case of doctors, there is a significant maldistribution of nurses by provider settings, by nursing categories, and by regions. It was noted earlier that 79% of all nurses work in public hospitals. With an additional 11% employed in private hospitals, there is a mere 10% left to cover PHC needs. PHC is most severely understaffed by nurses in Greece.

In addition, there are also shortages of qualified nursing staff. There has been some improvement in this area: in 1990, 63% of all nurses had a middle or higher degree certificate compared to 55% in 1980. However this is still inadequate, as there are still too many nurses with insufficient training. In 1990 the ratio of nurses with a higher degree per hospital bed was only 0.3 nurse per bed, when in other EU countries this ratio ranged from 0.65 to 1.2 per bed.

Finally, the regional distribution of nurses is highly uneven. Interestingly, an examination of the regional distribution of only qualified nurses working in NHS hospitals does not show as wide regional variations as in the case of the distribution of all nurses in all provider settings throughout the country. In fact, the fairly remote region of Epirus has the same ratio of qualified nurses per population as Attica (comprising Athens), while central Macedonia and Crete show nearly as high ratios as Attica. This suggests that NHS hospitals tend to attract qualified nurses among their staff regardless of their location.

Training and education of health care personnel

Medical students pursue their studies in seven university faculties of medicine (Athens, Salonica, Patras, Ioannina, Heraklion, Larissa and Alexandroupolis, each of which is the capital of its respective region). All programmes follow almost the same curriculum, and are considered to be of high quality. Basic medical studies last six years. For a doctor to be recognized as a specialist a further 3–6 years of postgraduate study is required. Medical graduates may practise without additional qualifications, however, the overwhelming majority of these go on to acquire a specialization. The medical curriculum is highly hospital-oriented, and contains little training related to PHC or family medicine.

The government has made some efforts to limit the numbers of medical students, however, not as a result of the Ministry of Health planning according to needs. Instead, the Ministry of Education has recently imposed a policy whereby the number of new students entering medical schools has been stabilized at a certain level, thereby no longer permitting increases in new entrants to medical schools. As a result, doctors are still being overproduced though to a lesser extent than earlier. A substantial number of Greek medical students pursue their studies abroad, thus exacerbating the problem of oversupply.

Upon completion of basic medical studies, graduates are required to enter their names on waiting lists at the Ministry of Health, according to their desired area of specialization. The allocation of students among specialties is determined centrally by hospital demand. The waiting times vary substantially according to specialty, and are generally lowest in the case of general practice which generates the lowest amount of interest. About 3000 doctors (plus an additional 1000 in the army) are waiting for a post or doing their compulsory service at a rural station.

Efforts to promote general practice as a specialty resulted in the establishment of a postgraduate programme in general practice in 1984, lasting three years. The training takes place mostly in a hospital setting, with only three months training in a PHC setting. In addition, a doctor who has practised for at least five years can become a GP upon completion of a six-month course. However most Greek doctors continue to prefer careers as hospital specialists rather than as GPs. Since 1995, GP specialist training lasts four years, with one year training in a health centre.

Continuing education is the responsibility of the hospitals and of scientific medical societies. Legislation in 1994 established a postgraduate education department within the Ministry of Health in collaboration with the Central Health Council (KESY) which acquired this responsibility in the last decade, in order to organize continuing education programmes.

Public health doctors must pursue a year's postgraduate training course at the National School of Public Health (Athens). Almost all doctors who graduate from this school return to their initial specialty, however, because they do not have a serious incentive to work in this area. As a result, half the posts of district health directors are not staffed. Since 1985 the National School of Public Health has run two other postgraduate programmes for health services management and sanitary engineers. Twenty students (mainly hospital employees) are trained annually on every course. Additionally some 50 persons (up to now) have taken such courses abroad. In 1994 the Ministry of Health announced 20 scholarships for studies abroad in the fields of management, health promotion, planning, etc. Also, 1996 is the starting year of the Public Administration School that offers a health planning management course. In the last 3–4 years, a number of senior hospital officers have pursued one-month on-the-job training abroad (in connection with HOPE, British Council, etc.).

There are 10 schools of nursing, 3 of which provide 4 years of training for qualified nurses, public health nurses, and visiting nurses; while 7 provide 3 years of training. There are also 54 schools (1 in each district) for auxiliary nurses with 2 years' training, and 1 nursing school which is part of the University of Athens. There are also 3 midwifery schools which provide 4 years of training and 21 secondary schools providing technical, professional and hospital education for 2 years.

Future projections

According to projections of numbers of health care personnel, it has been estimated that the number of doctors will increase by 15% in the period 1995–2000, and the number of nurses by 24%. While representing sizeable increases, these rates of change are actually lower than those corresponding to the period 1990–1995. In the case of doctors, this may be the result of policies recently initiated by the Ministry of Education (discussed above) to stabilize the number of positions in medical schools. The higher rate of increase of nurses relative to doctors suggests that the present imbalance in the doctor-to-nurse ratio will begin to be redressed. According to these projections, it should be possible to staff all existing public sector posts for doctors (financial considerations permitting) by the year 2000, while an additional 13% of doctors will be looking for a position.

In view of the magnitude of imbalances in health care personnel, the solution can only be pursued over the longer term. Quite clearly, no solution is possible in the absence of planning in the educational system which takes into account the distribution of medical specialties and professions. Although some steps in the right direction have begun to be taken, any attempted solution will require significant further investments in education to provide training in those areas that currently are facing serious shortages (training of nursing personnel, retraining of existing nurses, GPs, specialists in family medicine, health economists, managers, etc.).

Pharmaceuticals and health care technology assessment

Consumption of pharmaceuticals in Greece is very high. In 1989 the number of drug items consumed per capita was the second highest in the EU, surpassed only by France. This is in part due to highly excessive prescribing of expensive antibiotics, as well as to the absence of cost-effective measures to influence drug consumption. Drug expenditures in 1991 amounted to 2% of the GDP, compared to 0.6–1.5% in most other countries (with the exception of Germany which is the closest to Greece at 1.8%).

Domestic demand is satisfied by both imports and domestic production, part of which is also exported. There are about 100 pharmaceutical companies in Greece, half of which are industrial and the other half commercial. Fifteen are controlled by multinational companies and another 15 collaborate with foreign pharmaceutical companies. The Greek pharmaceutical industry is highly concentrated, with the top 10 companies controlling 43% of the market.

In 1983, the Ministry of Health and Welfare established the National Drug Organization (NDO), which is the main body in Greece responsible for the administration and supervision of the pharmaceutical sector. The NDO approves, rejects, or renews the license for every drug in circulation; it develops drug-related research and technology; it provides the Ministry of Trade with advice on pharmaceutical pricing; it participates in the production and distribution process through investment and research; and it authorizes the establishment of new pharmaceutical companies.

The NDO additionally controls some smaller companies, one of which is Pharmetrica, which is responsible for carrying out the statistical and economic evaluation of drugs.

The Ministry of Health and Welfare supervises and finances the NDO. The Ministry of Trade is responsible for pharmaceutical pricing. Prices are subject to approval by the Minister of Finance and the Minister of Health.

There are 7698 pharmacies and about 130 drug wholesalers in Greece. Pharmaceutical companies distribute their products to wholesalers (who in turn distribute them to pharmacies) and to hospitals, in the ratio of roughly four-fifths to one-fifth respectively. Consumers obtain their supplies from pharmacies and hospitals in approximately the same proportion: four-fifths from pharmacies and one-fifth from hospitals. The flow of drugs from wholesalers or pharmacies to hospitals is extremely small (about 1%).

There are virtually no policies being pursued to improve cost-effective consumption of pharmaceuticals. The following policies in fact run counter to cost-effectiveness:

- Prices of domestic drugs are set on the basis of the cost of the drug's basic ingredient with mark-ups for formulation, promotion, distribution, etc. The original manufacturer receives a premium of 14%, thus resulting in inflated transfer prices. Because of the difficulties involved in determining the drug's basic ingredient when the drug is imported, it is in the interests of producers to import drugs and doctor prices, rather than to manufacture them locally. As a result, the market share of imported drug sales has been steadily increasing in recent years, rising from 18.3% in 1987 to 44.8% in 1994. At the same time, no incentives are given to Greek producers to promote their production. In addition, older and less expensive drugs are withdrawn from the market and replaced by more expensive ones. This has resulted in a 280% increase in hospital drug expenditure during the last five years, while drug consumption over the same period has increased only by 12%.

- Not all social insurance funds have a positive or negative list. The insurance fund IKA has a positive list, which is also followed by OGA, however, it is not always enforced as doctors can prescribe unlisted drugs by justifying the prescription. Efforts are being made within IKA to change doctors' prescribing behaviour through monitoring. A recent study has shown that in 1994, 35% of drugs prescribed by a group of IKA doctors were not on the positive list. Following the imposition of sanctions, this percentage of prescribed drugs dropped to 15% in 1995.

- There is no promotion of generics, and generics are sold by both foreign and domestic companies under different brand names (termed "copies"). Prices of generics were recently set at 86% of the brand drug. However, price competition is limited because pharmacists are strongly prohibited from dispensing any substitute.

- There is no reference price system in operation.

- The recent introduction of co-payments on drugs has failed to curb demand, and there has been no monitoring or evaluation of the co-payment system.

- There is inadequate coordination among the representatives of providers, users and regulators.

- Doctors frequently over-prescribe drugs, and effective monitoring of the prescribing activities of insurance fund doctors is limited. IKA is an exception in this regard, as it has computerized medical profiles and monitors doctors on a monthly basis.

Recently, the Ministry of Trade announced a new policy for drugs to cut down the cost by up to 10%. Wholesaler prices on imported drugs will be defined according to the three lowest among EU countries. Wholesaler and pharmacist profit margins will be reduced by 1% each. A new positive list for drugs will be introduced for social insurance beneficiaries and a type of reference price will be formulated (financial limit per insured person per therapeutic category).

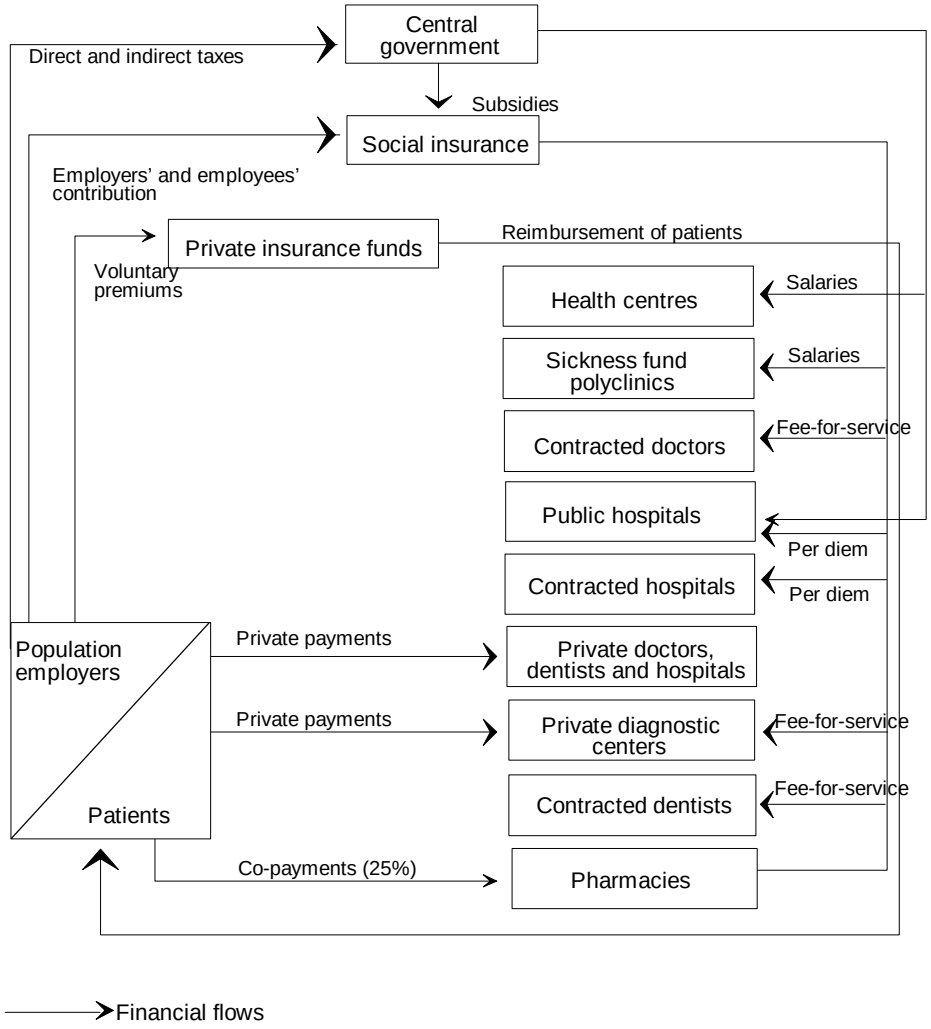
While these measures are in the right direction, further steps must be taken:

- recognition of intellectual property and drug patents; according to EU regulations, Greece had to conform to this by 1998;
- definition of over-the-counter (OTC) drugs as distinct from prescribed drugs;
- development of the market for generics;
- control of sales promotion and efforts to educate the public so as to avoid excessive use of drugs;
- price policy according to cost-effectiveness evaluations;
- monitoring the providers' prescription behaviour;
- development of a single classification system of drug codes;
- development of distribution per unit-dose;
- computerized link between the National Drug Organization, the Ministry of Trade, the social insurance funds and hospitals;
- development of medical audit systems monitoring the use of strict positive or negative lists.

Financial resource allocation

Third-party budget setting and resource allocation

Fig. 13. Financing flow chart



The financing flow chart illustrates the financial and service flows of the Greek health care system. The box on the left hand side represents the population. The three boxes at the top are third party payers which collect contributions, premiums or taxes and reimburse providers as well as patients. The providers of services are represented by the boxes on the right.

Much of the information contained in the chart has already been discussed in the previous sections. Therefore only a summary of the salient points will be presented here.

The third-party payers are mainly the government and the social insurance funds, as private insurance plays a comparatively small role in the financing of the system. The Greek health care system is a combination of the public contract model and the public integrated model. However, in view of the significant size of out-of-pocket payments, the voluntary out-of-pocket mode of finance and delivery is also relevant in characterizing the Greek system.

Resources for health care are allocated on a historical basis both at the central and the district level, with no other criteria playing a role in determining allocation. The state budget allocation for health is divided between expenditures incurred by the Ministry of Health and those incurred through the country's 52 districts. Each year, the previous year's allocation is adjusted by an amount equal to the rate of inflation plus new employment and investments. Central level expenditures include expenditures on administration, public health, insurance fund subsidies, subsidies to public hospitals, research expenditure, insurance services to civil servants, etc. The resources allocated through the districts include state administrative expenses for the civil servants employed in the health directorates of the districts, and mainly subsidies for public hospitals, health centres, rural doctors, and emergency services in the districts.

Payment of hospitals

Public hospitals are reimbursed by social insurance funds on a per diem basis. Traditionally, per diem fees have been kept below average per diem costs (thus allowing the budgets of social insurance funds to be in surplus until 1993). In 1992 per diem fees were increased by 200% and in 1993 by an additional 600%, thus throwing the insurance funds into deficit. These huge increases were prompted by the conservative government's policy, at that time, to decrease public expenditure on hospitals.

Prior to these increases in per diem fees, only about 12% of hospital revenues came from the fees paid by the insurance funds, with the remaining 88% coming from a state subsidy (this includes payment of salaries to hospital personnel, to be discussed below). At present, the contribution of the insurance funds has increased to about 30% of total hospital revenues. However, this actually resulted in creating significant deficits for the hospitals, as the insurance funds were not in a position to sustain the huge increases in per diem fees.

The state subsidy of hospitals is in principle based on a prospective budget for salaries and investment. However, in practice the state budget pays retrospectively for all hospital expenses incurred excluding sickness fund reimbursement. The system is therefore open-ended and demand-led, containing no incentives whatsoever to encourage cost-containment or efficient practices.

Payment of physicians

All health care personnel employed within the NHS, (i.e. rural health centres and NHS hospitals) are salaried employees of the state.

Doctors who work in IKA polyclinics are paid on a salary basis by IKA. Private doctors and dentists who are contracted by the social insurance funds are paid on a fee-for-service basis. The fees are generally set at a very low level, thus providing doctors with the incentive to charge the patient additional fees which are usually paid unofficially.

Unofficial payments to hospital doctors are also a prominent feature of the Greek public hospital sector. Following the introduction of the NHS after 1983, doctors received relatively high salaries. As a result, some progress was made at that time in reducing unofficial payments. However, while doctors now on average receive salaries which are approximately double that of other public employees, these are much lower in relative terms than in the early NHS period, thus creating incentives once again for doctors to supplement their income through unofficial payments. It is estimated that unofficial payments increase doctors' salaries by about 40% on average.

Other health care personnel, especially nurses, are paid salaries which are at roughly the same level as the average of public employees.

Quite clearly, payment methods for providers give no efficiency-promoting incentives, and moreover encourage the continuation of the practice of unofficial payments.

Health care reforms

Determinants and objectives

At present, a number of factors have combined to push the reform process forward. These factors include the changing international political environment, macroeconomic constraints, the lack of policy formulation mechanisms in the health sector, the technical and administrative inefficiencies, and social and behavioural patterns. The main reasons underlying the initiation of health care reforms in 1994–1995 are the following:

- absence of appropriate financial mechanisms with respect to levels of care, regions and social insurance funds, resulting in inequalities in population coverage and access to health care services;
- absence of cost-containment measures, coordination of payments, effective incentives to the providers, pricing policies, etc.;
- high centralization of the system, so that there is no local evaluation and decision-making following priority setting based on the health needs of the population;
- absence of effective managerial structures and organizational-administrative policies which would create incentives for health care personnel to be more productive and efficient;
- lack of a referral system due to the underdeveloped family physician and PHC system;
- unequal distribution and education of health care personnel;
- old fashioned and bureaucratic role of public health at the central level of government and in the districts;
- lack of quality and audit control programme, resulting in low credibility in the system and low citizen satisfaction levels.

The objectives underlying the reform of the health system are in brief:

- to create a coherent policy to improve health care with intersectoral coordination and a strong emphasis on public health (promotion, prevention, etc.);
- to decentralize the system and encourage citizen participation by providing equal access financially and geographically, and by establishing organizational structures permitting citizen participation;
- to improve management and quality of care through incentives for improved performance and specific budgets for education;
- to create incentives for cost-effectiveness, by enforcing budget limits and by cutting down levels of waste (in the prescribing of drugs, the provision of excessive diagnostic tests and doctors' visits);
- to update facilities where necessary;
- to provide family medicine with continuity of care;
- to promote primary health care.

Content of reforms and legislation

Highlights of major reform proposals and legislation:

- In 1934, the Social Security Organization (IKA) was established, providing insurance coverage to blue- and white-collar workers (about one-third of the population at that time).

- In 1953, the first legislation attempting to establish an NHS appeared, however it was never fully implemented.

- In 1961, the Agricultural Insurance Organization (OGA) was established, providing coverage for the agricultural population.

- In 1968, the L. Patras Plan was presented by the Ministry of Health, aiming at the introduction of an NHS, the reduction of regional inequalities, introduction of a family doctor system based on GPs, improvements in the quality of various services provided, and the introduction of a unified fund. After some half-hearted attempts to implement portions of the legislation, the plan was dropped.

- In 1976, a working party at the Centre of Planning and Economic Research prepared a study detailing the shortcomings of the health care system and proposing the creation of a unified fund, unification of the services provided by the three largest insurance funds; and the introduction of a family doctor system. The proposals never passed into legislation.

- In 1980, the Doxiades Plan formulated at the Ministry of Health produced a legislative proposal including the establishment of a planning agency for the coordination of health care provision, and the development of a network of rural health centres staffed by family doctors. The plan was rejected by parliament.

- In 1983, the PASOK government put forward a comprehensive reform plan that included many of the principles that had appeared in earlier reform proposals, plus some additional principles believed to underlie the successful establishment of an NHS: equity in delivery and financing of health care; development of primary health care including a referral system; expansion of public provision of primary and secondary care services and a limitation of privately provided services; and decentralization in the planning process with improvements in management and community participation. In brief, the plan focused on the development of a fully integrated system of public provision, with a focus on equity, decentralization, and management reforms. The plan was passed in Parliament in 1983, and implementation began almost immediately. A major shortcoming of the plan was that it did not deal effectively with the financing aspects of the system, leaving the crucial relationship between the social insurance funds and the newly established NHS undefined.

- In 1992, the conservative government passed legislation which emphasized the following: patient freedom of choice and private initiative; abolishment of restrictions on the construction of private hospitals; hospital freedom to hire private consultants; social insurance fund freedom to contract with any providers; financial and administrative responsibilities for rural health centres transferred from district hospitals to districts; new planning and management techniques; and new financial accountability and audit systems. Most of these provisions (mainly those in the public sector) were never implemented because of delays and a subsequent change of government which stopped the implementation process.

The most recent reform proposals:

In January 1994, the PASOK government (which had again come into power in October 1993) abolished most of the articles of the 1992 legislation passed by the conservatives. At the same time the Minister of Health established two committees:

- a local committee including Greek experts both from Greece and abroad systems (Karokis, Polyzos, Roupas, Sissouras, Theodorou, Yfantopoulos), which produced a Report on the Organization and Management of Health Services in Greece, detailing the shortcomings of the system;
- an international committee (Abel-Smith, Calltrop, Dixon, Dunning, Evans, Holland, Jarman and Mossialos), which visited many health services and received information from the local committee members, and which produced a Report on the Greek Health Services in June 1994. The main points of this report were for the most part incorporated into the reform plan that was subsequently formulated.

In addition, the Minister of Health established three local committees to examine in detail the reform issues in:

- unification of the sickness funds – decentralization
- organization and management of the system – manpower
- GP network – PHC.

The Athens School of Public Health examined the public health issues.

These committees were composed of politicians as well as social and professional representatives, and made recommendations that were included in three separate reports (January 1994). However, the unions, especially those of medical doctors, rejected the recommendations. Nonetheless, on the basis of the recommendations of the committees referred to above, the local committee of Greek experts (including members of all the local committees together with legal advisers of the Ministry of Health and the Parliamentary Health Commission), prepared a new proposal consisting of 100 articles (May 1995) to be submitted to Parliament. The opposition party fully agreed with the foreign experts' proposals, but rejected the proposed legislation.

The key elements of the proposed legislation were the following:

- **A unified sickness fund:** The main social insurance sickness funds transfer their funds for health care to one unified fund which is to purchase services for their members. The government will transfer to this fund all relevant subsidies which are allocated to health care.

- The resulting Unified Sickness Fund will be directly accountable to the Minister of Health, although it will be an independent public agency with a staff of experts and administrators in at least four divisions (collection of resources, distribution of resources to the NHS through regional bodies, supplies of drugs, quality control, research and monitoring).

- In addition, the proposal introduces prospective global budgets for hospitals and productivity incentives for health care personnel.

- **Organizational change:** The provision and financing of health care services will be split, with the Ministry of Health responsible for provision and the Unified Sickness Fund for financing. The proposal introduces a new organizational structure and administrative mechanism for provision. This involves the establishment of an NHS Management Executive at the central level, which is to supervise all NHS delivery services, and Regional Health Managers of Regional Health Directorates, to be responsible for delivery at the regional level. They are to collaborate with central and regional health boards, and are responsible for local needs assessment which is to form the basis for allocating the central fund's resources across regions. Regional Health Directorates include divisions of public health, clinical services, and monitoring the use of resources and facilities in collaboration with districts.

- Each hospital, according to the proposal, will be run by a specially trained and well paid general manager who is responsible to the hospital's Board and is also a member of it. A medical director will run medical services, while new managerial and financial structures will be introduced. NHS doctors will be periodically assessed and will face incentives and disincentives.

- **A family doctor system:** At the heart of the reform of health services is the establishment of a family doctor network in the whole country starting with urban areas. The 400 existing urban polyclinics and rural health centres will be upgraded. The whole country will be divided into 400 PHC units in which GPs will work in group or solo practices with lists of about 1500 registered residents. Each citizen served by the unified fund will be able to choose his/her GP. The GPs will be provided with space in the existing health centres, polyclinics and rural clinics or will practise from their own premises. Their remuneration will be based on contracts with the Unified Fund (with the exception of about 500 GPs who are already working in the system as full-time NHS and IKA employees and who will continue to be salaried employees). The 400 primary health care units, grouped on a regional and/or district basis, will be under the jurisdiction of their respective regional primary health care organizations. Ambulance centres will be upgraded through purchases of advanced equipment (ambulances, mobile units, helicopters, telematics, etc.).

- **Focus on health promotion and prevention:** Coherent plans for health improvement are to be developed, with emphasis on health promotion and disease prevention. The proposal provides for the establishment of a multidisciplinary public health service with trained public health doctors posted to work at the new regional level in collaboration with the existing district level. Laboratories for public health control are to be established, at least one in every region. Supervision at the central level and coordination with various national committees on different disease patterns is very important. A national committee and a special directorate in the ministry are to be created in order to make specific planning arrangements. Crash programmes for the training of managers, public health doctors and GPs are to be initiated.

However, another opportunity was lost as Prime Minister Papandreou's illness at the end of 1995 resulted in postponement of the legislation and governmental changes (a new Prime Minister in 1996, a new Minister of Health, etc.). The proposed legislation was not submitted to parliament at the end of 1995 as planned.

In early 1996, due to the political changes the reform plan was modified into a less radical but more pragmatic proposal. The modified proposal focuses on the following main areas of change:

- reorganization of the NHS with a new managerial role adjusting to the new organizational structure;
- rationalization of resources on the financing side, possibly postponing the unification of the biggest sickness funds, and allocation of resources via regional global budgets based on specific criteria;
- decentralization of the health care services and creation of regional health authorities;
- establishment of public health regional authorities and laboratories, and upgrading of public health as a whole;
- giving the initiative to the social insurance funds to establish a GP network beginning in urban areas;
- education for health professionals emphasizing the role of the new fields in health promotion, social medicine, general practice, school medicine, various nursing specialties, biotechnology, health services management and economics, information systems and public health;
- upgrading emergency care (ambulances, mobile card-surgical units, helicopters, etc.);
- changing the financing principles of the health care system by introducing global budgets, cost accounting per department or case, productivity incentives to health care professionals (especially medical doctors) and by finding additional resources through specifically targeted state subsidies or cost savings from rationalization of expenses in drugs, medical supplies, etc.;
- continuous improvement in mental health programmes;

- focus on issues of quality of care and quality assurance; establishment of a National Centre of Quality Control.

This proposal will probably be presented to parliament in the very near future.

Health for all policy

Greece has not developed an official health for all policy. In the course of the last few years, several attempts have been made to initiate a process of developing such a policy, however they have all failed.

Reform implementation

The reform proposals put forward during the post-war decades in Greece look like an unending process to try, on the one hand, to reform the health care system, and on the other to impose obstacles in implementing these health care reforms. Although the emphasis has varied somewhat from proposal to proposal, the main themes of the proposed reforms are remarkably similar: establishing an NHS; achieving equity in access and provision; consolidating the disparate and multiple sources of funding; addressing the weaknesses of PHC; establishing a family doctor system based on general practice; instituting a referral system; and achieving some degree of decentralization.

This suggests that reform planners, who have appeared with successive governments, have long been aware of the shortcomings of the health care system, and have also long been aware of the pressing need to address these shortcomings, and that they are not a new phenomenon but have been present for many years. The most important factor underlying the inability of successive governments to pass or implement the various legislative proposals involves political opposition to the reforms. There are as a rule three sources of political opposition: doctors' unions, representing the vested interests of their members, social insurance funds, which resist change and do not want to lose their traditional autonomy; and opposition parties in the government, which would rather impose their own particular version of reform and thereby directly serve the needs of their own particular clientele.

There are a number of factors that combined to permit the passing of the 1983 legislation and its subsequent partial implementation. First, the 1983 proposals had been discussed over many years, and similar proposals had been put forward under a variety of earlier governments. Therefore, by 1983 a certain political consensus regarding the need for reforms, had been achieved. Second, doctors' unions agreed with the need for reforms, and supported the PASOK government. Third, the PASOK government enjoyed broad popularity. Fourth, there was very widespread dissatisfaction with health care services. Finally, the severity of problems in the health care system had reached such proportions that change was almost universally viewed as being imperative.

The 1983 reforms, as noted above and throughout the discussions in this study, were partially implemented. The successful features of the reform can be briefly summarized to have included the following: establishment of the NHS; the significant expansion of public expenditure on health care; construction of rural health centres as well as a number of hospitals which significantly contributed to an improvement in access to health care services, especially for the rural population; and improved labour relations in the health sector, particularly during the initial five years of implementation. However, a number of issues were not addressed as planned, while certain new problems were inadvertently created during subsequent years. The rapid growth of the underground economy in health worked to undermine some of the achievements in equity; private expenditure on health increased significantly (though perhaps not to the same extent as public health expenditure); the family doctor system was not established; the urban health centres were not developed; the public health system was not developed; inequalities in provision through variable fund benefit packages persisted; the financial footing of the NHS and the social insurance funds became increasingly unstable; decentralization processes were not initiated; and there were perverse efficiency developments.

In part, the failure of the reforms on the financing side were due to the inadequate attention that was paid to the financial relationship between the social insurance funds and the newly established NHS, as well as inadequate attention to incentives and efficiency considerations, and hence can be attributed to faulty design of the reforms. Additional factors which worked to frustrate the implementation process included the generally inadequate administrative and institutional infrastructure, poor planning and management capabilities, and the custom of

appointing persons to managerial and administrative positions on the basis of political considerations.

In the case of the present (1996) reform proposals, the situation appears to be somewhat optimistic. The proposals now under consideration do not include all the provisions of the 1994–1995 proposals, and hence are more easily acceptable to broader segments of the population. Moreover, there appears to be almost universal agreement once again that change is imperative, as the system is facing problems of extreme urgency. Opposition has been shown by the doctors' union, but only with respect to a provision of the proposal seeking to abolish full life tenure for new doctors entering the NHS. The Ministry recently offered financial incentives to doctors, so trade unions will in all likelihood accept the proposals. There is no other opposition to the proposed legislation, therefore it is expected to pass in parliament.

The results of a recent public opinion survey show that the public generally views the expected changes favourably. There is evidence to suggest that as much as 70% of the Greek population now want radical as opposed to piecemeal changes in the health care system, and that moreover they are willing to pay for radical changes (through increased earmarked taxation), assuming that their increased expenditure will be effectively used for improvements in the system.

The health policy discussion of the last three years has raised public awareness of the issues and the problems, and has increased the public's expectations of an initiation of a process of change that promises to seriously address the shortcomings of the health care system.

Conclusions

A key objective of the 1983 reforms in Greece was to increase equity in access to health care services. This was to be achieved through the establishment of an NHS guaranteeing universal coverage and access to health care services. This objective was to some extent accomplished, particularly through the establishment of rural health centres and clinics, as well as by the establishment of large teaching hospitals in areas far from the major urban centres, where the larger and better equipped hospitals already in existence were concentrated. The network of rural health centres that was built during the mid-1980s in fact constitutes a solid structure upon which a PHC system can be built. In addition, the primary care services offered free-of-charge at all NHS hospitals increased access, as entitlement by virtue of the NHS was on the basis of citizenship and not fund membership.

The objective of equity was partially compromised, however, by the inadequate staffing and facilities of health centres which did not allow them to operate as effectively as originally planned, as well as by the development of the underground economy in more recent years.

The reforms currently under consideration attempt to deal with difficulties that were not effectively resolved by the 1983 reforms. These involve not only the equity issue, but also, and perhaps more importantly, the issues of efficiency, health gain, and quality of care, which had not been adequately addressed in the previous reform. These are all issues which are very important for the Greek health care system as they underlie some of its weakest points. Specifically, there are many sources of inefficiency, such as, for example, multiple sources of funding, open-ended provider payment systems, the absence of a referral system and family doctor system, and the uncoordinated public-private provider mix. The issue of health gain is one that has not been addressed, in view of weaknesses in public health and weaknesses (or nonexistence) in planning for health gain. Finally, quality of care is also an area that has only in very recent years emerged as a health policy issue.

Consumer choice, on the other hand, has not directly preoccupied reform planners to any significant degree, not has it been regarded as a major health policy issue. The reform legislation of 1992 did emphasize free consumer choice, however, this did not have any practical implications because consumer choice was largely free to begin with. Because of the structure of provision, and the lack of a referral system, free choice of provider has always been, for the most part, a characteristic feature of the health care system. It is only in the case of IKA polyclinics that certain limitations to free choice may exist.

If the key objective of the most recent reform proposal can be very briefly summarized, it could be said that most of the planned changes centre on the development of efficiency-promoting measures. Quality of care and quality assurance are additional important, though perhaps not so prominent, issues. Health gain, though not directly addressed, is at least indirectly making its appearance in the health policy agenda through the focus on development of the public health system and education for health promotion and public health specialists, as well as other related fields.

References

1. Abel-Smith A., et al. *Report on the Greek Health services*. Athens, Ministry of Health and Social Welfare of Greece, 1994.

2. Dervenis C. & N. Polyzos. *Study and Proposal on the Organization and Management of the NHS and the Development of Health Care Personn*el. Athens, Ministry of Health and Welfare, 1995.

3. Kyriopoulos J., et al. User satisfaction with health services in public hospitals, In*: Patients and Health Professions in Greece*, Athens, Academy of Health Professions, 1994.

4. Liaropoulos L.L. *Health services financing in Greece: a role for private health insurance.* Health Police 34, 1995.

5. Moraitis E., et al. *Study on the Organization and Function of a Primary Health Care System.* Athens, Ministry of Health and Welfare, 1995.

6. OECD. *The Reform of Health Systems: A Review of Seventeen OECD Countries.* Paris, Health Policy Studies No. 5, 1995.

7. Papanikolaou B. & I. Sigalas. *Patient satisfaction as an indicator of quality of hospital care*. Health Review, July–August 1995.

8. *Report on the Organization and Management of Health Services in Greece.* Athens, Ministry of Health, Welfare and Social Security, Greek Advisory Committee on the NHS, 1994.

9. Sissouras A., et al. Unified Sickness Fund: *Decentralization of Financing and Organization of the System.* Athens, Ministry of Health and Welfare, 1995.

10. *General Practice Profile. Greece.* Copenhagen, WHO Regional Office for Europe, 1995.

11. Yfantopoulos J., et al. Health Manpower Needs in Greece 1980–2000. In: *Report to DG V of the European Union.* Greece, General Practice Profile, 1993.