Health Care Systems in Transition

Written by
Margarida Bentes,
Carlos Matias Dias,
Constantino Sakellarides
and Vaida Bankauskaite

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Foreword

The Health Care Systems in Transition (HiT) profiles are country-based reports that provide an analytical description of a health care system and of reform initiatives in progress or under development. The HiTs are a key element of the work of the European Observatory on Health Systems and Policies.

HiTs seek to provide relevant comparative information to support policy-makers and analysts in the development of health care systems in Europe. The HiT profiles are building blocks that can be used:

- to learn in detail about different approaches to the organization, financing and delivery of health services;
- to describe the process, content and implementation of health care reform programmes;
- to highlight challenges and areas that require more in-depth analysis; and
- to provide a tool for the dissemination of information on health care systems and the exchange of experiences of reform strategies between policy-makers and analysts in different countries.

The HiT profiles are produced by country experts in collaboration with the Observatory's research directors and staff. In order to facilitate comparisons between countries, the profiles are based on a template, which is revised periodically. The template provides the detailed guidelines and specific questions, definitions and examples needed to compile a HiT. This guidance is intended to be flexible to allow authors to take account of their national context.

Compiling the HiT profiles poses a number of methodological problems. In many countries, there is relatively little information available on the health care system and the impact of reforms. Due to the lack of a uniform data source,

quantitative data on health services are based on a number of different sources, including the WHO Regional Office for Europe health for all database, Organisation for Economic Cooperation and Development (OECD) Health Data and data from the World Bank. Data collection methods and definitions sometimes vary, but typically are consistent within each separate series.

The HiT profiles provide a source of descriptive information on health care systems. They can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situation. They can also be used to inform comparative analysis of health care systems. This series is an ongoing initiative: material is updated at regular intervals. Comments and suggestions for the further development and improvement of the HiT profiles are most welcome and can be sent to observatory@who.dk. HiTs, HiT summaries and a glossary of terms used in the HiTs are available on the Observatory's website at www.observatory.dk.

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This HiT takes forward the Health Care Systems in Transition profile on Portugal of 1999, written by Anna Dixon (European Observatory on Health Systems and Policies) in collaboration with a working group led by Vasco Reis (National School of Public Health) and edited by Elias Mossialos.

The current series of Health Care Systems in Transition profiles has been prepared by the research directors and staff of the European Observatory on Health Systems and Policies. The European Observatory on Health Systems and Policies is a partnership between the WHO Regional Office for Europe,

the governments of Belgium, Finland, Greece, Norway, Spain and Sweden, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine.

The Observatory team working on the HiT profiles is led by Josep Figueras, Head of the Secretariat, and research directors Martin McKee, Elias Mossialos and Richard Saltman. Technical coordination is led by Susanne Grosse-Tebbe.

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The report reflects the data available in July 2003.

Introduction and historical background

Introductory overview

The Health Care Systems in Transition profile of Portugal gives a broad overview of the Portuguese health care system, its organization, financing and delivery. It describes in detail some of the reforms which have taken place in recent years and the changes which the system is presently undergoing. Following a general introduction to the country and its people, the report describes the historical development of health care services in Portugal from the eighteenth century to the present. The section on *Organizational structure and management* provides a description of the administrative bodies of the Portuguese health care system. It also introduces some of the other institutions and bodies operating in the areas of health care financing, purchasing and provision of services both within the National Health Service and the private sector. *Planning, regulation and management* looks at the mechanisms for capital, human resource and expenditure planning and the bodies responsible for the regulation of services and pharmaceuticals. Pharmaceutical regulation and policy are discussed in more detail in the final part of the section on *Health care delivery system.*

There are well-documented difficulties in obtaining reliable comparative data, particularly on health care expenditure. The section on *Health care financing and expenditure* attempts to bring together available national and international data on this subject and provide a brief analysis of the trends. It first considers the multiple sources of funding for health care, then goes on to describe the levels of coverage and benefits offered. Finally it presents and analyses health expenditure data.

Fig. 1 Map of Portugal[1]

Source: The World Factbook, 2004.

[1] The maps presented in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the European Observatory on Health Systems and Policies or its partners 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 health care services and provision offered in Portugal and the organization of the delivery of health care are described in the section on *Health care delivery system*. Primary, secondary and tertiary medical care services are described as well as public health services and social care services. A separate section on human resources and training describes the number and type of health care personnel, their distribution and training requirements. Finally, this section concludes with a description of pharmaceutical and technology assessment including the regulation of medical equipment (standards, quantity and distribution), approval of drug products, drug pricing and control of pharmaceutical sales.

The section on *Financial resource allocation* describes the flow of money through the system, from the population/patient through the various funding agencies to providers. Changes in the mechanisms for funding allocations from central to regional authorities are described, as is the new model of purchasing being introduced for hospital services. The changes to the methods of funding hospital services, primary care services and the payment of health care professionals are also described.

Much of this report is descriptive with limited analysis of data. As well as describing the current system it indicates the pressures for change, the nature of planned reforms, the process of implementation and possible outcomes. The section on *Health care reforms* brings together this information by highlighting the general pressures for change within the system and the barriers to change. It also presents a chronology of relevant health events and health legislation which has been enacted. Finally it describes the process of implementation and the extent to which reforms have achieved their stated objectives.

Country background

Geography and demographics

Portugal is part of the Iberian Peninsula in the southwest of Europe. The archipelagos of nine islands and Madeira (two main islands and a natural reserve of two uninhabited islands) in the Atlantic Ocean are also part of Portugal. The mainland is 91 900 km² (960 km north to south and 220 km east to west), with 832 km of Atlantic coastline and a 1215 km inland border with Spain.

The River Tejo, which rises in Central Iberic Peninsula, divides the country into two distinct geographical areas. The northern and central regions are characterized by rivers, valleys, forests and mountains. The highest range on the continent is the Serra da Estrela, peaking at Torre (1993 m), while the Pico,

in the Azores Islands, is the highest mountain overall, at 2100 m. The south, apart from the rocky backdrop of the Algarve, is much flatter, drier and less populated.

Portugal has a temperate climate influenced by the Atlantic Ocean, with considerable variations. The southern region of the Algarve can experience extremely high temperatures in midsummer while in winter the north receives plenty of rain and temperatures can be chilly, with snowfall common in the mountains, particularly the Serra da Estrela range. As a result, the natural flora is varied, with species typical of both western Europe and the Mediterranean.

According to the 2001 census, the total resident population of Portugal was 10 355 824, a 4.9% increase over the last decade *(1)*. Population density is 109 per square kilometre, similar to Slovakia, Hungary and France *(2)*.

One factor which contributed to this increase in population, together with the increase in life expectancy at birth, was the return of more than half a million Portuguese from the Portuguese administered overseas territories of Angola, Mozambique, Guinea-Bissau, Cape Verde, Sao Tome and Principe and Timor, which became independent following the 1974 revolution *(3)*.

Another important demographic phenomenon is migration out of Portugal. It is estimated that between 1960 and 1970 approximately 1 200 000 Portuguese migrated to almost every continent but mainly to European countries. In recent years some of the older emigrés have started repatriating *(4)*.

Recent legal and illegal immigration from Brazil and central and eastern Europe, together with the more traditional immigration from Africa are raising new problems and challenges to the Portuguese health care system.

According to the 2001 census the immigrant population represents 2.2% of the resident population (Instituto Nacional de Estatística, 2002). The majority (81.2%) are in the active age groups (15 to 64 years old) confirming the strong economic reasons for migrating to Portugal. Only 5% of the immigrants are above 64 years of age and 14% below 15 years of age. Immigrants from countries of eastern Europe have become more numerous during the last decade. A distinctive feature of this group is its higher literacy *(1)*.

Research shows less use of curative and preventive health services by African immigrant communities living in Portugal *(5)*, including reproductive health services (*6*). African immigrants also have higher rates of tuberculosis *(7)*, and their utilization of hospital and health centres depends on the duration of residence in Portugal and on holding a legal residence permit *(8)*.

While in 1970 only 26% of the population lived in urban areas, this rose to 29.0% in 1980, 34.0% in 1990, and 65.6% by 2000 *(2)*. The two main metropolitan areas are greater Lisbon (resident population 1.9 million in 2001),

and greater Porto (population 1.3 million in 2001). The migration of the population from the interior to the coastal cities has always been a constant feature of Portugal mainland, but increased after the 1974 revolution. Large suburban areas were built to accommodate the influx of internal and external immigrants. The rapid growth of these suburban neighbourhoods without an accompanying expansion of the public transport network is posing great traffic pressure on city centres.

The number of births has been declining steadily since 1960 (24.1 live births per 1000 population), and in 1990 the crude birth rate for Portugal was 11.76 live births per 1000 population, below the European average of 12.02 for the first time since 1970. In 2000, the crude birth rate was 11.75 live births per 1000 population ranking again above the European Union average of 10.69 *(2)*. The median age of the population rose from 31 years to 36 years old from 1986–1996, while the dependency ratio fell from 79.7 in 1984 to 48.1 in 2001 (based on the relation of the population under 15 and over 65 years of age to the remainder) *(1)*. Demographic changes seem to have followed a global improvement in socioeconomic conditions similar to those in other countries in the past. Recent projections show that the Portuguese population may still show a slight increase during the next decade but will decline from 2010 onwards. The increase in the proportion of people over 65 years old and the decrease of the population under 15 years of age will result in a "double ageing" effect. A scenario approach to these estimates seems to confirm that a decrease of the Portuguese population is almost inevitable even considering important increases in immigrant population *(9)*.

Economy

Recent economic growth began in early 1994 and real GDP growth increased to an estimated 3.2% in 2000 *(10,11)*. In 2000, GDP per capita was €11 288, up from 5135 in 1990, or €9546 at 1995 GDP level (7506 in 1990), or US $ PPP 17 638 (9875 in 1990) *(12)*. The inflation rate increased by 3.8% from December 1999 to December 2000, and was just above 2% in 2001 *(10,11)*.

Unemployment has fallen from 7.3% of the total population in 1996 in *(2)* to 4.7% in 2002 *(13)*. In 1999, long-term unemployment was 41.2% of the total unemployment *(10,11)*. Developments in the national and international economic situation during 2002 have resulted, according to official reports, in increasing signs of recession with moderate unemployment growth.

Despite global economic growth, Portugal has one of the highest levels of income inequality in Europe together with the United Kingdom, according to the 2002 European Health Report. The influence of this on the health of the population and its subgroups is not well studied.

Portugal has developed a diversified and increasingly service-based economy since joining the European Union in 1986. Over the past decade, successive governments have privatized many state-controlled firms and liberalized key areas of the economy, including the financial and telecommunications sectors. The country qualified for the European Monetary Union (EMU) in 1998 and began circulating the euro on 1 January 2002, along with 11 other European Union countries. Economic growth had been above the European Union average for much of the past decade, but fell back in 2001–2002. GDP per capita stands at 75% of that of the leading European Union economies. The three main sectors of the labour force in 1999 were services (60%), industry (30%) and agriculture (10%). The main industries were textiles and footwear, wood pulp, paper and cork, metalworking, oil refining, chemicals, fish canning, wine, and tourism *(13)*.

Political and administrative structure

Portugal has been a constitutional democratic republic since 1974, when the revolution put an end to the 48 year-long dictatorship of the Salazar-Caetano regime. The main institutions of the state are the President of the Republic, the parliament, the government and the courts. Both the President and the parliament are elected by direct universal suffrage.

The parliament is made up of 230 members elected according to a system of proportional representation and the highest average method (Hondt method). The Prime Minister is appointed by the President on the basis of the election results, and after consultation with the political parties. The President also appoints the other members of government on the recommendation of the Prime Minister.

The administrative system comprises 5 regions (North, Centre, Lisbon and Vale do Tejo, Alentejo and Algarve), 18 districts and 2 autonomous regions (the Azores and Madeira). The districts are further divided into municipalities (*concelhos*), which have their own level of elected government and boroughs (*freguesias*). The islands have their own political and administrative structures. The President appoints a Minister to represent the Republic in each of the autonomous regions, following a proposal by the national government. In December 1999 China resumed sovereignty over the territory of Macao, which had been under Portuguese sovereignty since 1887. Angola, Mozambique, Guinea-Bissau, Cape Verde and Sao Tome and Principe all became independent after the 1974 revolution.

Table 1. Structure of the economy according to category of industry (% share of GDP), 1995 and 2001.

	% share GDP[a]	
Year	1995	2001
Agriculture, forestry and fishing	5.0	3.0
Electricity, gas and water	3.0	3.0
Manufacturing	18.0	16.0
Commerce, restaurants and hotels	16.0	16.0
Construction	6.0	7.0
Services	39.0	41.0

Source: Ministério da Economia, Departamento de estudos e prospectiva, 2002.
Note: [a] excluding taxes.

Health indicators

Portuguese life expectancy at birth practically doubled during the twentieth century both in women (40.0 years in 1920, 79.7 years in 2000) and in men (35.8 years in 1920, 72.6 years in 2000). Although this trend has continued to develop favourably in the past 20 years (see Table 2), life expectancy in Portugal still remains below the European Union average. In 2001 the average life expectancy at birth in Portugal was 76.5 years while EU average was 78.48 years *(2)*. There is a remarkable difference between figures on life expectancy for men and for women in Portugal: the 2001 figures are 80.3 years for the latter and 73.5 years for the former *(12)*.

Child health indicators, although improving since the early 1960s, have suffered dramatic reductions since the 1974 revolution and currently are near the average European rate. The infant mortality rate decreased fivefold between 1970 and 1990, and halved from 10.8 per 1000 in 1991 to 5.0 per 1000 in 2001. However, regional differences still persist, the highest in the Azores (6.5/1000) and the lowest in the Centro region (3.8/1000) *(14)*.

The components of the infant mortality rate have also shown favourable evolutions. For example, the perinatal mortality rate dropped from 12.1 per 1000 in 1991 to 5.6 per 1000 in 2000. From 1990 to 2002 the neonatal mortality rate per 1000 decreased 50.7% from 6.9 to 3.4, and the post-neonatal mortality rate decreased 60.4% from 4.0 to 1.6 *(1)*, whereas neonatal mortality still accounts for 68.0% of infant deaths. The successful evolution of infant mortality, to the point where Portugal is lower than the European Union average and that of some more developed countries, may in a great part stem from more than 30 years of well defined policies, strategies, programmes and selective investments in perinatal, maternal and child care, in spite of political changes and discontinuities.

Table 2. Main health and demographic indicators

	1980	1985	1990	1995	1998	1999	2000
Male life expectancy at birth	65.7	69.4	70.5	71.3	71.7	71.9	72.6
Female life expectancy at birth	74.6	76.5	77.5	78.7	79.0	79.1	79.7
Death rate (crude rate per 1000)	9.6	9.7	10.4	10.5	10.7	10.8	10.4
% of population 65 years or older	10.5	11.9	13.8	14.6	15.2	15.3	15.5
Birth rate (1000 population)	16.0	13.0	11.8	10.8	11.4	11.6	11.8
Fertility rate (children per woman 15–49 years)	2.2	1.7	1.5	1.4	1.5	1.5	1.5
Infant mortality (deaths per 1000 live births)	24.3	17.8	11.0	7.5	6.0	5.6	5.5
Perinatal mortality, deaths per 1000 total births	22.4	17.4	10.5	7.2	5.8	5.5	5.2
Literacy rate (% population 15 years of age or more)	81.8	84.4	87.2	89.9	91.4	91.9	92.2

Source: WHO Regional Office for Europe health for all database, 2003.

Improvements in the health status of the Portuguese population seem to be associated with increases in human, material and financial resources devoted to health care, as well as to a general improvement in socioeconomic conditions. Despite the overall improvement in living standards, there are inequalities among the regions, and probably between social classes. These disparities are evident in the variation of some health indicators such as mortality rates and infant mortality rates, as well as in inequalities of access, as seen in the ratios of inhabitants to hospitals and to health professionals.

The leading causes of death are shown in Table 3. In 2001, diseases of the circulatory system accounted for 39% of all deaths and cancers 20% of all deaths. Together, these two groups now represent 59% of all deaths. From 1960 to 1990 the increase was remarkable (35% in 1960, 42% in 1970, 58% in 1980, and 62% in 1990). External causes represented 4.5% of all deaths in 2001, predominantly in men (73%). In 2000, 29% of deaths caused by external causes were due to motor vehicle related accidents *(15)*.

Portugal has one of the lowest mortality rates from cardiac ischemic disease among European Union countries. In 1999 this group of diseases accounted for one-fifth of all deaths from diseases of the circulatory system and there were substantial differences among the districts. In 1999 the highest standardized mortality rate was observed in the Azores (166.3 per 100 000) and the lowest in Leiria (41.2 per 100 000) *(16)*.

Diseases of the circulatory system are the leading cause of death in Portugal and rank high among European Union countries. In 2000 the SDR from diseases of the circulatory system was 308.1 per 100 000 in Portugal while the EU average was 249.9 per 100 000 *(2)*.

Cerebrovascular diseases account for almost half of the deaths associated with diseases of the circulatory system. Despite a remarkable 44% decrease between 1986 and 1999 (SMR 204 and 154 per thousand, respectively) in mortality from this cause, Portugal's rate is above the European Union average (156 and 52 per 1000, respectively, in 2000 *(2)*.

Malignancies are the second cause of death, and gastro-intestinal tumours are the most frequent type of cancer in both men and women. Gastric and large intestine cancers account for the majority of this type of cancers, but while the former decreased in mortality, rates from the latter increased one third from 1986 to 1999 *(16)*. Using mortality data tumours of the respiratory system rank as the second most frequent cancer in men and the third in women.

Approximately a quarter of premature mortality in men comes from traffic accidents. The mortality rate associated with motor vehicle accidents was 20 per 100 000 in 2000, the highest in European Union countries *(17)*. Excessive speed, dangerous manoeuvres and high blood alcohol levels are considered the main causes of this problem and have been targeted with specific legislation and law enforcement measures.

Among women, the highest proportion of potential years of life lost is caused by cancer (25.9%), followed by external causes (14.7%), diseases of the circulatory system (12.9%) and cerebrovascular diseases (5.8%).

Portugal still has the highest rate of notification of new cases of tuberculosis among European Union countries. (41.4 and 10.6 per 100 000, respectively, in 2000) *(2)*. Epidemiological patterns are distinctive among the regions,

Table 3. Leading causes of death as percentage of all deaths in men and women, 1997 – 2001

	Men		Women	
	1997	2001	1997	2001
Cerebrovascular diseases	17.3	16.0	24.8	23.0
Ischaemic hearth diseases	9.0	9.0	8.4	8.2
Gastric cancer	2.9	2.9	2.1	2.0
Colon cancer	1.8	2.2	1.8	2.0
Lung cancer	4.0	0.9	4.3	1.0
Female breast cancer	n/a	n/a	3.1	3.3
Prostate cancer	3.0	3.0	n/a	n/a
Pneumonia	3.9	3.7	3.6	3.6
Liver cirrhosis	2.8	2.6	1.2	1.0
Motor vehicle accidents	2.8	2.6	0.9	0.9
Diabetes	2.4	3.0	3.8	4.6

Source: Division of Epidemiology, General Directorate of Health, Ministry of Health, Portugal 2003.

Note: n/a not applicable.

depending on the relative weight of social and demographic factors (social exclusion and immigration), HIV infection and antibiotic resistance. Men between 25 and 34 years of age are the group at highest risk *(18)*. The National programme for the control of tuberculosis is managed by the General Directorate of Health and is strongly rooted in primary care services supported by Specialist Hospital and Laboratory services. The WHO DOTS strategy is the cornerstone of the programme, whose effectiveness is demonstrated by an increase in the cure of positive baciliferous patients from 74.2% in 1996 to 85.0% in 2000 *(18)*.

Portugal has one of the highest prevalence of HIV infection in Europe. By the end of 2001 there were 18 995 accumulated cases of HIV infection and 8710 AIDS cases (342 with infection HIV2 and 126 with infection HIV1 and HIV2). Mortality rates from HIV/AIDS have been growing from 3.96 deaths per 100 000 population in 1985/1990 up to 28.74 deaths per 100 000 population from 1997-1999. HIV/AIDS is predominantly associated with drug addiction, social exclusion and imprisonment. Of the cases diagnosed in 2001, 572 (48%) occurred among users of injected drugs, 494 (41%) among the heterosexual population. The national commission against AIDS has identified the following priority areas for intervention: epidemiological information, health education, national counselling and early detection centres, and national centres for administration of combined therapy and extra-hospital support activities.

Health determinants

The major health determinants in Portugal reflect the late adoption of a western way of life among the general population after the 1974 revolution. Lifestyle factors already result in higher mortality from external causes and tobacco consumption among men, for example, but will probably affect morbidity and mortality in coming decades; tobacco use among women has been increasing steadily since the 1980s *(19)*.

The Portuguese population in general has high levels of alcohol consumption, low levels of physical exercise and rapidly changing dietary habits (although vegetable and fruit consumption are still higher than in most European countries and fat consumption is lower) *(20)*. Per capita pure alcohol consumption was 15.6 litres in 1999, higher than the EU average of 11.7 litres; half this value comes from wine consumption *(2)*.

Although Portugal still has one of the lowest smoking prevalence in the European Union (percentage of daily smokers aged 15 or more in 1999: Portugal 20.5%; EU average 30.8%), the prevalence of daily smokers among young women seems to be increasing, according to Health Interview Survey data *(2,21)*.

Also, the percentage of the population exercising to a beneficial level (more than 3.5 hours per week) is the lowest in the EU (*20*). According to Health Interview Survey data, 12.8% of the population in 1999 (11.5 % in 1996) was obese (BMI>30Kg/m^2) *(22)*.

Historical development of the health care system

In order to examine Portugal's complex health care system, it is important to examine some of the main historical factors that have influenced its development. Prior to the eighteenth century, health care was provided only for the poor by the hospitals of the religious charities called *Misericórdias*. During the eighteenth century, the state established a limited number of teaching hospitals and public hospitals to supplement the charitable provision. This was further extended in 1860 with the appointment of salaried municipal doctors who provided curative services to the poor. The development of public health services did not begin until 1901. The first act of public health legislation in 1901 enabled the creation of a network of medical officers responsible for public health (see Table 4). A further public health law was introduced in 1945, which established public maternity and child welfare services. It was also under this law that the national programmes for tuberculosis, leprosy and mental health, which were already operating, were legally established.

The more recent development of health services can be traced back to 1946 when the first social security law was enacted. Health care provision at this time followed the German Bismarck model which provided cover to the employed population and their dependants through social security and sickness funds. This social welfare system was financed by compulsory contributions by employees and employers, and provided out-of-hospital curative services, free at the point of use. Cover was limited to industrial workers in the first instance, with other sectors of the workforce and their dependants added through extensions in 1959, 1965, 1971 and 1978.

Primary health care was not the subject of public intervention until the 1960s when new powers were established for its financing and organization. Despite the efforts made prior to 1970, the following major problems still existed:

- asymmetric geographical distribution of health facilities and human resources;
- poor sanitation and inadequate population coverage;

- centralized decision-making;
- no linkage or coordination among existing facilities and providers, and little evaluation;
- multiple sources of financing and a disparity of benefits among population groups;
- discrepancy between legislation and policy and actual provision of health services;
- low remuneration of health professionals.

Up until 1979 and the establishment of the National Health Service, the Portuguese state had traditionally left the responsibility for paying for health care to the individual patient and his or her family. Care of the poor was the responsibility of charity hospitals and out-of-hospital care remained the responsibility of the Department of Social Welfare. The state only took full responsibility for the costs of health care for civil servants. Otherwise the state provided limited preventive care, maternal and child health care, and had some interventions in the control of infectious diseases and mental health.

The move towards greater public provision of health care and a commitment to universality was embodied in legislation passed in 1971. This law, although never fully implemented, gave priority to prevention over cure and sought to integrate health policy in the context of wider social policies, that is, to include protection of the family and disabled persons and other health-related social welfare activities. After the revolution of 1974, a process of health services "nationalization" began which culminated in the establishment of the NHS in 1979. First, in 1974 district and central hospitals owned by the religious charities were taken over by the government. Local hospitals followed in 1975 and were integrated with existing health services. Finally in 1977, over 2000 medical units or health posts situated throughout the country were taken over by the government. These had previously been operated under the social welfare system for the exclusive use of social welfare beneficiaries and their families. The principle of a citizen's right to health was embodied in the Portuguese constitution as early as 1976 and was to be delivered through "a universal, comprehensive and free of charge National Health Service". The law enabling the implementation of this principle was not passed until 1979. The 1979 law establishing the NHS, laid down the principles of centralized control but with decentralized management. Central, regional and local bodies were established to this end. It brought together public health services and the health services provided by social welfare, leaving the general social security system to provide cash benefits and other social services (for example, for the elderly and children).

So by 1979 legislation had been introduced to establish:

- the right of all citizens to health protection;
- a guaranteed right to universal free health care through the NHS;
- access to the NHS for all citizens regardless of economic and social background;
- integrated health care including health promotion, disease surveillance and prevention;
- a tax-financed system of coverage in the form of the NHS.[2]

Despite the development of a unified publicly financed and provided health care system and the incorporation of most of the health facilities previously operated by the social welfare and religious charities, some aspects of the pre-1970s system persisted. In particular, the health subsystems (from the Portuguese *subsistemas)* continued to cover a variety of public and private employees. These schemes offered better services and greater choice of provider than would be available under the NHS. Consequently the trade unions, which ran and managed some of the funds, forcefully defended them on behalf of their members. In the autonomous regions of the Azores and Madeira, health policy followed the same general principles, but was implemented locally by regional governments who retained some flexibility.

At the start of the twenty-first century the health care system in Portugal continues to face problems such as:

- inadequate public ambulatory services, thus an increase in use of hospital emergency departments
- long waiting lists for surgical procedures
- dissatisfaction of consumers and professionals with public services
- a major increase in health expenditure and difficulties with cost control
- increased demand for health care from vulnerable groups
- difficulty in reducing mortality due to traffic accidents and lifestyle-related diseases.

The discussion of how these problems are being addressed through further reforms is included in each section of this report. The relevant legislation and reforms are discussed in detail in the section *Health care reforms.*

[2] Only when health care could not be provided through the NHS would outside services be covered.

Table 4. The health care system: historical background and recent reform trends

1901	The first act of public health legislation was published whereby a network of medical officers responsible for public health was created (Ricardo Jorge reform).
1944	The first social insurance law was enacted which for the first time clearly defined the financial responsible entities.
1945	Public maternity and child welfare services were established. National vertical institutes and programmes for tuberculosis, leprosy and mental health, which were already operating, were also legally established.
1946	A mandatory social health insurance system is created – *Caixas de Previdência.*
1968	The Hospitals Regulatory Act defined the nature and attributions of hospital care.
1971	Access to health care was recognized as a right and health centres were created.
1974	The Democratic revolution occurred on 25 April, which ended up a long period of right wing political dictatorship. As a result, a process of health services nationalization was started, aiming to give the whole population access to healthcare, irrespective of ability to pay.
1976	The Portuguese Constitution was approved which embodied citizens' right to health care.
1979	The National Health Service was created as a universal system, free at the point of use.
1982	The career of General Practitioners/ Family Doctors was created.
1983	The Health Centres Regulatory Act was passed which defined their organizational and functioning models.
1988	The Law on hospital management established guiding principles for NHS hospitals, including entrepreneurial management, decentralization of decision making through intermediate responsibility centres and nomination of management boards by the government.
1989	The first pricing list based on DRG was issued for third party payers in respect to NHS hospital inpatient use by their beneficiaries.
1990	The Law on the Fundamental Principles of Health introduced new principles for the organization and functioning of the health system. Inter alia, an explicit role was assigned to the private for profit and non-for-profit sectors through contracting with the NHS; the system´s operation and management was decentralized at the regional level and user charges were introduced for ambulatory services. Private practice was allowed in public hospitals, under certain conditions related to the seniority and position of physicians as well as to the status of exclusive employment in the NHS.
1991	The Law on Pharmaceuticals centralized in a unique piece of legislation many previously dispersed norms and established regulatory devices for market introduction, trading and dispensing as well as quality control and safety norms
1992	The regulation on the application of user charges in hospitals and health centres was published.
1993	The Statute of the NHS was published in order to accommodate the changes introduced by the Law of Fundamental Principles of Health in 1990, namely the decentralization of the health system , the integration of health centres and hospitals in health units and the contracting out of NHS services.

The new organics of the Ministry of Health was published.

A Decree on the statutory regulation of private health entities was issued in order to ensure the accomplishment of quality standards.

Five Regional Health Administrations were established.

1995 The first experience to put a NHS hospital under the management control of a private consortium was initiated with the launching of a public bid for proposals according to a set of pre-defined terms.

A unique NHS Patient Identity Card was created to avoid duplications of coverage by the population by the clarification of the financial responsible entity and to simplify burocratic procedures of patient identification and user charges payment status.

1997 A capitation-based budgeting for resource allocation to the Health Regional Administrations and a case-mix adjusted budgeting for hospitals were implemented at national level.

Contracting Agencies (initially denominated Accompanying Agencies) were created – one in each Regional Health Authority - with the overall aim of providing the basis for the payment and provider split within the NHS. The Contracting Agencies should also promote means of citizens participation in health decision making.

1998 An experimental payment system for general practitioners working at health centres was introduced. The intention was to pay according to capitation and performance, instead of the traditional payment by fixed salary. Adhesion to this experimental system was voluntary.

Contracting agencies began to be installed to contract specific projects with hospitals and health centres.

A National List of Health Equipment was published for the first time.

A Law on the principals of Mental Health policy was published whereby community care is given priority over institutional care under different arrangements. The Law also regulated the compulsive inpatient status of persons with mental illness.

1999 A National Health Strategy and goals for the period 1998-2002, involving a broad range of social partners, was published as a revised version of a more internal document issued in 1998.

Legislation was passed creating local health systems and reforming health centres. Local Health Systems were integrated frameworks for hospitals, health centres and other health care provider entities. Primary health care reform was based on financially autonomous health centres, based on networks of primare health care teams. This legislation was not implemented.

The Local Health Unit of *Matosinhos* became the first experience of effective integration of the local hospital and related health centres in a unique provider entity.

A Law was approved in Parliament to fund a special program to reduce waiting lists for surgical procedures at NHS hospitals. The contracting out of non-NHS entities was allowed only after internal capacity was fully used.

The creation of Responsibility Centres in hospitals was set up as means of establishing intermediate management levels and promote decentralization of authority and of responsibility, in order to achieve higher levels of efficiency in the NHS.

A restructuring of public health services at national and regional levels was set up. Five regional public health centres were established.

2000 A set of legislative measures aiming at the rational use of pharmaceuticals, including generics promotion was adopted.

The use of NHS Identity Card became mandatory.

2001 The norms for the licensing and evaluation of private clinics and dentist private practices were published.

2002 A framework for the implementation of public/private partnerships for the building, maintaining and operation of health facilities was created, along with the identification of the basic principles and instruments.

A new Law on the management of hospitals was issued to enable the changeover of some institutions into public enterprises as well as the set up of a series of entrepreneurial principles such as freedom of choice by the patient, budget contracting, and activity based payment of professionals.

A Decree established the obligation of NHS drugs prescription using the common international denomination, as well as the conditions under which prescribed brands can be substituted by generics at dispensing.

Reference prices for pharmaceuticals were introduced to cap State co-payment levels.

34 hospitals, corresponding to about 40% of all NHS hospitals were transformed into public enterprises.

Organizational structure and management

Organizational structure of the health care system

The Portuguese health care system is characterized by three co-existing systems: the National Health Service (NHS), special public and private insurance schemes for certain professions (health subsystems) and voluntary private health insurance. In this section, the various bodies, organizations and institutions comprising the health care system will be outlined (see Fig. 2). First the internal structure of the Ministry of Health will be described, and then other national and regional government authorities with a role in health care will be examined. Finally the private sector and the health subsystems, including the corresponding functions and responsibilities within the health care system, will be reviewed.

Ministry of Health

The central government through the Ministry of Health is responsible for developing health policy and overseeing and evaluating its implementation. It is also responsible for the coordination of health-related activities of other Ministries, such as Social Services, Education, Employment, Sport, Environment, Economy, Housing and Urban Planning. The core function of the Ministry is the regulation, planning and management of the NHS.

Many of the planning, regulation and management functions are in the hands of the Minister of Health. The Secretaries of State have responsibility for the first level of coordination. As part of a set of transitional rearrangements at the Ministry of Health in 2001, the post of High Commissioner for Health was created as a second level of coordination with the role of supervising, coordinating and guiding the regional health administrations (RHA) policies

and actions, *inter alia*. In order to meet the objectives of the public Cost-Containment Programme by cutting down the number of top management positions, the post of High Commissioner was created cumulatively to the post of Director-General for Health (without overlapping salary).

The Ministry of Health is made up of four directorates and six institutes. These are:

Department of Health Modernization and Resources
Resulted from merging the former General-Secretariat of the Ministry of Health and the Department of Human Resources in order to rationalize the existing structures and avoid duplication. The former General-Secretariat of the Ministry of Health provided technical and administrative support to the other sections of the Ministry, coordinated their work and provided assistance to staff within various Government offices. The former Department of Human Resources regulated, directed and evaluated human resource activities for the NHS, namely professional education and practice, and directly oversaw schools for the training of nurses and technical staff working in health.

The General Directorate of Health
Plans, regulates, directs, coordinates and supervises all health promotion, disease prevention and health care activities, institutions and services, whether or not they are integrated into the NHS.

The General Inspectorate of Health
Performs the disciplinary and audit function for the National Health Service in collaboration with the General Directorate of Health and audits NHS institutions and services.

The General Directorate of Health Infrastructures and Equipment
Assesses, regulates, plans and coordinates the procurement of equipment and provides technical support for the programme of NHS building work. It has regional directorates.

The National Institutes are the following:

- The National Institute of Pharmaceuticals and Medicine (INFARMED)
- The National Institute for Medical Emergencies (INEM)
- The Portuguese Blood Institute (IPS)
- The Institute of Financial Management and Informatics (IGIF)
- The Social Services for Health Personnel

- The National Institute of Health, Doctor Ricardo Jorge (INSA)[3]
- The National Institute of Drug Addiction (IDT).[4]

There are also four vertical programmes run by national bodies attached to the Ministry of Health: the National Council of Mental Health, the National Council on Prevention of Smoking, the National Committee on AIDS and the National Council of Oncology.

Legal provision has been made for a National Health Council**,** a consultative body for the Ministry of Health. Its function, in theory, is to represent all those concerned with the performance of health care: providers, patients, other health care employees, government departments in charge of health-related activities and other bodies.

Other ministries

Ministry of Finance

The creation of new posts within the NHS, whether hospital-based or not, requires the approval of the Ministry of Finance, which also determines the NHS budget based on a submission from the Ministry of Health. See the section *Third-party budget setting and resource allocation* for more information about this process.

Ministry of Labour and Social Insurance

This Ministry, formally the Ministry of Employment and Social Solidarity, is responsible for social benefits such as pensions, unemployment benefits and incapacity benefits. In 1995, 9.5% of GDP was allocated to social security. In 2000 this percentage rose to 12.1% *(12)*. The Ministry's collaboration with the Ministry of Health has improved in recent years. Joint projects include a review of certification for absence from work, a programme to improve coordination between health and social care services and an initiative to improve continuity of long term care for the elderly and disabled.

Ministry of Science and Higher Education

The Ministry of Science and Higher Education is responsible for undergraduate medical education and for academic degrees. The new government in April

[3] This institute promotes scientific research in the field of health and is the main reference laboratory for the public health sector. It also functions as the national health observatory and surveillance centre on health.

[4] Results from the merging of the former Service for Prevention and Treatment of Drug Addiction with the Portuguese Institute of Drug Addiction, under the aegis of the Ministry of Health.

2002 transferred part of the duties of the former Ministry of Education to the current Ministry. Specialty postgraduate training in Medicine, however, is the joint responsibility of the Medical Association and the Ministry of Health.

Regional health administrations (RHAs)

The NHS, though centrally financed by the Ministry of Health, has had since 1993 a strong regional structure comprising five health administrations: North, Centre, Lisbon and Vale do Tejo, Alentejo and the Algarve. In each region a health administration board, accountable to the Minister of Health, manages the NHS. Their management responsibilities are a mix of strategic management of population health, supervision and control of hospitals and centralized direct management responsibilities for primary care/NHS health centres.

The regional health administrations (RHAs) are responsible for the regional implementation of national health policy objectives and coordinate all levels of health care. They work in accordance with principles and directives issued in regional plans and by the Ministry of Health. Their main responsibilities are the development of strategic guidelines, coordination of all aspects of health care provision, supervision of management of hospitals and health centres, establishment of agreements and protocols with private bodies, and liaison with government bodies, *Misericórdias* and other private non-profit bodies, and municipal councils.

Regional health administrations are subdivided into eighteen sub-regions each with a sub-regional coordinator:

- North-Porto (main office), Braga, Bragança, Porto, Viana do Castelo and Vila Real;
- Centre-Coimbra (main office), Aveiro, Castelo Branco, Coimbra, Guarda, Leiria and Viseu;
- Lisbon and Vale do Tejo – Lisbon (main office), Santarém and Setúbal;
- Alentejo-Évora (main office), Beja, Évora and Portalegre;
- Algarve-Faro (main office).

Since 1998 each regional health administration (RHA) has established a Contracting Agency, a functionally autonomous entity with responsibility for contracting with hospitals, health centres and private for-profit and non-profit bodies. Its two main aims are to increase citizen participation in health decision-making and to develop the separation of purchasing and provider functions within the NHS. Legislation in 1999 created the Agencies National Council which was intended to set up and regulate the development of the contracting agencies. However, further governmental changes resulted in a slow down of the contracting impetus and the National Council was never effective.

Local government

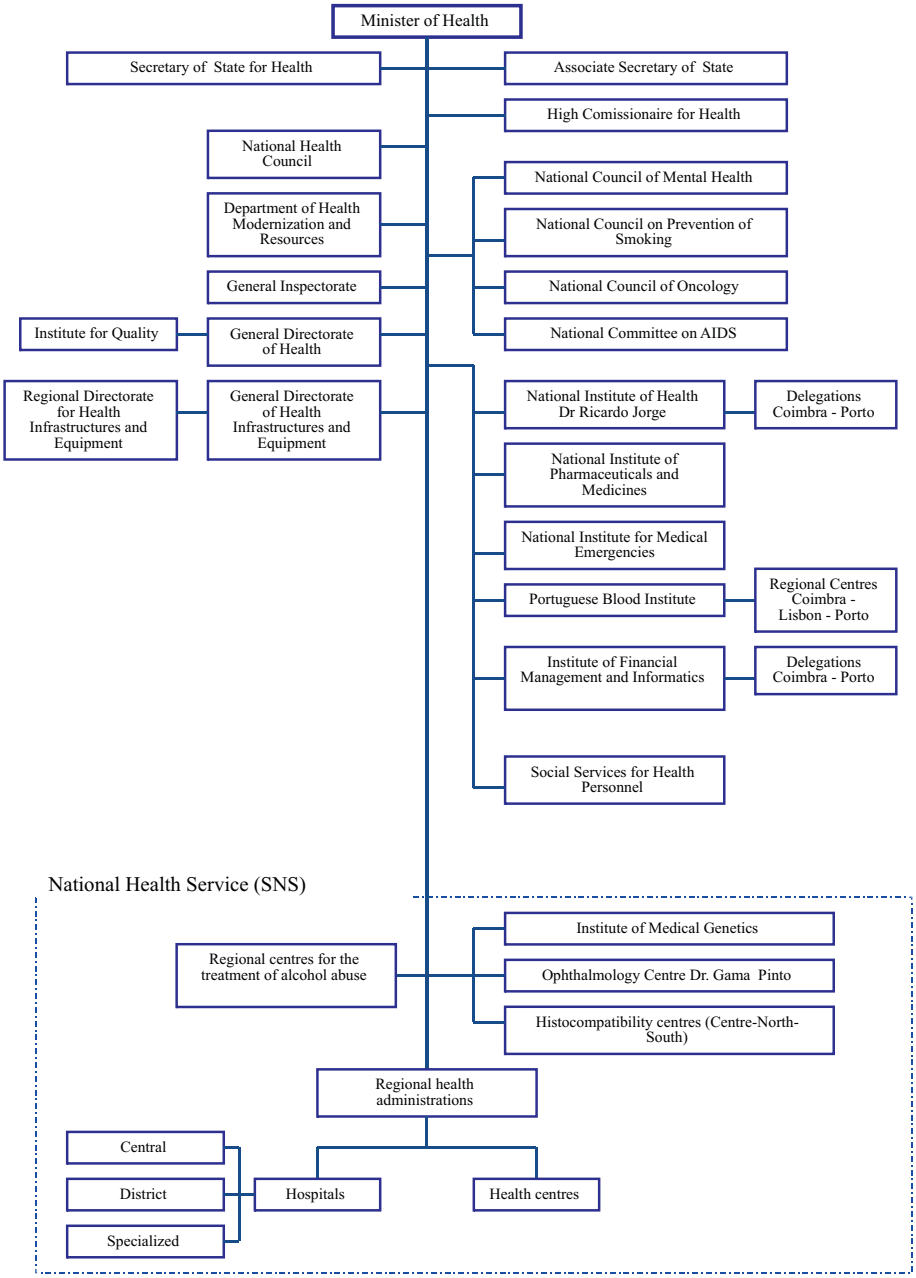
Below the region and sub-region are the municipalities. Health issues at this level are under the jurisdiction of the Municipal Health Commission. For the purposes of health care provision, boundaries are based on geographical proximity rather than administrative areas, so some communities may be included in neighbouring municipalities. This ensures that services are provided more quickly and easily. In some cases the larger urban communities have their own system of health care organization in order to meet the specific needs of the population.

There are a number of initiatives being undertaken in cooperation with the municipalities such as promoting greater traffic and pedestrian safety and encouraging physical exercise. Nutrition is also being promoted in close cooperation with the media, the educational system, sports organizations and local authorities. Portuguese Presidency of the European Union during the first six months of 2000 focused on food safety, starting with a white paper, along with major legislative reforms. Overall, though, the effective role of municipalities in the Portuguese health system is rather marginal. In recent years attempts have been made to establish partnerships between the central State and the municipalities with greater technical and financial capacities in respect to the building of new health centres, using external co-financing sources, particularly from the European Union. In spite of some good results, this practice is far from being consolidated. Also, the involvement of the municipalities in health promotion and improvement programmes, namely in child oral health, environmental health and behavioural orientation of risk groups have not expanded beyond a few specific projects.

Health subsystems

Two decades after the inception of the National Health Service (NHS) in Portugal, the historical remnants of the social welfare system still persist in the form of health insurance schemes for which membership is based on professional or occupational category. These are often referred to as health "subsystems" (*subsistemas*) and this term will be used throughout the report. In addition to the cover provided by the NHS, about 25% of the population is covered by the health subsystems. Health care is provided either directly or by contract with private or public providers (in some cases by a combination of both). Access is generally limited to members of a specific profession and their families. The main funds operating in the public and private sector are:

Fig 2. Organizational chart of Ministry of Health structure



- ADSE (*Assistência a Doença dos Servidores do Estado*) for civil servants;
- ADM (*Assistência na Doença aos Militares*) for military personnel, with three separate bodies: ADME (*Assistência na Doença aos Militares do Exercito*) for the army, ADMA (*Assistência na Doença aos Militares da Armada*) for the Navy; ADMFA (*Assistência na Doença aos Militares da Forca Aérea*) for the Air Force;
- SAD PSP (Assistência na Doença da Polícia de Segurança Pública) for Police Agents;
- IOS-CTT (*Instituto das Obras Sociais dos CTT*) for postal employees;
- PT-ACS (*Portugal Telecom – Associação de Cuidados de Saude*) for the employees of the public telecom operator;
- SAMS (*Serviços de Assistência Médico-Social*) for bank and associated insurance employees, with three regional branches: Central, North, South and Islands;
- SSINCM (*Serviços Sociais da Imprensa Nacional Casa da Moeda*) for employees of the national mint;
- SSMJ (*Serviços Sociais do Ministério da Justiça*) for employees of the Ministry of Justice;
- SSCGD (*Serviços Sociais da Caixa Geral de Depósitos*) for employees of the main public bank.

There are also a few additional smaller funds. Most health subsystems are members of the National Association of Health Subsystems. Some of the funds are associated with and run by trade unions and managed by boards of elected members. The largest fund, ADSE, is controlled by the Ministry of Finance. It covers 15% of the population, corresponding to 60% of all subsystem members (*23*) and includes amongst its members all employees of the NHS.

Private health care providers mainly fulfil a supplementary role to the NHS rather than providing a global alternative to it. Private sector activity continues to prosper despite the establishment of the NHS and now mainly provides diagnostic, therapeutic and dental services as well as some ambulatory consultations, rehabilitation and psychiatric care services. The key agents are private practitioners, *Misericórdias,* and private hospitals and clinics.

The level of activity in the private sector compared to the public sector can be seen in Table 5. The majority of specialist consultations take place in the private sector whereas the public sector provides the overwhelming majority of general practice consultations. Overall the private sector accounts for 32% of all medical consultations.

Table 5. Percentage of medical consultations in the public and private sectors, 1995/1996 and 1998/1999

	General		Specialist		Total	
	1995/1996	1998/1999	1995/1996	1998/1999	1995/1996	1998/1999
Public	58.5	55.8	11.1	12.3	69.6	68.1
Private	14.1	13.2	16.3	18.7	30.4	31.9
For profit	–	12.3	–	18.1	–	30.4
Non for profit (social)	–	0.9	–	0.6	–	1.5
Total	72.6	69.0	27.4	31.0	100.0	100.0

Source: Health Interview Surveys 1995/1996 and 1998/1999.

Note: Figures are based on responses to a National Health Survey question about the last visit to a doctor. This included both the type of visit, i.e. to a general practitioners or several specialties, and where the consultation took place, i.e. health centres, public hospitals, private clinics, etc. No adjustment was made for possible differences in age, sex or place of residence between the survey respondents and the general population.

Misericórdias

Misericórdias are independent non-profit institutions with a charitable background. The Lisbon *Misericórdia* is an exception, being a public enterprise with a board nominated jointly by the Ministry of Health and the Ministry of Labour and Social Security rather than elected by members. These institutions currently operate very few hospitals, despite their historical role as one of the main providers of health care. Their hospitals provide services including orthopaedics, plastic surgery, internal medicine and complementary therapies, but usually no acute or emergency services. The role of the *Misericórdias* in the Portuguese Health System seems to be growing under the political agenda of the new government. They have been given a priority role as providers in the official programme to diminish surgical waiting lists (PECLEC), it has been announced that they will be given back their ownership of pharmacies, which was curtailed when they were made public after the democratic revolution of 1974.

Private hospitals, and other privately provided services

In 1999, 41% of hospitals in Portugal were privately owned. Of these almost half belonged to for-profit organizations. However, only 23% of the total bed stock is privately owned.[5] One of the main areas of private activity is the provision of diagnostic tests: pathology, blood tests and X-rays are mostly provided privately, as are physiotherapy, dental care and renal dialysis. Over

[5] See the section on *Secondary and tertiary care* for more information about hospitals and hospital beds in the public and private sectors.

80% of the total NHS expenditure for renal dialysis in 2001 referred to transfers to the private sector, corresponding to an average annual increase of about 10% in the last five years *(24)*.

Private health insurance companies

On the financing side, the main private actors are the private health insurance companies. Voluntary health insurance (VHI) was introduced in 1978. Initially only group policies were offered, but individual policies have also been available since 1982. Approximately 10% of the population was covered by private insurance in 1998. Most policies are in the form of group insurance provided by the employer: fewer than 10% of people with private health insurance have individual policies.

Professional associations and unions

There are three main representative organizations for doctors: the Medical Association (Ordem dos Médicos) and two trade unions. Membership in the Medical Association is obligatory. Its functions include:

- accreditation and granting of license to practice
- accreditation and certification of specialist training[6]
- reinforcement of the disciplinary code with powers to censure and punish doctors.

Equivalent bodies for pharmacists (Ordem dos Farmacêuticos) and for dentists (Ordem dos Médicos Dentistas) have similar regulatory and disciplinary powers. More recently (1998) the National Nurses Association (Ordem dos Enfermeiros) was also established.

The National Association of Pharmacies covers almost 95% of pharmacies, although membership is optional. It has a powerful corporate role and operates as a fund handling the majority of pharmaceutical payments between the NHS and the associated pharmacies. Its mission includes modernization of the facilities and organizational models, continuous education and training of the pharmacists, dissemination of state-of-the art practices in pharmaceuticals management and dispensing, implementation of a global computerized information system for the pharmacies and collaboration with the State in projects and campaigns in the public health domain.

[6] This is a joint responsibility with the Ministry of Health (see *Human Resources and training*).

Public and consumer groups

Organizations advocating specifically on behalf of patients are still in their infancy, there are a number of quite active disease-based advocacy groups, such as those devoted to diabetics, haemophilia and HIV/AIDS. These are narrow interest groups, which usually promote the allocation of more resources for the care and treatment of patients in those particular disease groups. The development of mechanisms for giving citizens a voice in their health care was part of the remit of some regional contracting agencies. The creation in some contracting agencies of special commissions, comprising a mix of in-house professionals and members of municipalities and of civil associations was intended to stimulate the participation of community representatives in the health administration decision process.

Various initiatives are being undertaken to encourage citizens' participation in health, to increase patients' trust in the health system, to encourage the population to take responsibility for its own health and to obtain better quality and more appropriate care for users. For example, there are formal mechanisms for consumers to make complaints. In every public medical institution there is an office where patients can complain about any aspect of the NHS (called the Users' Office). All complaints are dealt with through the Users' Office and in case of medical negligence, may be referred to the Medical Association. However, patients are free to write directly to the regional coordinators or the Minister of Health or to pursue their case through the courts. This is, of course, expensive and few people do so. The majority of the complaints relate to organizational issues such as waiting times or service amenities rather than technical matters regarding specific treatments or interventions.

In order to support the Health Administration in dealing adequately with these matters, a National Observatory of Users' Offices was created in 2000 under the coordination of the Ministry of Health (Department of Health Modernization and Resources). To make it more operational, five regional observatories (one in each RHA) were also developed to promote better use of NHS services and facilities, thus providing higher levels of user satisfaction while guaranteeing an effective citizen involvement in health care.

Planning, regulation and management

The main functions in the system – planning, regulation, financing and management – overlap, due to the integrated nature of the health provision model, wherein the government is both the main provider and payer of care. Although separating these roles has been a key issue in reform efforts since 1966, it has not been implemented so far.

The Portuguese Constitution stipulates that the economic and social organization of the country must be guided, coordinated and disciplined by a national plan. The national plan must ensure, for example, the harmonious development of different sectors and regions, the efficient use of productive resources, and the equitable allocation of resources amongst the population and between regions. As the NHS does not have its own central administration, most of the planning, regulation and management functions are carried out by the Ministry of Health. There are central, regional and sector planning bodies. Central planning for health is mainly carried out by the General Directorate of Health, based on plans submitted by the RHAs boards. The High Commissioner for Health has authority over the RHAs. Consequently, a framework has been created to avoid regions pursuing national policies at their own paces, as has happened in the past.

A formal national health strategy and health care policy with quantified objectives and targets was defined for the first time in 1998, for the period 1998–2002. A revised version of this policy document was produced in 1999 involving a broader range of social partners and stakeholders. It was made public by the Ministry of Health under the suggestive title "Health: a Commitment". In fact, this structuring tool was a true commitment of the administration to the citizens. In 2002, the High Commissioner for Health produced a national Report on Health Gains revising the achievements and pitfalls of the strategy for the period 1998–2002 *(25)*.

Capital planning (equipment and facilities)

A separate central investment plan governs capital outlays within the NHS. Capital investment traditionally has been the responsibility of the General Directorate of Health. However a functional revision of the Institute for Financial Management and Informatics in 2000 extended its responsibility to that area. Most of the investment is provided internally by the Portuguese state budget through the Central Administration's Investment and Development Plan (PIDDAC). There has also been joint funding of hospital and health centre developments with the European Union through the European Regional Development Fund (ERDF).

Legislation in 1988 gave the Ministry of Health total control over the procurement and installation of high-technology equipment in the NHS and private sector. The legal guidelines for installing heavy equipment established ratios of equipment per inhabitant; these were abolished in 1995. However, the principle of prior authorization by the Ministry of Health for equipment within the NHS was retained. In 1998 a national list of health equipment was published, describing the distribution of specific items of equipment and services throughout

the country, regional variations in equipment, the amount of equipment in public and private facilities and the age of equipment. This list has not been updated and is not clear at present how useful it will be for planning purposes. (See also "Mechanisms for controlling health care technologies" in the section *Pharmaceuticals and health care technology assessment*).

In 2001 the Ministry of Health issued formal guidelines for the development of Regional Master Plans (RMP) for NHS hospital and primary care facilities. The intention was to turn the regional plans into core instruments for the harmonious and integrated development of NHS infrastructures at the national level. At the start of the new government in April 2002, the regional plans were at different stages of work in the five RHA, pending political re-evaluation for further developments.

Human resource planning

All NHS staff are civil servants and all new posts have to be approved by the Ministry of Finance. A *numerus clausus* was introduced in 1977, limiting the number of places available in medical schools in response to the excess of doctors created after the revolution in 1974, when many from the colonies returned to Portugal to complete their training. These excessive barriers to medical graduation and to other health professional careers, namely nursing, have necessitated recruitment of professionals from other countries. In 1998, the average number of nurses per 1000 population was 3.8 in Portugal versus a European Union average of 6.6, and by 2000 it had increased to 3.7 versus 7.5 per thousand, respectively *(2)*.

The striking lack of nursing personnel, the relative scarcity of doctors and the imbalance of primary care clinicians versus hospital specialists are some of the visible signs of the weakness of public health policy for human resources. A resolution of the Council of Ministers in December 1998 pointed out some solutions for this problem: founding of health sciences universities in provincial towns, creation of a new graduate programme in medicine in the northern region of the country, improvement of existing conditions for the current graduates in medicine and dentistry, reorganization of the nursing and technological public schools network, a gradual increase in the number of student admissions and creation of various partnerships between the Ministry of Health and the Ministry of Science and Graduate Education.

A strategic plan for health personnel education and training was another relevant output of the resolution. A working document was presented in December 2001, with a detailed needs assessment considering the average European staffing levels. In general terms, the document draws attention to

regional asymmetries in the distribution of doctors (the absolute numbers are within the European averages, however) and the need to increase the number of *numerus clausus*. The chronic under-staffing of nurses in primary and continuity care is also strongly addressed, setting a target of NHS nurse staffing coming close to the European average by 2010.

Management

Primary health care centres (described under *Primary health care*) are directly under the managerial control of the RHAs through the sub-regional coordinators. Routine management duties are ensured by a three-member council comprising a general practitioner (director), a nurse and an administrative member. The so-called "health centres of the third generation" with administrative and financial autonomy were expected to bring added value to the health administration, through a more accountable management model. This reform, though, was abandoned and a different primary health care reform was initiated after April 2002, the principles of which have been recently approved (Decree-Law 60/2003). The new model concentrates executive responsibility in one director, who does not have to be a general practitioner or other medical doctor. When the director is not a medical doctor, one is appointed to be responsible for the coordination of medical care.

Public hospitals are managed by a four-member board consisting of a president, usually a doctor, a chief executive officer, a head doctor and a head nurse, all appointed by the Ministry of Health (previous to legislation issued in 2002, the head doctor and head nurse were elected by peers). This composition, though, has been slightly changed in line with the recently transformed public enterprises. The management boards of these new hospital firms comprise a president plus two executive members; the head doctor and head nurse have been assigned a more technical role, in spite of their voting status at the board.

The development of innovative hospital management models is a path that has been slowly but steadily pursued within the NHS. A legal reform which was part of the 1990 Law on the Fundamental Principles of Health stated that management of NHS institutions and services could be handed over to the private sector through management contracts. These contracts could be applied to the whole health institution, i.e. hospital or health centre, a particular service or any functionally autonomous part of them. Health institutions and services managed in this way would be included in the NHS, thus obliging the management authorities to guarantee access to health care in the same way as other NHS services.

The first experience was initiated in 1995, allowing a public hospital to be put under the management control of a private consortium. This experimental type of management is currently operating at the *Fernando Fonseca Hospital* in Amadora, part of greater Lisbon. In order to facilitate the movement of personnel from the public hospitals to this privately-managed hospital, the state guarantees a position for all personnel if they return to the NHS within three years. This is causing retention problems for the privately-managed hospital as some doctors leave their jobs just before the three-year deadline is reached. In 1998, a different model applied to the hospital in S. Sebastião, in the North. The aim was not so much a withdrawal of the state from the providing function, but rather the implementation of a scheme of entrepreneurial management in a public hospital. Essentially, the new model changed from public to commercial law in purchasing goods and services and in personnel recruitment and management. The very same objective was pursued in the legal status conferred to the Barlavento Hospital (in the Algarve) in 2001 and by the creation of the Matosinhos Local Health Unit (also in the North) in 1999. The latter, though, integrates the hospital and surrounding health centres in a unique provider entity.

In November 2002, the new government issued legislation initiating progressive change in the management model of all public hospitals into entrepreneurial schemes of different types, ranging from the standard public status to private for-profit organizations. A public enterprise model is expected to be the dominant solution. A group of 34 hospitals of medium dimension (between 150 and 600 beds), corresponding to about 40% of all NHS hospitals, were selected to be transformed into public enterprises at the beginning of 2003. In addition to the intended greater flexibility and accountability in resource use, a major implication is the progressive change of the NHS personnel status from salaried civil servants to private employees working under negotiable contracts.

Regulation

The main responsibility for regulation of policy objectives and national quality standards lies at the central level with the General Directorate of Health. Under this body, a functionally separate institute for quality was created in 1999. Its scope covers the development of policies, strategies and procedures that support the professionals and the provider organizations in the continuous improvement of quality for the delivery of health care. It also promotes methods of certification of health institutions and the continuous education of professionals. Progress in this area has been achieved with the MoniQuor organizational quality model applied to primary care health centres and use of the King's Fund Certification

Process (a partnership of the Institute for Quality and the British King's Fund), now underway in more than one third of NHS hospitals.

With respect to regulatory management mechanisms, the Portuguese system might be viewed as highly normative, with extensive legislative provisions. There are, for example, numerous and sometimes very restrictive controls over pharmaceutical goods, high-technology equipment and the education, training and registration of health personnel. The defined rules and procedures, however, are not always adhered to or enforced, leading to what might be called a "management regulation deficit" of the health statutory system. Recognition that entrepreneurial initiatives require adequate measures to control what may otherwise be self-interested decisions is making the issue of management regulation a matter of discussion. An independent commission has been created to monitor the performance of the new public enterprise hospitals. Later on, its scope will be also extended to the new facilities to be run under public-private partnerships. The overall objective of the new "Health Regulation Entity" is to guarantee the convergence of all types of health partners in providing public service while respecting adequate performance and quality levels.

The National Institute of Pharmaceuticals and Medicine (INFARMED), established in 1993, was reorganized in 1999 to meet the new and reinforced European Union demands in the area of pharmaceuticals. It is responsible for the regulation of drugs and medical equipment, and supported by the Pharmaceutical Inspection Service, Pharmacovigilance Service and The Official Laboratory for Pharmaceutical Quality Control. A full description of their respective functions is given under "Regulation and Control of Pharmaceuticals".

Finally, the Court of Accounts, as an independent body that conducts periodical external auditing of the NHS performance, has in recent years produced some critical reports on the sector. These analyses have highlighted major organizational and financial problems and have made recommendations.

Decentralization of the health care system

Decentralization is formally a key word of the NHS constitutional framework. The Law on the Fundamental Principles of Health (1990) states that the NHS is managed at the regional level, with responsibility for the health status of the corresponding population, the coordination of the health services provision at all levels and the allocation of financial resources according to the population needs. This is in line with the reform trends in many European countries, which have regarded decentralization as an effective means to improve service delivery,

to better allocate resources according to need, to involve the community in health decision-making and to reduce inequities in health. In practice, however, responsibility for planning and resource allocation in the Portuguese health care system has remained highly centralized even after the current five regional health administrations were established in 1993. In theory, the creation of the RHA conferred financial responsibility: each RHA was to be given a budget from which to provide health care services for a defined population. In practice, however, the RHA autonomy over budget setting and spending has been limited to primary care, since hospital budgets continued to be defined and allocated by the central authority. The regional contracting agencies created in 1997 were expected to further decentralize resource allocation responsibility through the gradual implementation of contracting arrangements with hospitals and health centres (through the sub-regional coordination levels). However, uncertainties about the role of these entities have hampered their effectiveness.

The restructuring of the health services organization, including the sub-regional coordination levels at each RHA and the set up of health units, was part of a broader strategy to try and integrate and coordinate levels of provision. The fragmented way in which services had been organized locally was reflected in the separation of primary care from secondary and tertiary care within the hierarchy of the Ministry of Health: the hospitals had been the direct responsibility of the General Directorate of Hospitals and the health centres fell under the direct hierarchical authority of the General Directorate of Primary Health Care. These two directorates were merged to form the new General Directorate of Health.

At the hospital level, the delegation of responsibility down the line of management, allowing lower-level managers greater power to deploy resources more efficiently was the rationale for the creation of Responsibility Centres. These would group hospital services and units of an adequate management dimension under criteria of homogeneity of production and complementarities of objectives, aiming at a better coordination of medical specialties, cost control and higher competitive strength. Although legislation was enacted in 1999 to set up the framework for the creation of responsibility centres at NHS hospitals, most did not go beyond an experimental status.

Successful decentralization needs a specific social and cultural environment, in addition to laws and regulations. The historically centralized nature of the Portuguese health care system will be changed only when the reform initiatives last long enough to guarantee ideological certainty in the implementation of the needed changes.

Health care financing and expenditure

Main system of financing and coverage

Like most European systems, the Portuguese health care system is a mix of public and private financing. The NHS, which provides universal coverage, is predominantly funded through general taxation. The health subsystems, which provide either comprehensive or partial health care coverage to about a quarter of the population, are funded mainly through employee and employer contributions (including state contributions as an employer). A large proportion of funding is private, mainly in the form of direct payments by the patient and to a lesser extent in the form of premium to private insurance schemes and mutual institutions, which cover respectively 10% and 6.5% of the population *(26, 27)*. Table 6 shows the percentage of total health expenditure (THE) financed through public and private agents. Public expenditure, which comes mainly from taxation (over 90%) includes funding of direct provision within the NHS and subsidies to the health subsystems for public sector employees. Private expenditure basically includes out-of-pocket payments and voluntary health insurance.

Although there is currently no available updated information on expenditure by specific agents, out-of-pocket payments in Portugal are perceived to be among the highest in Europe, having accounted for over 44% of the THE in 1995 as reported in the OECD 1998 database. This number, though, seems to be excessive and inconsistent with the revised time series published in 2002, where private expenditure as a whole remains under 35% of the THE. Nevertheless, following the conclusions of international studies (*28*), one may state that, overall, the theoretically progressive, redistributive income tax system

in Portugal turns out to be slightly regressive, reflecting a high share of out-of-pocket payments, along with a heavy reliance on indirect taxes. Indirect taxes on goods and services account for 42.6% of total tax revenue, whereas taxes on income and profits represent 28.5% of total tax revenue *(23)*. In other words, health expenditure falls more heavily on low-income households.

Table 6. Main sources of finance by funding agents (as % of total expenditure on health care), 1990 – 2001

Source of finance	1990	1991	1992	1993	1994	1995	1997	1999	2000	2001
Public	65.5	62.8	59.6	63.0	63.4	61.7	64.8	67.6	68.5	69.0
Private	34.5	37.2	40.0	37.0	36.6	38.2	35.1	32.4	31.5	31.0

Source: OECD Health data, 2003, 2nd edition.

It would be desirable that future data on the main sources of health financing in Portugal provide details about public and private agents, in order to give a more accurate picture of the situation. Out-of-pocket payments, for example, can be partly deducted from taxes up to a certain limit, meaning that there is a portion of public funding of those payments through the tax system. In the absence of those values and without a clear identification of the "true" out-of-pocket financing, analyses can be misleading.

Public financing

Taxation

The NHS is mainly financed directly by general taxes. Tax revenue also funds the employer contribution for state and public sector employees. A soft budget for total NHS expenditures is established within the annual national budget. Actual health expenditures usually exceed the budget limits by wide margins, requiring the approval of supplementary budgets. Apart from direct transfers from the State Budget, the NHS raises its own revenues, mostly generated by hospitals. These include payments received from patients for special services such as private rooms, payments from beneficiaries of health subsystems and private insurers, payment received for the hiring of premises and equipment, income from investment, donations, fines, flat-rate admission charges and co-payments for drugs, consultations and diagnostic tests. In total this accounts for about 8% of total NHS revenue and is estimated to account for as much as 20% of the overall hospital budget.

Health subsystems

The health subsystems, which pre-date the establishment of the NHS, account for about 5% of total health expenditure and are normally financed through employer and employee contributions, with the largest portion paid by the employer. Most beneficiaries of public sector health subsystems such as those covering civil servants, contribute 1% of their salary. In private subsystems, such as those of private enterprises, the contribution can vary and even be symbolic or inexistent. Generally the benefits received under subsystem coverage exceed those provided within the NHS. The employer and employee contributions are often insufficient to cover the full costs of care and consequently a significant proportion of costs is shifted onto the NHS. Traditionally, most enrolees of these funds did not declare their membership when receiving treatment within the NHS, thus exempting the funds from responsibility for the full costs of their members' care. The mandatory use of the Patient Identity Card is progressively avoiding such duplications of coverage since it clarifies the financial responsibility for the patient.

The relationship between the NHS and the subsystems was explicitly addressed by the publication of legislation in late 1998. A scheme of systemic controlled "opting-out" was devised, by which the financial responsibility for personal care in the NHS could be transferred to public or private entities by means of a contribution to be established in a contract with the Ministry of Health. Three agreements have been made between the Ministry of Health and subsystems. The State transfers annually to those entities a capitated amount for each beneficiary and in turn, the corresponding subsystem pays the whole price of NHS hospital services and ceases to benefit from NHS co-payments in drug dispensing. The benefits of the improved articulation between the NHS and the subsystems are unquestionable. However, there is striking evidence a discrepancy between the ease of financial transfers from the Ministry of Health to the subsystems and the difficulty NHS services have in invoicing and billing the services rendered to the subsystems' beneficiaries.

Health care benefits and rationing

Theoretically, there are no services explicitly excluded from NHS coverage. However, throughout Portugal, there are some types of care that should be provided by the NHS but are not available in practice (for example, adult dental care). According to the Health Interview Survey of 1995/1996, about 92% of dental consultations were in the private sector. The NHS predominantly provides

direct acute hospital care, general practice and mother and child care. Specialist and dental consultations, diagnostic services and renal dialysis and physiotherapy treatments are more commonly provided in the private sector either under contractual arrangements with the NHS or through reimbursement schemes. There are also gaps in provision due to geographical inequities, with some areas still unable to provide certain specialist services. However, the high levels of investment in regional facilities outside Lisbon and Porto in recent years will probably make these new well-equipped environments more attractive to doctors and other health professionals.

Pharmaceuticals

A national drug formulary of active substances and ingredients lists all drugs approved for use in Portuguese NHS hospitals. Any prescription of drugs not on the list must be approved by a committee of pharmacists and doctors in each hospital. About 30% of drugs prescribed in hospitals are outside the formulary. In the ambulatory sector and outpatient departments, doctors are free to prescribe any drug available on the Portuguese drug market; almost all of them are partially reimbursed or totally paid by the NHS (for more detail see the section *Pharmaceuticals and Health Care Technology Assessment*).

Rationing/ waiting lists

It is not possible to identify any areas of health care where explicit choices have been made about rationing. There have been discussions about defining a basic package of health care benefits, but until now there has been no sign of such a policy being implemented. Though there is no rationing *per se*, there is de facto rationing within the NHS as a result of difficulties of access, the absence of specialists and doctors in rural areas and the lack of certain services. Waiting lists are often viewed as a means of rationing public sector care since they may cause people to opt for the private sector. But waiting lists are a far more complex subject that may result from the interaction of various factors, ranging from increased demand as a consequence of more access to services and better diagnostic technologies, or NHS internal productivity constraints resulting from conflicts of professional interests and management deficits, *inter alia*.

Complementary sources of financing

Voluntary health insurance

Approximately 10% of the population has taken out some form of voluntary health insurance (VHI). Mostly this is group insurance provided by the employer, since fewer than 10% of people with private health insurance have individual policies. The majority of VHI policies in Portugal are valid for only one year and consequently companies have the power to cancel and/or refuse to renew the contract. In addition, policies tend to be selective and lack comprehensiveness: as age is strongly associated with increased health care costs, many companies will try to exclude anyone over 65 or 70 years old.

A tax reform in 1988 made most health expenditures, including co-payments and payments to private doctors, fully deductible from taxable personal income. Tax deduction for health insurance premium was covered by a general ceiling on insurance premiums up until 1999 when a stand-alone limit was introduced. This policy meant there was little incentive to purchase or use private insurance. The value of this implicit government subsidy has been estimated at 4.8% of direct tax revenues or between 0.2% and 0.3% GDP. Incentives are skewed in favour of out-of-pocket expenditure.

Corporate insurance policies are more generous as the corporate tax laws are more liberal. Even so, few firms currently provide private group health insurance. It seems likely, however, that any further growth in the market will be in group and employer insurance policies. The main reasons for a potential growth in the private insurance market include the current tax incentives encouraging high earners and companies to take out private health insurance, the social status which VHI confers on enrolees since it is an indicator of high income, and difficulty in accessing the NHS and dissatisfaction with its services. The insurance premium global amount has actually increased in the period 1995–1999 at an annual average rate of circa 25%.

Mutual funds

About 7% of the population is covered by mutual funds, which are funded through voluntary contributions. They are non-profit organizations that provide limited cover for consultations, drugs and more rarely some inpatient care. They do not exclusively provide health benefits to associates so it is difficult to calculate the health component of the contributions.

Out-of-pocket payments

In recent years, there has been increasing use of co-payments in health care with the aim of making consumers more cost-aware. Out-of-pocket payments have consistently accounted for over 30% of total health expenditure over the last ten years (see Table 6). The majority of these payments (59.9% in 1994/1995 and 55.1% in 2000) are for drugs and therapeutic products (see Table 7). Medical, nursing and paramedical services and hospital expenses make up the bulk of the rest. These three categories of expenditure represent over 90% of a household's out-of-pocket payments on health care. The co-payments on pharmaceuticals vary from 40% to 100% depending on the therapeutic value of the drug. Pensioners pay a reduced co-payment and the chronically ill are exempt from co-payments on some courses of medication. More detail about the level of co-payment for pharmaceuticals is given in the section on *Pharmaceutical co-payments.*

Table 7. Out-of-pocket spending on health, by type of expenditure (% of total out-of- pocket health expenditure), 1989/1990; 1994/1995; 2000.

	1989/1990	1994/1995	2000
Drugs and therapeutic products	56.4	59.9	55.1
Medical, nursing and paramedical services	36.2	36.8	40.1
Hospital expenses	6.3	2.6	4.7
Other	1.1	0.7	0.1

Source: National Institute for Statistics (household budgets survey 2000).

User charges are levied on many NHS services. Flat rate charges exist for consultations (primary care and hospital outpatient visits), emergency visits, home visits, diagnostic tests and therapeutic procedures. Exemptions apply for low income patients, the physically handicapped or chronically ill, pregnant women, children up to 12 years of age, drug addicts in rehabilitation and chronic mental patients. Transportation costs are paid by the patient, except in special circumstances, such as long distance travelling, in which case costs are subsidized.

Public/private partnerships

Following exploratory work in 1999, directed at the conceptual discussion of private investment in State-owned health facilities, the new government has elected this issue as one of the priorities of the health agenda. The objective is to improve the NHS providing capacity while guaranteeing more value for

money, by associating private entities in the public responsibility to build, maintain and operate health facilities. From a financial point of view, the risk transfer from the State to the private operators alleviates the former from the initial investment burden, which would be otherwise excessive considering the financial constraints of the public sector. Objections have been raised in some political sectors concerning the long term consequences of this option. The model draws much on the experience of the British NHS Project Finance Initiative (PFI), although consideration is being given to including clinical services in the package. Legal provisions have recently been undertaken (Decree Law 185/2002) to create the adequate framework for the further implementation of actual partnerships. Although the intention is to extend the model to virtually all types of health facilities, priority will be given to hospitals. Between 2003 and 2006, ten hospital projects will be launched under public-private partnerships, including replacement of seven facilities and building of two new hospitals.

External funding

Since 1994 there has been a programme of investment in health care services, co-financed by the European Union. Through the European Regional Development Fund (ERDF) significant investments have been made. For each co-financed project the Portuguese contribution must be at least 25% of total investment. The external funding complements the Ministry of Health's own capital expenditure plans. Preparatory work is taking place in order to design and implement a new strategic plan for health with a 10-year horizon. A broad process of internal consultation has been initiated, as has external consultation, with WHO support, in order to learn from the experience of other European countries.

The health funds for 2000–2006 (the Saúde XXI programme) have been a result of negotiations between Portugal and the European Union under the strategic assumption that health promotion and prevention along with supporting information systems and technologies are the pillars of any real investment in the health sector. There has been, therefore, a shift of focus from the previous funding of building and infrastructure maintenance to the funding of strategic health-structuring areas. The Saúde XXI programme is structured along three development axes: health promotion and disease prevention, access to quality health care services (including a vast network of hospital referral arrangements); and promotion of health partnerships between the public and the private for-profit and non-profit sectors, with a special emphasis in home care, long term care and family health.

Health care expenditure

Total health care expenditure in Portugal has risen steadily from as little as 3% in 1970 to its present level of 8.2% of GDP, fairly close to the European Union average of 8.7% (*2*; see Fig. 3). Portugal now spends more than both Italy and Spain, despite having spent considerably less than they in 1970. Table 8 also shows that the amount spent on health care has risen in both absolute and relative terms over the last three decades. It appears that Portugal has not contained health care expenditure growth as successfully as other southern European countries. One plausible explanation lies in the political reluctance to impose cost control measures after it was assumed that investment was needed in order to build up new facilities and to promote the expansion of NHS coverage *(23)*.

Table 8. Trends in health care expenditure, 1970 – 2001

Total expenditure on health care	1970	1980	1990	1995	1996	1997	1998	1999	2000	2001
Per capita in current prices (euros)	3	40	312	639	699	752	812	896	995	1 065
Per capita in constant prices (1995) euros	103	307	464	669	708	740	775	809	863	888
Per capita (US $PPP)	40	265	611	1 134	1 195	1 341	1 365	1 469	1 519	1 613
Share of GDP (%)	2.6	5.6	6.2	8.3	8.5	8.6	8.6	8.7	9.0	9.2
Public as % of total expenditure on health care	59.0	64.3	65.5	61.7	64.7	64.8	65.4	67.6	68.5	69.0

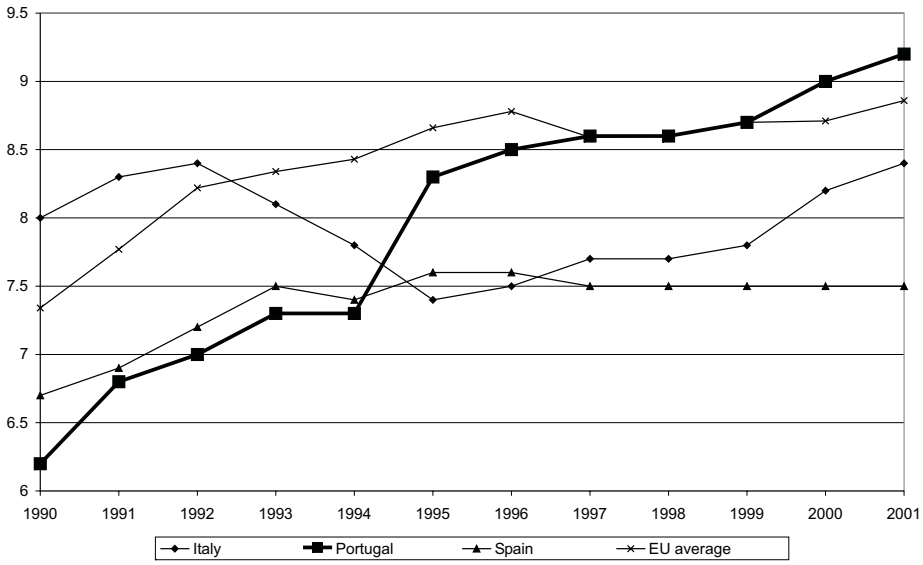
Source: OECD Health data 2003, 2nd edition.

Table 9. Trends in health care expenditure as a share of GDP (%) in Portugal and selected European countries, 1970 – 2001

	1970	1975	1980	1985	1990	1995	2000	2001
Ireland	5.1	7.4	8.4	7.6	6.1	6.8	6.4	6.5
Italy	–	–	–	–	8.0	7.4	8.2	8.4
Portugal	2.6	5.4	5.6	6.0	6.2	8.3	9.0	9.2
Spain	3.6	4.7	5.4	5.5	6.7	7.6	7.5	7.5
EU average	5.2	6.8	7.0	7.2	7.3	8.7	8.7	8.9

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

Fig. 3. Trends in health care expenditure as a share of GDP (%), in Portugal and selected European countries, 1990–2001



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

Fig. 4 shows that Portugal's GDP spent on health care is near the European Union average of 8.7% and in line with the many member countries. However, expenditure presented as a percentage of GDP is susceptible to fluctuations due to economic growth and does not account for differences in population size. Therefore direct comparisons should be made cautiously. Using US$ purchasing power parity (PPP) per capita as a measure of health care expenditure (see Fig. 5), Portugal falls well below the European Union average of US $ PPP 2123. Portugal spent US $ PPP 1441 per capita on health care in 2000, which is closer to other EU countries,[7] such as Greece (1339) and Spain (1556), but far from other countries with Beveridge type health systems, such as Denmark (2420), Italy (2032), or the United Kingdom (1763). In spite of the caution one should have in interpreting these data, due to a number of methodological problems in the calculation of PPP, Portugal appears to spend a significant amount on healthcare given its level of economic development *(23)*.

One of the major drawbacks of the Portuguese health system lies in the articulation between the State and non-statutory sectors. The proportion of total health expenditure from public sources (funds raised through taxation or

[7] All figures expressed in US$ PPP.

publicly-funded health subsystems) is around 70% (see Fig. 6), still one of the lowest in the European Union, compared to tax-based systems such as those in Denmark (82%), Italy (74%), and the United Kingdom (81%). Paradoxically, Portugal has a public integrated model of health financing where the State is simultaneously responsible for funding and delivering care and the owner of health equipment and facilities. Public health expenditure as a percentage of total health expenditure has risen steadily over the last 30 years, from 59% in 1970 to over 70% in 2000.

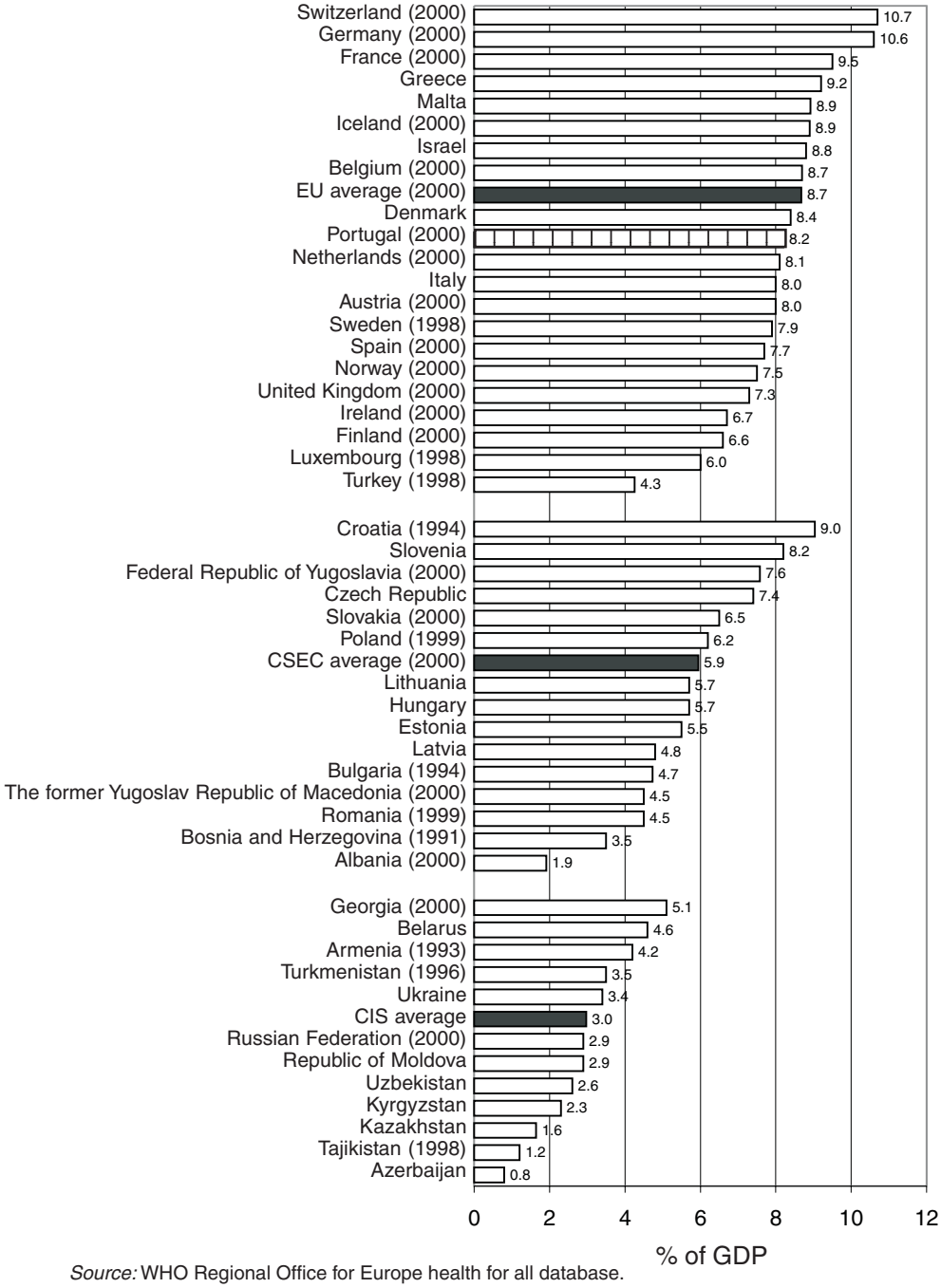
Table 10 shows general trends in the expenditure on different categories of health service provision. Pharmaceuticals consume a growing proportion of health expenditure up from 20% in 1980 to almost 26% in 1998. Inpatient care accounted for 36% of total expenditure in 1995, whereas ambulatory care was only 24%, but considerable activity in the private sector suggest that these numbers might be underestimated. As in many other health systems, despite attempts to prioritize primary health care over specialist hospital-based medicine, expenditure on ambulatory care services remains lower than that for inpatient care. The system's reliance on hospitals may be partly due to health centres' difficulties in providing ambulatory care, resulting in large numbers of users attending emergency departments or specialist outpatient clinics.

Table 10. Health care expenditure by categories (as % of total expenditure on health care) 1980 – 1998

	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
Inpatient care	28.7	26.4	32.3	33.0	35.0	36.5	36.8	33.4	–	–	–
Ambulatory care public only	25.2	26.8	23.5	23.9	23.1	27.8	26.1	24.2	–	–	–
Pharmaceuticals	19.9	25.4	24.9	24.3	24.7	25.6	25.2	25.2	26.3	26.9	25.8
Public investment	5.1	2.2	1.7	1.8	2.3	2.5	3.3	1.9	2.5	2.9	2.6

Source: OECD health data, 2002; WHO Regional Office for Europe health for all database.

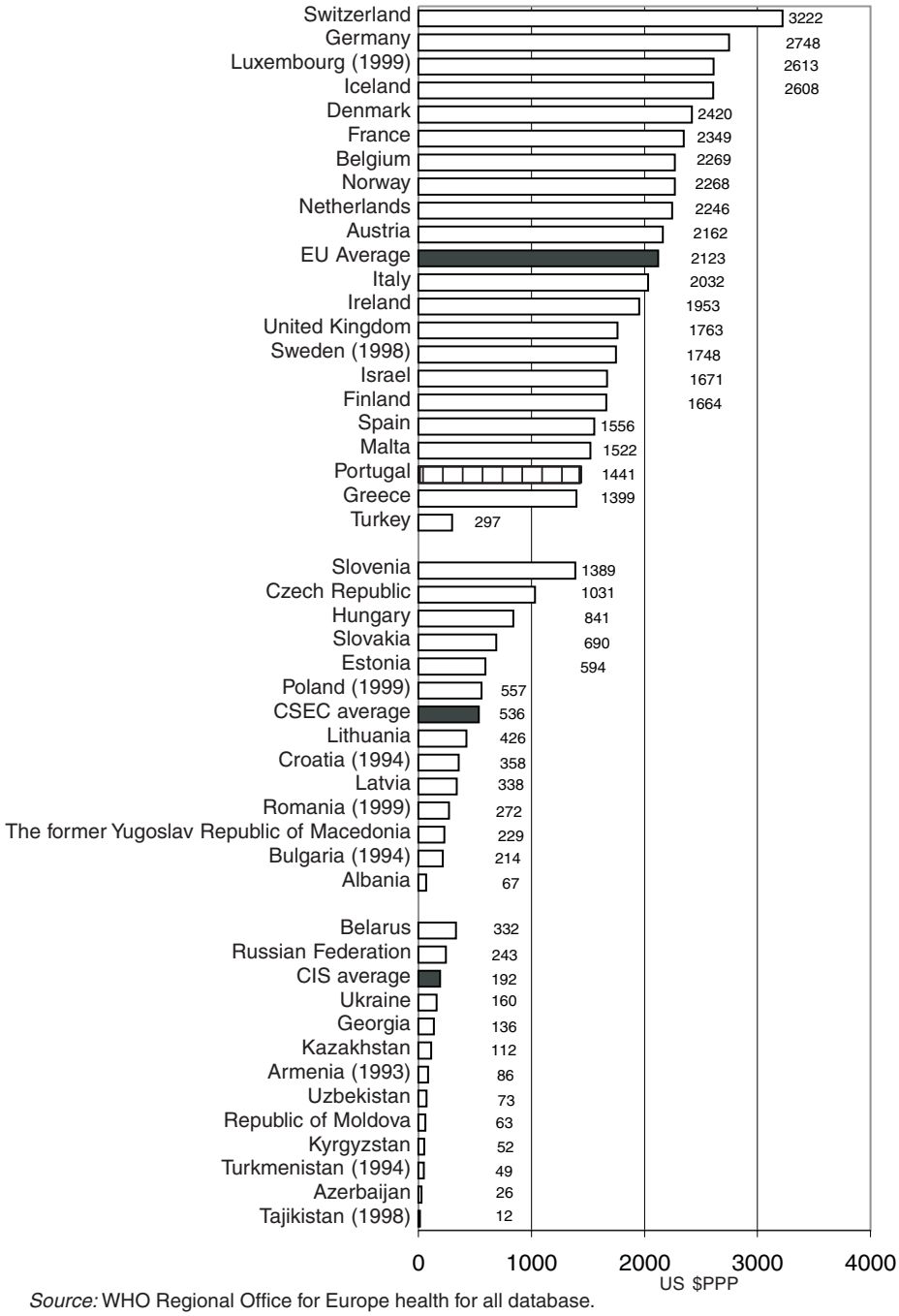
Fig. 4. Total expenditure on health as a % of GDP in the WHO European Region, 2001 or latest available year (in parentheses)



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

Note: CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.

Fig. 5. Health care expenditure in US $PPP per capita in the WHO European Region, 2000 or latest available year (in parentheses)

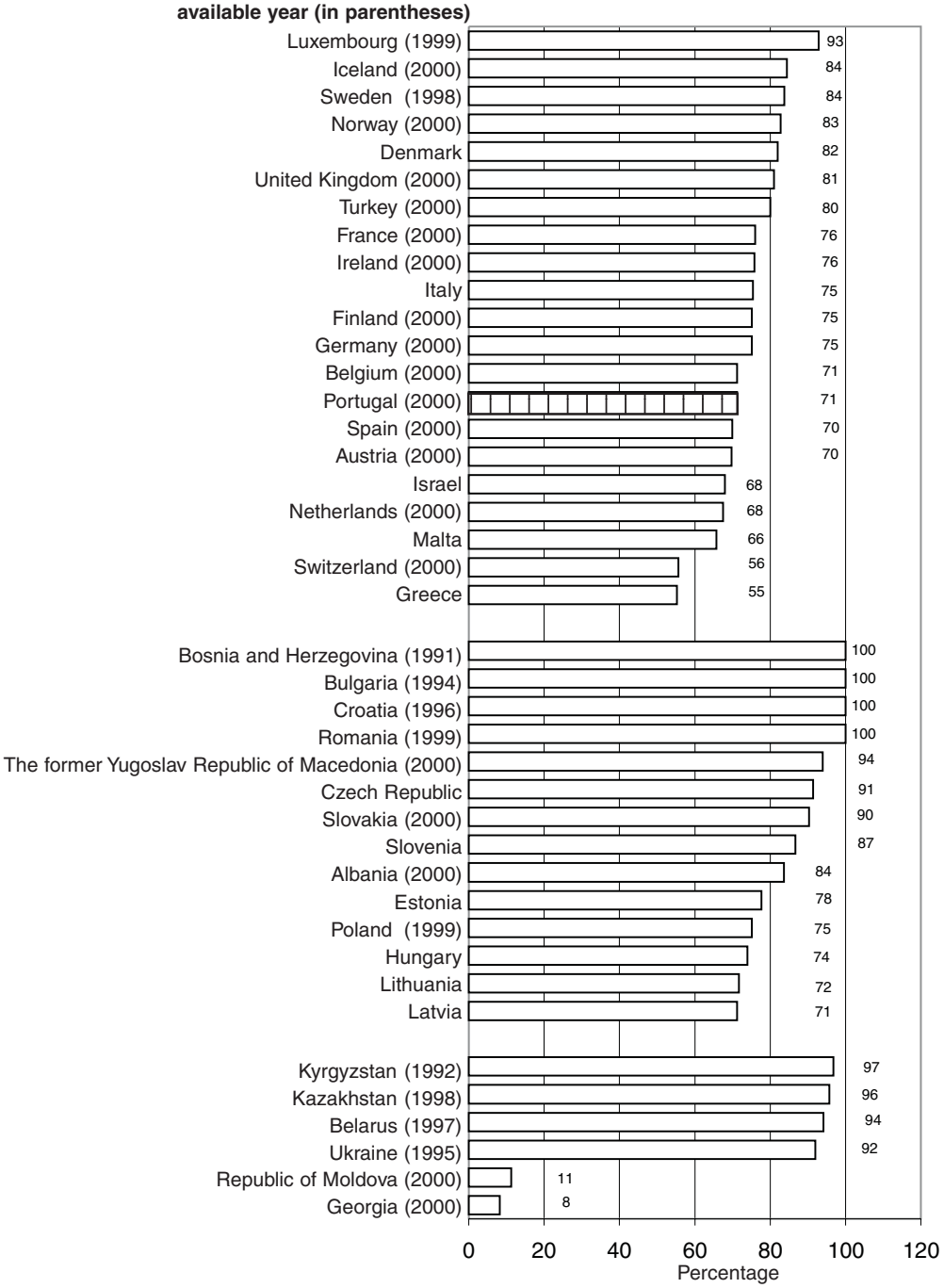


Source: WHO Regional Office for Europe health for all database.

Note: CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.

Portugal

Fig. 6. Health care expenditure from public sources as a percentage of total health care expenditure in countries in the WHO European Region, 2001 or latest available year (in parentheses)



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

Health care delivery system

Primary health care and public health services

Primary health care in Portugal is delivered by a mix of public and private health service providers. In this section, primary health care will be taken to cover all health care provided out-of-hospital by both generalists and specialists, and other non-specialist care and services such as dental care, physiotherapy, radiology and diagnostic services.

Health centres

Primary health care in the public sector is mostly delivered through publicly funded and managed health centres (HCs). Each of them covers an average of 28 000 people although some of them cover more than 100 000 people and others fewer than 5000 people. They employ in total 30 000 professionals (including regional health administration personnel). Of these, 25% are doctors (mostly general practitioners) and 20% are nurses. There are on average 80 health professionals per centre, although some have as many as 200 and others as few as one medical doctor.

Centres currently have no financial or managerial autonomy and are directly run by the regional health administrations (RHAs). The Ministry of Health allocates funds to the RHAs, which in turn determine the budget of each centre based on historical and activity costs. For more details see the section *Financial resource allocation – payment of health centres.*

Most primary health care is delivered by GPs/family doctors and primary care nurses in the health centre setting. However, some health centres also provide a limited range of specialized care. This is a result of the integration of

social welfare medical services into the National Health Service at the beginning of the 1980s. Specialists who had worked for the Department of Social Welfare were transferred and given contracts in the newly established NHS health centres. The specialists who work in HCs belong to the so-called ambulatory specialties, such as mental health, psychiatry, dermatology, paediatrics, gynaecology and obstetrics and surgery. However, very few of these posts will be filled when present incumbents leave. The range of services provided by GPs in HCs is as follows:

- general medical care for the adult population
- prenatal care
- children's care
- women's health
- family planning and perinatal care
- first aid
- certification of incapacity to work
- home visits
- preventive services, including immunization and screening for breast, cervical and other preventable diseases.

Patients must register with a GP, and can choose among the available clinicians within a geographical area. Some people seek health care services in the area where they work, but most choose a GP in their residential area. GPs work with a system of patient lists, on average approximately 1500 patients. There are GPs with patient lists exceeding 2000 and others with fewer than 1000. People may change GP if they apply in writing, explaining their reasons, to the RHA board. There is no statutory limit to how often someone may change their GP. According to international sources, the number of physician contacts per person in Portugal is 3.4 (1998), one of the lowest in the European Region, with only Sweden and Turkey having fewer contacts (2.8 and 2.0 respectively; see Fig. 7). National data used in Table 11 show that the number of medical

Table 11. Medical appointments in health centres and home visits, 1980 – 1996

	1980	1990	1991	1992	1993	1994	1995	1996
Medical appointments per capita	2.9	3.1	3.1	3.1	3.1	3.2	3.3	3.3
Home visits (1000)	1 031	191	162	141	141	130	125	122

Source: Department of Health Studies and Planning.

Note: There are very few home visits made by general practitioners – less than 48 per year per health centre.

appointments in health centres per capita has grown from 2.9 in 1980 to 3.3 in 1996. The number of home visits is insignificant.

Many patients prefer to go directly to emergency care services in hospitals or the private sector where the full range of diagnostic tests can be obtained in a few hours. This leads to excessive demand on emergency departments and considerable misuse of resources as expensive emergency services are used for relatively minor complaints. Portugal has the highest percentage of people living in absolute poverty, at 22% in 2002 *(17)*. Poverty is particularly prevalent in the South (Alentejo). Poorer and geographically isolated people have even bigger problems in accessing health services, because there are fewer hospitals than health centres and they are concentrated in more populated areas *(29)*.

The major problems currently facing primary health care are:

- inequitable distribution of health care resources (staff shortages in inland areas);
- difficult access to primary health care resulting in emergency room overuse;
- very limited public provision of services in continuing and home care;
- mixed opinions of the public primary health care system (30% of people find it lacks credibility);
- scarcity of quality control programmes, despite efforts by the Institute for Quality in Health;
- lack of coordination among primary health care centres, hospital doctors, hospitals and private doctors;
- lack of motivation of general practitioners working in isolation for fixed salaries;
- limited access to health care services for poorer and geographically isolated people;
- a shortage of qualified ancillary staff in health centres.

A series of recent health care reforms, initiated in 1995/1996, aim to tackle these problems by increasing accessibility, improving the continuity of care, increasing GP motivation with a new payment system, stimulating home care services and improving quality.

A number of pilot projects were established in 1996/1997. Of particular interest is the *Alfa Project* which began in the Lisbon and Vale do Tejo Region, based on the principles of group practice and team work. Its objectives were to:

- increase job satisfaction of the PHC personnel
- increase patients' satisfaction with primary care services

- increase access to public health services – a greater availability of postnatal care, patient-centred, family oriented care and more time for consultations and preventive activities
- improve quality
- rationalize prescriptions of pharmaceuticals and the number of diagnostic tests and examinations.

The *Alfa Project* experimented with a revised GP payment scheme in which groups of GPs were given overtime payments and other incentives in return for an assurance of providing 24-hour cover and adequate referral and follow-up of patients. A preliminary internal evaluation of these pilots indicated that the integrated models were successful, mainly because there was an improvement in satisfaction from both citizens and providers. Some of the principle ideas behind the reforms have been adopted nationally and new methods of remuneration for GPs are being introduced (see the section *Payment of health care professionals*).

Facilities

The number of health centres and health posts continued to grow throughout the 1980s and mid 1990s, showing a slight decrease since then with a total of 1126 primary care medical units in 1999 (see Table 12).

The facilities provided by each health centre (HC) vary widely in structure and layout: some were purpose-built to a reasonable size, with a rational distribution of space, and discrete areas for different purposes; some, mainly in large cities, were incorporated into the residential buildings and are badly designed and not patient-friendly; and some, mainly in rural areas and operated by *Misericórdias* or belonging to the church, were established in ancient hospitals and monasteries in the 1960s.

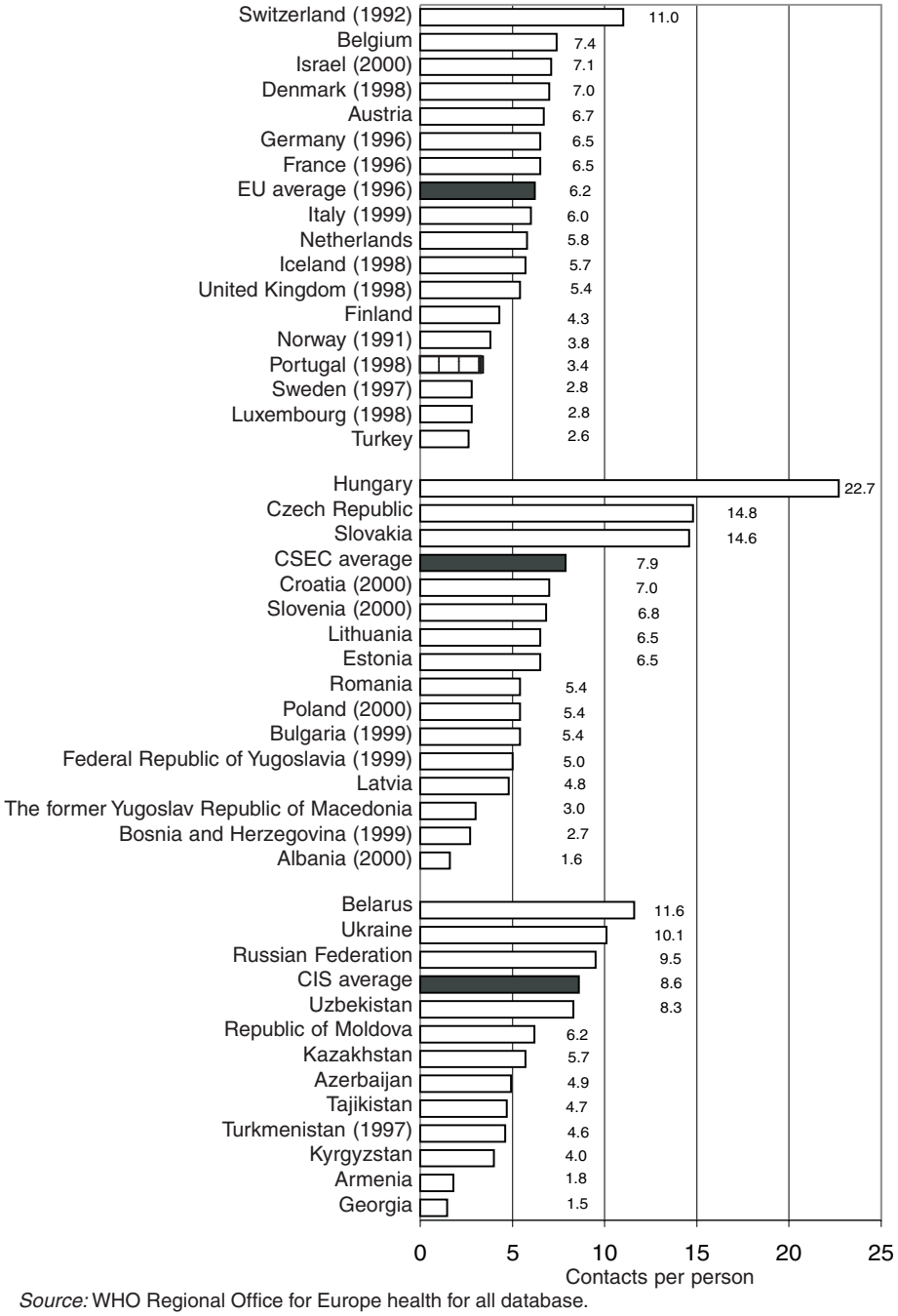
Diagnostic and therapeutic services

Table 12. Number of primary care facilities, 1970 – 1999

	1970	1980	1990	1995	1999
Medical Units	1 935	2 195	2 249	2 424	1126
Health Centres (assemblage of several PHC facilities)	–	265	354	383	390

Source: National Institute for Statistics, 1990–1999.

Fig. 7. Outpatient contacts per person in the WHO European Region, 2001 or latest available year (in parentheses)



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

Note: CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.

Portugal also has a large independent private sector which provides diagnostic and therapeutic services to NHS beneficiaries under contracts called *convenções*. These medical contracts cover ambulatory health facilities for laboratory tests and examinations such as diagnostic tests and radiology (they are scarce in medical consultations) and also renal dialysis and physical therapy. The NHS publicly declares the terms of service and the prices they are willing to pay. All providers who are prepared to accept the terms and meet basic quality standards can register. A list of all those providers who have registered is published annually. In principle, patients can choose from any of the providers who appear on the contracts. Many patients actually go directly to the emergency departments of hospitals where they expect to obtain consultation and tests within a much shorter time. Prices do not vary according to the level of service which means providers have little incentive to improve the quality of services.

Dental care

The publicly-funded oral health care system in Portugal is not comprehensive. There are very few NHS dentists, so people normally use the private sector. Some dentists contract with one or more of the health subsystems. Each scheme defines its own list of eligible treatments and fees. The schemes are usually slow to pay and the fees are low. Those dentists not under contract may provide care to patients covered by the schemes; patients pay directly and are then partially reimbursed by the scheme. Dental hygienists also provide dental care, though it must be under the direction of a dentist.

Referral process and links between primary and secondary care

The first point of contact within the public system is the GP/family doctor in a health centre (HC). Theoretically, people have no direct access to secondary care and GPs are expected to act as gatekeepers. Frequently, there is a delay in obtaining a consultation depending on the specialty. In reality, many people go directly to the emergency department in hospitals if they have any acute symptoms. It is estimated, based on recent local studies that around 25% of the attendees at hospital emergency units do not need immediate care. People who go to emergency departments and genuinely need specialized care are immediately referred. There are user charges for emergency visits, however these do not appear to affect the inappropriate use of emergency services. Those patients who are covered by the health subsystems can go directly to private hospitals and specialists allowed by their schemes. Private physicians can also refer them to NHS hospitals. Those patients covered by private health insurance may be eligible for private specialist consultations but this will depend on the benefit package offered.

The problem of lack of coordination between hospitals and health centres and the large numbers of patients by passing the referral system has prompted reform. One of the reform proposals, which has been on the agenda since the foundation of the NHS, is the development of local health units. The idea was to link a hospital (or several hospitals) with a number of health centres based partly on geographical proximity and partly on the balance of specialties and availability of an accident and emergency department. These "health units", whose main focus was health care institutions, were established but did not achieve all the expected improvements in coordination and did not fulfil the aim of integrating, coordinating and facilitating continuity of care.

Proposals for reform enacted in May 1999, went further with the concept of "local health systems". These would include private institutions and local councils as well as the medical services provided within the NHS. Local health systems were expected to lead to better interlinking between secondary and primary, public and private care. They aimed at changing the present scenario of lack of coordination among services and embrace a broader sense of health care focused on the population. Population-based budgets would then be allocated at a local level amongst all providers based on the assessment of health needs in the area. In practice, though, local health systems have not been implemented. One exception might be made for a close experience in Matosinhos, near Porto, which created a local health unit by integrating the hospital and related health centres in a unique provider entity.

Public health services

The public health services in Portugal are responsible for surveillance of health status and identification of its determinants. Public health services are also responsible for health promotion and disease prevention at community level and for the evaluation of the impact of health promotion and disease prevention activities. The organization of public health services nationally is the responsibility of the General Directorate of Health. The General Directorate of Health is responsible for the establishment of programmes, definition of strategy and approval of national plans. At a regional and local level the main actors are as follows:

- Local health authority consisting of a public health doctor usually based in a health centre;
- Public health doctors and sanitary technical staff;
- Regional health authority, supporting public health in regions and sub-regions;
- GPs/family doctors, responsible for health promotion as part of their work,

including family planning, antenatal services and screening programmes.

Public health doctors (medical doctors with a 4-years' specialist internship) have the primary responsibility for the epidemiological surveillance of the health status of the population and also for health prevention activities such as health promotion and disease surveillance. However in many health centres these responsibilities are transferred to GPs, due to a lack of public health doctors. Public health doctors' responsibilities include:

- surveillance and control of communicable disease
- surveillance of water quality parameters
- environmental health surveillance (with municipalities)
- ensuring compliance of local services (including health facilities) with health and safety standards
- environmental inspections of work places and work conditions
- building safety and housing inspection (with municipalities).

There is a policy to strengthen public health at both regional and local levels through provision of epidemiological expertise and leadership functions in health promotion issues. Five Regional Public Health centres have been created since 1999 as part of this policy. These centres were supposed to act as regional public health observatories and coordinate public health activities. However, financial and personnel resources have not met expected needs and the operation of Regional Health Centres is still at low levels. Of particular note is the establishment of SARA (Rapid Alert and Response System), a new information and management system for public health emergencies, whether related to food safety, communicable diseases or environmental health. This project aims to build a national information network for all public health staff, connecting all levels of public health care. It will provide the basis for the continuous development of standard guidelines and enable rapid responses to such emergencies.

Public health doctors currently have a low status within the NHS and there are problems with recruitment (half of all public health doctors' vacancies were unfilled in 1998). Their work up to now has been to act as health inspectors and occupational health officers, which was heavily bureaucratic and meant working from old directives. The aim of the latest reform is to link the development of local health systems with the new public health structures, giving public health doctors a broader remit for the health of the population. New teams of public health doctors and nurses will be established. The linkage of local health systems with the new public health structures is expected to

give public health doctors a broader remit for the health of the population. By creating these new public health units, previously disparate resources will be brought together.

A National Health Observatory was also established in 1998 as part of the National Institute of Health. This is intended to centralize major national health information systems and to produce timely reports on the health of the population and its determinants. Several information systems are also run by the National Health Observatory namely the National Health Interview Survey, the Sentinel Network of General Practitioners, the National Register of birth defects, and the home and leisure accidents surveillance system. Reports on the health of the population have been produced by the General Directorate of Health since 1997.

Health promotion and disease prevention activities

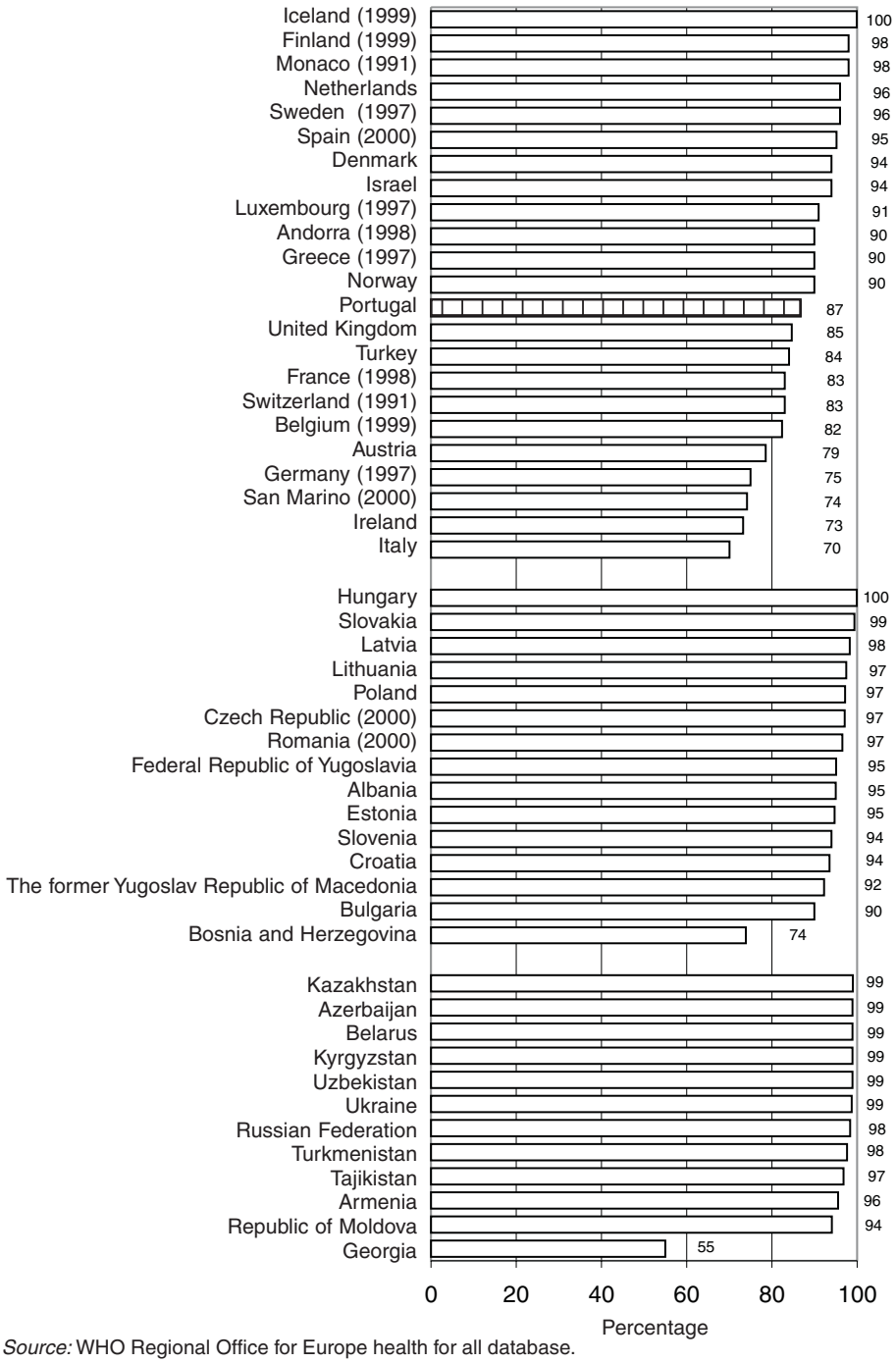
Some of the health education initiatives are run as vertical programmes by separate bodies within the Ministry of Health, for example, the National Prevention Council against Tobacco Consumption and the National Committee on AIDS. The National Institute for Drug Dependency, mainly concerned with research activities on drug and alcohol dependency, was recently merged with the coordinating structure for drug addiction treatment and prevention (SPTT) within the Ministry of Health.

As Fig. 8 shows, the immunization rate against measles in Portugal in 2001 was 87%. Immunization rates against other diseases in 1999 were: tuberculosis 88.0%, diphtheria 97.0%, poliomyelitis 96.0% (*30*). Responsibility for the implementation of the national immunization programme at local level lies with the health centres, whose activities include school health services. The network of primary health care centres built up during the 1980s apparently has contributed to relatively high rates of immunization.

Secondary and tertiary care

Secondary and tertiary care is mainly provided in hospitals although, as discussed above, some health centres still employ specialists who provide specialist ambulatory services. These positions are gradually diminishing in number and do not form a significant part of secondary and tertiary care provision. This section will focus on hospital inpatient and outpatient services.

Fig. 8. Levels of immunization for measles in the WHO European Region, 2001 or latest available year (in parentheses)



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

Portugal

Hospitals

In 1999, Portugal had 205 hospitals, 110 public and 84 private (see Table 13). Almost half of the private hospitals belong to for-profit organizations. The sharp decline in hospitals owned by *Misericórdias* between 1970 and 1980 followed the incorporation or "nationalization" of these facilities into the NHS. *Misericórdias* currently operate hospitals and facilities in the areas of rehabilitation, long-term care and residential care for the elderly, disabled and chronically sick (see the section *Organizational structure of the health care system*).

Trends in hospital numbers have been similar to those in other European countries. There has been a significant decrease in the number of hospitals over the last 30 years, from 634 in 1970 to 205 in 1999 (a reduction of 67%).

Table 13. Numbers of hospitals by category, 1970 – 1999

	1970	1980	1990	1996	1999
Total	634	493	257	221	205
Public (NHS)	171	394	145	122	110
Other Public	19	2	17	10	11
Misericórdias	284	8	–	–	–
Other Private	160	89	95	89	84
For profit	–	–	44	40	40
Not for profit	–	–	51	49	44

Source: National Institute for Statistics, 1990–2000.

Note: Hospitals do not include psychiatric, rehabilitation or hospitals outside the mainland.

Most hospital services are provided according to the integrated model, that is, directly by the NHS. However, non-clinical services such as maintenance, security, catering, laundry and incineration have for some time been outsourced to the private sector. Also, diagnostic and therapeutic services in the ambulatory sector are mainly provided by the private sector through all-willing provider contracts. A very limited number of clinical services are contracted out, usually in specific areas where waiting list reductions are needed, for example, cataracts. However, the program to reduce surgical waiting lists (PECLEC) precludes a more relevant and widespread role for both the private and the social sectors (see the section *Health care financing and expenditure – rationing/waiting lists*).

Hospitals are classified according to the services they offer:

- Central hospitals provide highly specialized services with advanced technology and specialist human resources;
- Specialized hospitals provide a broad range of specialized services;

- District hospitals are located in the main administrative district and provide a range of specialist services;
- District level-one hospitals only provide internal medicine, surgery and one or two other basic specialties.

Health resources are concentrated in the capital, Lisbon, and along the coast. There are no specialized or central hospital facilities in the regions of Alentejo and Algarve, which have only five and three district hospitals, respectively (see Table 14). Many of the inland hospitals have lacked resources and had poor facilities compared to those in Lisbon and Porto. The investment programme in recent years has concentrated heavily on these poorer rural regions and the hospitals there have benefited greatly. In fact, many of the inland district hospitals now have better facilities than those in the coastal areas.

Table 14. Number of NHS hospitals by health regions (2000)[a]

Region	Central	Specialized	District	District Level 1	Total
North	4	4	10	9	27
Centre	2	1	13	10	26
Lisbon and Vale do Tejo	7	9	11	2	29
Alentejo	–	–	3	2	5
Algarve	–	–	2	1	3

Source: Directorate General of Health; National Institute of Statistics 2002.

Note: [a] This table only includes mainland NHS hospitals. It does not include psychiatric hospitals, military hospitals and other government hospitals, autonomous regions or private facilities.

Hospital beds

The total number of hospital beds in 1999 was 35 404. Government-controlled hospitals accounted for 27 327 beds or 77.2 % of the total (see Table 15). The beds in the charitable hospitals have become obsolete since the 1980s as a result of nationalization and the specialization of these organizations in rehabilitation, psychiatric and long-term care. The decline in total bed numbers between 1980 and 1990 actually reflects a dramatic decline in beds within the NHS. This has been accompanied by an increase in the number of privately-owned beds.

As has been noted previously, there is an uneven distribution of resources between the regions. For most indicators of resources, both human and material, the regions of Alentejo and Algarve are the worst off. Table 16 shows that Algarve not only has the lowest number of total beds, but also has the lowest number of beds per capita. The Lisbon and Vale do Tejo Region has the highest proportion of total hospital beds (over 35%) however the highest per capita concentration is observed in the Central Region.

Table 15. Total number of beds[a] by category, 1980 – 1999 (% of total)

	1980	1990	1996	1999
NHS	42 883 (83.7)	31 075 (78.3)	30 392 (77.5)	27327 (77.2)
Misericórdias	464 (0.9)	–	–	–
Private and other	7 908 (15.4)	8 615 (21.7)	8 820 (22.5)	8077 (22.8)
Total	51 255	39 690	39 212	35 404

Source: National Institute for Statistics, 1990–2000.

[a] This table does include beds in mental health hospitals, observation beds in emergency departments and joint beds with health centres used by long-stay patients. This accounts for the difference with Table 16.

Table 16. NHS hospital beds[a] by region (2000)

Region	Total	% of total	per 1000 population
North	7130	29.9	2.23
Centre	6 404	26.8	2.68
Lisbon and Vale do Tejo	8 623	36.1	2.57
Alentejo	977	4.1	2.15
Algarve	727	3.0	1.87
Total/average	23 861	100.0	2.44

Source: National Institute of Statistics 2002 and General Directorate of Health.

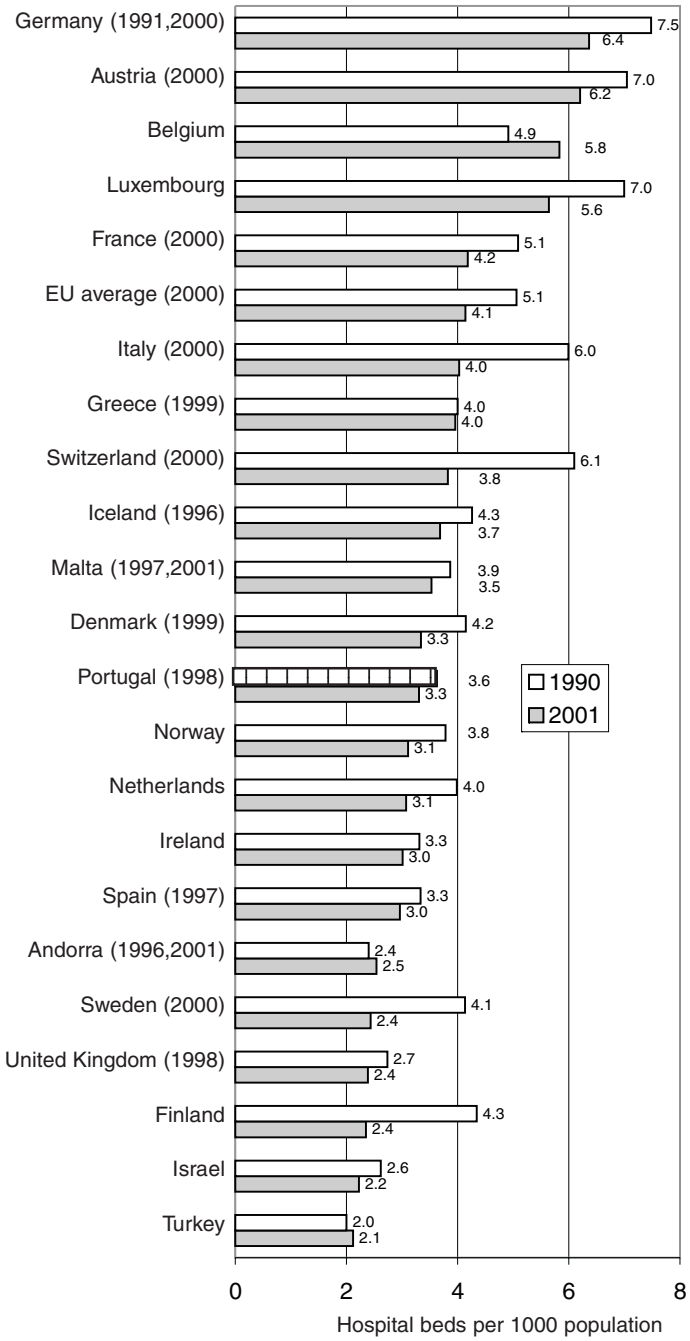
[a] This table only includes mainland NHS hospital beds. It does not include beds in psychiatric hospitals, observation beds in emergency departments or joint beds with health centres used by long-stay patients. This accounts for the difference with data in Table 15.

The number of hospital beds per 1000 population in the European Union dropped by over 20% in the 1990s, whereas in Portugal the decline was just 14% *(2)*. If only acute care beds are considered (see Fig. 9), the EU decline was 16%, compared to Portugal's 9%. Many of the cuts in bed numbers in EU countries were due to a perceived oversupply resulting from changes in technology, such as day surgery, and the increasing number of drug treatments, which have reduced the demand for hospital beds. In other countries a large proportion of the bed reductions were in long-term and psychiatric beds, which did not account for such a high proportion of total beds in Portugal, where services in these sectors were less developed. Portugal has a low number of beds in acute hospitals per 1000 population (3.3 in 1998), the same as Denmark in 1999 and similar to Norway (3.1 in 2001), lower than Italy (4.0 in 2001) and equal to Spain (3.0 in 2001).

Utilization

The number of outpatient appointments per capita has increased steadily since 1990. Table 17 shows that the average length of stay for NHS hospitals decreased steadily between 1990 and 2000 from 9.6 days to 7.9 days. The occupancy rate

Fig. 9. Hospital beds in acute hospitals per 1000 population in western Europe, 1990 and 2001 or latest available year (in parentheses)

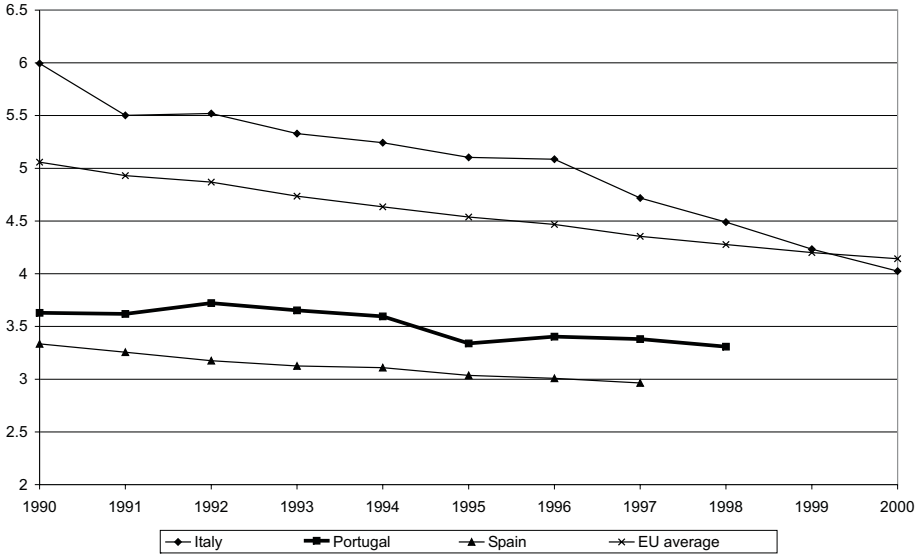


Source: WHO Regional Office for Europe health for all database.

EU: European Union.

Portugal

Fig. 10. Hospital beds in acute hospitals per 1000 population in Portugal and selected European countries, 1990 – 2000



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

has remained fairly low at about 75% since 1993. A slightly higher average length of stay can be seen in Table 18 because these figures include long-stay beds for chronic, elderly and psychiatric patients. Similarly, occupancy rates are even lower in Table 17, which includes the autonomous regions and non-acute sector NHS hospitals.

Table 17. Inpatient facilities utilization and performance in NHS hospital facilities in mainland Portugal,[a] 1990 – 2000

	1990	1991	1992	1993	1994	1995	1996	1998	1999	2000
Outpatient appointments per capita	454.0	466.7	497.2	520.0	541.0	590.1	578.5	609.0	627.0	633.0
Average length of stay in days	9.6	9.3	8.8	8.4	8.3	8.2	8.0	7.8	8.0	7.9
Occupancy rate (%)	74.2	75.3	69.3	75.9	75.9	75.2	74.6	73.7	74.4	74.9

Source: Institute of Health Financial Management and Informatics – IGIF (1995–1996) and IGIF Contas Globais do SNS, 1999, 2000.

Note:[a] This table only includes mainland NHS hospitals. It does not include psychiatric hospitals, military hospitals and other government hospitals, autonomous regions or private facilities.

Table 18. Inpatient facilities utilization and performance in both public and private health care services,[a] 1970 – 1998

	1970	1975	1980	1985	1990	1995	1998
Admissions per 1000 population	6.7	8.3	8.9	8.5	10.8	11.3	12.0
Average length of stay in days	23.8	17.6	14.4	13.9	10.8	9.8	9.0
Occupancy rate (%)	74.1	72.0	62.6	69.2	69.4	71.0	74.0

Source: OECD health data, 1998 and WHO Regional Office for Europe health for all database, 2003.

Note: [a] Includes psychiatric hospitals, autonomous regions and private facilities.

Admission rates increased dramatically throughout the 1970s and 1980s, but stabilized at 10% to 12% in the 1990s. Length of stay has fallen in line with trends in the rest of Europe due to advances in technology. The occupancy rate has been fairly consistent at around ±70%. Compared to other western European countries, Portugal has a relatively low number of hospital beds per 1000 population, but an average utilization rate, measured by admission and occupancy rates (see Table 19).

One of the main problems facing hospital services in Portugal is the excessive use of emergency departments for non-urgent treatment. A policy announcement was made at the beginning of 1999 that outpatient departments would be reorganized to give priority to patients with referral letters. As an incentive to patients to use the primary care services and to promote the use of the GP gatekeeping function, those patients without letters of referral will be made to wait longer than those with letters. This may help to reduce the numbers of patients bypassing the referral process.

Another major change for hospital services is the hospital reference networks (HRN), which regulate the technical interchanges between hospitals to guarantee an efficient and effective access of patients to needed health services. The HRN had already been announced in the National Strategy but the actual networks including the regional architectures have only been designed and approved more recently. So far, the published networks include: psychiatry, mother and child health, emergency, neurology, cardiologic intervention, infectious diseases, oncology, immunology, physical therapy, rheumatology and nephrology.

Waiting lists

According to sources of the Ministry of Health, the number of patients waiting for a surgical procedures at the end of 2001 was around 86 500, taking into account duplications in the hospital counts. The official recognition of this problem goes back to 1994, when a special programme (PERLE) was initiated

Table 19. Inpatient utilization and performance in acute hospitals in the WHO European Region, 2001 or latest available year

Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Western Europe				
Andorra	2.5	9.4	6.7[b]	70.0[b]
Austria	6.2[a]	27.2[a]	6.3[a]	75.5[a]
Belgium	5.8	16.9[b]	8.0[b]	80.0[c]
Denmark	3.3[b]	17.9	5.2[a]	83.5[a]
EU average	4.1[a]	18.9[b]	7.7[b]	77.4[c]
Finland	2.4	19.7	4.4	74.0[f]
France	4.2[a]	20.4[b]	5.5[b]	77.4[b]
Germany	6.4[a]	20.5[a]	9.6[b]	81.1[a]
Greece	4.0[b]	15.2[c]	–	–
Iceland	3.7[e]	18.1[f]	6.8[f]	–
Ireland	3.0	14.5	6.4	83.8
Israel	2.2	17.8	4.1	93.0
Italy	4.0[a]	16.0[a]	7.0[a]	75.5[a]
Luxembourg	5.6	18.4[g]	7.7[c]	74.3[g]
Malta	3.5	11.2[a]	4.3	75.5[a]
Netherlands	3.1	8.8	7.4	58.4
Norway	3.1	16.1	5.8	87.2
Portugal	3.3[c]	11.9[c]	7.3[c]	75.5[c]
Spain	3.0[d]	11.3[d]	7.6[d]	76.2[d]
Sweden	2.4[a]	14.9	4.9	77.5[e]
Switzerland	3.8[a]	16.3[c]	10.0[a]	85.0[a]
Turkey	2.1	7.6[a]	5.4	58.8
United Kingdom	2.4[c]	21.4[e]	5.0[e]	80.8[c]
CEE				
Albania	2.8[a]	–	–	–
Bosnia and Herzegovina	3.3[c]	7.2[c]	9.8[c]	62.6[b]
Bulgaria	–	14.8[e]	10.7[e]	64.1[e]
CEE average	5.4	17.8	8.3	72.3
Croatia	4.0	13.9	8.9	85.5
Czech Republic	6.3	18.9	8.6	70.5
Estonia	5.1	17.9	6.9	62.3
Hungary	6.4[a]	24.2	7.0	76.9
Latvia	5.8	18.6	–	–
Lithuania	6.3	21.7	8.0	76.3
Slovakia	6.7	18.8	9.2	70.9
Slovenia	4.2	15.9	6.8	70.5
The former Yugoslav Republic of Macedonia	3.4	8.2	8.0	53.7
NIS				
Armenia	3.7	4.7	9.6	31.6
Azerbaijan	7.9	4.7	15.5	25.7
Georgia	3.9	4.3	7.4	82.0
Kazakhstan	5.4	14.7	11.3	96.5
Kyrgyzstan	4.8	13.9	10.8	87.6
NIS average	7.9	19.1	12.5	85.0
Republic of Moldova	4.7	11.9	10.3	70.7
Russian Federation	9.1	21.6	13.2	85.8
Tajikistan	5.8[d]	8.9	13.0	54.5
Turkmenistan	6.0	12.4[d]	11.1[d]	72.1[d]
Ukraine	7.1	18.7	12.5	89.5
Uzbekistan	–	–	–	84.5

Source: WHO Regional Office for Europe health for all database.
Notes: [a] 2000, [b] 1999, [c] 1998, [d] 1997, [e] 1996, [f] 1995, [g] 1994, [h] 1993, [i] 1992, [j] 1991.

by the government to shorten waiting lists through contracts with private entities. In 1998 a law was approved by Parliament to promote the admission of patients waiting for surgical procedures into NHS hospitals (PPA). Through PPA the State stimulated those hospitals to extend their operating room schedules by granting them funds to provide additional payments to the surgical staff. In 2000, PPA was extended to the social and private sectors with NHS agreements. By the end of 2001, a total of 23 791 patients had been operated within the scope of the programme. In 2002, the new government revised the waiting list policy and a more relevant role is being given to the private non-for profit and for-profit sectors. A new programme (PECLEC) was launched in May 2002 and is expected to substantially reduce surgical waiting lists in two years. By June 2002, 123 166 patients were waiting for a surgical procedure, of which 86 000 had attained a clinically unacceptable delay time *(31)*.

Social care

There is very little state provision of community care services in Portugal, including long term care, day centres and social services for the chronically ill, the elderly and other groups with special needs such as mentally ill and the mentally and physically disabled. There is a traditional reliance on the family as the first line of care in Portugal, particularly in rural areas. However, demographic changes such as an increase in female employment and a breakdown in the extended family due to migration to urban centres mean that many people are no longer able to rely on such informal care. As in many other European countries, Portugal faces a growing elderly population and the pressure to provide social as well as medical care is increasing.

Elderly care

Some social services are provided in each region through the Ministry of Social Security. However, *Misericórdias,* which are independent charitable organizations, are the key providers of social care services. Day centres for the elderly provided 41 195 places in 1998, according to the Ministry of Social Security. They provide a range of services including activities, meals, food to take home, laundry services, bathing and even assistance obtaining medication and attendance at health centres. A small means-tested contribution is usually charged.

Residential care provided by the public sector is often of poor quality and lacks sufficient resources. Means-tested assistance is available, and social

services will pay a proportion of residential costs depending upon income. The alternative is the nursing homes run by *Misericórdias* and other non-profit institutions, which are of better quality and only request a nominal contribution from patients and their families. Home care is expanding as a result of a joint venture between the Ministry of Health and the Ministry of Labour and Social Security, called the Integrated Support Plan for the Elderly. In some regions, an infrastructure to deliver support to the elderly has been developed in partnership with RHAs, municipalities and private providers, such as *Misericórdias*.

As part of this interministerial project, the state is facilitating vocational training opportunities in areas such as domiciliary care and informal health care as part of a job creation scheme. Currently in the Lisbon and Vale do Tejo Region, there are about 20 to 30 local projects to create social care networks. The division of payment between the NHS and the social security department depends on the type of care provided by the project, i.e. nursing care or home help. Although there is regulation for nursing homes these are not evaluated/ controlled on a regular basis. Nursing homes in the private sector are very expensive and the majority of the population does not have the resources to pay for them.

Mental health

Subsequent to Law 2118 of 1963, which approved the principles of mental health care provision, mental health centres were created in 1964 in the different districts as well as in the large cities: Lisbon, Coimbra and Porto. At the beginning of the 1970s, the need to integrate mental health services in the general system of health care provision became obvious. As such, in 1984 the General Directorate for Primary Health Care was created with a Division of Mental Health Services. Later, the Law 127 of 1992 integrated the mental health centres into the general hospitals. This highlighted the dysfunctions of the country's organization in health regions headed by Regional Health Authorities. Considering the recommendations of the United Nations and the WHO with respect to the emphasis on community services, it was necessary to change this organization, in the name of rehabilitation and social integration. Law 36 of 1998 regulated the organization of services in this sector and created a clear referral system as well as a community care network. The current organization of services is characterized as follows:

- The referral model is that of community care.
- The local mental health services are the basis of the care system, joined to health centres and hospitals.

- When local mental health services are not justified, they are organized regionally.
- The teams are multidisciplinary for a population of around 80 000.
- Ambulatory services are based in health centres and inpatient admissions and emergencies are treated in hospitals.
- Care for children and teenagers is given by specific teams at the local level.
- Social rehabilitation is done in conjunction with the state health sector, social security and employment departments.
- Psychiatric hospitals support the local health teams, provide specialized and inpatient care, and have residential patients without any family or social support system.

In summary, psychiatric care is centred in the local health care services, predominantly in general hospitals, regional services and psychiatric hospitals (where about 70% of patients are schizophrenic). To overcome the lack of adequate information, the first morbidity study is now being conducted. A nationwide census in psychiatry was done in the health care institutions in 2001.

Human resources and training

There has been a significant increase in the size of the health care services labour force, from 2% of the total workforce at the end of 1974 to 2.7% in 1998. In 1999 the Ministry of Health was the second largest employer in the public sector, with 115 590 employees, 19% of the total public workforce. Between 1990 and 1998 the number of workers in the NHS increased 14.5% in continental Portugal (*32*).

Human resources

According to the Portuguese Medical Association, there were 31 758 medical doctors in Portugal in 1998. Data from the General Directorate of Health showed that 23 158 of these were employed by the NHS in 1998, the majority in secondary and tertiary care. General practitioners/family doctors, those specialized in family medicine, accounted for 29.5% of the total number of doctors in the NHS; 42.5% were hospital doctors and 2% were public health doctors (see Table 20).

Table 20. Medical doctors (%) by area of activity (1998)

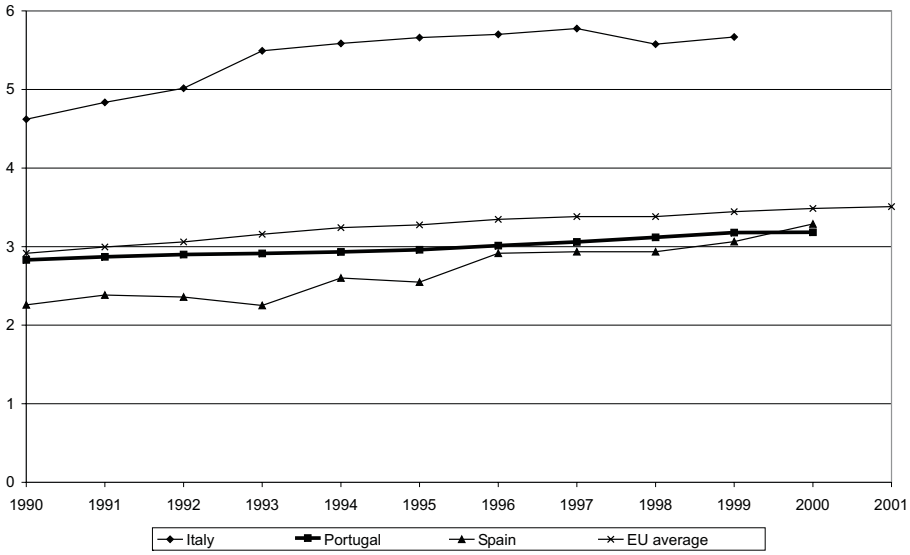
Area of medical activity	%
Secondary care	42.5
GP/family doctors	29.5
Medical trainees (all specialties)	24.2
Public health doctors	2.0
Other	1.8

Source: Department of Human Resources.

There has been a steady increase in the number of active doctors in Portugal since 1990. Before this there was a rapid increase from as few as 0.95 doctors per 1000 in 1970 to 2.83 per 1000 in 1990. As can be seen in Fig. 11, there were 3.2 physicians per 1000 population in 2000, lower than the European Union average of 3.9. There were fewer physicians per 1000 population in Portugal than in Italy (5.7 per 1000 in 1999) and almost the same as in Spain (3.3 per 1000 in 2000).

Fig. 12 shows that Portugal has steadily increased the ratio of nurses to inhabitants but has one of the lowest ratios in Europe. Spain and Italy also have lower than average numbers of nurses per capita. About 74% of nurses

Fig. 11. Number of physicians per 1000 population in Portugal, selected European countries and the EU, 1990 – 2001



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

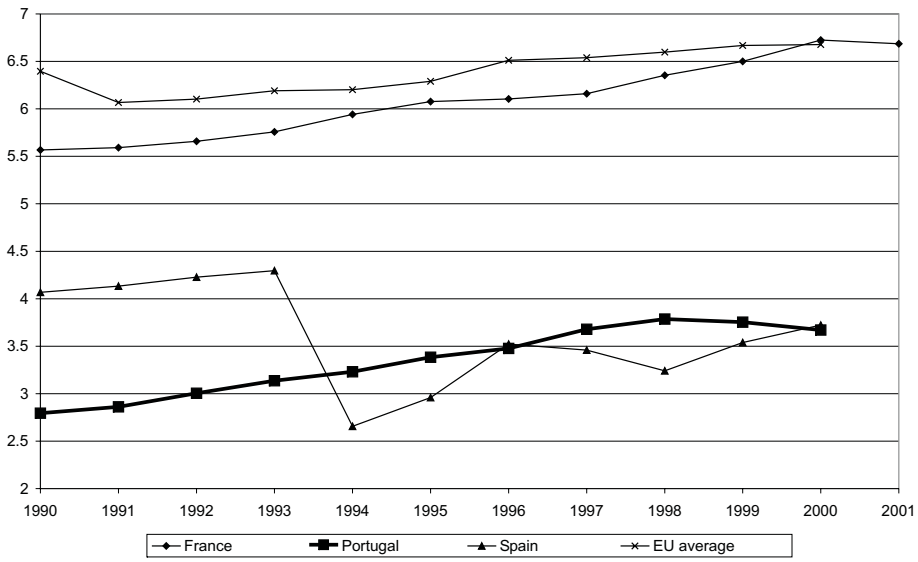
work in central and district hospitals and only 20% in primary care services and 3% in psychiatric services. The number of certified nurses rose considerably during the 1970s from 0.97 per 1000 to 2.24 per 1000 in 1980 (Table 21).

As Table 21 also shows, the number of dentists remains low, at 0.38 per 1000 inhabitants. The number of pharmacists in Portugal is also low compared to other southern European countries, with a ratio approximately half that of Spain and Italy.

Medical training

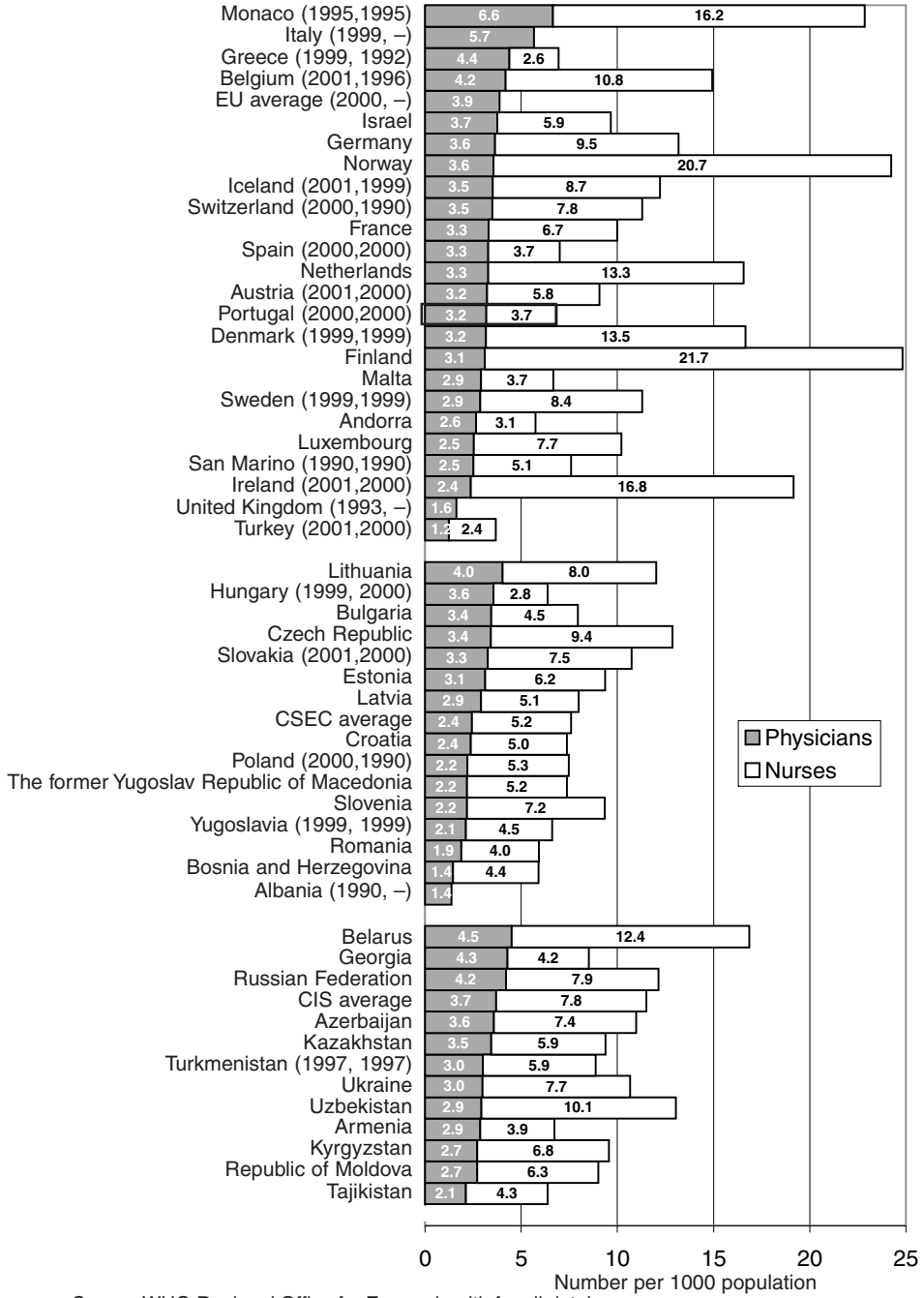
The number of doctors entering the workforce per 100 000 population in Portugal in 2000 was 5.92, up from 4.59 in 1991 (Table 22), but still the lowest in western Europe. The number of dentists graduating per 100 000 is now one of the highest in Europe, at 3.61 in 2000, almost double the European Union average of 1.96. This is due to the opening of new faculties of dental medicine since the early 1980s, providing graduate courses in dental medicine, rather than to a proportional increase in the specialization among medical graduates.

Fig. 12. Number of nurses per 1000 population in Portugal, selected European countries and the EU, 1990 – 2001



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

Fig. 13. Number of physicians and nurses per 1000 population in the WHO European Region, 2000 or latest available year (in parentheses)



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

Note: CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.

Table 21. Health care personnel per 1000 population, 1970 – 2000

	1970	1980	1990	1991	1992	1993	1995	1999	2000
Active physicians	0.95	1.96	2.83	2.87	2.90	2.91	2.96	3.18	3.18
Active dentists	0.007	0.11	0.17	0.17	0.18	0.21	0.26	0.38	0.43
Nurses[a]	0.97	2.24	2.79	2.86	3.00	3.14	3.38	3.76[b]	3.67
Active pharmacists	0.31	0.48	0.55	0.60	0.60	0.61	0.65	0.78	0.79

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

Notes: [a] A nurse is defined as a person who has completed a programme of basic nursing education and is qualified and authorized to practice nursing in all settings. Basic nursing education is a formalized programme of study of at least two years or more. The Portuguese figures will include midwives as they have to first complete nursing training before specialization; [b]1998 data.

There are currently seven medical schools in Portugal (two in Lisbon, one in Coimbra and two in Porto, one in Braga and one in Covilhã). Medical training programmes of the first five medical schools follow the same curriculum and are divided in two three-year phases: a core programme covering the basic sciences, and a clinical programme based on practice and specialized procedures. The two new medical schools at Braga and Covilhã are developing innovative educational programmes.

A curriculum reform to shorten the length of the medical university degree from six to five years is in preparation. After university, all graduates must then undertake a general internship for 18 months, with 6 months training in general practice and public health and a year in hospital training. On completion of the internship, graduates are recognized as medical doctors and are free to practise without supervision. However, if they want to follow a medical career in the NHS, they must go on to further specialization. The duration of training for the different medical specialties varies as follows: Hospital specialties, four to six years; general practice/family medicine, three years;[8] public health medicine, four years (including a one-year postgraduate public health course).

The government is jointly responsible, with the Portuguese Medical Association, for the accreditation and certification of specialist training for medical graduates. The duration of specialized training is determined by the specialist colleges of medicine and varies according to discipline: internal medicine and neurosurgery take six years, whereas anaesthesiology takes four years. Specialists must be skilled in the diagnostic and treatment procedures of their own specialty and must have proficiency in related techniques. They also have to do research and publish articles, which are evaluated in curriculum analysis. After recognition of their aptitude, they can apply for a hospital position or go on to clinical practice.

[8] The Portuguese Medical Association favours a four-year programme.

There has been a boom in medical training and a large increase in the number of women going into the profession both as medical doctors and other health staff.

Table 22. Ten most frequent hospital medical specialties (numbers of medical doctors) by health region in 1999

	Total	North	Centre	Lisbon and Vale do Tejo	Alentejo	Algarve
Internal medicine	1 120	335	204	500	50	31
Gynaecology and obstetrics	946	336	262	289	31	28
General surgery	919	291	184	368	42	34
Paediatrics	929	315	176	380	32	26
Anaesthesiology	943	277	204	418	16	28
Orthopaedics	648	205	167	226	25	25
Clinical Pathology	430	122	65	224	10	9
Psychiatry	567	217	114	208	13	15
Cardiology	394	111	86	174	12	11
Ophthalmology	438	112	88	211	18	9

Source: Department of Human Resources (1999).

The hospital specialty with the largest number of medical doctors in 1999 was internal medicine (see Table 22). General practice/ family medicine and public health, which do not appear on this table, are less attractive careers at present. The number of GP/family doctors is around 5500 and public health doctors around 600. The undergraduate medical curriculum is highly hospital-oriented and although there are several general practice/family medicine and public health departments and disciplines in the medical schools, they still have limited influence in the training of medical students.

Nurses

To train as a nurse, one must have undergone at least 12 years of school education. The course lasts three years, and upon successful completion the degree of bachelor and the professional title of nurse are granted. There is another degree (license) for which there is a one-year programme. There are no nursing auxiliaries or equivalents in Portugal. If a nurse wants to specialize, there are several postgraduate programmes of study:

- Midwifery: 22 months, after 2 years of clinical experience;
- Paediatric nursing: 22 months, after 2 years of clinical experience;
- Psychiatric nursing: 18 months and 2 years experience in mental health and psychiatry;
- Community nursing – 18 months, after 2 years clinical experience.

The current priorities expressed by the nursing profession include the development of a code of ethics, legislation on the practise of nursing and the creation of a regulatory body.

Other health care professionals

Since 1986, three public and two private schools of dentistry have opened. Previously, oral health care was provided by stomatologists who undertook three years' specialist training after their medical degree. Another non-medical grade exists, that of odontologist. It was introduced by the government at a time when there was a severe shortage of dentists, but it has been replaced by the degree in dental medicine awarded by higher education institutions.

Alternative medicine practices

Acupuncturists, chiropractors, homeopaths and other alternative practitioners are active in the Portuguese health care system. However, they have not as yet been recognized by the Ministry of Health, despite recent legislative initiatives.

Pharmaceuticals and health care technology assessment

Mechanisms for controlling health care technologies

Portugal does not have a tradition of technology assessment. However, since legislation enacted in 1988, prior authorization by the Ministry of Health has been necessary before the procurement and installation of some of the more sophisticated equipment in both the public and private sectors. In 1995, new legislation lifted the restrictions on CT and MRI scanners. A National List of Health Equipment was drawn up and published in 1998, detailing the distribution of specific items of equipment and services throughout Portugal. It was not primarily intended as a tool for determining the distribution of equipment, but it will enable planners and hospitals to identify areas where there are gaps in service provision. There are currently no effective methods for regulating the distribution of health equipment in the private sector. Most heavy medical equipment (67%) is located in the private sector, which is more flexible and innovative and therefore outstrips the public sector in the acquisition of high technology equipment (Table 23). Hospitals contract with private clinics for the use of equipment, providing a strong incentive for this provision pattern to continue.

Table 23. Number of units of medical equipment in the public and private sectors, 1998

Type of equipment	Public	Private	Total
Linear accelerator	14	2	16
Digital angiograph	23	5	28
Gamma camera	23	7	30
Lithotripter	5	7	12
Magnetic resonance	5	22	27
CAT	39	83	122
Total	109	126	235

Source: National List of Health Equipment, 1998.

The distribution of technology is also disproportionate among regions. The concentration of equipment in the coastal area forces people to travel to access certain treatments or tests. There is, for example, an enormous imbalance in the provision of radiotherapy, which can only be found in Lisbon, Porto or Coimbra. This has not only social and economic impacts, but also contributes to the waiting lists of these hospitals.

Regulation and control of pharmaceuticals

Since 1990 several legislative changes have resulted from the implementation of European Union directives, such as that to guarantee the quality and safety of pharmaceuticals. In addition, programmes of public information and education on the rational use of pharmaceuticals were developed and cost-containment policies were adopted. The National Institute of Pharmaceuticals and Medicines (INFARMED) was established in 1993. Since 1994, its remit has been widened to cover not only pharmaceuticals, but also medical equipment and other medical products. INFARMED is responsible for approving all drugs to be reimbursed by the NHS and for setting co-payment levels. Recently, INFARMED has introduced some measures of cost-effectiveness into the drug assessment procedures, and it can request cost-effectiveness studies to justify the reimbursement of new pharmaceuticals. In 1999 the government issued official guidelines about how best to carry out cost-effectiveness studies. This initiative decisively increased the utilization of efficiency criteria in reimbursement decisions concerning pharmaceuticals.

The guarantee system for the quality and safety of pharmaceuticals is a complex one and is not limited to the industrial process. Due to the unique features of the pharmaceutical market, decisions are not made under normal market conditions. Pharmaceutical production is controlled by a strong system of regulation. The following authorities enforce the standards for the quality and safety of pharmaceuticals:

- The Pharmaceutical Inspection Service verifies the adequacy of industrial procedures and their control systems.

- The National Pharmacovigilance Centre is an INFARMED body, in operation since 1992. It monitors drug safety, recalls drugs or takes them from the market as necessary. It cooperates with the European Agency for the Evaluation of Medicinal Products in London. This joint work has been very useful because of the discussion and help exchanged as well as the incentive it has provided to implement rules agreed at European level. Relationships with other European Pharmacovigilance Centres are also being developed.
- The Quick Alert System and participation in meetings of the Working Group of the Medical Commission for Portuguese Medicines contribute to the increasing safety of pharmaceutical products used in Portugal.
- The Official Laboratory for Pharmaceutical Quality Control studies pharmaceuticals, tests the efficiency of dossier evaluation and inspection of industrial production, links with the National Pharmacovigilance Centre, and regulates sanitary and homeopathic products.

Regulation of medical devices

Medical devices are regulated by Directive 93/42 EEC and a national directive of 1995. The notifying institutions are the National Institute of Health for active medical devices and INFARMED for non-active medical devices.

Regulation and control of pharmacies

Pharmacies must be owned by a qualified pharmacist. All drugs, including over-the-counter drugs (OTC) can only be sold in a pharmacy. In addition to this norm, which reduces competition, the location of pharmacies is highly regulated. There are a maximum number of pharmacists permitted in each community. The Ministry of Health decides whether there is a need for a new pharmacy in an expanding residential area. In the first instance there must be proof of at least 4000 new clients, and there must be no other pharmacy within 200 meters of the proposed site. Thus, established pharmacists have a monopoly over the drug market.

There is presently a limited service within hospitals for dispensing prescriptions to outpatients. Only those drugs which carry no co-payment are allowed to be dispensed. The idea of extending pharmacy services in hospitals to allow direct sales by the NHS is being debated within the Ministry of Health. Similarly, in health centres only those vaccinations which are provided free of co-payment are dispensed directly by the health centre. Otherwise patients have to take their prescriptions to a private pharmacist whether or not they receive the prescription from a NHS doctor in a health centre or from an outpatient department of a hospital.

Pharmaceutical policy

Portugal's pharmaceutical expenditure was around 2.1% of GDP in 2001, a very high position in the OECD ranking. However the country ranks lower in terms of pharmaceutical expenditure per capita, at US$ PPP 282. There is a national formulary of drugs, which is only used by NHS hospitals for inpatient prescriptions. This does not extend to health centres or outpatient services. Guidelines on prescribing behaviour are issued to doctors, and directors of health centres are encouraged to draw up local formularies. However these are simply guidelines and have no mandatory powers. The lack of a national drug list for ambulatory care together with the powerful influence exerted by the industry on doctors, could be reasons for the high levels of expenditure on pharmaceuticals. Portugal has made attempts to control expenditure on pharmaceuticals through agreements with industry, but some have been unsuccessful. In 1997 a budget cap was introduced as a means of controlling costs. This was the result of a voluntary agreement between the government and the pharmaceutical industry in which the industry agreed to pay back to the NHS 64.3% of any excess between 4% and 11% above the 1996 expenditure, creating a perverse incentive to inflate expenditure over the limit even further. By the middle of the first year, growth in expenditure on pharmaceuticals was already up by 16%.

In 2001 and 2002, an extensive revision was made of the dimensions of drug packets according to the routine usage, resulting in smaller packages for drugs of quick and intensive use and bigger ones for drugs used by chronic patients (a three-month treatment standard).

Increasing the use of generics has been one of the most relevant cost-control goals of the pharmaceutical policy in Portugal. Apart from several public information campaigns about the advantages of generics, in 2000 the price of generics was lowered from 20% below the original product price to 35% below. The reimbursement rate was also increased by 10% to provide a consumer incentive towards generics. In 2001, a law was passed stating that medical prescriptions should be made by the international common designation (ICD) or generic name, but allowing doctors to add the trade mark. This rule applies only to drugs with generics on the market, not those still under patent protection. Finally, in 2002, another important change was made: doctors' prescriptions can be replaced by the pharmacist with a cheaper generic, if doctor allows it in the prescription form.

All these progressive changes, and the installation in Portugal of the most relevant generic companies, led to a big increase in the utilization of generics. The most updated data show that in January 2003 generics represented about 5% of all reimbursed pharmaceuticals. Nevertheless, in 2002, there was an 8%

increase in pharmaceutical expenditures, the same as in 2001. Another pharmaceutical policy currently being implemented is the use of reference pricing for drug reimbursement. Since 1991 (Decree Law 72/91) the price of drugs has been established using an artificial price based on comparisons with other countries. In Portugal, so far, if two drugs of similar properties were already on the market, any new drug entering the market had to be priced at least 10% cheaper than the existing products. An attempt was made in 1998 to introduce reference pricing and the government has recently announced it as a policy option. This system groups drugs according to their active ingredients and sets a reference price for the group (often the average or lower-priced drug in the group). The introduction of reference prices in the reimbursement system was implemented in March 2003. The method will be applied only to the products that have a generic formulation in the Portuguese market, leaving out the drugs under patent protection. The reference price will be the highest price of generics. A substantial reduction of prices in the trade mark products without patent protection is expected, considering the previous experiences in other countries.

Pharmaceutical co-payments

Prescribed drugs are subject to variable patient co-payments based on effectiveness criteria, with full payment attached to those drugs deemed to have little or no clinical value. Since 1992, there have been three categories of NHS co-payment (see Table 24). Pensioners are eligible for a lower level of co-payment on Category B and C drugs. Since 1999, some drugs have been under periodic re-evaluation for efficacy patterns, resulting in the removal of nearly 100 products from the reimbursement list. Pharmaceuticals used by some highly vulnerable groups of patients are fully paid for by the NHS. The following therapeutic categories are fully covered:

- anti-diabetics
- anti-epileptics
- anti-Parkinson's
- anti-neoplasm and immunomodulators
- growth and anti-diuretic hormones
- specific drugs for haemodialysis
- cystic fibrosis treatments
- glaucoma treatments
- haemophilia treatments
- anti-tuberculosis and anti-leprous drugs.

In 1995 a new policy was introduced whereby private sector prescriptions were subject to cost-sharing by the NHS (Decree Law 272/95 de 23/10). The rationale of this reform was to reduce the number of private prescriptions being taken to health centres to have them repeated on a NHS prescription. However, it led to an inevitable rise in pharmaceutical expenditures.

Table 24. Pharmaceutical patient co-payments in the NHS

Category	Definition consumption 1994	Level of co-payment (Public)	Level of co-payment (Pensioners)	% of NHS
A	Substances vital for survival or used to treat chronic diseases	0%	0%	9.4
B	Essential drugs needed in the treatment of serious illnesses, requiring prolonged therapy	30%	15%	63.1
C	Non-priority medicines with confirmed therapeutic value	60%	45%	27.5
	Of little or no proven therapeutic value	100%	100%	–

Source: INFARMED; Pereira et al. 1999.

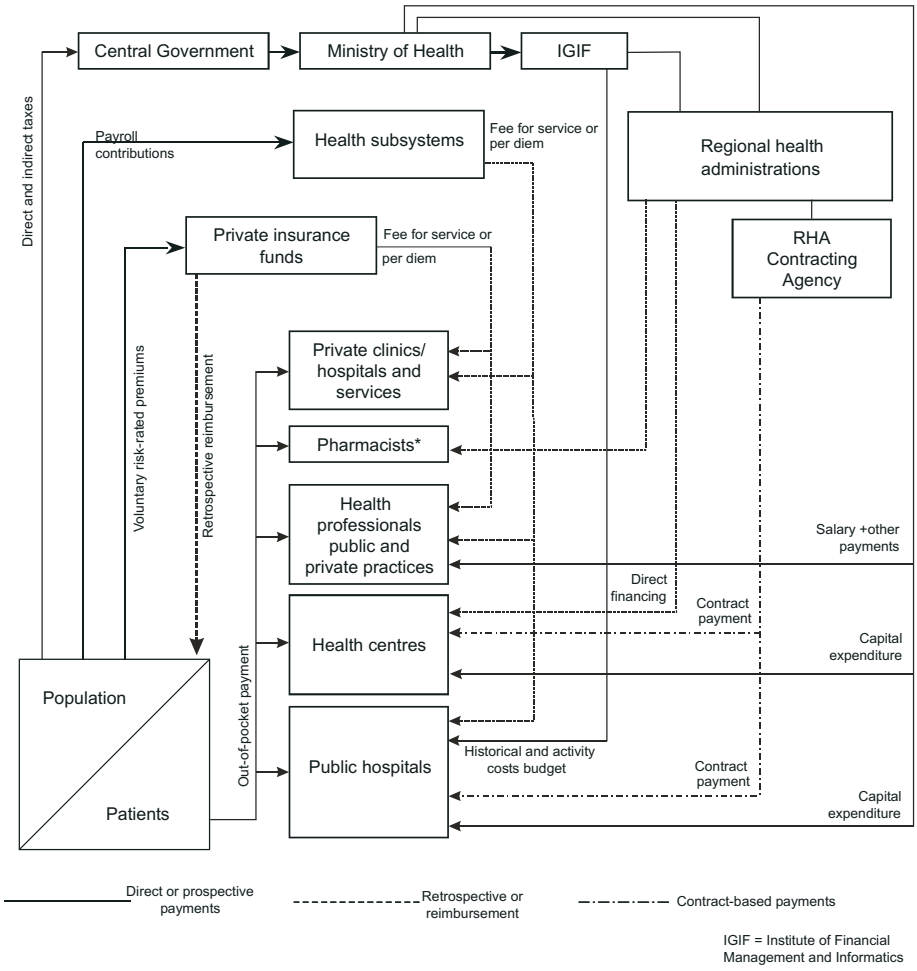
Financial resource allocation

Third-party budget setting and resource allocation

The NHS budget is set annually by the Ministry of Finance, based on historical spending and the plans put forward by the Ministry of Health, within an overall framework of political priority setting across the different sectors. Capital and current expenditure are separated, with the Ministry of Health retaining control for all capital expenditures (see Fig. 14). The Institute of Financial Management and Informatics, which is the department responsible for financial management within the Ministry of Health, prepares estimates detailing the resources required to support planned activities. The estimate of total expenditure for the current year is adjusted by the expected increase in the level of consumption, salary levels and the rate of inflation. The global budget for health is ultimately determined by the Ministry of Finance based on macroeconomic considerations. The Ministry of Health allocates a budget to each regional health administration (RHA) for the provision of health care to a geographically defined population. In practice, however, RHA autonomy over the way in which the budget is spent has been limited to primary care, since hospital budgets are still defined and allocated by the central level.

The RHA budget for primary health care is currently set on the basis of a merge of historical expense and capitation. This approach was introduced in 1998 and the budget computation has been progressively skewed towards a relative increase of the capitation component. In 2002 each RHA budget reached a balance of 50% of both components. In order to provide an approach to health care needs, the capitation component is adjusted by age and sex and also by a disease burden index computed according to the regional prevalence of selected health problems.

Fig. 14. Financing flow chart



Reform proposals initiated in 1996 intended to increase the purchasing role of the RHA, in order to move the system gradually towards a contract model of health care. The core instruments of this contracting culture would be the regional contracting agencies at each RHA. Their role is to identify the health needs of geographically defined populations and prospectively negotiate activity programmes and budgets with the provider institutions, with a view to integrating primary and hospital care to meet those needs. The health subsystems, whose revenues are frequently from employer and employee contributions, allocate financial resources according to a system of reimbursement to both members and providers following established price lists. A few of the schemes also employ doctors and provide services directly for

their members. The private health insurance schemes, whose revenue comes from risk rated premium mostly pay health care for their enrolees through retrospective reimbursement.

Payment of hospitals

Hospital budgets are drawn up and allocated by the Ministry of Health through the Institute of Financial Management and Informatics. At present, public hospitals are allocated global budgets that are partly case-mix adjusted. Traditionally, budgets had been based on the previous year's funding updated for inflation, but since 1997, a growing portion is based on diagnosis-related groups (DRG) information as well as on non-adjusted outpatient volume. This new activity-based resource allocation model brought to term research begun in 1990, involving systematic DRG grouping and the computation of hospital case-mix adjusted budgets.

The need to collect data on an individual patient basis for grouping purposes has led to the generation of a significantly improved information system for hospitals based on a minimum basic dataset – *Folha de Admissão e Alta.* This basic information system started to be developed in 1989 at the inception of DRG implementation in Portugal and today covers the totality of NHS hospitals. The centralized version of the system, which is run by the Institute of Financial Management and Informatics, assists in the process of adjusting prospective budgets for case-mix and other hospital specificities, enabling a more equitable and fair allocation of resources than would otherwise be possible if only patient volume or length of stay information were available.

The case-mix adjusted component of each hospital budget has been progressively increased as a means of creating incentives to improve efficiency. The implementation of the model in 1997 started as 10% DRG-based and reached 50% in fiscal year 2002. Some other refinements of the budget computation have been implemented in this period such as case-mix adjustment for ambulatory surgery and the set up of hospital peer grouping using a fuzzy set methodology (grade of membership model) for price setting. In spite of the formal sophistication of the payment model, the initial budget allocation is more indicative than normative. Because budget overruns are covered by supplementary allocations, the activity-based system has limited incentives to encourage cost-containment or efficient practices.

The establishment of contracting agencies in each regional health administration in 1998 aimed to change the way in which resources are allocated within the NHS by introducing negotiable prospective budgets. The power of

the contracting agencies was at the onset quite limited as the leverage of the purchaser is not sufficient to punish or to impose any consequence upon the hospital management or to force the needed corrective measures. Nevertheless, it was expected that the introduction of contracting mechanisms would increase cost awareness and provide incentives for efficiency. The first contracting agency was established in 1997 in Lisbon and Vale do Tejo and was subsequently recognized and endorsed by the Ministry of Health. The process continued and was reinforced along 1998 and 1999 with the creation of the remaining agencies (one in each of the five RHA) and the drawing up of tools and methods for negotiation and contract follow-up. Budget negotiations in all RHA began in 1999, with marginal impact. An amount corresponding to 3% of the total hospital budget was allocated to individual facilities as a result of the contracting arrangements between the contracting agency and the hospital boards, in respect to their performance levels. Accessibility to more efficient and better quality services was the cornerstone of the negotiations.

At the beginning of 2000, the contracting agencies continued to operate, but a clear slow down in their development impetus and the lack of strategic guidelines became evident as a result of the governmental changes in the fall of 1999. Further rearrangements of the health administration team in the summer of 2001 brought back the payment/provider split and the contracting issues to the forefront of the agenda, but more than a year later, the new government has not clarified their future place. However, the inclusion of the issues as topics of NHS reform, anticipates the retention of the concept underlying the contracting agencies.

Besides direct transfers from government, public hospitals also generate their own revenue from payments received from patients for special services (individual private rooms, for example), payments received from beneficiaries of the health subsystems or private insurance, and flat rate user charges for outpatient and diagnostic services. As a whole, these payments account for as much as 15% to 20% of the overall hospital budget. Private donations, in spite of its residual magnitude, especially for equipment acquisition, are also to be considered.

The health subsystems and private insurance schemes reimburse NHS hospitals retrospectively on a case basis for inpatient care and ambulatory surgery (according to a DRG price list) and on a fee-for-service basis for ambulatory services provided to their beneficiaries. Private insurers may use different modes of reimbursement. In some cases, patients are expected to pay and then be reimbursed retroactively for the cost of services. This method acts as an incentive for such patients to seek treatment from contracted providers.

Payment of health centres

Health centres (HCs) are responsible for primary health care. They do not yet have financial or administrative autonomy. The Ministry of Health allocates funds to the RHA, which in turn fund the global activity of each health centre through the sub-regional coordination level. The HC only receives a small budget for rent, utilities, etc., based on historical costs. All other costs are directly paid by the sub-regional coordination level. This means there is no global cost control.

In 2000, an experiment was conducted at the Lisbon and Vale do Tejo RHA to allocate indicative global budgets to health centres. Following a model similar in principle to the hospitals' payment system, a resource allocation formula was devised, combining an historical expense component (80%), an activity adjusted component using weighted production units (UPP, 15%) and a residual component to be allocated based on the number of residents with Patient Identity Card (5%). The intention was to simulate the impact of an activity-related allocation formula on the future autonomous health centres.

A major reform concerning health centres re-organization was proposed in 1999, but not actually implemented. It would have not only granted financial and administrative autonomy to HCs, but would have allowed the RHA to contract independently multi-professional teams, especially family health teams, from the HC and hold them accountable the provided care. This reform followed the same principles of introducing contracting and prospective activity-related budgets described above in the section *Payment of hospitals*. More recently, another reform proposed by the government is expected to introduce further changes to the previous organizational and funding models of primary health care. The published law points to a variety of primary health care provision and management modalities, including total or partial contracting out to private for-profit and non-profit entities or to groups of physicians. A capitation formula would apply starting in 2004, taking into account the number of patients adjusted for age, level of physical dependency and access conditions to the support hospital.

Payment of physicians

Members of management boards

Like all staff working in the NHS, members of the management boards of NHS institutions and department heads are salaried employees. Their

remuneration is fixed with no relation to attaining production goals or any other form of performance evaluation. However, as part of the health reform, a debate opened up about the virtues of incentive-based payments to health professionals, and the changeover of hospitals into public enterprises is expected to bring about some changes in personnel payment policies.

Doctors

All NHS doctors are salaried government employees. The fixed salary is established according to a matrix linking professional category and time of service, independently of any productivity measure. Other public-sector modes of employment and remuneration are full-time (35 hours/week), extended full-time with exclusive NHS employment (42 hours/week with no private practice allowed) and part-time (not allowed for a head of service).

In general, doctors perceive their salaries as relatively low and therefore feel justified in augmenting their income through private sector activity. However, when additional payments, together with other variable components such as overtime (for example, on-call duties), are taken into account, the total income per doctor is relatively high compared to the average wage. Particularly in rural hospitals, where there is a small number of doctors and on-call duties come round frequently, overtime can account for the majority of a doctor's income. In 1999, over 20% of all medical salary costs were for overtime. A regulation issued in 2001 established new procedures for overtime payment of doctors in hospital emergency rooms. The intention was to relate these payments to performance indexes in respect to outpatient visits in hospitals and in health centres and to operations of patients on surgical waiting lists.

The Lisbon and Vale do Tejo RHA initiated in 1996 the *Alfa Project* to encourage group practice, team work and professional accountability (see the section *Primary health care*). Groups of GPs were given extra overtime payments and other incentives in return for an assurance of better coverage and accessibility and adequate referral and follow-up of patients on their lists. The aim was to reduce the excessive demand % thus cost % at hospital emergency departments in the cities. This experiment attracted only a limited number of innovative PHC professionals and faced the resistance of the traditional NHS public administration. Most RHA did not want to launch the project in their regions.

Following this first experiment a new system of organization and reimbursement for groups of GPs/family doctors was introduced in 1998/1999 with a variable payment based on capitation and professional performance.

Participation in the scheme is voluntary and experimental. The mixed system comprises a basic guaranteed salary plus a capitation payment based on list size adjusted for population profile; a fee-for-service for target services such as home visits and minor surgery; target allowances for preventive care; and payment for such episodes of care as overall service to pregnant women including postnatal care. In order to collect greater evidence of the benefits of this new organizational and payment system, it was extended to late 2003.

Half of NHS salaried doctors also work in the private sector and many independent doctors work under contract for the NHS. The NHS, the health subsystems and private insurance negotiate fees independently with doctors. Fees charged to the NHS are generally the lowest. Private fees are not regulated by the government but are subject to a range of reference prices set by the Medical Association.

Table 25. Structure of medical doctors remuneration (million national currency units, 1999)

	Portugal	Lisbon and Vale do Tejo Regional Health Administration
Salaries	116 489	45 162
Overtime	35 671	6 588
Night work and other extras	3 332	851
Vacation subsidy	19 361	7 449
Total	174 854	60 050

Source: INFARMED; Pereira et al. 1999.

Nurses

Nurses are also employed by the NHS as state employees. They are entitled to an annual salary. This fixed salary is linked to a civil service pay-scale which rewards people according to a matrix linking professional category and time of service and is in no way related to performance. Public-sector work modalities for nurses are: full-time (35 hours/week), extended full-time (42 hours/week) and part-time (20 or 24 hours/week). The option for extended full-time is granted on a case basis, following a needs assessment of the service where the nurse is assigned and requiring authorization from the Ministry of Health. Although there is a determination to cap these cases at a maximum of 30% of the total nursing staff in each institution, their volume is perceived to be much higher. Not only there is a deficit of nursing personnel (see *Organizational Structure and Management*), but the professionals use it as a way of salary upgrade.

Health ancillary technicians

The technological and scientific evolution of medical diagnostic and therapeutic procedures has given the ancillary professionals a much more relevant role in health care provision. As with doctors and nurses, these professions are salaried under a pay-scale unrelated to performance. A major revision of their professional status was accomplished in 1999 along with a revised payment scale.

Other professionals allied to medicine

The majority of the allied professionals are private and independent providers of care. They work under contracts and are reimbursed on a fee-for-service basis. These payments are either made directly by the patient, who is then reimbursed by their fund or private insurance scheme, or directly by the NHS, if the NHS does not provide that service and has an agreement with the private sector.

Dentists

Most dentists in Portugal work in private practice where patients pay 100% of fees. Patients may be partially reimbursed by their subsystem, professional insurance scheme or private insurance scheme if dental care is included in the package of benefits. Dentists are free to determine the level of fee within a maximum and minimum amount set by the National Dental Association. These fees are not legally binding but form part of the disciplinary process and ethical code of the Association. There are very few salaried positions within the NHS for dentists. Only the more highly-trained stomatologists are admitted to work in hospitals.

Pharmacists

Pharmacists obtain their income from two main sources: co-payments directly from patients and the remainder from the NHS (via the RHA) or the appropriate insurance fund. The payment system follows a provider-pays model. This means that whoever prescribes pays. Therefore in the case of public hospitals, the individual hospital must cover the cost of the drug. If the prescription is from a health centre the payments are centralized through the RHA. Members of the National Association of Pharmacies invoice the Association, which reimburses them immediately; it then bills the RHA in bulk on behalf of its members. One of the perverse incentives of the payment system for pharmacists is that they benefit from dispensing more expensive drugs, therefore they do not stock the cheapest drugs. Over-the-counter drugs yield the greatest profit.

Health care reforms

Health care reforms aim at improving health status, providing a better response to health service needs and ensuring fair financing for health. As one would expect, different degrees of importance have been assigned to each one of these aims during the evolution of the Portuguese health system. In the earlier Bismarckian systems the emphasis of reforms was to find adequate ways to make health care services accessible. During the 1970s and the most of the 1980s, concern for better and more equitable responses to health service needs led to the establishment and expansion of the Portuguese health system. From the late 1980s through the 1990s, special emphasis was placed in improving access and efficiency in health care delivery. The need to invest in health, although recognized in a number of official documents, has not been a prominent item on the health policy agenda.

Aims and objectives

This part of the report will summarize the milestones of the Portuguese health systems development over last three decades. First, the historical account provided earlier in this report will be summarized from a health care reform perspective. To this effect four distinct time periods, corresponding generally to different political agendas, will be considered: before the 1970s, from the early 1970s to 1985, from 1985 to 1995, and from 1995 to 2002. Second, we will look at the current reform agenda, in effect since April 2002.

Content of reforms and legislation

Over these last 30 years a sustained effort to improve health and health services can be clearly identified. To a large extent these efforts have focused on increasing funding for the health sector, expanding the public health service infrastructure (both facilities and technologies), providing easier access to pharmaceuticals and improving the organization and management of the NHS. However well intended, reforms were often incompletely implemented, due to managerial limitations, resistance to change or political discontinuity. In fact, over this period of time it was frequently observed that within a single political cycle, under the same prime minister, changes of ministerial teams led to considerable changes in the political agenda.

The Portuguese health system before 1970

By 1970, Portugal displayed very unfavourable socioeconomic and health indicators in the European context: an infant mortality rate of 58.6 per 1000 live births (5.0 in 2001), approximately 8 000 physicians (33 000 in 2001), 37% of child deliveries in hospital (99% in 2001). The Portuguese health system was very fragmented: a few large state hospitals, a wide network of small *Misericórdia*, social security medical ambulatories, public health services with "well-baby clinics", tuberculosis and mental health dispensaries, and private medical practice, particularly in the ambulatory sector. Financial resources for the health sector were very limited – less than 3% of a GDP, very low by European standards. Due to very low salaries in public sector, health professionals had to accept a number of part-time jobs in order to make their living.

1971 – 1985: Establishment and expansion of the National Health Service

Health care reforms in 1971 included the establishment of health centres as integrated primary health care facilities. This took place seven years before the Alma Ata Declaration on Primary Health Care and became one of the main pillars of modern health system. This reform, although very incompletely implemented, provided the basis for the future Portuguese NHS. The democratic revolution of 1974 and the constitution of 1976 changed Portugal deeply and provided opportunities for new social policies to emerge. The establishment of the National Health Service was seen as the most appropriate response to the need for a more extensive and equitable health service coverage. The new constitutional law outlined the right of all to health protection and required the creation of a "universal, comprehensive and free" National Health Service. It

also referred to a sustainable economic, social, cultural development in order to ensure and promote health. The NHS law adopted in 1979 states that "access to the NHS should be guaranteed to all citizens independently of their economic and social status". The 1989 revision of the Constitution changed "free" services to "services tending to be free". The NHS law also meant that health financing began to come from the State budget, replacing the previous financing system based on social insurance funds.

It is important to mention that the 1970s were not, however, an easy time for reform. The "oil crisis" had a negative impact on the global economy, consequently there were very limited financial resources available to launch social reforms. The NHS was an under-funded venture from its very start. For a country experiencing the early days of democratization and decolonization, the managerial requirements of a NHS were a formidable challenge. After the first decade of their implementation (first-generation health centres), an opportunity to provide health centres with an organizational development process that would improve accessibility and accommodate a new profession (general medical practitioners) was lost, in 1984/1985, when the centres were merged with social security medical clinics (curative medical ambulatory services). As pay continued to be low for the health professions, very few professional were in the position to offer full-time service to the NHS. These were in effect key genetic limitations for the Portuguese NHS.

1985 – 1995: NHS regionalization and new role for the private sector

This decade was characterized by unprecedented political stability. Portugal became a member of the European Union in 1986 and became eligible for European funding for social and economic infrastructure development, including the health sector. The NHS facilities and technologies continued to expand and an increasing proportion of the country's GDP was allocated to health. However, at the same time the health sector faced numerous challenges, such as the lack of coordination between primary and secondary health care, concentration of resources in hospital care and health inequalities due to the high presence of the private sector. In addition, doctors had low incentives to work for the public sector and there was the lack of accountability of hospital managers. It became clear that organizational and managerial changes were necessary to improve the health sector's effectiveness and efficiency. Cost containment became a priority issue due to increasing expenditure for health care. In this context the following major issues emerged as the most evident concerns of the political agenda throughout this decade:

- The shift from the NHS to a health systems framework: The 1979 NHS legislation ignored, to a large extent, the existence of an important private and social sector in the health. The 1990 "framework legislation" defined the NHS's role within a broader health systems context, aiming to promote private sector complimentarity with the NHS.
- A new role for the private sector: The new legislation also aimed at stimulating the Portuguese private sector in the health arena, including the private management of NHS facilities. In 1995, management of a new 600-bed public hospital near Lisbon was contracted with a private consortium, but this modality was not applied again during the next 6 years.
- NHS regionalization and integration: In 1993, five health regions were established in continental Portugal, corresponding to five new regional health administrations. Also, "functional health units", constituted by hospitals and related health centres, were established to promote better integration of primary, secondary, and tertiary care.
- User charges in the NHS: These were introduced in the NHS 1990, with exemptions for poor and high risk groups via state subsidies at a rate below the average NHS cost-per-head.
- Health workers: An attempt was made to establish a more clear distinction between public appointments and the exercise of private practice in exchange of better pay in public services. Prolonged strikes by medical unions resulted in better pay, but little change elsewhere.

Discontinuities in the political agenda resulted in limited impact of these initiatives. In order to shift part of financial burden to the patients, the NHS law in 1990 proposed an opt-out scheme allowing patients to move from public to private insurers by receiving a subsidy from the state at a rate below the average cost per head of the NHS. This was not implemented due to an apparent lack of interest of the private insurance industry. Other changes included the initial steps in the development of a DRG information system for hospital management. Limitations in human resources planning and management resulted, 10 years later, in the importation of doctors and nurses from abroad, particularly Spain.

1995 – 2001: A "new public management" approach to NHS reform

After 10 years of considerable political stability – one-party base government, with a parliamentary majority in 8 of the 10 years – a new political cycle was initiated by the end of 1995. During the following 6 years the country was run

again by a one-party based government. However, unlike in the previous political cycle, these governments were supported by a parliamentary minority that chose not to promote a political coalition or alliance necessary to provide more solid stability. In Parliament, government support needed to be negotiated on a case-by-case basis. Such a political environment was not very conducive to major reforms, and a cautious and stepwise reform process was adopted, centred on the principles of "new public management" applied to NHS reform, summarized as follows:

- Health strategy: From 1996 to 1999 a broad "Health Strategy for the Turn of the Century" was developed, including 5-year and 10-year targets for health gains and service development. The strategy was discontinued when a new ministerial team took office by the end of 1999.
- Public entrepreneurism in hospitals and organizational development of health centres: It was decided in 1996 that all new hospitals would adopt a new more autonomous and flexible public enterprise managerial style. From 1996 to 1999 three new hospitals adopted this status. A series of experimental projects in PHC reorganization were initiated: small teams of GPs and PHC nurses were set up in more dispersed and community-accessible facilities. These experiments were evaluated positively and stimulated the adoption of GP performance-related pay on an experimental basis, new contracting practices, quality requirements and information infrastructure. In 1999 legislation was passed to reform health centres, but this reform process stopped in 2000 and it was not implemented.
- Quality assurance: A new approach to promoting quality in the health sector was designed and institutions (National Health Quality Council, Institute for Quality Development) were created to implement it.
- Human resource policy: In 1998, the Council of Ministers adopted a resolution establishing two new public medical schools, strengthening nursing training, promoting more health research capacities and better coordination among heath care, health education and training institutions. The implementation of this resolution in the following three years was incomplete.
- Improving the Public Health infrastructure: Five Regional Public Health Centres have been created since 1999 to strengthen both regional and local levels through epidemiological expertise and leadership in health promotion and health care management.
- Introducing a purchaser – provider split: In 1996 regional health authorities initiated a process establishing regional contracting agencies, which would

develop expertise in analyzing, negotiating, and deciding the allocation of public financing of health services, and appropriate information and monitoring tools for those purposes. The agencies were established in 1998, but their power has been limited because of their very small budgets and insufficient influence over providers.

- Local health systems: 1999 legislation established these to create an integrated framework for hospitals, health centres and other health care providers, but the legislation was not implemented.
- Decentralization: The implementation of decentralization strategies in Portuguese health sector has faced problems for several reasons, such as a strong tradition of centralized management and a lack of adequate human resources.

There were attempts to introduce programmes to reduce waiting lists for surgeries and to introduce NHS patient cards, but there were difficulties in implementing them. Despite the significant efforts to reduce waiting lists for surgery, at the end of 2001 the number of patients waiting for a surgical procedure was around 86 500 and the programme of NHS patient cards was never fully implemented.

Since 1997, the traditional method of retrospective hospital payment has been partly changed to incorporate prospective, activity-related elements (a DRG based system). A number of initiatives for regulating the pharmaceutical market were taken, including a few related to the promotion of generic drugs. In 2001 the Ministry of Health issued formal orientations and guidelines for the development of Regional Master Plans (RMP) for NHS hospital and primary care facilities. Simultaneously the Ministry announced plans to establish Private-Public Partnerships (PPPs) for the construction of new hospitals.

Current reform agenda (since April 2002)

Current political agenda combine the expansion and reorientation of policies initiated by previous governments (hospitals as public enterprises, PPPs, promotion of generic drugs) with a new approach to the role of the public, private and social sectors. The Portuguese health system is now thought of as a network of health care delivery services belonging to any of the mentioned sectors. Citizens will be allowed to choose among them according to their need and preferences. Public financing will be available to support these demand patterns, within the limits of the agreements established between the Ministry of Health and the chosen health care delivery services. The government has moved decisively in passing reform legislation and initiating is implementation in these areas:

- Access to health care; surgical waiting lists and personal physicians: Access to health care is seen as a top priority. The surgical waiting list programme was redesigned in order to respond to more ambitious objectives (ending waiting lists in the short run). Its scope has been extended to a larger number of surgical procedures, promoting a more intense use of private and social (non-profit) services, and improving the extra-pay to NHS services and staff in the surgical waiting list program. A new emphasis has been placed on the notion of a personal physician for everyone, as a response to the incomplete coverage of GP services.
- Hospital-companies: Legislation changing the management of hospitals was adopted in September 2002. From 1 January 2003, approximately 30% (34 former NHS hospitals out of 114) of public hospitals, corresponding to close to 50% of public sector's bed capacity, were converted into "hospital-companies". A special mission team was established to manage the change.
- Public-Private-Partnerships (PPPs) for all new public hospitals: The Ministry of Health has announced that 10 new hospitals to be constructed over the next few years will become PPPs, with private investment, public financing, private management (including clinical services) and public ownership.
- Primary health care reform: The government has adopted new legislation on the organization of health centres, which includes the possibility of them being managed by professional cooperatives, the private for-profit sector, or the social non-profit sector. GPs' organizations as well as medical unions and associations have expressed strong opposition to this reform.
- Pharmaceuticals: The Ministry of Health has been very active in the area of drug policy. Strong emphasis has been placed on prescribing generic drugs, coupled with reference pricing and the international common designation (ICD). There is already evidence that, following these initiatives, the generic market share expanded rapidly and considerably, and there is at least in the short run a decrease of public expenditures on pharmaceuticals.
- A new health regulatory body: Considering the expected development of a new kind of public-private-social mix in health care delivery, the Ministry of health has announced the establishment of a new regulatory body for health.

The current government programme also focuses on reorganizing medical emergency services, further developing long-term care infrastructure, a pricing system for publicly financed health care delivery, financial incentives to increase productivity in the public sector, public information on the performance of

public hospitals and health centres, and fiscal incentives for the development of private health insurance. A NHS contact centre for the public has also been announced. Since these changes are very recent, and no type of evaluation has been planned so far, it is too early to predict their outcomes. Any improvement in the current system will depend strictly on the capacity of government to regulate, monitor and supervise, to institute methods of cooperation and coordination and to develop appropriate resource allocation methods.

Health for all policy

Portuguese health policies have evolved considerably over the last fifty years. Up to the mid-1970s, public health action was oriented towards specific diseases, such as tuberculosis and those preventable by immunization, of high-risk population groups. By the mid- to late 1970s health policies were channelled through primary health care and the health centre movement, and later by the NHS and organizational arrangements. Institutional planning became mandatory, but was often more an administrative obligation than a tool to manage change. From the mid-1980s to the mid-1990s the community settings approach and the principles of health promotion played an important role in the development of the healthy cities and healthy schools networks. Between 1996 and 1999 an explicitly targeted health strategy was produced, revised and finally adopted in 1999 as: *Health, a commitment – a health strategy for the turn of the century (1998–2002)*. This document identified 27 major health areas for action % from aging and active living to depression and school health % in addition to health services access and quality, health professions, health financing, resource management, information and communication, and European and international cooperation. For each of these areas 5-year quantitative targets and 10-year qualitative or quantitative targets were established, and broad action orientations for achieving them were identified. The five Health Regions of the country accordingly developed their strategies on a more operational basis. Actors at the local level were stimulated to use this strategic framework to establish and achieve their own targets. It was agreed to monitor and evaluate this health strategy by the end of 1999, but as a new ministerial team took office at the end of 1999, this document lost political support. Currently the Ministry of Health is preparing new strategic orientations for improving a health plan that is expected to be adopted in early 2004, in close cooperation with WHO and the European Union.

Reform implementation

During the last three decades the implementation of the health care reform in Portugal has been a challenging process and many of the reforms were not implemented in the way they were designed to be. It is characteristic for the Portuguese health care system that new policies and models have been added to the old rather than replacing them. For example, when the NHS was founded, it was supposed to integrate all sub-systems of the social insurance scheme it replaced, but it never completely did so. As a result, the health care system is based on a three-tiered system of coverage by the NHS, public insurance services (covering about 25% of the population) and the private sector (covering about 17%), such that some groups have double or triple coverage.

It has also been common that laws concerning health care are passed but never implemented. The 1979 NHS legislation pointed to the need for a central NHS management structure but it was never implemented. Currently the central health administration is still fragmented into many directorates and institutes difficult to coordinate and unable to provide a central interface to regional health administrations. The 1990 new general health legislative framework was only translated into compatible NHS legislation in 1993 and into one of its more significant thrusts – private management of public institutions – with a single experiment in 1995. More recently, the 1999 legislation concerning the establishment of local health systems and primary health care reform was not implemented or replaced for 2 to 3 years.

It has been recognized that there is a lack of coordination between the primary and secondary health care levels in Portugal. The existing GP gatekeeping function is ineffective because of a shortage of full-time GPs in the NHS, a lack of coordination between GPs and specialists and the possibility of using emergency services. A law adopted in 1999 proposed the establishment of local health systems aimed to improve the coordination between the secondary and primary, public and private care and lead to more efficient use of resources has not been implemented in practice.

Five key factors impairing health care reform implementation can be identified:

- Poorly informed decisions: Very few of the most important health care reform initiatives in Portugal have been preceded by analytical documents detailing the evidence base for the proposed changes, establishing expected outcomes in an objective and quantitative way, clearly framing the impact assessment approach to be adopted or benefiting from broad technical and public debates.

The absence of such base line references severely impairs monitoring and evaluation prospects and therefore weakens effective implementation.

- Normative tradition: Management of change has a strong normative tradition in Portugal. Legislation is seen as a kick-off mechanism in a process of change rather than a tool for successful field experiences, implying that most of the reforms were only legislative and lacked substance in practical execution. In addition, the lack of clarity in health care related documents has constrained reform implementation. For example, equity is considered a main principle of the health care system, but there are conflicting interpretations of it in official documents.
- Command-and-control administration: Command and control administration and the lack of citizens participation in policy making have been the predominant features of the health system. The limited role played by policy and managerial information systems in decision-making make policy implementation a hazardous exercise.
- Lack of policy sustainability: Severe health policy discontinuities have been observed over the last twenty years, not just due to changes of government, in ministerial changes within a single government, and this has been a major impediment to reform implementation.
- Governance limitations and resistance to change: A good governance approach to management of change has yet to be applied in Portugal. Until recently, health care has not been a political priority. Current emphasis on implementation may mean that some of the lessons from the past have been taken into account, but detailed analysis of any evidence base and public debate are still limited.

Conclusions

The social and economic conditions of Portugal have seen extraordinary progress in the last thirty years. Improvement in health status and health services reflects these broader social developments. In some areas Portugal has done better than what one would expect from its social and economic development indicators. The Portuguese immunization programme has been very successful since its inception in the 1960s. It was developed in a way that ensured strong and sustained support from health professions and the community at large over a long period. This explains Portugal's high immunization rates by European standards.

Portugal was one of the first European countries to adopt, in the early 1970s, an integrated approach in primary health care through the development of an impressive health centre network. This movement faced mounting difficulties as successive governments failed to deliver much needed organizational and managerial reforms. In the late 1960s, the Portuguese infant mortality rate was in the 60 per 1000 range, by far the highest among the up to 1 May 2004 15 European Union Member States. Thirty years later (2001) it was 5.0, better than Greece, Holland, Ireland, Luxembourg and the United Kingdom, and equal to Belgium, ranking ninth in the EU. There is an important tradition in Portugal of caring for diabetics from the medical, public health and social perspectives. This goes back to the 1940s, when the first association aimed at providing insulin for the poor was established. Currently Portugal has one of the strongest diabetes management programs in Europe, and is using this experience to develop other disease management programmes.

Despite the remarkable achievements in health policy, numerous challenges remain in the Portuguese health care system. Compared to OECD countries, expenditure of the Portuguese health care sector is characterized by a high

level of resources relative to the GDP, a low level of per capita expenditure, high levels of pharmaceutical expenditure, and a very high level of private expenditure compared to other countries with a NHS structure. It has also been shown that the system is performing low in the equity, efficiency, accountability and responsiveness objectives. Many health care reforms have been legislated, but never completely implemented. The Portuguese NHS was never fully implemented and attempts to modernize its organizational structure and managerial models have faced considerable difficulties in the past and are likely to be controversial in the future, but nonetheless seem necessary in order to respond to very real challenges in accessibility, effectiveness and efficiency.

It will be essential in the near future for Portugal to improve access to health care services, to reduce health inequalities and to ensure better coordination between the primary and secondary health care levels. Public health and health promotion interventions should contribute to changing the public's behaviour with respect to such continuing problems as alcohol and drug abuse, cigarette smoking, HIV infection, and work-related, leisure and road accidents.

A trend toward increased diversity in health care delivery organizations has been felt in Portugal as in many other European countries. Emerging new forms of public management and public-private partnerships aim to increase accountability and cost containment in the health sector. Whether there will be an acceptable balance between this diversification and the country's regulatory and governance capacity of ensuring the public interest is likely to be a critical issue for the immediate future.

Pharmaceuticals weight heavily on health expenditure. Prescription patterns, particularly for commonly used drugs such as antibiotics, are far from satisfactory. Although drug policy initiatives taken in the past or more recently (such as the promotion of generic drug prescription and reference pricing) may alleviate some of the expenditure pressures on public budgets, it seems likely that further drug policy developments may require stronger European-wide action.

Financing and investing in health is certainly an area of critical concern. The limited and unbalanced human resource structure, reflecting poor long-term resource policy and planning capacities in the past, might represent one of the strongest challenges the Portuguese health sector may have to face in the years ahead. After a first attempt in the recent past, there seem to be now good prospects for further developing a comprehensive health strategy for Portugal. This is expected to bring together health promotion and protection

issues with health service concerns. It can bring new impetus to human resource policy and to health-related research. It may also provide a better European perspective for health development in Portugal.

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